STAFF REPORT

File No.: PLTT20240361

DATE OF MEETING:	October 16, 2025
TO:	Salt Spring Island Local Trust Committee
FROM:	Oluwashogo Garuba, Planner 2 Salt Spring Island Team
COPY:	Chris Hutton, Regional Planning Manager
SUBJECT:	Proposed Antennae siting Applicant: Meghan Borges Location: 131 Knott Place, SSI

RECOMMENDATION

1. **That the Salt Spring Island Local Trust Committee receive proposal for telecommunication tower installation at 131 Knott Pl., SSI for information and provide preliminary feedback for the antenna proposal.**

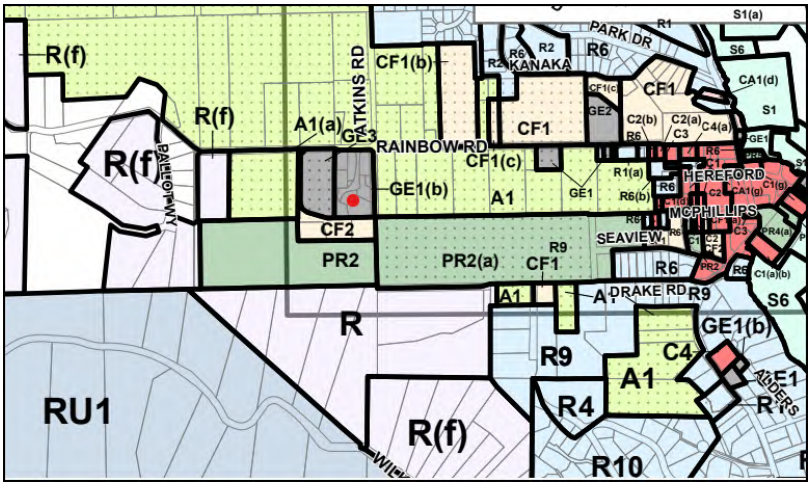
REPORT SUMMARY

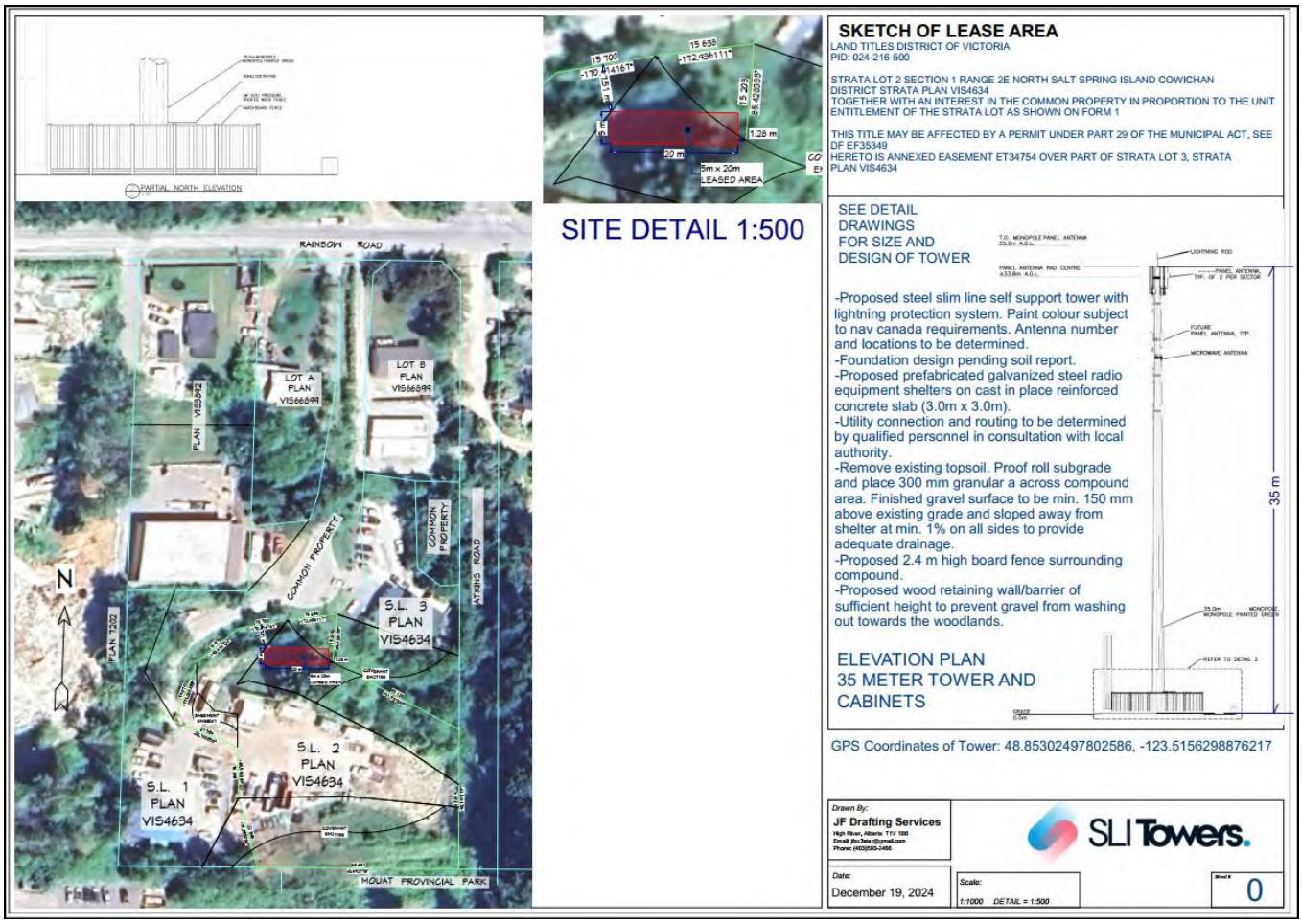
The purpose of this report is to present and request initial feedback from Salt Spring Island Local Trust Committee (SS LTC) the proposal to install a telecommunication tower at 131 Knott Place, SSI.

BACKGROUND

The subject property (Figure 1 & 2) is 131 Knott Place within the Salt Spring Island Local Trust Area. The 0.49 ha (1.2 ac) lot is zoned General Employment 1(b) - GE1(b). This report is proceeding because of the proposal received from SLI Towers Inc. They are proposing the installation of a new wireless telecommunications facility at the subject property with the possibility of co-location for all carriers and wireless internet providers.

The proposed tower is a 35 m (114.83 ft) slimline monopole installation within a compound area of 5 m (16.4 ft) x 20 m (65.62 ft) located at the north eastern side of the subject property and the base of the tower is proposed to be mitigated by a 2.4 m (7.87 ft) high board fence surrounding the compound as well as the existing tree line. The proposed installation is expected to improve wireless service in Ganges and along Fulford-Ganges Road as well as address continually increasing demand for wireless voice and data services as these are essential to the residents of Salt Spring Island





ANALYSIS

Policy/Regulatory

Islands Trust Policy Statement:

The Islands Trust Policy Statement contains the following directive policy relevant to telecommunications proposals:

5.3.1 Trust Council holds that local trust committees and island municipalities should be consulted and involved in the decision-making process regarding provision of utilities, transportation services or facilities that might affect land use in their local planning areas.

The proponent has informed Local Trust Committee of the proposal to install a telecommunication tower at the subject property and are seeking initial feedback regarding this proposal in accordance with the SS LTC Antenna System and Consultation Protocol The proponent has provided an Environmental Impact Assessment report (Attachment 1) prepared by a Qualified Environmental Professional (QEP) for the proposed activity and letter of narrative (Attachment 2) detailing the proposal as part of the information provided to Islands trust. According to the Environmental Assessment report, identified potential impact include soil disturbance, loss of native vegetation, habitat fragmentation among others. While the site is already partially disturbed, avoidance and mitigation measures are necessary during the construction to minimize environmental harm. These include proper soil and vegetation management, protection of nesting sites, dust and noise control, spill prevention and ongoing environmental monitoring.

Official Community Plan:

The subject property is designated as General Employment and Commercial Services in the OCP and is within the Non-Village Commercial and General Employment Development Permit Area 2 (DPA 2) Designation. Objectives of this DPA are:

E.2.3.1 To ensure that the commercial and general employment businesses allowed in rural and residential neighbourhoods can develop with the least impact on neighbouring properties.

E.2.3.2 To avoid a level of design regulation that could affect the viability of small commercial and industrial businesses.

E.2.3.3 To protect nearby agricultural lands (including their water supplies) and to reduce the potential for conflicts between agricultural activities and higher density settlement areas.

<u>OCP Policies and Objectives relevant to Telecommunication</u>

The following are relevant OCP objectives to the proposal:

C.5.1.1.1 To accommodate the facilities that provide Salt Spring Island with necessary power and telecommunications services, while minimizing impacts on neighbourhoods, community health, the natural environment and resource lands.

C.5.1.1.2 To accommodate telecommunications facilities that Industry Canada considers must be located on Salt Spring Island.

C. 5.1.1.3 To develop land use planning policies that help reduce the public expense of utilities.

Further analysis of the relevant OCP objectives and policies, as well as an assessment of key issues and opportunities, will be included in a future staff report for LTC's consideration.

Land Use Bylaw:

The following Salt Spring Island Land Use Bylaw (LUB) definition and regulations are pertinent to this report:

"Public utilities" means a *use* of land, or of *unoccupied* works and *structure*s such as pipes, wires, poles or towers, for the provision of electricity, gas, water, sewage collection, telephone, cablevision or telecommunication *services* to the *public* of the island on which it is located; or the *use* of land or *unoccupied structure*s for navigational aids.

3.1.1 The following *uses* are permitted in every *zone*:

(1) *public utilities*;

3.8.4 The *height* restrictions for *buildings* and *structures* set out in this Section do not apply to retaining walls, telecommunication antennae… provided that the *lot coverage* of such *structures* does not exceed 1 per cent or, if it is located on a *building*, the *structure* does not occupy more than 10 per cent of the roof area of the *building*.

Consultation

There is no statutory requirement for the Islands Trust to undertake public notification for the siting of a telecommunications facility. The onus rests with the proponent to notify affected properties for proposed towers greater than 15 meters in height which is applicable to this proposal. Written notice will be sent to all property owner and residents within 3 times tower height prescribed distance (35x3 = 105m) and community associations. All neighbouring land use jurisdictions, emergency service providers and school districts within 1,000 meters from the proposed antenna site will also be provided with written notices in accordance with the SS LTC Antenna System and Consultation Protocol. The proponent is also required to place notice in at least two editions of a local newspaper and a public information meeting notice shall also be placed in at least two editions of a local newspaper. The proponent will further be required with planning staff to determine a date, time and location for the meeting. Following the close of the notification period, the proponent must submit information as required by the Cell Tower Strategy, which will be provided along with a staff report requesting a statement of concurrence with the public consultation process from the LTC. In accordance with the SS LTC Antenna System and Consultation Protocol, the applicant will be required to provide the following for staff review prior to notification:

- draft of all public notices
- address list and map of all property owners and residents to be notified
- draft of newspaper ads
- copy of written notice referencing emergency service providers referral comments

NEXT STEPS

Should the proposal proceed, the proponent is required to submit an application requesting for statement of concurrence from the LTC.

Submitted By:	Oluwashogo Garuba, Planner 2	September 18, 2025
Concurrence:	Chris Hutton, Regional Planning Manager	October 10, 2025

ATTACHMENTS

1. Environmental Impact Assessment Report
2. Proponent's Justification Letter

ATTACHMENT 1

Environmental Assessment for the proposed Telecommunications Tower, located at 131 Knott Place, Salt Spring Island, BC

June 6, 2025 | Revision #0

Submitted to: SLI Towers Inc.
Prepared by: McElhanney Ltd.

Contact
Sandra Hemstock M.Sc, R.P.Bio
Senior Environmental Biologist
778-746-7519
shemstock@mcelhanney.com

Address
500 – 3960 Quadra Street,
Victoria BC Canada, V8X 4A3

Prepared by
Stefan McAvoy, B.S.c, R.P.Bio

Reviewed by
Sandra Hemstock, M.S.c, R.P.Bio

Our file: 2241-25034-00

Your Challenge.
Our Passion.

Contents

Executive Summary ..... **vi**

1. Introduction **1**

1.1. Project Overview 1
1.2. Objectives 2
1.3. Assessment Boundaries 2
1.4. Scope 3

2. Project Description **3**

2.1. Project Rationale 3

3. Methodology **4**

3.1. Environmentally Valuable Resources (EVRs) 4
3.2. Desktop Review 4
3.2.1. Land Use 5
3.2.2. Terrestrial Vegetation Resources 5
3.2.3. Terrestrial Wildlife Resources 6
3.2.4. Local Hydrology & Aquatic Resources 6
3.2.5. Species and Ecosystems at Risk 6
3.3. Field Assessment 7

4. Description of Existing Environment **7**

4.1. Land Use 7
4.2. Climate and Rainfall 9
4.3. Physiography and Topography 9
4.4. Terrestrial Resources 10
4.4.1. Landforms and Soils 10
4.4.2. Vegetation Communities 11
4.4.3. Plant Species at Risk 14
4.4.4. Ecological Communities at Risk 14
4.4.5. Invasive Plant Species 15
4.4.6. Wildlife Trees 16
4.4.7. Mammals 16

4.4.8. Birds 17
4.4.9. Amphibians and Reptiles 17
4.4.10. Wildlife Species at Risk 19
4.4.11. Critical Habitat 21
4.5. Aquatic Resources 21
4.5.1. Hydrology and Watercourses 21
4.5.2. Fish and Fish Habitat 22
4.5.3. Aquatic Species at Risk 22
4.6. Summary of Environmental Sensitivities 22
5. Associated Regulatory Context and Permits 22
5.1. Federal Legislation 23
5.1.1. *Migratory Birds Convention Act* (MBCA) 23
5.1.2. *Species at Risk Act* (SARA) 24
5.2. Provincial Legislation 24
5.2.1. Wildlife Act 24
5.2.2. Weed Control Act 24
6. Impact Assessment 24
6.1. Assessment of Impacts on Environmentally Valuable Resources 24
7. Environmental Mitigation Measures 26
7.1. Soil Management 26
7.2. Vegetation Management 26
7.2.1. Invasive Species 27
7.3. Wildlife and Wildlife Habitat Protection (SARA) 27
7.4. Least Risk Timing Windows for Birds 27
7.5. Air Quality & Dust Control 28
7.6. Noise Management 28
7.7. Spill Prevention and Emergency Response 29
7.8. Environmental Monitoring 29
8. Conclusions 29
9. Closing and Signature Page 31
References 32
Appendix A Statement of Limitations 35
Appendix B Historical Aerial Photographs 37
Appendix C Vegetation Survey Results 43

Appendix D CDC Search Results 45

Tables

Table 1. Key Project Data Sources. 4
Table 2. Invasive Plant Species Observed at the Site in May 2025. 15
Table 3. Mapped Nesting Locations in Proximity to the Site (WiTs, 2025). 17
Table 4. Potential amphibian and reptile species in the CDFmm zone which may occur within the LAA based on suitable habitat (Nuszdorfer, Klinka, and Demarchi, 1991) (BC Reptiles and Amphibians, 2025). 18
Table 5. Incidental observations of herptiles within a 5 km radius of the Site (Province of BC, 2025). 19
Table 6. At-risk vertebrate species within a 5 km search radius of the Site and their potential to use habitat available within the Project footprint (Province of BC, 2025). 20
Table 7. At-risk invertebrate species within a 5 km search radius of the Site and their potential to use habitat available within the Project footprint (Province of BC, 2025). 20
Table 8. Summary of applicable legislation and requirements for the Project. 22
Table 9. Potential environmental impacts of the Project on EVRs. 25
Table 10. Vegetation Survey Results from May 2025 44
Table 11. Provincially Listed Wildlife Species Potentially Occurring on Site based on Site Habitat Conditions (BC CDC, 2025). 46
Table 12. Provincially Listed Vascular and Non-vascular Plant Species Potentially Occurring on Site based on Site Habitat Conditions (BC CDC, 2025). 49
Table 13. Ecological Communities Search Results* – Terrestrial Realm (CDF in the Salt Spring Island Local Trust Area) (BC CDC, 2025). 50

Figures

Figure 1. General location of the Site located at 131 Knott Place, Salt Spring Island, BC (ortho courtesy of Google Earth). 1
Figure 2. Approximate Site Boundary (red outline) and Project footprint (yellow outline) located 131 Knott Place, Salt Spring Island, BC (ortho courtesy of Google Earth). 2
Figure 3. Regional topographic map (approximate Site boundaries outlined in yellow) (Map courtesy of (CRD, 2024)). 10
Figure 4. Soil Map showing soil polygon (information available through SIFT). 11
Figure 5. Vegetation Survey (VS) locations at the Site (approximate boundary of the Site and Project Footprint outlined in red and yellow respectively; base map courtesy of Google Earth 2023). 13
Figure 6. Inferred ecosystem mapping polygons (base map courtesy of Google Earth 2025). The approximate boundary of the Site is outlined in red. 14
Figure 7. Mapped surface water features within the LAA and RAA (iMapBC, 2025). 21

Photographs

Photograph 1. View of current Site conditions and use. 8
Photograph 2. View west of regenerating invasive vegetation on the southern Site boundary. 8
Photograph 3. View of mature trees Arbutus, Cedar, Big leaf maple, and Douglas fir at VS7. 13
Photograph 4. View of slope at VS8 showing disturbed understory and sub-mature trees. 13
Photograph 5. View at VS8 mature trees with invasive understory (May 25, 2025). 16
Photograph 6. Scotch broom observed in VS2 (May 5, 2025). 16

List of Acronyms Used

BC	British Columbia
BAEA	Bald eagle
BMPs	Best Management Practices
CDC	Conservation Data Centre (BC)
CDF	Coastal Douglas Fir
CDFmm	Coastal Douglas Fir moist maritime
CEMP	Construction Environmental Management Plan
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
DFO	Fisheries and Oceans Canada
EA	Environmental Assessment
ECCC	Environment and Climate Change Canada
EM	Environmental Monitor
ESC	Erosion and Sediment Control
EVR	Environmentally Valuable Resource
HADD	Harmful alteration, disruption, or destruction of their habitat
IBA	Important Bird Area
km	kilometre
LAA	Local Assessment Area
MBCA	*Migratory Birds Convention Act*
MWLARS	Ministry of Water, Land and Resource Stewardship
MoE	Ministry of Environment
MoF	Ministry of Forests
N/A	Not applicable
QEP	Qualified Environmental Professional
RAA	Regional Assessment Area
Rd	road

RFR	Request for Review
ROW	Right of Way
SARA	*Species at Risk Act*
SEI	Sensitive Ecosystem Inventory
SIFT	Soil Information Finder Tool
VS	Vegetation survey
WiTs	Wildlife Tree Stewardship
WSA	*Water Sustainability Act*

Executive Summary

McElhanney Ltd. was retained by SLI Towers Inc. to conduct an Environmental Assessment (EA) for the proposed telecommunications tower located at 131 Knott Place, Salt Spring Island, British Columbia (BC). The EA was conducted to evaluate the potential for environmental sensitivities within the Local Assessment Area (LAA) and to support appropriate mitigation planning during construction.

The LAA was evaluated for potential terrestrial and aquatic habitat and habitat value for plants, mammals, birds, amphibians, fish, and reptiles. The LAA was evaluated for Environmentally Valuable Resources (EVRs) which were defined as the biophysical components within or around the Site which may directly or indirectly be impacted by the Project.

The Site is characterized by historical disturbance, including gravel fill and compacted surfaces, and lacks intact native vegetation communities or habitat features of ecological sensitivity. While several species of wildlife were identified within the Regional Assessment Area (RAA), no species at risk or critical habitat were observed at the Site. Habitat potential for wildlife and at-risk species is considered low due to limited structural diversity, invasive vegetation, and surrounding development.

The Project footprint is located within a gravel storage yard that supports a small patch of regenerating vegetation. This area provides low to moderate habitat value for birds and small mammals. Although the immediate surroundings are highly disturbed and contribute to habitat fragmentation and the spread of invasive plant species, the site is directly adjacent to a forested park to the south, which contains mature native trees and supports a more diverse and sensitive ecosystem. This adjacent parkland likely serves as important habitat for a variety of wildlife species, including nesting birds, pollinators, and potentially species at risk. Construction activities may result in indirect impacts such as noise, dust, and light pollution, which could disturb wildlife using the adjacent forested areas. To minimize environmental impacts, protective measures should be implemented to protect the regenerating vegetation within the Project footprint to the extent feasible, prevent the spread of invasive species, and mitigate disturbances to wildlife in the adjacent parkland, particularly during sensitive periods such as the breeding season.

Environmental Valuable Resources identified for protection:

- Regenerating vegetation within the gravel yard.
- Habitat for birds and small mammals within the Project footprint.
- Adjacent mature forest in the parkland to the south.
- Wildlife corridors and connectivity through the regenerating vegetation to nearby habitat.
- Nesting birds and sensitive species in adjacent habitats.
- Pollinators and native plant communities in the forested park.
- Potential species at risk within nearby habitats.

Compliance with the following legislation is anticipated for this Project and must be confirmed following final design:

- The *Migratory Birds Convention Act* with respect to mitigating impacts on breeding birds,
- The *Species at Risk Act* with respect to at-risk wildlife and vegetation, and
- The *Weed Control Act* with respect to invasive plant species.

Without the implementation of appropriate Best Management Practices (BMPs), potential impacts may occur during design and construction of the Project. This EA contains general mitigations measures that can be used as a framework for the Contractor to develop a Construction Environmental Management Plan (CEMP), written by a Qualified Environmental Professional (QEP). Site specific construction environmental mitigation strategies will be planned and addressed in the CEMP. Given the existing level of disturbance, it is inferred that this Project would result in low to negligeable impacts with the appropriate implementation of BMPs.

1. Introduction

1.1.PROJECT OVERVIEW

McElhanney Ltd. (McElhanney) was retained by the SLI Towers Inc. (the Client) to conduct an Environmental Assessment (EA) to in support of the installation of a telecommunications tower at 131 Knott Place on Salt Spring Island, BC; herein referred to as the Site (see *Figure 1* and *Figure 2*). This EA summarizes the results of a detailed environmental assessment of biophysical components and includes information gathered during a Site visit conducted to identify and assess Environmentally Valuable Resources (EVRs) within and around the Project Site. It is understood that information in this report will support the design team in confirming that the identified Project footprint is appropriate for the proposed development.

Figure 1. General location of the Site located at 131 Knott Place, Salt Spring Island, BC (ortho courtesy of Google Earth).

Figure 2. Approximate Site Boundary (red outline) and Project footprint (yellow outline) located 131 Knott Place, Salt Spring Island, BC (ortho courtesy of Google Earth).

1.2.OBJECTIVES

This EA was conducted to confirm the presence and condition of EVRs within the assessment area, to provide guidance concerning potential environmental impacts, and to recommend mitigation strategies to avoid or minimize impacts to environmental features. The objective of the EA is to provide input in order to minimize potential impacts to EVRs identified in this report as a result of Project construction.

This EA was prepared by a Qualified Environmental Professional (QEP) and outlines the following:

- The findings of a desktop and field investigation with figures showing identified and potential EVRs,
- Anticipated federal and provincial permit requirements for the construction of the Project (as applicable),
- Recommended mitigation strategies to be employed by the Project, and
- Areas where follow-up information may be required.

1.3.ASSESSMENT BOUNDARIES

Spatial assessment areas for this Project were defined as follows:

- The **Site** is defined as the subject property,

- **Project footprint**: defined as areas of direct impact as part of construction of the Project including staging areas,
- **Local Assessment Area (LAA)**: defined as areas within the property boundary of the Site plus 100 m, and
- **Regional Assessment Area (RAA)**: includes areas within a 5 km radius of the Site for broad-based reviews of biogeographical databases. Note that database search areas were variable depending on the species or environmental resource. For example, plants and ecosystem searches used a 500 m radius to more accurately reflect ecosystems that could be potentially impacted by the Project, whereas wildlife searches used a larger area due to mobility of the species within the area.

The Site visit focused only on areas with the property boundary, while the desktop assessment included both the LAA and RAA.

1.4.SCOPE

This EA consisted of two key components: the review of existing Project information and publicly available historical data (desktop study), and verification of desktop findings through a Site visit. The EA focused on terrestrial and aquatic habitat within the RAA, while field verification was limited to the Site. This EA was conducted to meet the following scope:

- Identify the baseline for sensitive ecological features including species and ecosystems potentially located in the study area,
- Identify surface water features including streams and wetlands located within and around the Project Site,
- Evaluate the potential for environmental impacts based on the anticipated Project footprint and most probable methods of construction,
- Identify or describe proposed compensation and/or mitigation measures, or Best Management Practices (BMPs), to offset potential impacts/effects to environmental baseline conditions or EVRs,
- Identify potential environmental regulatory requirements for Project construction and additional assessments that may be necessary to satisfy regulatory requirements, and
- Provide environmental information to factor into the design decision-making process.

The statement of limitations is included as *Appendix A*.

2. Project Description

2.1.PROJECT RATIONALE

SLI Towers Inc. is proposing to install a telecommunications tower at 131 Knott Place, Salt Spring Island, BC. The Islands Trust, as the land-use authority for Salt Spring Island, has requested that an environmental assessment be undertaken to ensure potential impacts to sensitive ecosystems are appropriately considered. The assessment will support responsible project planning in alignment with the Islands Trust's mandate to preserve and protect the unique environmental and community values of the island.

3. Methodology

3.1.ENVIRONMENTALLY VALUABLE RESOURCES (EVRS)

Environmentally Valuable Resources (EVRs) are the biophysical components within or around the assessment area which may directly or indirectly be impacted by the Project. To confirm EVRs as part of this EA, several biophysical resources were assessed and are defined as follows:

- **Land Use:** defined as the human use of the land. Land use involves the management or modification of the natural environment,
- **Landforms & Soils:** a landform is a feature on the Earth's surface that is part of the terrain. Examples include mountains, hills, ravines, valleys, and plains. Soil is defined as the upper layer of the Earth's surface in which plants grow,
- **Local Hydrology:** defined as surface water resources including freshwater streams, wetlands, constructed ditches, and their connectivity including Site drainage,
- **Terrestrial Vegetation Resources:** defined as plant species, plant communities, and plant species at risk,
- **Terrestrial Wildlife Resources:** defined as wildlife habitat, observations of animals/signs of usage within the assessment area, and wildlife species at risk,
- **Aquatic Resources:** defined as areas where the presence of water is a dominant process. Aquatic resources may include, but are not limited to, lakes, streams, wetlands, constructed ditches, freshwater receiving environments, the aquatically adapted plant and animal species which use these resources, and their habitat.

3.2.DESKTOP REVIEW

A desktop literature review was completed as part of this assessment. Data was collected through desktop review of federal, provincial, and regional databases to identify any known environmentally sensitive elements in the area; a summary of key databases and mapping applications is presented in *Table 1*.

Table 1. Key Project Data Sources.

Source	Data	Scale of Review
Google Earth (Google Earth, 2025)	Change and impacts to natural vegetation through time	LAA
CRD Regional Map (CRD, 2024)	Civic addresses, aerial images, contour data, environmental data	RAA
iMapBC (iMapBC, 2025)	Climate and biogeoclimatic info Hydrological information Remediation sites	RAA
BC Conservation Data Centre (CDC) Species and Ecosystems Explorer (BC CDC, 2025)	Rare and endangered species occurrences Rare and endangered plant community occurrences Critical habitat for Species at Risk	RAA

Source	Data	Scale of Review
CDC iMap (Province of BC, 2025)	Spatial mapping of rare and endangered species occurrences	RAA
Habitat Wizard (Province of BC, 2025)	Hydrology and fish species information Incidental and survey wildlife occurrences Documented streams and water bodies	RAA
Wildlife Tree Stewardship Atlas (Community Mapping Network, 2025)	Raptor nesting sites and wildlife trees	RAA
Sensitive Ecosystem Inventory (SEI) (Community Mapping Network, 2025)	Sensitive ecosystems including wetlands	RAA
Sensitive Habitat Inventory Mapping (SHIM) (Community Mapping Network, 2025)	Sensitive habitats including salmon distribution mapping	RAA
E-Fauna BC (E-Fauna BC, 2025)	Distribution of non-sensitive fauna	RAA
E-Bird Canada (Cornell University, 2025)	Mapped observations of bird species	RAA
BC Soil Information Finder Tool (SIFT) (Province of BC, 2018)	Soil distribution and subsurface features	RAA

3.2.1. Land Use

Land use was assessed through a historic aerial photograph review, a web-based search of civic addresses, and a Site visit to determine the level of existing impacts to natural environments within the LAA.

3.2.2. Terrestrial Vegetation Resources

Vegetation resources were assessed through a Site visit and a review of provincial and federal web-based databases, as well as the following resources:

- Biogeoclimatic Ecosystem Classification Subzone/Variant Map for the South Island Resource District West Coast Region (BC Ministry of Forests, 2021),
- Ecosystems of British Columbia Chapter 5 Coastal Douglas-fir Zone (Nuszdorfer, Klinka, and Demarchi, 1991),
- A Field Guide to Site Identification and Interpretation for the Vancouver Forest Region (Green & Klinka, 1994), and
- Non-native invasive plant species (as listed in the *Weed Control Act* (Province of BC, 2025).

Queries were conducted within the BC Conservation Data Centre (CDC) Species and Ecosystems Explorer (BC CDC, 2025) and iMapBC 4.0 (iMapBC, 2025) databases for known at risk ecological communities, vascular plant and non-vascular plant species associated with the Coastal Douglas Fir moist maritime (CDFmm) Biogeoclimatic zone. Search parameters for queries completed within the CDC Species and Ecosystems Explorer included those species as listed within the Capital Regional District, while spatial assessments boundaries completed with iMapBC were limited to a 500 m radius around the Site. Qualitative species inventories were further refined based on Site conditions confirmed during the Site visit. Inventories were completed so that a complete plant list may be produced identifying dominant and non-native/invasive species throughout the assessment area. Ecosystems were identified through observations of vegetation

assemblages throughout the assessment area during the Site visit. Vegetation was defined as plant species, plant communities, and plant species at risk.

3.2.3. Terrestrial Wildlife Resources

Terrestrial wildlife resources were assessed through a Site visit and a review of provincial and federal web-based databases. Queries were conducted within the CDC Species and Ecosystems Explorer (BC CDC, 2025) and iMapBC 4.0 (iMapBC, 2025) databases for known at risk wildlife species associated with the CDFmm Biogeoclimatic zone. Queries for incidental observations of wildlife species were also completed using Habitat Wizard (both at-risk and not at-risk species). Online database searches were conducted within a 5 km radius of the Site unless otherwise noted.

The LAA was reviewed for incidental observations relating to evidence of wildlife including nests, scat, tracks, and burrows during the Site visit. Wildlife habitat conditions were supplemented with information obtained in a literature review for species typical in the CDFmm biogeoclimatic zone. This information, in combination with the photograph log of the Site, was reviewed to define an overview of potential habitat suitability, wildlife movement, and/or level of disturbance. Qualitative species inventories were completed based on habitat conditions confirmed during the Site visit.

Wildlife was defined as wildlife habitat and typical species known to frequent the area as indicated through a literature review.

3.2.4. Local Hydrology & Aquatic Resources

Hydrological resources and aquatic habitat and species were assessed through a Site visit and a review of provincial and federal web-based databases. The LAA was assessed for aquatic resources during field reconnaissance and a desktop review of available databases was completed to determine known water features in the surrounding area. No instream assessments to characterize fish or their habitat were completed as part of this EA and aquatic species inventories were completed based on available database information. Aquatic habitat was defined as streams, wetlands, constructed ditches, and constructed ponds.

3.2.5. Species and Ecosystems at Risk

The BC CDC Species and Ecosystems Explorer database was accessed to determine vertebrate and invertebrate at-risk species in the CVRD. Habitat preferences were noted for each listed species within the South Island Forest District (Klinkenberg (Editor), 2020), (iMapBC, 2025).

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was established under Section 14 of the federal *Species at Risk Act* (Government of Canada, 2025). COSEWIC is a committee that assesses and designates which wild species of animal, plant, or other organisms are at risk of loss from the wild in Canada. Below is a listing of the federal status categories used by COSEWIC and SARA to rank or list a species:

- **Endangered** – a species facing imminent extirpation or extinction.
- **Threatened** – a species likely to become endangered if limiting factors are not reversed.

- **Special Concern** – a species that is particularly sensitive to human activities or natural events but is not endangered or threatened.
- **Data Deficient** – a species for which there is insufficient scientific information to support status designation.
- **Not at Risk** – a species that has been evaluated and found not to be at risk.
- **Extirpated** – a species that no longer exists in the wild in Canada but occurring elsewhere in the world.

Federally listed species and their critical habitats are protected under SARA. The above designations used in this report indicate the status of wildlife species potentially present as per the provincial and federal listings of species at risk.

The CDC assigns a provincial rank or listing that ascribes to each species a 'red', 'blue' or 'yellow' designation based on its population status within BC (B.C. Conservation Data Centre, 2023). The rankings are described below:

- **Red** – any indigenous species, subspecies or ecological community that is extirpated, endangered, or threatened in BC.
- **Blue** – any indigenous species, subspecies or ecological community considered to be vulnerable or of special concern in BC. Blue listed elements are at risk, but are not extirpated, endangered, or threatened.
- **Yellow** – any indigenous species, subspecies or ecological communities that are apparently secure and not at risk.

3.3.FIELD ASSESSMENT

A Site visit was completed on May 5, 2025, in spring conditions which included a visual overview of the Site and surrounding area. The assessment included identification of vegetation species, recording of invasive plant species, observations of wildlife and/or wildlife habitat, and identification of streams or other aquatic resources within the LAA.

4. Description of Existing Environment

4.1.LAND USE

A desktop review of available historical aerial imagery (2005–2024) (*Appendix B*), along with a Site visit, was conducted to assess both the historical and current conditions of the Site and surrounding area. Knott Place is a private road located south of Rainbow Road, bordered by several narrow lots. Historically, the properties along Rainbow Road were residential, but the area has since transitioned to commercial and industrial uses.

The Site is located at the southern terminus of Knott Place and shows no evidence of permanent structures within its development footprint. Aerial imagery confirms that the Site has been cleared and disturbed since at least 2005. Since the initial disturbance, the boundaries have gradually regenerated with vegetation. The

land was graded to create a level surface, and gravel fill was imported to establish a parking area. Until as recently as 2022, the Site primarily functioned as a vacant gravel lot. More recent imagery and observations during the site visit indicate is current use as a storage year, with various equipment, trailers, and vehicles present.

The Site is characterized by compacted gravel surfaces interspersed with vegetated areas, particularly along the perimeter. Over time, the extent of surface disturbance has remained relatively stable. *Photographs 1* and *2* show current site conditions.

Photograph 1. View of current Site conditions and use.

Photograph 2. View west of regenerating invasive vegetation on the southern Site boundary.

According to BC assessment records, the building immediately north of the Site at 125 Knott Place was constructed in 2003 and is currently a medical supply company. To the northwest, at 327 Rainbow Rd, is a rental equipment and mini-storage business developed in 1997. Adjacent to the Site's northwest corner, at 319 Rainbow Rd, is Pretzel Motors Ltd., an auto repair shop that has been in business for 26 years as reported by the Better Business Bureau.

A registered easement, approximately 20 m wide, runs along the eastern boundary of the property. This easement is intended to accommodate future road access connecting Atkins Road to areas south of the Site. To the south, the property is bordered by Mouat Park, a large public park featuring an extensive trail network.

4.2.CLIMATE AND RAINFALL

Climatic conditions at the Site were inferred based on data provided by Environment Canada, Canadian Climate Normals 1991-2020 (Government of Canada, 2025). Recorded climate conditions for the Victoria Airport station were considered representative of the Site based on their proximity to that station. Mean daily temperatures by month recorded between 1991 and 2020 ranged between 4.4 degrees Celsius (°C) in December to 17.2°C in July. Annual precipitation was 866.6 mm with monthly average lows of 19.5 mm in July and highs of 144.2 mm in January.

Climate within the CDFmm biogeoclimatic zone is typically warm and dry in the summer months, with mild, wet winters owing to its location within the rain shadow of the Vancouver Island and Olympic Mountain ranges (Green & Klinka, 1994). Water deficits are common on zonal and drier sites.

4.3.PHYSIOGRAPHY AND TOPOGRAPHY

The local topography slopes to the north towards Rainbow Road. The southern boundary of the Site is 67 meters above sea level (masl) and descends to an elevation of 44 masl on the northern boundary (*Figure* 3). The topography has been modified to create the gravel lot in the central portion of the Site, which has an elevation of approximately 57-58 masl.

Figure 3. Regional topographic map (approximate Site boundaries outlined in yellow) (Map courtesy of (CRD, 2024)).

4.4.TERRESTRIAL RESOURCES

A characterization of terrestrial resources was completed as part of the assessment and was based on a desktop review and Site visit. Terrestrial resources assessed included vegetation, wildlife, and wildlife habitat, each of which is detailed in the following sections.

4.4.1. Landforms and Soils

The historic aerial photograph review and site visit indicated that the central portion of the Site has anthropogenic gravel fill materials and native topsoil was stripped as part of site grading activities. A review of the contour data provides evidence that native soils may have been retained on the vegetated areas of the Site following initial clearing activities.

Available soil survey reports and maps for British Columbia were reviewed to determine surficial geology and soil types at the Site. The BC Soils Information Finder Tool (SIFT) provided information on soil survey data for the Site from the Soils of Southeast Vancouver Island Duncan-Nanaimo Area MOE Technical Report 15 (Jungen, Sandborn, & Christie, 1985).

The soil order is the highest level (broadest grouping) within the Canadian System of Soil Classification (Keser & Pierre, 1973). Soils classified at the order level reflect the climate and landscape characteristics associated with the different regions of Canada. The Site is located within a polygon mapped as Qualicum

soil, which falls under the Brunisolic soil order and is further classified as an Orthic Dystric Brunisol, see *Figure 4*. Soils of this order are typically associated with forested regions where soil development is limited by factors such as parent material and climate. Orthic Dystric Brunisols generally exhibit organic surface horizons overlying brownish B horizons, with acidic conditions in the subsoil. These soils commonly develop on glaciofluvial deposits and are expected to be well-drained, with coarse textures and significant gravel content (Jungen, Sandborn, & Christie, 1985). While the broader classification provides a general expectation of soil characteristics, site-specific properties such as texture, drainage, and rooting conditions have not been confirmed through detailed assessment.

Figure 4. Soil Map showing soil polygon (information available through SIFT).

4.4.2. Vegetation Communities

The Site is located within the CDFmm biogeoclimatic subzone, typically found in low elevations along southeast Vancouver Island (Green & Klinka, 1994). Most forests that are found today in the CDFmm have were logged at the turn of the century, as is likely the case on-Site. The understory in the CDFmm is typically

dominated by Salal (*Gaultheria shallon*), Dull Oregon-grape (*Mahonia nervosa*), Ocean-spray (*Holodiscus discolor*), and Oregon beaked moss (*Kindbergia oregana*).

Topographic position is frequently correlated with the soil moisture regime, and thus the vegetation community structure. In the CDFmm zone, there are four common plant communities that occupy a gradient of soil moisture regimes ranging from very dry to wet and that have not been disturbed for a minimum of 50 years (Nuszdorfer, Klinka, and Demarchi, 1991). These plant communities range from very dry Douglas fir–Arbutus forests to wetter Red alder–Salmonberry stands—these are generally associated with undisturbed or naturally regenerating conditions.

The vegetation characteristics of the Site is heavily influenced by anthropogenic disturbances. Vegetation communities were all previously disturbed, with no plots representing undisturbed native ecosystems. A vegetation survey was completed on May 5, 2025, included nine survey locations within the LAA in areas in which vegetation was observed. *Photographs 3 and 4* show typical vegetation observed on the Site. Vegetation Survey (VS) points and vegetation community mapping are shown in *Figure 5* and *Figure 6.* Refer to *Appendix C* for the detailed results of the vegetation survey.

The vegetation plots surveyed across the Site (VS1–VS9) were all situated in disturbed areas and did not align with typical regenerating plant communities described for the CDFmm. Instead, the surveyed areas were characterized by a dominance of invasive species such as Himalayan blackberry (*Rubus armeniacus*) and Scotch broom (*Cytisus scoparius*), with native tree and shrub species occurring only sporadically or in isolated patches. This suggests that natural regeneration has been significantly hindered, and the current vegetation composition reflects ongoing disturbance and limited successional development. Refer to *Figure 6* for inferred ecosystem mapping of the Site

Two vegetation plots were situated immediately adjacent to the Project footprint (VS7 and VS8). VS7 included a mixture of native species, including scattered mature trees such as Arbutus (*Arbutus menziesii*), Bigleaf maple (*Acer macrophyllum*), Douglas fir (*Pseudotsuga menziesii*), and Western red cedar (*Thuja plicata*). However, invasive species such as Scotch broom and Himalayan blackberry were equally dominant in the understory. VS8, located north and downslope of VS7, exhibited similar species composition, but with younger tree growth and greater understory disturbance. It is likely that at VS7, the mature trees were retained during site clearing that occurred approximately 20 to 25 years ago, whereas at VS8 the size of the trees indicates they have regenerated since the Site was cleared.

Photograph 3. View of mature trees Arbutus, Cedar, Big leaf maple, and Douglas fir at VS7.

Photograph 4. View of slope at VS8 showing disturbed understory and sub-mature trees.

Figure 5. Vegetation Survey (VS) locations at the Site (approximate boundary of the Site and Project Footprint outlined in red and yellow respectively; base map courtesy of Google Earth 2023).

Figure 6. Inferred ecosystem mapping polygons (base map courtesy of Google Earth 2025). The approximate boundary of the Site is outlined in red.

4.4.3. Plant Species at Risk

The BC CDC was queried for regional listings of provincially designated threatened or endangered vascular and non-vascular plants identified within the CDFmm. Search results were then refined to exclude those species that lacked available habitat within or near the Site. Results are provided in *Appendix D*. The CDC iMap was also used to search known element occurrences for at-risk plant species within 500 m of the Site; however, no occurrences were identified.

No at-risk species were observed during the Site visit. Given that the Site is disturbed, with limited regenerating vegetation and few mature trees within the Project footprint, there is the low potential for at-risk vascular and non-vascular species to be present.

4.4.4. Ecological Communities at Risk

The CDC was queried for regional listings of provincially designated threatened or endangered ecological communities identified within the CDFmm within the RAA. The provincial database search results identified a mapped occurrence of the red-listed Grand fir / dull Oregon grape (*Abies grandis* / *Berberis nervosa*)

ecological community falls within the LAA, specifically in the southeast portion of the Site. However, results from the site visit and vegetation survey do not support the presence of this ecological community within the current Site boundaries. Although, the mapped occurrence overlaps with the upper slope near VS1, field observations in this area recorded extensive understory disturbance dominated by invasive species such as Himalayan blackberry and Scotch broom, with low native species diversity and coverage.

Vegetation plots across the Site (VS1–VS9) consistently reflected heavily disturbed conditions, limited structural complexity, and a predominance of non-native shrub species. Scattered native trees, including Douglas fir and Bigleaf maple, were present only in fragmented or early successional contexts and did not demonstrate the composition, structure, or intact understory characteristics of the Grand-fir/dull Oregon grape ecological community. Based on field observations and the aerial photograph, this at-risk ecological community is not considered present on-Site.

Appendix D contains the CDC search results for potential at-risk ecosystems refined by the available habitat that may occur within the RAA. The Site is directly adjacent to a natural forested area within a park, which may contain at-risk ecosystems. The park vegetation was not assessed during the field visit.

4.4.5. Invasive Plant Species

Invasive plant species tend to establish quickly, spread rapidly, and overtake native species habitat preventing the natural regeneration of an ecosystem. Invasive and non-native plant species were observed during the vegetation survey completed in May of 2025 and are summarized in *Table 2. Photographs 5 & 6* show typical invasive species on the Site.

Table 2. Invasive Plant Species Observed at the Site in May 2025.

Common Name	Scientific Name	Type of Plant
Scotch broom	*Cytisus scoparius*	Shrub
English bluebells	*Hyacinthoides non-scripta*	Herbaceous
Himalayan blackberry	*Rubus armeniacus*	Shrub
Grass species	*Poaceae spp. (not identified)*	Herbaceous

Himalayan blackberry and Scotch broom were widespread across the Site and frequently formed dense, monodominant thickets within disturbed areas, particularly along slope margins, infilled zones, and around the footprints of former structures. In several vegetation plots (e.g., VS2, VS3, VS4, VS5, and VS8), these invasive species were the dominant understory cover, often smothering native regeneration and reducing habitat quality. Additional invasive species such as English bluebells (*Hyacinthoides non-scripta*) and non-native grass species were also observed in localized patches.

Photograph 5. View at VS8 mature trees with invasive understory (May 25, 2025).

Photograph 6. Scotch broom observed in VS2 (May 5, 2025).

4.4.6. Wildlife Trees

Wildlife trees are standing live or dead trees that provide critical habitat for a range of species, including cavity-nesting birds, mammals, and invertebrates. No wildlife trees were identified during the Site visit and no trees exhibited the structural characteristics-such as cavities, broken tops, large dead branches, or loose bark typically associated with wildlife tree habitat functions. The absence of these features suggests limited suitability for cavity-nesting birds, bats, or other wildlife species.

However, mature trees within the LAA and RAA could provide suitable habitat for nesting passerines and provide valuable wildlife habitat they for avian and other species, such as bats. Other functions of mature trees, which may become important wildlife trees, include feeding, communication (drumming, marking) roosting, shelter, and overwintering. When trees in settled areas are managed for wildlife, and trees with wildlife tree features are maintained, some wildlife species that depend on these trees can be expected to remain in, or even return to, highly fragmented urban and rural forests (Fenger, 2006).

4.4.7. Mammals

The Site provides limited observable evidence of mammal activity based on the Site visit. No direct sightings or field indicators such as tracks, scat, or burrows were recorded within the Site boundary. While some suitable cover exists in areas, such as the regenerating forest near the Project footprint, urban development and fragmentation likely limit the suitability of the Site as consistent habitat for terrestrial mammals. However, species typically associated with urban-rural environments may opportunistically use the Site. Raccoons (*Procyon lotor*) and Eastern cottontail rabbits (*Sylvilagus floridanus*), for example, may utilize vegetated margins for foraging or cover. Larger mammals such as deer or bears may pass through the site as a movement corridor between adjacent habitats.

A review of provincial data for incidental mammal observations within the RAA (a 5 km search radius of the Site) was completed to determine species that are most likely to be encountered in or near the Site. Multiple mammal species were identified within a 5 km search radius are summarized in *Appendix D*.

Given the disturbed nature of the Site and limited structural habitat complexity, it is unlikely that large mammals would rely on the Site for regular use or habitat functions. Refer to *Section 4.4.10* for a summary of wildlife species at-risk with the potential to be present within the RAA.

4.4.8. Birds

A detailed bird and nesting survey were not completed during the Site visit, incidental observations were noted, and the assessment was supplemented with desktop review. The LAA contains moderate to high quality habitat features for birds (including passerines and raptors). Wildlife trees that provide nesting opportunities for both passerines and raptors were not observed on-Site but are inferred to occur within the LAA, with Mouat Park directly to the south providing high quality habitat for birds and wildlife (refer to *Section 4.4.6*).

Numerous birds are expected to use the low to moderate habitat available within the vegetated margins of the Site. Common species in the region include Spotted towhee (*Pipilo maculatus*), American robin (*Turdus migratorius*), Downy woodpecker (*Picoides pubescens*), Black-capped chickadee (*Poecile rufescen*), Northern flicker (*Colaptes auratus*), Anna's hummingbird (*Calypte anna*), and Song sparrow (*Melospiza melodia*). Other species may also include the Pileated woodpecker (*Hylatomus pileatus*), Yellow-bellied sapsucker (*Sphyrapicus varius*), Hairy woodpecker (*Leuconotopicus villosus*), Steller's jay (*Cyanocitta stelleri*), Common raven (*Corvus corax*), Chestnut-backed chickadee (*Poecile rufescens*), Brown creeper (*Certhia americana*), Winter wren (*Troglodytes hiemalis*), and Varied thrush (*Ixoreus naevius*), all of which eat conifer seeds or wood-boring insects (Nuszdorfer, Klinka, and Demarchi, 1991).

The Wildlife Tree Stewardship (WiTs) atlas (WiTs, 2025) was reviewed for the proximity of osprey and eagle nests to the Project footprint. There were no protected nests identified within the LAA; however, there was one Bald eagle *(Haliaeetus leucocephalus)* nest on record within a 2 km radius of the Site. The nest is approximately 1.2 km to the east and would not be influenced by development at the Site given the proximity. A summary of this mapped nest is present in *Table 3.*

Table 3. Mapped Nesting Locations in Proximity to the Site (WiTs, 2025).

Common Name	Scientific Name	Nest ID*	Notes	Distance to the Site
Bald eagle	*Haliaeetus leucocephalus*	BAEA-101-454	Last observed in 2004 from the Vesuvius Bay Ferry Terminal.	1.2 km E

Important Bird Areas

No Important Bird Areas (IBAs) were identified in the LAA or RAA (IBA Canada, 2025). The nearest IBA is the McFadden Creek Heronry located over 10 km north of the Site. Given the absence of open water and limited connectivity to suitable foraging or nesting habitat, the Site is not expected to provide any ecological benefit to birds utilizing the McFadden Creek IBA.

4.4.9. Amphibians and Reptiles

Herptiles (i.e., reptiles and amphibians) were not observed during the Site visit. Habitat value for reptiles was considered low due to extensive disturbance on Site and the lack of aquatic environments and rocky

outcrop habitats that provide for breeding, refuge, sunning and thermoregulation (i.e., basking), and forage that is required for these species. Coarse vegetation on the forest floor may provide hibernacula potential (meaning a place to seek refuge) for reptiles.

Table 4 summarizes herptiles which may potentially habitat within the LAA, these species are identified as typical in the CDFmm biogeoclimatic zone (Nuszdorfer, Klinka, and Demarchi, 1991).

Table 4. Potential amphibian and reptile species in the CDFmm zone which may occur within the LAA based on suitable habitat (Nuszdorfer, Klinka, and Demarchi, 1991) (BC Reptiles and Amphibians, 2025).

Common Name	Scientific Name	Type	Habitat in CDFmm*	Likelihood of Presence Based on Suitable Habitat**
American Bullfrog*	*Lithobates catesbeianus*	Amphibian	• Riparian areas	• **Unlikely** • Heavily reliant on aquatic environments and thus require large, permanent bodies of water for breeding and hibernation. • They may move between permanent and seasonal ponds until they dry up.
Northern Red-legged frog	*Rana aurora*	Amphibian	• Riparian areas	• **Unlikely** • Optimal breeding habitats are highly vegetated, permanent water bodies up to 2400 m. • Outside of the breeding season may disperse up to 4 km from breeding sites, often into moist forests. • May be found foraging on land. • Can be found in a variety of forest successional stages. • Hibernation may be aquatic or underground in terrestrial habitats.
Pacific treefrog	*Pseudacris regilla*	Amphibian	• Young seral and managed second-growth forests • Mixed coniferous and deciduous forests	• **Unlikely** • Outside the breeding season, in early spring, found in woodlands, meadows, pastures, and even urban areas, often quite far from the nearest body of water. • During the breeding season, the Pacific Treefrog makes its way to shallow wetlands where there is a lot of plant cover. • Often these wetlands or ponds are temporary, drying up by midsummer; they are called “ephemeral” wetlands.
Long-toed Salamander	*Ambystoma macrodactylum*	Amphibian	• Riparian areas	• **Unlikely** • Breed in large, shallow lakes and ponds with boggy edges and no predatory fish are best. • On land, valley bottoms and moist forests not far from water are preferred.
Northwestern Salamander	*Ambystoma gracile*	Amphibian	• Young seral and managed second-growth forests • Mixed coniferous and deciduous forests	• **Moderate** • Dependent on both forests and permanent water bodies. • Found in a wide variety of habitats, they are most common in mature, cool, moist forests, where they spend most of their time underground.
Rough-skinned newt	*Taricha granulosa*	Reptile	• Riparian areas	• **Unlikely** • Adults are primarily found in older mixed forests with abundant litter and woody debris, sometimes in cedar forests (rarely).

Common Name	Scientific Name	Type	Habitat in CDFmm*	Likelihood of Presence Based on Suitable Habitat**
				• Breeding occurs in ponds, bogs, swamps, and slow-moving streams, mainly in the spring.
Western gartersnake	*Thamnophis ordinoides*	Reptile	• Riparian areas	• **Moderate** • Primarily terrestrial, occurring in a variety of habitats including meadows, forest clearings, and along the edges of thickets. • Garter snakes rely on adequate cover from predators and are likely to spend much of their time thermoregulating under various types of cover.
Sharp-tailed snake	*Contia tenuis*	Reptile	• Young seral and managed second-growth forests • Mixed coniferous and deciduous forests	• **Moderate** • Dependent on forests and rocky outcrops or hillsides. • Cover is required for shelter, such as rocks or downed wood.
Northwestern gartersnake	*Thamnophis ordinoides*	Reptile	• Riparian	• **Moderate** • Terrestrial but often found near aquatic habitats in areas that are densely vegetated like meadows, forest edges, estuaries, and beaches. • Cover objects are important microhabitat features affording shelter and thermoregulation opportunities. • Hibernation is in deep rock caverns or crevices.

*Note: * indicates an invasive species (not native to BC).*

A review of provincial data for incidental reptile observations within the RAA (a 5 km search radius of the Site) was completed to determine species that are most likely to be encountered in or near the Project footprint. Search results are summarized in *Table 5*.

Table 5. Incidental observations of herptiles within a 5 km radius of the Site (Province of BC, 2025).

English Name	Scientific Name	Type	BC List	COSEWIC Status
Northern red-legged frog	*Rana aurora*	Amphibian	Blue	SC
Northwestern garter snake	*Thamnophis ordinoides*	Reptile	Yellow	-
Sharp-tailed snake	*Contia tenuis*	Reptile	Red	E
Painted turtle	*Chrysemys picta bellii*	Reptile	-	-

*Note: * indicates an invasive species (not native to BC).*

Refer to *Section 4.4.10* for a summary of wildlife species at risk with the potential to be present at the Site.

4.4.10. Wildlife Species at Risk

There were twenty-four elemental occurrences for at-risk vertebrate and invertebrate wildlife species identified within 5 km of the Site (iMapBC, 2025), as summarized in *Table 6* and *Table 7*. No at-risk species were observed during the Site visit.

Table 6. At-risk vertebrate species within a 5 km search radius of the Site and their potential to use habitat available within the Project footprint (Province of BC, 2025).

English Name	Scientific Name	Type	BC List	COSEWIC Status
Western Screech-owl, Kennicottii Subspecies	*Megascops kennicottii kennicottii*	birds	Blue	T
Roosevelt Elk	*Cervus canadensis roosevelti*	mammals	Blue	-
Western Skink	*Plestiodon skiltonianus*	reptiles	Blue	SC
Sharp-tailed Snake	*Contia tenuis*	reptiles	Red	E/T
Northern Red-legged Frog	*Rana aurora*	amphibians	Blue	SC
Great Blue Heron, Fannini Subspecies	*Ardea herodias fannini*	birds	Blue	SC
Band-tailed Pigeon	*Patagioenas fasciata*	birds	Blue	SC
Common Nighthawk	*Chordeiles minor*	birds	Blue	SC
Northern Pygmy-owl, Swarthi Subspecies	*Glaucidium gnoma swarthi*	birds	Blue	-
Double-crested Cormorant	*Phalacrocorax auritus*	birds	Blue	-
Surf Scoter	*Melanitta perspicillata*	birds	Blue	-
Purple Martin	*Progne subis*	birds	Blue	-
Sharp-tailed Snake	*Contia tenuis*	reptiles	Red	E/T
Little Brown Myotis	*Myotis lucifugus*	mammals	Blue	E
Peregrine Falcon, Anatum Subspecies	*Falco peregrinus anatum*	birds	Red	-
Black Swift	*Cypseloides niger*	birds	Blue	E
Barn Owl	*Tyto alba*	birds	Blue	T
Painted Turtle - Pacific Coast Population	*Chrysemys picta bellii*	turtles	Red	T
Townsend's Big-eared Bat	*Corynorhinus townsendii*	mammals	Blue	-

Table 7. At-risk invertebrate species within a 5 km search radius of the Site and their potential to use habitat available within the Project footprint (Province of BC, 2025).

English Name	Scientific Name	Type	BC List	COSEWIC Status
Common Woodnymph, incana subspecies	*Cercyonis pegala incana*	insects	Red	-
Threaded Vertigo	*Nearctula sp.*	gastropods	Blue	SC
Dun Skipper	*Euphyes vestris*	insects	Blue	T
Propertius Duskywing	*Erynnis propertius*	insects	Red	-
common green darner	*Anax junius*	insects	Blue	-

At-risk wildlife species were not observed at the Site; there is habitat within the LAA in the forested ecosystem to the south which has connectivity to forested land to the north of Rainbow Rd andis largely disturbed and provides low potential to support at-risk species. Although some regional records exist, the degraded nature of the site limits its suitability for forest dependant species. The CDC search results for species which includes relevant habitat types is included in *Appendix D.*

The detailed design will determine the extent of the expected disturbance within the Project footprint. Applicable mitigation measures to avoid impacts to wildlife in the area will be discussed upon the confirmation of the detailed design and should be detailed in the Project EMP.

4.4.11. Critical Habitat

Critical habitat for five species – Western painted turtle (Pacific coast population), Sharp-tailed snake, Gray's desert-parsley (*Lomatium grayi*), Batwing vinyl lichen (*Leptogium platinum*), and Yellow montane violet (*Viola praemorsa ssp. praemorsa*) was identified within a 5 km radius (RAA) of the Site. However, no critical habitat overlaps with the Site and Project footprint. The site lack suitable ecological conditions to support these species or their habitat requirements. None of these species were identified during the Site visit. While critical habitat may occur regionally, the Site area itself is unlikely to provide meaningful habitat functions for these species.

4.5.AQUATIC RESOURCES

4.5.1. Hydrology and Watercourses

The desktop review of available hydrological information identified one mapped surface water feature (Okano Creek) within the RAA (refer to *Figure 7*). The Site visit confirmed no surface water features present within the LAA. Okano Creek is classified as a naturally occurring watercourse and is located hydraulically downgradient of the Site. The creek is approximately 370 m north of the Site and is outside the area of direct or indirect potential impacts.

Figure 7. Mapped surface water features within the LAA and RAA (iMapBC, 2025).

4.5.2. Fish and Fish Habitat

There was no fish habitat identified within the LAA.

4.5.3. Aquatic Species at Risk

No aquatic species federally listed as “at risk” with the potential to be present within the LAA were identified during this assessment.

4.6. SUMMARY OF ENVIRONMENTAL SENSITIVITIES

The Site has been cleared and disturbed since at least 2005. Since the initial disturbance, the boundaries have gradually regenerated with vegetation providing low to moderate habitat for birds and small mammals. Bounding the Site to the south is Mouat Park which is owned by the Capital Regional District. This park is forested with mature coniferous trees and offers moderate to high value habitat for various species and may include sensitive ecosystems. Species within the park may periodically move through the LAA to access other preferred habitats to the north.

5. Associated Regulatory Context and Permits

The Project will conduct its activities in compliance with applicable legislation associated with environmental protection. Relevant environmental legislation that pertains to this Project is summarized in *Table 8.*

Table 8. Summary of applicable legislation and requirements for the Project.

Legislation	Agency	Area of Regulation	Issue	Mitigations/Permits/ Authorizations
Federal Legislation				
Species at Risk Act (*SARA*) (Government of Canada, 2025)	ECCC & Fisheries and Oceans (DFO)	Protects wildlife and wildlife habitat listed as threatened or endangered	Vegetation clearing, construction noise/disturbance	No permitting required, operate under due diligence practices. Vegetation clearing to be completed outside of nesting windows. Avoidance and mitigation strategies may be needed to avoid impacts to listed species.

Legislation	Agency	Area of Regulation	Issue	Mitigations/Permits/ Authorizations
Migratory Birds Convention Act (MBCA) (Government of Canada, 2021)	Environment Canada and Climate Change Strategy (ECCC)	Prohibits injury, molestation and destruction of migratory birds and their nests	Vegetation clearing, construction noise/disturbance	Inferred that no permit will be required, operate under due diligence practices. Vegetation clearing to be completed outside of nesting windows. If any trees are to be removed as part of the Project, a survey completed by a QEP experienced in identifying Pileated woodpecker nests must be completed prior to tree removal.
Provincial				
Weed Control Act (Province of BC, 2025)	Ministry of Environment & Climate Change (ENV)	Regulates control of designated noxious plants	Noxious weeds being introduced into the study area and further spread within the study area	Act imposes a duty on all landowners to control designated noxious plants.
Wildlife Act (Province of BC, 2022) *Wildlife Act* Designation and Exemption Regulation (BC 2014c).	Ministry of Water, Land and Resource Stewardship (MWLRS)	Regulates works that impact birds and other wildlife in the area (i.e. amphibians and reptiles)	Construction Noise/ Disturbance	Protects birds and their nests during the bird breeding season as well as the nests, nest trees and eggs of certain species of birds all year. Bird nesting surveys may be needed prior to vegetation clearing. Nuisance birds and their nests are exempt from protection. Preconstruction wildlife sweeps are recommended prior to clearing and ground disturbance activities.

The Project will be completed in accordance with applicable legislation associated with environmental protection.

A detailed discussion of legislation that may be applicable to Project works is included in the following sections.

5.1.FEDERAL LEGISLATION

5.1.1. *Migratory Birds Convention Act* (MBCA)

The MBCA (Government of Canada, 2021) prohibits the disturbance, destruction, or possession of migratory birds, their nests, or eggs. Migratory bird habitat is protected under the MBCA which prohibits the deposition of oil, oily waters, or other substances harmful to migratory birds in any areas that they frequent.

No specific permitting is required for adherence to this Act; however, an understanding of potential MBCA protected species within the Project area is recommended. Adherence to this Act can typically be completed using BMPs. Vegetation clearing within the bird breeding window will be required to adhere to this Act and

typically requires a QEP to complete a pre-clearing or pre-construction survey to ensure no birds and their eggs and/ or active nests are situated within the Project footprint.

Pileated Woodpecker Nests

Updates to the Migratory Birds Regulations (MBR) under the MBCA provides year-round protection to the nests of 18 species now listed under Schedule 1, because they are re-used annually (Government of Canada, 2022). For these nests, a designated waiting period is now required, and the nest must be protected year-round until the nest can be deemed abandoned. To be classified as abandoned, it must not have been used in the previous breeding seasons during the designated wait period. If there is a need to damage, disturb, destroy, or remove a nest of a schedule 1 species, there is a new requirement to provide notice to Environment and Climate Change Canada (ECCC) and register a nest under the new Abandoned Nest Registry.

Nests of Pileated woodpecker have the potential to be present in the Project area and are included in the list of MCBA Schedule 1 species as having a designated waiting period of **36 months**, even when unoccupied. If any trees are to be removed as part of the Project, a survey completed by a QEP experienced in identifying Pileated woodpecker nests must be completed prior to tree removal.

5.1.2. *Species at Risk Act* (SARA)

Federal lands are subject to the protection of species listed under Schedule 1 of the *Species at Risk Act* (SARA) as extirpated, endangered, or threatened (Government of Canada, 2025). It is an offence to kill, harm, harass, capture, or take an individual, and that species has legal protection related to the species' residence and critical habitat as specified in SARA. No specific permitting is required for adherence to this Act for this Project; however, an understanding of potential SARA protected species within the LAA is recommended. Adherence to this Act can typically be completed using BMPs during construction.

5.2.PROVINCIAL LEGISLATION

5.2.1. Wildlife Act

The provincial *Wildlife Act* (Province of BC, 2022), Section 34, protects birds and their nests during the bird breeding season as well as the nests, nest trees and eggs of certain species all year. Blue heron and raptors, particularly bald eagles, and osprey, require large nest trees near coastal water bodies (BC 2003). Project works will need to ensure that appropriate non-disturbance buffers are kept around any raptor's nests (if identified) to ensure compliance with the *Wildlife Act*.

Adherence to this Act can typically be completed using BMPs. Vegetation clearing should occur outside of the bird breeding window. If vegetation clearing during the bird breeding season is required, then an assessment by a QEP will be required to determine that no breeding birds or their nests will be impacted by the clearing. Providing that there are no active nests on the site, or that clearing is conducted outside of the bird breeding window, no specific permitting is required.

5.2.2. Weed Control Act

Act imposes a duty on all landowners to control designated noxious plants (Province of BC, 2025). The Contractor must implement mitigation measures to reduce the spread and establishment of invasive species due to construction impacts.

6. Impact Assessment

6.1.ASSESSMENT OF IMPACTS ON ENVIRONMENTALLY VALUABLE RESOURCES

Avoidance and mitigation strategies will be required during construction to reduce the impacts to EVRs identified in this assessment. *Table 9* below summarizes the key EVRs that were determined to have the potential to be impacted by the Project, and environmental impacts that have the potential to occur because of proposed Project activities. Many of these impacts can be mitigated, reduced, or avoided through design and/or with the implementation of BMPs that will be discussed further in *Section 7*. Impacts and mitigations discussed in this assessment are general, as no site plans or conceptual design drawings have been developed and/or reviewed by the QEP at the time of writing. A comprehensive assessment of potential Project impacts may be required once final design is complete.

Table 9. Potential environmental impacts of the Project on EVRs.

Biophysical Component	EVR	Potential Environmental Impact
Landforms & Soils	• Native topsoil	• Alteration or disturbance to soil profiles, • Altered drainage patterns, • Erosion and sedimentation, • Compaction, and • Spills of deleterious substances resulting in soil contamination.
Terrestrial Vegetation Resources	• Vegetation	• Damage to or loss of existing vegetation, • Introduction and/or spread of invasive species, • Potential root zone disturbance of trees/large shrubs, and • Decrease in biodiversity.
Terrestrial Wildlife Resources	• Riparian areas • Wildlife trees • Wildlife species	• Loss or disturbance of wildlife and active breeding sites (burrows, nests, dens, etc.), • Loss and/or further fragmentation of wildlife habitat, • Wildlife encounters and conflicts, and • Reduced habitat suitability.

7. Environmental Mitigation Measures

The proposed Project footprint is in a regenerating vegetated area within the Site. The understory is characterized by invasive species, which thereby reduces impacts to intact native ecosystems. However, there are several EVRs within the Project footprint and in the LAA that may be directly or indirectly impacted by this proposed Project. The following section outlines general mitigation measures to be implemented during construction to avoid or minimize residual impacts.

A residual impact assessment has not been included in this EA and this report may need to be revised following the completion of detailed design. The successful contractor will be responsible for developing a Construction Environmental Management Plan (CEMP) that details mitigation strategies to avoid or minimize impacts associated with the Project.

7.1. SOIL MANAGEMENT

Ground disturbing works will be required for this Project and as such the management of soils will be required. The Contractor shall be prepared to handle and temporarily store, if necessary, excavated soils in a way that minimizes the potential for the generation of dust and the erosion and/or movement of sediment.

The Contractor will adhere to the following general soil handling requirements:

- All imported backfill materials will be certified clean and free of noxious/invasive weed species,
- Soils are not to be mixed with construction debris, if applicable,
- Soil may be re-used if deemed non-contaminated and geotechnically suitable to be used as backfill. Whenever possible, non-contaminated soil will be re-used on-site as backfill as accepted within the design or disposed off-Site at an accepting clean fill site as appropriate,
- Should soils be considered excess and require off-Site disposal and/or relocation, the Contractor and must adhere to protocols defined in the following sections relative to off-Site disposal and/or relocation of soils from the Project Site.

7.2. VEGETATION MANAGEMENT

To mitigate damage or loss of native plant communities and species the following BMPs are recommended:

- Project design should retain vegetation where appropriate,
- Replace removed vegetation with new native plantings, if feasible, and
- Use local native plants in landscaping; they are adapted to local climates (such as hot, dry summers), and once established, will need less maintenance and watering than non-native plants.
- Limit vegetation removal to only those areas where it is required; flagging of no-go zones is recommended,
- Complete vegetation removal within appropriate timing windows for birds,
- Ensure the appropriate pre-clearing surveys are completed by a QEP.

7.2.1. Invasive Species

Control of invasive and noxious plant species is recommended. Due care should be taken to protect the Site and surrounding area from the introduction of invasive plants during construction. Mitigation measures include:

- Keeping equipment and vehicles clean to prevent tracking of soil on or off the Site,
- Providing fill and topsoil clean of seeds of invasive species, and
- Treatment of nearby infestations.

7.3.WILDLIFE AND WILDLIFE HABITAT PROTECTION (SARA)

Construction of the Project will require the implementation guidelines and BMPs to comply with federal environmental protection legislation. It is recommended that the Contractor retain a QEP to conduct a wildlife sweep, including wildlife salvages (if necessary), of the immediate area (Project footprint plus 100 m) prior to construction. Any important wildlife features including active nests and hibernacula must be marked, and appropriate minimum buffer distances established (buffers will be determined by the QEP and will be species specific). In addition to the use of buffered setbacks, timing restrictions for the species identified must be considered.

Wildlife encounters and conflicts are a potential during Project works. Wildlife conflicts may consist of relatively minor nuisances or more serious health, safety, or conservation concerns. The following BMPs are recommended:

- Work areas must be kept completely free of uncontained wildlife attractants such as food, waste materials, cleaning products, fuel etc.,
- All food and wildlife attractants should be secure when not in use,
- The contractor is responsible for ensuring any material that may be blown or washed away is retrieved,
- Garbage shall not be burned, buried, or disposed of on Site. All garbage generated during the Project will be contained and removed regularly for appropriate off-site disposal, including recycling where applicable, and
- Fuels and lubricants are known bear attractants. Care will be taken when fueling and maintaining generators, chain saws, etc.

7.4.LEAST RISK TIMING WINDOWS FOR BIRDS

Migratory breeding birds and their active nests are protected under the federal MBCA. As vegetation provides nesting and foraging habitat for birds and other animals, there is the potential to contravene the MBCA with the cutting of trees and shrubs for Project construction. During their breeding season, birds are especially sensitive to noise disturbances and may desert their nests and young. Construction timing windows for birds are the most suitable periods for performing works that would otherwise impact sensitive life stages.

The recommended BMP for tree and vegetation clearing is to complete works outside of the general nesting period. In addition, particularly noisy activities such as those that may be created during construction (i.e., chain saws, certain heavy equipment) should be scheduled outside of the breeding season when possible.

While the nesting period for bird species varies by species, the general bird breeding period is mid-March and may extend until late August (Government of Canada, 2018). Nesting periods for migratory birds in the area can be determined through use of the nesting calendar query tool. If vegetation clearing or other disruptive activities must be conducted during the breeding period, a QEP should be engaged by the Contractor(s) to survey the Site for active nests and flag no-go buffer zones around active nests.

The cumulative effects of small-scale human activities, ranging from simple disturbance to cutting down a nest tree, can also reduce the abundance and number of species of raptors in an area (Province of BC, 2013). In many cases, critical habitat features required by raptors can be protected or restored during land development, so that opportunities to maintain or enhance raptor biodiversity can be optimized.

It should be noted that raptor nesting sites are protected year-round and nesting activity may begin as early as January on the south coast. A wildlife sweep is recommended to be completed by a QEP directly before vegetation removal occurs to assess the area for raptor use (i.e., wildlife trees and/or other nesting sites).

7.5.AIR QUALITY & DUST CONTROL

The Contractor will conduct its construction operations in as efficient a manner as possible to reduce double handling of materials thereby limiting the risk of dust production. The Contractor must keep dust and mud under control. General air quality and dust control measures may include:

- Minimizing equipment emissions by operating equipment at optimum-rated loads,
- Minimizing soil and stockpile handling as much as is practical,
- Implementing erosion and sediment control BMPs to mitigate air contamination from windswept material, and
- Prohibiting burning of refuse or other material general during Project works.

The CEMP will define anti-idling procedures for vehicles and equipment that are in accordance with municipal bylaws, as well as measures to reduce or limit dust production during Project works. Such BMPs to be included in the CEMP include those for stockpile handling and soil movement (i.e., off-site transportation) and ESC measures (where applicable).

7.6.NOISE MANAGEMENT

Construction activities, including excavation and hauling of materials using heavy equipment will result in the production of noise. The Contractor must avoid creating any unnecessary noise during its work on the Project, and, except under emergency working conditions. Unnecessary noise can be mitigated through the implementation of BMPs. The following list contains several noise reduction BMPs that will be implemented during all phases of construction:

- Maintain equipment in good working order,
- Implement “Best Available Control Technologies” on equipment such as silencers and mufflers,
- Establish a speed limit to slow vehicles and mitigate noise generation, and
- Keep within the noise limits as per municipal bylaws.

7.7.SPILL PREVENTION AND EMERGENCY RESPONSE

The following are BMPs used to control and mitigate the effects of potential spills:

- Develop a response plan that is to be implemented immediately in the event of a spill of a deleterious substance and reference the spill response procedure,
- Keep an emergency spill kit on site that is supplied appropriately for materials and volumes onsite,
- Ensure clean-up measures are suitably applied so as not to result in further alteration of the undisturbed areas,
- Clean up and appropriately dispose of deleterious substances, and
- Maintain all machinery on site in a clean condition and free of fluid leaks.

7.8.ENVIRONMENTAL MONITORING

An EM should be employed by the Contractor to be on-Site during sensitive construction phases to address any environmental concerns should they arise.

Requirements for Environmental Monitoring and QEP duties will be included in the CEMP. The successful Contractor shall retain an independent QEP with a background in providing construction related QEP services. The Contractor's QEP will be responsible for environment compliance related to the Contractor's work. This includes obtaining any required permits for wildlife sweeps or salvages and implementing other necessary BMP work as required for environmental compliance.

8. Conclusions

This EA was completed with information obtained from desktop studies and a single Site visit during the spring season. The LAA was evaluated for potential terrestrial and aquatic habitat and habitat value for plants, mammals, birds, amphibians, fish, and reptiles. Review of provincial and regional databases indicate the potential presence of at-risk plants, and animal species in the region around the Site.

The Project footprint is located on a vegetated area within a property that is used as a storage yard characterized by historical disturbance, compacted gravel surfaces, and a dominance of invasive vegetation. While a small patch of regenerating vegetation is present, the area overall exhibits limited ecological integrity and provides low to moderate habitat value for birds and small mammals. No critical habitat, aquatic features, or species at risk were identified within the Site, and the potential for direct impacts to sensitive ecological features is considered low with the implementation of appropriate BMPs.

However, the Site is directly adjacent to a forested park to the south, which contains mature native trees and supports a more diverse and sensitive ecosystem. This adjacent parkland likely serves as important habitat for a variety of wildlife species, including nesting birds, pollinators, and potentially species at risk recorded within the broader Regional Assessment Area. Construction activities may result in localized environmental impacts such as topsoil disturbance, the spread of invasive species, and indirect effects from noise and dust, which could disturb wildlife in the adjacent forested areas.

To minimize environmental impacts, mitigation measures should be implemented to:

- Protect regenerating vegetation within the Project footprint where feasible,
- Prevent the introduction and spread of invasive species,
- Manage construction-related disturbances, particularly during sensitive periods such as the breeding season.

Compliance to the following additional legislation is recommended:

- The *Migratory Birds Convention Act* with respect to mitigating impacts on breeding birds,
- The *Species at Risk Act* with respect to at-risk wildlife and vegetation, and
- The *Weed Control Act* with respect to invasive species.

With the implementation of BMPs during construction, this Project is likely to be completed with low or negligeable impacts to the surrounding sensitive environmental features. With the application of BMPs and CEMP-based mitigation measures, the Project is not expected to result in significant adverse environmental effects. An Environmental Monitor should be employed by the Contractor and be on-site during sensitive construction phases to address any environmental concerns should they arise.

9. Closing and Signature Page

This report has been prepared with information available at the time of writing. Should any questions arise, please do not hesitate to contact the undersigned.

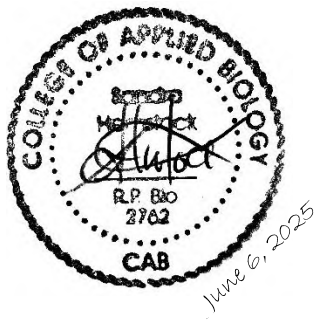
Yours truly,

McELHANNEY LTD

Prepared by:

Stefan McAvoy, B.Sc., R.P. Bio.
Environmental Professional
smcavoy@mcelhanney.com

Reviewed by:



Sandra Hemstock M.Sc., R.P.Bio.
Senior Environmental Professional
shemstock@mcelhanney.com

References

Government of British Columbia (B.C. Conservation Data Centre. (2023, November 8). *Conservation Data Centre Red, Blue & Yeloow Lists*. Retrieved from Explore CDC Data: https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/explore-cdc-data/red-blue-yellow-lists

BC CDC. (2025). *BC Species and Ecosystem Explorer.* Government of British Columbia.

BC Ministry of Forests. (2021). *Biogeoclimatic Ecosystem Classification Subzone / Variant Map.* Retrieved from South Island Resource District West Coast Region: https://www.for.gov.bc.ca/ftp/HRE/external/!publish/becmaps/PaperMaps/field/DSI_SouthIslandResourceDistrict_WestCoastRegion__field.pdf

BC Reptiles and Amphibians. (2025). *BC Reptiles and Amphibians*. Retrieved from https://bcreptilesandamphibians.ca/

Community Mapping Network. (2025). *Sensitive Ecosystems Inventory - Georgia Basin Habitat Atlas*. Retrieved from https://cmnmaps.ca/GBHA/

Community Mapping Network. (2025). *Sensitive Habitat Inventory and Mapping.* Retrieved from https://www.cmnmaps.ca/SHIM/

Community Mapping Network. (2025). *Wildlife Tree Stewardship Atlas*. Retrieved from https://cmnmaps.ca/WITS_gomap/

Cornell University. (2025). *eBird Canada*. Retrieved from https://ebird.org/canada/home

CRD. (2024, February). *CRD Regional Map.* Retrieved from https://maps.crd.bc.ca/Html5Viewer/?viewer=public&

Fenger, M. (2006). *Wildlife & Trees in British Columbia.* Lone Pine Publishing.

Google Earth. (2025). *Google Earth*. Retrieved from https://earth.google.com/web/@0,-1.2103,0a,22251752.77375655d,35y,0h,0t,0r

Government of Canada. (2018). *Nesting Periods.* Retrieved from https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods/nesting-periods.html

Government of Canada. (2021, December 13). *Migratory Birds Convention Act SC 1994, C22.* Retrieved from Justice Laws Website: https://laws-lois.justice.gc.ca/PDF/M-7.01.pdf

Government of Canada. (2022). *Migratory Birds Regulation Schedule 1.* Retrieved from https://laws-lois.justice.gc.ca/eng/regulations/SOR-2022-105/page-7.html#h-1348335

Government of Canada. (2025). *Canadian Climate Normals 1981-2010*. Retrieved from https://climate.weather.gc.ca/climate_normals/index_e.html

Government of Canada. (2025, May 5). *Species at Risk Act S.C. 2002 c. 29.* Retrieved from https://laws-lois.justice.gc.ca/PDF/S-15.3.pdf

Green & Klinka. (1994). *A field guide for site identification and interpretation for the Vancouver Forest Region. Land Management Handbook Number 28. Ministry of Forests, Province of BC.*

IBA Canada. (2025). Retrieved from https://ibacanada.ca/mapviewer.jsp?lang=EN

iMapBC. (2025). *iMapBC 4.0.* Retrieved from https://maps.gov.bc.ca/ess/hm/imap4m/

Jungen, Sandborn, & Christie. (1985). *Soils of Southeast Vancouver Island Duncan-Nanaimo Area MOE Technical Report 15.* Victoria: Ministry of Agriculture and Food.

Keser, N., & Pierre, D. (1973). *Soils of Vancouver Island - A Compendium.* Retrieved from https://www.for.gov.bc.ca/hfd/pubs/docs/mr/scanned-rn/rn034-rn066/Rn056.pdf

Klinkenberg (Editor). (2020). *E-Fauna Electronic Atlas of the Fauna of British Columbia [efauna.bc.ca].* Retrieved from Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver, BC.: https://linnet.geog.ubc.ca/biodiversity/efauna/

Nuszdorfer, Klinka, and Demarchi. (1991). *Chapter 5: Coastal Douglas-fir Zone.* Retrieved from https://www.for.gov.bc.ca/hfd/pubs/docs/srs/Srs06/chap5.pdf

Province of BC. (2013). *Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia*. Retrieved from https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/best-management-practices/raptor_conservation_guidelines_2013.pdf

Province of BC. (2018). *Soil Information Finder Tool*. Retrieved from https://governmentofbc.maps.arcgis.com/apps/MapSeries/index.html?appid=cc25e43525c5471ca7b13d639bbcd7aa

Province of BC. (2022, March 9). *Wildlife Act RSBC 1996 Ch 488.* Retrieved from BC Laws: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/96488_01

Province of BC. (2025). *CDC iMap*. Retrieved from http://maps.gov.bc.ca/ess/hm/cdc/

Province of BC. (2025). *Habitat Wizard*. Retrieved from https://maps.gov.bc.ca/ess/hm/habwiz/

Province of BC. (2025). *iMap BC 4.0.* Retrieved from https://maps.gov.bc.ca/ess/hm/imap4m/

Province of BC. (2025, May). *Weed Control Act RSBS 1996, Ch 487*. Retrieved from BC Laws: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/00_96487_01

WiTs. (2025). *Wildlife Tree Stewardship Atlas*. Retrieved from http://cmnmaps.ca/WITS_gomap/

Appendix A

Statement of Limitations

Use of this Report. This report was prepared by McElhanney Ltd. ("**McElhanney**") for the particular site, design objective, development and purpose (the "**Project**") described in this report and for the exclusive use of the client identified in this report (the "**Client**"). The data, interpretations and recommendations pertain to the Project and are not applicable to any other project or site location and this report may not be reproduced, used or relied upon, in whole or in part, by a party other than the Client, without the prior written consent of McElhanney. The Client may provide copies of this report to its affiliates, contractors, subcontractors and regulatory authorities for use in relation to and in connection with the Project provided that any reliance, unauthorized use, and/or decisions made based on the information contained within this report are at the sole risk of such parties. McElhanney will not be responsible for the use of this report on projects other than the Project, where this report or the contents hereof have been modified without McElhanney's consent, to the extent that the content is in the nature of an opinion, and if the report is preliminary or draft. This is a technical report and is not a legal representation or interpretation of laws, rules, regulations, or policies of governmental agencies.

Standard of Care and Disclaimer of Warranties. This report was prepared with the degree of care, skill, and diligence as would reasonably be expected from a qualified member of the same profession, providing a similar report for similar projects, and under similar circumstances, and in accordance with generally accepted engineering/planning/etc., and scientific judgments, principles and practices. McElhanney expressly disclaims any and all warranties in connection with this report.

Information from Client and Third Parties. McElhanney has relied in good faith on information provided by the Client and third parties noted in this report and has assumed such information to be accurate, complete, reliable, non-fringing, and fit for the intended purpose without independent verification. McElhanney accepts no responsibility for any deficiency, misstatements or inaccuracy contained in this report as a result of omissions or errors in information provided by third parties or for omissions, misstatements or fraudulent acts of persons interviewed.

Effect of Changes. All evaluations and conclusions stated in this report are based on facts, observations, site-specific details, legislation and regulations as they existed at the time of the site assessment/report preparation. Some conditions are subject to change over time and the Client recognizes that the passage of time, natural occurrences, and direct or indirect human intervention at or near the site may substantially alter such evaluations and conclusions. Construction activities can significantly alter soil, rock and other geologic conditions on the site. McElhanney should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein upon any of the following events: a) any changes (or possible changes) as to the site, purpose, or development plans upon which this report was based, b) any changes to applicable laws subsequent to the issuance of the report, c) new information is discovered in the future during site excavations, construction, building demolition or other activities, or d) additional subsurface assessments or testing conducted by others.

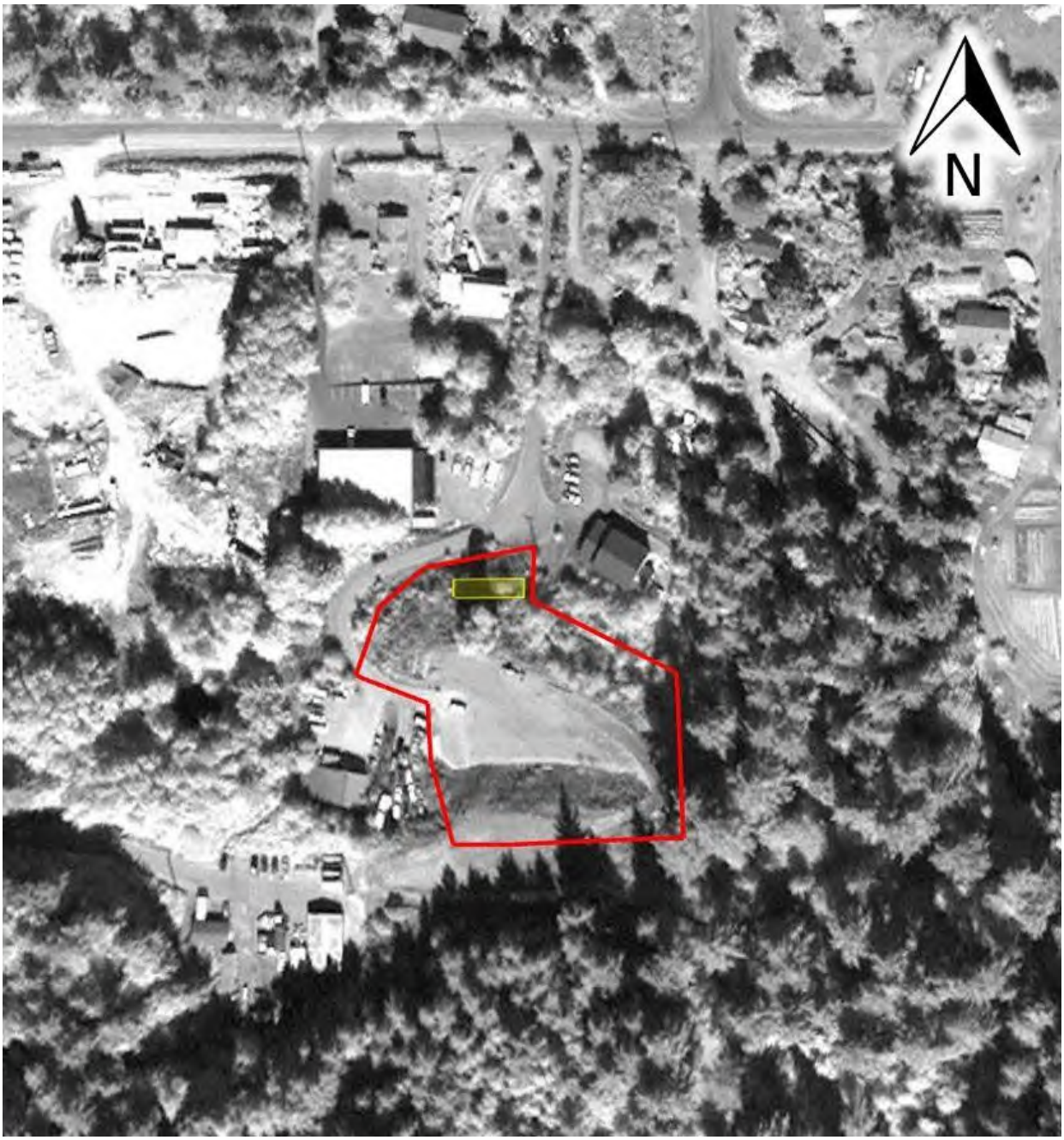
Independent Judgments. McElhanney will not be responsible for the independent conclusions, interpretations, interpolations and/or decisions of the Client, or others, who may come into possession of this report, or any part thereof. This restriction of liability includes decisions made to purchase, finance or sell land or with respect to public offerings for the sale of securities.

Appendix B

Historical Aerial Photographs

2005 (courtesy of Google Earth):

2010 (courtesy of Google Earth):



2014 (courtesy of Google Earth):

2015 (courtesy of Google Earth):

2022 (courtesy of Google Earth):

Appendix C

Vegetation Survey Results

Table 10. Vegetation Survey Results from May 2025

Common Name*	Scientific Name	Type of Plant	VS1	VS2	VS3	VS4	VS5	VS6	VS7	VS8	VS9
			terrestrial	terrestrial	terrestrial	terrestrial	terrestrial	terrestrial	terrestrial	terrestrial	terrestrial
Douglas-fir	*Pseudotsuga menziesii*	Conifer tree							X	X	X
Arbutus	*Arbutus menziesii*	Broadleaf evergreen							X		
Western red cedar	*Thuja plicata*	Conifer tree							X		
Grand fir	*Abies grandis*	Conifer tree	D								
Red alder	*Alnus rubra*	Deciduous tree						X		X	X
Bigleaf maple	*Acer macrophyllum*	Deciduous tree	X	X			D	D	X	X	X
Ocean spray	*Holodiscus discoloe*	Shrub	X							X	
Scotch broom*	*Cytisus scoparius*	Shrub		X	D	X			D	X	D
Himalayan blackberry*	*Rubus armeniacus*	Shrub	D	D	X	D	D		D		
Sword fern	*Polystichum munitum*	Fern	X					X			
Grasses	*Poaceae spp.*	Herb		X	X	D		X		X	

*Note: *indicates invasive species (not native in BC); D indicates dominant species.*

Appendix D

CDC Search Results

Table 11. Provincially Listed Wildlife Species Potentially Occurring on Site based on Site Habitat Conditions (BC CDC, 2025).

Scientific Name	English Name	BC List	COSEWIC	Habitats (Type / Subtype / Dependence)
Allogona townsendiana	Oregon forestsnail	Red	Endangered	Forest / Mixed Forest (deciduous/coniferous mix) / Obligate
Anaxyrus boreas	Western toad	Yellow	Special Concern	Forest / Conifer Forest - Dry / Facultative - frequent use; Forest / Conifer Forest - Mesic (average) / Facultative - frequent use; Forest / Conifer Forest - Moist/wet / Facultative - frequent use; Forest / Deciduous/Broadleaf Forest / Facultative - frequent use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use; Grassland/Shrub / Grassland / Facultative - frequent use; Grassland/Shrub / Meadow / Facultative - frequent use;
Aneides vagrans	Wandering salamander	Blue	Special Concern	Forest / Conifer Forest - Moist/wet / Unknown; Grassland/Shrub / Shrub - Logged / Unknown; Grassland/Shrub / Shrub - Natural / Unknown
Brachyramphus marmoratus	Marbled murrelet	Blue	Threatened	Forest / Conifer Forest - Mesic (average) / Facultative - occasional use; Forest / Conifer Forest - Moist/wet / Facultative - frequent use
Butorides virescens	Green heron	Blue	-	Anthropogenic / Urban/Suburban / Facultative - occasional use;
Callophrys johnsoni	Johnson's hairstreak	Red	Special Concern	Forest / Conifer Forest - Mesic (average) / Facultative - frequent use; Forest / Conifer Forest - Moist/wet / Facultative - frequent use
Callophrys mossii mossii	Moss' Elfin, mossii subspecies	Red	-	Forest / Deciduous/Broadleaf Forest / Facultative - frequent use; Grassland/Shrub / Grassland / Facultative - frequent use; Grassland/Shrub / Shrub - Natural / Facultative - frequent use
Cardellina canadensis	Canada warbler	Blue	Special Concern	Forest / Conifer Forest - Dry / Facultative - occasional use; Forest / Conifer Forest - Mesic (average) / Facultative - occasional use; Forest / Conifer Forest - Moist/wet / Facultative - occasional use; Forest / Deciduous/Broadleaf Forest / Facultative - frequent use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use; Grassland/Shrub / Shrub - Logged / Facultative - occasional use; Grassland/Shrub / Shrub - Natural / Facultative - occasional use
Carychium occidentale	Western thorn	Blue	-	Forest / Mixed Forest (deciduous/coniferous mix) / Obligate
Chrysemys picta pop. 1	Painted turtle - Pacific coast population	Red	Threatened	Anthropogenic / Industrial / Facultative - frequent use; Anthropogenic / Urban/Suburban / Facultative - frequent use
Coccothraustes vespertinus	Evening grosbeak	Yellow	Special Concern	Anthropogenic / Urban/Suburban / Facultative - frequent use; Forest / Conifer Forest - Dry / Facultative - frequent use; Forest / Conifer Forest - Mesic (average) / Facultative - frequent use; Forest / Conifer Forest - Moist/wet / Facultative - frequent use; Forest / Deciduous/Broadleaf Forest / Facultative - frequent use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use
Contia tenuis	Common Sharp-tailed Snake	Red	Endangered / Threatened	Forest / Conifer Forest - Dry / Facultative - frequent use; Grassland/Shrub / Meadow / Facultative - frequent use

Scientific Name	English Name	BC List	COSEWIC	Habitats (Type / Subtype / Dependence)
Contopus cooperi	Olive-sided flycatcher	Yellow	Special Concern	Forest / Conifer Forest - Mesic (average) / Facultative - occasional use; Forest / Conifer Forest - Moist/wet / Facultative - frequent use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - occasional use
Corynorhinus townsendii	Townsend's big-eared bat	Blue	-	Anthropogenic / Industrial / Facultative - frequent use ; Anthropogenic / Urban/Suburban / Facultative - frequent use ; Forest / Conifer Forest - Dry / Facultative - frequent use ; Forest / Conifer Forest - Mesic (average) / Facultative - frequent use ; Forest / Conifer Forest - Moist/wet / Facultative - frequent use ; Forest / Deciduous/Broadleaf Forest / Facultative - frequent use ; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use ; Grassland/Shrub / Grassland / Facultative - occasional use ; Grassland/Shrub / Shrub - Logged / Facultative - occasional use ; Grassland/Shrub / Shrub - Natural / Facultative - occasional use
Cryptomastix devia	Puget oregonian	Red	Extirpated	Forest / Mixed Forest (deciduous/coniferous mix) / Obligate
Euphagus carolinus	Rusty blackbird	Blue	Special Concern	Anthropogenic / Industrial / Facultative - occasional use; Anthropogenic / Urban/Suburban / Facultative - occasional use; Forest / Conifer Forest - Moist/wet / Facultative - frequent use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - occasional use
Hemphillia burringtoni	Keeled jumping-slug	Red	Special Concern	Forest / Conifer Forest - Moist/wet / Unknown; Forest / Deciduous/Broadleaf Forest / Unknown; Forest / Mixed Forest (deciduous/coniferous mix) / Unknown
Hemphillia dromedarius	Dromedary jumping-slug	Red	Threatened	Forest / Conifer Forest - Moist/wet / Obligate
Hydroprogne caspia	Caspian tern	Blue	Not at Risk	Anthropogenic / Urban/Suburban / Facultative - frequent use
Icaricia icarioides blackmorei	Boisduval's blue, blackmorei subspecies	Blue	-	Grassland/Shrub / Grassland / Facultative - frequent use; Grassland/Shrub / Meadow / Obligate
Lasionycteris noctivagans	Silver-haired bat	Yellow	Endangered	Anthropogenic / Industrial / Facultative - occasional use; Anthropogenic / Urban/Suburban / Facultative - occasional use; Forest / Conifer Forest - Dry / Facultative - frequent use; Forest / Conifer Forest - Mesic (average) / Facultative - frequent use; Grassland/Shrub / Grassland / Facultative - frequent use
Lasiurus cinereus	Hoary bat	Blue	Endangered	Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - occasional use; Lakes / Lake / Facultative - frequent use; Lakes / Pond/Open Water / Facultative - frequent use; Riparian / Riparian Forest / Facultative - frequent use

Scientific Name	English Name	BC List	COSEWIC	Habitats (Type / Subtype / Dependence)
Lepus americanus washingtonii	Snowshoe hare, washingtonii subspecies	Red	-	Forest / Conifer Forest - Dry / Facultative - occasional use; Forest / Conifer Forest - Mesic (average) / Facultative - frequent use; Forest / Conifer Forest - Moist/wet / Facultative - frequent use; Forest / Deciduous/Broadleaf Forest / Facultative - frequent use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use
Myotis lucifugus	Little brown myotis	Blue	Endangered	Anthropogenic / Industrial / Facultative - occasional use ; Anthropogenic / Urban/Suburban / Facultative - occasional use ; Forest / Conifer Forest - Dry / Facultative - frequent use ; Forest / Conifer Forest - Mesic (average) / Facultative - frequent use ; Forest / Conifer Forest - Moist/wet / Facultative - frequent use ; Forest / Deciduous/Broadleaf Forest / Facultative - frequent use ; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use ; Grassland/Shrub / Grassland / Facultative - occasional use ; Grassland/Shrub / Meadow / Facultative - occasional use ; Grassland/Shrub / Shrub - Logged / Facultative - occasional use ; Grassland/Shrub / Shrub - Natural / Facultative - occasional use
Nannopterum auritum	Double-crested cormorant	Blue	Not at Risk	Anthropogenic / Urban/Suburban / Facultative - occasional use; Forest / Conifer Forest - Mesic (average) / Facultative - occasional use
Pristiloma johnsoni	Broadwhorl tightcoil	Blue	-	Forest / Conifer Forest - Dry / Unknown; Forest / Conifer Forest - Mesic (average) / Unknown; Forest / Conifer Forest - Moist/wet / Unknown; Forest / Deciduous/Broadleaf Forest / Unknown; Forest / Mixed Forest (deciduous/coniferous mix) / Unknown; Rock/Sparsely Vegetated Rock / Talus / Unknown
Prophysaon coeruleum	Blue-grey taildropper	Blue	Threatened	Forest / Conifer Forest - Moist/wet / Obligate; Forest / Mixed Forest (deciduous/coniferous mix) / Obligate
Rana aurora	Northern red-legged frog	Blue	Special Concern	Forest / Deciduous/Broadleaf Forest / Facultative - occasional use; Grassland/Shrub / Meadow / Facultative - frequent use
Setophaga virens	Black-throated green warbler	Blue	-	Forest / Conifer Forest - Mesic (average) / Facultative - occasional use; Forest / Conifer Forest - Moist/wet / Facultative - occasional use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use
Sorex rohweri	Olympic shrew	Red		Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use; Riparian / Gravel Bar / Facultative - frequent use
Sorex trowbridgii	Trowbridge's shrew	Blue	-	Forest / Conifer Forest - Mesic (average) / Unknown; Forest / Conifer Forest - Moist/wet / Unknown; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use
Speyeria zerene bremnerii	Zerene fritillary, bremnerii subspecies	Red	-	Anthropogenic / Industrial / Facultative - occasional use; Anthropogenic / Urban/Suburban / Facultative - occasional use; Forest / Deciduous/Broadleaf Forest / Facultative - frequent use; Grassland/Shrub /Grassland / Facultative - occasional use; Grassland/Shrub / Meadow / Facultative - frequent use
Sympetrum vicinum	Autumn meadowhawk	Blue	-	Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - occasional use
Synthliboramphus antiquus	Ancient murrelet	Blue	Special Concern	Forest / Conifer Forest - Moist/wet / Facultative - frequent use; Grassland/Shrub / Shrub - Natural / Facultative - occasional use
Vertigo rowellii	Threaded vertigo	Blue	Special Concern	Forest / Deciduous/Broadleaf Forest / Obligate; Forest / Mixed Forest (deciduous/coniferous mix) / Obligate

Table 12. Provincially Listed Vascular and Non-vascular Plant Species Potentially Occurring on Site based on Site Habitat Conditions (BC CDC, 2025).

English Name	Scientific Name	BC List	Preferred Habitat Subtype
Phantom orchid	*Cephalanthera austiniae*	Red	Forest / Conifer Forest - Mesic (average) / Facultative - frequent use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use; Forest / Old Forest / Facultative - frequent use
Washington springbeauty	*Claytonia washingtoniana*	Blue	Forest / Conifer Forest - Dry / Unknown; Forest / Mixed Forest (deciduous/coniferous mix) / Unknown; =
Coastal wood fern	*Dryopteris arguta*	Blue	Forest / Conifer Forest - Dry / Facultative - frequent use; Forest / Deciduous/Broadleaf Forest / Facultative - occasional use; Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use
Brook spike-primrose	*Epilobium torreyi*	Red	Forest / Conifer Forest - Dry / Facultative - occasional use
Rough-leaved aster	*Eurybia radulina*	Red	Forest / Conifer Forest - Dry / Facultative - frequent use
Macoun's meadow-foam	*Limnanthes macounii*	Red	Forest / Deciduous/Broadleaf Forest / Facultative - occasional use
Fern-leaved desert-parsley	*Lomatium dissectum*	Red	Forest / Mixed Forest (deciduous/coniferous mix) / Facultative - frequent use
Butterfly bearing lomatium	*Lomatium papilioniferum*	Red	Forest / Conifer Forest - Dry / Facultative - occasional use
White meconella	*Meconella oregana*	Red	Forest / Deciduous/Broadleaf Forest / Facultative - frequent use
Slender popcornflower	*Plagiobothrys tenellus*	Red	Forest / Conifer Forest - Dry / Facultative - occasional use
White-lip rein orchid	*Platanthera ephemerantha*	Blue	Forest / Conifer Forest - Dry / Facultative - frequent use
Leafless wintergreen	*Pyrola aphylla*	Blue	Forest / Conifer Forest - Mesic (average) / Facultative - frequent use
Dwarf sandwort	*Sabulina pusilla*	Red	Forest / Conifer Forest - Dry / Facultative - frequent use
Purple sanicle	*Sanicula bipinnatifida*	Red	Forest / Deciduous/Broadleaf Forest / Facultative - occasional use
Small-flowered tonella	*Tonella tenella*	Blue	Forest / Conifer Forest - Dry / Facultative - frequent use
Howell's triteleia	*Triteleia howellii*	Red	Forest / Conifer Forest - Dry / Facultative - occasional use; Forest / Deciduous/Broadleaf Forest / Facultative - frequent use
Lindley's microseris	*Uropappus lindleyi*	Red	Forest / Conifer Forest - Dry / Unknown; Forest / Deciduous/Broadleaf Forest / Unknown
Howell's violet	*Viola howellii*	Red	Forest / Conifer Forest - Moist/wet / Facultative - frequent use

Table 13. Ecological Communities Search Results – Terrestrial Realm (CDF in the Salt Spring Island Local Trust Area) (BC CDC, 2025).*

Scientific Name	English Name	BC List	BGC	Ecosystem Group
Abies grandis / Mahonia nervosa	grand fir / dull Oregon-grape	Red	CDFmm/04	Terrestrial Realm - Forest: Coniferous - mesic
Abies grandis / Tiarella trifoliata	grand fir / three-leaved foamflower	Red	CDFmm/06	Terrestrial Realm - Forest: Coniferous - moist/wet
Arbutus menziesii / Arctostaphylos columbiana	arbutus / hairy manzanita	Red	CDFmm/00;	Terrestrial Realm - Forest: Broadleaf - dry
Pseudotsuga menziesii - Arbutus menziesii	Douglas-fir - arbutus	Red	CDFmm/02	Terrestrial Realm - Forest: Coniferous - dry
Pseudotsuga menziesii / Mahonia nervosa	Douglas-fir / dull Oregon-grape	Red	CDFmm/01	Terrestrial Realm - Forest: Coniferous - mesic
Pseudotsuga menziesii / Melica subulata	Douglas-fir / Alaska oniongrass	Red	CDFmm/03	Terrestrial Realm - Forest: Coniferous - dry
Quercus garryana - Arbutus menziesii	Garry oak - arbutus	Red	CDFmm/00	Terrestrial Realm - Forest: Broadleaf - dry
Quercus garryana / Bromus carinatus	Garry oak / California brome	Red	CDFmm/00;	Terrestrial Realm - Forest: Broadleaf - dry
Quercus garryana / Holodiscus discolor	Garry oak / oceanspray	Red	CDFmm/00	Terrestrial Realm - Forest: Broadleaf - dry
Thuja plicata / Achlys triphylla	western redcedar / vanilla-leaf	Red	CDFmm/12	Terrestrial Realm - Forest: Coniferous - moist/wet
Thuja plicata / Oemleria cerasiformis	Western Redcedar / Osoberry	Red	CDFmm/13	Terrestrial Realm - Forest: Coniferous - moist/wet
Thuja plicata - Pseudotsuga menziesii / Kindbergia oregana	western redcedar - Douglas-fir / Oregon beaked-moss	Red	CDFmm/05	Terrestrial Realm - Forest: Coniferous - moist/wet

Contact
Sandra Hemstock, M.Sc., R.P.Bio
778-746-7519
shemstock@mcelhanney.com

ATTACHMENT 2

Proposed New Telecommunications Installation

131 Knott Place, Salt Spring Island
File No. TOWB016

December 11, 2024

The Salt Spring Island Islands Trust
4 – 121 McPhillips Avenue
Salt Spring Island, BC

Proposed New Telecommunications Tower Installation
The Salt Spring Island Islands Trust
131 Knott Place, Salt Spring Island
File No. TOWB016

Introduction

SLI Towers Inc. is proposing a new wireless telecommunications facility at 131 Knott Place in Ganges on Salt Spring Island. Our current application has all carriers in mind and has the ability for co-location for all carriers and wireless internet providers (including Bell, Rogers, Telus and Freedom Mobile).

Our proposed location was selected as there is a great need for coverage in the area, and SLI Towers wanted to ensure the placement of our tower was setback from nearby residents while continuing to service them. SLI Towers believes the proposed telecommunications installation provides the best setbacks from existing residents while optimizing the ability to provide them with the enhanced coverage and network capacity for all major wireless network providers necessary to provide these vital services.

The subject property is designated a General Employment and Commercial Services land use area and the proposed tower will be within a compound area of 5m x 20m located at the northeastern side of the property. The view of the tower base will be greatly mitigated by a 2.4m high board fence surrounding the compound, as well as by the existing treeline.

Figure 1: Proposed 35m Monopole Tower location (shown by the green star)

Design

The proposed tower is a 35m slimline monopole installation, engineered to accommodate initial and future loading for national wireless carriers, as well as additional fixed wireless equipment as required. The design shall be considerate of the surrounding area and painted to camouflage with the existing vegetation (as illustrated in the photo simulations in Exhibit "A"). The installation will be within a compound area of 5m x 20m located on the northeast side of the subject property.

Zoning

The proposed tower is located in a General Employment (GE1), surrounded by Agricultural (A), Community Facility (CF) and Parks & Reserves (PR) zoned lands, as shown in Figure 2. Based on the government of British Columbia's Conservation Lands mapping, the proposed site is located well outside of any regulated areas.

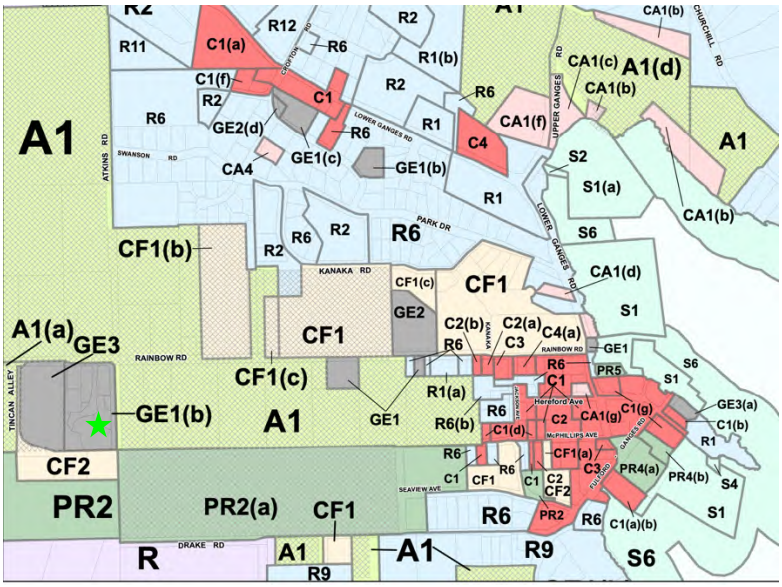


Figure 2: Ganges & Fulford Zoning Map
Salt Spring Island Land Use Bylaw No. 355

Coverage Objective

The proposed installation is designed to improve wireless service in Ganges and along Fulford-Ganges Road. The tower is required to address continually increasing demand for wireless voice and data services as high-quality data and voice services have become essential to local residents. A

switch from land lines to mobile devices also means that mobile networks are the primary means of accessing 911 and emergency services, for which reliable wireless coverage is vital. This coverage solution will address the poor cellular service issues directly and positively impact connectivity in the area.

Site Selection & Land Use Considerations

SLI Towers Inc. has selected the subject property as it is ideally situated within the required range of coverage in Salt Spring Island, while maximizing the setbacks from more sensitive uses nearby. The proposed tower location maintains a setback of approximately 700 m from the nearest residential zoned property as shown in Figure 4 below. As per ISED's protocol, the prescribed notification distance of a tower is three times the tower height, which in the case of our proposal would be 105m. Therefore, the tower would not only meet but exceed the prescribed notification radius from the nearest residential dwelling.

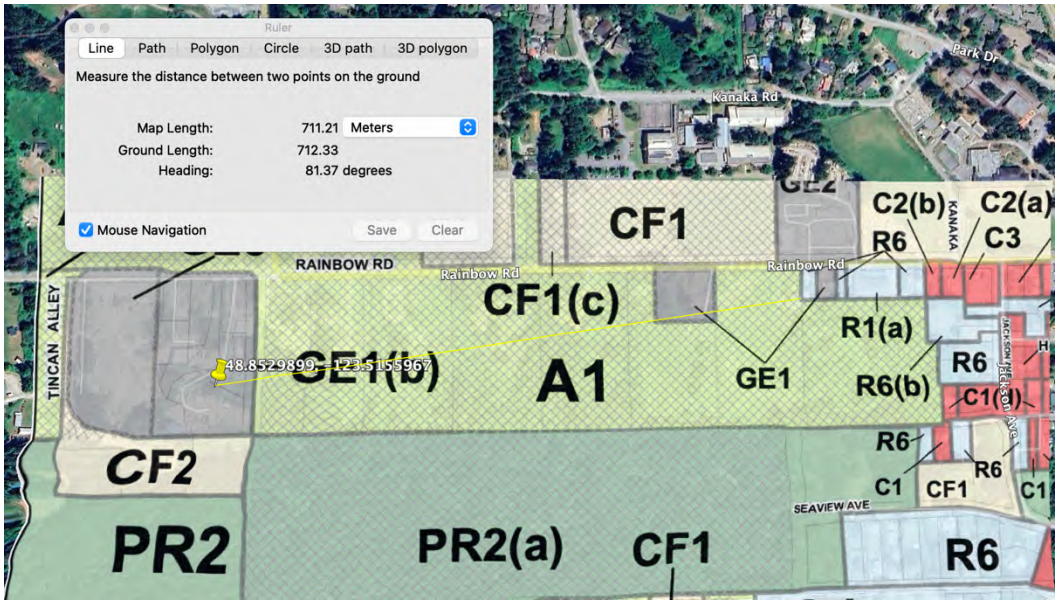


Figure 3: Distance of tower from nearest residential zoned property.

Screening Measures & Design

The proposed tower will be located on the southeastern side of the subject property and will occupy unused space. The proposed installation is illustrated in the conceptual sketch in Exhibit "B" of this report. Further, the compound will be completely surrounded by a 6ft fence in order to prevent public access. The slimline monopole style tower was chosen in order to support multiple carriers at a height necessary to improve coverage in the area, while greatly minimizing the visual impact.

Setbacks from Existing Antenna Sites & Co-location Opportunities

The configuration of modern wireless networks requires close proximity between cellular towers and base stations to ensure sufficient coverage and network capacity. When seeking to enhance coverage in Salt Spring Island, SLI Towers has contacted the municipality to inquire regarding any new tower applications or approvals, as well as reviewed existing towers for co-location opportunities, and have determined that there are no viable co-location options.

The nearest existing tower to the proposal location is a shared Rogers/Telus monopole (red pin) approximately 5.8 km north from the proposed installation which is much too far from the target area for any co-location opportunities. The only other wireless facilities in the vicinity are even further from the target area (green and yellow pins). These facilities are not close enough as is necessary to provide the coverage speeds residents have come to trust and expect, nor for any co-location opportunities. The only other facilities within the vicinity are all minor rooftop installations in Ganges, Fulford Harbour, and Genoa Bay.

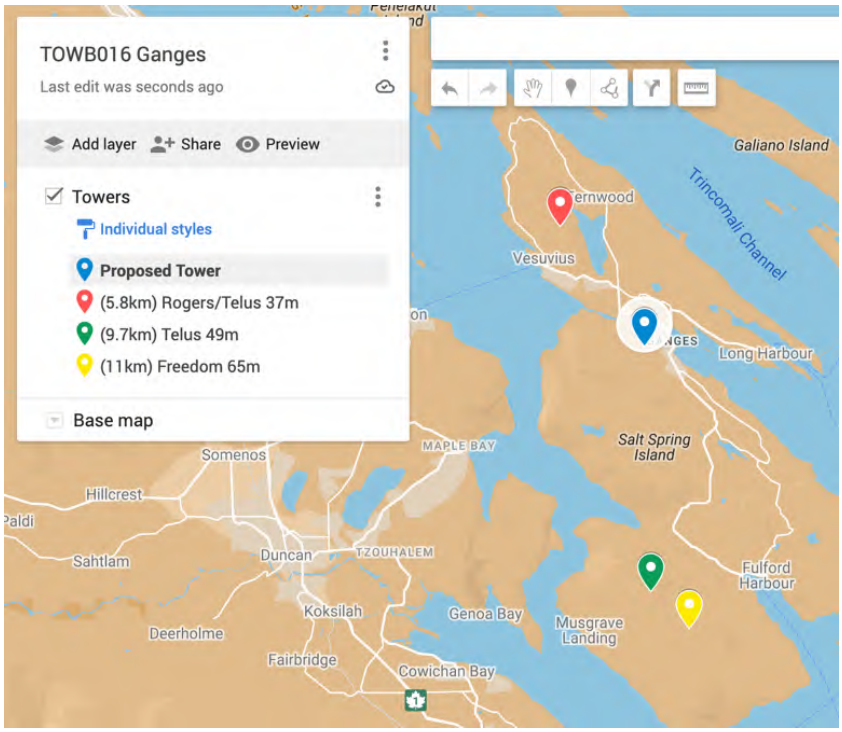


Figure 4: Existing Cellular Facilities in the vicinity of the Subject Property

Control of Public Access

Equipment to support the tower will be located within the tower compound with no public access. All service provider equipment cabinets will be monitored for unauthorized access and be further protected with lights / motion detectors.

Health Canada Safety Code 6 Compliance

Health Canada's role is to protect the health of Canadians, so it is the Department's responsibility to research and investigate any possible health effects associated with exposure to electromagnetic energy, such as that coming from cell phones and base stations. Health Canada has developed guidelines for safe human exposure to RF energy, which are commonly known as Safety Code 6. ISED Canada requires all proponents and operators to ensure that their installations and apparatus comply with Safety Code 6 at all times.

SLI Towers Inc. attests that the radio antenna system described in this notification package will comply with Health Canada's Safety Code 6 limits, as may be amended from time to time, for the protection of the general public including any combined effects of additional carrier collocations and nearby installations within the local radio environment. For more information on Safety Code 6, please visit the following Health Canada site at: www.healthcanada.gc.ca/radiation.

Canadian Environmental Assessment Act

SLI Towers Inc. attests that the radio antenna system as proposed for this site will comply with the Canadian Environmental Assessment Act, as the facility is exempt from review. The Federal government revised the Canadian Environmental Assessment Act in July 2012. Only radiocommunication antenna and supporting structures that are part of or incidental to projects that are designated by the Regulations.

Designating Physical Activities or otherwise designated by the Minister of the Environment as requiring an environmental assessment are subject to the CEAA, 2012. The proposed location creates no impact on area environmental features.

Transport Canada's Aeronautical Obstruction Marking Requirements

SLI Towers Inc. attests that the radio antenna system described in this justification report will comply with Transport Canada / NAV CANADA aeronautical safety requirements. When Transport Canada / NAV Canada have determined if any aeronautical safety features are required for the installation, such information will be provided to Puslinch.

For additional detailed information, please consult Transport Canada at:
http://www.tc.gc.ca/eng/civilaviation/regserv/cars/part6-standards-standard621-512.htm

Engineering Practices

SLI Towers Inc. attests that the radio antenna system as proposed for this site will be constructed in compliance with the applicable CSA codes (S37-18), or any applicable successor code) and comply with good engineering practices including structural adequacy.

Contact Information

SLI Towers Inc, can be contacted via the following methods:
146 Thirtieth Street, Suite 100
Etobicoke, ON M8W 3C4
(437) 425-3982
municipal@slitowers.ca

Municipal Consultation Process

SLI Towers Inc. builds and operates shared wireless telecommunications infrastructure designed to ensure that service providers can address their customers' needs in the most efficient manner. In Canada, wireless communications facilities are a federal undertaking, and consequently SLI Towers is required by ISED Canada to consult with land-use authorities in siting telecommunication infrastructure locations.

The consultation process established under ISED Canada's authority is intended to allow the local land-use authorities the opportunity to address land-use concerns while respecting the Federal government's exclusive jurisdiction over the siting and operation of wireless and data systems.

SLI Towers Inc. welcomes comments from the municipality and its agencies to address any expressed comments that are deemed relevant by Industry Canada's CPC-2-0-03 Issue 6.

ISED Canada's Spectrum Management

Please be advised that the approval of this site and its design is under the exclusive jurisdiction of the Government of Canada through ISED Canada. SLI Towers Inc is participating in this consultation in accordance with ISED Canada's guidelines CPC-2-0-03 Issue 6.

For more information on ISED Canada's consultation guidelines including CPC-2-0-03 contact http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/sf08777e.html or the local ISED Canada office:

ISEDC – Lower Mainland District Office / Bureau de district du Bas-Fraser
13401 – 108 Avenue, Suite 1700
Surrey BC V3T 5V6
Telephone: 1-800-667-3780 or 604-586-2521
Fax: 604-586-2528
Email: spectrumsurrey-surreyspectre@ised-isde.gc.ca

General information relating to antenna systems is available on ISED Canada's Spectrum Management and Telecommunications website: https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/home

Conclusion

Reliable wireless communication services are a key element of economic development across Canada. These services facilitate the growth of local economies by providing easy access to information and connectivity for residents and businesses alike. Access to modern communication networks is an increasing necessity along with other utilities, in both urban and rural communities.

As people rely more on wireless devices such as smartphones, tablets and laptops for business and personal use, new towers are required to ensure high quality voice and data services are consistently available.

In addition to meeting consumer and business needs, reliable wireless networks are also critical to ensuring accessibility to emergency services such as fire, police, and ambulance. Wireless communication products and services used daily by police, EMS and firefighters and other first responders, are an integral part of Canada's safety infrastructure.

SLI Towers Inc. attests that the proposed tower will address deficiencies in wireless network coverage and capacity, and minimizes the impact on surrounding land uses, since the collocation of multiple providers on the tower will eliminate the need for any additional tower infrastructure in the area.

SLI Towers Inc. looks forward to working with the Salt Spring Island Islands Trust to help improve wireless services in the municipality. If you require further information about this proposal, please contact us anytime.

Best regards,

SLI Towers Inc.
municipal@slitowers.ca
slitowers.ca

Exhibit A: Photo Simulation

(An image of the tower superimposed on an artist's rendering is shown to demonstrate the type of tower. The rendering does not depict the proposed location.)

Exhibit B: Sketch with Proposed Leased Area