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CO: Jasleen Kaur, CitiWest Consulting Ltd.

RE: 20525 AND 20541 46A AVENUE, LANGLEY – ENVIRONMENTAL

OVERVIEW ASSESSMENT REPORT

ENKON File No. 1988-001

INTRODUCTION

ENKON Environmental Limited (ENKON) was retained by Impeccable Construction Ltd. to conduct an environmental overview assessment in support of a development permit application for a proposed residential development located at 20525 and 20541 46A Avenue, Langley, British Columbia (the Property). This document has been prepared to identify and document potential project interactions with the environmental resource values near the Property and propose measures to avoid and/or mitigate potential adverse effects, including impacts to an Environmentally Sensitive Area (ESA), as identified in the Langley City's Official Community Plan (OCP) Bylaw 3200¹.

METHODS

Existing Information and Literature Review

Aquatic Habitat

Publicly accessible databases such as Habitat Wizard² and the Langley City's online mapping system (Geocortex)³, were consulted to identify any aquatic habitat on and near the Property.

¹ Langley City. 2021. Langley City Official Community Plan. Available at: https://langleycity.ca/sites/default/files/uploads/OCP/Official%20Community%20Plan%20Bylaw_R.pdf [accessed April 25, 2022]

² BC MOE (BC Ministry of Environment). 2022. Habitat Wizard. Available at https://maps.gov.bc.ca/ess/hm/habwiz/. [accessed April 25, 2022]

³ Langley City. 2022 Geocortex. Available at: https://map.langleycity.ca/html5viewer/?viewer=ext [accessed April 25, 2022]

Terrestrial Habitat

The Wildlife Tree Stewardship Atlas⁴ and the Great Blue Heron Atlas⁵ were queried for identified locations of bald eagle (*Haliaeetus leucocephalus*) nests and great blue heron (*Ardea herodias*) nest colonies.

A list of potential federally and provincially listed species at risk was generated by querying the BC Conservation Data Centre (CDC) Species and Ecosystem Explorer⁶ database to identify listed species that occur specifically within the Fraser Valley Regional District and the Coastal Western Hemlock very dry maritime eastern variant Biogeoclimatic Zone (CWHxm1). The preliminary species list is inclusive of provincially red- and blue-listed species and species listed under the *Species at Risk Act* (SARA) as either Endangered, Threatened or of Special Concern (Schedule 1).

The Province of BC's iMap BC website⁷ was queried for records of element occurrences and posted critical habitat occurring within 2.5 kilometres (km) of the Property. Habitat suitability information was used to refine the preliminary list of species of consideration for the Project. Available literature was used to evaluate the ability of habitat features found within and adjacent to the Property to support critical life history functions for each species on the preliminary species list. Examples of critical life history functions for wildlife include breeding, nesting/denning or hibernation, and for plants, germination, flowering and seed dispersal.

Langley City's Geocortex⁸ mapping system was queried for the location of ESAs in proximity to the Property.

Field Assessment

Aquatic Habitat

ENKON conducted a site visit on April 25, 2022 to determine if there were any previously unmapped watercourses or wetlands on or adjacent to the Property.

Terrestrial Habitat

During the April 25, 2022 site visit, ENKON noted the terrestrial habitat present on site, including suitability for species of conservation interest, raptor nests, as well as general wildlife habitat.

⁴ Community Mapping Network. 2022a. Wildlife Tree Stewardship Atlas. Available at: https://cmnmaps.ca/WITS_gomap/ [accessed April 25, 2022]

⁵ Community Mapping Network. 2022b. Great Blue Heron Atlas. Available at: https://cmnmaps.ca/GBHE/ [accessed April 25, 2022]

⁶ BC Conservation Data Centre: CDC iMap 2021. [web application]. Victoria, BC. Available: http://maps.gov.bc.ca/ess/sv/cdc [accessed April 25, 2022]

⁷ iMap BC. 2022. [web application] Available: http://maps.gov.bc.ca/ess/sv/imapbc [accessed April 25, 2022]

⁸ Langley City. 2022.[web application] Available: https://map.langleycity.ca/html5viewer/?viewer=ext [accessed April 25, 2022]

RESULTS

Existing Information and Literature Review

Aquatic Habitat

No previously mapped aquatic habitat was identified on or immediately adjacent to the Property.

Terrestrial Habitat

The closest recorded bald eagle nest to the Property is BAEA-204-036 (located approximately 1.5 km northwest of the Property).

The closest documented great blue heron colony, the Gordy G's Place colony (GBHE-204-033), is located approximately 4 km northeast of the Property. This colony was recorded as active in 2009.

Development of the Property is not anticipated to impact any previously mapped bald eagle nests or great blue heron nest colonies.

The Property includes a portion of an isolated Environmentally Sensitive Area ranked as moderately low value (Figure 1).

Species of Conservation Concern

A map of element occurrences documented by the CDC within 2.5 km of the Property is presented in Appendix A. Two element occurrences have been documented by the CDC within 2.5 km of the Property:

- Vancouver Island beggarticks (*Allogona townsendiana*) (Shape ID 72476) –more than 2 km south of the Property; and
- Mountain beaver (*Aplodontia rufa*) (Shape ID 20914) historical record from 1969 precise location unknown. Does overlap with the Property.

A map of the critical habitat located within 2.5 km of the Property is provided in Appendix A. Proposed critical habitat for marbled murrelet (*Brachyramphus marmoratus*), which includes the entirety of the southern mainland coast of BC, intersects the Property. There is also proposed critical habitat for barn owl (*Tyto alba*) within 2.5 km of the Property.

In consideration of the disturbed and isolated nature of the terrestrial habitat on the Property, it is unlikely for species at risk to be present. Habitat required for Vancouver Island beggarticks, and mountain beaver is not present on the Property.

Field Assessment

Aquatic Habitat

No aquatic habitat was identified during the field assessment.



Terrestrial Habitat

The Property has deciduous and coniferous trees, confined primarily to the ESA portion of the Property, below a steep slope break in the Property. The southern portion of the Property consists of a recently demolished house, as well as landscaped yard. Vegetation within the ESA was dominated by western redcedar (*Thuja plicata*) and vine maple (*Acer circinatum*) with several invasive species in the understory, including English ivy (*Hedera helix*), Himalayan blackberry (*Rubus armeniacus*), and English laurel (*Prunus laurocerasus*) (Photograph 1). There is an existing shed located within the ESA (Photograph 2).



Photograph 1: Looking north into the ESA (April 25, 2022).



Photograph 2: Looking northeast into the ESA showing existing shed (April 25, 2022).

The southern half of the Property, where the previous building sites were located, is dominated by mature coniferous trees, including western redcedar and Douglas-fir (*Pseudotsuga menziesii*), with several non-native ornamental and invasive species in the understory, including rhododendron, English laurel, bamboo, English ivy, and periwinkle (*Vinca* sp.) (Photographs 3 to 5).

No raptor nests were observed within the proposed development area during the field assessment. The only wildlife species noted during the field assessment were avian, including song sparrow (*Melospiza melodia*), American robin (*Turdus migratorius*), black-capped chickadee (*Poecile atricapillus*), Pacific wren (*Troglodytes pacificus*), and northwestern crow (*Corvus caurinus*).



Photograph 3: Looking north along the driveway of 20525 46A Avenue (April 25, 2022).



Photograph 4: Non-native species in previous residential yard in southern portion of the Property (April 25, 2022).



Photograph 5: Looking north at previous building site at 20525 46A Avenue (April 25, 2022).

CONCLUSION AND RECOMMENDATIONS

The Property does not include any mapped critical habitat for species at risk. There are no known occurrences of species at risk on the Property. No species at risk or evidence of species at risk were observed on the Property during the field assessment. The only wildlife species observed during the field assessment were avian. The Property contains a portion of an isolated ESA ranked as moderately low. Although the ESA contains mature coniferous forest, it is isolated, with no connection to any other natural habitat, and likely only provides habitat for birds and small mammals.

To avoid impacts to nesting birds and contravention of the federal *Migratory Bird Conventions Act* and Section 34b of the BC *Wildlife Act*, vegetation clearing should be scheduled outside of the nesting period (generally March 1 through August 31). If clearing outside of this period cannot be avoided, an active bird nest survey should be completed.

Please contact the undersigned if you have any questions or concerns.

Regards,

Prepared by:

Reviewed by:

Tracy Anderson, B.Sc., R.P.Bio. (#1863) Senior Project Manager

ENKON Environmental Limited

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Afshin O Parsa-manesh O Parsa-manesh O R.P. Bio CAB

Afshin Parsamanesh, M.Sc. R.P.Bio, (#1776) Senior Project Manager

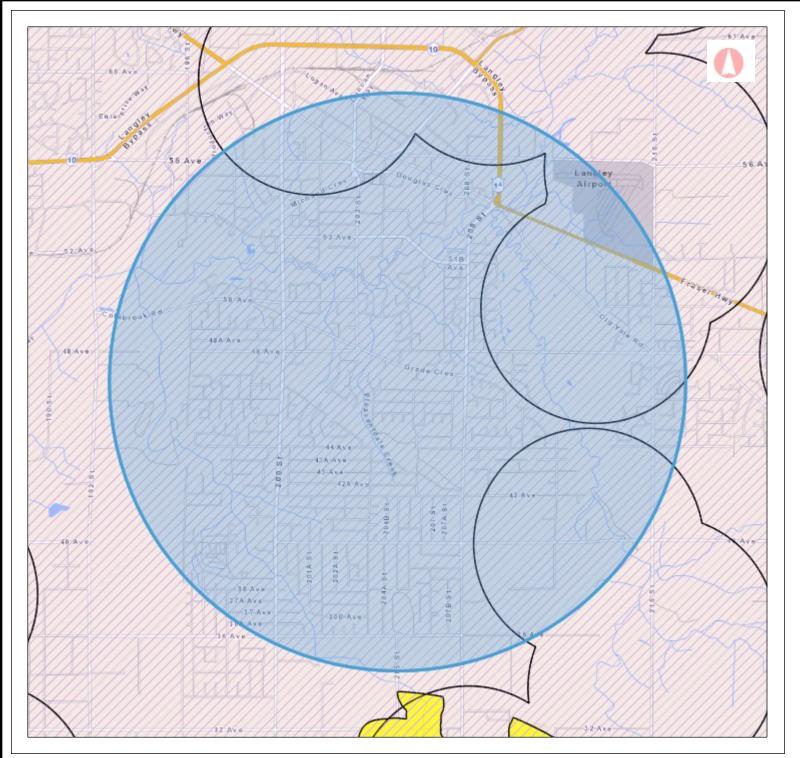
ENKON Environmental Limited

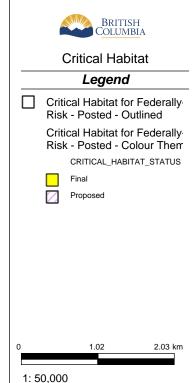
aparsamanesh@enkonenv.com

APPENDIX A

BC Conservation Data: Species Occurrence Report







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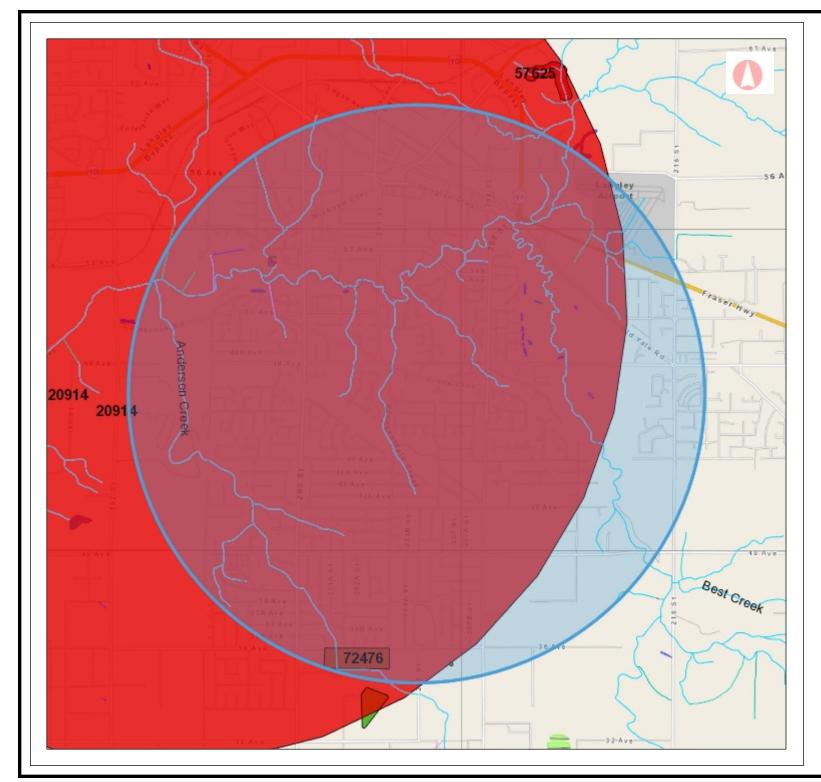
Datum: NAD83

Projection: WGS_1984_Web_Mercator_Auxiliary

Sphere

Key Map of British Columbia







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Datum: NAD83

1: 50,000

Projection: WGS_1984_Web_Mercator_Auxiliary

Sphere

Key Map of British Columbia





BC Conservation Data Centre: Species Occurrence Report Shape ID: 20914

Scientific Name: Aplodontia rufa
English Name: Mountain Beaver

Identifiers

Occurrence ID: 6264 **Shape ID:** 20914

Taxonomic Class: mammals

Element Group: Vertebrate Animal

Status

Provincial Rank: S4

BC List: Yellow

COSEWIC: SC (MAY 2012)

SARA Schedule: 1

Locators

Global Rank:

Survey Site: Langley

Directions: Location very poorly documented.

G5

Biogeoclimatic Zone:

Ecosection: FRL

Area Description

General Description:

Vegetation Zone:

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

Habitat: FOREST NEEDLELEAF

Occurrence Information

First Observation Date: 1969-07-28 Last Observation Date: 1969-07-28

Occurrence Data:

Note: This element occurrence is not being updated. This species is no longer being tracked by the BC CDC, but is a federally listed species therefore we are still exporting the mapped records. The information included here was accurate up until the last observation. 1969-07-28: museum specimen collected (Gyug 2000).

Occurrence Rank and Occurrence Rank Factors Rank: H: Historical 2003-11-12 **Rank Date: Rank Comments: Condition of Occurrence: Size of Occurrence: Landscape Context: Version Version Date:** 2003-11-12 **Version Author:** Stewart, A.C. **Mapping Information Estimated Representation Accuracy:** Low

Ν

Uncertain whether full extent of EO is known

Estimated Representation Accuracy Comments:

Confidence Extent Definition:

Additional Inventory Needed:

Inventory Comments:

Confident that full extent is represented by Occurrence:

Documentation

References:

Gyug, L.W. 2000. Status, distribution, and biology of the Mountain Beaver, Aplodontia rufa, in Canada. Can. Field-Nat. 114(3): 476-490.

Gyug, L.W. 2002. Electronic database compiling all known Mountain Beaver sightings in British Columbia to 2002.

Specimen: anonymous 1969. #7425. PMV

Suggested Citation:

B.C. Conservation Data Centre. 2014. Occurrence Report Summary, Shape ID: 20914, Mountain Beaver. B.C. Ministry of Environment. Available: http://maps.gov.bc.ca/ess/hm/cdc, (accessed Apr 25, 2022).



BC Conservation Data Centre: Species Occurrence Report **Shape ID:** 72476

Scientific Name: Bidens amplissima

English Name: Vancouver Island beggarticks

Identifiers

Occurrence ID: 9923
Shape ID: 72476
Taxonomic Class: dicots

Element Group: Vascular Plant

Status

Provincial Rank: S3
BC List: Blue
Global Rank: G3

COSEWIC: SC (NOV 2001)

SARA Schedule: 1

Locators

Survey Site: BROOKSWOOD, LANGLEY

Directions: Old gravel pit 110 m north of 32nd Avenue and 170 m east of 202nd Street and in Passive Park, 90

m south of the west end of the parking lot and at Noel Booth Park.

Biogeoclimatic Zone:

Ecosection: FRL

Area Description

General Description:

Drying lake bed in old gravel extraction pit with permanent water pools.

Vegetation Zone: Lowland

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

Habitat: PALUSTRINE: Temporary Pool

Occurrence Information

First Observation Date: 2008-10-27 Last Observation Date: 2018-11-07

Occurrence Data:

2018-11-07: Approximately 500 seeds were collected (Stewart 2019b). 2017-11-17: Approximately 500 seeds were collected (Stewart 2019a). 2014-09: Several thousand plants observed (C. Currie, pers. comm. 2014). 2008-10-27: Approximately 700-800 mature plants observed in an old gravel pit in drying depressions where surface water is absent by summer's end. Substrate is classified as a mixture of predominantly sand and fine gravel with lesser amounts of organics. Another 3 mature plants in a moderately vegetated moist depression in Passive Park, ca. 630 m northeast (Lee and Gebauer 2009; University of British Columbia herbarium).

Occurrence Rank and Occurrence Rank Factors

Rank: B : Good estimated viability

Rank Date: 2018-11-07

Rank Comments:

Large population, potentially at risk from recreational activities, invasive species and seasonal water fluctuations.

Condition of Occurrence:

2008: The small subpopulation at Passive Park is in poor condition, whereas the large subpopulation in the old gravel pit is in good condition (Lee and Gebauer 2009) Mostly late season forms due to high water levels in summer. A few plants with a few ray flowers (University of British Columbia herbarium). 2017: Plants in seed (Stewart 2019a). 2018: Plants in seed (Stewart 2019b).

Size of Occurrence:

2008: 700 - 800 plants at old gravel pit; 3 plants at Passive Park (Lee and Gebauer 2009). 2014: Several thousand plants observed (C. Currie, pers. comm. 2014). 2017: Observed (Stewart 2019a). 2018: Observed (Stewart 2019b).

Landscape Context:

Habitat is plentiful in the old gravel pit, but the site is often disturbed by recreational mountain-bikers and other threats include seasonal water fluctuations and the establishment of exotic weed species such as Hypericum boreale. The subpopulation at Passive Park is in poor condition as the park is heavily used for recreational purposes (e.g., frisbee-golf, biking) and plants are crushed, on occasion (Lee and Gebauer 2009; F. Lomer, pers. comm. 2008).

Version

Version Date: 2020-01-19

Version Author: Donovan, M., P. Chytyk, and E.

Barnewall

Mapping Information

Estimated Representation Accuracy: High

Estimated Representation Accuracy Comments:

Confident that full extent is represented by Occurrence: ?

Confidence Extent Definition:

Uncertain whether full extent of EO is known

Additional Inventory Needed: Y

Inventory Comments: To determine full extent and viability of population.

Documentation

References:

Currie, Chris. Personal communication.

Lee, C. and M. Gebauer. 2009. Vancouver Island Beggarticks (Bidens amplissima Greene) Priority Site Inventory - Region 2 (Lower Mainland). Prepared by Chris Lee and Martin Gebauer of Gebauer and Associates Ltd. for the B.C. Ministry of Environment. Surrey, BC.

Stewart, D. 2019a. Summary of Vancouver Island Beggarticks (Bidens amplissima) 2018-2019 Re-Introduction Efforts. Report prepared for Katzie Development Limited Partnership, 10946 Katzie Road, Pitt Meadows, BC V3Y 2G6. 14pp. + appendix.

Stewart, D. 2019b. Summary of Vancouver Island Beggarticks (Bidens amplissima) 2019-2020 Re-Introduction Efforts. Report prepared for Katzie Development Limited Partnership, 10946 Katzie Road, Pitt Meadows, BC V3Y 2G6. 14pp. + appendix.

University of British Columbia. Dep. Bot., Dep. Zool., Biol. Sci. Bldg., 6270 Univ. Blvd., Vancouver, BC.

Specimen: Lomer, F. (6898). 2008. #V227490. UBC.

Suggested Citation:

B.C. Conservation Data Centre. 2014. Occurrence Report Summary, Shape ID: 72476, Vancouver Island beggarticks. B.C. Ministry of Environment. Available: http://maps.gov.bc.ca/ess/hm/cdc, (accessed Apr 25, 2022).