Development Permit Application

Referral Form – RDCK File DP2601E

Date: March 18, 2026

You are requested to comment on the attached DEVELOPMENT PERMIT for potential effect on your agency's interests. We would appreciate your response WITHIN 30 DAYS (PRIOR TO April 18, 2026). If no response is received within that time, it will be assumed that your agency's interests are unaffected.

LEGAL DESCRIPTION & GENERAL LOCATION:

7782 Highway 3A, Balfour, BC V0G 1C0

LOT A DISTRICT LOT 192 KOOTENAY DISTRICT PLAN EPP11283 (PID: 028-638-425)

PRESENT USE AND PURPOSE OF PERMIT REQUESTED:

The subject property is located on the north side of the West Arm of Kootenay Lake approximately 200 metres west of the Balfour Ferry Terminal. The 1.2 acre parcel is divided by Balfour Wharf Road with a portion of the lot between Highway 3A and Balfour Wharf Road, and a portion of the lot between Balfour Wharf Road and Kootenay Lake. The property has been used as an RV Resort/Campground for a number of decades and the current owners are proposing to redesign the site layout, construct privacy fencing, install new wastewater systems and remove an existing wooden retaining wall.

The applicant has applied for joint a Watercourse Development Permit (WDP) and Industrial Commercial Development Pemit (ICDP) application. The WDP is required due to the proposal to decommission an existing wooden retaining wall within the 15 metre WDP Area associated with Kootenay Lake. The ICDP is required because the property is designated Industrial in the Area 'E' OCP. The purpose of this Industrial Commercial DP Area is to ensure that adequate landscaping and screening is provided to ensure appropriate buffers between subject property and surrounding residential uses.

AREA OF PROPERTY AFFECTED	ALR STATUS	ZONING	OCP
0.48 ha (1.2 acres)	n/a	n/a	Industrial (M) in Official Community Plan Bylaw No. 2260, 2013

APPLICANT: Don Faust on behalf of 0770725 BC LTD.

Please provide your response via email.

If your agency's interests are 'Unaffected' no further information is necessary. In all other cases, we would appreciate receiving additional information to substantiate your position and, if necessary, outline any conditions related to your position. Please note any legislation or official government policy which would affect our consideration of this permit.

☒ MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE	REGIONAL DISTRICT OF CENTRAL KOOTENAY
☒ HABITAT BRANCH	DIRECTORS FOR:
☒ FRONTCOUNTER BC	☐ A ☐ B ☐ C ☐ D ☒ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K
☒ ARCHAEOLOGY BRANCH	ALTERNATIVE DIRECTORS FOR:
☐ AGRICULTURAL LAND COMMISSION	☐ A ☐ B ☐ C ☐ D ☒ E ☐ F ☐ G ☐ H ☐ I ☐ J ☐ K
☐ REGIONAL AGROLOGIST	☒ APHC AREA 'E'
☐ ENERGY & MINES	☒ RDCK FIRE SERVICES
☐ MUNICIPAL AFFAIRS & HOUSING	☒ RDCK EMERGENCY SERVICES
☒ INTERIOR HEALTH, HBE TEAM	☒ RDCK BUILDING SERVICES
☐ SCHOOL DISTRICT NO.	☒ RDCK UTILITY SERVICES (BALFOUR WATER SYSTEM)
☐ WATER SYSTEM OR IRRIGATION DISTRICT	☐ RDCK RESOURCE RECOVERY
	☐ RDCK REGIONAL PARKS
	FIRST NATIONS

Nelson Office: Box 590, 202 Lakeside Drive, Nelson, BC. V1L 5R4

Phone: 250.352.6665 | Toll Free: 1.800.268.7325 (BC) | Email: info@rdck.ca | Fax: 250.352.9300

☒ UTILITIES (FORTIS, BC HYDRO, NELSON HYDRO, COLUMBIA POWER)	☒ KTUNAXA NATION COUNCIL YAQAN NU?KIY (LOWER KOOTENAY) ?AKINK'UM‡ASNUQ‡I?IT (TOBACCO PLAINS) ?AKISQNUK (COLUMBIA LAKE) ?AQ'AM (ST. MARY'S)

The personal information on this form is being collected pursuant to *Regional District of Central Kootenay Planning Procedures and Fees Bylaw No. 2457, 2015* for the purpose of determining whether the application will affect the interests of other agencies or adjacent property owners. The collection, use and disclosure of personal information are subject to the provisions of FIPPA. Any submissions made are considered a public record for the purposes of this application. Only personal contact information will be removed. If you have any questions about the collection of your personal information, contact the Regional District Privacy Officer at 250.352.6665 (toll free 1.800.268.7325), info@rdck.bc.ca, or RDCK Privacy Officer, Box 590, 202 Lakeside Drive, Nelson, BC V1L 5R4.

RDCK Map

REGIONAL DISTRICT OF CENTRAL KOOTENAY
Box 590, 202 Lakeside Drive,
Nelson, BC V1L 5R4
Phone: 1-800-268-7325 www.rdck.bc.ca
maps@rdck.bc.ca

Legend

- Place Names
- Electoral Areas
- RDCK Streets
- Cadastre - Property Lines
- Address Points

Map Scale:

1:9,028

Date: January 6, 2026

RDCK Map

REGIONAL DISTRICT OF CENTRAL KOOTENAY
Box 590, 202 Lakeside Drive,
Nelson, BC V1L 5R4
Phone: 1-800-268-7325 www.rdck.bc.ca
maps@rdck.bc.ca

Legend

- Electoral Areas
- RDCK Streets
- Cadastre - Property Lines
- Address Points

Map Scale:

1:2,257

Date: January 6, 2026

RDCK Map

REGIONAL DISTRICT OF CENTRAL KOOTENAY
Box 590, 202 Lakeside Drive,
Nelson, BC V1L 5R4
Phone: 1-800-268-7325 www.rdck.bc.ca
maps@rdck.bc.ca

Legend

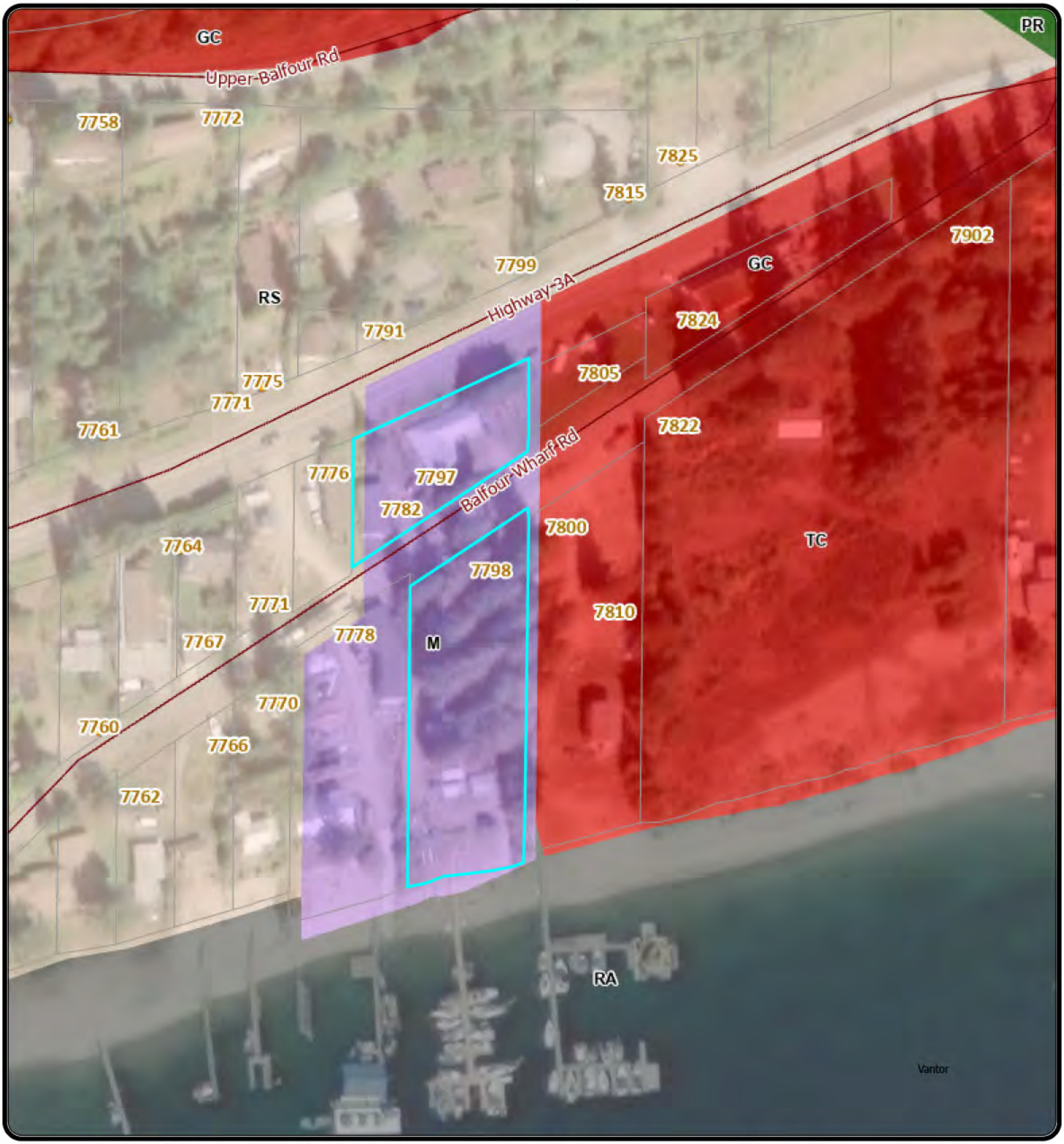
- Lakes and Rivers
- Streams and Shorelines
- Flood Construction Levels - 1990
- Electoral Areas
- RDCK Streets
- Cadastre - Property Lines
- Address Points

Map Scale:

1:2,257

Date: January 6, 2026

RDCK Map



REGIONAL DISTRICT OF CENTRAL KOOTENAY
Box 590, 202 Lakeside Drive,
Nelson, BC V1L 5R4
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maps@rdck.bc.ca

Official Community Plan

- Commercial
- Industrial
- Parks and Recreation
- Resource Area

Legend

- Suburban Residential
- Electoral Areas
- RDCK Streets
- Cadastre - Property Lines
- Address Points

Map Scale:

1:2,257

N W E S

Date: January 6, 2026

RDCK Map

REGIONAL DISTRICT OF CENTRAL KOOTENAY
Box 590, 202 Lakeside Drive,
Nelson, BC V1L 5R4
Phone: 1-800-268-7325 www.rdck.bc.ca
maps@rdck.bc.ca

Legend

- Flood Construction Levels - 1990
- Electoral Areas
- RDCK Streets
- Cadastre - Property Lines
- Address Points

Map Scale:

1:2,257

N W E S

Date: January 6, 2026

The mapping information shown are approximate representations and should only be used for reference purposes. The Regional District of Central Kootenay is not responsible for any errors or ommissions on this map.

RDCK Map

REGIONAL DISTRICT OF CENTRAL KOOTENAY
Box 590, 202 Lakeside Drive,
Nelson, BC V1L 5R4
Phone: 1-800-268-7325 www.rdck.bc.ca
maps@rdck.bc.ca

Development Permit Areas

- Industrial and Commercial
- Residential Cluster
- Watercourse

Legend

- Flood Construction Levels - 1990
- Electoral Areas
- RDCK Streets
- Cadastre - Property Lines
- Address Points

Map Scale:

1:2,257

Date: January 6, 2026

18.0 DEVELOPMENT PERMIT AREAS

Background

The OCP may designate Development Permit Areas under the authority of local government legislation. Unless otherwise specified, a development permit must be approved by the Regional Board, or delegate of the Board, prior to any development or subdivision of land within a designated Development Permit Area.

Development Permit Areas allow for implementation of special guidelines for the protection of the natural environment, protection from hazardous conditions, for revitalization of designated areas, or to guide the form and character of development within the Plan area. Development Permit Areas can also be used to meet targets for carbon emission reductions and energy and water conservation.

Where land is subject to more than one Development Permit Area designation, a single development permit is required. The application will be subject to the requirements of all applicable Development Permit Areas, and any development permit issued will be in accordance with the guidelines of all such Areas.

Development Permit Area #1: Watercourse Development Permit (WDP) Area

Category

The WDP area is designated under Section 919.1(1) (a) of the *Local Government Act* for the protection of the natural environment, its ecosystems and biological diversity.

Justification

The primary objective of this Development Permit Area designation is to regulate development activities in watercourses, lakes and wetlands and their adjacent riparian areas so as to protect aquatic habitat; and to conserve, enhance and, where necessary, restore watercourses and their riparian areas.

Area

The WDP area is comprised of:

1. Riparian assessment areas (Figure 1) for fish and wildlife habitat and drinking water, including:
    a. All areas within 15 metres of the high water mark of a watercourse, including the natural boundary of a lake;
    b. within 15 metres of the top of the ravine bank in the case of a ravine less than 60 metres wide;

c. within 5 metres of the top of the ravine bank in the case of a wider ravine that links aquatic to terrestrial ecosystems and includes both existing and potential riparian vegetation and existing and potential upland vegetation that exerts an influence on the watercourse; and

d. all areas within 15 metres of the high water mark of a wetland.

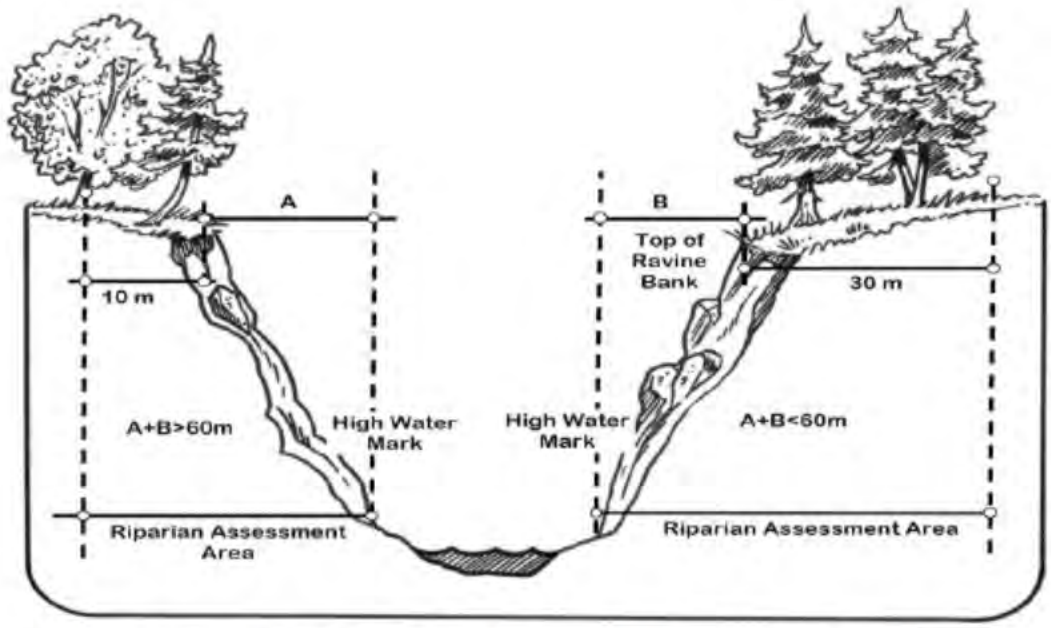


FIGURE 1: RIPARIAN ASSESSMENT AREA: means the area within 15 m of the high water mark of a watercourse; within 15 m of the top of the ravine bank in the case of a ravine less than 60 m wide; and within 5 m of the top of the ravine bank in the case of a wider ravine that link aquatic to terrestrial ecosystems and includes both existing and potential riparian vegetation and existing and potential upland vegetation that exerts an influence on the watercourse.

Source: British Columbia Ministry of Environment, *Riparian Areas Regulation Implementation Guidebook,* March 2005

Where the following definitions apply:

High water mark means the visible high water mark of a watercourse where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the watercourse a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself, and includes the active floodplain.

Lake means any area of year round open water covering a minimum of 1.0 hectares (2.47 acres) of area and possessing a maximum depth of at least 2.0 metres. Smaller and shallower areas of open water may be considered to meet the criteria of a wetland.

Top of ravine bank means the first significant break in a ravine slope where the break occurs such that the grade beyond the break is greater than 3:1 for a minimum distance of 15 m measured perpendicularly from the break, and the break does not include a bench within the ravine that could be developed.

Watercourse means any natural or man made depression with well-defined banks and a bed 0.6 metres (2.0 feet) or more below the surrounding land serving to give direction to a current of water at least six months of the year and/or having a drainage area of two square kilometres (0.8 square miles) or more upstream of the point of consideration.

Wetland means any areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

Guidelines

A development permit is required, except where specified under the exemptions section, for development or land alteration on land identified as a riparian assessment area within the WDP Area. Where not exempt, development requiring a development permit includes any of the following associated with or resulting from residential, commercial or industrial activities or ancillary activities to the extent that they are subject to local government powers under local government legislation:

a. removal, alteration, disruption or destruction of vegetation;
b. disturbance of soils;
c. construction or erection of buildings and structures;
d. creation of non-structural impervious or semi-impervious surfaces;
e. flood protection works;
f. construction of roads, trails, docks, wharves and bridges;
g. provision and maintenance of sewer and water services;
h. development of drainage systems;
i. development of utility corridors; and
j. subdivision as defined in section 872 of the *Local Government Act*;

Development shall be in accordance with the following guidelines:

2. All development proposals subject to this permit will be assessed by a Qualified Environmental Practitioner (QEP) or Registered Professional Biologist (RP Bio) in accordance with the Riparian Areas Regulation established by the Provincial and/or Federal governments as used elsewhere in the Province;

3. An WDP shall not be issued prior to the RDCK ensuring that a QEP or RP Bio has submitted a report certifying that they are qualified to carry out the assessment, that the assessment methods have been followed, and provides in their professional opinion that a lesser setback will not negatively affect the functioning of a watercourse or riparian area and that the criteria listed in the Riparian Areas Regulation has been fulfilled, and;
4. The Riparian Areas Regulation implemented through the WDP does not supersede other Federal, Provincial and or local government requirements, including that of other development permit areas, building permits, flood covenants, Federal or Provincial authorization. Land subject to more than one development permit area designation must ensure consistency with the guidelines of each development permit area, to provide comprehensive stewardship of both fish and wildlife habitat.

Exemptions

The WDP area does not apply to the following:

5. existing construction, alteration, addition, repair, demolition and maintenance of farm buildings and agricultural activities including clearing of land for agricultural purposes;
6. existing institutional development containing no residential, commercial or industrial aspect;
7. construction, renovation, or repair of a permanent structure if the structure remains on its existing foundation. Only if the existing foundation is moved or extended in to a riparian assessment area would a WDP be required, and;
8. an area where the applicant can demonstrate that the conditions of the ESDP Area have already been satisfied or a development permit for the same area has already been issued in the past and the conditions in the development permit have all been met, or the conditions addressed in the previous development permit will not be affected.

2. Additions, alterations and accessory structures in pre-existing developments, where all of the following are demonstrated at the time of application for Building Permit:

a. The parcel's strata, shared interest corporation, cooperative, or company has provided a letter of support for the proposal;

b. It is clearly demonstrated that the proposal will not impact adjacent riparian areas; and,

c. Proposed buildings and structures, with the exception of fences, are:

i. Sited a minimum of 7.5 metres from front or exterior side lot lines and 2.5m from any other lot line; and,

ii. Are screened from adjacent lands by a landscape screen.

Development Permit Area #3: Industrial and Commercial Area Permit (ICDP) Area

Category

The ICDP area is designated under Section 488 (1) (a) and (f) of the Local Government Act for the establishment of objectives for the protection of the natural environment and form and character of industrial and commercial uses within the Plan area.

Area

The ICDP area is comprised of all privately owned or leased lands designated as Industrial (M) and Commercial (TC and GC) on Schedule 'B'.

Justification

The primary objective of this development permit area designation is to ensure that industrial and commercial developments within the Plan area are compatible and considerate of the natural environment and the surrounding residential and rural character of the Plan area.

Guidelines

1. 1. Any off-street parking area, exterior display area or loading area on a lot used for Commercial or Industrial purposes shall:
    a. be provided with screening in the form of a fence not less than 1.5 metre in height or by a hedge not less than 1.5 metre in height at the time of planting where adjacent to a lot in any residential zone; such screening shall be planted or installed so that no person shall be able to see through it; and,

b. be separated from any directly abutting lot in any residential zone and from any adjoining highway other than a lane, by a fully and suitably landscaped and properly maintained strip not less than 1.5 metres in width.

2. Where any lot is used for commercial, industrial and institutional purposes, any part of such lot that is not used for buildings, exterior display areas, parking or loading facilities shall be maintained as a landscaped area, or as undisturbed forest.
3. Where any off-street parking area for four (4) or more vehicles is located within 4.5 metres of a front or exterior side lot line, it shall be screened by an evergreen hedge not less than 1.5 metre in height at the time of planting. The minimum width of soil area for the hedge shall be 0.75 metres. The hedge shall be planted one (1) metre from curbs or wheel stops.
4. The design, installation and maintenance of any landscaping area or screen should be in conformity with the current specifications of the "British Columbia Landscape Standard" prepared by the B.C. Society of Landscape Architects and the B.C. Nursery Trades Association. These standards do not apply where endemic, native plantings are used for landscaping.

Exemptions

The ICDP area does not apply to the following:

5. Development associated with agricultural, residential or institutional land uses and activities; and
6. Existing construction, alteration, repair, demolition and maintenance of industrial or commercial buildings.

To: Laura Christie and Sadie Chezenko

From: Andy Cohen

Re: ICDP Balfour

Date: December 21, 2025

Hello. As discussed in emails, we are submitting in the attached package:

TYPE of Permit

- An Application for an ICDP for our campground in Balfour.

Reasons for Application

- We are owners of the lands and need to refurbish our existing septic system to a complete, updated technology system to serve our RV guests. The Campground is 80 years old and has Balfour Water District Service, Nelson Hydro Service and our own septic system. We intend to install a new, engineered septic system and re-establish the RV sites in roughly the same location.

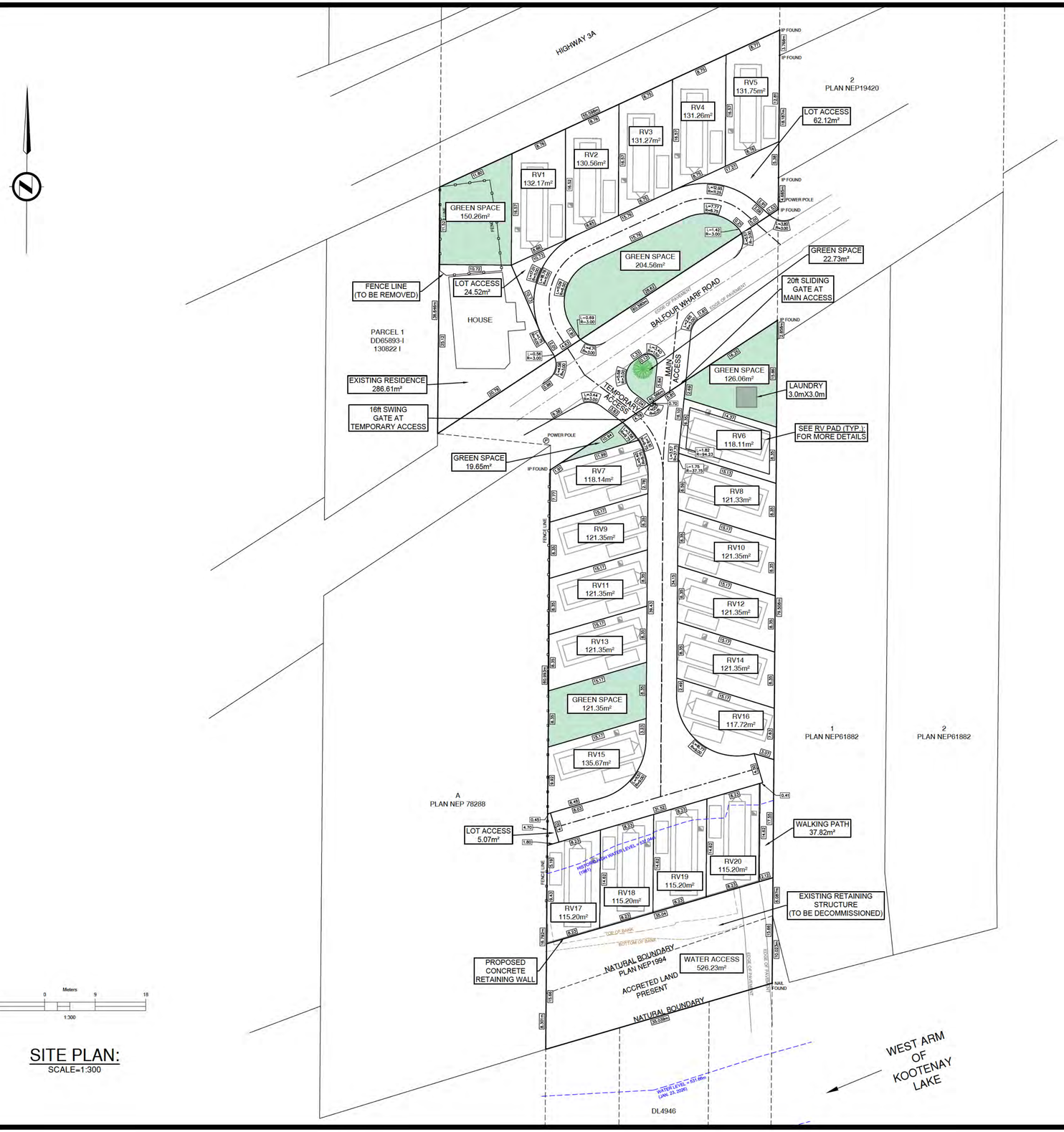
Description of the Works and Conformity with ICDP Guidelines

- An new 8ft tall solid fence will be installed on the perimeter of the property. A solid electric sliding gate will be installed to conform to the guidelines.
- The park will be landscaped with additional trees, flower and bush boxes separating each RV site.
- Parking on the lower section will be completely screened and parking on the upper section will be separated by hedges as described in the Guidelines.
- The final landscaping will conform with the "BC Landscape Standard" prepared by the BC Society of Landscape Architects and the BC Nursery Trades Association.

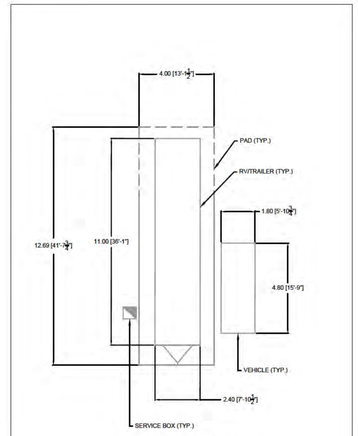
Once our engineers design a plan to bolster and or replace the existing lower bank, we will apply for a WDP if needed before any works go forward. At this time, we are applying for the ICDP only and once approved, will install septic and fencing. Note currently, none of the RV campgrounds in the area have any landscaping as described in the Guidelines.

Please call Andy at [redacted] to discuss any issues with this application.

Thank you!



SITE PLAN:
SCALE=1:300



RV PAD (TYP.):
SCALE=1:150

FOR REVIEW

General Notes

1. LEGAL ADDRESS PLAN EPP11283
2. RTK GNSS LOCALIZED TOPOGRAPHIC SURVEY PERFORMED ON JANUARY 23, 2026.
3. ELEVATIONS ARE GEODETIC.
4. CONCEPTUAL DESIGN ONLY

No.	Revision/Issue	Date

DESIGNED _____ DATE _____
CHECKED _____ DATE _____
DRAWN CK DATE MAR. 2026

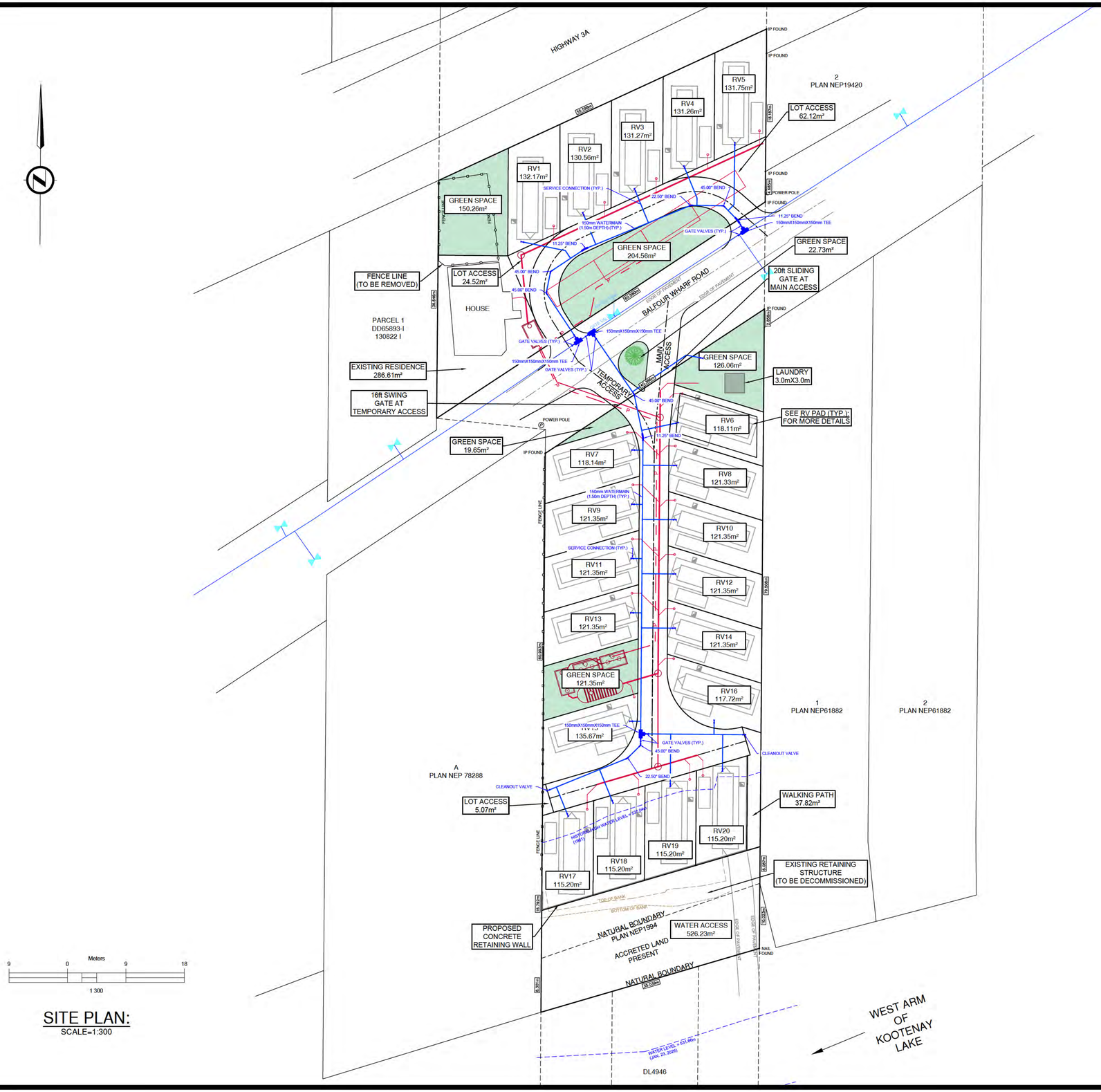
070725 BC Ltd.

PENNCO ENGINEERING (BC) LTD.
CONSULTING ENGINEERS
PERMIT NUMBER: 1003887
Suite 201–601 Front Street
Nelson, B.C. V1L 4B6
Tel: (250) 354–0112
Fax: (250) 354–0113
Email: bernie@pennco.ca

BALFOUR RV PARK

PROPOSED LOT LAYOUT

Project No.	Drawing No.
26–1786	1786–01
Scale: 1:300	Sheet: 01 OF 02
Date: MARCH 16, 2026	REV. –



SITE PLAN:
SCALE=1:300

NOTE:

1. SIZE AND CAPACITIES OF EXISTING WATERMAIN ON BALFOUR WHARF ROAD (TO BE DETERMINED)
2. EXISTING AND PROPOSED FIRE HYDRANT LOCATIONS (TO BE DETERMINED)
3. WATERMAIN TO BE 150mm PVC, MINIMUM DEPTH 1.50m BELOW FINAL GRADE
4. WATERMAIN TO BE 0.45m ABOVE SANITARY PIPING AND 3.00m MINIMUM HORIZONTAL DISTANCE FROM SANITARY PIPING.
5. WATERMAIN TO BE INSULATED IF, 1.50m MINIMUM DEPTH, 0.45m CLEARANCE OR 3.00m MINIMUM DISTANCE FROM SANITARY PIPING, CANNOT BE ACHIEVED
6. WATER SERVICE CONNECTION SIZE (TO BE DETERMINED)
7. WATER SERVICE CONNECTIONS 3.00m MINIMUM HORIZONTAL DISTANCE FROM SANITARY SERVICE CONNECTIONS

FOR REVIEW

General Notes

1. LEGAL ADDRESS PLAN EPP11283
2. RTK GNSS LOCALIZED TOPOGRAPHIC SURVEY PERFORMED ON JANUARY 23, 2026.
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4. CONCEPTUAL DESIGN ONLY

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DESIGNED _____ DATE _____
CHECKED _____ DATE _____
DRAWN CK DATE MAR. 2026

070725 BC Ltd.

PENNCO ENGINEERING (BC) LTD.
CONSULTING ENGINEERS
PERMIT NUMBER: 1003887
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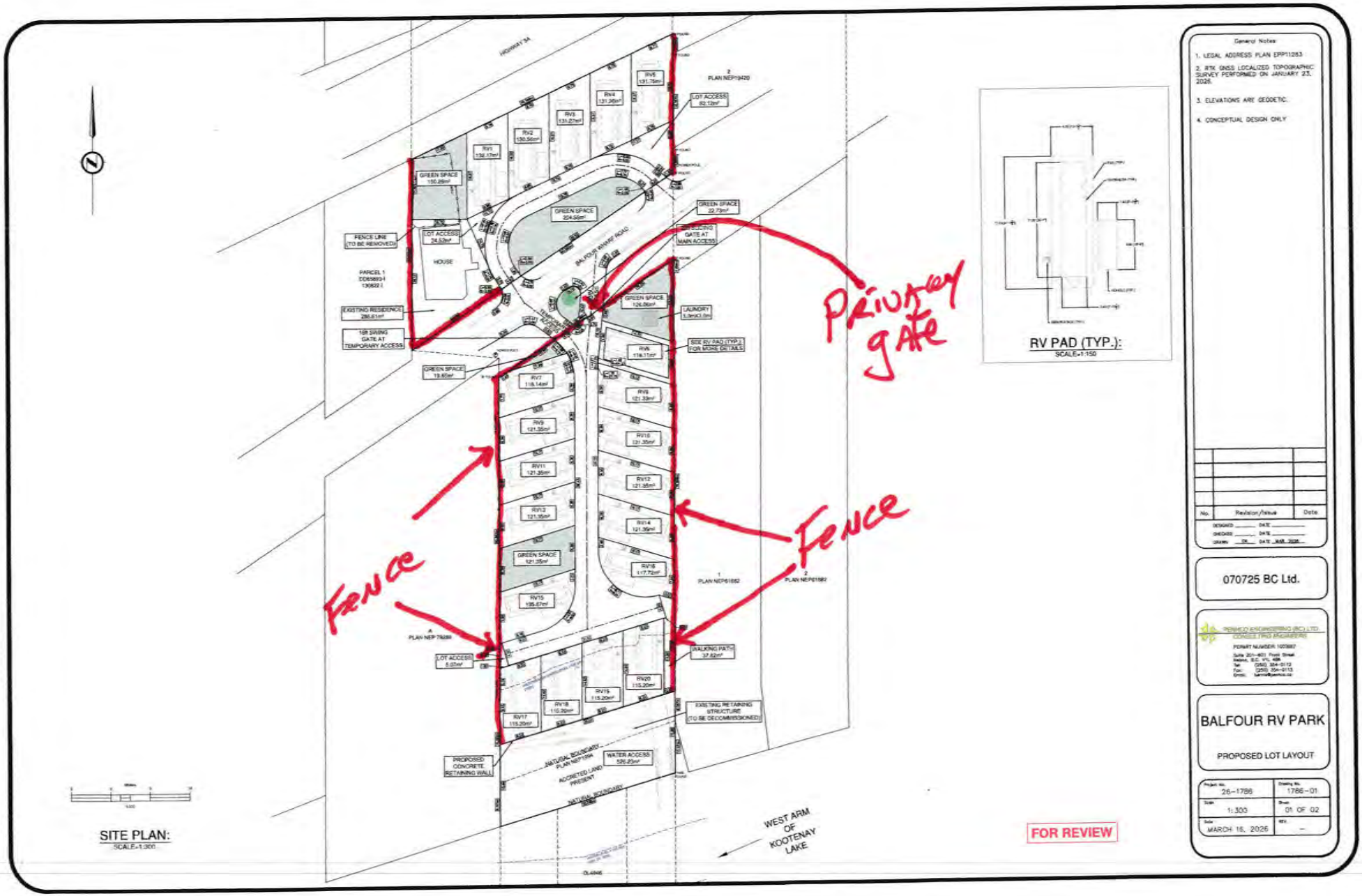
Nelson, B.C. V1L 4B6
Tel: (250) 354–0112
Fax: (250) 354–0113
Email: bernie@pennco.ca

BALFOUR RV PARK

PROPOSED UTILITIES PLAN

Project No.	Drawing No.
26–1786	1786–02
Scale: 1:300	Sheet: 02 OF 02
Date: MARCH 16, 2026	REV. –



SITE PLAN:
SCALE=1:300

RV PAD (TYP.):
SCALE=1:150

General Notes

1. LEGAL ADDRESS PLAN EPP11263
2. RTK GNSS LOCALIZED TOPOGRAPHIC SURVEY PERFORMED ON JANUARY 23, 2026.
3. ELEVATIONS ARE GEODETIC.
4. CONCEPTUAL DESIGN ONLY

No.	Revision/Issue	Date

DESIGNED ____ DATE ____
CHECKED ____ DATE ____
DRAWN DK DATE MAR 2026

070725 BC Ltd.

PERMIT NUMBER 1003997
Suite 201–601 Front Street
Nelson, B.C. V1L 4B6
Tel: (250) 354-0112
Fax: (250) 354-0113
Email: [illegible]

BALFOUR RV PARK

PROPOSED LOT LAYOUT

Project No.	Drawing No.
26-1786	1786-01
Scale	Sheet
1:300	01 OF 02
Date	REV.
MARCH 16, 2026	–

FOR REVIEW

Keefer Ecological Services Ltd

Riparian Assessment and Restoration Plan

Proposed Retaining Wall Removal and Shoreline Bank Restoration

Prepared for: Andy Cohen

Prepared by: Keefer Ecological Services Ltd.

2026-03-13

Table of Contents

1. Introduction

This report provides a riparian assessment for a lakeshore property located in Balfour Bay on the west shore of Kootenay Lake, near the Balfour ferry terminal in the Regional District of Central Kootenay (RDCK).

The assessment was prepared to support an application for a Watercourse Development Permit. The proposed work involves removing an existing deteriorated timber retaining wall along the shoreline and reshaping the bank to create a stable slope in its place. The intent of the project is to stabilize the shoreline and replace the failing retaining structure with a vegetated bank.

The RDCK requires a riparian assessment signed by a Qualified Environmental Professional (QEP) when development or shoreline works are proposed within the Watercourse Development Permit Area. The purpose of this assessment is to document existing site conditions, identify the natural boundary of the lake, evaluate the potential for fish habitat at the site, and assess whether the proposed works may affect fish habitat or riparian function.

Field observations were completed on March 5, 2026. The assessment included documentation of shoreline conditions, riparian vegetation, substrate type, slope and stability, and indicators of the natural boundary. Observations were also used to assess the potential presence of fish habitat and the likelihood of impacts from the proposed works.

Field observations indicate that the site's shoreline is already modified and provides limited riparian vegetation and structural habitat features. The assessment evaluates whether removing the existing retaining wall and regrading the bank may affect fish habitat or riparian function.

The report has been prepared for and at the expense of the owner of the assessed property. The authoring QEPs have not acted for or as agents of the RDCK and have followed provincially and federally recognized best management practices.

RDCK may rely on the QEP’s recommendations for the development and use of the property in a manner consistent with the Development Permit Area. This Report is believed to meet the stipulated requirements set by RDCK’s development permit application guidelines and terms of reference.

Figure 1. Project location within Balfour Bay on the west shore of Kootenay Lake near the Balfour Ferry Terminal in the Regional District of Central Kootenay. The inset map shows the site's regional location in the Kootenay Lake area.

2. Site Description

The project site is located on the west shore of Kootenay Lake in Balfour Bay within the Regional District of Central Kootenay. The property is situated near the Balfour ferry terminal and is accessed from the lakeshore road (Balfour Wharf Road) that runs along the western edge of the bay. Surrounding land use in the area consists primarily of residential lakeshore development with private docks, modified beach areas, and shoreline protection structures common along many parcels.

Photo 1. General view of the project shoreline within Balfour Bay showing the modified beach area and surrounding developed shoreline.

Balfour Bay is a sheltered portion of Kootenay Lake, near the outlet where the lake transitions into the lower Kootenay River. Water levels in the lake are regulated by dam operations and fluctuate seasonally. The shoreline in this portion of the bay is generally characterized by gently sloping beach areas and developed waterfront properties.

The subject property slopes gradually toward the lake and has a modified shoreline influenced by past development. Much of the central portion of the shoreline was previously cleared or altered, resulting in limited riparian vegetation along the immediate water's edge. The ground surface near the shoreline consists largely of exposed sand and gravel typical of developed beach areas in Balfour Bay.

Some riparian vegetation remains near the edges of the property where the shoreline transitions to neighbouring parcels. Vegetation in these areas includes mature trees and shrubs commonly found along lakeshores in the region. These vegetated areas form a relatively narrow band along the property margins, while the central portion of the site is largely open and disturbed.

The surrounding shoreline along Balfour Bay shows similar conditions, with many properties containing docks, retaining structures, or modified beach areas associated with residential use. Natural riparian vegetation is limited in many locations along this portion of the shoreline.

The site occurs within the Interior Cedar–Hemlock very wet (ICHxw) biogeoclimatic zone. Under natural conditions, shorelines in this ecosystem would typically support a mix of cottonwood, willow, and shrub species along the water's edge. At the project site, much of this vegetation has been removed or altered through past shoreline modification and residential use.

Overall, the shoreline at the project site reflects conditions typical of developed lakeshore properties within Balfour Bay, where historic shoreline alteration and residential use have reduced natural riparian vegetation and modified the natural shoreline profile.

3. Methodology for Determining the Riparian Assessment Area

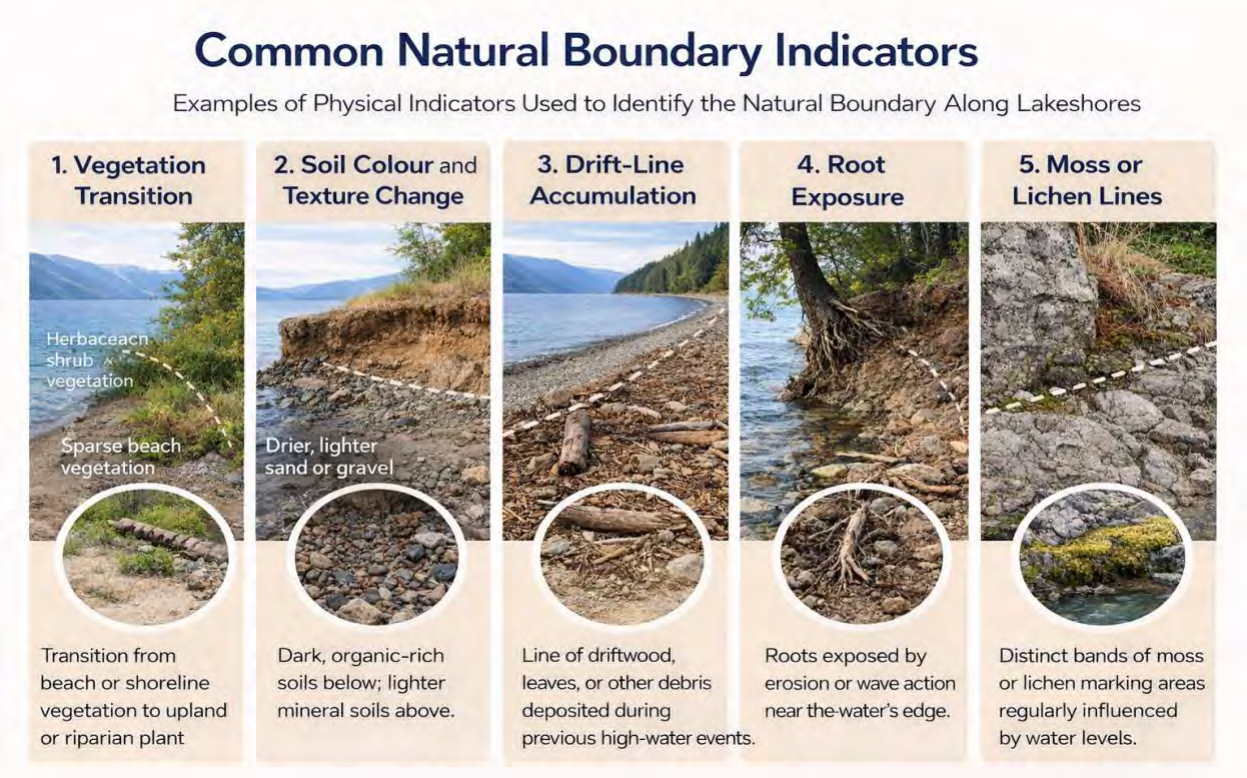
The riparian assessment area for this project was determined through a site-specific field assessment centred on the natural boundary of Kootenay Lake (generally around 531.97 m per Fortis BC "typical year" stats) and the setback requirements applied by the Regional District of Central Kootenay (RDCK). The Riparian Areas Protection Regulation (RAPR) Assessment Methods Manual provides the general framework for riparian assessments and typically requires determining the width of a Streamside Protection and Enhancement Area (SPEA). However, the RDCK Floodplain Management Bylaw applies a fixed 15 m setback from the natural boundary for shoreline development. As a result, a site-specific SPEA width calculation was not required for this assessment, and the riparian assessment area was defined by interpreting the natural boundary and applying the 15 m setback.

Field assessment was completed on March 5, 2026. The first step was to identify the natural boundary of Kootenay Lake in the field by walking the shoreline and evaluating physical indicators associated with the ordinary high-water level. Indicators recorded during the site visit included vegetation transitions, changes in soil colour and texture, drift-line accumulation, root exposure, and moss or lichen lines. A GPS track of the interpreted shoreline boundary was recorded, and photographs were taken documenting the vegetation transition and shoreline features.

Field observations indicated that the primary vegetation, debris, and soil transition associated with the ordinary high-water level occurred at approximately 532 m elevation. A secondary vegetation line was observed higher on the bank at approximately 533 m elevation and was interpreted as indicating a higher episodic water level associated with seasonal high-water or flood events. To ensure a precautionary interpretation of the shoreline boundary for the development permit review, the higher vegetation line was used as the reference point for the riparian setback.

The riparian assessment area was therefore established by measuring 15 m landward from this higher shoreline indicator. Measurements were taken in the field using a measuring tape from the interpreted

boundary toward the upland portion of the site. The resulting assessment area encompassed the existing retaining wall, the bank proposed for regrading, and the adjacent riparian vegetation within the 15 m setback area.



Within this assessment area, detailed observations were recorded of shoreline substrate, bank profile, slope, riparian vegetation, presence of invasive species, and nearshore habitat features. Measurements recorded during the site visit included the approximate length and height of the existing retaining wall, distances from the wall to shoreline indicators, site slopes above and below the wall, and the approximate area proposed for bank reshaping.

4. Existing Conditions

A site visit was completed on March 5, 2026, to document shoreline conditions, riparian vegetation, and general habitat features along the project shoreline. Observations were made from the upland portion of the property, along the beach area, and within the shallow nearshore zone.

The property slopes gently toward the lake. The upper portion of the site has an approximate slope of about 7 percent, while the lower shoreline area between the retaining wall and the water slopes toward the lake at roughly 13 percent. The shoreline profile is gradual and stable, with no obvious signs of active erosion or bank instability.

The shoreline and nearshore lakebed are composed primarily of sand and fine gravel, with scattered small gravel and occasional cobbles. The beach area transitions gradually into shallow water, then deepens further offshore. Water clarity during the site visit was generally clear, allowing the nearshore

substrate to be easily observed. Sparse patches of aquatic vegetation were present in shallow areas, but were scattered and not dense.

Substrate conditions observed at the site are dominated by sand and fine gravel with limited coarse material. Well-sorted spawning gravels were not observed, and structural features commonly associated with fish habitat, such as large woody debris, root wads, or large boulders, were largely absent along the shoreline and nearshore area. As a result, the immediate shoreline provides relatively limited habitat complexity.

Photo 2. Nearshore substrate at the site showing sand and fine gravel transitioning into shallow water along the shoreline.

The shoreline is currently modified by an existing timber retaining wall near the upper portion of the beach. The wall appears to be deteriorating and is beginning to sag in places. The structure is approximately 28 m long and about 1.9 m high. The area landward of the wall consists largely of sandy and gravelly fill with limited vegetation. The wall and associated disturbance have altered the natural shoreline profile along the central portion of the property. Riparian vegetation in this area is currently limited, likely reflecting past clearing and shoreline modification. The disturbed area associated with the wall and shoreline modification is estimated to be approximately 80–90 m².

Riparian vegetation at the site is limited. Most of the central portion of the shoreline is open beach with little vegetation present. Some vegetation remains near the edges of the property where the shoreline

transitions into neighbouring parcels. These areas contain scattered trees and shrubs, including black cottonwood (*Populus trichocarpa*), Douglas-fir (*Pseudotsuga menziesii*), and shrub species such as snowberry (*Symphoricarpos albus*), wild rose (*Rosa* spp.), Oregon grape (*Mahonia aquifolium*), and red-osier dogwood (*Cornus sericea*). Compared to natural lakeshore conditions, the existing riparian vegetation provides limited shading, bank stability, and organic input to the nearshore environment.

Photo 3. Disturbed shoreline area near the existing timber retaining wall, where riparian vegetation is limited.

Indicators of the natural boundary were observed during the field assessment. Changes in vegetation and soil conditions were visible along the upper portion of the beach, where the sand-and-gravel shoreline transitions to more stable ground with herbaceous vegetation. This transition was estimated to occur at an elevation of approximately 532 m. A secondary vegetation line was observed slightly higher on the slope near approximately 533 m elevation. This higher line likely represents occasional high-water events rather than the typical ordinary high-water level. These indicators are consistent with commonly used field indicators for identifying the natural boundary along regulated lake shorelines.

Photos 4-5. Approximate location of natural boundary indicators observed during the field assessment, including the debris and vegetation transition associated with the ordinary high-water level (~532 m; left) and a higher vegetation line (~533 m; right).

At the time of the site visit, lake levels reported by FortisBC indicated a water level of approximately 530.85 m at the Queen's Bay monitoring station. The natural boundary indicators observed in the field were therefore located approximately 1–2 m above the lake level at the time of the site visit.

Overall, the shoreline at the site reflects conditions typical of developed lakeshore properties within Balfour Bay, where historic shoreline alteration has reduced natural riparian vegetation and habitat complexity. Observed conditions are generally consistent with other developed shoreline properties within Balfour Bay.

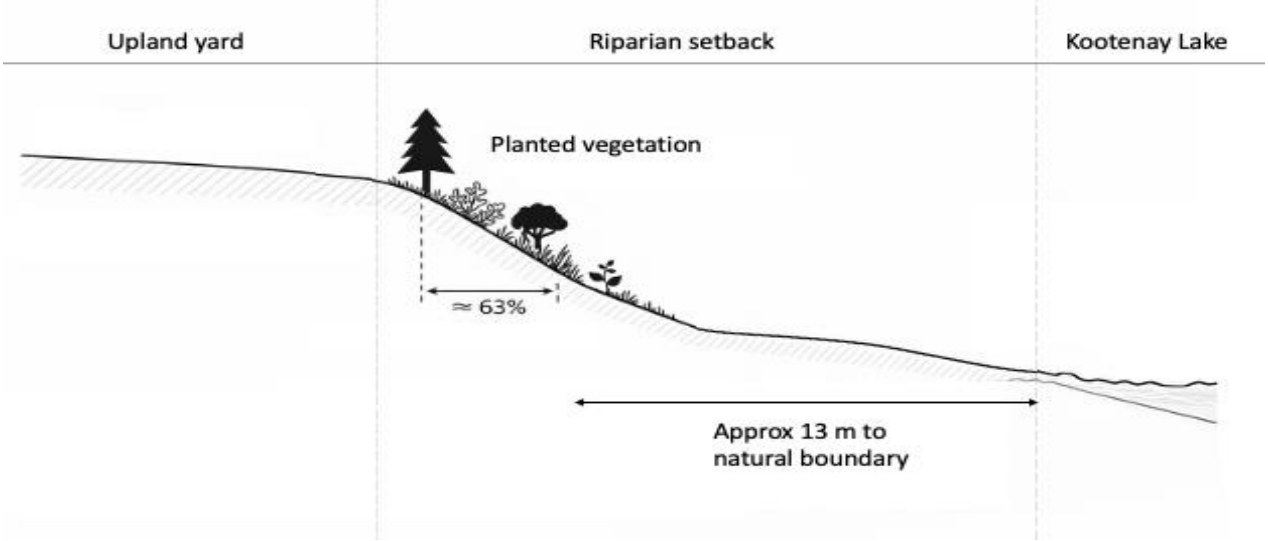
5. Proposed Development

The proposed work involves removing the existing timber retaining wall and associated concrete barrier elements along the shoreline. The existing wall is approximately 28 m long and about 1.9 m high. Removal of these structures will require excavation of the material currently retained behind the wall.

Photos 6-9. Existing timber retaining wall along the shoreline prior to removal.

The work area associated with the removal of the wall and the reshaping of the slope is expected to be limited to approximately 80–90 m², generally corresponding to the footprint of the existing disturbed shoreline area. The existing wall is located approximately 13–14 m landward of the interpreted natural boundary. No work is proposed below the natural boundary.

Figure 2. Conceptual shoreline profile following removal of the retaining wall.

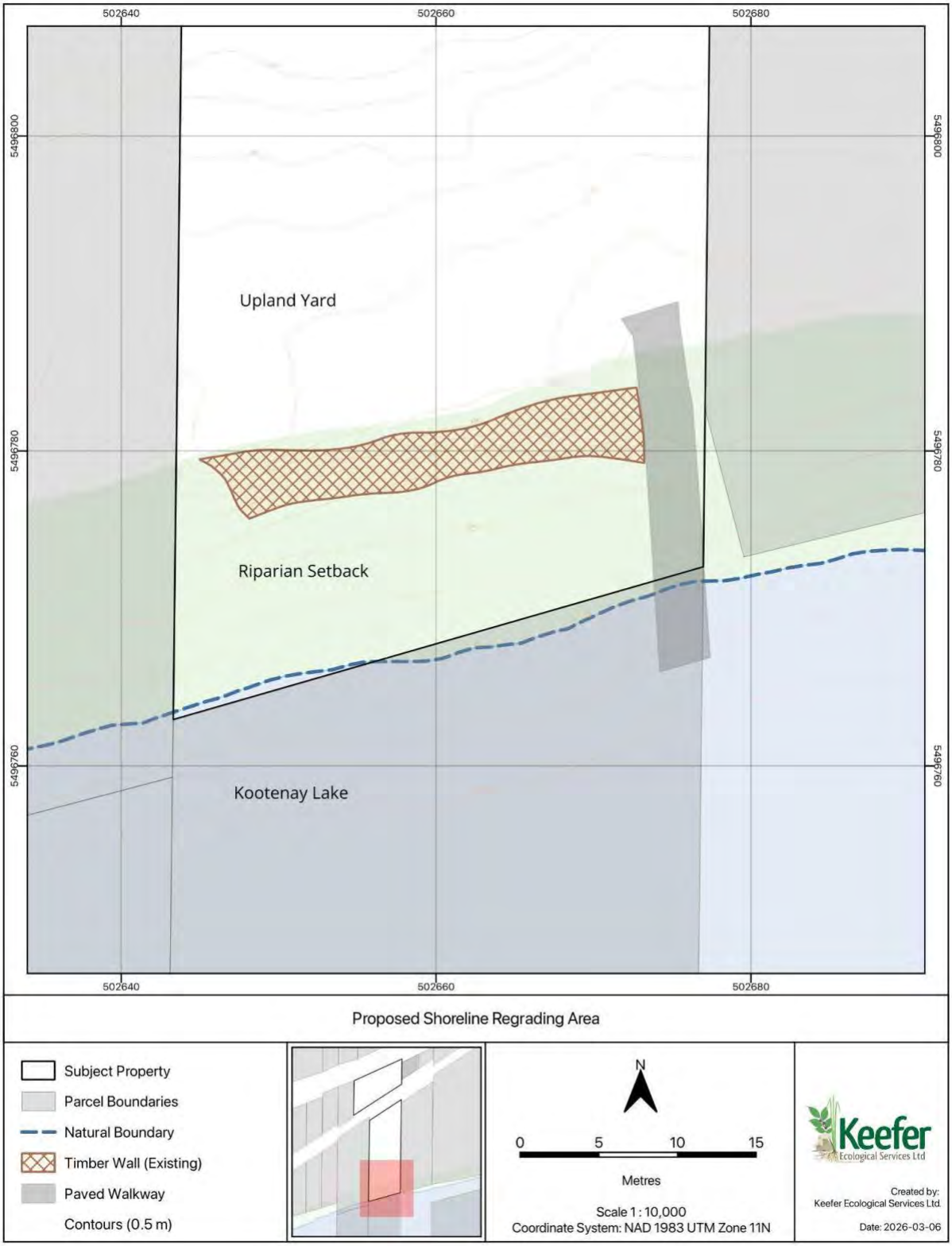


Excavated material and removed structural components will be temporarily staged outside of the 15 m setback from the natural boundary before being removed from the site. A disposal pile currently located outside of the setback area may be used for temporary placement of materials prior to final removal and off-site disposal.

Construction activities will include removal of timber wall materials, removal and disposal of the concrete barrier elements, limited excavation behind the wall, and grading of the exposed shoreline material to form the stabilized slope. Work will be completed using small-scale construction equipment appropriate for residential shoreline construction.

All proposed work will occur within the footprint of the existing disturbed shoreline area associated with the retaining wall and adjacent fill.

Figure 3. Site plan showing the existing retaining wall, interpreted natural boundary, 15 m setback, and the approximate area of proposed wall removal and shoreline grading.



6. Impact Assessment

The proposed works involve removing the existing timber retaining wall and reshaping the adjacent bank to create a stable slope between the upland portion of the property and the beach area. The disturbance associated with these activities is limited to the area currently occupied by the retaining wall and adjacent fill.

Riparian vegetation within the immediate work area is sparse but includes several native tree, shrub, and herbaceous species occurring along the margins of the disturbed shoreline and near the base of the existing retaining wall. Observed species include black cottonwood, Douglas-fir, Norway maple (*Acer platanoides*), Saskatoon, red-osier dogwood, and horsetail (*Equisetum hynamale*). These plants occur in small patches where soil conditions and moisture allow for localized establishment. Portions of this vegetation occur within the footprint of the proposed grading area and may be removed during retaining wall construction and bank reshaping.

Photo 10. Native vegetation is localized along the base of the retaining wall.

The nearshore environment adjacent to the site is characterized primarily by a sand-and-fine-gravel substrate with limited coarse material or structural features. Habitat elements commonly associated with higher quality shoreline fish habitat, such as well-sorted spawning gravels, groundwater seepage,

large woody debris, or boulder cover, were not observed during the field assessment. Aquatic vegetation was present in sparse patches but was not extensive.

The proposed work will occur above the interpreted natural boundary and will not involve excavation or placement of material within the lakebed. The lower beach area between the toe of the regraded bank and the water's edge will remain unchanged. The separation between the work area and the water reduces the likelihood of direct disturbance to nearshore aquatic habitat.

Several invasive plant species were also observed within disturbed portions of the shoreline and adjacent upland areas, including spotted knapweed (*Centaurea stoebe*), chicory (*Cichorium intybus*), and common mullein (*Verbascum thapsus*). These species are typical of disturbed shoreline environments in the region. Soil disturbance associated with wall removal and grading could create conditions favourable for the spread or establishment of these species if unmanaged.

Potential impacts associated with the proposed works are therefore expected to be limited primarily to localized and short-term disturbance during the removal of the existing retaining wall and the grading of the bank. These activities will occur within an area that has already been previously altered and currently provides limited riparian vegetation and habitat complexity.

Within the broader shoreline context of Balfour Bay, many properties feature retaining walls, docks, and other shoreline-protection structures. Natural bank profiles are uncommon along this portion of the lake. The proposed works replace an existing hardened shoreline structure with a vegetated bank slope while maintaining the overall shoreline position.

Based on field observations and the limited extent of the disturbance area, the proposed works are not expected to result in measurable loss of fish habitat or a significant reduction in riparian function at the site.

7. Mitigation and Restoration

Construction activities will involve removing the existing retaining wall and grading the bank to form a stable slope. Disturbance associated with these activities will occur within a relatively small portion of the shoreline and will be limited to the area previously occupied by the retaining wall and adjacent fill. The following measures are recommended to reduce the potential for erosion, sedimentation, and the establishment of invasive plants, and to restore vegetation along the regraded bank.

7.1. Erosion & Sediment Control

Erosion and sediment control during construction will focus primarily on proper work timing and stabilizing disturbed soil surfaces. Grading of the bank should be carried out during dry weather to reduce the potential for soil erosion and sediment movement. Construction should also be planned to avoid periods of heavy rainfall where practical.

Following completion of grading, the regraded bank will remain exposed until vegetation becomes established. The disturbed slope should therefore be seeded and stabilized as soon as grading is complete. See Section 6.3, below, for further details on revegetation. Early stabilization will help reduce the potential for surface erosion before vegetation has had time to establish.

After seeding, the steeper portion of the regraded bank should be covered with a light layer of straw mulch or similar organic mulch. Mulch helps protect the soil surface, retain moisture, and reduce erosion while vegetation establishes. Mulch application should focus on the steep portion of the slope where erosion risk is greatest.

The lower beach area between the toe of the regraded bank and the water's edge will remain unchanged and does not require mulch or erosion control measures. Additional erosion control measures may be implemented if site conditions indicate the need for further stabilization during or after construction.

7.2. Invasive Plant Species

Several invasive plant species were observed within the disturbed portions of the project area during the site visit. These included spotted knapweed, common mullein, and chicory. These species were present in low densities within disturbed soils near the retaining wall and along the upper edge of the beach.

These species are commonly associated with open or previously disturbed soils and are widespread throughout the Central Kootenay region. Their presence at the site reflects past shoreline disturbance and exposed soil conditions rather than natural riparian vegetation.

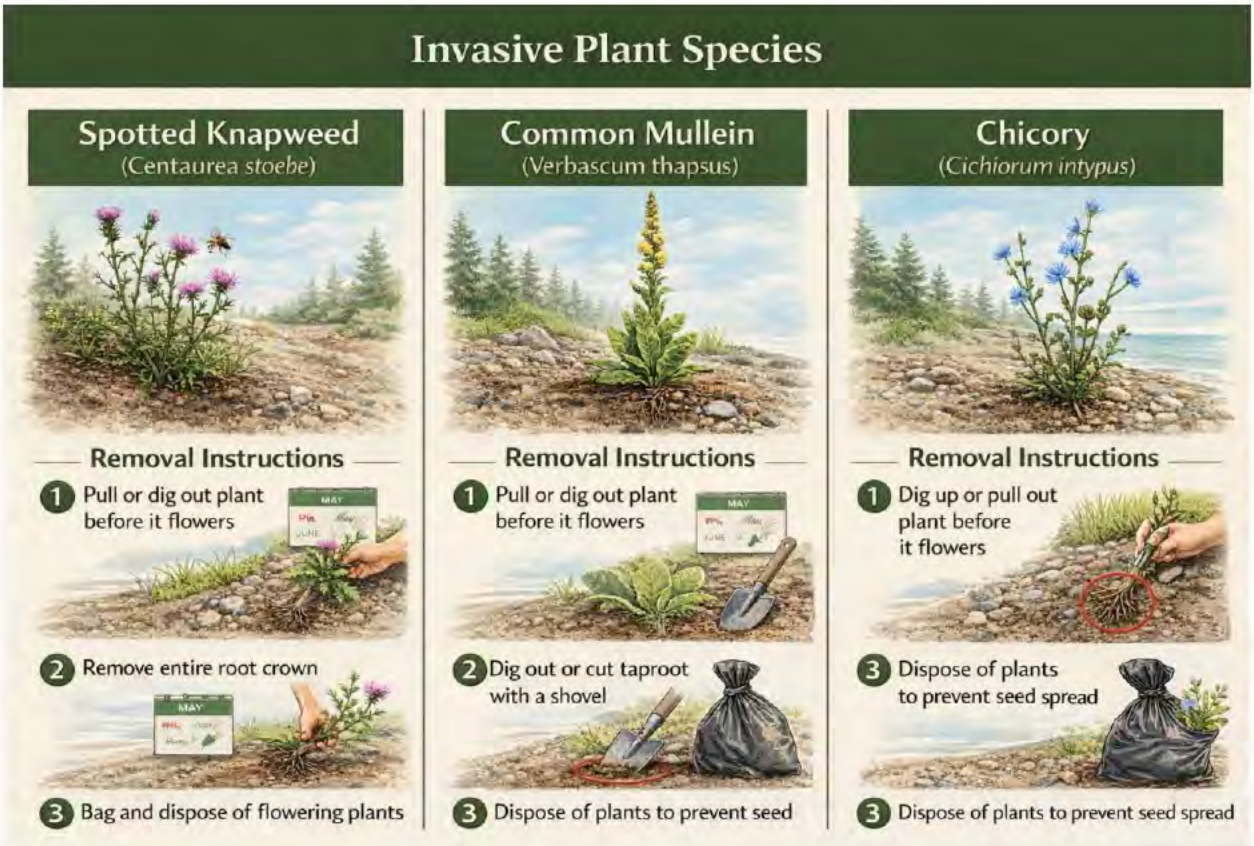
All three species are included on the Central Kootenay Invasive Species Society (CKISS) regional priority list, where they are generally addressed under a Strategic Control management approach. This category reflects species that are widely distributed within the region but are still managed to limit spread and reduce establishment in disturbed areas.

Spotted knapweed is also identified on the British Columbia Provincial Priority Invasive Species List under the Plant Regional Containment/Control category and is listed as a noxious weed in the province. Provincial management guidance focuses on limiting the spread and controlling populations where practical.

Table 6-1. Invasive plant species observed within the project area.

Common Name	Scientific Name	CKISS Regional Status	Provincial Status
Spotted knapweed	*Centaurea stoebe*	Strategic Control	Provincial Priority List – Regional Containment/Control; Noxious Weed
Common mullein	*Verbascum thapsus*	Strategic Control	Invasive species present in BC
Chicory	*Cichorium intybus*	Strategic Control	Invasive species present in BC

Disturbance associated with the removal of the retaining wall and grading of the bank will temporarily expose additional soil surfaces that may be suitable for invasive plant establishment if left unmanaged. Prompt revegetation and routine monitoring will help reduce this risk by establishing native vegetation cover and limiting opportunities for invasive species to colonize disturbed soils.



Prior to construction, invasive plants present within the work area should be removed where practical. Following construction, disturbed soils should be revegetated with native species as described in Section

6.3. Establishment of native vegetation will help reduce the likelihood of invasive plant establishment by providing ground cover and competition.

The site should also be visually inspected during the first growing seasons following construction. Any invasive plants observed establishing in the disturbed area should be removed promptly by hand.

7.3. Revegetation

Following removal of the retaining wall and regrading of the bank, disturbed soils should be revegetated to stabilize the slope, reduce erosion potential, and re-establish native riparian vegetation. Revegetation should include planting native trees and shrubs and seeding native grasses to provide both immediate soil stabilization and long-term root reinforcement.

Several native plant species are currently present along the retaining wall, including red-osier dogwood, Saskatoon, horsetail, cottonwood, and a young Douglas-fir. Removal of the retaining wall and grading of the bank will likely require removal of some existing vegetation. Where possible, existing vegetation should be retained or salvaged during construction. Any vegetation removed during construction should be replaced through planting to maintain or improve existing riparian vegetation cover.

To account for typical planting mortality and establishment uncertainty, replacement planting numbers should slightly exceed the number of plants removed.

Tree and Shrub Planting

Planting should focus primarily on native shrubs that are well adapted to Interior Cedar–Hemlock riparian environments and capable of stabilizing soil through dense root systems. Shrubs should be planted across the regraded bank, with higher densities on steeper portions of the slope where root reinforcement will be most beneficial.

Where possible, replacement planting should prioritize species already present on site. Additional native shrubs may also be incorporated to increase structural diversity and improve slope stabilization.

Snowberry and wild rose may be used as replacement species where red-osier dogwood or Saskatoon are not available. Shrub planting should be concentrated along the regraded slope rather than on the lower beach to maximize slope-stabilization benefits.

Native plants should be sourced from regional nurseries where possible. Nupqu Native Plants, a regional Indigenous-owned nursery specializing in locally adapted native species, may be a suitable source for shrubs and trees appropriate for revegetation.

Table 6-2. Recommended native trees and shrubs for riparian bank revegetation.

Species	Scientific Name	Recommended Quantity	Notes
Douglas-fir	*Pseudotsuga menziesii*	1–2 trees	Replace the removed tree and account for potential mortality - plant on the high side of the slope
Black cottonwood	*Populus trichocarpa*	6–8 trees	Replace existing cottonwood regeneration and allow for mortality

Red-osier dogwood	*Cornus sericea*	3–4 shrubs	Moisture-loving riparian shrub
Saskatoon	*Amelanchier alnifolia*	2–3 shrubs	Common native shrub in the region - plant on the high side of the slope
Snowberry	*Symphoricarpos albus*	As available	Suitable replacement species
Wild rose	*Rosa* spp.	As available	Alternative shrub, depending on availability

Grass Seeding

Following grading, exposed soil surfaces should be seeded with a native grass seed mix to provide early ground cover and reduce erosion potential while planted shrubs and trees establish. A native seed mix composed of species adapted to moist Interior forest openings and riparian disturbance is recommended.

These species are native to British Columbia and occur naturally in moist forest openings, disturbed soils, and riparian environments. Together, they provide a balance of rapid establishment and longer-term soil stabilization.

Table 6-3. Recommended native grass seed mix.

Species	Scientific Name	Suggested Proportion	Functional Role
Tufted hairgrass	*Deschampsia cespitosa*	40%	Moisture-tolerant species suited to riparian soils
Blue wildrye	*Elymus glaucus*	35%	Native forest grass adapted to disturbed soils
Slender wheatgrass	*Elymus trachycaulus*	25%	Rapid establishment and early erosion control

A seeding rate of approximately 20–25 kg/ha is typically sufficient for erosion control and native grass establishment. Based on the approximate area of the newly contoured bank, an estimated 0.5–1.0 kg of seed mix should provide adequate coverage. Final quantities may be adjusted depending on the final graded area.

Commercial native seed blends containing these or similar species are available from regional suppliers such as Interior Seed and Fertilizer. **An equivalent native blend may be used at the discretion of a qualified individual familiar with local restoration practices.** Interior Seed and Fertilizer may also provide guidance on regionally appropriate native seed mixes suitable for moist Interior forest conditions.

Seeding should occur immediately after grading to reduce the time soils remain exposed. Straw mulch may be applied following seeding, as described in Section 6.1, to help protect the soil surface and support vegetation establishment.

7.4. Monitoring

Following construction and revegetation, the restored bank should be monitored periodically to ensure that vegetation establishment and slope stabilization are progressing as intended. Monitoring can be carried out through simple visual inspections of the site during the first several growing seasons after construction.

An initial inspection should occur shortly after completion of grading, seeding, and planting to confirm that revegetation measures have been implemented as intended and that erosion control measures remain in place. Additional inspections should occur periodically during the first two to three growing seasons, particularly following major rainfall events or spring runoff, when erosion or slope movement is most likely.

Monitoring should focus on vegetation establishment, slope stability, and the presence of invasive plant species. If minor issues are identified, simple corrective actions such as reseeding small areas, applying mulch, replacing plants, or removing invasive plants can help maintain the stability of the restored bank.

Monitoring can gradually decrease once vegetation has become established and the slope shows no signs of erosion or instability. At that stage, occasional observation during normal use of the property is typically sufficient to confirm that the restored bank remains stable and vegetated.

Table 6-4. Suggested monitoring observations and potential actions.

Observation	What it may indicate	Suggested Action
Grass seed germinating and covering the soil	Successful vegetation establishment	No action required
Sparse or patchy grass growth	Poor germination or seed washout	Lightly rake the soil and reseed the affected areas
Planted shrubs or trees showing stress or mortality	Planting in shock or dry conditions	Replace plants during the next planting season if needed
Small rills or shallow erosion lines form on the slope	Surface runoff concentrating on bare soil	Apply straw mulch and reseed affected areas
Bare soil remaining after the first growing season	Incomplete vegetation establishment	Apply additional seed and mulch
New invasive plants appearing (e.g., spotted knapweed, mullein, chicory)	Colonization of disturbed soil	Remove plants by hand before they mature and produce seed
Minor soil movement after heavy rain	Localized slope adjustment	Lightly regrade the area if needed and reseed

8. Conclusions

The proposed removal of the existing retaining wall and regrading of the bank is intended to improve shoreline conditions while maintaining slope stability and supporting the establishment of native riparian vegetation. The existing wall currently separates the upland area from the shoreline and limits

the presence of natural shoreline features. The proposed works will re-establish a more natural bank profile while maintaining a stable slope through revegetation with native trees, shrubs, and grasses.

Based on site observations and the scope of the proposed works, the activities described in this report are not expected to result in a harmful alteration, disruption, or destruction of fish habitat when implemented with the mitigation measures outlined in this report. The work will occur above the high-water mark and will focus on removing existing infrastructure and stabilizing the bank through revegetation. The proposed approach emphasizes minimizing disturbance to the shoreline and promoting long-term vegetative stabilization.

Erosion and sediment control measures, careful work timing, invasive species management, and revegetation of the regraded bank will help ensure that soil stability is maintained and that the potential for sediment delivery to the lake is minimized. Establishment of native vegetation will provide longer-term bank stabilization and improve riparian conditions over time.

In the professional opinion of the authors, the proposed works, when conducted in accordance with the mitigation and restoration measures described in this report, are **unlikely to result in a harmful alteration, disruption, or destruction of fish habitat.**

The authors acknowledge that the RDCK may rely on the QEP's recommendations for the development and use of the property in a manner consistent with the Development Permit Area.

Prepared by:

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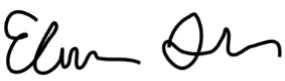
Baylie Sjodin is a Forester-in-Training (FIT) and has completed formal training and certification in Riparian Areas Protection Regulation (RAPR) assessment methods. She has conducted multiple riparian assessments in British Columbia, including identification of natural boundary indicators, shoreline condition documentation, and preparation of riparian assessment reports supporting development permit applications with the RDCK.

Prepared by:



Elinor Sisk, BIT #5280

Elinor Sisk is a Biologist-in-Training (BIT) who provides technical and field support for ecological assessments. Her work includes GIS mapping, spatial data preparation, and environmental data collection to support riparian and habitat assessments. She assists with site documentation, vegetation identification, and preparation of figures and mapping products used in environmental reporting.

Reviewed by:

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Michael Keefer is a Registered Professional Agrologist (PAg). His professional practice includes environmental impact assessment, vegetation assessment, reclamation planning, and regulatory compliance. He has experience completing Riparian Area Assessments and preparing technical reports supporting development permit applications within the RDCK.

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Mikayla Smart is a Registered Professional Biologist (RPBio) with the College of Applied Biology of British Columbia. She has experience conducting riparian and ecological field assessments, including vegetation surveys and habitat assessments, and preparing technical reports supporting provincial and municipal environmental permitting processes including with the RDCK.