

Rezoning Application

# Bottom Wood Lake Road Site

## Lake Country, BC

Submitted to City of Kelowna / District of Lake Country  
by Arcadis Professional Services (Canada) Inc.  
June 10, 2024





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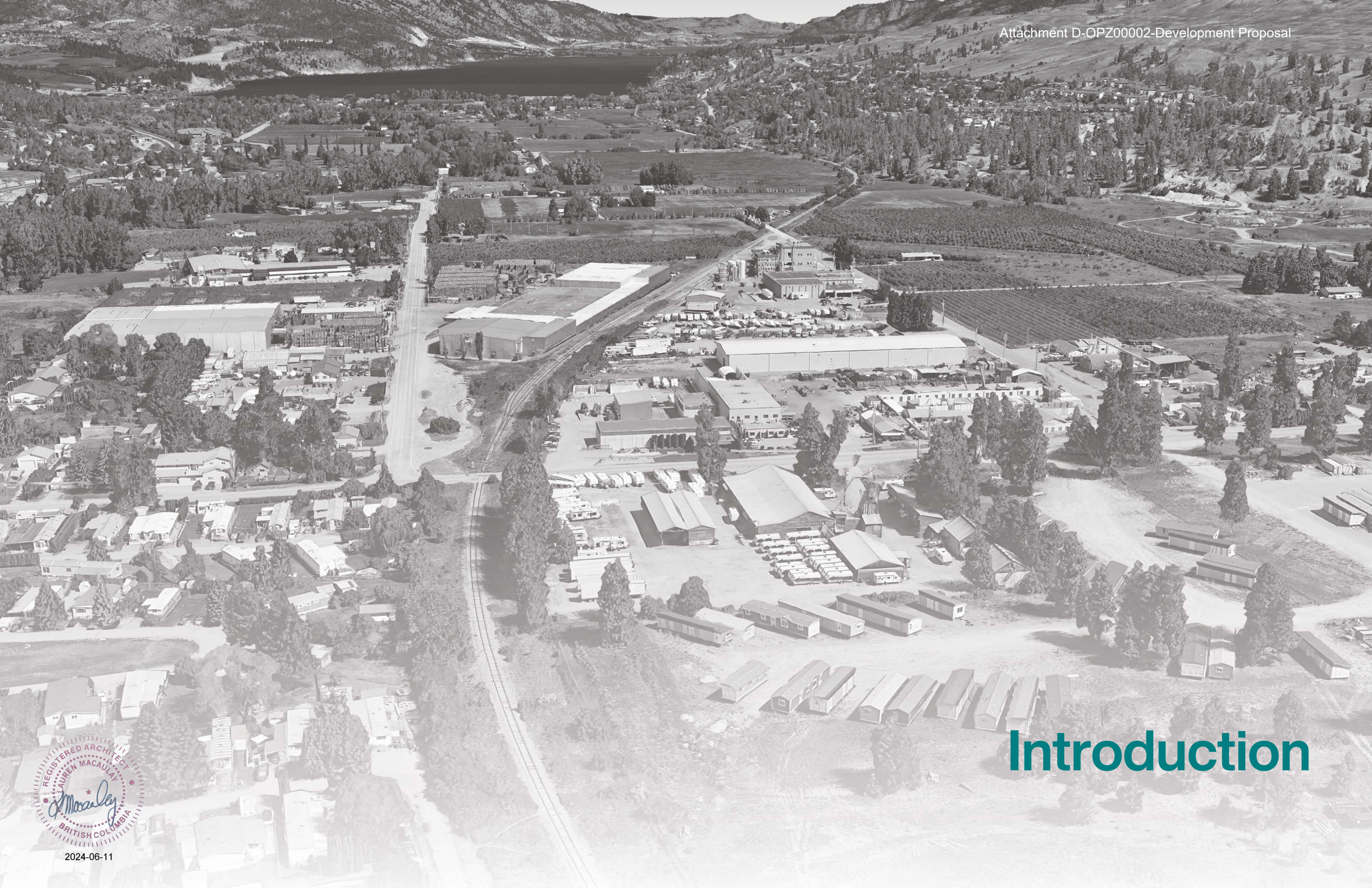
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# Introduction



Executive Summary

Arcadis was retained by West Point Projects Inc. to prepare a rezoning and OCP amendment application for lots: 9595, 9751, 9819 Bottom Wood Lake Road and 672 Beaver Lake Road (the “Subject Site”). The Subject Site is situated in both the District of Lake Country and City of Kelowna municipalities covering approximately 8.65 acres site area. The objective of this rezoning application is to provide a conceptual master plan for a cohesive, four phased development on the Subject Site. This application package includes site design, landscape design, architectural massing, character guidelines, and servicing information for the proposed development.

The intent of the application is to permit the redevelopment of the brownfield site into a residential community-oriented development. This proposed development will include a diverse range of residential housing types such as family-style townhomes and one-to-three-bedroom apartment units with rich amenity spaces to promote healthy living and active lifestyles. Townhomes will be oriented at grade along the street and residential dwellings will be located on levels two through six. The proposed development features six mid-rise buildings and townhomes with a variety of indoor and outdoor private, semi-public, and

public spaces. The site will be well connected to the Okanagan Rail Trail (ORT), and parking will be primarily located below grade.

Currently the lands are zoned as I1 in the District of Lake Country and I2 in the City of Kelowna. The rezoning application proposes the portions of the Subject Site within the District of Lake Country be rezoned to a new Direct Control zone following the City of Kelowna’s MF-3 zone as a base reference for permitted uses, density, lot coverage, lot size, setbacks, building height, parking, landscaping and other zoning requirements.

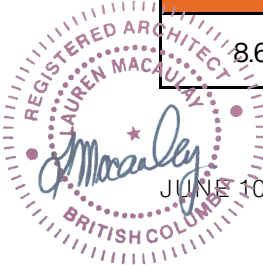
The proposed Direct Control Zone seeks a maximum density of 2.35 FAR. The proposed densities range from 0.80 FAR to 2.22 FAR depending on project phase, with proposed building heights of up to 6 storeys.

The conceptual master plan will consist of four separate phases (refer to phasing plan).

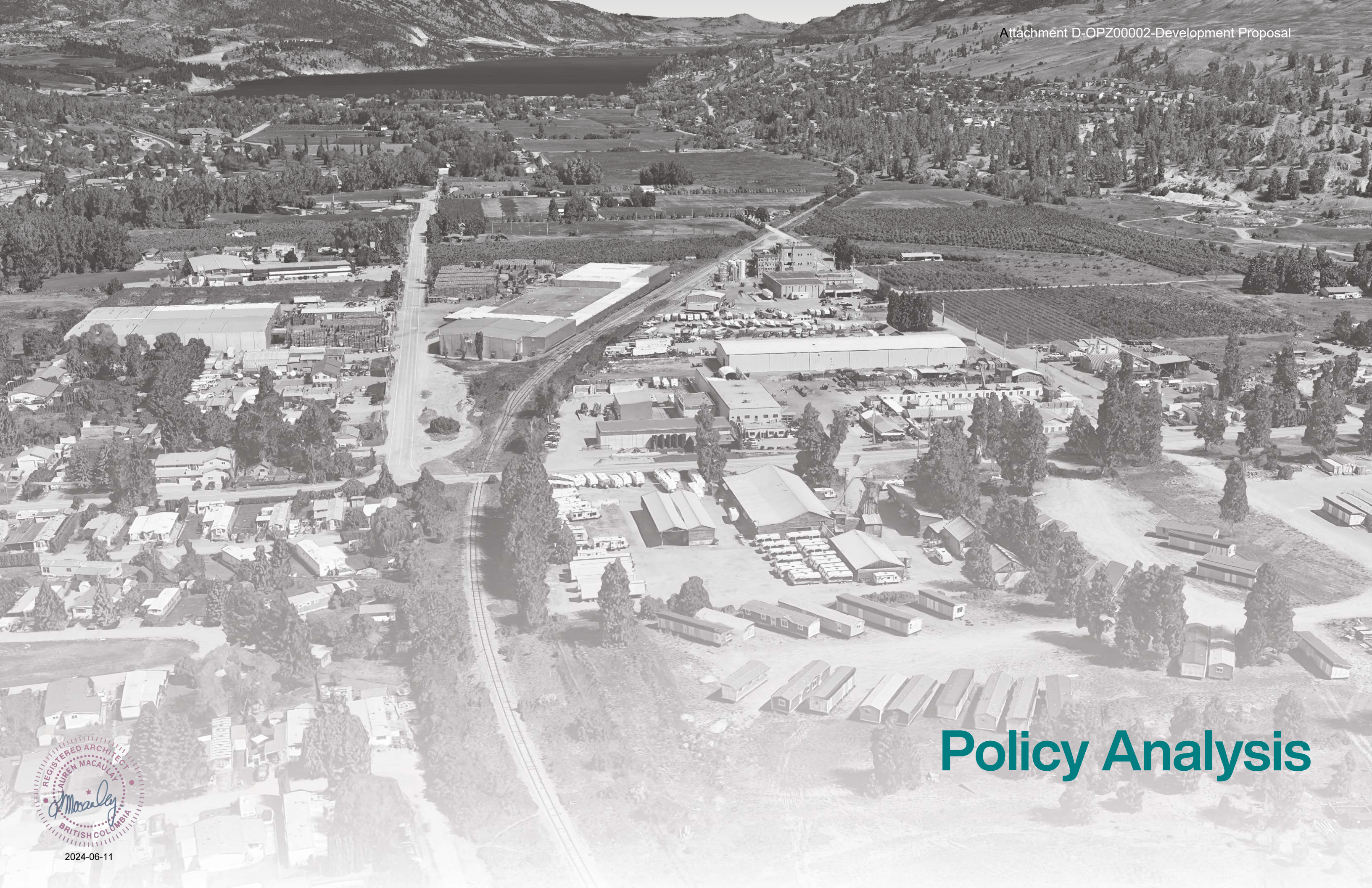
PRELIMINARY PROJECT STATISTICS				
SITE AREA (ACRES)	SITE AREA (SF)	EST. UNITS	EST. PARKING REQ'D.	FAR
8.65	376,873	±640	±769	1.58



Aerial Site Map







# Policy Analysis





Policy Summary and Land Ownership

Policy Summary

The Subject Site is located within two municipalities, the District of Lake Country and the City of Kelowna. The site is currently used for light-industrial warehousing uses. The Site is currently designated as Service Commercial in the Lake Country Official Community Plan, which enables a number of auto-oriented commercial uses. In the City of Kelowna Official Community Plan, the Site is designated Industrial.

To enable redevelopment for the proposed residential project, Official Community Plan Amendment applications to a “High Density Residential” designation in the Lake Country Official Community Plan.

To accommodate the proposed residential development, a rezoning is proposed in both municipalities. This application proposes a new **Direct Control zone** for portions of the Subject Site that lie within the District of Lake Country.

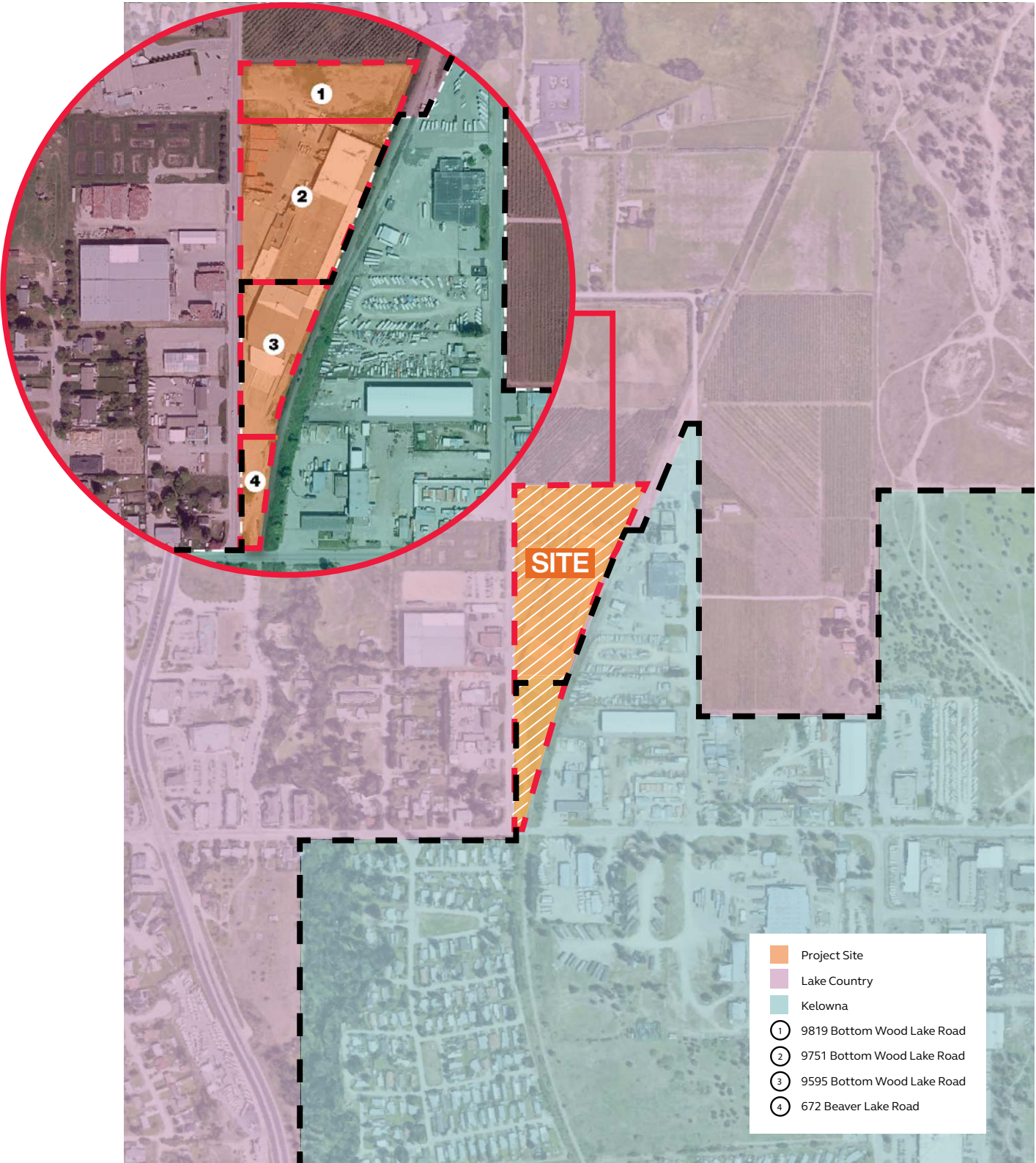
A separate, concurrent rezoning and Official Community Plan amendment application will be made for the portions of the Subject Site that lie within the City of Kelowna.

Site Summary

The Subject Site is comprised of four lots split between two municipalities. The two northern lots are located in the District of Lake Country and the two southern lots in the City of Kelowna. The four lots are:

- 9819 Bottom Wood Lake Road (Lake Country),
- 9751 Bottom Wood Lake Road (Lake Country),
- 9595 Bottom Wood Lake Road (Kelowna), and
- 672 Beaver Lake Road (Kelowna).

Taken together the four lots comprise a total site area of 8.65 acres.





Land Use and Zoning

The District of Lake Country's Official Community Plan ("OCP") provides the 20-year vision for Lake Country based around the following principles:

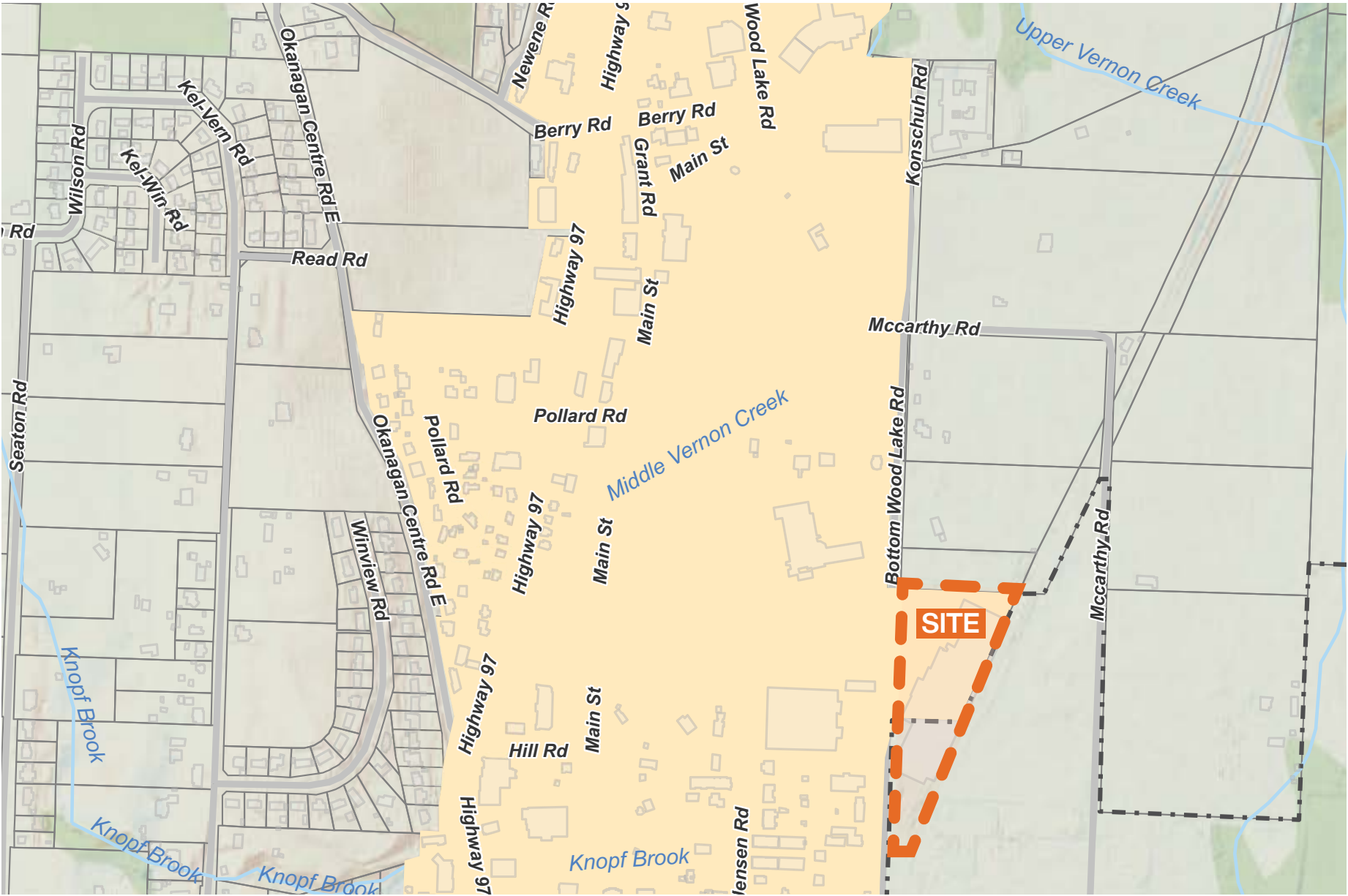
- Preserve our rural and agricultural character.
- Create a vibrant town centre. Promote development in existing neighbourhoods.
- Achieve sustainable development through smart growth.
- Protect and enhance our natural environment.
- Facilitate an active, healthy, inclusive community.
- Maintain high-quality municipal services.

To achieve these goals, the OCP stresses the importance of infill development within the existing built up areas to increase residential density, housing diversity, and to protect environmentally sensitive and agricultural areas. Although the Subject Site is not currently designated for residential infill, the District of Lake Country's OCP was drafted under assumptions of lower population growth. The District has exceeded even the highest population growth assumptions from the OCP.

Neighbourhood Designation

The District of Lake Country OCP sets out refined policy direction at a neighbourhood-level. The Subject Site is located in the District's "Town Centre".

The Town Centre currently houses the majority of Lake Country's commercial and light industrial development potential. The Town Centre is intended to be developed as the residential, employment and cultural core with a pedestrian - friendly blend of residential and commercial uses.



Lake Country OCP Map

- Building Outlines
- Planning - Lake Country Boundary
- Planning - Town Centre
- Site Extents





Land Use and Zoning

Existing Land Use Designation

The Subject Site is currently designated as Service Commercial in the OCP.

Service Commercial

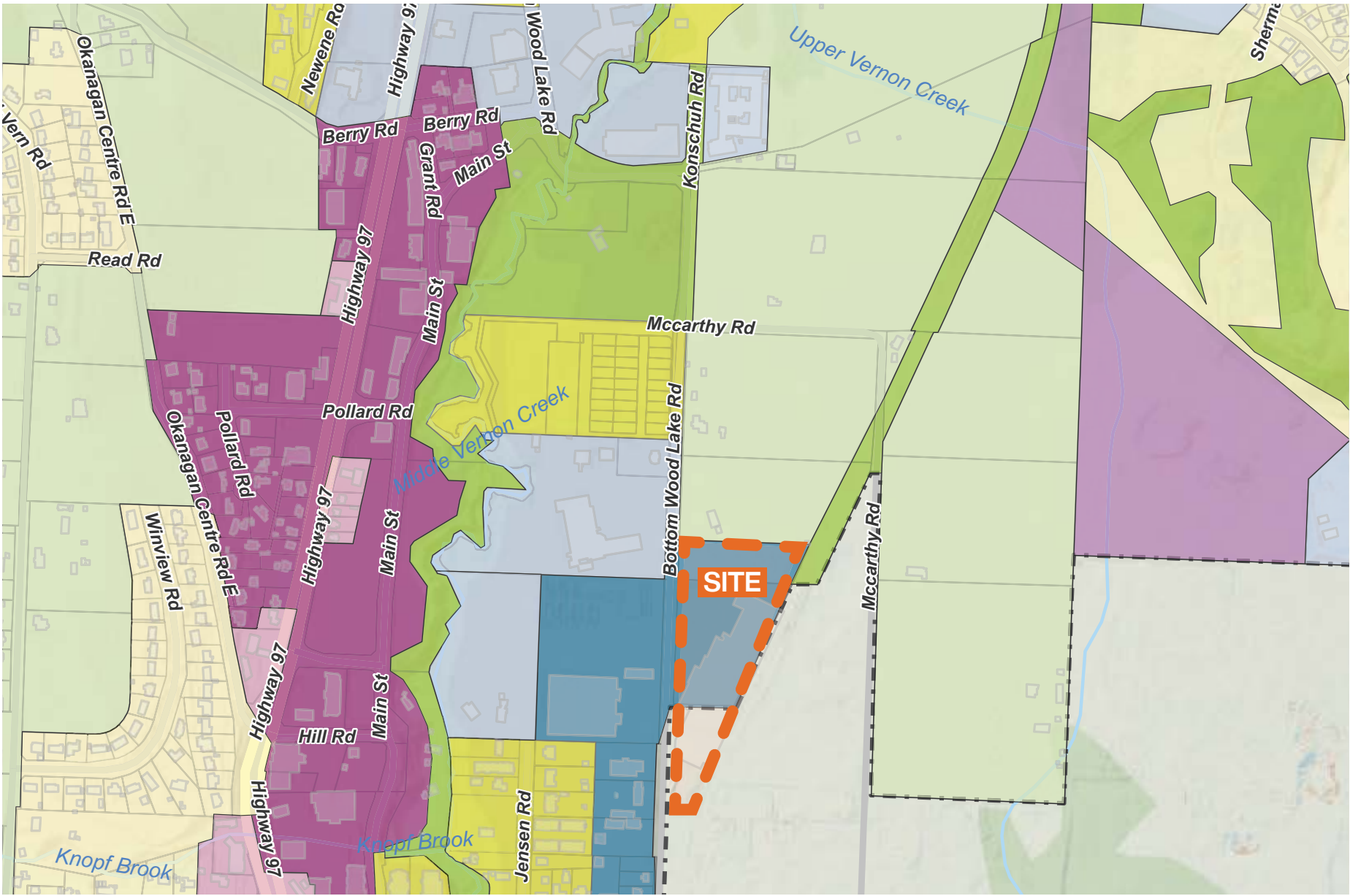
Service Commercial areas are intended to focus on large - scale or vehicular oriented uses. Subject to appropriate zoning, future uses could include equipment rental businesses, building suppliers or warehouse sales operations.

Proposed Land Use Designation

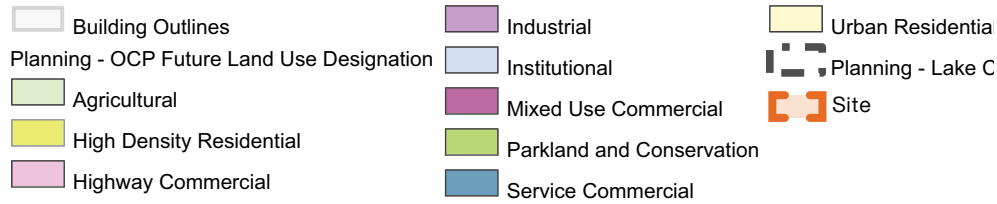
To accommodate the proposed master plan for the Subject Site, an amendment to Lake Country’s OCP to a “High Density Residential” designation is proposed.

High Density Residential

High Density Residential designated areas should focus on the creation of livable and diverse places. Neighbourhoods should be compact, walkable and of a human scale while supporting transit and active transportation options for residents. A broad range of housing options should be available for a diverse population and limited neighbourhood commercial uses are permitted.



Lake Country OCP Map





Land Use and Zoning

Surrounding Land Use Context

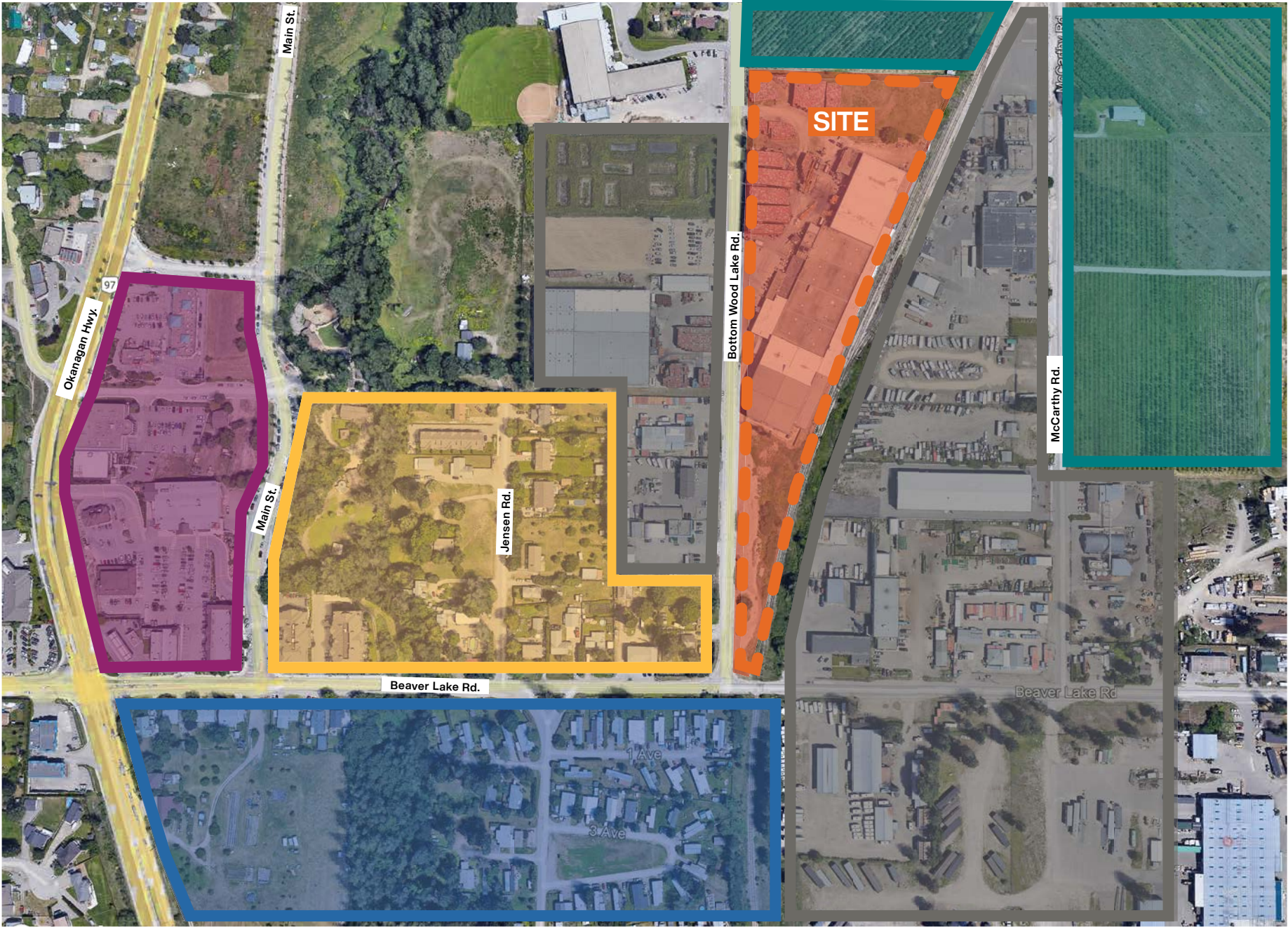
Existing Land Use

Neighbouring lots to the east and west are currently undergoing redevelopment. The lot to the west is zoned for service commercial. The lot to the east is planned to be developed as two industrial buildings two storeys in height with landscape buffers along McCarthy Road and the Okanagan Rail Trail (ORT).

The growing commercial heart of Lake Country is located less than 400m to the west of the Subject Site along Main Street. Between the Subject Site and Main Street, several lots are being redeveloped as multi-family buildings.

The agricultural-designated lot to the north of the Subject Site is within the Agricultural Land Reserve (ALR). As per the District of Lake Country’s Agricultural DP Area Guidelines, a 30m building setback from the ALR boundary is recommended for any residential redevelopment on the Subject Site.

Relationship to Subject Site	Property	Existing Land Use	Future OCP Land Use
East	670 Beaver Lake Road, 9580-9750 McCarthy Road (City of Kelowna)	Light Industrial	Industrial
North	9989 Bottom Wood Lake Road (District of Lake Country)	Agricultural	Agricultural
West	9718 Bottom Lake Road	Light Industrial	Service Commercial
West	9510 - 9650 Bottom Lake Road	Single-Family Residential	Service Commercial
South	715 Beaver Lake Road	Mobile Home Park (First Nations Reserve Land)	First Nations Reserve Land



Land Use Site Context

- Blue box

First Nations Reserve
- Yellow box

Residential
- Green box

Agricultural
- Grey box

Industrial
- Purple box

Commercial
- Orange dashed box

Site





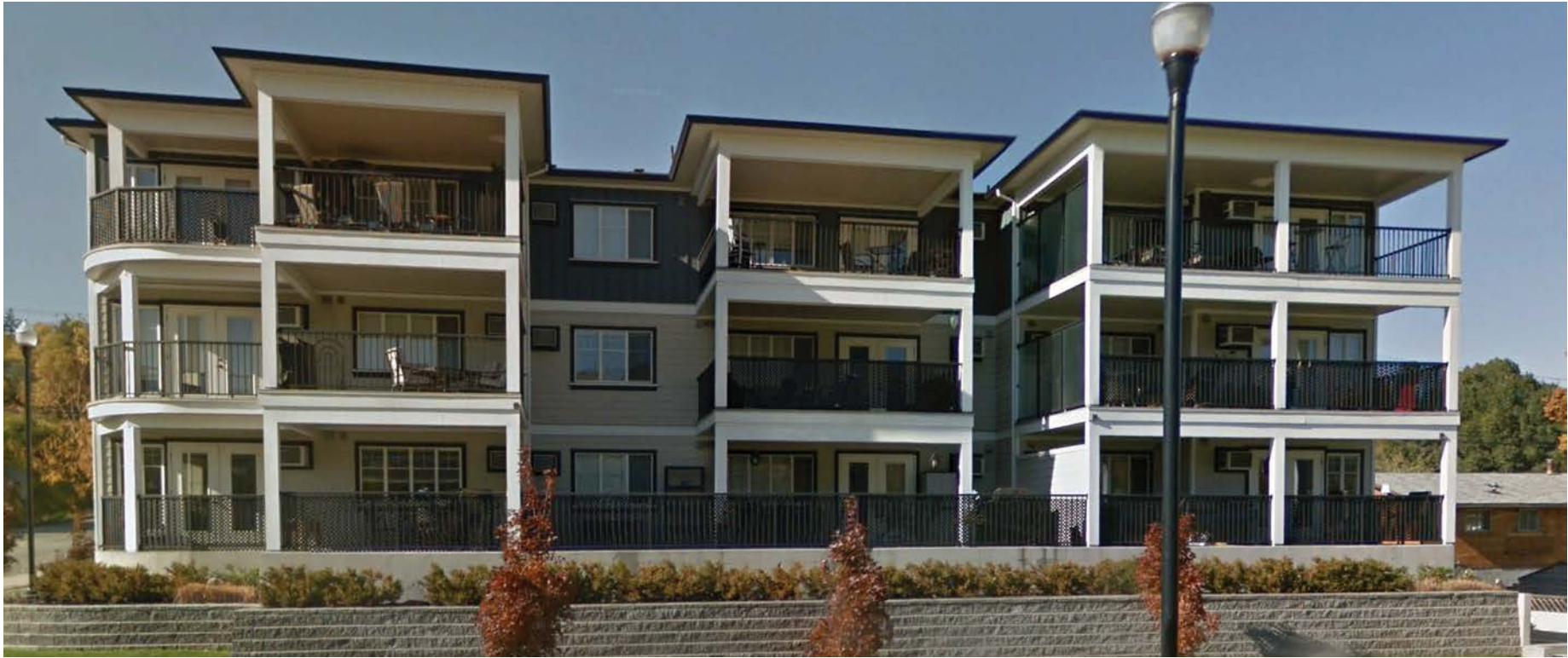
Land Use and Zoning

Proposed DC Zone

The Subject Site is currently zoned I1 - General Industrial for those portions in the District of Lake Country and I2 - General Industrial for those portions in the City of Kelowna. To accommodate residential uses, a rezoning will be required in conjunction with the proposed OCP amendment. It is proposed that in the District of Lake Country, the site be rezoned to a new Direct Control Zone that mirrors the provisions of the City of Kelowna’s MF3 Zone.

Key provisions of this proposed Direct Control Zone include:

	Proposed DC Zone
Principal Uses	(a) Apartment Housing (b) Multiple Housing (c) Row Housing (d) Stacked Row Housing
Secondary Uses	(a) Accessory buildings (b) Accessory structures (c) Accessory uses (d) Utility services, minor impact
Maximum Density (FAR)	2.35
Maximum Building Height:	Apartment Building: 22 metres or 6 Storeys Row Housing: 11 metres or 3 Storeys Accessory Buildings: 7 metres or 2 Storeys
Building Siting	Front Setback: 3.0 metres Rear Setback: 4.5 metres Side Setback (General): 3.0 metres Side Setback (Adjacent to ALR): 30 metres
Off Street Parking	1.2 Stalls Per Unit (including visitor stalls)



Example of Apartment building in Lake Country’s Town Centre



Example of MF3 Zoned Development in Kelowna







# Site Analysis





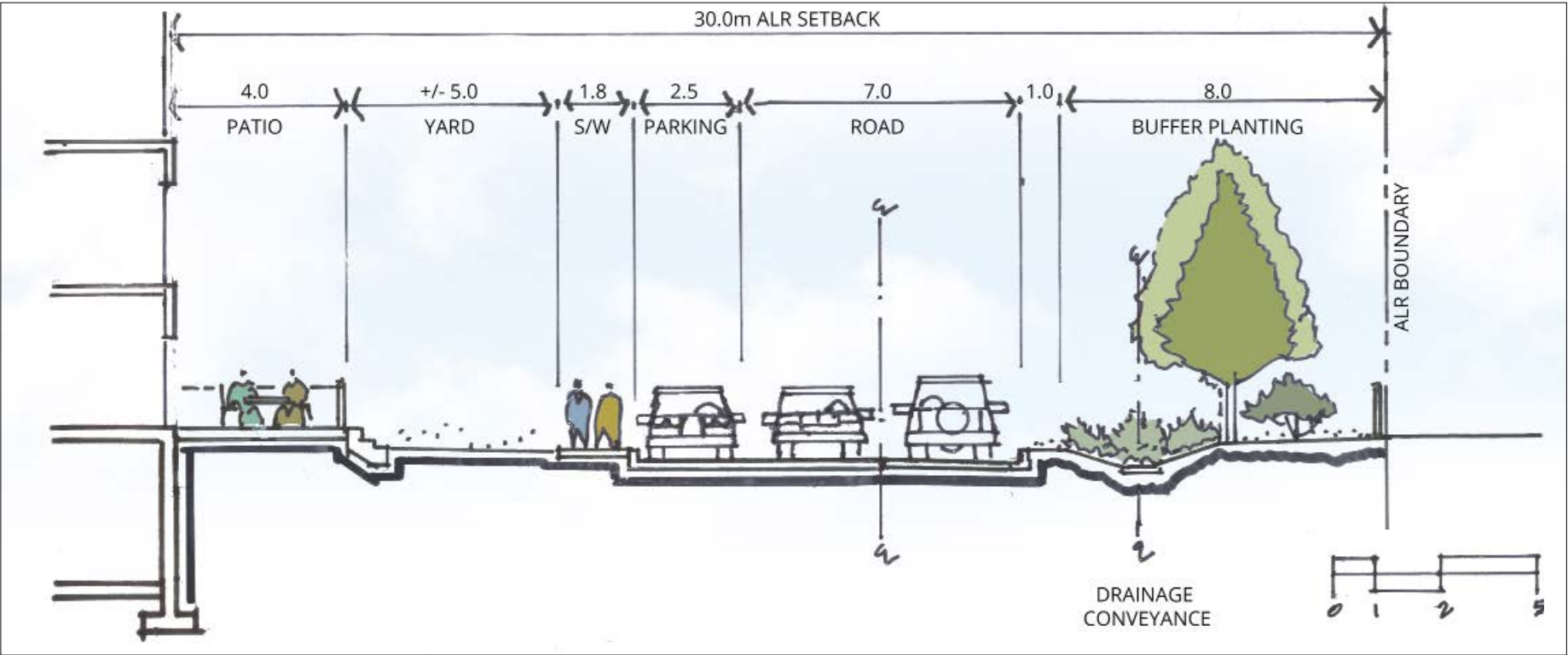
ALR Setbacks

Site Requirement

The site design incorporates a 30m ALR setback from the north property line and ALR boundary to the face of residential buildings. This is consistent with BC Ministry of Agriculture’s requirements for a Level 1 Urban Side Setback Buffer. A road ROW and drainage conveyance falls within this ALR setback.

Per the Ministry’s ALR guidelines: “residential parcels that are separated from the agricultural area by a road allowance can reduce the size of the Level 1 vegetated buffer. The siting [setback] of the residence should still be 30m but the vegetative buffer can be reduced to 7.5 meters, provided new driveway accesses from these parcels onto the subject road allowance are avoided, and the vegetated buffer is located as near and parallel to the agricultural area boundary as possible.”

The site design provides a continuous 8m wide vegetative buffer immediately adjacent to the ALR boundary. The buffer will consist of a single row of shrub screening, a single row of mixed deciduous and evergreen tree planting, and a triple row of trespass inhibiting shrubs. A vegetated infiltration swale will be incorporated into the trespass inhibiting zone to provide passive stormwater management.



Proposed ALR Setback Section





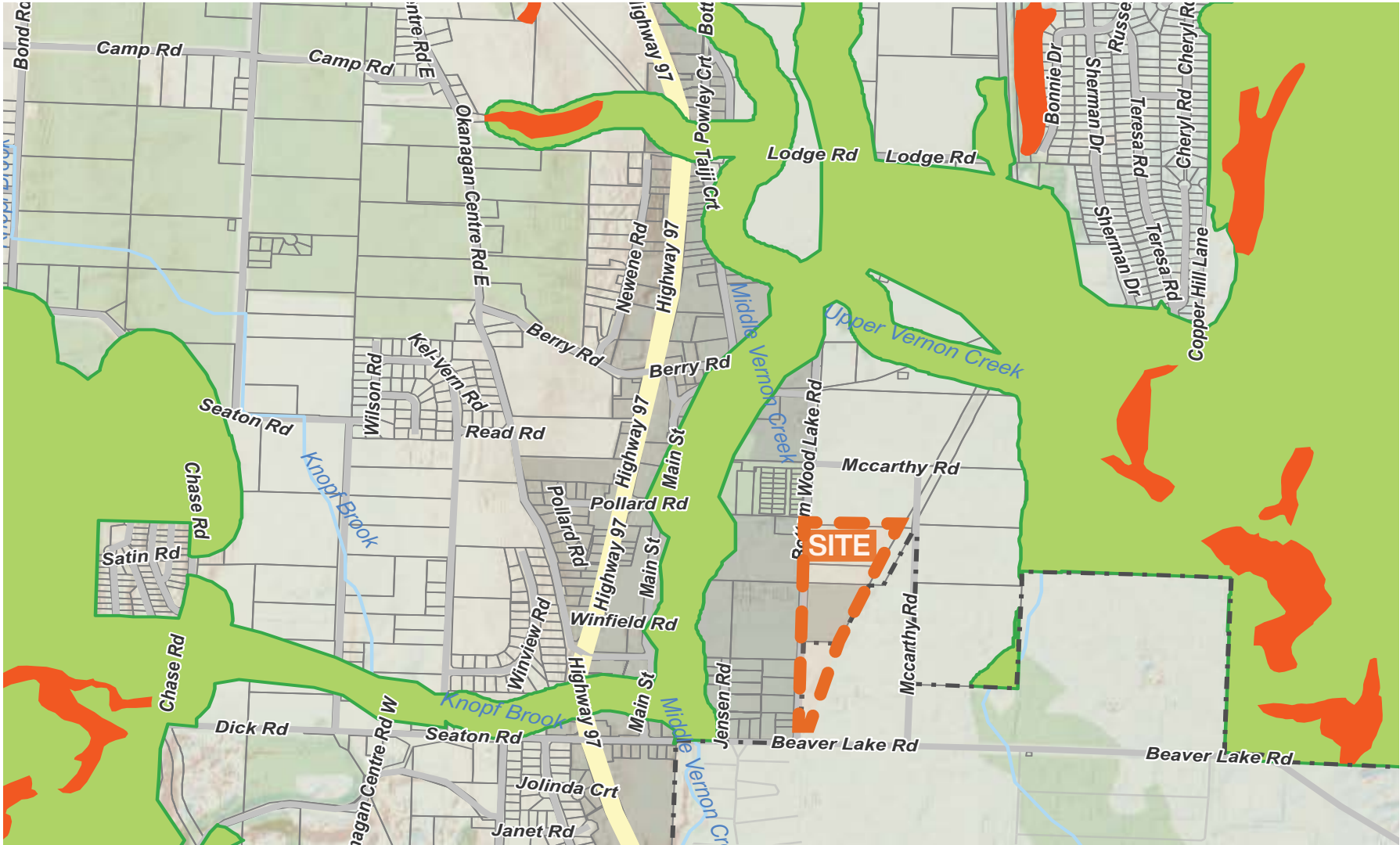
Topography, Hydrology, and Environmental Features

Topography

The Subject Site does not have significant grades, however due to the consistent long fall grade, grading will ensure an overland flow route across the site. The west side of 9819 Bottom Wood Lake Road is approximately 1 to 2 metres lower than 9751 Bottom Wood Lake Road, but grades up to the east to align with the elevation of 9751 Bottom Wood Lake Road. There is an approximate 5.8m grade difference from the north to south end of the Subject Site.

Natural Features

Owing to the site’s past industrial use, little in the way of natural features exist. The redevelopment of this brownfield site into a new residential development should provide an overall positive contribution in the amount of “green” site coverage, when compared to existing conditions, through the addition of new park spaces and tree canopy coverage.



Project Site and Surrounding Topography

- Planning - Lake Country Boundary
- Planning - Stability Hazard DPA
- Planning - Natural Environment Development Permit Area
- Site





Soil and Contaminated Conditions

Environmental Site Assessment

A Phase I and Phase II Environmental Site Assessment was completed for the Subject Site by Tetra Tech Canada Inc. The Phase II ESA found that:

The Site was previously used by BC Tree Fruits Cooperative who have ceased operations on the Site. Historically and presently, no BC Contaminated Sites Regulation Schedule 2 activities were identified on the Site.

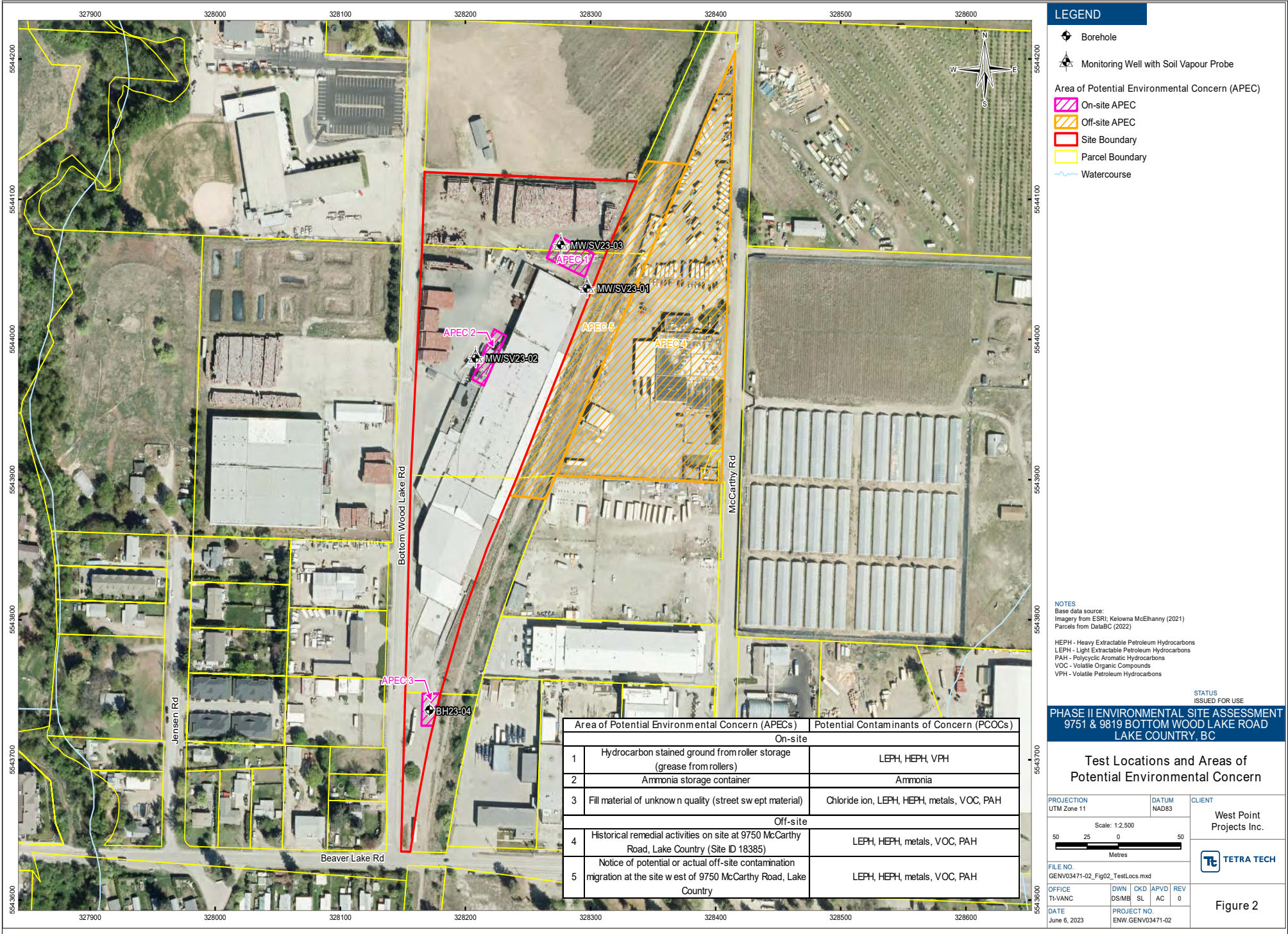
The Phase I ESA identified three on site Areas of Potential Environmental Concern (“APEC”s), hydrocarbon-stained ground from industrial roller storage, an ~8,000 L above ground storage tank containing ammonia and stockpiles of fill material of unknown quality.

Two off - site APECs were identified, both related to a historical remediation activated identified through the BC Site Registry.

The Phase II ESA included advancing four boreholes with three locations completed as groundwater monitoring wells (with three nested soil vapour probes). Each location was selected to investigate the APECs. Soil samples were collected from all four borehole locations. Groundwater samples were collected from the three groundwater monitoring wells.

The Phase II ESA did not identify contamination at the Site associated with APECs reported in the Phase I ESA.

Refer to the document “Phase II Environmental Site Assessment 9751 and 9819 Bottom Wood Lake Road, Lake Country, BC” for full report.



Environmental Site Assessment





A geotechnical field study was conducted by Interior Testing Services Ltd. (ITSL) on May 5 2023 and May 11, 2023 to identify the underlying soil and groundwater conditions for site development, building design and construction.

7.1 “Recommendations for site preparation and foundation design have been provided in the previous sections of this report. It is recommended that ITSL review the final proposed building foundation designs prior to construction. This is to confirm our assumptions with respect to building elevations and loading conditions, and so we can confirm our preliminary static settlement estimates.”

7.3 “It is further recommended that ITSL carry out site observations of the stripped subgrade to confirm soil conditions are as expected, or to advise of suitable alternative measures, if necessary. In addition, if structural FILLS are required, ITSL should carry out field density testing to confirm adequate compaction has been achieved.”

Refer to the document: “Geotechnical Report: Proposed Residential Development 9751 and 9819 Bottom Wood Lake Road Lake Country, BC” for the full report.



2024-06-11

MATERIALS TESTING • SOILS  
CONCRETE • ASPHALT • CORING  
GEOTECHNICAL ENGINEERING

#1 – 1965 MOSS COURT  
KELOWNA, B.C. V1Y 9L3  
250-860-6540  
INFO@INTERIORTESTING.COM

West Point Projects  
612 Bernard Avenue  
Kelowna, BC V1Y 6P3

June 2, 2023  
Job 23.112

Attention: Mr. Jim Langill

Re: **Geotechnical Report**  
**Proposed Residential Development**  
**9751 and 9819 Bottom Wood Lake Road**  
**Lake Country, BC**

As requested, Interior Testing Services Ltd (ITSL) has completed a drilling investigation at the above noted site for the proposed residential building development. Please find attached a site plan with schematic logs and five pages of bore hole logs. Also attached is a copy of our two-page "Terms of Engagement," which forms the basis on which we undertake this work and was previously signed and accepted.

## 1.0 INTRODUCTION & SCOPE OF WORK

We understand future development with residential buildings is being considered for the subject property. We anticipate the proposed buildings may include underground and main floor parkade, main floor commercial spaces, and residential units above likely constructed with wood framing. In addition, ITSL anticipates that the proposed development will also include typical site servicing and access driveways.

The purpose of our field investigation was to identify the underlying soil and groundwater conditions with respect to geotechnical comments for site development, building design and construction. The following report presents our investigation and laboratory results, along with general geotechnical comments and recommendations for site preparation, foundation design, building drainage, utility service construction and pavement structure.

Page 1

ITSL Geotechnical Report

INTERIOR TESTING SERVICES LTD.

6.2 The onsite, granular soils could be suitably used as trench backfill material, provided they can be compacted to 95% MPD and particles larger than roughly 200 mm diameter are removed. Trench backfill should be placed in a structural manner, as outlined in Section 4.2 of this report.


**7.0 CONCLUSIONS**


7.1 Recommendations for site preparation and foundation design have been provided in the previous sections of this report. It is recommended that ITSL review the final proposed building foundation designs prior to construction. This is to confirm our assumptions with respect to building elevations and loading conditions, and so we can confirm our preliminary static settlement estimates.

7.3 It is further recommended that ITSL carry out site observations of the stripped subgrade to confirm soil conditions are as expected, or to advise of suitable alternative measures, if necessary. In addition, if structural FILLS are required, ITSL should carry out field density testing to confirm adequate compaction has been achieved.

We trust this meets your current needs. Please call if you have any questions.

Sincerely,  
Interior Testing Services Ltd.  
Permit to Practice No. 1001971

  
Eli Schock, EIT

  
Jennifer Anderson, P.Eng

Page 7



Evaluation of Natural Hazard Risks

Site Precautions

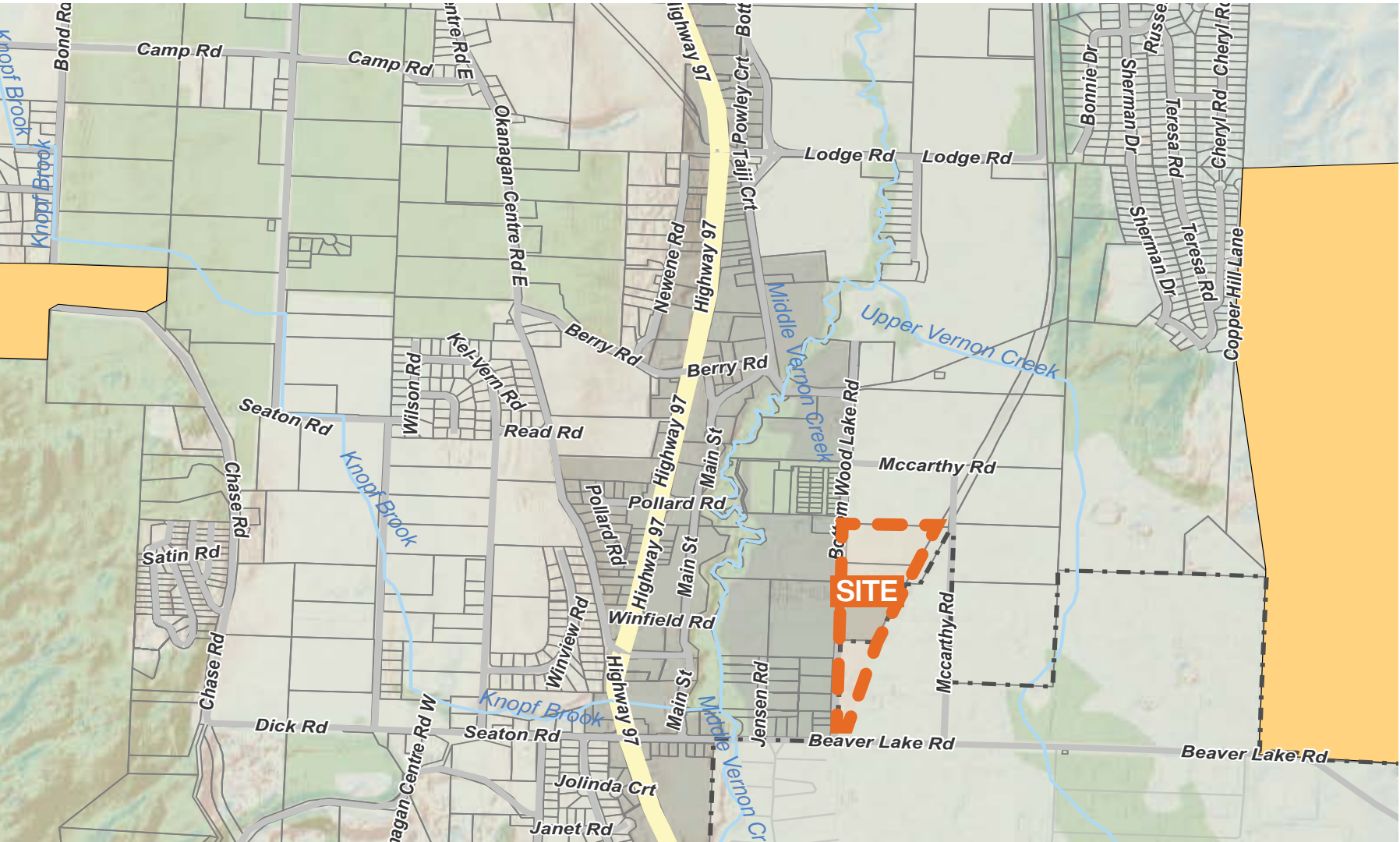
Recent years have seen a dramatic increase in major weather - related events. Whether it's prolonged drought, wildfires, extreme heat, or damaging frost, there are Best Management Practices (BMP) that should be incorporated into plant selection to off-set many of these risks.

The use of drought tolerant native, and adaptive native planting will be encouraged for new landscaped areas. Incorporating principles of Xeriscape will allow plants to thrive in the Okanagan's unique environment with minimal maintenance and water requirements.

Firesmart BC has developed several guidelines to make residential properties more fire resilient. This includes selecting specific plants in response to 'priority zones' based on their flammability and growth characteristics.

Limiting the use of evergreen trees and planting more broadleaf deciduous trees will both reduce wildfire risk and promote more shade relief in response to extreme temperatures.

Ensuring plants are selected based on an appropriate hardiness zone and planted with quality soil and mulching will help to minimize damage caused by extreme temperature fluctuations.





Sustainability Goals

Several sustainability features will be incorporated into the proposed development. These include using drought-tolerant and native plant species, integrating tree coverage, creating a walkable environment that reduces car dependency, integrated stormwater management with landscape design, and other water conservation strategies.

The number of interior roads and surface parking lots on the site will be significantly reduced, with the majority of parking located below grade. The site prioritizes pedestrians over cars with its pedestrian-oriented design and internal site circulation. Proximity to the Okanagan Rail Trail also promotes active forms of movement such as walking, biking, and alternatives to automobile usage.

Sustainable water conservation and stormwater management practices will be integrated through the grading, landscape design, and site planning. The placement of buildings and its effects on micro-climates, solar, wind, shading, and temperature conditions of the outdoor spaces will inform the development of the conceptual master plan.

Biodiversity of native plant species and vegetation will be used to promote bee pollination, healthy air, and healthy natural environments within the development.

The development will meet the BC Energy Step Code (latest edition) as part of its sustainability commitments.



Sustainable Goals & Strategies



Historical Conditions

The Subject Site has deep roots in the agricultural industry of the Okanagan Valley. The existing fruit packing warehouse was built in the 1960s for B.C. Tree Fruits and was in operation until 2022. B.C. Tree Fruits is a co-operative comprised of more than 230 fruit growers in the Okanagan Valley. The co-operative began in 1936 and has been integral to the development of the valley’s agricultural expansion.

The agricultural industrial use of the site reflects a long history of fruit packing in Lake Country, with packinghouses present in Oyama and Okanagan Centre as early as the 1910’s. The proposed development intends to incorporate design elements that reflect the site’s important role in developing the agricultural industry of the Central Okanagan, and will respond to the existing rural character to the north.



Heritage inspired landscape and architectural design elements



Historic images of Lake Country - Retrieved from the District of Lake Country Museum and Archives

JUNE 10, 2024

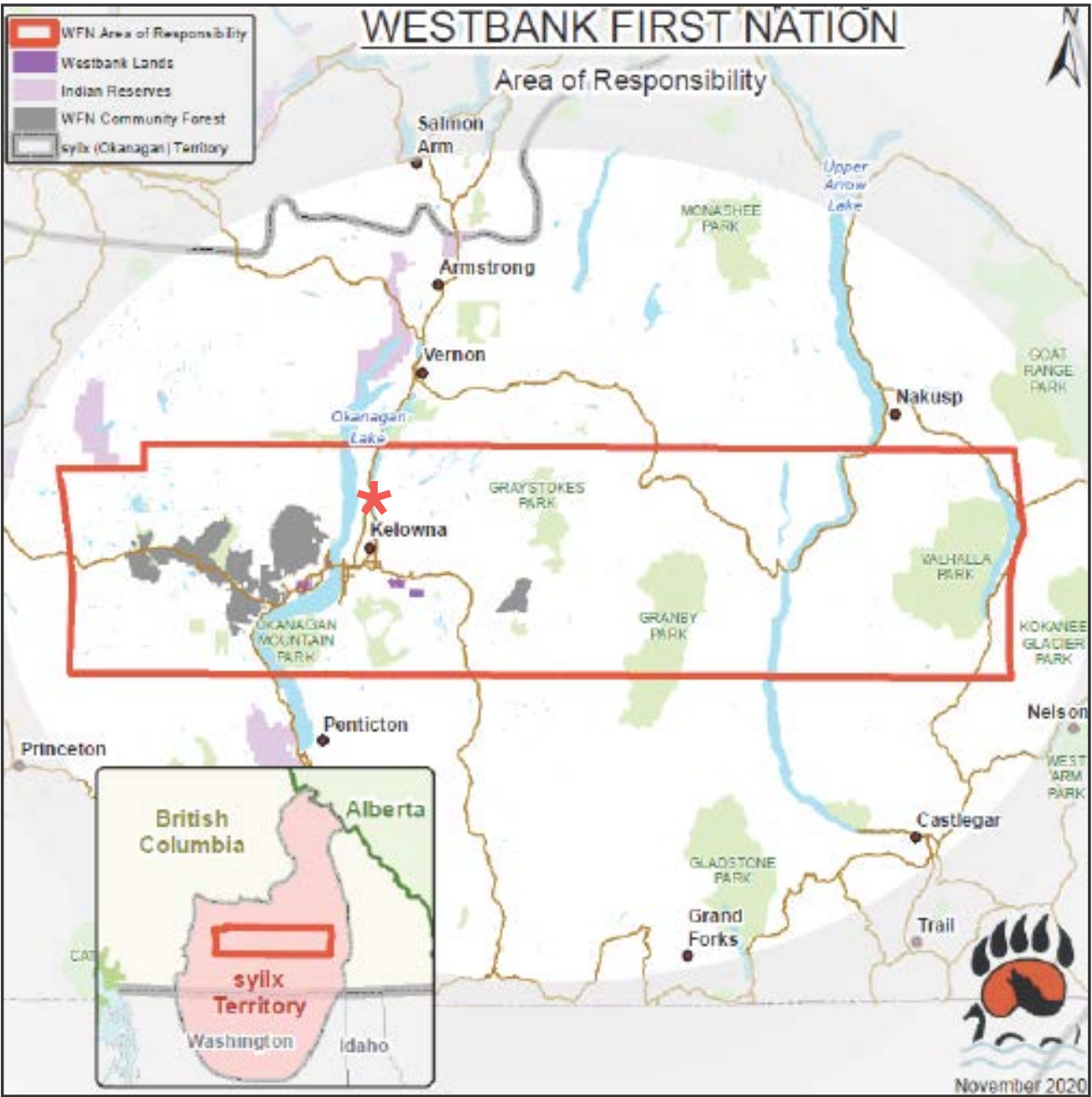


Archaeological Assessment

A portion of the lands sits within the territory of the syilx Okanagan Peoples. Westbank First Nation (“Westbank”) is one of the seven communities of the syilx Okanagan Peoples (also known as the Okanagan Nation) in Canada.

An archaeological overview assessment (AOA) was conducted by Ursus Heritage Consulting on behalf of West Point Projects Inc. at the end of May, 2024.

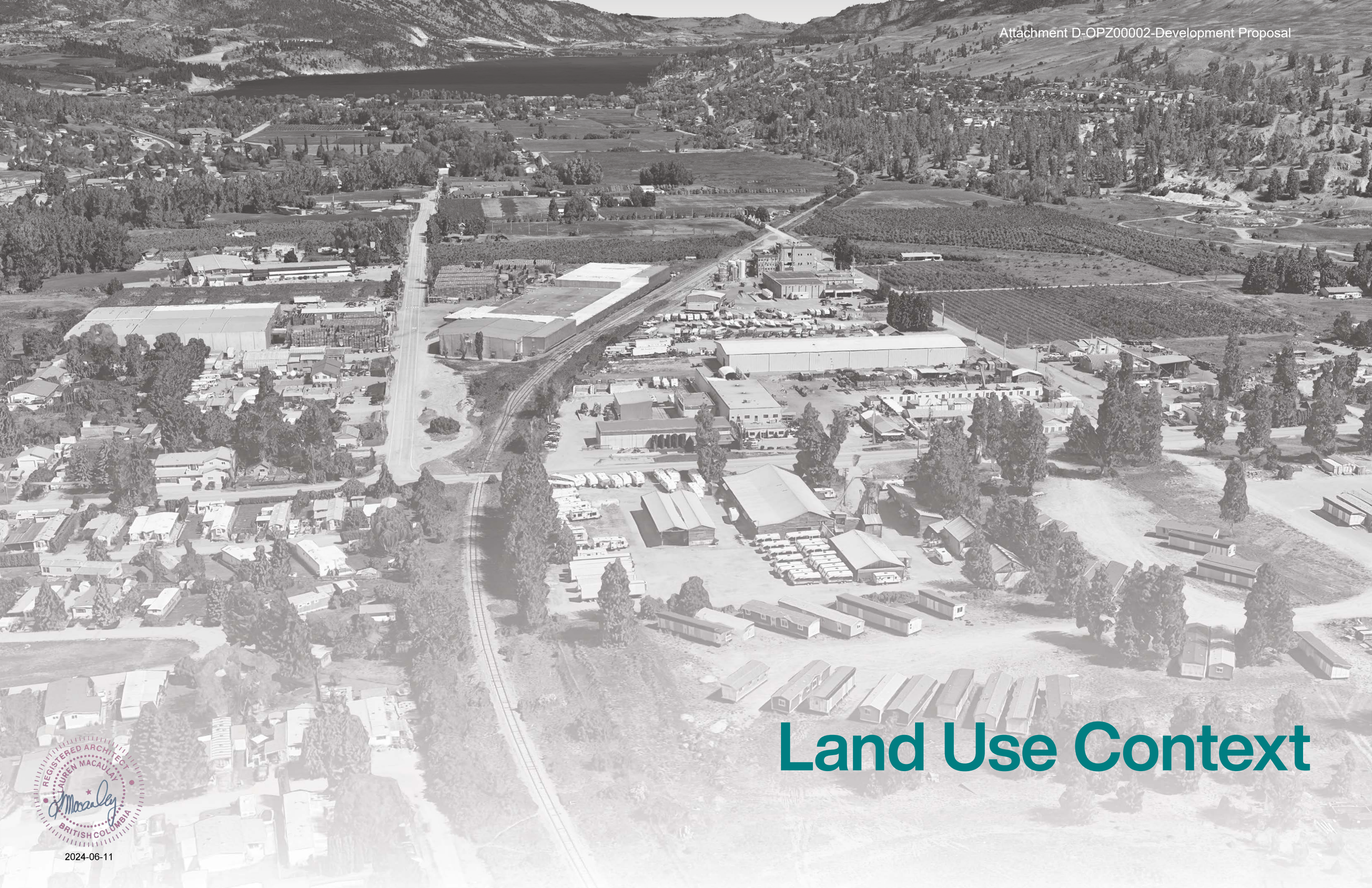
The proposed Project has been assessed with low archaeological potential. (Refer to Recommendations pg 8 of 16 in the report). For the full report please see the document titled: “RE: Archaeological Overview Assessment for the Proposed Bottom Wood Lake Road Townhouse Project, in Lake Country, BC.”



\* Site







# Land Use Context



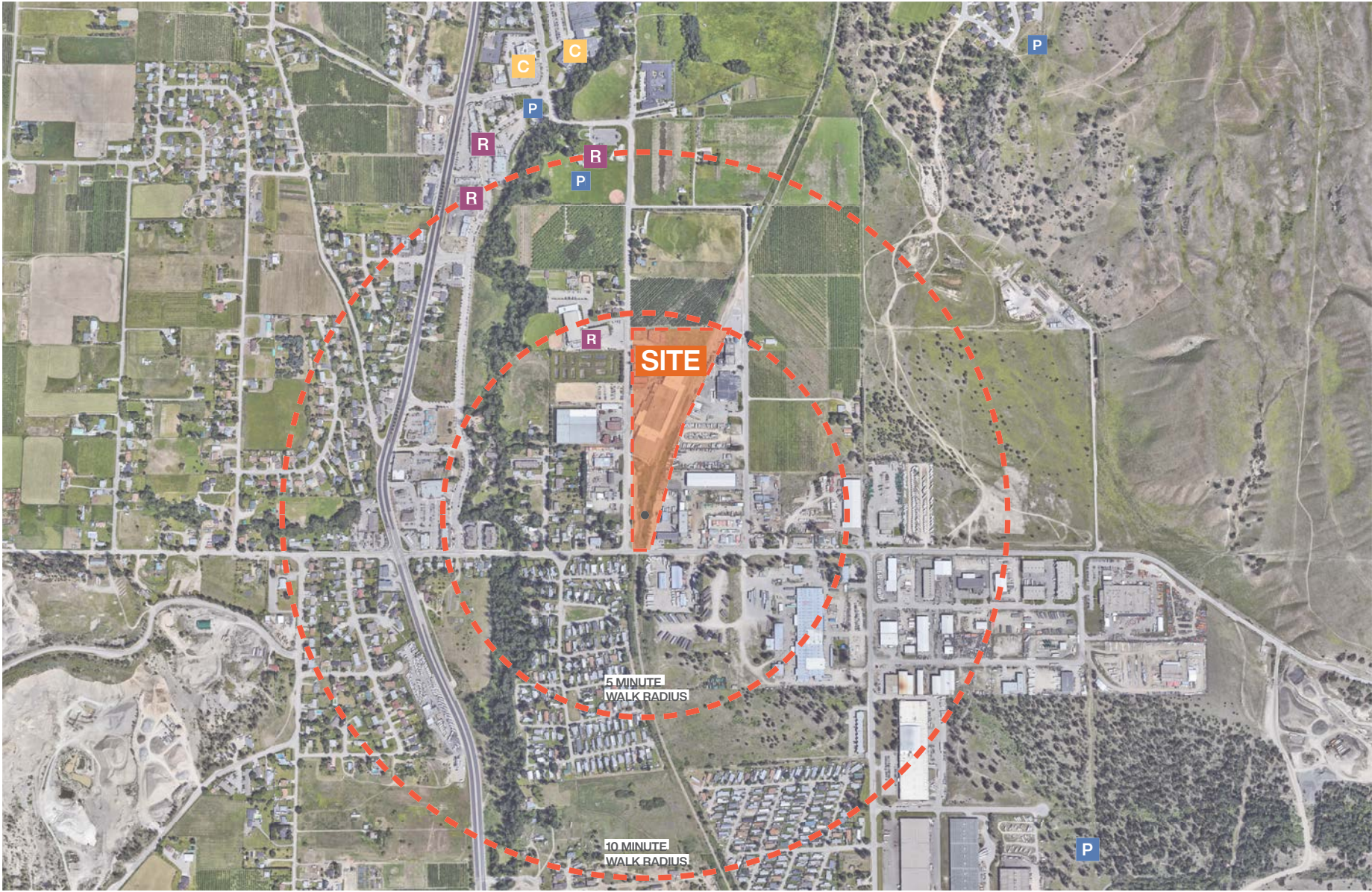


Existing Parks, Public Space, and Recreation Facilities

Community Amenities

The Subject Site is located in close proximity to a variety of existing amenities. Within a 5-10 minute waking radius from the site are:

- Many retail shops and restaurants including Lake Country Town Centre.
- Several large park spaces and community facilities including Swalwell Park, Tretheway Splash Park and Lake Country Lions Memorial Park, and the Lake Country Library
- Cultural facilities including Creekside Theatre, Winfield Memorial Hall
- H.S. Grenada Middle School, and George Elliott High School



Community Amenities Map

C

Cultural

R

Recreation

P

Park

5 min and 10 min walking radius



JUNE 10, 2024

2024-06-11





Existing Transportation Infrastructure

Public Transportation

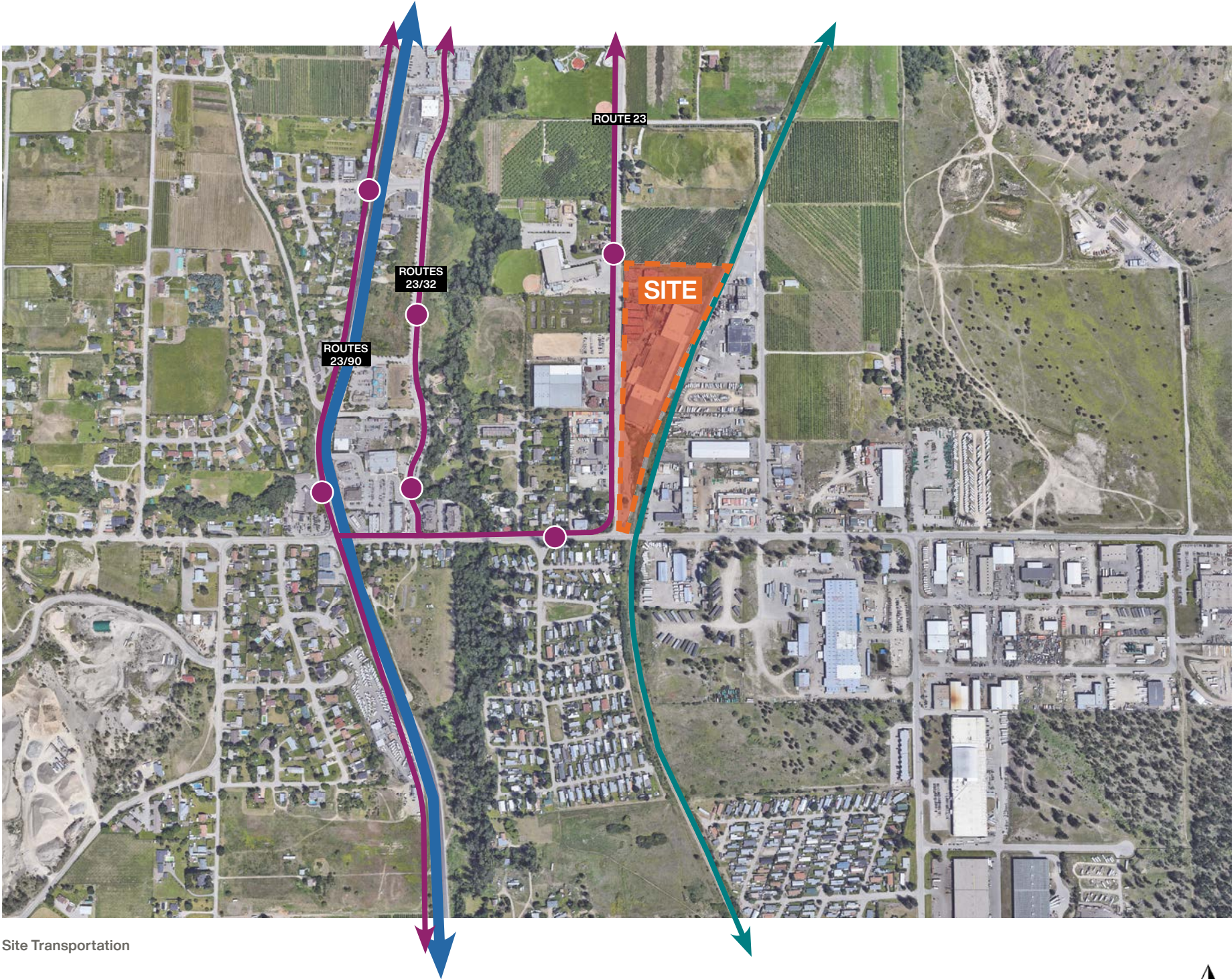
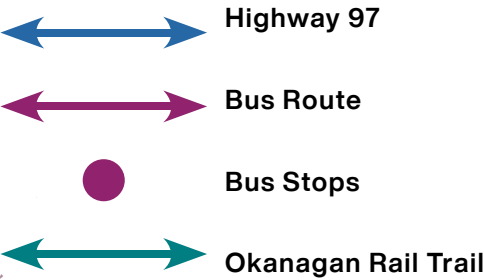
The Subject Site is located immediately adjacent to a Route 23 bus stop. This bus route runs between the UBC Okanagan bus exchange and Lake Country, with numerous stops within Lake Country’s Town Centre, and a stop at YLW Airport. The Subject Site is also located near a bus stop at Beaver Lake Road and Highway 97 for Route 90. This route connects to the UBC Okanagan bus exchange in Kelowna to the south, and Okanagan College in Vernon to the north.

Active Transportation

The Subject Site is located directly adjacent to the Okanagan Rail Trail. This bicycle and pedestrian trail leads from Vernon in the north to Kelowna in the south.

Vehicle Transportation

The Subject Site has good access to Highway 97 via Beaver Lake Road, providing connections to the Oyama district of Lake Country and Vernon to the north, UBC Okanagan, YLW Airport and downtown Kelowna to the south.





145371 - LAKE COUNTRY REZONING APPLICATION

Existing Site Photos



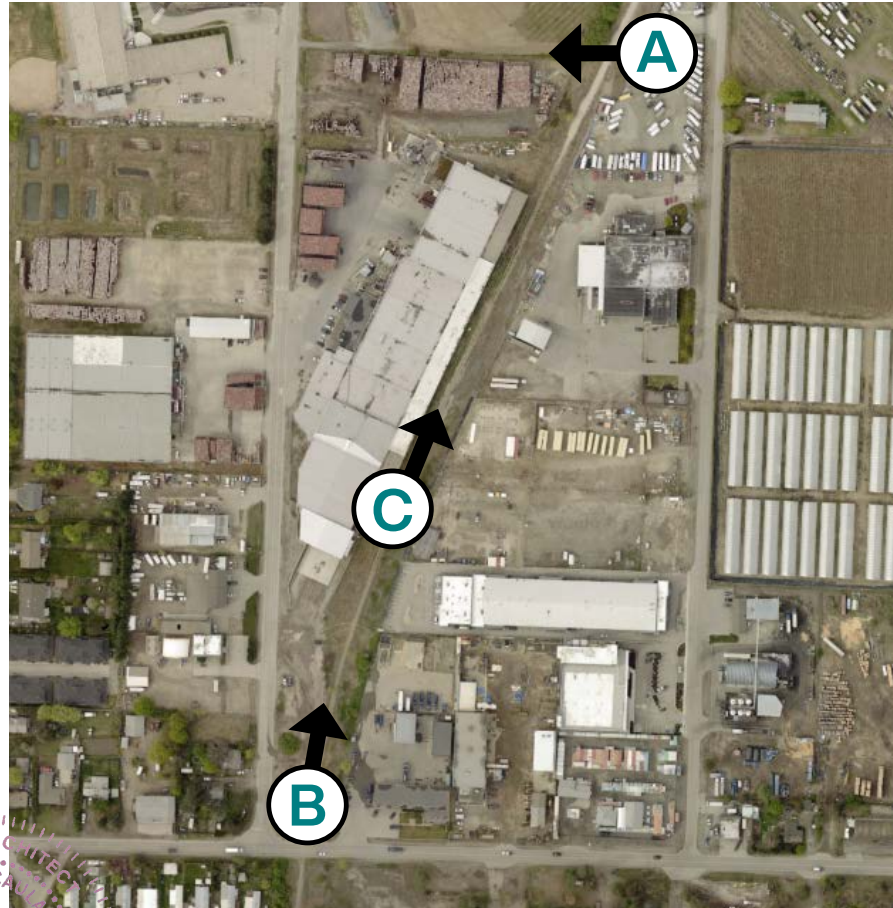
View A



View B



View C

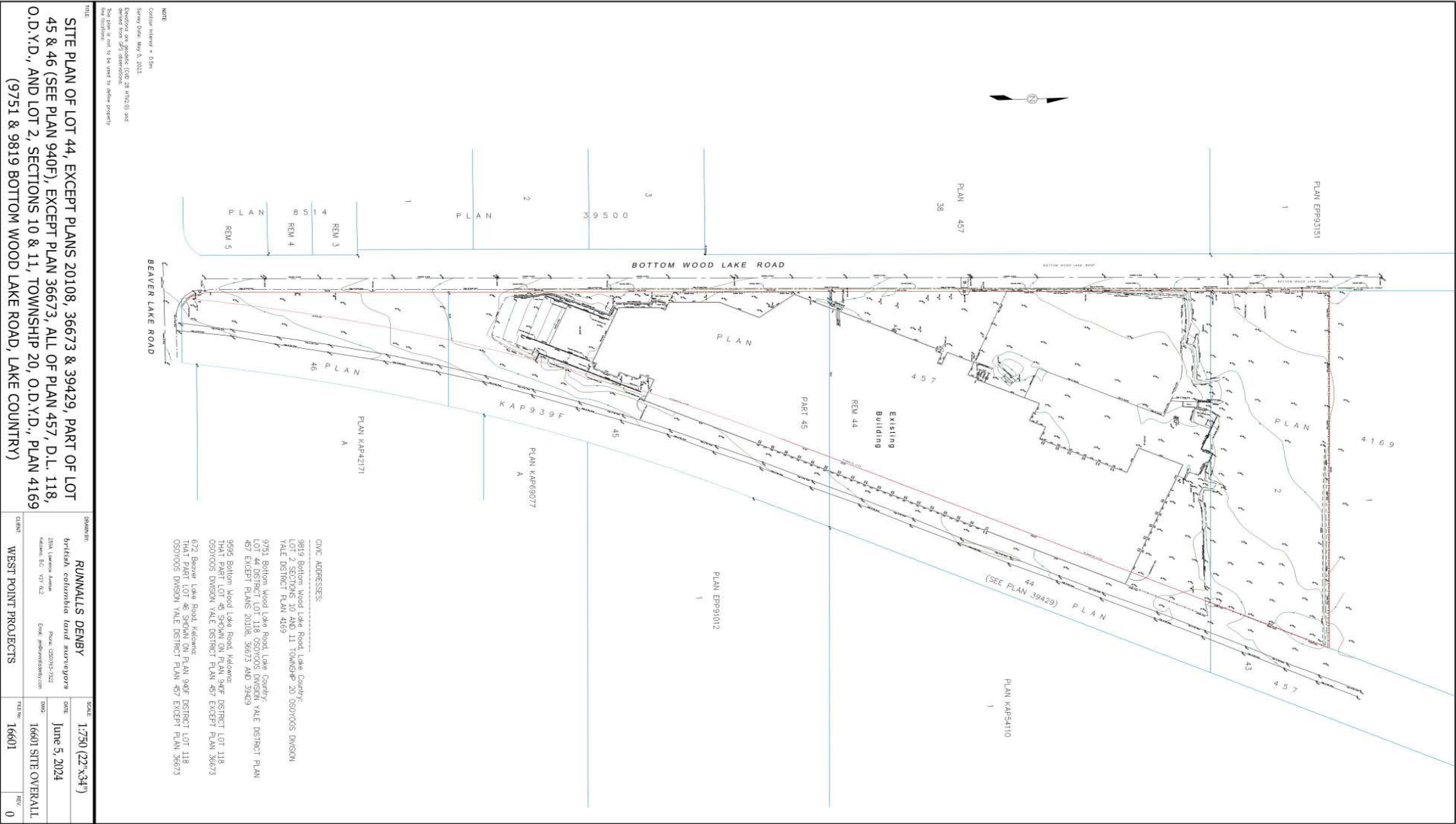


REGISTERED ARCHITECT  
LAUREN MACALUSO  
KEY PLAN  
JUNE 10, 2024  
BRITISH COLUMBIA

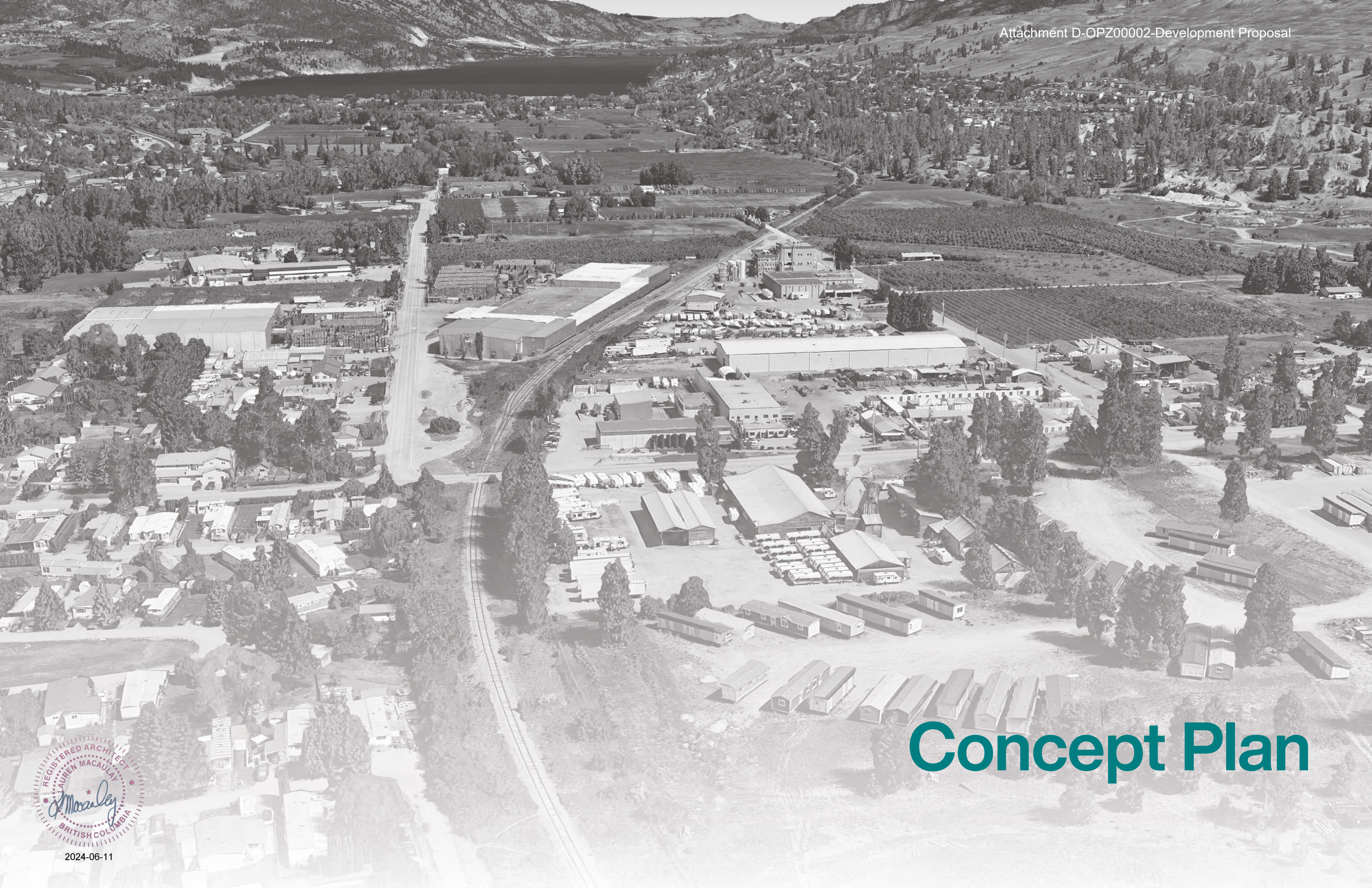


Existing Site Survey

Existing site survey provided by Runnalls Denby BC Land Surveyors. Refer to enlarged site plan for survey geodetic heights.







# Concept Plan





Land Use Plan

The Subject Site is bounded by agricultural farmland to the north, Okanagan Rail Trail to the east, Beaver Lake Road to the south and Bottom Wood Lake Road to the west. The total site area is 8.65 acres.

The proposed development is envisioned as the first significant steps towards creating a complete, concentrated community in District of Lake Country. Improvements to the streetscape, landscape, block structure and public amenities, as well as the introduction of new building forms to the area, will enhance this location as a convenient, desirable, beautiful place to live, work, shop, and play.

The masterplan features six residential buildings and townhouses. The buildings are oriented around the edges, forming an internal street and pedestrian oriented plaza space with pocket parks, play areas, hardscape areas for weekend markets and generous tree and planting coverage.

At the full build out, the site will provide approximately 640 residential units in townhouse and apartment formats, ranging from one to three bedrooms. A shared amenity space overlooks the central courtyard space to create a vibrant, complete mixed-use community. Parking is primarily below grade.

The site features strong east-west pedestrian connections to connect to the Okanagan Rail Trail (ORT), as well as a primary north to south pedestrian spine that connects a series of smaller plazas together to promote healthy living and active lifestyles.



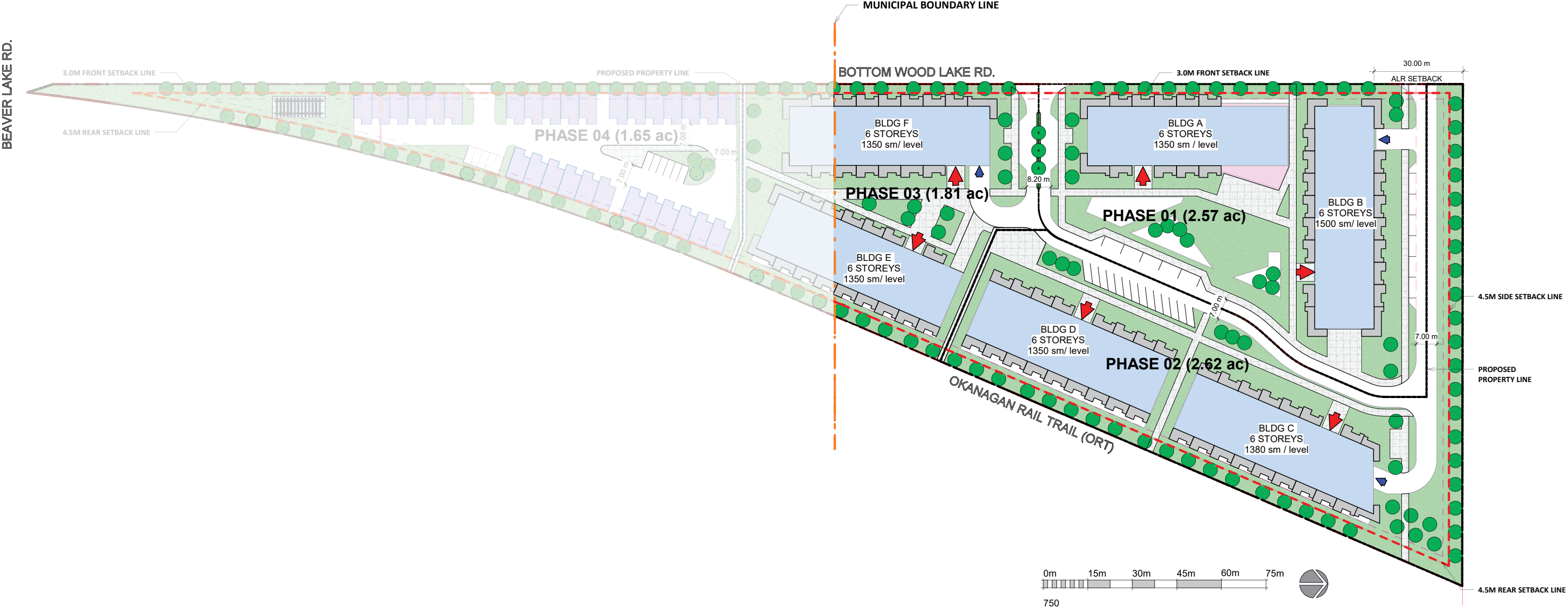
Conceptual Site Plan





145371 - LAKE COUNTRY REZONING APPLICATION

Site Plan





Housing Plan

The proposed development aims to promote social diversity and accommodates different housing types and lifestyles. The development will provide a wide range of housing options including family-oriented townhouses and 1 to 3-bedroom apartment units for a broad demographic mix.

This multifamily development blends street-oriented townhomes, apartment units, and shared amenities. The development is committed to offering quality, long term housing solutions in a neighbourhood surrounded by a multitude of amenities including grocery, shopping, schools and green spaces.

The application is a significant opportunity to add new housing options within a town centre setting and respond to the continued demand and sustainability of the community.

Lake Country’s Housing Needs Report (June 2023)

The following excerpt is noted in the report:

*“Based on an average 3% future growth rate, it is estimated a minimum of 2,505 new housing units will be needed by 2031, which reflects an average of 250 units per year”.*

An estimated ± 640 units are proposed for the site, comprising approximately 1/4 of all housing needed by 2031 and significantly easing the District’s existing housing shortage.



Aerial View of Proposed Development



View from Balcony Towards Central Courtyard





Built Form Analysis

The proposed development will accommodate a mix of residential densities and typologies. The maximum height of multi-unit buildings will be six storeys, however, increased height may be considered based on topographic conditions, to the satisfaction of Approving Authority.

Building massing will allow for sunlight exposure to all units and minimize shadowing onto main outdoor park and amenity spaces. Shadow studies may be provided at the development permit stages.

Where possible, units at grade will have patios with direct access to the street to foster a sense of community and promote safety and security within the development.

Building facades will be designed to incorporate features, proportions, and characteristics of the community (e.g. articulation, building materials, building massing), with some variety in building colors, materials, and textures to enhance the community character.

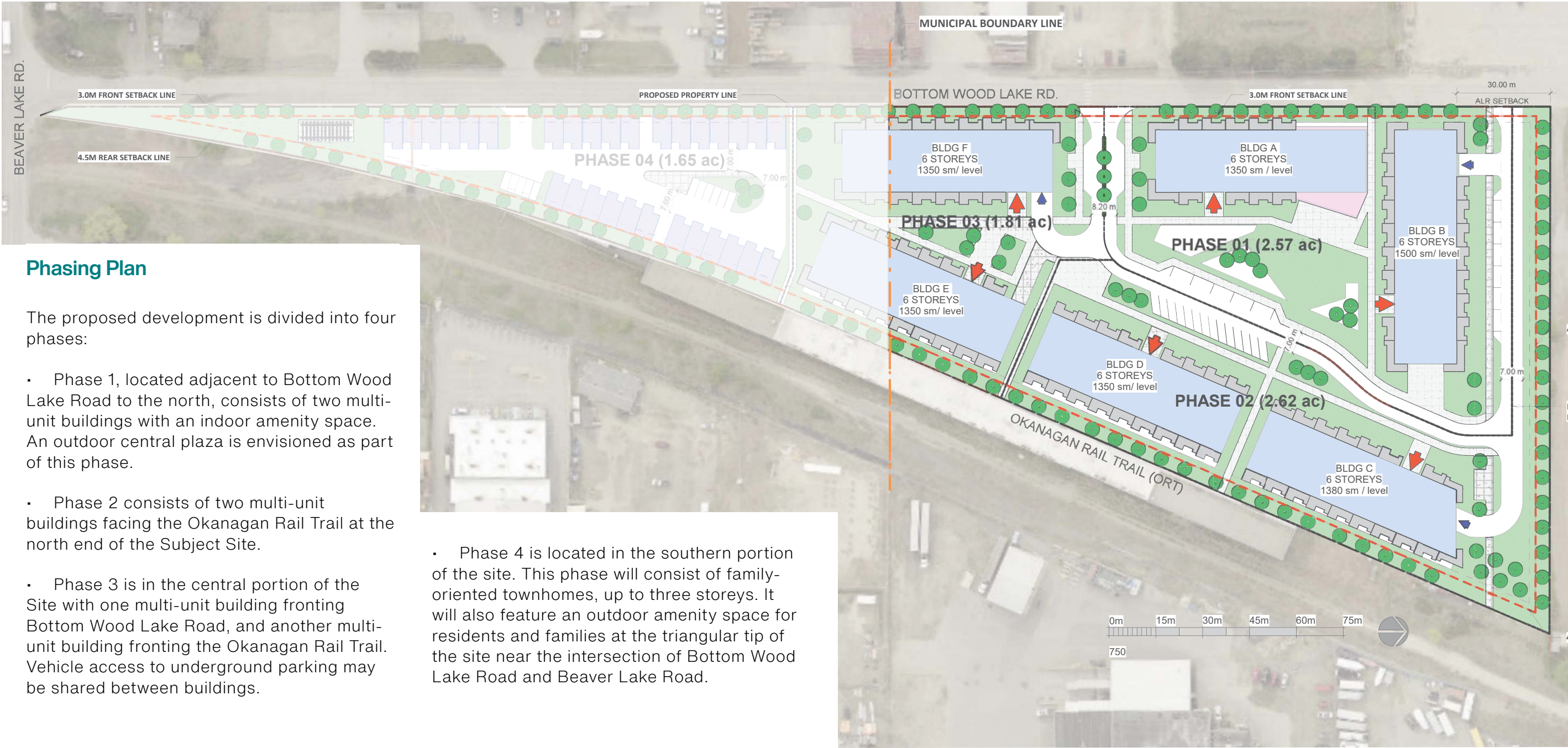
Design emphasis will be placed at building corners and outdoor spaces to ensure a seamless quality public realm is maintained throughout the development. There may be opportunities to incorporate historical elements related to the site’s use as a packing house to establish a unique identity and a create memorable experience for visitors and residents.



Built Form Precedence Images







Phasing Plan

The proposed development is divided into four phases:

- Phase 1, located adjacent to Bottom Wood Lake Road to the north, consists of two multi-unit buildings with an indoor amenity space. An outdoor central plaza is envisioned as part of this phase.
- Phase 2 consists of two multi-unit buildings facing the Okanagan Rail Trail at the north end of the Subject Site.
- Phase 3 is in the central portion of the Site with one multi-unit building fronting Bottom Wood Lake Road, and another multi-unit building fronting the Okanagan Rail Trail. Vehicle access to underground parking may be shared between buildings.
- Phase 4 is located in the southern portion of the site. This phase will consist of family-oriented townhomes, up to three storeys. It will also feature an outdoor amenity space for residents and families at the triangular tip of the site near the intersection of Bottom Wood Lake Road and Beaver Lake Road.

Phasing Diagram





Project Statistics Breakdown

Phase	Proposed Bldg Area (SF)	Site Area (SF)	Site Area (Acres)	Proposed FAR (based on Gross Floor)	Max. Allowable FAR	Est. Unit Count	Proposed Bldg Height (Max storeys)	Est. Req'd.Parking (1.2 stalls per unit)
Phase 1 (District of Lake Country)	185,746	111,789	(2.57)	1.66	2.35	207	6	249
Phase 2 (District of Lake Country)	176,307	114,253	(2.62)	1.54	2.35	203	6	244
Phase 3 (City of Kelowna/District of Lake Country)	174,375	79,015	(1.81)	2.21	2.35	200	6	240
Phase 4 (City of Kelowna)	57,261	71,816	(1.65)	0.80	2.35	30	3	36

Phase	Proposed Bldg Area (SF)	Site Area (SF)	Site Area (Acres)	Proposed FAR (based on Gross Floor)	Max. Allowable FAR	Est. Unit Count	Proposed Bldg Height (Max storeys)	Est. Req'd.Parking (1.2 stalls per unit)
Overall	593,689	376,873	8.65	1.58	2.35	640	6	769





Parks & Public Space Plan

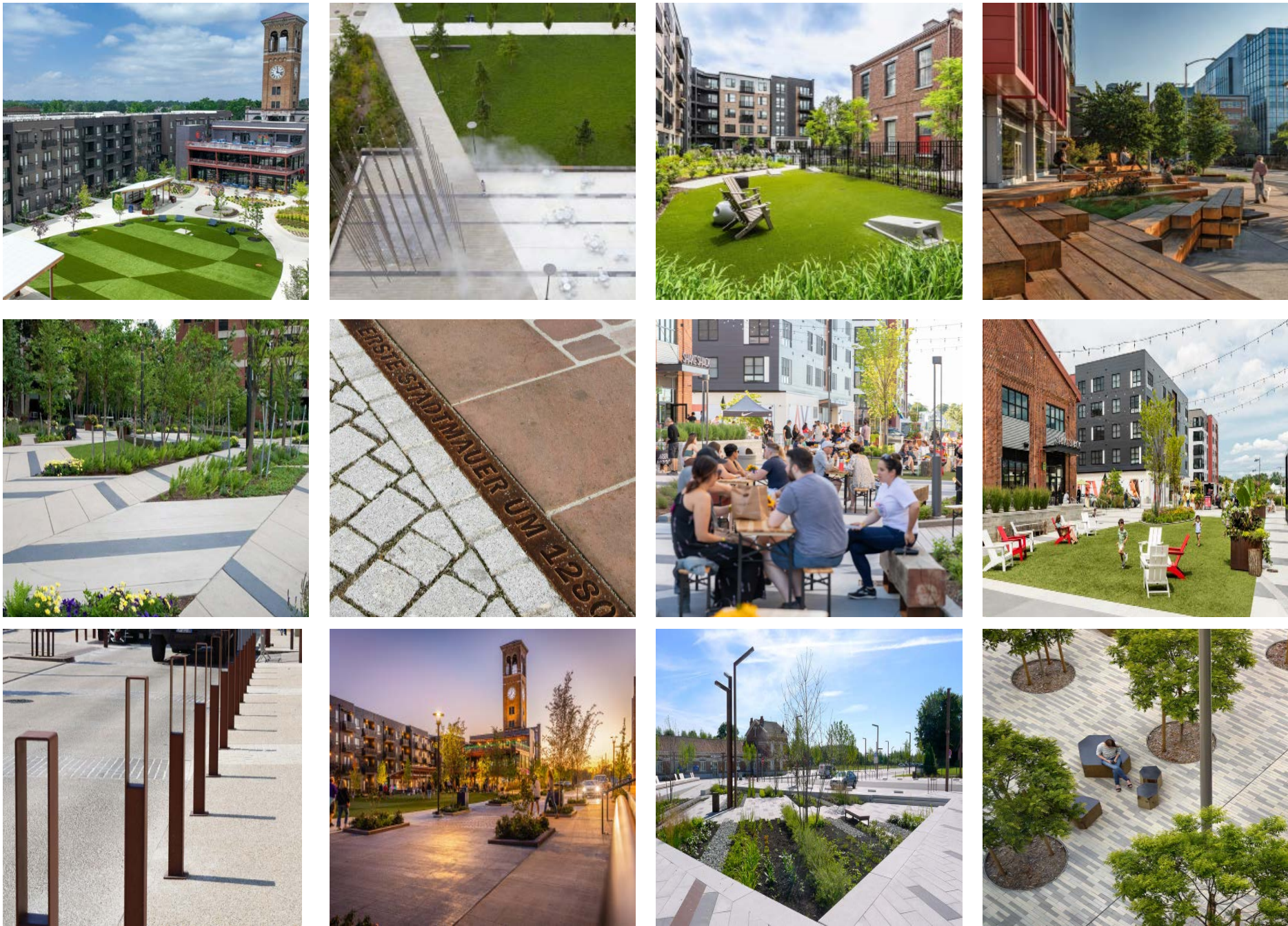
A network of parks and open spaces will support the proposed high-density residential development through a range of passive recreational opportunities that will be easily accessible for its residents. It will also promote connectivity between the residential blocks within the development, as well as to the broader community through the Okanagan Rail Trail (ORT) that serves as a major recreational corridor linking together various local and regional amenities.

Maintaining strong pedestrian connections to the ORT echo’s the site’s past use as a fruit packinghouse and will provide ample opportunities for re-interpretation of this historic use through new thematic landscape elements that will create a unique identity and experience within the outdoor spaces.

A palette of landscape planting and materials will be selected in response to the Okanagan’s unique climate and regional character. This will further reinforce the development’s unique identity.

In response to municipal landscape requirements, the appropriate landscape setbacks will be provided along Bottom Wood Lake Road (east) and the ORT (west) to buffer uses between the residential development and adjoining sites. To the north, a vegetative buffer will also be provided in response to the adjoining property’s ALR designation.

Planting will also respond to specific site design requirements, such as the use vegetative swales and infiltration planting for any passive stormwater management, shade tree planting, and transitional planting between public spaces and private patios.



Landscape Precedents

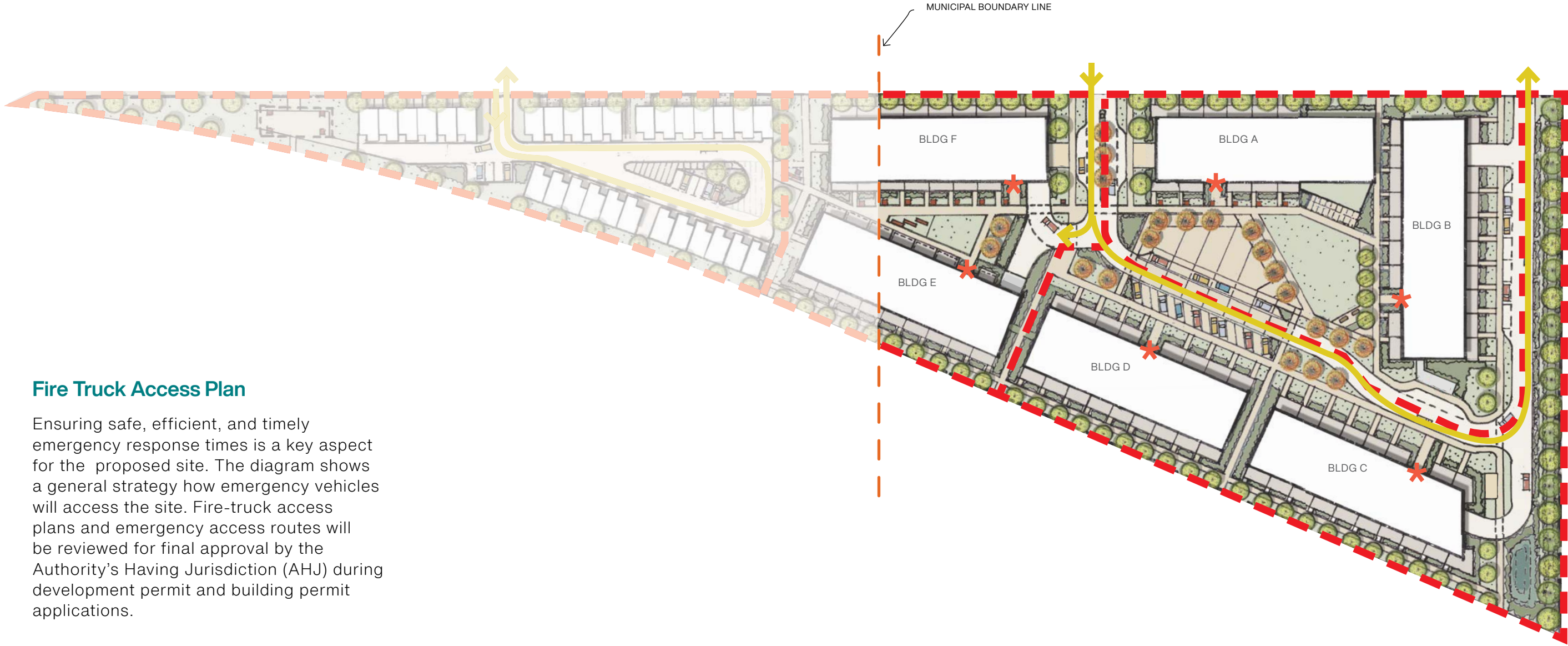




Landscape Concept Plan







Fire Truck Access Plan

Ensuring safe, efficient, and timely emergency response times is a key aspect for the proposed site. The diagram shows a general strategy how emergency vehicles will access the site. Fire-truck access plans and emergency access routes will be reviewed for final approval by the Authority’s Having Jurisdiction (AHJ) during development permit and building permit applications.

- Fire Truck Access
- - - Phasing Line
- \* Building Entrance





An aerial photograph showing a mix of industrial and residential development. In the center, there are several large industrial buildings, including a long warehouse-like structure and various smaller workshops or storage units. A railway line runs vertically through the middle of the image. To the left, there's a residential area with smaller houses and trees. In the background, a large body of water is visible, surrounded by forested hills. The overall scene depicts a developing area with a mix of land uses.

# Civil Site Servicing Strategy

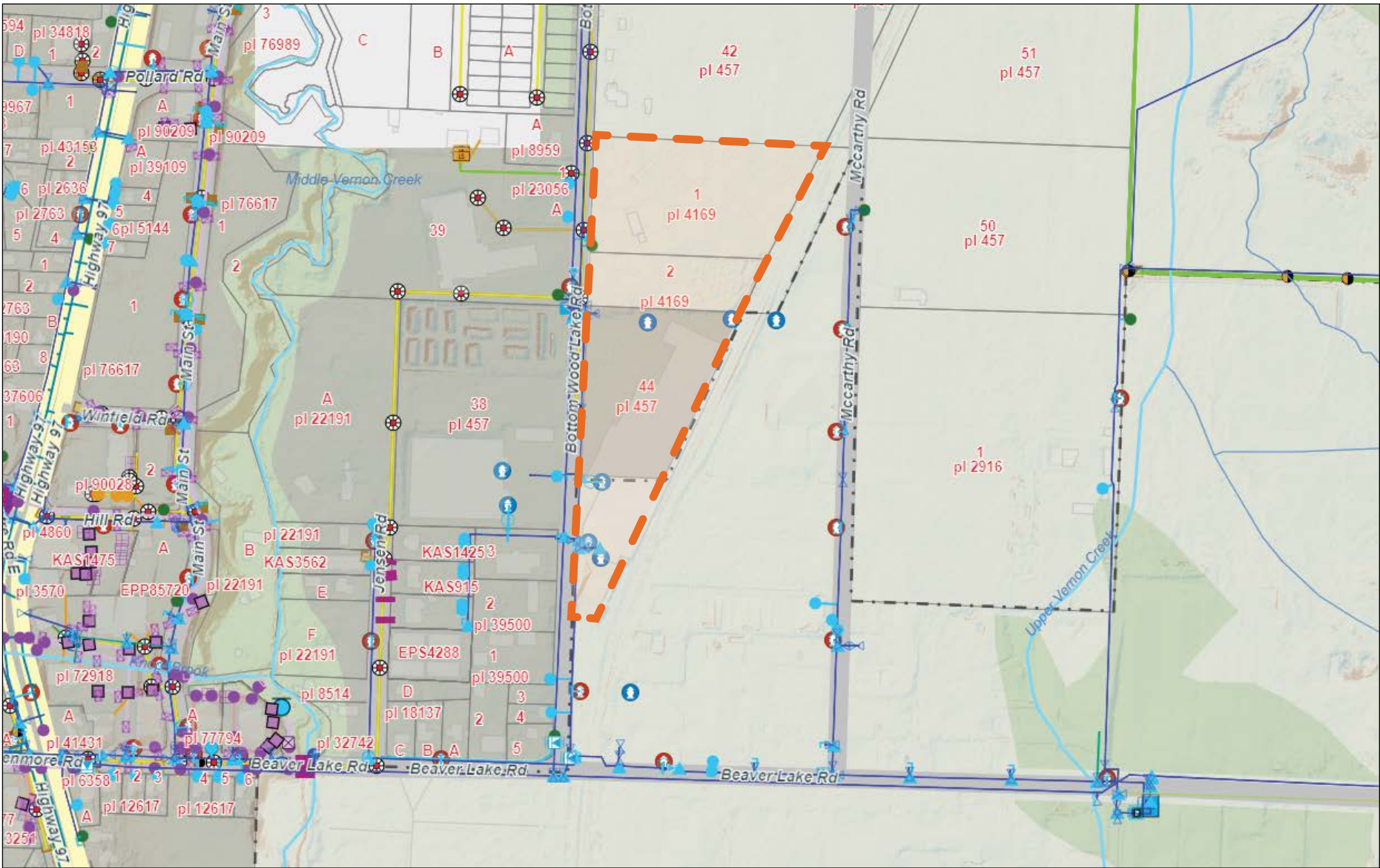


Existing Utility Infrastructure

Our understanding is The District has been working on various upgrades to this portion of BWL Rd over the last three years (Bottom Wood Lake Road Phase 2 Project); these include the following upgrades:

- Installation of new 200mm PVC sanitary sewer – construction completed.
- New asphalt multi-use path on west side of road – construction completed.
- Addition of barrier curbs and piped storm system with 350mm HDPE main, drywells, and catch basins – construction completed.
- Updated road cross-section to two travel lanes with bike lanes on each side – construction completed.
- Undergrounding of shallow utilities – not yet complete, work is currently on hold.

No watermain upgrades along the frontage of the subject properties on BWL Rd were completed as part of this project.



Utility Infrastructure



## Existing Shallow Utilities

**BC Hydro**

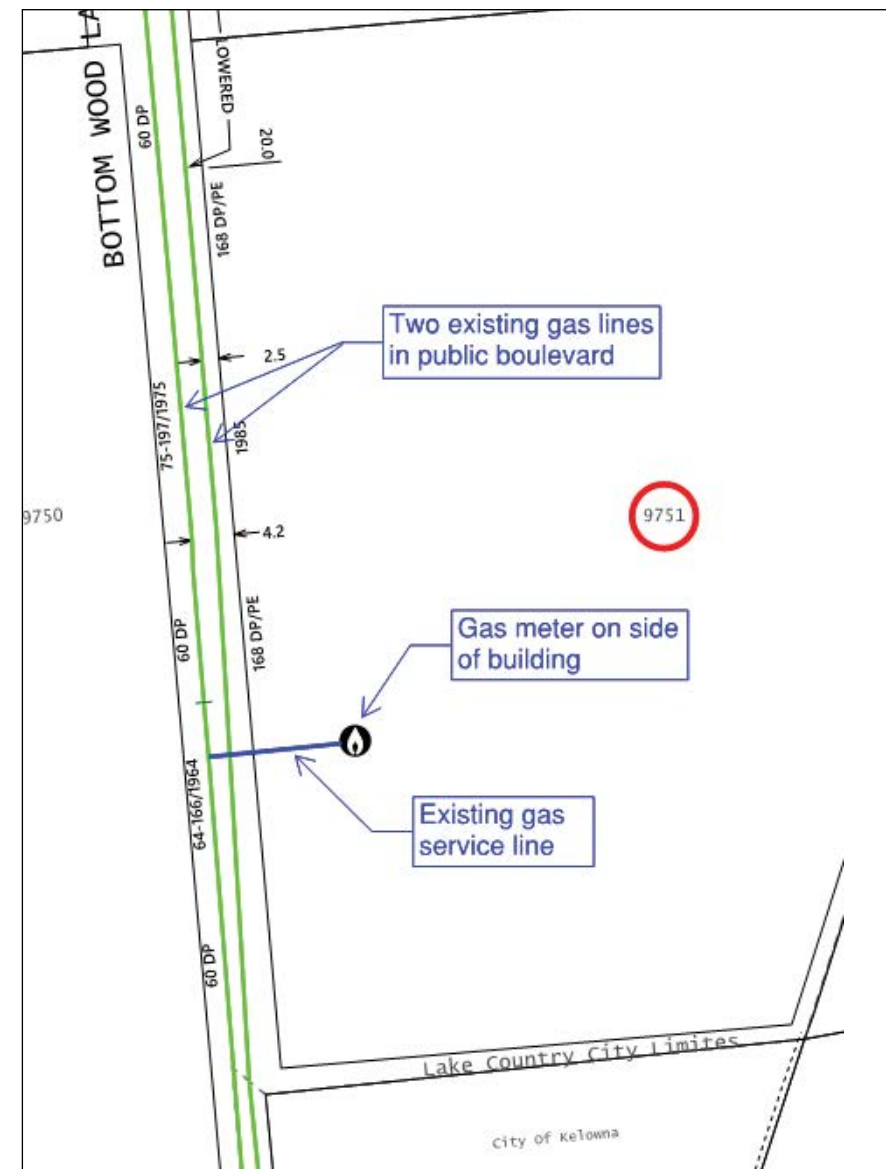
There is an existing three phase overhead pole line along the West side of Bottom Wood Lake Rd and a double circuit three phase overhead line along the adjacent Beaver Lake Rd. The property is currently serviced via a primary (25kV) service via overhead lines crossing Bottom Wood Lake Rd to a private pole within the site. There should be enough capacity on the existing BC Hydro infrastructure to provide service to this development without requiring any significant upstream upgrades

### Communications (Telus/Shaw)

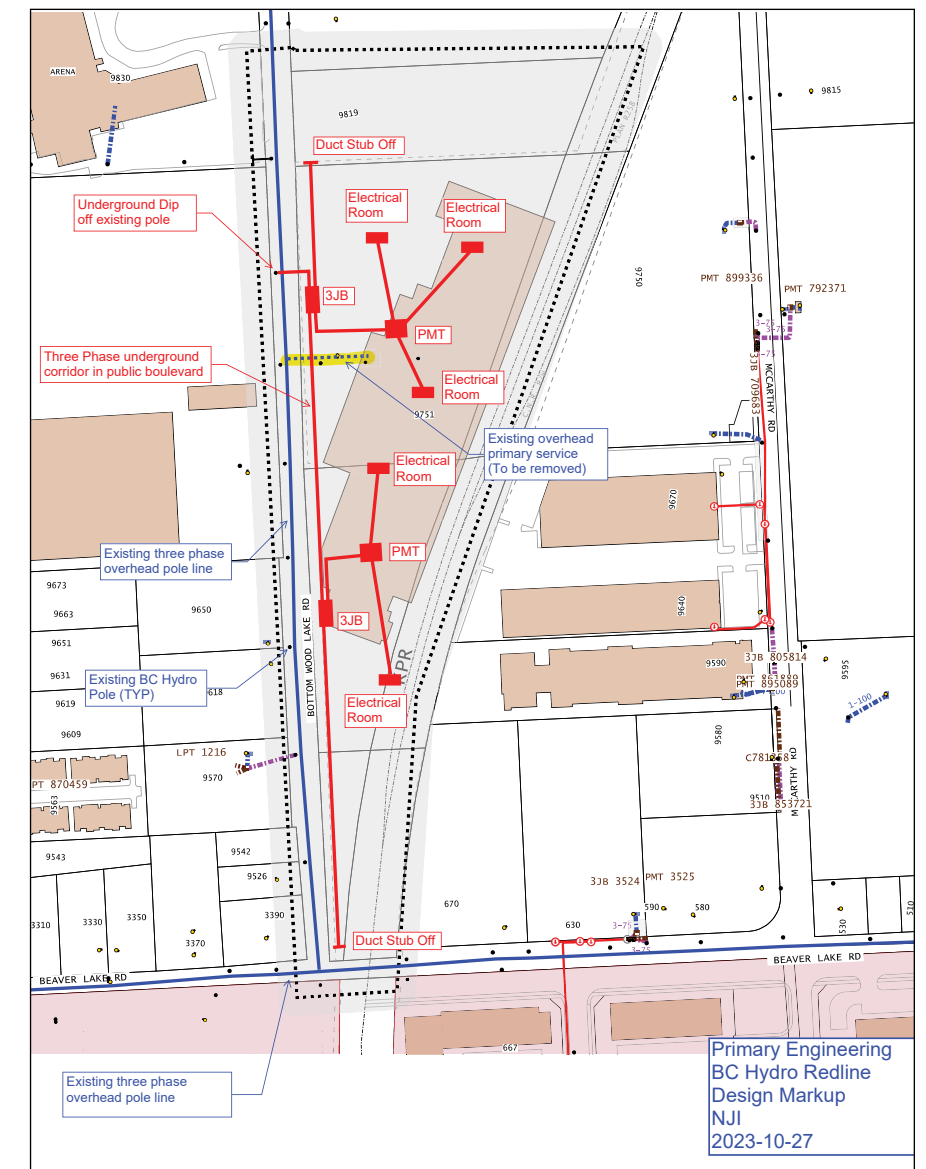
There is existing overhead Shaw & Telus lines along Bottom Wood Lake Rd. The site is currently fed via an overhead service from the same that is providing the BC Hydro service. This overhead service will not be required for the multi family development thus will need to be removed.

## Fortis Gas

There are two existing gas lines along Bottom Wood Lake Rd fronting the development site. There is currently a gas service into the site feeding a gas meter on the side of the building. This existing gas service will not be required for the new multi family development thus will need to be removed.



### Existing Shallow Utility Locations





Functional Service Report (FSR)

The Functional Servicing Report ‘FSR’ is intended to present preliminary design concepts in order to demonstrate how the site may be serviced and developed in keeping with the applicable regulatory requirements (i.e. City of Kelowna Bylaws, District of Lake Country Bylaws, BC Building Code, etc.).

The design concepts presented herein represent a first step in the design process and do not represent detailed engineering designs for the project. Detailed designs will be prepared and submitted to the City, the District, and all other required regulatory agencies in due course following receipt of a Development Permit.

Refer to the document titled: “*Functional Service Report - Revision 2 Multi-Family Residential Development - 9751 Bottom Wood Lake Road*” for full report.







**Functional Servicing Report - Revision 2  
Multi-Family Residential Development – 9751 Bottom Wood Lake Road**

May 30, 2024

Prepared for: 9751 Bottom Wood Lake Road Properties Ltd.  
Prepared by McElhanney Ltd.


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BC Canada V1X 7C5

Our file: 2451-1632-061

Our File: 2451-1632-061 | May 30, 2024

**8. Closing**  
We trust that this report meets your expectations, and we look forward to continuing to work with you to bring this project to fruition. If you have any questions, please contact the undersigned.

Prepared By:  
  
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Engineer of Record

Reviewed By:  
  
Whitney Roe, P.Eng.  
Project Engineer

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McElhanney Ltd.  
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Engineers and Geoscientists of BC

JUNE 10, 2024

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