



To: ACRD Board of Directors

Meeting Date: April 22, 2026

From: Alex Dyer, GM of Planning & Development

File #: RE22009/PL20220053

Electoral Area: "E" Beaver Creek

Voting Structure: Electoral Area Directors

Subject: Rezoning application RE22009 – 5750 Falls Street (Tilley)

Recommendation:

THAT Bylaw P1465, Beaver Creek Official Community Plan Amendment Bylaw, be read a first time.

THAT Bylaw P1466, Regional District of Alberni-Clayoquot Zoning Text Amendment Bylaw, be read a first time.

THAT Bylaw P1482, Regional District of Alberni-Clayoquot Zoning Atlas Amendment Bylaw, be read a first time.

THAT the public hearing for Bylaws P1465, P1466 and P1482 be delegated to the Director for Electoral Area 'E', the Alternate Director or the Chairperson of the Regional District.

THAT the Board of Directors confirm that adoption of Bylaws P1465, P1466 and P1482 is subject to:

- a. Support from the Tseshaht and Hupacasath First Nations.***
- b. The applicants agreeing to a covenant to limit the siting of all campsites to a Flood Construction Level established by a Geotechnical Engineer and to certify that the property is safe for the intended use as it relates to seasonal flooding and tsunami inundation.***
- c. Agreement to include the property within the Beaver Creek Water Service Area and confirmation that the Beaver Creek Water System can service the 100-site campground, or confirmation of a suitable alternative for water servicing.***
- d. Confirmation from a Registered On-Site Wastewater Practitioner that the property has the capacity to accommodate on-site sewage disposal for the 100-site campground.***
- e. Issuance of a Commercial Access Permit from the Ministry of Transportation & Transit.***
- f. Completion of a traffic study to assess the impact of the development on the road network.***
- g. Registration of an Easement over the existing driveway to provide continued access to the neighbouring property described as Parcel E, District Lot 7.***
- h. Meeting all technical referral agency requirements.***

Development Proposal: The property owners are applying to rezone their 5.6 hectare (13.75 acre) property located at 5750 Falls St from Forest Reserve (A4) District to a site-specific Campground Commercial (C8-C) District in order to construct a 100-site campground, campground amenity facilities, and two caretaker dwellings. The campground would be intended for tourist and seasonal temporary accommodation and open year-round. The campground would be fully serviced and located on the east half of the property a minimum of 60 metres from the Somass River. The campsites would be 6 metres (20 feet) wide and range from 15 metres (50 feet) to 24 metres (80 feet) deep.

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July 2023 Board Meeting: The application was considered at the July 26, 2023 Board of Directors meeting where the Board passed the following resolution: “THAT prior to considering the bylaws for first reading, the Board require additional information from the applicants to indicate support in principle from First Nations and to provide initial water, sewer, and geotechnical safety recommendations for servicing the campground development.”

April 2026 Update: Following the initial Board review, the applicants have been working on meeting the requirements of rezoning in order to proceed with the application. The applicants have now submitted a package of new information that intends to address the questions identified by the Board. The new information is summarized below:

First Nations Support: The Tseshaht First Nation provided a letter dated July 3, 2025, that expressed strong support for the rezoning to develop a sustainable and accessible campground on the property. The letter notes that the proposed campground aligns with Tseshaht’s shared goals of promoting outdoor recreation, environmental stewardship, and economic development, and highlights the proposal’s emphasis on sustainable practices to preserve the area’s natural resources. The letter is provided without prejudice to Tseshaht’s Aboriginal Title and Rights and highlights conditions relating to the importance of governance, cultural aspects, territorial recognition, and participation. The rezoning application is also being referred to the Hupacasath First Nation for their consideration.

Natural Hazards Geotechnical Engineering Review: The applicants engaged Lewkowich Engineering Associates to assess any potential geotechnical hazards at the site that would impact the proposed development, including tsunami inundation, seasonal flooding, and slope stability. The Lewkowich report, dated March 4, 2024, considered the Somass Watershed Flood Management Plan from 2020 to determine flood hazards. The assessment established a 9.5 m Flood Construction Level that would apply to the finished ground elevation for the camping area, which may be achieved by landfill in the areas east of the existing clubhouse structure located approximately 75 m from the Present Natural Boundary of the Somass River. The report concluded that the site is considered safe and suitable for the proposed development of a 100-site campground, provided the recommendations in the report are followed.

On-Site Sewage Disposal: The applicants engaged McElhanney Engineering to review the on-site sewage disposal requirements for the proposed campground. McElhanney provided a letter dated October 27, 2025 detailing their assessment and concluding that there is sufficient area of suitable soils to allow for the viable construction of an on-site sewage disposal system to service the 100-site campground in compliance with Island Health’s Sewerage System Regulation.

Traffic Study: The applicants engaged Watt Consulting Group to assess the traffic impact from the proposed development. Watt provided a memorandum, dated January 10, 2025, that assessed the traffic volume generated from the development and concluded that it will not significantly impact traffic operations on the adjacent roadways due to low trips generated from the campground and low to moderate existing traffic volumes on the corridor. The proposed driveway width is 9 m which is deemed typical for a campground; the site access is located at an appropriate distance from adjacent driveways and intersections to avoid any sightline issues; and there are sufficient turn movements within the proposed internal road system to allow for navigation by large motorhomes, RVs, and fire trucks.

Advisory Planning Commission Recommendation: This application was first considered by the Beaver Creek Advisory Planning Commission (APC) at their July 10, 2023 meeting. The APC passed a recommendation to concur with the staff recommendation and support the rezoning application as presented with an additional comment to encourage the owners to work together with the ACRD to support options for permanent or full-time residency at campsites.

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Members: City of Port Alberni, District of Ucluelet, District of Tofino, Yuułu?it’ath Government, Huu-ay-aht First Nations, Uchucklesaht Tribe, Toquaht Nation
Electoral Areas "A" (Bamfield), "B" (Beaufort), "C" (Long Beach), "D" (Sproat Lake), "E" (Beaver Creek) and "F" (Cherry Creek)

The rezoning application with the updated information was considered by the Beaver Creek APC again on April 15, 2026 where the APC passed a motion to support the application as presented with a recommendation to move the application through to the public process.

Property Owner(s)/Applicant(s): Glen & Carleen Tilley

Agent: Tyson & Penny Tilley; Trent & Jessica Tilley

Property Information:

Civic Address	5750 Falls Street						
Legal Description	PARCEL F (DD 13367N) OF SECTION 7 ALBERNI DISTRICT						
PID	008-395-586	Folio	303.000	ALR? (Y/N)	No	Lot Size	5.6 ha (13.74 ac)
Current Zoning	Forest Reserve (A4) District			Proposed Zoning	Campground Commercial (C8-C) District		
Current OCP	Residential Use			Proposed OCP	Commercial Use		
Development Permit Area(s)		DPA I, DPA II					
Current Use & Description		The 5.6 hectare (13.75 acre) property contains several improvements including a single family dwelling, accessory buildings, and recreational vehicles. The property fronts onto Falls Street with approximately 220 metres (720 feet) of frontage on the Somass River. The topography of the property slopes sharply down from an upper bench of fill placed along Falls Street to a large relatively flat lower bench along the river. The property is a mix of second growth treed areas throughout and cleared areas that have been developed for improvements located on the lot and for the lawn area along the river, camping spaces and access roads. There is a single family dwelling located in the north west corner of the property adjacent to the river, a number of accessory buildings along the north lot line and recreational vehicle areas throughout.					

Surrounding Zoning and Land Use			
North	Large acreage rural and agricultural uses Forest Rural (A4) District	South	Papermill Dam Park Park & Public Use (P2) District
East	Residential and small acreage rural uses RA1, RA3, RM1 and A1 District zoning	West	Somass River and Tseshaht First Nation – Tsahaheh 1 IR

Services:

- a) **Sewage Disposal:** On-site sewage disposal. As a condition of rezoning, it is recommended that the applicants engage a Registered On-site Wastewater Practitioner to assess the capability of the land to accommodate on-site sewage disposal for up to 100 campsites and two single family dwellings. The applicants have engaged McElhanney Engineering to satisfy this requirement.
- b) **Water Supply:** Groundwater well. The property is not within the Beaver Creek Water System (BCWS) Service Area. There is an existing BCWS water main along the east side of Falls Street and the applicants intend to connect to the system to service the development. As a condition of rezoning, it is recommended that the applicants petition the Board to be included in the BCWS service area and to engage with BCWS staff and Engineering support to determine capacity of the system, connection requirements and Development Cost

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Electoral Areas "A" (Bamfield), "B" (Beaufort), "C" (Long Beach), "D" (Sproat Lake), "E" (Beaver Creek) and "F" (Cherry Creek)

Charge requirements.

- c) **Fire Protection:** Beaver Creek Fire Department. The rezoning will be referred to the Beaver Creek Fire Department to assess any access and water infrastructure requirements needed in order to provide fire protection for the campground development. It is noted that the Traffic Impact Study has highlighted there are adequate turnaround areas and access roads within the proposed internal road system to provide suitable access for emergency vehicles and fire apparatus.
- d) **Access:** The property is accessed by a looping driveway that connects off Falls Street along the upper bench of the property to the lower bench where the existing camping areas, open areas and single family dwelling are located. The driveway connects with the parcel lying to the north, described as Parcel E, District Lot 7, providing the only road access to that property which is owned by the same family. Staff recommend that the property owners register an Easement to provide continued access into Parcel E as there is no alternate direct access to Falls Street.

The applicants intend to re-grade the upper bench area and the eastern portion of the property to construct the campground with a U-shaped road that would provide access to each campsite and then return to the landing area adjacent to Falls Street. The applicants intend to construct the road with an approximate 3% grade throughout. The Ministry of Transportation & Transit will require a Commercial Access Permit for the access into the campground development and it is recommended that this be required as part of the rezoning. The applicants engaged Watt Consulting Group to complete a Traffic Impact Assessment to assess the traffic impacts on the adjacent road network, access to Falls Street, and the suitability of the proposed internal road network.

Planning Policy Discussion:

- a) **Official Community Plan:** The Beaver Creek Official Community Plan (OCP) designates the property as Residential Use. The objective of the Residential Use designation is to provide a range of housing options within the plan area. The land use designation does not support the operation of a commercial campground and an OCP amendment is required to facilitate the rezoning.

Policy 5.2.1 supports campground uses on lands designated as Commercial Use. The applicants have applied to redesignate the property to the Commercial Use designation. Objective 5.1.2 under Commercial Use encourages tourism and other economic development opportunities and Objective 3.1.4 under General Planning in the OCP aims to facilitate a wide variety of opportunities for economic activity and employment within the Plan area.

The property is impacted by two Development Permit Areas (DPAs): DPA I – Riparian Areas Protection and DPA II – Natural Hazard Areas Protection. DPA I applies to all land within 30 metres of the Somass River and requires an assessment from a Qualified Environmental Professional prior to any development or land alteration within the riparian area. DPA II applies to the 20 metre tsunami inundation zone and requires an assessment from a Professional Engineer certifying that the land is safe for the intended use. The tsunami inundation zone encompasses the entire property.

The commercial campground proposal does not comply with the policies and objectives of the Residential Use designation in the Beaver Creek OCP. The applicants have applied to redesignate the property to Commercial Use to facilitate the rezoning.

- b) Zoning:** This parcel is currently zoned Forest Reserve (A4) District, which permits one single family dwelling, one Accessory Dwelling Unit, accessory buildings and uses, and a variety of agricultural, forestry, mining, utilities and aquaculture uses on the property. The A4 zone is a rural holding zone that is typically applied to remote, un-serviced areas of the Regional District. The applicants have applied to rezone the property to allow for the operation of a commercial campground. Planning staff have drafted the site-specific Campground Commercial (C8-C) District zone to facilitate the applicant's intended development of a 100-site campground, amenity buildings, and two caretaker dwellings.

	Current: A4	Proposed: C8-C
Minimum Lot Area (ha)	16	4
Minimum Lot Width (m)	200	100
Principal & Accessory Front Yard Setback (m)	15	15
Principal Side Yard Setback (m)	4.6	4.5
Principal Rear Yard Setback (m)	9.1	9
Accessory Side Yard Setback (m)	4.6	0.91
Accessory Rear Yard Setback (m)	4.6	0.91
Watercourse Setback (m)	30	60
Lot Coverage	-	10%

The Campground Commercial (C8-C) District permitted uses and conditions of use are outlined in Zoning Text Amendment Bylaw P1466 as follows:

Permitted Uses

- (1) Campgrounds
- (2) Two (2) single family dwellings
- (3) Accessory buildings and uses

Conditions of Use

- (1) In this zone "campsite" means an established site within a campground for the temporary location and siting of recreational vehicles or tents as a temporary recreational use for a period not to exceed 180 days in any calendar year, whether the use is continuous or intermittent.
- (2) Maximum number of campsites shall not exceed 100 within the C8-C District.
- (3) No recreational vehicle or tent shall be located other than on an established campsite.
- (4) There shall be no year-round or permanent occupation of a campsite.
- (5) All campsites and structures shall be located a minimum of 60 metres from the natural boundary of the Somass River.
- (6) All campsites shall be located a minimum of 15 metres from the rear lot line and 4.5 metres from

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side lot lines. A minimum 4.5 metre buffer area of landscaping or natural vegetation screening must be provided between campsites and neighbouring uses.

- (7) The single family dwellings shall not be used as short term vacation rental units.
- (8) A single family dwelling or campsite shall not be a separate strata unit.
- (9) In this zone “accessory buildings and uses” includes office facilities; clubhouse; retail store; washroom, shower, and laundry facilities; parking; gazebos; picnic shelters; structures containing garbage, recycling, and organics collection; and structures required to contain fire, emergency, water, sewer, and electrical infrastructure.

The campground proposal requires a rezoning of the subject property from Forest Reserve (A4) District to a site-specific Campground Commercial (C8-C) District.

Comments: The applicants intend to construct a 100-site campground on the subject property with a caretaker dwelling and associated campground amenity facilities. There is an existing single family dwelling, existing camping areas and a number of accessory buildings already located on the west half of the property adjacent to the Somass River. The applicants intend to construct the new campground on the east half of the property in an area that would be re-graded and developed into campsites, amenities and a caretaker dwelling accessed by a U-shaped internal access road. The campground would be located a minimum of 60 metres from the Somass River and the waterside portion of the property would be left as a common area for campers. The campground would be serviced by the Beaver Creek Water System and a new on-site sewage disposal system. The applicants’ intention is to allow for tourist, temporary, and seasonal accommodation on a year-round basis within the campground and not allow for permanent residential accommodation of campsites.

The rezoning does not comply with the policies and objectives of the Beaver Creek OCP and would represent a significant commercial development for the area. However, there are a number of aspects to this proposal that Planning staff support, subject to the outcome of the public input process and provided technical matters can be addressed.

There is a need for additional campground capacity in the Alberni Valley and this property presents an opportunity for an appropriately serviced campground that is located close to community services and recreational amenities. The property is on an existing BC Transit bus route along Falls Street and is located approximately 330 metres from the City of Port Alberni boundary on land outside of the Agricultural Land Reserve.

The proposed campground would be located a minimum of 60 metres from the Somass River and built up to be above the minimum Flood Construction Level recommended by the Somass Watershed Flood Management Plan. The proposal would intend to limit the impact on the sensitive river ecosystem and the rezoning would remove the intensive uses currently permitted under the existing A4 District zoning such as log dumping and transportation, portable sawmilling, aquaculture, and resource extraction.

Technical Considerations: If the Board proceeds with considering the rezoning application, staff have highlighted a number of technical matters that are recommended to be included as conditions of rezoning.

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Members: City of Port Alberni, District of Ucluelet, District of Tofino, Yuułuʔiłʔatʼ Government, Huu-ay-aht First Nations, Uchucklesaht Tribe, Toquaht Nation
Electoral Areas "A" (Bamfield), "B" (Beaufort), "C" (Long Beach), "D" (Sproat Lake), "E" (Beaver Creek) and "F" (Cherry Creek)

First Nations Support

The property lies within unceded Tseshaht First Nation and Hupacasath First Nation traditional territories along the Tsuma-as (Somass) River. The property is located across the river from the Tseshaht First Nation Tsahaheh 1 IR. Staff understand that the Somass River ecosystem and surrounding lands are areas of high importance to the First Nations and recommend that the applicants and Regional District engage in early and ongoing consultation with both the Tseshaht and Hupacasath First Nations. The applicants have provided a letter of support from the Tseshaht First Nation and staff will engage with both First Nations as part of the rezoning referral process ahead of the public hearing.

Protection from Seasonal Flooding and Tsunami Risk

The majority of the property lies within the 20 metre tsunami inundation zone and a large portion of the property also lies within the 200-year designated floodplain established by the Somass Watershed Flood Management Plan. The Plan identifies a 9.5 metre Flood Construction Level within the area of the subject property. This FCL was recommended as part of a 200-year coastal floodplain assessment with a climate change factor. The existing ground elevation within the lower area of the proposed campground ranges from 8 to 10 metres and the applicants have stated they intend to build up this area with fill from the high side of the property.

The applicants have submitted a report from LEA Ltd. dated March 4, 2024. The report indicates the property is at significant risk of flooding of the Somass river or a 1 in 200 year tsunami event. The property has experienced water levels reaching the existing clubhouse with water levels of approximately 300mm in 2016. The geotechnical report indicates that in a significant flood event egress from the campground would be compromised. The proposed campground should be constructed at or above the recommended FCL of 9.5m GD. Landfill will be required to meet the required FCL. Section 3.7 of the LEA report prescribe fill guidelines for the property.

The Geotechnical report indicates the property can be made safe for the intended use provided the recommendations in the report are followed. Staff recommend that the assessment establishing a safe Flood Construction Level for this site be registered on the property title by Restrictive Covenant.

Water Servicing

The property lies outside of the Beaver Creek Water Service Area but lies directly adjacent to the boundary with properties to the north and east included within the service area. There is an existing BCWS watermain that extends along the east property boundary on Falls Street. The applicants intend to connect to this watermain and construct a private water system within the property to service the campground development. The applicants will need to petition the ACRD to be included in the BCWS service area. Planning staff recommend that the applicants engage with BCWS staff and Engineering support to determine the requirements to connect to the water system. Confirmation that the property can be included in the service area, and appropriately serviced by Beaver Creek Water, would be included as a condition of rezoning approval.

If the development proceeds and the applicants intend to construct a private water system to service the campsites, an operating permit from Island Health will be required under the *Drinking Water Protection Act* and Regulations. Island Health will be included as a technical referral agency ahead of the public hearing process.

On-Site Sewage Disposal

The applicants intend to construct a new on-site sewage disposal system to service the 100-site campground, washroom/laundry facilities, and two single family dwellings. The applicants engaged McElhanney Engineering to assess the soil capacity on-site and they have concluded that there is sufficient area of suitable soils to allow for

an on-site sewage disposal system that will service the 100-site campground and comply with Island Health's Sewerage System Regulation. Island Health regulates on-site sewage disposal with a daily design flow of less than 22,700 litres per day after which the Ministry of Environment and Parks would regulate under the *Environmental Management Act*. Both agencies would be included in the technical referral agency process ahead of the public hearing.

Access

The Ministry of Transportation and Transit will require a Commercial Access Permit for the commercial campground and staff recommend that support from the Ministry be included as a condition of rezoning approval. The applicants have engaged Watt Consulting Group to complete a Traffic Impact Assessment to assess the traffic impacts on the adjacent road network and the overall access requirements.

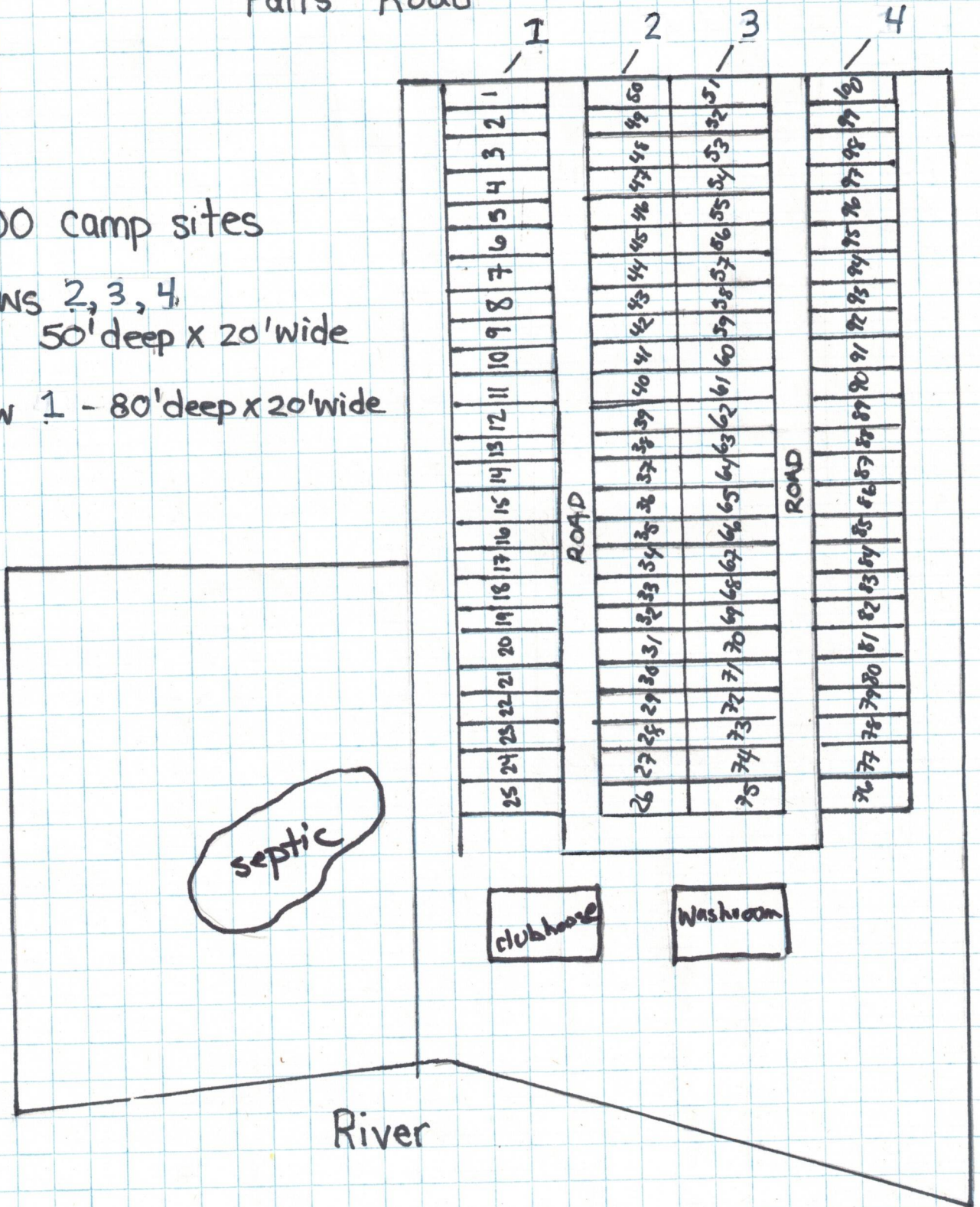
Submitted by: Alex Dyer
Alex Dyer, MCIP, RPP, General Manager of Planning & Development

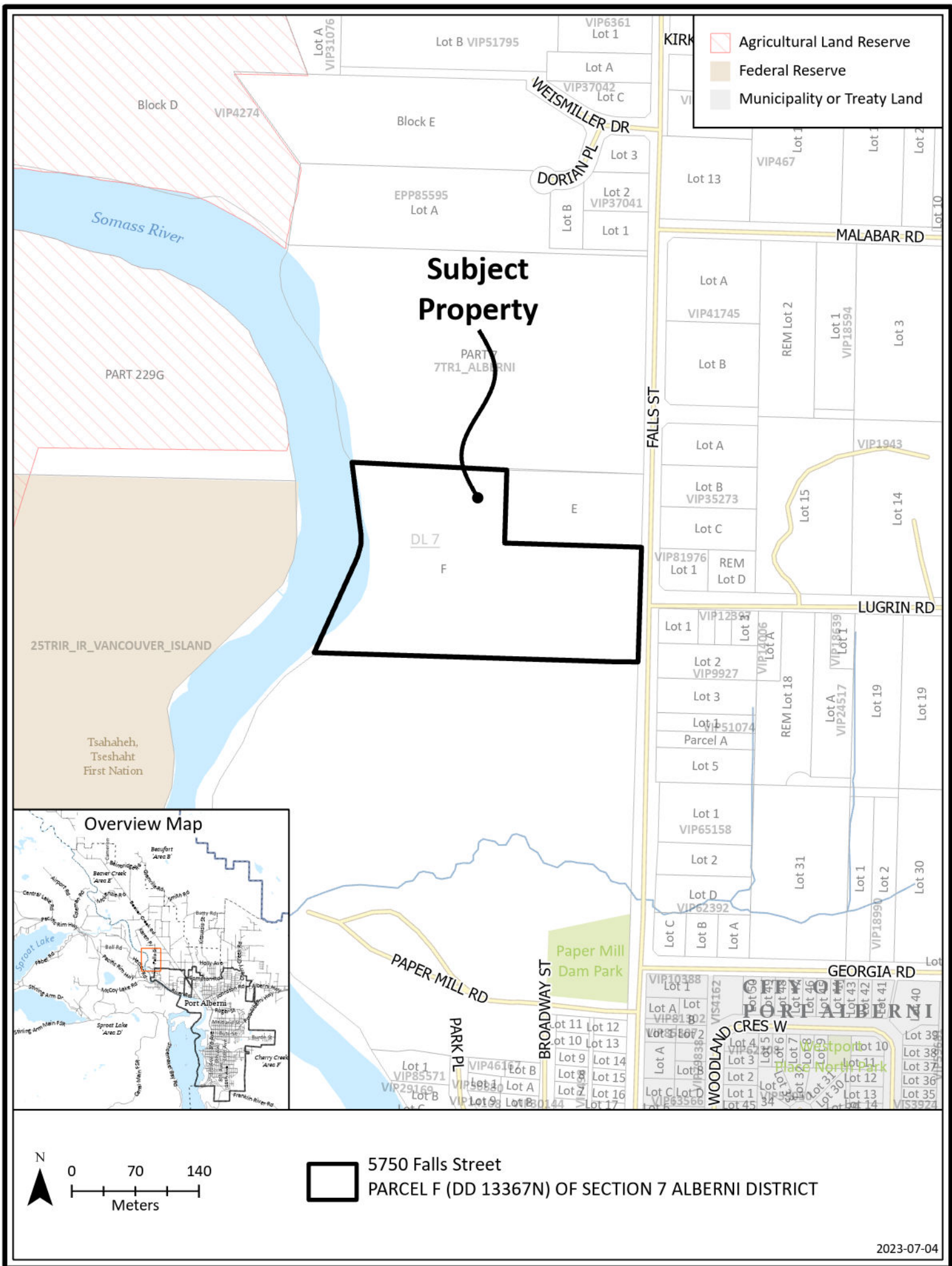
Reviewed by: Cynthia Dick
Cynthia Dick, General Manager of Administrative Services

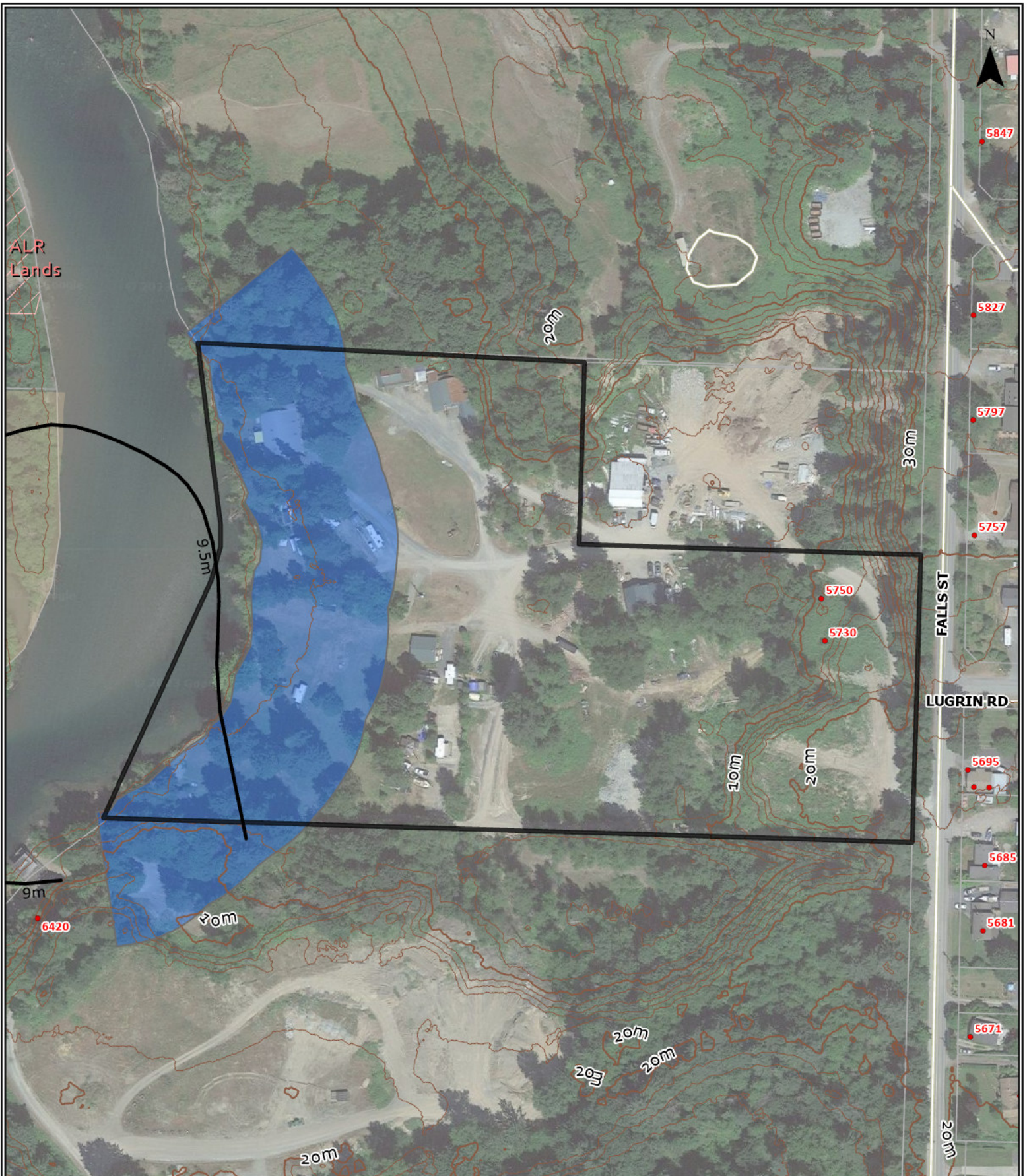
Approved by: Daniel Sailland
Daniel Sailland, MBA, Chief Administrative Officer

Falls Road

- 100 camp sites
- rows 2, 3, 4
50' deep x 20' wide
- row 1 - 80' deep x 20' wide







5750 Falls Street
PARCEL F (DD 13367N) OF SECTION 7 ALBERNI DISTRICT

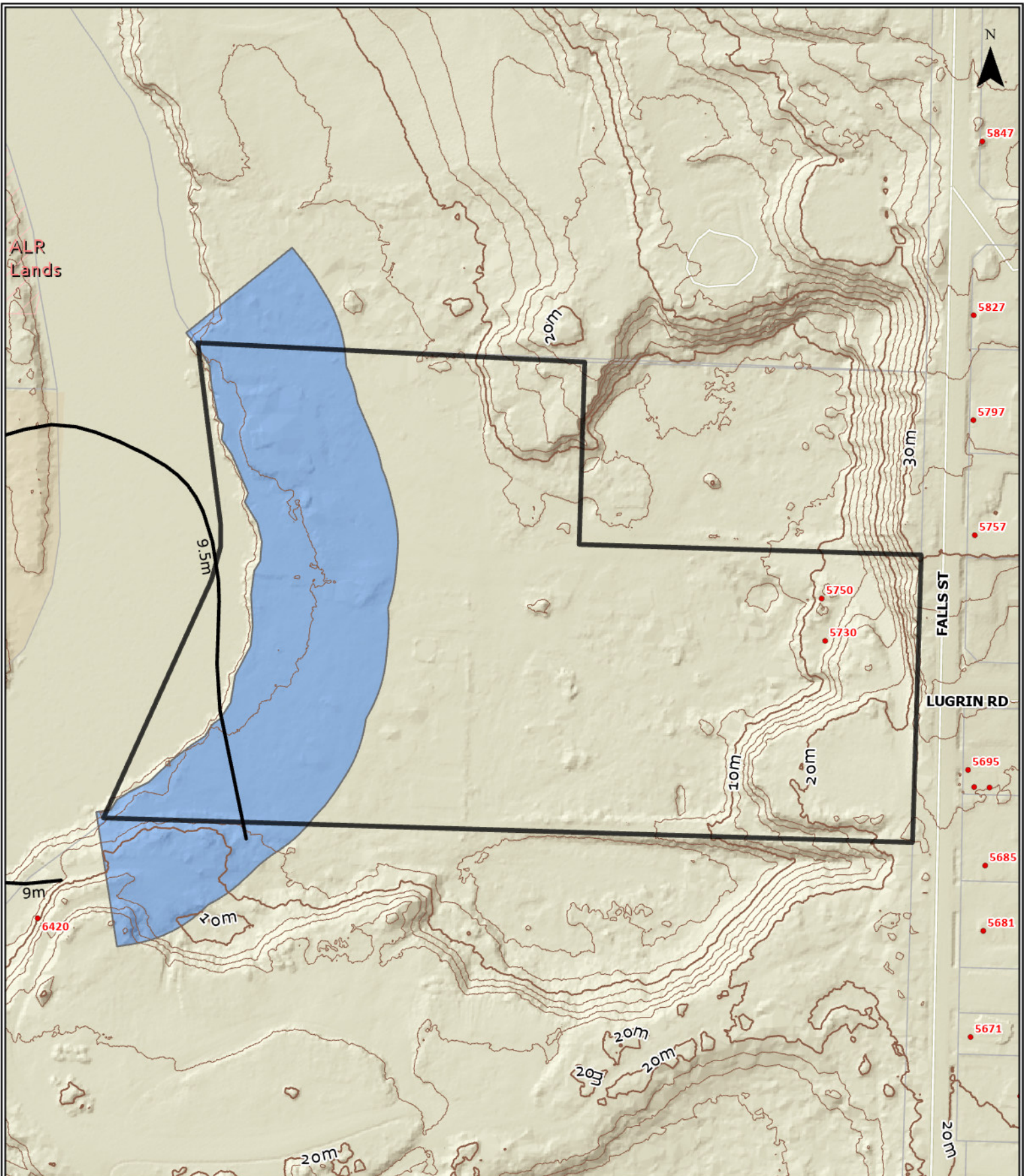
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- Subject Property
- 60m from Somass River
- Contour Interval
- 2m
- 10m
- Somass Watershed Flood Construction Level

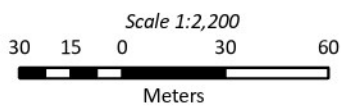


Prepared 2023-07-06
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ParcelMapBC; GeoBC; ACRD

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5750 Falls Street
 PARCEL F (DD 13367N) OF SECTION 7 ALBERNI DISTRICT



- Subject Property
- 60m from Somass River
- Contour Interval
- 2m
- 10m
- Somass Watershed Flood Construction Level



Prepared 2023-07-06
 Sources : ParcelMapBC;
 GeoBC; ACRD

This product is intended for general reference use only and should not be used for navigation or legal purposes.

June 28, 2023 Pictures



Existing driveway entrance into property from Falls Street



Upper bench area looking north toward the existing driveway. This area will be re-graded for the campground



Existing access road along the south property line looking west toward the Somass River



Lower extent of the proposed campground looking north



Lower extent of the proposed campground looking south



Lower extent of the proposed campground looking east toward Falls Street



Open area and existing camping area adjacent to the river. This area would be left open as common space for the campground



Somass River frontage from lot line adjacent to Papermill Dam Park looking north



TSESHAHT FIRST NATION

5091 Tsuma-as Dr. Port Alberni, BC V9Y 8X9
P: 250.724.1225 | F: 250.724.4385 | Tseshaht.com

July 3, 2025

Alberni-Clayoquot Regional District
3008 Fifth Ave
Port Alberni, BC V9Y 2E3
250.720.2700

To Whom it May Concern,

I am writing to express our strong support for the rezoning of 5750 Falls Street which aims to develop a sustainable and accessible campground. As Tseshaht First Nation – Elected Chief Councillor, we believe this project will bring significant benefits to our community and visitors alike and we appreciate the collaboration and respect shown by the company/family.

The proposed campground aligns with our shared goals of promoting outdoor recreation, environmental stewardship, and economic development. It will provide a safe, welcoming space for families, outdoor enthusiasts, and tourists, encouraging more visitors to explore our natural beauty and support local businesses.

Furthermore, the project's emphasis on sustainable practices and conservation will help preserve the area's natural resources for future generations. I am confident that the new campground will be a valuable addition to our region and have a positive impact on our community's quality of life. Tseshaht First Nation is proud that through our mutually agreed to Memorandum of Understanding that Tilley's future proposed sewage system will comply with all laws ensure other registration and mitigation occurs.

We thank the proponent/company for working with Tseshaht to ensure environmental standards, including but not limited to: caution around the riverside, high standard sewer/septic system and erosion; while also ensuring archaeology protocols are in place that respect our First Nation.



TSESHAHT FIRST NATION

5091 Tsuma-as Dr. Port Alberni, BC V9Y 8X9
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This project lies within the unceded territories/hahoulthee of our ha'wiih (hereditary chiefs' territory). This letter of support is being provided Without Prejudice to Tseshaht First Nation Aboriginal Title and Rights.

Tseshaht also has conditions we provide for all letters of support which are also applicable for this initiative which we have collaborated with the company on, that include, but are not limited to:

1. **Governance**- pending Tseshaht availability; a role/seat for Tseshaht any governance board, committee or working group on the subject matter when applicable.
2. **Cultural** - Tseshaht participation in any groundbreaking or grand opening given this is in our territory with Tseshaht protocols and ceremonies as agreed to by Tseshaht.
3. **Territorial recognition**- a commitment signage on the project or event, in writing through an agreed to plaque or sign recognizing uncaded Tseshaht hahoulthee/territory, or joint communications regarding the project or external communications such as media.
4. **Tseshaht participation**- specific seats, positions, employment, training, or other opportunities for Tseshaht and members in the initiative

Tseshaht First Nation supports this initiative and encourage your favorable consideration of its development.

Thank you for your time and attention.

Sincerely,

Wahmeesh (Ken Watts)
Tseshaht First Nation – Elected Chief Councillor

MEMORANDUM

Date: January 10, 2025
To: Penny Tilley
From: Nadine King, P.Eng., PTOE
Our File No: 3874.B01
Subject: 5750 Falls Street Campground TIA – Simplified Design Report

1.0 INTRODUCTION

WATT Consulting Group was retained by Tilley's Plumbing and Heating to prepare a Traffic Impact Assessment (TIA) for the proposed development 5750 Falls Street in Port Alberni. The proposed development is a 100-site campground with one full movement access onto Falls Street. A traffic impact assessment for the rezoning approval is required. The development site is located in the Alberni-Clayoquot Regional District (ACRD) and therefore all roadways are under the jurisdiction of the Ministry of Transportation and Transit (MoTT). The MoTT will require a Commercial Access Permit for the proposed campground. This memo provides the transportation analysis as per MoTT Terms of Reference (TOR) as outlined in the MoTT *Planning and Designing Access to Developments* manual.

1.1 Site Location

The development site (existing single-family dwelling with accessory buildings) is located 330m from the City of Port Alberni municipal boundary and approximately 1.0 km from Highway 4. The site is situated between Falls Street and the Somass River.

1.2 Roadway Network

The site is accessed via Highway 4 to Falls Street. Falls Street is a local road running north-south. The proposed site access is the same as the existing driveway location on the west side of Falls Street 45m south of Lugrin Road. There is an existing BC Transit bus route along Falls Street. See **Figure 1** for the site location and existing roadway network.

MEMORANDUM

Date: 2025-01-10

To: Penny Tilley

Subject: 5750 Falls Street Campground TIA – Simplified Design Report

WATT CONSULTING GROUP

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Figure 1: Site Location and Existing Roadway Network

1.3 Existing Conditions of Site

The site (5.6 Hectare) is currently zoned Forest Reserve (A4) District and requires to be rezoned to Campground Commercial (C8-C) District. The development site has a 220m frontage side on Falls Street. The topography of the site slopes sharply down from an upper bench of fill placed along Falls Street to a large relatively flat lower bench along the river. The existing site is accessed by a looping driveway from the entrance along the upper bench to lower bench to the west (camping area). The driveway is shared with the adjacent lot (same owner) to the north. The upper bench area and the east portion of the site has steep grades; therefore, re-grading of the area and widening driveway are required for the proposed campground development.

1.4 Scope of Work

Based on the location and number of forecasted peak hour trips for the proposed development (100-site campground), the following outlines the report details:

- Prepare and confirm the Terms of Reference with both MoTI and the Regional District of Alberni-Clayoquot.
- Generate traffic based on the proposed land use and density, using trip generation rates from the *ITE Trip Generation Manual* (11th ed.).
- Review site access(es) for sight distances and turn lane requirements and provide comment on any suggested mitigation measures due to the development.
- Review the geometry at the proposed site layout and on-site vehicle turning templates.
- Review known roadway issues, access restrictions, environmental issues, cost sharing, and summarize results as required in Section A of the form found in Appendix A of the *MoTI Planning and Designing Access to Developments* document.
- Prepare a draft report summarizing the analysis, findings, and any recommendations.
- Complete Section A (4 pages) of the Appendix A form (MoTI's Template). Transportation Design Terms of Reference is attached in **Appendix A**.

2.0 TRIP GENERATION

The proposed development is a campground with a maximum of 100-campsites, campground amenity facilities, and two caretaker dwellings. Vehicular trip generation rates for the proposed development are based on the *ITE Trip Generation Manual* (11th Edition). The provided ITE trip rates for the campground land use are based on occupied campsites. For a conservative trip estimate, all campsites are assumed to be occupied (worst-case scenario). The site trip generation by the ITE rates is provided in **Table 1**.

Based on the ITE trip generation rates, the proposed development is forecast to generate 21 two-way trips during the AM peak hour and 27 two-way trips during the PM peak hour. As estimated site trips are much lower than the 100 trips during peak hours, the traffic assessment will follow the Simplified Process (Trips < 100 vph, change < 20%) as per the MoTT manual. On Falls Street, existing peak hour volumes are estimated to be relatively low or moderate. The proposed development will therefore not significantly impact traffic operations at the adjacent roadway system due to low trips generated and the low to moderate existing traffic volumes on the corridor. Future volume changes on

Falls Street will not be significant as the development will add less than 30 vph in the peak hours.

Based on the site trip estimate, no dedicated turn lanes are not required on Falls Street at the site access. The proposed access will be no capacity issues anticipated with a full movement access.

Table 1: Trip Generation – Commercial Campground

ITE Code	Land Use	Units	Unit Rate	Trip Rate	% IN	% Out	Trips In	Trips Out	Total Trips
AM Peak Hour									
416	Campground	100	per campsite*	0.21	36%	64%	8	13	21
PM Peak Hour									
416	Campground	100	per campsite*	0.27	65%	35%	18	9	27

*ITE rates are based on occupied campsites.

3.0 PROPOSED DRIVEWAY AND SITE LAYOUT

Appropriate access spacing between adjacent driveways is necessary to reduce vehicle conflicts during egress and ingress. TAC's *Geometric Design Guide for Canadian Roads*, 2017 was consulted to determine the minimum access spacing requirements (Figure 8.9.2). For commercial driveway spacing, a minimum of 5m is recommended from street corners and 3m from adjacent access points.

A final site plan has not been determined at this point. However, according to the proposed current site plan, the proposed driveway is located close to the south end of the property 45m from Lugin Road. The spacing between Lugin Road and the site access exceeds TAC's suggested spacing of 15m. See **Appendix B** for the current site plan.

The proposed driveway width is 9.0m. This is appropriate for a typical campground driveway as TAC suggests 7.2m – 12.0m for two-way commercial. The proposed driveway provides a 30m throat length, which is appropriate for a commercial campground. The proposed internal road provides a sufficient 16m width for the two-way drive aisle between paralleled campsites. The proposed internal road design is considered appropriate for large RV's maneuvering. The proposed driveway and internal

road system will accommodate future traffic demand of the development including large RV and fire trucks.

The internal roadways should be improved to safely accommodate trailers, large RVs and emergency vehicles (fire truck) including driveway grade requirements. As per the BC MoTI's Supplement to TAC manual (Section 1420), the first 15m of commercial driveways should be constructed at a maximum 2% grade. A STOP sign is required on the driveway (exit) at Falls Road.

4.0 TURNING SIGHT DISTANCE

To assess the safety of the access points, the Intersection Sight Distance (ISD) was reviewed. Based on the proposed land use (campground), a high percentage of the site users would be pick-up trucks with a camper or small/medium size RVs (6m - 9m long), and large RVs (12m - 14m long) would be infrequently used.

Even though the large RV is not expected regularly it has been selected as the design vehicle for the study as well as a fire truck. As more sight distance is required for left turn than right turn, the sight distance assessment was completed based on the requirements for left turn only.

Falls Street has an average 8% upward grade to the north from the access location for 140m point then continues relatively flat. To the south of the site access Falls Street is relatively flat. Sight distance measures were conducted using a combination of Google Earth's surface elevation data and Google Map Street View. The vertical curve CAD analysis is based on a 1.08m driver's eye height and a 0.6m height object for a conservative estimate. The measured sight distances exceed 150m for both directions and exceed required intersection sight distances. See **Figure 2 / 3** for sightlines at the proposed access location.



Figure 2: Sightlines to Left (North) at Access



Figure 3: Sightlines to Right (South)

The required intersection sight distances for left turns from minor leg stop-controlled roads were calculated based on the TAC's equation 9.9.1 ($ISD = 0.278V_{major}T_g$). The time gap (T_g) for single-unit trucks is 9.5 seconds for left turn. Therefore, the required left turn sight distance (for 50 km/h design speed on a two-lane road) is 140m. For a passenger car, a required sight distance is 113m for vehicles turning left. Required sight distances to the left reflect extended braking distances due to the 8% downgrade. **Table 2** is a summary of the sight distance review for two design vehicles at the site access.

Table 2: Intersection Sight Distances for Left Turn from Stop

Design Vehicle	Time Gap (T_g)	Required ISD	Provided SD	SD Met?
Passenger Car	7.5 s	113 m	150m to Left, 200m+ to Right	All SD Met
Single-Unit Truck	9.5 s	140 m		

5.0 ON-SITE CIRCULATION

The proposed driveway and internal road layout are appropriately designed to accommodate a large RV (14m long motorhome) which is considered the largest possible vehicle on-site. Based on the current site plan a 14m motorhome and a fire truck are able to maneuver through the internal road and turnaround at open spaces of the proposed layout. A medium motorhome and passenger car (which is the size of a Ford 150 truck) with a trailer can manoeuvre at proposed small campsites (small campsites are 6m X 15m). See **Appendix C** for the motorhomes / fire truck's turning template drawings.

6.0 CONCLUSION AND RECOMMENDATIONS

The proposed development will have no impact on the capacity of the adjacent roadway (Falls Street). The site access is located appropriately from adjacent driveways and intersections and there are no sightline issues at the driveway intersection with Falls Street. A review of turn movements into and through the site found no issues for a large motorhome / RV or fire truck to navigate through the site. The 'small' campsites will be limited to small to medium sized RVs.

The following is recommended for the site:

MEMORANDUM

Date: 2025-01-10

To: Penny Tilley

Subject: 5750 Falls Street Campground TIA – Simplified Design Report

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Page 7 of 10

- Provide a minimum 9m driveway width at the intersection with Falls Road and internally on the site.
- The driveway should be graded to 2% or less for the first 15m.
- At the intersection of the driveway and Falls Street a STOP sign is required on the site driveway.

See the attached PDAD **Appendix A** form that accompanies this report.

Sincerely,

WATT Consulting Group



Nadine King, P.Eng., PTOE

Vice President - Transportation



MEMORANDUM

Date: 2025-01-10

To: Penny Tilley

Subject: 5750 Falls Street Campground TIA – Simplified Design Report

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APPENDIX A: PDAD FORM (SECTION A)

Transportation Design Terms of Reference

Project: 5750 Falls Street Campground TIA BC MoT file: _____ Dist/Region: _____
Major road: Falls Street Cross street: Lugrin Rd (Closest Intersection)
Municipality/Reg Dist: Alberni-Clayoquot Regional District (ACRD)
BC MoT contact: _____ E-mail: _____
Date received: _____ Date completed: _____
Report prepared by: Watt Consultring Group (firm)
Responsible professional: Nadine King, P.Eng., PTOE (name)

Municipal Information:

☐ Subdivision ☒ Rezoning ☐ Development Permit ☐ Urgent
Municipal file number: RE22009/PL20220053 Bylaw number: P1465, P1466, P1482
Municipal staff contact: Alex Dyer Tel: _____ E-mail: _____

Applicant Information:

Name: Glen & Carleen Tilley
Street address: 5750 Falls Street
City: Port Alberni Province: BC Postal Code: _____
Tel: _____ Fax: _____ E-mail: _____

Project Information:

Legal description: PARCEL F (DD 13367N) OF SECTION 7 ALBERNI DISTRICT
PID: 008-395-586
Street address: 5750 Falls Street
Topographic description: Significant slopes in the east portion along Falls Street and a large relatively flat lower bench along the River (west side of the property)
Current land use: Single family residential Proposed land use: Commercial Campground
Current zoning: Forest Reserve (A4) District Proposed zoning: Campground Commercial (C8-C)
Proposed study ToR prepared and submitted by: Watt Consultring Group Date: _____
Proposed study ToR reviewed for BC MoT by: _____ Municipality: _____
Date: _____ Date: _____

☐ Revisions required – *List on Attachment A.*
☐ ToR/Scope approved for BC MoT by (name) _____ Date: _____

Scope development meeting scheduled for (date and time): _____
Local government notified of meeting date and time by: _____
Scope development meeting attendees: _____

☐ Meeting minutes attached

Simplified application or detailed design?

- ☒ **Detailed design not required** – Complete Section A only (Form Pages 1 to 4)
- ☐ **Detailed design required** – Complete Section A (Form Pages 1 to 3 only), Section B and Section C

Reasons for detailed design review:

- ☐ Site traffic volume > 100 vph in peak hour
- ☐ Signals impacted
- ☐ Roadway geometry problems
- ☐ Safety issues
- ☐ Other: _____

The following issues/criteria/design guidelines must be adequately addressed in the study.

The developer must provide page number references to the report in "Page Ref." column.

BC MoT and Mun. columns are for BC MoT/municipal use only.

Section A – Required for all Applications

	Page Ref.	OK	
		BC MoT	Mun.
A1 Known Roadway Issues			
☐ Geometric problems at site – <i>List on Attachment A.</i>			
☐ Documented safety concerns at site – <i>See B8</i>			
Other: <u>For the steep east portion, regrading would be required.</u>			
A2 Access Restrictions (Additional restrictions may be required by analysis/mitigation.)			
No left turns permitted to or from _____			
☐ No direct access to major road _____			
☐ Access to side-street required _____			
☐ Rear access required			
☐ Shared access required with _____			
☐ Freeway: No access permitted to freeway, ramps or street within 300 m of end of ramp			
☐ Protection for interchange, no access permitted within 300 m of proposed freeway ramp			
☐ Other: _____			
Identify on Attachment A any restrictions or options to be assessed.			

[illegible]

Submitted by: _____ Date: _____

Signature: _____

P. Eng. Seal and Certificate No: _____

PTOE Certificate No: _____

Simplified Process Criteria (Simplified process only. For detailed review, complete Sections B and C)

A6 Highway Design Speed and Sight Distances for intersections

(Check required design speed – TAC Figures 2.3.3.4 and 2.3.3.6 – for 2 lane roads.)

Design Speed	Approaching Vehicle Sight Distance	Exiting Vehicle Sight Distance
☒ 50	200 m	125 m (133m to North due to downgrade)
☐ 60	240 m	155 m
☐ 70	275 m	200 m
☐ 80	310 m	250 m
☐ 90	350 m	310 m
☐ Other (> 2 lane, or other speed)	_____	_____

	Page Ref.	OK	
		BC MoT	Mun.
A7 Left Turn Lanes (Attach copy of appropriate BC Supplement layout Fig. 710.D.1 to 710.L)			
☐ Required on highway, length of storage _____ m ☐ Required on access, length of storage _____ m ☐ To be determined by developer	n/a		
A8 Acceleration or Deceleration Lanes Required on Highway			
☒ No ☐ Yes (Select values for required design speed from BC Supplement Figs. 710.D.1 to 710.L and attach copy.)			
A9 Parking			
☐ Municipal bylaw rate ☐ ITE parking generation rate			
☐ Number of stalls required _____ ☒ To be determined by developer			
☐ Municipal stall dimensions ☐ BC MoT stall dimensions			
☐ Minimum distance between access point and 1 st on-site intersection _____ m ☒ To be determined by developer			
☐ Other conditions: See A11 or use Attachment A.			

A10 Highway Realignment Required

☒ No ☐ Yes (Describe, using Attachment A if required.) _____

A11 Other Requirements (Describe, using Attachment A if required.)

At the proposed site access, a 9.0m driveway width required. The first 15m of the driveway should be at a maximum 2% grade.

MEMORANDUM

Date: 2025-01-10

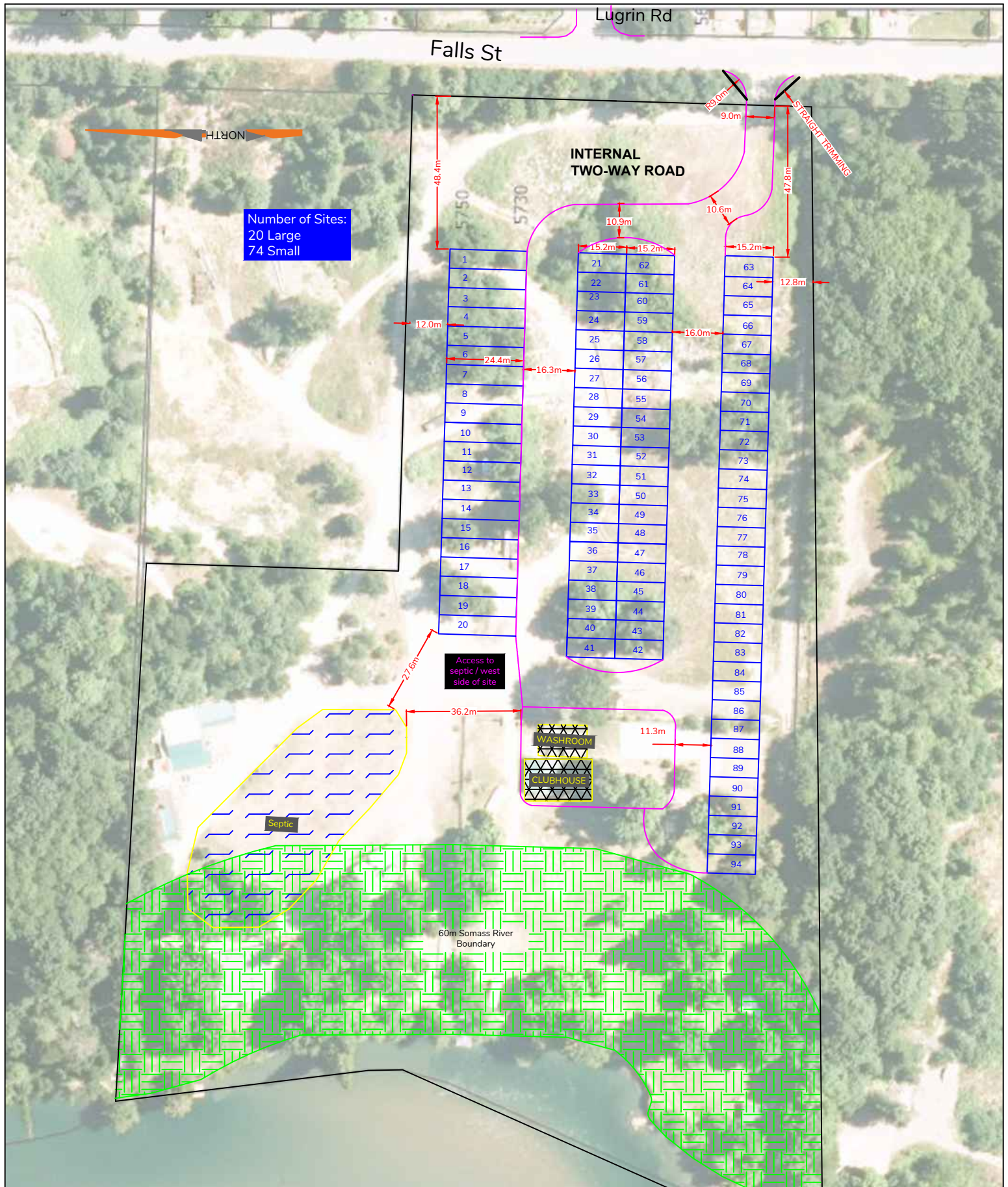
To: Penny Tilley

Subject: 5750 Falls Street Campground TIA – Simplified Design Report

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APPENDIX B: SITE PLAN



5750 FALLS STREET TIA SITE PLAN LAYOUT

DRAWING NO:
3874.SP-1

REV NO:
0

SCALE:
1:1500

DESIGN SPEED:
-

PROJECT NO:
3874.B01

DATE:
2024-12-12

DRAWN:
SM

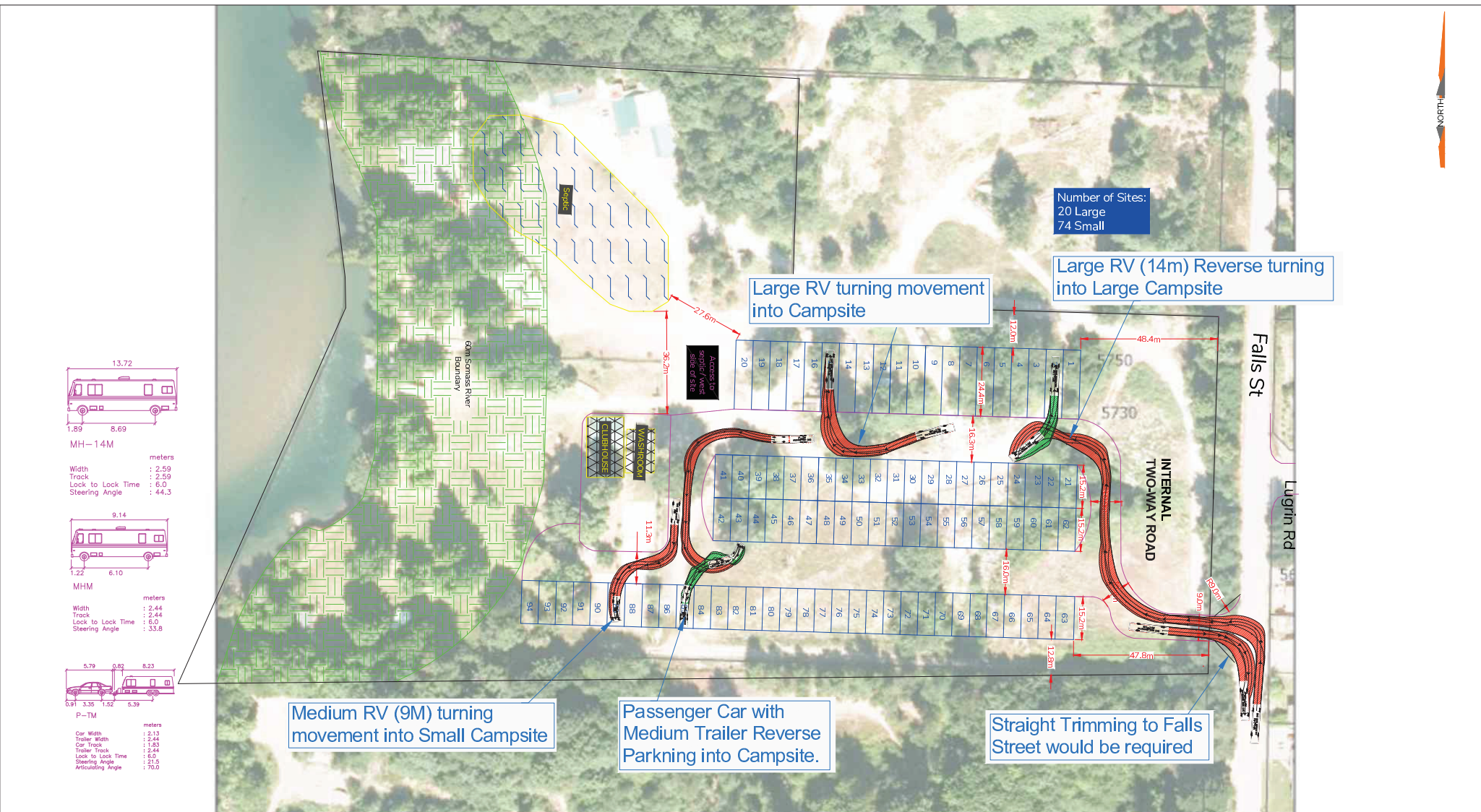
CHECKED:
XX

DESIGN VEHICLE:
-

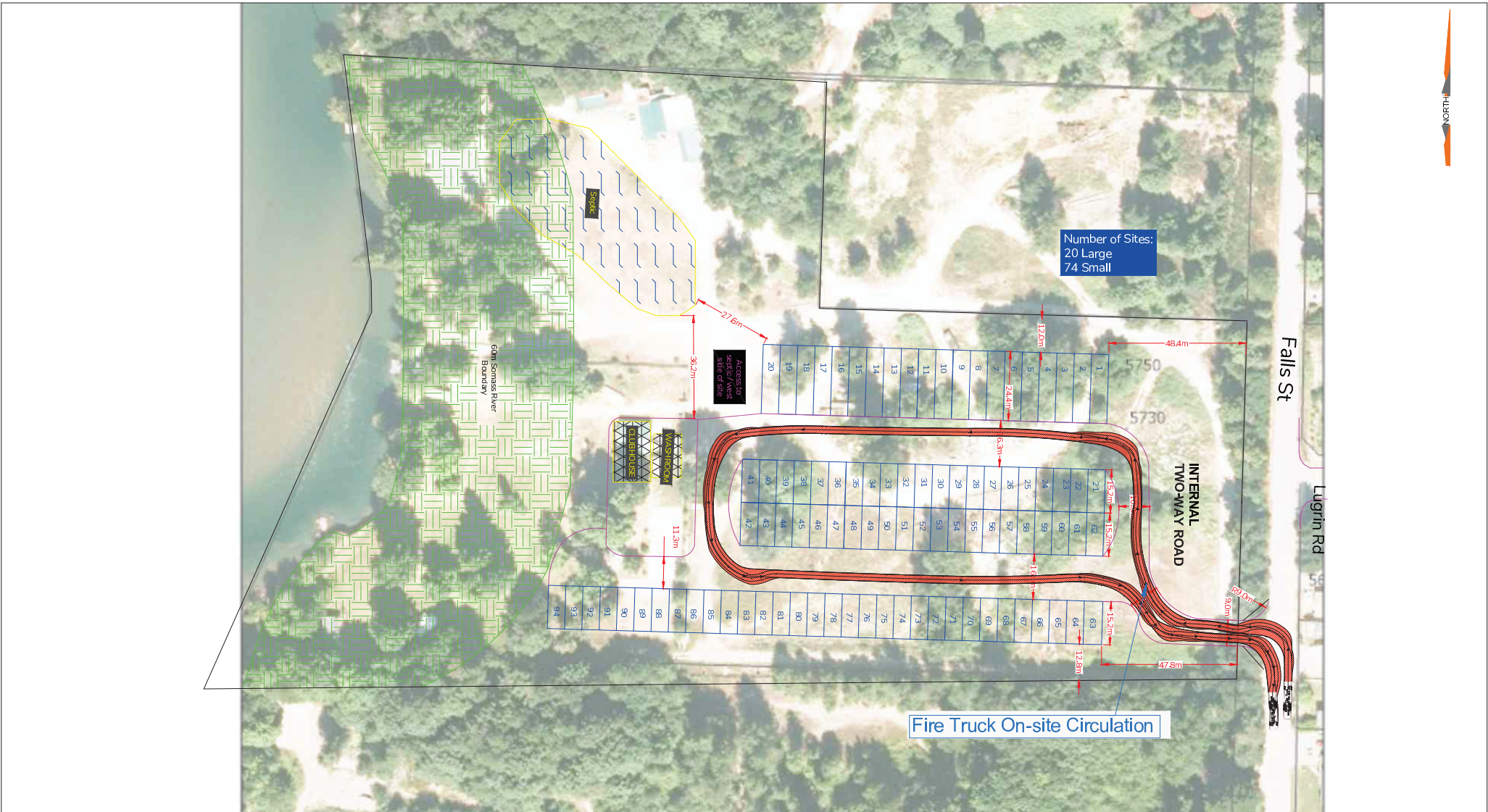


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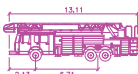
THESE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS ENTERED INTO A CONTRACT, AND THERE ARE NO REPRESENTATIONS OF ANY KIND MADE BY THE DESIGN PROFESSIONAL TO ANY PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS NOT ENTERED INTO CONTRACT.



LEGEND:	PERMIT TO PRACTICE:	SEAL:	REVISIONS			5750 FALLS STREET TIA VEHICLE TURNING TEMPLATES REVIEW RV / P-TRAILER SWEEP PATH TRACKING			WATT Consulting Group WATTCONSULTINGGROUP.COM PROJECT NO: 3874.B01
	THESE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS ENTERED INTO A CONTRACT, AND THERE ARE NO REPRESENTATIONS OF ANY KIND MADE BY THE DESIGN PROFESSIONAL TO ANY PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS NOT ENTERED INTO CONTRACT.		0	REVISION DESCRIPTION	2024-12-12	DRAWING NO:	SCALE:	DRAWN:	
			1			3874-VT-1	1:1250	MJ	
			2			DESIGN SPEED:	DESIGN VEHICLE:	CHECKED:	
			3			ON-SITE 10 KM/H	MEDIUM / LARGE RV / TRAILER	NK	
			4						
			5						
			6						
			7						



LEGEND:



Aerial Fire Truck

Width	: 2.59
Track	: 2.59
Lock to Lock Time	: 6.0
Steering Angle	: 33.3

PERMIT TO PRACTICE:

THESE DESIGN DOCUMENTS ARE PREPARED SOLELY FOR THE USE BY THE PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS ENTERED INTO A CONTRACT, AND THERE ARE NO REPRESENTATIONS OF ANY KIND MADE BY THE DESIGN PROFESSIONAL TO ANY PARTY WITH WHOM THE DESIGN PROFESSIONAL HAS NOT ENTERED INTO CONTRACT.

SEAL:

REVISIONS	
0	REVISION DESCRIPTION
1	2024-12-12
2	
3	
4	
5	
6	
7	

5750 FALLS STREET TIA VEHICLE TURNING TEMPLATES REVIEW FIRE TRUCK SWEEP PATH TRACKING

DRAWING NO: 3874.VT-2	SCALE: 1:1250	DRAWN: MJ
DESIGN SPEED: ON-SITE 10 KM/H	DESIGN VEHICLE: FIRE TRUCK	CHECKED: NK



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PROJECT NO: 3874.B01

MEMORANDUM

Date: 2025-01-10

To: Penny Tilley

Subject: 5750 Falls Street Campground TIA – Simplified Design Report

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APPENDIX C: VEHICLE TURNING TEMPLATE DRAWINGS

TECHNICAL MEMO

To Tyson Tilley Tilley's Plumbing	From Karl Williaume, P.Eng. Senior Engineer Water and Wastewater Facilities
Re Onsite Sewer Servicing 5750 Falls Street	Date October 27, 2025

McElhanney Ltd. have been retained to provide engineering services for the design of an onsite sewage system to service a proposed 100-unit RV Campground at 5750 Falls Street in Port Alberni, PID 008-395-586. We are providing this technical memo in support of a rezoning application to verify the viability of providing water and sewer servicing for the proposed campground.

McElhanney conducted a site investigation on October 2, 2025, to review soil conditions for design of an onsite sewage system. The parcel is 5.6 hectares (13.75 acres) in area, bordering the Somas River to the East and Falls Street to the west, with a gentle prevailing slope of approximately 5% towards the river. Soil test pits (TP25-06, TP25-07, TP25-08) and permeameter tests (PT-3, PT-4, PT-5) were reviewed in the upper area of the parcel, 150+ meters from the river. Deep sand and loamy sand soils were encountered in this area, consistent with the glacial-fluvial deposits indicated on the BC Soil Information Finder Tool. Seasonal water tables $\geq 1.2\text{m}$ in depth are anticipated in the test pit area due to the depth of permanent root zones and absence of soil seepage or mottling. Permeameter tests indicated that the soils are well drained with Kfs rates in the range of 2000 - 4000 mm/d. Based on our site observations it is deemed that there is a sufficient area of suitable soils to be viable for an onsite sewage disposal system under the current Sewerage System Regulation. McElhanney may provide a summary of test results at the request of the District.

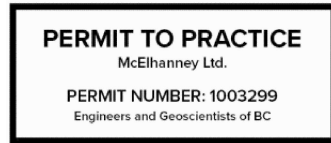
Potable water supply on the property is currently provided by an onsite well, which was not reviewed by McElhanney. To support the development of the proposed campground, we understand that the intention is to decommission this well and provide potable water servicing from the municipal system.

Based on our review of the site, McElhanney deems that the site is serviceable for the provision of an onsite sewage system to support the proposed campground. A qualified professional will be required to submit a Filing under the Sewerage System Regulation prior to construction of any new onsite sewerage system. At the time of the Filing, it must be demonstrated that flows discharged to ground from any onsite system will comply with the maximum daily discharge of $22.7 \text{ m}^3/\text{d}$ under the regulation.

Prepared by:



Karl Williaume, P.Eng.



Reviewed by:

A handwritten signature in black ink, appearing to read "Nick Bruce".

Nick Bruce, P.Eng.



APPENDIX A

Statement of Limitations

Statement of Limitations

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

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

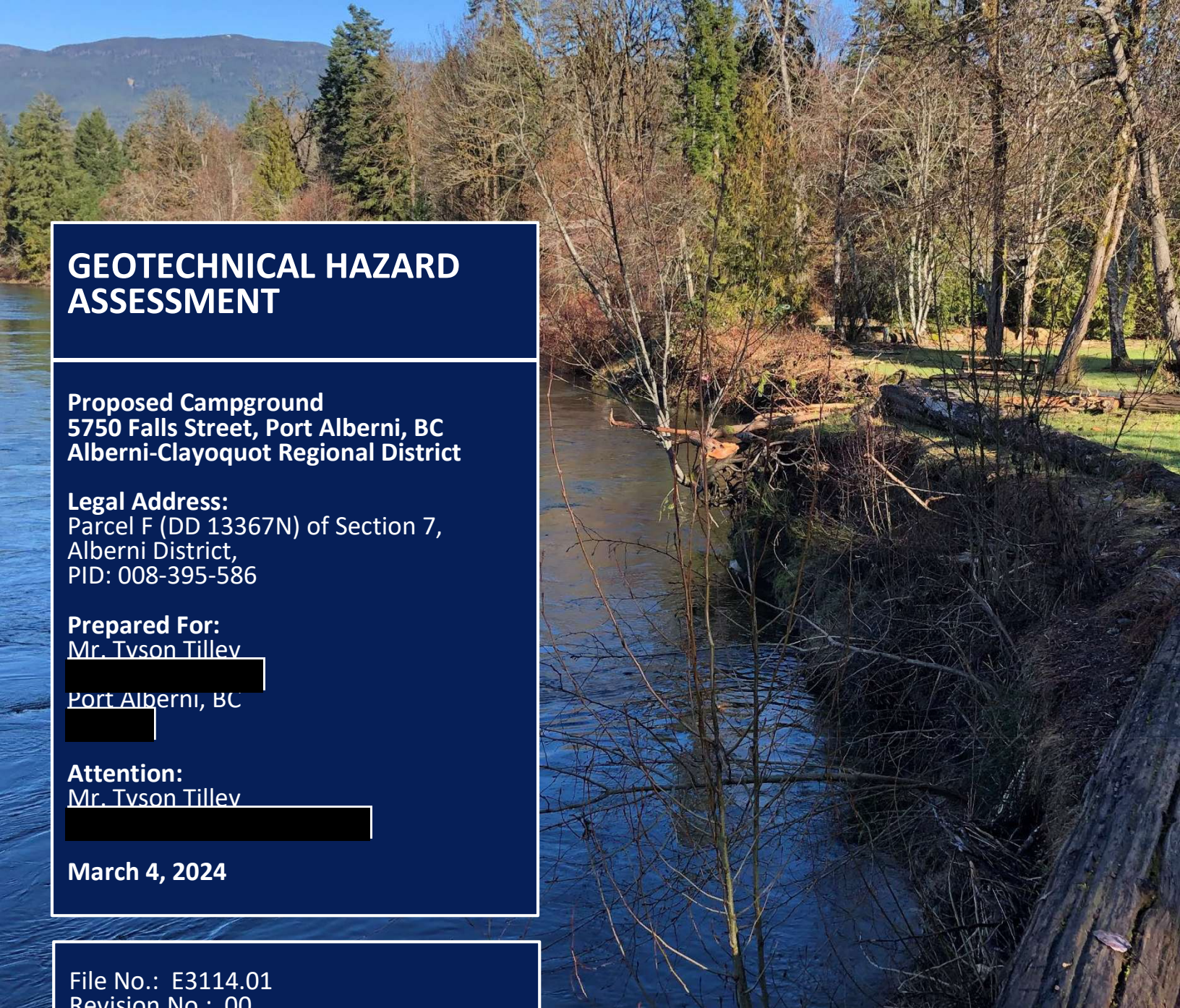
Information from Client and Third Parties. McElhanney has relied in good faith on information provided by the Client and third parties noted in this report and has assumed such information to be accurate, complete, reliable, non-fringing, and fit for the intended purpose without independent verification.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

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



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





GEOTECHNICAL HAZARD ASSESSMENT

Proposed Campground
5750 Falls Street, Port Alberni, BC
Alberni-Clayoquot Regional District

Legal Address:
Parcel F (DD 13367N) of Section 7,
Alberni District,
PID: 008-395-586

Prepared For:
Mr. Tyson Tillev
[REDACTED]
Port Alberni, BC
[REDACTED]

Attention:
Mr. Tyson Tillev
[REDACTED]

March 4, 2024

File No.: E3114.01
Revision No.: 00
Prepared by:
Paul Fraser, B.A., CTech
Chris Hudec, M.A.Sc., P.Eng.

Lewkowich Engineering Associates Ltd.
1900 Boxwood Road
Nanaimo, BC, V9S 5Y2
250-756-0355 (Office)
250-756-3831 (Fax)
www.lewkowich.com
geotech@lewkowich.com

Permit to Practice Number: 1001802



DISCLAIMER

1. Lewkowich Engineering Associates Ltd. (LEA) acknowledges that this report, from this point forward referred to as “the Report,” may be used by the Alberni-Clayoquot Regional District (ACRD) as a precondition to the issuance of a development and/or building permit and that this Report and any conditions contained in the Report may be included in a restrictive covenant under Section 56 of the Community Charter and registered against the title of the property at the discretion of the ACRD.
2. This Report has been prepared in accordance with standard geotechnical engineering practice solely for and at the expense of Mr. Tyson Tilley. We have not acted for or as an agent of the ACRD in the preparation of this Report.
3. The conclusions and recommendations submitted in this Report are based upon information from relevant publications, a visual site-assessment of the property, anticipated and encountered subsurface soil conditions, available floodplain data, current construction techniques, and generally accepted engineering practices. No other warrantee, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the structures becomes available, the recommendations may be altered or modified in writing by the undersigned.
4. This Report was authored, to the best of our knowledge at the time of issuance, with considerations for local requirements specific to the Authority Having Jurisdiction (AHJ) and their standards for the preparation of such reports, the 2018 British Columbia Building Code (BCBC), and current engineering standards. Updates to municipal bylaws, policies, or requirements of the AHJ, or updates to the BCBC and/or professional practice guidelines may impact the validity of this Report.
5. This Report has been prepared by Mr. Paul Fraser, B.A., CTech, and Mr. Chris Hudec, M.A.Sc., P.Eng. Messrs. Fraser and Hudec are both adequately experienced in geotechnical engineering and hazard assessments and are also members in good standing with their respective associations, Mr. Fraser with the Applied Science Technologists & Technicians of British Columbia (ASTTBC), and Mr. Hudec with the Engineers and Geoscientists of British Columbia (EGBC).

EXECUTIVE SUMMARY

1. The following is a brief synopsis of the property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
2. The property, 5750 Falls Street, Port Alberni, BC, from this point forward referred to as “the Property,” is located within the central region of Vancouver Island, northwest of the City of Port Alberni and within the jurisdictional boundaries of the ACRD. The proposed development for the Property at the time of this Report includes construction of a 100-site campground, intended for use by recreational vehicles (RVs).
3. A site-specific hazard assessment was conducted to identify potential geotechnical hazards for the subject Property. The primary geotechnical hazards identified relate to the Property’s boundary with the Somass River and the associated seasonal flooding, the effects of climate change and sea level rise (SLR), and the tsunami inundation zone. We understand the Property is located within the defined tsunami inundation zone (Alberni Canal Maximum Tsunami Level) of 20.0m geodetic datum (GD), as provided by the Province of British Columbia.
4. As part of our assessment, LEA reviewed the Somass Watershed Flood Management Plan report, prepared by Northwest Hydraulic Consultants Ltd (NHC), dated May 1, 2020. It was determined that the Riverine Flood Construction Level (FCL), including freeboard, for any future development at the subject Property is 9.5m (CGVD2013).
5. As per EGBC guidelines a minimum setback of 30.0m from the estimated Future Natural Boundary (FNB) would be considered appropriate for this site. This setback typically applies to the construction of new buildings; in this case, no landfill shall encroach upon this setback.
6. Provided the recommendations outlined in this Report are followed, we consider the land can be made safe for the proposed development.

List of Abbreviations Used in the Report

Abbreviation	Title
ACRD	Alberni-Clayoquot Regional District
AHJ	Authority Having Jurisdiction
ASTTBC	Applied Science Technologists & Technicians of British Columbia
BCBC	British Columbia Building Code
BCOCP	Beaver Creek Official Community Plan
DPA	Development Permit Area
EGBC	Engineers and Geoscientists of British Columbia
FCL	Flood Construction Level
FNB	Future Natural Boundary
GD	Geodetic Datum (CGVD2013)
LEA	Lewkowich Engineering Associates Ltd.
MFLNRORD	BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development
NHC	Northwest Hydraulic Consultants Ltd.
PNB	Present Natural Boundary

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1.0 INTRODUCTION

1.1 General

- a. As requested, LEA has carried out a geotechnical hazard assessment of the subject Property with respect to the future construction of a 100-site campground. This Report provides a summary of our findings and recommendations.

1.2 Background

- a. The Property is currently developed with a number of buildings including workshops/carports, single-family residence, single-storey clubhouse building, washrooms, and several RV sites.
- b. Based on limited information provided by the client, we understand the proposed development consists of constructing 100 fully serviced RV sites located within the center of the southern portion of the Property. We understand the existing clubhouse and washroom buildings will remain as part of the development and a new septic field will be installed.
- c. The Property is located within the central region of Vancouver Island, northwest of the City of Port Alberni. See Figure 1.1 below.

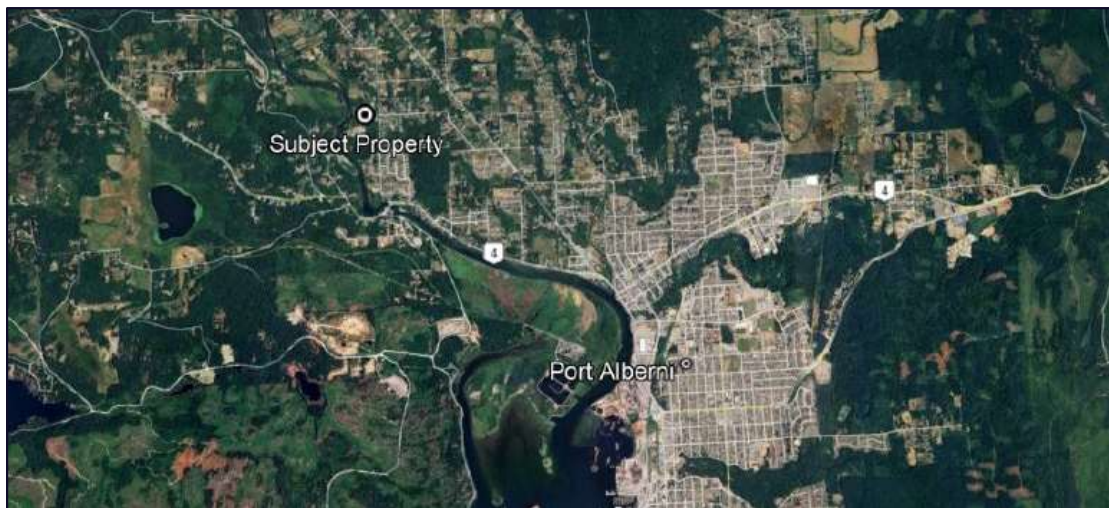


Figure 1.1 – Large Scale Location Plan (Satellite Imaging from Google Earth^{®1})

- d. A review of the 2023 BCOC² and associated Map No. 3³ indicate the Property is located within two DPA's:
 - i. DPA-I Riparian Areas Protection – includes all lands within 30 meters of major streams and rivers. An assessment report addressing DPA-I requirements shall be prepared by a qualified environmental professional and is not included as part of this assessment.
 - ii. DPA-II Natural Hazard Areas Protection – areas that are or may be subject to natural hazards such as flooding, sea-level rise, erosion, slides, rock falls, subsidence, tsunami-hazard zones, and steep slopes inclined at 30% or greater.

- e. The requirements for DPA-II outlined in the BCOC² that are applicable to the subject Property state:
- “Development or alteration of land, buildings and structures should be planned to avoid intrusion into DPA II areas and to minimize the impact of any activity on these areas.”*
- and;
- “Development should be planned to avoid the tsunami hazard area, described as the area between the high tide line and a horizontal distance of 30 metres from the natural boundary of the sea or the furthest extent of the tsunami zone as shown by the best available mapping, whichever is greater.”*
- f. The current Alberni-Clayoquot Zoning By-law 1971⁴ states:
- “Notwithstanding anything else contained in this By-law, except where relief is granted by the Water Resources Service of the Department of Lands, Forests and Water Resources, no building shall be constructed:*
- i. *Within 7.62 meters [25 feet] of the natural boundary of a lake or within 30.48 meters [100 feet] of the natural boundary of any other natural water course or source of water supply (other than a well, which is governed by the Sanitary Regulations, 1917), or*
 - ii. *on ground surface less than 0.609 meters [2 feet] above 200 Year flood level (other than flood caused by tsunami) where it can be determined, or, where it cannot be determined, 3.048 meters [10 feet] above the natural boundary of a lake or any other natural water course in the immediate flood hazard area.”*
- g. We understand the ACRD has prepared a draft update of their zoning bylaw (Zoning Bylaw No. P1333, 2023)⁵, stating:
- “No building or structure shall be constructed, reconstructed, altered, moved or extended:*
- i. *on ground below the flood construction level established by designated 200-year floodplain mapping, or where a location is determined to be safe for the intended use by a qualified professional with training in geotechnical study and geohazard assessments. Where the 200-year floodplain has not been established and in the absence of an assessment by a qualified professional, a minimum 3 m flood construction level above the natural boundary of the ocean, a lake or a major stream as defined by this Bylaw, is required; or*
 - ii. *within 15 m of a minor stream and 30 m of a major stream; or*
 - iii. *within 15 m of any lake; or*
 - iv. *unless otherwise specified in this Bylaw, within 15 m of the natural boundary of the ocean: or*
 - v. *These restrictions do not apply to industrial and commercial buildings and structures where the use of the waterfront is a necessary subsidiary part of the business activity.*

- h. Following EGBC's Professional Practice Guidelines for Legislated Flood Assessments⁶, this Report would be categorized as a Class 0 assessment, applicable for Development and/or Building Permits.

1.3 Covenant Review

- a. As part of our assessment, we have reviewed the documents registered on the legal title of the Property, specifically, any restrictive covenants registered against the Property that may relate to the conclusions and recommendations provided in this Report.
- b. Current to the date of this Report, there are no covenants under Section 215 of the Land Title Act registered against the Property that relate to the comments, conclusions, and recommendations in this Report.

1.4 Assessment Methodology

- a. A visual reconnaissance of the Property was carried out February 14, 2024, which included observations of the current site conditions, topography, and expected development area.
- b. A desktop review of relevant background information was undertaken, including available aerial photographs, published geology, topography, and floodplain mapping, with consideration of the applicable EGBC practice guidelines and the most current and relevant technical documents provided by NHC⁷ and MFLNRORD⁸. Please refer to the list of references at the end of this Report.

2.0 SITE CONDITIONS

2.1 Physical Setting

- a. The Property is identified with the following civic and legal address:
- i. 5750 Falls Street, Port Alberni, BC (ACRD)
 - ii. Parcel F (DD 13367N) of Section 7, Alberni District
 - iii. PID: 028-110-323
- b. The Property is located along the east bank of the Somass River, northwest of the City of Port Alberni, within the Electoral Area E boundaries of the ACRD. The Property location is shown below in Figure 2.1.



Figure 2.1 – Small Scale Location Plan (Satellite Imaging from Google Earth^{®1})

- c. As per the current Alberni-Clayoquot Zoning By-law 1971⁴, the Property is zoned as “Forest Reserve District” (A4) and is bordered to the north, northeast, and south by other A4 properties; to the east by Falls Street; and to the west by the Somass River.

2.2 Terrain and Features

- a. In general, the terrain declines steadily from the Falls Street frontage to a near level bench that makes up the majority of the Property above the PNB of the Somass River. The overall slope from Falls Street to the lower bench is estimated to be inclined at 2 Horizontal to 1 Vertical or 26°, with total relief across the Property estimated to be 18m±.
- b. Evidence of previous earthworks and site manipulation can be seen throughout the Property, including numerous stockpiles of rubble/debris and a large spoil pile located approximately 75m to 100m to the west of the Falls Street frontage.
- c. Sporadic immature and mature trees and brush are found throughout the Property with the majority of dense vegetation confined to the perimeter.
- d. Typical terrain conditions are shown below in Figures 2.2.1 and 2.2.2.



Figure 2.2.1 – Typical Terrain Conditions – Spoil Pile (View Looking Northeast)



Figure 2.2.2 – Typical Terrain Conditions (View Looking West)

2.3 Regional Geology

- a. Surficial geology for the area is classified as part of the Hawarth deposit, commonly comprised of fluvial soils (very gravelly loamy sand), and “gleyed” soils (silt) with impeded drainage⁹.
- b. Bedrock geology for the area is classified as being part of the Nanaimo Group, typically consisting of boulder, cobble, and pebble conglomerate, coarse to fine sandstone, siltstone, shale, and/or coal¹⁰. A contact boundary between Nanaimo Group and Vancouver Group – Karmutsen Formation is located approximately 300m southwest of the Property.

2.4 Soil Conditions

- a. A subsurface investigation was not included as part of this assessment. Generally, subsurface soil conditions, as encountered by this office in similar investigations in the area, consist of a layer of topsoil, underlain by dense fluvial deposits of sand and gravel, at shallow depths (<1.0m).

2.5 Surface and Groundwater Conditions

- a. During our field review, LEA noted ponded surface water at several locations on the Property where fine-grained soils were exposed at surface. Surficial soils were saturated due to recent seasonal rainfall events. However, we expect the encountered ponding to be indicative of impeded drainage in the area.
- b. Groundwater flows may fluctuate seasonally with cycles of precipitation. Groundwater conditions observed at other times may differ from those observed during our assessment.

2.6 Foreshore Conditions

- a. The foreshore can be characterized as a near-vertical bank comprised of silt, sand, and gravel deposits immediately above the Somass River. The foreshore conditions, at the time of our assessment, are shown below in Figures 2.6.1 and 2.6.2.



Figure 2.6.1 – Typical Foreshore Conditions (View Looking South)



Figure 2.6.2 – Typical Foreshore Conditions (View looking North)

2.7 Somass Watershed Flood Management Plan Review

- a. In preparation of this Report, we have reviewed the Somass Watershed Flood Management Plan report prepared by NHC, dated May 1, 2020⁷. The NHC report provides a detailed analysis including but not limited to hydrology, geomorphology, hydraulic modelling, coastal assessment and wave modelling, to determine flood hazards for the Somass Watershed. We understand the Somass Watershed includes the Stamp, Ash, and Sproat Rivers; Great Central and Sproat Lake; and the Somass Estuary. The report notes several significant flood events have occurred over the past 100 years along the Somass River, with the largest flood occurring in 1961 where approximately 400mm of water covered River Road⁷. We understand through anecdotal information provided by the client, that flood levels at the subject Property in 2016 reached the existing clubhouse location where approximately 300mm of floodwater covered the current floor elevation.
- b. The NHC study includes floodplain maps with estimated flood boundaries and associated FCL elevations using isolines plus freeboard for the Somass River. The FCLs are based on the 1 in 200-year design flood event, including an estimated increase of overall discharge within the Somass Watershed of up to 20% by the year 2100 as a result of climate change effects on riverine conditions, as well as the effects of SLR at the Property.
- c. The floodplain maps indicate the majority of the subject Property is located within the 200-year floodplain limits¹¹. For reference, see Figure 2.7.1 below.

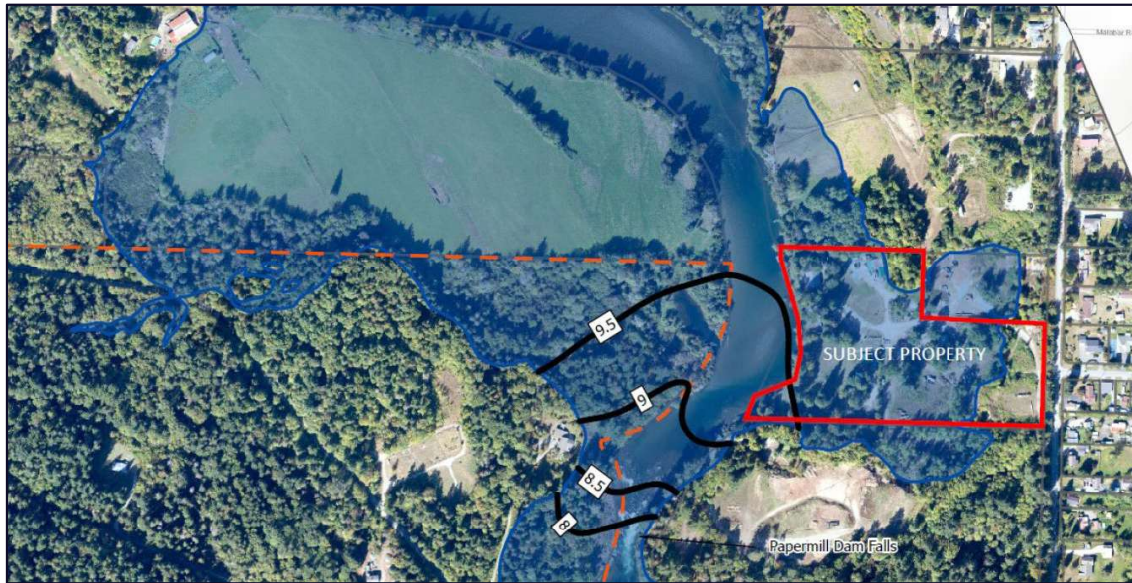


Figure 2.7.1 – Floodplain Extent at Subject Property (mark-up of NHC Flood Maps⁷)

3.0 DISCUSSION AND RECOMMENDATIONS

3.1 Recommended Flood Construction Level

- In the absence of a site-specific topographic survey, we are unable to comment accurately on the geodetic elevations of the parcel. However, based on a review of Google Earth® we have estimated the existing ground elevations to vary from 7.0m± GD to 25.0m± GD from the PNB of the Somass River to the Falls Street frontage.
- As indicated on Sheet 9 of the 200-Year Designated Floodplain Map (see Figure 2.7.1 above), the required FCL for any future development on the Property relating to habitable residential construction is 9.5m GD (CGVD2013)¹¹.
- As per ACRD requirements, the proposed 100-site campground should be constructed at or above the recommended FCL of 9.5m GD. This FCL would apply to the finished ground elevation for each site.
- Current ground elevations throughout the proposed campground area are estimated to vary from 7.0m± GD to 10.0m±; therefore, it is expected that landfill will be required to meet the FCL.
- Please refer to Section 3.6 below for further information relating to landfill, site grading, and scour protection.

3.2 Recommended Setback

- Provincial guidelines recommend a minimum setback of 30.0m from the natural boundary of any watercourse⁸. The Somass River is subject to SLR due to climate change. Therefore we recommend a setback of 30m from the estimated FNB.
- The NHC report indicates the recommended SLR rate for the year 2100, including regional uplift, is 0.83m

for Port Alberni. This increase should be applied to the PNB elevation to determine the required 30.0m setback from the estimated FNB. In this case, this setback would apply to the toe of the proposed fill area. Any existing structures within this setback area would be exempt.

- c. For reference and based on our review of topography using Google Earth®, we estimate the existing clubhouse building is located approximately 75m± from the PNB. Therefore, we expect the required landfill would be confined to the east side of the clubhouse location.

3.3 Foreshore Revetment

- a. Considering the steep-sloping shoreline bank and the expected slope composition, the erosion hazard is deemed moderate for this Property. We expect erosion is possible during significant storm events that would cause flooding of the Somass River. Evaluation of the rate and/or extent of erosion is beyond the scope of this Report. If the Client wishes to address the issue of potential erosion along the natural boundary and within the foreshore area, then further investigation and analysis into the use and installation of mitigative measures is required. LEA can provide recommendations for design of mitigative works for foreshore erosion if requested.
- b. As a minimum, we recommend the foreshore and alignment of the natural boundary be regularly monitored by current and future Property owners. Any notable regression of the natural boundary, specifically following a significant flood event or winter season or otherwise, would require a reassessment of the foreshore conditions.

3.4 Floodwater and Inundation

- a. In the event of a design flood (1 in 200-year), floodwater from the Somass River would inundate the majority of the Property. We expect that existing buildings and structures within the floodplain area and below the FCL would be susceptible to damage from floodwaters, or debris carried by floodwaters. It is also possible that safe access and egress would be difficult in the event the lower area is inundated by floodwater. The general risk of flooding is expected to increase with the effects of climate change and associated SLR.

3.5 Tsunami Inundation

- a. The Alberni Canal Maximum Tsunami Level at Port Alberni has been established at 20.0m GD by the Province of British Columbia.
- b. In the event of the maximum design tsunami, we expect the subject Property would be temporarily inundated with floodwater. It is expected that the floodwater within the inundation area would be active and would produce substantial flows that could cause significant damage to buildings and structures and erode soils around and/or under structures. The topography of the subject parcel may direct or confine

floodwaters to the subject Property and adjacent parcels to the northwest and south. Therefore, the risk of the maximum design tsunami inundating the Property and eroding soils around and/or under structures is considered high.

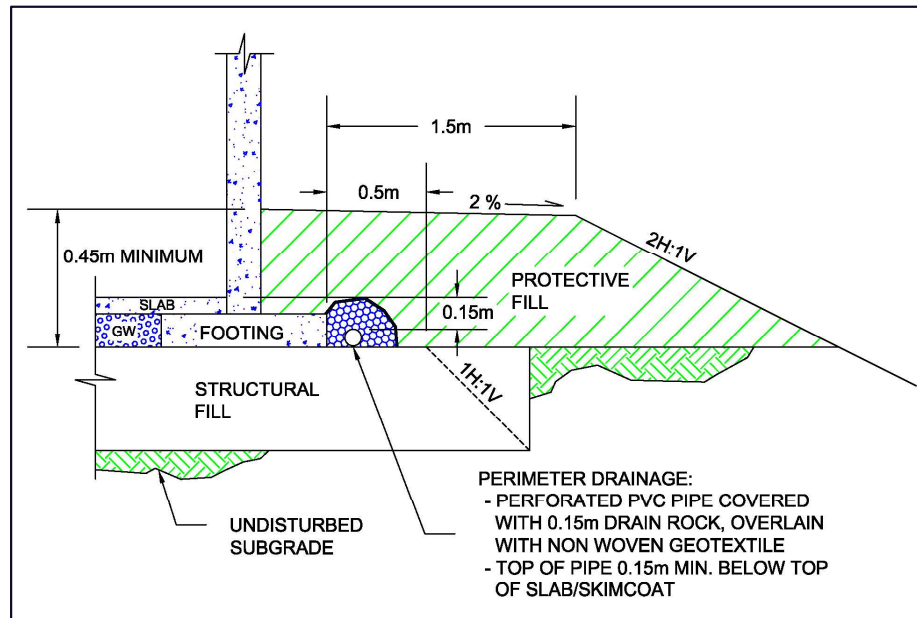
- c. If a Tsunami Warning is issued for the area, evacuation procedures provided by local and provincial government agencies should be followed. Safe egress to ground elevations above 20.0m GD is available at the east extent of the subject Property.

3.6 Landfill, Site Grading and Sour Protection

- a. We expect landfill above existing site grades will be required to meet the recommended FCL for the proposed development.
- b. Unsuitable materials shall first be removed prior to fill placement.
- c. The selection, placement and compaction of landfill materials shall generally follow our guidelines for structural fill, as described in Section 3.7 below.
- d. The face of any landfill must be protected from erosion and scour. To reduce erosion potential, LEA recommends a maximum slope inclination of 3 Horizontal to 1 Vertical. The face of the Somass-facing landfill slope shall be protected with plantings and vegetative cover. Alternatively, the slope can be armored with rip-rap boulders or a product with similar roughness.
- e. We note the addition of a mass landfill within the Property will prevent floodwater from entering the filled area of the property. That volume of floodwater may marginally increase the depth of floodwater on adjacent properties during less than design storm events. The degree and potential impact of redirected floodwaters has not been assessed and is beyond the scope of this Report.

3.7 Structural Fill

- a. The following guidelines for the placement and compaction of structural fill should be used.
- b. Structural fill should be inorganic sand and gravel. If structural fill placement is to be carried out in the wet season, material with a fines content limited to 5% passing the 75µm sieve should be used, as such a material will not be overly sensitive to moisture, allowing compaction during rainy periods of weather.
- c. Structural fill should be compacted to a minimum of 95% of Modified Proctor maximum dry density (ASTM D1557).
- d. Structural fills should include the zone defined by a plane extending down and outward a minimum 0.5m from the outer edge of the proposed sites, roadways etc., at an angle of 45 degrees from horizontal to ensure adequate subjacent support. This support zone is generally shown in Figure 3.7.1 below.



- e. Compaction of fill should include moisture conditioning as needed to bring the soils to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.
- f. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a “jumping-jack,” 200mm for a small roller and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.
- g. It should be emphasized that the long-term performance of roadways and prepared RV pads is highly dependent on the correct placement and compaction of underlying structural fills.

4.0 CONCLUSIONS

4.1 Local Government Conformance Statement

- a. LEA confirms that the recommendations made in this Report conform to the guidelines and objectives expressed under the current ACRD By-law 1971 (2018) and the proposed draft ACRD Zoning Bylaw No. P1333 (2020) relating to the development of campgrounds.
- b. The Somass River is a defined watercourse located to the west of the Property. All construction/development shall be carried out in conformance with the requirements of any jurisdictional limitations. Any jurisdictional limitations applicable to the Property and proposed development shall supersede the geotechnical recommendations made in this Report.
- c. Based on our review of the relevant publications and site-specific field assessment, it is the opinion of LEA

that seasonal flooding and the effects of climate change and SLR, and the Property's location within the tsunami inundation zone, are the potential geotechnical hazards within the subject Property.

- d. Provided the recommendations in this Report are followed, we confirm that from a geotechnical point of view the land is considered safe and suitable for the proposed development (100-site campground), with the probability of a geotechnical failure resulting in property damage of less than:
- 2% in 50 year for seismic events,
 - 1 in 200-year return for flooding of riverine areas while accounting for 100-years of SLR, excluding tsunami hazards, and
 - 10% in 50 years for all other geotechnical hazards.

and that the proposed development will not result in a detrimental impact on the environment, subject Property or adjoining properties.

- e. Due to the Property location adjacent to the Somass River, the associated tsunami risk is considered to be high. As the magnitude-frequency relation for tsunami-related flooding is unknown, we recommend following evacuation procedures provided by local and provincial government agencies for the area.
- f. Prior to construction, LEA recommends confirming the existing ground surface elevations within the proposed development areas using a qualified BC Land Surveyor. The recommended FCL of 9.5m GD and 30.0m setback beyond the FNB elevation and location should also be confirmed.

5.0 CLOSURE

- a. Lewkowich Engineering Associates Ltd. appreciates the opportunity to be of service on this project. If you have any comments, or additional requirements at this time, please contact the undersigned at your convenience.

Respectfully Submitted,
Lewkowich Engineering Associates Ltd.



Paul Fraser, B.A., CTech
Senior Technician



Chris Hudec, M.A.Sc., P.Eng.
Senior Project Engineer

6.0 ATTACHMENTS

- Engineers and Geoscientists British Columbia (EGBC) Appendix I: Flood Assurance Statement.

7.0 REFERENCES

1. Google Earth Pro, Accessed February 2024, Image date June 25, 2023.
2. Alberni-Clayoquot Regional District document titled, “Beaver Creek Official Community Plan Bylaw No. P1291, Schedule A, amended April 2023.
3. Alberni-Clayoquot Regional District map, “Beaver Creek OCP Map No. 3 Development Permit Areas and Development Approval Information Areas”, amended April 2023.
4. Alberni-Clayoquot Regional District, “Alberni-Clayoquot Zoning By-law 1971”, updated August 29, 2023.
5. Alberni-Clayoquot Regional District, “Draft Zoning Bylaw No. P1333, 202X”, dated August 2023, accessed February 2024.
6. Engineers and Geoscientists of British Columbia report titled “Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC,” version 2.1, dated August 28, 2018.
7. Northwest Hydraulic Consultants Ltd., report titled “Somass Watershed Flood Management Plan”, Ref No. 3003140, dated May 1, 2020.
8. BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development report titled “Flood Hazard Area Land Use Management Guidelines,” Amended January 1, 2018.
9. Soils of South Vancouver Island, British Columbia, Soil Survey Report No. 44, Sheet 3.
10. Province of British Columbia, iMapBC, Accessed February 2024,
<https://maps.gov.bc.ca/ess/hm/imap4m/>
11. Northwest Hydraulic Consultants Ltd., “Appendix J: Designated Flood Maps”, Sheet 9 of 15, Job Number 3003140, dated April 30, 2020.

FLOOD ASSURANCE STATEMENT

Note: This statement is to be read and completed in conjunction with the current Engineers and Geoscientists BC *Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC* (“the guidelines”) and is to be provided for flood assessments for the purposes of the *Land Title Act*, Community Charter, or the *Local Government Act*. Defined terms are capitalized; see the Defined Terms section of the guidelines for definitions.

To: The Approving Authority

Date: March 1, 2024 LEA File# E3114

Alberni-Clayquot Regional District

3008 5th Ave., Port Alberni, BC V9Y 2E3

Jurisdiction and address

With reference to (CHECK ONE):

- ☐ *Land Title Act* (Section 86) – Subdivision Approval
- ☒ *Local Government Act* (Part 14, Division 7) – Development Permit
- ☒ Community Charter (Section 56) – Building Permit
- ☐ *Local Government Act* (Section 524) – Flood Plain Bylaw Variance
- ☐ *Local Government Act* (Section 524) – Flood Plain Bylaw Exemption

For the following property (“the Property”):

Parcel F (DD 13367N) of Section 7, Alberni District: 575 Falls Street

Legal description and civic address of the Property

The undersigned hereby gives assurance that he/she is a Qualified Professional and is a Professional Engineer or Professional Geoscientist who fulfils the education, training, and experience requirements as outlined in the guidelines.

I have signed, sealed, and dated, and thereby certified, the attached Flood Assessment Report on the Property in accordance with the guidelines. That report and this statement must be read in conjunction with each other. In preparing that Flood Assessment Report I have:

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

___ 1. Consulted with representatives of the following government organizations:

- ☒ 2. Collected and reviewed appropriate background information
- ☒ 3. Reviewed the Proposed Development on the Property
- ☒ 4. Investigated the presence of Covenants on the Property, and reported any relevant information
- ☒ 5. Conducted field work on and, if required, beyond the Property
- ☒ 6. Reported on the results of the field work on and, if required, beyond the Property
- ☒ 7. Considered any changed conditions on and, if required, beyond the Property

8. For a Flood Hazard analysis I have:

- ☒ 8.1 Reviewed and characterized, if appropriate, Flood Hazard that may affect the Property
- ☒ 8.2 Estimated the Flood Hazard on the Property
- ☒ 8.3 Considered (if appropriate) the effects of climate change and land use change
- ☒ 8.4 Relied on a previous Flood Hazard Assessment (FHA) by others
- ___ 8.5 Identified any potential hazards that are not addressed by the Flood Assessment Report

9. For a Flood Risk analysis I have:

- ___ 9.1 Estimated the Flood Risk on the Property
- ___ 9.2 Identified existing and anticipated future Elements at Risk on and, if required, beyond the Property
- ___ 9.3 Estimated the Consequences to those Elements at Risk

FLOOD ASSURANCE STATEMENT

10. In order to mitigate the estimated Flood Hazard for the Property, the following approach is taken:

- ☐ 10.1 A standard-based approach
- ☐ 10.2 A Risk-based approach
- ☒ 10.3 The approach outlined in the guidelines, Appendix F: Flood Assessment Considerations for Development Approvals
- ☐ 10.4 No mitigation is required because the completed flood assessment determined that the site is not subject to a Flood Hazard

11. Where the Approving Authority has adopted a specific level of Flood Hazard or Flood Risk tolerance, I have:

- ☐ 11.1 Made a finding on the level of Flood Hazard or Flood Risk on the Property
- ☐ 11.2 Compared the level of Flood Hazard or Flood Risk tolerance adopted by the Approving Authority with my findings
- ☐ 11.3 Made recommendations to reduce the Flood Hazard or Flood Risk on the Property

12. Where the Approving Authority has not adopted a level of Flood Hazard or Flood Risk tolerance, I have:

- ☒ 12.1 Described the method of Flood Hazard analysis or Flood Risk analysis used
- ☒ 12.2 Referred to an appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk
- ☒ 12.3 Made a finding on the level of Flood Hazard or Flood Risk tolerance on the Property
- ☒ 12.4 Compared the guidelines with the findings of my flood assessment
- ☒ 12.5 Made recommendations to reduce the Flood Hazard or Flood Risk

☒ 13. Considered the potential for transfer of Flood Risk and the potential impacts to adjacent properties

☒ 14. Reported on the requirements for implementation of the mitigation recommendations, including the need for subsequent professional certifications and future inspections.

Based on my comparison between:

[CHECK ONE]

- ☐ The findings from the flood assessment and the adopted level of Flood Hazard or Flood Risk tolerance (item 11.2 above)
- ☒ The findings from the flood assessment and the appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk tolerance (item 12.4 above)

I hereby give my assurance that, based on the conditions contained in the attached Flood Assessment Report:

- ☐ For subdivision approval, as required by the *Land Title Act* (Section 86), "that the land may be used safely for the use intended":

[CHECK ONE]

- ☐ With one or more recommended registered Covenants.
- ☐ Without any registered Covenant.

☒ For a development permit, as required by the *Local Government Act* (Part 14, Division 7), my Flood Assessment Report will "assist the local government in determining what conditions or requirements it will impose under subsection (2) of this section [Section 491 (4)]".

☒ For a building permit, as required by the *Community Charter* (Section 56), "the land may be used safely for the use intended":

[CHECK ONE]

- ☒ With one or more recommended registered Covenants.
- ☐ Without any registered Covenant.

☐ For flood plain bylaw variance, as required by the *Flood Hazard Area Land Use Management Guidelines* and the *Amendment Section 3.5 and 3.6* associated with the *Local Government Act* (Section 524), "the development may occur safely".

☐ For flood plain bylaw exemption, as required by the *Local Government Act* (Section 524), "the land may be used safely for the use intended".

FLOOD ASSURANCE STATEMENT

I certify that I am a Qualified Professional as defined below.

March 1, 2024

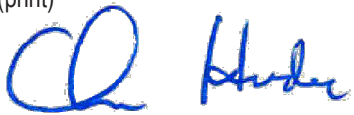
Date

Chris Hudec

Prepared by

Chris Hudec

Name (print)



Signature

1900 Boxwood Road

Address

Nanaimo, BC, V9S 5Y2



Telephone



Email

Reviewed by

Name (print)

Signature



(Affix PROFESSIONAL SEAL here)

If the Qualified Professional is a member of a firm, complete the following:

I am a member of the firm **Lewkowich Engineering Associates Ltd.**
and I sign this letter on behalf of the firm. (Name of firm)



REGIONAL DISTRICT OF ALBERNI-CLAYOQUOT

BYLAW NO. P1465

**A BYLAW TO AMEND BYLAW NO. P1291
BEAVER CREEK OFFICIAL COMMUNITY PLAN**

WHEREAS by Section 478(2) of the *Local Government Act*, all bylaws enacted by the Regional Board must be consistent with an existing official community plan;

AND WHEREAS the Regional Board may amend an existing official community plan;

NOW THEREFORE the Board of Directors of the Regional District of Alberni-Clayoquot in open meeting assembled enacts as follows:

1. TITLE
This bylaw may be cited as the Beaver Creek Official Community Plan Amendment Bylaw No. P1465.
2. Schedule A, Map No. 2 Land Use Designations, is hereby amended by redesignating PARCEL F (DD 13367N) OF SECTION 7 ALBERNI DISTRICT from "Residential Use" to "Commercial Use" as shown on Schedule 'A' which is attached to and forms part of this bylaw.
3. This bylaw shall come into force and take effect upon the adoption thereof.

Read a first time this day of ,
Public Hearing held this day of ,
Read a second time this day of ,
Read a third time this day of ,

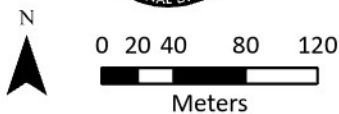
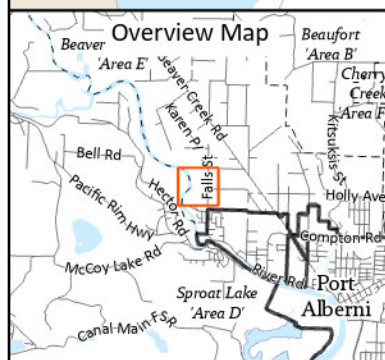
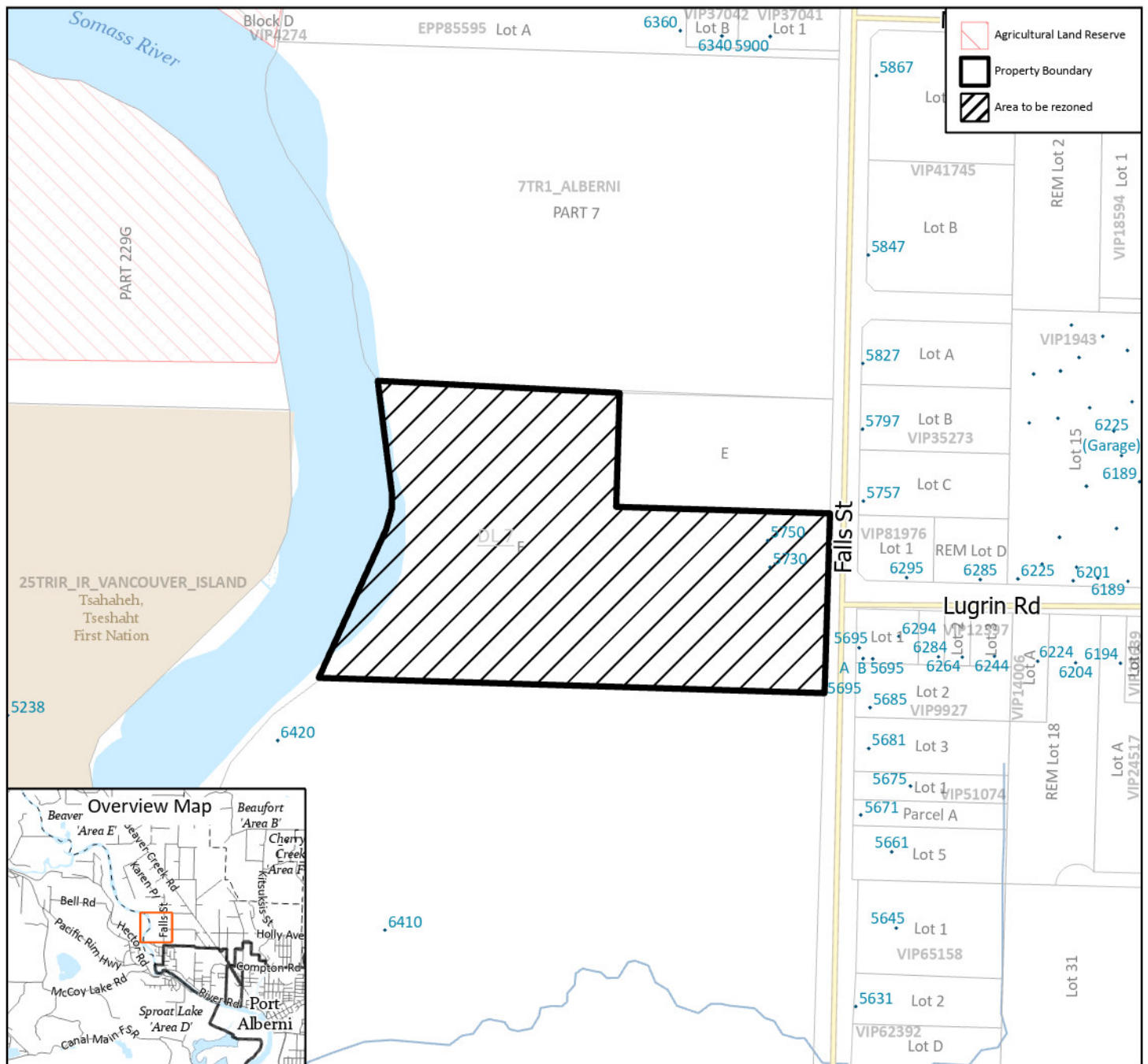
Adopted this day of ,

Corporate Officer

Chair of the Regional Board

Schedule 'A'

This schedule is attached to and forms part of the Beaver Creek Official Community Plan Amendment Bylaw P1465, 2023



Legal description: PARCEL F (DD 13367N) OF SECTION 7 ALBERNI DISTRICT

 To be redesignated from Residential Use to Commercial Use.



REGIONAL DISTRICT OF ALBERNI-CLAYOQUOT

BYLAW NO. P1466

OFFICIAL ZONING TEXT AMENDMENT

A bylaw of the Regional District of Alberni-Clayoquot to amend Bylaw No. 15, being the “Regional District of Alberni-Clayoquot Zoning By-law No. 15, 1971”.

WHEREAS the *Local Government Act* authorizes the Regional Board to amend a zoning bylaw upon the affirmative vote of the directors in accordance with Sections 464, 465, 470 and 479 of the *Local Government Act*;

AND WHEREAS the Board of Directors of the Regional District of Alberni-Clayoquot, in open meeting assembled, enacts the following amendment to the text of the Regional District of Alberni-Clayoquot Zoning By-law No. 15, 1971:

1. TITLE

This bylaw may be cited as the Regional District of Alberni-Clayoquot Zoning Text Amendment Bylaw No. P1466.

2. Bylaw No. 15 of the Regional District of Alberni-Clayoquot is hereby amended by:

- a. Adding section “128C Campground Commercial (C8-C) District” and subsections to read as follows:

128C Campground Commercial (C8-C) District

This District provides for facilities to accommodate tourists and vacationers in tents and recreational vehicles in areas which are particularly located and suited to such uses.

128C.1 Uses Permitted

- (1) Campgrounds
- (2) Two (2) single family dwellings
- (3) Accessory buildings and uses

128C.2 Conditions of Use

- (1) In this zone “campsite” means an established site within a campground for

the temporary location and siting of recreational vehicles or tents as a temporary recreational use for a period not to exceed 180 days in any calendar year, whether the use is continuous or intermittent.

- (2) Maximum number of campsites shall not exceed 100 within the C8-C District.
- (3) No recreational vehicle or tent shall be located other than on an established campsite.
- (4) There shall be no year-round or permanent occupation of a campsite.
- (5) All campsites shall be located a minimum of 60 metres from the natural boundary of the Somass River.
- (6) All campsites shall be located a minimum of 15 metres from the rear lot line and 4.5 metres from side lot lines. A minimum 4.5 metre buffer area of landscaping or natural vegetation screening must be provided between campsites and neighbouring uses.
- (7) The single family dwellings shall not be used as short term vacation rental units.
- (8) A single family dwelling or campsite shall not be a separate strata unit.
- (9) In this zone “accessory buildings and uses” includes office facilities; clubhouse; retail store; washroom, shower, and laundry facilities; parking; gazebos; picnic shelters; structures containing garbage, recycling, and organics collection; and structures required to contain fire, emergency, water, sewer, and electrical infrastructure.

- b. By amending Section 200, Schedule II – Bulk and Site Regulations, to include the following line item:

Zoning District or Use	Minimum Lot Width (feet)	Minimum Lot Area	Maximum Lot Coverage	Minimum Setbacks (Feet)			Maximum Height (feet)
				Front	Rear	Side	
C8-C	330	10 acres	10%	40	30	15	30

- c. By amending Section 4.3, Interpretation, to include “C8-C” on the line which references “C Districts”.
- d. By amending Section 5.1, Designation of Districts, to include “128C Campground Commercial (C8-C) District” in the Commercial Section.

3. This bylaw shall come into force and take effect upon the adoption thereof.

Read a first time this day of ,

Public Hearing held this day of ,

Read a second time this day of ,

Read a third time this day of ,

Adopted this day of ,

Corporate Officer

Chair of the Regional Board



REGIONAL DISTRICT OF ALBERNI-CLAYOQUOT

BYLAW NO. P1482

OFFICIAL ZONING ATLAS AMENDMENT NO. 763

A bylaw of the Regional District of Alberni-Clayoquot to amend Bylaw No. 15, being the "Regional District of Alberni-Clayoquot Zoning By-law No. 15, 1971".

WHEREAS the *Local Government Act* authorizes the Regional Board to amend a zoning bylaw after a public hearing and upon the affirmative vote of the directors in accordance with Sections 464, 465, 470 and 479 of the *Local Government Act*;

AND WHEREAS an application has been made to rezone a property;

AND WHEREAS the Board of Directors of the Regional District of Alberni-Clayoquot, in open meeting assembled, enacts the following amendment to the Official Zoning Atlas of the Regional District of Alberni-Clayoquot Zoning By-law No. 15, 1971:

1. TITLE

This bylaw may be cited as the Regional District of Alberni-Clayoquot Zoning Atlas Amendment Bylaw No. P1482.

2. Bylaw No. 15 of the Regional District of Alberni-Clayoquot is hereby amended by rezoning: PARCEL F (DD 13367N) OF SECTION 7 ALBERNI DISTRICT from Forest Reserve (A4) District to Campground Commercial (C8-C) District as shown on Schedule 'A' which is attached to and forms part of this bylaw.

3. This bylaw shall come into force and take effect upon the adoption thereof.

Read a first time this day of ,
Public Hearing held this day of ,
Read a second time this day of ,
Read a third time this day of ,

Adopted this day of ,

Corporate Officer

Chair of the Regional Board

