



## REGULAR MEETING OF COUNCIL

George Fraser Community Room, Ucluelet Community Centre,  
500 Matterson Drive, Ucluelet, and  
Electronically via Zoom ([Ucluelet.ca/CouncilMeetings](https://ucluelet.ca/CouncilMeetings))  
**Tuesday, December 10, 2024 @ 4:00 PM**

### AGENDA

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Council would like to acknowledge the Yuulu?i?ath, on whose traditional territories the District of Ucluelet operates.	
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Audience members and delegates are advised that this proceeding is being video recorded and broadcast on YouTube and Zoom, which may store data on foreign servers.	
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9. NOTICE OF MOTION

10. CORRESPONDENCE

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11. INFORMATION ITEMS

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- 11.2. Appointment of Pacific Rim School District's Representative to the District of Ucluelet  
*Paula Mason, Manager of Corporate Services, School District 70 Pacific Rim*  
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12. MAYOR'S ANNOUNCEMENTS AND COUNCIL COMMITTEE REPORTS

- 12.1. Councillor Shawn Anderson  
*Deputy Mayor, April 1 - June 30, 2024*
- 12.2. Councillor Jennifer Hoar  
*Deputy Mayor, January 1 - March 31, 2024*
- 12.3. Councillor Ian Kennington  
*Deputy Mayor, July 1 - September 30, 2024*
- 12.4. Councillor Mark Maffei  
*Deputy Mayor, October 1 - December 31, 2024*
- 12.5. Mayor Marilyn McEwen

13. QUESTION PERIOD

14. CLOSED SESSION

- 14.1. Procedural Motion to Move In-Camera  
**THAT** the December 10, 2024, Regular Council Meeting be closed to the public pursuant to the following sections of the Community Charter:
- 90(1)(a) personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality; and
  - 90(1)(c) labour relations or other employee relations.

15. ADJOURNMENT



## REGULAR MEETING OF COUNCIL

Held Electronically and in the George Fraser Community Room,  
Ucluelet Community Centre, 500 Matterson Drive, Ucluelet  
**Tuesday, September 24, 2024 @ 4:00 PM**

### MINUTES

Present: **Chair:** Mayor McEwen  
**Council:** Councillors Anderson, Hoar (Via Zoom), Kennington, and Maftel  
**Staff:** Duane Lawrence, Chief Administrative Officer  
Jeffrey Cadman, Director of Finance  
Bruce Greig, Director of Community Planning  
Rick Geddes, Fire Chief  
Joseph Rotenberg, Manager of Corporate Services  
John Towgood, Municipal Planner  
Nancy Owen, Executive Assistant

Regrets:

#### 1. CALL TO ORDER

The September 24, 2024, Regular Council Meeting was called to order at 4:01 PM.

##### 1.1 ACKNOWLEDGEMENT OF THE YUULU?IŁ?ATH

Council acknowledged the Yuulu?ił?ath, on whose traditional territories the District of Ucluelet operates.

##### 1.2 NOTICE OF VIDEO RECORDING

Audience members and delegates were advised that the proceeding was being video recorded and broadcast on YouTube and Zoom, which may store data on foreign servers.

##### 1.3 PROCEDURAL MOTION TO PERMIT A MEMBER TO ATTEND THE MEETING ELECTRONICALLY

2024.2273.REGULAR *IT WAS MOVED AND SECONDED:*

*THAT Council suspend sections 10.5(ii) and 10.6.(b) of the Council Procedure Bylaw until December 31, 2024, to allow Councillor Hoar to attend more than four in-person Council meetings electronically and to allow Councillor Hoar to attend in-person Closed Council meetings electronically.*

**CARRIED.**

**2. LATE ITEMS**

**2.1 Clayoquot Biosphere Trust Letter Dated September 24, 2024**

2024.2274.REGULAR *IT WAS MOVED AND SECONDED:  
THAT the agenda be amended by adding the late item titled “Clayoquot Biosphere Trust Letter Dated September 24, 2024”, as item 10.3.*  
CARRIED.

**3. APPROVAL OF THE AGENDA**

**3.1 Approval of the September 24, 2024, Regular Council Meeting Agenda**

2024.2275.REGULAR *IT WAS MOVED AND SECONDED:  
THAT the September 24, 2024, Regular Council Meeting Agenda be adopted as amended.*  
CARRIED.

**4. ADOPTION OF MINUTES**

**4.1 August 27, 2024, Special Council Meeting Minutes**

2024.2276.REGULAR *IT WAS MOVED AND SECONDED:  
THAT the August 27, 2024, Special Council Meeting Minutes be adopted as presented.*  
CARRIED.

**4.2 September 3, 2024, Regular Council Meeting Minutes**

2024.2277.REGULAR *IT WAS MOVED AND SECONDED:  
THAT the September 3, 2024, Regular Council Meeting Minutes be adopted as presented.*  
CARRIED.

**5. PUBLIC INPUT & DELEGATIONS**

**5.1 Delegations**

**Sergeant Marc Jones, Ucluelet RCMP Detachment  
Re: Quarterly Policing Update**

Sergeant Jones provided an update on local policing activities and noted higher call volumes including increases in minor thefts, disturbances and liquor act offences. He also noted a decrease in violent offenses.

Sergeant Jones outlined local initiatives related to speeding and the Immediate Roadside Prohibition program. He also confirmed

that the Ucluelet detachment is in the training phase for the use of body-worn cameras.

**6. UNFINISHED BUSINESS**

There was no unfinished business.

**7. BYLAWS**

**7.1 Zoning Amendment and DVP for Lot 2 Plan EPP117265  
John Towgood, Municipal Planner**

Bruce Greig, Director of Community Planning, presented this report.

2024.2278.REGULAR *IT WAS MOVED AND SECONDED:*

1. **THAT** Council give first and second reading to District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024; and
2. **THAT** Council direct Staff to give notice for a public hearing to be held on District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 and Development Variance Permit 24-04.

CARRIED.

**7.2 Permissive Tax Exemption Bylaw  
Jeffrey Cadman, Director of Finance**

Mr. Cadman presented this report.

Jenn Dart, Operations and Development Manager for Redd Fish Restoration Society (Redd Fish) addressed Council noting that the financial statements submitted in support of their application does not represent their full fiscal year. She noted the recent purchase of their new facility represents a significant liability and outlined plans to use the facility as an educational center. Redd Fish requested a three-year tax exemption.

Mayco Noel, Redd Fish Board of Directors Chair, advocated for Redd Fish's tax exemption request. He also advocated for the Food Bank and Ucluelet Aquarium Society tax exemptions included in the Permissive Tax Exemption Bylaw.

Council discussed Redd Fish's tax exemption request.

2024.2279.REGULAR *IT WAS MOVED AND SECONDED:*

**THAT** Council give District of Ucluelet Permissive Tax Exemption Bylaw No. 1358, 2024 first and second reading.

CARRIED.

2024.2280.REGULAR *IT WAS MOVED AND SECONDED:*

**THAT** Council amend District of Ucluelet Permissive Tax Exemption Bylaw No. 1358, 2024 by:

- a. deleting the word “and” at the end of section 2(i);
- b. deleting the word “.” at the end of section 2(j) and inserting “;”;
- c. inserting the heading “**Exemption for Redd Fish Restoration Society**” after section 2(j);
- d. inserting “Redd Fish Restoration Society – Roll No. 168000 being Lot A, Plan VIP23074, District Lot 282, Clayoquot Land District, PID 003-221-784, 1728 Peninsula RD, that is owned and used by Redd Fish Restoration Society for restoration, research and education.” as section 2(k).

CARRIED.

2024.2281.REGULAR *IT WAS MOVED AND SECONDED:*  
**THAT** Council give District of Ucluelet Permissive Tax Exemption Bylaw No. 1358, 2024, third reading, as amended.

CARRIED.

2024.2282.REGULAR *IT WAS MOVED AND SECONDED:*  
**THAT** the agenda be amended to address report items in the following order: “8.1 Living Organ Donor Support Policy”, “8.2 ADU Covenant Authorization - 359 Marine Drive”, “8.3 Chamber of Commerce Economic Development Initiative”, and “8.4 Preliminary Discussion - 221 Minato Road (ERIF)”.

CARRIED.

## 8. REPORTS

### 8.1 Living Organ Donor Support Policy *Jeffrey Cadman, Director of Finance*

Mr. Cadman presented this report.

2024.2283.REGULAR *IT WAS MOVED AND SECONDED:*  
**THAT** Council adopt the District of Ucluelet Living Organ Donor Support Policy Number 7-2550-1.

CARRIED.

### 8.2 ADU Covenant Authorization - 359 Marine Drive *Maddie Haynes, Planning Assistant*

Bruce Greig, Director of Community Planning, presented this report.

2024.2284.REGULAR *IT WAS MOVED AND SECONDED:*  
**THAT** Council authorize the Mayor and Corporate Officer to execute the Section 219 restrictive covenant for 359 Marine Drive for registration at the Land Title Office.

CARRIED.

### 8.3 Chamber of Commerce Economic Development Initiative

**Duane Lawrence, Chief Administrative Officer**

Mr. Lawrence presented this report.

2024.2285.REGULAR *IT WAS MOVED AND SECONDED:*

- **THAT** Council direct staff to provide a letter of support for the Chamber of Commerce 2024 Rural Economic Diversification and Infrastructure Program grant application in support of a Community Economic Development Capacity Building project;
- **THAT** Council direct staff to allocate \$35,000 to the Chamber of Commerce in support of the Community Economic Development Capacity Building project for 2024; and,
- **THAT** Council direct staff to include for consideration an allocation of \$35,000 in the 2025 and 2026 budgets for the development of an economic development agreement with the Chamber of Commerce.

CARRIED.

**8.4 Preliminary Discussion - 221 Minato Road (ERIF)  
Bruce Greig, Director of Community Planning**

Mr. Greig presented this report.

The following outlines questions that Council considered and related Council discussion:

Do Council members have any initial concerns about a road configuration with limited pedestrian facilities and vehicle parking spaces backing onto the roadway?

- Council discussed this matter and noted that it is not a concern.
- Council noted that the configuration is essential to keeping the development affordable.
- Council noted the need for a pathway within the development and that vehicles backing onto a roadway is common in other subdivisions, and necessary for increased density.

Do Council members have any initial concerns with the concept of no additional parkland dedication for this development?

- Council noted that there is a considerable park dedication already in the area.
- Council noted the ecological value of Olsen Bay and the sensitivity of this ecosystem.
- Council noted that the lack of a complete environmental assessment and wetland delineation, which may identify further spaces which should be protected.

Do Council members have any initial concerns with the concept of

taking on the cost of constructing the trails, and making this a priority capital project so that trails can be completed prior to occupancy of the site by new residents?

- Council noted that this is a means of keeping the cost of the development down.
- Council further noted that Resort Municipality Initiative funding could be used for trail development.
- Council noted the need to protect Olsen Bay, and the trail could help achieve this.

Do Council members have any initial concerns with a proposal to remove a 30-metre treed buffer along Highway 4 and substantial tree clearing throughout the developable lands that would maximize the area for housing construction on the 221 Minato Road site, and which would diverge from OCP Policies 3.162, 3.163 and 3.171 meant to limit the clearing of trees and changes to the public entrance to town?

- Council noted the trees should be sustained as they provide a benefit to the residents in the subdivision and for the appeal they provide at the entryway into the community.
- Council further noted that this should receive public input and a compromise should be considered.
- Council noted that the terrestrial habitat benefit on the site is limited.
- Council noted that the site is currently disturbed, and this would result in the treed entrance to town being moved about 800 m to the north and would not have a negative visual impact.
- Council noted that this sacrifice may be necessary for the requested density.
- Council noted concerns with tree blowdown when eliminating a buffer.

Do Council members support extending the 50km/hr speed zone northwest by approximately 1000m and staff making a request to the Ministry of Transportation and Infrastructure (MoTI) in advance of receiving a development application by ERIF.

- Council noted support for this proposal, especially given the road parking at the Ancient Cedar loop trail entrance.
- Council noted that it would have limited impact on transportation times.
- Council noted that it may be beneficial to reduce the speed limits to 40 km/h throughout town rather than reducing speeds only in this area.

Do Council members expect that if a zoning amendment and other approvals are granted, the affordable and/or attainable housing units



would need to be ensured through housing agreements and covenants that are administered and monitored by the municipality or an experienced qualified third-party?

- Council noted the need to develop a Housing Authority to administer and monitor the affordable and attainable portions of the development.
- Council noted that a Housing Authority would be useful for other developments.

Do Council members have any initial concerns with the concept of extending a commercial designation to the area on the corner of Minato Road?

- Council noted that this location may be ideal for services like convenience stores near the new housing.
- Council noted other approved commercial developments near this site at the entrance of town.

Do Council members have any initial concerns over a component of short-term rentals (STRs) in the current proposal at 221 Minato Road?

- Council noted that STRs may be supportable where affordable housing is provided as part of the development.
- Council noted that the STRs may be essential to allow the development of affordable housing.
- Council noted that STRs may be essential revenue for the homeowners in this proposed development.
- Council expressed concern that the ten waterfront homes could become whole home STRs sitting vacant when not rented. In response Staff clarified that the zoning bylaw could be tailored to prohibit whole home STRs in this development.

Subject to meeting environmental and servicing requirements, and subject to public comment, do Council members have any initial concerns with the concept of a temporary manufacturing facility on the eastern portion of the site?

- Council noted that this may be necessary to get the affordable housing.
- Council noted that a manufacturing facility may create less noise and waste than a typical construction site. Council also noted that the District limits the manufacturing facility's impact on the environment.
- Council noted the temporary manufacturing facility is fundamental to the developer's approach to building affordable housing.

## **9. NOTICE OF MOTION**

There were no notices of motion.

## 10. CORRESPONDENCE

### 10.1 Correspondence Related to the Sunset Point Boardwalk

Staff clarified that the boardwalk was built nearly 20 years ago by the developer and is in a state of disrepair. Staff have a plan to replace the boardwalk with a gravel path and repair the viewpoint platform.

Staff further noted a requirement in the Land Title Act that subdivisions that front onto a body of water in the ocean are to provide public access by road right of way, unless it is exempted. An exemption was granted for the Sunset Point subdivision, with the requirement that a statutory public right of way be provided instead of the road dedication.

Council noted that littering could be considered a bylaw enforcement issue and trespassing is a RCMP issue.

### 10.2 Correspondence Related to Stop Signs at Bay Street and Peninsula Road

Council noted that there is a staff report forthcoming on this matter.

### 10.3 Clayoquot Biosphere Trust Letter Dated September 24, 2024

Council noted this letter and the associated invitations to the following:

- Exhibit in observance of the National Day of Truth and Reconciliation held at the Ucluelet Secondary School on Monday, September 30th from 10:00 AM to 3:00 PM, and
- The Clayoquot Biosphere Trust Fall Regional Forum held at Tin Wis on Thursday, October 24th from 8:30 AM to 4:00 PM.

Councillor Anderson left the meeting at 6:05 PM and returned at 6:08 PM.

## 11. INFORMATION ITEMS

### 11.1 Fire and Emergency Services 2024 Q1-Q2 Report *Rick Geddes, Fire Chief*

Chief Geddes presented this report.

In response to Council noting that the majority of calls are relate to medical incidents and motor vehicle incidents, the Fire Chief noted that there are fewer fire related calls because of the improved building and fire code provisions related to chimneys.

In response to Council questions, the Fire Chief noted the need to focus

on recruitment and retention. He recommended that Council consider funding partial benefits for Volunteer Fire Fighters and instituting an paid on-call system. Both proposals will be brought forward during the budget process.

## **12. MAYOR'S ANNOUNCEMENTS AND COUNCIL COMMITTEE REPORTS**

### **12.1 Councillor Shawn Anderson *Deputy Mayor, April 1 - June 30, 2024***

Councillor Anderson:

- met with MLA Babchuk on September 4th to discuss the North Island College initiative that is offering micro-credentials for students involved in the kelp industry;
- attended Ukee Days volunteer appreciation night and the ERIF open house on September 11th;
- attended the Ucluelet Chamber of Commerce Economic Development Committee meeting, and later attended the Yuułu?ił?ath Government Council to Council Leadership meeting on September 12th;
- attended the Ucluelet Soapbox Derby on September 14th; and
- attended the Union of British Columbia Annual Convention from September 16th to 20th. Councillor Anderson noted meetings with North Island College to discuss kelp farming in the area and Island Health to discuss the recruitment of rotational specialists for the community.

### **12.2 Councillor Jennifer Hoar *Deputy Mayor, January 1 - March 31, 2024***

Councillor Hoar:

- attended a Vancouver Island Regional Library Board meeting on September 14th where their budget was reviewed. Councillor Hoar noted the need for increased funding to libraries as funding has been frozen for years;
- attended the Union of British Columbia Annual Convention from September 16th to the 20th and noted here highlights were the George Stroumboulopoulos presentation discussing 'The Art of Listing' and the session on Mental Health.

Councillor Hoar also encouraged people to attend the Ucluelet Secondary School exhibit in observance of the National Day of Truth and Reconciliation.

### **12.3 Councillor Ian Kennington *Deputy Mayor, July 1 - September 30, 2024***

Councillor Kennington attended the Union of British Columbia Annual Convention from September 16th to the 20th. His highlights were:

- attending the Tools to Implement New Housing Legislation presentation where expanding the scope of development cost charges was discussed, inclusionary zoning was explained and the housing needs report calculator was presented; and
- meeting with North Island College to discuss kelp farming in the area.

#### **12.4 Councillor Mark Maffei**

***Deputy Mayor, October 1 - December 31, 2024***

Councillor Maffei

- attended the Ucluelet Soapbox Derby on September 14th;
- attended the Union of British Columbia Annual Convention from September 16th to the 20th where he met with North Island College and noted the 'What's Next for Housing' panel discussions;
- attended the Cultural Heritage Festival on September 21st including the Bullhead Derby.

#### **12.5 Mayor Marilyn McEwen**

Mayor McEwen:

- attended the Alberni-Clayoquot Regional District (ACRD) West Coast Committee meeting on September 4th, where it was noted that class A compost is now available at the landfill and the Pacific Rim National Park shared their visitors statistics;
- attended the Barkley Community Forest (BCF) meeting on September 11th and noted that BCF is planning an open house to be held at the Ucluelet Community Centre on October 22nd;
- also on September 11th, attended an ACRD Board meeting and open house hosted by ERIF on the proposed development at 221 Minato Bay;
- attended the Yuułu?if?ath Government (YG) Council to Council Leadership meeting on September 12th and noted that YG received grant funding to build 57 new homes in the next two years; and
- attended the Union of British Columbia Annual Convention from September 16th to the 20th. Mayor McEwen noted that her highlights were George Stroumboulopoulos' 'The Art of Listening' presentation, the Mental Health session, and the meeting with North Island College.

### **13. QUESTION PERIOD**

Joshua Hunt, CEO of ERIF Sustainable Solutions clarified that ERIF is a housing provider and noted the concerns Council conveyed will be considered in their application.

Mike Baird, a resident of Sunset Point Subdivision, expressed concerns with the public path on Sunset Point. He submitted that if the boardwalk is replaced with a gravel path, the barrier to his property would be removed and he would have to install a fence which the District should finance.

## 14. CLOSED SESSION

### 14.1 Procedural Motion to Move In-Camera

2024.2286.REGULAR *IT WAS MOVED AND SECONDED:*

*THAT the September 24, 2024 Regular Council Meeting be closed to the public pursuant to the following sections of the Community Charter:*

- 90(1)(e) the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality; and*
- 90(2)(b) the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party.*

CARRIED.

The meeting was closed to the public at 6:50 PM.

## 15. ADJOURNMENT

### 15.1 Procedural Motion to Adjourn

Council returned to open session at 7:53 PM.

2024.2287.REGULAR *IT WAS MOVED AND SECONDED:*

*THAT the September 24, 2024, Regular Council Meeting be adjourned at 7:53 PM.*

CARRIED.

## CERTIFIED CORRECT:

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Duane Lawrence, Corporate Officer

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Marilyn McEwen, Mayor



# NOTICE OF PUBLIC HEARING

## Zoning Amendment Bylaws & Development Variance Permits



Pursuant to Section 464, 466, and 499 of the *Local Government Act*, notice is hereby given that Public Hearings will be held during the **December 10, 2024, Regular Council Meeting, which commences at 4:00 PM**. This Regular Council Meeting will be held both in-person in the **George Fraser Community Room in the Ucluelet Community Centre, located at 500 Matterson Drive, Ucluelet B.C.** and electronically via the Zoom platform. The Public Hearings are being held to allow Council to receive public input on *District of Ucluelet Zoning Amendment Bylaw No. 1355* and associated Development Variance Permit (DVP) 24-04, as well as *District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024*, and associated DVP 24-08.

### Zoning Amendment Bylaw No. 1355, 2024 & Development Variance Permit 24-04

**Application Numbers:** RZ24-09 and DVP24-04

**Applicants:** Go Cabin Vacation Property Management Inc.

**Location:** 1082 Peninsula Road

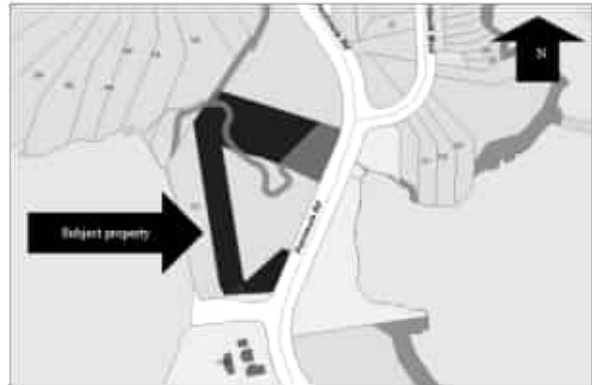
**Legal Description:** Lot 2, Plan EPP117265, Section 21, Clayoquot Land District

**Summary:** The zoning amendment bylaw and DVP application is to facilitate a 3-lot subdivision of the subject property and subsequent stratification of 13 existing resort condominiums.

**Zoning Amendment Bylaw No. 1355:** The purpose of this proposed Bylaw, in general terms, is to amend *District of Ucluelet Zoning Bylaw No. 1160, 2013*, to allow a minimum lot size of 680m<sup>2</sup> for the subject property, whereas the Zoning Bylaw requires a minimum lot size of 1000m<sup>2</sup>.

**DVP24-04:** The purpose of this proposed DVP, in general terms, is to vary the *District of Ucluelet Zoning Bylaw No. 1160, 2013* to permit:

- a minimum front yard setback for a proposed *Resort Condo* cabin of 2m, whereas 6m is required;
- a minimum front yard setback for an existing accessory building of 1m, whereas 6m is required; and
- a minimum exterior side yard setback for an existing accessory building of 2.5m, whereas 6m is required.



### Zoning Amendment Bylaw No. 1356, 2024 & Development Variance Permit 24-08

**Application Numbers:** RZ24-11 and DVP24-08

**Applicants:** Ann Kim and Helen Cho

**Location:** 1768 Peninsula Road

**Legal Description:** Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District

**Summary:** The zoning amendment bylaw, DVP, and minor sitework would bring existing legally non-conforming site characteristics into compliance with current bylaws to facilitate an application for the site to be subdivided into two land parcels.

**Zoning Amendment Bylaw No. 1356:** The purpose of this proposed Bylaw, in general terms, is to amend *District of Ucluelet Zoning Bylaw No. 1160, 2013*, to:

- change the designation of the northeastern most 501.6m<sup>2</sup> of the subject property from CS-2 Service Commercial to CS-1 Village Square Commercial zoning;
- decrease the lot frontage minimum and lot size minimum; and
- define the number of allowable *Resort Condo* units to be 1 or 2 units.

**DVP24-08:** The purpose of this proposed DVP, in general terms, is to vary the *District of Ucluelet Zoning Bylaw No. 1160, 2013* to permit:

- a minimum interior side yard setback of 0m for an existing building, whereas 1.5m is required;
- 5 parking spaces, whereas 8 spaces are required;
- a parking aisle width of 6.3m, whereas 7.5m is required; and
- narrower landscaping widths and heights than is required.



Anyone who believes these Bylaws or DVPs would affect their interests may make a written submission and will be given an opportunity to be heard at the Public Hearing as follows:

**Participate by written submission:** All written submissions must include your name and street address and should reference the application number in the subject line. Any submission dropped-off at the District Office or mailed must be received by 4:00 pm on the day of the Public Hearing. Written submissions are considered part of the public record pursuant to the *Freedom of Information and Protection of Privacy Act*.

**Drop-off at the District Office**  
200 Main Street,  
Ucluelet B.C.

**Drop-off at the Public Hearing**  
George Fraser Community Room,  
Ucluelet Community Centre, 500  
Matterson Drive, Ucluelet B.C.

**Mail**  
District of Ucluelet  
P.O. Box 999  
Ucluelet B.C.  
V0R 3A0

**Email**  
[communityinput@ucluelet.ca](mailto:communityinput@ucluelet.ca)

**Participate in-person, by Zoom, or telephone:**

**Participate in-person**  
George Fraser Community  
Room in the Ucluelet  
Community Centre, 500  
Matterson Drive, Ucluelet B.C.

**Participate by Zoom or telephone**  
Information about participating electronically, including Zoom login details, is available at [Ucluelet.ca/CouncilMeetings](http://Ucluelet.ca/CouncilMeetings) and [Ucluelet.ca/PublicHearings](http://Ucluelet.ca/PublicHearings). Council Meetings are also live streamed on the District of Ucluelet's YouTube Channel.  
For more information contact the Corporate Service Department at 250-726-7744.

**Review related materials:**

Copies of the proposed Bylaws, DVPs, and the public hearing information packages may be inspected at the District of Ucluelet Office, 200 Main Street, Ucluelet B.C., during regular business hours (Monday to Friday, 8:30 a.m. - 4:00 p.m., excluding statutory holidays) and online at [Ucluelet.ca/PublicHearings](http://Ucluelet.ca/PublicHearings).

**Questions?**

Contact the District of Ucluelet Planning Department at 250-726-7744 or [planning@ucluelet.ca](mailto:planning@ucluelet.ca).

**Privacy disclaimer**

Public Hearings are webcast live and a recording is available on the District's YouTube channel. Correspondence you submit, including name and address, will form part of the public record, and will be published on the District's website or read into the record. The District considers your name and address relevant to this matter and will disclose this personal information as it informs Council's consideration of your opinion in relation to the subject property. However, your phone number and email address will not be disclosed.

Personal information is collected by the District under the authority of s. 26 (c) of the *Freedom of Information and Protection of Privacy Act* for the purpose of administering the Public Hearing. Please direct any questions about personal information to District's Privacy Officer by telephone: (250) 726-7744, email: [jrotenberg@ucluelet.ca](mailto:jrotenberg@ucluelet.ca), or mail: P.O. Box 999, Ucluelet, BC, V0R 3A0.



## DISTRICT OF UCLUELET

### Bylaw No. 1355, 2024

A bylaw to amend the "District of Ucluelet Zoning Bylaw No. 1160, 2013".

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**WHEREAS** Section 479 and other parts of the Local Government Act authorize zoning and other development regulations;

**NOW THEREFORE** the council of the District of Ucluelet, in open meeting assembled, enacts as follows;

#### 1. Citation

This bylaw may be cited as "District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024".

#### 2. Text Amendment

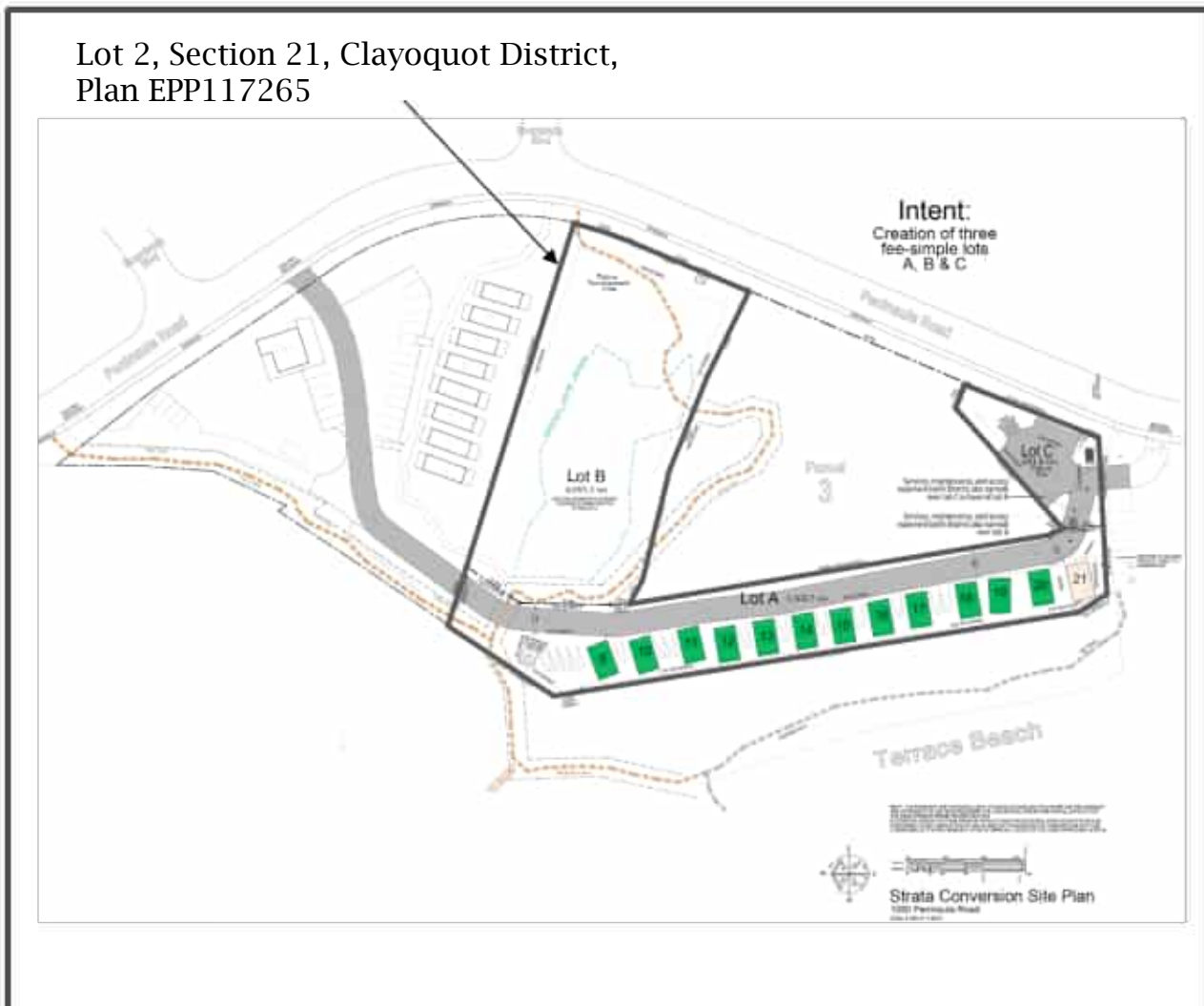
The District of Ucluelet Zoning Bylaw No. 1160, 2013, as amended, is hereby further amended by adding a new subsection alphanumerically in Schedule B – The Zones within the CS-5 Zone – TOURIST COMMERCIAL such that the new subsection reads as follows:

**"CS-5.7 Other Regulations:**

CS-5.7.1 Notwithstanding other regulations of this bylaw, the lands legally described as Lot 2, Section 21, Clayoquot District, Plan EPP117265 and labeled "Lot C" on the Future Subdivision Map below, the Minimum Lot Size is 680m<sup>2</sup>."

## Future Subdivision Map

Lot 2, Section 21, Clayoquot District,  
Plan EPP117265



**READ A FIRST TIME** this 24<sup>th</sup> day of **September, 2024**.

**READ A SECOND TIME** this 24<sup>th</sup> day of **September, 2024**.

**SECOND READING RESCINDED** this 12<sup>th</sup> day of **November, 2024**.

**AMENDED** this 12<sup>th</sup> day of **November, 2024**.

**READ A SECOND TIME AS AMENDED** this 12<sup>th</sup> day of **November, 2024**.

**PUBLIC HEARING held** this \*\* day of \*\*\*, 2024.

**READ A THIRD TIME** this \*\* day of \*\*\*, 2024.

**ADOPTED** this \*\* day of \*\*\*, 2024.

**CERTIFIED CORRECT;** "District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024".

---

Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

---

Duane Lawrence  
Corporate Officer



## DEVELOPMENT VARIANCE PERMIT DVP24-04

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**GO CABIN VACATION PROPERTY MANAGEMENT INC.**  
(the "Owner")

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures and other development thereon:

**PID 032-127-812, Lot 2, Plan EPP117265, Section 21, Clayoquot Land District**

3. The work authorized by this Permit may only be carried out in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, for the future parcels specified on the Future Subdivision Map attached as **Schedule A**, and for the proposed creation of a phased strata on proposed Lot A:

- i. Lot A: a minimum front yard setback for a proposed resort Condo Cabin of 2.0 m, whereas section CS-5.6.1 (1) (a) of the zoning bylaw indicates a minimum of 6.0 m.
- ii. Lot C: a minimum front yard setback for an existing accessory building of 1.0 m, whereas section CS-5.6.1 (2) (a) of the zoning bylaw indicates a minimum of 6.0 m.
- iii. Lot C: a minimum exterior side yard setback for an existing accessory building of 2.5 m, whereas section CS-5.6.1 (2) (d) of the zoning bylaw indicates a minimum of 6.0 m.

5. The above variances are granted for the proposed initial subdivision and buildings on the Land as shown on Schedule A. Should the Land or portions of the Land be redeveloped at some future date, this Development Variance Permit shall cease to apply and the zoning in effect at the time shall apply.

6. This permit is valid for a period of 24 months from the date of issuance. If by that time a final plan of subdivision is not registered with the BC Land Title Survey Authority in general accordance with Schedule A, then this Development Variance Permit shall cease to apply and the zoning standards in effect at the time shall apply.

7. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.

8. This Permit is NOT a Building Permit.

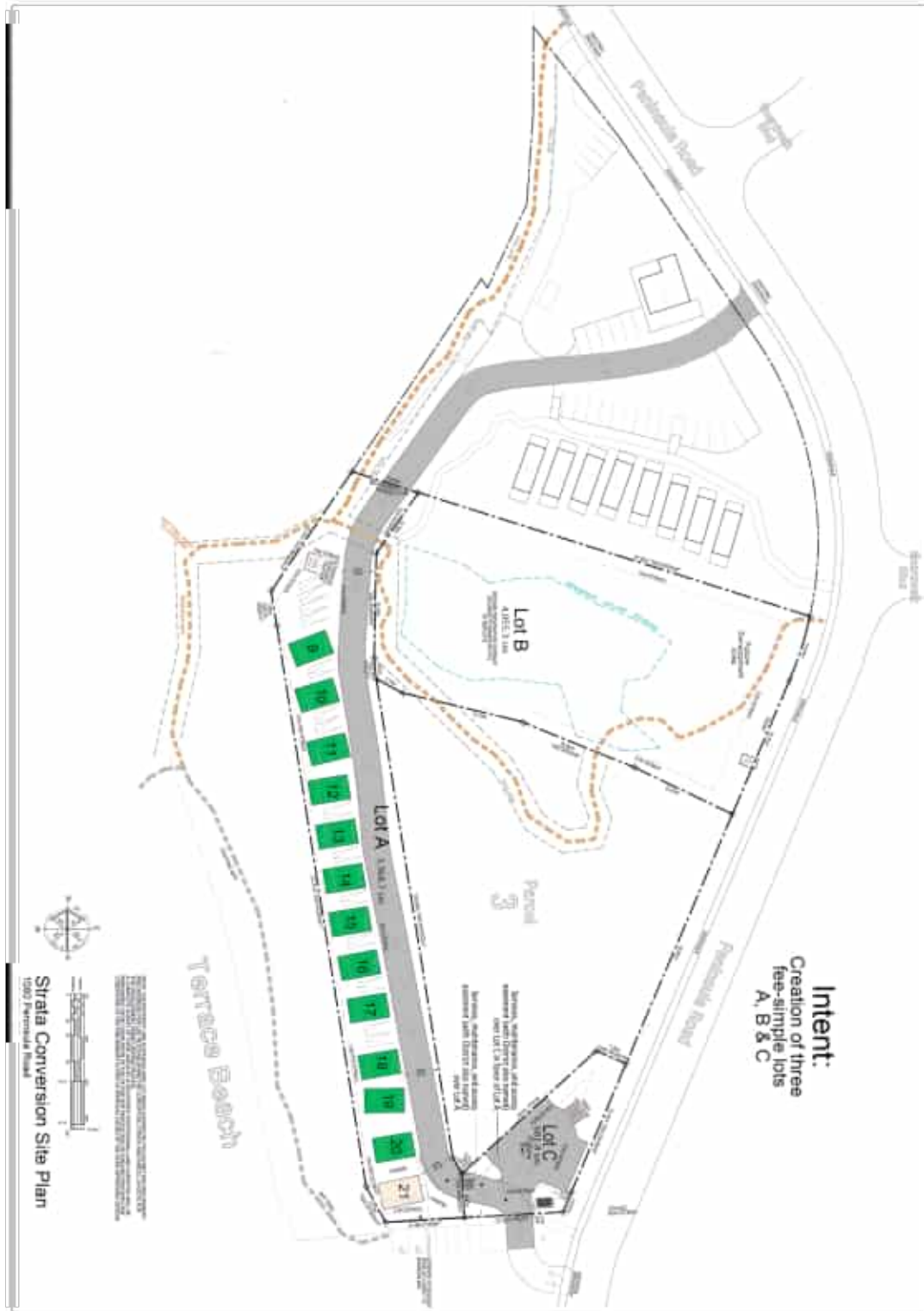
**AUTHORIZING RESOLUTION** passed by the Municipal Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

**ISSUED** the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

---

Bruce Greig  
Director of Community Planning

**SCHEDULE A**









## REPORT TO COUNCIL

Council Meeting: November 12, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

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**FROM:** JOHN TOWGOOD, MUNICIPAL PLANNER

**FILE NO:** 3360-20-REZ24-09 3090-20-DVP24-04

**SUBJECT:** ZONING AMENDMENT AND DVP FOR LOT 2 PLAN EPP117265

**REPORT NO:** 24-114

**ATTACHMENT(S):** APPENDIX A – REPORT 24-94 AND APPENDICES DATED SEPTEMBER 24, 2024  
APPENDIX B – AMENDED FUTURE SUBDIVISION MAP  
APPENDIX C – ZONING AMENDMENT BYLAW NO. 1355, 2024 (AS AMENDED)  
APPENDIX D – DEVELOPMENT VARIANCE PERMIT 24-04 (AS AMENDED)

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### RECOMMENDATION(S):

1. **THAT** Council repeal second reading of *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*.
  2. **THAT** Council amend *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024* by:
    - a. removing subsections CS-5.7.1(2) and CS-5.7.1(3) from the bylaw's text amendment; and,
    - b. replacing the Future Subdivision Map with the map attached to staff report 24-114 as Appendix B.
  3. **THAT** Council give second reading to *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, as amended.
  4. **THAT** Council direct Staff to give notice for a public hearing to be held on the amended *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, and Development Variance Permit 24-04.
- 

### BACKGROUND:

On September 24, 2024, Council received a report (**Appendix A**) outlining a request to amend and vary *Zoning Bylaw No. 1160, 2013*, to facilitate the fee simple and phased strata subdivision of Lot 2, Section 21, Clayoquot District, Plan EPP117265. Council gave first and second reading to *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, the corresponding bylaw for this request. On September 26<sup>th</sup> the applicant notified planning staff that there was no longer a requirement to create a phased strata because the owner plans to build the 13<sup>th</sup> cabin immediately.

**DISCUSSION**

This change proposed by the applicant requires that *Bylaw No. 1355* be amended prior to the public hearing. The specific changes are the removing subsections CS-5.7.1(2) and CS-5.7.1(3) from the bylaw’s text amendment and a replacement of the Future Subdivision Map with the updated map attached to this report as **Appendix B**. The Development Variance Permit is also required to be modified by removing Clause 4.i (minimum frontage variance now no longer required) and adding the following variance in its place:

“Lot A: a minimum front yard setback for a proposed *Resort Condo* cabin of 2.0 m, whereas section CS-5.6.1 (1) (a) of the zoning bylaw indicates a minimum of 6.0 m.”

Other than the changes proposed in this report the application remains the same and the original report (**Appendix A**) can be referenced for this application.

**ANALYSIS OF OPTIONS:**

A	Council repeal second reading, amend and then give second reading to District of Bylaw No. 1355, and Direct Staff to give notice of public hearing	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Would allow District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 to advance to a public hearing.</li> <li>• The applicant would receive their desired outcome.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• Would allow District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 to advance to a public hearing.</li> <li>• DVP and other decisions of Council would be considered at a future meeting once notification has been completed.</li> </ul>
B	Modify the draft zoning bylaw prior to second reading directing Staff to give notice of first reading.	<u>Pros</u>	<ul style="list-style-type: none"> <li>• A modification to the bylaw amendment that Council deems appropriate may be beneficial to the application.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• The application would be delayed.</li> </ul>
		<u>Suggested Motion</u>	<ul style="list-style-type: none"> <li>• THAT Council directs Staff to modify the draft <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i>, to <b>(state desired outcome of amendments)</b>, for further consideration at a future meeting.</li> </ul>
D	Reject the application.	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• The application would not proceed.</li> <li>• Additional Staff time will be required to follow up with applicant and consultants.</li> </ul>
		<u>Suggested Motion</u>	<ul style="list-style-type: none"> <li>• THAT <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i> be rejected; and,</li> </ul>

	THAT Council direct Staff and to advise the applicant that in order to proceed with the development the following changes are necessary: [state reasons].
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**POLICY OR LEGISLATIVE IMPACTS:**

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This application would amend and vary *District of Ucluelet Zoning Bylaw No. 1160, 2013*.

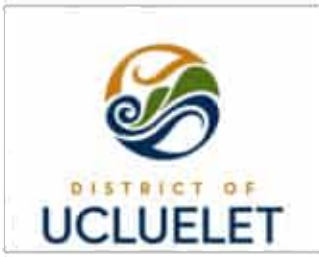
**NEXT STEPS:**

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If Council directs Staff to give notice of public hearing for *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, and DVP24-04, Staff will schedule the public hearing and undertake the necessary notification.

Respectfully submitted:

JOHN TOWGOOD, MUNICIPAL PLANNER  
BRUCE GREIG, DIRECTOR OF COMMUNITY PLANNING  
DUANE LAWRENCE, CAO



# Appendix A - report 24-94

## REPORT TO COUNCIL

Council Meeting: September 24, 2024

500 Matterson Drive, Ucluelet, BC V0R 3A0

FROM: JOHN TOWGOOD, MUNICIPAL PLANNER

FILE NO: 3360-20-REZ24-09 3090-20-DVP24-04

SUBJECT: ZONING AMENDMENT AND DVP FOR LOT 2 PLAN EPP117265

REPORT NO: 24-94

ATTACHMENT(S): APPENDIX A – APPLICATION  
APPENDIX B – ZONING AMENDMENT BYLAW NO. 1355  
APPENDIX C – DEVELOPMENT VARIANCE PERMIT 24-04

### RECOMMENDATION(S):

1. **THAT** Council give first and second reading to *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*; and
2. **THAT** Council direct Staff to give notice for a public hearing to be held on *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024* and Development Variance Permit 24-04.

### BACKGROUND:

In 2020, Go Cabin Vacation Property Management Inc. (the “**Applicant**”) developed an abandoned segment of Peninsula Road as an extension of their existing “The Cabins at Terrace Beach” resort. This development involved zoning amendments, road dedications, consolidation of multiple parcels of land, trail dedications, and a return of land to the Yuułuʔiłʔatḥ Government. Once all approvals were completed, building permits were issued for twelve cabins and those cabins have now been built.

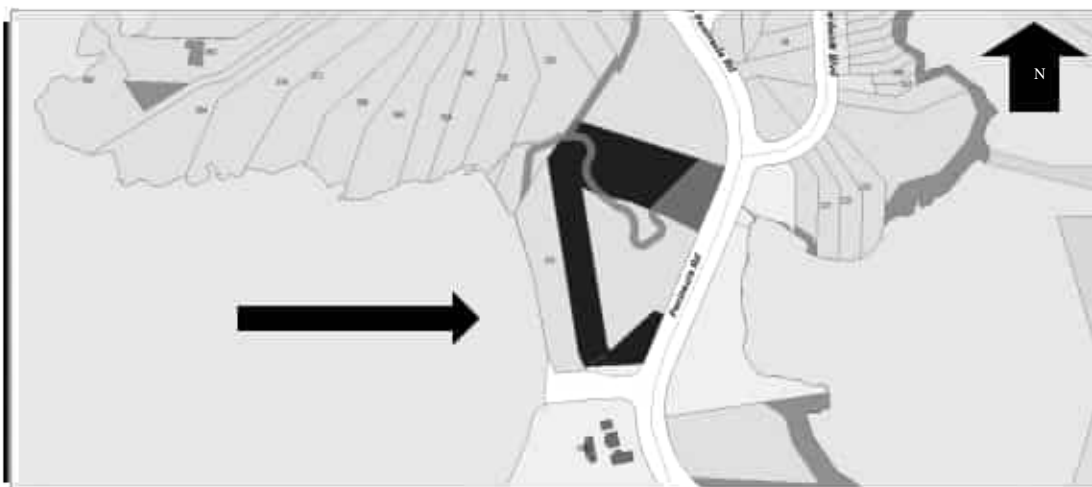


Figure 1. Area of Lot 2 Plan EPP177265

### DISCUSSION:

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The new cabins are located on part of the new Lot 2, Section 21, Clayoquot District, Plan EPP117265 (see **Figure 1**).

The applicant wishes to stratify the newly created cabins so that each of the twelve cabin buildings would have a separate strata title. This would be accomplished in two steps. The first step would be to create a subdivision of three fee-simple lots from the parent Lot 2. The second step would be to register a phased strata subdivision over the proposed new Lot "A" initially containing the twelve new cabins. A future phase of the phased strata would include the small remainder of Lot "A" which could accommodate a thirteenth cabin that was part of the owners' original plans (as was approved in the DP for this development).

### Step One:

The following three proposed lots would be created by the first step, as shown in **Figure 2** below:

- **Lot A** – is a 3,368.7sqm property containing the twelve recently constructed cabins, access road, and services. This proposed parcel would be subsequently subdivided as a phased building strata (further described below and in **Figure 3**).
- **Lot B** – is a 4,055sqm property with developable area near the Peninsula Road frontage with the remainder of the rear lot containing a wetland. The wetland has been defined by a biologist and the new lot created by this subdivision would retain the wetland protection covenant charge CB1208206 on its title. Access and services would be from Peninsula Road.
- **Lot C** – is a 681.8sqm property with developable area fronting Peninsula Road and with access from the municipal Seabridge Way road right-of-way. Access easements would need to be registered over the new Lot C for the services and access (including fire access) crossing from Lot A to Seabridge and Peninsula.

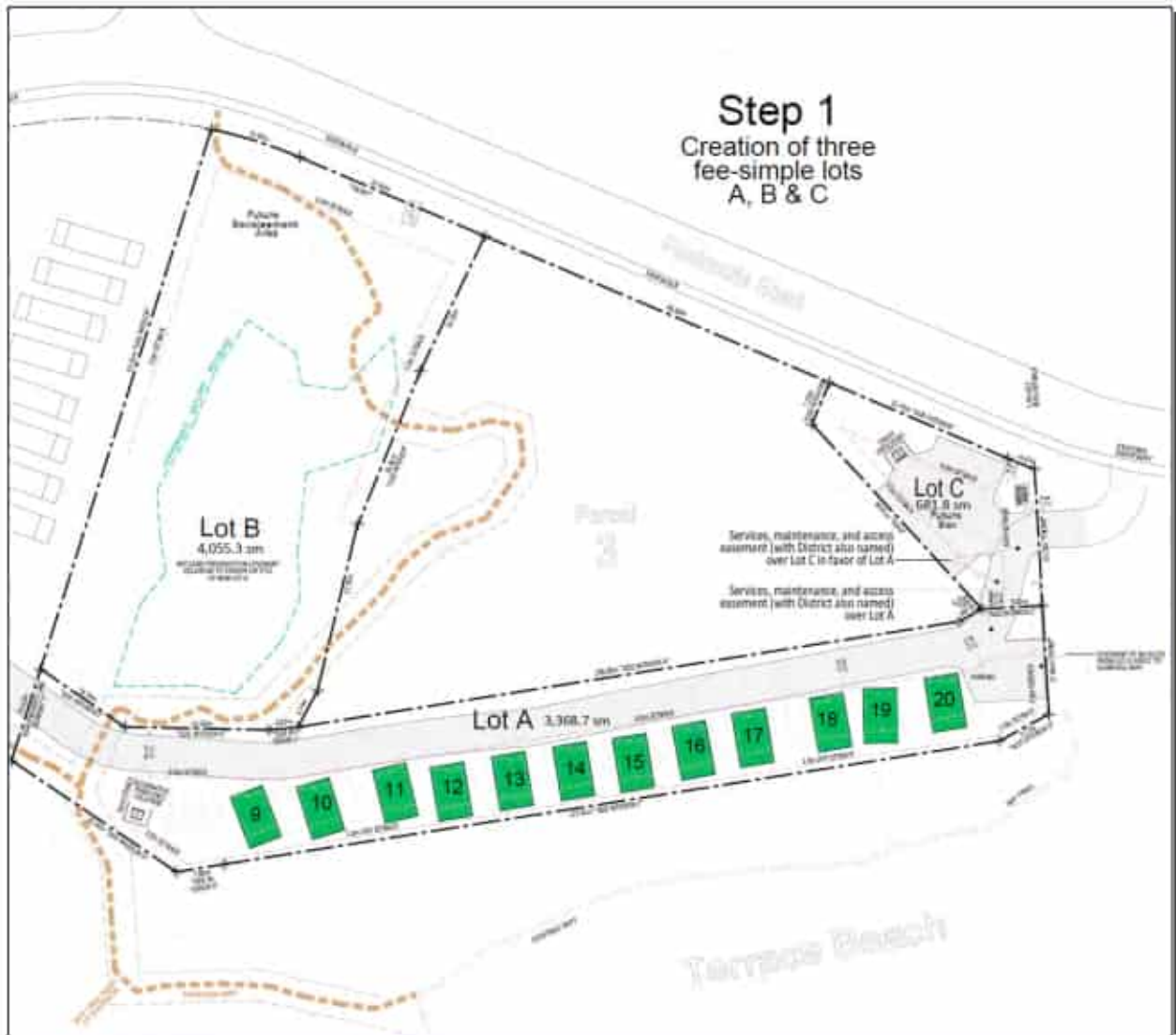


Figure 2 – Future Subdivision: Step One (three fee-simple parcels)

Step Two:

The second proposed step would see the owners register a phased strata plan for the cabins on the new Lot A. This could happen immediately following the registration of the subdivision plan discussed as step one, above. The plan would create a strata containing the 12 existing cabins, with a small remainder parcel (see **Figure 3**) which could accommodate a 13<sup>th</sup> cabin at a later date.

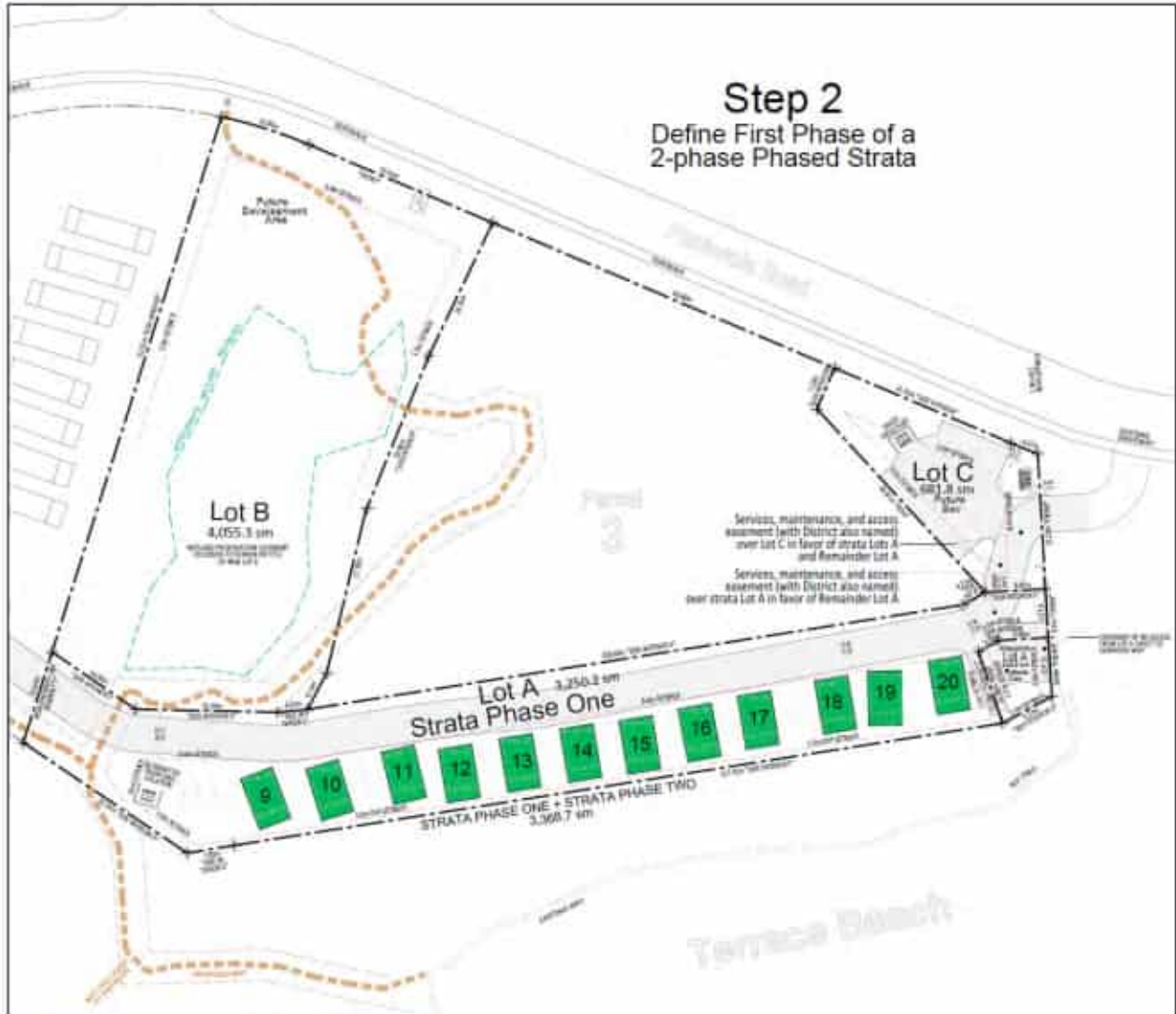


Figure 3 - Future Subdivision: Step Two (phased strata of Lot A)

Zoning:

The property is currently zoned CS-5 Tourist Commercial. It is proposed that the property retain the CS-5 zoning designation, with the following subsection added to achieve the applicant’s desired outcome:

**“CS-5.7 Other Regulations:**

CS-5.7.1 Notwithstanding other regulations of this bylaw, on the lands legally described as Lot 2, Section 21, Clayoquot District, Plan EPP117265, the following regulations apply in the areas of the lands outlined in thick dashed lines and as labelled on the Future Subdivision Map at the bottom of this section:

- (1) In the area of the proposed Lot C:
  - a. Minimum Lot Size: 680m<sup>2</sup>

- (2) In the area of the proposed Lot A:
  - a. Minimum Front Yard setback: 3.0m
  - b. Minimum Side Yard Interior setback: 1.0m
- (3) In the area of the proposed Remainder Lot A:
  - a. Minimum Lot Size: 118.0m<sup>2</sup>
  - b. Minimum Front Yard setback: 3.0m
  - c. Minimum Rear Yard setback: 1.5m
  - d. Minimum Side Yard Exterior setback: 1.0m
  - e. Minimum Side Yard Interior setback of 0.0m
  - f. On proposed Remainder Lot A, a *Resort Condo* use may contain one unit.”

The above amendment to the zoning regulations would provide the necessary adjustments to allow the minimum lot sizes for Lot C and the Lot A remainder, and reduced setbacks for Lot A and the Lot A remainder matching the approved DP and DVP that were issued for the cabin construction. The requested zoning amendments align with the development plan presented for the 2020 development permit, affecting only the internal lot configuration and maintaining the public realm within Seabridge Way.

### Development Variance Permit

The applicant will need variances to the zoning bylaw to allow the proposed subdivision. These variances are specified in Development Variance Permit (DVP) 24-04 which is attached as **Appendix “C”** of this report. Similar to the requested zoning amendments, the requested variances are in line with the development plan anticipated in the 2020 development permit.

The DVP would permit a reduced frontage for Lot A – necessary during the first phase of the phased strata (the minimum frontage in the CS-5 zone would be met once the second phase were to join the strata). The two setbacks varied by the DVP would legalize an existing electrical shed on the area of the property proposed as Lot C, sited to meet Hydro requirements near Peninsula Road and Seabridge Way.

### No Access Covenant to Seabridge Way

To ensure that Lot A, Lot C and the Lot A remainder will be accessed from the current development’s existing internal access road, a no-access Section 219 covenant would be applied to those future properties. This covenant would specifically restrict any additional access points from Seabridge Way. The District is to be named on these covenants, so that future owners could not discharge the covenant without first obtaining approval from the municipality.

### Servicing and access covenants:

To ensure access and servicing rights to Lot A and Lot C a set of covenants and easements will be required. The District of Ucluelet will need to be a party to some of these agreements to ensure that the charges could not be removed from the property title without District approval.



**Frontage - Local Government Act:**

Both Lot A and the remainder of Lot A (the remainder would be a smaller fee-simple parcel at the conclusion of the first phase of the proposed phased strata) do not meet the minimum frontage required under section 512(2) of the *Local Government Act* which states:

*512(1) If a parcel being created by a subdivision fronts on a highway, the minimum frontage on the highway must be the greater of:*

- (a) 10% of the perimeter of the lot that fronts on the highway, and*
- (b) the minimum frontage that the local government may, by bylaw, provide.*

With the adoption of the *District of Ucluelet Development Application Procedures Bylaw No. 1350, 2024*, the District of Ucluelet’s Approving Officer now has delegated authority to grant an exemption from the minimum frontage requirements under section 512.

**Servicing**

The Lot A remainder would require use of the existing services for Lot A. The proposed Lot C would either require access to the Lot A services or will be required to create new service connections on the Peninsula Road frontage. Lot B would only be serviced from Peninsula Road. As the proposed zoning amendment does not change the uses or densities currently allowed, a larger servicing capacities review is not triggered by this application.

**Fire Services**

The original development has been reviewed and approved by Ucluelet’s emergency services. There is no proposed change to the physical layout from the 2020 development plans.

**ANALYSIS OF OPTIONS:**

A	Council give first and second reading to District of Bylaw No. 1355, and Direct Staff to give notice of public hearing	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Would allow District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 to advance to a public hearing.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• Would allow District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 to advance to a public hearing.</li> <li>• DVP and other decisions of Council would be considered at a future meeting once notification has been completed.</li> </ul>

<b>B</b>	Modify the draft zoning bylaw prior to directing Staff to give notice of first reading.	<u>Pros</u>	<ul style="list-style-type: none"> <li>A modification to the bylaw amendment that Council deems appropriate may be beneficial to the application.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>The application would be delayed.</li> </ul>
		<u>Suggested Motion</u>	<p>THAT Council directs Staff to modify the draft <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i>, to <b>(state desired outcome of amendments)</b>, for further consideration at a future meeting.</p>
<b>D</b>	Reject the application.	<u>Pros</u>	<ul style="list-style-type: none"> <li>Unknown at this time.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>The application would not proceed.</li> <li>Additional Staff time will be required to follow up with applicant and consultants.</li> </ul>
		<u>Suggested Motion</u>	<p>THAT <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i> be rejected; and,</p> <p>THAT Council direct Staff and to advise the applicant that in order to proceed with the development the following changes are necessary: <b>[state reasons]</b>.</p>

POLICY OR LEGISLATIVE IMPACTS:

This application would amend the *District of Ucluelet Zoning Bylaw No. 1160, 2013*.

NEXT STEPS:

If Council directs Staff to give notice of public hearing of *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, Staff will schedule the public hearing and undertake the necessary notification.

Respectfully submitted:

JOHN TOWGOOD, MUNICIPAL PLANNER  
 BRUCE GREIG, DIRECTOR OF COMMUNITY PLANNING  
 DUANE LAWRENCE, CAO



Doug Cole Architect, AIBC  
16802 3rd Avenue  
La Conner, WA 98257  
360-466-2555

April 22, 2024  
(revised September 4, 2024)

District of Ucluelet Planning Department  
PO Box 999  
Ucluelet, BC V0R 3A0

Re: Application for Lot Subdivision & Strata Conversion at 1082 Peninsula Road  
Statement of Intent

Dear Planning Staff:

On behalf of the owners of The Cabins at Terrace Beach I am requesting District and ACRD reviews and approvals to subdivide the existing Cabins Lot 2 into four distinct tax parcels which for the purposes of this application we are calling Lot A, Remainder Lot A, Lot B and Lot C.

The property under consideration is the recently completed Cabins expansion project which included the construction of twelve cabins for “tourist commercial accommodation” uses within the zoning designation of CS-5. The parcel was developed under the conditions of Development Permit DP20-17, Development Variance Permit DVP21-02 and District of Ucluelet building permits BP22-08 thru BP22-19 (commonly referred to as Cabins 9-20). Construction of both site servicing and all twelve cabins is complete, with final occupancy permits issued for the project on May 16, 2024.

It is the ownerships desire to stratify that portion of the parcel which contains cabins 9-20 via the creation of “Lot A”. Additionally, the ownership wishes to create a separate lot adjacent to Cabin 20 which would accommodate a 13<sup>th</sup> cabin or other form of commercial use as allowed under the current zoning bylaw (“Remainder Lot A”). It should be noted that the original DP and DVP approved up to thirteen cabin units on the lands, however due to a variety of factors, only the first twelve were constructed, with the owner’s intention of preserving the right to place a structure on the remainder of the property at some time in the future. However, to do this, a distinct lot must be created with the option of it being absorbed into the strata at some future time.

In addition to Lot A and Remainder Lot A there are two additional parcels to be created. These are labeled on the site plan as “Lot B” and “Lot C” included in this application. Lot B is proposed as a one-acre parcel which includes an existing restrictive covenant protecting the wetland areas of the parcel. Some future development of Lot B may be warranted along the Peninsula Road end, however at this time we are only seeking to create the parcel itself. Lot C is the irregular-shaped area at the southeast end of the development. The original Development Permit contemplated a 1,900 sf Resort Condo/Mixed Use support facility with two nightly accommodations and

resort services in this location. That portion of the project was not brought forward to the point of a formal building permit application and the area had been used for construction staging, site servicing and utilities, and now provides an area for surface parking and a waste/recycle enclosure for Cabins operations and guest use. It should be noted that in the event of the future sale of Lot C, the trash and recycling enclosure facility could be relocated to be completely on Lot A as shown on the site plan exhibits.

Lastly, in the location where a 13<sup>th</sup> cabin was to have gone (cabin 21), we are proposing to preserve the right for a 13<sup>th</sup> structure to be constructed - which may join the strata at some time in the future. This structure would likely be in a similar form and character to the existing cabins and would request the same setbacks as were approved in the original Development Permit.

Both Lots A and Remainder Lot A would require an access easement over Lot C to Seabridge Way, and Lot A would require an access easement over Remainder Lot A as well.

A comparison of how each lot complies with the existing regulations for the CS-5 zone is attached to this letter. The areas of requested adjustment related to setbacks and lot sizes are shown in **red font** on that study and these represent our request for a zoning amendment to be applied to this parcel.

In general, there is nothing being requested in this application from a land use or density perspective beyond what was already approved during the original DP and DVP processes.

Thank you for your consideration and please do not hesitate to contact me with any questions or comments.

Sincerely,



Doug Cole, AIBC  
British Columbia Architect 2075

cc: Ross Elliott, Lougheed Properties  
Ron Clayton, Go Cabins Vacation Management  
Trevin Rogers, Baker Newby

attachments: Strata Conversion Site Plan, Bylaw Analysis

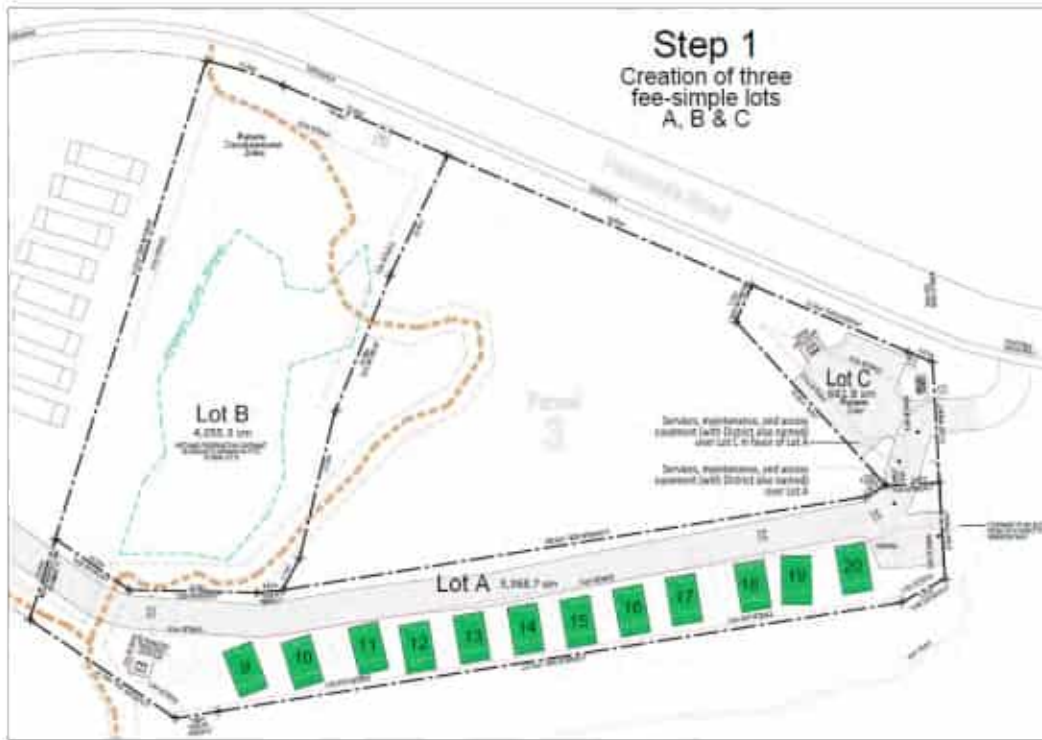
BYLAW ANALYSIS

BYLAW ANALYSIS							Red font indicates where modifications from current bylaws are requested						
R3 Cabins													
Strata Conversion													
5/16/2024 rev 9/4/2024													
Zoning: CS-5 Tourist Commercial			Units	Lot A	Remainder	Total Lot A	Lot B	Lot C					
Lot & Building Statistics				Lot A	Lot A	Total Lot A	Lot B	Lot C					
Lot Area (by proposed preliminary layout pre-survey)			m <sup>2</sup>	Strata Ph 1	Strata Ph 2	Phased Strata							
Building Gross Floor Areas - including balconies (for FAR)			Per Bldg.	12 Structures	1 Structure (Future)		Future Dev	Future Dev					
Building Footprints (for Lot Coverage)			m <sup>2</sup>	1613.7	134.5	1,748.2	tbd	tbd					
Bylaw Compliance				585.3	48.8	634.1	tbd	tbd					
CS-5.2 Lot Regulations			Bylaw Req	12 Units	1 Unit		Future Dev	Future Dev					
Minimum Lot Size / Compliant?			1000 m <sup>2</sup>	Yes	118.6 / No (a)	Yes	Yes	681.8 / No					
Minimum Lot Frontage / Compliant?			15.0 m	8.00 / No (b)	9.69 / No (b)	17.69 / Yes	87.3 / Yes	22.22 / Yes					
Minimum Lot Width			n/a	n/a	n/a	n/a	n/a	n/a					
Minimum Lot Depth			n/a	n/a	n/a	n/a	n/a	n/a					
CS-5.3 Density			Bylaw Req										
Maximum Floor Area Ratio & Max Gross Floor Areas			0.70 %	0.50	1.13	0.52	Future Dev	Future Dev					
Compliant?				Yes	No	Yes	tbd	tbd					
Maximum Lot Coverage & Max Building Footprint			40.0 ratio	18.0	41.1	18.8	Future Dev	Future Dev					
Compliant?				Yes	No	No	tbd	tbd					
CS-5.4 Maximum Size (Gross Floor Area)			Bylaw Req										
Principal Building			n/a	n/a	n/a	n/a	n/a	n/a					
Accessory Buildings			n/a	n/a	n/a	n/a	n/a	n/a					
CS-5.5 Maximum Height			Bylaw Req										
Principal Buildings & Structures			12.0 m	11.8 (c)	Future Dev	Future Dev	Future Dev	Future Dev					
Compliant?				Yes	tbd	tbd	tbd	tbd					
Accessory Buildings			5.5 m	n/a	n/a	n/a	tbd	Yes					
CS-5.6 Minimum Setbacks			Bylaw Req										
Principal Buildings & Structures				Proposed	Proposed	Proposed	Proposed	Proposed					
Front			6.0 m	3.0 (e)	3.0 (d)	3.0	6.0	6.0					
Rear			3.0 m	20.0 (f)	1.5 (g)	20 (h)	wetland tbd	3.0					
Side (Interior)			3.0 m	See below	See below	See below	3.0	3.0					
Side (Exterior)			6.0 m	see below	see below	see below	n/a	6.0					
LOT A Side (Interior) Setbacks													
Segment A, B, C, K, & L			3.0 m	8.0 (i)	8.0 (i)	8.0 (i)							
Segments D, F, & G (Terrace Beach)			3.0 m	1.0 (j)	1.0 (j)	1.0 (j)							
Segment E			3.0 m	1.5 (k)	1.5 (k)	n/a (k)							
Segment H			3.0 m	3.0	3.0	3.0							
Accessory Buildings													
Front			6.0 m	n/a	n/a	n/a	6.0	1.0 (l)					
Rear			3.0 m	n/a	n/a	n/a	wetland	3.0					
Side (Interior)			3.0 m	n/a	n/a	n/a	3.0	3.0					
Side (Exterior)			6.0 m	n/a	n/a	n/a	n/a	2.5 (l)					

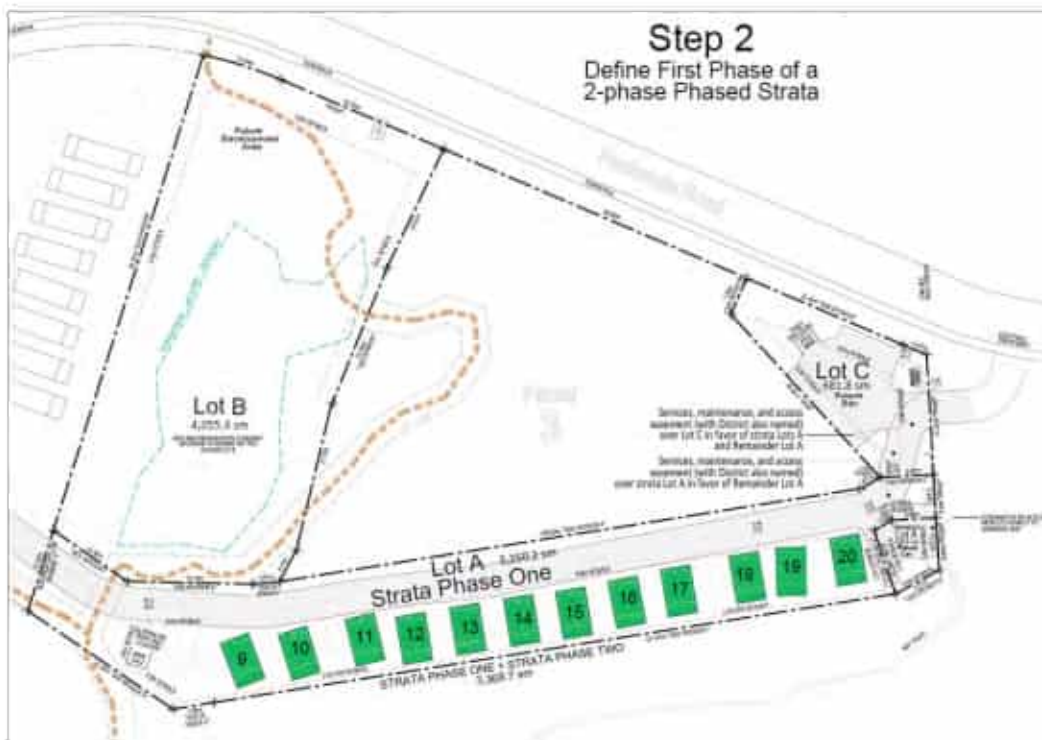
Footnotes

- (a) Upon joining the Strata, Remainder Lot A merges in with Lot A, which is already compliant in terms of minimum lot size. Until then the lot requires variance to the minimum lot size.
- (b) Lot A and Remainder Lot A are initially non-compliant in terms of lot frontage until such time Remainder Lot A joins the strata, then the merged lots frontage will become >15m along Seabridge Way.
- (c) Existing Building Heights are averages per survey. All existing buildings are height compliant.
- (d) Remainder Lot A proposes a 3.0m front yard setback to allow a structure of similar size to the existing cabins be placed on this parcel.
- (e) Proposing a 3.0m setback to match that of Remainder Lot A
- (f) 20m setback from the upper north end road to the flat area north of Cabin 9.
- (g) Remainder Lot A's front yard is against Seabridge way, leaving the rear yard towards Cabin 20.
- (h) Upon Remainder Lot A joining the strata, Remainder Lot A's property lines dissolve, leaving the 20m rear yard at the north end of the lot.
- (i) While 3m is the bylaw requirement, the 8m proposed respects the existing laneway.
- (j) Same as the originally approved DP & DVP.
- (k) Prior to merging of Lots A and Remainder Lot A, segment E is a "side interior" line for Lot A and a "rear yard" line for Remainder Lot A. Upon merging, this property line dissolves.
- (l) Recognizes existing meter shed.

STEP ONE: CREATE 3 FEE-SIMPLE LOTS



STEP TWO: CREATE A PHASED STRATA ON LOT A



DISTRICT OF UCLUELET

Bylaw No. 1355, 2024

A bylaw to amend the "District of Ucluelet Zoning Bylaw No. 1160, 2013".

WHEREAS Section 479 and other parts of the Local Government Act authorize zoning and other development regulations;

NOW THEREFORE the council of the District of Ucluelet, in open meeting assembled, enacts as follows;

1. Citation

This bylaw may be cited as "District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024".

2. Text Amendment

The District of Ucluelet Zoning Bylaw No. 1160, 2013, as amended, is hereby further amended by adding a new subsection alphanumerically in Schedule B – The Zones within the CS-5 Zone – TOURIST COMMERCIAL such that the new subsection reads as follows:

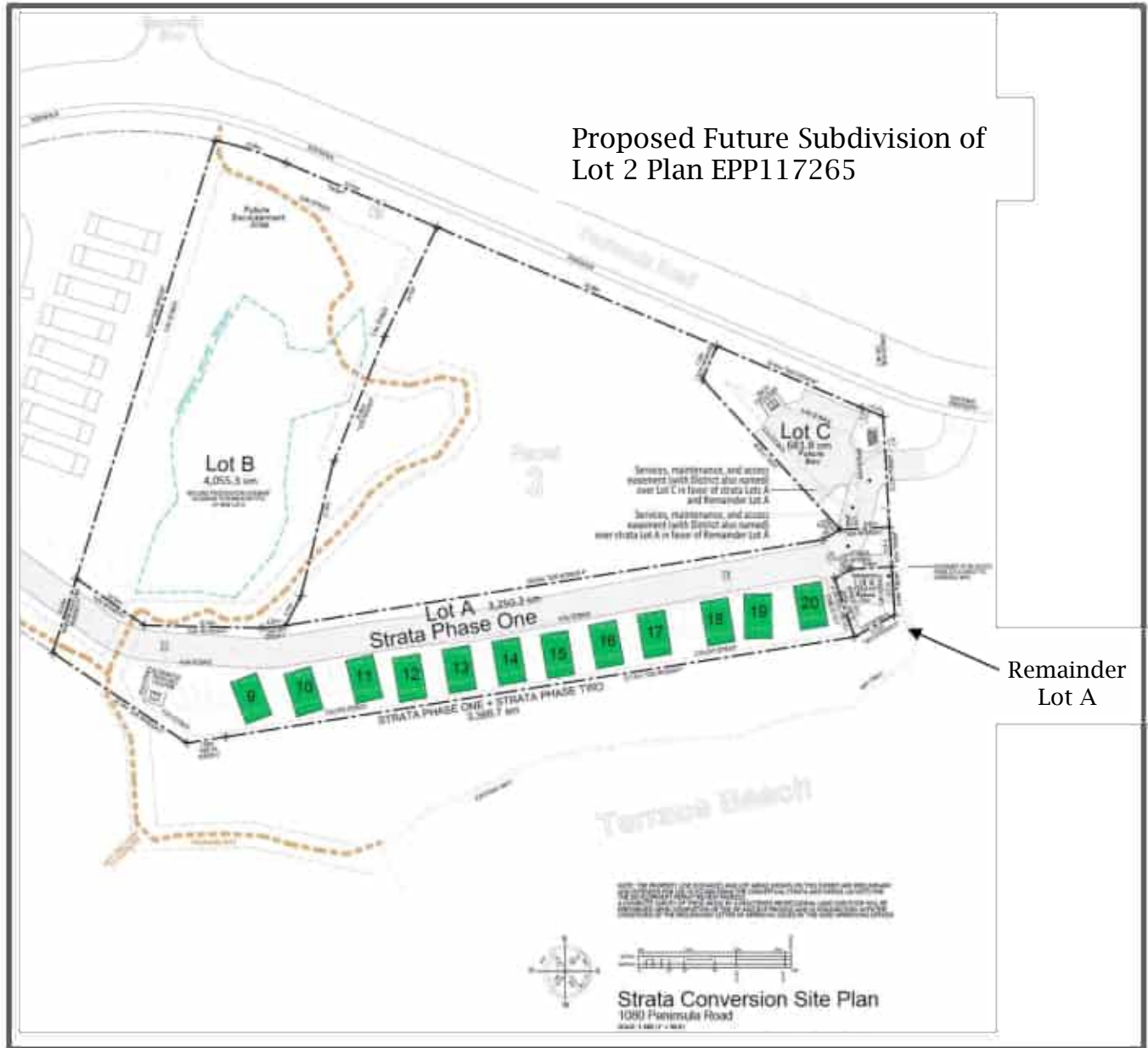
"CS-5.7 Other Regulations:

CS-5.7.1 Notwithstanding other regulations of this bylaw, on the lands legally described as Lot 2, Section 21, Clayoquot District, Plan EPP117265, the following regulations apply in the areas of the lands outlined in thick dashed lines and as labelled on the Future Subdivision Map at the bottom of this section:

- (1) In the area of the proposed Lot C:
  - a. Minimum Lot Size: 680m<sup>2</sup>
- (2) In the area of the proposed Lot A:
  - a. Minimum Front Yard setback: 3.0m
  - b. Minimum Side Yard Interior setback: 1.0m
- (3) In the area of the proposed Remainder Lot A:
  - a. Minimum Lot Size: 118.0m<sup>2</sup>
  - b. Minimum Front Yard setback: 3.0m
  - c. Minimum Rear Yard setback: 1.5m
  - d. Minimum Side Yard Exterior setback: 1.0m
  - e. Minimum Side Yard Interior setback of 0.0m
  - f. On proposed Remainder Lot A, a *Resort Condo* use may contain one unit.



Future Subdivision Map



READ A FIRST TIME this \*\* day of \*\*\*, 2024.

READ A SECOND TIME this \*\* day of \*\*\*, 2024.

PUBLIC HEARING held this \*\* day of \*\*\*, 2024.

READ A THIRD TIME this \*\* day of \*\*\*, 2024.

ADOPTED this \*\* day of \*\*\*, 2024.

District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024



**CERTIFIED CORRECT;** "District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024".

---

Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

---

Duane Lawrence  
Corporate Officer

## DEVELOPMENT VARIANCE PERMIT DVP24-04

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**GO CABIN VACATION PROPERTY MANAGEMENT INC.**  
(the "Owner")

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures and other development thereon:

**PID 032-127-812, Lot 2, Plan EPP117265, Section 21, Clayoquot Land District**

3. The work authorized by this Permit may only be carried out in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, for the future parcels specified on the Future Subdivision Map attached as **Schedule A**, and for the proposed creation of a phased strata on proposed Lot A:

- i. Lot A: a minimum lot frontage of 8.0 m, whereas section CS-5.2.2 of the zoning bylaw specifies a minimum of 15.0 m.
- ii. Lot C: a minimum front yard setback for an existing accessory building of 1.0 m, whereas section CS-5.6.1 (2) (a) of the zoning bylaw indicates a minimum of 6.0 m.
- iii. Lot C: a minimum exterior side yard setback for an existing accessory building of 2.5 m, whereas section CS-5.6.1 (2) (d) of the zoning bylaw indicates a minimum of 6.0 m.

5. The above variances are granted for the proposed initial subdivision and buildings on the Land as shown on Schedule A. Should the Land or portions of the Land be redeveloped at some future date, this Development Variance Permit shall cease to apply and the zoning in effect at the time shall apply.

6. This permit is valid for a period of 24 months from the date of issuance. If by that time a final plan of subdivision is not registered with the BC Land Title Survey Authority in general accordance with Schedule A, then this Development Variance Permit shall cease to apply and the zoning standards in effect at the time shall apply.

7. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.

8. This Permit is NOT a Building Permit.

**AUTHORIZING RESOLUTION** passed by the Municipal Council on the XX day of XX, 2024.

**ISSUED** the XX day of XX, 2024.

---

Bruce Greig  
Director of Community Planning



**Intent:**  
Creation of three  
fee-simple lots  
A, B & C



THIS PLAN AND THE INFORMATION CONTAINED HEREIN ARE FOR INFORMATION ONLY AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AUTHORITIES. THE INFORMATION CONTAINED HEREIN IS NOT TO BE USED FOR ANY OTHER PURPOSE.



**Sirata Conversion Site Plan**  
10100 Peninsula Road  
SCALE: 1:500 (1" = 12.5')

**DISTRICT OF UCLUELET**

**Bylaw No. 1355, 2024**

A bylaw to amend the “District of Ucluelet Zoning Bylaw No. 1160, 2013”.

---

**WHEREAS** Section 479 and other parts of the Local Government Act authorize zoning and other development regulations;

**NOW THEREFORE** the council of the District of Ucluelet, in open meeting assembled, enacts as follows;

**1. Citation**

This bylaw may be cited as “District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024”.

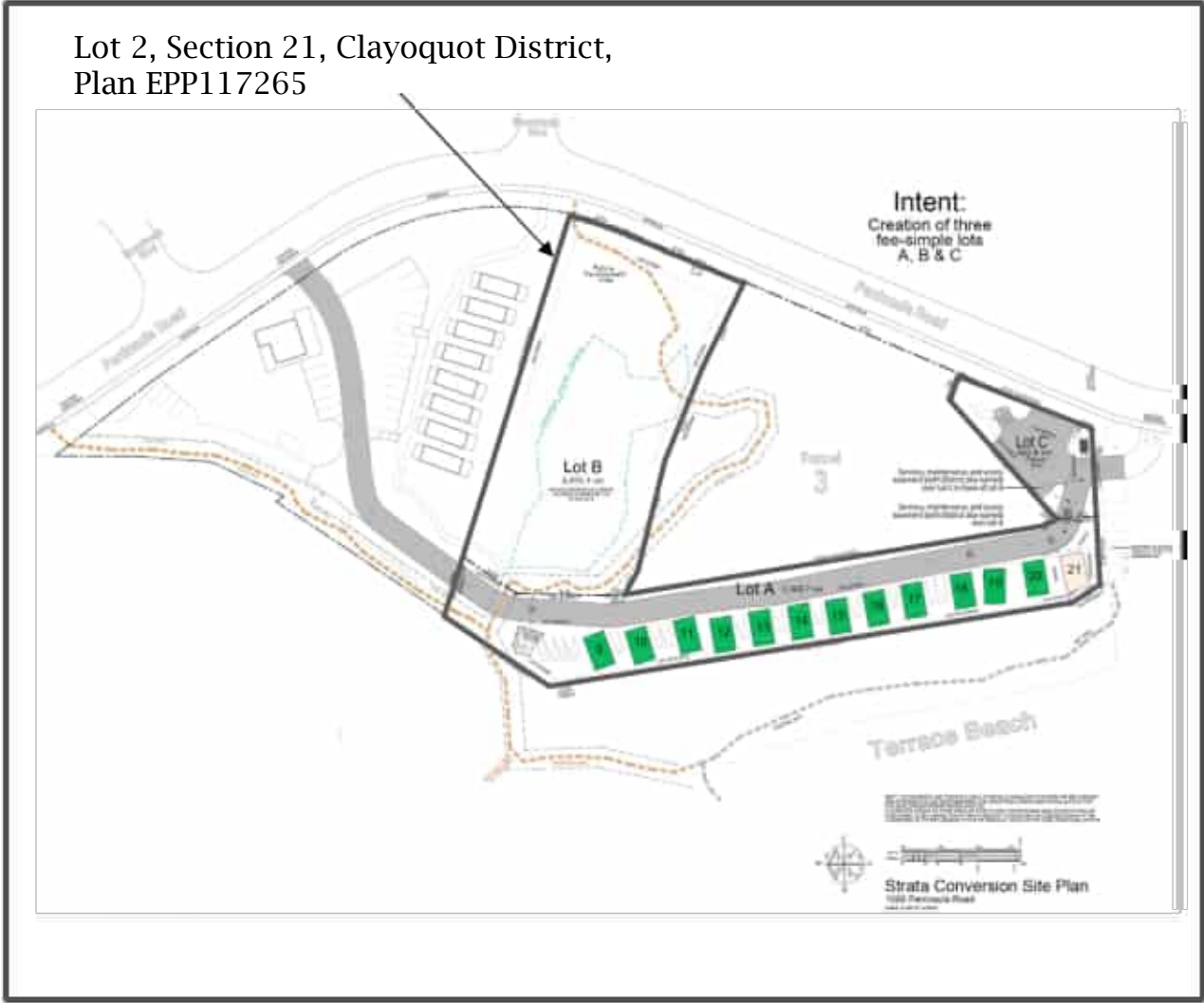
**2. Text Amendment**

The District of Ucluelet Zoning Bylaw No. 1160, 2013, as amended, is hereby further amended by adding a new subsection alphanumerically in Schedule B – The Zones within the CS-5 Zone – TOURIST COMMERCIAL such that the new subsection reads as follows:

**“CS-5.7 Other Regulations:**

CS-5.7.1 Notwithstanding other regulations of this bylaw, the lands legally described as Lot 2, Section 21, Clayoquot District, Plan EPP117265 and labeled “Lot C” on the Future Subdivision Map below, the Minimum Lot Size is 680m<sup>2</sup>.

Future Subdivision Map



- READ A FIRST TIME** this 24<sup>th</sup> day of **September, 2024.**
- READ A SECOND TIME** this 24<sup>th</sup> day of **September, 2024.**
- SECOND READING RESCINDED** this    day of **\*\*\*, 2024.**
- AMENDED** this    day of **\*\*\*, 2024.**
- READ A SECOND TIME AS AMENDED** this \*\* day of **\*\*\*, 2024.**
- PUBLIC HEARING held** this \*\* day of **\*\*\*, 2024.**
- READ A THIRD TIME** this \*\* day of **\*\*\*, 2024.**

**ADOPTED** this \*\* day of \*\*\*, 2024.

**CERTIFIED CORRECT;** "District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024".

\_\_\_\_\_  
Marilyn McEwen  
Mayor

\_\_\_\_\_  
Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

\_\_\_\_\_  
Duane Lawrence  
Corporate Officer





## DEVELOPMENT VARIANCE PERMIT DVP24-04

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**GO CABIN VACATION PROPERTY MANAGEMENT INC.**  
(the "Owner")

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures and other development thereon:

**PID 032-127-812, Lot 2, Plan EPP117265, Section 21, Clayoquot Land District**

3. The work authorized by this Permit may only be carried out in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, for the future parcels specified on the Future Subdivision Map attached as **Schedule A**, and for the proposed creation of a phased strata on proposed Lot A:

- i. Lot A: a minimum front yard setback for a proposed resort Condo Cabin of 2.0 m, whereas section CS-5.6.1 (1) (a) of the zoning bylaw indicates a minimum of 6.0 m.
- ii. Lot C: a minimum front yard setback for an existing accessory building of 1.0 m, whereas section CS-5.6.1 (2) (a) of the zoning bylaw indicates a minimum of 6.0 m.
- iii. Lot C: a minimum exterior side yard setback for an existing accessory building of 2.5 m, whereas section CS-5.6.1 (2) (d) of the zoning bylaw indicates a minimum of 6.0 m.

5. The above variances are granted for the proposed initial subdivision and buildings on the Land as shown on Schedule A. Should the Land or portions of the Land be redeveloped at some future date, this Development Variance Permit shall cease to apply and the zoning in effect at the time shall apply.

6. This permit is valid for a period of 24 months from the date of issuance. If by that time a final plan of subdivision is not registered with the BC Land Title Survey Authority in general accordance with Schedule A, then this Development Variance Permit shall cease to apply and the zoning standards in effect at the time shall apply.

7. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.

8. This Permit is NOT a Building Permit.



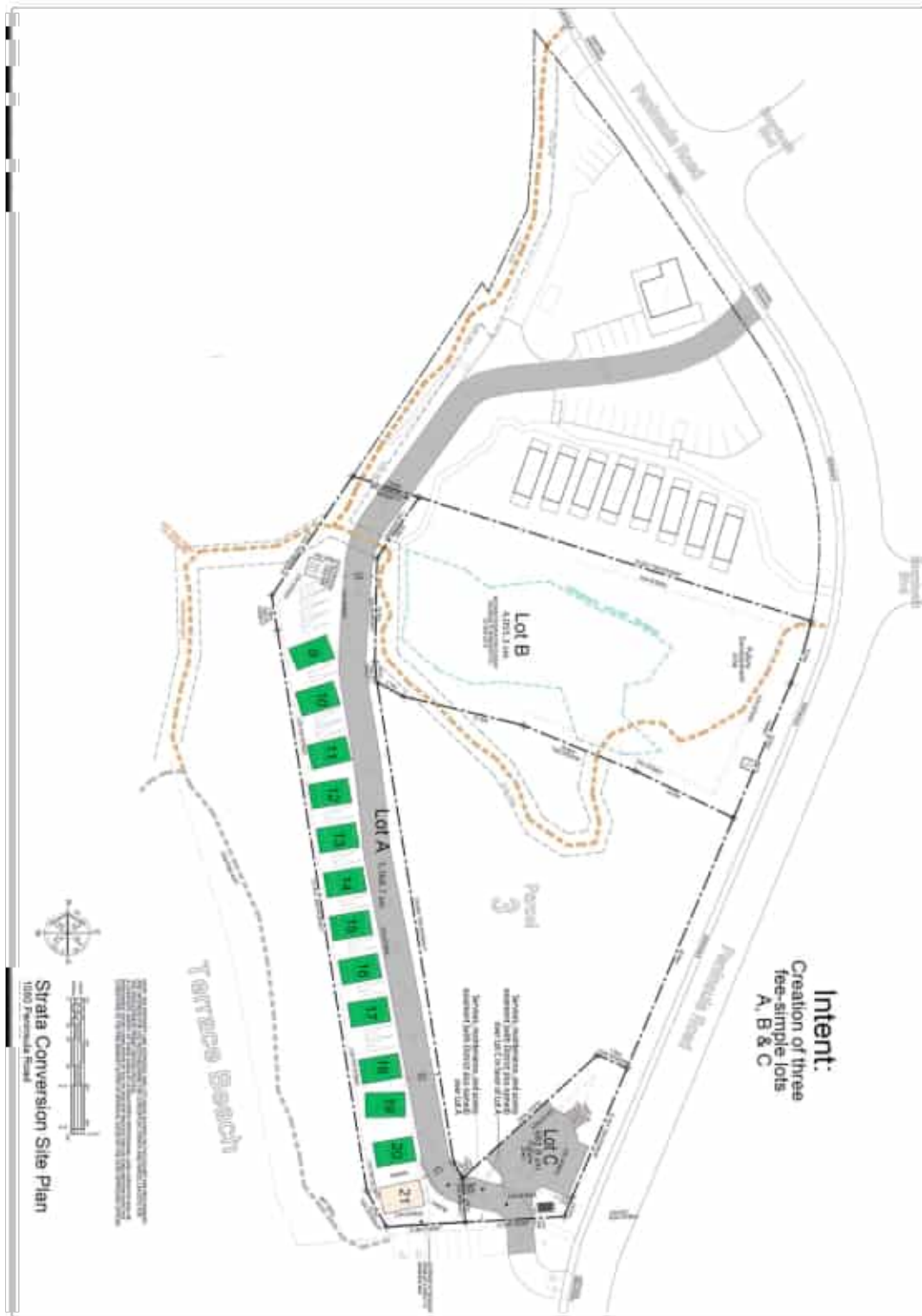
**AUTHORIZING RESOLUTION** passed by the Municipal Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

**ISSUED** the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Bruce Greig  
Director of Community Planning



SCHEDULE A







**Draft Minute Excerpts from the  
September 24, 2024, Regular Council Meeting**

**7. BYLAWS**

**7.1 Zoning Amendment and DVP for Lot 2 Plan EPP117265  
*John Towgood, Municipal Planner***

Bruce Greig, Director of Community Planning, presented this report.

2024.2278.REGULAR *IT WAS MOVED AND SECONDED:*

1. **THAT** Council give first and second reading to District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024; and
2. **THAT** Council direct Staff to give notice for a public hearing to be held on District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 and Development Variance Permit 24-04.

**CARRIED.**





**Draft Minute Excerpts from the  
November 12, 2024, Regular Council Meeting**

**6. BYLAWS**

**6.2 Zoning Amendment and Development Variance Permit for Lot 2 Plan  
EPP117265**

*John Towgood, Municipal Planner*

Mr. Greig presented this report.

2024.2298.REGULAR *IT WAS MOVED AND SECONDED:*

***THAT** Council repeal second reading of District of Ucluelet Zoning  
Amendment Bylaw No. 1355, 2024.*

**CARRIED.**

2024.2299.REGULAR *IT WAS MOVED AND SECONDED:*

***THAT** Council amend District of Ucluelet Zoning Amendment Bylaw No.  
1355, 2024 by: a. removing subsections CS-5.7.1(2) and CS-5.7.1(3) from  
the bylaw's text amendment; and, b. replacing the Future Subdivision Map  
with the map attached to staff report 24-114 as Appendix B.*

**CARRIED.**

2024.2300.REGULAR *IT WAS MOVED AND SECONDED:*

***THAT** Council give second reading to District of Ucluelet Zoning  
Amendment Bylaw No. 1355, 2024, as amended. Page 3 of 7 Regular  
Council Meeting Minutes – November 12, 2024*

**CARRIED.**

2024.2301.REGULAR *IT WAS MOVED AND SECONDED:*

***THAT** Council direct Staff to give notice for a public hearing to be held on  
the amended District of Ucluelet Zoning Amendment Bylaw No. 1355,  
2024, and Development Variance Permit 24-04.*

**CARRIED.**





**Joseph Rotenberg**

---

**From:** Bruce Faith [REDACTED]  
**Sent:** November 29, 2024 6:56 PM  
**To:** Community Input Mailbox  
**Subject:** Re: Zoning Amendment

**[External]**

Please include Application RZ24-11 & DVP24-08 in my previous submission.

Bruce Faith  
[REDACTED]  
310 Reef Point Rd.

On Fri, Nov 29, 2024 at 5:20 PM Bruce Faith [REDACTED] wrote:

Bruce Faith, 310 Reef Pt Rd. Application # RZ24-09 & DVP24-04

Why are you entertaining a zoning change when none of the minimum requirements are not met. This application does not meet the minimum front yard setback, does not meet minimum setback for an existing accessory building and does not meet the minimum exterior side yard requirements. Why is Council even considering this application when so many of the requirements are not being met. We have to stop catering to rental properties and Concentrate on affordable housing, water treatment upgrades and infrastructure up grades ie. asbestos pipes removal, which has now affected the elementary school drinking water.

Bruce Faith



# NOTICE OF PUBLIC HEARING

## Zoning Amendment Bylaws & Development Variance Permits



Pursuant to Section 464, 466, and 499 of the *Local Government Act*, notice is hereby given that Public Hearings will be held during the **December 10, 2024, Regular Council Meeting, which commences at 4:00 PM**. This Regular Council Meeting will be held both in-person in the **George Fraser Community Room in the Ucluelet Community Centre, located at 500 Matterson Drive, Ucluelet B.C.** and electronically via the Zoom platform. The Public Hearings are being held to allow Council to receive public input on *District of Ucluelet Zoning Amendment Bylaw No. 1355* and associated Development Variance Permit (DVP) 24-04, as well as *District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024*, and associated DVP 24-08.

### Zoning Amendment Bylaw No. 1355, 2024 & Development Variance Permit 24-04

**Application Numbers:** RZ24-09 and DVP24-04

**Applicants:** Go Cabin Vacation Property Management Inc.

**Location:** 1082 Peninsula Road

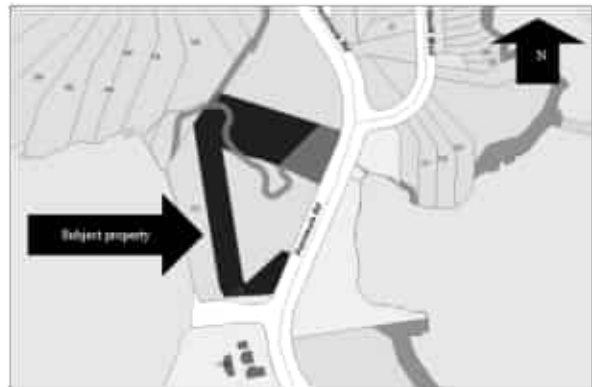
**Legal Description:** Lot 2, Plan EPP117265, Section 21, Clayoquot Land District

**Summary:** The zoning amendment bylaw and DVP application is to facilitate a 3-lot subdivision of the subject property and subsequent stratification of 13 existing resort condominiums.

**Zoning Amendment Bylaw No. 1355:** The purpose of this proposed Bylaw, in general terms, is to amend *District of Ucluelet Zoning Bylaw No. 1160, 2013*, to allow a minimum lot size of 680m<sup>2</sup> for the subject property, whereas the Zoning Bylaw requires a minimum lot size of 1000m<sup>2</sup>.

**DVP24-04:** The purpose of this proposed DVP, in general terms, is to vary the *District of Ucluelet Zoning Bylaw No. 1160, 2013* to permit:

- a minimum front yard setback for a proposed *Resort Condo* cabin of 2m, whereas 6m is required;
- a minimum front yard setback for an existing accessory building of 1m, whereas 6m is required; and
- a minimum exterior side yard setback for an existing accessory building of 2.5m, whereas 6m is required.



### Zoning Amendment Bylaw No. 1356, 2024 & Development Variance Permit 24-08

**Application Numbers:** RZ24-11 and DVP24-08

**Applicants:** Ann Kim and Helen Cho

**Location:** 1768 Peninsula Road

**Legal Description:** Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District

**Summary:** The zoning amendment bylaw, DVP, and minor sitework would bring existing legally non-conforming site characteristics into compliance with current bylaws to facilitate an application for the site to be subdivided into two land parcels.

**Zoning Amendment Bylaw No. 1356:** The purpose of this proposed Bylaw, in general terms, is to amend *District of Ucluelet Zoning Bylaw No. 1160, 2013*, to:

- change the designation of the northeastern most 501.6m<sup>2</sup> of the subject property from CS-2 Service Commercial to CS-1 Village Square Commercial zoning;
- decrease the lot frontage minimum and lot size minimum; and
- define the number of allowable *Resort Condo* units to be 1 or 2 units.

**DVP24-08:** The purpose of this proposed DVP, in general terms, is to vary the *District of Ucluelet Zoning Bylaw No. 1160, 2013* to permit:

- a minimum interior side yard setback of 0m for an existing building, whereas 1.5m is required;
- 5 parking spaces, whereas 8 spaces are required;
- a parking aisle width of 6.3m, whereas 7.5m is required; and
- narrower landscaping widths and heights than is required.



Anyone who believes these Bylaws or DVPs would affect their interests may make a written submission and will be given an opportunity to be heard at the Public Hearing as follows:

**Participate by written submission:** All written submissions must include your name and street address and should reference the application number in the subject line. Any submission dropped-off at the District Office or mailed must be received by 4:00 pm on the day of the Public Hearing. Written submissions are considered part of the public record pursuant to the *Freedom of Information and Protection of Privacy Act*.

**Drop-off at the District Office**  
200 Main Street,  
Ucluelet B.C.

**Drop-off at the Public Hearing**  
George Fraser Community Room,  
Ucluelet Community Centre, 500  
Matterson Drive, Ucluelet B.C.

**Mail**  
District of Ucluelet  
P.O. Box 999  
Ucluelet B.C.  
V0R 3A0

**Email**  
[communityinput@ucluelet.ca](mailto:communityinput@ucluelet.ca)

**Participate in-person, by Zoom, or telephone:**

**Participate in-person**  
George Fraser Community  
Room in the Ucluelet  
Community Centre, 500  
Matterson Drive, Ucluelet B.C.

**Participate by Zoom or telephone**  
Information about participating electronically, including Zoom login details, is available at [Ucluelet.ca/CouncilMeetings](http://Ucluelet.ca/CouncilMeetings) and [Ucluelet.ca/PublicHearings](http://Ucluelet.ca/PublicHearings). Council Meetings are also live streamed on the District of Ucluelet's YouTube Channel.  
For more information contact the Corporate Service Department at 250-726-7744.

**Review related materials:**

Copies of the proposed Bylaws, DVPs, and the public hearing information packages may be inspected at the District of Ucluelet Office, 200 Main Street, Ucluelet B.C., during regular business hours (Monday to Friday, 8:30 a.m. - 4:00 p.m., excluding statutory holidays) and online at [Ucluelet.ca/PublicHearings](http://Ucluelet.ca/PublicHearings).

**Questions?**

Contact the District of Ucluelet Planning Department at 250-726-7744 or [planning@ucluelet.ca](mailto:planning@ucluelet.ca).

**Privacy disclaimer**

Public Hearings are webcast live and a recording is available on the District's YouTube channel. Correspondence you submit, including name and address, will form part of the public record, and will be published on the District's website or read into the record. The District considers your name and address relevant to this matter and will disclose this personal information as it informs Council's consideration of your opinion in relation to the subject property. However, your phone number and email address will not be disclosed.

Personal information is collected by the District under the authority of s. 26 (c) of the *Freedom of Information and Protection of Privacy Act* for the purpose of administering the Public Hearing. Please direct any questions about personal information to District's Privacy Officer by telephone: (250) 726-7744, email: [jrotenberg@ucluelet.ca](mailto:jrotenberg@ucluelet.ca), or mail: P.O. Box 999, Ucluelet, BC, V0R 3A0.

## DISTRICT OF UCLUELET

### Zoning Amendment Bylaw No. 1356, 2024

A bylaw to amend the "District of Ucluelet Zoning Bylaw No. 1160, 2013".  
(1768 Peninsula Road)

---

**WHEREAS** the District of Ucluelet Council by Bylaw No. 1160, 2013, adopted the Zoning Bylaw and now deems it appropriate to amend the Zoning Bylaw;

**NOW THEREFORE** the Council of the District of Ucluelet, in open meeting assembled, enacts as follows:

#### 1. Map Amendment:

Schedule A (Zoning Map) of *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by changing the zoning designation of the northeastern most 501.6m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), shown shaded on the map attached to this Bylaw as Appendix 'A', from CS-2 Service Commercial to CS-1 Village Square Commercial.

#### 2. Text Amendments:

Schedule B of the *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by:

- A. Adding a new subsection alphanumerically to the CS-2 Service Commercial zone such that the new section reads as follows:

"CS-2.7 Other Regulations:

CS-2.7.1 Notwithstanding other regulations in this bylaw, on the lands legally described as the southwestern most 731.6 m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), the following regulations apply:

- (1) minimum lot size: 731.6m<sup>2</sup>
- (2) minimum lot frontage: 13.72m
- (3) a *Mixed Commercial/Resort Condo* use is permitted, with the *Resort Condo* component limited to either one or two units."

- B. Adding a new subsection alphanumerically to the CS-1 Village Square Commercial zone such that the new section reads as follows:

"CS-1.7 Other Regulations:

CS-1.7.1 Notwithstanding other regulations in this bylaw, on the lands legally described as northeastern most 501.6m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), the minimum lot frontage is 13.72m.”

**3. Citation:**

This bylaw may be cited as “District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024”.

**READ A FIRST TIME** this 10<sup>th</sup> day of **October, 2024.**

**READ A SECOND TIME** this 10<sup>th</sup> day of **October, 2024.**

**PUBLIC HEARING** this      day of      , **2024.**

**READ A THIRD TIME** this      day of      , **2024.**

**ADOPTED** this      day of      , **2024.**

**CERTIFIED CORRECT:** “District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024.”

---

Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer


**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

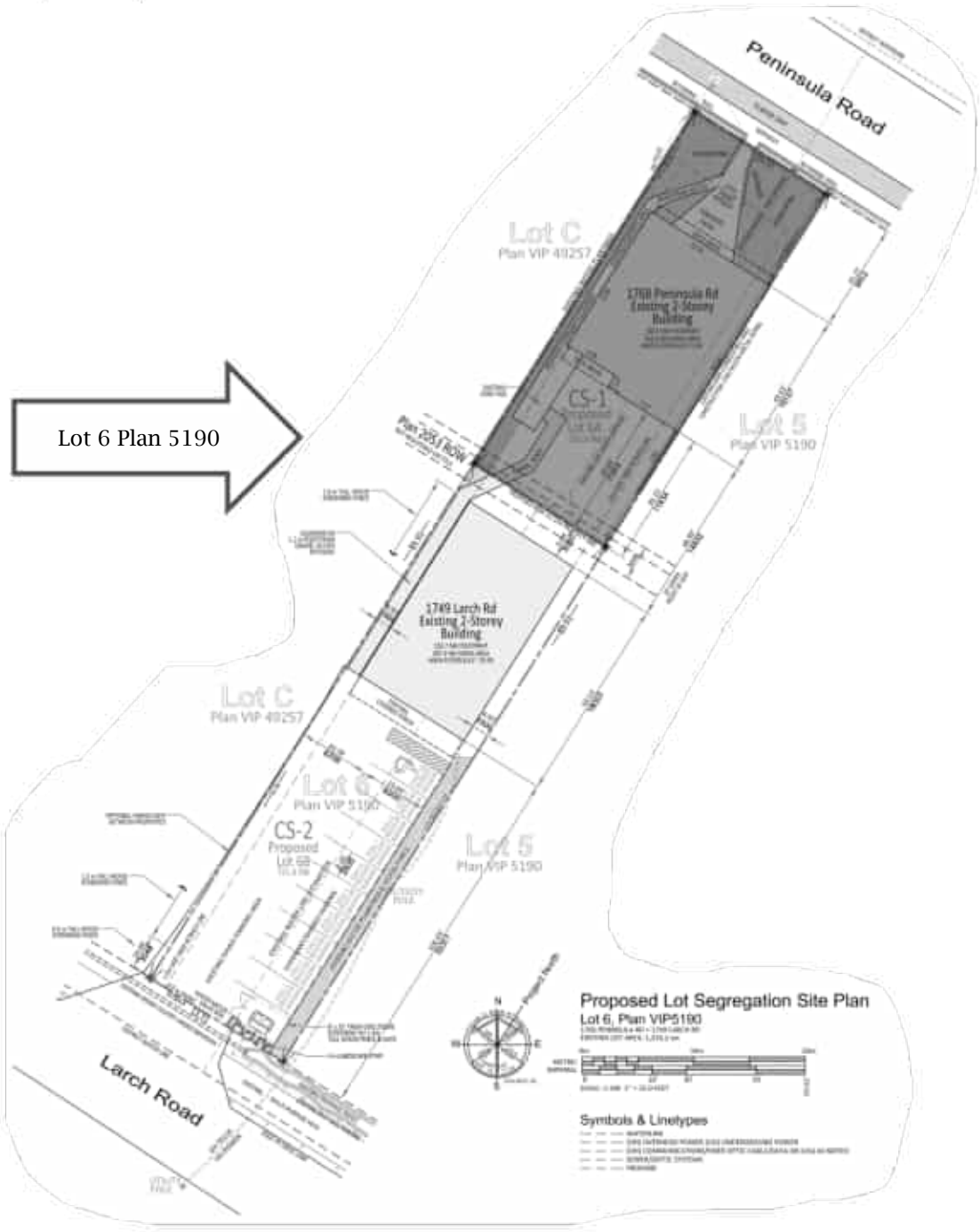
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Duane Lawrence  
Corporate Officer

**Appendix 'A'**

**District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024**


 From: CS-2 Service Commercial  
 To: CS-1 Village Square Commercial







## DEVELOPMENT VARIANCE PERMIT DVP24-08

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**Ann Kim and Hyun Cho, 1768 Peninsula Road, Ucluelet, BC, V0R 3A0** (the "Owner")

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures, and other development thereon:

**1768 Peninsula Road; PID 005952115, Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District, Pacific Rim Professional Centre** (the "Land")

3. The work authorized by this Permit may only be carried out:

- a. in compliance with the requirements of the *District of Ucluelet Zoning Bylaw No. 1160, 2013* ("zoning bylaw"), except where specifically varied or supplemented by this development variance permit and,
- b. in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, specific to the lot 6A as identified on **Schedule A**:

**1. A Side Yard Setback of 0m whereas section CS-1.6.1(1)(c) of the zoning bylaw indicates a minimum of 1.5m.**

5. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, specific to lot 6B as identified on **Schedule A**:

- 1. A minimum of five off-street parking spaces whereas section 505.1 of the zoning bylaw requires a minimum of eight off-street parking spaces,**
- 2. A minimum aisle width of 6.3m (20.78ft), whereas section 504.3(1) requires a minimum aisle width of 7.5m (25ft) for a 90-degree parking angle,**
- 3. Landscaping a minimum of 0m in width and 0m in height whereas section 601.2(1)(a) requires no less than 1.5m (5ft) in height and 1.5m (5ft) in width,**
- 4. A minimum of 1m in width of landscaping, whereas section 601.2(2) requires a width of 1.5m (5ft),**
- 5. Landscaping a minimum of 0m in width and 0m in height, whereas section 603.1(1) requires no less than 1.2m (5ft) in height and 1.8m (5ft) in width,**

6. **Landscaping a minimum of 1m in width, whereas section 603.1(2) requires a width of 1.8m (6ft).**
6. The above variances are granted for the proposed subdivision as shown on **Schedule A**.
7. The above variances are granted for the proposed structures and uses of the land as shown on **Schedule A**. Should the buildings be later removed or destroyed, this Development Variance Permit shall cease to apply and the zoning bylaw requirements in effect at the time shall apply.
8. The Owner shall substantially commence the development within 24 months of the date of issuance, after which this permit shall be null and void.
9. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.
10. This Permit is NOT a Building Permit.

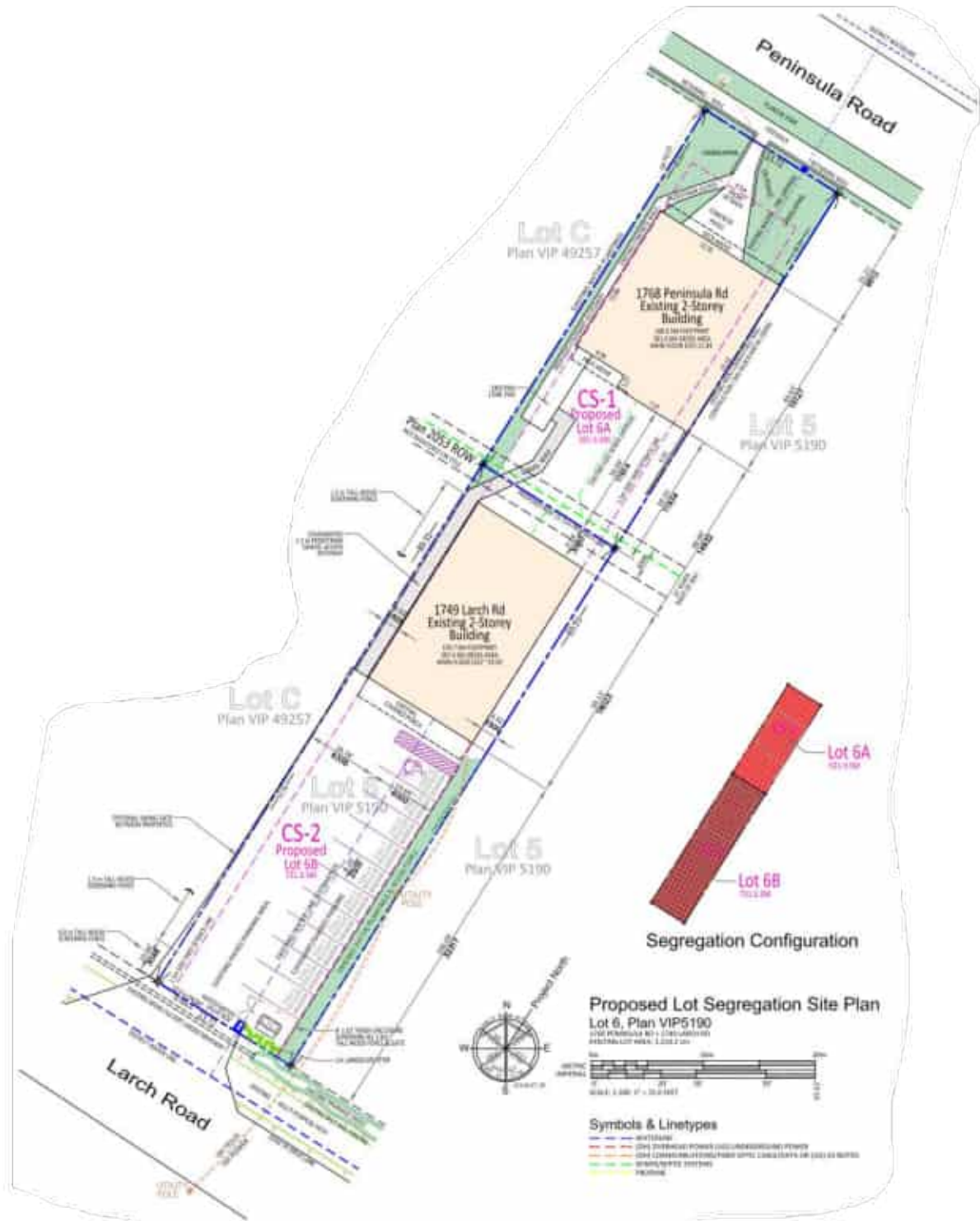
**AUTHORIZING RESOLUTION** passed by the Municipal Council on the      <sup>th</sup> day of      , 2024.

**ISSUED** the      <sup>th</sup> day of      , 2024.

---

Bruce Greig  
Director of Community Planning

**SCHEDULE A**







# REPORT TO COUNCIL

Council Meeting: October 10, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

FROM: ANNELIESE NEWEDUK, PLANNER

FILE NO: 3360-20 RZ24-11/3090-20 DVP 24-08

SUBJECT: ZONING AMENDMENT AND DEVELOPMENT VARIANCE PERMIT  
FOR 1768 PENINSULA ROAD

REPORT NO: 24-100

ATTACHMENT(S): APPENDIX A - APPLICATION  
APPENDIX B – DISTRICT OF UCLUELET ZONING AMENDMENT BYLAW NO. 1356, 2024  
APPENDIX C – DEVELOPMENT VARIANCE PERMIT 24-08

### RECOMMENDATION(S):

THAT Council give first and second reading to *District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024*, and direct staff to give notice for a public hearing to receive input on the bylaw and on Development Variance Permit 24-08.

### BACKGROUND:

This report regards the property at 1768 Peninsula Road (see **Figure 1**); PID 005-952-115, Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (the “**Subject Property**”; see **Figure 1**), more commonly known as the location for Piña Style. The owner has applied to subdivide the property, accompanied by applications for a development variance permit (DVP) and rezoning that would collectively bring the property into compliance with current bylaws.



Figure 1. The Subject Property

As **Figure 1** shows, the subject property is a narrow through-lot with frontage on both Peninsula Road and Larch Road. There are currently two *Mixed Commercial/Residential* buildings. The intent is for the existing uses to continue as is, and no changes to servicing configurations are proposed as a result of this application.

The applicant is proposing to split the property between the two buildings (See **Appendix 'A'**). For the remainder of this report, Lot A will refer to the proposed land parcel fronting Peninsula Road, and Lot B will refer to the proposed land parcel fronting Larch Road (see **Figure 2**). Through a combination of sitework, a zoning amendment (see **Appendix 'B'**) and a development variance permit (see **Appendix 'C'**), the site will be brought into compliance to facilitate the proposed subdivision.

In addition, the applicant has requested a series of charges be filed on the title of the new parcels to define parking allocations, pedestrian access, and servicing between the two properties, as well as maintenance and repairs within the commonly shared areas. The District of Ucluelet will need to be a party to some of these agreements to ensure that the charges could not be removed from the property title without District approval.

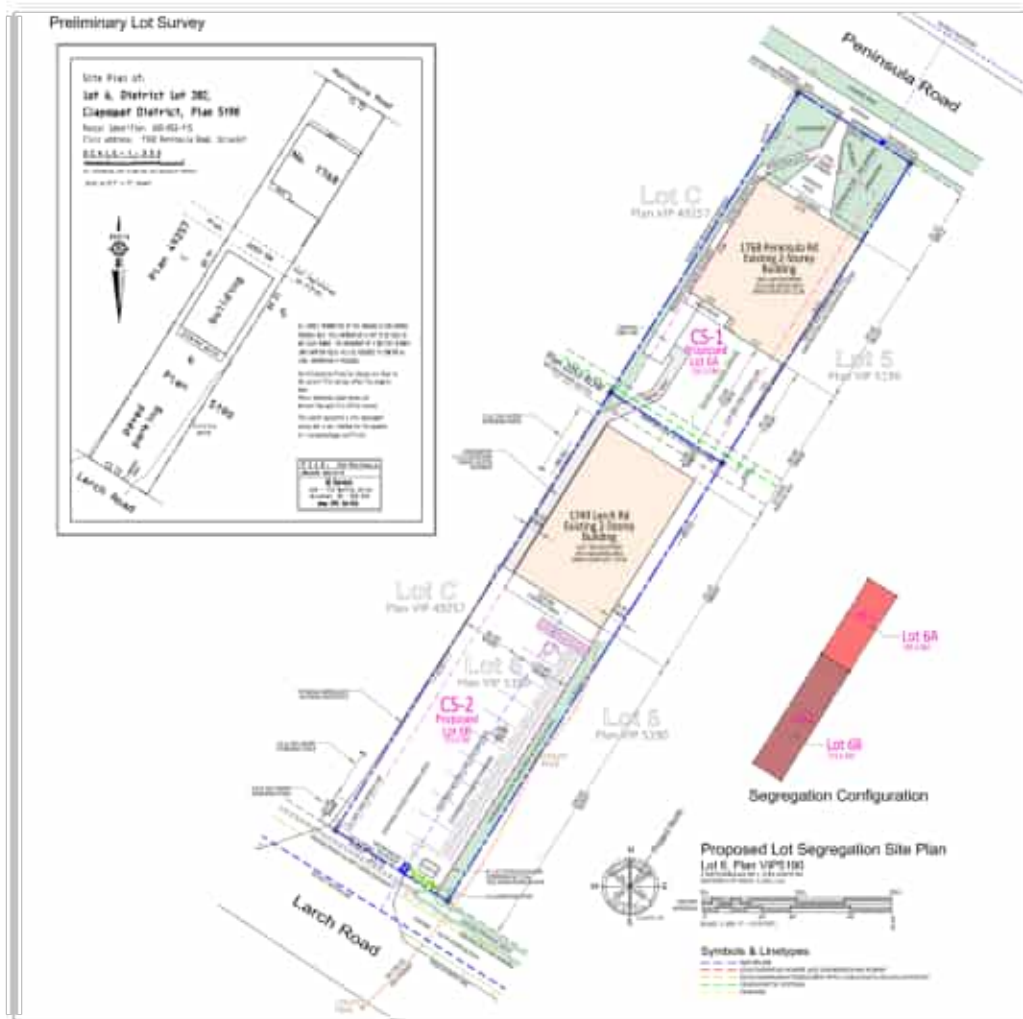


Figure 2. Proposed Subdivision Site Plan

ZONING:

The subject property is currently zoned Service Commercial (**CS-2**). Surrounding properties are all zoned either Village Square Commercial (**CS-1**) or CS-2, and directly west is a lawful non-conforming single-family dwelling. Lot B would maintain its CS-2 zoning, however the applicant has applied for Lot A to be rezoned to CS-1.

OFFICIAL COMMUNITY PLAN:

The subject property's OCP Long-Range Land Use Designation is split Village Square Commercial fronting Peninsula Road and Multi-Family Residential fronting Larch Road. The subject property falls within the Village Square Form and Character Development Permit Area (DPA I). However, the proposed landscaping and sitework for this application is exempt from requiring a DP as it falls under OCP Exemption number 9, which states that "new landscaping and/or landscape maintenance which complies with these design guidelines" is exempt.

DISCUSSION:

REZONING:

The applicant has applied to rezone proposed Lot A from CS-2 to CS-1 (See **Appendix 'B'**). Both the CS-2 and CS-1 zones share similar permitted uses, including the *Mixed Commercial/Residential* use that would continue to exist on the subject property. However, if the subdivision is approved, the building's floor area ratio (**FAR**) and lot coverage would not comply with CS-2 regulations. Therefore, the rezoning request is supportable as the CS-1 regulations allow for a higher FAR and a higher lot coverage percentage, which better aligns with the existing conditions of the property.

Proposed Lot B would maintain its existing CS-2 zoning, however, a site-specific text amendment will modify the minimum allowable lot size from 800sm to 731.6sm.

The CS-1 and CS-2 minimum lot frontage is 15m. Because the subject property currently has frontage on Peninsula and Larch Road, it meets this minimum frontage requirement. However, the proposed subdivision would create two land parcels that individually do not meet the frontage minimums. Therefore, Bylaw No. 1356 includes site specific text amendments that would modify the minimum frontage requirement from 15m to 13.72m for both proposed Lot A and Lot B.

*PROPOSED LOT B RESORT CONDO USE:*

Lot B's CS-2 zoning allows for *Mixed commercial/Residential* and *Mixed commercial/Resort condo* uses. In the Zoning Bylaw, the *resort condo* definition is "a *building*, or group of *buildings*, providing two or more separate *dwelling units*, for *commercial tourist accommodation use...*". The owner wishes to flexibly operate one or two units as *resort condo*. This would require a zoning amendment to permit less than two units. It is in the public interest to define the number of *resort condo* units allowable to ensure that at least one unit operates as a long-term rental because the OCP's Long Range Land Use designation on proposed Lot B is Multi-Family. Therefore, Bylaw No. 1356 includes a site-specific text amendment that would permit either one or two *resort condo* units on the subject property.

DEVELOPMENT VARIANCE PERMIT:

Areas of the property that can be brought into compliance through siteworks are being done to the extent possible. This includes the construction of a fence along the northwest side yard, definition of pedestrian pathways and connectivity, definition of parking spaces, creation of a screened garbage facility, and landscaping to screen the parking area from the road. The remaining non-compliant aspects of the subject property can be attributed to lot size/shape limitations and existing site design; therefore, the applicant is requesting to address these through variances (see **Appendix 'C'**).

*PARKING:*

Based on current building uses, the minimum parking requirements for the subject property are as follows:

	<i>Required</i>	<i>Proposed</i>	<i>Deficit</i>	<i>Solution</i>
<i>Lot A</i>	Total: 8 Residential: 2 Retail: 6	5	3	<ul style="list-style-type: none"><li>• Pay Cash-in-lieu for 3 spaces</li><li>• Register a parking easement as the 5 proposed spaces will be on Lot B</li></ul>
<i>Lot B</i>	Total: 8 Residential: 3 Office: 5	5	3	<ul style="list-style-type: none"><li>• Variance request to allow for 5 instead of 8 spaces.</li></ul>
<i>Combined</i>	16	10	6	

The applicant is proposing to have all 10 of the proposed parking spaces on Lot B, with a combined deficit of 6 spaces. Its not advisable to have all of Lot B's parking needs met, and practically none of Lot A's. As a solution, the applicant is proposing to evenly allocate the available spaces on Lot B between the two properties. This is supportable as it meets an adequate amount of the off-site parking needs for both sites, a parking easement can be registered to ensure access, and the respective space deficits can be addressed accordingly. For Lot A, Section 506.1 in the Zoning Bylaw allows the applicant to pay cash-in-lieu of \$8,000.00 per space to the District. For lot B, a variance has been requested to vary Section 505.1 of the Zoning Bylaw to require only 5 spaces.

In addition to the number of spaces, the applicant is requesting to vary the minimum aisle width for 90-degree parking from 7.5m (25ft) as per section 504.3(1) in the Zoning bylaw to 6.3m. The shape of the lot is narrow, which leaves no additional area for a fully compliant aisle width (See **Figure 2**). The applicant has expressed that the current aisle width functions adequately and meets the Fire Services Development Design Policy 14-7320-2, which recommends a minimum access aisle width of 6m.

*PROPOSED LOT A SETBACK:*

The existing building on the proposed Lot A currently sits at a 0m setback whereas Zoning Bylaw Section CS-1.6.1(1)(c) requires a minimum interior side yard setback of 1.5m. The building is currently lawful non-conforming, however needs to be brought into compliance to permit the subdivision. The variance would allow the building to maintain its existing placement.



LANDSCAPING & SCREENING:

The applicant is asking for the following landscaping and screening variances:

- Section 601.2(1) requires the subject property to be screened from the adjacent residential uses through a landscaping strip and a fence. Section 603.1(1) requires the parking lot to be screened from the adjacent residential use through a landscaping strip. The applicant is seeking a variance to permit screening through the fence only, proposing that the fence alone will provide sufficient screening without landscaping. The rationale is that the lot is too narrow, and there is not sufficient room to provide the landscaping strip and maintain the parking aisle width and the pedestrian path.
- Allow for 1m in width of landscaping to screen the property's use from the highway whereas zoning bylaw Section 601.2(2) requires a minimum of 1.5m in width.
- Allow for a minimum of 1m in width of landscaping to screen the parking area whereas zoning bylaw Section 603.1(2) requires a minimum of 1.8m in width.

FIRE:

The proposed access lane satisfies the minimum required width of 6 m, although clear delineation will be required in order to eliminate the temptation to park in the fire access lane. Centre-line turning radius off of Larch Road must not be less than 12 m. The access lane through the parking area will require "No Parking - Fire Lane" markings and signage consistent with the District of Ucluelet's Fire Services Development Design Guidelines. Maintenance of the fire access lane will also provide adequate space for vehicles to back out of the parking stalls, negating the need to back onto Larch Road when exiting.

SERVICING:

The current rezoning and DVP applications are pre-cursors to a subdivision. A full engineering review of the existing services in comparison to the *Subdivision Control Bylaw* requirements has not been completed as of the writing of this report. There is opportunity during the subdivision process, however, to identify whether any street or servicing upgrades are necessary.

ANALYSIS OF OPTIONS:

A	Give first and second reading to <i>Bylaw No. 1356</i> and direct staff to give notice for a public hearing on the bylaw and DVP	<u>Pros</u>	<ul style="list-style-type: none"><li>• Would address lawful non-conforming aspects of subject property</li><li>• Would allow applicant to achieve desired outcome</li><li>• Proposed sitework and screening would increase public benefit</li></ul>
		<u>Cons</u>	<ul style="list-style-type: none"><li>• Unknown at this time.</li></ul>
		<u>Implications</u>	<ul style="list-style-type: none"><li>• Would allow the application to proceed to a public hearing</li><li>• Staff time would be required to arrange a public hearing and follow-up report</li><li>• There would be no changes to existing buildings and uses</li></ul>





Doug Cole Architect, AIBC  
16802 3rd Avenue  
La Conner, WA 98257  
360-466-2555

September 17, 2024

District of Ucluelet Planning Department  
PO Box 999  
Ucluelet, BC V0R 3A0

Re: Statement of Intent  
Application for a Development Variance Permit, Rezone, and Lot Subdivision at 1768 Peninsula Road (PID 005952115)

Dear Planning Staff:

On behalf of the owners of the property at 1768 Peninsula Road I am requesting District review and approval to subdivide the existing lot into two distinct tax parcels and also rezone one of the newly created lots from the current CS-2 designation to CS-1. It is our understanding that in addition to the rezoning and lot segregation, the application will require a Development Variance Permit (DVP) for various elements of the property which are explained in detail below.

**Property Overview**

The existing 1,233.2 sm parcel (Lot 6) is rectangular in shape with a depth of 89.91 m and with 13.72m of frontage on both Peninsula and Larch Roads. Two structures currently exist on the CS-2 zoned property, both of which are two storey buildings containing ground floor commercial uses with residential above.

The two existing structures are serviced from their respective street frontages with sewerage occurring by means of an existing right of way located between the two buildings as shown on site plan sheet A1.1 and also on the A.G. Survey. No additional servicing configurations are anticipated as a result of this application.

**Applicant's Intent**

The owners wish to segregate the lot such that both become separate tax parcels (lot 6A facing Peninsula Road and lot 6B facing Larch Road) with lot 6B retaining its existing CS-2 zoning and lot 6A converting to CS-1 zoning. This change is in keeping with the applicants intent to provide flexibility for lot 6A for potential future renovations and modifications as well as for flexibility in the range of potential uses. Leaving the lot 6A portion of the property in its current CS-2 designation would require a variance for the existing building size - as it would immediately exceed the allowable floor area ratio (FAR) for the CS-2 zone once the lots were segregated, while re-zoning to CS-1 puts lot 6A in compliance with lot coverage and FAR standards of that zone.

### **Requested Elements of the Development Variance Permit**

In addition to the bylaw analysis provided on sheet A1.1, The following elements are being requested for approval under the DVP application.

1. Lot 6A: Vary the southeast side yard setback from 1.5m to 0m - Section 1.6.1(1)(c)
  - a. Reason: This provides for the existing Pena building wall to be on the property line.
2. Lot 6A: Vary the parking requirements from 8 spots to 5 spots by way of cash-in-lieu payment.
  - a. Reason: See discussion below related to "Parking"
3. Lot 6B: Vary the definition of resort condo from requiring a minimum of 2 units per building to 1 unit - Section 103.1
  - a. Reason: To allow continuance of the existing permitted use for one suite within the Larch Building to be used as a tourist accommodation.
4. Lot 6B: Vary the minimum aisle width for 90-degree parking from 7.5m (25ft) to 6.3m (20.78ft) - Section 504.3(1)
  - a. Reason: The limitation of the site width leaves no additional area for a fully compliant aisle width. The existing paved parking area functions adequately in its present configuration.
5. Lot 6B: Vary the requirement from having 1.8m of landscaping to 1.0m of landscaping to screen the parking area from the road - Section 603.1(2)
  - a. Reason: This is the logical location for a new screened trash/recycle enclosure which leaves approximately 1 m for landscape plantings while still providing screening of the parking area.
6. Lot 6B: Vary the parking requirement from the required 8 spots to 5 spots.
  - a. Reason: See discussion below related to "Parking"
7. Both Lots: Along the northwest property line vary the requirement to landscape/screen from adjacent uses through either (a) landscaping a minimum of 1.5m wide and 1.5m high or (b) provide a fence between 1.5m and 2m high - Section 601.2(1). The applicant is proposing to provide a 1.5m wood fence from the northwest end of the Larch building towards Larch Road, approximately 50 m.
  - a. Reason: There is not sufficient room to provide a 1.5m wide landscape strip and maintain the parking aisle width and the pedestrian path leading between the two lots. We are proposing a 1.5m tall wood fence as the means of required screening.

### **Rezoning**

1. Rezone lot 6A from CS-2 to CS-1
2. Modify the minimum lot size for lot 6B from 800 sm to 731.6 sm
3. Modify the minimum lot frontages for both lots from 15m to 13.72m

### **Parking**

1. A total of 10 parking spots can be accommodated in the existing paved parking area.
2. A total of 16 spots are required based on current uses of the buildings.
3. The existing building on lot 6A requires 8 stalls and the existing building on lot 6B also requires 8 stalls.
  - a. Proposal: That 3 of the 8 stalls on lot 6A fall under the "cash-in-lieu" payment method, while the remaining 3 stalls be provided by way of a variance over lot 6B.

### **Additional Relevant Conditions**

1. That a recorded easement (or other form of agreement acceptable to the District) be filed on the title of the new parcels to define parking allocations, pedestrian access between properties, and for servicing, maintenance and repairs within these commonly shared areas.

Please do not hesitate to reach out with any questions or additional supporting information that may be needed.

Sincerely,

Doug Cole, AIBC  
British Columbia Architect 2075



attachments:

Development Application Form  
Owners Authorization Form  
Development Checklist

A.G. Survey drawing dated 07-15-2024

Lot Segregation Plan & Bylaw Analysis dated 09-17-2024

Zoning Analysis from Sheet A1.1 provided here for convenience

CS-1 Zoning			CS-2 Zoning		
1768 Peninsula Road	Proposed or [Existing]	Conforming	1749 Larch Road	Proposed or [Existing]	Conforming
<b>Principal Uses Allowed</b>			<b>Principal Uses Allowed</b>		
(a) Hotel			(a) Hotel		
(b) Mixed Commercial/Residential	[Existing]	Yes	(b) Motel		
(c) Retail	[Existing]	Yes	(c) Mixed Commercial/Residential	[Existing]	Yes
(d) Personal Services			(d) Mixed Commercial/Resort Condo		
(e) Office			(e) Office		
(f) Tourist Information Booth			(f) Tourist Information Booth		
(g) Art Gallery			(g) Retail, including supermarket		
(h) Financial Institution			(h) Convenience Store		
(i) Neighbourhood Pub			(i) Restaurant		
(j) Restaurant			(j) Bistro/Café		
(k) Bistro/Café			(k) Take Out Food Services		
(l) Take Out Food Services			(l) Personal Services		
(m) Commercial Recreation			(m) Commercial Recreation		
(n) Commercial Entertainment			(n) Studio		
(o) Public Assembly			(o) Community Use		
(p) Community Use			Mobile Vending (Peninsula Road)		
(q) Daycare Centre					
(r) Studio					
(s) Boat Building and Repair					
Mobile Vending (Peninsula Road)					
<b>Secondary Uses Allowed</b>			<b>Secondary Uses Allowed</b>		
None			(a) Accessory Residential Dwelling Unit		
			<i>But only in conjunction with a Principal Use</i>		
<b>Existing Building Gross Floor Area (sm)</b>			<b>Existing Building Gross Floor Area (sm)</b>		
Ground Floor	[180.5]		Ground Floor	[193.7]	
Upper Floor	[180.5]		Upper Floor	[193.7]	
Total	[361.0]	Yes	Total Existing	[387.4]	Yes
<b>Minimum Lot Size (sm)</b>			<b>Minimum Lot Size (sm)</b>		
200 sm for all uses	501.6	Yes	1,000 sm for Hotel Motel uses	731.6	No
			800 sm for all others	731.6	No
<b>Minimum Lot Frontage</b>			<b>Minimum Lot Frontage</b>		
15.0 m	[13.72]	No	15 m	[13.72]	No
<b>Density</b>			<b>Density</b>		
Maximum FAR: 2.0	[0.72]	Yes	Maximum FAR: 0.60	[0.53]	Yes
Maximum Lot Coverage: 85%	[36.0%]	Yes	Maximum Lot Coverage: 50%	[26.5%]	Yes
<b>Maximum Building Size</b>			<b>Maximum Building Size</b>		
None specified			40 seats or 147 sm for Restaurants		
			None specified for all other uses		
<b>Maximum Building Height</b>			<b>Maximum Building Height</b>		
11m or 3 storey	[~7.9m est.] [2 Storey]	Yes	8.5m or 2-1/2 storey	[~7.6m est.] [2 Storey]	Yes
<b>Minimum Setbacks</b>			<b>Minimum Setbacks</b>		
Front: 4.5 m on Peninsula Road otherwise zero	[9.5]	Yes	Front: 0.0 m	[32.3]	Yes
Rear: 4.0 m	[11.9]	Yes	3.0 m	3.0	Yes
Side, Northeast: 1.5 m	[1.5]	Yes	Side, Northeast: 1.5 m	[1.5]	Yes
Side, Southwest: 1.5 m	[0.0]	No	Side, Southwest: 1.5 m	[1.5]	Yes

Division 500 Parking Requirements	Requirement	Required [Existing]	Calculations & Remarks
<b>1768 Peninsula Road Building</b>			
Commercial Space (Retail Use)	1 per 30 sm of Gross Floor Area	6 Spaces	180.5 sm ground floor / 30 sm per car = 6.01 spaces req'd
Residential Above Commercial	1 per unit	2 Spaces	
<b>1749 Larch Road Building</b>			
Commercial Space (Office)	1 per 40 sm of Gross Floor Area	5 Spaces	193.7 sm ground floor / 40 sm per car = 4.84 spaces req'd
Residential Above Commercial	1 per unit	3 Spaces	
<b>Loading Space</b>	1 per 1900 sm of gross floor area		374.2 sm of combined ground floor space / 1,900 sf per loading space = 0.20 loading spaces. None proposed.
<b>Total Spaces Required</b>		16 spaces	
Total Spaces Achievable		[10 spaces]	
Parking Deficit		6 spaces	
<b>Proposed Parking Approach</b>			
Lot 6A		3 spaces	Cash in Lieu
Lot 6B		3 spaces	Variance





Site Plan of:  
Lot 6, District Lot 282,  
Clayoquot District, Plan 5190

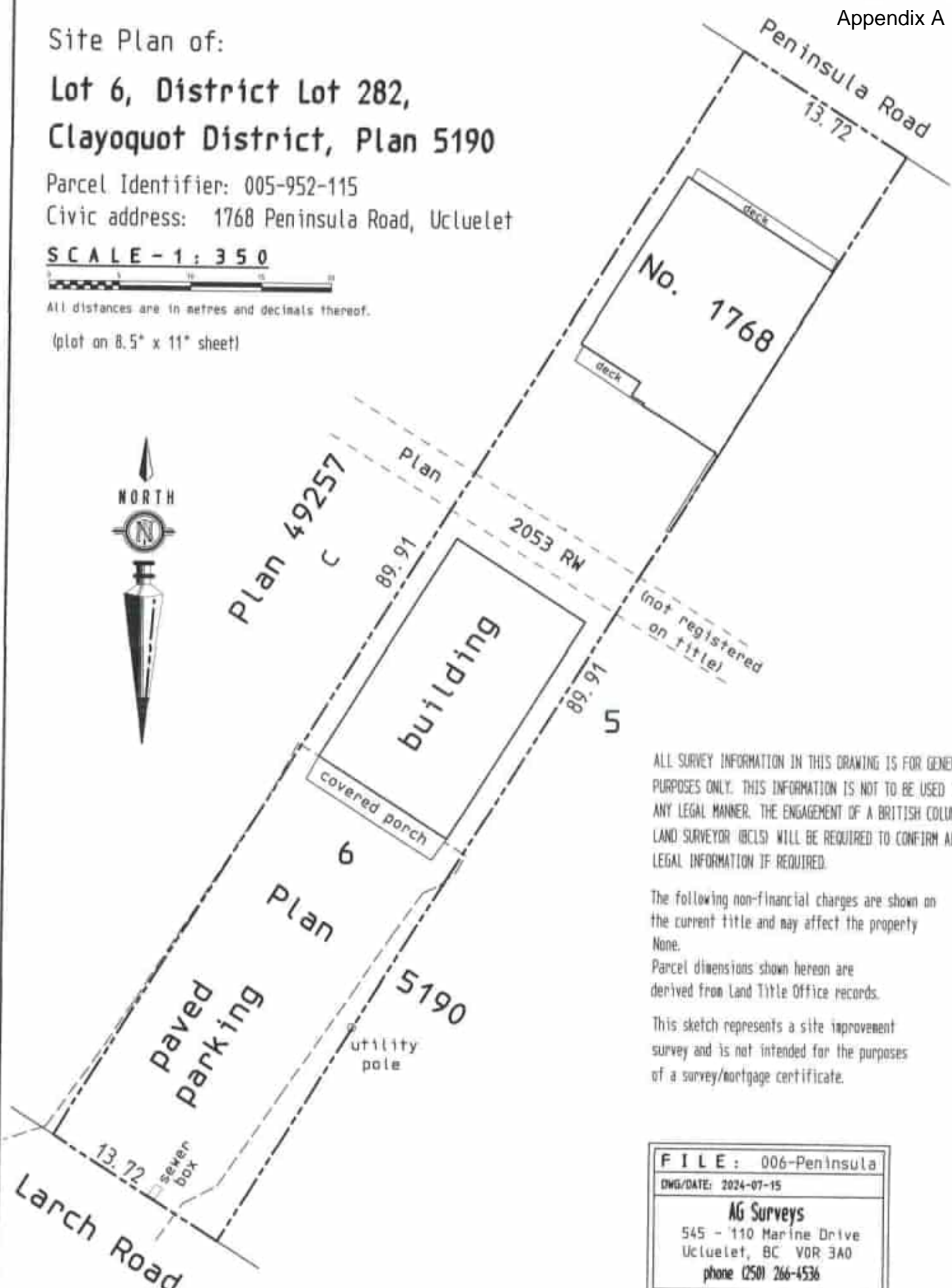
Parcel Identifier: 005-952-115  
Civic address: 1768 Peninsula Road, Ucluelet

SCALE - 1 : 350



All distances are in metres and decimals thereof.

(plot on 8.5" x 11" sheet)



ALL SURVEY INFORMATION IN THIS DRAWING IS FOR GENERAL PURPOSES ONLY. THIS INFORMATION IS NOT TO BE USED IN ANY LEGAL MANNER. THE ENGAGEMENT OF A BRITISH COLUMBIA LAND SURVEYOR (BCLS) WILL BE REQUIRED TO CONFIRM ALL LEGAL INFORMATION IF REQUIRED.

The following non-financial charges are shown on the current title and may affect the property  
None.

Parcel dimensions shown hereon are derived from Land Title Office records.

This sketch represents a site improvement survey and is not intended for the purposes of a survey/mortgage certificate.

FILE: 006-Peninsula
DWG/DATE: 2024-07-15
<b>AG Surveys</b>
545 - 110 Marine Drive
Ucluelet, BC V0R 3A0
phone (250) 266-4536



**DISTRICT OF UCLUELET****Zoning Amendment Bylaw No. 1356, 2024**

A bylaw to amend the “District of Ucluelet Zoning Bylaw No. 1160, 2013”.  
(1768 Peninsula Road)

---

**WHEREAS** the District of Ucluelet Council by Bylaw No. 1160, 2013, adopted the Zoning Bylaw and now deems it appropriate to amend the Zoning Bylaw;

**NOW THEREFORE** the Council of the District of Ucluelet, in open meeting assembled, enacts as follows:

**1. Map Amendment:**

Schedule A (Zoning Map) of *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by changing the zoning designation of the northeastern most 501.6m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), shown shaded on the map attached to this Bylaw as Appendix ‘A’, from CS-2 Service Commercial to CS-1 Village Square Commercial.

**2. Text Amendments:**

Schedule B of the *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by:

- A. Adding a new subsection alphanumerically to the CS-2 Service Commercial zone such that the new section reads as follows:

“CS-2.7 Other Regulations:

CS-2.7.1 Notwithstanding other regulations in this bylaw, on the lands legally described as the southwestern most 731.6 m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), the following regulations apply:

- (1) minimum lot size: 731.6m<sup>2</sup>
- (2) minimum lot frontage: 13.72m
- (3) a *Mixed Commercial/Resort Condo* use is permitted, with the *Resort Condo* component limited to either one or two units.”

- B. Adding a new subsection alphanumerically to the CS-1 Village Square Commercial zone such that the new section reads as follows:

“CS-1.7 Other Regulations:

CS-1.7.1 Notwithstanding other regulations in this bylaw, on the lands legally described as northeastern most 501.6m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), the minimum lot frontage is 13.72m.”

**3. Citation:**

This bylaw may be cited as “District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024”.

**READ A FIRST TIME** this      day of      , **2024.**

**READ A SECOND TIME** this      day of      , **2024.**

**PUBLIC HEARING** this      day of      , **2024.**

**READ A THIRD TIME** this      day of      , **2024.**

**ADOPTED** this      day of      , **2024.**

**CERTIFIED CORRECT:** “District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024.”

---

Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

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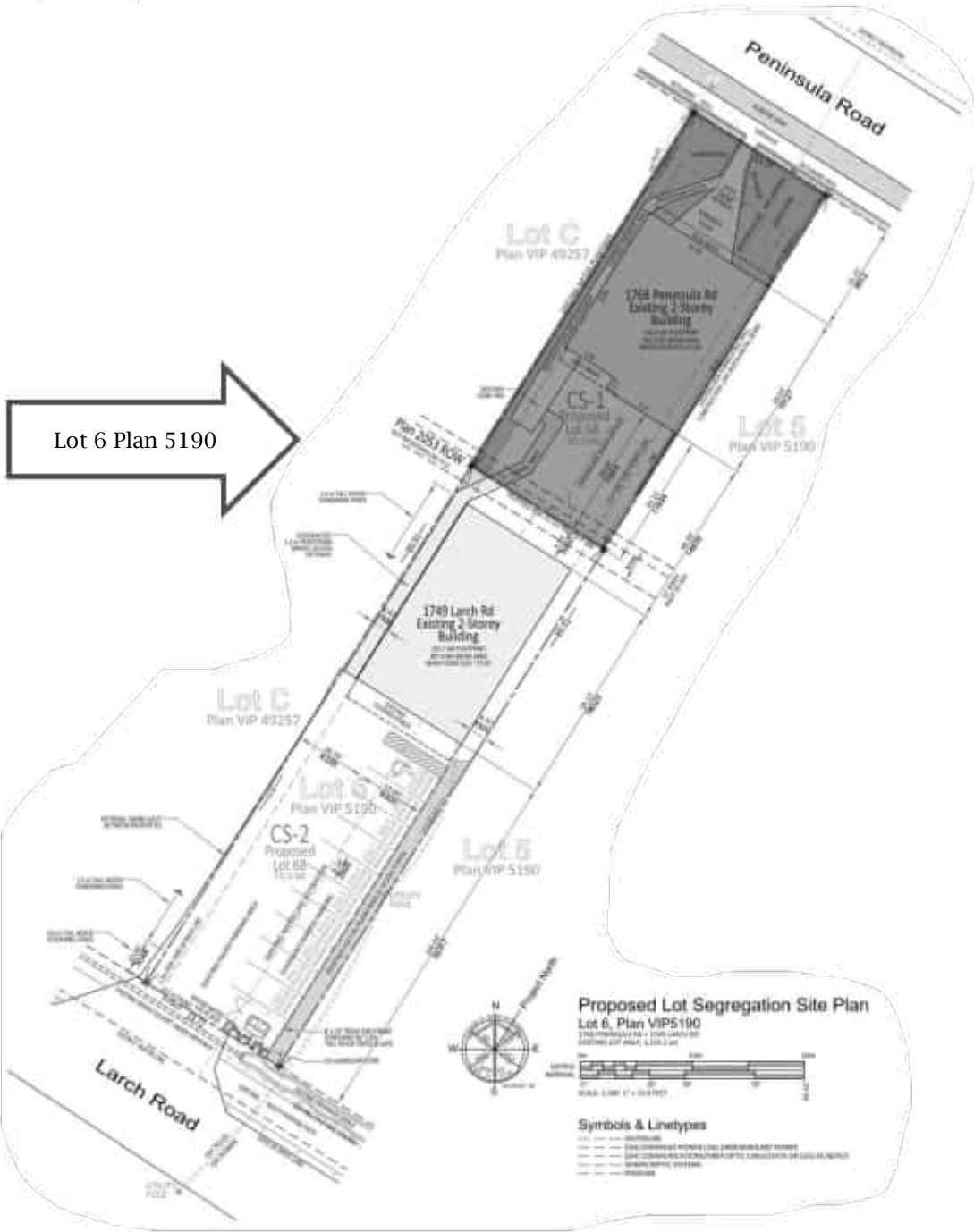
Duane Lawrence  
Corporate Officer

**Appendix 'A'**

**District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024**



From: CS-2 Service Commercial  
To: CS-1 Village Square Commercial





## DEVELOPMENT VARIANCE PERMIT DVP24-08

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**Ann Kim and Hyun Cho, 1768 Peninsula Road, Ucluelet, BC, V0R 3A0** (the "Owner")

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures, and other development thereon:

**1768 Peninsula Road; PID 005952115, Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District, Pacific Rim Professional Centre** (the "Land")

3. The work authorized by this Permit may only be carried out:

- a. in compliance with the requirements of the *District of Ucluelet Zoning Bylaw No. 1160, 2013* ("zoning bylaw"), except where specifically varied or supplemented by this development variance permit and,
- b. in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, specific to the lot 6A as identified on **Schedule A**:

1. **A Side Yard Setback of 0m** whereas section CS-1.6.1(1)(c) of the zoning bylaw indicates a minimum of 1.5m.

5. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, specific to lot 6B as identified on **Schedule A**:

1. **A minimum of five off-street parking spaces** whereas section 505.1 of the zoning bylaw requires a minimum of eight off-street parking spaces,
2. **A minimum aisle width of 6.3m (20.78ft)**, whereas section 504.3(1) requires a minimum aisle width of 7.5m (25ft) for a 90-degree parking angle,
3. **Landscaping a minimum of 0m in width and 0m in height** whereas section 601.2(1)(a) requires no less than 1.5m (5ft) in height and 1.5m (5ft) in width,
4. **A minimum of 1m in width of landscaping**, whereas section 601.2(2) requires a width of 1.5m (5ft),
5. **Landscaping a minimum of 0m in width and 0m in height**, whereas section 603.1(1) requires no less than 1.2m (5ft) in height and 1.8m (5ft) in width,

6. **Landscaping a minimum of 1m in width, whereas section 603.1(2) requires a width of 1.8m (6ft).**
6. The above variances are granted for the proposed subdivision as shown on **Schedule A**.
  7. The above variances are granted for the proposed structures and uses of the land as shown on **Schedule A**. Should the buildings be later removed or destroyed, this Development Variance Permit shall cease to apply and the zoning bylaw requirements in effect at the time shall apply.
  8. The Owner shall substantially commence the development within 24 months of the date of issuance, after which this permit shall be null and void.
  9. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.
  10. This Permit is NOT a Building Permit.

**AUTHORIZING RESOLUTION** passed by the Municipal Council on the      <sup>th</sup> day of      , 2024.

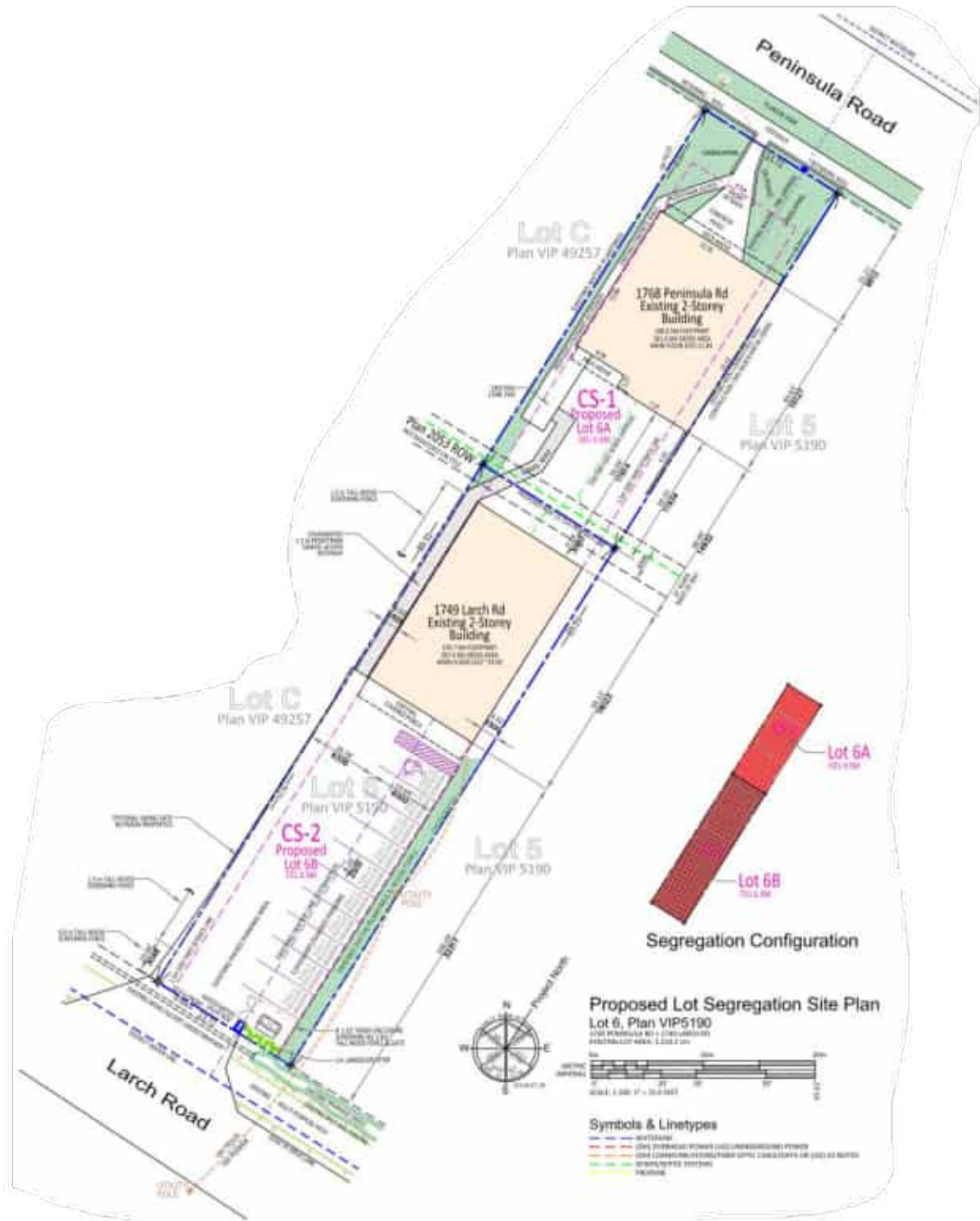
**ISSUED** the      <sup>th</sup> day of      , 2024.

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Bruce Greig  
Director of Community Planning



**SCHEDULE A**







**Minute Excerpts from the  
October 10, 2024, Regular Council Meeting**

**5. BYLAWS**

**5.1 Zoning Amendment and Development Variance Permit for 1768 Peninsula Road  
*Anneliese Neweduk, Planner***

Ms. Neweduk presented this report.

In response to Council questions, Staff clarified that the variance related to the parking isle width is supportable as it meets the fire access lane minimum width requirements outlined in the Fire Services Development Design Policy.

The applicant's agent was available to answer Council questions.

2024.2290.REGULAR *IT WAS MOVED AND SECONDED:*

***THAT*** Council give first and second reading to District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024, and direct staff to give notice for a public hearing to receive input on the bylaw and on Development Variance Permit 24-08.

**CARRIED.**



**Joseph Rotenberg**

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**From:** Bruce Faith [REDACTED]  
**Sent:** November 29, 2024 6:56 PM  
**To:** Community Input Mailbox  
**Subject:** Re: Zoning Amendment

**[External]**

Please include Application RZ24-11 & DVP24-08 in my previous submission.

Bruce Faith  
[REDACTED]  
310 Reef Point Rd.

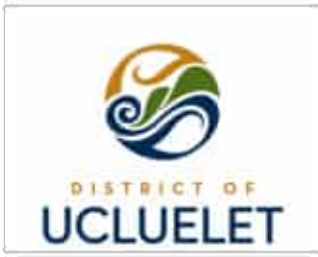
On Fri, Nov 29, 2024 at 5:20 PM Bruce Faith [REDACTED] wrote:

Bruce Faith, 310 Reef Pt Rd. Application # RZ24-09 & DVP24-04

Why are you entertaining a zoning change when none of the minimum requirements are not met. This application does not meet the minimum front yard setback, does not meet minimum setback for an existing accessory building and does not meet the minimum exterior side yard requirements. Why is Council even considering this application when so many of the requirements are not being met. We have to stop catering to rental properties and Concentrate on affordable housing, water treatment upgrades and infrastructure up grades ie. asbestos pipes removal, which has now affected the elementary school drinking water.

Bruce Faith





## REPORT TO COUNCIL

Council Meeting: December 10, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

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**FROM:** JOHN TOWGOOD, MUNICIPAL PLANNER

**FILE NO:** 3360-20-RZ24-09/3090-20-DVP24-04

**SUBJECT:** ZONING AMENDMENT AND DVP FOR LOT 2 PLAN EPP117265

**REPORT NO:** 24-128

**ATTACHMENT(S):** APPENDIX A – ZONING AMENDMENT BYLAW NO. 1355, 2024  
APPENDIX B – DEVELOPMENT VARIANCE PERMIT 24-04  
APPENDIX C – REPORT 24-114 NOVEMBER 12, 2024  
APPENDIX D – REPORT 24-94 SEPTEMBER 24, 2024

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### RECOMMENDATION(S):

**THAT** Council give third reading to *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*.

**THAT** Council adopt to District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024.

**THAT** Council authorize the Director of Community Planning to execute and issue Development Variance Permit 24-04.

---

### BACKGROUND:

On September 24, 2024, Council received a report (**Appendix D**) outlining a request to amend and vary *District of Ucluelet Zoning Bylaw No. 1160, 2013*, to facilitate the fee simple and phased strata subdivision of Lot 2, Section 21, Clayoquot District, Plan EPP117265. Council gave first and second reading to *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, the corresponding bylaw for this request. On September 26<sup>th</sup> the applicant notified planning staff that there was no longer a requirement to create a phased strata because the owner plans to build the 13<sup>th</sup> cabin immediately. This request (see **Appendix C**) required that *Bylaw No. 1355* have its second reading repealed and the bylaw amended prior to the public hearing. At the November 12, 2024 meeting, Council repealed second reading, amended the bylaw, and gave it second reading as amended. The required notice was given for *Bylaw No. 1355* with the public hearing occurring within this Council Meeting prior to this report. Council is now in a position to consider third reading and adoption of *Bylaw No. 1355*.

Council directed staff to give statutory notice to receive input on the Development Variance Permit 24-04 (**Appendix B**); this notification was completed. If *Bylaw No. 1355* is adopted, Council can consider authorization of Development Variance Permit 24-04.

**ANALYSIS OF OPTIONS:**

A	Council give third reading to District of Bylaw No. 1355, and approve DVP24-04	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Would allow the applicants development to proceed as requested</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• Would amend and vary Zoning Bylaw 1160, 2013</li> </ul>
B	Modify zoning bylaw.	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• The application would be delayed</li> </ul>
		<u>Suggested Motion</u>	<ul style="list-style-type: none"> <li>• <b>THAT</b> Council request <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i>, be amended in the following ways (<b>state desired outcome of amendments</b>), and that the bylaw be brought back for Council consideration.</li> </ul>
D	Reject the application.	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• The application would not proceed</li> <li>• Additional Staff time will be required to follow up with applicant and consultants</li> </ul>
		<u>Suggested Motion</u>	<p><b>THAT</b> <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i> be rejected; and,</p> <p><b>THAT</b> Council direct Staff and to advise the applicant that in order to proceed with the development the following changes are necessary: <b>[state reasons]</b>.</p>

**POLICY OR LEGISLATIVE IMPACTS:**

This application would amend and vary *District of Ucluelet Zoning Bylaw No. 1160, 2013*.

**NEXT STEPS:**

If Council adopts District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 and approves DVP 24-04, the applicant would be able to apply for building permit and subdivision.

Respectfully submitted:      JOHN TOWGOOD, MUNICIPAL PLANNER  
                                          BRUCE GREIG, DIRECTOR OF COMMUNITY PLANNING  
                                          DUANE LAWRENCE, CAO



**DISTRICT OF UCLUELET**

**Bylaw No. 1355, 2024**

A bylaw to amend the “District of Ucluelet Zoning Bylaw No. 1160, 2013”.

---

**WHEREAS** Section 479 and other parts of the Local Government Act authorize zoning and other development regulations;

**NOW THEREFORE** the council of the District of Ucluelet, in open meeting assembled, enacts as follows;

**1. Citation**

This bylaw may be cited as “District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024”.

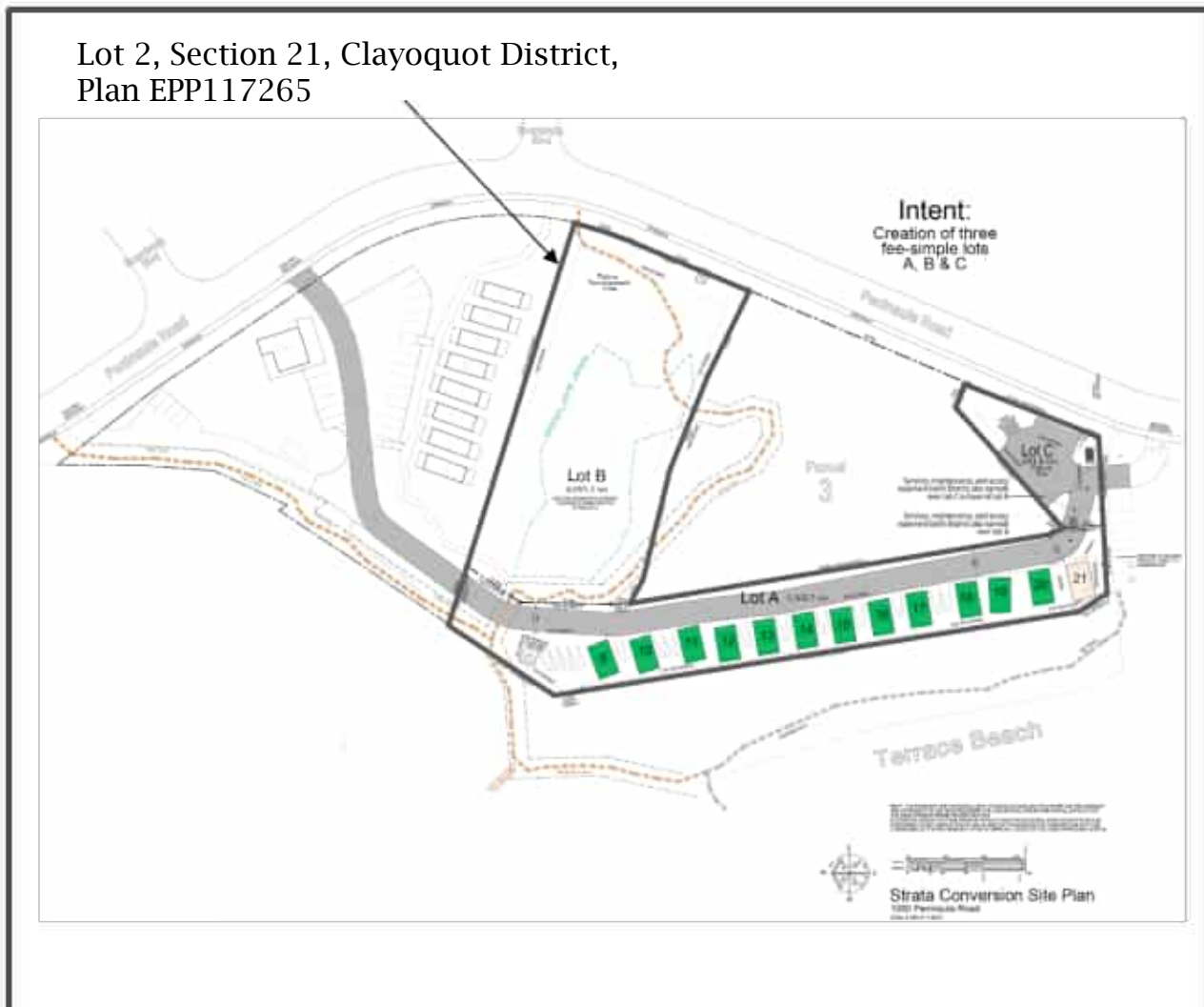
**2. Text Amendment**

The District of Ucluelet Zoning Bylaw No. 1160, 2013, as amended, is hereby further amended by adding a new subsection alphanumerically in Schedule B – The Zones within the CS-5 Zone – TOURIST COMMERCIAL such that the new subsection reads as follows:

**“CS-5.7 Other Regulations:**

CS-5.7.1 Notwithstanding other regulations of this bylaw, the lands legally described as Lot 2, Section 21, Clayoquot District, Plan EPP117265 and labeled “Lot C” on the Future Subdivision Map below, the Minimum Lot Size is 680m<sup>2</sup>.”

Future Subdivision Map



**READ A FIRST TIME** this 24<sup>th</sup> day of **September, 2024.**

**READ A SECOND TIME** this 24<sup>th</sup> day of **September, 2024.**

**SECOND READING RESCINDED** this 12<sup>th</sup> day of **November, 2024.**

**AMENDED** this 12<sup>th</sup> day of **November, 2024.**

**READ A SECOND TIME AS AMENDED** this 12<sup>th</sup> day of **November, 2024.**

**PUBLIC HEARING held** this \*\* day of \*\*\*, 2024.

**READ A THIRD TIME** this \*\* day of \*\*\*, 2024.

**ADOPTED** this \*\* day of \*\*\*, 2024.

**CERTIFIED CORRECT;** "District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024".

---

Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

---

Duane Lawrence  
Corporate Officer



## DEVELOPMENT VARIANCE PERMIT DVP24-04

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**GO CABIN VACATION PROPERTY MANAGEMENT INC.**  
(the "Owner")

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures and other development thereon:

**PID 032-127-812, Lot 2, Plan EPP117265, Section 21, Clayoquot Land District**

3. The work authorized by this Permit may only be carried out in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, for the future parcels specified on the Future Subdivision Map attached as **Schedule A**, and for the proposed creation of a phased strata on proposed Lot A:

- i. Lot A: a minimum front yard setback for a proposed resort Condo Cabin of 2.0 m, whereas section CS-5.6.1 (1) (a) of the zoning bylaw indicates a minimum of 6.0 m.
- ii. Lot C: a minimum front yard setback for an existing accessory building of 1.0 m, whereas section CS-5.6.1 (2) (a) of the zoning bylaw indicates a minimum of 6.0 m.
- iii. Lot C: a minimum exterior side yard setback for an existing accessory building of 2.5 m, whereas section CS-5.6.1 (2) (d) of the zoning bylaw indicates a minimum of 6.0 m.

5. The above variances are granted for the proposed initial subdivision and buildings on the Land as shown on Schedule A. Should the Land or portions of the Land be redeveloped at some future date, this Development Variance Permit shall cease to apply and the zoning in effect at the time shall apply.

6. This permit is valid for a period of 24 months from the date of issuance. If by that time a final plan of subdivision is not registered with the BC Land Title Survey Authority in general accordance with Schedule A, then this Development Variance Permit shall cease to apply and the zoning standards in effect at the time shall apply.

7. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.

8. This Permit is NOT a Building Permit.

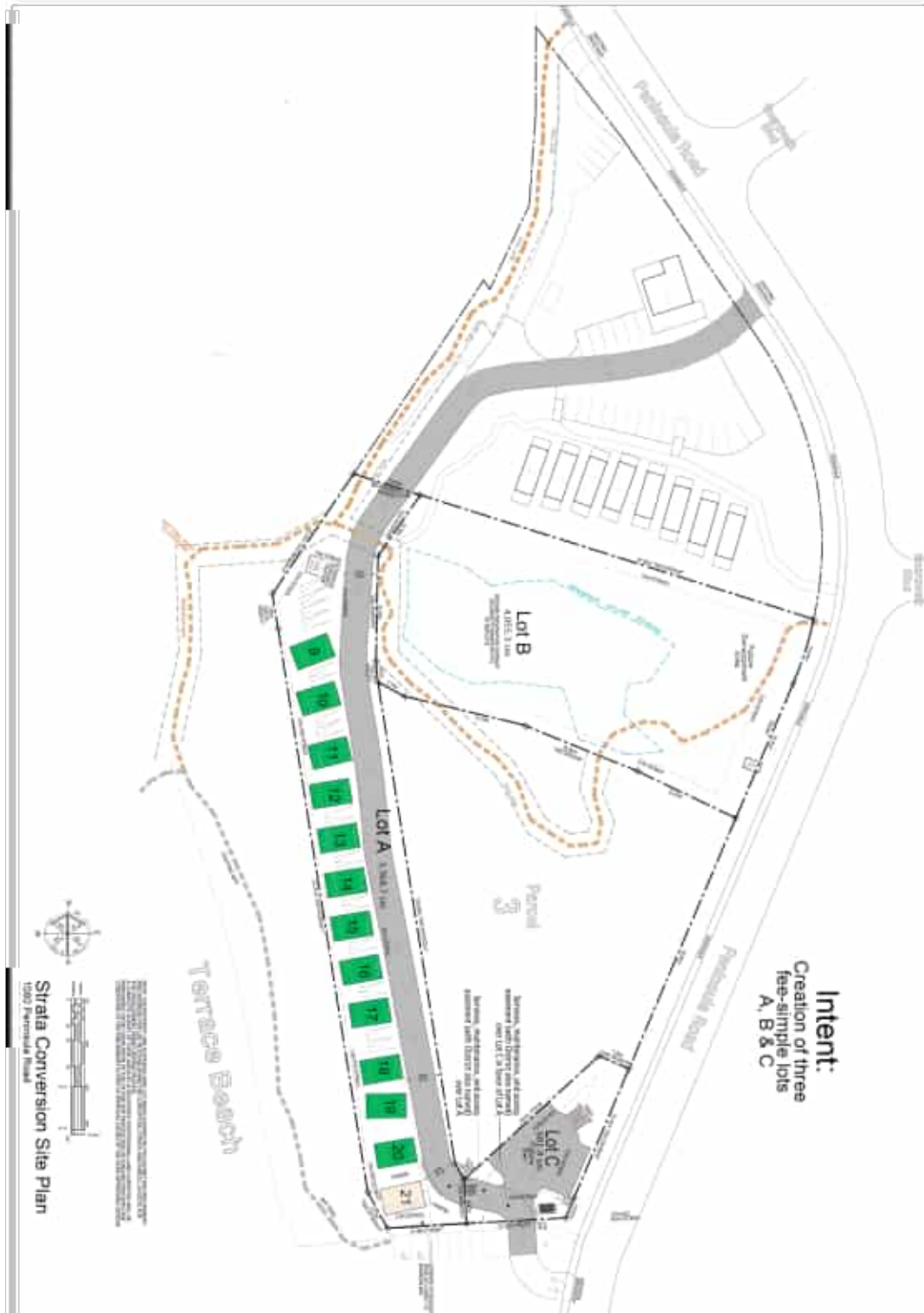
**AUTHORIZING RESOLUTION** passed by the Municipal Council on the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

**ISSUED** the \_\_\_\_\_ day of \_\_\_\_\_, 2024.

---

Bruce Greig  
Director of Community Planning

**SCHEDULE A**









## REPORT TO COUNCIL

Council Meeting: November 12, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

**FROM:** JOHN TOWGOOD, MUNICIPAL PLANNER

**FILE NO:** 3360-20-REZ24-09 3090-20-DVP24-04

**SUBJECT:** ZONING AMENDMENT AND DVP FOR LOT 2 PLAN EPP117265

**REPORT NO:** 24-114

**ATTACHMENT(S):** APPENDIX A – REPORT 24-94 AND APPENDICES DATED SEPTEMBER 24, 2024  
APPENDIX B – AMENDED FUTURE SUBDIVISION MAP  
APPENDIX C – ZONING AMENDMENT BYLAW No. 1355, 2024 (AS AMENDED)  
APPENDIX D – DEVELOPMENT VARIANCE PERMIT 24-04 (AS AMENDED)

### RECOMMENDATION(S):

1. **THAT** Council repeal second reading of *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*.
2. **THAT** Council amend *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024* by:
  - a. removing subsections CS-5.7.1(2) and CS-5.7.1(3) from the bylaw's text amendment; and,
  - b. replacing the Future Subdivision Map with the map attached to staff report 24-114 as Appendix B.
3. **THAT** Council give second reading to *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, as amended.
4. **THAT** Council direct Staff to give notice for a public hearing to be held on the amended *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, and Development Variance Permit 24-04.

### BACKGROUND:

On September 24, 2024, Council received a report (**Appendix A**) outlining a request to amend and vary *Zoning Bylaw No. 1160, 2013*, to facilitate the fee simple and phased strata subdivision of Lot 2, Section 21, Clayoquot District, Plan EPP117265. Council gave first and second reading to *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, the corresponding bylaw for this request. On September 26<sup>th</sup> the applicant notified planning staff that there was no longer a requirement to create a phased strata because the owner plans to build the 13<sup>th</sup> cabin immediately.

DISCUSSION

This change proposed by the applicant requires that *Bylaw No. 1355* be amended prior to the public hearing. The specific changes are the removing subsections CS-5.7.1(2) and CS-5.7.1(3) from the bylaw’s text amendment and a replacement of the Future Subdivision Map with the updated map attached to this report as **Appendix B**. The Development Variance Permit is also required to be modified by removing Clause 4.i (minimum frontage variance now no longer required) and adding the following variance in its place:

“Lot A: a minimum front yard setback for a proposed *Resort Condo* cabin of 2.0 m, whereas section CS-5.6.1 (1) (a) of the zoning bylaw indicates a minimum of 6.0 m.”

Other than the changes proposed in this report the application remains the same and the original report (**Appendix A**) can be referenced for this application.

ANALYSIS OF OPTIONS:

A	Council repeal second reading, amend and then give second reading to District of Bylaw No. 1355, and Direct Staff to give notice of public hearing	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Would allow District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 to advance to a public hearing.</li> <li>• The applicant would receive their desired outcome.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• Would allow District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 to advance to a public hearing.</li> <li>• DVP and other decisions of Council would be considered at a future meeting once notification has been completed.</li> </ul>
B	Modify the draft zoning bylaw prior to second reading directing Staff to give notice of first reading.	<u>Pros</u>	<ul style="list-style-type: none"> <li>• A modification to the bylaw amendment that Council deems appropriate may be beneficial to the application.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• The application would be delayed.</li> </ul>
		<u>Suggested Motion</u>	<ul style="list-style-type: none"> <li>• THAT Council directs Staff to modify the draft <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i>, to <b>(state desired outcome of amendments)</b>, for further consideration at a future meeting.</li> </ul>
D	Reject the application.	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• The application would not proceed.</li> <li>• Additional Staff time will be required to follow up with applicant and consultants.</li> </ul>
		<u>Suggested Motion</u>	<ul style="list-style-type: none"> <li>• THAT <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i> be rejected; and,</li> </ul>

	THAT Council direct Staff and to advise the applicant that in order to proceed with the development the following changes are necessary: [state reasons].
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POLICY OR LEGISLATIVE IMPACTS:

This application would amend and vary *District of Ucluelet Zoning Bylaw No. 1160, 2013*.

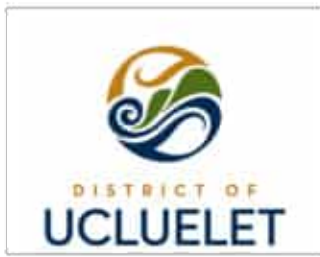
NEXT STEPS:

If Council directs Staff to give notice of public hearing for *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, and DVP24-04, Staff will schedule the public hearing and undertake the necessary notification.

Respectfully submitted:

JOHN TOWGOOD, MUNICIPAL PLANNER  
BRUCE GREIG, DIRECTOR OF COMMUNITY PLANNING  
DUANE LAWRENCE, CAO





## REPORT TO COUNCIL

Council Meeting: September 24, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

FROM: JOHN TOWGOOD, MUNICIPAL PLANNER

FILE NO: 3360-20-REZ24-09 3090-20-DVP24-04

SUBJECT: ZONING AMENDMENT AND DVP FOR LOT 2 PLAN EPP117265

REPORT NO: 24-94

ATTACHMENT(S): APPENDIX A – APPLICATION  
APPENDIX B – ZONING AMENDMENT BYLAW NO. 1355  
APPENDIX C – DEVELOPMENT VARIANCE PERMIT 24-04

### RECOMMENDATION(S):

1. **THAT** Council give first and second reading to *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*; and
2. **THAT** Council direct Staff to give notice for a public hearing to be held on *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024* and Development Variance Permit 24-04.

### BACKGROUND:

In 2020, Go Cabin Vacation Property Management Inc. (the “**Applicant**”) developed an abandoned segment of Peninsula Road as an extension of their existing “The Cabins at Terrace Beach” resort. This development involved zoning amendments, road dedications, consolidation of multiple parcels of land, trail dedications, and a return of land to the Yuułuʔiłʔatḥ Government. Once all approvals were completed, building permits were issued for twelve cabins and those cabins have now been built.

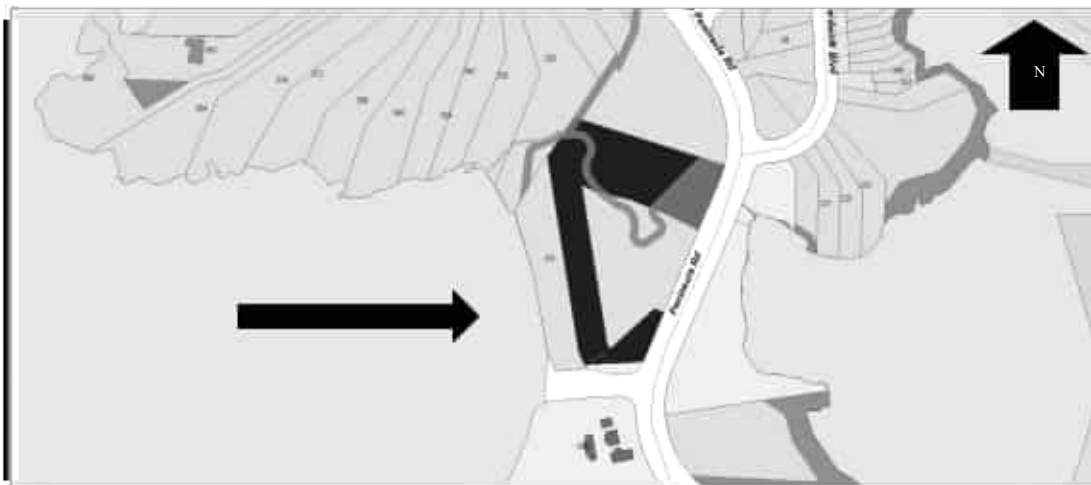


Figure 1. Area of Lot 2 Plan EPP117265

DISCUSSION:

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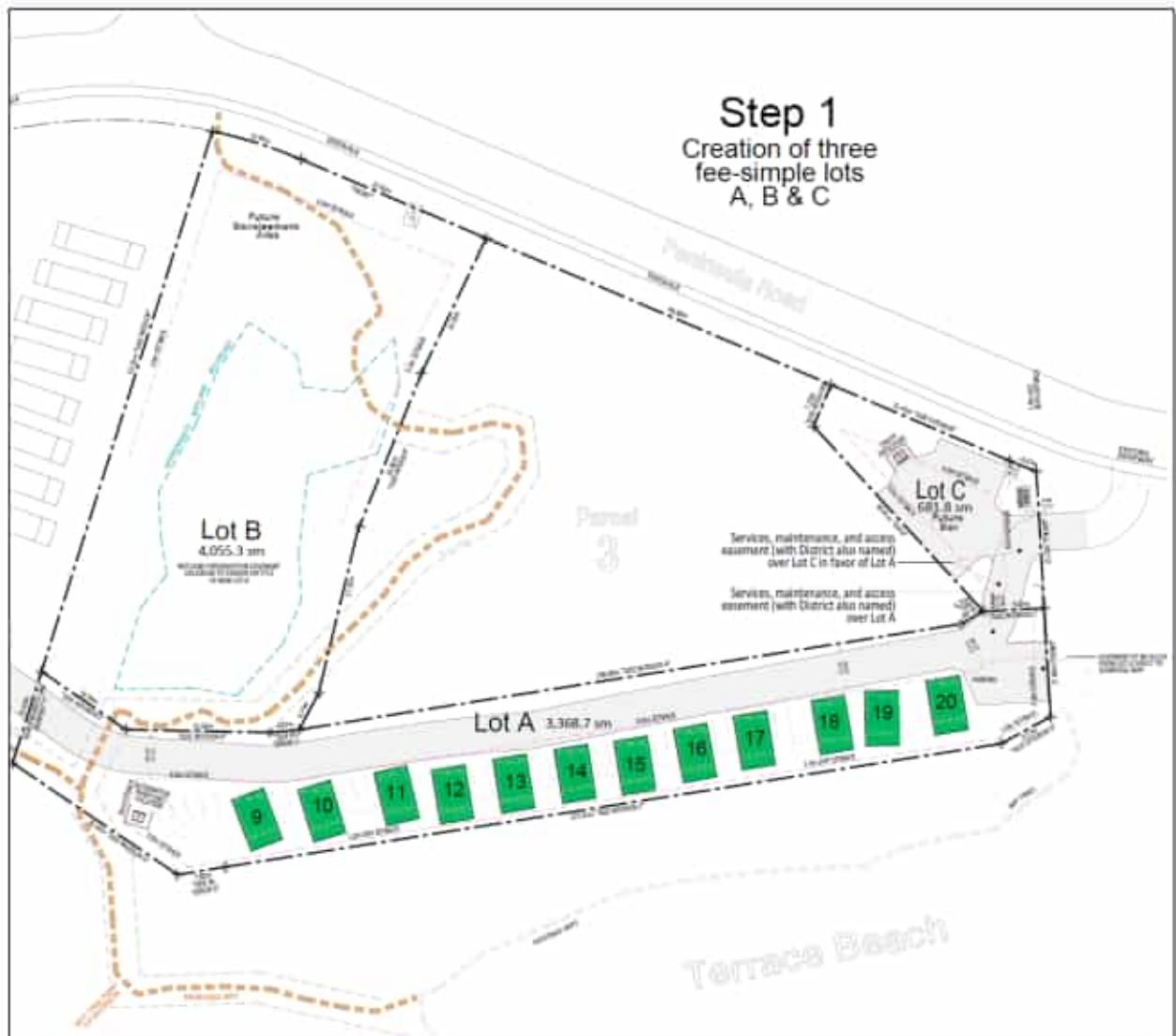
The new cabins are located on part of the new Lot 2, Section 21, Clayoquot District, Plan EPP117265 (see **Figure 1**).

The applicant wishes to stratify the newly created cabins so that each of the twelve cabin buildings would have a separate strata title. This would be accomplished in two steps. The first step would be to create a subdivision of three fee-simple lots from the parent Lot 2. The second step would be to register a phased strata subdivision over the proposed new Lot "A" initially containing the twelve new cabins. A future phase of the phased strata would include the small remainder of Lot "A" which could accommodate a thirteenth cabin that was part of the owners' original plans (as was approved in the DP for this development).

Step One:

The following three proposed lots would be created by the first step, as shown in **Figure 2** below:

- **Lot A** – is a 3,368.7sqm property containing the twelve recently constructed cabins, access road, and services. This proposed parcel would be subsequently subdivided as a phased building strata (further described below and in **Figure 3**).
- **Lot B** – is a 4,055sqm property with developable area near the Peninsula Road frontage with the remainder of the rear lot containing a wetland. The wetland has been defined by a biologist and the new lot created by this subdivision would retain the wetland protection covenant charge CB1208206 on its title. Access and services would be from Peninsula Road.
- **Lot C** – is a 681.8sqm property with developable area fronting Peninsula Road and with access from the municipal Seabridge Way road right-of-way. Access easements would need to be registered over the new Lot C for the services and access (including fire access) crossing from Lot A to Seabridge and Peninsula.



**Figure 2** – Future Subdivision: Step One (three fee-simple parcels)

### Step Two:

The second proposed step would see the owners register a phased strata plan for the cabins on the new Lot A. This could happen immediately following the registration of the subdivision plan discussed as step one, above. The plan would create a strata containing the 12 existing cabins, with a small remainder parcel (see **Figure 3**) which could accommodate a 13<sup>th</sup> cabin at a later date.

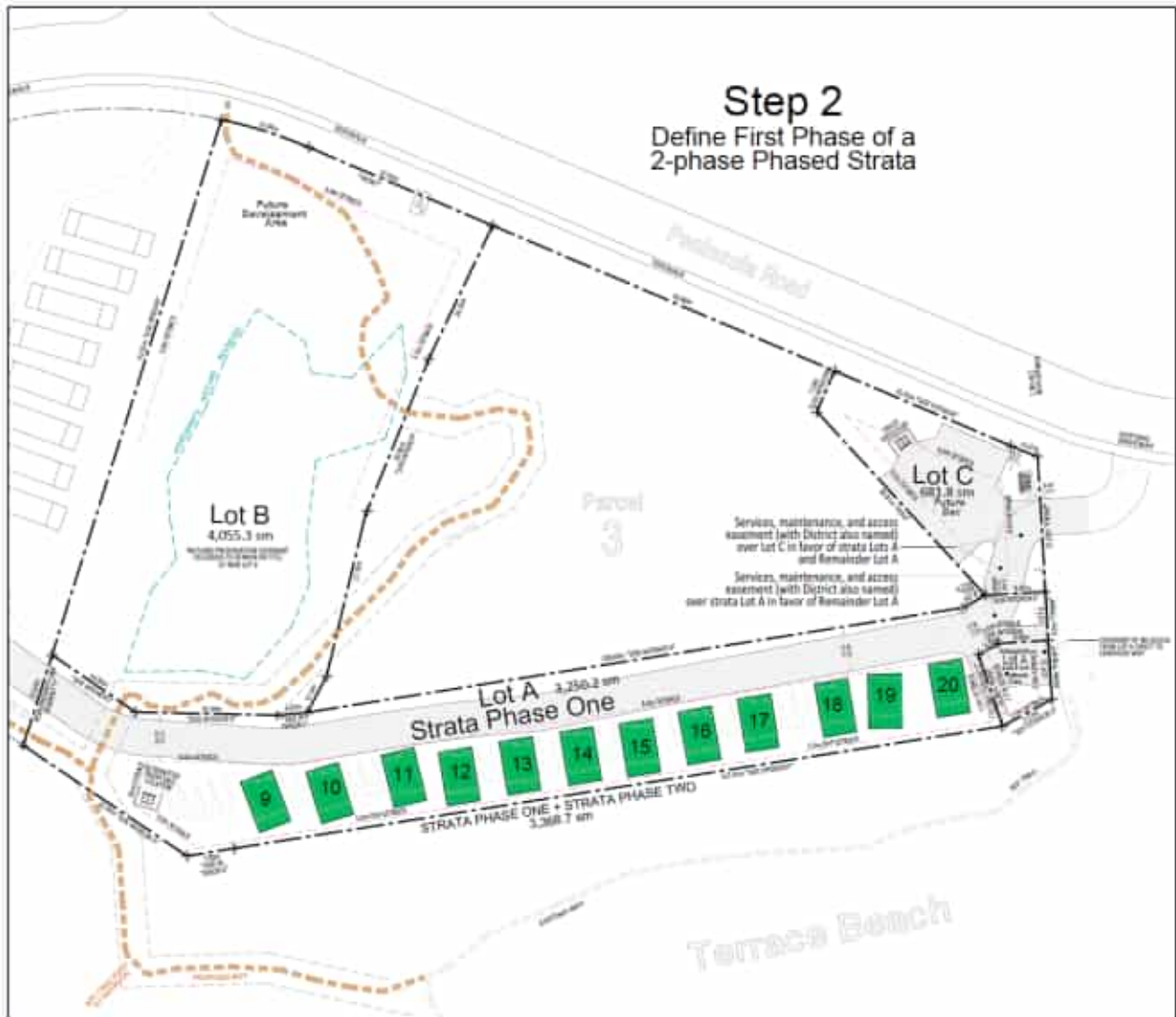


Figure 3 - Future Subdivision: Step Two (phased strata of Lot A)

Zoning:

The property is currently zoned CS-5 Tourist Commercial. It is proposed that the property retain the CS-5 zoning designation, with the following subsection added to achieve the applicant’s desired outcome:

**“CS-5.7 Other Regulations:**

CS-5.7.1 Notwithstanding other regulations of this bylaw, on the lands legally described as Lot 2, Section 21, Clayoquot District, Plan EPP117265, the following regulations apply in the areas of the lands outlined in thick dashed lines and as labelled on the Future Subdivision Map at the bottom of this section:

- (1) In the area of the proposed Lot C:
  - a. Minimum Lot Size: 680m<sup>2</sup>



- (2) In the area of the proposed Lot A:
  - a. Minimum Front Yard setback: 3.0m
  - b. Minimum Side Yard Interior setback: 1.0m
- (3) In the area of the proposed Remainder Lot A:
  - a. Minimum Lot Size: 118.0m<sup>2</sup>
  - b. Minimum Front Yard setback: 3.0m
  - c. Minimum Rear Yard setback: 1.5m
  - d. Minimum Side Yard Exterior setback: 1.0m
  - e. Minimum Side Yard Interior setback of 0.0m
  - f. On proposed Remainder Lot A, a *Resort Condo* use may contain one unit.”

The above amendment to the zoning regulations would provide the necessary adjustments to allow the minimum lot sizes for Lot C and the Lot A remainder, and reduced setbacks for Lot A and the Lot A remainder matching the approved DP and DVP that were issued for the cabin construction. The requested zoning amendments align with the development plan presented for the 2020 development permit, affecting only the internal lot configuration and maintaining the public realm within Seabridge Way.

#### **Development Variance Permit**

The applicant will need variances to the zoning bylaw to allow the proposed subdivision. These variances are specified in Development Variance Permit (DVP) 24-04 which is attached as **Appendix “C”** of this report. Similar to the requested zoning amendments, the requested variances are in line with the development plan anticipated in the 2020 development permit.

The DVP would permit a reduced frontage for Lot A – necessary during the first phase of the phased strata (the minimum frontage in the CS-5 zone would be met once the second phase were to join the strata). The two setbacks varied by the DVP would legalize an existing electrical shed on the area of the property proposed as Lot C, sited to meet Hydro requirements near Peninsula Road and Seabridge Way.

#### **No Access Covenant to Seabridge Way**

To ensure that Lot A, Lot C and the Lot A remainder will be accessed from the current development’s existing internal access road, a no-access Section 219 covenant would be applied to those future properties. This covenant would specifically restrict any additional access points from Seabridge Way. The District is to be named on these covenants, so that future owners could not discharge the covenant without first obtaining approval from the municipality.

#### **Servicing and access covenants:**

To ensure access and servicing rights to Lot A and Lot C a set of covenants and easements will be required. The District of Ucluelet will need to be a party to some of these agreements to ensure that the charges could not be removed from the property title without District approval.

**Frontage - Local Government Act:**

Both Lot A and the remainder of Lot A (the remainder would be a smaller fee-simple parcel at the conclusion of the first phase of the proposed phased strata) do not meet the minimum frontage required under section 512(2) of the *Local Government Act* which states:

*512(1) If a parcel being created by a subdivision fronts on a highway, the minimum frontage on the highway must be the greater of:*

- (a) 10% of the perimeter of the lot that fronts on the highway, and*
- (b) the minimum frontage that the local government may, by bylaw, provide.*

With the adoption of the *District of Ucluelet Development Application Procedures Bylaw No. 1350, 2024*, the District of Ucluelet’s Approving Officer now has delegated authority to grant an exemption from the minimum frontage requirements under section 512.

**Servicing**

The Lot A remainder would require use of the existing services for Lot A. The proposed Lot C would either require access to the Lot A services or will be required to create new service connections on the Peninsula Road frontage. Lot B would only be serviced from Peninsula Road. As the proposed zoning amendment does not change the uses or densities currently allowed, a larger servicing capacities review is not triggered by this application.

**Fire Services**

The original development has been reviewed and approved by Ucluelet’s emergency services. There is no proposed change to the physical layout from the 2020 development plans.

**ANALYSIS OF OPTIONS:**

A	Council give first and second reading to District of Bylaw No. 1355, and Direct Staff to give notice of public hearing	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Would allow District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 to advance to a public hearing.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• Would allow District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 to advance to a public hearing.</li> <li>• DVP and other decisions of Council would be considered at a future meeting once notification has been completed.</li> </ul>

B	Modify the draft zoning bylaw prior to directing Staff to give notice of first reading.	<u>Pros</u>	<ul style="list-style-type: none"> <li>A modification to the bylaw amendment that Council deems appropriate may be beneficial to the application.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>The application would be delayed.</li> </ul>
		<u>Suggested Motion</u>	<p>THAT Council directs Staff to modify the draft <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i>, to <b>(state desired outcome of amendments)</b>, for further consideration at a future meeting.</p>
D	Reject the application.	<u>Pros</u>	<ul style="list-style-type: none"> <li>Unknown at this time.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Unknown at this time.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>The application would not proceed.</li> <li>Additional Staff time will be required to follow up with applicant and consultants.</li> </ul>
		<u>Suggested Motion</u>	<p>THAT <i>District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024</i> be rejected; and,</p> <p>THAT Council direct Staff and to advise the applicant that in order to proceed with the development the following changes are necessary: [state reasons].</p>

POLICY OR LEGISLATIVE IMPACTS:

This application would amend the *District of Ucluelet Zoning Bylaw No. 1160, 2013*.

NEXT STEPS:

If Council directs Staff to give notice of public hearing of *District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024*, Staff will schedule the public hearing and undertake the necessary notification.

Respectfully submitted:

JOHN TOWGOOD, MUNICIPAL PLANNER  
 BRUCE GREIG, DIRECTOR OF COMMUNITY PLANNING  
 DUANE LAWRENCE, CAO





## REPORT TO COUNCIL

Council Meeting: December 10, 2024  
 500 Matterson Drive, Ucluelet, BC V0R 3A0

**FROM:** ANNELIESE NEWEDUK, PLANNER

**FILE NO:** 3360-20 RZ24-11/3090-20 DVP 24-08

**SUBJECT:** ZONING AMENDMENT AND DEVELOPMENT VARIANCE PERMIT  
 FOR 1768 PENINSULA ROAD

**REPORT NO:** 24-124

**ATTACHMENT(S):** APPENDIX A – DISTRICT OF UCLUELET ZONING AMENDMENT BYLAW No. 1356, 2024  
 APPENDIX B – DEVELOPMENT VARIANCE PERMIT 24-08

**RECOMMENDATION:**

THAT Council give third reading to *District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024*.

THAT Council adopt *District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024*.

THAT Council authorize the issuance of Development Variance Permit 24-08.

**BACKGROUND:**

During the [October 10, 2024, Regular Council Meeting](#), the *District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024* (See **Appendix A**) received first and second reading. At the same Council Meeting, Council directed staff to give notice for a Public Hearing on the Bylaw and the associated Development Variance Permit 24-08 (See **Appendix B**). Notification was completed and a Public Hearing on the bylaw was held prior to this report as part of this Council Meeting. Having conducted a Public Hearing, Council is now in a position to consider third reading and adoption of *Bylaw No. 1356*. Background information can be found in the [October 10, 2024, Council Meeting Agenda \(item 5.1\)](#) and in the Agenda for this Council Meeting under Public Hearing item 5.2.1.

**ANALYSIS OF OPTIONS:**

A	Give third reading and adopt <i>Bylaw No. 1356</i> , and approve issuance of DVP24-08	<b><u>Pros</u></b>	<ul style="list-style-type: none"> <li>• Would support the applicants intent to subdivide.</li> <li>• Would remove lawful non-conforming property characteristics</li> </ul>
		<b><u>Cons</u></b>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<b><u>Implications</u></b>	<ul style="list-style-type: none"> <li>• If adopted, would allow for the application to proceed and would remove the lawful non-conforming property characteristics.</li> </ul>

<b>B</b>	Amend <i>Bylaw No. 1356</i> and/or DVP24-08	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Would ensure Council’s expectations are met</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• If the Bylaw is amended, Council will have to direct staff to give notice for a second Public Hearing.</li> </ul>
		<u>Suggested Motion(s)</u>	<p><b>THAT</b> Council direct staff to bring back <i>District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024</i>, with the following amendments: <b>[specify desired changes]</b> for readings of the amended bylaw and public hearing at a future Council Meeting date.</p>
<b>C</b>	Abandon <i>Bylaw No. 1356</i> and reject DVP24-08	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Lawful non-conforming property characteristics would remain</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• Would not allow application or proposed subdivision to proceed</li> <li>• Lawful non-conforming property characteristics would remain</li> </ul>
		<u>Suggested Motion(s)</u>	<p><b>THAT</b> Council reject the application for Development Variance Permit 24-08 and <i>District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024</i>.</p>

**POLICY OR LEGISLATIVE IMPACTS:**

This application is consistent with the *Local Government Act* and the *District of Ucluelet Official Community Plan Bylaw No. 1306, 2022*. If the application proceeds, *Bylaw No. 1356* would amend and DVP24-08 would vary the *District of Ucluelet Zoning Bylaw No 1160, 2013*.

**NEXT STEPS:**

Should the Bylaw receive third reading and adoption, Council would be in a position to authorize the issuance of DVP24-08. This would allow the applicant to move forward with their subdivision application. Prior to subdivision approval, the applicant would need to register a series of charges on the title of 1768 Peninsula Road to ensure the sitework, landscaping, parking allocation, pedestrian access, and servicing agreements be developed as outlined in the application and Staff Report No. 24-100.

**Respectfully Submitted:**      Anneliese Neweduk, Planner  
                                                  Bruce Greig, Director of Community Planning  
                                                  Duane Lawrence, CAO

**DISTRICT OF UCLUELET****Zoning Amendment Bylaw No. 1356, 2024**

A bylaw to amend the "District of Ucluelet Zoning Bylaw No. 1160, 2013".  
(1768 Peninsula Road)

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**WHEREAS** the District of Ucluelet Council by Bylaw No. 1160, 2013, adopted the Zoning Bylaw and now deems it appropriate to amend the Zoning Bylaw;

**NOW THEREFORE** the Council of the District of Ucluelet, in open meeting assembled, enacts as follows:

**1. Map Amendment:**

Schedule A (Zoning Map) of *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by changing the zoning designation of the northeastern most 501.6m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), shown shaded on the map attached to this Bylaw as Appendix 'A', from CS-2 Service Commercial to CS-1 Village Square Commercial.

**2. Text Amendments:**

Schedule B of the *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by:

- A. Adding a new subsection alphanumerically to the CS-2 Service Commercial zone such that the new section reads as follows:

"CS-2.7 Other Regulations:

CS-2.7.1 Notwithstanding other regulations in this bylaw, on the lands legally described as the southwestern most 731.6 m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), the following regulations apply:

- (1) minimum lot size: 731.6m<sup>2</sup>
- (2) minimum lot frontage: 13.72m
- (3) a *Mixed Commercial/Resort Condo* use is permitted, with the *Resort Condo* component limited to either one or two units."

- B. Adding a new subsection alphanumerically to the CS-1 Village Square Commercial zone such that the new section reads as follows:

"CS-1.7 Other Regulations:

CS-1.7.1 Notwithstanding other regulations in this bylaw, on the lands legally described as northeastern most 501.6m<sup>2</sup> of Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District (PID: 005-952-115 at 1768 Peninsula Road), the minimum lot frontage is 13.72m.”

**3. Citation:**

This bylaw may be cited as “District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024”.

**READ A FIRST TIME** this      day of      , **2024.**

**READ A SECOND TIME** this      day of      , **2024.**

**PUBLIC HEARING** this      day of      , **2024.**

**READ A THIRD TIME** this      day of      , **2024.**

**ADOPTED** this      day of      , **2024.**

**CERTIFIED CORRECT:** “District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024.”

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Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

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Duane Lawrence  
Corporate Officer

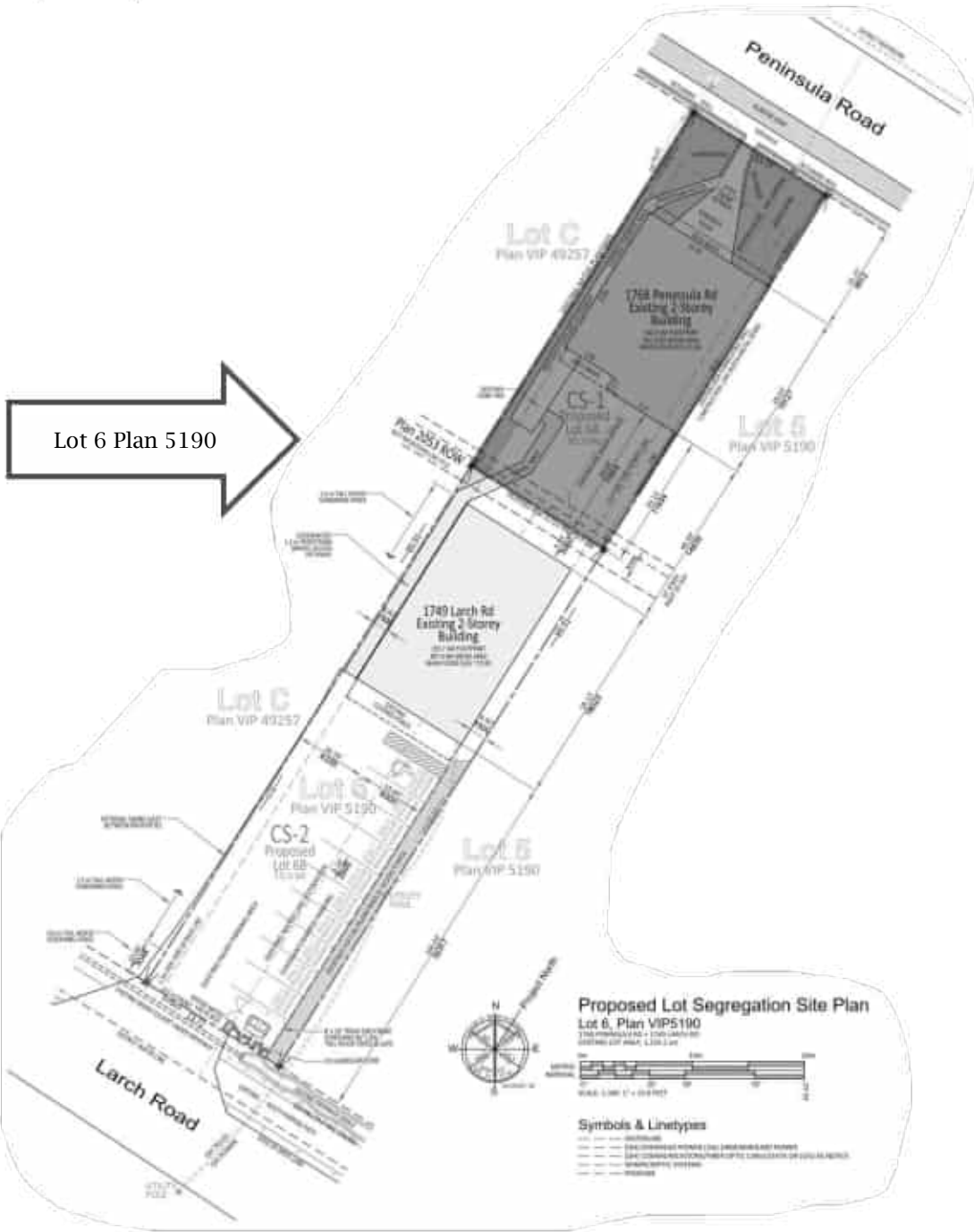


**Appendix 'A'**

**District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024**



From: CS-2 Service Commercial  
To: CS-1 Village Square Commercial





## DEVELOPMENT VARIANCE PERMIT DVP24-08

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**Ann Kim and Hyun Cho, 1768 Peninsula Road, Ucluelet, BC, V0R 3A0** (the "Owner")

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures, and other development thereon:

**1768 Peninsula Road; PID 005952115, Lot 6, Plan VIP5190, District Lot 282, Clayoquot Land District, Pacific Rim Professional Centre** (the "Land")

3. The work authorized by this Permit may only be carried out:

a. in compliance with the requirements of the *District of Ucluelet Zoning Bylaw No. 1160, 2013* ("zoning bylaw"), except where specifically varied or supplemented by this development variance permit and,

b. in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, specific to the lot 6A as identified on **Schedule A**:

**1. A Side Yard Setback of 0m whereas section CS-1.6.1(1)(c) of the zoning bylaw indicates a minimum of 1.5m.**

5. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, specific to lot 6B as identified on **Schedule A**:

**1. A minimum of five off-street parking spaces whereas section 505.1 of the zoning bylaw requires a minimum of eight off-street parking spaces,**

**2. A minimum aisle width of 6.3m (20.78ft), whereas section 504.3(1) requires a minimum aisle width of 7.5m (25ft) for a 90-degree parking angle,**

**3. Landscaping a minimum of 0m in width and 0m in height whereas section 601.2(1)(a) requires no less than 1.5m (5ft) in height and 1.5m (5ft) in width,**

**4. A minimum of 1m in width of landscaping, whereas section 601.2(2) requires a width of 1.5m (5ft),**

**5. Landscaping a minimum of 0m in width and 0m in height, whereas section 603.1(1) requires no less than 1.2m (5ft) in height and 1.8m (5ft) in width,**

6. **Landscaping a minimum of 1m in width, whereas section 603.1(2) requires a width of 1.8m (6ft).**
6. The above variances are granted for the proposed subdivision as shown on **Schedule A**.
7. The above variances are granted for the proposed structures and uses of the land as shown on **Schedule A**. Should the buildings be later removed or destroyed, this Development Variance Permit shall cease to apply and the zoning bylaw requirements in effect at the time shall apply.
8. The Owner shall substantially commence the development within 24 months of the date of issuance, after which this permit shall be null and void.
9. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.
10. This Permit is NOT a Building Permit.

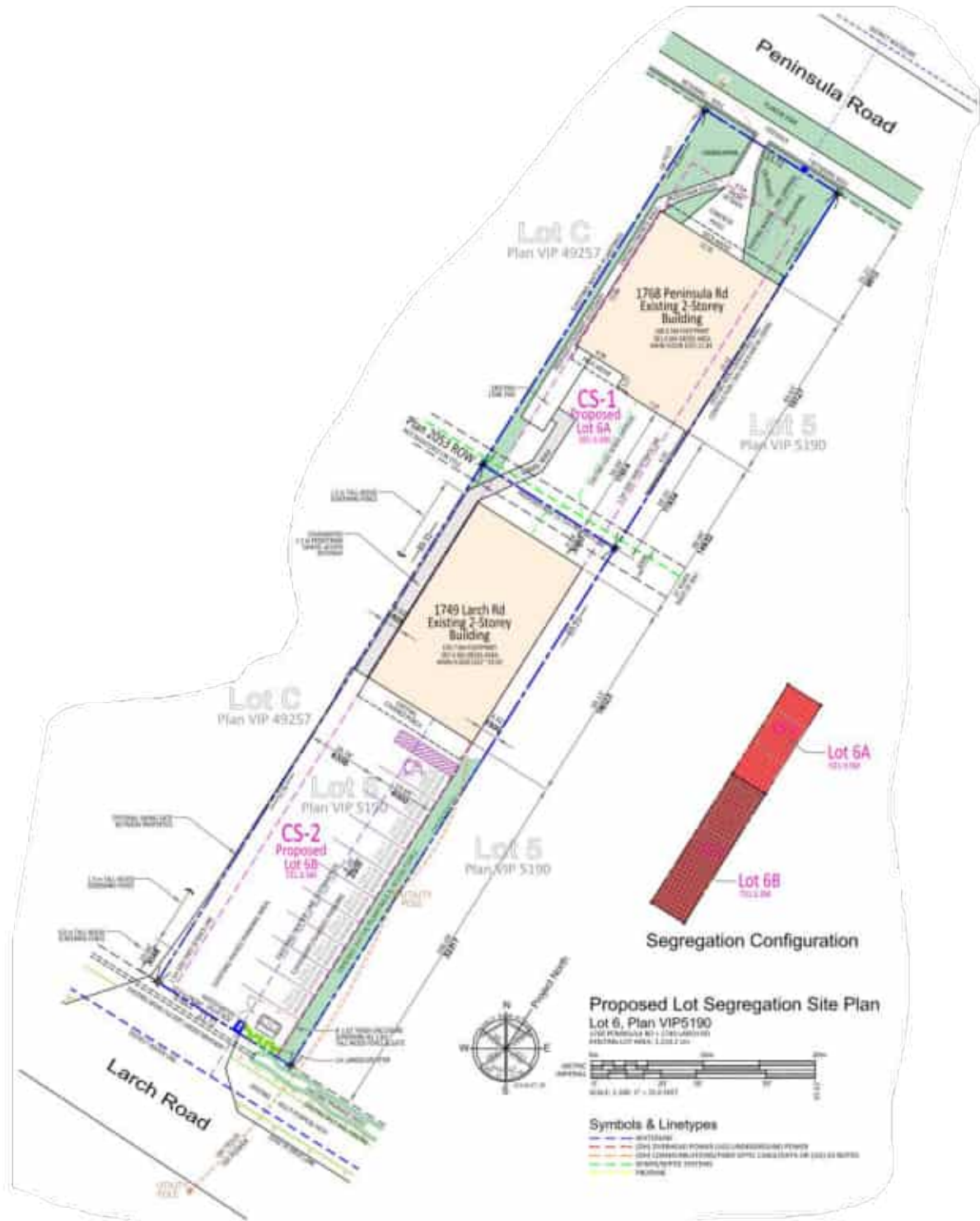
**AUTHORIZING RESOLUTION** passed by the Municipal Council on the      <sup>th</sup> day of      , 2024.

**ISSUED** the      <sup>th</sup> day of      , 2024.

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Bruce Greig  
Director of Community Planning

**SCHEDULE A**







- c. Detailed grading and rainwater management plans for the proposed development of the site which integrate the preliminary engineered plans for civil works, the recommendations of the Qualified Environmental Professional, and the landscape plans for the proposed development.
  - d. A copy of the development proforma that was previously presented to members of Council, for public distribution ahead of a public hearing.
  - e. Details of the ERIF Housing Association, its directors and constitution under the *Societies Act*, to inform the preparation of a draft Housing Agreement bylaw.
2. **THAT**, subject to receipt of the above, Council direct staff to expedite the return of the development proposal and bylaws to Council for consideration of readings and referral to a public hearing.

**BACKGROUND:**

ERIF Sustainable Solutions (ERIF) approached the community of Ucluelet with a suite of concepts for delivering housing. ERIF first introduced themselves to Council as a delegation at the June 11, 2024, Council meeting. ERIF also held a well-attended community open house on September 11, 2024, at the Ucluelet Community Centre. A preliminary Council discussion on the proposal was held September 24, 2024 (see **Appendix A**). ERIF submitted an initial information package September 20, 2024 (see **Appendix D**). A number of additional application items and correspondence have since been submitted to round out the application. Most recently Council endorsed the tsunami flood risk tolerance level at its November 26, 2024, meeting (see **Appendix C2 & C5**). The completed Flood Assessment was received December 4, 2024 (see **Appendix C1**).

**THE PROPOSAL:**

The ERIF team has presented plans for a development on the 221 Minato Road site including 262 units: 211 residential apartments, 11 residential / vacation rental houses (+ secondary suites), 29 vacation rental apartments and a 1,200m<sup>2</sup> commercial building (see **Figure 1**).

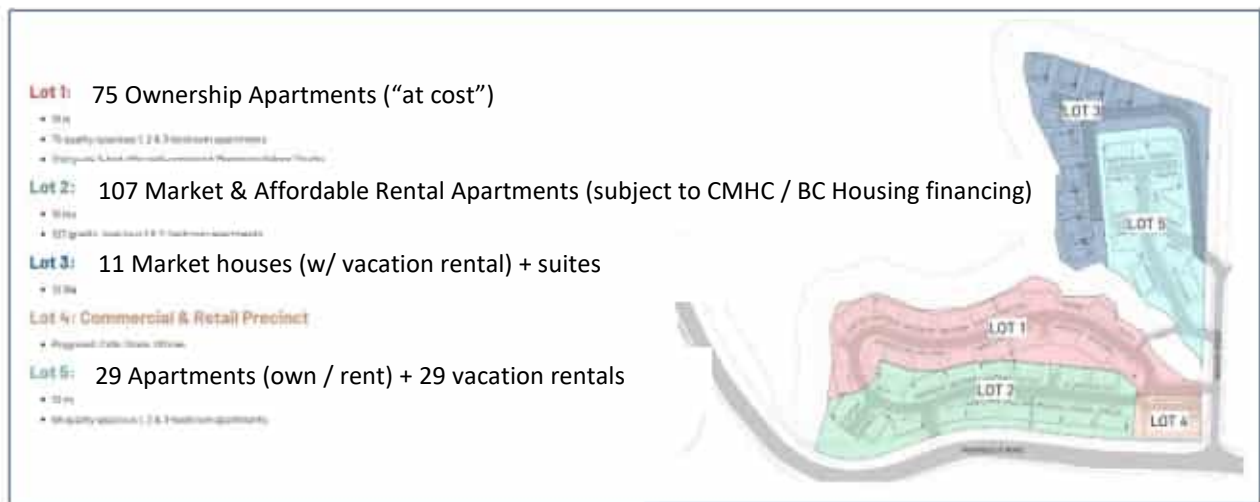


Figure 1: proposed development blocks



The proposed building form (for all but the 11 waterfront houses) is 2-storey modular clusters of 1-, 2- and 3-bedroom apartments that the applicant intends to construct using their modular system. A total of 55 buildings are shown in the project summary. The applicant states that their combination of a modular core with SIPS panel framing will reduce building costs to achieve greater affordability. The plan includes a total of 398 surface parking spaces (see **Appendices C10 & D**).

The first phase of the development would include the 11 market waterfront homes with vacation rentals, the commercial building on the corner of Minato Road and Peninsula Road, and 29 apartment condos to be sold “at cost” (with the price to be determined) – see **Figure 2**.

ERIF states that future phases (including the 107 market and affordable rental units) would depend on obtaining preferential financing from CMHC and/or BC Housing, and on full absorption of units in the preceding phase. Those attainable and affordable rental units, plus secondary suites in the waterfront homes (likely long-term rentals) represent 45% of the total proposed dwellings.

Phasing plan reference (p. 19 of ERIF application)	Construction Phase	# units	description	subject to:
Stage A	One	29	below-market sales on part of "Lot 1" (at cost)	prices to be determined
Stage B		11 + 11	waterfront lots w/ STRs + suites on "Lot 3"	
Stage C		1,290 m <sup>2</sup>	commercial on "Lot 4"	
TUP on Lot 5			temporary manufacturing / assembly facility on "Lot 5"	
Stage D	Two	29	rental housing on part of "Lot 2": 70% market / 30% affordable	if government financing subsidy available
Stage E	Three	46	below-market sales on remainder of "Lot 1"	if stage A sells out
Stage F		68	rental housing on remainder of "Lot 2": 70% market / 30% affordable	if stage D fully rented & government financing available
Stage F	Four	29 + 29	market sales and rentals + STRs on "Lot 5"	if 60 units occupied on Lots 1 and/or 2

Figure 2: content of proposed development phases

**PROPOSED BYLAW CHANGES:**

**OCP Bylaw:**

The proposal would require amendment to the Official Community Plan (OCP) bylaw. A draft OCP amendment bylaw has been prepared that would remove conflicts between the development proposal and the current OCP mapping and pertinent development policies. Council indicated in the discussion on September 24, 2024, that due to the housing and affordability offered, it may create an exception to the currently adopted policies in the OCP bylaw for this development. The draft bylaw is found in **Appendix E**.

**Zoning Bylaw:**

The current zoning of the property is a site-specific comprehensive development zone CD-6 – Minato Road, which was adopted in 2022 for a 212-unit proposed housing development on the same site. ERIF is proposing to replace the CD-6 zoning regulations to suit the current development proposal. A draft zoning amendment bylaw is found in **Appendix F**. This bylaw was

drafted by ERIF and has not been altered by staff other than minor corrections (to avoid conflicts within the structure of the existing zoning bylaw) and necessary formatting.

#### **ADDITIONAL APPLICATION DETAILS:**

The site plan provided by ERIF maximizes the number of buildings on the site. To achieve the density shown, the plan proposes the following:

- Clear most of the remaining trees on the site;
- Remove the 30m treed buffer adjacent to Peninsula Road;
- Construction of extensive retaining walls and regrading the site to create areas above the tsunami flood construction level of 10.7m.

The site plan appears to be developed without first completing a full site analysis. Proceeding with development approvals - without first fully understanding and accommodating sensitive features of the land that should be protected - could place the housing development at risk of delays. The need to understand and shape the development to suit the archaeological and ecological values of the land is prioritized by existing Ucluelet policy and was understood at the time of the previous rezoning in 2022. At the time, Council and the owners placed a covenant on the title of the property to enable the further site studies and engineering to follow, but with assurance that the work would be completed prior to subdivision and development. ERIF was made aware of these requirements of the 221 Minato Road property when they were first looking at potential development sites in May and early June.

#### **Archaeological:**

The Preliminary Field Reconnaissance (updated November 2024) identified four areas on and adjacent to the site of archaeological value and cultural use. The report notes, *“the Yuuʔuʔiʔpaʔ Government – Ucluelet First Nation requests complete avoidance of the one (1) registered archaeological sites DfSj-TBA, the two (2) identified areas of potential, and the one (1) traditional use site.”* More detailed information on the civil works near these features – including grading, utilities and rainwater discharge – would ensure avoiding impacts from the proposed development. The application currently states that care will be taken to avoid removing trees in the traditional use area wherever possible (see **Appendix C4**), but the current civil plans appear to show grading work and construction overlapping that area (see **Appendix D**).

#### **Environmental assessment:**

As identified in 2022, further environmental assessment and wetland delineation work was necessary prior to subdivision or development. An environmental assessment report was submitted by ERIF which updates a 2017 assessment provided by Aquaparian Environmental Consulting on measures to mitigate site impacts by the previous landowners. This report does not map the existing environmental features on the site or analyse the impacts that the proposed development would have on the ecological feature of the site and the adjacent park land. An

overview of the ecological context is provided, but the analysis commissioned does not map out existing sensitive features on site, overlay the proposed development, and then comment on the expected impacts or provide recommendations to avoid harm. That typical scope of a pre-development biophysical assessment is what the Ucluelet OCP (and covenant on title) calls for. Staff are recommending that a biophysical assessment of the site be completed – as is typical for [development in BC](#) and as required by the Ucluelet OCP bylaw.

In 2023 a developer (the District Group) considered purchasing the 221 Minato Road property; as part of their due diligence and preparing a development application they engaged a Qualified Environmental Professional (QEP) to do a biophysical analysis of the site. Although they did not complete their development application or submit the final results of the QEP site assessment, a preliminary plan was provided to the District indicating 5 wetland areas (with 15m setbacks) on the property, in locations now shown to be filled and developed on the ERIF plans (see **Figure 3**).



Figure 3: preliminary 2023 site plan indicating wetlands

Other recent developments in Ucluelet have come under scrutiny by the Ministry of Environment, with one receiving a provincial order to stop the site development and prepare a wetland remediation and offsetting plan – a process that delayed the development over 18 months. Understanding the site, before proceeding with development, is prudent to avoid unexpected delays and costs. Completing the investigation and wetland delineation according to current provincial standards early in the process can avoid putting the housing development project at risk.

The proposal includes significant impervious areas of roof surfaces, paving, parking areas and roadways. The plans for the civil works show stormwater discharge into an area that flows to an existing stream corridor providing fish and other aquatic habitat. Runoff volume calculations should be coordinated with the landscape design and be coordinated with the QEP for recommendations on mitigation measures and whether provincial permitting processes will be necessary. **Figures 4 - 8** identify areas of concern that should be assessed by a QEP.



Figure 4. Civil drawing C02. Storm outlet from lots 1 and 2 to creek. Volume?



Figure 5. Architectural drawing A201. Pond construction requiring a provincial permit for changes in and about a stream?

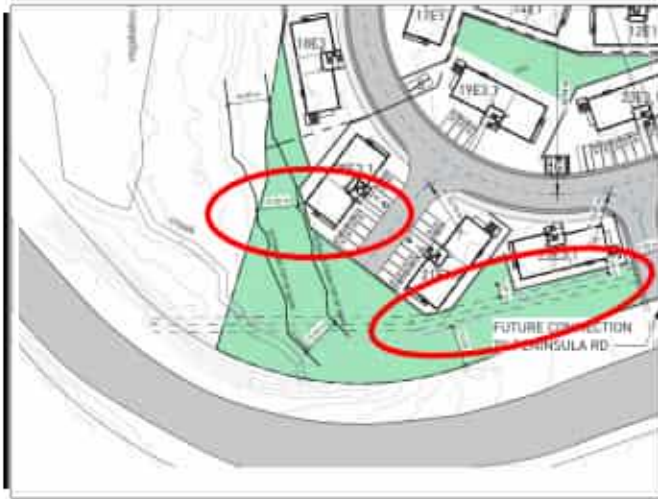


Figure 6. Architectural drawing A201. Retaining wall footings within setback from fish-bearing stream? Also, building setback from overhead hydro lines?

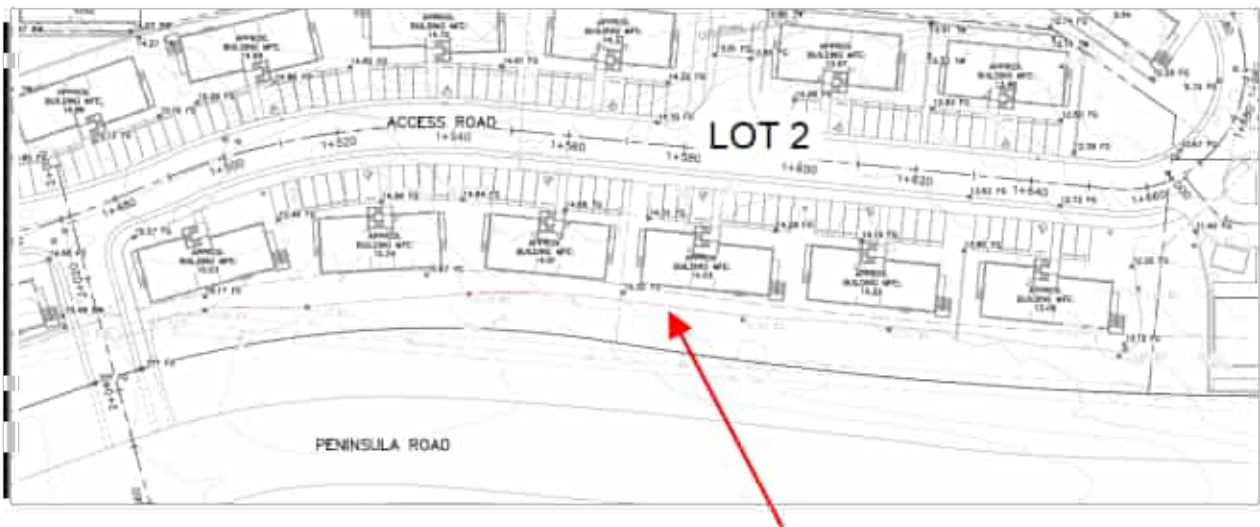


Figure 7. Civil drawing C03. Edge of excavation (dashed red line) within root zone of trees to be “preserved wherever possible.”



### **Housing Agreement:**

Given the information provided on the proposal, servicing and amenities, staff consider that a phased development agreement (PDA) is not the best tool for this development. The one shared amenity that might lend itself to a PDA is the park space on Lot 1 at the edge of Lot 2. A PDA would contain detailed plans for the park, play features etc., with detailed costing along with a commitment to the timing of the park construction. Given the relative size of the park in the overall development, staff recommend that the park details could more simply be handled as part of the Development Permit covering the adjacent multi-family housing buildings.

Housing Agreements should be developed for the Lots 1 and 2 ownership and rental units. A Housing Agreement bylaw could be drafted when more detail is provided on the ERIF Housing Association and the mechanisms for financing the construction and operation of those units. Separate housing agreements on the development parcels would also provide the owner with more flexibility than a phased development agreement (which would need to contain all the details and timing commitments for each phase before a public hearing is held on the PDA bylaw).

### **ALTERNATIVE OPTIONS:**

Staff understand Council's interest in expediting this application, however as noted above, a complete QEP assessment and site analysis should be completed prior to proceeding with bylaw amendment and prior to issuance of an environmental Development Permit. Addressing the potential conflicts noted above could result in a different site plan, and would normally be completed prior to proceeding with development approvals by Council. If Council chooses to proceed ahead of receiving the full site assessment, staff would then recommend amending the restrictive covenant currently on title to ensure those items are completed prior to subdivision. There is a risk in this approach, that the development might need to backtrack if site plan adjustments triggered further amendments to the OCP or zoning.

With the receipt of the flood assessment, the package has been referred to the Yuułu?if?ath Government for early review under Council policy 13-6830-01 for a period of 30 days. As Council has indicated its interest in fast-tracking this proposal, it should provide guidance if an alternative process is desired. The Yuułu?if?ath Government is already aware of some aspects of the proposed development, and a letter was submitted after the September 24, 2024, Council discussion (see **Appendix B**). As soon as the outstanding components of the site analysis and application information discussed above is received, staff will expedite completion of the bylaws and presentation of additional review materials in preparation for a public hearing.



A	Obtain complete site analysis and application information while other aspects of the review proceed.	<u>Pros</u>	<ul style="list-style-type: none"> <li>Allows avoidance of impact on sensitive ecological, archaeological and cultural features.</li> <li>Reduces risk of delays to the project later on.</li> <li>Enables preparation of Housing Agreement bylaw</li> <li>Enables concurrent review by Yuuʼuʼiifʼath Government.</li> <li>Consistent with municipal bylaws, policies and provincial best practices.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Delay for the development to proceed .</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>Once outstanding information is received, staff would expedite bylaw preparation and bring the application back to Council for consideration of readings and referral to a public hearing.</li> </ul>
B	Proceed with bylaw readings and public hearing. <b>[not recommended at this time]</b>	<u>Pros</u>	<ul style="list-style-type: none"> <li>Would expedite the process.</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Risk of delays later in the process.</li> <li>Risk of harm to sensitive ecological and cultural resources.</li> <li>Incomplete information disclosed ahead of public hearing.</li> <li>Decision prior to completing YG referral process.</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>Staff would give notice of a public hearing.</li> </ul>
		<u>Wording of Motion</u>	<ol style="list-style-type: none"> <li><b>THAT</b> Council give first reading to <i>Ucluelet Official Community Plan Amendment Bylaw No. 1366, 2024</i>.</li> <li><b>THAT</b> Council direct staff to refer <i>District of Ucluelet Official Community Plan Amendment Bylaw No. 1366, 2024</i>, to the Yuuʼuʼiifʼath Government, the Ministry of Transportation and Infrastructure and the School District 70 Board of Education for a period of 30 days for comment.</li> <li><b>THAT</b> Council give second reading to <i>Ucluelet Official Community Plan Amendment Bylaw No. 1366, 2024</i>.</li> <li><b>THAT</b> Council give first and second readings to <i>Ucluelet Zoning Amendment Bylaw No. 1367, 2024</i>.</li> <li><b>THAT</b> Council indicate that adoption of the OCP amendment and Zoning amendment bylaws would be subject to the owners registering a Section 219 covenant on the subject property to ensure the following is provided as a matter of public interest: [insert conditions].</li> <li><b>THAT</b> Council refer <i>Ucluelet Official Community Plan Amendment Bylaw No. 1366, 2024</i>, and <i>Ucluelet Zoning Amendment Bylaw No. 1367, 2024</i>, to a public hearing.</li> </ol>



**NEXT STEPS:**

This stage of approvals (timing dependent of submissions of complete application materials) includes the following steps authorized by Council:

- a. Consider OCP amendment bylaw
- b. Consider Zoning amendment bylaw
- c. Consider Housing Agreement bylaw
- d. Public Hearing (OCP amendment, rezoning and housing agreement bylaws)
- e. Amend or replace the restrictive covenant on the property title (e.g., replace with housing agreements)
- f. Adopt bylaws
- g. Issue environmental DP to enable subdivision and site works
- h. Authorize municipal off-site infrastructure works

Subsequent steps (some may progress concurrently with the above - timing will depend on the developer's decisions and their consultants' timing to provide the required plans and analyses):

- i. Subdivision - Preliminary Layout Assessment
- j. Final Subdivision
- k. Development Permit(s) for individual multi-family and commercial sites
- l. Building Permit applications for each structure

Respectfully submitted:      **Bruce Greig, Director of Community Planning**  
**Duane Lawrence, Chief Administrative Officer**





REPORT TO COUNCIL

Council Meeting: September 24, 2024
500 Matterson Drive, Ucluelet, BC V0R 3A0

FROM: BRUCE GREIG, DIRECTOR OF COMMUNITY PLANNING FILE NO: 3030-01 PRE-APP 24-06\_221 MINATO

SUBJECT: PRELIMINARY DISCUSSION - 221 MINATO ROAD (ERIF) REPORT NO: 24-97

ATTACHMENT(S): APPENDIX A - PRELIMINARY PLANS
APPENDIX B - RECENT PROPERTY HISTORY
APPENDIX C - S.219 COVENANT CB265207 EXCERPTS

RECOMMENDED PROCESS:

This report aims to gauge Council’s general sense of the community interest for a potential housing development at 221 Minato Road, and the degree of support or concern for specific aspects of the preliminary proposal and its impacts. Potential questions to consider and discuss are presented at the end of the report – Council may have others. Staff recommend that Council resolutions on these matters is not appropriate at this time, since a formal application has not yet been submitted; a more general discussion and comment on initial impressions or concerns may be helpful as the applicants finalize their plans for submission and formal review.

BACKGROUND:

ERIF Sustainable Solutions (ERIF) have approached the community of Ucluelet with an intriguing suite of concepts for delivering housing. ERIF first introduced themselves to Council as a delegation at the June 11, 2024, Council meeting. ERIF also held a well-attended community open house on September 11, 2024, at the Ucluelet Community Centre.

Staff have met several times with the ERIF team and are pleased with the open communication on the 221 Minato Road property. As with all developments proposing affordable and attainable housing options, staff are committed to moving things forward as quickly as possible. The discussions to date have been fruitful and have fleshed out a number of areas and possibilities for identifying and clearing hurdles for the housing concept and proposed development at 221 Minato Road.

The ERIF team has a number of unanswered questions about the site and its feasibility for the development program they are pursuing. Answers to some of those questions hinge on decisions by the municipality. Some technical questions can be resolved at the staff level, but others will depend on decisions made by Council.

THE PRELIMINARY PROPOSAL:

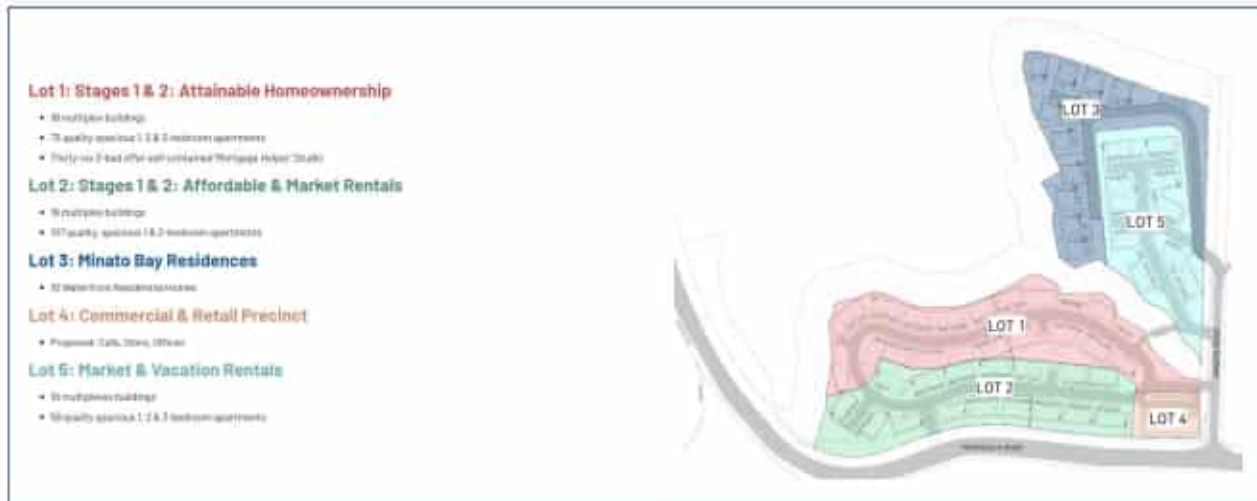
The ERIF team has presented preliminary plans for a development on the 221 Minato Road site including 221 residential units, 29 vacation rentals and a 1,200m<sup>2</sup> commercial building.



The proposed housing program currently includes:

- “240 Apartments:
  - 75 Attainable Homeownership
  - 53 Affordable Rentals (CMHC)
  - 83 Market Sales and Rentals
  - 29 Vacation Rentals
- 10 Waterfront Homes”

The proposed building form is 2-storey modular clusters of 1-, 2- and 3-bedroom apartments that would employ an innovative construction system. A total of 55 buildings are shown in the project summary. The combination of a modular core with SIPS panel framing is a creative approach to managing building costs. The plan includes a total of 398 surface parking spaces (see **Appendix A**).



**PROPERTY BACKGROUND:**

A brief outline of recent development steps is included in **Appendix B**. The current zoning of the property is a site-specific comprehensive development zone CD-6 – Minato Road that was created with the adoption of zoning amendment Bylaw No. 1312, 2022. That rezoning process began with a Committee-of-the-Whole meeting discussion [May 24, 2022](#), with a similar discussion of the site and high-level feedback to the proponent on their preliminary plans. That report includes a discussion of the background issues on the site. The CD-6 zoning permits up to 212 housing units on the property in a mix of single-family, duplex and multi-family forms. A mix of affordable and attainable rental and ownership housing was included, totalling 78% of the total units.

With the 2022 rezoning, there were a handful of issues that were not fully resolved – the owners wished to seek support for the zoning with the intent of following up with further engineering, archaeological and environmental work. Those items would need to be addressed prior to subdivision and development of the land, which could follow. The owners agreed to register a section 219 restrictive covenant on title to ensure that their commitments would be met, further details and studies would be provided, and that the development would proceed as proposed. A copy of the relevant excerpts from the registered covenant is found in **Appendix C**. The owners have subsequently provided the promised road and park dedication, and have obtained a licence of occupation for their existing bridge.

**CONTEXT & PROCESS:**

ERIF is pursuing an aggressive timeline and assessing how best to address issues in their application.

The purpose of this report is to provide a chance for ERIF to gauge the degree of Council support on several issues that may inform the project design and steps forward. This report is, by necessity, at a high level since we are not yet at the point of receiving a complete application - this report does not provide a complete staff analysis and recommendations for decisions. Once a formal application has been received and a full review has been completed Council will be able to consider

any request made by the developer. Until that time staff are presenting this information for guidance purposes only. No decisions of Council are being requested at this time.

#### SUMMARY OF TECHNICAL CHALLENGES:

As with any development, there are a number of technical issues that the need to be solved prior to subdivision and construction on the site at 221 Minato Road. Much of this work involves engineering analysis and design to ensure the safe and appropriate infrastructure is installed to support the development, while protecting sensitive and/or valuable features on- and off-site. The 2022 covenant in Appendix C provides a starting point. In some cases the requirements are set by bylaw, standard engineering practice and/or regulatory requirements of other agencies (e.g., Ministry of Transportation and Infrastructure). A brief overview of these items is listed below.

As proponents develop their plans, a balancing of site servicing and construction costs is part of their decision-making. The ERIF team has requested confirmation of some areas where Council decisions would affect the costs borne by the developer. Those are highlighted in the questions at the end of this report.

#### A. Site Servicing

The proponent will need to provide all on-site infrastructure including roads, sidewalks, water, sewer, electrical and data, street lighting, etc. The adequacy of municipal off-site water and sewer infrastructure is the subject of current engineering work by the District. A strategy for addressing the known sewer capacity issues in this catchment area, and funding options, will be presented to Council at an upcoming meeting – expected in October. The mechanism and degree of developer contributions will doubtless factor into the total project costs.

#### B. Tsunami Flood Hazard

The District's flood hazard mapping identified that the land at 221 Minato Road may be at risk of flooding in the event of a tsunami. Provincial guidance would point new development away from areas identified as being potentially subject to those types of hazards. The District's interim flood risk tolerance policy enables the property owner to propose an engineered solution to mitigate flood risks. The ERIF team are aware of the further work necessary to confirm the tsunami flood reference plane and possible mitigation features – and their costs – and confirming that a qualified engineer can provide a flood assurance statement to enable subdivision and development in those areas. In other words, the exact areas where housing construction will be feasible has not yet been confirmed. Staff understand that ERIF has engaged a consultant to do the engineering work; the results of that analysis will presumably confirm the site suitability or may trigger changes to the development approach and site plan.

#### C. Environmental and Archaeological assessment of the site:

As identified in 2022, further environmental assessment and wetland delineation work is necessary prior to subdivision or development. While a change in the zoning could

proceed ahead of those studies being completed, there is a risk that the results may identify areas unsuitable for development. Generally, best practice is to have complete site analysis prior to developing a site plan, but approvals can proceed with the understanding that the developer may have to change course as the work is completed.

D. Site Access, Circulation and Road Design:

No detailed plans have been submitted for the proposed road and pedestrian infrastructure beyond what is shown on the site plan. The site plan shows surface parking spaces backing directly onto the proposed road – this configuration treats the street more as the drive aisle for a parking lot, which is effective and safe at only the lowest speeds. Review and comment on whether this is possible while meeting the needs of emergency access would happen after an application has been made.

A comparable road cross-section might be the design for the current OceanWest phase 5 subdivision extending Forbes Road to Marine Drive. A pathway separated by a planted boulevard, integrated surface drainage design and parallel on-street parking spaces where space allows have consistently been part of recent residential subdivisions in Ucluelet.

As noted above, the completion of environmental assessment and wetland delineation may require some realignment of the proposed roads.

A consideration to be explored with this development is the appropriate use of public roads versus private lanes. The developers are encouraged to think ahead to the legal structure of individual fee-simple and/or strata lots and how they will connect to municipal services – this can influence where public roads and service mains extend into the property, and the extent of private service connections.

Q. Do Council members have any initial concerns about a road configuration with limited pedestrian facilities and vehicle parking spaces backing onto the roadway?

POLICY ISSUES AND QUESTIONS:

1. Park Land Dedication:

As noted above, the owners of the property have already dedicated the road right-of-way to widen Minato Road and the park land to protect the marine shoreline and stream corridor, as was promised in 2022. The ERIF team are requesting confirmation that no further park dedication will be required for the future development of the site.

Staff generally consider this to be a reasonable request, but note the following:

- If the complete environmental assessment and wetland delineation identifies further sensitive areas that should be protected, park dedication is a stronger conservation tool than a covenant on private property. Such areas might be better protected and maintained long term as additions to the park corridors; and,

- With 250 new homes there should be some consideration of play space. Tugwell Field and the Lions Park are the nearest existing park play spaces. From the corner of Minato Road and Peninsula Road, it is 1.1km to the nearest playground, requiring children and families to cross the highway to access suitable play spaces. A small green space is shown on the site plan; either a strata-maintained play space (with ongoing strata maintenance costs) or public park dedication for a play area should be considered within the proposed new neighbourhood.

**Q: Do Council members have any initial concerns with the concept of no additional park land dedication for this development?**

2. Construction of Public Trails:

Currently, the property owner has committed to constructing, at their cost, gravel pedestrian trails within the stream corridor and shoreline park areas as part of the development of the property (see covenant sections 2(c), 2(d) and 4 of the covenant in **Appendix C**). Olsen Bay is a very sensitive marine ecosystem, and can be impacted by disturbance as minor as footprints. It is therefore important that appropriate trails or protections be constructed within the park areas before new residents begin to occupy the site, to enable people to experience the landscape (and connect to the Wild Pacific Trail) without inadvertently damaging the environment. The ERIF team are requesting that constructing trails, and the costs, be borne by the municipality.

**Q: Do Council members have any initial concerns with the concept of taking on the cost of constructing the trails, and making this a priority capital project so that trails can be completed prior to occupancy of the site by new residents?**

3. Peninsula Road 30m Buffer and Further Lot Clearing:

The Ucluelet OCP bylaw includes policy 3.163 which applies to this, and other areas designated for comprehensive development planning:

*“Policy 3.163 A 30-metre wide tree buffer with no development must be provided along both sides of the Pacific Rim Highway.”*

The intent of this policy has been to maintain a forested entry into the community. Approaching Ucluelet is an experience of traveling through the forest, with glimpses of the surrounding mountains and Olsen Bay, before arriving in town. The proposed development plan would change the experience of how residents and visitors approach and arrive in the community.

The site plan with the 2022 rezoning maintained the 30-m treed buffer adjacent to Peninsula Road (see site plan attached to covenant in **Appendix C**). OCP Policy 3.162 prohibits the wholesale clearing of land on development sites, and points to tree retention as a community priority:

*“Policy 3.162 Clear-cutting tracts of land greater than 0.5 hectare is prohibited; habitat protection and tree retention is to guide and form the character of the development.”*



The OCP Policy 3.171 further points to tree retention as a priority:

*“Policy 3.171 The area on Minato Road north of Peninsula Road is designated for Future Comprehensive Planning. This area is envisioned as a residential community with potential for guest accommodation, with significant tree retention. The shoreline and marine wetlands of Olsen Bay is recognised as having important ecosystem values. No development should approach within 30m of the high water mark of Olsen Bay. A greenbelt should be maintained along stream corridors and the shoreline.”*

The site plan provided by ERIF maximizes the number of buildings on the site. To achieve the density shown, the plan proposes the following:

- Clear most of the remaining trees on the site (excluding dedicated park areas);
- Remove the 30m treed buffer adjacent to Peninsula Road;
- Extensive retaining walls and regrading to create areas above potential flood construction level.

The retained trees around the new neighbourhood would effectively be limited to those standing in the park areas.

**Q:** Do Council have any initial concerns with a proposal to remove a 30-metre treed buffer along Highway 4 and substantial tree clearing throughout the developable lands that would maximize the area for housing construction on the 221 Minato Road site, and which would diverge from OCP Policies 3.162, 3.163 and 3.171 meant to limit the clearing of trees and changes to the public entrance to town?



Figure 1. Aerial photo showing 221 Minato Road and areas cleared by previous owner



Figure 2. Areas of further clearing (tan) per proposed site plan.

4. Highway 4 Speed Reduction:

Watt Consulting has analysed the traffic impacts, access and turning movements for the proposed development. One item noted by the traffic engineers is that the speed limit drops to 50km/h near Minato Road, and with the proposed development it would be beneficial for the safety and comfort of road users to move the transition from 70km/h to 50km/h further west. ERIF has asked if the District would support or make a request to the Ministry of Transportation and Infrastructure to change the speed transition point on the highway.

Staff note that parking on the road edge near the Ancient Cedars trailhead to the Wild Pacific Trail is less than ideal. Reducing the speed limit to 50km/h northwest of that point – perhaps at the corner near the Olsen Bay pump station – could improve the safety and comfort of road users at that point as well. Travel time for a vehicle travelling at 50km/h vs 70km/h over that distance would mean an additional 20 seconds to reach town.

**Q: Do Council members support extending the 50km/hr speed zone northwest by approximately 1000m and staff making a request to MoTI in advance of receiving a development application by ERIF.**

5. Qualifying Local Renters and Buyers:

The ERIF proposal suggests that the affordable and market rentals shown on proposed Lot 2 would be developed with financing support from BC Housing and CMHC. These programs typically see preferential financing based on a percentage of units to be rented at below-market rates to qualifying households.

The attainable ownership units shown on the proposed Lot 1 are described as below-market ownership units supported by the ERIF Not-for-Profit Housing Association including a 5% vendor take-back loan to help with down payments. The proponents have described the sale of these units and the qualification of buyers would be handled by the ERIF association and RE/Max. Typical with non-market housing agreements, qualifying buyers and monitoring housing agreements is done by a third party – either a housing authority or non-profit housing organization experienced in property management. The S.219 covenant provided by the owners for the 2022 rezoning committed to entering into Housing Agreements and covenants to ensure the affordability and qualification criteria of buyers. This is typical with non-market housing; a recent example is the Lot 13 development where housing agreements specify that qualified buyers cannot own other property, must fall within the agreed income levels and must have been a resident of the west coast for an agreed-to period of time.

**Q: Do Council members expect that if a zoning amendment and other approvals are granted, the affordable and/or attainable housing units would need to be ensured through housing agreements and covenants that are administered and monitored by the municipality or an experienced qualified third-party?**

6. Commercial Component:

The ERIF proposal includes a 1,200m<sup>2</sup> commercial building right at the corner of Minato Road. The building site would be within the 30m buffer discussed above. That area of the site is also shown as “parks and open space” on the OCP Schedule A Long-Range Land-Use Plan. Schedule A shows the balance of the property as a mix of single-family and multi-family residential. Nearby properties to the southeast on Peninsula Road have commercial designations.

**Q: Do Council members have any initial concerns with the concept of extending a commercial designation to the area on the corner of Minato Road?**

7. Vacation Rentals:

A number of recent rezonings for housing developments have proposed components of tourist accommodation, but these have consistently failed to gain Council support as the community prioritizes housing. The prior designation of the property at 221 Minato included tourist commercial (in alignment with the former campground zoning on a portion of the property). Since 2022 the zoning and OCP designations on the property have been for residential uses only.

The ERIF proposal shows short-term vacation rentals as a component for the 10 waterfront market homes on Proposed Lot 3 and 29 of the units on proposed Lot 5. The ERIF team have indicated the need for the short-term vacation option to off-set the costs of developing affordable housing. The 2022 rezoning proposal for 221 Minato initially included short-term rentals as a proposed use in 47 of the units - but that component was not supported by Council and was removed from the proposal to focus the development on housing.

**Q: Do Council members have any initial concerns over a component of short-term vacation rentals in the current proposal at 221 Minato Road?**

8. Temporary Use Permit:

ERIF has enquired if a TUP would be possible to situate a temporary manufacturing site on the phase 5 portion of the development to facilitate the construction process. No details have been provided at this time.

**Q: Subject to meeting environmental and servicing requirements, and subject to public comment, do Council members have any initial concerns with the concept of a temporary manufacturing facility on the eastern portion of the site?**

NEXT STEPS:

- To keep moving on their desired timeline, in the coming days ERIF will need to submit a complete application for rezoning and environmental development permit:
  - a. These would set the stage for the subsequent applications for subdivision and further development permits for the proposed multi-family building sites. Those

applications can follow at a point when there is confidence in the alignment of parcel boundaries, roads and services.

- b. The applicant will need to provide a complete set of [application materials](#) and fees as one package.
  - c. The application will need to include a statement of the housing mix and the levels of affordability, addressing [OCP](#) policy 3.143 and 3.134
  - d. The application should include an updated environmental assessment and archaeological assessment: if these are not available yet, at least submit statements from the consultants confirming their engagement, process and timing.
- First stage of approvals (timing dependent of submissions of complete application materials) would include the following authorized by Council:
    - e. Consider OCP amendment bylaw;
    - f. Consider Zoning amendment bylaw;
    - g. Consider Housing Agreement bylaw;
    - h. Consider Phased Development Agreement Bylaw;
    - i. Public Hearing (OCP amendment, rezoning, housing agreement and phased development agreement bylaws)
    - j. Amend or replace the restrictive covenant on the property title;
    - k. Adopt bylaws
    - l. Issue environmental DP to enable subdivision and site works;
    - m. Authorize municipal off-site infrastructure works;
  - Subsequent applications (some may progress concurrently with the above - timing will depend on the developer’s decisions and their consultants’ timing to provide the required plans and analyses):
    - k. Subdivision - Preliminary Layout Assessment
    - l. Final Subdivision
    - m. Development Permit(s) for individual multi-family and commercial sites
    - n. Building Permit applications for each structure

Council discussion on the questions above will assist staff and the ERIF team in gauging the degree of comfort with the direction indicated by the preliminary details of the development, as the proponent finalizes their plans. Staff look forward to seeing more details on the ERIF proposal and

continuing to work through the development approvals process to see a housing development take shape on the site that meets the community needs and expectations.

Respectfully submitted:        Bruce Greig, Director of Community Planning  
                                                 Duane Lawrence, Chief Administrative Officer

SITE PLAN





# PROPOSED SUBDIVISION

### Subdivision Lots

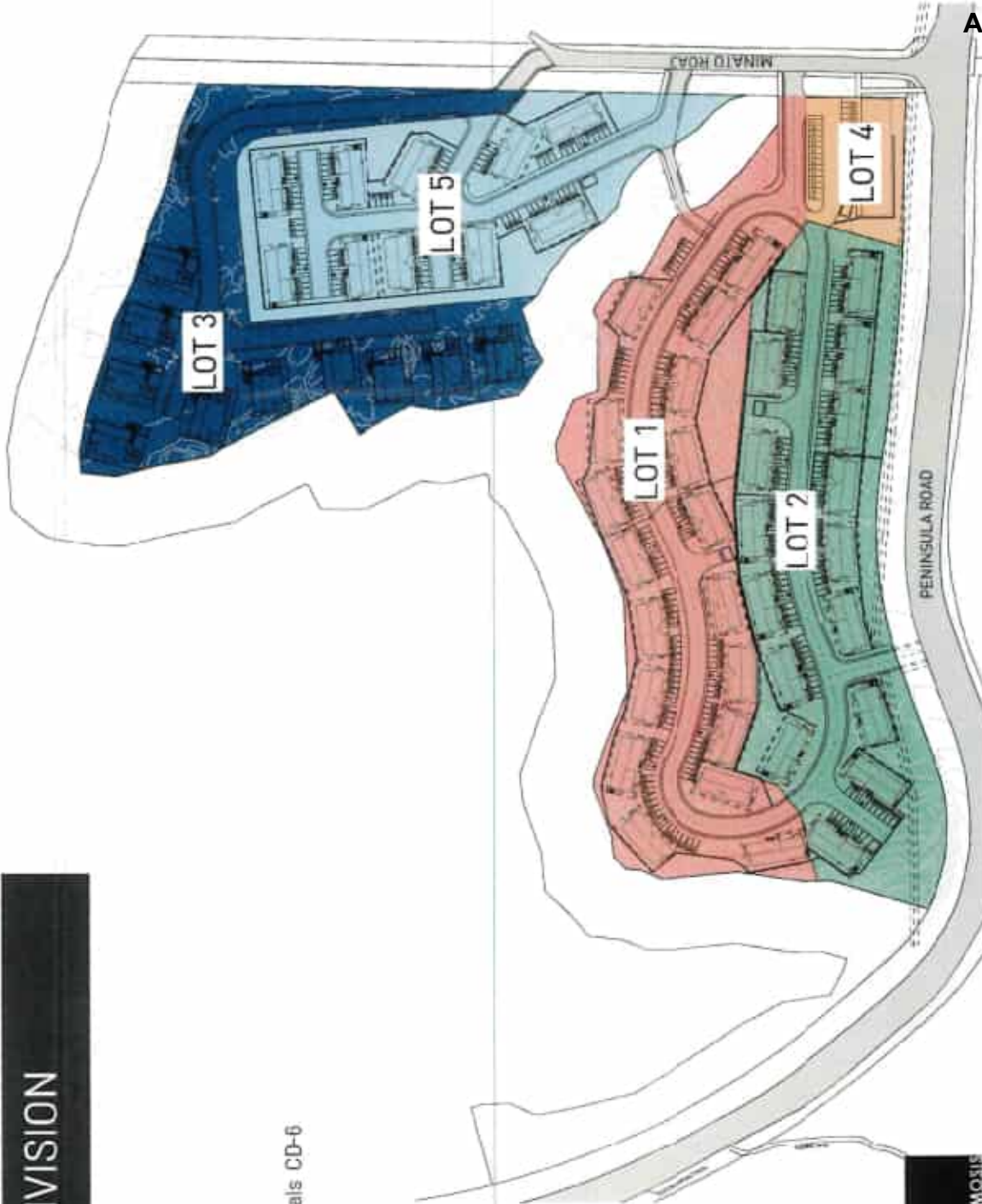
- LOT 1: Below-Market Sales CD-6
- LOT 2: Affordable Rentals 30% & Market Rentals CD-6
- LOT 3: Ten Waterfront Homes CD-6
- LOT 4: Small Business & Retail Precinct CS2
- LOT 5: Market Apartments CD-6

### Incorporating Updates to:

- Official Community Plan
- By Law Update CD-6
- Rezone Lot 4 as CS2
- Site Covenant Restrictions

### With Agreement for:

- Licence of Occupation for Bridge
- Subdivision Approval
- Phased Development Plan
- Strata Title for Lot 1 and Lot 5



MINATO ROAD 221 MINATO ROAD, UCLUELET | 2024-08-29

PROJECT DATA

PROJECT DATA															
	Buildings	Units	Units	Units	Units	Units	Total Suites	Total Gross Floor Area (m <sup>2</sup> )	Parking Req'd	Visitors Req'd	Total Parking Req'd	Parking Provided	Visitors Provided	Accessibility Provided	Total Parking Provided
<b>South Site</b>															
Lot 1 Stage 1 Attainable	7	0	2	13	14		29	1,444 m <sup>2</sup>	29	6	35	29	5	5	39
Lot 1 Stage 2 Attainable	11	0	4	26	22		46	2,261 m <sup>2</sup>	46	10	56	42	12	5	59
Lot 2 Stage 1 Housing	6	12	6	21	0		39	1,197 m <sup>2</sup>	39	8	47	62	11	9	82
Lot 2 Stage 2 Housing	10	20	16	32	0		68	1,938 m <sup>2</sup>	68	14	82	42	10	5	57
Lot 4 Commercial	1							1,200 m <sup>2</sup>	30	2	30	27		2	29
<b>Sub-Totals</b>	<b>35</b>	<b>32</b>	<b>28</b>	<b>84</b>	<b>36</b>		<b>182</b>	<b>8,040 m<sup>2</sup></b>	<b>212</b>	<b>38</b>	<b>250</b>	<b>202</b>	<b>38</b>	<b>26</b>	<b>266</b>
<b>North Site</b>															
Lot 5 Market Rentals	10	14	8	30	6		58	2,014 m <sup>2</sup>	58	12	70	62	12	10	84
Lot 3 Waterfront Home Lots	10					10	10	3,500 m <sup>2</sup>	40	8	48	40	8		48
<b>Sub-Totals</b>	<b>20</b>	<b>14</b>	<b>8</b>	<b>30</b>	<b>6</b>	<b>10</b>	<b>68</b>	<b>5,514 m<sup>2</sup></b>	<b>98</b>	<b>20</b>	<b>118</b>	<b>102</b>	<b>20</b>	<b>10</b>	<b>132</b>
<b>Totals</b>	<b>55</b>	<b>46</b>	<b>36</b>	<b>116</b>	<b>42</b>	<b>10</b>	<b>250</b>	<b>13,554 m<sup>2</sup></b>	<b>310</b>	<b>58</b>	<b>368</b>	<b>304</b>	<b>58</b>	<b>36</b>	<b>398</b>

ATTAINABLE HOME SALES

Lot 1 Stage 2: Eagle 1/3  
Strata Attainable Sales  
48 Apartments - Sales

UNITS	No.
Multiplexes	11
1 Bedroom	4
2 Bedroom	26
3 Bedroom	22
Adaptable Studios	22
Parking	39

AFFORDABLE RENTALS: 30%

Lot 2 Stage 1: Eagle 1 1/3 1  
30% Affordable Rental  
39 Apartments - Rent

UNITS	No.
Multiplexes	8
1 Bedroom	18
2 Bedroom	21
3 Bedroom	0
Adaptable Studios	0
Parking	39

Lot 3 Stage 2: Eagle 1 1/3 1  
30% Affordable Rental  
65 Apartments - Rent

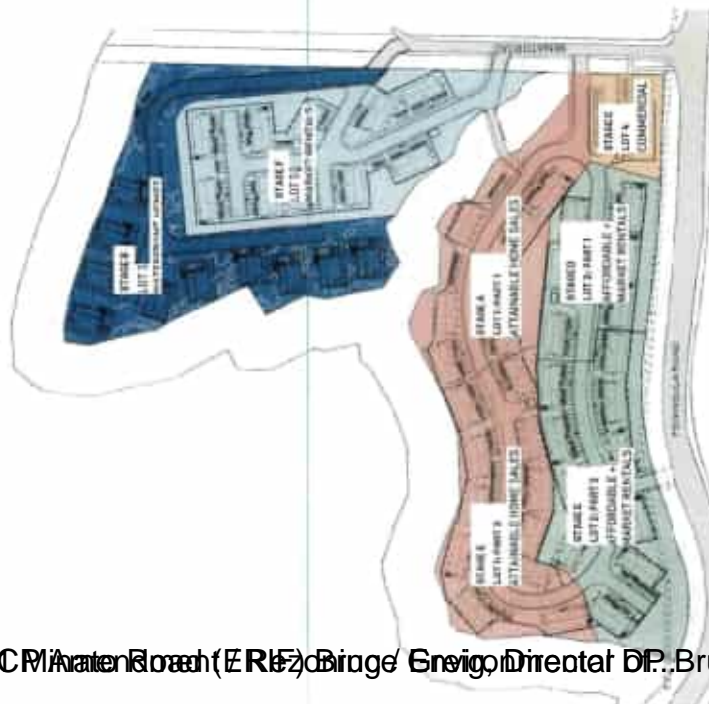
UNITS	No.
Multiplexes	10
1 Bedroom	32
2 Bedroom	24
3 Bedroom	0
Adaptable Studios	0
Parking	59



HINATO ROAD 221 MINATO ROAD, UCLUELET (2024-08-29) EORMOSIS PROPERTIES



PHASED DEVELOPMENT PLAN

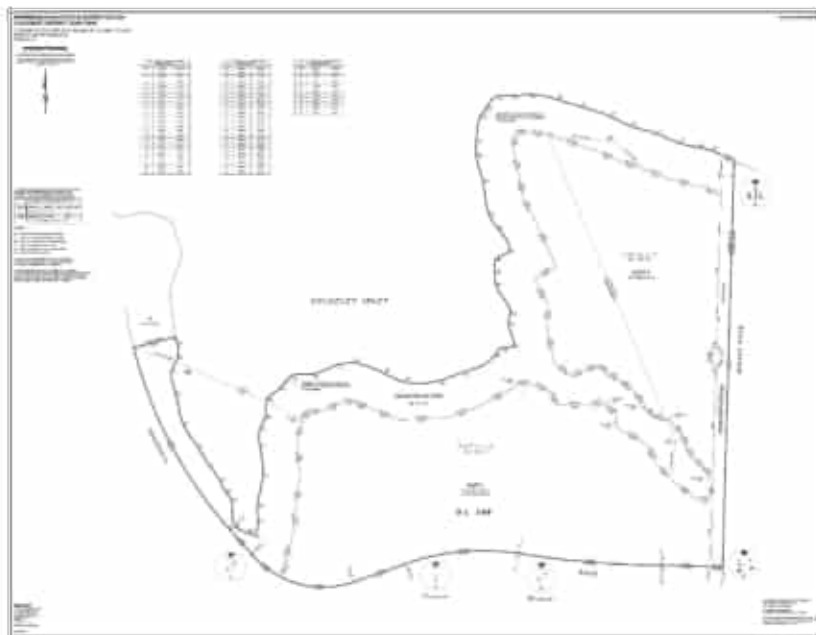


Stages	Built Form & Type	Title & Conditions
Stage A	<p><b>LOT 1: PART 1</b></p> <ul style="list-style-type: none"> <li>• Attainable Home Sales - Below-Market Homeownership</li> <li>• 7 Multiplex Buildings</li> <li>• 29 Keys</li> <li>• 2 x 1-bedroom   13 x 2-bedroom   14 x 3-bedroom</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Sales Strata Titled</b></li> <li>• Six Eagle 1 &amp; Three Eagle 3</li> <li>• <b>Notes:</b> Studios not to be separated in court as will be strata titled and sold in 3-bedroom apartments.</li> <li>• <b>Notes:</b> 3-bedroom apartments include a studio apartment. Studio apartments available for long-term rental.</li> </ul>
Stage B Concurrent with Stage A	<p><b>LOT 3: Waterfront Homes</b></p> <ul style="list-style-type: none"> <li>• 10 x Waterfront Family Home</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Fee Simple Subdivision (Home Association)</b></li> <li>• Designed with option for intergenerational living with self-contained studio available for long-term and/or short-term rentals.</li> <li>• <b>CONDITION:</b> Stage A construction concurrent with Stage B.</li> </ul>
Stage C	<p><b>LOT 4: Commercial Precinct</b></p> <ul style="list-style-type: none"> <li>• 800sqm Ground Floor Retail - Cafe, Store, Etc.</li> <li>• 800sqm Upper Floor Offices</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Held in one line.</b></li> <li>• <b>NOTE:</b> Phase D and E may be brought forward if government funding available and demand for rentals and sales is truly tenacious.</li> </ul>
Stage D	<p><b>LOT 2 - PART 1:</b></p> <ul style="list-style-type: none"> <li>• Affordable Rentals - 30% of Keys</li> <li>• Market Rentals</li> <li>• 8 Multiplex Buildings</li> <li>• 39 Keys</li> <li>• 19 x 1-bedroom   21 x 2-bedroom</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Held in one line.</b></li> <li>• <b>CONDITION:</b> Subject to government funding and approval timing.</li> <li>• Three Eagle 1 &amp; Two Eagle 2</li> <li>• Same floor plan but may be adaptably leased as 2-bedroom plus separate studio - not as a 3-bedroom).</li> </ul>
Stage E	<p><b>LOT 1: PART 2</b></p> <ul style="list-style-type: none"> <li>• Attainable Home Sales - Below-Market Homeownership</li> <li>• 11 Multiplex Buildings</li> <li>• 46 Keys</li> <li>• 4 x 1-bedroom   20 x 2-bedroom   22 x 3-bedroom</li> <li>• <b>Notes:</b> 3-bedroom apartments include a studio apartment.</li> <li>• Studio apartments available for long-term rental.</li> </ul> <p><b>LOT 2 - PART 2:</b></p> <ul style="list-style-type: none"> <li>• Affordable Rentals - 30% of Keys</li> <li>• Market Rentals</li> <li>• 10 Multiplex Buildings</li> <li>• 40 Keys</li> <li>• 32 x 1-bedroom   24 x 2-bedroom</li> </ul>	<p><b>LOT 1: PART 2 - Sales Strata Titled</b></p> <ul style="list-style-type: none"> <li>• Nine Eagle 1 &amp; Two Eagle 3</li> <li>• <b>Notes:</b> Studios not to be separated in court as will be strata titled and sold in 3-bedroom apartments.</li> <li>• <b>Notes:</b> 3-bedroom apartments include a studio apartment. Studio apartments available for long-term rental.</li> <li>• <b>CONDITION:</b> Subject to and commencing after Attainable Homes in Lot 1 Part 1 are sold out.</li> </ul> <p><b>LOT 2 - PART 2</b></p> <ul style="list-style-type: none"> <li>• <b>Held in one line.</b></li> <li>• <b>CONDITION:</b> Subject to government funding and commencing when grant funding received and Lot 2: Part 1 fully leased.</li> <li>• Same floor plan but may be adaptably leased as 2-bedroom plus separate studio - not as a 3-bedroom)</li> </ul>
Stage F	<p><b>LOT 4: Market Apartments:</b></p> <ul style="list-style-type: none"> <li>• Market rentals and sales</li> <li>• 10 multiplex buildings</li> <li>• 58 Keys</li> <li>• 22 x 1-bedroom   30 x 2-bedroom   6 x 3-bedroom</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Strata Titled</b></li> <li>• Apartments for long-term and short-term vacation rentals.</li> </ul>

PAST APPLICATIONS:

A number of steps toward development have occurred in recent years on the property at 221 Minato Road:

- 2017: rezoning application for campground and guest house (later withdrawn)
- 2017: previous owners cleared much of the site (without first obtaining a development permit)
- 2018: new zoning application for campground and guest house uses
- 2019: DP issued for restoration of riparian areas
- 2020: rezoning bylaw No. 1244 adopted
- 2020: DP issued for subdivision (to create campground parcel and guest house parcel). Subdivision not completed by owners.
- 2022: Change of ownership – rezoning application for 212 housing units; bylaw No. 1312 adopted January, 2023. S.219 covenant registered by owners to ensure commitments (see Appendix C).
- 2023: owners submit survey plan for dedication of park and road (as proposed with the rezoning of the property). Expansion of the Minato Road alignment, shoreline and stream park corridors are now transferred to the District.
- 2023: the District Group submits incomplete rezoning and subdivision applications for the property, with authorization from the current owners.
- 2024: the District Group applications are withdrawn.
- 2024: Licence of Occupation granted to the current owners of the property to allow continued use of the existing bridge spanning the stream (park) corridor.



Survey plan of park and road dedication

**TERMS OF INSTRUMENT – PART 2**

COVENANT (Section 219 *Land Title Act*)

THIS COVENANT dated for reference the \_\_\_ day of \_\_\_\_\_, 2022 is

BETWEEN:

**MINATO DEVELOPMENT CORP. (BC1281485)**

2842 – 140 Street  
Surrey BC V4P 2H9

(the “Grantor”)

AND:

**DISTRICT OF UCLUELET**

Box 999  
200 Main Street  
Ucluelet BC V0R 3A0

(the “District”)

WHEREAS:

- A. The Grantor is the registered owner of land located at 221 Minato Road in Ucluelet, British Columbia and more particularly described as:

PID: 026-487-764  
Lot B District Lot 286 Clayoquot District Plan VIP79908

(the “Land”);

- B. Section 219 of the *Land Title Act* permits the registration of a covenant of a negative or positive nature in favour of the District, in respect of the use of land or buildings, or the building on land;
- C. The Grantor has applied to the District for a rezoning of the Land to permit the development of housing on the Land, and in connection with the Grantor’s application for rezoning the Grantor has offered grant this Covenant to the District;
- D. The Grantor wishes to grant this Covenant to the District to confirm it will not subdivide or develop the Land except generally in accordance with the development plan prepared in conjunction with the Grantor’s rezoning application and presented to the District Council and the public in connection with the application;

THIS COVENANT is evidence that in consideration of the payment of TWO DOLLARS (\$2.00) by the District to the Grantor, and other good and valuable consideration (the receipt and sufficiency of which are acknowledged by the parties), the Grantor covenants and agrees with the District, in accordance with section 219 of the *Land Title Act*, as follows:

**Definitions**

1. In this Covenant:

- (a) "Affordable Housing Units" means any of the housing units with price, occupancy or tenure restrictions in accordance with the Housing Agreements;
- (b) "Development Plan" means the drawing attached to this Agreement as Schedule A;
- (c) "Director" means the District's Director of Community Planning;
- (d) "Housing Agreements" means, collectively, the housing agreements and covenants to be registered in respect of housing units under s. 4 of this Agreement;
- (e) "Median Income" means the current median annual household income for all Ucluelet households, as published by Statistics Canada.

**Restrictions on Use, Subdivision and Development of the Land**

2. The Grantor will not alter, subdivide or develop the Land for any purpose, and although nothing in this covenant affects or limits the Grantor's right to apply for a subdivision or any permit from the District in relation to the Land, neither the District nor its approving officer shall be obliged to approve any alteration, subdivision or development of the Land, until and unless the Grantor has complied with all of the following conditions and requirements:

- (a) Before March 1<sup>st</sup>, 2023, or such later date as the District may agree to in its sole discretion, the Grantor must dedicate as park the areas shown outlined in black and labelled P-1 on the Development Plan, and must dedicate as road the area shown hatched and labelled "Road Dedication" and "Future Parking Area" on the Development Plan.
- (b) The Grantor must provide all of the following, in writing, to the District:
  - (i) an archaeological assessment of the site and the proposed development with recommendations for any mitigation measures, design changes and/or permitting requirements to protect archaeological and cultural resources;
  - (ii) an assessment by a Qualified Environmental Professional (QEP) of the ecological resources of the Lands and surrounding ecosystem, with recommendations for how the proposed development can avoid and/or mitigate impacts on terrestrial and marine ecosystems or enhance the existing ecological function of the site;
  - (iii) grading and rainwater management plans for the proposed development of the Lands (incorporating the recommendations of the QEP and landscape plans for the proposed development);
  - (iv) engineering analysis and design for safe vehicular and pedestrian access to the proposed residential development on the Lands in a location and configuration to the satisfaction of both the District and BC Ministry of Transportation and Infrastructure;

- (v) engineering analysis and design of off-site works and services required to ensure that District infrastructure will accommodate the impact of the proposed development on the Lands, including water, sanitary, roads and pathways;
  - (vi) proposed phasing and servicing plans, identifying thresholds for when infrastructure upgrades (including road access, water, sewer) would be necessary before additional housing units are constructed;
  - (vii) proposed layout and approach to subdivision (including all proposed elements of fee-simple, bare land strata, or building stratas) identifying proposed property boundaries and the location and extent of public and private infrastructure, facilities, roads, pathways, parks, open space, etc.;
  - (viii) more detailed plans for proposed road and open space design including plans for public / shared recreation and play infrastructure;
  - (ix) description of proposed green building measures including electrical vehicle charging at all units;
  - (x) engineering analysis of all aspects of the proposed development on the Lands located in areas identified as subject to tsunami flood hazard, according to District of Ucluelet Tsunami Risk Tolerance Interim Policy 8-5280-1.
- (c) The Grantor must provide to the District, and receive the Director’s approval of, a detailed plan for the construction of gravel-surfaced pedestrian trails, viewing platforms, and associated infrastructure, to the District’s Wild Pacific Trail standards, in the approximate alignment shown on the Development Plan (the “Trail Plan”).
- (d) The Trail Plan must:
- (i) specify trail alignments that achieve the following objectives:
    - A. minimize impact on the natural environment
    - B. minimize pedestrian encroachment into the salt marsh and intertidal areas;
    - C. minimize tree removal;
    - D. maximize the experience by trail users;
    - E. fit the character of the existing municipal trail network;
  - (ii) include stairs, bridges, boardwalks, ramps, railings and other similar trail structures as reasonably necessary to achieve the above-noted objectives;
  - (iii) include view platform designs that are of a scale and quantity to allow future residents and trail users to enjoy the views (minimum 800 square feet, in two separate platforms);
  - (iv) include archaeological and environmental assessment and oversight as necessary during construction.

- (e) The Grantor must grant to the District and register on title to the Land, a housing agreement (or agreements) under s. 483 of the *Local Government Act* and a restrictive covenant (or covenants) under s. 219 of the *Land Title Act*, all to the satisfaction of the Director, to ensure the following:
  - (i) At least ten rental housing units with rental rates restricted to ensure affordability for households earning a maximum of 80% of Median Income, with the following unit mix: four units with one bedroom, four units with two bedrooms, and two units with three bedrooms;
  - (ii) At least 88 rental housing units with rental rates restricted to ensure affordability for households earning between 80% and 100% of Median Income, with the following unit mix: 40% of the units with one bedroom, 40% of the units with two bedrooms, and 20% of the units with three bedrooms;
  - (iii) At least 67 houses or townhouses with rental or sale prices restricted to be affordable for households earning up to 130% of median income, with a mix of unit sizes.

and the Director may require the Grantor to include in the Housing Agreements additional terms and conditions respecting the timing and phasing of any development of the Lands, to ensure construction and occupancy of any Affordable Housing Units is reasonably proportionate to the subdivision of lots and/or issuance of building permits for other residential uses on the Lands and without limiting the Director’s discretion under this section, the Grantor agrees that Affordable Housing Units must comprise at least 65% of housing units constructed in the first phase of development of the Lands.

- 3. If the Grantor wishes to construct a bridge in the area to be dedicated as park but marked “Licence of Occupation Area” the Grantor must first request from the District a licence for that purpose, and the District will grant the licence provided it requires the Grantor to maintain liability insurance in an amount satisfactory to the Director, acting reasonably, and to indemnify the District against any claims that might be made against the District as a result of the existence or use of the bridge, and provided further that the Grantor agrees to construct and operate the bridge in a manner that causes no disruption or minimal disruption to the public use of and right to pass through the dedicated park.
- 4. Despite any construction that may have been authorized after the Grantor has fulfilled its obligations under section 2 of this Agreement, the use or occupancy of any building on the Land is further restricted as follows:
  - (a) No building on the Land shall be used or occupied until and unless the Grantor has completed the construction of the portion of trail in the area labeled T-1 in the Development Plan, in accordance with the Trail Plan;
  - (b) No building on the areas of the Land labeled B, C and D on the Development Plan shall be used or occupied until and unless the Grantor has completed the construction of the portion of trail in the area labeled T-2 in the Development Plan, in accordance with the Trail Plan;

- (c) No building on the areas of the Land labeled E, F or G on the Development Plan shall be used or occupied until and unless the Grantor has completed the construction of the portion of trail in the area labeled T-3 on the Development Plan, in accordance with the Trail Plan.

**Inspections**

- 5. The District and any of its officers and employees may enter on the Land at all reasonable times, to inspect the Land for the purpose of ascertaining compliance with this Covenant.

**Amendment**

- 6. This Covenant may be altered or amended only by an agreement in writing signed by the parties.

**No Public Law Duty**

- 7. Whenever in this Covenant the District is required or entitled to exercise any discretion in the granting of consent or approval, or is entitled to make any determination, take any action or exercise any contractual right or remedy, the District may do so in accordance with the contractual provisions of this Covenant only and will not be bound by any public law duty, whether arising from the principles of procedural fairness or the rules of natural justice or otherwise.

**No Obligations on District**

- 8. The rights given to the District by this Covenant are permissive only and nothing in this Covenant:
  - (a) imposes any duty of care or other legal duty of any kind on the District to the Grantor or to anyone else;
  - (b) obliges the District to enforce this Covenant, which is a policy matter within the sole discretion of the District; or
  - (c) obliges the District to perform any act, or to incur any expense for any of the purposes set out in this Covenant.

**No Effect on Laws or Powers**

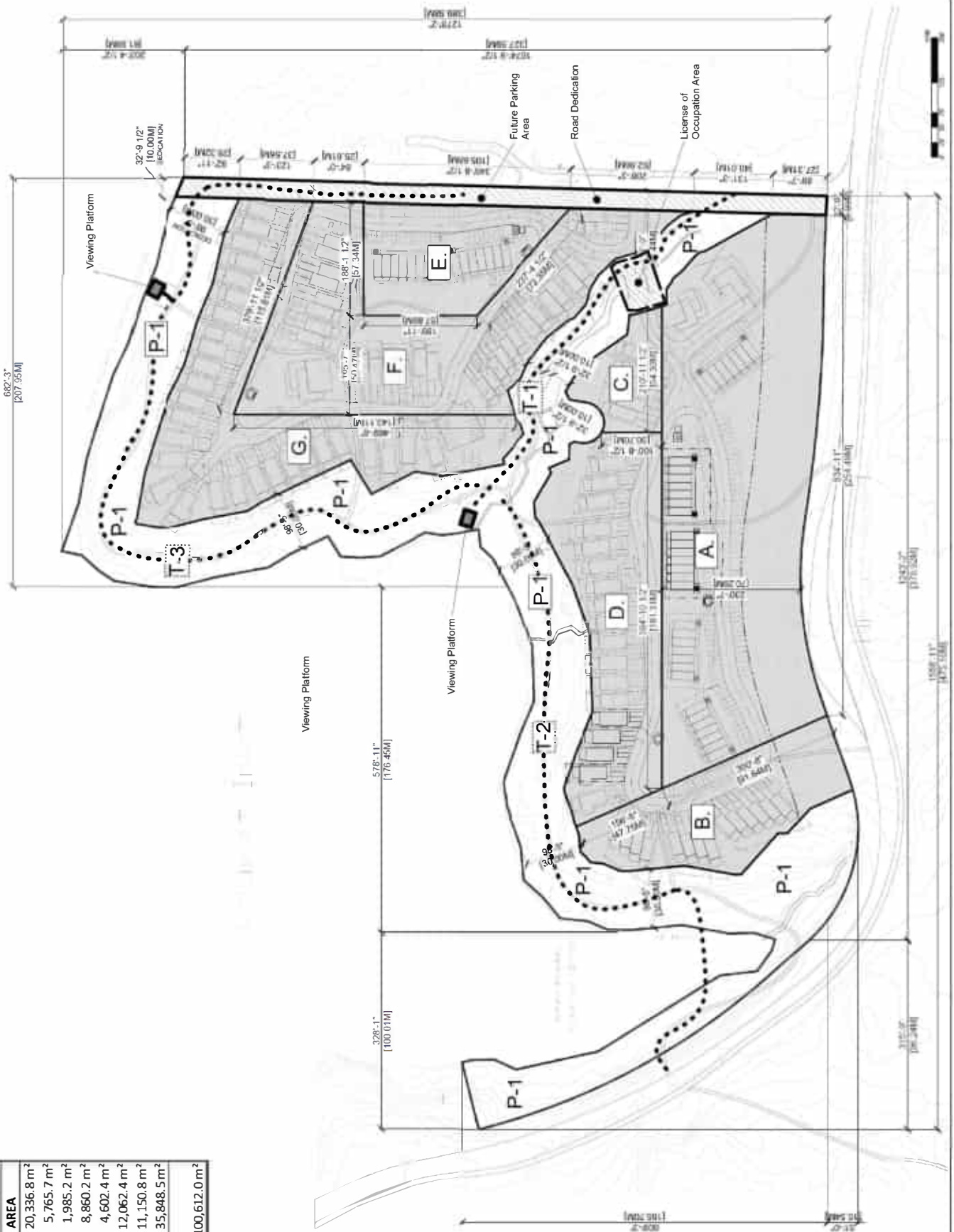
- 9. This Covenant does not,
  - (a) affect or limit the discretion, rights or powers of the District under any enactment or at common law, including in relation to the use or subdivision of the Land;
  - (b) affect or limit any law or enactment relating to the use or subdivision of the Land; or
  - (c) relieve the Grantor from complying with any law or enactment, including in relation to the use or subdivision of the Land.

**District's Right to Equitable Relief**

Schedule A

DRAFT 2022-05-30

LAND USE AREAS	AREA
A.	20,336.8 m <sup>2</sup>
B.	5,765.7 m <sup>2</sup>
C.	1,985.2 m <sup>2</sup>
D.	8,860.2 m <sup>2</sup>
E.	4,602.4 m <sup>2</sup>
F.	12,062.4 m <sup>2</sup>
G.	11,150.8 m <sup>2</sup>
P-1	35,848.5 m <sup>2</sup>
Total	100,612.0 m <sup>2</sup>





**Duane Lawrence, Chief Administrative Officer**

Mr. Lawrence presented this report.

2024.2285.REGULAR *IT WAS MOVED AND SECONDED:*

- **THAT** Council direct staff to provide a letter of support for the Chamber of Commerce 2024 Rural Economic Diversification and Infrastructure Program grant application in support of a Community Economic Development Capacity Building project;
- **THAT** Council direct staff to allocate \$35,000 to the Chamber of Commerce in support of the Community Economic Development Capacity Building project for 2024; and,
- **THAT** Council direct staff to include for consideration an allocation of \$35,000 in the 2025 and 2026 budgets for the development of an economic development agreement with the Chamber of Commerce.

CARRIED.

**8.4 Preliminary Discussion - 221 Minato Road (ERIF)  
Bruce Greig, Director of Community Planning**

Mr. Greig presented this report.

The following outlines questions that Council considered and related Council discussion:

Do Council members have any initial concerns about a road configuration with limited pedestrian facilities and vehicle parking spaces backing onto the roadway?

- Council discussed this matter and noted that it is not a concern.
- Council noted that the configuration is essential to keeping the development affordable.
- Council noted the need for a pathway within the development and that vehicles backing onto a roadway is common in other subdivisions, and necessary for increased density.

Do Council members have any initial concerns with the concept of no additional parkland dedication for this development?

- Council noted that there is a considerable park dedication already in the area.
- Council noted the ecological value of Olsen Bay and the sensitivity of this ecosystem.
- Council noted that the lack of a complete environmental assessment and wetland delineation, which may identify further spaces which should be protected.

Do Council members have any initial concerns with the concept of

taking on the cost of constructing the trails, and making this a priority capital project so that trails can be completed prior to occupancy of the site by new residents?

- Council noted that this is a means of keeping the cost of the development down.
- Council further noted that Resort Municipality Initiative funding could be used for trail development.
- Council noted the need to protect Olsen Bay, and the trail could help achieve this.

Do Council members have any initial concerns with a proposal to remove a 30-metre treed buffer along Highway 4 and substantial tree clearing throughout the developable lands that would maximize the area for housing construction on the 221 Minato Road site, and which would diverge from OCP Policies 3.162, 3.163 and 3.171 meant to limit the clearing of trees and changes to the public entrance to town?

- Council noted the trees should be sustained as they provide a benefit to the residents in the subdivision and for the appeal they provide at the entryway into the community.
- Council further noted that this should receive public input and a compromise should be considered.
- Council noted that the terrestrial habitat benefit on the site is limited.
- Council noted that the site is currently disturbed, and this would result in the treed entrance to town being moved about 800 m to the north and would not have a negative visual impact.
- Council noted that this sacrifice may be necessary for the requested density.
- Council noted concerns with tree blowdown when eliminating a buffer.

Do Council members support extending the 50km/hr speed zone northwest by approximately 1000m and staff making a request to the Ministry of Transportation and Infrastructure (MoTI) in advance of receiving a development application by ERIF.

- Council noted support for this proposal, especially given the road parking at the Ancient Cedar loop trail entrance.
- Council noted that it would have limited impact on transportation times.
- Council noted that it may be beneficial to reduce the speed limits to 40 km/h throughout town rather than reducing speeds only in this area.

Do Council members expect that if a zoning amendment and other approvals are granted, the affordable and/or attainable housing units

would need to be ensured through housing agreements and covenants that are administered and monitored by the municipality or an experienced qualified third-party?

- Council noted the need to develop a Housing Authority to administer and monitor the affordable and attainable portions of the development.
- Council noted that a Housing Authority would be useful for other developments.

Do Council members have any initial concerns with the concept of extending a commercial designation to the area on the corner of Minato Road?

- Council noted that this location may be ideal for services like convenience stores near the new housing.
- Council noted other approved commercial developments near this site at the entrance of town.

Do Council members have any initial concerns over a component of short-term rentals (STRs) in the current proposal at 221 Minato Road?

- Council noted that STRs may be supportable where affordable housing is provided as part of the development.
- Council noted that the STRs may be essential to allow the development of affordable housing.
- Council noted that STRs may be essential revenue for the homeowners in this proposed development.
- Council expressed concern that the ten waterfront homes could become whole home STRs sitting vacant when not rented. In response Staff clarified that the zoning bylaw could be tailored to prohibit whole home STRs in this development.

Subject to meeting environmental and servicing requirements, and subject to public comment, do Council members have any initial concerns with the concept of a temporary manufacturing facility on the eastern portion of the site?

- Council noted that this may be necessary to get the affordable housing.
- Council noted that a manufacturing facility may create less noise and waste than a typical construction site. Council also noted that the District limits the manufacturing facility's impact on the environment.
- Council noted the temporary manufacturing facility is fundamental to the developer's approach to building affordable housing.

## 9. NOTICE OF MOTION

There were no notices of motion.





District of Ucluelet  
200 Main Street, Ucluelet, BC V0R 3A0  
Attn: Duane Lawrence, CAO

October 4, 2024

**Re: Comment for Record - 221 Minato Road (Erif)**

Dear Mr. Lawrence,

This letter is in response to the Council Meeting held Tuesday, September 24, 2024, specifically agenda item 8.1 Preliminary Discussion - 221 Minato Road (Erif). With the understanding a full application has not been submitted for development of the property and a Preliminary Field Reconnaissance (PFR) will be provided, the Yuutu?it?ath Government would like to ensure the following comments are on record.

It is our understanding of conversations with Erif representatives that the remaining vegetation at 221 Minato Road would not be removed, as proposed in image (b) below.

To remove the current vegetation as presented, the land would be near clear cut. Respectfully and sustainably, we recommend the remaining vegetation and setbacks remain intact. It is known the land was originally felled without District approval, in a culturally and ecologically sensitive area. It is of value to note that the green X on image (a), marks the location of the traditional use site, consisting of seven contemporary culturally modified trees (CMT's), that we encountered during the survey.

It is in Yuutu?it?ath's best interest to preserve as much forested areas as possible, to maintain traditional harvesting areas, as well as the cultural identity and spiritual wellness of the Yuutu?it?ath. This is directly related to the health of the forests and protection of sensitive areas.



Image (a)



Image (b)

Sincerely,

Melissa Boucha, Manager of Intergovernmental Affairs

Cc: John Rankin, Director of Intergovernmental Affairs, Yuutu?it?ath Government  
Carey Cunneyworth, Director of Culture, Language, and Heritage, Yuutu?it?ath Government  
Bruce Greig, Director of Community Planning, District of Ucluelet



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- **Appendix C2** – DoU Letter to KWL (November 28, 2024)
- **Appendix C3** – November 26, 2024, Regular Council Meeting Late Item
- **Appendix C4** – Updated Archaeologist Report & QEP Comments (November 21, 2024)
- **Appendix C5** – Flood Assessment Summary (November 19, 2024)
- **Appendix C6** – Revised Application (November 4, 2024)
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- **Appendix C8** – DOU Response Initial Feedback (October 4, 2024)
- **Appendix C9** – ERIF Response to September 24, 2024, Council Discussion (October 4, 2024)
- **Appendix C10** – Amended Site Plan (September 30, 2024)
- **Appendix C11** – Environmental Assessment Report (September 26, 2024)
- **Appendix C12** – DoU Initial Review Response (September 24, 2024)



**KERR WOOD LEIDAL**  
consulting engineers

Greater Vancouver  
300 – 4185 Still Creek Drive  
Burnaby, BC V5C 6G9  
T 604.294.2088

# Flood Assessment 221 Minato Road, Ucluelet

**Final Report**  
**December 4, 2024**  
**KWL Project No. 4558.001**

**Prepared for:**  
**ERIF Economic Restoration Infrastructure Fund**





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## Executive Summary

ERIF Economic Restoration Infrastructure Fund (ERIF) plans to subdivide and develop the waterfront property at 221 Minato Road, Ucluelet, BC with a mix of multi-family residential, single-family residential and commercial real estate. Based on District of Ucluelet mapping, the property is known to be partially in the tsunami flood hazard zone. To support a subdivision application, the District of Ucluelet (DoU) have requested a flood assessment and assurance statement. ERIF have retained Kerr Wood Leidal Associates to conduct coastal storm and tsunami flood assessments for the project site, which are summarized in this report.

The project site is located on Olsen Bay, within Ucluelet Inlet, on the West Coast of Vancouver Island. The 10 hectare site is irregularly shaped. There is a 30 m wide riparian buffer (DoU parkland) between the site and the Bay so that the property is not directly fronting on the ocean. The shared boundary with the riparian buffer is approximately 1,000 m long. A five-lot subdivision is proposed. Lot 1 and 2 (multi-family residential) and Lot 4 (commercial) are up-slope on the project site, with an elevation ranging from 6 to 15 m. Lot 5 (multi-family residential) is somewhat down-slope with an elevation ranging from 6 to 10 m. Lot 3 borders the waterfront riparian zone, with an elevation of 5 to 7 m. None of the buildings on these lots are proposed to serve as tsunami refuge structures.

Previous work, completed by the District of Ucluelet, generated coastal storm and tsunami flood hazard maps. Based on this work, the DoU have included coastal storm Flood Construction Levels (FCLs) in their Official Community Plan bylaw. The bylaw does not provide similar tsunami Flood Construction Levels. An interim policy statement from the DoU makes allowance for development in the tsunami flood hazard area provided a flood assessment is conducted by a qualified professional (QP) according to provincial guidance, and that the QP identifies safe building conditions for each lot.

Coastal storm flood hazard at the project site was assessed based on the FCL maps published in the DoU bylaws. A FCL of 4.3 m CGVD28 is indicated at the project site. The coastal storm setback limit is contained mostly within the riparian buffer zone but limit does make small incursions into the project site at two locations.

Regulatory and professional practice guidance for development in tsunami flood hazard areas is still developing. This assessment makes use of guidance in Provincial and Engineers and Geoscientists of British Columbia (EGBC) documents, however it is noted that this guidance has been developed primarily for riverine and coastal storm flooding applications. Where necessary the assessment is supported by literature from additional sources and the professional opinion of the authors. Importantly, this assessment is based on a single very large rupture of the Cascadia Subduction Zone (CSZ), and includes the effects of rupture-induced subsidence, high tide, and relative sea level rise. The tide level is specified 0.9 m higher than minimum recommended guidance, which introduces conservatism in the hazard estimates and has an effect similar to adding a freeboard.

Tsunami flood hazard for the project site was initially assessed based on the existing site topography. For the design tsunami, the maximum water level over the project site (including subsidence) was found to be 10.7 m CGVD28. In this scenario Lots 1, 2, 4, and 5 are partially inundated, while Lot 3 is near-fully inundated.

To mitigate tsunami hazard, ERIF have proposed to use landfill supported by retaining walls to raise Lots 1, 2, 4, and 5 to the lot-specific tsunami FCL, 10.7 m CGVD28. They have proposed to structurally raise the houses of Lot 3 on columns to the lot-specific tsunami FCL, 9.7 to 10.6 m CGVD28. The effect of these building mitigation measures was assessed by modifying the tsunami model to represent the proposed land raising. The results of the modelling show that the land raising is effective at protecting Lots 1, 2, 4, and 5 from flooding during the design tsunami event.

While the proposed raising of houses in Lot 3 will lower their risk of damage, the flood hazard during the design tsunami flood event would still be high. Based on the regulatory guidance available, it was judged that a risk assessment was required to justify the development of this Lot. A simple risk assessment was conducted to



quantify the risk to people and property. A key assumption in this assessment is that all residents will be instructed to evacuate in the event of a tsunami, and that a well-developed evacuation plan is in place. The risk assessment estimated a 1:142,000 chance of death annually due to tsunami, and the DoU has confirmed that they will tolerate this risk level for the development of Lot 3.

A flood mitigation plan was developed with a number of requirements focused on minimizing coastal and tsunami flood risk. The plan is the same for Lots 1, 2, 4, and 5, and slightly different for Lot 3. These mitigation plans include both building mitigation measures and planning mitigation measures. Of significant importance is that the Strata Council for each lot develops an emergency management plan which directs residents to evacuate during a tsunami event. Refer to Section 7 for details on the flood mitigation plan.

Based on the findings of this report and subject to implementation of the flood mitigation plan of Section 7, we assure that the proposed subdivision and development may be *used safely for the use intended*. With this statement we mean that the coastal and tsunami flood risk to the development falls below the DoU's stated threshold. A flood assurance statement is provided in Appendix E which formalizes this statement.





## 1. Introduction

It is understood that ERIF Economic Restoration Infrastructure Fund (ERIF) plans to subdivide and develop the waterfront property at 221 Minato Road, Ucluelet, BC (the project site) with a mix of multi-family residential, single-family residential and commercial real estate.

Tsunami hazard mapping published by the District of Ucluelet (DoU) in 2020 indicates that portions of this property are within the tsunami flood hazard zone [1]. Consequently, the DoU Approving Officer has stated:

*For subdivision, development permit and/or building permit, the District will need to receive a Flood Assurance Statement sealed by a qualified professional meeting the Provincial requirements to allow new development in identified flood risk areas.*

ERIF have retained Kerr Wood Leidal Associates Ltd. (KWL) to provide coastal engineering support for this project. This report provides an assessment of the coastal storm and tsunami flood hazards, a risk assessment of the proposed development, and a summary of proposed flood mitigation measures. The findings of this report will support the issuance of a Flood Assurance Statement.

### 1.1 Project Site

The project site is located on Olsen Bay, within Ucluelet Inlet, on the West Coast of Vancouver Island (see Figure 1-1). The site is within the District of Ucluelet. The 10 hectare site is irregularly shaped. There is a 30 m wide riparian buffer (DoU parkland) between the site and the Bay so that the property is not directly fronting on the ocean. The shared boundary with the riparian buffer is approximately 1,000 m long (see Figure 1-2). The property is bisected by a small creek. A second creek intersects its southern margin. The southern portion of the property slopes steeply from the shoreline to elevations greater than 10 m CGVD28. The northern portion of the property slopes more gently from the shoreline and eventually plateaus at approximately 8 m CGVD28. The property is subject to coastal storm and tsunami flood hazards from the sea, and riverine flood hazards from the two small creeks.

The boundaries of the proposed five lot subdivision are shown in Figure 1-2. The proposed development plan is shown in Appendix A. The proposed uses of each lot area as follows:

- Lot 1: Multi-family residential (75 units)
- Lot 2: Multi-family residential (107 units)
- Lot 3: Single-family residential (11 units)
- Lot 4: Commercial
- Lot 5: Multi-family residential (58 units)

It is understood that each lot will be under strata title and each managed with a separate strata council.

ERIF understands that the project site is within the tsunami hazard area and the proposed development plan reflects some initial building mitigation measures to support mitigating tsunami risk:

- Ground level on Lots 1, 2, 4, and 5 will be raised above the tsunami flood construction level using tsunami-resistant retaining walls.
- Homes on Lot 3 will be raised above the tsunami flood construction level on a tsunami-resistant platform that would allow the tsunami to flow below the buildings.

It is understood that these measures are intended to reduce damage to these buildings, and that the buildings will not serve as tsunami refuge structures.



## 1.2 Project Understanding

The main goals of this work are to assess the coastal storm and tsunami flood hazards at the project site, evaluate the proposed development, and develop a set of conditions under which the development could be considered *suitable for the intended use*. This involves the following tasks:

- Specification of design coastal storm and tsunami events, including the flood levels, and estimation of the associated flood hazards.
- Evaluation of the adequacy of the initial proposed building mitigation measures, and consideration of the possible need for supplemental building mitigation measures.
- Evaluation of the flood risk based on the proposed development plan, including proposed mitigation measures.
- Confirmation that the flood risk is acceptable based on the DoU's tolerance for risk.
- Preparation of a flood mitigation plan that incorporates the proposed building mitigation measures, appropriate planning mitigation measures.
- Completion of a Flood Assurance Statement confirming the site is suitable for the intended use.

## 1.3 Key Terminology

Term	Abbreviation	Description
Building Mitigation Measures	-	Flood mitigation measures which are implemented through engineering of the built environment
Planning Mitigation Measures	-	Flood mitigation measures which are implemented through planning mechanisms such as bylaws, control of land use and emergency management actions.
Tsunami Flood Level	TFL	The maximum water level during the tsunami relative to a fixed vertical datum, plus the rupture-induced land subsidence relative to that same datum. Includes the effects of tides and relative sea level rise.
Tsunami Flood Reference Plane	TFRP	Equivalent to Tsunami Flood Level.
Tsunami Flood Construction Level	-	The Tsunami Flood Level plus any appropriate freeboard or safety factor.
Coastal Storm Flood Level	CFL	The maximum wave runup elevation during the design storm. Includes the effects of tides, surge, and sea level rise.
Coastal Storm Flood Construction Level	-	The Coastal Storm Flood Level plus an appropriate freeboard, usually 0.6 m.
Flood Construction Level	FCL	Uses the Flood Level (coastal or tsunami) plus an allowance for Freeboard to establish the elevation of the underside of a wooden floor system or top of concrete slab for habitable buildings



Term	Abbreviation	Description
Natural Boundary		Means the visible high watermark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual and so long continued in all ordinary years as to mark upon the soil of the bed of the lake, river, stream or other body of water a character distinct from that of the banks thereof, in respect to vegetation, as well as in respect to the nature of the soil itself (BC Land Act, Section 1).
Present Natural Boundary	PNB	The present state of the Natural Boundary.
Future Natural Boundary	FNB	The future state of the Natural Boundary.

## 1.4 Datum

Vertical elevations in this report are specified relative to a vertical datum. Generally Canadian Geodetic Vertical Datum of 1928 (CGVD28) is used except where referencing elevations from other sources.



# ERIF Economic Restoration Infrastructure Fund Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**  
**KERR WOOD LEIDAL**  
consulting engineers



Project No. 4558.001  
Date November 2024  
Scale 1:35,000  
0 250 500 1,000 m

## Project Location

**Figure 1-1**



**ERIF Economic Restoration Infrastructure Fund**  
 Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**  
**KERR WOOD LEIDAL**  
 consulting engineers



Project No. 4558.001  
 Date November 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

**Project Site Map**

**Figure 1-2**





## 2. Background

### 2.1 Previous Work

In 2020, Ebbwater Consulting and Cascadia Coast Research completed coastal flood hazard mapping for the District of Ucluelet [1]. This mapping included coastal storm and tsunami flood hazard mapping. Many scenarios were modelled and several were mapped. Coastal storm flood levels, including the effects of sea level rise, tides, storm surge, and waves, were determined for each combination of the following parameters:

- Relative sea level rise: 0 m, 0.5 m, 1.0 m, and 2.0 m
- Return period: 15, 50, 100, 200 and 500 years

For tsunami, five different tsunami scenarios generated from the Cascadia Subduction Zone (CSZ) were modelled based on fault rupture models developed in 2018 by the University of Victoria and the Geological Survey of Canada [2]. These included one buried rupture, two trench breaching, and two splay faults. All fault ruptures are based on 500 years of fault locking and stress accumulation and a rupture along the full linear extent of the CSZ. The flood levels calculated as part of this work were tabulated for shoreline reaches surrounding Ucluelet. Based on the flood levels at Transect 24, the closest to the project site, the tsunami flood levels are much higher than the coastal storm flood levels, by a factor of about 2.

In 2022 Ebbwater Consulting completed a technical report for a previous owner of the project site. The report proposed Tsunami Flood Construction Levels at the project site [3]. This work was based on the results of the 2020 modelling and mapping work, and also provides a preliminary risk assessment for the proposed development. However, the authors have declined to provide an accompanying Flood Assurance Statement, citing lack of coastal engineering expertise. Consequently, this work has been deemed insufficient by the Ucluelet Approving Officer for the purposes of supporting a subdivision application.

### 2.2 Regulatory Guidance

Through the Local Government Act, the Province of British Columbia (the Province) grants local governments the authority to manage flood hazards. Mechanisms of management may include the designation of flood hazard areas, regulation of land within flood hazard areas, the development of Flood Construction Levels and setbacks, and the implementation of structural mitigation works. To support applications for development in flood hazard areas, a local government may require a flood assessment report to be completed by a Qualified Professional (QP). In Ucluelet, three primary sources of guidance are available to the QP completing a Flood Hazard Assessment:

1. The Province of BC "Flood Hazard Area Land Use Management Guidelines". [4]
2. Engineers and Geoscientists BC (EGBC) Professional Practice Guidelines "Legislated Flood Assessments in a Changing Climate in BC". [5]
3. Bylaws and policies developed by the District of Ucluelet. [6] [7]

The following subsections summarize the guidance from each of these sources which is pertinent to the proposed subdivision.



## BC Flood Hazard Area Land Use Management Guidelines

Originally developed in 2004, the Flood Hazard Area Land Use Management Guidelines (FHALUMG) were updated in 2018 to account for advances in the understanding of climate change, sea level rise, and tsunami flood risk [4].

The original 2004 guidance for management of coastal storm and tsunami flood hazards relies heavily on the concept of the natural boundary. The natural boundary is determined by a surveyor based on the observed high-water mark. The updated guidance acknowledges sea level rise may alter the natural boundary in the future. The suggested approaches for calculating the FCL were updated so that they no longer rely on the current natural boundary. However, setback guidance still refers to the natural boundary and now requires an estimate of its future position. Minimal guidance for estimating the position of the future natural boundary (FNB) is provided.

The FHALUMG anticipate that the management of land use in coastal flood hazard areas may require flood assessments to be completed by a QP and provides some direction on acceptable levels of coastal storm and tsunami flood hazard.

Section 3.5.5.1 and 3.5.5.2 of FHALUMG provides some guidance on acceptable levels of coastal storm flood hazard:

*The building setback should be at least the greater of 15 m from the future estimated Natural Boundary of the sea at Year 2100, or landward of the location where the natural ground elevation contour is equivalent to the Year 2100 FCL.*

*All lots created through subdivision should have viable building sites on natural ground that is above the Year 2100 FCL and comply with the setback guidelines noted above.*

Section 3.5.6 of FHALUMG provides some guidance on acceptable levels of tsunami hazard:

*A subdivision application in a tsunami prone area must include a report by a suitably qualified Professional Engineer, experienced in coastal engineering who must formulate safe building conditions for each proposed lot based on a review of recent Tsunami hazard literature including the report, "Modelling of Potential Tsunami Inundation Limits and Run-Up", by AECOM for the Capital Regional District, dated June 14, 2013, plus the historical report, "Evaluation of Tsunami Levels Along the British Columbia Coast", by Seaconsult Marine Research Ltd., dated March 1988. At a minimum, building conditions should protect improvements from damage from a tsunami of equal magnitude to the March 28, 1964 tsunami that resulted from the Prince William Sound, Alaska earthquake and a possible Cascadia Subduction Zone earthquake.*

*Setback requirements should be established on a site-specific basis and take into account tsunami hazards. The setback must be sufficient to protect buildings and must be at least 30 metres from the Year 2100 estimated natural boundary.*





## Legislated Flood Assessments in a Changing Climate in BC

The standard of practice for Flood Hazard Assessment is provided in Engineers and Geoscientists BC (EGBC) Professional Practice Guideline, "Legislated Flood Assessments in a Changing Climate in BC", Version 2.1 (2018).

Section F3.2 provides guidance on subdivision approvals in a flood hazard area:

*A new subdivision should only be considered for a floodplain that is not protected by a standard/adequate Dike if:*

- *the local government has adopted an appropriate bylaw or land use regulation that provides for subdivision with knowledge of the Flood Hazard;*
- *a standard/adequate Dike is constructed as part of the development (in which case, Section F3.3 of this appendix applies); or*
- *the QP concludes that the site may be suitable for the intended use.*

*A QP may conclude that the site may be suitable for the intended use if the local authority accepts that the proposed subdivision may proceed in the absence of a standard/adequate Dike, and at least one of the following conditions applies:*

- *The subdivision site is located on the flood fringe (i.e., its removal from the floodplain would not increase the designated flood level) and the ground is fully raised to the 200-year return period flood level plus Freeboard (with consideration of protection of the landfill slope against erosion).*
- *The subdivision site would only nominally increase the current development density on the floodplain, and is not in a high hazard area of the floodplain (i.e., an avulsion path, a flood velocity greater than 1 m/s, a flood depth greater than 2.5 m, and/or where safe access and egress is not possible).*
- *The subdivision site would only nominally increase the current development density in the floodplain, and a Risk Assessment is undertaken whereby the local government establishes a tolerable level of Risk and the QP assessment confirms that the Risk would be within this level.*

## District of Ucluelet Bylaws and Policy

The DoU has two policy documents relating to development in flood hazard areas: the Official Community Plan [6], and the Interim Policy for Tsunami Risk Tolerance [7].

The Official Community Plan (OCP) was adopted in May of 2022. The OCP includes policies to refine Flood Construction Levels (2.34) and conduct flood risk mapping (2.50). It includes requirements for flood assessment in Natural Hazard Development Permit Areas (DPA VIII), including identification of the natural boundary, setbacks, and Flood Construction Levels. The OCP includes mapping of FCLs for coastal storm flooding, but not tsunamis. **The reach which covers the project site has a Coastal Storm FCL of 4.5 m CGVD2013.**

The DoU does not designate Development Permit areas for coastal flooding, however, it does exercise its ability to require professional assessment and certification of construction under section 56 of the Community Charter. Coastal storm FCL and tsunami hazard areas, derived from the 2020 mapping



project, are included as supplementary maps in the OCP. The following statement is included with a note on flood hazards:

*It is District policy that it is in the public interest for new subdivisions and developments to be planned to avoid areas of potential flood risk.*

The *Tsunami Risk Tolerance – Interim Policy* [7] relaxes this statement on complete avoidance and provides some direction on acceptable hazard levels for development in the tsunami flood zone. Table 2-1, reproduced from [7], provides the minimum acceptable elevations for a range of uses. Though not stated, it is assumed that, like the FCL, the *minimum acceptable elevation* applies to the underside of a wooden floor system or top of a concrete floor slab. The minimum elevation for new residential or commercial buildings on new lots is given by the Tsunami Flood Reference Plane (TFRP). This term is not defined within the DoU bylaw or policy documents but is assumed for the purpose of this assessment to be the same TFRP defined in Appendix A of [1] – i.e., the maximum water level attained during a design tsunami event due to the combined effects of ambient water levels (tide and sea level rise), the tsunami wave crest, and land subsidence. While Coastal Storm Flood Construction Levels are provided in OCP Map 4, TFRP levels are not provided. The DoU Flood Mapping work of 2020 [1] provides the TFRP for a range of sea level rise and tsunami scenarios.

**Table 2-1: DoU Minimum Acceptable Elevations for Different Uses (Table 1 from [7])**

Proposed Facility or Use	Minimum Elevation	Reference
New critical infrastructure (e.g. health care, emergency, seniors' housing, core water infrastructure, core sewage treatment infrastructure, evacuation routes, etc.)	18 m tsunami planning elevation	OCP Map 6
Key buildings for assemblies of people (schools, daycare facilities, etc.)	Tsunami Flood Reference Plane + 50%	Site-specific analysis by suitably qualified Professional Engineer experienced in coastal engineering
Public infrastructure (e.g., roads, sewer pump stations, etc.)	Tsunami Flood Reference Plane +50%	Site-specific analysis by suitably qualified Professional Engineer experienced in coastal engineering
New residential and commercial buildings on <u>new</u> lots	Tsunami Flood Reference Plane	Site-specific analysis by suitably qualified Professional Engineer experienced in coastal engineering
New buildings on <u>existing</u> lots	Coastal Storm FCL	OCP Map 4
Accessory buildings, storage, parking, industrial uses on <u>new</u> lots	Coastal Storm FCL	OCP Map 4
Private infrastructure	Coastal Storm FCL	OCP Map 4

A following section of the *Tsunami Risk Tolerance – Interim Policy* provides guidance for approval of buildings or structures within areas identified as being subject to tsunami hazard:

*Any subdivision approval of new lots where building sites would overlap areas identified as being subject to potential tsunami hazard will be subject to the following:*

- *a report by a qualified professional engineer experienced in coastal engineering who must determine the tsunami flood reference plane for the site and formulate safe*





*building conditions for each lot, per the current BC Flood Hazard Area Land Use Management Guidelines;*

- *certification by a qualified professional engineer that the building site can be safely constructed for the intended use with habitable spaces and electrical / mechanical systems located above the applicable minimum elevations set out in Table 1;*
- *the report by the qualified professional engineer must reference current structural standards for tsunami loads and effects including, as a minimum, ASCE/SEI 7-16, Minimum Design Loads and Associated Criteria for Buildings and Other Structures or subsequent best practices and standards;*
- *the report by the qualified professional engineer must address the anchoring of foundations to bedrock; and,*
- *a restrictive covenant registered on title of the property:*
  - *restricting the use of the land to meet the conditions specified in the professional's report enabling the land to be used safely for its intended use;*
  - *containing conditions respecting reimbursement by the owner for any expenses that may be incurred by the municipality as a result of a breach of a covenant; and,*
  - *indemnifying the District of Ucluelet and the Province of British Columbia from any liability or claim for property damages, injury or loss of life resulting from flooding.*

## Gaps in Regulatory Guidance for Tsunami

The regulatory guidance on tsunami hazard assessment in BC is still developing. The FHALUMG requires that flooding due to the 1964 Alaska tsunami be evaluated, however many studies have shown that the CSZ poses a larger threat to most of the BC coastline (e.g., [1]). The FHALUMG also requires evaluation of flood hazards from a tsunami generated by a potential fault rupture of the CSZ, however it does not provide guidance on the characteristics of the fault rupture that should be assumed.

### Design Fault Rupture

Even if the fault geometry is known, two general characteristics of a rupture which must be defined are the *recurrence interval* and the *rupture mechanism*.

1. **Recurrence Interval:** This is the time since the last major rupture of the fault. The longer the fault is locked, the more stress accumulates, the more likely a rupture is imminent, and the larger the rupture magnitude can be expected. The last major fault rupture of the CSZ occurred in the year 1700, which is 324 years before present. By the year 2100, the fault would have locked for 400 years. The average recurrence interval for a rupture of the CSZ is about 500 years, and this value has been used by many for the purposes of hazard assessment [2].
2. **Rupture Mechanism:** This refers to the physical movement of the tectonic plates during rupture, and how they deform the seafloor. Scientific understanding of the CSZ is still developing. Scientists have posited a number of potential rupture models based on limited observations of the fault geomechanics [2]. The deformation of the seafloor and resulting tsunami wave varies greatly with some of these rupture models. Currently there is no clear evidence to indicate that any of these models are more likely than others.



### Freeboard

For riverine and coastal flooding, the FHALUMG suggests that a freeboard should be added to the calculated flood level to account for uncertainties when specifying a Flood Construction Level. Freeboard is typically 0.3 m or 0.6 m depending on the analysis approach. The FHALUMG provides no guidance on the applicability of freeboard to tsunami flooding.

The DoU Tsunami Risk Tolerance – Interim Policy states the minimum acceptable building elevation for residential and commercial buildings is equal to the tsunami flood reference plane, without any additional freeboard or safety factor [7].

### Setback

The FHALUMG suggests that where there is significant tsunami risk, the building setback should be established on a site-specific basis and should be at least 30 m from the estimated future natural boundary, unless the building is constructed on bedrock. While this guidance is clear, the reasoning behind it is not. It is presumed that this is an allowance for erosion, which may be due to the combined effects of coastal processes during the lifetime of the building, and hydrodynamic processes associated with the design event.

### Mitigation Measures

The regulatory guidance in [4] and [5] discuss the following flood mitigation measures for coastal and riverine flooding:

- Raising of buildings to FCL by landfill.
- Raising of buildings to FCL by structural means.
- Protection of buildings by a standard dike.

None of the available regulatory guidance suggests acceptable approaches to tsunami flood mitigation.

Specifications from the American Society of Civil Engineers [8] [9] [10], provide design guidance for buildings in tsunami hazard areas. These specifications state:

- Structural landfill is not permitted in high hazard coastal areas, but is permitted in lower hazard coastal areas.
- Raised buildings with an open lower floor are an acceptable tsunami flood mitigation option.
- Tsunami barriers, similar to a sea dike, are an acceptable tsunami flood mitigation option.



### 3. Coastal Storm Flood Hazard Assessment

Flood hazards result from inundation of normally dry land. Flood hazard assessment does not consider the consequences of that inundation. Flood hazard for a specific event is most often quantified in terms of flood extent, flood depth, and current speed. Understanding the flood hazard over a given site provides an important basis for determining whether development is appropriate, and to plan how that land may be safely and effectively used.

Coastal flood hazard was assessed for the 2020 DoU Flood Mapping project [1]. Based on this work the DoU OCP states explicitly that the coastal storm FCL of the reach which includes the project site is 4.5 m CGVD2013 (4.3 m CGVD28). This FCL includes the effects of tides, storm surge, wave runup, 1 m of sea level rise, and 0.6 m of freeboard. Application of this FCL to the subject project is consistent with the above-noted regulatory guidance. See Figure B-1 for a map indicating the coastal storm flood hazard area (area below the FCL based on the existing topography). Only in a few small places within the project site is the natural ground elevation below the coastal storm FCL.





## 4. Tsunami Flood Hazard Assessment

This section summarizes the tsunami flood hazard at the project site.

### 4.1 Methods

This section outlines the methods used to assess the tsunami flood hazard at the project site. These methods are based on the regulatory guidance summarized in Section 2.2, supported by the professional opinion of the authors.

#### Relative Sea Level Rise

The available regulatory guidance provides a clear directive to account for 1 m of sea level rise when planning out to the year 2100 (roughly the design life of the proposed development). In addition, the vertical motion of the land should be considered. Much of BC is moving upwards due to isostatic rebound following the end of the last ice-age. Along the West Coast of Vancouver Island, the land is also moving upwards (tectonic uplift) due to strain accumulation from the locking of the CSZ. Some of the uplift due to locking can be expected to be rapidly reversed due to subsidence during the next fault rupture. The magnitude of uplift due to isostatic rebound is uncertain. Given that the isostatic rebound over the next 100 years is likely relatively small (a few decimeters at most) and the uncertainty in the magnitude of sea level rise is large, a conservative approach is taken, and a relative sea level rise (RSLR) value of 1.0 m is used in this assessment.

#### Fault Rupture Scenario

The FHALUMG suggests that the design tsunami scenario should consider at least the 1964 Alaska Tsunami and a potential tsunami generated by a rupture of the CSZ. The 2020 DoU Flood Mapping project demonstrated that the CSZ is the much greater tsunami hazard to the DoU. Given the significant uncertainty in the fault rupture of the CSZ it is deemed appropriate to base the design case on the largest credible event for which a rupture model is available, in this case Splay Fault A of Gao et al [2]. This rupture model is based on 500 years of strain accumulation and has a moment magnitude of 9.0. It should be noted that larger ruptures of the CSZ are estimated to have occurred in the paleo-tsunami record [11], but they are generally associated with rupture intervals longer than 500 years and no rupture models are currently available for this event so it cannot be modelled with accuracy.

#### Tsunami Model

This assessment is based on a specific model scenario from the 2020 DoU Flood Mapping Project:

- Ambient water level is set at 3.0 m CGVD28, which includes 1 m RSLR and 2 m of tide height.
- The Spay Fault A rupture model of Gao et al [2] is used.

The mapping from the previous project was examined and judged to be appropriate for use in this site-specific assessment.

It is noteworthy that the tidal allowance of 2.0 m corresponds roughly to higher high water large tide (HHWLT); the largest tide expected in any given year. Typical practice is for the tsunami modelling to be run with a tide level of at least mean high water (MHW) [12]. The difference between HHWLT and MHW at Ucluelet is about 0.9 m.



While a freeboard is not used in this tsunami hazard assessment, the conservative specification of the tidal condition relative to typical practice serves a similar purpose. This approach also has the advantage that the conservatism is propagated through the tsunami model so that the conservatism is reflected not only in the resulting water levels, but also in the current speeds. This may be important for the design of structural mitigation measures.

## Land Subsidence

The CSZ runs parallel to the continental shelf offshore of BC. Locking of the plates causes stress accumulation which is causing downward movement of the sea floor along the fault and upward movement of the land along the West Coast of Vancouver Island, including the DoU. When the CSZ ruptures that accumulated stress and vertical land movement will be released. Offshore, along the fault line, this will create a near-instantaneous upward movement of the sea floor which initiates the tsunami wave. Along the West Coast of Vancouver Island, the land will near-instantaneously drop (subside) down by about 2 m. When considering tsunami flood hazard this subsidence must be accounted for. Accordingly, the tsunami flood level is calculated relative to the undeformed topography as the sum of:

- the maximum water level (including the effects of RSLR and tide) during the design event relative to a fixed vertical datum; and
- the local subsidence relative to the same fixed datum.

Vertical land motion data is a primary output of the fault rupture model. This data is input as a boundary condition to the tsunami wave model, so that both the bathymetry/topography and the sea surface are offset by the vertical land motion estimated by the fault rupture model.

## Flood Hazard Area

The extents of the flood hazard area are defined as any areas which experience a non-zero flood depth during the design tsunami event.

## 4.2 Results and Discussion

Maximum tsunami flood extents and flood levels are shown in Figure C-1. Flood levels include the effects of relative sea level rise, tide, tsunami, and land subsidence. The tsunami extents cover most of the project site, and the tsunami flood levels range from 9.7 m to 10.7 m CGVD28.

Maximum tsunami flood depths are shown in Figure C-2 based on existing ground elevations. Flood depths range from 0 to 5 m over the project site, with the greatest inundation at Lot 3.

Maximum current speeds are shown in Figure C-3. Current speeds over the project site range from 0 to 5 m/s. Locations with a deeper flood depth tend to have a higher maximum current speed.

Figure C-4 shows the areas of the project site with high flood hazard, as defined in [5], where depth is greater than 2.5 m or current speed is greater than 1 m/s. This figure provides an indication of which areas may be considered higher hazard and unsuitable for development without additional mitigation measures. It is understood, however, that the thresholds for high hazard areas provided in [5] were developed for river flooding and their applicability to tsunami flooding is not clear.





## 5. Flood Mitigation Assessment

The previous section analyzed the tsunami flood hazard based on the existing site conditions. However, two initial building mitigation measures have been proposed by ERIF:

1. Raise Lots 1, 2, 4, and 5 above the tsunami FCL using landfill contained by tsunami-resistant retaining walls. Retaining wall alignment is indicated in Figure A-1.
2. Raise homes on Lot 3 above the tsunami FCL on a tsunami-resistant platform that would allow the tsunami to flow below the buildings.

This section evaluates the adequacy of these proposed measures given the coastal storm and tsunami flood hazards for existing site conditions. The tsunami flood hazard is then re-evaluated to reflect these proposed building mitigation measures.

### 5.1 Setbacks

The FHALUMG [4] provides guidance for building setbacks. For the coastal storm flood hazard, the guidelines recommend a minimum setback of 15 m from the Future Natural Boundary (FNB), or landward of the location where the natural ground elevation corresponds to the associated FCL, whichever is the greatest; and in the case of tsunami hazards a minimum distance of 30 m from the FNB. Locating these setbacks requires that the location of the FNB be estimated.

The natural boundary reflects the historic impact of the presence and action of water on the shoreline soils and vegetation. The project site is exposed to low levels of wind-wave energy, so it is reasonable to assume that the Present Natural Boundary (PNB) is driven primarily by tidal water levels. Plan EPP129243 indicates the PNB as determined by a BC Land Surveyor. The surveyed PNB follows the 2 m CGVD28 contour closely, which is approximately equal to the elevation of higher high water large tide. For the purpose of determining the FHALUMG recommended setbacks at the project site, the FNB may be estimated by applying a 1 m RSLR allowance to the existing PNB (i.e., the FNB is estimated to rise to an elevation of 3 m CGVD28).

Figure D-1 shows the surveyed PNB, the estimated FNB, the 15 m minimum coastal storm setback, and the 30 m minimum tsunami setback recommended by the FHALUMG.

### 5.2 Adequacy of Proposed Building Mitigation Measures

#### Lots 1, 2, 4, and 5

Under existing conditions, the topography of Lots 1, 2, 4, and 5 are nearly all above the coastal storm FCL and shoreward of the associated FHALUMG recommended minimum coastal storm setback. Only on one small area near the north boundary of Lot 1 does the existing topography dip down below the coastal storm FCL.

Under existing conditions Lots 1, 2, 4, and 5 would only be partially flooded by the design tsunami event. The maximum tsunami flood level is about 10.7 m CGVD28. These lots are located on the flood fringe, and it appears to be practical to fully raise the ground to the tsunami FCL for flood protection as per the development plan. This flood mitigation approach is in concordance with Section F3.2 of [5]. The tsunami FCL will be confirmed as part of the analysis in Section 5.3.



While the FHALUMG states that for tsunami flooding, buildings should be set back at least 30 m from the FNB, it is assumed that the purpose of this provision is to mitigate against erosion. Since the land on these lots will be raised, the retaining walls must be designed to by a qualified professional engineer to withstand the design tsunami including seismic effects, hydrodynamic loading, debris impact, and scour. The design may or may not require construction of the retaining walls into bedrock, but will be required to adequately address erosion concerns, and so will have an equivalent functional performance with respect to prevention of undermining of building foundations. Based on these requirements it is judged acceptable to relax the tsunami setbacks to 15 m from the FNB. Buildings must be setback from the retaining walls as indicated in Figure A-1.

### Lot 3

Under existing conditions, nearly all of Lot 3 is above the coastal storm FCL and shoreward of the associated FHALUMG recommended minimum coastal storm setback. Only at one small area near the creek mouth does the existing topography dip down below the coastal storm FCL.

Lot 3 would be nearly completely flooded during the design tsunami. Flood depths are 3 m over much of the lot, and up to 5 m in some places. Current speeds in Lot 3 are up to 5 m/s and therefore the lot is considered a high flood hazard area [5]. The tsunami flood level ranges from about 9.7 to 10.6 m. Lot 3 is not on the flood fringe (i.e., it is not contiguous with dry land), and it does not appear practical to fully raise the ground to the tsunami FCL. As an alternative, structural raising of the buildings to the tsunami FCL may be feasible for flood mitigation. The tsunami FCL elevation will be confirmed as part of the analysis in Section 5.3.

To minimize damage to the buildings of Lot 3 and the risk of damage to other structures in the tsunami flood hazard area, the buildings of Lot 3 could be structurally raised on piles or columns above the FCL so that the tsunami may be allowed to flow underneath. This approach would elevate the main building out of the flood hazard zone, and minimizes the loading on the building due to hydrodynamic forces. It also does not remove the building footprint from the floodplain, so has negligible flood risk transfer impacts. It is not suggested that these buildings be designed as tsunami refuge structures, so these buildings must be evacuated in a tsunami event. Design standards for this type of flood resistant building (Category II) are provided in [8] and [9].

While the foundations of the buildings on Lot 3 must be designed not to fail during the design tsunami, including from the effects of erosion, they do not necessarily need to be designed to endure repeated coastal flooding. As such the buildings on Lot 3 should be sited landward on the coastal storm setback indicated in Figure D-1.

## 5.3 Re-Assessment of Tsunami Hazard

A new tsunami simulation was developed to evaluate the tsunami flood hazard with the retaining walls and landfill shown in the proposed development plan (Figure A-1). This simulation was based directly on the model developed for the DoU mapping project [1]. The only change from the original simulation was to raise the model topography to 10.7 m within Lots 1, 2, 4, and 5. No changes were made to the topography of Lot 3. It is assumed that the buildings on Lot 3 are raised on platforms which are hydrodynamically transparent to the tsunami wave (using piles or columns).

First, the potential transfer of tsunami hazard due to implementation of the mitigation measures was assessed. The impact to neighbouring areas of the floodplain was quantified by comparing the results of the tsunami simulation with and without the proposed land raising at the project site. It was found that the land raising would increase the maximum flood level in Olsen Bay by about 0.05 m, and by about





0.01 m in the wider Ucluelet Inlet. This is deemed a negligible change in tsunami hazard and therefore acceptable.

Next, the change in flood hazard at the project site was investigated. The tsunami hazard with the proposed land raising are illustrated in Figures D-2 (flood levels and extents), D-3 (flood depths), D-4 (current speed), and D-5 (high hazard areas). While there would be still some minor flooding on Lots 1, 2, 4, and 5 it would be very shallow ( $\leq 0.1$  m) and therefore tolerable. Based on this assessment, the land-raising flood mitigation measures would be effective at mitigating flood risk on Lots 1, 2, 4, and 5. Based on this assessment, and the conserve specification of the tide level noted in Section 4.1 (Tsunami Model), the tsunami FCL of Lots 1, 2, 4, and 5 is assessed at 10.7m CGVD28.

Tsunami conditions on Lot 3 would not change significantly with the proposed land raising. The tsunami flood level ranges from 9.7 to 10.6 m CGVD28 over the lot. Lot 3 remains a high flood risk area based on the criteria of [5].

Given that Lot 3 is in a high flood hazard area, and is not on the flood fringe, the EGBC Professional Practice Guidelines provide only one avenue to permitting development. As per Section 3.2 of [5]:

*The subdivision site would only nominally increase the current development density in the floodplain, and a Risk Assessment is undertaken whereby the local government establishes a tolerable level of Risk and the QP assessment confirms that the Risk would be within this level.*

The first requirement is that the development only nominally increase density in the floodplain. The term "nominal" is not defined or elaborated upon. It seems reasonable that the current development plan to construct 11 houses could be considered a nominal increase to the development density in the floodplain within the DoU. The DoU District Council has reviewed the current development plan and confirmed in a letter that they consider the 11 proposed houses on Lot 3 to be a nominal increase in development density [13].

The second requirement is that the DoU establishes a tolerable level of risk, and that a tsunami flood risk assessment is carried out and confirms that the proposed development of Lot 3 is below the tolerable risk level. A tsunami flood risk assessment for Lot 3 is presented in the next section.



## 6. Tsunami Risk Assessment – Lot 3

Flood risk is determined based on assessment of the flood hazard and the consequences of the flooding. It is most often quantified in terms of mortality and economic losses and these metrics may be annualized to normalize the assessment process. Depending on the degree of detail of the risk assessment, multiple flooding events may be considered.

### 6.1 Risk Assessment Methods

This section outlines the methods used to assess the tsunami flood hazard at the project site. The selected approach for risk assessment is outlined in [5]:

A Flood Risk Assessment (FRA) involves estimating the likelihood that a flood will occur and cause some magnitude and type of damage or loss. Following are the principal steps in the Risk Assessment:

1. Identify Flood Hazard Scenarios. These are defined as distinct outcomes from a given hazard that result in some direct Consequence (e.g., fatalities, damage to a building, environmental damage, intangibles such as human suffering) and are based on the results of the hazard assessment described in Section D: Flood Hazard Assessments. They can include different return periods for the same hazard, variable flood extent or Flood Intensity, multi-hazard chains of events, or different consequence chains.
2. Estimate the probability of a Hazard Scenario resulting in some undesirable outcome. This is based on the estimated likelihood that the hazard will occur, reach the Element at Risk when it is present within the hazard zone, and cause the undesirable outcome. These may include a range of outcomes in categories such as economic loss, environmental damage, safety, and corporate or political reputation.
3. Estimate the Consequences of the unwanted outcome including economic losses; human health and loss of life; environmental losses; cultural/historic losses; and intangibles such as psychological distress. Details are described in Section E2.2.
4. Define Tolerable Risk criteria.
5. Prioritize Risk reduction strategies

Flood Risk can be expressed as:

$$R = P_H * P_{S,H} * P_{T,S} * V * E$$

where:

- R = total Flood Risk;
- P<sub>H</sub> = annual exceedance probability of a flood occurring;
- P<sub>S,H</sub> = spatial probability that the flood will reach the Element at Risk;
- P<sub>T,S</sub> = temporal probability that the Element at Risk will be present when the flood occurs (for fixed infrastructures and homes this is equal to 1);
- V = the Vulnerability, or probability of loss of life or the proportion of an asset loss to total loss; and
- E = the number of people at Risk or the homes and infrastructures at Risk





## Hazard Scenario

As in Section 4.1, risk has been evaluated based on a single largest-credible tsunami hazard scenario with implementation of the proposed mitigation measures (land raising). The use of a single hazard scenario for risk assessment is appropriate given the non-random nature of rupture along a given fault zone. Put another way, it is highly unlikely that more than one tsunami-generating rupture of the CSZ occurs within the design life of the proposed development.

## Probability of Consequences

The time-dependent probability of a full rupture of the CSZ is estimated in [14] and [15] based on the paleo-tsunami record. This record represents a range of rupture moment magnitudes, many of which are estimated to be smaller than the 9.0 Mw rupture model used in this assessment, but a few of which are estimated to be larger [11]. For the year 2100, the annual occurrence probability is estimated to be about 0.2%; equivalent to a 1:500-year return period. Here the occurrence probability is taken as equivalent to the exceedance probability ( $P_H$ ).

For the purposes of this assessment all people living on Lot 3, and all assets located below the flood level, are assumed to be at risk. i.e.,  $P_{S,H}=100\%$ .

For fixed infrastructure the Element at Risk will always be present, so the temporal probability is  $P_{T,S}=100\%$ . People, on the other hand, spend about 70% of their time at home on average [16], i.e.,  $P_{T,S}=70\%$ . Note that the impact of evacuation is not considered here but is considered in quantification of consequences (loss of life).

## Elements at Risk

In this risk assessment, the evaluated elements at risk are limited to people and built infrastructure. It should be noted, however, that all infrastructure at risk will be the responsibility of either the homeowner or the strata corporation of Lot 3. The DoU will not own or maintain this infrastructure.

Eleven detached houses, each with a secondary suite, are planned for Lot 3, for a total of 22 residences. According to 2021 census data, the average occupancy in the Ucluelet area is 2.3 per residence [17]. This yields an expected total of 51 people living on Lot 3.

ERIF have provided an estimate of the total value of the infrastructure damage during the design tsunami event. Note that damage to habitable spaces elevated above the Flood Construction Level are not included in these totals, but there is still potential for damage to these spaces due to floating debris.

**Repairs to homes: \$2.75M.** Includes replacement of break-away wall panels on uninhabitable lower floors, stair replacement, and landscaping.

**Common area servicing and infrastructure: \$1.6M.** Includes landscaping, damage to roads, sewage and water pipe and pump systems.



## Estimation of Risk

### Loss of Life

The probability of mortality rate<sup>1</sup> as a function of tsunami height is estimated in [18] for the 2011 Japanese tsunami. For a tsunami height of approximately 10 m, the estimated mortality rate ranges from 3 to 5% with a best estimate of 4%. Another study estimated the mortality rate as a function of flood depth in New Orleans during Hurricane Katrina [19]. For a flood depth 3 m, the estimated mortality rate ranges from about 0.5% to 4% with a best estimate of 2%. It should be stressed that these estimates are specific to the social and geographic conditions of the studied event and region. Important is the variation in available warning, emergency planning procedures, and the age and robustness of the building stock. While there is variance between and within these studies, they do provide similar estimates of the mortality rate during a large flooding event.

The proposed flood mitigation measures influence the selection of an appropriate mortality rate in this application. With suitable emergency management plan, most residents should be able to evacuate to high ground, only about 300 m away, before the tsunami arrives. Further, the development is being designed with safe evacuation routes in mind. Given these factors, a mortality rate on the low range of the observed data of has been selected for use in this analysis. i.e.,  $V_{life}=0.5\%$

### Economic Losses

Given the limited scope of this assessment, it was possible to directly estimate the present-day costs of the potential economic losses due to damage to infrastructure located below the FCL directly as \$4.35M, i.e.,  $V * E = \$4.35M$ .

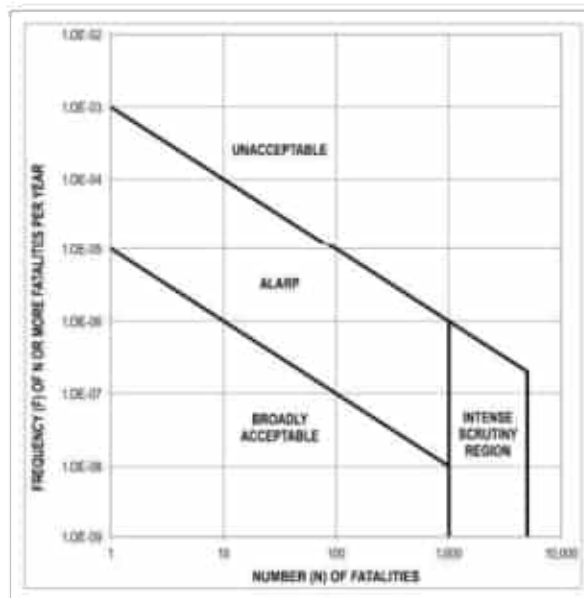


Figure 6-1: F-N curves to evaluate the risk to life loss of groups (source Kendall et al. 1977).  
 Reproduced from [5]

<sup>1</sup> Number of deaths as a percentage of total population.





## 6.2 Risk Results and Discussion

Using the methods of Section 6.1, the total economic losses on Lot 3 due to the design tsunami event are estimated to be \$4.35M. The annualized economic losses can be calculated as:

$$R_{econ} = P_H * P_{S,H} * P_{T,S} * V * E = 0.002 * 1 * 1 * \$4,350,000 = \$8,700$$

The expected mortality during the design tsunami event can be calculated as:

$$R_{life} = P_{S,H} * P_{T,S} * V_{life} * E = 1 * 0.70 * 0.005 * 51 = 0.18 \text{ people}$$

This suggests only about a 18% chance that one person on Lot 3 dies during the design tsunami event.

The annual chance of death annually due to tsunami to any of the residents of Lot 3 can be calculated as:

$$P_m = P_H * P_{S,H} * P_{T,S} * V = 0.002 * 1 * 0.70 * 0.005 = 0.0007\% = 1/142,000$$

The potential loss of life during the design event is 0.18 people (i.e., <1), and the annualized infrastructure losses are \$8,700. Based on the risk matrix provided in Table 6-1, this puts the overall risk at of the proposed development at "low". Given this overall risk level and the guidance in Table E-2 of [5], the current analysis is deemed a suitable assessment of the risk and no further refinement of this assessment is necessary.

**Table 6-1: Matrix to Determine the Level of Risk Assessment Needed Based on the Exposure of a Development and Vulnerable Populations to Flood Hazards (reproduced from [5])**

Potential Loss of Life for Applied Return Period	Annualized Potential Building Loss (\$)				
	<1,000	1,000 to 10,000	10,000 to 100,000	100,000 to 1,000,000	>1,000,000
>100	VH	VH	VH	VH	VH
10 to 100	H	H	VH	VH	VH
2 to 10	H	H	H	H	VH
1 to 2	M	M	M	H	H
0	VL	L	M	M	H

**Notes:**  
 VH = Very High; H = High; M = Moderate; L = Low; VL = Very Low

In the United Kingdom maximum tolerable risk of death to an individual is 1:100,000 annually for a new development. The Netherlands uses a more stringent maximum risk tolerance of 1:1,000,000 annually. A plot indicating ranges of risk acceptability levels is provided in Figure 6-1 (reproduced from [5]). This plot suggests that an annual risk of death to a single person is "broadly acceptable" below a likelihood of 1:100,000, and unacceptable above 1:1000. Between these two thresholds is the *as low as reasonably possible* (ALARP) zone, where mitigation measures should be used to reduce the risk to as low as reasonably possible.

Risk tolerance is a community value, and so should be defined by representatives of the community. ERIF have been engaged with District Council, including sharing a draft version of this report. Based on this engagement, the District Council have passed a motion stating an acceptable risk tolerance specific



to this development at an annual chance of death due to tsunami of 1 in 142,000 [13]. It is understood that this statement of risk acceptance does not apply to any other development.

It should be noted that the acceptability of these risk metrics is sensitive to the mortality rate ( $V_{life}$ ) that is assumed. A low mortality rate has been used in these calculations based on the relative accessibility of high ground, the assumption that all residents will be instructed to evacuate in the event of a tsunami, and that a well-developed evacuation plan is in place.



## 7. Flood Mitigation Plan

This section summarizes the proposed flood mitigation measures that would allow the QP to conclude that the land may be *suitable for intended use*. Both coastal storm and tsunami flood hazards have been considered in the development of this plan.

**This mitigation plan has been developed considering that residents of all lots will be directed to evacuate in the event of a tsunami according to a well-developed evacuation plan.**

### 7.1 Lots 1, 2, 4, and 5

The flood mitigation measures for Lots 1, 2, 4, and 5 are summarized below.

- The Tsunami FCL is 10.7 m CGVD28.
- The Tsunami FCL must be achieved through compacted landfill.
- No basements are permitted.
- Landfill must be supported by tsunami resistant retaining walls in the indicative location and extent shown in Figure A-1.
- Retaining walls must be designed by a qualified professional engineer with reference to ASCE 7-22 and 22-14 [9] [8] so that they do not fail during the design tsunami event. Seismic, hydrodynamic, debris impact, and erosion processes must be accounted for in the design. With reference to [4] and [7], the design should have the performance equivalent to building onto bedrock.
- Buildings must be set back at least 15 m from the FNB, as indicated by the coastal setback line in Figure D-1. Buildings must be setback from the retaining walls as indicated in the development plan (Figure A-1).
- Foundations of buildings protected by tsunami-resistant retaining walls should be designed by an appropriately qualified professional engineer, but do not necessarily need to be constructed into bedrock.
- Suitable emergency egress must be provided for any enclosed areas below the FCL.
- Prior to occupation each Strata Council must develop and approve an emergency management plan which directs residents to evacuate in the event of a tsunami.
- The emergency management plan must be developed in coordination with relevant professionals contributing to this project, as well as the DoU Emergency Management Coordinator. The plan should consider the following:
  - identification of an Emergency Response Coordinator and their responsibilities;
  - identification of the responsibilities of the Strata and responsibilities of the DoU;
  - prioritization of evacuation in the event of a tsunami and provide an evacuation plan;
  - specification of requirements for evacuation route signage; and
  - specification of training requirements for persons of responsibility, and education opportunities for the residents.





## 7.2 Lot 3

The flood mitigation measures for Lot 3 are summarized below.

- The Tsunami FCL for Lot 3 varies over the property from 9.7 to 10.6 m CGVD28, as indicated by Figure D-2. The FCL corresponds to the highest tsunami flood level affecting each building.
- The Tsunami FCL must be achieved through structural means.
- The buildings must be raised on columns or piles such that the underside of the platform is above the FCL and the tsunami may flow freely below platform.
- All houses on Lot 3 must be designed by a qualified professional with reference to ASCE 7-22 and 22-14 [9] [8] so that they do not fail during the design tsunami event. Seismic, hydrodynamic, and erosion processes must be accounted for in the design. The design should also consider potential debris impact and damming. With reference to [4] and [7], the design should have the performance equivalent to building onto bedrock.
- Buildings must be located landward of the coastal storm setback limit (Figure D-1).
- Building space below the FCL must not be used for habitation, the storage of goods susceptible to damage by exposure to floodwaters, or siting of fixed equipment susceptible to damage by exposure to floodwaters. Parking of licensed vehicles is acceptable.
- Suitable emergency egress must be provided for any enclosed areas below the FCL.
- Buildings must include an emergency egress route, such as a deployable ladder, in case the primary stairs access is damaged.
- Stair or ramp access must be provided on the west and north side of Lot 5, so that residents of Lot 3 may evacuate directly onto Lot 5.
- Prior to occupation the Strata Council must develop and approve an emergency management plan which directs all residents to evacuate in the event of a tsunami.
- The emergency management plan should be developed in coordination with relevant professionals contributing to this project, as well as the DoU Emergency Management Coordinator. The plan should consider the following:
  - identification of an Emergency Response Coordinator and their responsibilities;
  - identification of the responsibilities of the Strata and responsibilities of the DoU;
  - prioritization of evacuation in the event of a tsunami and provide an evacuation plan;
  - specification of requirements for signage in building areas below FCL;
  - specification of requirements for evacuation route signage; and
  - specification of training requirements for persons of responsibility, and education opportunities for the residents.
- The strata council must introduce a bylaw to prohibit buildings and items which may become hazardous floating debris during a tsunami. These bylaws would:
  - limit the storage of large volumes of building materials;
  - limit outbuildings of any type (including temporary structures) to one building less than 10 m<sup>2</sup>; and
  - prohibit the storage of recreational vehicles and shipping containers on site.



### 7.3 Minato Road

It is understood that Minato Road is a DoU asset and is outside the scope of the proposed development. However, to support safe evacuation of residents of the proposed development, it is suggested that Minato Road be raised to 10.7 m CGVD28 between Peninsula Road and the access to Lot 5.

### 7.4 Future Changes to Building, Site, and Floodproofing Measures

Any changes to the buildings, or floodproofing measures which impact the flood risk at the sites must be reviewed by a QP and approved by the DoU. Examples of changes which would require QP review include, but are not limited to:

- alteration of the site grade;
- alteration of buildings below the Flood Construction Level;
- alterations to land retaining structures;
- construction of additional buildings or outbuildings.



## 8. Residual Risk and Safe Use

As with the majority of flood mitigation plans, there remains residual risk to the development. The risk due to the design tsunami has been assessed in this report and has been deemed acceptable by the DoU. There remains the possibility, however unlikely, that a tsunami could be larger than the design tsunami used in this assessment. This creates residual risk which is not assessed in this report.

Based on the findings of this report and subject to implementation of the flood mitigation plan of Section 7, we assure that the proposed subdivision and development may be *used safely for the use intended*. With this statement we mean that the coastal and tsunami flood risk to the development falls below the DoU's stated threshold. A flood assurance statement is provided in Appendix E which formalizes this statement.



## 9. Next Steps

The following outlines the steps required to implement the flood mitigation plan presented in this flood assessment.

- A QP will support the design team by providing tsunami conditions (flood level, current speed, etc.) and other specialist advice as needed.
- Each building permit application will include a QP confirmation that the building design meets the applicable requirements of the flood mitigation plan.
- Following the issuance of building permits for Lot 3, the QP will stay informed of construction progress to verify that the required measures are being appropriately implemented.
- Prior to an issuance of occupancy permits, a QP will visit the project site and constructed buildings to ensure that the buildings comply with the flood mitigation plan, and provide a sealed confirmation memo.
- Prior to the issuance of occupancy permits, a QP will review each strata corporation's emergency management plan and relevant bylaws to ensure they comply with the flood mitigation plan, and provide a sealed memo indicating their findings.





## 10. Limitations of this Report

This report shall remain valid for five years from the time of sealing, or until Ucluelet or Provincial flood policy or guidelines change, whichever is sooner. Any future redevelopment of the site will be subject to the flood management policies in place at the time of the redevelopment.



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- [18] D. P. Aldrich and Yasuyuki Sawada, "The physical and social determinants of mortality in the 3.11 tsunami," *Social Science & Medicine*, vol. 124, pp. 66-75, 2014.
- [19] S. N. Jonkman, B. Maaskant, E. Boyd and M. L. Levitan, "Loss of Life Caused by the Flooding of New Orleans After Hurricane Katrina: Analysis of the Relationship Between Flood Characteristics and Mortality," *Risk Analysis*, vol. 29, no. 5, 2009.



## 12. Report Submission

Peer Review:

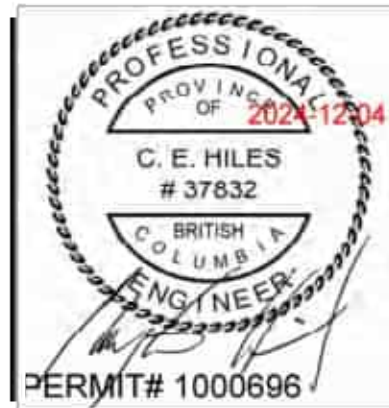
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### Statement of Limitations

This document has been prepared by Kerr Wood Leidal Associates Ltd. (KWL) for the exclusive use and benefit of ERIF Economic Restoration Infrastructure Fund for the Flood Assessment 221 Minato Road, Ucluelet. No other party is entitled to rely on any of the conclusions, data, opinions, or any other information contained in this document.

This document represents KWL's professional judgement based on the information available at the time of its completion and as appropriate for the project scope of work. Services performed in developing the content of this document have been conducted in a manner consistent with that level and skill ordinarily exercised by members of the engineering profession currently practising under similar conditions. No warranty, express or implied, is made.

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### Revision History

Revision #	Date	Status	Revision	Author
0	December 4, 2024	Final	Final for release	CEH



Appendix A

# Proposed Site Plan









## Appendix B

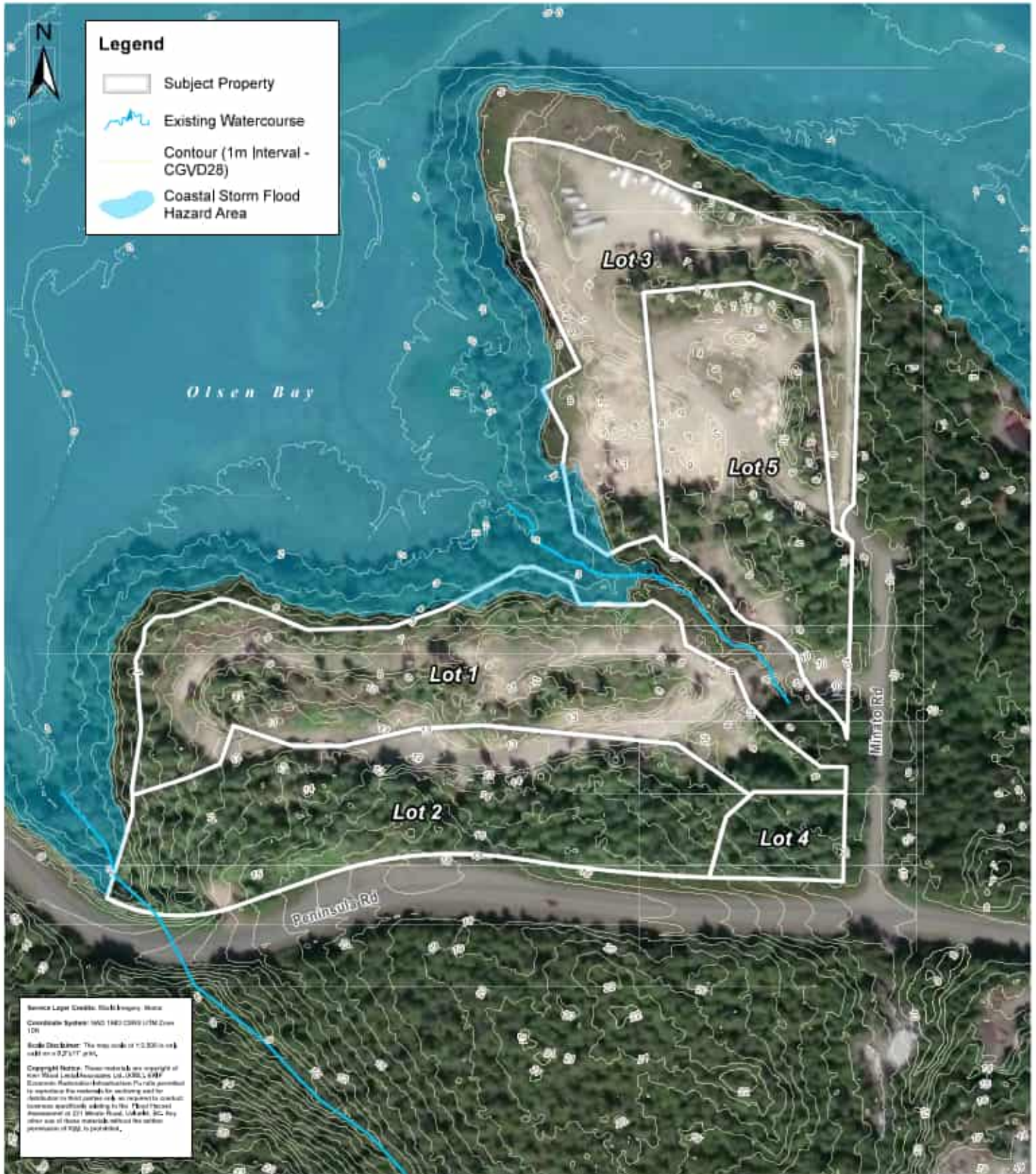
# Coastal Flood Hazard Plots

**ERIF Economic Restoration Infrastructure Fund**  
 Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**

**KERR WOOD LEIDAL**  
 consulting engineers



**Legend**

- Subject Property
- Existing Watercourse
- Contour (1m Interval - CGVD28)
- Coastal Storm Flood Hazard Area

Source Layer Credits: British Columbia  
 Coordinate System: NAD 1983 CSRS UTM Zone 18N  
 Scale Disclaimer: This was made at 1:5000 scale and is not for use at a larger scale.  
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Project No. 4558.001  
 Date November 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

**Coastal Storm Flood Hazard Area**

**Figure B-1**

## Appendix C

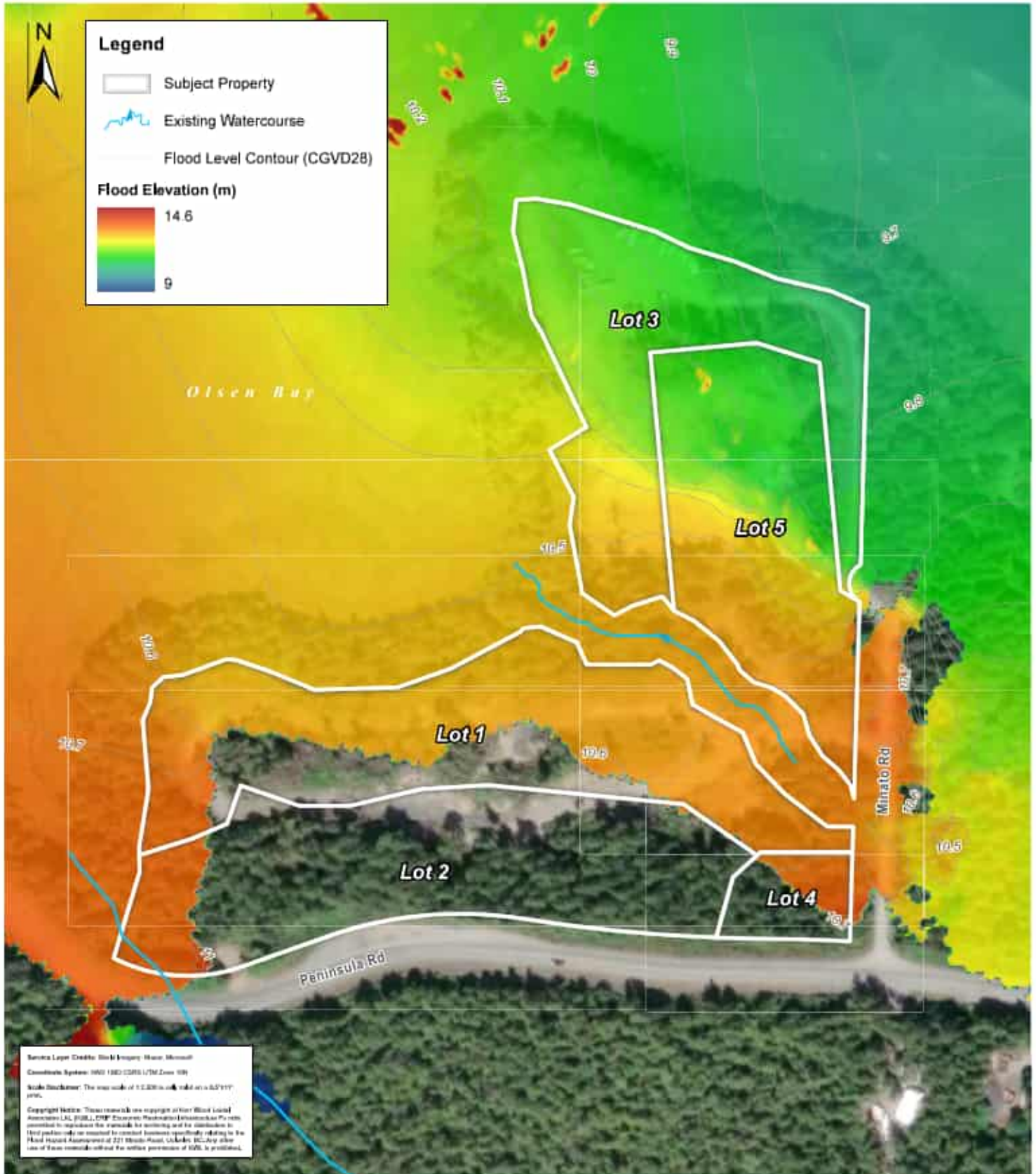
# Tsunami Flood Hazard Plots



**ERIF Economic Restoration Infrastructure Fund**  
 Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**  
**KERR WOOD LEIDAL**  
 consulting engineers



Project No. 4558.001  
 Date November 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

**Tsunami Maximum  
 Flood Extents and Levels**

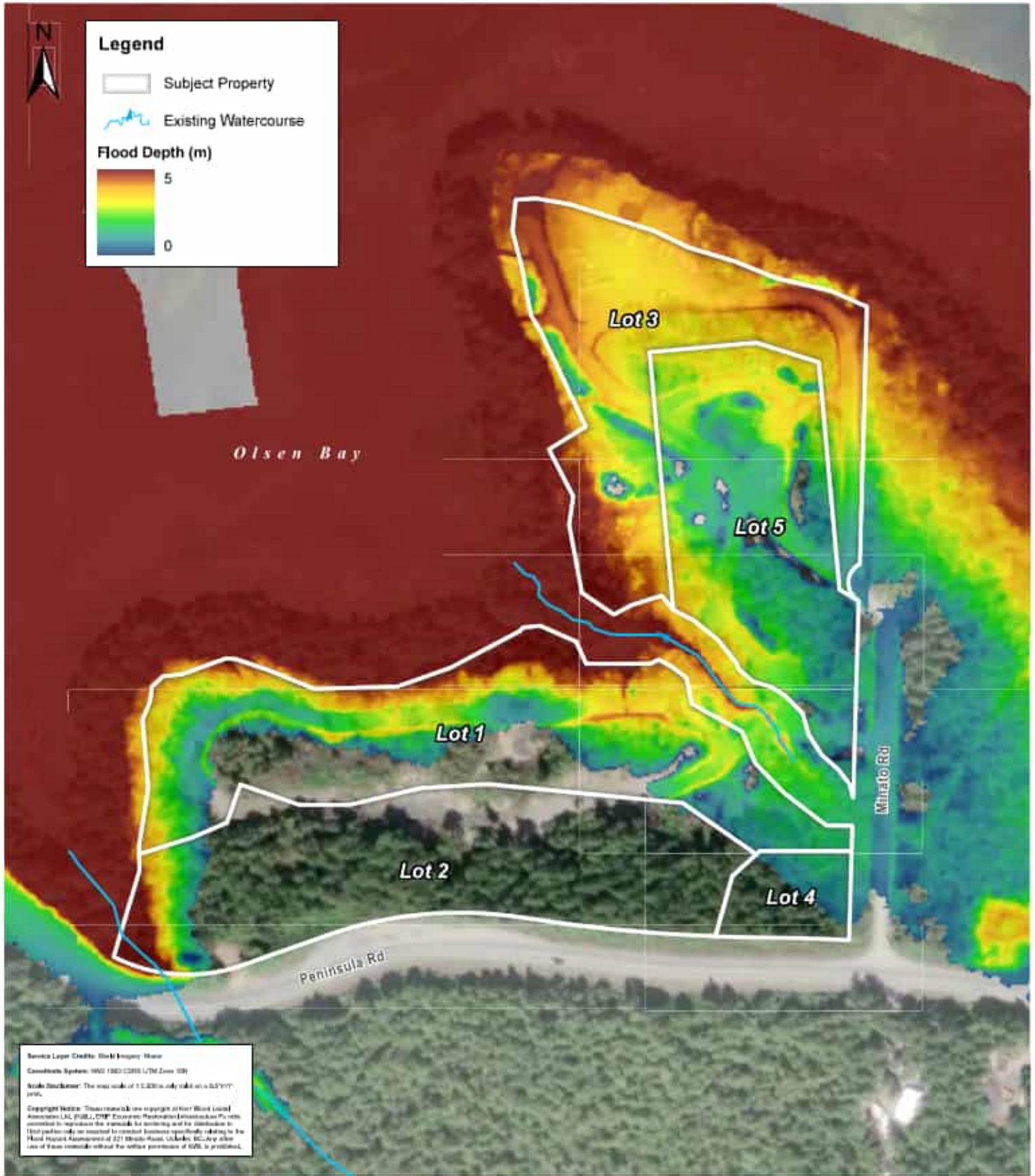
**Figure C-1**



**ERIF Economic Restoration Infrastructure Fund**  
 Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**  
**KERR WOOD LEIDAL**  
 consulting engineers



Project No. 4558.001  
 Date November 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

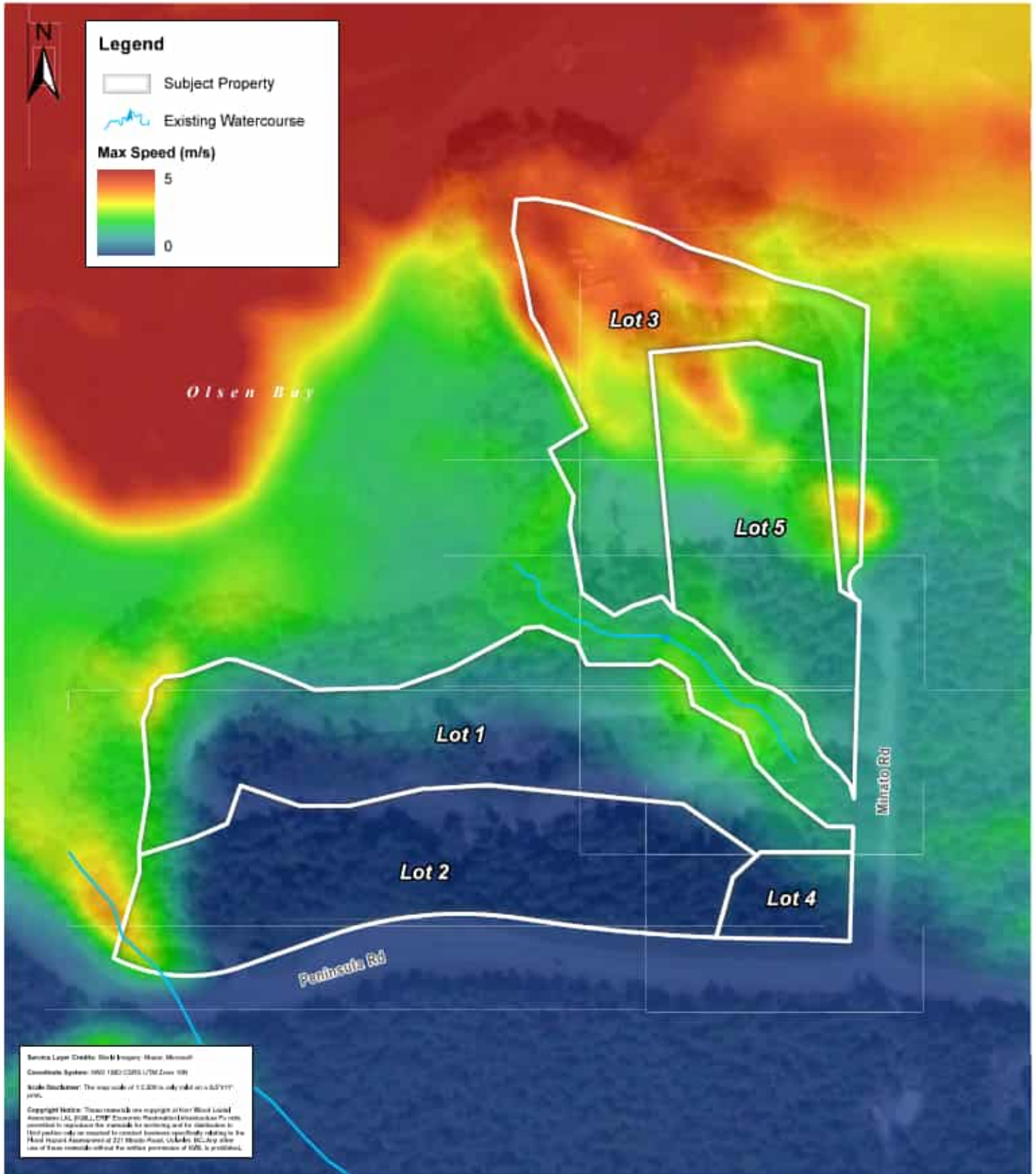
**Tsunami Maximum Flood Levels**

**Figure C-2**

**ERIF Economic Restoration Infrastructure Fund**  
Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**  
**KERR WOOD LEIDAL**  
consulting engineers



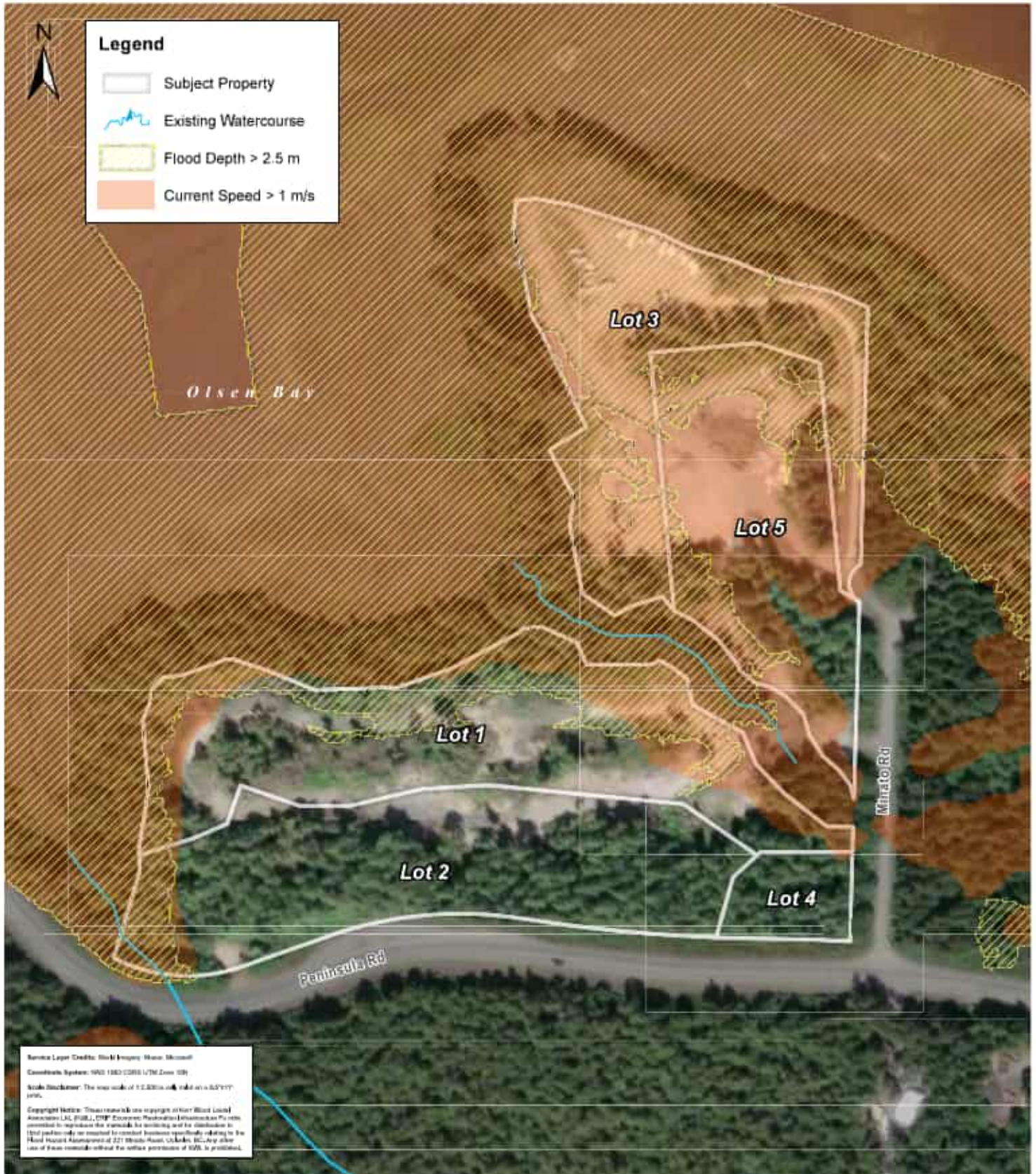
Project No. 4558.001  
Date November 2024  
Scale 1:2,500  
0 12.5 25 50 m

**Tsunami Maximum Current Speed**

**Figure C-3**



**ERIF Economic Restoration Infrastructure Fund**  
 Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



Project No. 4558.001  
 Date November 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

**Tsunami High Flood Hazard Area**

**Figure C-4**



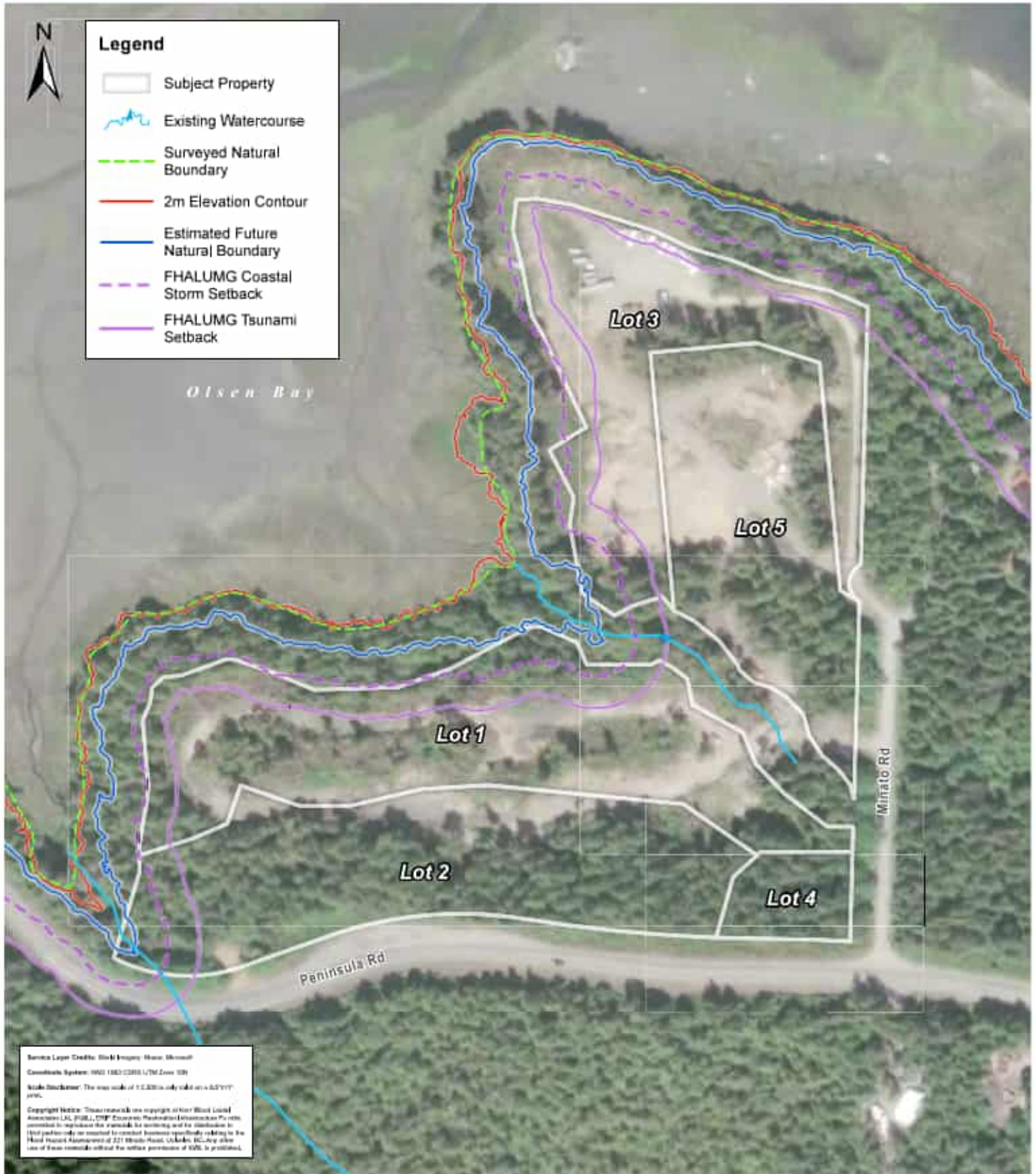
## Appendix D

# Flood Mitigation Plots

**ERIF Economic Restoration Infrastructure Fund**  
 Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**  
**KERR WOOD LEIDAL**  
 consulting engineers



Project No. 4558.001  
 Date December 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

**Natural Boundary and Setbacks**

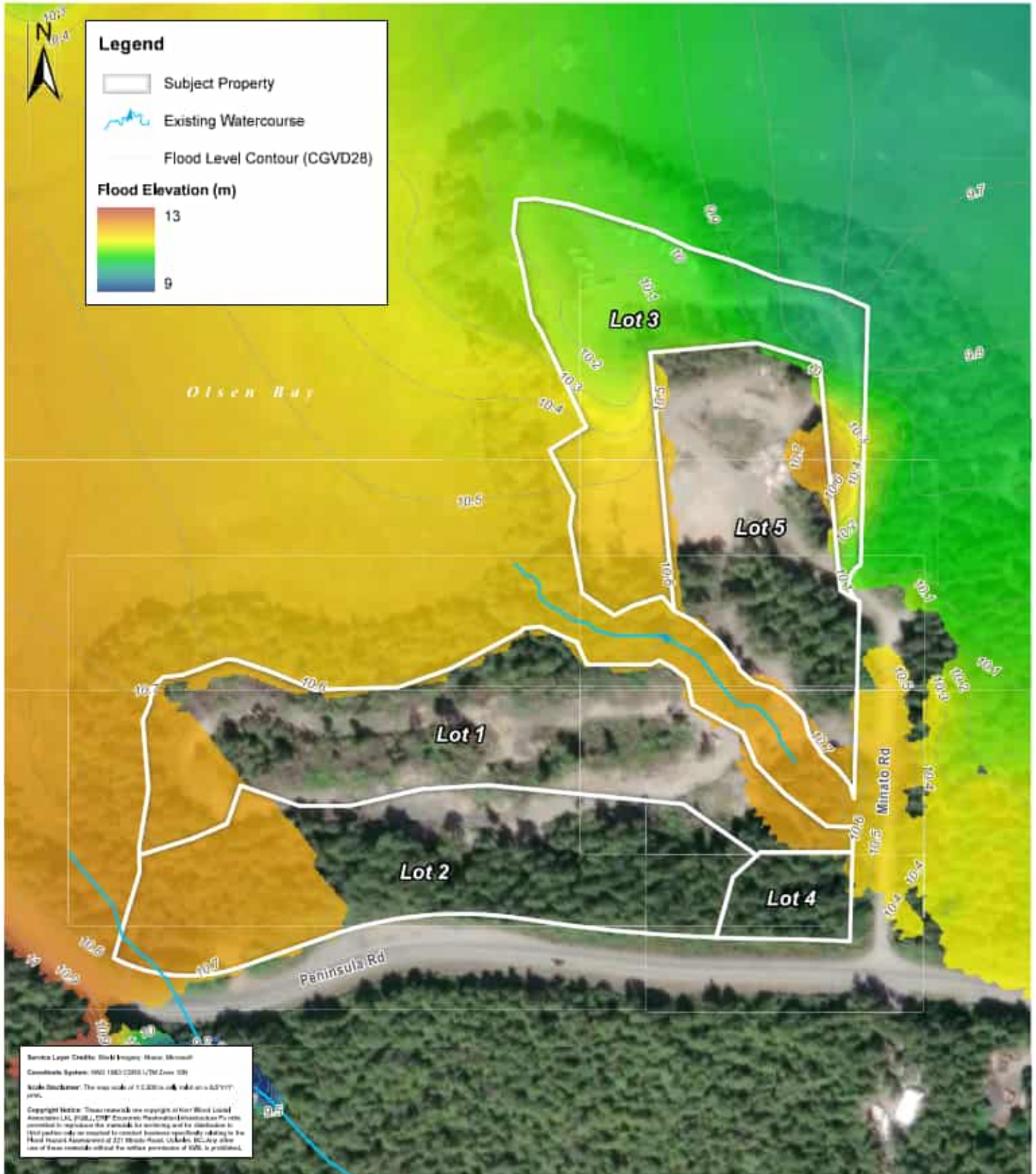
**Figure D-1**



**ERIF Economic Restoration Infrastructure Fund**  
 Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**  
**KERR WOOD LEIDAL**  
 consulting engineers



Project No. 4558.001  
 Date November 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

**Tsunami Maximum Flood Extents and Levels with Proposed Landfill**

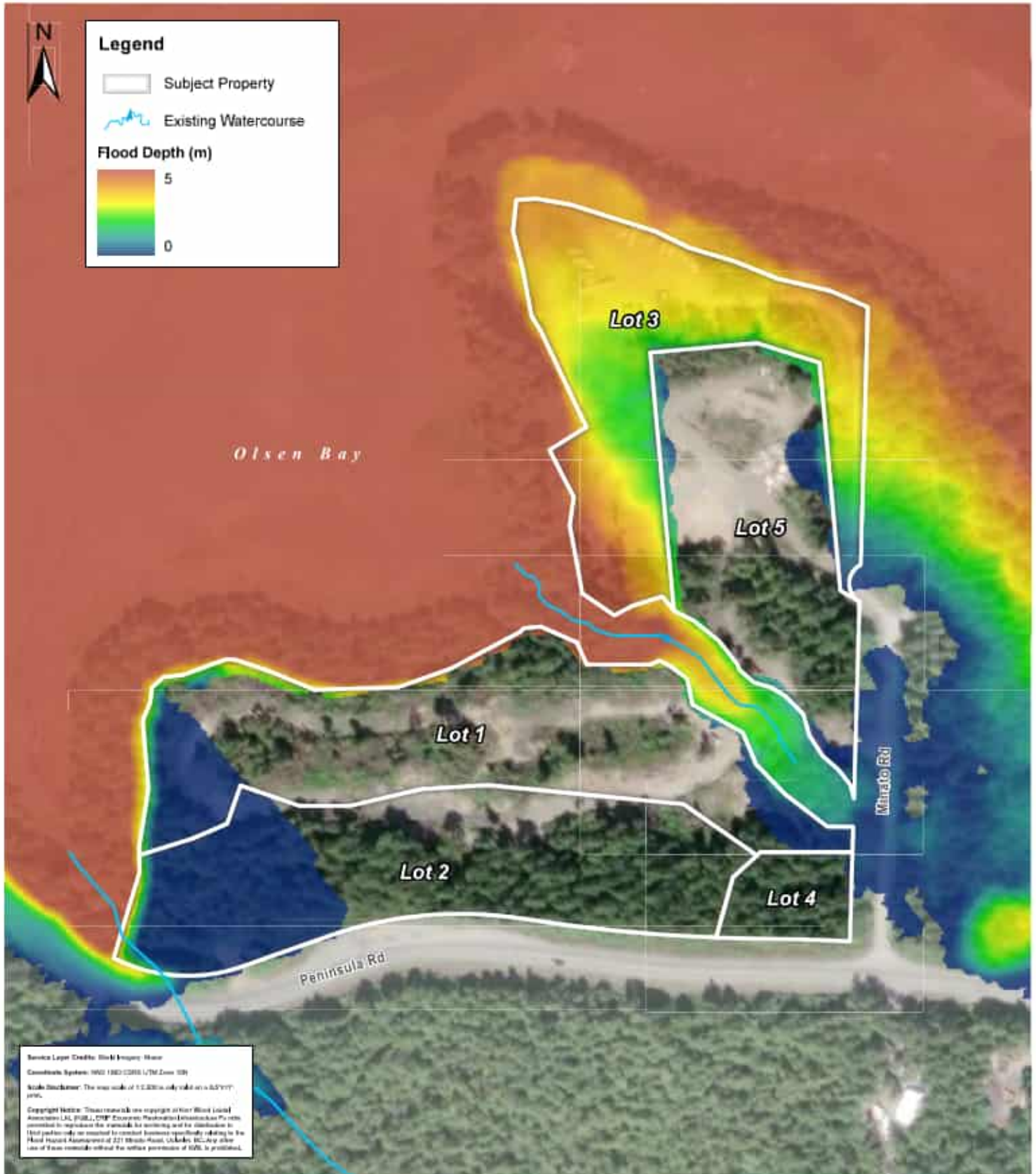
**Figure D-2**



**ERIF Economic Restoration Infrastructure Fund**  
 Flood Hazard Assessment at 221 Minato Road, Ucluelet, BC



**Appendix C1**  
**KERR WOOD LEIDAL**  
 consulting engineers



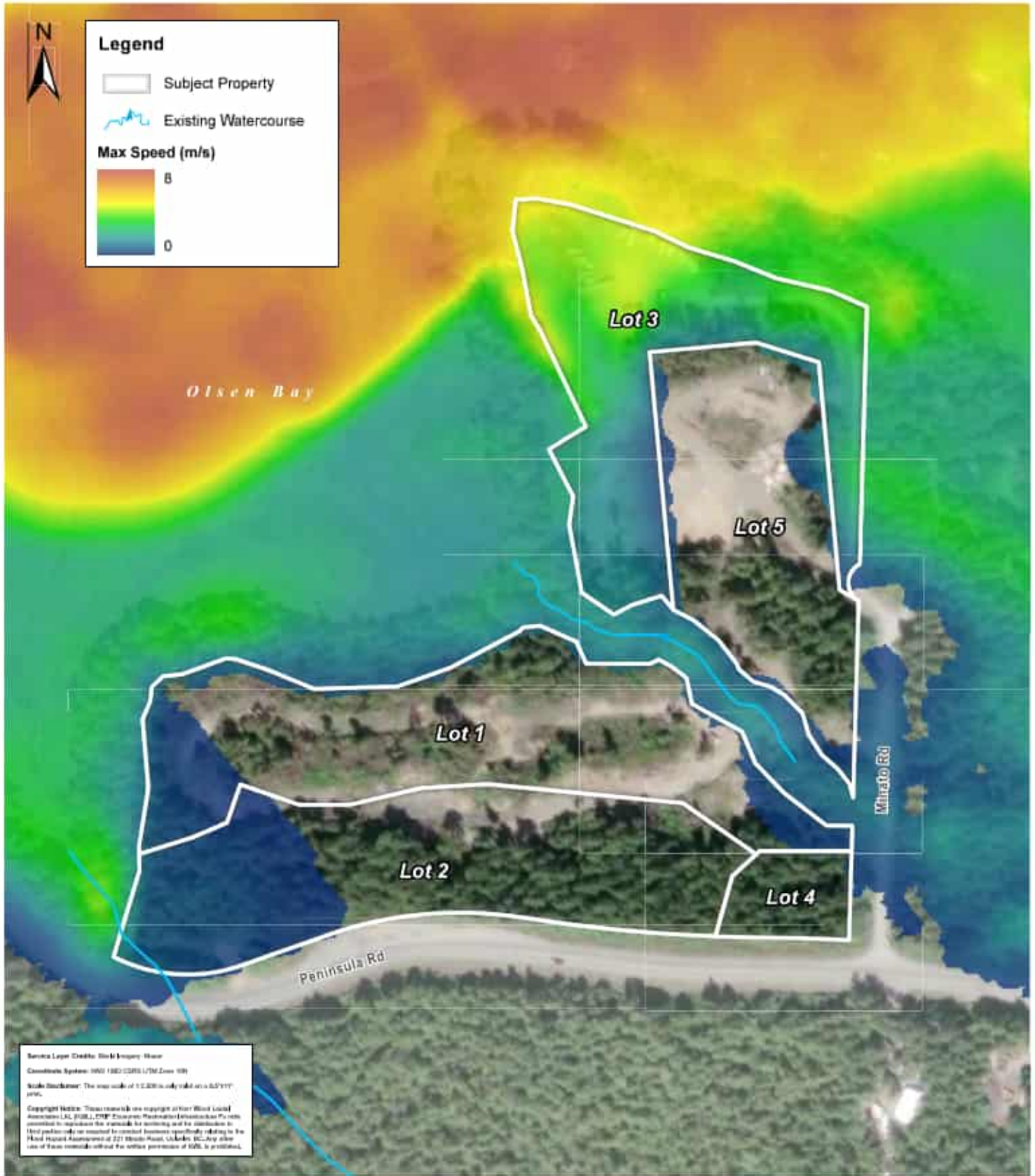
Service Layer Credits: Bing (Imagery), Mapbox  
 Coordinate System: NAD 1983 UTM Zone 18N  
 Scale Disclaimer: The map scale of 1:2,500 is only valid as a 2D print.  
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Project No. 4558.001  
 Date November 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

**Tsunami Maximum Flood Levels  
 with Proposed Landfill**

**Figure D-3**



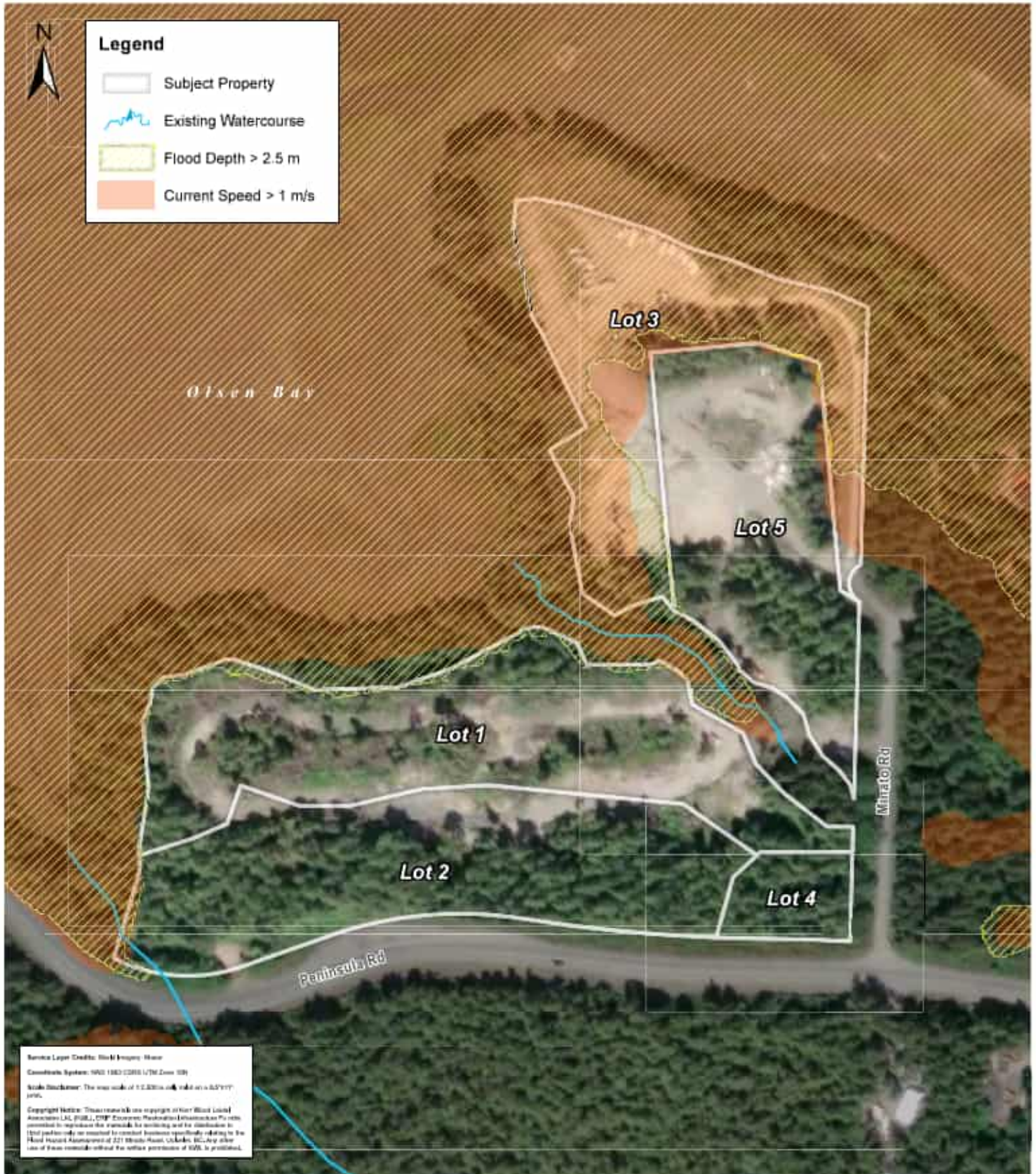


Project No. 4558.001  
Date November 2024  
Scale 1:2,500  
0 12.5 25 50 m

### Tsunami Maximum Current Speed with Proposed Landfill

Figure D-4





Project No. 4558.001  
 Date November 2024  
 Scale 1:2,500  
 0 12.5 25 50 m

**Tsunami High Flood Hazard Area  
 with Proposed Landfill**

**Figure D-5**





## Appendix E

# Flood Assurance Statement

## 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: October 22, 2024

The District of Ucluelet  
200 Main Street, Ucluelet, BC, V0R 3A0  
 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"):

221 Minato Rd, Ucluelet, BC

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:  
The District of Ucluelet Planning Department
- 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:

[CHECK ONE]

- 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".

PROFESSIONAL PRACTICE GUIDELINES

LEGISLATED FLOOD ASSESSMENTS IN A CHANGING CLIMATE IN BC

FLOOD ASSURANCE STATEMENT

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

Date

December 4, 2024

Prepared by

Clayton Hiles, P.Eng

Name (print)

*[Handwritten Signature]*

Signature

844 Courtney St #400,

Address

Victoria, BC V8W 1C4

(250) 595-4223

Telephone

chiles@kwl.ca

Email

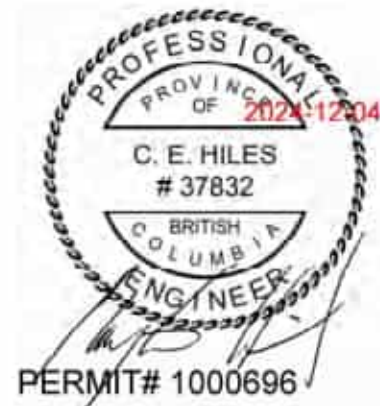
Reviewed by

Eric Morris, P.Eng

Name (print)

*[Handwritten Signature]*

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 Kerr Wood Leidal Associates

and I sign this letter on behalf of the firm.

(Name of firm)



Kerr Wood Leidal Consulting Engineers  
 300 – 41856 Still Creek Drive  
 Burnaby, BC, V5C 6G9

November 28, 2024

To Whom It May Concern,

**RE: Flood Assessment 221 Minato Road, Ucluelet**

I am writing to notify you that Council adopted the following resolutions at the November 26, 2024, Regular Meeting:

**THAT** Council direct staff to prepare a letter acknowledging the risk assessment provided by Kerr Wood Leidal Consulting Engineers in their report 'Flood Assessment 221 Minator Road, Ucluelet' as acceptable, on the condition that the BC drafted waiver is signed protecting staff and Council from any liability.

**THAT** Council has reviewed the Risk Assessment prepared by Kerr Wood Leidal for 221 Minato Road, Ucluelet and confirms that the risk set out in the report is acceptable including:

1. That the development may proceed in the absence of a standard dike.
2. That the development of Lot 3 with 11 houses represents a nominal increase to the housing density on the DoU tsunami floodplain.
3. That the risk of mortality associated with the development of Lot 3 at 1:142,000 annually is acceptable.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. McEwen', is written over a horizontal line.

Marilyn McEwen, Mayor

*District of Ucluelet Life on the Edge®*

200 Main Street, PO BOX 999, Ucluelet, British Columbia V0R 3A0  
 (250) 726-7744 • Fax (250) 726-7335 • info@ucluelet.ca • www.ucluelet.ca





**REGULAR MEETING OF COUNCIL**

George Fraser Community Room, Ucluelet Community Centre,  
500 Matterson Drive, Ucluelet, and  
Electronically via Zoom ([Ucluelet.ca/CouncilMeetings](https://ucluelet.ca/CouncilMeetings))  
**Tuesday, November 26, 2024 @ 4:00 PM**

**LATE ITEM(S)**

	Page
1. LATE ITEMS	
1.1. 221 Minato Road - OCP & Subdivision Application - Flood Assurance Statement <i>Joshua Hunt, CEO, ERIF Sustainable Solutions</i> <a href="#"><u>221 Minato Road - OCP &amp; Subdivision Application - Flood Assurance Statement</u></a>	3 - 10



November 19th, 2024

**To:**

Mayor and Councillors

[communityinput@ucluelet.ca](mailto:communityinput@ucluelet.ca)

**Copied to:**

Duane Lawrence, CAO

Bruce Greig, Director of Community Planning

John Towgood, Municipal Planner

District of Ucluelet

**RE: 221 MINATO ROAD – OCP & SUBDIVISION APPLICATION – FLOOD ASSURANCE STATEMENT**

---

Dear Councillors,

ERIF Economic Restoration Infrastructure Fund Inc (ERIF) is pleased to provide the following supplementary documents for the OCP Amendment and Subdivision proposed for the Development Permit for 221 Minato lodged on September 20, 2024, and Revision A lodged November 3.

The DOU requested a further flood report and Flood Assurance Statement to support subdivision and development of the site. This report has been prepared by BC's most highly regarded Coastal Engineers, Kerr Wood Leidal (KWL) and the draft flood documents have been submitted.

The Flood Hazard Assessment supports the proposed development of Lots 1, 2, 4, and 5 and a Flood Assurance Statement can be issued for these lots.

A Flood Risk Assessment is provided for the final Lot, Lot 3, which is proposed to develop with eleven single family homes. This risk assessment supports the proposed development of Lot 3 and can be finalised with written support from Council.

The Flood Report is marked as 'draft' because in section 8, the flood engineers request that Council review the Risk Assessment for Lot 3 (excerpted below) and confirm that the 'low' risk level identified is acceptable. Once this is received the flood Report will be finalised and Flood Assurance Statement issued. This confirmation of acceptable risk is required because the DOU Tsunami Interim Policy does not provide a general acceptable risk level, but requires a site-specific assessment.

The Risk Assessment provides detailed modelling of the potential economic and physical loss to the eleven homes on Lot 3 in the event of major tsunami. It confirms the assessed risk level as 'low' with a ratio of 1:142,000 annual chance of fatality. It sets out international best practices standard of risk assessment and provides support for this risk level being acceptable by those standards.

In response to this risk assessment, ERIF has prepared a detailed Risk Management Plan with evacuation plan, carefully reviewed with Ucluelet's Fire Chief responsible for emergency response. ERIF has proposed structural mitigation measures to raise the homes above the reported flood level. KWL have tested this modelling and confirmed their assessed risk levels support the proposed development as safe and suitable for a Flood Assurance Statement.

To finalise the report and provide the requested Flood Assurance Statement, KWL's flood engineer has requested correspondence from the Council to confirm the risk level is acceptable noting:

The Council has reviewed the Risk Assessment prepared by Kerr Wood Leidel for 221 Minato Road, Ucluelet and confirms that the risk set out in the report is acceptable including:

- That this development may proceed in the absence of a standard dike.
- That the development of Lot 3 with 11 houses represents a nominal increase to the housing density on the DoU tsunami floodplain.
- That the risk of mortality associated with the development of Lot 3 is acceptable (1:142,000 annually).

We ask that the Council provide this correspondence so that the Flood Engineers can finalise their report and provide the requested Flood Assurance Statement.

With the flood documentation as the final document requested now complete for this submission, we ask that the Council consider the proposed OCP and By Law Amendment for subdivision and development at their upcoming meeting on December 10 2024. This will enable us to provide appropriate public notice periods before the end of the year.

We trust this report provides what is required to move forward with the letter requested. Please reach out if there are any further questions we can assist with.

We look forward to the application being presented to Council so we can move toward construction of this much needed housing to provide for Ucluelet’s flourishing future.

In partnership,



**Joshua Hunt**

**CEO – ERIF Sustainable Solutions**

Report link: <https://drive.google.com/drive/folders/1ytjEWqk6VT2PAzUVmQ1-Vc9qkq9C5JVJ?usp=sharing>



ERIF ECONOMIC RESTORATION INFRASTRUCTURE FUND  
Flood Assessment 221 Minato Road, Ucluelet  
Draft Report  
November 14, 2024

## 6. Tsunami Risk Assessment – Lot 3

Flood risk is determined based on assessment of the flood hazard and the consequences of the flooding. It is most often quantified in terms of mortality and economic losses and these metrics may be annualized to normalize the assessment process. Depending on the degree of detail of the risk assessment, multiple flooding events may be considered.

### 6.1 Risk Assessment Methods

This section outlines the methods used to assess the tsunami flood hazard at the project site. The selected approach for risk assessment is outlined in [5]:

A Flood Risk Assessment (FRA) involves estimating the likelihood that a flood will occur and cause some magnitude and type of damage or loss. Following are the principal steps in the Risk Assessment:

1. Identify Flood Hazard Scenarios. These are defined as distinct outcomes from a given hazard that result in some direct Consequence (e.g., fatalities, damage to a building, environmental damage, intangibles such as human suffering) and are based on the results of the hazard assessment described in Section D: Flood Hazard Assessments. They can include different return periods for the same hazard, variable flood extent or Flood Intensity, multi-hazard chains of events, or different consequence chains.
2. Estimate the probability of a Hazard Scenario resulting in some undesirable outcome. This is based on the estimated likelihood that the hazard will occur, reach the Element at Risk when it is present within the hazard zone, and cause the undesirable outcome. These may include a range of outcomes in categories such as economic loss, environmental damage, safety, and corporate or political reputation.
3. Estimate the Consequences of the unwanted outcome including economic losses; human health and loss of life; environmental losses; cultural/historic losses; and intangibles such as psychological distress. Details are described in Section E2.2.
4. Define Tolerable Risk criteria.
5. Prioritize Risk reduction strategies

Flood Risk can be expressed as:

$$R = P_H * P_{S_H} * P_{T_S} * V * E$$

where:

- R = total Flood Risk;
- $P_H$  = annual exceedance probability of a flood occurring;
- $P_{S_H}$  = spatial probability that the flood will reach the Element at Risk;
- $P_{T_S}$  = temporal probability that the Element at Risk will be present when the flood occurs (for fixed infrastructures and homes this is equal to 1);
- V = the Vulnerability, or probability of loss of life or the proportion of an asset loss to total loss; and
- E = the number of people at Risk or the homes and infrastructures at Risk.

KERR WOOD LEIDAL ASSOCIATES LTD.  
consulting engineers



## Hazard Scenario

As in Section 5.3, risk has been evaluated based on a single largest-credible hazard scenario with implementation of the proposed mitigation measures (land raising). The use of a single hazard scenario for risk assessment is appropriate given the non-random nature of rupture along a given fault zone. Put another way, it is highly unlikely that more than one tsunami-generating rupture of the CSZ occurs within the design life of the proposed development.

## Probability of Consequences

The time-dependent probability of a full rupture of the CSZ is estimated in [11] and [12]. For the year 2100, the annual occurrence probability is estimated to be about 0.2%; equivalent to a 1:500-year return period. Here the occurrence probability is taken as equivalent to the exceedance probability ( $P_H$ ).

For the purposes of this assessment all people living on Lot 3, and all assets located below the flood level, are assumed to be at risk. i.e.,  $P_{SH}=100\%$ .

For fixed infrastructure the temporal probability that the Element at Risk will always be present, so  $P_{TS}=100\%$ . People, on the other hand, spend about 70% of their time indoors at home on average, and about 6% of their time outdoors (including at their home) [13]. Given that the habitable space of homes is to be raised above the flood construction level, and the homes are to be designed to withstand the earthquake and tsunami, it might be considered reasonable to assign risk only for the time they are outdoors. However, any residents which failed to evacuate could be stuck in their homes without functioning utilities and without a means of egress, which could have negative impacts on mortality, especially for vulnerable populations. For the purpose of this assessment, it has been assumed that the residents have a 70% chance of being at home and exposed to tsunami hazard. i.e.,  $P_{TS}=70\%$ .

## Elements at Risk

In this risk assessment, the evaluated elements at risk are limited to people and built infrastructure. It should be noted, however, that all infrastructure at risk will be the responsibility of either the homeowner or the strata corporation of Lot 3. The DoU will not own or maintain this infrastructure.

Eleven detached houses, each with a secondary suite, are planned for Lot 3, for a total of 22 residences. According to 2021 census data, the average occupancy in the Ucluelet area is 2.3 per residence [14]. This yields an expected total of 51 people living on Lot 3.

ERIF have provided an estimate of the total value of the infrastructure damage during the design tsunami event. Note that habitable spaces of homes are to be elevated above the Flood Construction Level, so are not included in these totals.

**Repairs to homes: \$2.75M.** Includes replacement of break-away wall panels on uninhabitable lower floors, stair replacement, and landscaping.

**Common area servicing and infrastructure: \$1.6M.** Includes landscaping, damage to roads, sewage and water pipe and pump systems.





## Estimation of Risk

### Loss of Life

The probability of mortality as a function of tsunami height is estimated in [15] for the 2011 Japanese tsunami. For a tsunami height of approximately 10 m, the estimated mortality rate ranges from 3 to 5% with a best estimate of 4%. Another study estimated the mortality rate as a function of flood depth in New Orleans during Hurricane Katrina [16]. For a flood depth 3 m, the estimated mortality rate ranges from about 0.5% to 4% with a best estimate of 2%. It should be stressed that these estimates are specific to the social and geographic conditions of the studied event and region. Important is the variation in available warning, and the age and robustness of the building stock. While there is variance between and within these studies, they do provide similar estimates of the mortality rate during a large flooding event.

The proposed flood mitigation measures influence the selection of an appropriate mortality rate in this application. With suitable emergency management plan, most residents should be able to evacuate to high ground, only about 300 m away, before the tsunami arrives. Further, the proposed homes will be designed to withstand the design tsunami with habitable space above the flood level. So even if a resident fails to evacuate, the risk to that person sheltering in these homes is still substantially lower than in a conventional home constructed at grade. Given these factors, a mortality rate on the low range of the observed data of has been selected for use in this analysis. i.e.,  $V_{life}=0.5\%$

### Economic Losses

Given the limited scope of this assessment, it was possible to directly estimate the potential economic losses due to damage to infrastructure located below the FCL directly as \$4.35M. i.e.,  $V * E = \$4.35M$ .

### Risk Tolerance

Risk tolerance is a community value, and so should be defined by representatives of the community. It is understood that ERIF have been engaging with emergency management personnel as well as District Council to discuss the issue of risk tolerance. ERIF have reported that DoJ has no pre-established risk criteria or tolerance for risk.

In the United Kingdom maximum tolerable risk of death to an individual is 1:100,000 annually for a new development. The Netherlands uses a more stringent maximum risk tolerance of 1:1,000,000 annually. A plot indicating ranges of risk acceptability levels is provided in Figure 6-1 (reproduced from [5]). This plot suggests that an annual risk of death to a single person is "broadly acceptable" below a likelihood of 1:100,000, and unacceptable above 1:1000. Between these thresholds is the *as low as reasonably possible* (ALARP) zone, where mitigation measures should be used to reduce the risk to as low as reasonably possible.

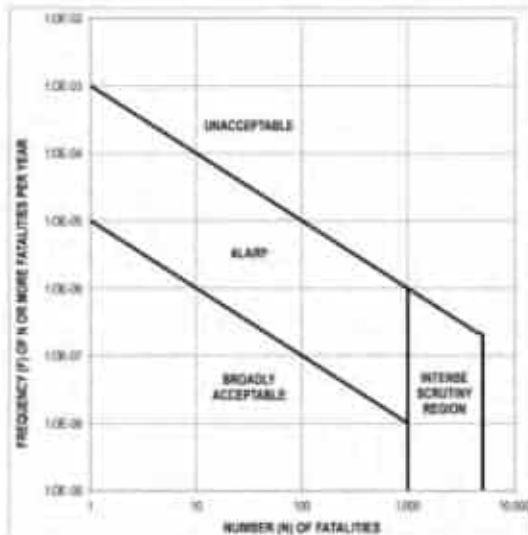


Figure 6-1: F-N curves to evaluate the risk to life loss of groups (source Kendall et al. 1977). Reproduced from [5]

### 6.2 Risk Results and Discussion

Using the methods of Section 6.1, the total economic losses on Lot 3 due to the design tsunami event are estimated to be \$4.35M. The annualized economic losses can be calculated as:

$$R_{econ} = P_H * P_{S-H} * P_{T-S} * V * E = 0.002 * 1 * 1 * \$4,350,000 = \$8,700$$

The expected mortality during the design tsunami event can be calculated as:

$$R_{life} = P_{S-H} * P_{T-S} * V_{life} * E = 1 * 0.70 * 0.005 * 51 = 0.18 \text{ people}$$

This suggests only about a 18% chance that someone on Lot 3 dies during the design tsunami event. This can be restated as about a 1:142,000 chance of death annually due to tsunami to any of the residents of Lot 3. Based on the guidance in the [5], this level of risk falls in a category of risk which is "broadly acceptable".

However, the representatives of the District of Ucluelet should review this analysis and the estimated risk level and determine for themselves if this level of risk is acceptable to the community. This community feedback must be integrated into this report and used as a basis for determining the acceptable level of risk for the proposed development. **The report cannot be completed until this feedback is obtained.** The potential loss of life during the design event is 0.18 people (i.e. <1), and the annualized infrastructure losses are \$8,700. Based on the risk matrix provided in Table 6-1, this puts the overall risk at of the proposed development at "low". Given this overall risk level and the guidance in Table E-2 of [5], the current analysis is deemed a suitable assessment of the risk and no further refinement of this assessment is necessary.





**Table 6-1: Matrix to Determine the Level of Risk Assessment Needed Based on the Exposure of a Development and Vulnerable Populations to Flood Hazards (reproduced from [5])**

Potential Loss of Life for Applied Return Period	Annualized Potential Building Loss (\$)				
	<1,000	1,000 to 10,000	10,000 to 100,000	100,000 to 1,000,000	>1,000,000
>100	VH	VH	VH	VH	VH
10 to 100	H	H	VH	VH	VH
2 to 10	H	H	H	H	VH
1 to 2	M	M	M	H	H
0	VL	L	M	M	H

**Notes:**  
 VH = Very High; H = High; M = Moderate; L = Low; VL = Very Low

DRAFT



## 8. Input Required from the DoU

**Feedback from the DoU District Council is needed to facilitate the completion of this report.** The DoU District Council must provide written feedback indicating if they accept or not the following:

- That this development may proceed in the absence of a standard dike.
- That the development of Lot 3 with 11 houses represents a *nominal* increase to the housing density on the DoU tsunami floodplain.
- That the risk of mortality associated with the development of Lot 3 is acceptable (1:142,000 annually).

DRAFT

November 21st, 2024

Incorporation No: BC 1319635  
2200, 885 Georgia St West, Vancouver, British Columbia, CA V6C 3E8

Duane Lawrence, CAO  
Bruce Greig, Director of Community Planning  
John Towgood, Municipal Planner  
District of Ucluelet

**RE: 221 MINATO ROAD – OCP, SUBDIVISION, DEVELOPMENT PERMIT APPLICATION –  
UPDATED ARCHEOLOGIST REPORT AND ENVIRONMENTAL REPORT COMMENTS**

Dear Duane, Bruce and John,

ERIF Economic Restoration Infrastructure Fund Inc (ERIF) herein provides an updated Archaeological Report for the proposed development for 221 Minato, superseding the report previously lodged.

The 2022 Covenant Restrictions on the property require a further Environmental Report, Archaeologist report and engineering analysis for tsunami flood hazard as follows:

2(b)(i)	Archaeological Assessment	(i) an archaeological assessment of the site and the proposed development with recommendations for any mitigation measures, design changes and/or permitting requirements to protect archaeological and cultural resources;
2(b)(ii)	Environmental Assessment	an assessment by a Qualified Environmental Professional (QEP) of the ecological resources of the Lands and surrounding ecosystem, with recommendations for how the proposed development can avoid and/or mitigate impacts on terrestrial and marine ecosystems or enhance the existing ecological function of the site;
2(b)(x)	Engineering for Tsunami	(x) engineering analysis of all aspects of the proposed development on the Lands located in areas identified as subject to tsunami flood hazard, according to District of Ucluelet Tsunami Risk Tolerance Interim Policy 8-5280-1.

The reports have now been prepared and submitted to support the proposed development of the site while protecting the site’s environmental and cultural resources.

The updated **Archaeological Report** by Yuułuʔiłʔatḥ Government - Ucluelet First Nation (UFN) Department of Culture, Language & Heritage is here: [https://drive.google.com/drive/folders/1JKBJOzjt\\_V10KuGP-ZzjNz4IHHLQNw4N?usp=sharing](https://drive.google.com/drive/folders/1JKBJOzjt_V10KuGP-ZzjNz4IHHLQNw4N?usp=sharing)

You will see that the erroneous line has been updated to remove the confusion in how it was framed. The updated report reads:

*“Construction of this proposed residential development would require significant alterations to the land consisting of extensive ground alterations and it was communicated to UFN that further tree felling requirements will be kept to a minimum to remove danger trees and to facilitate the site plan, which was not provided at the time of this assessment but has been provided since. “*

You queried the position of the identified locations against the site plan. To assist in this assessment, please find below overlaid the Archaeologist mapped sites and the lodged Masterplan. The image below overlays the site plan and the identified areas of cultural significance, which are situated in the waterfront areas dedicated back to DOU to the north and west of the site. The traditional use cedars noted closest to Peninsula Road are not protected by the Heritage Conservation Act but all care will be taken to preserve them wherever possible.



The **Environmental Impact Assessment** Report by Aquaparian is here as previously submitted in October 2024: <https://drive.google.com/drive/folders/1PhoU17Ksa3SZQuO-ODkmXPkfmnAhtBXw?usp=sharing>

The Environmental Report provides an assessment of 48 pages and we believe addresses all items required in the covenant restrictions as follows:

- the first 27 pages carefully document the current site (ecological resources of the land and surrounding ecosystem) as required.
- Pages 31-36 present thirty-three recommendations for how the proposed development can avoid or mitigate impacts on the terrestrial and marine ecosystem as the covenant restriction directs.
- The report pages 29-31 further document a riparian regeneration plan for planting to enhance the existing ecological function of the site, including details of tree types being planted and suitable sources for native plants and seeds to regenerate the land.

ERIF has provided the below map of tree coverage and relative to the site masterplan. In addition,

- an Arborist Report mapping sitka spruce and danger trees and
- an initial Landscaping Plan

were lodged with the Development Permit application.



ERIF was pleased to provide our update on the DOU's requests for a further **Flood Hazard Assessment** which has been supplied for Lot 1,2,4,5. The document is linked here: <https://drive.google.com/drive/folders/1ytjEWqk6VT2PAzUVmQ1-Vc9qkq9C5JVJ>. We have also provided the Flood Risk Assessment for Lot 3 and asked that Council provide a letter the KWL Coastal Engineers confirming their acceptance of the flood risk level assessed. When that is received, the report will have the 'draft' watermark removed and the Flood Assurance Statement will be issued.

With all required documents complete we would appreciate your consideration of the first and second reading for OCP and By Law Amendment being prepared for the December 10 2024 Council meeting. This would enable notice to be provided before end of year and progression to third reading and Development Permit at Council's first meeting in January 2025.

We are committed to providing much needed affordable and attainable housing and thank you for your work in reviewing our submission to provide this sustainable solution for Ucluelet's housing future.

Please reach out if there are any further questions we can assist with.

In partnership,



**Joshua Hunt**

**CEO – ERIF Sustainable Solutions**

November 19th, 2024

**To:**

Mayor and Councillors

[communityinput@ucluelet.ca](mailto:communityinput@ucluelet.ca)

**Copied to:**

Duane Lawrence, CAO  
Bruce Greig, Director of Community Planning  
John Towgood, Municipal Planner  
District of Ucluelet

**RE: 221 MINATO ROAD – OCP & SUBDIVISION APPLICATION – FLOOD ASSURANCE STATEMENT**

---

Dear Councillors,

ERIF Economic Restoration Infrastructure Fund Inc (ERIF) is pleased to provide the following supplementary documents for the OCP Amendment and Subdivision proposed for the Development Permit for 221 Minato lodged on September 20, 2024, and Revision A lodged November 3.

The DOU requested a further flood report and Flood Assurance Statement to support subdivision and development of the site. This report has been prepared by BC's most highly regarded Coastal Engineers, Kerr Wood Leidal (KWL) and the draft flood documents have been submitted.

The Flood Hazard Assessment supports the proposed development of Lots 1, 2, 4, and 5 and a Flood Assurance Statement can be issued for these lots.

A Flood Risk Assessment is provided for the final Lot, Lot 3, which is proposed to develop with eleven single family homes. This risk assessment supports the proposed development of Lot 3 and can be finalised with written support from Council.

The Flood Report is marked as 'draft' because in section 8, the flood engineers request that Council review the Risk Assessment for Lot 3 (excerpted below) and confirm that the 'low' risk level identified is acceptable. Once this is received the flood Report will be finalised and Flood Assurance Statement issued. This confirmation of acceptable risk is required because the DOU Tsunami Interim Policy does not provide a general acceptable risk level, but requires a site-specific assessment.

The Risk Assessment provides detailed modelling of the potential economic and physical loss to the eleven homes on Lot 3 in the event of major tsunami. It confirms the assessed risk level as 'low' with a ratio of 1:142,000 annual chance of fatality. It sets out international best practices standard of risk assessment and provides support for this risk level being acceptable by those standards.

In response to this risk assessment, ERIF has prepared a detailed Risk Management Plan with evacuation plan, carefully reviewed with Ucluelet's Fire Chief responsible for emergency response. ERIF has proposed structural mitigation measures to raise the homes above the reported flood level. KWL have tested this modelling and confirmed their assessed risk levels support the proposed development as safe and suitable for a Flood Assurance Statement.

To finalise the report and provide the requested Flood Assurance Statement, KWL's flood engineer has requested correspondence from the Council to confirm the risk level is acceptable noting:



The Council has reviewed the Risk Assessment prepared by Kerr Wood Leidel for 221 Minato Rd, Ucluelet and confirms that the risk set out in the report is acceptable including:

- That this development may proceed in the absence of a standard dike.
- That the development of Lot 3 with 11 houses represents a nominal increase to the housing density on the DoU tsunami floodplain.
- That the risk of mortality associated with the development of Lot 3 is acceptable (1:142,000 annually).

We ask that the Council provide this correspondence so that the Flood Engineers can finalise their report and provide the requested Flood Assurance Statement.

With the flood documentation as the final document requested now complete for this submission, we ask that the Council consider the proposed OCP and By Law Amendment for subdivision and development at their upcoming meeting on December 10 2024. This will enable us to provide appropriate public notice periods before the end of the year.

We trust this report provides what is required to move forward with the letter requested. Please reach out if there are any further questions we can assist with.

We look forward to the application being presented to Council so we can move toward construction of this much needed housing to provide for Ucluelet’s flourishing future.

In partnership,



**Joshua Hunt**

**CEO – ERIF Sustainable Solutions**

Report link: <https://drive.google.com/drive/folders/1ytjEWqk6VT2PAzUvMq1-Vc9qkq9C5JVJ?usp=sharing>



ERIF ECONOMIC RESTORATION INFRASTRUCTURE FUND  
Flood Assessment 221 Minato Road, Ucluelet  
Draft Report  
November 14, 2024

## 6. Tsunami Risk Assessment – Lot 3

Flood risk is determined based on assessment of the flood hazard and the consequences of the flooding. It is most often quantified in terms of mortality and economic losses and these metrics may be annualized to normalize the assessment process. Depending on the degree of detail of the risk assessment, multiple flooding events may be considered.

### 6.1 Risk Assessment Methods

This section outlines the methods used to assess the tsunami flood hazard at the project site. The selected approach for risk assessment is outlined in [5]:

A Flood Risk Assessment (FRA) involves estimating the likelihood that a flood will occur and cause some magnitude and type of damage or loss. Following are the principal steps in the Risk Assessment:

1. Identify Flood Hazard Scenarios. These are defined as distinct outcomes from a given hazard that result in some direct Consequence (e.g., fatalities, damage to a building, environmental damage, intangibles such as human suffering) and are based on the results of the hazard assessment described in Section D: Flood Hazard Assessments. They can include different return periods for the same hazard, variable flood extent or Flood Intensity, multi-hazard chains of events, or different consequence chains.
2. Estimate the probability of a Hazard Scenario resulting in some undesirable outcome. This is based on the estimated likelihood that the hazard will occur, reach the Element at Risk when it is present within the hazard zone, and cause the undesirable outcome. These may include a range of outcomes in categories such as economic loss, environmental damage, safety, and corporate or political reputation.
3. Estimate the Consequences of the unwanted outcome including economic losses; human health and loss of life; environmental losses; cultural/historic losses; and intangibles such as psychological distress. Details are described in Section E2.2.
4. Define Tolerable Risk criteria.
5. Prioritize Risk reduction strategies

Flood Risk can be expressed as:

$$R = P_H * P_{S_H} * P_{T,S} * V * E$$

where:

- R = total Flood Risk;
- P<sub>H</sub> = annual exceedance probability of a flood occurring;
- P<sub>S,H</sub> = spatial probability that the flood will reach the Element at Risk;
- P<sub>T,S</sub> = temporal probability that the Element at Risk will be present when the flood occurs (for fixed infrastructures and homes this is equal to 1);
- V = the Vulnerability, or probability of loss of life or the proportion of an asset loss to total loss; and
- E = the number of people at Risk or the homes and infrastructures at Risk.

KERR WOOD LEIDAL ASSOCIATES LTD.  
consulting engineers



## Hazard Scenario

As in Section 5.3, risk has been evaluated based on a single largest-credible hazard scenario with implementation of the proposed mitigation measures (land raising). The use of a single hazard scenario for risk assessment is appropriate given the non-random nature of rupture along a given fault zone. Put another way, it is highly unlikely that more than one tsunami-generating rupture of the CSZ occurs within the design life of the proposed development.

## Probability of Consequences

The time-dependent probability of a full rupture of the CSZ is estimated in [11] and [12]. For the year 2100, the annual occurrence probability is estimated to be about 0.2%; equivalent to a 1:500-year return period. Here the occurrence probability is taken as equivalent to the exceedance probability ( $P_H$ ).

For the purposes of this assessment all people living on Lot 3, and all assets located below the flood level, are assumed to be at risk. i.e.,  $P_{SH}=100\%$ .

For fixed infrastructure the temporal probability that the Element at Risk will always be present, so  $P_{TS}=100\%$ . People, on the other hand, spend about 70% of their time indoors at home on average, and about 6% of their time outdoors (including at their home) [13]. Given that the habitable space of homes is to be raised above the flood construction level, and the homes are to be designed to withstand the earthquake and tsunami, it might be considered reasonable to assign risk only for the time they are outdoors. However, any residents which failed to evacuate could be stuck in their homes without functioning utilities and without a means of egress, which could have negative impacts on mortality, especially for vulnerable populations. For the purpose of this assessment, it has been assumed that the residents have a 70% chance of being at home and exposed to tsunami hazard. i.e.,  $P_{TS}=70\%$ .

## Elements at Risk

In this risk assessment, the evaluated elements at risk are limited to people and built infrastructure. It should be noted, however, that all infrastructure at risk will be the responsibility of either the homeowner or the strata corporation of Lot 3. The DoU will not own or maintain this infrastructure.

Eleven detached houses, each with a secondary suite, are planned for Lot 3, for a total of 22 residences. According to 2021 census data, the average occupancy in the Ucluelet area is 2.3 per residence [14]. This yields an expected total of 51 people living on Lot 3.

ERIF have provided an estimate of the total value of the infrastructure damage during the design tsunami event. Note that habitable spaces of homes are to be elevated above the Flood Construction Level, so are not included in these totals.

**Repairs to homes: \$2.75M.** Includes replacement of break-away wall panels on uninhabitable lower floors, stair replacement, and landscaping.

**Common area servicing and infrastructure: \$1.6M.** Includes landscaping, damage to roads, sewage and water pipe and pump systems.



## Estimation of Risk

### Loss of Life

The probability of mortality as a function of tsunami height is estimated in [15] for the 2011 Japanese tsunami. For a tsunami height of approximately 10 m, the estimated mortality rate ranges from 3 to 5% with a best estimate of 4%. Another study estimated the mortality rate as a function of flood depth in New Orleans during Hurricane Katrina [16]. For a flood depth 3 m, the estimated mortality rate ranges from about 0.5% to 4% with a best estimate of 2%. It should be stressed that these estimates are specific to the social and geographic conditions of the studied event and region. Important is the variation in available warning, and the age and robustness of the building stock. While there is variance between and within these studies, they do provide similar estimates of the mortality rate during a large flooding event.

The proposed flood mitigation measures influence the selection of an appropriate mortality rate in this application. With suitable emergency management plan, most residents should be able to evacuate to high ground, only about 300 m away, before the tsunami arrives. Further, the proposed homes will be designed to withstand the design tsunami with habitable space above the flood level. So even if a resident fails to evacuate, the risk to that person sheltering in these homes is still substantially lower than in a conventional home constructed at grade. Given these factors, a mortality rate on the low range of the observed data of has been selected for use in this analysis. i.e.,  $V_{life}=0.5\%$

### Economic Losses

Given the limited scope of this assessment, it was possible to directly estimate the potential economic losses due to damage to infrastructure located below the FCL directly as \$4.35M. i.e.,  $V * E = \$4.35M$ .

### Risk Tolerance

Risk tolerance is a community value, and so should be defined by representatives of the community. It is understood that ERIF have been engaging with emergency management personnel as well as District Council to discuss the issue of risk tolerance. ERIF have reported that DoJ has no pre-established risk criteria or tolerance for risk.

In the United Kingdom maximum tolerable risk of death to an individual is 1:100,000 annually for a new development. The Netherlands uses a more stringent maximum risk tolerance of 1:1,000,000 annually. A plot indicating ranges of risk acceptability levels is provided in Figure 6-1 (reproduced from [5]). This plot suggests that an annual risk of death to a single person is "broadly acceptable" below a likelihood of 1:100,000, and unacceptable above 1:1000. Between these thresholds is the *as low as reasonably possible* (ALARP) zone, where mitigation measures should be used to reduce the risk to as low as reasonably possible.



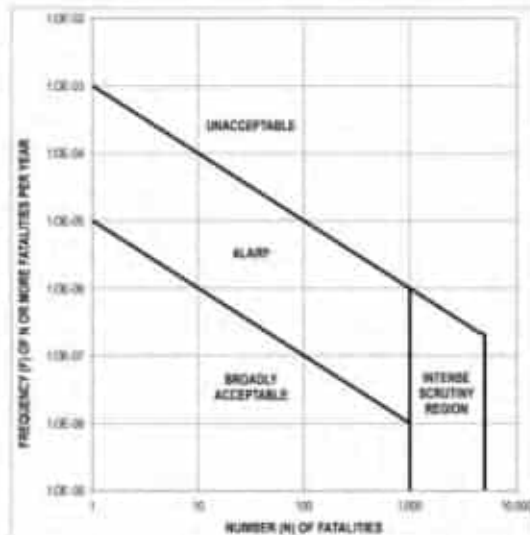


Figure 6-1: F-N curves to evaluate the risk to life loss of groups (source Kendall et al. 1977). Reproduced from [5]

## 6.2 Risk Results and Discussion

Using the methods of Section 6.1, the total economic losses on Lot 3 due to the design tsunami event are estimated to be \$4.35M. The annualized economic losses can be calculated as:

$$R_{\text{econ}} = P_H * P_{S-H} * P_{T-D} * V * E = 0.002 * 1 * 1 * \$4,350,000 = \$8,700$$

The expected mortality during the design tsunami event can be calculated as:

$$R_{\text{life}} = P_{S-H} * P_{T-D} * V_{\text{life}} * E = 1 * 0.70 * 0.005 * 51 = 0.18 \text{ people}$$

This suggests only about a 18% chance that someone on Lot 3 dies during the design tsunami event. This can be restated as about a 1:142,000 chance of death annually due to tsunami to any of the residents of Lot 3. Based on the guidance in the [5], this level of risk falls in a category of risk which is "broadly acceptable".

However, the representatives of the District of Ucluelet should review this analysis and the estimated risk level and determine for themselves if this level of risk is acceptable to the community. This community feedback must be integrated into this report and used as a basis for determining the acceptable level of risk for the proposed development. **The report cannot be completed until this feedback is obtained.** The potential loss of life during the design event is 0.18 people (i.e. <1), and the annualized infrastructure losses are \$8,700. Based on the risk matrix provided in Table 6-1, this puts the overall risk at of the proposed development at "low". Given this overall risk level and the guidance in Table E-2 of [5], the current analysis is deemed a suitable assessment of the risk and no further refinement of this assessment is necessary.



**Table 6-1: Matrix to Determine the Level of Risk Assessment Needed Based on the Exposure of a Development and Vulnerable Populations to Flood Hazards (reproduced from [5])**

Potential Loss of Life for Applied Return Period	Annualized Potential Building Loss (\$)				
	<1,000	1,000 to 10,000	10,000 to 100,000	100,000 to 1,000,000	>1,000,000
>100	VH	VH	VH	VH	VH
10 to 100	H	H	VH	VH	VH
2 to 10	H	H	H	H	VH
1 to 2	M	M	M	H	H
0	VL	L	M	M	H

**Notes:**  
 VH = Very High; H = High; M = Moderate; L = Low; VL = Very Low







## 8. Input Required from the DoU

**Feedback from the DoU District Council is needed to facilitate the completion of this report.** The DoU District Council must provide written feedback indicating if they accept or not the following:

- That this development may proceed in the absence of a standard dike.
- That the development of Lot 3 with 11 houses represents a *nominal* increase to the housing density on the DoU tsunami floodplain.
- That the risk of mortality associated with the development of Lot 3 is acceptable (1:142,000 annually).

DRAFT

## Bruce Greig

**From:** Juliette Green <juliette.g@erif.ca>  
**Sent:** November 4, 2024 3:01 AM  
**To:** Duane Lawrence; Bruce Greig; John Towgood  
**Cc:** Joshua Hunt; Jodie Thompson; Sarah H  
**Subject:** 221 Minato Rd - DP Revision A - Supplementary Reports and Flood Update  
**Attachments:** 221Minato DP Revision A Lodged November 3 2024.pdf; ERIF DP Revision A for 221 Minato Cover November 3 2024.docx

### [External]

Dear Duane, Bruce and John,

ERIF Economic Restoration Infrastructure Fund Inc. is pleased to provide the following supplementary documents in support of our Development Permit (DP) application for 221 Minato Road, originally lodged on September 20, 2024.

This email completes all requirements as outlined in the DP checklist. The further Flood Hazard Assessment and Flood Assurance Statement for Lots 1, 2, 4, & 5, and the Risk Management Plan for Lot 3 are currently being completed and are scheduled for submission in the next 1-2 weeks. Please find below details about the indepth work that is being carried out by the coastal engineers and the most recent update.

### Supplementary Documentation

To supplement the original application, we have now lodged the following documents:

- 1) Archaeological Preliminary Field Reconnaissance Report for 221 Minato Road – prepared by Yuuutu?it?ath Government (UFN) Department of Culture, Language, and Heritage.
- 2) Addition of Eleventh Waterfront Home in Lot 3 – As part of the emergency management planning for Lot 3, the placement of the tenth home was revised, and an additional, eleventh home has been added to the northern section of the site. The DP application has been updated to reflect this adjustment. Each item has been updated as minimally as possible to reflect the eleventh home on Lot 3. All amendments have been marked in *blue italics* for ease of review.

You will also see the clarifications requested regarding title types for each subdivided lot and the phased development plan.

Please find the **updated submission attached** in both word and PDF formats, sharing all renewed links in one location for ease of reference.

### Further Flood Report and Flood Assurance Statement

ERIF are very conscious of the delay on the further Flood Report requested and are doing all we can to expedite this.

These delays occurred as the site-specific Flood Report prepared by Ebbwater (who we understood was as the DOU's preferred consultant and advisor) was unfortunately not accepted by the DoU as sufficient.

The DoU have requested a further Flood Assurance Statement, which is a level of documentation not *required* under the Provincial Guidelines, but within the municipalities *discretion* to request or not. Ebbwater, who prepared all Ucluelet flood mapping and modelling, the site-specific Flood report for 221 Minato, and advises the DOU on flood matters, unfortunately confirmed that they are not qualified to provide a Flood Assurance Statement.

As a result ERIF has faced substantial cost and delay duplicating the previous flood mapping. We have persevered to contract coastal engineers of the highest calibre in BC, who were on the panel contributing to the drafting of the Provincial Guidelines. As the Flood Assurance Statement is such a high standard of modelling, policy and indemnity, it has taken multiple levels of qualified engineers and now further independent review to prepare this, with additional costs exceeding \$42,000 for this report alone.

The current status is that the reports have been taken to an Independent Reviewer this week, who is one of BC's highest authorities on tsunamis. KWL's update is below:

*"The Flood Hazard Assessment, Flood Risk Assessment and Risk Mitigation report has been prepared to draft. This work has reviewed modelling and mapping previously completed for the DoU, integrated engineering and planning documents from ERIF, and conducted additional tsunami modelling to evaluate the proposed flood mitigation measures. The current outlook is that ERIFs proposed development of this site is looking favourable and able to be supported, but this will depend on Council's feedback regarding tolerable risk levels.*

*In an abundance of care, we are having the report independently reviewed next week. Once that process has been completed, and any outstanding issues addressed, we anticipate we will be able to issue a Flood Assurance Statement as you have requested." (Clayton Hiles, KWL, November 2nd).*

We appreciate the DOU patiently waiting on this extensive process to provide the Flood Assurance Statement. We expect to provide this additional Flood Assurance Statement you have requested in 1-2 weeks.

### **Fees and Submission Timelines**

We will be coming in later today to pay the DP application and Temporary Use Permit fees. With this submission, we believe the Development Permit is complete in accordance with the checklist you supplied, and the additional Flood Study requested will be supplied as soon as possible.

In the meantime, we ask that you do all you can to continue to process our Development Permit application lodged Sept 20. We appreciate that you have mentioned previously that you are processing the DP as a priority. Given our objective to commence construction early in the new year, we kindly request an update on the anticipated timeline for DP approval once the remaining Flood reports are submitted.

Similarly, for the Temporary Use Permit application lodged Sept 30, we have now submitted the stamped engineers drawings and we will pay the permit application fee later today. Could you also advise a timeline for the temporary use permit approval please.

Please let us know if any further clarification or documentation is needed. I will write again immediately when the further flood reports can be supplied.

We thank you again for your work in reviewing the lodged documents and look forward to speaking further with you as the application progresses.

With thanks  
Juliette Green

**Juliette Green | Strategic Impact Director**

✉ [juliette.g@erif.ca](mailto:juliette.g@erif.ca) | 🌐 [www.erif.ca](http://www.erif.ca)



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IMPORTANT: The contents of this email and any attachments are confidential. They are intended for the named recipient(s) only. If you have received this email by mistake, please notify the sender immediately and do not disclose the contents to anyone or make copies thereof.

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**From:** Clayton Hiles <CHiles@kwl.ca>  
**Sent:** Saturday, November 2, 2024 9:15 AM  
**To:** 'Juliette Green' <juliette.g@erif.ca>; 'Joshua Hunt' <joshua.h@erif.ca>  
**Cc:** File <File@kwl.ca>  
**Subject:** 221 Minato Tsunami hazard Update

Hi Juliette and Josh,

I just wanted to provide an update on the reports you have requested for 221 Minato and appreciate your patience as we have worked through this process.

The Flood Hazard Assessment, Flood Risk Assessment and Risk Mitigation report has been prepared to draft. This work has reviewed modelling and mapping previously completed for the DoU, integrated engineering and planning documents from ERIF, and conducted additional tsunami modelling to evaluate the proposed flood mitigation measures. The current outlook is that ERIFs proposed development of this site is looking favourable and able to be supported, but this will depend on Council's feedback regarding tolerable risk levels.

In an abundance of care, we are having the report independently reviewed next week. Once that process has been completed, and any outstanding issues addressed, we anticipate we will be able to issue a Flood Assurance Statement as you have requested.

Thanks again for your patience,

# Clayton

KWL File # 4558.001



**Clayton Hiles** PEng | Coastal Engineer

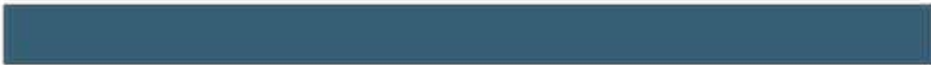
+1 (250) 294-  
8017

+1 (778) 677-  
7682



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Sent from the unceded traditional territory of the Xwsepsum (Esquimalt) and Ləkʷəŋən (Songhees), and WSÁNEĆ (Saanich) Peoples. We are grateful for the opportunity to work from this land.



## Preliminary Field Reconnaissance of proposed residential development at 221 Minato Road, Ucluelet BC.





Prepared for: ERIF

Author: Carey Cunneyworth (UFN)

First Nation Traditional Territory: Ucluelet First Nation

Survey Date: August 29, 2024

Field Director: Carey Cunneyworth

Survey Crew: Tyson Touchie Jr (UFN)  
Jay Millar (UFN)

Attachments: Figure 1, Photos 1-3

Archaeological: Yes

Borden #: DfSj-TBA/UFN2024\_001

Site Registration: Carey Cunneyworth

Cover Photo: Tyson Touchie showing CMT 1,  
C.Cunneyworth, img\_8177.jpg



## 1.0 INTRODUCTION

### 1.1 Objectives

The objectives of this Preliminary Field Reconnaissance (PFR) survey and report are to:

- (a) Identify the above-ground and/or naturally exposed archaeological, cultural, and heritage resources;
- (b) Record and determine the extent of possible impacts to existing and new archaeological sites by the proposed development;
- (c) Identify and evaluate areas of archaeological potential within the development that may require subsurface testing or monitoring;
- (d) Make recommendations regarding any further archaeological work that may be required, and ways in which possible developmental impacts to the existing archaeological, cultural or heritage resources can be reduced or alleviated.

### 1.2 Survey and Report Summary

One (1) new archaeological site consisting of one (1) culturally modified tree (CMT) and one (1) traditional use site (TUS) consisting of seven (7) contemporary CMTs were encountered during this survey. Two (2) areas of sub-surface archaeological potential were identified during this survey. No other pre-1846 archaeological, or cultural features were identified during this survey.

Due to the archaeological findings and cultural significance of this area, as well as the impact that this proposed development at C'iiluk<sup>w</sup>is (Olsen Bay) will have on the Yuułu?ił?ath community and to Yuułu?ił?ath territory, further consultation with the Yuułu?ił?ath government – Ucluelet First Nation will be required.

Further archaeological work may be required in relation to this proposed development and recommendations are made in section 7.0.

## 2.0 Background

### 2.1 General

In June of 2024, ERIF consulted the Ucluelet First Nation (UFN) concerning a proposed 24.8-acre residential development at 221 Minato Road on partially cleared private lands. Construction of this proposed residential development would require significant alterations to the land consisting of extensive ground alterations and it was communicated to UFN that further tree felling requirements will be kept to a minimum to remove danger trees and to facilitate the site plan, which was not provided at the time of this assessment but has been provided since. Due to the close proximity of this proposed development to registered archaeological sites and known ethnographic sites, UFN considers the area to be of high archaeological potential and requested that a PFR be conducted.

### 2.3 Archaeological and Ethnographic Research

The location of this proposed development falls entirely within the known traditional territory of the Yuułu?ił?ath (Ucluelet First Nation). The Yuułu?ił?ath are a Nuu-chah-nulth group that have resided on the shores of the Ucluelet Inlet and surrounding area since time immemorial.

Archaeological sites on the Ucluelet Peninsula dates Yuułu?il?ath occupation in the area back to over 4000 years ago, with Yuułu?il?ath oral histories stretching further back in time. The Yuułu?il?ath ancestors evolved with this land over millennia and maintained a deep relationship with it by following a seasonal calendar that involved rotational movement through family-owned places and resources. These ancestors cared for the land and resources, and in return the land and resources supported them. The modern day Yuułu?il?ath are a post-contact consolidation of at least seven (7) previously independent primary groups that each consisted of multiple sub-groups and families.

The modern Yuułu?il?ath are made up of the following primary groups:

- Yuułu?il?ath
- Hu?u?ath
- K̇inaxuumas?ath
- Hitaçu?ath
- K̇waayimta?ath
- Hinaṗii?is?ath
- Ẇaayi?ath

Prior to conducting fieldwork, archaeological site potential was addressed by reviewing the literature and speaking with the UFN community for known archaeological and ethnographic sites in close proximity to and within the study area.

One (1) ethnographic site and/or named place is located immediately adjacent or within this study area.

**C'iiluk<sup>w</sup>is** is the Yuułu?il?ath place meaning “soft beach” now known as Olsen Bay. It is described as the “shallow soft bottomed bay reaching close to the road”

One (1) registered archaeological sites is located immediately adjacent or within this study area.

**DfSj-64** is located near the southern shore of C'iiluk<sup>w</sup>is or Olsen Bay, adjacent the highway on the south side. This site consists of an aboriginally logged CMT stump. This site is located outside the study area, however it's HCA protected buffer zone falls within the study area boundary.

Three (3) registered archaeological sites are located within close proximity (<300 m) to the study area.

**DfSj-55** is located on the northern shore of C'iiluk<sup>w</sup>is or Olsen Bay. This site consists of a subsurface shell midden.

**DfSj-65** is located on the northwest shore of C'iiluk<sup>w</sup>is or Olsen Bay. This site consists of an aboriginally logged CMT stump.

**DfSj-77** is located on the northern shore C'iiluk<sup>w</sup>is or Olsen Bay. This site consists of sixteen (16) aboriginally logged and/or bark-stripped CMT's.

Permit #: Non-Permit  
Temporary #: N/A  
Borden #: N/A  
Date of visit: August 29, 2024



Photo 1: Jay Millar (UFN) and Tyson Touchie Jr (UFN) with TUS CMTs. Looking N, C.Cunneyworth, img\_8166.jpg

### 3.0 ASSESSMENT METHODS

The field team examined pertinent archaeological site maps and ethnographic maps, as well as aerial photographs and legal boundary maps prior to conducting the actual survey. This assisted in modelling the field reconnaissance and targeting the areas of highest potential within the survey areas.

This field survey occurred on August 29<sup>th</sup>, 2024, and consisted of one UFN archaeologist and two UFN field technicians traversing the defined survey area spaced 5-20m apart. This survey concentrated primarily within the timbered and undeveloped areas of the study area, as well as along the shoreline. All standing and fallen timber within the study area were inspected for cultural modification. All natural exposures were visually inspected for subsurface archaeological deposits. Subsurface testing was not permitted during this PFR survey.

### 4.0 SURVEY RESULTS

#### 4.1 Field Survey

This survey consisted of foot traverse across the entire 24.8-acre property including the entire shoreline which is situated on the south and southwest shores of C'iiłuk<sup>w</sup>is or Olsen Bay. C'iiłuk<sup>w</sup>is or Olsen Bay is located near the mid-point of the Ucluelet harbor on the south side and is between the Yuułuʔiłʔatḥ ancestral village of ʔakmqis and the ancestral and current home village of Hitacu. The survey area is accessed by Minato Road which leads to a road at the entrance of the study area and continues through the study area as roundabouts. This study area has been partially cleared in association with road development through the property.

The survey area generally consisted of an undulating and flat forested terrace with poor drainage along the shoreline and at lower elevations (1-5m), and the undeveloped middle and upper elevations (5-25 m) generally consisted of hummocky and undulating minor slopes with mixed coastal forest including mature old growth. Visibility across the survey area ranged from very poor (1-10 m) in the northeastern portion due to very dense coastal salal and huckleberry undergrowth, to good (10-20 m) in the middle and higher elevations where there are lower amounts of undergrowth in well-spaced forest. Forest composition generally consisted of mixed hemlock and cedar under 100cm diameter, with some old growth cedars measuring over 200 cm in diameter. Large spruce were encountered along the shoreline, and some yew were noted throughout the study area. Deadfall and blowdown amounts were considered low-moderate. No evidence of historical logging in the form of sawn stumps or logs was encountered in the undeveloped forested areas or outside the cleared areas impacted by the built roads.

Survey visibility ranged from very poor - good depending on the forest cover and understory density and survey coverage was achieved across 90% of the total area. Visually inspected natural exposures showed no evidence of any previously unregistered buried archaeological deposits. All exposed rock was inspected for modifications, shelters and overhangs, and no archaeological remains were encountered within any geological features.





Permit #: Non-Permit  
Temporary #: N/A  
Borden #: DfSj-TBA/UFN2024\_001  
Date of visit: August 29, 2024



Photo 2: 6 cm metal adze toolmark on CMT 1. Looking E, C.Cunneyworth, img\_8173.jpg



Photo 3: Bottom plank notch of CMT 1. Looking E, C.Cunneyworth, img\_8174.jpg

## 7.0 RECOMMENDATIONS

Based on the results of this assessment, further archaeological work could be required. The following recommendations are made for this proposed development and in the cases any unidentified archaeological features or sites be encountered after this survey.

### 7.1 Avoidance

Complete avoidance of the one (1) registered archaeological site DfSj-TBA as well as the two (2) identified areas of potential, and the one (1) traditional use site that are located within the study area will provide the maximum protection from potential impacts resulting from the proposed residential development.

The Yuułuʔiłʔatḥ Government – Ucluelet First Nation requests complete avoidance of the one (1) registered archaeological sites DfSj-TBA, the two (2) identified areas of potential, and the one (1) traditional use site.

Should any construction and/or development take place within the immediate vicinity of the above-mentioned sites, a Yuułuʔiłʔatḥ representative should be on site to act as a monitor.

### 7.2 Mitigation

If complete avoidance from proposed development related impacts is either not feasible or practical for any of the archaeological and/or cultural resources found within or immediately adjacent this proposed development, then mitigation of these features and sites will be required. Any proposed impact, removal, alteration, or destruction of archaeological remains, including CMTs, will require that the proponent applies for, and obtains, a Heritage Conservation Act (HCA) Section 12.4 Site Alteration Permit (SAP).

Should any future construction and/or development fall within or immediately adjacent the areas of potential, further consultation with the Yuułuʔiłʔatḥ Government – Ucluelet First Nation would be required, and subsurface testing under a Heritage Inspection Permit (HIP) may be required.

### 7.3 General Recommendations

1. That *ERIF* inform all contractors who will be involved with building activities in the proposed development area that archaeological remains in the Province of British Columbia are protected from disturbance, intentional or inadvertent, by the Heritage Conservation Act (RSBC 1996, Chapter 87) and Section 51 of the Forest Practices Code Act (1995);
2. That *ERIF* inform contractors that, in the event that previously unidentified archaeological remains (including culturally modified trees) are encountered during building activities, that all activities with potential impacts to the remains must be halted, and the Ucluelet First Nation must be contacted upon discovery, and be informed of the location, the type/s of archaeological remains encountered, and the nature of the disturbance.

## 8.0 REFERENCES

Applaud, Brian, and Ray Kenny

1996 *British Columbia Archaeological Impact Assessment Guidelines*. Ministry of Small Business, Tourism and Culture, Archaeology Branch, Victoria.

Brolly, Richard, and Brian Pegg

1998 *Archaeological Investigations in Ucluelet Traditional Territory*. HCA 1995-048. Prepared by Arcas Consulting Archaeologists LTD

Inglis, R.I, and J.C Haggarty

1986 *Pacific Rim National Park Ethnographic History*. Report on File, Western Canada Services Centre, Parks Canada, Archaeological Services, Victoria, BC.

Kammler, Henry

2016 *NCN Barkley Sound Dictionary*. Work in Progress.

Pojar, Jim, and Andy Mackinnon

2004 *Plants of Coastal British Columbia*. Ministry of Forests and Lone Pine Publishing. Vancouver, BC.

Stryd, Arnoud H.

1997 *Culturally Modified Trees of British Columbia: A Handbook for Identification and Recording of Culturally Modified Trees*. Ministry of Forests, Vancouver Forest Region, Nanaimo.

November 3rd, 2024



**Attn:**

Duane Lawrence, CAO  
Bruce Greig, Director of Community Planning  
John Towgood, Municipal Planner  
District of Ucluelet

**RE: 221 MINATO ROAD – DEVELOPMENT PERMIT APPLICATION – REVISION A**

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Dear Duane, Bruce and John,

ERIF Economic Restoration Infrastructure Fund Inc is pleased to provide the following supplementary documents for the Development Permit for 221 Minato lodged on September 20, 2024.

To supplement the original application, this lodgement provides this newly lodged final report:

**Archaeological Preliminary Field Reconnaissance Report** for 221 Minato Rd by Yuułu?it?ath Government - Ucluelet First Nation (UFN) Department of Culture, Language and Heritage:  
[https://drive.google.com/file/d/1OAKJS3KbL57G\\_KO\\_bDRihN2svfxqSKLt/view?usp=sharing](https://drive.google.com/file/d/1OAKJS3KbL57G_KO_bDRihN2svfxqSKLt/view?usp=sharing)

With the lodgement of this report the Development Permit Checklist is complete.

**Additional Flood Report**

In addition to the site-specific Flood Report already supplied, ERIF aim to lodge the further Flood Study and Flood Assurance Statement in the next 1-2 weeks. Currently being finalised through an Independent Review, the Flood Hazard Assessment, Risk Assessment Study with Risk Management Plan, and the Flood Assurance Statement will be uploaded to this folder when received:

<https://drive.google.com/drive/folders/1ytjEWqk6VT2PAzUVmQ1-Vc9qkq9C5JVJ?usp=sharing>

**Addition of Eleventh Waterfront Home in Lot 3:** In the process of refining the emergency management for Lot 3 with the flood consulting engineers and Ucluelet's Fire Chief, it was agreed that changing the placement of the tenth home was required and an eleventh home could be added to the north of the site. The Development Permit application has been updated to reflect this.

**Updates to existing lodged reports:**

Where required to reflect the 11<sup>th</sup> home in Lot 3, minor changes have been made to the draft proposals as follows:

- a. Stamped Masterplan provided by Formosis including Zoning Analysis: *updated to reflect the eleventh home in Lot 3.*
- b. Overview of Development: *updated pages 1, p5 data table, p7 and p8 masterplan images, p9 with updated image and additional strata title details, p10 with updated image.*
- c. Appendix A - Draft Bylaw Revisions. *Updated pages: p1, p5 Project Data Table, p7 Image, p8, p10 to reference 11 waterfront homes on Lot 3. Updated p9 with precise terminology for strata title types.*
- d. Appendix B - Draft Covenant Restrictions. *Minor change to update image on p12.*
- e. Appendix C - Draft Subdivision Plan noting Easements and Covenants: while the subdivision boundaries have not changed, there is a minor repositioning of the entry road to

accommodate the homes to the north of Lot 3. We have also taken this opportunity to respond to the District of Ucluelet's queries on title and Strata types in more detail with input from our consulting surveyor team by *updating the cover letter Appendix C from our DP lodgement below.*

- f. Appendix D - Draft Phased Development Plan & Phased Development Agreement. *Minor change to update images on p18 and p19.*

Where lodged documents have been updated, any in-text updates have been marked in *blue italics* so they can be easily identified, and all changes have been detailed in the table below.

**Ongoing Collaborations:** These works to be continued and updated:

- A. Flood Hazard Assessment, Flood Risk Assessment and Flood Assurance Statement by Coastal Engineers Kerr Webb Leidel to follow within 1-2 weeks.
- B. Confirmation of off-site servicing scope and design in coordination with Civil Engineers and District of Ucluelet.
- C. Detailed design of tsunami resilient structures and retaining walls for Build Permit in collaboration with Coastal, Structural and Geotechnical engineering teams.
- D. Early Works Permit Application following approval of Development Permit and Temporary Use Permit.

We thank you again for doing all you can to continue to expedite processing our Development Permit application lodged September 21<sup>st</sup> and Temporary Use Permit lodged September 30<sup>th</sup>, while we await the additional Flood report. Please reach out if there are any further questions we can assist with.

We look forward to presentation of the application to Council for approval at your earliest convenience so we can get underway with bringing this development to life for the benefit of the Ucluelet community and it's future economic and social growth.

In partnership,



**Joshua Hunt**

**CEO – ERIF Sustainable Solutions**



**APPENDIX A - Log of Updated Documents – November 3, 2024**

This is the listing and direct links to the updated documents to reflect the Masterplan update to eleven homes on Lot 3, supplementary archaeological and link to upload requested flood reports.

#	Lodged Document	Document Link
	<b>Application</b>	
	<b>Rezoning and Subdivision</b>	
7	<p>Subdivision Lot Layout provided by Formosis</p> <ul style="list-style-type: none"> <li>a) Application Drawings</li> <li>b) Site context</li> <li>c) Topographical and geographical features</li> <li>d) Property lines, setbacks, proposed buildings and structures</li> <li>e) Grading and rainwater plans</li> </ul>	<p>SUPERSEDED Formosis subdivision lodged September 2024:  <a href="https://drive.google.com/file/d/1XxXeZBfdcNPsp3LC0Yy-MTeEtQYw-ODq/view?usp=sharing">https://drive.google.com/file/d/1XxXeZBfdcNPsp3LC0Yy-MTeEtQYw-ODq/view?usp=sharing</a></p> <p>UPDATED Formosis subdivision lodged November 3, 2024:  <a href="https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing">https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing</a>  <i>The subdivision lot lines are unchanged, but the northernmost road of Lot 3 has been repositioned, two homes added to the north and one home removed from the south of Lot 3.</i></p>
	<b>Development Permit</b>	
9	Overview of Application	<p>SUPERSEDED Overview of Application lodged September 2024:  <a href="https://www.canva.com/design/DAGO4rcs5fs/hZRtm0s7iluBJicN28-ICQ/view?utm_content=DAGO4rcs5fs&amp;utm_campaign=designshare&amp;utm_medium=link&amp;utm_source=editor">https://www.canva.com/design/DAGO4rcs5fs/hZRtm0s7iluBJicN28-ICQ/view?utm_content=DAGO4rcs5fs&amp;utm_campaign=designshare&amp;utm_medium=link&amp;utm_source=editor</a></p> <p>UPDATED Overview of Application lodged November 3, 2024:  <a href="https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing">https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing</a>  <i>Updated pages: p1, p5 Project Data Table, p7 Image, p8, p10 to reference 11 waterfront homes on Lot 3. Updated p9 with precise terminology for strata title types.</i></p>
10	Masterplan provided by Formosis including Zoning Analysis	<p>SUPERSEDED Masterplan lodged September 2024:  <a href="https://drive.google.com/file/d/1XxXeZBfdcNPsp3LC0Yy-MTeEtQYw-ODq/view?usp=sharing">https://drive.google.com/file/d/1XxXeZBfdcNPsp3LC0Yy-MTeEtQYw-ODq/view?usp=sharing</a></p> <p>UPDATED Masterplan lodged November 3, 2024:  <a href="https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing">https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing</a>  <i>Updated A001, A201, A202, A203 to show 11 waterfront homes on Lot 3.</i></p>
	<b>Supporting Consultant Reports</b>	
20	Archaeological Report by Yuuľu?i?ath Government - Ucluelet First Nation (UFN) Department of Culture, Language & Heritage	<p>SUPERSEDED Interim Archaeological Report lodged September 2024:  <a href="https://drive.google.com/file/d/1XtHRCnwaJWRMF8kmpx_08dK9YLIHLUIQ/view?usp=sharing">https://drive.google.com/file/d/1XtHRCnwaJWRMF8kmpx_08dK9YLIHLUIQ/view?usp=sharing</a></p> <p>UPDATED Final Archaeological Report lodged November 2024:  <a href="https://drive.google.com/file/d/1OAKJS3KbL57G_KO_bDRihN2svfxqSKLt/view?usp=sharing">https://drive.google.com/file/d/1OAKJS3KbL57G_KO_bDRihN2svfxqSKLt/view?usp=sharing</a></p>

25	Flood Hazard Report and Flood Assurance Statement by KWL (2024)	Existing Link for upload: <a href="https://drive.google.com/drive/folders/1ytjEWqk6VT2PAzUVMQ1-Vc9qkq9C5JVJ?usp=sharing">https://drive.google.com/drive/folders/1ytjEWqk6VT2PAzUVMQ1-Vc9qkq9C5JVJ?usp=sharing</a> Updated to provide Flood Hazard Assessment, Flood Assurance Statement for Lots 1,2,4,5. The Risk Assessment Report and subsequent Flood Assurance Statement for Lot 3 will be added to this link as soon as available.
<b>Draft Proposals for Review</b>		
A.	Draft Bylaw Revisions	SUPERSEDED Draft By Law Revisions lodged September 2024: <a href="https://docs.google.com/document/d/1FSbn8FNnsy3qjSzUh1mavNRluLw6pfiw/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1FSbn8FNnsy3qjSzUh1mavNRluLw6pfiw/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a>  UPDATED Draft By Law Revisions lodged November 2024: <a href="https://docs.google.com/document/d/1MDtgiGVJuMb7iFi4WW6Dm6-iyKWgLxbS/edit?usp=sharing&amp;oid=104541964235100947456&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1MDtgiGVJuMb7iFi4WW6Dm6-iyKWgLxbS/edit?usp=sharing&amp;oid=104541964235100947456&amp;rtpof=true&amp;sd=true</a> <i>Updated as follows:</i> <ul style="list-style-type: none"> <li>• p2 image</li> <li>• p3 Table 6.3.1 amended to show 11 waterfront homes,</li> <li>• p3 table CD6.4 amended to show new lot coverage for Lot 3 with extra home,</li> <li>• p3 CD6.6 amended to allow additional 1m height for waterfront homes to accommodate potential increase in habitable flood level,</li> <li>• p4 CD6.7 table amended to front and rear setback for Lot 3 homes with updated road position.</li> </ul>
B.	Draft Covenant Restrictions	SUPERSEDED Draft Covenant Restrictions lodged September 2024: <a href="https://drive.google.com/file/d/196Z9trECIEt9WnyBcKZuQgTD4qnn8dmt/view?usp=sharing">https://drive.google.com/file/d/196Z9trECIEt9WnyBcKZuQgTD4qnn8dmt/view?usp=sharing</a>  UPDATED Draft Covenant Restrictions lodged November 2024: <a href="https://drive.google.com/file/d/1YrM8Ccoa1BdRqj_AOPr3BUPpUZOGUxy/view?usp=sharing">https://drive.google.com/file/d/1YrM8Ccoa1BdRqj_AOPr3BUPpUZOGUxy/view?usp=sharing</a> <i>Page 12 Appendix 1 updated with image of November 3 v2 Masterplan</i>
D.	Draft Phased Development Plan & Phased Development Agreement – refer to appendix F	SUPERSEDED Draft Phased Development Agreement lodged September 2024: <a href="https://docs.google.com/document/d/1L25VN9kXSXqjSEF-qNXroewtg_xWzuUS/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1L25VN9kXSXqjSEF-qNXroewtg_xWzuUS/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a>  UPDATED Draft Phased Development Agreement lodged November 2024: <a href="https://docs.google.com/document/d/1F6KqgGjTf6wa5FhHMK18QL1I_gTOKHnzJ/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1F6KqgGjTf6wa5FhHMK18QL1I_gTOKHnzJ/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a> <i>Page 18 Schedule B Masterplan updated with image of November 3 v2 Masterplan. Page 19 Phasing Plan updated with v2 image.</i>

**APPENDIX B – Updated Log of Current Application – All Lodged Documents with November 3 Links**

This is the listing and direct links to all documents outlined in the Development Application Checklist and Covenant Restrictions, noting the new links updated on November 3, 2024:

#	Lodged Document	Document Link
<b>Application</b>		
1	Application Form	<a href="https://drive.google.com/file/d/1vUqBnnZlk9T7IKUDEbkSTFBuzLGQRXO9/view?usp=drive_link">https://drive.google.com/file/d/1vUqBnnZlk9T7IKUDEbkSTFBuzLGQRXO9/view?usp=drive_link</a>
2	DOU's Development Permit Application Checklist	<a href="https://drive.google.com/file/d/1t9luV59fluXCRDZYG0L6FZO2L_wLrzH2/view?usp=sharing">https://drive.google.com/file/d/1t9luV59fluXCRDZYG0L6FZO2L_wLrzH2/view?usp=sharing</a>
3	Title Search & State of Title Certificate	Title Search: <a href="https://drive.google.com/file/d/161dYjcjlTeTela3HbKpwQ1fla7C3Kzyj/view?usp=sharing">https://drive.google.com/file/d/161dYjcjlTeTela3HbKpwQ1fla7C3Kzyj/view?usp=sharing</a> State of Title: <a href="https://drive.google.com/file/d/161dYjcjlTeTela3HbKpwQ1fla7C3Kzyj/view?usp=sharing">https://drive.google.com/file/d/161dYjcjlTeTela3HbKpwQ1fla7C3Kzyj/view?usp=sharing</a>
4	Site Disclosure Statement	<a href="https://drive.google.com/file/d/1cDqHcxmbzPI4nUuWI59CYGt9trHNTfa5/view?usp=drive_link">https://drive.google.com/file/d/1cDqHcxmbzPI4nUuWI59CYGt9trHNTfa5/view?usp=drive_link</a>
5	Written Statement of Intent	<a href="https://drive.google.com/file/d/1p17QF4qN1KTZ2DTdGI2GyoleCvzZoLed/view?usp=sharing">https://drive.google.com/file/d/1p17QF4qN1KTZ2DTdGI2GyoleCvzZoLed/view?usp=sharing</a>
<b>Rezoning and Subdivision</b>		
6	Municipality Policies List and Links	<a href="https://docs.google.com/document/d/1HbGalTgZwUJgGnLEzlp3i7kQ1G_Duj6/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1HbGalTgZwUJgGnLEzlp3i7kQ1G_Duj6/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a>
7	Subdivision Lot Layout provided by Formosis f) Application Drawings g) Site context h) Topographical and geographical features i) Property lines, setbacks, proposed buildings and structures j) Grading and rainwater plans	a - d. Formosis 'Link Updated November 3': <a href="https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing">https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing</a>  e. Herold Engineering: <a href="https://drive.google.com/file/d/13JZlm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing">https://drive.google.com/file/d/13JZlm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing</a>
8	Draft Subdivision Plan provided by Williamson & Associates Professional Surveyors	<a href="https://drive.google.com/file/d/1i4nAUxAHJUudN1skFdLn3yqkLFs1EnxK/view?usp=sharing">https://drive.google.com/file/d/1i4nAUxAHJUudN1skFdLn3yqkLFs1EnxK/view?usp=sharing</a>  .DWG: <a href="https://drive.google.com/file/d/1HICp6L4enlUgaSBbqW_mPFc3QmbyyS-/view?usp=sharing">https://drive.google.com/file/d/1HICp6L4enlUgaSBbqW_mPFc3QmbyyS-/view?usp=sharing</a>
<b>Development Permit</b>		
9	Overview of Application	<a href="https://www.canva.com/design/DAGUhlh4VCI/ZZ_JJzAcdrJlz11C0c9hUg/view?utm_content=DAGUhlh4VCI&amp;utm_campaign=designshare&amp;utm_medium=link&amp;utm_source=editor">https://www.canva.com/design/DAGUhlh4VCI/ZZ_JJzAcdrJlz11C0c9hUg/view?utm_content=DAGUhlh4VCI&amp;utm_campaign=designshare&amp;utm_medium=link&amp;utm_source=editor</a> – Link Updated November 3

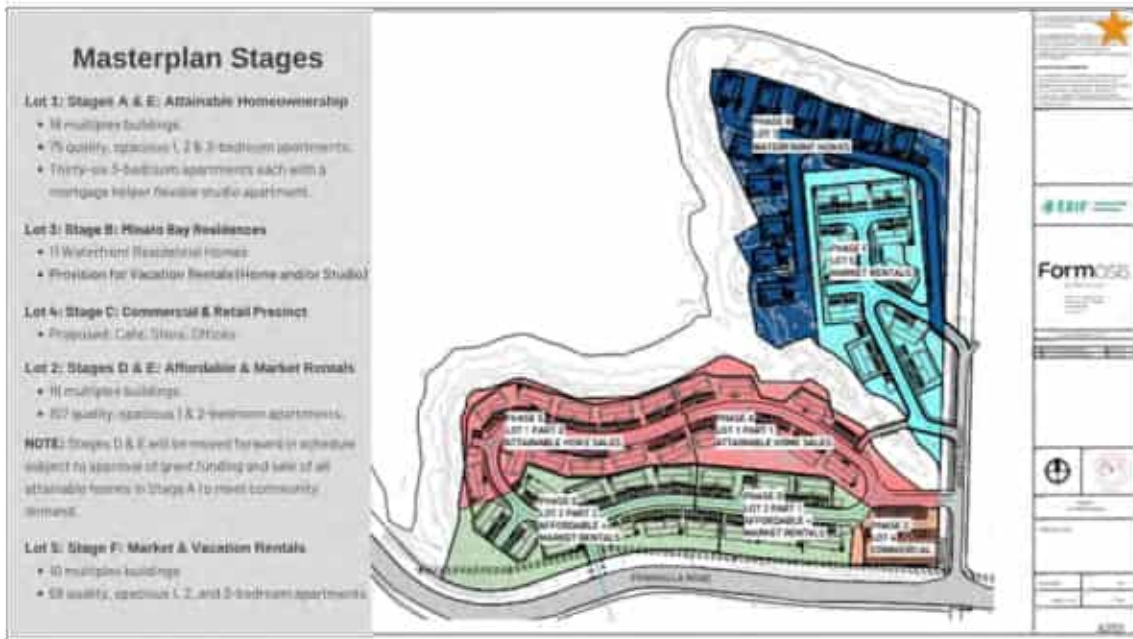
10	Masterplan provided by Formosis including Zoning Analysis	Formosis 'Link Updated November 3': <a href="https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing">https://drive.google.com/file/d/111xBx_FBMP-z373xTL7SZp7YUYa_EtHn/view?usp=sharing</a>
11	Built Forms – Eagle 1 Plans	<a href="https://drive.google.com/file/d/1ZZyOd56F2DwQWU-iyq_Qg-B1JcQy8uiT/view?usp=sharing">https://drive.google.com/file/d/1ZZyOd56F2DwQWU-iyq_Qg-B1JcQy8uiT/view?usp=sharing</a>
12	Built Forms – Eagle 3 Plans	<a href="https://drive.google.com/file/d/1E0LOkhqNqZtpxi0VGLwLzfWqSP-z1OeW/view?usp=sharing">https://drive.google.com/file/d/1E0LOkhqNqZtpxi0VGLwLzfWqSP-z1OeW/view?usp=sharing</a>
13	Built Forms – Waterfront Homes	<a href="https://drive.google.com/file/d/1jmK4k2thvZ0g9WD1KylsnLulrgoA0QYB/view?usp=sharing">https://drive.google.com/file/d/1jmK4k2thvZ0g9WD1KylsnLulrgoA0QYB/view?usp=sharing</a>
<b>Supporting Consultant Reports</b>		
14	Environmental Report provided by Aquaparian	Drive for report added: <a href="https://drive.google.com/drive/folders/1PhoU17Ksa3SZQuO-ODkmXPkfmnAhtBXw?usp=sharing">https://drive.google.com/drive/folders/1PhoU17Ksa3SZQuO-ODkmXPkfmnAhtBXw?usp=sharing</a>
15	Tree Report provided by Joe Carlaozzi	<a href="https://drive.google.com/file/d/1ihxdH2FO7UKQbRdExk8G1WR0S-zcVDsM/view?usp=sharing">https://drive.google.com/file/d/1ihxdH2FO7UKQbRdExk8G1WR0S-zcVDsM/view?usp=sharing</a>
16	Draft Servicing Plan prepared by Herold Engineers	<a href="https://drive.google.com/file/d/13JZIm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing">https://drive.google.com/file/d/13JZIm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing</a>
17	Stormwater Management Servicing Plans by Herold Engineers	<a href="https://drive.google.com/file/d/13JZIm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing">https://drive.google.com/file/d/13JZIm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing</a>
18	Interim Sewage Solution Design Proposal prepared by Creus Engineering	<a href="https://drive.google.com/file/d/1w0XEzLsX_o6TgZJbImGfE4PvjZZmzFtW/view?usp=sharing">https://drive.google.com/file/d/1w0XEzLsX_o6TgZJbImGfE4PvjZZmzFtW/view?usp=sharing</a>
19	Traffic Impact Report by Watt Consulting	<a href="https://drive.google.com/file/d/1-0u5454ShDO8kuLuytizHks6dQrZB1gn/view?usp=sharing">https://drive.google.com/file/d/1-0u5454ShDO8kuLuytizHks6dQrZB1gn/view?usp=sharing</a>
20	Archaeological Report by Yuuľu?if?ath Government - Ucluelet First Nation (UFN) Department of Culture, Language & Heritage	<a href="https://drive.google.com/file/d/1OAKJS3KbL57G_KO_bDRihN2svfxqSKLt/view?usp=sharing">https://drive.google.com/file/d/1OAKJS3KbL57G_KO_bDRihN2svfxqSKLt/view?usp=sharing</a> – Link Updated November 3
21	Landscaping Plan by MacDonald Gray	<a href="https://drive.google.com/file/d/1L4BY5JthEqVLaAWnju8Qr7HLBEvBPZa/view?usp=sharing">https://drive.google.com/file/d/1L4BY5JthEqVLaAWnju8Qr7HLBEvBPZa/view?usp=sharing</a>
22	Geotechnical Reports by Geopacific	March 2024: <a href="https://drive.google.com/file/d/1Pbkaz4obVlyggOAO9nJGfJZ4hxmgiEUt/view?usp=sharing">https://drive.google.com/file/d/1Pbkaz4obVlyggOAO9nJGfJZ4hxmgiEUt/view?usp=sharing</a>  Sep 2023: <a href="https://drive.google.com/file/d/1J0oDoyHva3TmDft3xWAPN7YuUTuau3cu/view?usp=sharing">https://drive.google.com/file/d/1J0oDoyHva3TmDft3xWAPN7YuUTuau3cu/view?usp=sharing</a>
23	Site Specific Flooding Coastal Report by Ebbwater (2022)	<a href="https://drive.google.com/file/d/1qxYSLu61D1jkLjj--2hC-byi1nmPg6dE/view?usp=sharing">https://drive.google.com/file/d/1qxYSLu61D1jkLjj--2hC-byi1nmPg6dE/view?usp=sharing</a>
24	Tsunami resilient building design by Stantec Hydrotechnical and Structural Engineers (July 2024)	<a href="https://drive.google.com/file/d/1zUabbA3_XKyv5khMR5CAPWOKTAff-9ka/view?usp=sharing">https://drive.google.com/file/d/1zUabbA3_XKyv5khMR5CAPWOKTAff-9ka/view?usp=sharing</a>

25	Flood Hazard Report and Assurance by KWL (2024)	KWL Flood Hazard Assessment, Lot 3 Risk Assessment, Flood Assurance Statement across all lots – to be uploaded mid November: <a href="https://drive.google.com/drive/u/2/folders/1ytiEWqk6VT2PAzUVmQ1-Vc9qkq9C5JVJ">https://drive.google.com/drive/u/2/folders/1ytiEWqk6VT2PAzUVmQ1-Vc9qkq9C5JVJ</a>
26	Contamination Screening Report by Thurber (2023)	<a href="https://drive.google.com/file/d/15xVxNZ2fOsMVtTg_W_-UQHXRScKRP7Lt/view?usp=sharing">https://drive.google.com/file/d/15xVxNZ2fOsMVtTg_W_-UQHXRScKRP7Lt/view?usp=sharing</a>
<b>Draft Proposals for Review</b>		
A.	Draft Bylaw Revisions	<a href="https://docs.google.com/document/d/1MDtgiGVJuMb7iFi4WW6Dm6-iyKWgLxbS/edit?usp=sharing&amp;oid=104541964235100947456&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1MDtgiGVJuMb7iFi4WW6Dm6-iyKWgLxbS/edit?usp=sharing&amp;oid=104541964235100947456&amp;rtpof=true&amp;sd=true</a> – Link Updated November 3
B.	Draft Covenant Restrictions	Draft Proposal for Review Satisfaction of Existing Covenant Restrictions: <a href="https://docs.google.com/document/d/1-6VDI-UTlqCNTDSVtkE96pyVwDtyy5rS/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1-6VDI-UTlqCNTDSVtkE96pyVwDtyy5rS/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a>  2024 Draft Covenant Restrictions Link Updated November 3: <a href="https://drive.google.com/file/d/1YrM8Ccoa1BdRqj_AOPr3BUPpUZOGUxy/view?usp=sharing">https://drive.google.com/file/d/1YrM8Ccoa1BdRqj_AOPr3BUPpUZOGUxy/view?usp=sharing</a>
C.	Draft Subdivision Plan noting Easements and Covenants – refer to appendix D	<a href="https://drive.google.com/file/d/1i4nAUxAHJUudN1skFdLn3yqkLFs1EnxK/view?usp=sharing">https://drive.google.com/file/d/1i4nAUxAHJUudN1skFdLn3yqkLFs1EnxK/view?usp=sharing</a> <i>Appendix D updated in letter below.</i>
D.	Draft Phased Development Plan & Phased Development Agreement – refer to appendix F	<a href="https://docs.google.com/document/d/1F6KqgGjTf6wa5FhHMK18QL1IgTOKHnzJ/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1F6KqgGjTf6wa5FhHMK18QL1IgTOKHnzJ/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a> – Link Updated November 3

**UPDATED APPENDIX C – Proposed Environmental Development Permit - Draft Subdivision Plan noting Easements and Covenants**

**Proposed Subdivision**

Being submitted concurrently with the zoning amendment is an application to subdivide the remaining 16.57 acres, following the 8.85 acres park dedication, into five lots. The southern portion of the site will focus on attainable home ownership (Lot 1), and affordable rentals (Lot 2) with a commercial space to the corner of Minato and Peninsula Roads (Lot 4). The northern portion of the site is intersected by the central stream which has been provided to the District of Ucluelet as Parkland Dedication. This portion will accommodate *eleven* waterfront homes (Lot 3) and multiplex units which will be strata titled and sold, or where possible held for market rental.



**Legal Title**

**LOT 1: PHASED BUILDING STRATA (Attainable Homes)**

*This lot will have zero lot setback and will have 'construction stages' of Stage 1 (29 apartments/7 builds) then Stage 2 (11 buildings). The associated section of the private road will be constructed in conjunction with each Stage and each has it's own emergency vehicle access provisions. The lot will also have 'Strata Phases' in 18 phases as each building will be a phase, and when each multiplex completes, it will be surveyed and can be sold as attainable house and be occupied.*

**LOT 2: FEE SIMPLE TITLE (Affordable Rentals)**

*This does not require a municipal road as it has a frontage to Peninsula Rd. No need for this to be Bare Lot Strata as all rentals being held in one title/portion of land by one owner as affordable rentals.*

**LOT 3 FEE SIMPLE TITLE ACCESSED BY COMMON LOT (or Bare Land Strata) Waterfront Homes**

*This lot proposed to use Fee Simple Subdivision for 11 waterfront homes with 'access by common lot' (private entry road) under a Home Association. This model is more common in the interior and is*



under s312 of the Land Title Regulation and permits access via shared interest in common lot (private road entry). An alternative title if this is not supported can be Bare Land Strata.

**LOT 4: BUILDING STRATA (Commercial)**

CS2 zoned commercial build with office space above and retail below, in four strata titled sections.

**LOT 5: PHASED BUILDING STRATA (Market Multiplex)**

This will have 'Strata Phases' in 10 phases as each building will be a phase, and when each multiplex completes construction it will be surveyed and can be occupied, and sold if not retained for rental.

Commercial Zoned Lot 4

This is the proposed existing zoning to be used for Lot 4.

**CS-2 Zone - SERVICE COMMERCIAL**

This Zone is intended for convenient shopping opportunities for those travelling in vehicles and those commercial uses which, due to their service nature, may require large lot areas. Viability is added strictly mixed uses including residential and tourist commercial accommodation.

**CS-2.1 Permitted Uses:**

CS-2.1.1 The following uses are permitted, but secondary permitted uses are only permitted in conjunction with a principal permitted use.

(1) Principal:

- (a) Hotel
- (b) Motel
- (c) Mixed Commercial/Residential
- (d) Mixed Commercial/Tourist Guide
- (e) Office
- (f) Tourist Information Booth
- (g) Retail, including supermarket
- (h) Convenience Store
- (i) Restaurant
- (j) Biting/Cafe
- (k) Take Out Food Services
- (l) Personal Service
- (m) Commercial Recreation
- (n) Studio
- (o) Community Use

(2) Secondary:

- (a) Accessory Residential Dwelling Unit

CS-2.1.2 For Peninsula Road and Main Street, and for properties fronting either, Mobile Vending is also a principal permitted use.

**CS-2.2 Lot Regulations**

CS-2.2.1 Minimum Lot Size:

(1) Hotel: 1,000 m<sup>2</sup> (¼ acre)  
 (2) Motel: 1,000 m<sup>2</sup> (¼ acre)  
 (3) All other uses: 800 m<sup>2</sup> (0.081 ha)

CS-2.2.2 Minimum Lot Footage: 13 m (50 ft)  
 CS-2.2.3 Minimum Lot Width: 5m  
 CS-2.2.4 Minimum Lot Depth: 7.61

**CS-2.3 Density:**

CS-2.3.1 Maximum Number

- (1) Mixed Commercial/Residential: 4 residential dwelling units per 1,000 m<sup>2</sup> (¼ acre) lot area
- (2) Accessory Residential Dwelling (not 1 per 200 m<sup>2</sup> (2,700 ft<sup>2</sup>) non-residential gross floor area)

CS-2.3.2 Maximum Floor Area Ratio: 0.60  
 CS-2.3.3 Maximum Lot Coverage: 50%

**CS-2.4 Maximum Use (Gross Floor Area)**

CS-2.4.1 Principal Building

- (1) Restaurant: 40 units or 367 m<sup>2</sup> (1,000 ft<sup>2</sup>)

**CS-2.4.5 Minimum setbacks:**

CS-2.4.5.1 The following minimum setbacks apply, as measured from the front lot line, rear lot line and side lot lines, respectively:

	(a) Front Yard Setback	(b) Rear Yard Setback	(c) Side Yard - Street Setback	(d) Side Yard - Entrance Setback
(1) Principal	3 m (10 ft)	3 m (10 ft)	1.5 m (5 ft)	3 m (10 ft)
(2) Accessory	1.5 m (5 ft)	1.5 m (5 ft)	1.5 m (5 ft)	3 m (10 ft)

CS-2.4.5.2 In addition, the minimum rear setback of 4.7 m (15 ft) applies to all (a) front abutting Peninsula Road.

**Easements**

Positive and Negative Easements will be granted between the lots as follows, in the form of a Restrictive Covenant on title after settlement. An easement is the right to the use of or a right to restrict the use of the land of another person in some way. A positive easement gives the owner as right to do a positive act on another person's land. A negative easement imposes restriction on the owner The easement always accommodates the dominant tenement e.g. a servient owner grants the dominant owners a right of way over the servient owner's property,

Positive covenants:

- Lot 1 subservient to Lot 2 and Lot 4 by permitting services to pass through underground and sharing the roadway.
- Lot 2 subservient to Lot 4 and Lot 1 by permitting services to pass through underground and sharing the roadway.
- Lot 4 subservient to Lot 2 and Lot 1 by permitting services to pass through underground and sharing the roadway.
- Lot 3 subservient to Lot 5 for services and right of way to pass through.
- *Lot 5 subservient to Lot 3 for pedestrian egress right of way, and Lot 3 subservient to Lot 5 for same.*

**Sewer and Water Metering**

Despite the right of ways exchanged, this is a fairly simple subdivision as each lot has its own water and sewer access. The interim sewage storage solution was acknowledged as more suitable to be shared with all back to one lot.

**Request for Variance on Minimum Street Frontage**

Lot 1 requires a variance against usual bylaws to permit a narrow street frontage of minimum 10m though which services and driveway can run to unlock this hidden land.



**APPENDIX D – Draft Phased Development Plan and Draft PDA Agreement**

We are developing homes that seamlessly integrate with Ucluelet's stunning natural surroundings. This project is more than just housing—it's a master-planned community where sustainable, affordable homeownership meets modern design, benefiting local families and workers. This initiative will leave a lasting legacy, strengthening and enhancing the resilience of Ucluelet for generations to come.

**Concept and Environmental Harmony:**

The architecture is inspired by the coastal beauty of Ucluelet, using natural wood finishes, earthy tones, and expansive windows to bring the outdoors inside. Our homes are designed to blend into the landscape, preserving trees and green spaces, while reflecting the serene environment that surrounds them. This creates a peaceful living experience that aligns with nature.

**Quality Building Technology and Materials:**


Each residence is constructed with sustainable building materials and innovative techniques to ensure minimal environmental impact and high energy efficiency.

**A Commitment to Sustainability and Community:**

The apartments offer thoughtfully designed 1, 2, and 3-bedroom units with open-concept layouts to maximize space and light. Three-bedroom units include self-contained studios that can serve as rental units, helping to offset living costs.

Outdoor living spaces, including decks and patios, allow residents to enjoy the natural environment. The community plan incorporates green spaces, recreational areas, and bike paths that link to Ucluelet's wider trail network. Amenities like picnic areas, natural seating, and storage for kayaks and surfboards encourage an active, outdoor lifestyle.

Designed to foster both environmental stewardship and a sense of community. The integration of communal areas and paths ensures that residents not only live in harmony with nature but also with each other.

PHASED DEVELOPMENT PLAN	Stages	Build Form & Type	Title & Conditions
	<p><b>Stage 1</b></p> <p><b>LOT 1 - PART 1</b></p> <ul style="list-style-type: none"> <li>• Affordable Home Sales - Below-Market Homeownership</li> <li>• 2 Multiple Buildings</li> <li>• 25 Units</li> <li>• 2 x 1 Bedroom (12 x 2) and 1 x 2 Bedroom</li> </ul> <p>Note: Services such as recreation, landscaping, parking will be phased in aligned with construction phases.</p>	<p>• Phased Building Strata Title</p> <ul style="list-style-type: none"> <li>• Construction Stage 1: 17 for Two/Three/20 apartments</li> <li>• For Stage 1A, Three Stage 1 each Stage constructed as a Strata Phase so each building can be completed then surveyed and occupied</li> <li>• Note: Studios can be for long-term rental or short-term rental</li> <li>• CONSTRUCTION: Stage 1 construction commences with Stage 2.</li> </ul>	<p>• Fee Simple Subdivision (Home Association) or More Land Strata</p> <ul style="list-style-type: none"> <li>• Designed with option for intergenerational living with self-contained studio suitable for rental, home office, short-term rental</li> <li>• CONSTRUCTION: Stage 1 construction commences with Stage 2.</li> </ul>
	<p><b>Stage 2</b></p> <p><b>LOT 3: Waterfront Homes</b></p> <ul style="list-style-type: none"> <li>• 1 x Waterfront Family Home</li> <li>• accessed by connection to existing road entry</li> </ul> <p>Note: Services such as recreation, landscaping, parking will be phased in aligned with construction phases.</p>	<p>• Fee Simple Subdivision (Home Association) or More Land Strata</p> <ul style="list-style-type: none"> <li>• Designed with option for intergenerational living with self-contained studio suitable for rental, home office, short-term rental</li> <li>• CONSTRUCTION: Stage 1 construction commences with Stage 2.</li> </ul>	<p>• Fee Simple Subdivision (Home Association) or More Land Strata</p> <ul style="list-style-type: none"> <li>• Designed with option for intergenerational living with self-contained studio suitable for rental, home office, short-term rental</li> <li>• CONSTRUCTION: Stage 1 construction commences with Stage 2.</li> </ul>
	<p><b>Stage 3</b></p> <p><b>LOT 4: Commercial Precinct</b></p> <ul style="list-style-type: none"> <li>• 2000 sqm Street Front Retail - Cafe, Shop, etc.</li> <li>• 1000 sqm Street Front Office</li> </ul>	<p>• Building Strata Title (Commercial)</p> <ul style="list-style-type: none"> <li>• Two office levels above. Any retail below.</li> <li>• NOTE: Phase 3 will only be brought forward if government funding available and demand for services and space is fully taken up.</li> </ul>	<p>• Building Strata Title (Commercial)</p> <ul style="list-style-type: none"> <li>• Two office levels above. Any retail below.</li> <li>• NOTE: Phase 3 will only be brought forward if government funding available and demand for services and space is fully taken up.</li> </ul>
	<p><b>Stage 4</b></p> <p><b>LOT 2 - PART 1</b></p> <ul style="list-style-type: none"> <li>• 2 Flexible Rentals - 200 of Age</li> <li>• Market Rentals</li> <li>• 2 Multiple Buildings</li> <li>• 20 Units</li> <li>• 1 x 1 Bedroom (12 x 2) and 1 x 2 Bedroom</li> </ul> <p>Note: Services such as recreation, landscaping, parking will be phased in aligned with construction phases.</p>	<p>• Fee Simple Subdivision - hold an use title for affordable rentals.</p> <ul style="list-style-type: none"> <li>• CONSTRUCTION: Subject to government funding and approved zoning</li> <li>• Three Units 18, Two Stage 2</li> <li>• Service that shall only be adaptively used as 2 bedroom plus separate studio - not as a 3 bedroom</li> </ul>	<p>• Fee Simple Subdivision - hold an use title for affordable rentals.</p> <ul style="list-style-type: none"> <li>• CONSTRUCTION: Subject to government funding and approved zoning</li> <li>• Three Units 18, Two Stage 2</li> <li>• Service that shall only be adaptively used as 2 bedroom plus separate studio - not as a 3 bedroom</li> </ul>
	<p><b>Stage 5</b></p> <p><b>LOT 1 - PART 2</b></p> <ul style="list-style-type: none"> <li>• Affordable Home Sales - Below-Market Homeownership</li> <li>• 2 Multiple Buildings</li> <li>• 40 Units</li> <li>• 1 x 1 Bedroom (12 x 2) and 1 x 2 Bedroom (12 x 2) and 1 x 2 Bedroom</li> <li>• 2 Multiple Buildings</li> <li>• 20 Units</li> <li>• 2 x 1 Bedroom (12 x 2) and 1 x 2 Bedroom</li> </ul> <p>Note: Services such as recreation, landscaping, parking will be phased in aligned with construction phases.</p>	<p><b>LOT 1 - PART 2 - Phased Building Strata Title</b></p> <ul style="list-style-type: none"> <li>• Note: Stage 1B, Two Stage 2 each Stage constructed as a Strata Phase so each building can be completed then surveyed and occupied</li> <li>• Note: 2 apartment units include a studio apartment which can be used with second bedroom, but not for shared occupancy</li> <li>• CONSTRUCTION: Stage 1B and construction of affordable homes at 1 of Part 1 are included.</li> </ul> <p><b>LOT 2 - PART 2</b></p> <ul style="list-style-type: none"> <li>• Fee Simple Subdivision - hold an use title for affordable rentals.</li> <li>• CONSTRUCTION: Subject to government funding and approved zoning</li> <li>• Service that shall only be adaptively used as 2 bedroom plus separate studio - not as a 3 bedroom</li> </ul>	<p><b>LOT 1 - PART 2 - Phased Building Strata Title</b></p> <ul style="list-style-type: none"> <li>• Note: Stage 1B, Two Stage 2 each Stage constructed as a Strata Phase so each building can be completed then surveyed and occupied</li> <li>• Note: 2 apartment units include a studio apartment which can be used with second bedroom, but not for shared occupancy</li> <li>• CONSTRUCTION: Stage 1B and construction of affordable homes at 1 of Part 1 are included.</li> </ul> <p><b>LOT 2 - PART 2</b></p> <ul style="list-style-type: none"> <li>• Fee Simple Subdivision - hold an use title for affordable rentals.</li> <li>• CONSTRUCTION: Subject to government funding and approved zoning</li> <li>• Service that shall only be adaptively used as 2 bedroom plus separate studio - not as a 3 bedroom</li> </ul>
	<p><b>Stage 6</b></p> <p><b>LOT 5: Market Apartments</b></p> <ul style="list-style-type: none"> <li>• Market Rentals and sales</li> <li>• 10 Multiple Buildings</li> <li>• 20 Units</li> </ul> <p>Note: Services such as recreation, landscaping, parking will be phased in aligned with construction phases.</p>	<p>• Phased Building Strata Title</p> <ul style="list-style-type: none"> <li>• Initial temporary use as Construction Facility.</li> <li>• Apartments for long term and short term use/rentals or sale</li> <li>• Ten multiple buildings each constructed as a Strata Phase for each building</li> </ul>	<p>• Phased Building Strata Title</p> <ul style="list-style-type: none"> <li>• Initial temporary use as Construction Facility.</li> <li>• Apartments for long term and short term use/rentals or sale</li> <li>• Ten multiple buildings each constructed as a Strata Phase for each building</li> </ul>

### **Bylaw 1350 2024 Phased Landscaping Agreement**

The building and all associated works, including but not limited to civil, stormwater, services, roadworks, retaining and planting will be only obligated to be delivered concurrently with the stage that is being constructed.

#### **Phased Landscape**

- 22** Plans may be approved for large-scale developments at the discretion of the Manager to enable the completion of the landscape plan in phases and the submission of the related security deposit at each phase. The Applicant is required to request a phased approach to the execution of the landscape plan at the time of Development Permit application, clearly identifying on the submitted landscape plan the proposed phases and related cost estimates for each phase.

[Proposed PDA Agreement – Link Updated November 3](#)

**CLICK LINK ABOVE TO OPEN DRAFT AGREEMENT**

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THE DESIGNER HAS CONDUCTED VISUAL ANALYSIS OF THE PROPOSED PROJECT AND HAS DETERMINED THAT THE PROJECT IS VISUALLY COMPATIBLE WITH THE SURROUNDING ENVIRONMENT.



DATE	DESCRIPTION



PROJECT: 221 MINATO ROAD  
 SHEET: 001 OF 001

DATE	DESCRIPTION

A001









THE OFFICE OF THE COUNTY ENGINEER HAS REVIEWED THIS PLAN FOR CONFORMANCE WITH THE REQUIREMENTS OF THE CALIFORNIA PUBLIC UTILITIES CODE AND THE CALIFORNIA ELECTRIFICATION CODE. THIS REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE PLAN AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED HEREON. THE ENGINEER'S REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE PLAN AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED HEREON.



PROJECT: 221 MINATO ROAD  
SHEET: 001 OF 001

Appendix C6







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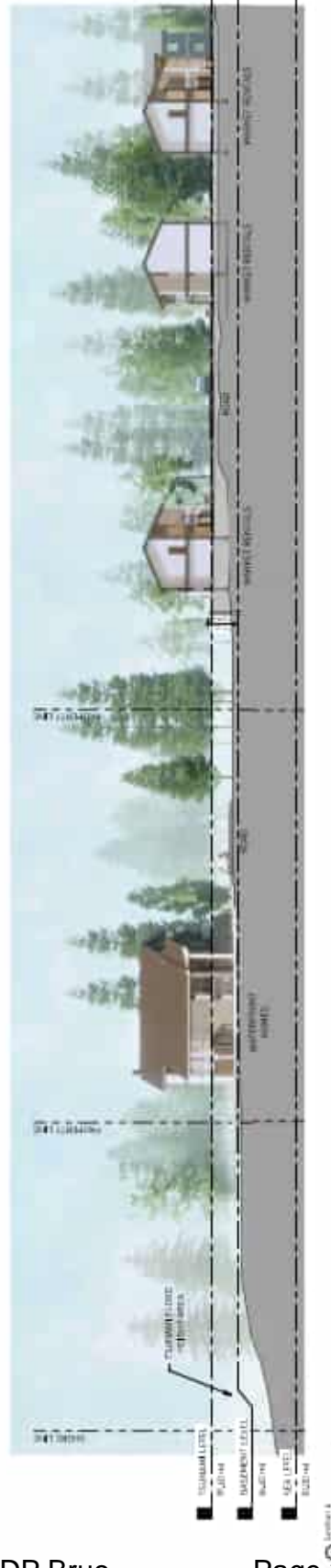
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PROJECT NO.	221 MINATO ROAD
DATE	2024-07-15
SCALE	1:100
DRAWN BY	J. SMITH
CHECKED BY	M. JONES
DATE	2024-07-15



**MINATO**  
 221 MINATO ROAD  
 UTA UTTERA

PROJECT NO.	221 MINATO ROAD
DATE	2024-07-15
SCALE	1:100
DRAWN BY	J. SMITH
CHECKED BY	M. JONES
DATE	2024-07-15







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FORMOSIS  
2011 WHITE PLAINS

Appendix C6

01

THE CITY OF BRUCE ARDREY, BRUCE COUNTY, ONTARIO  
 1000 BRUCE ARDREY ROAD, BRUCE ARDREY, ONTARIO N0G 1G0  
 TEL: 519-861-1000 FAX: 519-861-1001  
 WWW.CITYOFBRUCE.ORG

PROPOSED PROJECT: 221 MINATO ROAD, BRUCE ARDREY, ONTARIO  
 PROJECT NO.: 2017-0001  
 PROJECT NAME: 221 MINATO ROAD, BRUCE ARDREY, ONTARIO  
 PROJECT TYPE: RESIDENTIAL DEVELOPMENT  
 PROJECT STATUS: IN PROGRESS

DATE OF THIS REPORT: 2017-09-20  
 REPORT TITLE: ENVIRONMENTAL IMPACT STATEMENT  
 REPORT NUMBER: 2017-0001-01  
 REPORT AUTHOR: ERIF CONSULTANTS  
 REPORT REVIEWER: ERIF CONSULTANTS  
 REPORT APPROVER: ERIF CONSULTANTS  
 REPORT DATE: 2017-09-20



Project Name	221 Minato Road, Bruce Ardreay, Ontario
Project No.	2017-0001
Project Status	In Progress
Project Type	Residential Development
Project Location	221 Minato Road, Bruce Ardreay, Ontario
Project Start Date	2017-09-20
Project End Date	2017-09-20



221 MINATO ROAD  
 BRUCE ARDREAY, ONTARIO

Appendix C6

2017-09-20



**Bruce Greig**

<b>From:</b>	Joshua Hunt <joshua.h@erif.ca>
<b>Sent:</b>	October 8, 2024 7:27 AM
<b>To:</b>	Bruce Greig
<b>Cc:</b>	Juliette Green; Jodie Thompson; sarah.h@igvnexus.com; Duane Lawrence; John Towgood; James Macintosh
<b>Subject:</b>	Re: 221 Minato Road
<b>Attachments:</b>	Reply to Bruce 1- 20241007.docx

[External]

Hi Bruce

We appreciate the opportunity to provide clarification on the specific components mentioned in our proposal.

I thought the easiest way to answer the questions is write my responses in blue on the attached word document that shows your questions and then our answers to them.

We are committed to transparency and would be happy to provide further documentation or meet to discuss these details in greater depth.

Thank you again for your support and guidance throughout this process.



**Joshua Hunt | CEO**

 (236) 507 - 4309 |  [joshua.h@erif.ca](mailto:joshua.h@erif.ca) |  [www.erif.ca](http://www.erif.ca)



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On Fri, Oct 4, 2024 at 12:19 PM Bruce Greig <[bgreig@ucluelet.ca](mailto:bgreig@ucluelet.ca)> wrote:



Hi Joshua, Juliette and Jodie;

Thank you for submitting materials for development applications at 221 Minato Road. We have begun reviewing the materials submitted to date. We'll circulate portions for external reviews when all the pieces are in; meanwhile we've started to review the package.

We have not reviewed all the details of the various consultant reports yet.

A few areas stand out where clarification is needed, and we want to put them to you as early as possible.

A. Housing mix and affordability:

The application materials submitted propose leaving the specifics of affordability to a later date. While it is understandable that a developer wants flexibility, there is also a need to clearly disclose what the landowner / applicant will commit to - so that the public can form a clear understanding when commenting to Council in a public hearing on the bylaws. While we can process the application based on the information provided, it would be strengthened by being clearer on the unit mix, rent / price and eligibility (income, residency, etc.). Some things to consider:

ERIF's legal structure is composed of a company and not-for-profit with a mandate to provide restorative benefits to communities, whether that be in the supply of affordable and attainable housing or the creation of green energy sources.

The reason at this early stage, the exact levels of attainable housing have not been outlined, are that there are still a lot of costs in this project that are yet to be ratified.

One such unknown cost is from the DoU itself. As you would understand, it is hard (actually near impossible) for any entity that plans to sell and rent apartments at cost price to the community, to outline a sales price when the DoU has not told us what the costs of connecting to town services will be. In addition, there are other costs, like building the retaining wall for the purposes of lifting the construction levels to meet new Tsunami flood levels that are still under consultation with the required levels and then the required engineering still being worked through.

As such, it would be crazy to put ERIF (an organization established for the purpose of doing good) at this early stage, into a position of potential bankruptcy by enforcing a commitment to supply a certain number of attainable homes, at a certain price when we are still working on solidifying what the project costs will be. Particularly when management of costs is the only way that affordable housing can actually be provided.

- The OCP bylaw Policy 3.143 requires that rezoning applications involving more than 5 units dwelling units shall provide a statement describing the affordable housing components achieved by the proposal.

Lot 2 of the project, with 107 apartments will be financed by CMHC and/or BC Housing under their affordable rental scheme. CMHC funding requirements dictate that a minimum of 30% of the 107 apartments in this section of the development will be rented at 79% of the median rentals of this area. CMHC dictates to us what this rental amount will be (outlined further below). We are also working with BC Housing who have stated that they would also be interested in contributing to this project which would enable ERIF to increase the CMHC minimum beyond 30%. Likewise, BC Housing dictates to us what this rental amount will be for these apartments. The rest of the apartments in this Lot will be rented at market rates applicable to this area.

ERIF's desire is to provide as many affordable rentals as is commercially viable but CMHC, as the principal funder dictates to us what commercial viability looks like, which is, that the funding is conditional upon achieving a 1.1 DCR.

I'd be happy to go through these numbers with Staff so they can see exactly how it all comes together as the requirements of these government initiatives are quite involved and restrictive if this helpful.

- Policy 3.134 targets a minimum of 75% of housing in new developments to be **attainable** by Ucluelet resident households.

Sorry but I think I must have missed something here. Bruce, can you check for me that this minimum is correct as it doesn't seem to make sense? If it is correct, I can see how with the price of land and increasing construction costs it's a near impossibility for any traditional developer to build anything other than tiny, one-bedroom homes in Ucluelet, if at all.

This is what the rental and sale price based on the below DoU definition of the term "attainable housing" actually looks like:

2021 Census - median household gross income in Ucluelet = \$83,000

- Attainable
- a) Adjusted income = up to 120% of median income = \$ 99,600
  - b) Restriction of up to 30% of adjusted income allocated to housing cost = Max Rental = \$29,880 pa or \$2,483 per month

2024 Market Rental (per month) 2 Bed = \$2200 – 2500. 3-Bed = \$2400 - 2900

Mortgage = loan serviceability of \$29,880 pa would allow for borrowings of up to \$550,000. At a 90% lend this would mean that the maximum purchase price of a property is \$611,000.

Then from a developer's point of view. If they could purchase land at \$600k and were to build 2 apartments on it at an average build cost of \$425/ sq ft the largest apartment that can be built is 731 sq/ft which would be tiny 2 bedroom or a spacious 1-bedroom dwelling.

I think we need to work together to change this. Thanks for bringing this to my attention as I don't think this is the actual intent of the DoU – the community needs housing, and we should work together to provide this.

If what is listed above as a minimum requirement is truly needed to allow this project to proceed, ERIF could simply eliminate all 3-bedroom options and only provide 1- and 2-bedroom apartments. This would ensure that 240 of our 250 dwellings that are being constructed on the site, fall within the DoU definition of “attainable housing”. I don't think this is the right direction to go as I think the community would benefit from having a 3-bedroom mix within the project and await your thoughts on this.

- The OCP bylaw defines “**affordable housing**” as: *“housing costing 30% or less of annual household income suitable for households of low and moderate income, equal to 80% or less than the median household income in the District of Ucluelet, as reported by Statistics Canada and as defined by Canada Mortgage Housing Corporation, CMHC”.*

#### DoU Affordable Definition

2021 Census – median gross household income in Ucluelet = \$83,000

- Adjusted income = 80% of median income = \$ 66,400
- Restriction of up to 30% of adjusted income allocated to housing costs =  
Max Rental = \$19,920 pa or \$1,660 per month

To date CMHC has not told us what criteria will be for people to qualify for the affordable rentals of Lot 2 – they have only told us what the proposed rental rates will be.

CMHC have provided the following (which we consider to be grossly inaccurate based on current local rates): Median Rents: 1 bed = \$900, 2 Bed = \$1170, 3 Bed = \$1450. Therefore, the rents and what CMHC require ERIF not-for-profit to charge on 30% of the site for affordable housing are as follows: 1 Bed = \$743, 2 Bed = \$972, 3 Bed = \$1200.

As you can see, these affordable rental rates are far below current market rates in Ucluelet and even the DoU definition and as such I don't think the DoU should be placing additional restrictions and covenants on the land when this part of the project is being funded by CHMC. They as the principal funder, will be the governing body who will ensure the rental rates and eligibility criteria are being met.

In addition to CMHC funding we are talking to BC Housing who have a different formula and criteria that they use and determine what rental rates will be charged. I think it would be crazy for DoU to also add their covenant restrictions to the site when you have CMHC and BC Housing both already providing restrictions particularly when the intent is to provide as much affordable housing as we can.

I think a good way forward would be for the DoU to place a restriction on Lot 2 that any development on this Lot must be built and funded by CHMC and/or BC Housing under their affordable rental schemes. This will determine and ensure the adequate number of affordable rentals being delivered to the community

- Council has adopted a policy to clarify what is meant by attainable:
 

*“**attainable**” housing is considered housing that is affordable to Ucluelet households earning 120% or less than the median gross household income, as determined by the latest census, spending no more than 30% of their household income on housing costs”.*

ERIF’s commitment to Council is that Lot 1 will be built with 0% developers’ margin and will be offered for sale back to the local community. I have no problem not calling the apartments attainable housing if this is in conflict to the DoU definition.

When we discussed the application criteria with some Councillors, the Mayor and Staff we all decided that we do not want these apartments means or income restricted. The criteria we agreed on is listed on page 7 of the linked document below.

[https://www.canva.com/design/DAGO - duZyg/OER4r0hHyku5GFzGrXaWWQ/view?utm\\_content=DAGO - duZyg&utm\\_campaign=designshare&utm\\_medium=link&utm\\_source=editor#7](https://www.canva.com/design/DAGO - duZyg/OER4r0hHyku5GFzGrXaWWQ/view?utm_content=DAGO - duZyg&utm_campaign=designshare&utm_medium=link&utm_source=editor#7)

It would be foolish of me to proceed with this development and have ERIF holding the debt on a project with 0% margin because of a restriction on the title of the property saying who does or doesn't qualify to buy these properties. I don’t believe it is the intent of the DoU to restrict housing to its local people and this type of covenant could do just that.

The statement describing the mix of housing components should use these terms consistent with the definitions above. Units that fall outside the definition of affordable or attainable are still valuable, but it needs to be clear what is actually being proposed.

Yes agreed – terminology needs to be consistent and defined. At this stage within the DP submission this is what we have proposed:

**- Lot 1 defined “at cost”** – 75 apartments sold with 0% developer’s margin. The goal is to make these apartments "attainable" per DoU definition. However, since we don't yet know the total project costs, including costs from the DoU, we can't confirm if we'll meet these criteria for "attainable" pricing (maximum sales price of \$611,000 and maximum rent of \$29,880 per year or \$2,483 per month). However, it's unlikely the 3-bedroom units will meet this definition, so if 75% of the units must be "attainable," ERIF’s only option maybe to remove the 3-bedroom configuration from the plans.

- **Lot 2 defined as CMHC “affordable”** – 107 apartments. As this is going to be financed by CMHC under their affordable rental scheme, the project will need to comply with CMHC criteria which may differ from the DoU definition. ERIF request a reprieve from the DoU “affordable” definition with a qualifier based solely on the government principal funder enforcing their restrictive covenants as has been outlined above.

Lot 3, 4 and 5 make up a total of 28% of the density of the site but carry 50% of the land acquisition costs so that ERIF can help deliver low-cost housing to the community in Lots 1 & 2.

- **Lot 3 defined as market** - 10 waterfront homes - does not fall within the DoU definitions of “affordable” or “attainable”.

- **Lot 4 defined as commercial** – facility on the corner of Minato and Peninsula.

- **Lot 5 defined as market** - 58 apartments for sale or rental. We do anticipate that a large number of these apartments might still qualify under the DoU “attainable” housing definition but this will be based on demand.

In the housing statement, please also describe the anticipated strata fees for the proposed affordable and/or attainable sales units. Strata fees are included in the total housing costs when assessing affordability against household incomes.

As we are applying concurrently for DP as well as subdivision changes, we understand this question but as outlined above, ERIF is undertaking to provide low-cost housing to the community through strategic allocation of the site so that costs can be managed to make this project viable. To this end, strata fees will be as efficient and cost effective as possible.

But it is too early for us to put together a strata budget which will be included in the apartment contracts when they have been formed. It is an important part of the process, but we are just not at this stage yet until final master planning has been completed and approved and costs quantified.

However, as a reply we intend our strata fees to be an open book of actual costs, initially outlined by ERIF but then annually set by the apartment owners via a committee/council. Where typically for developments such as these the costs would include some fixed and some variable cost items like:

1. **Rates:** paid to Council (usually based on land value but can include surcharges for upgrade of roads and services) – yet to be advised by DoU.
2. **Water / Sewerage:** with a base contribution for each property for the sewage and connection fees. Then usage may be sub metered based on actual usage for each unit. If not sub metered, it would be shared as a proportionate contribution based on unit holdings.

3. **Power:** shared as a proportionate contribution to BC Hydro expenses based on unit holdings for shared costs like power to streetlights and shared EV stations (if not a pay-as-you-go model). Also note we are in the process of seeking a grant for solar for the project which will further reduce the costs of electricity and the strata fees.
4. **Maintenance:** contribution to maintenance of common area (usually based on an internally drafted 20-year maintenance plan, such as road maintenance, arborist and landscaping etc).
5. **Fire and other emergency service requirements** (e.g. annual checks and reporting, often higher for multiplex and determined by local regulations, and fire provider pricing e.g. does each building require X number of fire extinguishers that need to be checked and refilled annually?).
6. **Insurances:** a strata owner would usually need to contribute to insurance costs that are held collectively across the development for all buildings. We may propose for Lot 3 that there is a nominal strata insurance, and each home is individually insured. For Lot 1 this will likely be a shared strata policy and each unit holder contributing proportionate to their ownership.
7. **Strata management costs:** if there is an external management company for strata there would be an administrative cost to this. They would coordinate the repairs and maintenance for owners. Possibly ERIF could bill this to Lot 1. For Lot 3 and similar projects this may be managed directly by owners if a small number of lots. If combining say 10 waterfront homes and 21 smaller single-family homes in Lot 5 we may need to review this and allow for strata management fees, but need to keep these as low as possible as it's a big put off to potential owners to have outgoings that would not apply to other freestanding homes.
8. **Waste:** hoping we can arrange municipal collection included in rates. We are discussing with Mayco Noel at Ozzard Waste Management to ensure we are designing whatever is needed to get municipality collection e.g. can he collect from our enclosed bear proof bin bays or do these need to be hauled to the street frontage (noting that the frontage for Lot 1 to Minato is very narrow at 12m wide so bins there would be problematic). For the waterfront homes and potentially single-family Lot 5 what are the bin types and will owners bring them to the kerb of the private road? We want minimum fuss of hauling bins to a collection point) or this may end up having to be a strata cost), and to comply with whatever is needed so they can be collected from the private road loops not hauled to street frontage.

Strata costs will be allocated as being proportionate to the unit holdings (i.e. a 3-bedroom unit would contribute more than a 1-bedroom, relative to the total built area in the strata and are usually expressed as a ratio of total holdings e.g. 20:800).



Further detail will be necessary to understand the following elements mentioned in the proposal:

- Not-for-profit housing organization

ERIF Housing Association, a not-for-profit entity, will oversee the attainable homeownership initiative and rental units within the project of Lots 1 and 2. This organization is dedicated to addressing local housing needs, ensuring that profits are reinvested into the community rather than being driven by developer profit margins. We will engage a rental management company with 5+ years of experience to manage the affordable rentals properties.

- Sub-committee of the not-for-profit housing association

A dedicated sub-committee within ERIF Housing Association will be formed to develop and implement qualification criteria for the attainable homeownership initiative. This group will be responsible for ensuring transparency and fairness in the allocation of homes, working closely with local stakeholders to prioritize Ucluelet residents. We have suggested that the committee is made up of a member of council, chamber of commerce, a social welfare organisation and a representative from ERIF Housing Association.

- Qualification criteria (e.g., residency, incomes)

Our qualification criteria for the attainable homeownership initiative is included in the DP application and is designed to prioritize Ucluelet residents and workers. The primary criterion is that applicants must use the property as their primary residence, with further prioritization for those who have lived in Ucluelet or the surrounding areas for at least one year. Income criteria will not be imposed, but the initiative will ensure homes are allocated to individuals and families committed to the community.

- Rent caps

For the 107 affordable rental units, we are committed to aligning rent levels with CHMC and/or BC Housing affordable housing definitions.

- Price caps

The attainable homeownership units will be sold at below-market rates, reflecting the efforts to minimize construction costs and eliminate developer profit. Final pricing will be determined based on ongoing evaluations and final costings, ensuring affordability for local families.

- Resale caps

To preserve affordability over time and prevent property speculation, resale caps will be enforced. Should a homeowner wish to sell within the first five years, ERIF Housing Association will have the first right to repurchase the property at the

original purchase price plus a modest percentage (3% for each year held). This ensures long-term affordability while allowing homeowners some flexibility for future resale.

Please also describe the proposed duration of affordable and/or attainable agreements.

The affordability duration for Lot 2 is set by CMHC and is 20 years. As far as our intention for Lot 1 sales at cost, as per page 7 listed above, ERIF provides a 3-year term.

The details of the commitment to affordability will need to be drafted in a housing agreement, and attached as a schedule to a housing agreement bylaw, ahead of the public hearing.

We aim to collaborate with the Council and possibly the Chamber of Commerce to define the criteria and ensure the project benefits the community without straining ERIF or the project itself.

B. Approach to subdivision:

Appendix D in the application materials describes the proposed lots. A few questions to help us define the zoning amendment and phased development agreement bylaws:

- Proposed Lot 1 is described as “strata titled for affordable sales with zero lot setback or phased development”. Does this mean creating a **phased strata** over Lot 1, or **separate strata-titled buildings** (i.e., neighbouring stratas within the area of Lot 1) or does it refer to elements that would be included in a **phased development agreement**? They each have different implications for what needs to go into the bylaws.

**Lot 1 – below market sales / attainable** is proposed as a **Residential Phased Strata** and we are in the process of preparing Form P allowing for our buildings on site to be constructed in sequenced phases.

Our intent is to build each stage with a phase per building and obtain building occupancy at the completion of the phase allowing for sale and occupancy of the apartments as soon as practicable.

(For our clarity purposes – we propose on this Lot that a strata plan will be registered after the first phase is completed, and as the development progresses, each subsequent phase is merged with the original strata plan rather than create a new strata corporation every time a strata plan is filed in the Land Title Office.)

On Lot 1 we will construct 7 multiplex buildings, 75 apartments which will have ONE strata corporation. 29 Apartments in Stage 1 (2 x 1 bed, 13 x 2 bed, 14 x 3 bed) and in Stage 2, 46 Apartments (4 x 1 bed, 20 x 2 bed, 22 x 3 bed).

**Stage 1**

---

Phase 1 = Building 1E3 – common = surf & kayak storage, parking, garbage storage

Phase 2 = Building 2E1 – common facilities = parking

Phase 3 = Building 3E1 – common facilities = parking

Phase 4 = Building 4E1 – common facilities = parking

Phase 5 = Building 5E1 - common facilities = parking

Phase 6 = Building 6E1 - common facilities = parking

Phase 7 = Building 7E1 - common facilities = parking



**Stage 2**

Phase 8 = Building 8E1 – common facilities = parking

Phase 9 = Building 9E1 – common facilities = parking

Phase 10 = Building 10E1 – common facilities = parking

Phase 11 = Building 11E1 – common facilities = parking

Phase 12 = Building 12E1 - common facilities = parking

Phase 13 = Building 13E1 - common facilities = parking

Phase 14 = Building 14E1 - common facilities = parking

Phase 15 = Building 15E3 - common facilities = parking

Phase 16 = Building 16E3 – common = surf & kayak storage, parking, garbage storage

Phase 17= Building 17E1 - common facilities = parking

Phase 18 = Building 18E3 – common = surf & kayak storage, parking, garbage storage



In respect to common facilities for this Lot they are noted above and include surf & kayak storage facilities, parking bays and garbage storage.

In respect to the phased strata, ERIF is requesting a zero-lot setback for construction on this lot based on section 238(2) of the SPA providing that parcels in a phased strata plan that will be consolidated on deposit of a phase are deemed to be consolidated for the purpose of enabling a building inspector to issue a building permit in respect of a building.

In reference to the Phased Development Agreement our understanding was that this agreement formalized the commitment we have made to the DoU in respect of which dwellings, and lots will be completed and in what order, ensuring that we have in writing that low cost is the priority of this development site. This agreement therefore is the overarching document of that commitment rather than specific to strata allocations.

- Proposed Lot 2 is described as “Bare Lot Strata all held in one line as affordable rentals”. Does this mean each building containing rental units would be located on a separate legal parcel created by bare land strata? And those parcels would be held under common ownership (but possibly sold separately)? Please clarify what “held in one line” refers to: we believe this may need a bit of translation from Aussie to Canuck.

#### **Lot 2 – defined as CMHC “affordable”**

We will need further guidance from you in respect to how this portion is subdivided.

The intent here is to have all buildings (and apartments) owned by ERIF Housing Association (this was our reference to being held in one line) and rented under CMHC restrictions for a period of 20 years. After this time (20 years) the buildings will then continue with ERIF Housing Association providing local community housing. ERIF aren’t anticipating selling these apartments and therefore separate strata isn’t required. There is no phasing required but construction will occur over two stages.

On Lot 2 we will construct 16 multiplex buildings, 107 apartments which will be owned and managed through not-for-profit ERIF Housing Association. 39 Apartments in Stage 1 (18 x 1 bed, 21 x 2 bed, 0 x 3 bed) and in Stage 2, 68 Apartments (36 x 1 bed, 32 x 2 bed, 0 x 3 bed).

ERIF Housing Association would be responsible for ALL costs including any maintenance and repairs including on any common use areas and there is no strata contributions etc as these properties are simply rentals. It is proposed that tenants will be responsible for utilities in addition to their rental but no additional on costs.

It is our understanding that a **bare land strata plan** may not be the right option for this intention and so ask for your guidance here. (Again, for our clarity, a bare land strata is a one that is defined with reference to land survey markers rather than floors, walls, or ceilings (SPA, s 1(1)). A bare land strata plan will not depict buildings located within a strata lot, including if the building existed when the bare land strata plan was created. However, a bare land strata plan will depict buildings located on common property.)

- Proposed Lot 3 refers to a “fee simple subdivision... with common lot under home association”: does the common lot refer to the road? If so, that would not be a fee-simple subdivision (a fee-simple subdivision would require public road dedication).

We would like to request further guidance from you in respect to how this portion is subdivided.

The intent here is to create 10 individual lots which will be sold and owned by individual parties. We anticipate the road to be private, held and managed as common property by a Housing Society consisting of each of the 10 lot owners. Lot owners are responsible for all costs on their lot up to where their driveway meets the road. We do not require build

covenants on this subdivision as ERIF are building all houses on Lot 3 and will sell completed dwellings.

The advice that we have been given was that proposal could be managed by a bare land strata but it would be great if you could confirm.

If bare land strata is going to be proposed (phased or not) within any of the Lots, the application should show the area of each of those proposed bare land strata parcels: we would need to know the areas to enable us to draft the bylaws. If any of the lots are proposed to be developed as a phased strata (building strata or bare land strata) then you will also need to define what amenities or common facilities will be provided for the use of the strata owners, with each phase.

#### Noted

##### C. Phasing:

Separate from how title to the various parcels of land and units are legally defined, the application also proposes a phased development agreement (PDA). The details of the PDA will have to be worked out prior to Council sending it (along with OCP amendment and zoning amendment bylaws) to a public hearing. To expedite the drafting of a phased development agreement, please provide a framework for discussion. This can be simply a list of a) the specified bylaw provisions you wish the agreement to cover, and b) those items that you foresee will be constructed with each phase of the development. This includes servicing and utilities; the timing for each phase of clearing, grading and retaining walls; environmental remediation or enhancement features; landscaping; parks & playground features – many of the items listed on pages 7 to 9 of the application materials package. In a number of places, the application refers to detailed designs to be provided at a later date; the PDA will define the scope and timing of when those will be delivered.

The application materials do not exactly describe the project phases in a way that matches what would be committed to in the PDA, which is fine – but we need to clarify. For the purpose of phasing, it looks like you intend to approach construction in four phases as follows (please confirm):

The framework you requested was provided upon submission.

Please refer to Appendix F – Draft Phased Development Plan and Draft PDA Agreement within the [Cover Letter](#) (page 19). This references the triggers in which these phases will be executed rather than specific dates. Two examples of these triggers are as follows:

- Lot 2 Part 1: will commence upon approval of government funding and once the DP approval is in place.
- Lot 1 Part 2: will commence when Lot 1 Part 1 Attainable Homes have sold out which allows the market to respond to the demand. respond to market demand for housing.

On this table it is also noted that servicing civils, stormwater, landscaping/planting will be done in aligned with construction processes per each phase. Each phase will have the lot completed in its entirety including landscaping, public amenities, green energy measures, etc. For further explanation please refer to the Proposed PDA (found on page 20) as an individual document here:

<https://drive.google.com/file/d/1i4nAUxAHJUudN1skFdLn3yqkLFs1EnxK/view?usp=sharing>. It's worth noting that this document is based off a template used by Nanaimo Municipality for their Phased Development Agreements.

- Page 4 Section 4.1 states the Specified Bylaw Provisions.
- Page 5 Section 7.1 Servicing Agreement states in respect to works and services that “the Developer covenants and agrees that it will enter into a Works and services agreement with the District in accordance with the requirements of the District’s Bylaw”.
- For each construction phase, please identify any proposed environmental protection, extent of clearing, earthworks, on- and off-site servicing, green energy measures, public amenities, etc. These will be spelled out in the PDA document.

ERIF is dedicated to supporting communities towards sustainable infrastructure, carbon neutrality and expediting reconciliation. These principles find echoes in the 221 Minato Road project's environmental assessment. As we embark on the development, we are deeply committed to minimizing our impact on the existing tree population and ensuring their continued vitality. We are aware of the previous owner's unethical actions that damaged the ecosystem. We want to emphasize that our approach is entirely different.

Our Approach:

- Tree Preservation: is at the upmost importance. Wherever possible, we will strive to preserve existing trees. Our team will carefully assess each tree, prioritizing preservation at every opportunity.
- Regeneration and Restoration: We are dedicated to not only preserving existing trees but also actively contributing to the site's ecological richness. We have a comprehensive regeneration plan in place:
  - Plant a diverse array of native trees and vegetation throughout the development including but not limited to 31 western hemlock trees, 20 Western redcedar and 15 Sitka spruce within the restoration area. The density of the regenerating tree saplings is approximately 3-5 trees per 100m2 which is approximately 114 naturally regenerated trees within the restoration area.
  - Use organic soil on site as a growing medium for planting areas and salvage native plants, logs and stumps with soil and live native vegetation. This will assist in incorporating native plant seed banks and add natural local form and character to the development.



- Use of naturally stacked rock and include pocket plantings using native coastal vegetation. All seeding will include recognized west coast seed mix (i.e. clover, vetch, wildflower).
- Culturally Mindful: The Yuuʔitʔath Government - Ucluelet First Nation (UFN) were engaged to conduct a preliminary field reconnaissance (PFR) on the culturally modified trees present on the site. These tree do not effect our masterplan and will be outline in the full archaeologist report
- Environmental Specialists: We have also engaged a team including Environmental Biologist from Aquaparian and a local Arborist who will oversee the setback reduction process. Their expertise will ensure that any tree which is classified as dangerous under WorkSafe BC Regulation Section 26.11 is removed in such a way that minimizes disruption to the surrounding ecosystem. Aquaparian will also be engaged as part of the retaining wall design where they interact with parklands to protect the trees in those zones and their root structures.

At ERIF, we believe that responsible development and environmental preservation can go hand in hand. We are dedicated to creating a vibrant community at 221 Minato Road while ensuring the protection and enhancement of the natural environment.

D. Temporary Use Permit:

- Is the proposal to erect the manufacturing facility before or after the construction of retaining walls and regrading in the area of proposed Lot 5?

Yes, we plan to erect the temporary structure prior to the construction of the required retaining walls while leaving adequate space for these walls to be built while the temporary structure is in place.

- The application refers to the temporary building as being insulated, but also describes a fabric-covered steel structure. Please clarify.

While the temporary building is a single skin vinyl membrane on a steel structure, it does offer insulation properties and will be heated to maintain a controlled working environment for our construction staff.

Our temporary building supplier has advised that they don't tend to assign an insulation value to the single skin vinyl membrane. Their installers will do their best to seam and seal, so we will have decent control of the airflow and suggest that we allow for expanding foam in the blocks (as they always have some gap at the seams). They have also advised that depending on the final layout etc, some clients have opted to trim the blocks in foam board and plywood to reduce the thermal bridge at the blocks.

- The application refers to a treed buffer remaining to screen the view of construction on Lots 1 and Lot 3: does this refer to trees on- or off-site? Please clarify.

We intend to leave as many trees as possible on site to create a division, privacy and screening between all buildings, stages and lots. Additional trees will be planted between Lot 3 and Lot 5 to create further screening and to beautify this area that has been cleared by previous owners.

- If electrical demand for the facility exceeds the existing 400A service prior to new Hydro services to “Lot 5”, will generators be used?

Based on our current assessments, we do not anticipate electrical demand to exceed the existing 400A service available on-site. Should additional power be required in the future, it will be evaluated and addressed appropriately by application the BC Hydro through our expert consultants Electrical Engineers at RB Electrical. Additional capacity is more likely to be created through the broader BC Hydro electrification process rather than interim need for generators.

**Fees:**

As we discussed when you were in the office last week, it would be appropriate to submit the fees once you have all the initial materials together for your application including the tsunami flood engineering report and the report on the archaeological assessment. A summary of the application fees at this stage:

- OCP amendment: \$1,600 plus \$500 per HA over 1 HA based on developable lands: \$4,600
- Zoning Amendment: \$1,000 plus \$500 per HA over 1 HA: \$4,000

(Site area: 6.67 HA/16.47 AC)

- Development Permit (environmental): \$1,000 plus \$500 per HA over 1 HA: \$4,000
- Development Variance Permit: \$600
- Temporary Use Permit: \$350
- Public hearing fee: \$700
- Notification fee: \$500 x 2 (OCP/rezoning/DVP plus separate for TUP)

Total: \$15,250

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At this point it would be premature to process a subdivision application, as the bylaw amendments and permits listed above are pre-cursors to the subdivision of the land. A subdivision application could be reviewed as the zoning, on- and off-site servicing and specific terms of a phased development agreement become clearer. At that time, the fees would be:

- Subdivision: \$800 plus \$150 per lot
  - Development Permits (form & character – commercial and multi-family) for individual phases of building and associated landscaping: \$1,000
  -
- 

I hope all the above helps.

We look forward to receiving the flood engineering report and the report on the archaeological assessment. We will expedite the review and collection of comments back from the internal and external referrals, and will let you know of any further areas for clarification.

As always, please don't hesitate to contact me if you have any questions.

Regards,

Bruce

Bruce Greig

Subject:

FW: 221 Minato Road

**From:** Bruce Greig**Sent:** October 4, 2024 12:19 PM**To:** Joshua Hunt <joshua.h@erif.ca>; Juliette Green <juliette.g@erif.ca>; Jodie Thompson <jodie.t@erif.ca>; sarah.h@ignexus.com**Cc:** Duane Lawrence <dlawrence@ucluelet.ca>; John Towgood <JTowgood@ucluelet.ca>; James Macintosh <jmacintosh@ucluelet.ca>**Subject:** 221 Minato Road

Hi Joshua, Juliette and Jodie;

Thank you for submitting materials for development applications at 221 Minato Road. We have begun reviewing the materials submitted to date. We'll circulate portions for external reviews when all the pieces are in; meanwhile we've started to review the package.

We have not reviewed all the details of the various consultant reports yet.

A few areas stand out where clarification is needed, and we want to put them to you as early as possible.

**A. Housing mix and affordability:**

The application materials submitted propose leaving the specifics of affordability to a later date. While it is understandable that a developer wants flexibility, there is also a need to clearly disclose what the landowner / applicant will commit to - so that the public can form a clear understanding when commenting to Council in a public hearing on the bylaws. While we can process the application based on the information provided, it would be strengthened by being clearer on the unit mix, rent / price and eligibility (income, residency, etc.). Some things to consider:

- The OCP bylaw Policy 3.143 requires that rezoning applications involving more than 5 units dwelling units shall provide a statement describing the affordable housing components achieved by the proposal.
- Policy 3.134 targets a minimum of 75% of housing in new developments to be **attainable** by Ucluelet resident households.
- The OCP bylaw defines "**affordable housing**" as: "*housing costing 30% or less of annual household income suitable for households of low and moderate income, equal to 80% or less than the median household income in the District of Ucluelet, as reported by Statistics Canada and as defined by Canada Mortgage Housing Corporation, CMHC*".
- Council has adopted a policy to clarify what is meant by attainable: "**“attainable” housing** is considered housing that is affordable to Ucluelet households earning 120% or less than the median gross household income, as determined by the latest census, spending no more than 30% of their household income on housing costs”.

The statement describing the mix of housing components should use these terms consistent with the definitions above. Units that fall outside the definition of affordable or attainable are still valuable, but it needs to be clear what is actually being proposed.

In the housing statement, please also describe the anticipated strata fees for the proposed affordable and/or attainable sales units. Strata fees are included in the total housing costs when assessing affordability against household incomes.

Further detail will be necessary to understand the following elements mentioned in the proposal:

- Not-for-profit housing organization
- Sub-committee of the not-for-profit housing association
- Qualification criteria (e.g., residency, incomes)
- Rent caps
- Price caps
- Resale caps

Please also describe the proposed duration of affordable and/or attainable agreements.

The details of the commitment to affordability will need to be drafted in a housing agreement, and attached as a schedule to a housing agreement bylaw, ahead of the public hearing.

#### **B. Approach to subdivision:**

Appendix D in the application materials describes the proposed lots. A few questions to help us define the zoning amendment and phased development agreement bylaws:

- Proposed Lot 1 is described as “strata titled for affordable sales with zero lot setback or phased development”. Does this mean creating a **phased strata** over Lot 1, or **separate strata-titled buildings** (i.e., neighbouring stratas within the area of Lot 1) or does it refer to elements that would be included in a **phased development agreement**? They each have different implications for what needs to go into the bylaws.
- Proposed Lot 2 is described as “Bare Lot Strata all held in one line as affordable rentals”. Does this mean each building containing rental units would be located on a separate legal parcel created by bare land strata? And those parcels would be held under common ownership (but possibly sold separately)? Please clarify what “held in one line” refers to: we believe this may need a bit of translation from Aussie to Canuck.
- Proposed Lot 3 refers to a “fee simple subdivision... with common lot under home association”: does the common lot refer to the road? If so, that would not be a fee-simple subdivision (a fee-simple subdivision would require public road dedication).

If bare land strata is going to be proposed (phased or not) within any of the Lots, the application should show the area of each of those proposed bare land strata parcels: we would need to know the areas to enable us to draft the bylaws. If any of the lots are proposed to be developed as a phased strata (building strata or bare land strata) then you will also need to define what amenities or common facilities will be provided for the use of the strata owners, with each phase.

#### **C. Phasing:**

Separate from how title to the various parcels of land and units are legally defined, the application also proposes a phased development agreement (PDA). The details of the PDA will have to be worked out prior to Council sending it (along with OCP amendment and zoning amendment bylaws) to a public hearing. To expedite the drafting of a phased development agreement, please provide a framework for discussion. This can be simply a list of a) the specified bylaw provisions you wish the agreement to cover, and b) those items that you foresee will be constructed with each phase of the development. This includes servicing and utilities; the timing for each phase of clearing, grading and retaining walls; environmental remediation or enhancement features; landscaping; parks

& playground features – many of the items listed on pages 7 to 9 of the application materials package. In a number of places, the application refers to detailed designs to be provided at a later date; the PDA will define the scope and timing of when those will be delivered.

The application materials do not exactly describe the project phases in a way that matches what would be committed to in the PDA, which is fine – but we need to clarify. For the purpose of phasing, it looks like you intend to approach construction in four phases as follows (please confirm):

Phased development plan reference (p.19 of ERIF application)	Construction Phase	description	subject to:
Stage A Stage B Stage C TUP on Lot 5	One	below-market sales on part of "Lot 1" waterfront lots + STRs on "Lot 3" commercial on "Lot 4" temporary manufacturing / assembly facility on "Lot 5"	prices to be determined
Stage D	Two	rental housing on part of "Lot 2": 70% market / 30% affordable	if government financing sub
Stage E	Three	below-market sales on remainder of "Lot 1" rental housing on remainder of "Lot 2": 70% market / 30% affordable	if stage A sells out if stage D fully rented & gov
Stage F	Four	market sales and rentals + STRs on "Lot 5"	if 60 units occupied on Lots

For each construction phase, please identify any proposed environmental protection, extent of clearing, earthworks, on- and off-site servicing, green energy measures, public amenities, etc. These will be spelled out in the PDA document.

**D. Temporary Use Permit:**

- Is the proposal to erect the manufacturing facility before or after the construction of retaining walls and regrading in the area of proposed Lot 5?
- The application refers to the temporary building as being insulated, but also describes a fabric-covered steel structure. Please clarify.
- The application refers to a treed buffer remaining to screen the view of construction on Lots 1 and Lot 3: does this refer to trees on- or off-site? Please clarify.
- If electrical demand for the facility exceeds the existing 400A service prior to new Hydro services to "Lot 5", will generators be used?

**Fees:**

As we discussed when you were in the office last week, it would be appropriate to submit the fees once you have all the initial materials together for your application including the tsunami flood engineering report and the report on the archaeological assessment. A summary of the application fees at this stage:

- OCP amendment: \$1,600 plus \$500 per HA over 1 HA based on developable lands: \$4,600
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(Site area: 6.67 HA/16.47 AC)
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- Public hearing fee: \$700
- Notification fee: \$500 x 2 (OCP/rezoning/DVP plus separate for TUP)



---

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- Subdivision: \$800 plus \$150 per lot
- Development Permits (form & character – commercial and multi-family) for individual phases of building and associated landscaping: \$1,000
- 

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I hope all the above helps.

We look forward to receiving the flood engineering report and the report on the archaeological assessment. We will expedite the review and collection of comments back from the internal and external referrals, and will let you know of any further areas for clarification.

As always, please don't hesitate to contact me if you have any questions.

Regards,  
Bruce



**Bruce Greig**  
Director of Community Planning  
**District of Ucluelet**  
200 Main Street, Ucluelet, B.C. V0R 3A0  
Phone: 778-748-8484

**Bruce Greig**

**From:** Juliette Green <juliette.g@erif.ca>  
**Sent:** October 4, 2024 6:39 PM  
**To:** Marilyn McEwen (Ucluelet Mayor); Shawn Anderson (Ucluelet Council); Mark Maftei (Ucluelet Council); Ian Kennington (External); Jennifer Hoar (Ucluelet Council)  
**Cc:** Bruce Greig; Duane Lawrence; John Towgood; Joshua Hunt; Jodie Thompson; sarah.h@igvnexus.com; Ian Kennington (Ucluelet Council)  
**Subject:** Council Q&A for 221 Minato Rd  
**Attachments:** 2024-09-24\_DOU\_Regular\_Meeting\_ERIF\_Q&As\_241005.pdf

**Follow Up Flag:** Flag for follow up  
**Flag Status:** Flagged

**[External]**

Dear Mayor and Council,

We value your feedback on ERIF’s proposed development at 221 Minato Rd shared at your Meeting on September 24th. Thank you for your comments, support and points for further discussion.

To ensure alignment and address any outstanding questions, we have prepared this summary of the key points raised by the Councillors during the meeting, along with responses from our executive team supplying additional information.

We value your input as we move forward with the application process and invite you to reach out if you require further clarification or have any additional questions.

We thank you for the opportunity to partner with you in bring this project to life, make them attainable for the local community, and contribute to the flourishing future of Ucluelet.

Best regards,

Juliette Green

**Juliette Green | Strategic Impact Director**

✉ [juliette.g@erif.ca](mailto:juliette.g@erif.ca) | 🌐 [www.erif.ca](http://www.erif.ca)



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# September 24, 2024: DOU Regular Meeting Appendix C9

## Q&As

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**Q1) Do Council members have any initial concerns about a road configuration with limited pedestrian facilities and vehicle parking spaces backing onto the roadway?**

**DOU**

IK: "My home backs onto a roadway. I don't think this is different to what we have in the community at the moment. I personally don't have a problem with it."

MM: "I concur. There are a lot of constraints to this site that means we are going to have to accept some compromises. I don't believe this is anything to get overly worried about as part of the preliminary plan."

MMM: "The configuration of this property is to create density, which keeps the affordability aspect in parcel."

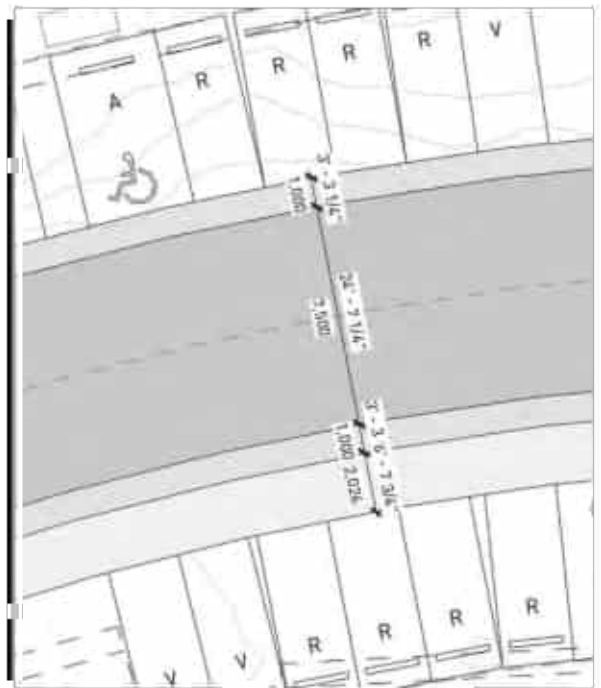
SA: "I concur."

JH: "I don't want a pedestrian pathway to be completely ignored. I agree with you IK that this is happening in other subdivisions."

**ERIF**

ERIF has partnered with traffic consultants Watt Consulting to optimise the road and traffic flows for the site. The design balances resident safety, accessibility, and efficient land use to maximise the number of affordable homes.

To ensure highest safety, the road will be a private road with a capped speed limit of 15kph, ensuring a slower and safer environment. To enhance pedestrian use, we have incorporated a 2-meter-wide pedestrian path and additional 1-meter-wide shoulder around all roads (as shown in Appendix A). The loop road structure was recommended by Watt Consulting for best traffic flows. Care has been taken to ensure careful compliance with emergency vehicle access, with turning bays in each stage of the development, and an additional emergency exit point to Peninsula Road, which has the support of BC Ministry of Transport. For additional information, please refer to the [traffic engineering report](#).



Appendix A

**Q2) Do Council members have any initial concerns with the concept of no additional park land dedication for this development?**

**DOU**

IK: "The parkland dedication has already been made. The District have control of that asset and it's considerable, I think it's good enough."

MM: “I don’t see a problem with the trail construction costs being worn by the Municipality. They have been forthright about approaching this by keeping costs down, I’m quite willing to meet them on a pragmatic playing field. I agree with highlighting ecological value of Olsen Bay. We should consider potential impacts now to plan for them. I’d like to see it protected, and we have every chance of doing that with ERIF moving forward.”

SA: “I agree with IK that there is a sufficient amount of parkland dedicated at this point. It’s an efficient use of space. We will do what we need to do to get the affordable housing in there.”

JH: “A little concerned not having the complete Environmental assessment and wetland delineation, which might ID more spaces that need to be protected. I understand there has already be a large park dedication here. Cautiously not concerned.”

MMM: “I believe they are in the progress of getting this completed.”

**ERIF**

The 2022 rezoning committed extensive lands as parkland dedication through the waterfront and middle creek area. Nearly 30% of the site was committed at that time, and this has now been legally confirmed as dedicated by the DOU. The original commitment exceeded the typical 5% parkland dedication and creates a natural reserve protecting this land.

With this land now legally dedicated, it creates a strong protection for the water features. This is confirmed in the Environmental Impact Assessment prepared by Aquaparian which can be viewed by [clicking here](#).



Appendix B

Appendix B highlights the Parkland Dedication areas now on title which includes a 30-meter shoreline dedication (coloured in green on the Appendix B), protecting the waterfront zone. The area is blessed with nearby trails, bike paths, and existing parks offering ample opportunities for outdoor recreation.

A dedicated recreation space is proposed for the affordable rental and attainable homeownership communities of Lot 1 and 2 to enjoy which is shown in the Appendix C.

These amenities, combined with the green spaces within the development itself, offer an abundance of green space and recreational opportunities to enjoy. We value the Councillor's support to uphold the existing parkland dedication, as further reduction in available land would impact the viability of this project to meet Ucluelet's housing needs.



Appendix C

**Q3) Do Council members have any initial concerns with the concept of taking on the cost of constructing the trails, and making this a priority capital project so that trails can be completed prior to occupancy of the site by new residents?**

**DOU**

SA: "The way it's worded is as if the onus is back on us, but at the same time the only way this moves forward is keeping costs low, maintaining it's affordability. We are in a housing crisis, I believe the trails are important but I also believe we can bare that cost. RMI funding for the future. I wouldn't hold their feet to fire on this."

MMM: "Yes RMI money would be available for trails."

MM: "One thing that sets this developer apart is they were quite forthright about their costs. I think it would be a mistake to put them in a position where they are on the hook for a major financial investment, which is separate from what they approached us to do, affordable housing."

IK: "Nothing further to do add. I agree this is an ecologically sensitive area and we potentially need something temporary to protect it. Not saying we need to build the trail before this housing is occupied. There may be a more cost-effective solution to doing that protection. Trail yet to be discussed."

JH: "We want this site protected. We don't people in housing accessing this with no protection, which is where the idea of the trail originated. We have access to RMI funds, I have no issues with taking over the cost but I do think this needs to be prioritised."

**ERIF**

The waterfront land has been dedicated back to the DOU, giving the Council time to consult with the community, plan trails and seek RMI funding. Part of this process may consider the Environmental Assessment Report recommendation that the Council preserve this area in its natural state as a wildlife corridor. ERIF do not see the construction of potential trails as needing to be a pre-condition of approval of the construction of the proposed homes, or their occupation. There will be natural separation of the waterfront from the homes with retaining walls and fencing, designed to complement the natural form and character of the site, in collaboration with the environmental biologist consultants, geotechnical and structural engineering teams.

**Q4) Do Council have any initial concerns with a proposal to remove a 30-meter tree buffer along Highway 4 and substantial tree clearing throughout the developable lands that would maximize the area for housing construction on the 221 Minato Road site, and which would diverge from OCP Policies 3.162, 3.163 and 3.171 meant to limit the clearing of trees and changes to the public entrance to town?**

## DOU

MM: "I have some initial concerns. I think we need to have a deeper discussion with ERIF about this plan. It's the entrance to the community. The bulk of this lot has already been cleared, what is remaining there is of questionable ecological value in terms of terrestrial habitat. I don't want these trees cut down. I think this is something we need to hear the public's opinion on."

IK: "Everyone loves trees. Our current entrance into town is a drive through forest that leads to a pile of tires. We have an opportunity to increase it's visual value and create an entrance into a community. If housing is as critical as we all know it is, there will be tough choices on how we deliver our housing target of 800 homes within the next 20 years. We need housing, people are literally crying out for it."

MMM: "This is another one of those little sacrifices that may need to occur to create that density."

SA: "I agree. With the OCP stipulations on tree coverage it seemed more of a form of character as opposed to an ecological refuge. I would want to showcase this project off."

JH: "It's hard for me to get rid of a tree buffer. I understand to get density we need to narrow it down, but almost making it non-existent, I have problems with that."

MMM: "Also another issue is if you clear a lot of trees, the remaining can become danger trees because they have been protected by the others for so long. It may be a reason to remove the trees so there aren't any danger trees."

JH: "Yes, the trees were cleared to close to the upper edge of that property those trees may go over in a storm. I don't see the point of their tiny strip of green at that point."

## ERIF

The proposed change is not a complete removal of the 30-meter buffer in the OCP, but a reduction to 10 meters from the boundary line, and approximately 20 meter setback from Peninsula Road. An accurate siting of the development relative to the road has been prepared and is linked here: [221 Minato's Planting Analysis](#), also referred below in Appendix D. Detailed distances have been marked on the supporting documentation to demonstrate the treed

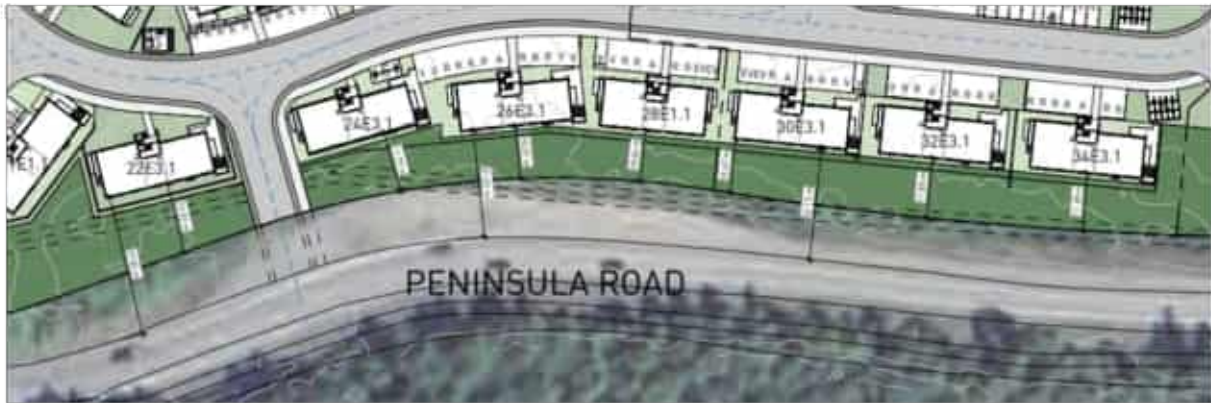


setback

that

will

Appendix C9



Appendix D

Unfortunately, due to clearing and site use by former owners, there has been substantial damage to some trees impacting their health and safety. The trees have been assessed by a formal Arborist tree survey and qualified Danger Tree assessor as recommended by the environmental biologist. They have been further reviewed in the Archaeology report which found no protected trees of significant cultural value will be lost.



Appendix E

In addition to retaining respected consultants for the assessment and preservation of existing trees, ERIF will also invest in the regeneration and enhancement of the site's ecological richness. We have a comprehensive regeneration plan in place set out in the Environmental report:

- Plant a diverse array of native trees and vegetation throughout the development including but not limited to 31 western hemlock trees, 20 Western redcedar and 15 Sitka spruce within the restoration area. The density of the regenerating tree saplings is approximately 3-5 trees per 100m2 which is approximately 114 naturally regenerated trees within the restoration area.
- Use organic soil on site as a growing medium for planting areas and salvage native plants, logs and stumps with soil and live native vegetation. This will assist in incorporating native plant seed banks and add natural local form and character to the development.

- Use of naturally stacked rock and include pocket plantings using native coastal vegetation. All seeding will include recognized west coast seed mix (i.e. clover, vetch, wildflower).

Aquaparian will also be engaged as part of the retaining wall design to ensure where these walls interact with parklands and they contribute to protection of the trees in those zones and their root structures, and enhance the native habitats. Their expertise will ensure that any tree which is classified as dangerous under WorkSafe BC Regulation Section 26.11 is removed in such a way that minimizes disruption to the surrounding ecosystem. Arborists and biologist consultant will oversee works where required to preserve and enhance existing tree buffers in the substantial parkland dedication areas, which comprise nearly 30% of the site.

Our commitment to environmental stewardship extends beyond the Peninsula Road setback. Throughout the 221 Minato Road development, we are prioritizing sustainable practices and habitat restoration. We are creating extensive green spaces, restoring riparian areas, and implementing measures to protect local wildlife. This plan will not only compensate for any trees lost during the setback reduction but will also enhance the overall biodiversity of the site.

We aim to create a community-friendly interface from this site and prioritize affordable housing so Ucluelet can continue to grow and thrive. After detailed review in the [Environmental Assessment report](#), [Tree survey](#) and [Archaeological report](#) we believe that the proposed building layout and proposed setback from Peninsula Road strikes the best balance to achieve our environmental restoration goals for the area while providing affordable housing in the time of great need. Dedicated Parkland will ensure the highest protection of key tree areas near the shoreline and creek, enhanced by significant planting and regeneration works.

**Q5) Do Council members support extending the 50km/hr speed zone northwest by approximately 1000m and staff making a request to MoTI in advance of receiving a development application by ERIF.**

#### DOU

JH: "I am totally for this. That 50km should have been moved further outside of town ages ago. The parking that happens around Ancient Cedars zone has been really unsafe."

SA: " I echo that 100%. I like the idea of pushing out the town a little more. It would be another 20 seconds to reach town."

MM: "Cart before the horse to approach MoTI ahead of the development application (if the two are linked)."

IK: "We were going to reduce speed limits across town. I wonder whether this is part of the same conversation. Generally 50km/hr, it could be slower, but I would support it."

MMM: "I would support it. I agree, larger conversations are needed to look at all of town."

#### ERIF

ERIF supports the Council's views that reduction in the speed of Peninsula Road would benefit the Ucluelet community and both pedestrian and cyclist use of the area, particularly with Ancient Cedars access and the Health Clinic. The MoTI has confirmed that if the Municipality wish to present this proposal they will work with you to undertake the necessary review by the MOTI Chief Engineer which can take some time.

However, the Traffic Impact Assessment prepared by Watt Consulting, and the proposed preliminary design for the development does not recommend nor require a reduction in speed on Peninsula Road. The report supports development of 221 Minato Road by upgrading Minato Road to be a municipal road and as the access road for the development. This report has been filed with MOTI under file number 2024-04965. MOTI have given their initial written support for the proposal for residential access from Minato Road, noting this road is within the Municipal boundary and permitting falls under DOU. They have expressed in-concept support for a gated emergency access to Peninsula Road, which will enable future-proofing for future OCP plans for Peninsula Road. ERIF continue to work with MOTI to finalise the formal approvals of the Minato/Peninsula intersection.

**Q6) Do Council members expect that if a zoning amendment and other approvals are granted, the affordable and/or attainable housing units would need to be ensured through housing agreements and covenants that are administered and monitored by the municipality or an experienced qualified third-party?**

### DOU

SA: “[ERIF] sat us down and showed us the numbers, it was astounding. This would work out to be incredibly affordable for people. I do think it needs to be run by a housing incorporation or an at arm’s length group.”

MMM: “I don’t believe it takes long to set up a housing authority.”

IK: “There is a critical first phase of this development that will warrant the formation of a housing authority, which will go on to have greater impact throughout the community for other small housing developments. This is the kickstarter for that.”

SA: “ERIF suggested approaching the community first. That was their suggestion first off. There will be a vetting process, but I thought having the community first was a great first step.”

JH: “We are at the point where a housing authority or third party would be very worthwhile. I don’t think the municipality should be doing it themselves.”

MM: “Short answer is yes. One unequivocal fact that the community needs affordable housing. It’s something unambiguous with no debate. We have an opportunity to partner with a developer that has that in mind. It’s not the municipality’s role, but whatever we can do to kickstart it we should. It would be a mistake not to explore that, encourage it and support it.”

### ERIF

ERIF Housing Association, a not-for-profit organization, has been created to manage the attainable homeownership initiative. ERIF has prepared a Draft Housing Agreement and Covenant Restrictions in our Development Permit application to confirm the commitment to affordable homes. We have established draft eligibility criteria for the attainable home ownership initiative and welcome your feedback. The applications will be administered by the Gray Team and the not-for-profit with a selection panel formed to ensure a fair and transparent assessment of applications against these criteria. This panel would ideally include representatives from the Municipality, the Chamber of Commerce, and a welfare organization. Similar developments have faced difficulties of much-needed dwellings remaining vacant due to overly restrictive requirements, and a transparent and responsive process will ensure financial sustainability for all parties involved. ERIF Housing Association, in conjunction with a rental management company, will oversee the affordable rental processes, governed by the

grant-funding restrictions. Fair, transparent and accessible eligibility criteria is essential, whether administered by ERIF's not-for-profit organization, or by partnering with a municipality-established housing cooperative. By working together, we can ensure the development remains financially viable, while the housing cooperative serves the community's needs and future growth.

**Q7) Do Council members have any initial concerns with the concept of extending a commercial designation to the area on the corner of Minato Road?**

**DOU**

JH: "I am not adverse to having a small commercial development. Where would the residents buy their milk? If this is going to be a neighborhood with young kids maybe there is a daycare. There are options."

MMM: "They want places to buy their products close by. I am in support of this."

IK: "I do support the integration of commercial into residential neighbourhoods for this project."

MM: "I wholeheartedly agree with the milk statement. Adding 250 doors, requires their needs to be serviced."

SA: "I agree with all statements. This will add another pocket to town."

**ERIF**

We value Council's comments and have allowed for adaptable spaces that can include retail store, other commercial and office space, giving priority to convenience of the local residents.

**Q8) Do Council members have any initial concerns over a component of short-term vacation rentals in the current proposal at 221 Minato Road?**

**DOU**

IK: "The only concern I have is public perception. When ERIF showed us the numbers, the sliding scales showed how we could pay for affordable housing. The profit margins are very calculated, it needs to be just enough to balance the scales. There are other developments that have come to town who aren't offering us anything. This sets a precedent, if you want limited STRs, you need to provide something to the community. I believe it supportable."

MM: "This has been the opposite to usual STR conversations. I don't support STR but I understand the math here. As reluctant as I am to support an STR, if that is the way forward than I would definitely consider that it's the best out of a bad situation. As it's been presented, I have difficulty criticizing it."

SA: "The STRs are few compared to the whole project. Prop up wages deficit through providing affordable housing (for example: Vancouver nurse coming to do work locally)."

JH: "The only hesitation I have on this is that the 10 waterfront homes would be a part of the whole house short-term rentals."

MMM: "I don't believe they would be whole-house STRs. They would just have a unit that would be a short-term rental."

JH: "It's not apparent from the way it's written, so I am unsure. Although I may not be an STR fan, it does allow this project to get off the ground."



The Development Permit seeks support for Lots 3 and 5 only to have a short-term rental component. These dwellings will support the financial feasibility of the affordable and attainable home development. To ensure a balanced mix of housing options, we could implement restrictions such as:

- At least one long-term rental (4+ months) or owner-occupied unit within each building: This would guarantee a certain level of permanent residency in all areas of the development. The remaining unit/s or suite/s would permit vacation rentals. This would allow for some flexibility while maintaining a predominantly long-term rental focus.
- Alternatively, within Lot 3 and Lot 5, a specific number of buildings could be designated for short-term rentals. This would limit the concentration of vacation rentals and help preserve the neighbourhood's character.
- By incorporating these measures, we can create a development that provides both short-term rental opportunities and a stable residential community for financially viable attainable home ownership and affordable rentals in Ucluelet.

**Q9) Subject to meeting environmental and servicing requirements, and subject to public comment, do Council members have any initial concerns with the concept of a temporary manufacturing facility on the eastern portion of the site?**

#### DOC

MMM: "I believe this is only 1 option they are looking at."

SA: "I know people who are desperate for housing. There is light at the end of the tunnel. There is a price to pay for getting this done quickly, I don't believe this is an expensive price."

IK: "All developments will need to be built. A manufacturing facility is actually going to produce less noise and less waste compared to traditional construction."

MM: "ERIF have a vertically integrated manufacturing capacity which makes this feasible. I agree this is a no-brainer that allows the developer to offer this product. Subject to environment reports."




JH: "I concur with previous statements. I am not adverse."

MM: "This will also make the process much quicker. That is something else to consider."

#### ERIF

ERIF values the support expressed by the Council for a Temporary Access Permit to enable high-quality, all-seasons construction of the homes greener, smarter, and faster by establishing an on-site Construction Facility. The Temporary Use Permit has been lodged with the Municipality on September 30 and is linked here: [ERIF Temporary Use Permit Application](#).



<p>221 MINATO ROAD</p>	<p>DATE: 08/11/2023</p>	<p>PROJECT: 221 MINATO ROAD</p>	<p>SCALE: AS SHOWN</p>			<p><b>Formoss</b> Architecture</p>		<p>221 MINATO ROAD (ERIF): OCP Amendment / Rezoning / Environmental DP Bruc...</p>	<p>Page 311 of 929</p>
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UCLUELET  
 2024-24-01  
 DATE: 2024-01-01



**UNIT TYPE LEGEND**

RES-1	RES-2	RES-3	RES-4	RES-5	RES-6	RES-7	RES-8	RES-9	RES-10	RES-11	RES-12	RES-13	RES-14	RES-15	RES-16	RES-17	RES-18	RES-19	RES-20	RES-21	RES-22	RES-23	RES-24	RES-25	RES-26	RES-27	RES-28	RES-29	RES-30	RES-31	RES-32	RES-33	RES-34	RES-35	RES-36	RES-37	RES-38	RES-39	RES-40	RES-41	RES-42	RES-43	RES-44	RES-45	RES-46	RES-47	RES-48	RES-49	RES-50	RES-51	RES-52	RES-53	RES-54	RES-55	RES-56	RES-57	RES-58	RES-59	RES-60	RES-61	RES-62	RES-63	RES-64	RES-65	RES-66	RES-67	RES-68	RES-69	RES-70	RES-71	RES-72	RES-73	RES-74	RES-75	RES-76	RES-77	RES-78	RES-79	RES-80	RES-81	RES-82	RES-83	RES-84	RES-85	RES-86	RES-87	RES-88	RES-89	RES-90	RES-91	RES-92	RES-93	RES-94	RES-95	RES-96	RES-97	RES-98	RES-99	RES-100
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**CONSTRUCTION SPECIFICATIONS**

Item	Description	Quantity	Unit	Value
1	Excavation	1000	m <sup>3</sup>	1000
2	Foundation	500	m <sup>2</sup>	500
3	Structural Steel	200	kg	200
4	Concrete	1000	m <sup>3</sup>	1000
5	Roofing	500	m <sup>2</sup>	500
6	Interior Finishes	1000	m <sup>2</sup>	1000
7	Exterior Finishes	500	m <sup>2</sup>	500
8	Landscaping	1000	m <sup>2</sup>	1000
9	Site Work	1000	m <sup>2</sup>	1000
10	Utilities	1000	m <sup>2</sup>	1000
11	Other	1000	m <sup>2</sup>	1000

**PROJECT SUMMARY**

Item	Description	Quantity	Unit	Value
1	Excavation	1000	m <sup>3</sup>	1000
2	Foundation	500	m <sup>2</sup>	500
3	Structural Steel	200	kg	200
4	Concrete	1000	m <sup>3</sup>	1000
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7	Exterior Finishes	500	m <sup>2</sup>	500
8	Landscaping	1000	m <sup>2</sup>	1000
9	Site Work	1000	m <sup>2</sup>	1000
10	Utilities	1000	m <sup>2</sup>	1000
11	Other	1000	m <sup>2</sup>	1000

**PROJECT INFORMATION**

CLIENT ADDRESS: 221 MINATO ROAD, UCLUELET, BC V3R 2K1, CANADA  
 CLIENT: [REDACTED]  
 DATE: 2024-01-01  
 PROJECT: [REDACTED]



221 MINATO ROAD (ERIF): OCP AMENDMENT / REZONING / ENVIRONMENTAL DP BRUC...

ERIF Environmental Resource Institute

Formosis Architecture

221 MINATO ROAD  
MONTREAL, QUEBEC H3T 1Y5  
TEL: 514 392-1111  
WWW.FORMOSIS.COM

APPENDIX C10  
SITE PLAN FOR THE PROPOSED DEVELOPMENT

DATE: 2014-09-15

SCALE: 1:1000

PROJECT NO: 2014-09-15





221 MINATO ROAD (ERIF): OCP AMENDMENT / REZONING / ENVIRONMENTAL DP BRUC...

ERIF Environmental Resource Information Framework

Formosis Architecture

221 MINATO ROAD  
2024-2025  
Scale: 1:500  
Date: 10/10/2024

03









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Appendix C10



THE CITY OF BRUCE ARDREY, BRUCE COUNTY, ONTARIO  
PLANNING DEPARTMENT  
1000 WILSON AVENUE, SUITE 100  
BRUCE ARDREY, ONTARIO N0B 1G0  
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**Bruce Greig**

<b>From:</b>	Juliette Green <juliette.g@erif.ca>
<b>Sent:</b>	September 26, 2024 6:32 AM
<b>To:</b>	Joshua Hunt; Duane Lawrence; Bruce Greig; John Towgood; Jodie Thompson
<b>Subject:</b>	Re: DP Submission - 221 Minato Road
<b>Attachments:</b>	ERIF DP Application 221 Minato Cover Sept 20 2024.pdf

**[External]**

Dear Duane, Bruce, John and Team

We are pleased to present the Environmental Assessment Report from Aquaparian for 221 Minato Rd. The direct link to the document is here and has been uploaded to the Appendix links:

<https://drive.google.com/drive/folders/1PhoU17Ksa3SZQuO-ODkmXPkfmnAhtBXw;>

We have taken considerable care to ensure this document provides a detailed plan for regeneration of the forest, further planting, and best protection of the Creek and Waterfront through the Parkland Dedication areas given back to the District which are nearly 30% of the original site area. We are proactively following these recommendations, proceeding with Tree Survey and Assessment and fostering continual collaboration between our amazing consultants, engineers, biologists, geotech all working together to plan build methodology that protects and preserves the natural beauty of the site.

I noted the comment on the Archaeological report being in interim report format. We will follow up on the final report from Yuułu?it?ath Government - Ucluelet First Nation (UFN) Department of Culture, Language & Heritage and will provide this as soon as it is available. To confirm the identified sites are within the parkland dedication areas, in the interim, Carey Cunneyworth prepared this map.

<https://drive.google.com/file/d/1u0s8Rg082iU00fkk0v2F7YqhUySKKi46/view?usp=sharing>

The final document you have requested is the further Flood Hazard Assessment and Flood Assurance Statement. As you know from our meeting on Monday with Clayton Hiles, one of BC's most preeminent Coastal Engineers, we aim to have this report back within a week.

I trust the supporting brief on tsunami, drawing on the guidance of our engineers and expert consultants, was helpful to confirm that the Municipality has discretion in what is requested and considered in the subdivision and DP approval process. ERIF has provided Ebbwater's site-specific report on the flood levels as required in the Interim Tsunami Policy. Nonetheless we will press on with preparing the further Flood Hazard Assessment study and Flood Assurance Statement as requested.

The physical documents for ERIF's application for the By Law Update, Subdivision, Environmental and Build Development Permits have been lodged at your office. We followed the DP checklist to ensure this was a complete set so trust this meets your requirements.

ERIF also came to the District office yesterday to pay the lodgement fees but were advised the staff had not yet calculated the invoice. We look forward to receiving the invoice at your earliest convenience so the submission fees can be paid.

We trust you have all you require to commence assessment of the applications. ERIF will forward the additional Flood Study and Assurance Statement as soon as they are available.


Thank you for reviewing the documentation and working with us on this wonderful opportunity for Ucluelet's future growth.

With thanks

Juliette Green

**Juliette Green | Strategic Impact Director**

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**From:** Joshua Hunt <joshua.h@erif.ca>  
**Sent:** Saturday, September 21, 2024 5:42 AM  
**To:** Duane Lawrence <dlawrence@ucluelet.ca>; Bruce Greig <bgreig@ucluelet.ca>; John Towgood <JTowgood@ucluelet.ca>; Juliette Green <juliette.g@erif.ca>; Jodie Thompson <jodie.t@erif.ca>  
**Subject:** DP Lodgement - 221 Minato Road

Dear Duane, Bruce, John and District of Ucluelet Team

On behalf of ERIF, we are delighted to present the Rezoning, Subdivision and Development Permit applications for 221 Minato Road.

Please find attached the Cover Letter which links all the required documentation for the application. You will also see a supporting presentation here: [Development Permit \(18SEPT20204\) - 221 Minato Road Ucluelet \(canva.com\)](#). Hard copy versions will be supplied at our meeting on Tuesday and we will visit the office to arrange application fees.

We are committed to working with you to deliver high quality attainable and affordable homes for Ucluelet and contribute to thriving future economic and community growth. We thank you for your consideration.

Please note that there are two outstanding items that we will provide when received as soon as possible:  
1) Flood Hazard Report and Assurance by KWL: this deliverable is well underway and will be supplied as soon as possible. Thank you for meeting with ERIF and our consultant team on Monday at 12 pm to discuss this further.

2) Environmental Report by Aquaparian: this report is being finalised and will be submitted shortly.

Each of the supporting documents are available in the linked files and our team are readily available to assist with any questions regarding the documentation as we progress through the approval process.

We look forward to meeting with Council this coming Tuesday. We thank you for your work reviewing the supplied reports and documentation to support our application. In the meantime, if you have any questions or require further clarification, please do not hesitate to contact us.

Thank you for your time and assistance with this exciting opportunity to serve Ucluelet.

In partnership,



**Joshua Hunt | CEO**

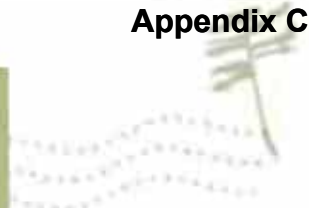
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**AQUAPARIAN**  
Environmental Consulting Ltd.



**2024 ENVIRONMENTAL ASSESSMENT REPORT  
221 MINATO ROAD, UCLUELET BC**



Minato Road Development  
Juliette Green  
ERIF Sustainable Solutions  
Juliette.g@erif.ca

Revised September 2024



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## 1.0 INTRODUCTION & BACKGROUND

Aquaparian Environmental Consulting Ltd (Aquaparian) has been retained by ERIF Sustainable Solutions to provide an updated Environmental Impact Assessment Report (EA) report for a rezoning application for a proposed multi-family residential development located at 221 Minato Road in the District of Ucluelet, BC. The proposed development is at the rezoning and development permit application phase.

An Environmental Impact Assessment (EA) report was originally produced for the property by Aquaparian in May of 2017 for the past owners of the property in preparation for a proposed campground, RV use and single-family residence. The original owner of the property BNEE Enterprises cleared much of the forest stand on the property including the clearing and encroachment into municipal development permit areas (DPA) resulting in contravention of District of Ucluelet (DOU) DPA riparian and foreshore protection and Provincial land development guidelines and regulations. The property was understood to contain large, mature trees with several considered old-growth in classification, fish bearing watercourses with associated forested swamps, and wildlife trees. The property also contains a foreshore connection to Ucluelet Inlet with intertidal / estuarine mudflats and marine saltmarsh which is considered very sensitive. The 2017 EIA and 2018 Vegetation Management Plan (VMP) was produced to address the impacted conditions of the DPAs following site clearing. The VMP was never fully completed and based on follow-up site visits including a recent site assessments on August 8 and September 17, 2024, portions of the impacted DPAs have undergone natural infilling of understory vegetation, but additional vegetation planting works should be conducted to restore the vegetation setbacks.

In 2019, A Section 11 Notification under the *Water Sustainability Act* was submitted to replace a log stringer road crossing bridge over the main access road with a new wooden box culvert crossing. A revised EIA report was produced by Aquaparian in July of 2022 for proposed rezoning of the property to Campground and Guest House zoning with a foreshore setback, stream riparian and Minato Road trail land dedication for park which was approved by the DOU. As understood, the Parkland Dedication is now locked in on title and finalized within a 2023 property survey. The 30m foreshore setback and creek riparian corridors within the property are now legally protected as parkland and in the care and ownership of the District of Ucluelet. The park land dedications total 8.8 acres or 30% of the site leaving a buildable area of 16 acres. A rezoning amendment application has been submitted to the DOU for Comprehensive Development (CD) to allow for a proposed mixed, multi-family and single-family residential development. Park dedication for the foreshore setback and stream setback has been included in this rezoning application. This revised EA report is for the new proposed rezoning. Because the DOU Official Community Plan was recently updated in 2022 this assessment report has also been revised to address the new environmental DPA guidelines.



203-321 Wallace Street, Nanaimo, BC V9R 5B6  
SARAH BONAR 250-714-8446 CHRIS ZAMORA 250-714-8864

A site location image is included as Figure 1a and an image showing the boundary of the subject property is included as Figure 1b. A selection of photographs taken during the 2017 site assessment and most recent on August 8, 2024 are included as Appendix A.

## 1.1 Project Description

The proposed multi-family residential development project is at the preliminary planning stage and is expected to be constructed in a phased approach with multiplex residential dwellings and ten detached homes, with mixed use for attainable homeownership, community-run affordable rentals and market rentals and ownership. A 30m setback from the foreshore and a 10m riparian setback from a stream in the centre of the property is dedicated as park and now is owned by the District of Ucluelet. A 10m wide land dedication along the west side of Minato Road property boundary is positioned outside of any development and owned by the Municipality. The remaining 16 acres of buildable area is divided into the north section to the west of the Minato Road and the south section to the north of Peninsula Road. The north section includes two road access points off Minato Road, waterfront residential homes and holding apartments. A pedestrian bridge over the central stream (middle) is to connect the north and south sections. The south section includes a new access road off Minato Road, a future road access off Peninsula Road, apartments, a commercial development in the southeast corner and park space in the centre. It is understood that the DOU has agreed to reduce the vegetation corridor setback along Peninsula Road to 10m starting from the property lot line.

Initial development plans for the property are illustrated in conceptual drawings produced by Formosis Architecture for ERIF Sustainable Solutions (developer) and included as Appendix B. Proposed project phasing is as follows (See Appendix B):

- Phase A – Lot 1 Part 1 Attainable Home Sales;
- Phase B – Lot 3 Waterfront Homes;
- Phase C – Lot 4 Commercial Development;
- Phase D – Lot 2 Part 1 Affordable & Market Rentals;
- Phase E – Lot 1 Part 2 Attainable Home Sales and Lot 2 Part 2 Affordable & Market Rentals; and,
- Phase F – Lot 5 Market Rentals.

## 1.2 Regulatory Review

The following is a review of regulations that may apply (but not limited to) development of the property:

- District of Ucluelet Development Permit Areas (DPAs) – Official Community Plan (OCP) Bylaw No. 1306, 2022



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The OCP identifies that the property is subject to the following Environmental DPAs:

- **DPA V – Terrestrial Ecosystems (Mature Forest)** - This Development Permit Area includes mature forests and wildlife habitat that could be subject to degradation due to development or harmful uses.

**Guidelines**

E.V.1. Development should be planned to avoid intrusion into DPA V areas of the site and to minimize the impact of any activity on these areas.

E.V.2. Development permit applications that encroach on areas designated as DPA V should include a report prepared by a qualified environmental professional outlining the following information:

- a. detailed site plan (1:250 or larger) identifying the location of property lines, proposed development and natural features including any Sitka Spruce, krummholz tree forms, nesting trees or wildlife corridors;
- b. an impact statement describing effects of proposed development on the natural features and ecosystems on the site;
- c. measures necessary to avoid wildlife conflict and any adjustments to the development plan where necessary to avoid established wildlife corridors;
- d. guidelines and procedures for mitigating habitat degradation including limits of proposed leave areas;
- e. recommendations for timing, construction standards, and where further assessment is necessary (e.g., seasonal nesting bird surveys),
- f. habitat compensation alternatives, where compensation is approved.

**DPA VI – Stream and Riparian Areas Protection** - include the lands within 30 metres of streams and watercourses and include watercourses, lakes, streams, ponds and wetlands identified as fish-supportive habitat or connected to watercourses. For a ravine less than 60 metres wide, the DPA applies to a strip on both sides of the stream measured from the high-water mark to a point that is 30 metres beyond the top of the ravine bank.

A section of the stream through the centre of the property (Middle Stream) is within a shallow gully that benches down to an elevation that meets the foreshore but does not completely fit the definition of a ravine which is a narrow, steep-sided valley that is commonly eroded by running water and has a slope grade greater than 3:1.

**Guidelines**

E.VI.1. Development or alteration should be planned to avoid intrusion into DPA VI areas of the site and to minimize the impact of any activity on these areas.



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SARAH BONAR 250-714-8446 CHRIS ZAMORA 250-714-8864

E.VI.2. Development permit applications that would encroach on areas designated as DPA VI should include a report prepared by a qualified environmental professional outlining the following information:

- detailed site plan (1:250 or larger) identifying the natural boundary and a line 30 metres from the natural boundary;
- an impact statement describing effects of proposed development on the natural conditions;
- measures deemed necessary to protect the integrity of streamside protection and enhancement areas from the effects of development;
- guidelines and procedures for mitigating habitat degradation including limits of proposed leave areas; and,
- habitat compensation alternatives, where compensation is approved.

E.VI.3. Development permit applications should include a vegetation management plan indicating the extent of proposed buffer areas and the proposed management of vegetation in these areas.

E.VI.4. Based on the biophysical assessment of the site within an area designated DPA VI, works or protective measures such as the planting or retention of trees or vegetation may be required to preserve, protect, restore or enhance stream, watercourses, fish habitat or riparian areas.

E.VI.5. In the absence of a report from a qualified environmental professional, a minimum buffer of 30 metres should be preserved between the high water mark of the watercourse and any building or structure.

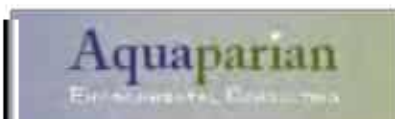
E.VI.6. The total amount of impervious cover on property adjacent to a watercourse should minimize impact on the receiving aquatic environment. Consideration should be given to reducing impervious cover through reduction in building footprint and paved areas, exceeding the minimum riparian setback where feasible, and use of on-site infiltration.

## DPA VII – Marine Shoreline

### Guidelines

E.VII.1. This DPA applies to all lands within 30 metres, measured horizontally in both landward and seaward directions, from the natural boundary of the ocean.

E.VII.2. Unless otherwise exempt, prior to undertaking any development on the lands within DPA VII, the owner of the lands must obtain a Development Permit, the application for which must include an assessment report that has been prepared by a Qualified Environmental Professional, with demonstrated experience regarding the subject matter. The assessment report will identify how the proposed development will affect aquatic resources, and recommend measures to reduce or mitigate any negative impacts, such as the:



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- i. Appropriate siting of buildings, structures, roads, driveways, parking areas, trails, paths, and utilities;
  - ii. Retention or restoration of native vegetation and soils;
  - iii. Removal of invasive species;
  - iv. Designation of buffer areas to protect environmentally sensitive features or habitat;
  - v. Specification of any activities that may occur within the buffer areas; and
  - vi. Must state that the proposal is suitable for the area intended for development.
- E.VII.3. Land shall be retained in its natural state where possible, preserving indigenous vegetation and trees. If an adequate suitable building envelope exists on a parcel outside of the DPA, the proposed development should be directed to that site or area. Encroachment into the DPA shall only be permitted where the applicant can demonstrate that the encroachment is necessary to protect environmentally sensitive features, due to hazardous conditions or topographical considerations, or to relate the development to surrounding buildings and structures.
- E.VII.4. The removal of trees and vegetation within DPA VII is discouraged and must be limited to only those areas that must be cleared to support the development. Any clearing required to accommodate roads, buildings, structures, and utilities, with the exception of necessary hydraulic, percolation, or geotechnical testing, shall not occur until after the issuance of a Development Permit to minimize the potential for soil erosion, runoff and spread of invasive species.

OCP Pg. 74 - General Future Comprehensive Planning Area Policies

Policy 3.171 The area on Minato Road north of Peninsula Road is designated for Future Comprehensive Planning. This area is envisioned as a residential community with potential for guest accommodation, with significant tree retention. The shoreline and marine wetlands (salt marsh) of Olsen Bay is recognized as having important ecosystem values. No development should approach within 30m of the high-water mark of Olsen Bay. A greenbelt should be maintained along stream corridors and the shoreline.

The 2022 re-zoning included Restrictive Covenant requirements (DOU Report to Council Meeting Notes dated June 7, 2022) prior to submission of a development permit including the following that are related to the environment:

- The following areas dedicated as Park:
  - 1) Area extending 30m inland from the natural boundary of the sea and watercourse located in the southwest corner of the Lands;
  - 2) An area extending 10m on either side of the identified watercourse running through the approximate centre (middle) of the lands;

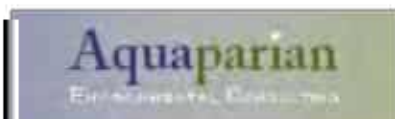


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- The following areas dedicated as Road:
  - 1) A 10m strip parallel to the east boundary of the Lands for widening of the Minato Road public road right-of-way and extension to the shore of Olsen Bay;
- Archaeological assessment of the site and the proposed development with recommendations for any mitigation measures, design changes and/or permitting requirements to protect archaeological and cultural resources;
- Assessment by a Qualified Environmental Professional (QEP) of the ecological resources of the Lands and surrounding ecosystem, with recommendations for how the proposed development can avoid and / or mitigate impacts on terrestrial and marine ecosystems or enhance the existing ecological function of the site;
- Grading and rainwater management plans for the proposed development of the Lands (incorporating the recommendations of the QEP and landscape plans for the proposed development);
- A proposed plan for construction (and phasing if appropriate) at the Owner's cost for gravel-surfaced pedestrian trails in the approximate alignment shown on the Development Plan, and:
  - i. Constructed to the Ucluelet Wild Pacific Trail construction standards;
  - ii. Following specific site-determined alignment to the satisfaction of the Director of Community Planning to achieve the following:
    - 1) Minimize impact on the natural environment;
    - 2) Specifically, minimize possibility of pedestrian encroachment into the salt marsh and intertidal areas of Olsen Bay;
    - 3) Minimize tree removal;
    - 4) Maximize the experience by trail users; and,
    - 5) Fit the character of the municipal trail network.
  - iii. Including stairs, bridges, boardwalks, ramps, railings and other similar trail structures as reasonably necessary to achieve the above; and,
  - iv. Including archaeological and environmental assessment and oversight as necessary during construction.
- Comprehensive Development 6 Zone - Minato Road

The subject property was rezoned (Zoning Bylaw Amendment No. 1312, 2022) from GH: Guest House and CG: Campground to CD 6: Comprehensive Development 6 Zone – Minato Road and P-1: Public Institutional (park dedication).  
The CD-6 Zone is intended for the development of a mix of multi-family and single-family residential development providing for a mix of sizes, types and tenures including affordable rental, market rental, attainable ownership (under a housing agreement covenant) and market ownership homes.



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- **Provincial Riparian Areas Protection Regulation (RAPR)**

The provincial RAPR (2019) calls on local governments to protect riparian areas during residential, commercial and industrial development. The purpose of the RAPR is to protect the features, functions and conditions vital for maintaining stream health and productivity. The RAPR applies to all municipal regions along the east side of Vancouver Island from Victoria to Campbell River and inland to Port Alberni. The West Coast communities of Tofino and Ucluelet have also recognize the RAPR and the policy guidelines in protecting watercourses including all streams, rivers, lakes, ponds, and wetlands. These watercourses are considered protected if they support fish or flow into fish bearing waters and are to be considered as Development Permit Areas (DPA) requiring protective riparian buffers.

- **Section 34 of the Provincial Wildlife Act**

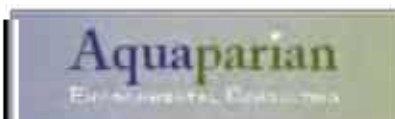
Section 34 of the Provincial Wildlife Act states that a person commits an offence if the person, except as provided by regulation, possesses, takes, injures, molests or destroys:

- (a) a bird or its egg,
- (b) the nest of an eagle, peregrine falcon, gyrfalcon, osprey, heron or burrowing owl; or
- (c) the nest of a bird not referred to in paragraph (b) when the nest is occupied by a bird or its egg.

In areas with no local government tree protection bylaws, outside of the nesting season, a landowner has the right to cut down any trees right up to and beside a tree containing the nest. During the nesting season, such an activity may 'molest' the nesting birds, and could result in an offence (supported under the federal Migratory Bird Convention Act, 1994). Provincial guidelines indicate the songbird nesting season is from March 15<sup>th</sup> to August 15<sup>th</sup> of a given year.

\*Eagle, Osprey, Great Blue Heron and Pileated Woodpecker nests are all provincially protected year-round, whether or not the nest is in use (as per the Provincial Wildlife Act). Bald eagles, ospreys and herons typically nest in forest stands near the ocean (including near protected coves). Bald eagle nesting season generally starts in January and extends until the end of August of a given year. Nesting activity can occur outside these dates depending on the weather.

Breach of provincial regulations may have occurred including Section 34 of the Provincial Wildlife Act for the protection of migratory birds nesting with special emphasis



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on the protection of any Eagle, Osprey or heron nests / nest trees which are protected all year round. Due to the pre-assessment site clearing, nests could not be identified.

- **Provincial Water Sustainability Act (WSA), Section 11 (2016)**

Prohibits any changes in or about a stream without submitting a provincial Section 11 Notification or Approval of proposed works or receiving an Approval from the BC Ministry of Environment. Changes in and about a stream is defined in the WSA as:

- Any modification to the nature of a stream, including any modification to the land, vegetation and natural environment of a stream or the flow of water in a stream or,
- Any activity or construction within a stream channel that has or may have an impact on a stream or a stream channel; includes culvert and bridge installations.

No works such as Culvert or Bridge Installation are to be completed without Notification or Approval by the Province.

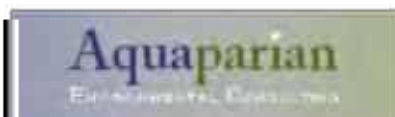
- **BC Heritage Conservation Act.**

All archaeological sites, recorded or not, are protected under the Heritage Conservation Act and must not be altered or damaged without a site alteration permit from the Archaeology Branch. Culturally Modified Trees (CMT) are protected under the BC Heritage Act and require a permit before removal. Old growth trees may also be protected under the BC Heritage Act depending on species, size and significance. If a cultural find is identified on site, all works around the location of the find area to stop immediately and the province notified. An archaeologist with experience in local first nations knowledge is to be retained through the province or from local first nations (Ucluelet FN or Toquaht Nation).

- **Federal Fisheries Act Section 35**

Fish and fish habitat protection provisions under the *Fisheries Act* (2019) include the following:

- No person shall carry on any work, undertaking or activity, other than fishing, that results in the death of fish; and,
- No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat. The definition of harmful alteration, disruption or destruction of fish habitat is any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish.



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- **Federal Fisheries Act Section 36**

Environment and Climate Change Canada administers Section 36 of the *Fisheries Act*, the key pollution prevention provision, prohibiting the deposit of deleterious substances into waters frequented by fish, unless authorized by regulations under the *Fisheries Act* or other federal legislation. A deleterious substance can be any substance that, if added to any water, would degrade or alter its quality such that it could be harmful to fish, fish habitat or the use of fish by people.

Changes to the federal *Fisheries Act* in 2019 have re-focused efforts on protecting both fish and fish habitat and include the productivity of commercial, recreational and Aboriginal fisheries. Changes to the *Fisheries Act* include the prohibition against causing serious harm to fish that are part of or support a commercial, recreational and Aboriginal fishery (as per Section 35), and includes the prohibiting the altering the passage for fish and modifying the flow of watercourses.

- **Federal Migratory Birds Convention Act, 1994.**

Most species of birds in Canada are protected under this *Act*. "Migratory birds" are defined by Article I of the Convention which names the families and sub-families of birds protected, and provides some clarification of the species included. In general, birds not falling under federal jurisdiction within Canada include grouse, quail, pheasants, ptarmigan, hawks, owls, eagles, falcons, cormorants, pelicans, crows, jays, kingfishers, and some species of blackbirds.

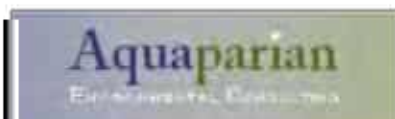
Vegetation clearing in the nesting season may result in an impact to birds protected under this *Act* and are required to undertake a bird nest presence survey prior to any clearing works. Provincial and federal migratory bird protection measures restrict tree and understory vegetation clearing outside the expected migratory bird nesting window (outside the period between March 15 to August 15).

## 2.0 MINATO ROAD PROPERTY SITE DESCRIPTION

The subject parcel is located within mostly undeveloped lands northwest of the Village of Ucluelet. The property is irregularly-shaped with a total area of 24.8 acres and legally identified as follows:

**Lot 1, District Lot 286, Clayoquot District, Plan EPP129243 (PID: 032-135-084).**

The subject property is bounded to the north and west by Olsen Bay which is a sheltered bay in the Ucluelet Inlet, to the south by Peninsula Road and to the east by Minato Road. The western



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portion of the parcel are the remains of a narrow-forested strip that follows a curve along Peninsula Road around the bay for approximately 175m. The property supports the lower reaches of two watercourses that flow into Olsen Bay. Both watercourses are understood to be fish-bearing near their confluence with the ocean. The Middle Stream bisects through the centre of the site and the Western Stream is located in the western portion of the site near Peninsula Road.

The property is gently sloping towards the ocean with the higher land being along Peninsula Road. A section of intact forest consists of mature second-growth coastal western hemlock forest with some veteran western redcedar and Sitka spruce trees. The northern edge of the property primarily consists of salt marsh habitat influenced by upland drainage and tidal mudflat. The western side of the property includes a bench of land which is partially cleared. The previous owner of the property BNEE Enterprises grubbed and removed most of the remaining tree stumps and stockpiled them to the sides of the development property. Over the past seven years, the remaining stand of trees and foreshore embankment along the northern edge of the development show signs of erosion and sloughing resulting in the further loss of several trees. Google Earth aerial imagery showing the forested site in 2016 prior to clearing works and the post-clearing conditions is included as Figure 2.

### 3.0 ENVIRONMENTAL SETTING

The following section provides an overview of biophysical attributes and land use of the site based on 2017 site survey and subsequent August 8, 2024 site survey.

#### 3.1 Physical Resources

The physical resources of the region are interrelated and are influenced by the surficial geology, topography, climate and drainages of the surrounding environment. These physical attributes are described as follows:

##### 3.1.1 Topography

The property slopes moderately down from Peninsula Road which forms the southern boundary of the property into a gentle slope north towards the ocean. Much of the property is greater than 7-10m above sea level. The western portion of the site between Peninsula Road and the sheltered bay is a low-lying depression with pockets of wet soils and ponded water with a high-water table. Surface flows drain north towards the shoreline. The area of the treeline down to the saltmarsh along the northwest side of the property includes a forested bench while the treeline area along the northern property boundary is a steep slope to the intertidal.



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### 3.1.2 *Climate*

The property is found within the Coastal Western Hemlock Submontaine Very Wet Maritime CWHvh1 subzone variant. The CWHvh1 is restricted to the southwest coast at low elevations between sea level and approximately 200m. The CWHvh1 is restricted to a narrow coastal fringe on the outer coast of southwest Vancouver Island near Port Renfrew to Quatsino Sound (Green and Klinka, 1994). The proximity of the site to the Pacific Ocean moderate temperatures and results in a common occurrence of fog, cloud and drizzle throughout the year. Precipitation varies widely in this sub-region, with lowest values occurring in the local rain shadow on the north eastern part of Vancouver Island at Bull Harbour (Green R.N. and Klinka, K, 1994).

The mean annual precipitation in the area ranges between 2009 to 3943 mm. The mean annual temperature is 9.1 °C. The Ucluelet area has experienced both above average winter rainfalls and hot dry summer months over the past five to six years indicating coastal climatic change.

### 3.1.3 *Land/soil*

A review of the Ministry of Environment Technical Report 17, Soils of Southern Vancouver Island identified the most common soils within the subject property are comprised of the Hankin Soil Association, with the taxonomic classification of Duric Ferro-Humic Podzol (Jungen, Technical Report 17).

Hankin soils occur in the Western redcedar subzone of the Coastal Western Hemlock – Pacific Silver fir (*Amabilis fir*) within the Estevan Coastal Plan. The soils have developed in cobble, gravelly fine and/or gravelly sand colluvial morainal deposits, less than 1m thick overlaying argillite bedrock (Jungen, Technical Report 17). Slopes typically vary between 1 to 30% with elevation from sea level to 600m.

### 3.1.4 *Surface Water*

The subject property contains two streams that support fish use within their lower reaches below Peninsula Road and close to the confluence with the ocean. The streams are fed by upland groundwater sources and stormwater runoff coming from ditching along Peninsula Road and Minato Road and likely support amphibians throughout their length in the property. A small perched skunk cabbage and sedge dominated swamp forms a fanned floodplain for the Middle Stream and a second small upper drainage helps to attenuating seasonal run-off from the property. The stream and drainage combine in the floodplain and flow



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into Ucluelet Inlet and through a salt marsh that encompasses much of the shoreline within the bay and are considered key environmentally sensitive features on the property worthy of protection. A second stream (Western Stream) is located at the southwestern end of the property boundary within a steeply incised stream channel. The fish-bearing stream crosses under Peninsula Road in a large diameter culvert (~1.5m<sup>2</sup> dia) and directs flows into Olsen Bay. This watercourse also receives road run-off from Peninsula Road.

A small drainage is also located at the northeast corner of the property and was excavated out by the previous owner with clearing for additional road access into the property. The drainage receives directed run-off from ditches on both sides of an interior access road within the subject property and directs flows down the foreshore embankment. Requirements for erosion control at this location may be required.

### 3.1.5 Groundwater

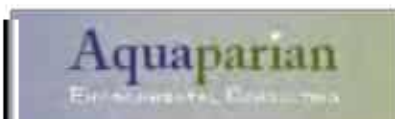
The low-lying seepages in the western portion of the site have a high-water table that appears to be directly influenced by surface run-off and seasonal perched groundwater conditions. Saturated soils and ponded water throughout the property indicate water to be at or close to the surface forming small creeks and forested wetlands. These creeks flow during winter and wet summer months.

## 3.2 BIOLOGICAL RESOURCES

### 3.2.1 Flora

The CWHvh1 zonal forests (Coastal Western Hemlock Submontaine Very Wet Maritime CWHvh1 subzone variant) are dominated by Western hemlock (*Tsuga heterophylla*), Sitka spruce (*Picea sitchensis*), western redcedar (*Thuja plicata*) and minor amounts of amabilis fir (*Abies amabilis*). Major under story vegetation commonly includes salal (*Gaultheria shallon*), Alaskan blueberry (*Vaccinium alaskaense*), red huckleberry (*Vaccinium parvifolium*), deer fern (*Blechnum spicant*), step moss (*Hylocomium splendens*) and lanky moss (*Rhytidiadelphus loreus*). Evergreen huckleberry (*Vaccinium ovatum*) is a minor species on zonal sites, but more common on drier sites (Green and Klinka, 1994).

The initial site survey of the property was completed on April 25, 2017 after the forest stand of the property had been mostly cleared which prevented a thorough and detailed survey of the forest stand and its biological attributes. The original





survey was also completed before the typical growing season for flowering plants.

Observation of the remaining forest stand noted the property to be represented by the vegetation Site Series 01 (CwHw –Salal) and Site Series 13 (CwSs – Skunk Cabbage) (Green, R.N and K. Klinka, 1994). Trees and shrubs were observed to be associated with wet and poor nutrient environments. Western redcedar represented the dominant tree species. Subdominant tree species included Western hemlock, Sitka spruce and red alder (*Alnus rubra*). Minor amounts of Amabilis fir were present. The shrub layer within Site Series 01 is dominated by salal, red huckleberry, false azalea (*Menziesia ferruginea*), evergreen huckleberry, deer fern and Alaskan blueberry. The shrub layer within Site Series 13 also includes salal, red huckleberry, false azalea, and evergreen huckleberry. The coastal western hemlock zone is characterized by a forest floor composed of a dense litter of needles and small branches. Cool, damp and acidic conditions favour a moss layer build up over time that may have been present prior to clearing (Green, R.N and K. Klinka, 1994).

### 3.2.2 Fauna

The coastal rainforest of western Vancouver Island supports a broad diversity of wildlife including large and small mammals, bats, songbirds and amphibians. Large terrestrial mammals expected to be found within the forests within and adjacent to the parcel include black bear (*Ursus americanus*), black tailed deer (*Odocoileus hemionus*), cougar (*Puma concolor*) and wolf (*Canis lupus*). Smaller mammals commonly associated with the CWHvh1 zone include American mink (*Mustela vison*), ermine (*Mustela erminea*), river otter (*Lontra canadensis*) and several species of mice and voles. The wetter areas likely support several amphibians including Northwestern Salamander (*Ambystoma gracile*), Pacific tree frog (*Hyla regilla*) and red-legged frog (*Rana aurora*). The salt marsh habitat provides habitat for many species of mammals including shrews, mice, voles, raccoons and river otters. Some of the fish species that are likely to use the marsh area tidal channels for food, shelter and breeding include herring, salmon, cutthroat trout, stickleback, sole flounder and surf perch.

Wildlife observations during the site visit included several black-tailed deer and a mother black bear with two juvenile cubs within the northern end of the site utilizing habitat between the salt marsh area and the forested stands. Black bears are expected to frequent the area regularly foraging on sedge grasses in the saltmarsh and the root systems of skunk cabbage in the adjacent forested swamps. The property may also include avian cavity nesters including Pileated



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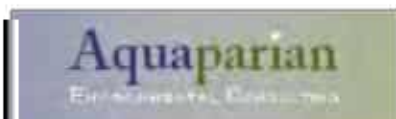
woodpecker (*Dryocopus pileatus*) in which cavity holes were observed in some of the trees. Bald eagles (*Haliaeetus leucocephalus*) were observed flying overhead of the property. Banana slugs (*Ariolimax columbianus*) were observed in the study area. Harbour seal (*Phoca vitulina*) vocalizations were noted from within the sheltered bay. Several wildlife paths were observed throughout the subject parcel and because the property has seen minimal change over the past two to three years since its original clearing, the property is expected to be visited by other animals including various mustelids, wolves and cougars.

### 3.2.3 Birds

A detailed bird survey was outside the scope of this study. No obvious bird nests were observed at the time of the site visit (April 25, 2017 or August 8, 2024). The area is suitable habitat for eagle, osprey and heron nesting use due to the ocean front location and presence of mature trees though no obvious raptor nests were observed. Many species of songbirds were observed at the time of the assessment and the area is still likely used by various songbirds for foraging and nesting. Many wildlife trees were observed with pileated woodpecker holes in the trunk that may be later utilized by secondary cavity nesting species. A number of bird species are expected to utilize the area throughout the year such as humming birds, woodpeckers, northwestern crow, American robin (*Turdus migratorius*), common raven (*Corvus corax*), warblers, vireo's, thrush, hawks and owls; as well many marine birds will use the area such as Great Blue Heron (*Ardea herodias*), Brant geese (*Branta bernicla*), Canada geese (*Branta canadensis*), mallards (*Anas platyrhynchos*), greater yellowlegs (*Tringa melanoleuca*), sandpipers, kingfishers, mergansers, green-winged teals (*Anas carolinensis*), gadwalls, plovers, snipe, bald eagles and ospreys (*Pandion haliaetus*).

Review of the Wildlife Tree Stewardship (WITS) nest inventory database did not identify the presence of any recorded bald eagle nests within the property. The closest eagle nest identified was located approximately 800m northwest of the subject property (Nest BAEA-108-307). A search of the remaining forest stand did not result in the observations of feathers, guano splashes, pellets, or prey remains at the base of trees or within open areas. The nesting period for bald eagles on Vancouver Island is typically mid-February to the end of June but can be weather dependant. Osprey are typically active between mid-April to the beginning of July, while Great blue-herons nest between March and September.

Remaining trees within the property are expected to support suitable nesting platforms and cavity nesting opportunities for various hawks and owls including



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Northern Goshawk (*Accipiter gentilis*), Barred Owls (*Strix varia*), and Western screech owl (*Otus kennicottii*). The property is well positioned close to the ocean and to open forest patches where mice and song birds can be hunted. Ancillary information from the property's new owners have noted observations of owl use within the property.

### 3.2.4 Fisheries

Two streams are located within the Minato Road property. The Middle Stream located in the centre of the southern half of the property is classified as an S4 stream (<1.5m fish bearing) and receives drainage from highway run-off and groundwater seepage. The drainage is mostly confined in a narrow channel within the cleared development area and then braids out as it flows down a topographic bank leading to the ocean. A small second drainage channel also meets the Middle Stream below in a small gully which includes stream floodplain characteristics. The Middle Stream has a length of more than 160m within the property and has an average channel width of 1.2m with a gravel and silt streambed substrate. A portion of the riparian stream corridor was previously cleared (2017) for the bridge crossing and along the side of the road to the north of the bridge, but then follows into a mostly intact forest stand. Vegetation restoration works were recommended within a 10m protective buffer on either side of the watercourse (following Provincial RAPR Guidelines). At the point of topographic change, the creek flows within a small defined gully with a high groundwater table which is dominated by western hemlock, western redcedar, Sitka spruce, skunk cabbage, deer fern, evergreen huckleberry, salmonberry, giant horsetail, red huckleberry, false azalea, salal, false lily-of-the-valley, slough sedge and moss species. This stream is also tidally influenced and likely supports habitat at its confluence for rearing coho salmon parr. Aquaparian proposes where the creek flows down into the gully that riparian protection measures start at the top of the gully embankment in order to ensure bank stability and protection of the lower swamp / floodplain.

The additional site assessment on September 17, 2024 confirmed the location of the municipal Parkland Dedication / property boundary (lot marker stakes) and confirmed that the top of bank for the Middle Stream gully would be protected within the parkland. As understood, ERIF will allow for an additional one metre buffer protection beyond the Parkland Dedication boundary for building works.

A second small watercourse (Western Stream) is located on the far western boundary of the property (outside the proposed development) and is classified as an S3 stream (1.5-5m wide fish-bearing). The watercourse has a channel length of approximately 110m within the property. Reach 1 of this stream (Western



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Stream) is tidally influenced. The stream enters the property through a large 1.5m diameter corrugated metal culvert buried under Peninsula Road. The culvert is slightly hanging but should allow the passage of fish during moderate to high seasonal stream flows. The stream is approximately 2m in width, 20cm deep near the estuary with a gravel streambed. The watercourse is flat, braided in sections with undercuts from streamside roots and flows are highly tannin in colour. The Western Stream flows through the undisturbed forested area of the site within the southwestern portion and is identified under the BC CDC as fish-bearing with a coho salmon (*Oncorhynchus kitsutch*). A copy of the provincial Habitat Wizard search results has been included as Appendix C. It is understood that this stream will be protected within the foreshore Parkland Dedication and the 10m Peninsula Road setback put in place by the DOU.

Within the District of Ucluelet, all watercourses, lakes, streams, ponds and wetlands identified as fish-supportive habitat or connected to watercourses are protected and are considered as DPAs that include the lands within 30 metres of the watercourse measured from the high-water mark. The development of the property may require submission of a Development Permit application to allow encroachment into the 30m for the middle stream.

The sensitive marine saltmarsh and forested buffer comprising the shoreline of the property is protected under the Marine Shoreline DPA VII. This DPA applies to all lands within 30 metres, measured horizontally in both landward and seaward directions, from the natural boundary of the ocean. The previous owner did significantly encroach into this 30m setback when they cleared large sections of the property. The 30m setback has been identified as "Parkland Dedication" and this area was planned to encompass a public trail. The foreshore DPA is considered an important corridor for wildlife utilizing the back area of Ucluelet Inlet and Olsen Bay. The installation of a community trail within the 30m setback should include further discussion with the DOU and consideration of this area remaining as a wildlife corridor rather than community trail by the DOU.

Any proposed installation of new culverts or stream-crossing bridges during development of the property will require approval from the DOU as owner of the stream park dedications areas, as well as completion of a provincial *Water Sustainability Act (WSA)* Notification with the Ministry of Forests, Lands, Natural Resource Operations (FLNRO). Stormwater management applications may also require further approvals under the *WSA*.



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### 3.2.5 Species-at-Risk

The Species-at-Risk Act (SARA) is designed to prevent or reduce the likelihood of wildlife species becoming extinct or extirpated and to provide for the recovery and management of endangered, threatened and species of special concern as a result from harm by human activity. Provisions of SARA include prohibiting the taking or possession of listed species and the damaging or destruction of their residents and critical habitat.

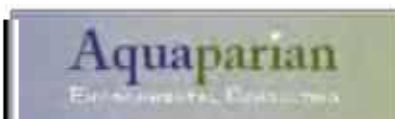
**Red-Listed** species includes any ecological community, and indigenous species and subspecies that is extirpated, endangered, or threatened in British Columbia. Red-listed species and sub-species may be legally designated as, or may be considered candidates for legal designation as Extirpated, Endangered or Threatened under the Wildlife Act.

**Blue-Listed** species includes any ecological community, and indigenous species and subspecies considered to be of special concern (formerly vulnerable) in British Columbia.

A search of the BC Species and Ecosystem Explorer Database for red and blue-listed vertebrates, invertebrates, vascular, non-vascular plants and lichens within the Vancouver Island region, South Island, Alberni-Clayoquot Regional District, Coastal Western Hemlock BGC Zone for habitats including: Forest, Ocean, Riparian, Stream/River and Wetland resulted in 25 red-listed species and 57 blue-listed species. The BC CDC species search results have been included as Appendix D.

The BC iMap website identified the following provincially red-listed rare species within the study area: Seaside Centipede Lichen (*Heterodermia sitchensis*). The last observation was in 2001 (Occurrence Record #28392) of two thalli observed on small twigs of a Sitka spruce located on the headland near the shoreline (refer to Figure 3). A narrow buffer of approximately ~8m was left intact along the shoreline at the northern tip of the property by the previous property owner where the rare lichen had been recorded except where a few trees were removed for a wooden deck that extends out towards the shoreline. Aquaparian inspected the area of the 2001 identification and could not identify any Seaside Centipede Lichen occurrences.

The following includes a description of sensitive wildlife species that are considered as potentially to be found either within the subject property or within the adjacent lands immediately surrounding the subject lands:



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**Seaside Centipede Lichen (*Heterodermia sitchensis*): Red-listed  
(COSEWIC Status Endangered)**

This lichen is a pale greyish, leafy, basally attached lichen. It can be recognized by the presence of marginal cilia and tiny urn-like structures near the lobe tips. In Canada, it occurs only in coastal British Columbia, where it ranges 210km from northern Vancouver Island south to Pacific Rim National Park. Within this region, it is known exclusively from the Very Wet Hypermaritime subzone of the Coastal Western Hemlock Zone. Throughout its range, this lichen occurs exclusively at seaside on nitrogen-enriched twigs in the lower canopy of old Sitka spruce trees (BC CDC).

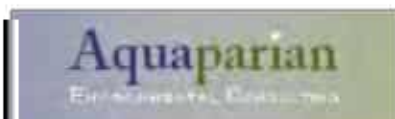
This rare species of lichen was identified in the provincial iMap database as occurring in only two locations in the area including the northern tip of the subject property on old Sitka spruce trees near the shoreline. The only other known location of the species was identified at the end of Seaplane Base Road approximately 0.8km east of the subject parcel.

No occurrences of this lichen species were identified by Aquaparian during the August 2024 site survey of the lower branches of Sitka spruce trees in the area. A detailed survey was not completed as part of the scope of this Biophysical Assessment. The area of the past 2001 identification of this species will be protected within the 30m marine DPA. If future removal of vegetation is required for the proposed marine trail, a detailed species identification assessment may be required.

**Marbled Murrelet (*Brachyramphus marmoratus*): Blue-listed**

A chunky seabird with a black bill and an entirely dark tail. The nesting season is late March to late September. In coastal areas, the bird is mainly in salt water within 2 km of shore, including bays and sounds; not uncommon up to 5 km offshore; occasionally also on rivers and lakes usually within 20 km of ocean. Nesting is found in old growth forest, especially stands of large Sitka spruce and western hemlock. In British Columbia, the adult diet during the breeding season is mostly fishes, primarily Pacific Sandlance and Pacific Herring (BC CDC).

It is believed that calm marine waters of Ucluelet Inlet likely provide foraging opportunities for murrelets, however, due to the flat profile of the subject property, Murrelets are not expected to utilize the surrounding forest lands.



**Townsend's Big-eared Bat (*Corynorhinus townsendii*): Blue-listed**

In Canada, it is restricted to British Columbia. On the coast, it inhabits Vancouver Island, the Gulf Islands and the Vancouver area. In British Columbia this species is associated with a variety of habitats from coastal forests to arid grasslands of the interior. Its elevational range in the province is from sea level to 1070 metres, although most occurrences are from low elevations. Although it is widespread across most of southern British Columbia, this bat is particularly vulnerable to human activity. The only nursery colony found in British Columbia was in the attic of a house on Vancouver Island; it consisted of about 60 females and their young. A late flyer, Townsend's Big-eared Bat emerges an hour or so after dark. It is an agile bat that is capable of flying at slow speeds. Food habits have not been studied in British Columbia (BC CDC). The area surrounding the subject parcel may provide foraging and perching habitat for these bats.

**Keen's Myotis (*Myotis keenii*): Blue-listed**

These bats frequently use moist to wet coniferous forest habitats. The distributional range suggests an association with coastal forest habitat. Apparently, this bat is associated with mature forests. Across its range it has been found roosting in southwest-facing rock crevices, among geothermally heated rocks, in tree cavities, in bark crevices, and in buildings. Tree cavities and loose bark are important natural roost sites and may be limiting in some parts of the range. Known maternity roosts and summer feeding areas in British Columbia are at elevations below 240 meters; known hibernation sites occur above 400 meters in caves over 100 meters long. These bats have been observed foraging over hot spring pools and clearings above scrubby salal (BC CDC). Surrounding forests and estuary may provide foraging opportunities for these bats.

**Northern Red-legged Frog (*Rana aurora*): Blue-listed**

Range extends from southwestern British Columbia, including Vancouver Island in Canada, south along the coast of the United States. Red-legged frogs have been observed in a variety of aquatic and terrestrial habitats. They breed in shallow, littoral zones of lakes, temporary and permanent pools, wetlands, bogs and fens in close proximity to forests. Lotic habitats with little to no flow may be utilized by red-legged frogs, and riparian areas are important for newly metamorphosed froglets. Outside of the breeding season, red-legged frogs primarily utilize all forest and woodland types, but individuals are occasionally found in more open and rural areas such as shrubland/chaparral,



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cropland/hedgerow, old fields, and suburban/orchard. Red-legged frogs are most common at elevations below 500m with low slopes and containing moist, mature/old forest in some areas (BC CDC). Moist forest conditions within the property likely support the red-legged frog.

A northern red-legged frog occurrence is identified within the provincial Habitat Wizard database approximately 1.3km southeast of the subject property and extending approximately 1km in a southeast direction. The small wet forested swamps likely support red-legged frogs.

**Western Toad (*Anaxyrus boreas*): Blue-listed**

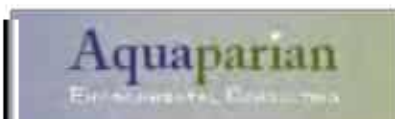
Western toads have been observed in a variety of aquatic and terrestrial habitats. They breed in shallow, littoral zones of lakes, temporary and permanent pools and wetlands, bogs and fens, and roadside ditches. Toads utilize a variety of terrestrial habitats in BC, including all forest and woodland types, shrubland/chaparral, savanna, cropland/hedgerow, grassland/herbaceous cover, old fields, and suburban/orchard. Hibernacula are located in areas with loose soils and burrows. Toads have been observed using downed wood for cover in recent clearcuts (BC DCD). Wet areas within the property may provide suitable habitat for this species.

**Ermine (*Mustela erminea anguinae*): Blue-listed**

Ermine are endemic to Vancouver Island and they inhabit a variety of forest and woodland habitats. Ermine are highly adaptable predators, easily invading small burrows to feed on voles, mice, and young rabbits. They also eat earthworms, frogs, and squirrels, climbing trees and swimming if necessary. In the summer, the Ermine's coat is brown, but in the winter it is pure white except for the tip of the tail, which stays black. Ermine population density tends to fluctuate as rodent populations fluctuate. Ermine prefer coniferous or mixed forests and streamside woodlands (BC CDC). The forest habitat within and adjacent to the parcel may support this species. The two riparian corridors likely provide suitable habitat for ermine to utilize.

**Wandering Salamander (*Aneides vagrans*): Blue-listed**

This salamander is widespread on Vancouver Island and neighboring islands in British Columbia, and also has been found on the mainland. Habitat ranges from moist coniferous forests; in forest edge, forest clearings, talus, and burned over areas. The salamander is usually found under bark, in rotten logs, or in rock crevices. It may aggregate in decayed logs in summer. Logs are the primary



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microhabitat in spring, summer, and fall on Vancouver Island. It lays eggs in cavities in rotten logs, in rock crevices, under bark, or among vegetation. The wandering salamander feeds on small arthropods and is inactive in cold temperatures and hot, dry weather (BC CDC). The subject parcel contains damp and wet areas with downed logs that may support this species.

**Vancouver Island Western Water Shrew (*Sorex navigator brooksi*): Blue-listed**

This shrew is endemic to Vancouver Island and occurs along watercourses. They are dependent on high-quality intact riparian systems and found over a large part of Vancouver Island. They live in a diverse range of stream habitats, from narrow to wide streams, from slow-moving to moderately-fast flowing waters. The substrate of the streambed is usually cobble or gravel, and the stream typically has a complex environment with instream coarse woody debris, and dense riparian vegetation (shrubs and herbs). They are found at low elevations, in a variety of forest types and age classes, as long as the riparian corridor is intact. The primary threat to habitat of the Vancouver Island common water shrew is loss, fragmentation, and degradation due to urban development, as well as forest practices that affect riparian habitat and water quality (BC CDC June 2019). This shrew is relatively rare but has been found mostly in southern and eastern Vancouver Island, but may occur as far west as Ucluelet.

**Cutthroat Trout (*Oncorhynchus clarkia clarkia*): Blue-listed**

Cutthroat trout (*clarkii subspecies*) are anadromous meaning this cutthroat trout subspecies spawns and rears in freshwater (small streams and large rivers) but can also forage in tidal waters as an adult. Some resident fish spend their entire life in freshwater. Cutthroat will forage in tidal estuaries but are typically found up freshwater systems utilizing all inflowing systems including stream mainstems, tributaries, lakes and forested swamps (BC CDC). The streams within the subject property provide suitable habitat for cutthroat trout.

**Northern pygmy owl, *swarthi* species (*Glaucidium gnoma swarthi*): Blue-listed**

There are three species of the seven owl species recognized in North America that breed in BC. The *swarthi* subspecies is endemic to Vancouver Island and adjacent islands. These owls are crepuscular, feeding on small mammals, reptiles, amphibians, a variety of bird species and invertebrates using a perch and pounce hunting method. They forage along roads through forested areas,



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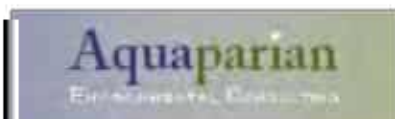
openings within continuous forest, open stands, riparian corridors and open habitats along lakeshores and higher elevations. Forage sites include shrub, pole sapling, young, mature or old forest seral stages. This obligate secondary cavity nester is dependent on woodpecker or natural cavities in coniferous trees. Nesting sites include young forest with suitable wildlife trees, mature forest or old forest sites. (Cooper and Beauchesne, 2004). The mature riparian forest habitat of the study area may provide suitable habitat for this species.

**Western Screech Owl *kennicottii* subspecies (*Megascops kennicottii kennicottii*): Blue-listed**

The range of this small owl extends from south-coastal and southeastern Alaska, south through coastal British Columbia to coastal Oregon. In Canada, the species occurs only in British Columbia in two regions: along the coast of BC including Vancouver Island, but excluding the Queen Charlotte Islands, and in the southern interior part of the province, with most of the interior birds being found in the Okanagan Valley. This subspecies has a very low population in Canada where it depends on lower elevation mature riparian woodlands for nesting and roosting. This owl prefers open forest for foraging and requires cavities in old, large trees for nesting and roosting. Populations have apparently declined in southern Vancouver Island and the Lower Mainland concurrently with the recent arrival of the Barred Owl, which is likely a predator of this species. The Western Screech-owl is a nocturnal, non-migratory species that is territorial year-round (BC CDC). The western screech owl may use the mature riparian forest habitat of the study area and adjacent lands.

**Brandt's Cormorant (*Phalacrocorax penicillatus*): Red-listed**

This species of marine bird is a resident throughout the year near nesting areas, but ranges more widely when not breeding. Post-breeding dispersal from colonies on the west coast of the United States occurs in July and August as thousands move north to the waters of southern British Columbia and Puget Sound; a gradual movement southward begins in September and October, but at least 10,000 to 15,000 overwinter in Puget Sound, the Strait of Georgia, and Juan de Fuca Strait. The range is mainly the inshore coastal zone, especially in areas having kelp beds; also around some offshore islands; less commonly, inshore on brackish bays; in winter, mostly around sheltered inlets and other quiet waters. Typically they nest on flat or gently sloping surfaces on the tops of rocky islands along the coast, favoring protected leeward sides of islands; they frequently nest with other sea birds and may sometimes use wider ledges of mainland cliffs. The nest is built on the ground by both sexes and may be re-used



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in the subsequent year. Egg laying occurs mainly in June in British Columbia. The cormorant gathers in flocks in feeding areas. Gulls commonly prey on eggs and chicks. Ucluelet Inlet likely provides suitable foraging habitat for Brandt's Cormorant.

**Great blue heron, *fannini* subspecies (*Ardea herodias fannini*): Blue-listed**

Great blue heron is a large wading bird residing along the Pacific coast from southeastern Alaska south to Washington. Nests are colonially in tall Sitka spruce, western red cedar, western hemlock, pine, red alder and black cottonwood. Isolation from disturbance appears to be an important factor in nest site selection. Foraging habitat includes aquatic areas generally less than 0.5m deep, such as: marine intertidal areas, estuaries, riparian areas, wetlands, freshwater lakes, and muskegs. These areas are generally within 5 km of the nest site, although some areas have been identified up to 33km away (BC CDC). The salt marsh and tidal mudflat intertidal area surrounding the subject property provides ideal foraging habitat for this species. No heron nests were identified within or adjacent to the subject property.

3.2.6 *Sensitive Ecosystem Inventory*

The Sensitive Ecosystems Inventory of East Vancouver Island and the Gulf Islands (SEI) systematically identified and mapped specific rare and fragile ecosystems. The purpose of the SEI project was to identify remnants of rare and fragile terrestrial ecosystems and to encourage land-use decisions that will ensure the continued integrity of these ecosystems.

Seven sensitive ecosystem types were mapped in the east coast of Vancouver Island study area as follows: Wetland, Woodland, Riparian, Older Forest (>100yrs), Terrestrial Herbaceous, Sparsely Vegetated and Coastal Bluff. Two other important ecosystems were mapped for their general biodiversity and wildlife habitat values: Older Second Growth Forest (60-100yrs) and Seasonally Flooded Agricultural Fields.

Within the study area, an SEI pilot project to map SEI attributes on Weyerhaeuser West Island Timberlands lands was conducted. The model and objectives for SEI mapping on the West Island Timberlands are somewhat different than previous SEI projects because there is a single tenure holder, an existing GIS with Terrestrial Ecosystem Mapping (TEM), forest cover and other relevant data, and regulations requiring reserves for some of the ecosystem types identified in previous SEI inventories (e.g., riparian, wetland, old forest). A combination of previous SEI project categories and those rare natural plant



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communities on the BC Conservation Data Centre tracking lists (Red and Blue) were used to define a single GIS map layer.

In addition to the Provincial Red- and Blue-listed plant communities, a local "landscape rarity" sub-category was created within the Rare Community (RC) category. Landscape rarity was defined as site series or other ecosystems that collectively represent 2% of the Defined Forest Area (DFA). These ecosystems were subdivided into three rarity classes based on their total area as follows:

- la 1 – less than 10 ha (51 units)
- la 2 – 10 ha to 50 ha (30 units)
- la 3 – 51 ha to 210 ha (39 units).

The subject parcel is located within Mapsheet 092C093 and mapped SEI habitat units include the shoreline salt marsh ecosystem that is identified as la1: Landscape Rarity Class 1: less than 10ha (May 2017 report).

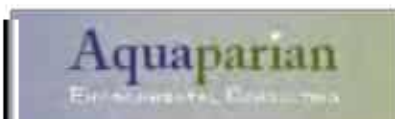
The property was observed to support four habitat units including a mature second-growth forest with some old growth conifers spread throughout the property; riparian stream habitat found along the two identified streams dominated by skunk cabbage, salal and deer fern pockets, small pocket wetlands dominated by skunk cabbage and slough sedge, and salt marsh shoreline habitat dominated by salt-tolerant sedge and unique shrub habitat.

A description of the four vegetation communities are as follows:

*Second-growth Older Forest (OSG:CWH)*

The forest is identified as an Older Second Growth Forest dominated by conifers within the Coastal Western Hemlock (CWH) bio-geoclimatic zone. Trees within the stand average 100 years or greater. The forest floor is composed of a dense litter of needles and small branches and favouring a cool moist moss ground layer built up over time.

The majority of the site appeared to have consisted of a second growth forest stand with much of the canopy cover dominated by Western redcedar, Western hemlock and Sitka spruce. Minor tree species also included Red alder and Amabilis fir. Western redcedar dominated the canopy of the property near Peninsula Road with Western redcedar and Western hemlock dominating the eastern portion of the lot and older Western redcedar with mature Sitka spruce dominating the western portion of the property. Several large mature redcedars were identified within the intact tree stand with tree diameters ranging from 76 to



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123cm (DBH). A number of large Sitka spruce with a DBH of 112 to 140cm were also documented.

Understory vegetation predominantly consisted of salal, salmonberry (*Rubus spectabilis*), evergreen huckleberry, deer fern, licorice fern (*Polypodium glycyrrhiza*), red huckleberry, and sword fern (*Polystichum munitum*). Other species present include bracken fern (*Pteridium aquilinum*), Scotch broom (*Cytisus scoparius*) and reindeer lichen (*Cladonia rangiferina*). Mosses and lichens noted included Oregon-beaked moss (*Eurhynchium oregonum*).

Down and dead logs, fallen wood debris and the trunks of old growth cedars were commonly covered with several moss species, liverworts, hanging lichens and ferns. Mosses included Oregon beaked moss, lanky moss, tree moss, step moss and cat-tail moss (*Isothecium myosuroides*). Thick hanging lichens including witches' hair (*Alecteria sarmentosa*) were common amongst old-growth trees.

*Riparian Mature Forest (RI:5) – mature forest*

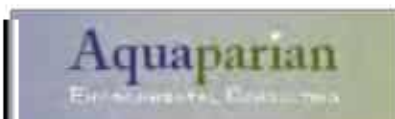
Mature riparian forests generally have a dominant canopy cover with the understory more developed where the canopy opens. Forest stands are generally 80 to 200 years in age. The riparian vegetation along the identified streams is dominated by skunk cabbage, salal, common horsetail (*Equisetum arvense*), deer fern, red huckleberry, Solomon's seal (*Polygonatum multiflorum*), Oregon beaked moss and witches' hair. Canopy cover species includes Western hemlock, Western redcedar and Sitka spruce. The riparian areas of the subject parcel include streamside riparian zones along both sides of the two identified streams and the riparian zone of the ocean shoreline.

*Pocket Wetland (WN:sp)*

These forested pocket swamps typically have a fluctuating water table, often with shallow surface water and are nutrient rich on mineral soils dominated by rushes, sedges or grasses. Wet forest pockets located in the low-lying portion of the parcel within the shallow gully adjacent to the Middle Stream supported both aquatic and saturated soil tolerant species such as skunk cabbage (CwSs – Skunk Cabbage) and slough sedge.

*Salt Marsh Habitat (WN:ms)*

These wetlands area characterized by permanent, seasonal or diurnal flooding of nutrient rich waters and include salt marsh estuary. The two small streams within





the property were found to be connected at confluence with salt marsh habitat dominated by Lyngby's sedge (*Carex lyngbyei*), Pacific silverweed (*Argentina pacifica*) and sweet gale (*Myrica gale*) and reed canary grass (*Phalaris arundinacea*) thickets near the tide line. Other salt tolerant species included common rush (*Juncus effusus*), slough sedge, sea watch (*Angelica lucida*), marsh jaumea (*Jaumewa carnososa*), sea plantain (*Plantago maritima*), common arrowgrass (*Triglochin maritima*), sea milkwort (*Lysimachia maritima*), Pacific glasswort (*Salicornia pacifica*), common horsetail, cinquefoil (*Potentilla palustris*) and bracken fern. Sweet gale along the upper marsh was also associated with large western redcedar and sitka spruce, minor amounts of amabilis fir and Pacific crabapple (*Malus fusca*). The lower reach (Reach 1) of both streams were also associated with skunk cabbage, salmonberry, willow *sps*, dwarf dogwood (*Cornus canadensis*), wild strawberry (*Fragaria virginiana*) and salmonberry.

Vegetation that could be identified within the cleared portions of the property include western redcedar, western hemlock, Sitka spruce, salal, evergreen huckleberry and deer fern. It is expected that the cleared section of forest resembled the forest stand previously identified along the southern boundary of the property. Other emerging species within the previously cleared portion of the site include red alder sapling, shore pine sapling, salmonberry, common rush, pearly everlasting, common dandelion, thimbleberry, grass species and invasive species including Scotch broom, evergreen blackberry and Himalayan blackberry.

### 3.3 LAND USE

#### 3.3.1 Present Land Use

The subject parcel was extensively cleared of its native forest by BNEE Enterprises in winter of 2017, followed by grubbing and grading of tree stumps and the stripping of organic soils. The previous owner also laid out a series of access roads throughout the property. The owner of property was instructed in 2018 to follow a vegetation management plan to re-instate impacted vegetation buffers along the foreshore and along the Middle Stream. It appears that revegetation of these areas has occurred primarily through natural regeneration of understory vegetation and some seedling trees with the exception to the required tree density. The new multi-family development will require completion of the proposed revegetation plan by planting of additional trees within vegetation buffers as previously requested for the property and also to a level that would meet rainwater or stormwater management standards for a large residential build-out. The new development should include a Stormwater Management Plan and a Landscape Management / Preservation Plan that meets residential development standards for regions subjected to extreme levels of rainfall.



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Construction of retaining walls should follow form and character of the natural environment explore the used of naturally stacked rock and pocket plantings using native coastal vegetation.

### 3.3.2 *Special Places*

The study area falls within the lands traditionally occupied by the Yuulu?il?ath (Ucluelet) First Nation which are part of the collective Nuu-Chah-Nulth First Nation. A review of cultural and historical information for the subject parcel was conducted through the BC Archaeological Branch of the Ministry of Forests, Land and Natural Resource Operations (MFLNRO). Provincial records indicate that there are no known archaeological sites known within the property.

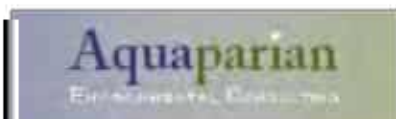
However, the property and the shoreline estuary were likely used as a food source and gathering place for local first nation groups. As such, prior to any further land alterations, the owner should be prepared to retain a Professional Archaeologist to review the activities, and where warranted, have the archaeologist conduct a site walk of the property to identify any potential unknown or unprotected archaeological material. As understood, ERIF has retained a professional archaeologist from Yuulu?il?ath Government – Ucluelet First Nation to complete an assessment and report of cultural findings within the property.

## 4.0 RIPARIAN RESTORATION

Requirements for vegetation restoration works within the property were based on site conditions identified in the 2017 EIA report and based on a compliance letter produced for the property by the DOU dated December 13, 2018. The following requirements as per page 2 of the district letter remedial vegetation works. Figure 4 includes an image of the proposed restoration areas within the foreshore and riparian setbacks of the property. Because development plans within the property have changed and the pioneering or infilling of native plants species has taken hold throughout the property within the past seven years, vegetation remediation works within DPAs will require further revisions.

Vegetation remediation of the site is to include the following:

- Along the impacted 10m riparian buffer strip protected by the Parkland Dedication for the Middle Stream headwaters including inflowing side channels, some natural regeneration has occurred from the existing seed bank in the soils. The understory appears to be well



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established with red alder Sitka spruce and western redcedar saplings, salmonberry, baldhip rose, Scotch broom, common horsetail, salal, deer fern, common rush, slough sedge and reed canary grass. To enhance the riparian habitat and to ensure the natural tree canopy density of the surrounding intact riparian area is achieved, **Aquaparian recommends removal of invasive plant species including Scotch broom and planting 20 western hemlock trees within the restoration area on the south side of the Middle Stream interspersed with existing riparian vegetation;**

- If ERIF proposes removal and replacement of the existing Middle Stream bridge crossing, this could be restored for parkland use for pedestrian or bike access or re-instate graded streambanks using native trees and shrubs; and,
- Along the impacted 30m coastal parkland dedication area now owned by the DOU within the north end of the property, the previously cleared areas have naturally regenerated with understory vegetation including red alder, western hemlock, shore pine, Sitka spruce and western redcedar saplings, deer fern, bracken fern, salmonberry, evergreen huckleberry, Scotch broom, evergreen blackberry, Himalayan blackberry, thimbleberry, salal, common rush, pearly everlasting, common dandelion, clover and grass species. **Aquaparian recommends removal of invasive species including Himalayan blackberry and Scotch broom and planting of additional trees to increase the density of the existing tree saplings.** The trees in the intact portion of the setback are approximately 5m apart on average. The density of the regenerating tree saplings is approximately 3-5 trees per 100m<sup>2</sup> which is approximately 114 naturally regenerated trees within the restoration area (based on an area of 2850m<sup>2</sup>). The original revegetation plan recommended 160 native trees to be planted within the coastal restoration area. Therefore, Aquaparian recommends that an additional 46 native trees be planted within the coastal restoration area interspersed with existing native vegetation.

Where possible, use stockpiled organic soil on site as a growing medium for planting areas and salvage native plants, logs and stumps with soil and live native vegetation to transplant within the site and incorporate into the planting plan for landscaping. This will assist in incorporating native plant seed banks and add natural local form and character to the development

#### 4.1 PLANTING PLAN

The re-instatement of natural trees and shrub vegetation is intended to help stabilize the soils and improve natural habitat in the riparian zones. The Parkland Dedication areas now owned by the DOU are riparian setbacks and restoration areas that are to be considered as No-Go zones and left to naturally infill after planting. Native plant species were selected based on existing native species and suitability to the site conditions. The following tree species have been included in the planting plan to achieve desired restoration results and have been selected for the restoration areas within the foreshore and riparian restoration areas (see Table 1).



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Table 1. Parkland Dedication Planting Plan

Common Name	Species	Spacing	Size	Quantity	Cost Per	Total
Riparian Planting Plan: plant trees interspersed with existing vegetation within the restoration area on the south side of the Middle Stream.						
Coastal western hemlock	<i>Tsuga heterophylla</i>	5m <sup>2</sup>	2 Gallon	20	\$20	\$400
<b>Sub-total</b>				<b>20</b>		<b>\$400</b>
Coastal Planting Plan: plant trees interspersed with existing vegetation within the restoration area of the 30m shoreline Parkland Dedication in the northern portion of the property.						
Western redcedar	<i>Thuja plicata</i>	5m <sup>2</sup>	2 Gallon	20	\$20	\$400
Sitka spruce	<i>Picea sitchensis</i>	5m <sup>2</sup>	2 Gallon	15	\$20	\$300
Western hemlock	<i>Tsuga heterophylla</i>	5m <sup>2</sup>	2 Gallon	11	\$20	\$220
<b>Sub-total</b>				<b>46</b>		<b>\$920</b>
<b>TOTAL</b>				<b>66</b>		<b>\$1320</b>

\*Note: cost estimates are based on the Streamside Native Plants Wholesale Price Guide. Costs may vary depending on supplier.

Plant in fall or early spring and irrigate immediately and as necessary within the first 2-3 growing seasons. Pocket plant trees by digging a planting hole twice the size of the pot and add a mixture of topsoil and a handful of bone meal to the planting hole to reduce drought stress and maximize survival. Replace any dead trees within the first two seasons.

#### 4.2 PLANT SOURCE

##### Streamside Native Plants

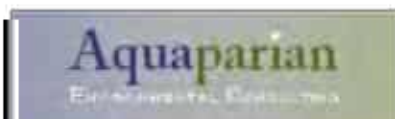
7455 Island Highway West, Bowser, BC V0R 1G0  
Phone/Fax: 250-757-9999 / Toll Free: 1-877-570-3138  
<https://www.streamsidenativeplants.com/>  
E-mail: [orderdesk@streamsidenativeplants.com](mailto:orderdesk@streamsidenativeplants.com)

##### Green Thumb Nurseries

6261 Hammond Bay Road, Nanaimo BC V9T 5M4  
Phone: 250-758-0808  
E-mail: [greenthumbnurseriesnanaimo@gmail.com](mailto:greenthumbnurseriesnanaimo@gmail.com)

#### 5.0 ENVIRONMENTAL PROTECTION MEASURES

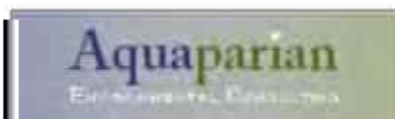
The following are environmental protection measures recommended to incorporate regulatory measures identified in the District of Ucluelet's Official Community Plan (OCP) and for lands within the environmental DPAs: Terrestrial Ecosystems; Marine Shoreline; and, Stream and Riparian Areas Protection:



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- Clearing of vegetation should occur outside the songbird nesting season of March 15 – August 15. QEP to be provided clearing plan well prior to vegetation clearing in order to complete a pre-clearing survey;
  - If additional vegetation is to be removed during the active bird nesting season (March 15 – August 15) a QEP should be retained to conduct pre-clearing bird nest surveys to prevent committing an offense as defined by the Provincial Wildlife Act section 34 and federal Migratory Bird Act. Pileated Woodpecker nests are provincially protected year-round, whether or not the nest is in use (as per the Provincial *Wildlife Act*). A Pileated Woodpecker nest survey will have to be conducted by a QEP prior to any tree removal;
  - If any additional mature, old-growth, dead standing trees or snags will require removal for proposed development a bat and owl nesting survey is recommended prior to removal;
  - The completion of a proper Archaeological Assessment to determine the presence of cultural use including chance finds during excavations (completed as understood);
- That further development within the property includes a Landscape Management / Preservation Plan which includes the protection of remaining native coastal vegetation, and watercourse features, including sensitive shoreline saltmarsh habitat and restoration of impacted / over-cleared areas, noting that some of these areas have been dedicated back to DOU ownership as parkland;
- That the owner of the new residential development retains a local landscaping company to complete all native re-vegetation / restoration works remaining to be completed for the 30m waterfront park area and along the Middle Stream. The restored vegetation setback along the Middle Stream is recommended to be isolated from public access using wooden rail fencing;
  - Remove invasive plant species (such as Himalayan blackberry and Scotch broom) that have become established within the restoration areas of the 30m waterfront park area and within the riparian setback of the Middle Stream. Check annually and remove any re-emerging invasive plant species.
  - Remove the wooden deck structure along the shoreline within the northern portion of the property. Remove any refuse, soil or mulch piles, woody debris or construction debris from the coastal setback area and allow natural vegetation to infill.



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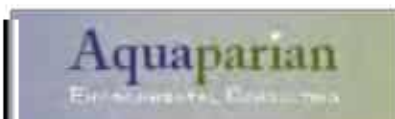
- If further vegetation removal is required outside of the protective setbacks, retain large stumps with soil and live native plants and transplant to vegetated areas to provide habitat value;
- Complete a Danger Tree assessment by a certified Danger Tree assessor. Potential Danger Trees under 100ft in height and located within the 30m foreshore buffer are to fall in place and not removed unless a livable structure is deemed to be a target. Retain stumps in place if possible (cut to at least 10ft tall);
- As per Terrestrial Ecosystem (Mature Forest) DPA guidelines (DOU OCP), the detailed site plan for the development will need to identify any natural features including Sitka Spruce trees and nesting trees. Aquaparian recommends surveying Sitka Spruce trees 60cm DBH or larger, retain if possible and including on the site plan. Additional protection areas may be recommended to protect stands of these trees;
- No road crossing, culvert installations or bridge installation are to be completed without the completion of a Section 11 Notification / Approval as per the Provincial *Water Sustainably Act*;
- That the Middle Stream, Western Stream and any associated tributaries (including ditches) and wetlands be incorporated into a Stormwater Management Plan (SMP) for the development. All road, buildings or infrastructure run-off should be directed to naturally vegetated or constructed ditches/swales before being directed to native streams or shoreline;
- Wherever possible, with seismic and flood considerations, that constructed retaining walls for housing should follow form and character of the natural environment and include the use of naturally stacked rock and include pocket plantings using native coastal vegetation. All seeding should include recognized west coast seed mix (i.e. clover, vetch, wildflower) and not a rye grass mix.
- Ensure all proposed buildings, foundations, retaining walls, vegetation removal and excavations are outside of the environmental protective setbacks. If development is planned near the setback boundaries, then the root systems of adjacent large diameter trees along the boundary may require protection from damage such as compaction of root systems by heavy equipment and rock retaining wall construction. A tree survey of adjacent trees may be required to determine the need for tree protection fencing around the drip line of these trees (Typically 6 x the diameter of the tree).
- That the 30m Park Dedication areas given to the DOU along the foreshore and dedicated along the Middle Stream be extended by an additional setback under



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covenant restriction of one meter in order to protect the stability of the banks. The stormwater design to the Middle Creek to include top of benched embankment area.

- That the development provides a minimum 10m setback from the top of bank for the Western Stream, targeting 15m wherever possible, with consultation with Aquaparian on retaining wall design if required in this area to enhance the protection of the Western Stream.
- It is recommended that Aquaparian and a Qualified Geotechnical Engineer be consulted in the design of retaining walls to enhance protection of the foreshore and Middle Stream.
- Because of the sensitivity of the saltmarsh and understanding that the foreshore and its riparian forest stand provides a significant wildlife corridor for small and large mammal species (in particular bears, wolves and cougars) that further discussions occur with the DOU about the installation of a public trail. Aquaparian recommends that the 30m waterfront park be protected from development as a wildlife corridor and not include a public trail;
- Further earthworks are to be completed during the dry season to prevent sediment migration. If earthworks cannot be completed during the dry months, sediment and erosion measures should be implemented (i.e. silt fence) to prevent migrating sediments from the site. Earthworks proposed within 30m of the foreshore or 15m of streams and ditches to include Environmental Construction Monitoring and turbidity monitoring;
- All fill brought to the site is to be clean i.e. free of hazardous contaminants and locally sourced;
- No deleterious substances such as sediment, fuel, oil, paint, concrete wash water or uncured concrete are to enter streams, ditches or marine waters;
- All heavy equipment used for the development to be clean and free of leaks and inspected daily. Full spill kits are to be present on all machinery;
- A spill response plan is to be in place with emergency contact numbers in case of accidental spill;
- Excavated topsoil piles, if left on site for any length of time, are to be either covered by tarps or surrounded by silt fencing to prevent migration of fines if a heavy rain event occurs;



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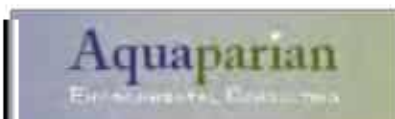


- Bare soils should be seeded with Westcoast seed mix and covered in a layer of straw as soon as possible following construction;
- The natural site surface flow drainage pattern throughout the property be used as natural stormwater drainage features for future developments (subject to engineering design); and,
- As part of stormwater management requirements, that roadways, laneway and vehicle parking pads explore the use of permeable pavers or gravels strip to include ground water recharge and reduced surface run-off within the property.

## 6.0 ADDITIONAL DEVELOPMENT STUDIES

As part of the development permit process for the project, the following studies / tasks are further expected:

- Survey of significant Sitka Spruce trees with the property prior to any further vegetation clearing works;
- As per the federal and provincial migratory bird act, completion of migratory bird nesting surveys if vegetation clearing works are proposed to occur between March 15 and August 15 of a given year. Confirmation that no bald eagle nesting within the property prior to clearing.
- That installation of bridges, culverts, stormwater outfall / headwalls within the property include the acquisition of Provincial (Regulatory) WSA Notifications or Approvals, in addition to approval by the DOU as the parkland owner.
- Prior to the site preparation or construction that a project specific Construction Environmental Management Plan (CEMP) is produced that addresses environmental mitigation measures to be incorporated for development construction activities; including additional land clearing, grading, road building, installation of utility services, excavations, erosion and sediment control, concrete works etc.
- Expected that portions of the project will require environmental monitoring services including erosion and sediment control and stormwater management during site preparation, bridge or culvert installations, stormwater outfall installations and retaining wall installations near the foreshore at the north end of the development.



## 7.0 SUMMARY

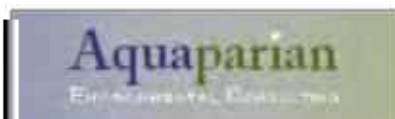
The subject parcel is located northwest the Village of Ucluelet in an area of mostly undeveloped lands north of Peninsula Road. The subject parcel was originally zoned Rural Residential (RU) followed by approved re-zoning for Campground and Guest House. In early 2023, the land was re-zoned as Comprehensive Development. At the time of the original environmental site visit, a large portion of the property was cleared which included encroachment into the 30m marine foreshore DPA and also across a fish bearing watercourse (Middle Stream). The site is characterized by a mature second-growth coastal western hemlock forest with some veteran western redcedar and Sitka spruce trees and two fish-bearing streams running through the property and draining into a sheltered bay and sensitive saltmarsh habitat. The subject property also contains remains of mature / old growth trees, wildlife trees and habitat for various birds, as well as habitat for large and small mammals. The marine foreshore also appears to act as a corridor for wildlife within the surrounding area.

## 8.0 CONCLUSION

Aquaparian Environmental Consulting Ltd (Aquaparian) was retained by the new property owners (ERIF/Minato Road Development Co) of 221 Minato Road in Ucluelet to update the Environmental Impact Assessment report originally produced for the property by Aquaparian in May of 2017. The original owner of the property BNEE Enterprises cleared large sections of the mature old growth forest without municipal approval and encroachment into development permit areas (DPA) resulting in contravention of District of Ucluelet DPA protection and Provincial land development guidelines and regulations. Vegetation restoration compensation measures required to reinstate DPAs was never carried out. Future re-zoning for approved residential development have included local council to create Restrictive Covenants requiring the restoration of impacted sensitive vegetation communities within the property prior to allowing approval for construction or infrastructure installation. All works within environmentally sensitive vegetation and restoration areas to be directed and monitored by a Qualified Environmental Professional.

## 9.0 CLOSURE

This report has been completed in accordance with generally accepted biological practices. No other warranty is made, either expressed or implied. Aquaparian trusts that the information provided in this report meets your requirements.



203-321 Wallace Street, Nanaimo, BC V9R 5B6  
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221 Minato Road Environmental Assessment  
September 2024

Any questions regarding information provided in this document, please contact the undersigned at (250) 591-2258.

Respectfully submitted,

**AQUAPARIAN ENVIRONMENTAL CONSULTING LTD.**

Prepared by:

Review & Prepared by:

\_\_\_\_\_  
Crystal Campbell, Environmental Tech.

  
\_\_\_\_\_  
Chris Zamora B.Sc, R.P.Bio  
Senior Biologist/Principal



<https://netorg5387218.sharepoint.com/sites/Shared/Shared Documents/Documents/Projects/Projects/N894 Ucluelet 221 Minato Road/Sep 2024 BA/221 Minato Road EA - September 23, 2024.docx>



203-321 Wallace Street, Nanaimo, BC V9R 5B6  
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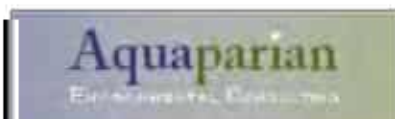
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wildlife/birds\\_vancouver\\_island\\_northern\\_pygmy\\_owl.pdf](https://www2.gov.bc.ca/assets/gov/environment/natural-resource-policy-legislation/accounts-measures-for-managing-identified-wildlife/birds_vancouver_island_northern_pygmy_owl.pdf) (Accessed November 24, 2021).

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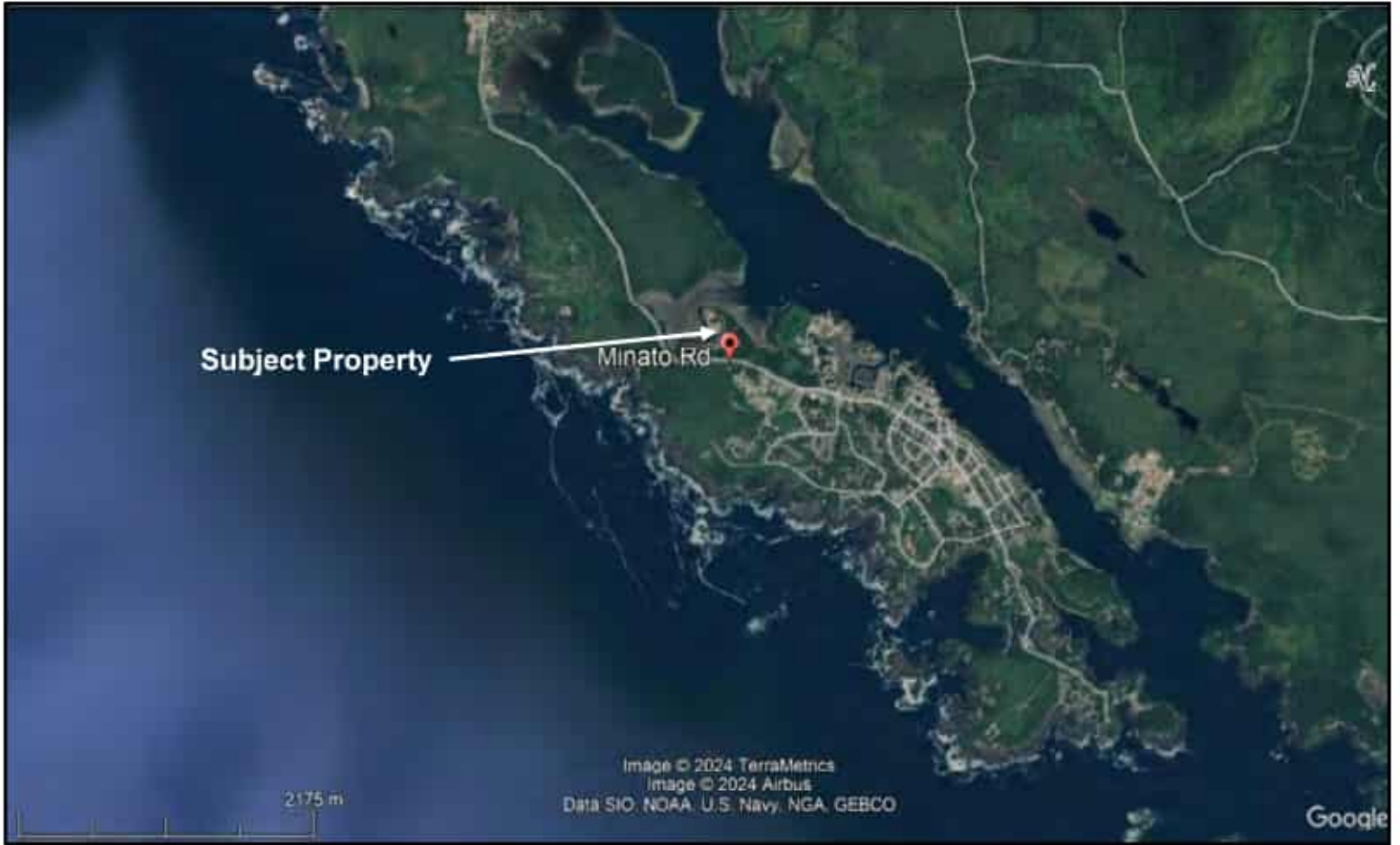


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**FIGURE 1**  
**SITE LOCATION MAP**  
**UCLUELET, BC**



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**FIGURE 2**  
**GOOGLE EARTH IMAGES OF MINATO ROAD PROPERTY**



203-321 Wallace Street, Nanaimo, BC V9R 5B6  
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August 2016 – Pre-Clearing



August 2019 – Post-Clearing



May 2023





**FIGURE 3**  
**221 MINATO ROAD – BC IMAP SEARCH RESULTS**



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Figure 3

**FIGURE 4**  
**221 MINATO ROAD – VEGETATION REMEDIATION AREA(S)**



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**FIGURE 4. RESTORATION AREAS  
221 MINATO ROAD, UCLUELET BC**

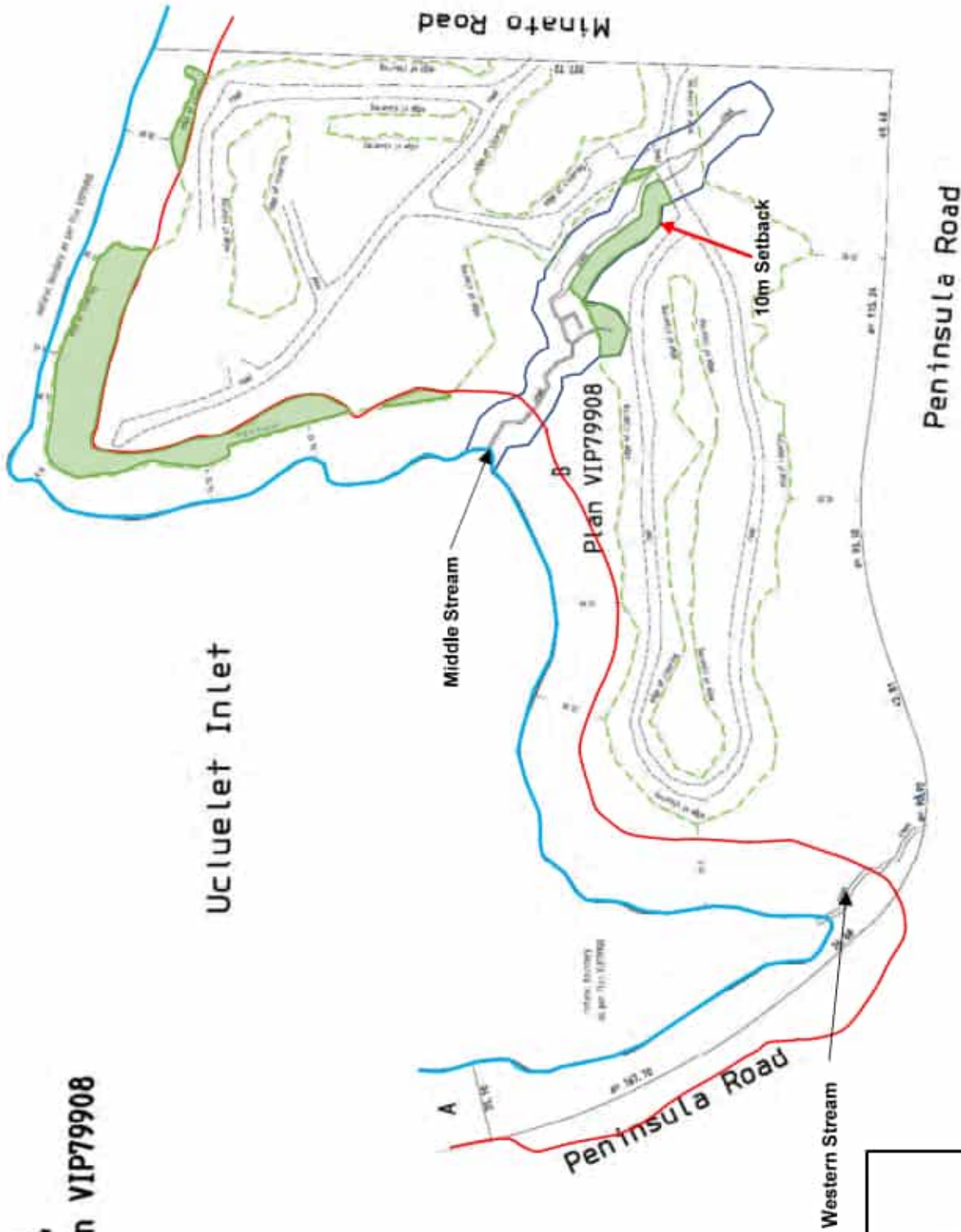
Site Plan of:  
**Lot 282, District Lot 282,  
 Hazyquot District, Plan VIP79908**  
 Parcel Identifier: 026-487-764

SCALE: 1:1000

Plot of Arch D sheet



The following non-financial charges are shown as  
 the current title and may affect the property.  
 2024/12/22  
 Parcel dimensions shown herein are  
 derived from Land Title Office records.



**LEGEND:**

- Coastal Setback (30m)
- Streamside Setback (10m)
- Shoreline Natural Boundary
- Edge of clearing boundary
- Restoration Areas

**APPENDIX A**  
**SITE PHOTOGRAPHS 2017 & 2024**



203-321 Wallace Street, Nanaimo, BC V9R 5B6  
SARAH BONAR 250-714-8446 CHRIS ZAMORA 250-714-8864



March 2017

Appendix A: Site Photographs



Photo 1: View of entrance leading into Minato Rd and southern half of property.

Photo 2: View of logs and stumps stockpiled to side of road



Photo 3: View of the Middle Stream and stringer log bridge. 6" flow clearance. Bridge has since been replaced. Flows toward ocean.



Photo 4: View of the Middle Stream and stringer log bridge. Riparian vegetation to be re-established.



Photo 5: View of the Middle Stream where it crosses log bridge. Riparian area cleared to left side of bridge.

Photo 6: View along main access road; south end of development. Road cleared to edge of 30m highway setback.







Photo 7: View on opposite side of road alignment. Pondered water along road at upper end of the Middle Stream side channel; Southern half of property.



Photo 8: Impacted drainage. Area to be integrated into stormwater management plan for site. Overflow from the Middle Stream in the southern half of property.



Photo 9: 2017 Image of cleared and grubbed section of site in northern half of property. Portion of foreshore buffer area cleared during tree removal.

Photo 10: Cleared section of site within 30m foreshore buffer. 30m foreshore riparian buffer to be re-established.



Photo 11: Stockpiled soil burying the base of some trees in 30m foreshore DPA needs to be removed.



**August 2024**



Photo 12. August 2024: Showing the site access road off Minato Road with shed and woody debris piled along the side of the road. Southern half of property.



Photo 13. The site entrance forks. One side leads west to a bridge crossing the upper end of the Middle Stream.



Photo 14. New wooden bridge over the Middle Stream. Southern half of property.



Photo 15. Gravel loop road through southern section of the site with deep ditches along the sides of the road.





Photo 16. The riparian vegetation within the restoration area adjacent to the Middle Stream have regenerated with understory species and sparse tree saplings. Aquaparian recommends planting more native trees in this area to complete the remediation.



Photo 17. Showing the Middle Stream channel within shallow ravine located in southern half of property.



Photo 18. The Middle Stream outlets to Olsen Bay through an estuarine salt marsh comprised of Lyngby's sedge.



Photo 19. The riparian tree line transitions to salt marsh near the northern tip of the property. Here the salt marsh is dominated by sea asparagus and transitions to a tidal mudflat.





Photo 20. Showing the tidal mudflat within the sheltered Olsen Bay within Ucluelet Inlet adjacent to the subject property and its northern tip.



Photo 21. The remaining riparian habitat within the 30m foreshore setback along the western property boundary (northern half). Some leaning trees and a wildlife snag. Trees to be left in place.



Photo 22. View of the cleared area in the north-central portion of the property with wood mulch piles. The 30m foreshore setback area (where stumps are located adjacent to the tree line) that was previously cleared has been regenerating with understory species and some tree saplings. Additional native tree plantings are required in this area to achieve the restoration result that was previously recommended.





Photo 23. Photo showing two juvenile black bears on top of mulch piles near the northwestern property boundary. The foreshore riparian area acts as an important wildlife corridor.



Photo 24. The cleared area at the northern tip of the property where vehicles, trailers and boats are presently parked.



Photo 25. Narrow band of riparian trees along the northern tip of property. The wooden deck at shoreline built by previous owner without permit and should be removed.



Photo 26. The regenerated foreshore riparian restoration area near the northern tip of the site.





Photo 27. The road that terminates at the northern tip has ditching alongside the road that drains toward the foreshore setback.



Photo 28. An excavated stormwater detention pond just south of the northern tip of the property in 30m setback to be infilled and revegetated.



Photo 29. The Western Stream enters the southwest portion of the property from a large diameter culvert that crosses Peninsula Road. Showing culvert outlet.



Photo 30. Showing the Western Stream channel.

**APPENDIX B**

**Minato Road Development**

**Multi-family Rezoning Application Package**

**Formosis Architecture**



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THE APPLICANT HAS REVIEWED THE APPLICANT'S PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT (EAR) AND HAS CONDUCTED VISUAL AND VISUALIZATION STUDIES TO DETERMINE THE VISUAL IMPACTS OF THE PROPOSED DEVELOPMENT. THE APPLICANT HAS CONDUCTED VISUAL AND VISUALIZATION STUDIES TO DETERMINE THE VISUAL IMPACTS OF THE PROPOSED DEVELOPMENT. THE APPLICANT HAS CONDUCTED VISUAL AND VISUALIZATION STUDIES TO DETERMINE THE VISUAL IMPACTS OF THE PROPOSED DEVELOPMENT.

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PROJECT NO. 2011-001  
 DATE: 08/14/11

PROJECT NO.	2011-001
DATE	08/14/11
PROJECT NAME	221 MINATO ROAD (ERIF)
PROJECT LOCATION	BRUCE ARDEN



Appendix C11





ERIF logo, Formosis logo, and other project information including a north arrow and a table with project details.







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 4800 University Ave  
 Vancouver, BC V6T 1A6  
 Canada  
 Tel: (604) 271-1111  
 Fax: (604) 271-1112  
 Email: info@formosis.com

PROJECT: 221 MINATO ROAD  
 SHEET: 01 - EXTERIOR ELEVATION  
 DATE: 2023-10-10

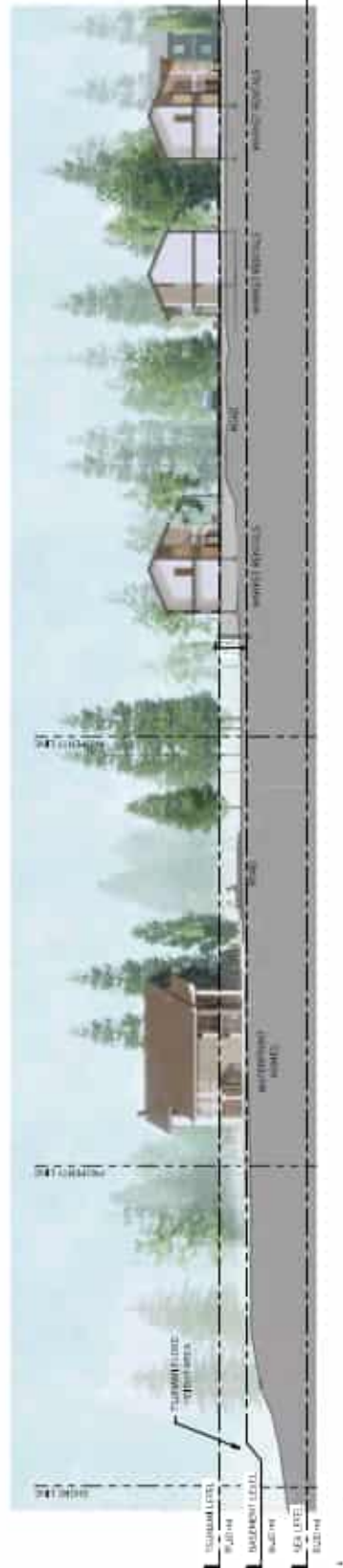
NO.	REVISION

PROJECT: 221 MINATO ROAD  
 SHEET: 01 - EXTERIOR ELEVATION  
 DATE: 2023-10-10

PROJECT: 221 MINATO ROAD  
 SHEET: 01 - EXTERIOR ELEVATION  
 DATE: 2023-10-10

PROJECT: 221 MINATO ROAD  
 SHEET: 01 - EXTERIOR ELEVATION  
 DATE: 2023-10-10

Appendix C11





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PROJECT NO.: SHEET NO.:	DATE: SCALE:	DRAWN BY: CHECKED BY:	APPROVED BY:
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Appendix C11



Appendix C11



**APPENDIX C**  
**BC HABITAT WIZARD SITE SEARCH RESULTS**



203-321 Wallace Street, Nanaimo, BC V9R 5B6  
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habwiz Mapping

**Legend**

All Fish points

POINT\_TYPE\_CODE



Stream Centre Line Network

WDIC\_SFFTP\_CODE

- 100 - Coastline
- 1000 - Single-line blue-line, main
- 1050 - Single-line blue-line, throu
- 1100 - Single-line blue-line, seco
- 1150 - Single-line blue-line, seco
- 1200 - Construction line, main fl
- 1250 - Construction line, double
- 1300 - Construction line, secon



1: 4,514

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Datum: NAD83  
 Projection: WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere

**Appendix C11**

Key Map of British Columbia





**APPENDIX D**  
**BC CONSERVATION DATA CENTRE SYSTEM EXPLORER**  
**SEARCH RESULTS**



203-321 Wallace Street, Nanaimo, BC V9R 5B6  
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BC Species & Ecosystems Explorer

Appendix C11

Search Results 42 records [Modify Search](#) [New Search](#) [Print](#) [Export Results](#) [Help](#)

Show 100 rows  Column Visibility  Sort Order

Scientific Name	English Name	Provincial	BC List	Global	COSEWIC	SARA
<i>Accyfer alascensis laingi</i>	American Glaucous-winged Gull	S2 (2010)	Red	G5T2 (2016)	T	1-T (2003)
<i>Aechmophora occidentalis</i>	Western Grebe	S1S2B,S2N (2023)	Red	G5 (2016)	SC	1-SC (2017)
<i>Ambystoma vagrans</i>	Wandering Salamander	S3 (2022)	Blue	G4 (2005)	SC	1-SC (2018)
<i>Ardea herodias farrini</i>	Great Blue Heron, farrini subspecies	S3B,S4N (2022)	Blue	G5T4 (2016)	SC	1-SC (2010)
<i>Asio flammeus</i>	Short-eared Owl	S3B,S1N (2022)	Blue	G5 (2016)	T	1-SC (2012)
<i>Bolitochloa rivularis</i>	river bulrush	S2S3 (2019)	Blue	G5 (2024)		
<i>Botaurus lentiginosus</i>	American Bittern	S3B,S3NRN (2015)	Blue	G5 (2016)		
<i>Brachyramphus nainorator</i>	Mitred Murrelet	S3 (2022)	Blue	G3 (2016)	T	1-T (2003)
<i>Branta bernicla</i>	Brant	S3M (2015)	Blue	G5 (2016)		
<i>Buteo lagopus</i>	Rough-legged Hawk	S3N (2018)	Blue	G5 (2016)	NAH	
<i>Bubulixis wislizenii</i>	Great Heron	S3S4B (2015)	Blue	G5 (2016)		
<i>Callitis canutus</i>	Red Kinglet	S37M (2022)	Blue	G4 (2016)	T	1-T (2011)
<i>Calliphris johnsoni</i>	Johnson's Hairstreak	S27 (2020)	Red	G3 (2017)	SC	
<i>Cardamine angulata</i>	angled bittercress	S3 (2019)	Blue	G5 (1988)		
<i>Cardelina canadensis</i>	Canada warbler	S3B (2022)	Blue	G5 (2016)	SC	1-T (2010)
<i>Cassia ambigua</i> var. <i>ambigua</i>	espalma paintbrush	S3 (2019)	Blue	G5B (2015)		
<i>Cerastium fischerianum</i>	Fischer's chickweed	S3 (2019)	Blue	G4 (2016)		
<i>Cervus elephas roosevelti</i>	Roosevelt Elk	S3S4 (2017)	Blue	G5T4 (2016)		
<i>Chordeiles minor</i>	Common Nighthawk	S3S5B (2022)	Blue	G5 (2016)	SC	1-SC (2023)
<i>Chrysemys picta</i> pop. 1	Painted Turtle - Pacific Coast Population	S1S2 (2018)	Red	G5T2Q (2007)	T	1-T (2021)
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	S3XB (2022)	Red	G5 (2016)		
<i>Coenonympha californica insulana</i>	Common Ringlet, insulana subspecies	S1 (2021)	Red	G5T3T4 (1998)		
<i>Corynorhinus townsendi</i>	Townsend's Big-eared Bat	S3 (2022)	Blue	G4 (2016)		
<i>Cryptomastix divisa</i>	Puget Oregonian	S3X (2015)	Red	G2 (2017)	X-T	1-X-T (2005)
<i>Cyanocitta stelleri</i>	Black Swift	S2S4B (2022)	Blue	G4 (2016)	E	1-E (2019)
<i>Desmometus hesperus</i>	Evening Fieldslug	S5H (2015)	Red	G2Q (2013)	DD	
<i>Eremophila alpestris atigata</i>	Horned Lark, atigata subspecies	S3XB (2019)	Red	G5T2 (2016)	E	1-E (2005)
<i>Erythronium dentata</i>	tooth-leaved monkey-flower	S3 (2019)	Blue	G5 (1990)		

Appendix C11

Scientific Name	English Name	Provincial	BC List	Global	COSEWIC	SARA
<i>Euphagus carolinus</i> (pub/eswp/reports.do?elcode=ABFBX05010)	Rusty Blackbird	B3B4B (2015)	Blue	G4 (2016)	SC	1-SC (2009)
<i>Euphydryas editha bayleri</i> (pub/eswp/reports.do?elcode=ILEPK405K)	Edith's Checkerspot, bayleri subspecies	B1 (2021)	Red	G4G5T1 (2008)	E	1-E (2003)
<i>Euphyes vestris</i> (pub/eswp/reports.do?elcode=ILEPT7100)	Dun Skipper	B2B3 (2020)	Blue	G5 (2020)	T	1-T (2003)
<i>Falco peregrinus anatum</i> (pub/eswp/reports.do?elcode=ABNKD06071)	Peregrine Falcon, anatum subspecies	B27 (2011)	Red	G4T4 (2016)	NAR	
<i>Falco peregrinus peasei</i> (pub/eswp/reports.do?elcode=ABNKD06073)	Peregrine Falcon, peasei subspecies	B3B4 (2019)	Blue	G4T3 (2016)	SC	1-SC (2003)
<i>Falco rusticolus</i> (pub/eswp/reports.do?elcode=ABNKD06080)	Gyrfalcon	B3B4B, SNRN (2015)	Blue	G5 (2016)	NAR	
<i>Glaucidium gnoma swarthi</i> (pub/eswp/reports.do?elcode=ABNB08015)	Northern Pygmy-Owl, swarthi subspecies	B3B4 (2016)	Blue	G4G5T3T4Q (2018)		
<i>Gulo gulo luscus</i> (pub/eswp/reports.do?elcode=AMAJF03011)	Wolverine, luscus subspecies	B3 (2010)	Blue	G4T4 (2016)	SC	1-SC (2016)
<i>Gulo gulo vancouverensis</i> (pub/eswp/reports.do?elcode=AMAJF03014)	Wolverine, vancouverensis subspecies	BH (2017)	Red	G4TH (2016)	SC	1-SC (2016)
<i>Hemiphysalis bairdii</i> (pub/eswp/reports.do?elcode=MGAS59010)	Kestled Jumping-slug	B27 (2015)	Red	G3 (2023)	SC	1-SC (2008)
<i>Hemiphysalis drummondii</i> (pub/eswp/reports.do?elcode=MGAS59040)	Dromedary Jumping-slug	B2 (2024)	Red	G3G4 (2005)	T	1-T (2005)
<i>Hystroprogne caspia</i> (pub/eswp/reports.do?elcode=ABNNM08020)	Caspian Tern	B2B4B (2024)	Blue	G5 (2016)	NAR	
<i>Ictinia saepta insularis</i> (pub/eswp/reports.do?elcode=ILEP03013)	Greenish Blue, insularis subspecies	BH (2021)	Red	G5TH (2016)	E	1-E (2003)
<i>Icteria virens</i> (pub/eswp/reports.do?elcode=ABPBX24010)	Yellow-breasted Chat	B2B (2018)	Red	G5 (2016)	E	1-E (2003)
<i>Larus californicus</i> (pub/eswp/reports.do?elcode=ABNHM03110)	California Gull	B1B, SNRN (2022)	Red	G5 (2016)		
<i>Lasiurus cinereus</i> (pub/eswp/reports.do?elcode=AMACC05032)	Hoary Bat	B3B4 (2022)	Blue	G3G4 (2022)	E	
<i>Limnodromus griseus</i> (pub/eswp/reports.do?elcode=ABNMF10010)	Short-billed Dowitcher	B1B2B, B2B3M (2023)	Red	G3 (2024)		
<i>Limosa haemastica</i> (pub/eswp/reports.do?elcode=ABNMF08020)	Hudsonian Godwit	B1B (2022)	Red	G4 (2016)	T	
<i>Megascops kennicottii kennicottii</i> (pub/eswp/reports.do?elcode=ABNBB01042)	Western Screech-Owl, kennicottii subspecies	B2B3 (2017)	Blue	G4G5T4 (2016)	T	1-T (2005)
<i>Melanerpes formicivorus</i> (pub/eswp/reports.do?elcode=ABNYF04010)	Lewis's Woodpecker	B2B3B (2022)	Blue	G4 (2016)	T	1-T (2012)
<i>Melanitta americana</i> (pub/eswp/reports.do?elcode=ABNJB17040)	Black Scoter	B3B4N (2015)	Blue	G5 (2016)		
<i>Melanitta perspicillata</i> (pub/eswp/reports.do?elcode=ABNJB17020)	Surf Scoter	B3B, B4N (2015)	Blue	G5 (2016)		
<i>Microtus townsendii owstoni</i> (pub/eswp/reports.do?elcode=AMAFF11042)	Townsend's Vole, owstoni subspecies	B1 (2024)	Red	G5T1 (2016)		
<i>Muzukium pertusum</i> (pub/eswp/reports.do?elcode=IMBIN50020)	Swamp Fingertadlem	B2B4 (2015)	Blue	G5 (2015)		
<i>Mustela richardsoni anguinae</i> (pub/eswp/reports.do?elcode=AMAJF02014)	Ermine, anguinae subspecies	B3 (2010)	Blue	G5T3 (2016)		
<i>Myotis lucifugus</i> (pub/eswp/reports.do?elcode=AMACC01010)	Little Brown Myotis	B3B4 (2022)	Blue	G3G4 (2024)	E	1-E (2014)
<i>Nannopterum auritum</i> (pub/eswp/reports.do?elcode=ABNFD01020)	Double-crested Cormorant	B3B4 (2015)	Blue	G5 (2016)	NAR	
<i>Nycticorax nycticorax</i> (pub/eswp/reports.do?elcode=ABNGA11010)	Black-crowned Night-Heron	B1 (2022)	Red	G5 (2016)		
<i>Ophiogomphus occidentis</i> (pub/eswp/reports.do?elcode=HODD12140)	Sinuous Snaketail	B3 (2023)	Blue	G5 (2015)		
<i>Opovornis agilis</i> (pub/eswp/reports.do?elcode=ABPBX11020)	Connecticut Warbler	B3B (2024)	Blue	G4G5 (2016)		
<i>Oreamnos americanus</i> (pub/eswp/reports.do?elcode=AMALE02010)	Mountain Goat	B3 (2024)	Blue	G5 (2016)		
<i>Oreale oregana</i> (pub/eswp/reports.do?elcode=PDOXA010M0)	redwood scree	B3 (2019)	Blue	G5 (1990)		

Appendix C11

Scientific Name	English Name	Provincial	BC List	Global	COSEWIC	SARA
<i>Patagioenas fasciata</i>	Band-tailed Pigeon	B3B4 (2022)	Blue	G4 (2018)	SC	1-SC (2011)
<i>Pelecanus erythrorhynchos</i>	American White Pelican	B1B (2022)	Red	G4 (2018)	NAR	
<i>Phalaropus lobatus</i>	Red-necked Phalarope	B3B, SNRM (2023)	Blue	G4G5 (2018)	SC	1-SC (2019)
<i>Pinicola enucleator carolinæ</i>	Pine Grosbeak, carolinæ subspecies	B3 (2005)	Blue	G5T3 (2018)		
<i>Pirivitta dominica</i>	American Golden-Plover	B3B4B (2018)	Blue	G5 (2018)		
<i>Ptilinopus johnsoni</i>	Broadwing Tanager	B3 (2015)	Blue	G3 (2013)		
<i>Progne subis</i>	Purple Martin	B3B4B (2022)	Blue	G5 (2018)		
<i>Procyonops caeruleus</i>	Blue-grey Tanager	B2B3 (2024)	Blue	G3G4 (2010)	T	1-T (2018)
<i>Proserpinaca acedus</i>	Smith's Fairybelly	B3T (2022)	Blue	G5 (1990)		
<i>Rana aurora</i>	Northern Red-legged Frog	B3 (2022)	Blue	G4 (2018)	SC	1-SC (2008)
<i>Recurvirostra americana</i>	American Avocet	B2B3B (2023)	Blue	G5 (2018)		
<i>Setophaga castanea</i>	Bay-breasted Warbler	B2B (2022)	Red	G5 (2018)		
<i>Setophaga virens</i>	Black-throated Green Warbler	B3B (2024)	Blue	G5 (2018)		
<i>Sorex naugator brookii</i>	Western Water Shrew, brookii subspecies	B3 (2024)	Blue	G5T2T3 (2018)		
<i>Stalioa grisea</i>	Heida Owl Slug	B2T (2024)	Red	G2T (2018)	SC	1-SC (2018)
<i>Sterna forsteri</i>	Forster's Tern	B1B (2022)	Red	G5 (2018)	DD	
<i>Sympetrum vicinum</i>	Autumn Meadowhawk	B3B4 (2023)	Blue	G5 (2015)		
<i>Synaldis borealis</i>	Ancient Murrelet	B2B3B, SNM (2022)	Blue	G4 (2018)	SC	1-SC (2006)
<i>Tarpteryx nigeri</i>	Black Petrel	B2B3 (2023)	Blue	G4 (2000)		
<i>Tinga incana</i>	Wandering Tattler	B3B (2024)	Blue	G4G5 (2018)		
<i>Tyto alba</i>	Barn Owl	B3 (2022)	Blue	G5 (2018)	T	1-T (2018)
<i>Ursus arctos</i>	Grizzly Bear	B3T (2018)	Blue	G4 (2022)	SC	1-SC (2018)

Showing 1 to 32 of 32 entries

First Previous 1 Next Last

Search Criteria

Animals OR Plants OR Lichens  
 AND BC Conservation Status Red (Extirpated, Endangered, or Threatened) OR Blue (Special Concern)  
 AND 'Regional Districts' Regional District of Alberni-Clayoquot  
 AND Habitat Subtypes: Conifer Forest - Moistwet, Estuary, Marsh, Muckflats - Intertidal, Old Forest, Riparian Forest, Stream/River, Wetland Forest/Seasonal Swamps  
 AND BCG Zone: Substn: CWH-h  
 Sort Order: Scientific Name Ascending

Notes

1. Citation: B.C. Conservation Data Centre. 2024. BC Species and Ecosystems Explorer. B.C. Minist. of Environ. Victoria, B.C. Available: <https://a100.gov.bc.ca/pub/eswp/> (<https://a100.gov.bc.ca/pub/eswp/>) [accessed Sep 9, 2024].
2. The data contained in the Results Export in COSEWIC are provided under the Open Government License - BC (<http://www.data.gov.bc.ca/locat/dic/docs/cosewic/OGL-1bc2.0.pdf>).
3. We welcome your comments at [cdccdata@gov.bc.ca](mailto:cdccdata@gov.bc.ca).



**Appendix C11**

[Privacy \(/www2.gov.bc.ca/gov/content/home/privacy\)](#) [Accessibility \(/www2.gov.bc.ca/gov/content/home/accessible-government\)](#) [Copyright \(/www2.gov.bc.ca/gov/content/home/copyright\)](#)  
[Contact Us \(/www2.gov.bc.ca/gov/content/home/get-help-with-government-services\)](#)

**Bruce Greig**

<b>From:</b>	Duane Lawrence
<b>Sent:</b>	September 10, 2024 12:14 PM
<b>To:</b>	Juliette Green; joshua.h@erif.ca; jodie.t@erif.ca
<b>Cc:</b>	Ian Kennington (Ucluelet Council); Jennifer Hoar (Ucluelet Council); Marilyn McEwen (Ucluelet Mayor); Mark Maftai (Ucluelet Council); Shawn Anderson (Ucluelet Council); Bruce Greig
<b>Subject:</b>	221 Minato Development Project

Hello Josh, Juliette, and Jodie,

Sorry for the short delay on getting back to you. I wanted to complete a full review and provide a more detailed update with respect to our discussions related to your proposed development, as we understand it, as well as advise you of some action items we will be undertaking to provide the requested clarity of key issues your team has identified.

We understand that you have a number of unanswered questions about the site and its feasibility for the development program you are pursuing. We also understand that the answers to a number of your questions hinge on decisions by the municipality. Some areas can be resolved at the staff level, but others will depend on decisions made by the Council. Staff are pleased with the open communication from ERIF and are committed to moving things forward as quickly as possible.

The discussions to date have been fruitful and have fleshed out a number of areas and possibilities for clearing hurdles for this housing concept. ERIF is pursuing an aggressive timeline and to move forward at this pace we see the following steps as key:

1. Submit a complete application for rezoning and environmental development permit.
  - a. These will set up for the subsequent applications for subdivision and further development permits for the multi-family building sites. Those applications can follow at a point when there is confidence in the alignment of parcel boundaries, roads and services.
  - b. Provide a complete set of [application materials](#), and fees - submit all items as one package.
  - c. Include a statement of the housing and the levels of affordability (see [OCP](#) policy 3.143 and 3.134)
  - d. Include an updated environmental assessment and archaeological assessment: if these are not available yet, at least submit statements from your consultants confirming their engagement, process and timing.
2. Regardless of your application timing, staff will prepare a report for Council to consider at its September 24 meeting to enable a chance for ERIF to gauge the degree of Council support on a number of issues that may inform steps forward. This will by necessity be at a high level, since they will not have a complete application with staff analysis and recommendation for decisions. Council will have to keep an open mind to the future decisions made on the formal application. This is also an opportunity for ERIF to share what you heard at your open house. Questions we will prompt Council to consider:

- a. Proposed no additional park dedication beyond the stream and shoreline areas already obtained from the past zoning approvals;
  - b. The municipality is being asked to take on the construction of trails;
  - c. Compromise of the 30m forested buffer along the highway entering town, proposed to achieve number of housing units;
  - d. District request to Ministry of Transportation and Infrastructure to reduce speed limit on Hwy to 50km/h starting roughly at the Olsen Bay pumphouse;
  - e. Expectation for arms length vetting of qualifying tenants / purchasers (housing authority function – not by developer or realtor);
  - f. Small Commercial node at corner of Minato and Peninsula;
3. First stage of approvals (timing dependent of submissions of complete application materials) would include the following authorized by Council:
- a. Adopt rezoning bylaw;
  - b. Agree to amend or replace restrictive covenant on the property title;
  - c. Issue environmental DP to enable subdivision and site works;
  - d. Adopt PDA bylaw;
  - e. Adopt Housing Agreement Bylaw (?);
  - f. Authorize off-site works (not sure of the shape of this)
4. Subsequent approvals:
- a. Subdivision Preliminary Layout Assessment
  - b. Final Subdivision
  - c. DP for individual multi-family and commercial sites

Site suitability:

A. Tsunami

- i. For subdivision, development permit and/or building permit, the District will need to receive a Flood Assurance Statement sealed by a qualified professional meeting the Provincial requirements to allow new development in identified flood risk areas – see Appendix I of the professional practice guidance for engineers and geoscientists on [legislated flood assessments](#) in BC.
- ii. DoU staff would be pleased to meet with ERIF and your consultants to review what is needed to enable municipal approvals and clarify requirements;
- iii. The DoU Interim policy allows for the District to contemplate a development in a known flood risk area provided the development meets the provincial requirements. The interim policy should not be considered as the guiding document to determine flood risk levels. These levels can only be determined by a qualified engineer.

B. Sanitary

- i. District will provide updated cost estimates for site servicing and potential timing
- ii. District will require additional information on flow, to be able to verify how an on-site retention tank could work as an interim sanitary solution. The District will need clarity from ERIF if your development is prepared to fund this work or if you are

asking the DoU to do this. Our existing master plan includes adding a flow meter at the Hemlock lift station when it is redeveloped. If ERIF would like the DoU to completed this in advance of the planned replacement in 2025 Council will need to approve the added ~\$30,000 expense which would normally be included in the redevelopment of the lift station. Doing it in advance could mean we would undertake this work twice.

- iii. District anticipates a detailed report to go to Council in early October upon receipt of engineering reports for solutions; Actions and timing will be determined based off of this report through Council direction.

#### C. Water Supply and Power

- i. DoU will review existing reports as part of REZ/DP application
- ii. Determination of adequate water/power supply can only be verified once full details of power and water requirements have been determined and verified by DoU

#### D. Traffic Management

- i. DoU will review traffic modeling with REZ/DP application.
- ii. If modeling meets MOTI requirements the District should be able to support the proposal as presented
- iii. Provided a speed reduction along HWY 4 is supported by Council, DOU would submit request to MoTI for a speed reduction.

#### E. Roads

- i. DoU to review road proposals as part of REZ/DP and subdivision applications, DoU can undertake a preliminary review when drawings are provided. For the Minato Road cross section – new Forbes Road section in OceanWest phase 5 might be a good indication

#### F. Parking and private roads

- i. DOU will review road alignments, emergency access with REZ/DP application
- ii. The latest plan shows a pattern where all parking spaces back out onto the road and Staff have noted this as a safety concern. The road effectively acts as the drive aisle to a parking lot. This layout would only function at extremely low traffic speeds and is not seen as ideal for most subdivisions.
- iii. Further discussion necessary on what is private road and what is public. Consider maintenance of utilities (water main looping, hydrants and sewer mains) and also the legal setup of lots / stratas and the long-term cost of maintaining infrastructure (and the impact of strata costs on total housing costs and long term affordability)

#### G. Subdivision

- i. Council will need to consider a reduced frontage on Hwy 4, as part of ERIF DP application. Staff plan on presenting this to Council on the 24<sup>th</sup> for initial comments. Note that Council will not be able to commit to this until a full application has been received.
- ii. Reduced street frontage (width of Lot 1 frontage on Minato Road) would depend on your environmental report and need approval from Council. Road location is very close to stream corridor; updated environmental assessment and wetland delineation may shift the proposed layout of road access and lot lines.



H. Parkland

- i. Council decision required to confirm no additional dedications with this subdivision (see above).

I. Environmental Assessment

- i. Highly recommended to expedite this to ensure proposed layout works on the site; delineation of ESA's and wetlands may prompt changes to lot lines and road layout – this could impact what the developer requests in the zoning. Completing the site analysis before committing to a site layout would avoid the risk of going back to adjust - but that may be the risk/cost of fast-tracking the approvals.

J. Phased Development Agreement

- i. This project lends itself to a PDA. A PDA bylaw will need to be adopted by Council with the rezoning. Details will need to be available before a bylaw is presented to Council - at least to the degree that the agreement framework can be defined.

K. Zoning Update

- i. DoU can only confirm full support for a rezoning application once we have received the details and complete a full review. Details (housing types, affordability, site plan, environmental impacts, etc.) need to be confirmed in your DP and Rezoning Application. Gauging Council support for the overall density and the mix of market / non-market housing will be key for ERIF (see above re: September 24<sup>th</sup>).
- ii. DoU anticipates the removal and replacement of the existing covenant to reflect ERIF's affordable housing plans and strategy at rezoning.

L. DP and Operational/Early Works

- i. DoU would require, at a minimum, Archaeologist Report, Environmental Report, Flood Assurance Statement prior to subdivision assessment. Full civil engineering design is required for on- and off-site works prior to subdivision approval.
- ii. DoU under a PDA can potentially approve preliminary works provided the Owner acknowledges that any works undertaken on the site would be at the Owners risk. Without a complete application package the DoU can not provide any guarantees that no revisions to plans would be required and approvals on any one matter would be provided.

1. Review of existing site reports/plans/documents

- iii. DoU anticipates that the detailed site reports ERIF has received on the site will meet the application requirements but can only confirm that this is the case once we receive an application package and have an opportunity to review them in detail against the application. As soon as a complete application package has been received we will start this process.

M. Temporary Use Permit

- i. ERIF enquired if a TUP would be possible to situate a temporary manufacturing site on the phase 5 portion of the development in order to facilitate the construction process. It is possible for this to be considered although would need to be applied

for separately from DP process and approved by Council. We would need to review this in detail but in theory a TUP could be contemplated by Council for this purpose.

If you have any questions please do not hesitate to reach out.

Regards,



**Duane Lawrence**  
**Chief Administrative Officer**

Box 999, 200 Main Street  
Ucluelet, B.C., V0R 3A0  
Phone: 778-748-8477

*The District of Ucluelet acknowledges the traditional territories, lands and waters of the Yuulu?i?ath on which the District of Ucluelet operates.*

**Bruce Greig**

<b>From:</b>	Joshua Hunt <joshua.h@erif.ca>
<b>Sent:</b>	September 20, 2024 12:43 PM
<b>To:</b>	Duane Lawrence; Bruce Greig; John Towgood; Juliette Green; Jodie Thompson
<b>Subject:</b>	DP Lodgement - 221 Minato Road
<b>Attachments:</b>	ERIF DP Application 221 Minato Cover Sept 20 2024.pdf

<b>Follow Up Flag:</b>	Follow up
<b>Flag Status:</b>	Completed

**[External]**

Dear Duane, Bruce, John and District of Ucluelet Team

On behalf of ERIF, we are delighted to present the Rezoning, Subdivision and Development Permit applications for 221 Minato Road.

Please find attached the Cover Letter which links all the required documentation for the application. You will also see a supporting presentation here: [Development Permit \(18SEPT20204\) - 221 Minato Road Ucluelet \(canva.com\)](#). Hard copy versions will be supplied at our meeting on Tuesday and we will visit the office to arrange application fees.

We are committed to working with you to deliver high quality attainable and affordable homes for Ucluelet and contribute to thriving future economic and community growth. We thank you for your consideration.

Please note that there are two outstanding items that we will provide when received as soon as possible:

- 1) Flood Hazard Report and Assurance by KWL: this deliverable is well underway and will be supplied as soon as possible. Thank you for meeting with ERIF and our consultant team on Monday at 12 pm to discuss this further.
- 2) Environmental Report by Aquaparian: this report is being finalised and will be submitted shortly.

Each of the supporting documents are available in the linked files and our team are readily available to assist with any questions regarding the documentation as we progress through the approval process.

We look forward to meeting with Council this coming Tuesday. We thank you for your work reviewing the supplied reports and documentation to support our application. In the meantime, if you have any questions or require further clarification, please do not hesitate to contact us.

Thank you for your time and assistance with this exciting opportunity to serve Ucluelet.

In partnership,



 [\(236\) 507 - 4309](tel:(236)507-4309) |  [joshua.h@erif.ca](mailto:joshua.h@erif.ca) |  [www.erif.ca](http://www.erif.ca)



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September 20th, 2024

**Attn:**

Duane Lawrence, CAO

Bruce Greig, Director of Community Planning

John Towgood, Municipal Planner

District of Ucluelet

**RE: 221 MINATO ROAD – DEVELOPMENT PERMIT APPLICATION**

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Dear Duane, Bruce and John,

ERIF Economic Restoration Infrastructure Fund Inc is delighted to present this application for a Development Permit (both Environmental and Multi Family Permits) for the lands located at 221 Minato Road. Our entire team is grateful for the opportunity to contribute to the development of this project and honored to be a part of the much-needed housing solution for Ucluelet.

**Application Items**

1. Application Form
2. DOU's Development Application Checklist
3. Title Search & State of Title Certificate
4. Site Disclosure Statement
5. Written Statement of Intent

**Rezoning and Subdivision**

6. Municipality Policies List and Links
7. Subdivision Lot Layout provided by Formosis
8. Draft Subdivision Plan provided by Williamson & Associates Professional Surveyors

**Development Permits – Environmental and Multi Family**

9. Overview of Application
10. Masterplan provided by Formosis including Zoning Analysis
11. Build Forms - Eagle 1 Plans
12. Build Forms - Eagle 3 Plans
13. Build Forms - Waterfront Homes

**Supporting Consultant Reports**

In addition, the following consultant reports have been provided:

14. Environmental Report provided by Aquaparian
15. Tree Report provided by Joe Carlaozzi
16. Draft Servicing Plan prepared by Herold Engineers
17. Stormwater Management Servicing Plans by Herold Engineers
18. Interim Sewage Solution by Creus Engineering
19. Traffic Impact Report by Watt Consulting and commenced approval with MoTI
20. Interim Archaeological Report by Yuułu?if?ath Government - Ucluelet First Nation (UFN)  
Department of Culture, Language & Heritage

- 21. Landscaping Plan by MacDonald Gray
- 22. Geotechnical Reports by Geopacific
- 23. Site Specific Tsunami Report by Ebbwater
- 24. Tsunami resilient design by Hydrotechnical and Structural Engineers with Stantec
- 25. Flood Hazard Report and Assurance by KWL
- 26. Contamination Screening Report by Thurber

**Draft Proposals:** We have also provided these draft documents to progress the approval process:

- A. Draft Bylaw Revisions
- B. Draft Covenant Restrictions
- C. Draft Subdivision Plan noting Easements and Covenants
- D. Draft Phased Development Plan & Phased Development Agreement

**Document Appendix:** The appendices which follow are:

- A. Log of Current Lodgement documents
- B. Our Solutions outlining the proposed solutions for the site development.
- C. Rezoning Amendment and Draft Bylaw
- D. Proposed Environmental Development Permit - Draft Subdivision Plan noting Easements and Covenants
- E. Proposed Multi Family and Commercial Site Development Permit
- F. Draft Phased Development Plan and Draft PDA Agreement
- G. Official Community Plan (OCP) Variations
- H. Log of Additional Site-Specific Supporting Reports

**Ongoing Collaborations:** These works to be continued and updated:

- A. Flood Hazard Assessment and Flood Assurance Statement by Coastal Engineers Kerr Webb Leidel to follow immediately after lodgement.
- B. Confirmation of off-site scope and design in coordination with Civil Engineer and District of Ucluelet.
- C. Coordination with MoTI for proposed site access off Peninsula Road.
- D. Interim Archaeological Report will be substituted with Final Report.
- E. Detailed design of tsunami resilient structures and retaining walls for Build Permit in collaboration with Coastal Engineer, Structural Engineers and Geotechnical engineering team.
- F. Lodgement of a Temporary Use Permit and Early Works Permit Application.

We welcome the opportunity to provide this housing solution to the Ucluelet partnering with the Council and Municipality for a future abundant in economic and community growth.

In partnership,



**Joshua Hunt**

**CEO – ERIF Sustainable Solutions**

Cc: Jon Mara, President/Director, Minato Development Corporation

Chris Bozman, President, Saltwater Building Co.

**APPENDIX A - Log of Current Application – Lodged Documents**

This is the listing and direct links to all documents outlined in the Development Application Checklist and Covenant Restrictions:

#	Lodged Document	Document Link
<b>Application</b>		
1	Application Form	<a href="https://drive.google.com/file/d/1vUqBnnZIk9T7IKUDEbkSTFBuzLGQRXO9/view?usp=drive_link">https://drive.google.com/file/d/1vUqBnnZIk9T7IKUDEbkSTFBuzLGQRXO9/view?usp=drive_link</a>
2	DOU's Development Permit Application Checklist	<a href="https://drive.google.com/file/d/1t9luV59fluXCRDZYG0L6FZO2L_wLrzH2/view?usp=sharing">https://drive.google.com/file/d/1t9luV59fluXCRDZYG0L6FZO2L_wLrzH2/view?usp=sharing</a>
3	Title Search & State of Title Certificate	Title Search: <a href="https://drive.google.com/file/d/161dYicjITeTela3HbKpwQ1fla7C3Kzvj/view?usp=sharing">https://drive.google.com/file/d/161dYicjITeTela3HbKpwQ1fla7C3Kzvj/view?usp=sharing</a> State of Title: <a href="https://drive.google.com/file/d/161dYicjITeTela3HbKpwQ1fla7C3Kzvj/view?usp=sharing">https://drive.google.com/file/d/161dYicjITeTela3HbKpwQ1fla7C3Kzvj/view?usp=sharing</a>
4	Site Disclosure Statement	<a href="https://drive.google.com/file/d/1cDqHcxmbzPI4nUuWI59CYGt9trHNTfa5/view?usp=drive_link">https://drive.google.com/file/d/1cDqHcxmbzPI4nUuWI59CYGt9trHNTfa5/view?usp=drive_link</a>
5	Written Statement of Intent	<a href="https://drive.google.com/file/d/1t1AwmsL98EtK-8gihF5U2e7RE16EwxM/view?usp=sharing">https://drive.google.com/file/d/1t1AwmsL98EtK-8gihF5U2e7RE16EwxM/view?usp=sharing</a>
<b>Rezoning and Subdivision</b>		
6	Municipality Policies List and Links	<a href="https://docs.google.com/document/d/1HbGalTgZwUJgGnLEzIzP3i7kQ1G_Duj6/edit?usp=sharing&amp;ouid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1HbGalTgZwUJgGnLEzIzP3i7kQ1G_Duj6/edit?usp=sharing&amp;ouid=116257945114196824088&amp;rtpof=true&amp;sd=true</a>
7	Subdivision Lot Layout provided by Formosis a) Application Drawings b) Site context c) Topographical and geographical features d) Property lines, setbacks, proposed buildings and structures e) Grading and rainwater plans	a - d. Formosis: <a href="https://drive.google.com/file/d/1XxXeZBfdcNPSp3LCOYy-MTeEtQYw-ODq/view?usp=sharing">https://drive.google.com/file/d/1XxXeZBfdcNPSp3LCOYy-MTeEtQYw-ODq/view?usp=sharing</a> e. Herold Engineering: <a href="https://drive.google.com/file/d/13JZIm9w2sKtcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing">https://drive.google.com/file/d/13JZIm9w2sKtcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing</a>
8	Draft Subdivision Plan provided by Williamson & Associates Professional Surveyors	<a href="https://drive.google.com/file/d/1i4nAUxAHJUudN1skFdLn3yqkLFs1EnxK/view?usp=sharing">https://drive.google.com/file/d/1i4nAUxAHJUudN1skFdLn3yqkLFs1EnxK/view?usp=sharing</a>  .DWG: <a href="https://drive.google.com/file/d/1HICp6L4enlUgaSBbqwW_mPFc3QmbyyS-/view?usp=sharing">https://drive.google.com/file/d/1HICp6L4enlUgaSBbqwW_mPFc3QmbyyS-/view?usp=sharing</a>
<b>Development Permit</b>		
9	Overview of Application	<a href="https://www.canva.com/design/DAGO4rcs5fs/hZRtm0s7iluBJicN28-ICQ/view?utm_content=DAGO4rcs5fs&amp;utm_campaign=designshare&amp;utm_medium=link&amp;utm_source=editor">https://www.canva.com/design/DAGO4rcs5fs/hZRtm0s7iluBJicN28-ICQ/view?utm_content=DAGO4rcs5fs&amp;utm_campaign=designshare&amp;utm_medium=link&amp;utm_source=editor</a>
10	Masterplan provided by Formosis including Zoning Analysis	<a href="https://drive.google.com/file/d/1XxXeZBfdcNPSp3LCOYy-MTeEtQYw-ODq/view?usp=sharing">https://drive.google.com/file/d/1XxXeZBfdcNPSp3LCOYy-MTeEtQYw-ODq/view?usp=sharing</a>
11	Built Forms – Eagle 1 Plans	<a href="https://drive.google.com/file/d/1ZZyOd56F2DwQWU-iyq_Qg-B1JcQy8uiT/view?usp=sharing">https://drive.google.com/file/d/1ZZyOd56F2DwQWU-iyq_Qg-B1JcQy8uiT/view?usp=sharing</a>
12	Built Forms – Eagle 3 Plans	<a href="https://drive.google.com/file/d/1E0LOkhqNqZtpxi0VGLwlfWqSP-z1OeW/view?usp=sharing">https://drive.google.com/file/d/1E0LOkhqNqZtpxi0VGLwlfWqSP-z1OeW/view?usp=sharing</a>
13	Built Forms – Waterfront Homes	<a href="https://drive.google.com/file/d/1jmK4k2thvZ0g9WD1KylsnLulrgoAQYB/view?usp=sharing">https://drive.google.com/file/d/1jmK4k2thvZ0g9WD1KylsnLulrgoAQYB/view?usp=sharing</a>

Supporting Consultant Reports		Appendix D
14	Environmental Report provided by Aquaparian	Link for pending live upload: <a href="https://drive.google.com/drive/folders/1PhoU17Ksa3SZQuO-ODkmXPkfmnAhtBXw?usp=sharing">https://drive.google.com/drive/folders/1PhoU17Ksa3SZQuO-ODkmXPkfmnAhtBXw?usp=sharing</a>
15	Tree Report provided by Joe Carlaozzi	<a href="https://drive.google.com/file/d/1ihxdH2FO7UKQbRdExk8G1WR0S-zcVDsM/view?usp=sharing">https://drive.google.com/file/d/1ihxdH2FO7UKQbRdExk8G1WR0S-zcVDsM/view?usp=sharing</a>
16	Draft Servicing Plan prepared by Herold Engineers	<a href="https://drive.google.com/file/d/13JZIm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing">https://drive.google.com/file/d/13JZIm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing</a>
17	Stormwater Management Servicing Plans by Herold Engineers	<a href="https://drive.google.com/file/d/13JZIm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing">https://drive.google.com/file/d/13JZIm9w2sKTcf4csR5ke-Bdf_7eAFbSU/view?usp=sharing</a>
18	Interim Sewage Solution Design Proposal prepared by Creus Engineering	<a href="https://drive.google.com/file/d/1w0XEzLsX_o6TgZJblmGfE4PvjZZmzFtW/view?usp=sharing">https://drive.google.com/file/d/1w0XEzLsX_o6TgZJblmGfE4PvjZZmzFtW/view?usp=sharing</a>
19	Traffic Impact Report by Watt Consulting	<a href="https://drive.google.com/file/d/1-0u5454ShDO8kuLuytizHks6dQrZB1gn/view?usp=sharing">https://drive.google.com/file/d/1-0u5454ShDO8kuLuytizHks6dQrZB1gn/view?usp=sharing</a>
20	Interim Archaeological Report by Yuufu?if?ath Government - Ucluelet First Nation (UFN) Department of Culture, Language & Heritage	<a href="https://drive.google.com/file/d/1XtHRCnwaJWRMF8kmpx_08dK9YLIHLUIQ/view?usp=sharing">https://drive.google.com/file/d/1XtHRCnwaJWRMF8kmpx_08dK9YLIHLUIQ/view?usp=sharing</a>
21	Landscaping Plan by MacDonald Gray	<a href="https://drive.google.com/file/d/1112JClO0bzHlxtujApHZg1ryS9t0NHXq/view?usp=sharing">https://drive.google.com/file/d/1112JClO0bzHlxtujApHZg1ryS9t0NHXq/view?usp=sharing</a>
22	Geotechnical Reports by Geopacific	March 2024: <a href="https://drive.google.com/file/d/1Pbkaz4obVlygqOAO9nJGfJZ4hxmgiEUt/view?usp=sharing">https://drive.google.com/file/d/1Pbkaz4obVlygqOAO9nJGfJZ4hxmgiEUt/view?usp=sharing</a>  Sep 2023: <a href="https://drive.google.com/file/d/1J0oDoyHva3TmDft3xWAPN7YuUTuau3cu/view?usp=sharing">https://drive.google.com/file/d/1J0oDoyHva3TmDft3xWAPN7YuUTuau3cu/view?usp=sharing</a>
23	Site Specific Flooding Coastal Report by Ebbwater (2022)	<a href="https://drive.google.com/file/d/1qxYSLu61D1jKlLij--2hC-byi1nmPg6dE/view?usp=sharing">https://drive.google.com/file/d/1qxYSLu61D1jKlLij--2hC-byi1nmPg6dE/view?usp=sharing</a>
24	Tsunami resilient building design by Stantec Hydrotechnical and Structural Engineers (July 2024)	<a href="https://drive.google.com/file/d/1zUabbA3_XKyv5khMR5CAPWOKTafF-9ka/view?usp=sharing">https://drive.google.com/file/d/1zUabbA3_XKyv5khMR5CAPWOKTafF-9ka/view?usp=sharing</a>
25	Flood Hazard Report and Assurance by KWL (2024)	Link for pending live upload: <a href="https://drive.google.com/drive/folders/1PhoU17Ksa3SZQuO-ODkmXPkfmnAhtBXw?usp=sharing">https://drive.google.com/drive/folders/1PhoU17Ksa3SZQuO-ODkmXPkfmnAhtBXw?usp=sharing</a>
26	Contamination Screening Report by Thurber (2023)	<a href="https://drive.google.com/file/d/15xVxNZ2fOsMVTg_W-UQHXRScKRP7Lt/view?usp=sharing">https://drive.google.com/file/d/15xVxNZ2fOsMVTg_W-UQHXRScKRP7Lt/view?usp=sharing</a>
<b>Draft Proposals for Review</b>		
A.	Draft Bylaw Revisions	<a href="https://docs.google.com/document/d/1FSbn8FNnsy3qjSzUh1mavNRlulw6pfiw/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1FSbn8FNnsy3qjSzUh1mavNRlulw6pfiw/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a>
B.	Draft Covenant Restrictions	Draft Proposal for Review Satisfaction of Existing Covenant Restrictions: <a href="https://docs.google.com/document/d/1-6VDI-UTlqCNTDSVtkE96pyVwDtyy5rS/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1-6VDI-UTlqCNTDSVtkE96pyVwDtyy5rS/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a>  2024 Draft Covenant Restrictions: <a href="https://drive.google.com/file/d/196Z9trECIEt9WnyBcKZuQgTD4qnn8dmt/view?usp=sharing">https://drive.google.com/file/d/196Z9trECIEt9WnyBcKZuQgTD4qnn8dmt/view?usp=sharing</a>

C.	Draft Subdivision Plan noting Easements and Covenants – refer to appendix D	<a href="https://drive.google.com/file/d/1i4nAUxAK1kFskFdlN3yqkLFs1EnxK/view?usp=sharing">https://drive.google.com/file/d/1i4nAUxAK1kFskFdlN3yqkLFs1EnxK/view?usp=sharing</a>
D.	Draft Phased Development Plan & Phased Development Agreement – refer to appendix F	<a href="https://docs.google.com/document/d/1L25VN9kXSXqjSEF-qNXroewtg_xWzuUS/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true">https://docs.google.com/document/d/1L25VN9kXSXqjSEF-qNXroewtg_xWzuUS/edit?usp=sharing&amp;oid=116257945114196824088&amp;rtpof=true&amp;sd=true</a>



The following results from a careful analysis of the site's unique characteristics, ensuring harmony with the surrounding environment. By anticipating and addressing both current and future challenges, this development is designed to remain a valuable and relevant asset for years to come. The approach prioritizes safety at all stages of the development, green energy, and community integration while ensuring compliance with all relevant regulations and guidelines.

### Site Specific

1. **Tsunami Report:** A comprehensive Tsunami Report has been conducted in close collaboration with Coastal, Structural, and Geotechnical Engineers. The report's findings have informed the incorporation of building resiliency measures into the development design, ensuring it is equipped to mitigate risks from potential natural disasters. Safety and resilience remain paramount in our approach.
2. **Servicing and Off-Site Infrastructure:** The development's servicing and infrastructure plans will align with the District of Ucluelet's upgrade rollouts once a timeline is shared. In the interim, we are prepared to implement on-site storage systems if required, while ensuring necessary upgrades to the Hemlock pump station's monitoring system are coordinated to meet community standards.
3. **Power Supply:** The BC Hydro upgrades currently underway along Highway 4 into Tofino demonstrate a proactive approach to meeting the increasing energy demands of the region. The replacement of existing poles with taller structures capable of accommodating additional power lines will enhance the capacity and reliability of the power distribution system. These improvements are essential to supporting planned developments, such as the new wastewater treatment facility, ensuring a robust power supply for the community, and the new proposed development at 221 Minato Road.

Furthermore, the underground infrastructure installation near the Highway 4 junction, as part of the power line upgrade from the Long Beach substation, strengthens the connection between Tofino and the primary power source. By bolstering the transmission capabilities, BC Hydro is taking significant steps to address the growing energy needs and promote future development. The comprehensive nature of these upgrades instils confidence that the power infrastructure in Tofino will be well-equipped to support the anticipated load requirements at 221 Minato, facilitating seamless operations and fostering continued growth.



4. **Sidewalk Typical Road Cross Section:** The proposed road as pictured to the right will be 7.5m, with 1m shoulder each side then a 1.5m-2m sidewalk suitable for pedestrians and cyclists.

1. **Green Measures:** The proposed green energy measures for the 221 Minato Road development are designed to meet Step 3-4 of the BC Energy Step Code, ensuring energy efficiency and sustainability.

Key features include:

- **EV Charging Stations:** Installed in the parking areas of the multiplex and commercial precinct to support green transportation and future-proof the development for electric vehicle use.
- **Above Standard Glazed Windows:** Enhancing energy efficiency by improving thermal insulation and reducing heat loss, while also increasing noise reduction for residents.
- **Advanced Insulation:** Utilizing high-performance insulation materials to minimize energy consumption and maintain stable internal temperatures in all units.
- **Structural Insulated Panels (SIPs):** Incorporated into the building structure to increase energy efficiency by providing superior insulation and reducing air leakage.
- **Solar Panels:** Integrated into the design to harness renewable energy, reducing reliance on the grid and lowering the carbon footprint of the development. Subject to grant funding, there is opportunity for solar power throughout 221 Minato to create the largest rooftop solar installation in British Columbia.
- **Battery Storage System:** Integrated with solar panels, the battery system stores excess energy for backup during power outages, ensuring continuous power supply and reducing grid reliance.
- **LED Internal and External Lighting:** Energy-efficient LED lighting will be used throughout all residential units and communal areas to further reduce energy consumption.
- **Energy-Efficient Appliances:** All units will feature high-efficiency appliances to promote lower energy usage.
- **High-efficiency HVAC Systems:** Advanced heating, ventilation, and air conditioning systems that use less energy and reduce emissions. Dehumidifiers are also installed to maintain optimal indoor humidity levels, enhancing air quality and comfort while preventing moisture buildup.
- **Heat Recovery Ventilation (HRV) Systems:** These systems improve indoor air quality while recovering heat from exhaust air, reducing the overall energy needed for heating.
- **Smart Thermostats:** Integrating smart thermostat systems for individual units to allow residents to optimize heating and cooling, further increasing energy savings.
- **Native Landscaping:** Planting native species that require less water and maintenance, which also supports local biodiversity and ecosystem health.
- **Sustainable Building Materials:** Using eco-friendly, recycled, and locally sourced materials wherever possible.
- **Natural Lighting:** Maximizing natural light with large windows and thoughtful building orientation, reducing the need for artificial lighting and improving resident well-being.

- **Low/Non-Toxic Materials:** The development will utilize low or non-toxic materials, including eco-friendly paints and finishes, to improve indoor air quality and promote a healthier living environment.

### Green Space and Communal Areas

The 221 Minato Road development prioritizes communal areas and green space to enhance the quality of life for residents and create vibrant public spaces that align with Ucluelet's community values. Key features of the communal spaces and green initiatives include:



### **Green Space & Community Enhancements:**

- **Existing Bridge:** the existing licence of occupation will continue to use the bridge during the construction process on completion of all development the bridge can be preserved for transit and emergency exit. Consideration will be given to the being repurposed a walking and biking bridge to foster active transportation and safe, pedestrian-friendly connectivity.
- **Community Gathering Areas:** Natural lumber seating and picnic tables to be installed in key locations, creating inviting communal spaces for residents and visitors to gather.
- **Communal Enhancements:** The communal areas will be enhanced with lighting, pet stations and bike racks.
- **EV Charging Stations:** Dedicated electric vehicle charging stations will be provided within the multiplex parking and commercial precinct parking, supporting the shift to sustainable transportation.
- **Recreation Pathways:** A bike path connecting the development to Ucluelet's existing bike paths, with routes to both Ucluelet town and Tofino, ensuring the development is well-integrated with the broader community.
- **Surfboard & Kayak Storage:** Communal storage for surfboards and kayaks will be offered to encourage active recreation and make use of the natural surroundings.
- **Natural Play Areas:** Retained natural stumps, logs, and play spaces will be incorporated into the green spaces, offering residents a unique and eco-friendly outdoor experience. These areas will double as seating spots, encouraging interaction with the natural environment.

**Forest Area Regeneration:** A significant effort will be made to regenerate forest areas within the development, preserving and enhancing Ucluelet's natural landscape. The preserved forest zones will provide natural buffers, offer wildlife habitats, and serve as additional green space for the community.

**Environmental and Archaeological Assessments:** Our Environmental and Archaeological Reports, along with tree preservation initiatives, ensure that the natural beauty of the site is preserved. It is important to note that 30% setback of the land, already titled to the District of Ucluelet, is designated as park dedication. This ensures the protection and long-term conservation of the area's environmental integrity.

**Green Parking Rationale:** We propose reducing parking to 1 space per unit, (a reduction from the current bylaw of 1.5) supported by green transport options such as bike paths and public transport connections. Many units, particularly three-bedroom ones, are designed for families who prioritize sustainable living, reducing the need for excessive car usage.

### Community Integration

1. **Bikeways and Pathways:** The development features bike paths and pedestrian walkways, seamlessly connecting with Ucluelet and Tofino's green transport networks. These pathways support green transportation, encouraging residents to reduce car usage and embrace eco-friendly travel options.
2. **Parks and Play Areas:** Our design includes thoughtfully planned parks, play areas, and community amenities that promote outdoor activity and social engagement. These spaces are designed to blend with the natural landscape, offering residents a welcoming environment for recreation.
3. **Proposed Plans for Roads and Public Recreation Areas:** The development will integrate more detailed designs for roadways and open spaces, in line with the District of Ucluelet's request. These designs will focus on shared recreation and play infrastructure, ensuring accessibility and community use. We look forward to working closely with the District to finalize these plans, making sure they meet the needs and expectations of the broader Ucluelet community.
4. **Wild Pacific Trail:** - Should the Wild Pacific Trail extension proceed, ERIF is fully committed to ensuring seamless access throughout its implementation.
5. **Traffic and MOTI** – The proposed development does not necessitate a reduction in the speed limit on Peninsula Road to 50 kph as a prerequisite for commencement. Ongoing coordination with the MOTI is focused on establishing safe and efficient site access directly from Peninsula Road, ensuring the project can proceed without impacting existing traffic flow or safety.

### Environment

- **Proposed No Additional Park Dedication Beyond the Stream and Shoreline Areas Already Obtained from Past Zoning Approvals:**
  - The proposed development at 221 Minato Road does not include additional park dedication beyond the stream and shoreline areas that were already obtained during past zoning approvals with a provision of 30 metres. These existing dedications align with our vision for environmental stewardship and community access to natural spaces. The stream and shoreline areas will be carefully preserved, ensuring continued public access and ecological protection as per Aquaparians Environmental Report.

- **The Municipality is Being Asked to Take on the Construction of Trails:**
  - We recognize the District's concerns regarding the construction of trails and appreciate the importance of these connections within the community, particularly along the preserved stream and shoreline areas. As the setbacks and preserved land are titled as municipal property, we will fully support the Municipality's future direction for these areas. While we are committed to ensuring that the development integrates well with the community, we believe the construction and long-term maintenance of the trails should align with the District's broader vision for public amenities. We look forward to collaborating on how best to support this initiative.
- **Compromise of the 30m Forested Buffer Along the Highway Entering Town, Proposed to Achieve Number of Housing Units:**
  - The 30m forested buffer along the highway is a critical element in maintaining the visual appeal and natural character of the entrance to Ucluelet. While our current proposal involves a partial compromise of this buffer to accommodate the necessary number of attainable housing units, we are committed to minimizing any environmental and aesthetic impact. We are open to reviewing the site layout and exploring alternatives that could preserve as much of the buffer as possible while still meeting the housing targets that are essential for addressing Ucluelet's housing needs.
- **District Request to Ministry of Transportation and Infrastructure to Reduce Speed Limit on Highway to 50 km/h Starting Roughly at the Olsen Bay Pumphouse:**
  - We fully support the District's request to the Ministry of Transportation and Infrastructure to reduce the speed limit on the highway to 50 km/h starting at the Olsen Bay pumphouse. This measure will significantly improve traffic safety as the town's population increases and will provide a safer environment for residents and visitors entering Ucluelet. A lower speed limit will also complement the development's goals of creating a pedestrian-friendly and interconnected community.
- **Expectation for Arm's Length Vetting of Qualifying Tenants / Purchasers (Housing Authority Function – Not by Developer or Realtor):**
  - We are committed to working with the District to establish a clear, transparent process that prioritizes Ucluelet residents and meets the community's housing goals. We agree with the District's expectation for an arm's length process for vetting qualifying tenants and purchasers.
  - We are proposing that this process is managed by ERIF Housing Association, and the vetting facilitated through a selection committee that could include members from District staff, council, chamber of commerce, etc. The sales of the properties will be managed by The Gray Team RE/MAX Mid Island Realty. We welcome an open discussion regarding the best way forward and are very keen to hear your suggestions on alternatives that ensures transparency, fairness, and adherence to the eligibility criteria, particularly for the attainable homeownership and affordable rental units.
- **Small Commercial Node at Corner of Minato and Peninsula:**
  - The inclusion of a small commercial node at the corner of Minato and Peninsula is intended to provide essential services to the new residential community and enhance its overall walkability. This commercial space will be designed to offer retail, hospitality, and office



services that complement the needs of the residents and contribute to the local economy. We envision this node as a community hub that fosters social and economic activity while aligning with the character of Ucluelet.

**Proposal to Amend Zone CD-6:**

The purpose of this application is to amend the CD-6 Bylaw for the lands located at 221 Minato Road to further create a path forward to providing much needed housing in the District of Ucluelet.

Currently, the property is zoned CD-6 Minato Road and was newly rezoned at the beginning of 2023. The proposed amendment follows many of the same principals and objectives, including but not limited to:

- Providing a significant component affordable housing type to the community.
- Provide a variety of affordable rental units.
- Provide a component of market rental housing with appropriately managed vacation rentals as the final stage after affordable housing needs have been met.
- Maintain the 30-metre Park Dedication along the shoreline and the 10-metre buffer along the central stream.
- First phases of development to occur in the southern portion of the property targeting attainable home ownership and affordable rental.

Where the revised proposal differs is in the following:

- Provide a mix of housing to a maximum of 250 residences.
- Amend the zone to allow for flexibility in sequencing.
- Provide a second site access along Peninsula Road.
- Provide a dedicated parcel for future subdivision and land sale and/or partnership with a non-for-profit agency for the purpose of providing affordable housing.

The drafted Comprehensive Development zone included within this submission outlines residential land use including medium density multi-family buildings, and ten waterfront homes. The rezoning differs from the previous approval as we seek approval for commercial zoning on the corner of Minato Road and Peninsula Road to activate the corner frontage and increase community amenity. This is consistent with the surrounding lots in the Official Community Plan Long Range Use Plan for 'SC' Service Commercial lots. A zoning land use map has been included as part of the CD zone to further map out where the proposed built forms will be positioned on site.

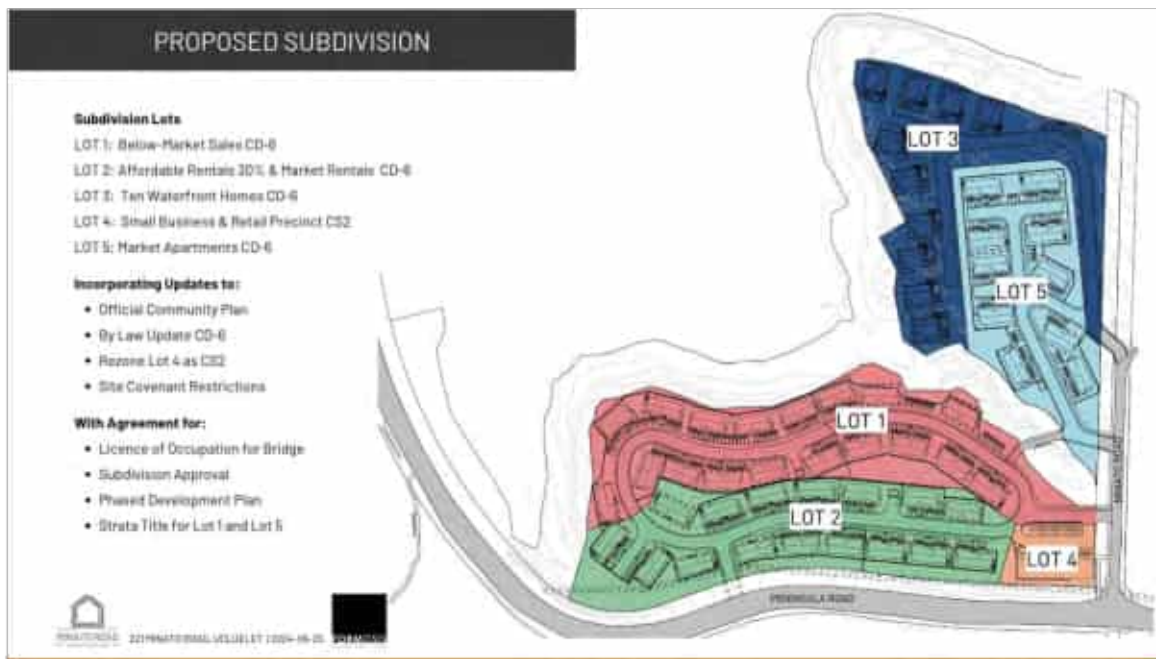
With the anticipated continued population growth, a near zero vacancy rate and limited housing stock, ERIF is committed to providing Ucluelet with quality, well designed residential homes. Our driving passion is to develop attainable home ownership and affordable rentals, and these have been prioritised in the first phases of the development. Establishing a not-for-profit entity to manage these homes, great care, consideration and consultation has been given to create a transparent process for waitlists of the homes, led by the community for the community, prioritizing the needs of the existing residents of Ucluelet and local businesses to have access to those homes to build our local economy.

The balance of the site to the North of the Middle Creek Parkland Dedication seeks to provide the financial feasibility to support the attainable sales below market pricing. The ten waterfront homes will be constructed in the first phase concurrently with the attainable homes of Lot 1 to create highly desirable housing key development team members will invest in to call Ucluelet home. The balance of waterfront homes will be sold once constructed and to maximise returns we seek their approval for short term rental use, leased in one or more suites.

In addition, the medium density multiplex designs provide units for rental and sales at market value, supporting the heavy discounting of the attainable homes by maximising their profitability as short-term rentals.

**Proposed Subdivision**

Being submitted concurrently with the zoning amendment is an application to subdivide the remaining 16.57 acres, following the 8.85 acres park dedication, into five lots. The southern portion of the site will focus on attainable home ownership (Lot 1), and affordable rentals (Lot 2) with a commercial space to the corner of Minato and Peninsula Roads (Lot 4). The northern portion of the site is intersected by the central stream which has been provided to the District of Ucluelet as Parkland Dedication. This portion will accommodate ten waterfront homes (Lot 3) and multiplex units which will be strata titled and sold, or where possible held for market rental.



**Legal Title**

Lot 1 – Strata Titled for affordable sales with zero lot setback or phased development.

Lot 2- Bare Lot Strata all held in one line as affordable rentals

Lot 3 – Fee simple Subdivision for 10 waterfront homes with common lot under Home Association, with permission for ‘vacation rental’ letting.

Lot 4 – CS2 zoned commercial build with office space above and retail below.

Lot 5 – Bare Lot Strata and each unit strata titled, both for sale and rental at market including ‘vacation rental’ letting.

**CS-2 Zone - SERVICE COMMERCIAL**

This Zone is intended for convenient shopping opportunities for those travelling in vehicles and those commercial uses which, due to their service nature, may require larger lot areas. Vibrancy is added with mixed uses including residential and tourist commercial accommodation.

**CS-2.1 Permitted Uses:**

**CS-2.1.1** The following uses are permitted, but secondary permitted uses are only permitted in conjunction with a principal permitted use:

(1) Principal:

- (a) Hotel
- (b) Motel
- (c) Mixed Commercial/Residential
- (d) Mixed Commercial/Resort/Gambling
- (e) Office
- (f) Tourist Information Booths
- (g) Retail, including supermarket
- (h) Convenience Store
- (i) Restaurant
- (j) Bistro/Café
- (k) Take Out Food Services
- (l) Personal Services
- (m) Commercial Recreation
- (n) Studio
- (o) Community Use

(2) Secondary:

- (a) Accessory Residential Dwelling Unit

**CS-2.1.2** For Peninsula Road and Main Street, and for properties fronting either, Mobile Vending is also a principal permitted use.

**CS-2.2 Lot Regulations**

**CS-2.2.1** Minimum Lot Size:

(1) Hotels: 1,000 m<sup>2</sup> (¼ acre)  
 (2) Motel: 1,000 m<sup>2</sup> (¼ acre)  
 (3) All other uses: 800 m<sup>2</sup> (0,180 8/10)

**CS-2.2.2** Maximum Lot Coverage: 35 m (20 ft)  
**CS-2.2.3** Minimum Lot Width: N/A  
**CS-2.2.4** Minimum Lot Depth: N/A

**CS-2.3 Density:**

**CS-2.3.1** Maximum Number

- (1) Mixed Commercial/Residential: 4 residential dwelling units per 1,000 m<sup>2</sup> (¼ acre) lot area
- (2) Accessory Residential Dwelling Unit 1 per 250 m<sup>2</sup> (2,781 ft<sup>2</sup>) non-occupational gross floor area

**CS-2.3.2** Maximum Floor Area Ratio: 0.60  
**CS-2.3.3** Maximum Lot Coverage: 30%

**CS-2.4 Maximum Size (Gross Floor Area):**

**CS-2.4.1** Principal Building:

- (1) Restaurant: 40 seats or 167 m<sup>2</sup> (1,800 ft<sup>2</sup>)

**CS-2.4 Minimum Setbacks:**

**CS-2.4.1** The following minimum setbacks apply, as measured from the front lot line, rear lot line and side lot lines(s), respectively:

	(1) Front Yard - Setback	(2) Rear Yard - Setback	(3) Side Yard - Interior Setback	(4) Side Yard - Exterior Setback
(1) Principal	3 m (10 ft)	3 m (10 ft)	1.5 m (5 ft)	3 m (10 ft)
(2) Accessory	3 m (10 ft)	1.5 m (5 ft)	1.5 m (5 ft)	3 m (10 ft)

**CS-2.4.2** In addition, the minimum front setback of 4.5 m (15 ft) applies to all lot lines abutting Peninsula Road.

**Easements**

Positive and Negative Easements will be granted between the lots as follows, in the form of a Restrictive Covenant on title after settlement. An easement is the right to the use of or a right to restrict the use of the land of another person in some way. A positive easement gives the owner as right to do a positive act on another person’s land. A negative easement imposes restriction on the owner The easement always accommodates the dominant tenement e.g. a servient owner grants the dominant owners a right of way over the servient owner’s property,

Positive covenants:

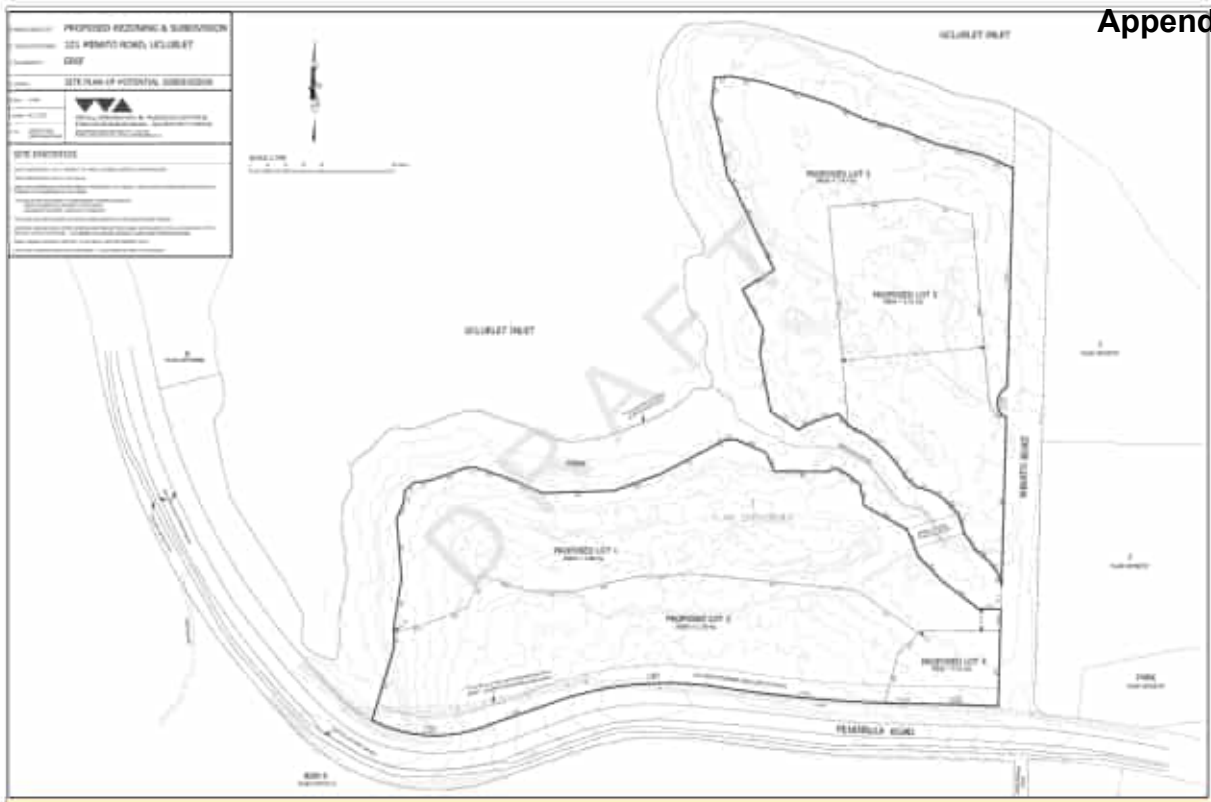
- Lot 1 subservient to Lot 2 and Lot 4 by permitting services to pass through underground sand sharing the roadway.
- Lot 2 subservient to Lot 4 and Lot 1 by permitting services to pass through underground sand sharing the roadway.
- Lot 4 subservient to Lot 2 and Lot 1 by permitting services to pass through underground sand sharing the roadway.
- Lot 3 subservient to Lot 5 for services and right of way to pass through.

**Sewer and Water Metering**

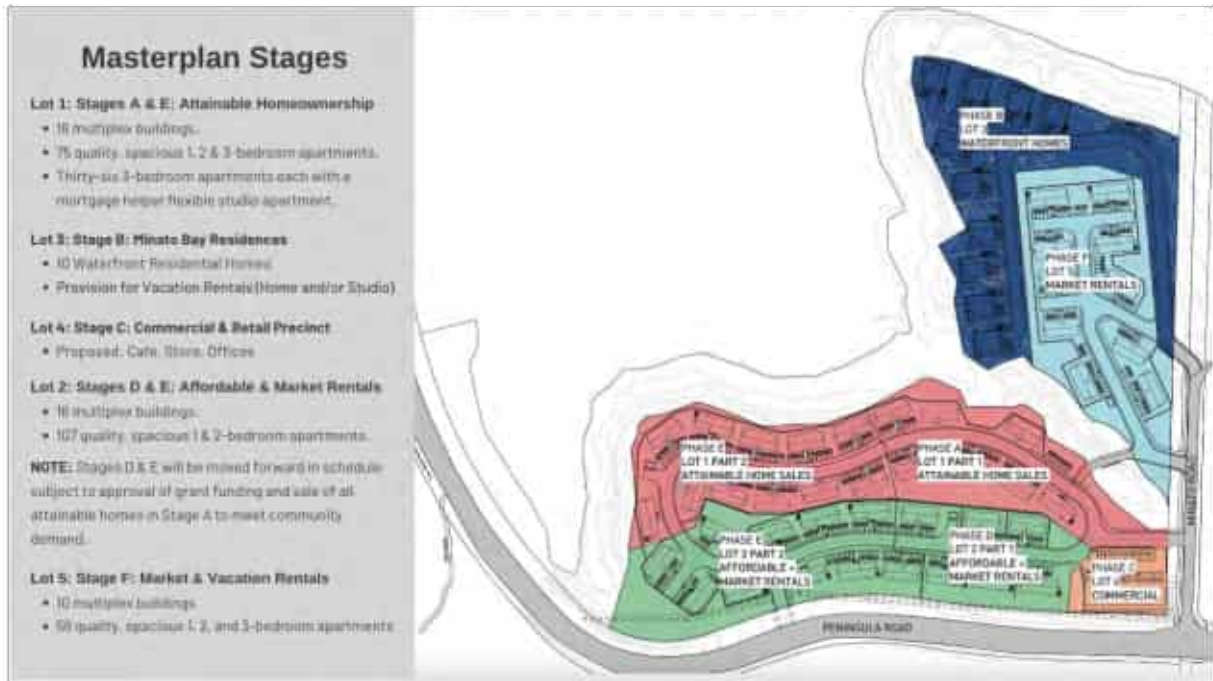
Despite the right of ways exchanged, this is a fairly simple subdivision as each lot has its own water and sewer access. The interim sewage storage solution was acknowledged as more suitable to be shared with all back to one lot.

**Request for Variance on Minimum Street Frontage**

Lot 1 requires a variance against usual bylaws to permit a narrow street frontage of minimum 10m though which services and driveway can run to unlock this hidden land.







**Masterplan Stages**

**Lot 1: Stages A & E: Attainable Homeownership**

- 16 multiplex buildings.
- 75 quality, spacious 1, 2 & 3-bedroom apartments.
- Thirty-six 3-bedroom apartments each with a mortgage-helper flexible studio apartment.

**Lot 3: Stage II: Minato Bay Residences**

- 10 Waterfront Residential Homes.
- Provision for Vacation Rentals (Home and/or Studio)

**Lot 4: Stage C: Commercial & Retail Precinct**

- Proposed: Cafe, Store, Offices

**Lot 2: Stages D & E: Affordable & Market Rentals**

- 16 multiplex buildings.
- 107 quality, spacious 1 & 2-bedroom apartments.

**NOTE:** Stages D & E will be moved forward in schedule subject to approval of grant funding and sale of all attainable homes in Stage A to meet community demand.

**Lot 5: Stage F: Market & Vacation Rentals**

- 10 multiplex buildings
- 50 quality, spacious 1, 2, and 3-bedroom apartments

**PROJECT DATA, 221 MINATO ROAD, QUELVELET**

	Buildings	1	2	3	4	5	Total Units	Total Gross Floor Area (sq'f)	Lot Area	Floor Space Ratio	Building Footprint	Lot Coverage	Typical Building Height	Parking Ratio	Vehicle Ratio	Total Parking Ratio	Parking Provided	Vehicle Provided	Swappable Provided	Total Parking Provided
<b>South Site</b>																				
Lot 1 Stage 1 Attainable	7	0	0	12	14	0	29	2,079 sq'	14,400 sq'	0.36	1,289 sq'	17%	6m	29	4	25	44	0	0	39
Lot 1 Stage 2 Attainable	11	0	0	20	27	0	44	4,054 sq'	14,400 sq'	0.36	2,027 sq'	17%	6m	44	15	34	51	10	0	61
Lot 2 Stage 1 Housing	4	12	9	21	0	0	39	2,282 sq'	14,400 sq'	0.30	1,141 sq'	10%	6m	21	8	17	24	0	0	30
Lot 2 Stage 2 Housing	15	0	14	22	0	0	44	3,212 sq'	14,400 sq'	0.30	1,606 sq'	10%	6m	40	14	42	47	12	0	59
Lot 4 Commercial	1	0	0	0	0	0	1	1,000 sq'	14,400 sq'	0.50	1,000 sq'	20%	11m	0	0	0	0	0	0	0
<b>Sub-Total</b>	<b>38</b>	<b>12</b>	<b>14</b>	<b>54</b>	<b>41</b>	<b>0</b>	<b>147</b>	<b>11,427 sq'</b>	<b>54,000 sq'</b>	<b>0.36</b>	<b>6,044 sq'</b>	<b>20%</b>	<b>6m</b>	<b>112</b>	<b>36</b>	<b>208</b>	<b>177</b>	<b>24</b>	<b>0</b>	<b>201</b>
<b>North Site</b>																				
Lot 3 Waterfront Homes	10	0	0	0	0	0	10	2,702 sq'	14,400 sq'	0.19	1,269 sq'	10%	11.5m	40	9	49	45	0	0	45
Lot 5 Market Rentals	10	14	0	30	0	0	44	3,742 sq'	14,400 sq'	0.26	1,864 sq'	14%	6m	50	13	70	62	13	0	75
<b>Sub-Total</b>	<b>20</b>	<b>14</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>44</b>	<b>6,444 sq'</b>	<b>28,800 sq'</b>	<b>0.22</b>	<b>3,134 sq'</b>	<b>14%</b>	<b>6m</b>	<b>102</b>	<b>22</b>	<b>119</b>	<b>107</b>	<b>13</b>	<b>0</b>	<b>120</b>
<b>Totals</b>	<b>58</b>	<b>26</b>	<b>14</b>	<b>84</b>	<b>41</b>	<b>0</b>	<b>191</b>	<b>17,871 sq'</b>	<b>82,800 sq'</b>	<b>0.21</b>	<b>9,178 sq'</b>	<b>17%</b>	<b>6m</b>	<b>214</b>	<b>58</b>	<b>327</b>	<b>284</b>	<b>13</b>	<b>0</b>	<b>321</b>

The intention of the development proposal is to provide the following Affordable Rentals and Attainable Home Ownership sales, subject to site conditions, funding and approvals.

ATTAINABLE HOME SALES		AFFORDABLE RENTALS: 30%	
<b>Lot 1 Stage 2: Eagle 1/3 Strata Attainable Sales</b> <b>46 Apartments - Sales</b>		<b>Lot 1 Stage 1: Eagle 1/3 Strata Attainable Sales</b> <b>29 Apartments - Sales</b>	
UNITS	No.	UNITS	No.
Multiplexes	11	Multiplexes	7
1 Bedroom	4	1 Bedroom	2
2 Bedroom	20	2 Bedroom	13
3 Bedroom	22	3 Bedroom	14
Adaptable Studios	22	Adaptable Studios	14
Parking	78	Parking	53
<b>Lot 2 Stage 1: Eagles 1.1/3.1</b> <b>30% Affordable Rental</b> <b>39 Apartments - Rent</b>		<b>Lot 2 Stage 2: Eagle 1.1/3.1</b> <b>30% Affordable Rental</b> <b>68 Apartments - Rent</b>	
UNITS	No.	UNITS	No.
Multiplexes	6	Multiplexes	10
1 Bedroom	18	1 Bedroom	32
2 Bedroom	21	2 Bedroom	24
3 Bedroom	0	3 Bedroom	0
Adaptable Studios	0	Adaptable Studios	0
Parking	39	Parking	50

Affordable Housing Requirements for Certain Uses:

1.1 With respect to the development of "Single Family Waterfront Homes" and "Multiple Family Residential" uses on the Lands, the Developer covenants and agrees to provide a restrictive covenant, affordable housing agreement or other written assurances, at the discretion of and to the reasonable satisfaction of the District, concurrent with the subdivision of the relevant portion of the Lands and prior to the issuance of an occupancy permit for any building on the portions of the Lands so developed, such that Affordable Housing units will be developed at a rate of at least thirty (30%) percent of the total units developed (that is, one (1) Affordable Housing unit for every three (3) units, or part thereof), in accordance with the following requirements:

(a) The Affordable Housing units are to be constructed by the Developer, but managed and administered by a not-for-profit housing organization, including with respect to rentals and sales (in which case acceptable profits are to return to the Developer).

(b) Qualification criteria, parameters and guidelines shall be developed by a not-for-profit housing organization in consultation with the District and the Developer.

(c) The Affordable Housing unit mix shall include one-, two- and three-bedroom units. Where if possible 10% of units will be suitable for special needs occupants.

(d) (e)(f) With respect to rental units, rent caps shall be developed, maintained and enforced by the not-for-profit housing organization in consultation with the District and the Developer; with respect to strata ownership units, price caps and resale caps shall be developed, maintained and enforced by the not-for-profit housing organization in consultation with the District and the Developer; and a reasonable percentage from both rental units and strata fees shall be paid back to the not-for-profit housing organization for administrative purposes, as determined by the not-for-profit housing organization in consultation with the District and the Developer and any government grant funding body.

(g) With respect to the area identified as "Lot 5 – Market Apartments" in the Rezoning Bylaw, development of this area as multiple family residential use, may not be developed until a minimum of at least sixty (60) Attainable home ownership or Affordable Rental units, or combination thereof, have been developed on the Lands, allocated to Lot 1 and Lot 2, including issuance of occupancy permit(s).

The other requirements of section continue to apply to Lot 5 Market Apartments, and without limiting the generality of the foregoing, the total Affordable Housing requirements remains one (1) unit for every three (3) units developed.

(h) The commencement of construction of the Lot 1 Stage 2 Attainable Home Ownership and Lot 2 Stage 2 Affordable Rentals will be triggered by the complete sale or full rental take up of constructed units in Lot 1 Stage 1 Attainable Home Ownership and Lot 2 Stage 1 Affordable Rentals, concurrently with approval of the necessary government grant funds for subsidised construction of these units, and every reasonable effort will be made to expedite development of these lots at the developer's discretion.

(i) Where this Housing Agreement, or an agreement prepared as a result of a requirement of this Part, requires the Developer to limit its price on the sale of a residential housing unit to a certain percentage of market value, or the Attainable sale price as defined by the Sub-Committee of the Not-for-Profit Housing Association. If the Housing Association otherwise requires consideration of

market value to define 'Attainable' Home Ownership, these values will be subject to review and verification by a qualified Valuer mutually selected by the District and the Developer. **Appendix D**



The building and all associated works, including but not limited to civil, stormwater, services, roadworks, retaining and planting will be only obligated to be delivered concurrently with the stage that is being constructed.

**Phased Landscape**

- 22 Plans may be approved for large-scale developments at the discretion of the Manager to enable the completion of the landscape plan in phases and the submission of the related security deposit at each phase. The Applicant is required to request a phased approach to the execution of the landscape plan at the time of Development Permit application, clearly identifying on the submitted landscape plan the proposed phases and related cost estimates for each phase.

[Proposed PDA Agreement LINK](#)



The proposed rezoning and development permit results in some variations to the OCP and the following maps will need updating:



**Schedule A – Long Range land Use Map**

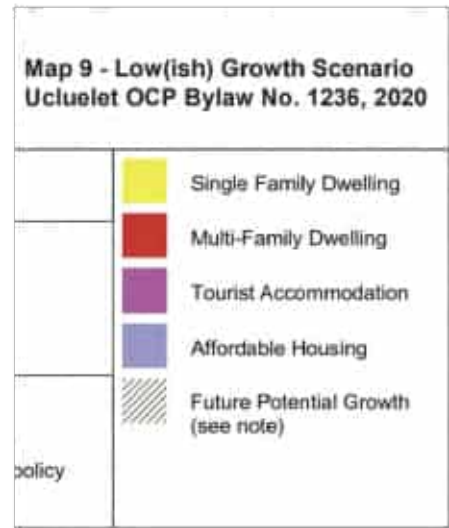
- Update the marked positions of SF (single family) to only waterfront lots.
- Update the Main North and South lots as Multi-Family Residential.
- Corner of Minato and Peninsula to show SC Service Commercial zone.
- Reposition white road to reflect access not yet permitted to Peninsula.
- Adjust Parkland Dedication to show terminates well before Minato Rd.



Municipality to review walking trails and viewpoints to determine if update.

Reduce setback to Peninsula Rd.

## Appendix D



Update Single Family as some Affordable Housing, and the rest of the lot as Single Family Waterfront homes and Multi Family.

#	Lodged Document	Document Link
	<b>Supporting Consultant Reports</b>	
1	Stormwater Management Servicing Plans by McGill and Associates (Sep 2023)	<a href="https://drive.google.com/file/d/1bt6VFIQqYp1XF0BgIAo-yhB48ANGGjRw/view?usp=sharing">https://drive.google.com/file/d/1bt6VFIQqYp1XF0BgIAo-yhB48ANGGjRw/view?usp=sharing</a>
2	Water and Sanitary Impact on Infrastructure by Koers & Associates (March 2024)	<a href="https://drive.google.com/file/d/1Z1mpeulaVHUag3XdMM6dAOGU8tANVwtG/view">https://drive.google.com/file/d/1Z1mpeulaVHUag3XdMM6dAOGU8tANVwtG/view</a>
3	Water Demands by Koers and Associates (2022)	<a href="https://drive.google.com/file/d/115wybfc4nGm9veHUEzWQ57puqWHwKdj/view?usp=sharing">https://drive.google.com/file/d/115wybfc4nGm9veHUEzWQ57puqWHwKdj/view?usp=sharing</a>
4	Traffic Impact Report by Watt Consulting (Feb 2022)	<a href="https://drive.google.com/file/d/10ubxVQExbFjrrfyIOlzxmfaRnL5B8BWY/view">https://drive.google.com/file/d/10ubxVQExbFjrrfyIOlzxmfaRnL5B8BWY/view</a>
5	Traffic Impact Assessment by Watt Consulting Group (Jan 2024)	<a href="https://drive.google.com/file/d/1_ji0jPq9Ms1n7kbtGKdpStCpIM8fM1jS/view?usp=sharing">https://drive.google.com/file/d/1_ji0jPq9Ms1n7kbtGKdpStCpIM8fM1jS/view?usp=sharing</a>
6	Geotechnical Report by Geopacific (Sept 2023)	<a href="https://drive.google.com/file/d/14FBBF1vc0c8wmGX-l3-MajDA4Ak6WgQm/view?usp=sharing">https://drive.google.com/file/d/14FBBF1vc0c8wmGX-l3-MajDA4Ak6WgQm/view?usp=sharing</a>
7	Geotechnical Reports by Frontera Geotechnical (Dec 2021)	<a href="https://drive.google.com/file/d/11OEKOaylhvwxFoLkxzY1LgP3IWmUuZt7/view?usp=sharing">https://drive.google.com/file/d/11OEKOaylhvwxFoLkxzY1LgP3IWmUuZt7/view?usp=sharing</a>
8	Ebbwater Consulting Flood Report for 221 Minato (2022)	<a href="https://drive.google.com/file/d/11-ZL9hM48AAsELWCvMCq8w80krhITHhB/view?usp=sharing">https://drive.google.com/file/d/11-ZL9hM48AAsELWCvMCq8w80krhITHhB/view?usp=sharing</a>

## 221 Minato Road - Statement of Intent

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### **Purpose of the Application:**

The purpose of this application is to obtain a Development Permit for the proposed 221 Minato Road project. This development aims to address critical housing needs within the Ucluelet community by providing a diverse range of housing options, including attainable homeownership, affordable rentals, market rentals, and waterfront homes. Additionally, the project will include a commercial precinct to enhance community access to essential services and foster economic growth.

### **Compliance with Development Permit:**

The proposal complies with the Development Permit checklist. The proposal incorporates sustainable design principles, ensuring compatibility with the surrounding environment, and prioritizing community needs. The development plan includes high-quality construction, environmentally responsible practices, and thoughtful integration of residential and commercial spaces to create a vibrant, interconnected community. The design respects the natural landscape, preserving green spaces, and aligns with the community's long-term vision for growth and sustainability.

### **Divergence from Development Permit Guidelines and Justification:**

The proposal and supporting documentation includes divergences of adjustments to zoning to permit a commercial interface with Peninsula Road adjusts setbacks, building heights and densities to accommodate a greater number of attainable and affordable housing units. We believe these adjustments should be supported as they serve the community goal of increasing housing accessibility and addressing the acute housing shortage in Ucluelet. The proposed variances have been carefully considered to balance community concerns with the need for sustainable growth.

### **Existing and Proposed Use of the Land, Buildings, and Structures:**

The existing use of the land at 221 Minato Road is currently undeveloped and under-utilized, with a mix of natural landscapes and some previous cleared disturbances. The proposed development will transform the site into a mixed-use community featuring multi-family homes, waterfront homes and a commercial precinct. The land use will shift from vacant to a vibrant residential and commercial hub, promoting community integration and economic activity.

### **Existing and Proposed Works and Services:**

The existing works on the site are limited, with minimal infrastructure currently in place. The proposed phased development includes significant upgrades to utilities and services, including road improvements, water and sewer systems, stormwater management, and sustainable energy solutions including solar panels and EV charging stations. These enhancements will not only support the new development but also provide long-term benefits to the surrounding area by improving overall infrastructure quality and resilience. Interim sewage services have been provisioned to bridge the upgrade should it be needed.

**Community Consultations:**

Minato Road Properties has actively engaged with the Ucluelet community and key stakeholders throughout the planning process. Consultations have included meetings with local residents, business owners, the Chamber of Commerce, the Mayor, Fire Chief, Councillors, and district staff and a community open house, to gather feedback and ensure the project aligns with community expectations and needs. Moving forward, we will continue to involve the community through consultation processes, feedback sessions, and ongoing communication to refine the development plan and address any concerns. This collaborative approach underscores our commitment to creating a project that truly reflects the aspirations and values of the Ucluelet community.

This statement of intent outlines the key elements of the 221 Minato Road development proposal and demonstrates our commitment to compliance with the Development Permit guidelines while addressing the critical housing and service needs of Ucluelet. We respectfully request consideration and support for this application to bring this transformative project to life.



## Municipality Policies List and Links

## Site and Zoning Restrictions by District of Ucluelet

221 Minato Rd, Ucluelet					
Type	Report	Consultant	Date	Results	Link
Covenant	Covenant Restrictions	District of Ucluelet	2022	Limitations on current title as restrictions passed 2022. Negotiations underway to substantially revise these Sept 2024.	<a href="https://drive.google.com/file/d/1itHg9RNp9qMW_WjAc98OHc3oR07oJTrG/view?usp=sharing">https://drive.google.com/file/d/1itHg9RNp9qMW_WjAc98OHc3oR07oJTrG/view?usp=sharing</a>
By Law	District of Ucluelet	Rezoning By Law	2022	Detailed Rezoning By Law as passed 2022 for 221 Minato Rd for proponent Minato Bay Holdings.	<a href="https://drive.google.com/file/d/1Ebz1p8huJd19cepMFMNvoy8b8ZCK4uA/view?usp=sharing">https://drive.google.com/file/d/1Ebz1p8huJd19cepMFMNvoy8b8ZCK4uA/view?usp=sharing</a> (link repaired 15 Aug)
Minutes	District of Ucluelet	Rezoning By Law	2022	Discussion noted in Minutes when Council passed the 221 Minato Rezoning By Law to give context to the approval.	<a href="https://drive.google.com/file/d/1ppqc6V8cAXSS2igN2WZhZSvmEAdF3mOI/view?usp=drive_link">https://drive.google.com/file/d/1ppqc6V8cAXSS2igN2WZhZSvmEAdF3mOI/view?usp=drive_link</a>
Policy	Fire Policy	District of Ucluelet	July 2024	Detailed Fire Chief directives on fire standards for developments.	<a href="https://drive.google.com/file/d/17jJkvkKBy3B_XoEddkUv90S4dj14ZQtJ/view?usp=sharing">https://drive.google.com/file/d/17jJkvkKBy3B_XoEddkUv90S4dj14ZQtJ/view?usp=sharing</a>
Policy	Fire Policy	District of Ucluelet	May 2024	Detailed Interim policy for Tsunami management in Ucluelet.	<a href="https://drive.google.com/file/d/1qornZW-6VNSjN1PP-w_w9zAcuKwq2EQN/view?usp=sharing">https://drive.google.com/file/d/1qornZW-6VNSjN1PP-w_w9zAcuKwq2EQN/view?usp=sharing</a>
By Laws	District of Ucluelet	Consolidated By Laws	2024	Consolidated By Laws for all of Ucluelet. Generic requirements such as s500 parking ratios.	<a href="https://ucluelet.ca/community/planning-forms-pubs?download=395:zoning-by-law-1160-unofficial-consolidation">https://ucluelet.ca/community/planning-forms-pubs?download=395:zoning-by-law-1160-unofficial-consolidation</a>
Title	Parkland Dedication Survey	Title Data	2024	Williamson Surveying supplied the formal Parkland Dedication areas as held on title at September 2024	

THE CITY OF BRUCE ARBOR, MISSISSIPPI, HAS ADOPTED THE FOLLOWING ORDINANCE:

ORDINANCE NO. 2015-001

AN ORDINANCE TO AMEND THE ZONING ORDINANCES OF THE CITY OF BRUCE ARBOR, MISSISSIPPI, TO REZONE A PORTION OF THE LANDS LOCATED AT THE INTERSECTION OF MINATO ROAD AND MCNEINGULA ROAD, BRUCE ARBOR, MISSISSIPPI, FROM THE R-1 ZONING DISTRICT TO THE R-2 ZONING DISTRICT.

IT IS HEREBY ORDERED THAT THE CITY ENGINEER SHALL BE AND HE IS HEREBY AUTHORIZED TO EXECUTE NECESSARY RECORDING AND FILING OF THIS ORDINANCE WITH THE MISSISSIPPI DEPARTMENT OF REVENUE.

APPROVED AND ADOPTED THIS 15TH DAY OF MAY, 2015.

\_\_\_\_\_  
CITY CLERK



PROJECT: 221 MINATO ROAD  
 OWNER: ERIF, INC.

DATE	NO.
15/05/15	001





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ERIF

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Scale: 1" = 40'



MINATO  
 221 MINATO ROAD

DATE: 11/14/14  
 SHEET: 01  
 PROJECT: 221 MINATO ROAD  
 DRAWING: 01



**UNIT TYPE LEGEND**

UNIT TYPE	AREA (SQ. FT.)	AREA (SQ. METERS)
APARTMENT (1 BR)	10,000	929
APARTMENT (2 BR)	15,000	1,394
APARTMENT (3 BR)	20,000	1,858
TOTAL	45,000	4,181

- LEGEND**
- APARTMENT (1 BR)
  - APARTMENT (2 BR)
  - APARTMENT (3 BR)
  - ACCESSIBLE PARKING
  - CONCRETE
  - ASPHALT
  - LANDSCAPE
  - PAVING
  - WATER
  - SEWER
  - STREET LIGHT
  - LANDSCAPE TREE
  - LANDSCAPE SHRUB
  - LANDSCAPE PLANT

**PROJECT INFORMATION**

CLIENT ADDRESS: 221 MINATO ROAD, HOUSTON, TX 77055

CLIENT: ERIF

DATE: 11/14/14

SCALE: 1" = 40'

PROJECT: 221 MINATO ROAD, HOUSTON, TX 77055

DESIGNER: FORMOSIS ARCHITECTURE

DATE: 11/14/14

**PROPERTY INFORMATION**

NO.	AREA (SQ. FT.)	AREA (SQ. METERS)	TYPE
1	10,000	929	APARTMENT (1 BR)
2	15,000	1,394	APARTMENT (2 BR)
3	20,000	1,858	APARTMENT (3 BR)
TOTAL	45,000	4,181	



THE PROJECT HAS BEEN REVIEWED BY THE LOCAL PLANNING COMMISSION AND APPROVED FOR THE LOCAL GOVERNMENT TO PROCEED WITH THE PROJECT. THE PROJECT IS SUBJECT TO THE LOCAL GOVERNMENT'S REVIEW AND APPROVAL OF THE PROJECT'S COMPLIANCE WITH THE LOCAL GOVERNMENT'S ZONING ORDINANCES AND OTHER APPLICABLE REGULATIONS. THE PROJECT IS SUBJECT TO THE LOCAL GOVERNMENT'S REVIEW AND APPROVAL OF THE PROJECT'S COMPLIANCE WITH THE LOCAL GOVERNMENT'S ZONING ORDINANCES AND OTHER APPLICABLE REGULATIONS.



221 MINATO ROAD  
SHELBY COUNTY, TENNESSEE  
2024-01-15

Appendix D

A-02







DATE	2017-04-10
SCALE	AS SHOWN
PROJECT	221 MINATO ROAD
DESIGNER	ERIF



THE CLIENTS AND/OR CONSULTANTS ACCEPT FULL RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THE LOCAL AUTHORITY AND THE LOCAL AUTHORITY'S ACCEPTANCE OF THIS INFORMATION DOES NOT CONSTITUTE AN ENDORSEMENT OF THE INFORMATION OR A GUARANTEE OF THE ACCURACY OF THE INFORMATION.

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**Formosis Architecture**



MINATO  
 221 MINATO ROAD  
 BRUCEDALE, CO  
 80109

Appendix D  
 A150





THE BOARD OF SUPERVISORS HAS REVIEWED THE PROPOSED PROJECT AND HAS DETERMINED THAT THE PROJECT IS IN ACCORDANCE WITH THE LOCAL GOVERNMENT'S POLICIES AND REGULATIONS. THE BOARD OF SUPERVISORS HAS APPROVED THE PROJECT AND HAS AUTHORIZED THE LOCAL GOVERNMENT TO ENTER INTO AN AGREEMENT WITH THE DEVELOPER.



APPROVED BY THE BOARD OF SUPERVISORS  
DATE: 10/15/2018

PROJECT NAME	221 MINATO ROAD
PROJECT NUMBER	2018-001
PROJECT LOCATION	221 MINATO ROAD, BRUCELAND, CA 95006
PROJECT TYPE	RESIDENTIAL DEVELOPMENT
PROJECT STATUS	PENDING

Appendix D

A801



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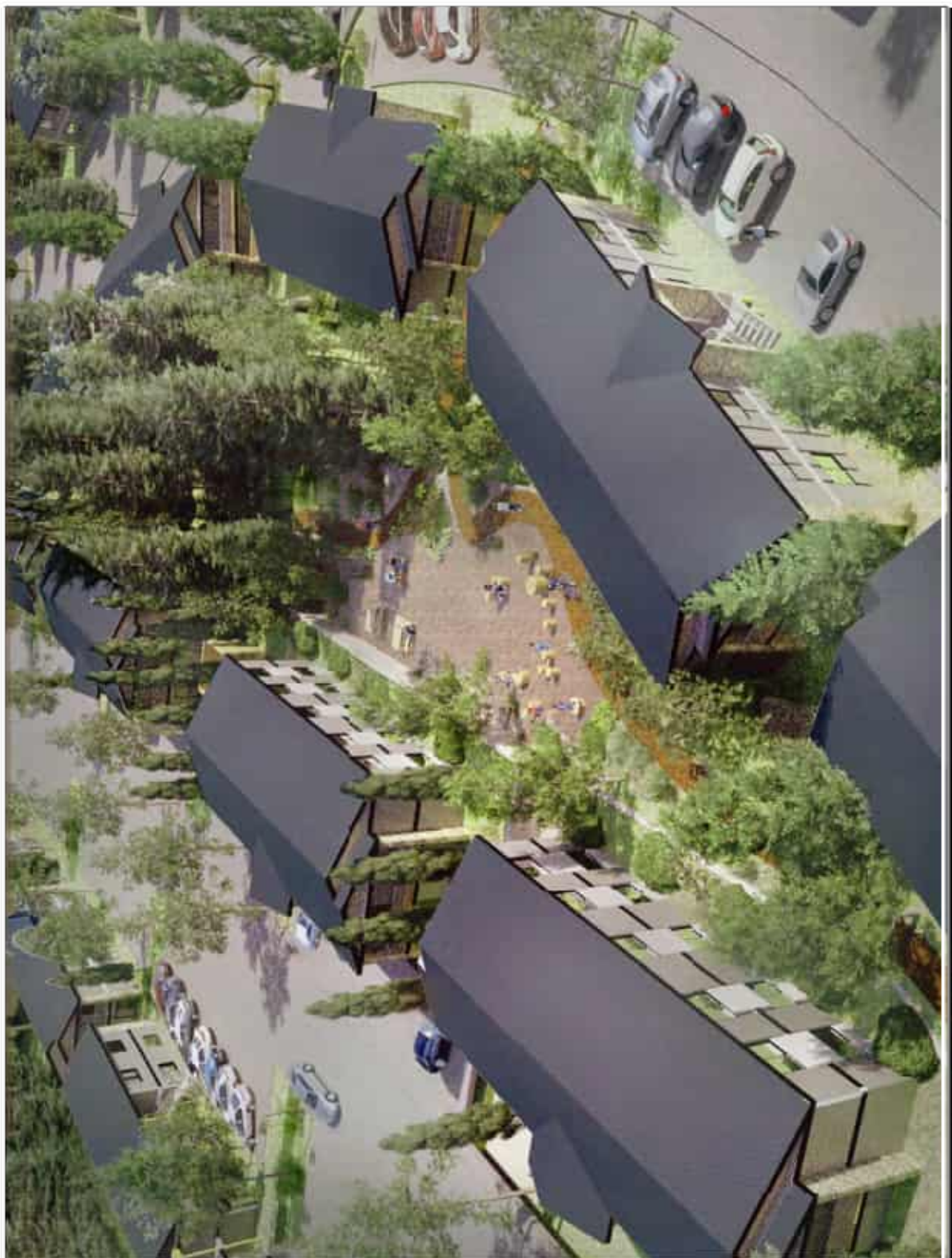
BRUCE COUNTY  
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Appendix D  
 A802



221 Minato Road

# 5 Lot - Proposed Subdivision & Multi-Family Development

## Site Servicing Report

ERIF Sustainable Solutions  
Ucluelet, BC



**Prepared by:**

Herold Engineering Limited  
3701 Shenton Road  
Nanaimo, BC  
V9T 2H1

**Herold Project No.** 6437-001





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## 1.0 INTRODUCTION

Herold Engineering Limited was requested by ERIF Sustainable Solutions to provide civil engineering services including site servicing and roadworks for the proposed 5 lot subdivision and multi-family development at 221 Minato Road in Ucluelet, BC.

The intent of this report is to identify possible issues related to accessing and servicing this site and to suggest appropriate approaches for the design of this development. The project consists of the subdivision of the 221 Minato Road into four (4) new residential lots and one (1) new commercial lot. The site is currently within the District of Ucluelet (DoU) and is zoned Rural Residential (RU). The site is largely forested with some localized cleared areas from previous development activity.

The combined site is 6.68 ha and generally slopes from the south to north. A creek, which collects runoff from Peninsula Road and terminates at Minato Road, bisects the lot running east to west. Proposed Lots 1, 2 & 4 will be located south of the creek and Lots 3 & 5 will be located north of the creek.

Proposed site servicing and underground utilities are shown on the attached drawing C01-C07 available in Appendix A.



Figure 1: Proposed 5 Lot Development (Formosis Architecture)

The development is expected to proceed in the following stages:

Table 1: Development Phasing (ERIF)

Stage	Area	Type, Number of Units	Population*
Stage A	Lot 1, Part 1	7 Multiplex buildings (29 units)	70
Stage B (Concurrent with Stage A)	Lot 3, Waterfront Homes	10 units	24
Stage C	Lot 4, Commercial Development	600m <sup>2</sup> ground floor retail and 600m <sup>2</sup> upper floor offices	22
Stage D	Lot 2, Part 1	6 Multiplex buildings (39 units)	94
Stage E	Lot 1, Part 2 Lot 2, Part 2	11 Multiplex buildings (46 units) 10 Multiplex buildings (68 units)	110 163
Stage F	Lot 5, Market Apartments	11 Multiplex buildings (58 units)	139
Total		<b>250 Units (residential only)</b>	<b>622</b>

\*Residential (2.4 people per unit (2021 Canada Census))

\*Commercial (90 people per hectare (MMCD Design Guidelines))

## 2.0 ROADS AND ACCESS

The subject site is fronted by Peninsula Road to the south (see Figure 2) and Minato Road to the west (see Figure 3).





Figure 2: Peninsula Road - Looking East (Google Maps)



Figure 3: Minato Road – Looking North (Google Maps)

Site access for all lots within the development are proposed to be from Minato Road. Lots 1, 2 & 4 will be accessed from a single access point from Minato Road, south of the existing creek. Although Lot 2 does not have frontage on Minato Road, a common access agreement will be in place over Lot 1 to access Lot 2. Lots 3 & 5 will be accessed from Minato Road, north of the existing creek, with separate accesses.

Please see the January 2024 Transportation Engineering memo prepared by Watt Consulting for details around the intersection of Minato Road/Peninsula Road as well as the future potential for a secondary access directly from Peninsula Road. Report items include:

- Implement intersection improvements at Minato Road/Peninsula Road including a Type 1B westbound lane
- Recommend a pedestrian crossing across Peninsula Road at Minato Road for a connection to the Wild Pacific Trail
- In the future, this section of Peninsula Road is envisioned to have a speed limit of 50 km/h, at which time the sight lines for a secondary access could be achieved.

An additional access to Lot 2 from Peninsula Road is proposed but will be used for emergency vehicle and pedestrian access only.

Currently, Minato Road is an approximately 6.30m wide dead-end gravel road. As part of the proposed development, frontage upgrades to Minato Road are expected along with a new offset turn-around at the end of the existing road. The final arrangement of the turn-around and extent of frontage upgrades will be coordination with DoU staff during detailed design.

No frontage upgrades are expected on Peninsula Road, although consultation with the Ministry of Transportation & Infrastructure (MoTI) is ongoing.

## 3.0 WATERMAIN

### 3.1 Existing Water System

There is an existing 200Ø PVC watermain along the east side of Minato Road which ends at the road extents near the entrance to Lot 4. There is a 450Ø PE watermain along the south shoulder of Peninsula Road.

There is an existing fire hydrant at the corner of Peninsula Road and Minato Road and at the end of Minato Road.

### 3.2 Existing Water Modeling

Koers & Associates Engineering (KAE), on behalf of DoU, prepared a water modeling report for a different arrangement of the proposed development which included a full buildout of 300 residential units and 716 people. (Appendix C) The current proposed development is proposing 250 units at final buildout, to be phased as outlined in Table 1.



Based on potential water demands as noted in the MMCD Design Guidelines 2022, KAE indicated the approximate available fire flows available at the connection to the 200Ø PVC watermain on Minato Road to be **103 l/s** (assumed elevation of 8.0m geodetic) and from the 450Ø PE watermain on Peninsula Road to be **300 l/s**. (assumed elevation of 11.0m geodetic)

### 3.3 Proposed Water System

Each of the proposed development lots will have a separate water service to its property frontage complete with individual meters. All lots, except for Lot 2, will be serviced from the 200Ø PVC watermain on Minato Road. Lot 2 will be serviced from the 450Ø PE on Peninsula Road.

The domestic water demand calculations are based on the MMCD Design Guidelines (2022) Standards and Specifications - Water Distribution.

Unit water demand rates used for this analysis are shown in Table 3.3.1 below.

**Table 3.3.1 - Unit Demand Rates (Metered Developments)**

Scenario	Demand Rate
Average Day Demand (ADD)	300 L/capita/day
Maximum Day Demand (MDD)	600 L/capita/day
Peak Hour Demand (PHD)	900 L/capita/day

The demand calculations are presented in Tables 3.3.2 and Table 3.3.3 below.

**Table 3.3.2 - Population Calculations**

Type		Density	Population
Commercial		90 pph	22
Residential	250 units	2.4 cap/unit	600
		<b>Total Equivalent</b>	<b>622</b>

**Table 3.3.3 - Residential Demand**

Scenario	Demand
ADD	2.16 L/s
MDD	4.32 L/s
PHD	6.48 L/s

### 3.4 Fire Flow Requirements

Preliminary Fire Underwriter's Survey (FUS) calculations for each building of the proposed development indicate that a "worst-case" situation occurs within Lot 1 which results in a required fire flow of **85 L/s** for a duration of 1.75 hours. (See attached FUS Calculations in Appendix B)



Based on KAE's approximate available fire flows noted above, the proposed watermain and hydrants are expected to be capable of providing the required domestic and fire flows to each building.

As part of the DP review process, we understand that DoU may engage KAE to complete modelling to confirm the capacity of the existing water system.

The final size of the services and meters, as well as the arrangement of backflow prevention, to each lot will be determined through detailed design and coordination with the mechanical consultant.

## **4.0 SANITARY SEWER**

### **4.1 Existing Sanitary System**

There is an existing 250Ø gravity sanitary sewer on Peninsula Road that spans the west half of the Peninsula Road frontage and connects to the Peninsula Road pump station. There is also an existing 100Ø sanitary forcemain along Minato Road which services the property east of Minato Road (210 Minato Road) and connects to the gravity main on Peninsula Road upstream of the pump station.

The Peninsula Road pump station is part of a chain of downstream pump stations which include the Hemlock Street pump station, the Fraser Lane pump station, and the Helen Road pump station, prior to reaching the DoU sewage treatment plant.

### **4.2 Existing Sanitary System Capacity & Modelling**

KAE, on behalf of DoU, prepared a sanitary sewer modeling report for a different arrangement of the proposed development which included a full buildout of 300 residential units and 716 people. The current proposed development is proposing 250 units and 622 people at final buildout, to be phased as outlined in Table 1.

(Appendix C – KAE Report 0361-242-01, Rev. 1).

Based on KAE's calculations, the report notes the existing Peninsula Road pump station does not have capacity to receive the expected flows of the full development build-out (300 units and 716 people based on the different arrangement). The anticipated flows under that arrangement are noted below on Table 2, and the pump station is noted to have approximately 4 L/s of additional capacity under current conditions.

Table 2 – Excerpt from KAE Servicing Memo

No. of Dwelling Units	Service Population <sup>(1)</sup>	Dry Weather Design Peak Flow		Infiltration & Inflow Allowance		Wet Weather Design Peak Flow (L/s)
		Per Capita <sup>(2)</sup> (L/s per capita)	Total (L/s)	Per Area <sup>(3)</sup> (L/s per ha)	Total <sup>(4)</sup> (L/s)	
100	250	0.022	5.5	0.13	0.3	5.8
165	412	0.022	9.0	0.13	0.4	9.4
300	716	0.022	15.8	0.13	0.7	16.5

The KAE report provides recommendations for infrastructure improvements which would be required to accommodate the flows from the development. These recommendations are based on the DoU Sanitary Sewer Master Plan (SSMP), also prepared by KAE, and prepared in June 2023.

Concurrently, DoU is planning for capital upgrades to the sanitary sewer system which includes improvements to gravity mains, forcemains, and lift stations throughout the District. Discussions with KAE to date have indicated that the highest priority for DoU is the replacement of the Hemlock Street pump station, as well as associated piping around the pump station. A memo prepared by KAE to supplement the SSMP is expected at the end of September 2024 which will make update the SSMP recommendations on what capital upgrades should take place based on the proposed development outlook within DoU.

### 4.3 Proposed Sanitary System

Considering the existing limitations of the DoU sanitary sewer system accommodating the flows from this development, we propose the following arrangements which are anticipated to correspond to the ongoing capital sewer upgrades and related available capacity. Please see the attached Sanitary Calculations in Appendix B.

Table 3 – Proposed Sanitary Flows

Stage	Revised PWWF
Stage A	0.88 L/s
Stage B (Concurrent with Stage A)	0.46 L/s
Stage C	0.27 L/s
Stage D	1.09 L/s
Stage E	3.13 L/s
Stage F	1.66 L/s



From Table 3, we note that Stages A-D could be completed within the existing capacity of the existing Peninsula Road pump station (4 L/s).

Ongoing discussions with DoU will refine the capital plan upgrades and timing, such that the development can proceed within the limitations of the existing sanitary system.

#### 4.4 Alternate Solution - Sanitary Detention

As an alternative solution, the attached Creus Engineering Report (Appendix C) provides rationale for a private sewage detention system which collects sanitary flows from the site and pumps (via private pumps) them into the municipal system at staged outflows and times depending on the system capacity at the time, typically during off-peak hours during the night. The report estimates that a 20,000 US gallon tank may suffice for this development, and that the private pump station would be integrated with the DoU system through SCADA controls. This solution would be used for Stages E & F, or for any stage which results in the existing capacity being exceeded by the proposed development flows.

We understand that the Hemlock pump station is currently pumping approximately 18-19 hours per day, based on conversations with KAE, and that a significant amount of the inflow is related to groundwater particularly in the wet seasons. The anticipated upgrade to Hemlock Street pump station includes additional capacity and metering which can be incorporated into a SCADA system.

As shown on the attached drawings, the proposed buildings on each lot will be serviced by gravity to localized low points within the lots. Lots 3 & 5 will have individual pump stations which will connect to the gravity main on Peninsula Road via separate service. Lots 1, 2, & 4 will contain a centralized collection point for the gravity and low-pressure systems from each lot. This centralized holding tank will then connect to the gravity main on Peninsula Road via a single service.

Should the required capital sanitary system upgrades be completed in the future, which accommodate the sanitary flows from the entire development, the sanitary flows from could then be re-routed directly to the municipal system to bypass the detention system.

The final size of the services and mains to each lot, as well as pump station capacities and details around sanitary detention, will be determined through detailed design and coordination with the mechanical consultant.

## 5.0 STORMWATER MANAGEMENT

This preliminary Stormwater Management plan is intended to outline the existing and proposed stormwater management features of the site for Development Permit application. This report is based on the design requirements of DoU and the known existing conditions at the development site.

## 5.1 Existing Site Conditions

The existing site is 6.68 ha and generally slopes from the south to north. A creek, which collects runoff from Peninsula Road and terminates at Minato Road, bisects the lot running east to west.

The site has localized clearings throughout the lot including looped gravel access roads within the southern and northern portions of the lot. The remaining areas are forested with bedrock outcrops. The site currently drains overland to the central creek and/or to the ocean (Ucluelet Inlet).

## 5.2 Stormwater Management Summary

The proposed site will be divided into two separate catchment areas, south and north of the existing creek. Each catchment area will contain separate outfalls to existing drainage courses. Outfall locations have been discussed with and reviewed by the project environmental consultant, Aquaparian Environmental Consulting.

The following is an overview of the proposed stormwater management plan for the development. During detailed design a final stormwater management plan will be created based on DoU and environmental requirements. Additionally, the "Stormwater Source Control Design Guidelines 2012" (SSCDG) will be consulted for stormwater management best practices during detailed design.

### South Catchment Area (Lots 1, 2, & 4):

- Runoff from the access road, sidewalks, parking areas, and building drainage will be collected via catchbasins and directed to a new onsite storm sewer system.
  - There is a potential for some localized rain garden facilities to collect road runoff, prior to connecting to the storm system. These facilities, and other source control measures will be considered during detailed design.
- The new underground storm system will direct flows to an existing low point in the northeast corner of Lot 1.
  - Easements will be required to accept overland and piped flows from the adjacent Lots 2 & 4.
- A new, naturalized pond will be created to accept flows from the storm system. An overland pond outlet will direct runoff to an existing drainage path to the adjacent creek.
  - The pond location and pond outlet will be coordinated with the Environmental consultant during detailed design.



### North Catchment Area (Lots 3 & 5):

- Runoff from the access road, sidewalks, and parking areas will be collected via roadside landscaped swales and directed to a new pond at an existing low point in the northeast corner of Lot 3.
  - Easements will be required to accept overland and piped flows from the adjacent Lots 2 & 4.
- The new pond will contain an overland outlet which will connect to an existing outlet for the ditch system on Minato Road. The outlet enters the existing park dedication area before reaching the ocean (Ucluelet Inlet).
  - The pond location and overland route through the Park dedication area will be coordinated with the Environmental consultant and DoU during detailed design.

## 6.0 EROSION AND SEDIMENT CONTROL

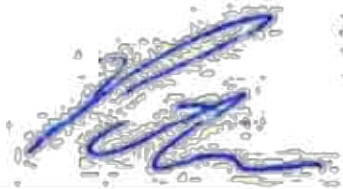
An Erosion and Sediment Control plan meeting current DoU and Environment requirements will be prepared and submitted with the application for Building Permit.

## 7.0 CONCLUSION

The design of the civil works associated with this project will be consistent with the District of Ucluelet's engineering standards and aligned with the overall project goals of sustainability, functionality & practicality.

### HEROLD ENGINEERING LIMITED

Prepared by:



Patrick Ryan, P. Eng  
Principal



Evan Pearce, ASCT  
Associate

# Appendix A





DATE	2024-03-15
PROJECT	221 MINATO ROAD DEVELOPMENT
CLIENT	ERIF SUSTAINABLE SOLUTIONS
DESIGNER	HEROLD CIVIL WORKS
SCALE	AS SHOWN
PROJECT NO.	221-24-001
DATE	2024-03-15
PROJECT	221 MINATO ROAD DEVELOPMENT
CLIENT	ERIF SUSTAINABLE SOLUTIONS
DESIGNER	HEROLD CIVIL WORKS
SCALE	AS SHOWN
PROJECT NO.	221-24-001
DATE	2024-03-15

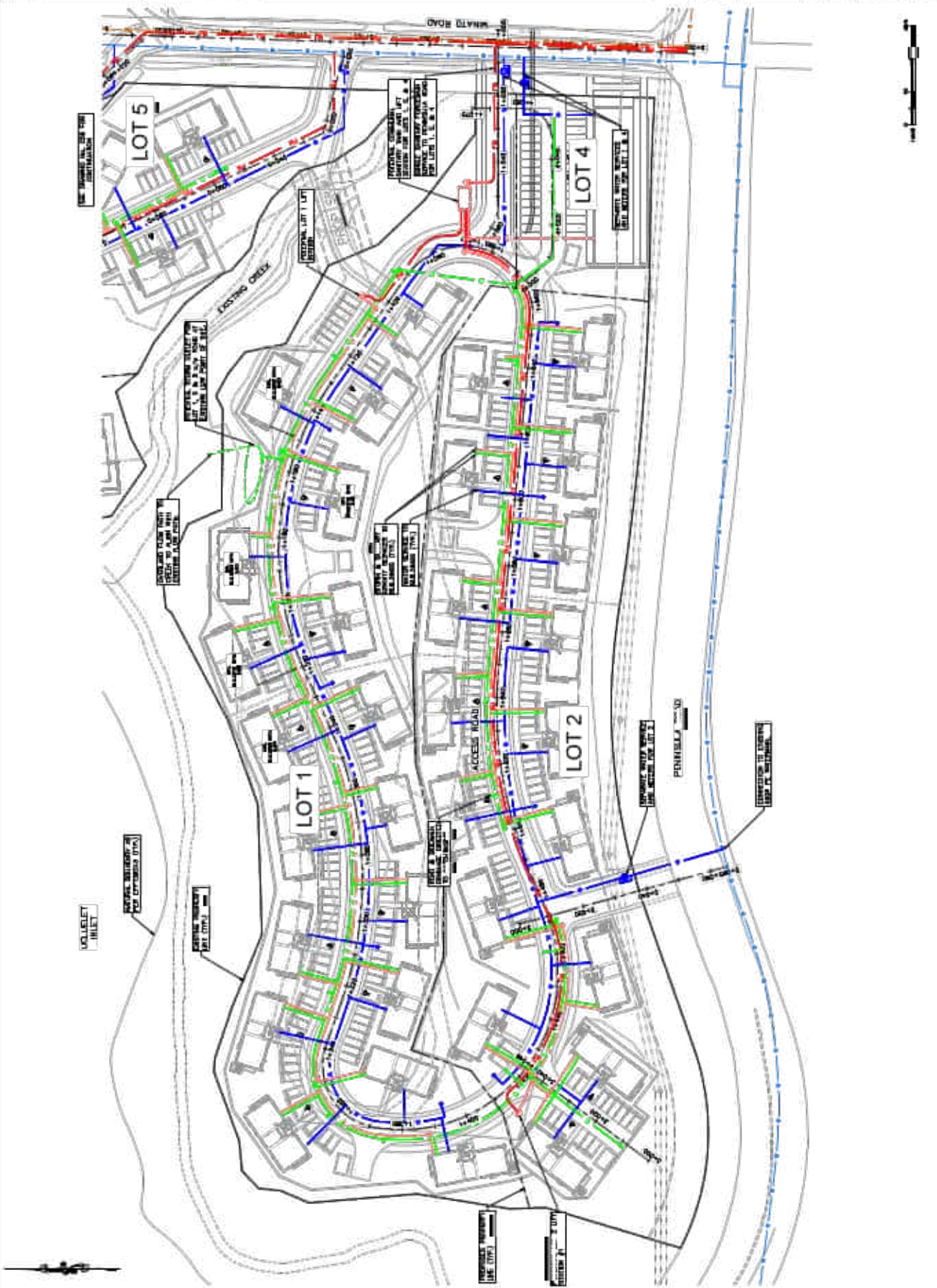
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 Vancouver, BC V6H 2G6  
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 www.heroldcivil.com

**221 MINATO ROAD DEVELOPMENT**  
 CIVIL WORKS  
 VOLUME 1, BC  
 ERIF SUSTAINABLE SOLUTIONS

**DESIGNED BY**  
 HEROLD CIVIL WORKS

**DATE**  
 2024-03-15

**PROJECT**  
 221 MINATO ROAD DEVELOPMENT  
 CIVIL WORKS  
 VOLUME 1, BC  
 ERIF SUSTAINABLE SOLUTIONS





DATE	NOV 14 2014
PROJECT	221 MINATO ROAD DEVELOPMENT
CLIENT	ERIF SUSTAINABLE SOLUTIONS
DESIGNER	HEROLD CIVIL WORKS
SCALE	AS SHOWN
PROJECT NO.	14-001
DATE	NOV 14 2014
BY	[Signature]
CHECKED BY	[Signature]
APPROVED BY	[Signature]
DATE	NOV 14 2014

LOT 1, LOT 2 & LOT 4  
SITE GRADING  
PLAN

**HEROLD**  
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221 MINATO ROAD DEVELOPMENT  
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VULNELET, BC  
ERIF SUSTAINABLE SOLUTIONS

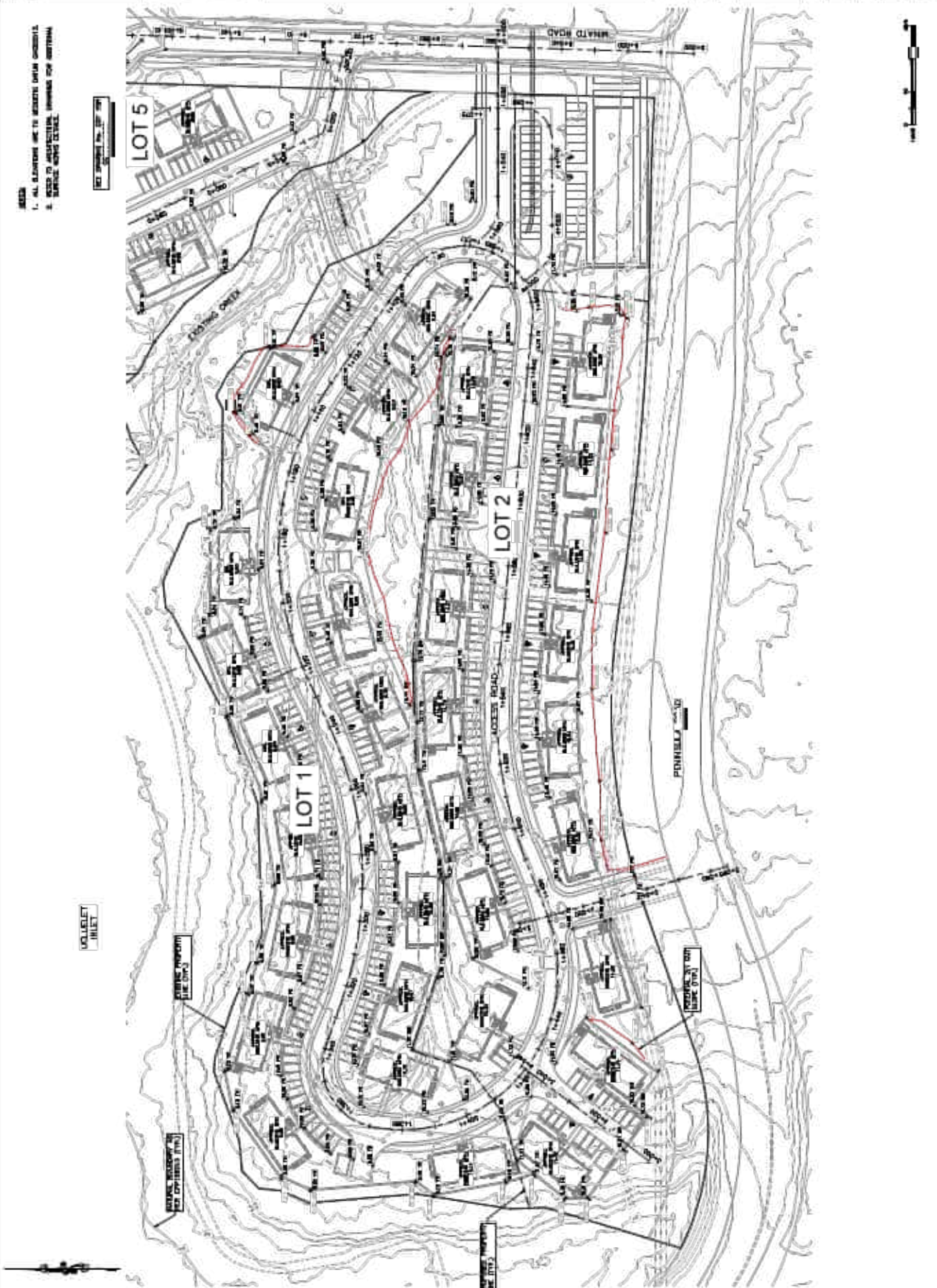
DESIGNED BY  
[Signature]

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[Signature]

DATE  
NOV 14 2014  
PROJECT  
221 MINATO ROAD DEVELOPMENT  
CLIENT  
ERIF SUSTAINABLE SOLUTIONS  
SCALE  
AS SHOWN  
PROJECT NO.  
14-001  
DATE  
NOV 14 2014  
BY  
[Signature]  
CHECKED BY  
[Signature]  
APPROVED BY  
[Signature]  
DATE  
NOV 14 2014

- NOTES
1. ALL ELEVATIONS ARE TO MIDDLE OF GRADE UNLESS OTHERWISE SPECIFIED.
  2. REFER TO ARCHITECTURAL DRAWINGS FOR ANTENNA SPACING AND LEVEL.

SEE DRAWING NO. 14-001-02



Project Name	221 Minato Road Development
Client	ERIF Sustainable Solutions
Scale	1:1000
Date	2024-10-27
Sheet No.	C04

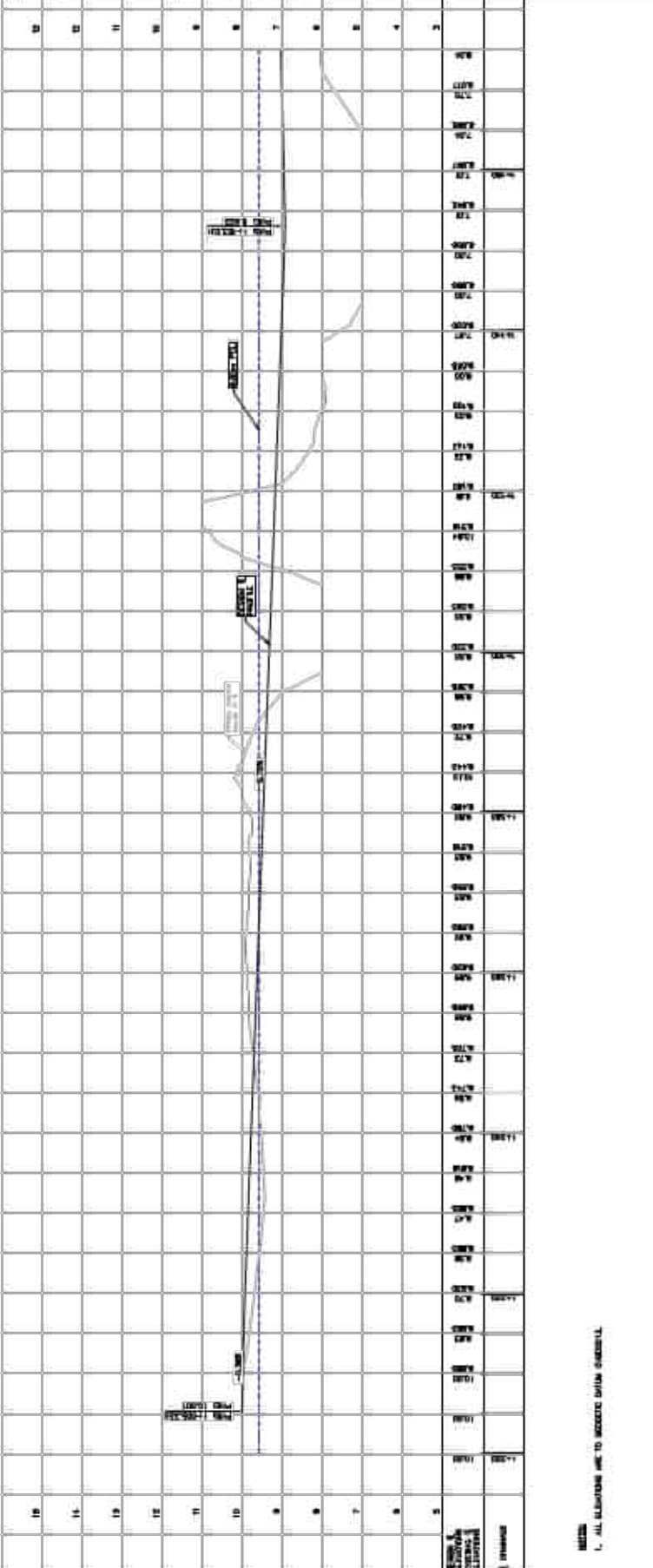
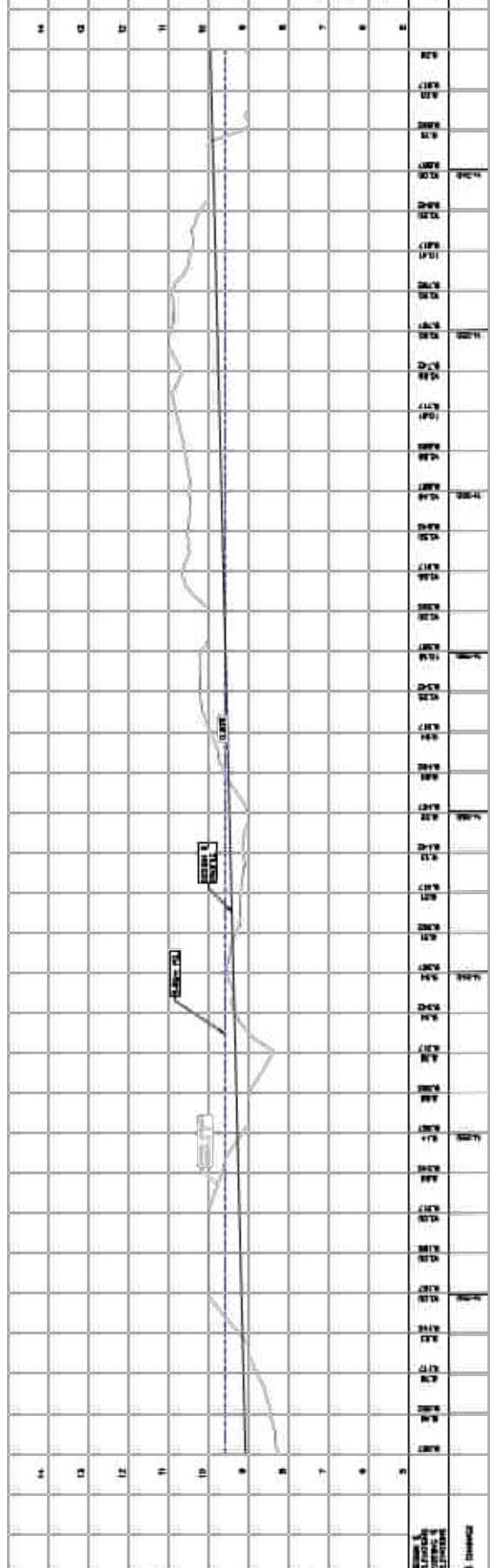
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221 MINATO ROAD DEVELOPMENT  
 CIVIL WORKS  
 ERIF SUSTAINABLE SOLUTIONS  
 VICTORIA, BC

DESIGNED BY  
 (NAME)

CHECKED BY  
 (NAME)

DATE  
 (DATE)



NOTES:  
 1. ALL ELEVATIONS ARE TO MIDDLE OF HIGH WATER.





DATE: 2024-07-15	PROJECT: 221 MINATO ROAD DEVELOPMENT
SCALE: AS SHOWN	CLIENT: HEROLD CIVIL WORKS
DESIGNER: [Name]	APPROVED: [Name]

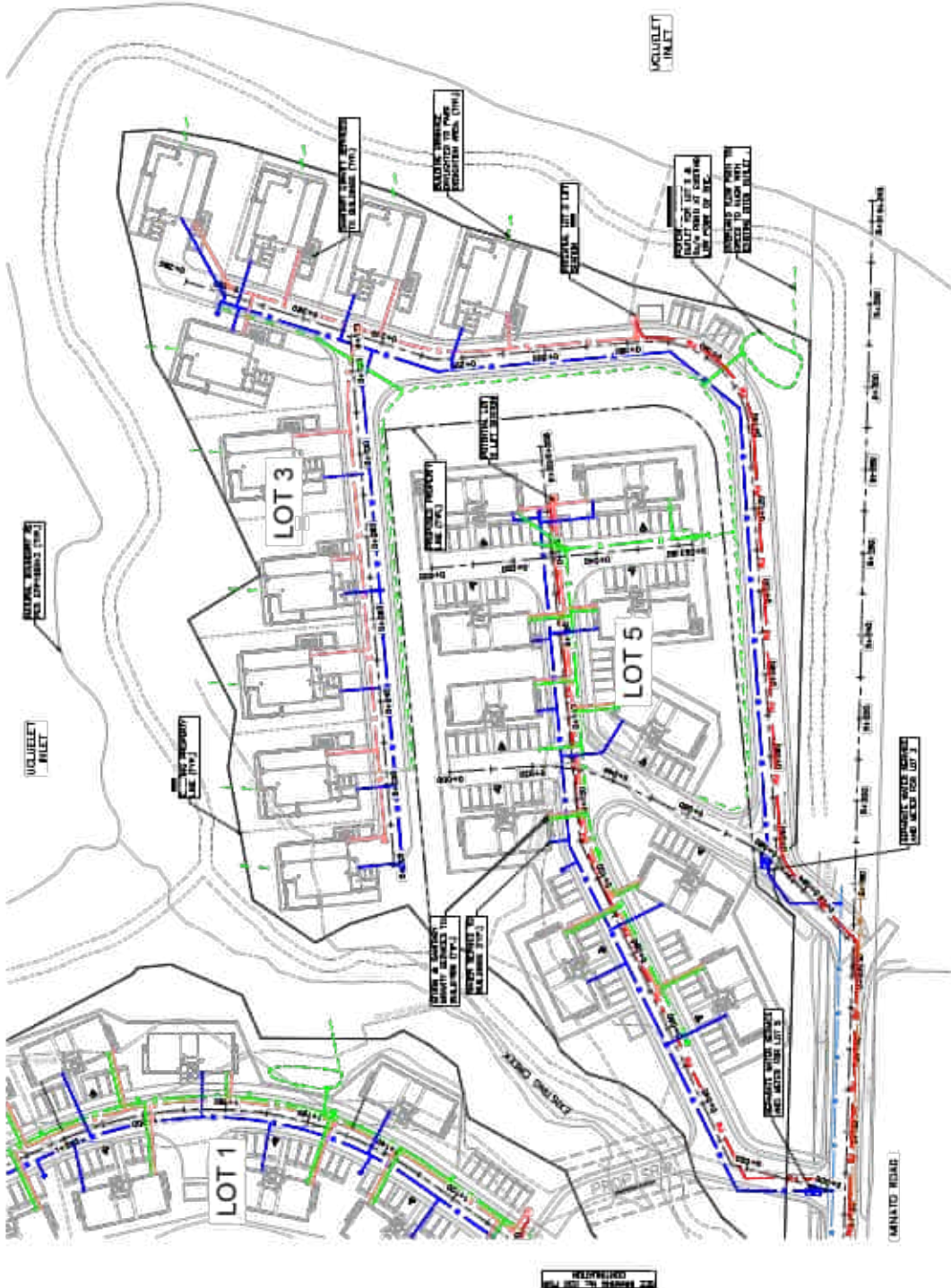
DATE: 2024-07-15	PROJECT: 221 MINATO ROAD DEVELOPMENT
SCALE: AS SHOWN	CLIENT: HEROLD CIVIL WORKS
DESIGNER: [Name]	APPROVED: [Name]

221 MINATO ROAD DEVELOPMENT  
 CIVIL WORKS  
 L'ORÉLÉTT, BC  
 ERIF SUSTAINABLE SOLUTIONS



LOT 3 & LOT 5 -  
 SITE RECYCLING  
 PLAN

Appendix D	
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# Appendix B



**FIRE UNDERWRITER'S SURVEY**

**PROJECT NAME:** 221 Minato Road - 5 Lot Subdivision **HEL PROJECT No.:** 6473-001  
**PROJECT LOCATION:** 221 Minato Road, Ucluelet, BC **DATE:** 18/09/2024  
**DESIGNED BY:** Evan Pearce, ASCT  
**REVIEWED BY:** Patrick Ryan, P.Eng.

FIRE AREA CONSIDERED: Residential Building (Eagle3) Lot 1

TYPE OF CONSTRUCTION: TYPE V, WOOD FRAME CONSTRUCTION

FIRST FLOOR AREA: 200 m<sup>2</sup> CONSTRUCTION COEFFICIENT, C: 1  
 SECOND FLOOR AREA: 200 m<sup>2</sup>

$$RFF = 220C\sqrt{A}$$

TOTAL FLOOR AREA, A: 400 m<sup>2</sup> FIRE FLOW FROM EQUATION 4000 L/min. a

GROUP Residential  
 HAZARD NON-COMBUSTIBLE -25% x a -1000 L/min.  
 SUBTOTAL 3000 L/min. b

AUTOMATIC SPRINKLER NO 0%  
 WATER SUPPLY IS STANDARD FOR BOTH THE SYSTEM AND FIRE DEPARTMENT HOSE LINES NO 0%  
 FULLY SUPERVISED SYSTEM NO 0%  
 SUBTOTAL 0 L/min. c  
 SUBTOTAL 3000 L/min. c

EXPOSURES	DISTANCE					
FRONT	23	ADD	10%			
LEFT	8	ADD	20%			
RIGHT	8	ADD	20%			
BACK	5	ADD	20%			
		TOTAL	70%	x b	2100	L/min. d

NOTES:

1. Front is the Access Road
2. Floor area taken from Architectural Plans
3. Based on Water Supply For Public Fire Protection - 2020

FIRE FLOW REQUIRED c + d **5100** L/min.  
 or **85** L/Sec.

Permit to Practice No. 1000201





**SANITARY SEWER DESIGN  
CALCULATION SHEET**

**PROJECT NAME:** 221 Minato Road - 5 Lot Subdivision  
**PROJECT LOCATION:** 221 Minato Road, Ucluelet BC  
**DESIGNED BY:** Evan Pearce, ASCt  
**REVIEWED BY:** Patrick Ryan, P.Eng.

**HEL PROJECT No.:** 6473-001  
**DATE:** 18/09/2024

Manning's "n" 0.013 PVC

Mannings Formula  

$$V = \frac{R^{2/3} S^{1/2}}{n}$$

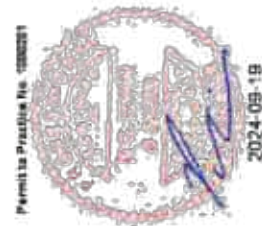
Harmon Peaking Factor  

$$PF = 1 + 14 / (4 + P^{0.5})$$
  
*P = Population in 1000's*

Area	Location	Area (Ha)	Units or Lots	Density ppu	Equivalent Population	Average Flow (L/day/pp)	Peaking Factor (PF)	Peak Flow (ML/day)	Infiltration & Inflow (ML/day)	Total Flow (ML/day)	Total Flow (l/s)	Pipe Diameter (mm)	Slope, s (%)	Velocity, V (m/s)	Capacity (l/s)
Stage A	Lot 1 (Part 1 of 2)	0.94	29	2.4	70	220	4.28	0.9556	0.0105	0.076	0.881	150	2.00	1.22	21.5
Stage B	Lot 3	1.45	10	2.4	24	220	4.37	0.0231	0.0152	0.039	0.455	150	2.00	1.22	21.5
Stage C	Lot 4 (Commercial)	0.24		90	22	220	4.38	0.0208	0.0027	0.023	0.272	150	2.00	1.22	21.5
Stage D	Lot 2 (Part 1 of 2)	0.62	39	2.4	94	220	4.25	0.0875	0.0059	0.094	1.094	150	2.00	1.22	21.5
Stage E	Lot 1 (Part 2 of 2) Lot 2 (Part 2 of 2)	2.1	114	2.4	274	220	4.10	0.2465	0.0235	0.270	3.125	150	2.00	1.22	21.5
Stage F	Lot 5	1.32	58	2.4	139	220	4.20	0.1287	0.0148	0.143	1.660	150	2.00	1.22	21.5

**Note:**

- Commercial population equivalent different that water demand (75pph vs. 90 pph) MMCD Design Criteria, used 90 pph to match population data.
- Infiltration allowance is 11,200 L/ha/day, entire site area used.
- Average flow based on DoU Specifications of 1.91m<sup>3</sup>/day for population of 500-1000.



3701 Shenton Road Nanaimo, BC V9T 2H1 250-751-8558



# Appendix C



**KOERS  
& ASSOCIATES  
ENGINEERING LTD.**  
*Consulting Engineers*

**Appendix D**  
P.O. BOX 790  
194 MEMORIAL AVENUE  
PARKSVILLE, BC V9P 2G8  
Phone: (250) 248-3151  
Fax: (250) 248-5362  
www.koers-eng.com

March 19, 2024  
0361-242-01, Rev 1

District of Ucluelet  
P.O. Box 999  
200 Main St  
Ucluelet, BC V0R 3A0

**Attention:** Mr. Bruce Grieg, Director of Planning

**Re:** 221 Minato Road, Ucluelet  
Proposed 284 Residential Unit Development  
Water & Sanitary Sewer Analysis, Impact on District Infrastructure

As requested, we have carried out analyses of the potential impact of the proposed residential development on the District of Ucluelet’s water distribution and sanitary sewer collection system.

## 1 PROPOSED DEVELOPMENT

### 1.1 Conceptual Plan

The proposed conceptual development (see **Figure 1**) consists of up to 300 residential dwelling units in three types of buildings:

- Apartments: 144
  - Single Unit Dwellings: 75
  - Non Profit Parcel Units: 65
  - To Be Determined: 16
- Total: 300

### 1.2 Conceptual Building Characteristics

The District Group has provided the following preliminary construction characteristics for the proposed apartment and single unit dwellings:

**Table 1 – Conceptual Building Characteristics**

Building	Material	Area per Floor ft <sup>2</sup>	No. of Floors	Total Floor Area ft <sup>2</sup>
Apartments	wood frame	10,000	4	40,000
Single Units				
- one bedroom	wood frame	650	1	650
- two bedroom	wood frame	900	1	900
Non Profit Units	n/a	n/a	n/a	n/a

**Notes:**

- 1 Information provided by District Group in their email dated Jan 29, 2024 to Koers & Associates Engineering Ltd.
- 2 n/a = not available; no information provided.

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Figure 1 – Proposed Development Conceptual Site Plan  
(provided by District Group)

1.3 Population

An estimate of the population for the proposed development was not provided at the time of this analysis. A total population of 716 was used based on the types of dwelling units and population density allowances as shown in Table 2.

Table 2 – Development Estimated Service Population

Dwelling Type	No. of Units	Density (Persons/Unit)	Population (people)
Apartment	144	2.5	360
Single Units			
one bedroom	35	1.5	53
two bedroom	40	2.5	100
Non Profit	65	2.5	163
TBD	16	2.5	40
Total	300	2.39 <sup>(1)</sup>	716

Notes:

(1) 2021 Canada Census reported a population density of 2.40 persons per dwelling unit based on a population count of 2,066 residing in 860 dwelling units.

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Bruce Grieg

**1.4 Development Phasing**

The development is proposed to be built-out in phases, the exact number and timing of which were not provided. The initial phases could consist of approximately 100 to 165 units, depending on market demand.

**2 WATER DISTRIBUTION SYSTEM ANALYSIS**

**2.1 System Performance Criteria Analysis**

The adequacy of the distribution system for various demand conditions is judged by the residual pressures available throughout the system and by the maximum velocities in the watermains. The criteria applied to assess the ability of the District’s distribution system to service the proposed development are listed in **Table 3**.

**Table 3 – Distribution System Design Criteria <sup>(1)</sup>**

Parameter	Value	
	(metric)	(imperial)
<b>Peak Hour Demand Conditions</b>		
minimum residual pressure at property line	300 kPa	44 psi
maximum velocity in watermains	2.0 m/s	6.6 ft/s
<b>Fire Flow Demand Conditions (during Maximum Day Demands)</b>		
minimum residual pressure at hydrant	150 kPa	22 psi
maximum velocity in watermains	3.5 m/s	11.5 ft/s
minimum residual pressure at property line	35 kPa	5 psi
<b>Static Conditions</b>		
maximum service pressure	860 kPa	125 psi

**Notes:**

(1) MMCD Design Guidelines 2022.

**2.2 Water Demands**

An estimate of the design water demands was not provided at the time of this analysis.

Design demands (average day, maximum day, and peak hour) were developed based on the **Table 2** population estimate and the per capita design water demands in the *MMCD Design Guidelines 2022*. As the District of Ucluelet presently does not meter residential demands (only Commercial/Industrial/Institutional properties are metered) the per capita design demands for unmetered water systems was applied.

The calculated design water demands are presented in **Table 4**. A design fire flow was not provided at the time of this analysis.

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Bruce Grieg

**Table 4 – Modelled Water Demands**

Description	Population	Per Capita Demand <sup>(1)</sup>		Total Demand	
		L/day per capita	L/s per capita	m <sup>3</sup> /day	L/s
Average Day	716	400	-	286	3.3
Maximum Day	716	900	-	644	7.5
Peak Hour	716	-	0.016	-	11.4

**Notes:**

(1) MMCD Design Guidelines 2022.

### 2.3 Modelling Results

Computer modelling analysis was carried out using the current District of Ucluelet WaterCAD model.

The proposed development is serviced by the District's Highway Reservoir which has a top water level of 65 m geodetic and a storage volume of 1,400 m<sup>3</sup>.

#### 2.3.1 STATIC PRESSURE

Based on an assumed elevation of 8 metres for the development, the resulting static pressure is 559 kPa (81 psi), based on the Highway Reservoir top water level of 65 m.

#### 2.3.2 RESIDUAL PRESSURE DURING PEAK HOUR DEMAND

The calculated residual pressure at the proposed connection point along Minato Road during peak hour demand is shown in [Table 5](#) and greater than minimum design requirement of 300 kPa (44 psi).

**Table 5 – Residual Pressure During Peak Hour Demand**

Location	Elevation m	HGL m	Pressure kPa (psi)
Proposed Connection (off Minato Road)	8	63	533 (77)

#### 2.3.3 MAXIMUM AVAILABLE FIRE FLOW

The calculated maximum available fire flow at the proposed connection point along Minato Road during maximum day demand is shown in [Table 6](#). In addition, an alternate connection location to the existing 450 mm dia. watermain on Peninsula Road was evaluated, to provide an estimate of the available fire flow at the development.

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**Table 6 – Maximum Available Fire Flow**

Location	Elevation (m)	Available Fire Flow <sup>(1)</sup>		Residual Pressure	
		l/s	(igpm)	kPa	(psi)
Proposed Connection (off Minato Rd)	8	103	(1,460)	439	(64)
Alternate Connection (off Peninsula Rd)	11	300	(4,755)	428	(62)

**Notes:**

- (1) Based on a maximum velocity of 3.5 m/s in the distribution system as recommended by the *MMCD Design Guidelines 2022*.

### 3 SANITARY SEWER SYSTEM ANALYSIS

#### 3.1 Sanitary Sewer Servicing

The site indicates sewage from the development would be pumped. The pumped sewage would discharge into the District's gravity sanitary sewer main on Peninsula Road which drains to the District's existing Peninsula Road pump station which is located ±100 m east of Minato Road as shown in the attached [Figure 2](#).

#### 3.2 Design Flows

Design flows of the proposed development were not included in the rezoning application information provided to Koers. Design flows for computer modelling purposes have been developed in accordance with the District's Engineering Standard and Specifications for Sanitary Sewers (Bylaw 521, Schedule B). The calculated design flows for the potential initial phases of the development and at full buildout are summarized in [Table 7](#).

**Table 7 – Development Design Flows**

No. of Dwelling Units	Service Population <sup>(1)</sup>	Dry Weather Design Peak Flow		Infiltration & Inflow Allowance		Wet Weather Design Peak Flow (L/s)
		Per Capita <sup>(2)</sup> (L/s per capita)	Total (L/s)	Per Area <sup>(3)</sup> (L/s per ha)	Total <sup>(4)</sup> (L/s)	
100	250	0.022	5.5	0.13	0.3	5.8
165	412	0.022	9.0	0.13	0.4	9.4
300	716	0.022	15.8	0.13	0.7	16.5

**Notes:**

- (1) See [Table 2](#).
- (2) District of Ucluelet Engineering Design Standard and Specification, Schedule B, 1.1 Sewage Quantity (1.91 m<sup>3</sup>/day per capita for design population range of 500 – 1,000).
- (3) District of Ucluelet Engineering Design Standard and Specification, Schedule B, 1.1 Sewage Quantity (11.2 m<sup>3</sup>/day per ha).
- (4) Based on an estimated buildable site area of approximately 5.7 ha. And assumed area of 1.9 ha for 100 units and 3.1 ha for 165 units.

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## 4 EXISTING SEWER SYSTEM CAPACITY

### 4.1 Gravity Collection System, Minato Rd to Peninsula Rd Pump Station

The proposed development would discharge flows into the 250 mm dia. gravity main on Peninsula Road that drains into the Peninsula Road Pump Station as shown in the attached [Figure 2](#). The capacity of the existing 250 mm dia. gravity main is adequate to handle the peak design flow of 16.5 L/s as shown in [Table 8](#).

**Table 8 – Peninsula Road Gravity System Capacity vs Peak Design Flows**

Gravity Main					Design Peak Flow	
Label	SMH Upstream	Dia. (1) (mm)	Slope (1) (%)	Capacity (2) (L/s)	Existing (3) (L/s)	After Development (4) (L/s)
SP-501	SMH-501	250	0.50 %	37	0.5	17.0
SP-502	SMH-502	250	0.49 %	37	1	17.5
SP-503	SMH-503	250	0.57 %	40	5	21.5

**Notes:**

- (1) Based on record drawing information only. Actual diameter and slope may vary.
- (2) Based on pipe flowing 80% full (d/D = 0.8) and a Manning’s N = 0.013 as per *MMCD Design Guidelines 2022* for collector sewers.
- (3) Existing Design Peak Flow are based on current zoning of the properties presently connected to the District’s sanitary sewer system that contribute flows to these gravity mains. This therefore excludes Signature Circle properties. The design flow includes an allowance for Inflow and Infiltration based on a review of daily pump run-hour records for Year 2018 for the periods of Jan 27-29 vs the month of May.
- (4) Based on complete build-out of the 300 dwelling units proposed for this development (221 Minato Rd).

### 4.2 Peninsula Rd Pump Station & Downstream Sanitary Sewer System

#### 4.2.1 PENINSULA RD PUMP STATION CAPACITY

The calculated peak design flow for the initial phases of the development (100 to 165 units) and at full buildout (300 units) are higher than the calculated pumping capacity of the Peninsula Road Pump Station as shown in [Table 9](#).

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**Table 9 – Peninsula Rd Pump Station Design Inflow & Pumping Capacity Outflow**

Proposed Development No. of Dwelling Units <sup>(1)</sup>	Design Peak Inflow			Outflow <sup>(3, 5)</sup> (Pumping Capacity)	
	Existing Conditions <sup>(2, 3)</sup> (L/s)	Proposed Development <sup>(4)</sup> (L/s)	Combined Total (L/s)	One Pump (L/s)	Both Pumps (L/s)
-	5	-	5	9	12
100	5	5.8	10.8	9	12
165	5	9.4	14.4	9	12
300	5	16.5	21.5	9	12

**Notes:**

- (1) See [Table 7](#).
- (2) Existing Design Peak Flow are based on current zoning of the properties presently connected to the District's sanitary sewer system that contribute flows to these gravity mains. This therefore excludes Signature Circle properties.
- (3) Actual flows are not available as flows are not metered at the pump station; only pump run-hours are recorded.
- (4) From [Table 7](#).
- (5) The pumping rates are theoretical and based on the intersection of the pump curve with the calculated total dynamic head curve of the pump station's discharge forcemain (290 m of 100 mm dia.). The pump station is reported to contain two Flygt model 3127.180 HT pumps equipped with 7.4 hp motors. The pump design duty point is 9 L/s at 16.5 m Total Dynamic Head (TDH).

To service the proposed development, the [Table 9](#) data indicates the existing pumps will need to be replaced with larger pumps capable of pumping a higher flow rate against an increased TDH (for the forcemain routing options discussed in Section 5) to direct the flows to the Forbes Road pump station.

#### 4.2.2 DOWNSTREAM SANITARY SEWER SYSTEM CAPACITY

Increasing the pumping capacity of Peninsula Road Pump Station will result in higher peak flows in the District's downstream sanitary sewer gravity mains and the pump stations they drain to, which are:

- Hemlock St Pump Station, which discharges to
- Fraser Lane Pump Station, which discharges to
- Helen Road Pump Station.

The location of these pump stations is shown in the attached [Figure 2](#). The recently completed District of Ucluelet Sanitary Master Plan (June 30, 2023) noted the design flows for the Hemlock St pump station are already existing its design pumping capacity and that increased pumping capacity at the Fraser Lane and Helen Road pump stations will be required to accommodate the District's OCP growth projections.

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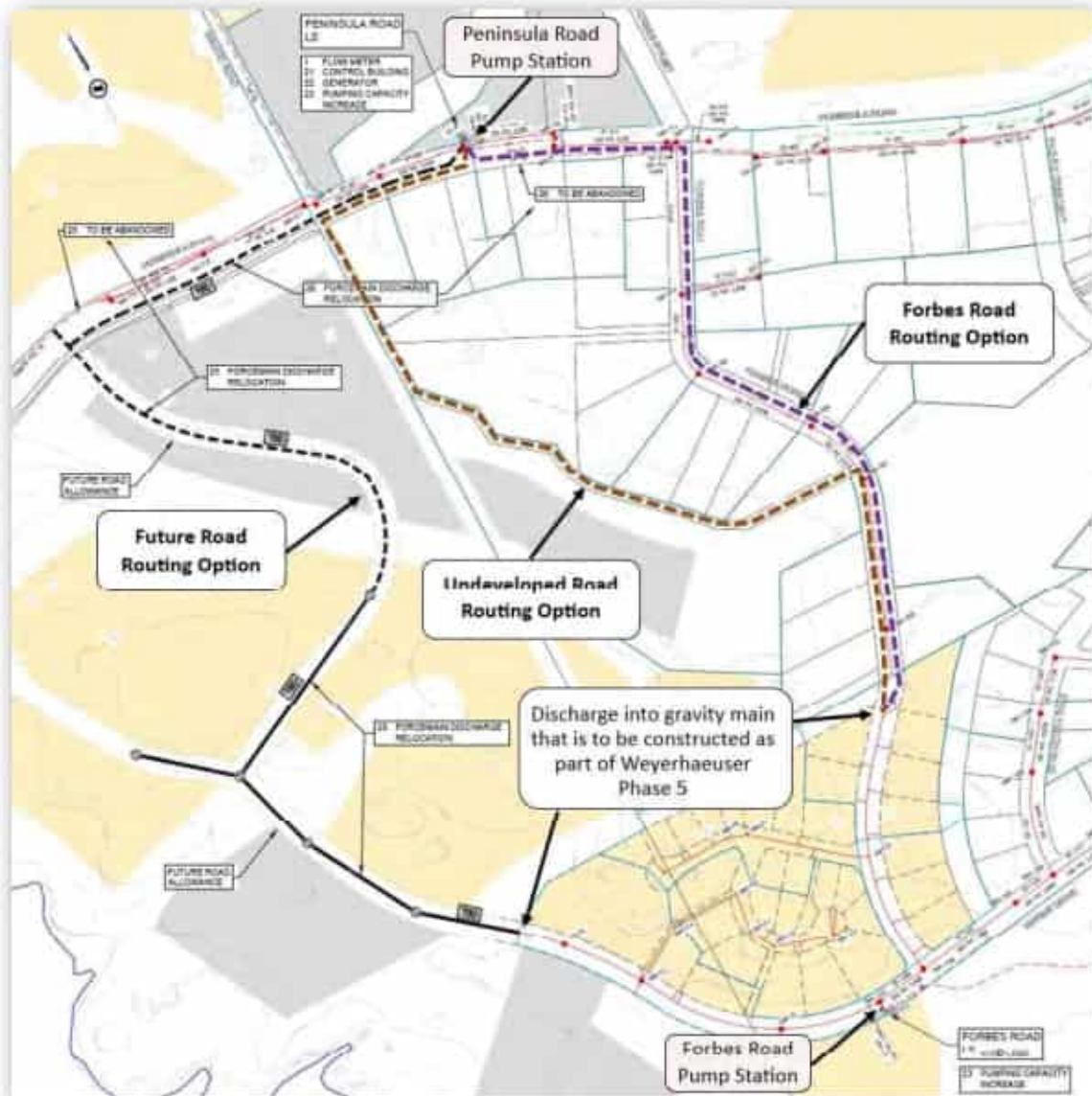
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## 5 PENINSULA RD PUMP STATION, FORCEMAIN REDIRECTION

### 5.1 Redirection Routing Options

The District’s Sanitary Master Plan (June 30, 2023) identified redirecting the Peninsula Road forcemain to discharge to the District’s existing Forbes Road pump station as part of the works required to accommodate OCP build-out. The redirection was conceptually shown to be west along Peninsula Road and then south along a future road allowance of a future subdivision phase of the Weyerhaeuser lands. This conceptual route is shown below in **Figure 3** along with two other potential routing options (undeveloped road and Forbes Road).



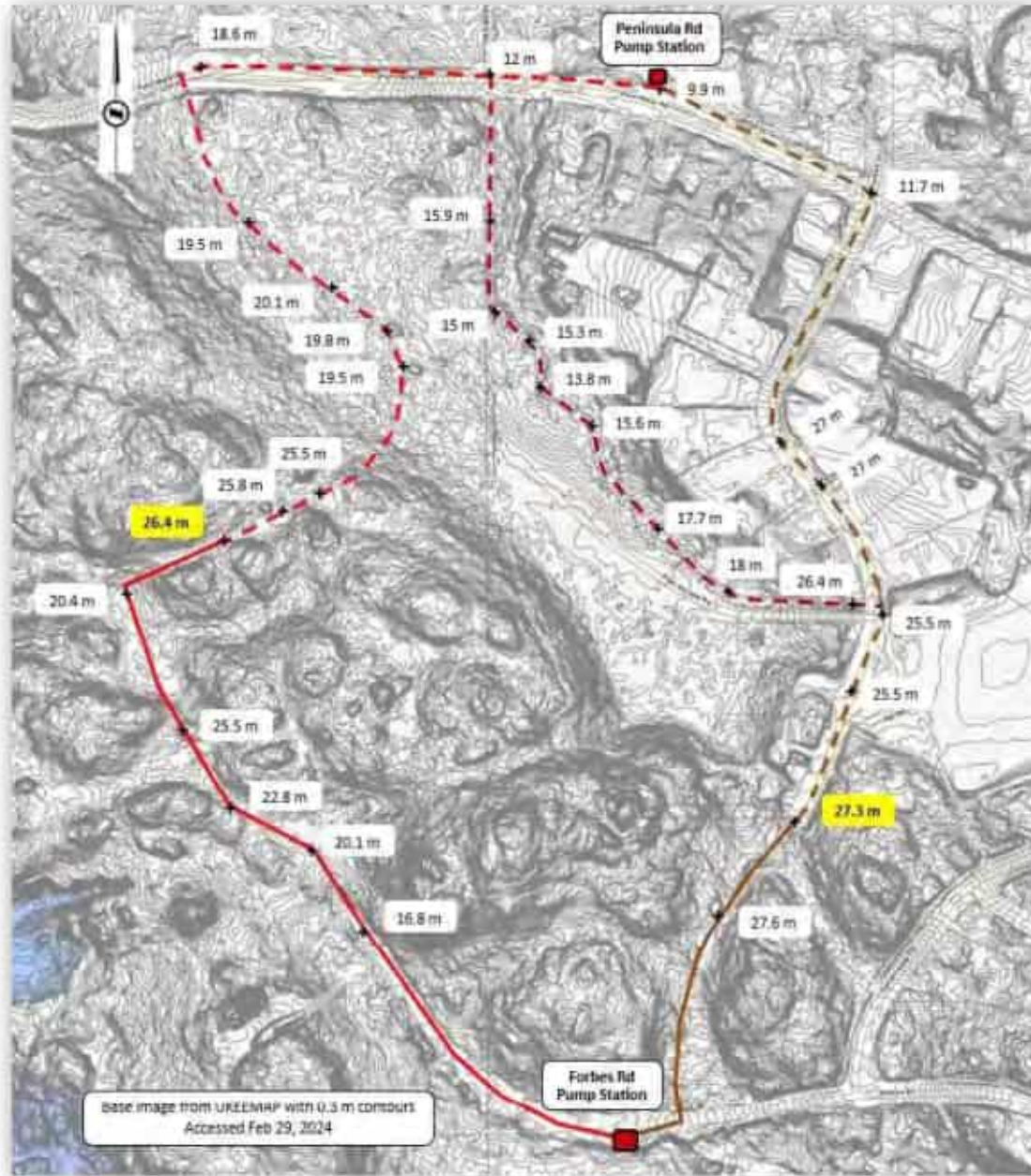
**Figure 3 – Redirection of Peninsula Rd Pump Station Forcemain**  
(from Ucluelet Sanitary Master Plan, June 30, 2023, Dwg No. 1863-SAN-2, with additions)

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**5.1.1 FUTURE ROAD ROUTING OPTION**

This is the longest of the three options, consisting of ±700 m of forcemain and ±750 m of gravity main and requires the securing of future road allowances. A portion of the gravity main, ±250 m, is to be constructed as part of the Weyerhaeuser Phase 5 subdivision development. The highpoint along this route is shown on the District’s on-line UKEEMAP to be 26.4 m as noted in **Figure 4**.



**Figure 4 – Ground Elevation Contours along Forcemain Route Options**

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### 5.1.2 UNDEVELOPED ROAD ROUTING OPTION

This consists of  $\pm 850$  m of forcemain of which  $\pm 550$  m would be constructed in the undeveloped (fully forested) 10 m wide road allowance. The forcemain would discharge into the top end of the  $\pm 230$  m of gravity main that is to be constructed as part of the Weyerhaeuser Phase 5 subdivision development. The highpoint along this route is shown on the District's on-line UKEEMAP to be at the current (south) end of Forbes Road at an elevation of 27.3 m as noted in [Figure 4](#).

### 5.1.3 FORBES ROAD ROUTING OPTION

The Forbes Road Routing Option consists of  $\pm 680$  m of forcemain that would be constructed along Peninsula Road and Forbes Road. The forcemain would discharge into the top end of the  $\pm 230$  m of gravity main that is to be constructed as part of the Weyerhaeuser Phase 5 subdivision development. The highpoint along this route is shown on the District's on-line UKEEMAP to be at the current (south) end of Forbes Road at an elevation of 27.3 m as noted in [Figure 4](#).

## 5.2 Impact on Downstream Forbes Rd and Big Beach Pump Stations

### 5.2.1 FORBES ROAD PUMP STATION

With the redirection of the Peninsula Road pump station forcemain to discharge into the Forbes Road pump station catchment, flows to the Forbes Road pump station will increase.

The current peak flow condition into the station was estimated to be 4 L/s compared to the theoretical pumping rate of 31 L/s as shown in Table 17 of the *District of Ucluelet Sanitary Master Plan, June 30, 2023*. In the near-term, it is anticipated that this station should be capable of accommodating the initial phases of this development, subject to a number of factors, including but not limited to:

- the pace and extent of development within: the Forbes Rd pump station catchment; the Peninsula Road pump station catchment; and the Olson Bay pump station catchment, and
- the pumping rate of the Peninsula Rd pump station (as it discharges into the Forbes Rd pump station).

The upgrading of the pumping capacity of the Forbes Road pump station is projected to be required before Year 2050 based on the OCP Map 9 Low(ish) Growth as shown in Table 17 of the *District of Ucluelet Sanitary Master Plan, June 30, 2023*.

The impact of the redirection of the Peninsula Road sewage lift station on the flows into the Forbes Road pump station for the initial phases of the development (100 to 165 units) and at full buildout (300 units) is shown in [Table 10](#).

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**Table 10 – Forbes Rd Pump Station Design Inflow & Pumping Capacity Outflow**

Proposed Development No. of Dwelling Units <sup>(1)</sup>	Design Peak Inflow			Outflow <sup>(3)</sup> (Pumping Capacity)	
	Existing Conditions <sup>(2, 3)</sup> (L/s)	From Peninsula Rd Pump Station <sup>(4)</sup> (L/s)	Combined Total (L/s)	One Pump (L/s)	Both Pumps (L/s)
-	4	-	4	31	40
100	4	10.8	14.8	31	40
165	4	14.4	18.4	31	40
300	4	21.5	25.5	31	40

**Notes:**

- (1) See [Table 7](#).
- (2) From Table 17 of the *District of Ucluelet Sanitary Master Plan, June 30, 2023*.
- (3) Actual flows are not available.
- (4) From [Table 9](#).

A capacity review of the Forbes Road pump station should be carried out with each phase of the proposed development.

The Forbes Road pump station discharges to the collection system that drains to the Big Beach pump station, which is discussed below.

**5.2.2 BIG BEACH PUMP STATION**

The Big Beach pump station, is a duplex pump station that receives flows from the Forbes Road pump station (as well as from the ±42 ha of developed land within its own catchment area). Prior to last year, this pump station used to discharge to a gravity main on Victoria Road. In the summer of 2023, the point of discharge was redirected to a gravity main on Peninsula Road by extending the forcemain up (northeast) along Matterson Drive.

The pump station’s forcemain now consists of 237 m of 150 mm dia. (from the pump station to Victoria Rd) plus 430 m of 300 mm dia. (from Victoria Rd to Peninsula Rd). The calculated duty for the Victoria Road point of discharge was 34 L/s as noted in Table 17 of the *District of Ucluelet Sanitary Master Plan, June 30, 2023*. A review of the pump curve and updated system curve indicates the pump station’s new operating point (pumping rate) is ±20 L/s for the Peninsula Road point of discharge. If both pumps were to operate simultaneously, the pumping rate is estimated to increase to ±28 L/s.

The impact of the redirection of the Peninsula Road sewage lift station forcemain on the flows into the Forbes Road pump station is shown in [Table 11](#).

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**Table 11 – Big Beach Pump Station Design Inflow & Pumping Capacity Outflow**

Proposed Development No. of Dwelling Units <sup>(1)</sup>	Design Peak Inflow			Outflow <sup>(3)</sup> (Pumping Capacity)	
	Existing Conditions <sup>(2, 3)</sup> (L/s)	From Peninsula Rd Pump Station <sup>(4)</sup> (L/s)	Combined Total (L/s)	One Pump (L/s)	Both Pumps (L/s)
-	26 <sup>(5)</sup>	-	26	20	28
100	26 <sup>(5)</sup>	10.8	36.8	20	28
165	26 <sup>(5)</sup>	14.4	40.4	20	28
300	26 <sup>(5)</sup>	21.5	47.5	20	28

**Notes:**

- (1) See [Table 7](#).
- (2) From Table 17 of the *District of Ucluelet Sanitary Master Plan, June 30, 2023*. This is the calculated peak flow for the entire service area of the Big Beach pump station, including the calculated design peak flow entering the Forbes Road pump station. The Forbes Road pump station has a higher calculated duty point pumping rate (31 L/s) which is significantly higher than its current estimated peak flow of 4 L/s into the pump station as shown in [Table 10](#).
- (3) Actual flows are not available as flows are not metered at the pump station; only pump run-hours are recorded.
- (4) From [Table 10](#).

The [Table 11](#) analysis indicates the existing conditions design flows into the Big Beach pump station are greater than the pumping capacity of a single pump and may require the operation of both pumps. The proposed development will add flows to Forbes Road pump station which will require the Forbes Road pumps to running longer and operate more frequently. This will in turn require the Big Beach pumps to run longer and operate more frequently.

The existing pumps in the Big Beach Pump Station will need to be replaced with larger (high flow rate) pumps to service the proposed development. However, there are capacity constraints on the gravity system that the Big Beach Pump Station discharges into that need to be considered as discussed in the following section.

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Bruce Grieg

### 5.2.3 GRAVITY SYSTEM (BIG BEACH PUMP STATION TO HELEN RD PUMP STATION)

The Big Beach pump station now (as of the summer of 2023) discharges to a 1,300 m long gravity system of varying diameters and slopes that drains to the Helen Road Pump Station. This gravity system has limited capacity in several locations, with the nearest being a 60 m length of 200 mm dia. main at 0.72% slope on Pine Road (ending at Alder St). The theoretical capacity of this main is listed below along with two of sections of 300 mm dia. mains that convey flows from the Hemlock and Fraser Lane pump stations:

- Pine Rd: 60 m of 200 mm dia. at 0.72% : just full capacity = 28 L/s
- Eber Rd: 210 m of 300 mm dia. at 0.5% : just full capacity = 69 L/s
- Foreshore: 220 m of 300 mm dia. at 0.5% : just full capacity = 69 L/s

Their locations are shown in [Figure 2](#). We are not aware of reported capacity issues with these mains. We note the Pine Road gravity main is deep (from 1.9 m to 5.1 m) and periodic surcharging could occur over a short period of time that may not negatively impact the properties connected to it or connected to the mains upstream of it.

The *District of Ucluelet Sanitary Master Plan, June 30, 2023* identified as an Immediate Term need the construction of a gravity main along Peninsula Road and upgrading of existing gravity mains along Marine Drive and Helen Road in order to accommodate future development and the increase pumping capacity at Big Beach Pump Station that it requires. (see [Table 19 – Proposed Works, Immediate Term](#), projects 8, 9, and 10, the locations of which are shown on [Dwg No. 1863-SAN-3](#)). Upgrading the 150 mm dia. portion of the Big Beach Pump Station forcemain to 300 mm dia. is also required (see [Table 20 – Proposed Works, Longer Term](#) project 24 and [Dwg No. 1863-SAN-3](#)). These works are required in order to service future development, including the buildout of this proposed development.

### 5.2.4 HELEN ROAD PUMP STATION

The Helen Road pump station pumps all sewage from the District of Ucluelet to the sewage lagoon for treatment. It is anticipated that this duplex pump station, with a reported design pumping rate of 124 L/s (per [Table 17](#) in the *District of Ucluelet Sanitary Master Plan, June 30, 2023*), can accommodate the initial phases of the proposed development.

The impact of the proposed development on the flows into the Helen Road pump station is shown in [Table 12](#).

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District of Ucluelet  
Bruce Grieg

**Table 12 – Helen Rd Pump Station Design Inflow & Pumping Capacity Outflow**

Proposed Development No. of Dwelling Units <sup>(1)</sup>	Design Peak Inflow			Outflow <sup>(3)</sup> (Pumping Capacity)	
	Existing Conditions <sup>(2, 3)</sup> (L/s)	From Proposed Development <sup>(4)</sup> (L/s)	Combined Total (L/s)	One Pump (L/s)	Both Pumps (L/s)
-	89	-	89	124	144
100	89	5.8	94.8	124	144
165	89	9.4	98.4	124	144
300	89	16.5	105.5	124	144

**Notes:**

- (1) See [Table 7](#).
- (2) From Table 17 of the *District of Ucluelet Sanitary Master Plan, June 30, 2023*.
- (3) Actual flows are not available as flows are not metered at the pump station; only pump run-hours are recorded.
- (4) From [Table 11](#), Combined Total column.

A capacity review of the Helen Road pump station should be carried out with each phase of the proposed development.

We trust this is the information you require at this time. Please do not hesitate to contact us should you have any questions or if we can be of further assistance.

Yours truly,

KOERS & ASSOCIATES ENGINEERING LTD.

Mitchell Brook, P.Eng.  
Project Manager

Chris Holmes, P.Eng.  
Project Engineer

Chris Downey, P.Eng.  
Senior Review Engineer

Permit to Practice No. 1001658.

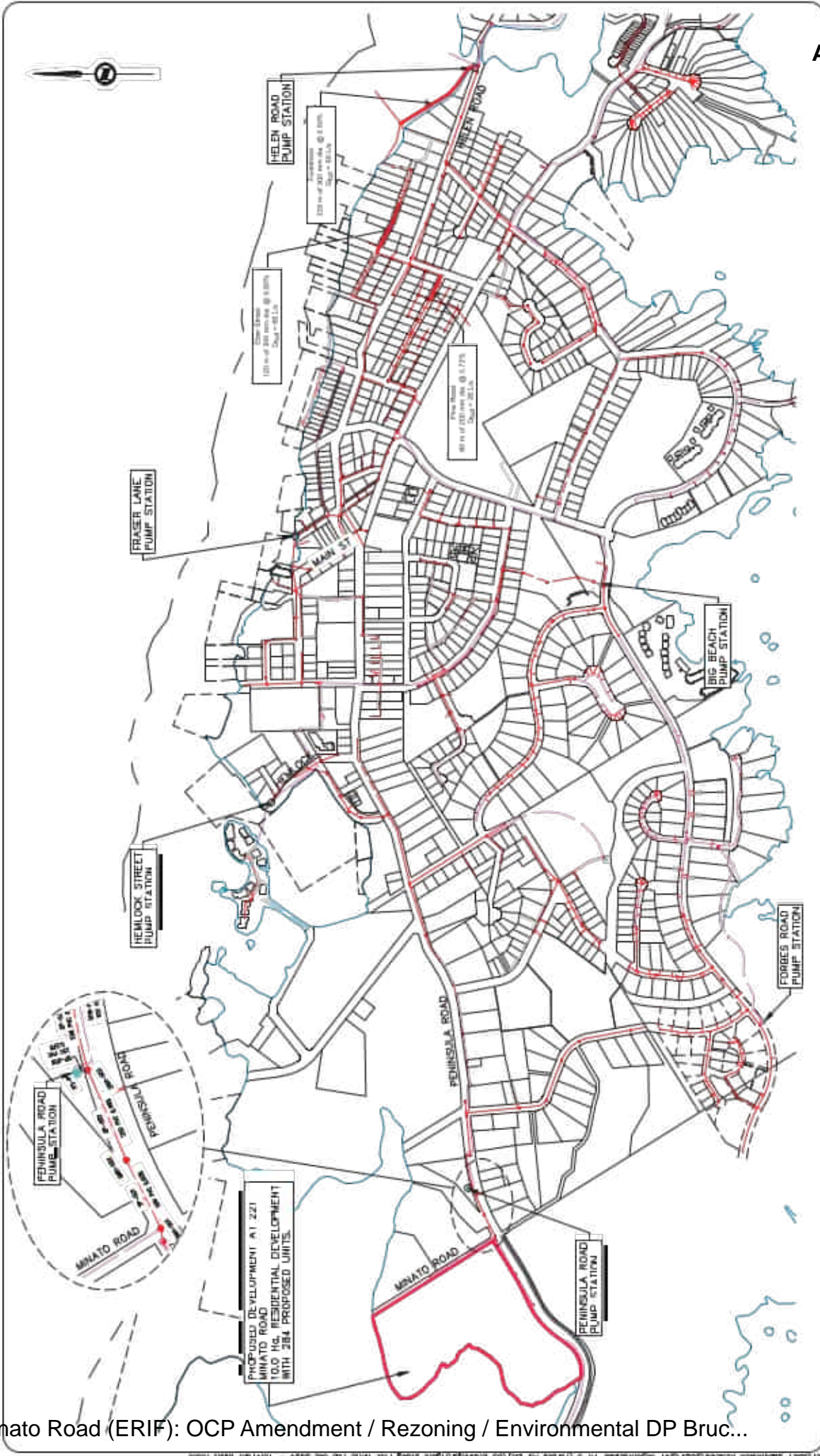
Attachment

Figure 2 – District of Ucluelet Existing Sanitary Sewer Collection System

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TITLE		District of Ucluelet	
APPROVED		Existing Sanitary Sewer Collection System	
DATE	CH	SCALE	FIG. NO.
FEB 2014		1:8000	Figure 2
PROJECT No.	0361-241		

CLIENT	DISTRICT OF UCLUELET	
	221 Minato Road, Proposed Development	
PROJECT	Sanitary Sewer Impact Analysis	

**KOEBS & ASSOCIATES**  
ENGINEERING LTD.  
Consulting Engineers



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Civil Engineers & Project Managers

July 30, 2024

File No. 24600

ERIF  
Campbell River, BC  
V9W 5Y1

**Attention: Juliette Green**

## **221 Minato Rd Ucluelet - Sewage Management Proposal**

Creus Engineering was approached several years ago to provide input on proposed development at Minato Road in Ucluelet. This involved conceptual overview input on feasibility from a Civil Engineering perspective. One area that was identified that required resolution was the capacity of the overall Ucluelet sanitary system.

We understand that Economic Restoration Infrastructure Fund (ERIF) is proposing a new development comprising of single family and multi-family homes at 221 Minato Road in Ucluelet. Creus has visited this site in 2022 with the past project manager, Mr Chris Bozman, but this memorandum has been prepared on desktop review only. ERIF has sought input from Creus to provide a conceptual solution for sewage disposal. In particular identifying a concept for management of peak flows where they exceed system capacity, especially as an interim solution, if required, while the District of Ucluelet (DOU) undertakes planned infrastructure upgrades to their sanitary system.

### **1. About Creus**

CREUS is a partnership of Engineers, Project Managers and Technologists who strive to use the best technology, knowledge, experience and creativity to provide solutions to real world development issues. The core team has over 70 years of in-depth experience in the development industry holding senior positions in engineering, construction, general contracting, development, project management and positions in the regulatory industry. Our field of expertise is in designing systems for Stormwater Management, Sedimentation and Erosion Control as well as sewage solutions in challenging sites.

Kevin Healy has over 35 years of experience with senior positions in the construction, engineering, and the development industry. He has experienced land development from the perspective of a municipal employee, earthworks sub-contractor, general contractor, developer, and Consulting Engineer. As a Director of Creus, he leads the approvals and construction on projects with tough topography and tight environmental, political, and jurisdictional restrictions. An example project was in Cypress Mountain Resort where he managed the design, tendering, construction and commissioning of the water treatment, distribution and storage system and the sewage storage and pumping system jointly with Cypress and BC Parks. Some examples of Creus's past projects are in Appendix A.

### **2. Background**

Several reports have been prepared for 221 Minato Rd from 2022 to 2024 giving an overview of the sanitary infrastructure and demand generated by the proposed development of this site. ERIF advises these reports include:

- Water and Sanitary demands – Impact on Infrastructure (Link: <https://drive.google.com/file/d/110EzXl36LSvRhn87atWr-p0DbFY2TB6m/view?usp=sharing> ) completed by Koers & Assoc Engineering (Mitchell Brook, Chris Downey) in March 2024 (Koers 2024)

- Preliminary Servicing Review (Link: <https://drive.google.com/file/d/1bt6VFIQqYp1XF0BglAo-yhB48ANGGjRw/view?usp=sharing> ) completed by McGill and Associates (Brodie Couch, Mike Lange) in September 2023 (McGill 2023)
- Sanitary Model – (Link: <https://drive.google.com/file/d/113d71XucgoGH6EIHPZkii3U0ItShZybB/view?usp=sharing> ) completed by Koers & Assoc Engineering (Mitchell Brook) in March 2022 (Koers 2022)

The most recent report is an overview of demand for residential dwellings that was modelled for 221 Minato Rd by Koers and Associates in March 2024. The detailed modelling in this existing report has been reviewed by Creus to inform the proposed conceptual sewage concept.

ERIF’s proposed development is largely consistent with previous proposals for use of the site for residential dwellings, with the addition of a commercial precinct. Therefore, the modelling in Koer’s 2024 report has informed the development of the conceptual sewage response. Further modelling will need to be undertaken to refine the modelling for each stage for ERIFs Masterplan and as required in a later phase of detailed design. This will be required to define potential deficiencies in the system capacity and also identify periods where there is excess capacity on a diurnal and seasonal basis.

**3. Koers & Associates 2024 Report**

The most recent report on the existing sewage infrastructure was prepared by Koers & Assoc Engineering (Mitchell Brook, Chris Downey) entitled ‘Water and Sanitary Sewer Analysis – Impact on District Infrastructure’ (19 March 2024 – File Number 0361-242-01, Rev 1). The report was prepared for a previous District Group masterplan for the site, but the modelling of demand is equivalent for the purpose of evaluation conceptual solutions to that required for the updated Masterplan proposed by ERIF. A comparison of the two Masterplans is shown in Table 2 below. The Koer’s 2024 report was prepared to model water and sanitary demand for 300 residences and a population of 716 people. The ERIF Masterplan is based on 216 dwellings (made up of 205 apartments and 11 waterfront homes) and a commercial precinct.

Stage 1 demand modelling for the District Group plans allowed for 165 units and a population of 412 people. The ERIF proposed Masterplan is similar with Stage 1-4 including 160 units and 368 people. For the purposes of identifying concept solution this has been used as an equivalent base and Creus has used a preliminary review of this report to identify potential concept solutions.

**Table 2 – Comparison of dwellings in Koer’s 2024 modelling for District Group and Current ERIF Masterplan**

	District Group (Koers 2024 Model)	Current ERIF Master Plan
Initial Stage Dwellings	165 Units	160 Units
Initial Stage Population	412 people	363 people
Total Dwellings	300 Residences	216 Dwellings
Total Projected Population	716 people	Total population TBC

Koers 2024 Report projected sanitary sewer demand flow based on 300 units/ 716 population requiring 15.8L/s in dry weather peak flow ranging to 16.5L/s in wet weather peak flow. For the initial stage development of 165 units / 412 population sewage demand would require 9L/s in dry weather peak flow, ranging to 9.4L/s in wet weather peak flow. This is shown in the table below excerpted from Koer’s report.

**Image 2 – Koer’s modelling of population and demand flows**

**Table 7 – Development Design Flows**

No. of Dwelling Units	Service Population <sup>(ii)</sup>	Dry Weather Design Peak Flow		Infiltration & Inflow Allowance		Wet Weather Design Peak Flow (L/s)
		Per Capita <sup>(1)</sup> (L/s per capita)	Total (L/s)	Per Area <sup>(1)</sup> (L/s per ha)	Total <sup>(1)</sup> (L/s)	
100	250	0.022	5.5	0.13	0.3	5.8
165	412	0.022	9.0	0.13	0.4	9.4
300	716	0.022	15.8	0.13	0.7	16.5

Notes:

- (1) See Table 2.
- (2) District of Ucluelet Engineering Design Standard and Specification, Schedule B, 1.1 Sewage Quantity (1.91 m<sup>3</sup>/day per capita for design population range of 500 – 1,000).
- (3) District of Ucluelet Engineering Design Standard and Specification, Schedule B, 1.1 Sewage Quantity (11.2 m<sup>3</sup>/day per ha).
- (4) Based on an estimated buildable site area of approximately 5.7 ha. And assumed area of 1.9 ha for 100 units and 3.1 ha for 165 units.

The Koer's 2024 Report sets out existing sewer system capacity, then assesses peak flows to four key downstream pump stations: Peninsula Rd Pump Station, Forbes Rd Pump Station, Big Beach Pump Station and Helen Rd Pump Station. The report confirms that upgrade of existing infrastructure is required to manage the projected peak flow from the proposed development of 221 Minato Rd. Koers 2024 reports concludes that a complete development of 300 units/ 716 people would require upgrade of pumps to higher flow rate units in some pump stations.

#### 4. Proposed Infrastructure Upgrade by the District of Ucluelet

ERIF has advised that the District of Ucluelet has a budget and rollout plan for the upgrade of their existing sanitary infrastructure. Koer's 2024 Report also describes some of the proposed upgrades in the Ucluelet Sanitary Master Plan including Helen Rd Pump Station upgrades. ERIF advised their June 2024 discussions with DOU about the infrastructure capacity indicate that the planned upgrade works will enable the infrastructure to meet the demands required for the development.

Therefore, the intent of the concept in this memorandum is to recommend an interim solution that can ensure that sewage from the proposed development at 221 Minato Road does not exceed the System capacity. The concept is to retain release sewage flows based on system capacity and retain partial flows on site when the municipal system is at capacity and released at rates that the system can accommodate. This would result in partial releases throughout the day based on preliminary review of the Koers report with release of stored sewage in time periods of off-peak flow when the system has capacity. The Koers report does not identify diurnal deficiencies and capacity but comments on daily flows which is standard procedure. The daily flow regime is assumed based on general operating conditions of standard municipal systems. These windows of capacity in the system would enable the release of flow to be controlled to reduce the demand on these pump stations in peak demand periods. The proposed model could respond to the current capacity limitations of the DOU infrastructure and would enable the system to adapt to the updated capacity of each pump station as upgrades are rolled out by the municipality over time.

#### 5. Proposed Sewage Concept

ERIF has advised that DOU has plans for the rollout of infrastructure upgrades and intend for the development to connect to this system. On initial review of the 2024 report, the upgrades would address the Minato developments requirements. ERIF's indicated an objective to address potential timing conflicts in the infrastructure upgrade schedule as it relates to development. The concept would need to be sized and coordinated based on contracted vs planned upgrades. The ERIF objectives were identified as:

- Provide an interim solution to ensure early-stage development can commence if there is any delay to DOU infrastructure upgrades.
- Ensure the system is responsive to the increase in capacity of the DOU infrastructure over time as the proposed upgrades are rolled out;

- To potentially be maintained as an on-site 'back up' system in event of works on the sewer line or extreme demand on local infrastructure capacity, such as high rainfall storm event during the height of tourist season.
- The proposed concept could also serve as a backup sewage management system in the event of peak demand on municipality infrastructure such as wet weather and peak tourist season.

The proposed conceptual sewage design is premised on the expectation that the sewage generated at 221 Minato Road will be feeding into the DOU infrastructure, but will typically be managed with variable release based on available system capacity. Retained sewage would be released based on feedback from the system. Initial overview of the capacity and flows indicated

1. **On Site Storage:** An on-site storage system with capacity to manage deficiencies in capacity for a projected peak days of sewage demand. Detailed flow data from the pump stations would be required to model the diurnal daily limitation and periods of capacity. The size of the collection system and type of users and infiltration and inflow characteristics of the system will determine the diurnal flow pattern. Given the system configuration it is expected that the system would run at full capacity for 2-4 hours two to three times a day. There would generally be significant capacity in pipes and pump station during the night time hours but also during periods during the day. As such storage would not represent a full day average system deficiency storage, but would likely be 20-40% of that amount. This can not be determined at this time without better understanding of the flow data, actual pump runs background flow data. It would also depend on the phase in process of development which is expected to be based on expected infrastructure upgrades. From very preliminary review a starting point might be a 20,000 gallon tank which would be designed to double in height if the development pace vs infrastructure upgrade schedule demands. The parameters for required storage would need to be resolved with the DOU engineering and operational staff, their consultants and the development team to resolve a reasonable level of redundancy that the variable release system would provide. This would need to be reassessed at each level of development. The tank would likely be an above grade glass fused to steel, though epoxy coated steel may be applicable if the service life is known to be short. The tank would be equipped with a variable speed pump, agitation system and odour control system. The system would be designed for low impact with minimal odour concerns due to being a small pump, minimal treatment on site and a short term hold of sewage for the period to off-peak release.
2. **Sewage release:** Release of sewage to the municipality sanitary infrastructure will be variable based on capacities in the system. The preliminary review of the Koers report appears to support in early periods of development that some flow would be allowed at most times. Where inflow exceeds the available outflow it would be detained. During windows of capacity in the system the variable pump would increase flow. In off-peak times significant outflow can be accommodated. There is generally significant capacity available during night periods. Capacity of each element of the system would have to be evaluated to determine the storage required however it is expected. The available release would be updated as downstream infrastructure is updated.
3. **Monitoring Capacity:** To ensure the system is responsive to the capacity of municipality infrastructure, information would have to be provided from the information control system in the existing sanitary system. Generally, this information is obtained using a SCADA system. Koer has indicated some deficiencies in the control and reporting system now form some of the system elements. That system information would be required to actually size and model the variable release concept. The SCADA would typically communicate includes sensors of levels in the wet well, pressure in system, which pumps are functioning and the current flow rates. Operator input can refine the 'comfort zone' for each pump station such as typical demand, flow rate based on their knowledge of the age of the system and other data.
4. **Operation Considerations:** The variable release is seeking to optimize the use of the downstream system. This results in more run hours on the pump, but less overdemand



situations. All system require down periods for maintenance and repair. These are sometime scheduled during the current off peak periods. The storage capacity can be managed to actually assist in flow management to allow for those works.

The concept combines these components of on-site storage, off-peak flow and utilizing the collected data supplied by the municipality's monitoring of their sanitary infrastructure. This model enables the proposed system at 221 Minato Road to be responsive to ensure flow rate and timing is released according to the capacity of the DOU sanitary system, even as it changes over time with planned upgrades.

This concept proposal is based on a similar system used successfully in the Cypress Mountain Ski Resor in District of West Vancouver, which provided a reliable sewage solution for over ten years, while the municipality infrastructure was upgraded utilizing a similar variable release.

## 6. Conclusions

This memorandum recommends working together to detail a variable release concept with storage that can be increased over time to bridge any peak flow constraints of the system. This could start with upgrades to the existing controls systems and say a 20,000 gallons of storage where release would be tied to capacities in the system and reflect upgrades in the system as they are brought on line. The variable release would be part of the overall system upgrade process and would be reanalyzed at each stage of development. The demand flow has been used from initial review of Koer's 2024 Report, and consideration of the proposed dwellings in ERIF's 2021 Masterplan. The proposed population and residences in Stages 1-4 for ERIF's Masterplan are similar to the flow demand modelled by Koer's for the District Group Masterplan in March 2024 to provide a reasonable starting point to this discussion.

Additional modelling and flow measurement would need to be undertaken to confirm demands, diurnal capacity in the system and level of confidence in scheduling of upgrades. This concept is proposed in parallel to the rollout of infrastructure upgrade planned by the District of Ucluelet. Creus recommends further discussion with DOU and their consultant to formulate a plan to move forward with additional flow monitoring and modelling to determine the extents of the system that would be necessary to provide a reasonable level of redundancy to manage peak flow and over capacity periods in the system.

If you have further questions in this regard, please do not hesitate to contact me

Respectfully yours,

**CREUS Engineering Ltd.**

Kevin Healy, P.Eng.  
Director  
Permit to Practice 1001543

**Appendix A – Creus Past Projects**

**Harbourside Waterfront, North Vancouver, BC**Client: **Concert Properties and Knightsbridge Properties**

**Description:** Concert Properties and Knightsbridge Properties are proposing to redevelop the Harbourside waterfront lands in North Vancouver. The proposed development generally consists of 13 residential buildings, 1 rental housing building, 3 office buildings, 1 hotel building, and ground floor commercial components in 5 of the buildings. The project will involve a major redevelopment of the site including re-grading of the existing site roads. The total site area is approximately 4.9ha.



**CREUS Member Roles:** CREUS is responsible for all the site servicing, roadworks, erosion and sediment control design and monitoring, and Stormwater Management elements of the project.

**Categories:** Mixed-Use Development, Stormwater, Waterfront

**Dollarton Highway, Dollarton Highway, North Vancouver, BC**Client: **Noble Holdings**

**Description:** a 5-acre waterfront residential development on a hillside neighborhood. This project has involved the design, preliminary approvals and detailed design for the 7-lot development.

**CREUS Member Roles:** CREUS members were the original and continue to be the Engineer of record for all the detailed Civil, sediment and erosion control and Stormwater Management elements of the project and managed the tender and construction of the works and provided inspections on all civil works. CREUS was responsible for the seawall, the concrete pier and private marina, stormwater outfall, as well as foreshore protection. Creus worked with the environmental consultant to mitigate impacts on contaminated sites and avoid requirements for removals of contaminated sediments from historical marine industrial activities on the site



**Categories:** Residential, Marine / Environmental

**Furry Creek. SLRD. BC**Client: **Tanac Land Developments and Park Lane Homes**

**Description:** 1,000-acre mixed use waterfront developments on a mountainside with numerous creeks, highway, hydro, rail issues. This project has involved the design of civil services, roads, pump stations, reservoirs, golf course integration, golf course renovations and improvements, approvals and site preparation construction and inspection.

**CREUS Member Roles:** A CREUS member was the Development Manager during the early portions of the development, directly managing the design, approvals, tendering construction management, subdivision and operational agreements

for roads and services, highway interchange, hydro substation upgrade, fibre optic servicing, water system implementation, sewage treatment plant, sewage outfall, award winning creek and foreshore restoration works, marketing sales centre, show home, member of Advisory Design Panel, subdivision of more than half of the current subdivisions, completion of the golf course and renovations. CREUS members were also involved as Engineer of record for the detailed Civil design, sediment and erosion control and Stormwater Management elements of the last three phases of development

**Categories:** Project Management, Integrated Mixed Use Development Projects, Highway Works





**PROJECT:** PROPOSED REZONING & SUBDIVISION  
**LOCATION:** 221 MINATO ROAD, UCLUELET  
**CLIENT:** ERIF

**DRAWING:** SITE PLAN OF POTENTIAL SUBDIVISION

**SCALE:** 1:750

**DRAWN:** SC / TJH

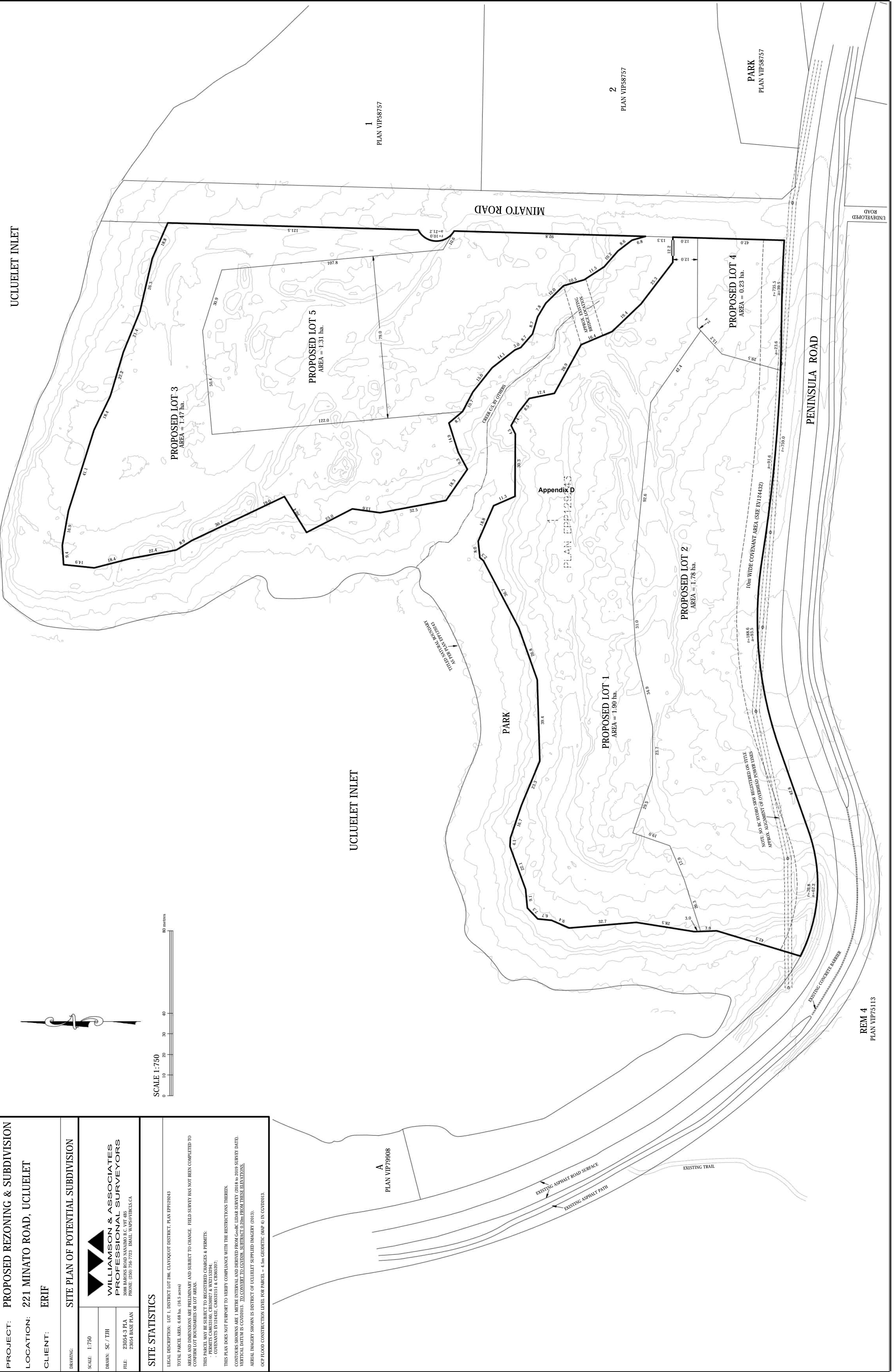
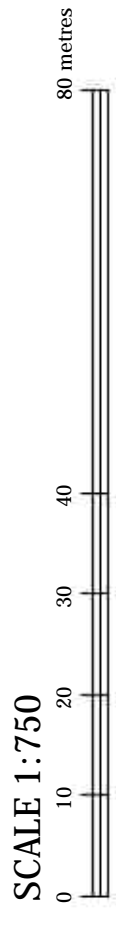
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23054 BASE PLAN



**WILLIAMSON & ASSOCIATES**  
**PROFESSIONAL SURVEYORS**  
 3088 BARONS ROAD NANAIMO B.C. V9T 4B5  
 PHONE: (250) 756-7723 EMAIL: WAPS@VIRGIS.CA

**SITE STATISTICS**

LEGAL DESCRIPTION: LOT 1, DISTRICT LOT 286, CLAYOQUOT DISTRICT, PLAN EPP129413  
 TOTAL PARCEL AREA: 6.08 ha. (16.5 acres)  
 AREAS AND DIMENSIONS ARE PRELIMINARY AND SUBJECT TO CHANGE. FIELD SURVEY HAS NOT BEEN COMPLETED TO CORNER LOT BOUNDARIES OR LOT AREAS.  
 THIS PARCEL MAY BE SUBJECT TO REGISTERED CHARGES & PERMITS:  
 - COVENANTS EY124432, C8852413 & C8862907.  
 THIS PLAN DOES NOT PURPORT TO VERIFY COMPLIANCE WITH THE RESTRICTIONS THEREIN.  
 CONTOURS SHOWN ARE 1 METRE INTERVAL AND DERIVED FROM GeBC LIDAR SURVEY (2018 to 2019 SURVEY DATE). VERTICAL DATUM IS CGVD2013. TO CONVERT TO CGVD2011, SUBTRACT 0.29m FROM THESE ELEVATIONS.  
 AERIAL IMAGERY SHOWN IS DISTRICT OF UCLUELET SUPPLIED IMAGERY (2019).  
 OCP FLOOD CONSTRUCTION LEVEL FOR PARCEL = 4.5m GEODETIC (MAP 4) IN COVD2013.



Appendix A (9) “Development Permit Overview of Application”

Canva Slides Link:

[https://www.canva.com/design/DAGO4rcs5fs/hZRtm0s7iluBjicN28-ICQ/view?utm\\_content=DAGO4rcs5fs&utm\\_campaign=designshare&utm\\_medium=link&utm\\_source=viewer](https://www.canva.com/design/DAGO4rcs5fs/hZRtm0s7iluBjicN28-ICQ/view?utm_content=DAGO4rcs5fs&utm_campaign=designshare&utm_medium=link&utm_source=viewer)





**DWG INDEX - ARCHITECTURAL**

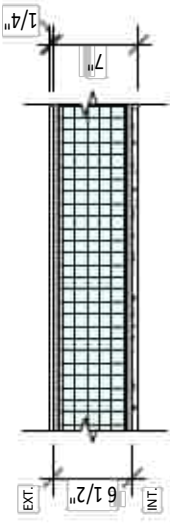

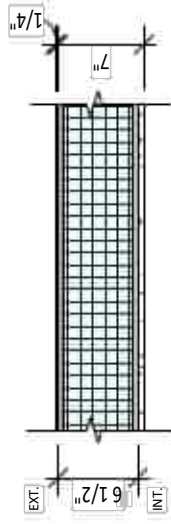
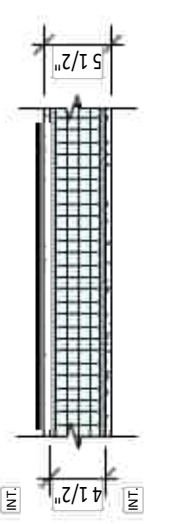
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102	SCHEDULES - MODULE ASSEMBLIES	C	FINAL SCHEMATIC
103	DOOR SCHEDULE + WINDOW SCHEDULE	C	FINAL SCHEMATIC
200	FOUNDATION PLAN	C	FINAL SCHEMATIC
201	COMPLEX - FLOOR PLAN - LEVEL 1	C	FINAL SCHEMATIC
202	COMPLEX - FLOOR PLAN - LEVEL 2	C	FINAL SCHEMATIC
300	ELEVATIONS	C	FINAL SCHEMATIC
301	ELEVATIONS	C	FINAL SCHEMATIC
400	SECTION	C	FINAL SCHEMATIC
401	SECTION	C	FINAL SCHEMATIC
402	SECTION	C	FINAL SCHEMATIC
500	MODULE A ENLARGED	C	FINAL SCHEMATIC
501	MODULE B ENLARGED	C	FINAL SCHEMATIC
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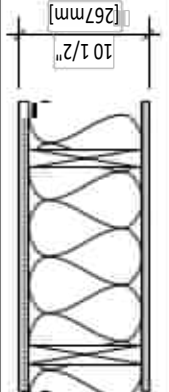
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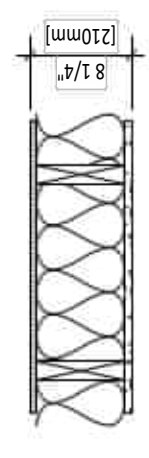


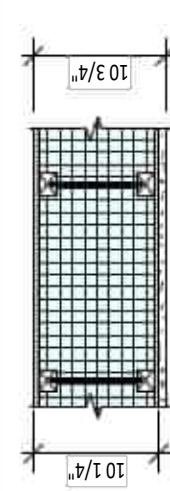
Appendix D

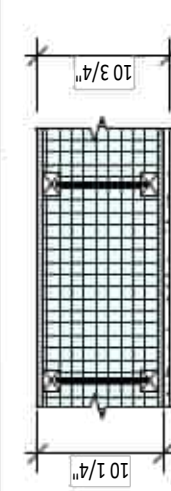
 <p><b>STEENHOF</b> BUILDING SERVICES GROUP</p> <p>STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>	 <p><b>ERIF</b>   Sustainable Solutions</p>	<p>Engineers Seal:</p>	<p>Revision Schedule</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-14</td> </tr> <tr> <td>B</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-20</td> </tr> <tr> <td>C</td> <td>FINAL SCHEMATIC</td> <td>2024-06-28</td> </tr> </tbody> </table> <p style="font-size: 8px; margin-top: 5px;"> <small>                     COPYRIGHTED: THIS DRAWING IS AN INSTRUMENT OF SERVICE FOR THE PROJECT SPECIFIED. THE DRAWING AND DESIGN ARE EXCLUSIVE PROPERTY OF THE REGISTERED ENGINEERING COMPANY AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE ENGINEER'S WRITTEN CONSENT.                      NOTE: THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THIS DRAWING AND WHERE DISCREPANCIES OCCUR THIS SHALL REPORT TO THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.                 </small> </p>	No.	Description	Date	A	ISSUE FOR REVIEW	2024-06-14	B	ISSUE FOR REVIEW	2024-06-20	C	FINAL SCHEMATIC	2024-06-28
No.	Description	Date													
A	ISSUE FOR REVIEW	2024-06-14													
B	ISSUE FOR REVIEW	2024-06-20													
C	FINAL SCHEMATIC	2024-06-28													
<p>client name: <b>ERIF SUSTAINABLE SOLUTIONS</b></p> <p>project name: STANDARD DETAILS</p> <p>description:</p> <p>project no.: 240185</p> <p>drawing status: <b>PRELIMINARY</b></p>		<p>drawing title: <b>COVER SHEET - ARCHITECTURAL</b></p>													
<p>drawn by: MAE</p> <p>chkd by: RAS</p> <p>date: 2024-06-14</p> <p>version: RAS</p> <p>rev: C</p> <p>Drawing No.:</p>		<p>all dimensions are in: IMPERIAL [METRIC]</p> <p>scale:</p>													
		100													

WALL ASSEMBLY LEGEND - SIP PANELS		
TYPE MARK	DESCRIPTION	R-VALUE
S1 EXTERIOR WALL HORIZONTAL SIDING	 <p>-EXTERIOR FINISH - HORIZONTAL SIDING -7/16" OSB SHEATHING -5 5/8" RIGID INSULATION -7/16" OSB SHEATHING -1/2" TYPE X GWB (25 Min)</p>	23.2
S1a EXTERIOR WALL PANEL SIDING	 <p>-EXTERIOR FINISH - PANEL SIDING -7/16" OSB SHEATHING -5 5/8" RIGID INSULATION -7/16" OSB SHEATHING -1/2" TYPE X GWB (25 Min)</p>	23.2
S2 6 1/2" INTERIOR WALL PANEL DRYWALL BOTH SIDES	 <p>-1/2" TYPE X GWB (25 Min) -7/16" OSB SHEATHING -5 5/8" RIGID INSULATION -7/16" OSB SHEATHING -1/2" TYPE X GWB (25 Min)</p>	
S2a 4 1/2" INTERIOR WALL PANEL DRYWALL BOTH SIDES	 <p>-1/2" TYPE X GWB (25 Min) -7/16 OSB SHEATHING -3 5/8" RIGID INSULATION -7/16" OSB SHEATHING -1/2" TYPE X GWB (25 Min)</p>	15.4



FLOOR ASSEMBLY LEGEND		
TYPE MARK	DESCRIPTION	R-VALUE
F2 FLOOR	 <p>-3/4" SHEATHING -2x10 JOISTS @ 16" O.C -5/8" TYPE X GWB</p>	

CEILING ASSEMBLY LEGEND			
TYPE MARK	CEILING ASSEMBLY SECTION VIEW	DESCRIPTION	R-VALUE
C1 CEILING		-1/2" SHEATHING -2x8 JOISTS @ 16" O.C -1/2" DRYWALL, MUD & TAPE.	37.8

ROOF ASSEMBLY LEGEND - SIP PANELS			
TYPE MARK	ROOF ASSEMBLY SECTION VIEW	DESCRIPTION	R-VALUE
R1 ROOF		-7/16" SHEATHING -9 3/8" RIGID INSULATION -7/16" SHEATHING -1/2" DRYWALL, MUD & TAPE.	37.8

FLOOR ASSEMBLY LEGEND - SIP PANELS			
TYPE MARK	FLOOR ASSEMBLY - MODULE SECTION VIEW	DESCRIPTION	R-VALUE
F1 FLOOR		-7/16" OSB SHEATHING -9 3/8" RIGID INSULATION -7/16" SHEATHING	37.8

Appendix D

 <p>STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-9400</p>		Engineers Seal:	Revision Schedule
		drawing title: <b>SCHEDULES - SIP ASSEMBLIES</b>	client name: <b>ERIF SUSTAINABLE SOLUTIONS</b>
		drawn by: MAE chkd by: RAS date: 2024-06-14 version: RAS rev: C	project name: STANDARD DETAILS description: 240185 project no.: 240185 drawing status: <b>PRELIMINARY</b> all dimensions are in: IMPERIAL [METRIC] scale: 3/4" = 1'-0"



Appendix D

WALL ASSEMBLY LEGEND - MODULE		
TYPE MARK	WALL ASSEMBLY PLAN VIEW	DESCRIPTION
M1 NEXUS MODULE - EXTERIOR WALL		-1/2" PLYWOOD SHEATHING -5 1/2" STEEL STUD -R22 BAT INSULATION -1/2" TYPE X GWB (25 Min)
M2 INTERIOR MODULE WALL - PERIMETER		-1/2" TYPE X GWB -3 5/8" STEEL STUD -1/2" TYPE X GWB
M2a INTERIOR MODULE WALL (DRYWALL ON ONE SIDE)		-3 5/8" STEEL STUD -1/2" TYPE X GWB
M3 INTERIOR MODULE WALL - INTERIOR		-1/2" TYPE X GWB -3 5/8" STEEL STUD -1/2" TYPE X GWB

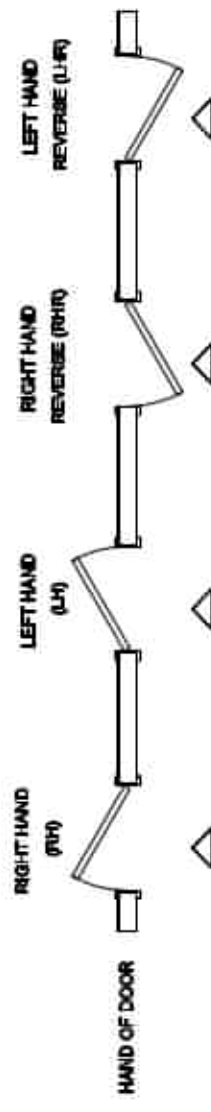
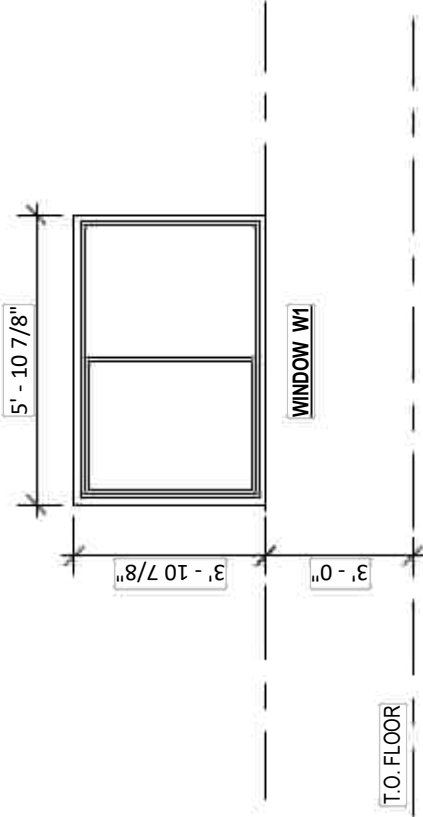
 STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400		Engineers Seal:	Revision Schedule <table border="1"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-14</td> </tr> <tr> <td>B</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-20</td> </tr> <tr> <td>C</td> <td>FINAL SCHEMATIC</td> <td>2024-06-28</td> </tr> </tbody> </table>	No.	Description	Date	A	ISSUE FOR REVIEW	2024-06-14	B	ISSUE FOR REVIEW	2024-06-20	C	FINAL SCHEMATIC	2024-06-28
		No.	Description	Date											
A	ISSUE FOR REVIEW	2024-06-14													
B	ISSUE FOR REVIEW	2024-06-20													
C	FINAL SCHEMATIC	2024-06-28													
client name: <b>ERIF SUSTAINABLE SOLUTIONS</b> project name: STANDARD DETAILS description: 240185 project no.: 240185 drawing status: <b>PRELIMINARY</b>		drawing title: <b>SCHEDULES - MODULE ASSEMBLIES</b> drawn by: MAE chkd by: RAS date: 2024-06-14 version: RAS rev: C Drawing No.:													
all dimensions are in: IMPERIAL [METRIC] scale: 3/4" = 1'-0"		Drawing No.:	102												

**WINDOW SCHEDULE**

Type Mark	COUNT	WINDOW SIZE	
		WIDTH	HEIGHT
W1	14	5' - 10 13/16"	3' - 10 13/16"

Grand total: 14

**WINDOW TYPES:**

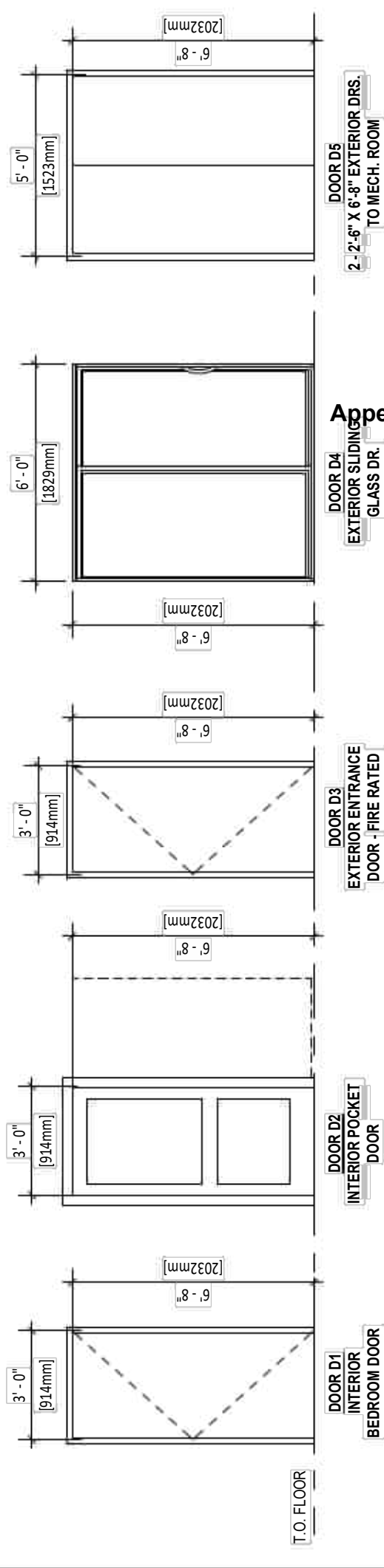


**DOOR SCHEDULE**

DOOR NUMBER	COUNT	DOOR SIZE		Comments
		WIDTH	HEIGHT	
D1	8	3' - 0"	6' - 8"	BEDROOM DOOR
D2	12	3' - 0"	6' - 8"	POCKET DOOR
D3	6	3' - 0"	6' - 8"	ENTRANCE DR. - FIRE RATED
D4	4	6' - 0"	6' - 8"	SLIDING PATIO DOOR
D5	4	5' - 0"	6' - 8"	2'-2'-6" X 6'-8" DOORS

Grand total: 34

**DOOR TYPES:**



**Appendix D**

**STEENHOF** BUILDING SERVICES GROUP  
 STEENHOF Building Services Group  
 40 Peter Street S.  
 Orillia, ON L3V 5A9  
 Tel: 705-325-5400 Fax: 705-325-8400

**ERIF** Sustainable Solutions

Engineers Seal:

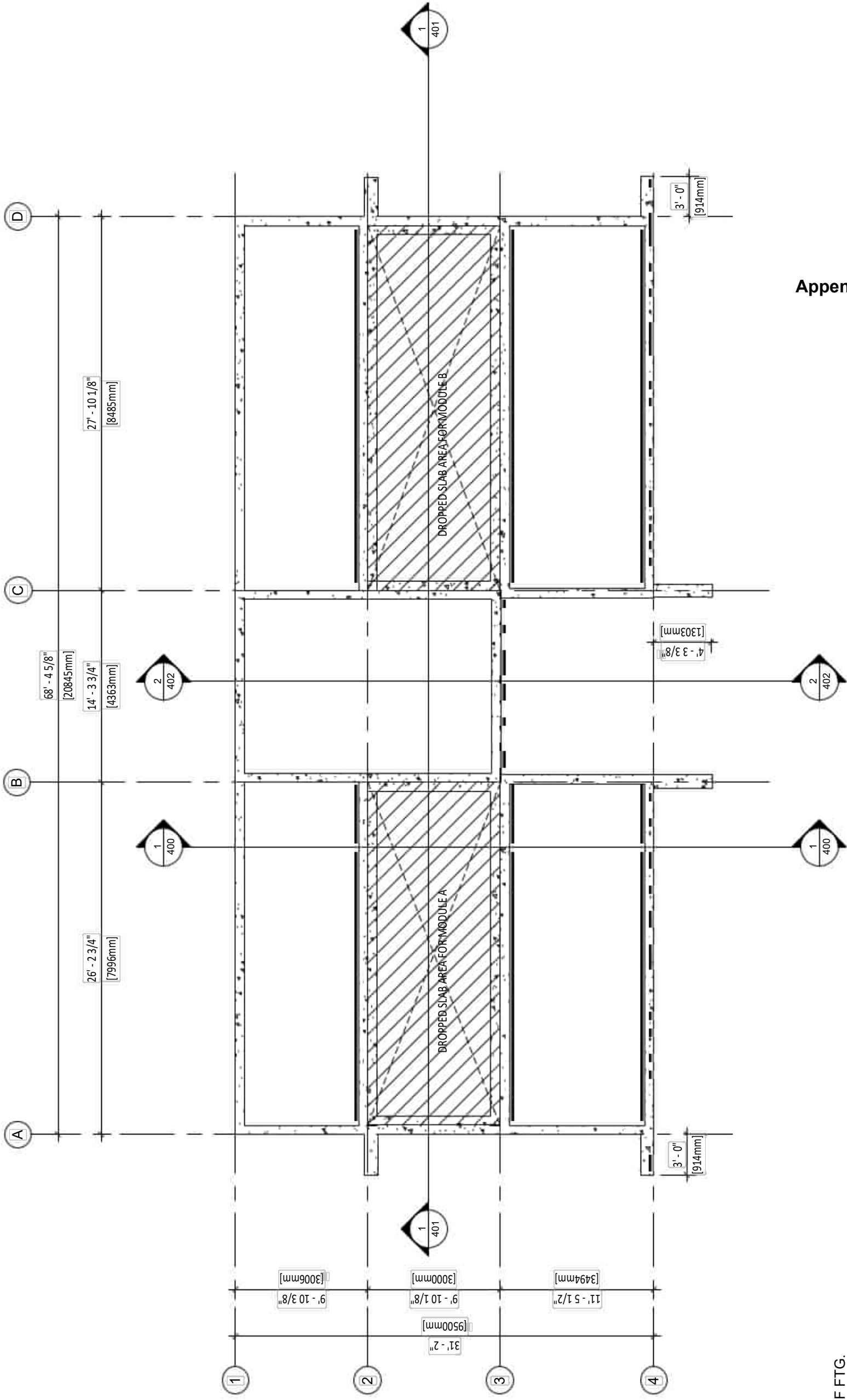
Revision Schedule	
No.	Date
A	2024-06-14
B	2024-06-20
C	2024-06-28

CONTRACTOR NOTE: THIS DRAWING IS AN INSTRUMENT OF SERVICE FOR THE PROJECT SPECIFIED. THE DRAWING AND DESIGN ARE EXCLUSIVE PROPERTY OF THE ARCHITECTED ENGINEERING COMPANY AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE ARCHITECT'S WRITTEN CONSENT. NOTE: THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REQUIREMENTS SHOWN ON THIS DRAWING AND MAKE NECESSARY ADJUSTMENTS PRIOR TO THE BEGINNING OF CONSTRUCTION. WITH ANY PORTION OF THE WORK IN THE CONTRACT.

client name: **ERIF SUSTAINABLE SOLUTIONS**  
 project name: STANDARD DETAILS  
 description:  
 project no.: 240185  
 drawing status: **PRELIMINARY**



drawing title: **DOOR SCHEDULE + WINDOW SCHEDULE**  
 all dimensions are in: IMPERIAL [METRIC]  
 scale: As indicated

drawn by: MAE  
 chkd by: RAS  
 date: 2024-06-14  
 version: RAS  
 rev: C  
 Drawing No.: **103**

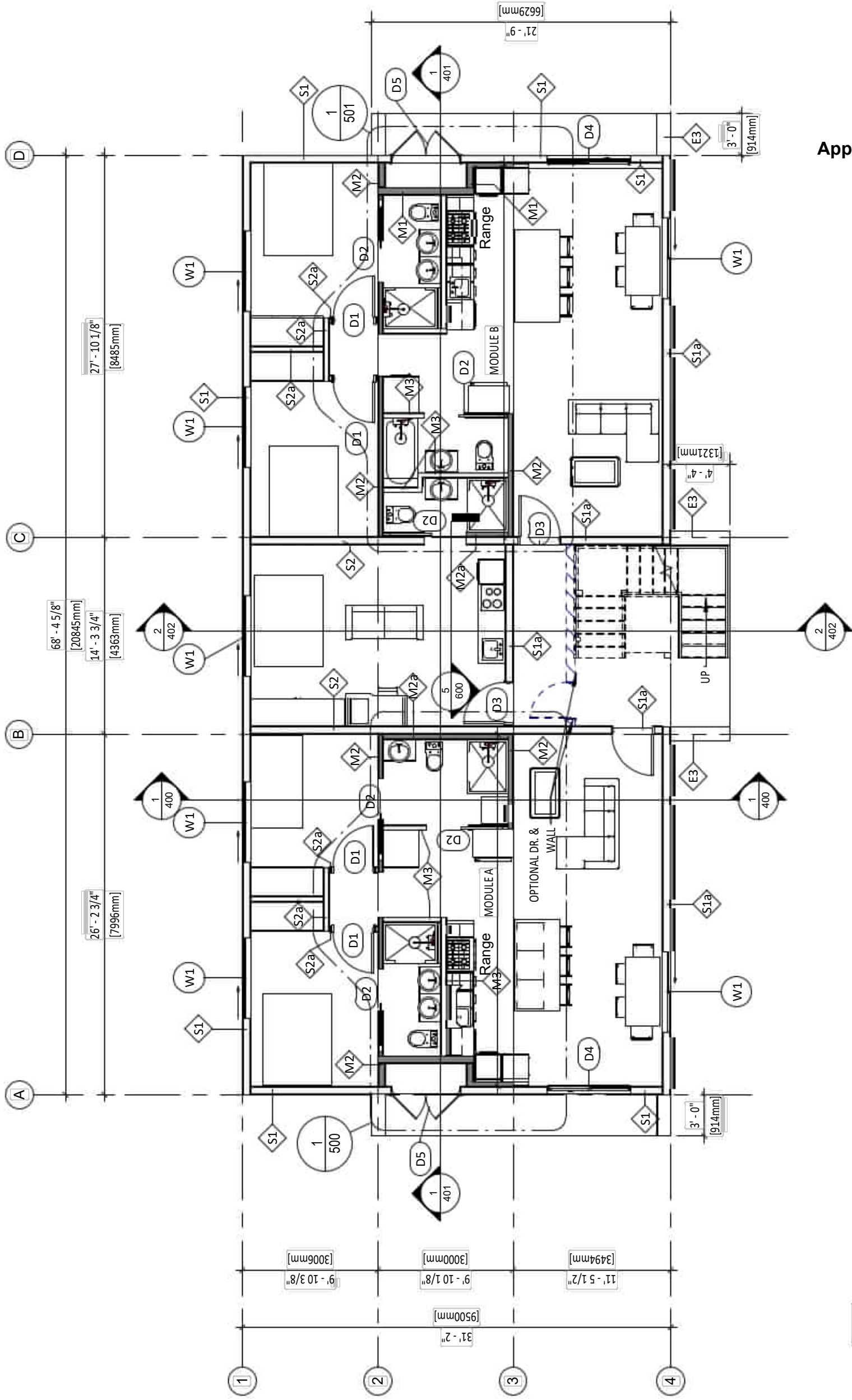


Appendix D

1 TOP OF FTG.  
1/8" = 1'-0"



 <p><b>STEENHOF</b> BUILDING SERVICES GROUP STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>	 <p><b>ERIF</b> Sustainable Solutions</p>	<p>Engineers Seal:</p>	<p>client name: <b>ERIF SUSTAINABLE SOLUTIONS</b> project name: STANDARD DETAILS</p>												
<p>drawing title: <b>FOUNDATION PLAN</b></p>		<p>drawn by: MAE chkd by: RAS date: 2024-06-14 version: RAS rev: C Drawing No.: 200</p>													
<p>description: A ISSUE FOR REVIEW B ISSUE FOR REVIEW C FINAL SCHEMATIC</p>		<p>description: 240185 project no.: 240185 drawing status: <b>PRELIMINARY</b></p>													
<p>all dimensions are in: IMPERIAL [METRIC] scale: 1/8" = 1'-0"</p>		<p>revision schedule:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-14</td> </tr> <tr> <td>B</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-20</td> </tr> <tr> <td>C</td> <td>FINAL SCHEMATIC</td> <td>2024-06-28</td> </tr> </tbody> </table> <p><small>DISCLAIMER: THIS DRAWING IS AN INSTRUMENT OF SERVICE FOR THE PROJECT SPECIFIED. THE DRAWING AND DESIGN ARE EXCLUSIVE PROPERTY OF THE ENGINEER. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REQUIREMENTS SHOWN ON THIS DRAWING AND MAKE NECESSARY ADJUSTMENTS BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.</small></p>		No.	Description	Date	A	ISSUE FOR REVIEW	2024-06-14	B	ISSUE FOR REVIEW	2024-06-20	C	FINAL SCHEMATIC	2024-06-28
No.	Description	Date													
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B	ISSUE FOR REVIEW	2024-06-20													
C	FINAL SCHEMATIC	2024-06-28													



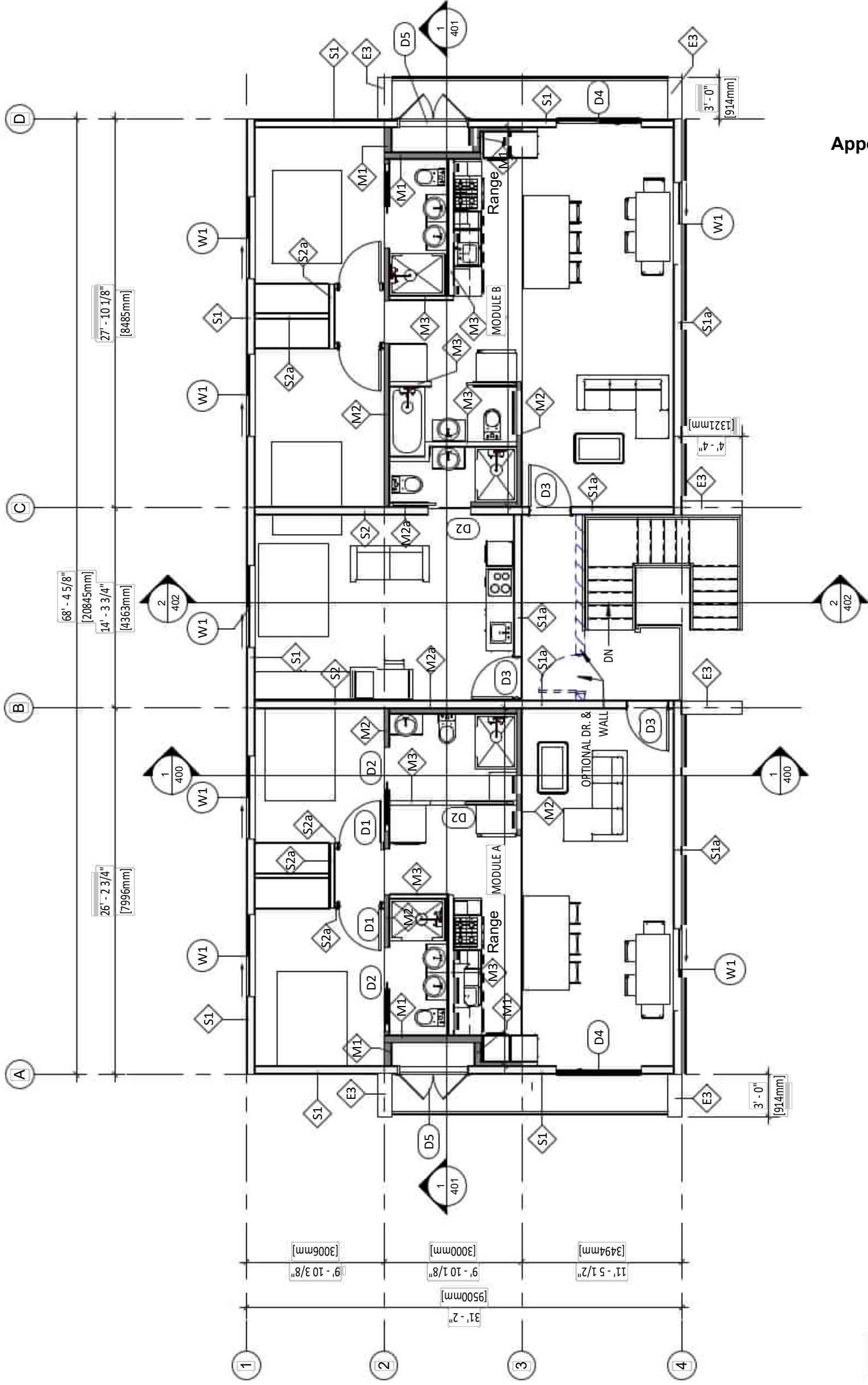


1 LEVEL 1 - T.O. FLOOR  
1/8" = 1'-0"

Appendix D

 <p><b>STEENHOF</b> BUILDING SERVICES GROUP STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>	 <p><b>ERIF</b> Sustainable Solutions</p>	<p>Engineers Seal:</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Revision Schedule</th> </tr> <tr> <th>No.</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>2024-06-14</td> </tr> <tr> <td>B</td> <td>2024-06-20</td> </tr> <tr> <td>C</td> <td>2024-06-28</td> </tr> </tbody> </table> <p style="font-size: 8px; margin-top: 5px;">                     CONSULTANT: THIS DRAWING IS AN INSTRUMENT OF SERVICE FOR THE PROJECT SPECIFIED. THE DRAWING AND DESIGN ARE EXCLUSIVE PROPERTY OF THE ENGINEER. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REQUIREMENTS SHOWN ON THIS DRAWING AND MAKE ANY CORRECTIONS BEFORE PROCEEDING WITH ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.                 </p>	Revision Schedule		No.	Date	A	2024-06-14	B	2024-06-20	C	2024-06-28
Revision Schedule													
No.	Date												
A	2024-06-14												
B	2024-06-20												
C	2024-06-28												
<p>client name: <b>ERIF SUSTAINABLE SOLUTIONS</b></p> <p>project name: STANDARD DETAILS</p> <p>description: 240185</p> <p>project no.: 240185</p> <p>drawing status: <b>PRELIMINARY</b></p>		<p>drawing title: <b>COMPLEX - FLOOR PLAN - LEVEL 1</b></p>											
<p>drawn by: MAE</p> <p>chkd by: RAS</p> <p>date: 2024-06-14</p> <p>version: RAS</p> <p>rev: C</p> <p>Drawing No.:</p>		<p>all dimensions are in: IMPERIAL [METRIC]</p> <p>scale: 1/8" = 1'-0"</p>											







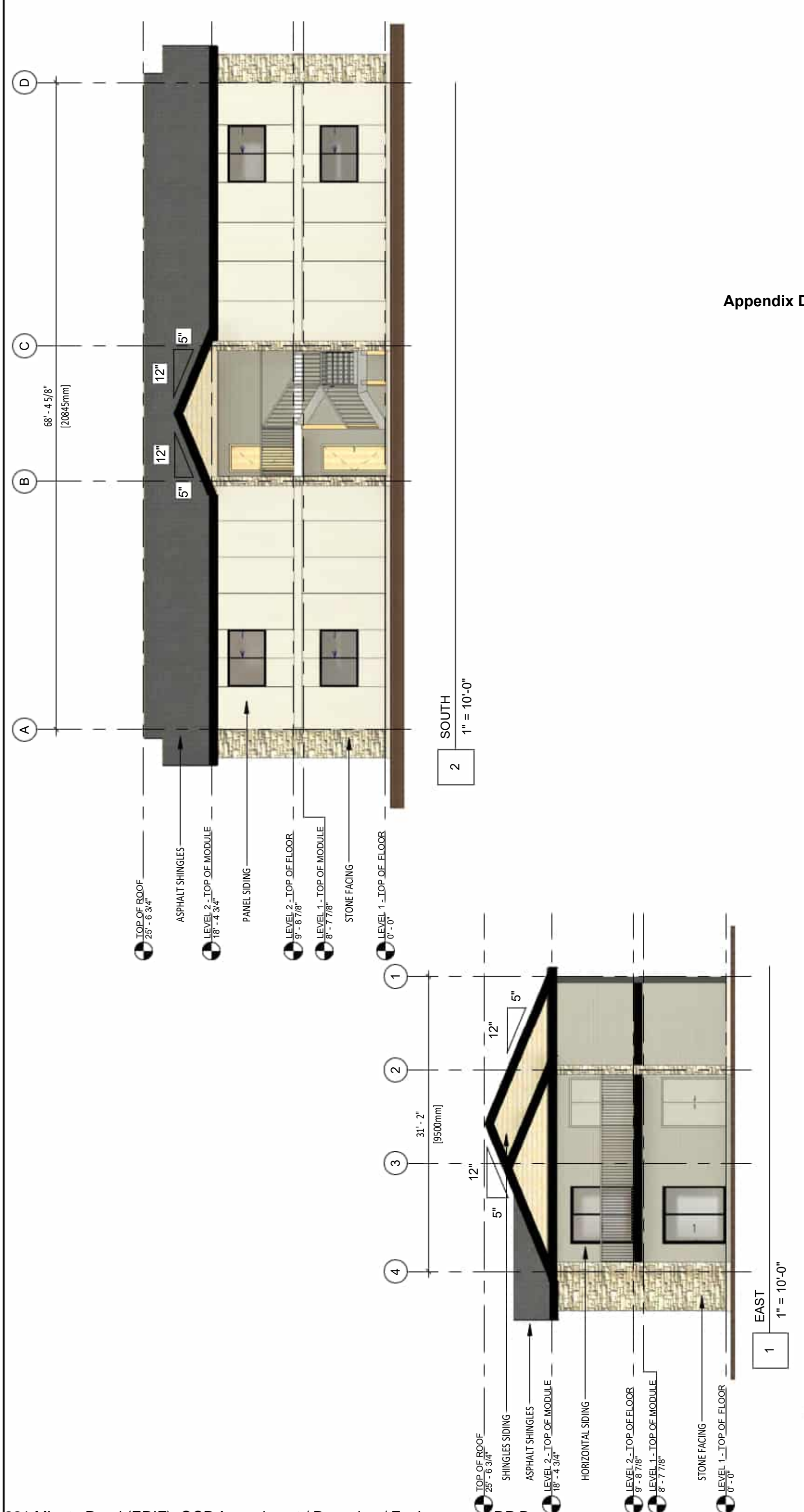
Appendix D

LEVEL 2 - T.O. FLOOR



1

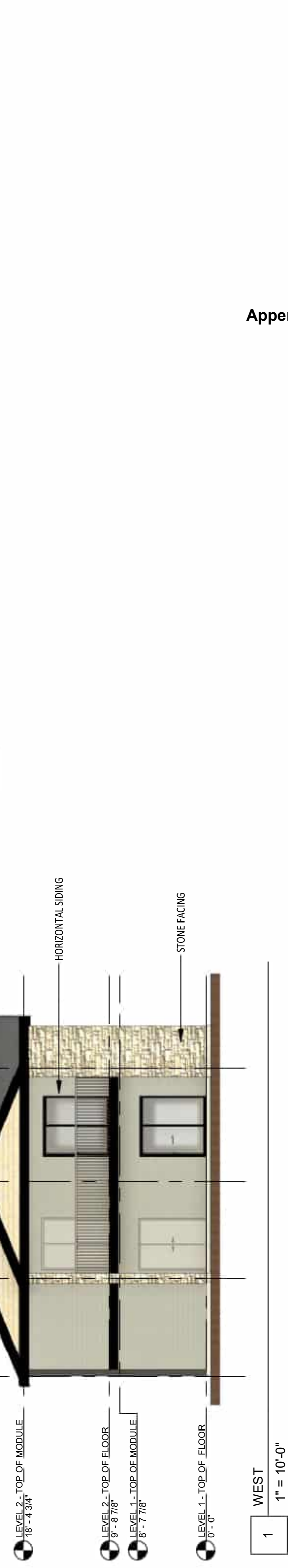
1/8" = 1'-0"

 <p>STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>				Engineers Seal:	
drawing title: <b>COMPLEX - FLOOR PLAN</b> - LEVEL 2		client name: <b>ERIF SUSTAINABLE SOLUTIONS</b>		drawing status: <b>PRELIMINARY</b>	
date: 2024-06-14		project name: STANDARD DETAILS		drawing status: PRELIMINARY	
version: RAS		description: 240185		all dimensions are in: IMPERIAL [METRIC]	
rev: C		project no.: 240185		scale: 1/8" = 1'-0"	
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drawn by: MAE		client name:		drawing title:	
chkd by: RAS		project name:		drawing title:	
date: 2024-06-14		description:		drawing title:	
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rev: C		drawing status:		drawing title:	
Drawing No.:		drawing status:		drawing title:	





Appendix D

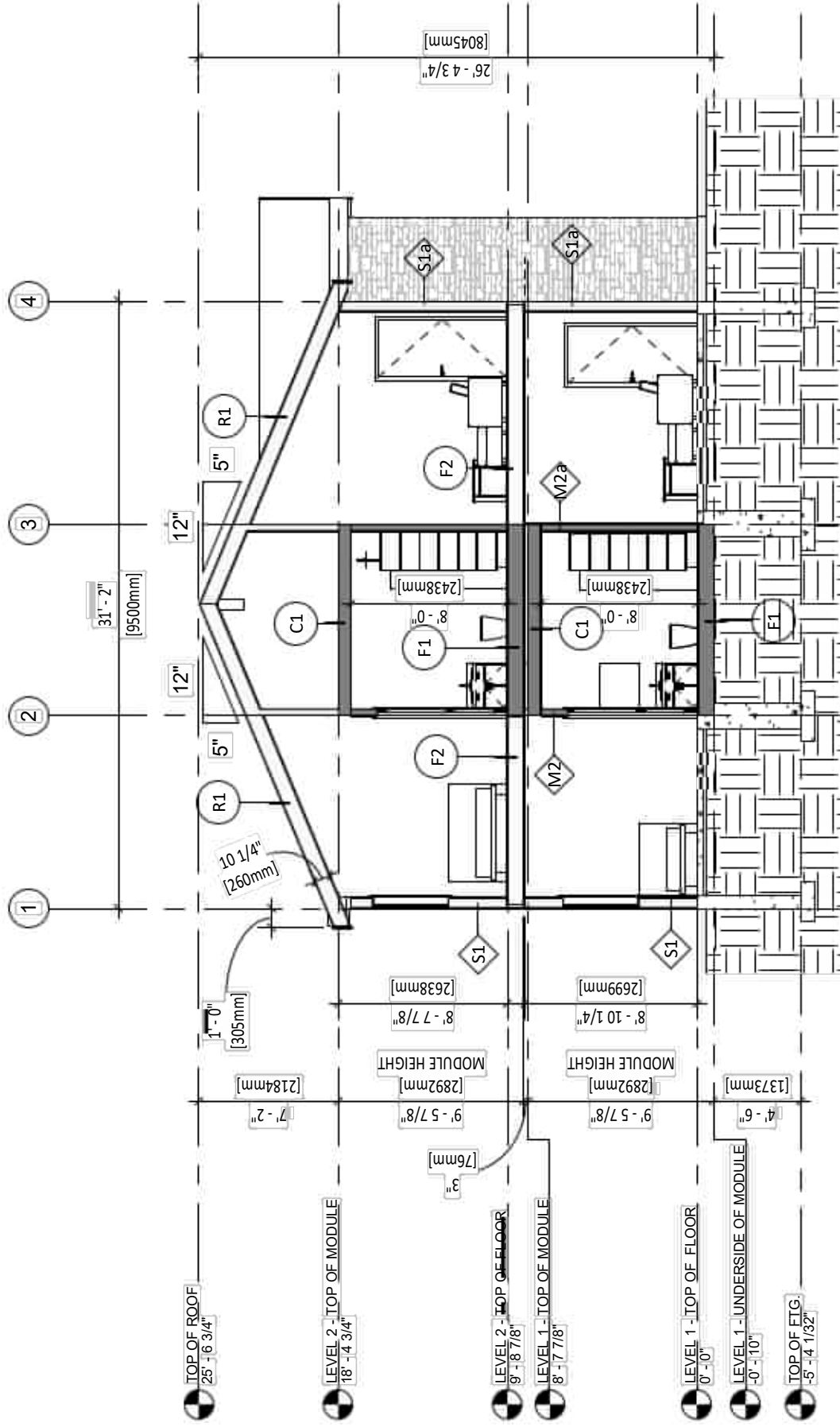
				Engineers Seal:	
STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400		ERIF Sustainable Solutions		[Signature Area]	
client name: <b>ERIF SUSTAINABLE SOLUTIONS</b>		drawing title: <b>ELEVATIONS</b>		drawn by: MAE	
project name: STANDARD DETAILS		description:		chkd by: RAS	
drawing status: <b>PRELIMINARY</b>		project no.: 240185		date: 2024-06-14	
all dimensions are in: IMPERIAL [METRIC]		scale: 1" = 10'-0"		version: RAS rev: C	
Drawing No.:		Drawing No.:		Drawing No.:	



Appendix D



 <p><b>STEENHOF</b> BUILDING SERVICES GROUP</p> <p>STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>	 <p><b>ERIF</b> Sustainable Solutions</p>	<p>Engineers Seal:</p>	<p>client name: <b>ERIF SUSTAINABLE SOLUTIONS</b></p> <p>project name: STANDARD DETAILS</p> <p>description: 240185</p> <p>project no.: 240185</p> <p>drawing status: <b>PRELIMINARY</b></p> <p>all dimensions are in: IMPERIAL [METRIC]</p> <p>scale: 1" = 10'-0"</p>												
<p>Revision Schedule</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-14</td> </tr> <tr> <td>B</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-20</td> </tr> <tr> <td>C</td> <td>FINAL SCHEMATIC</td> <td>2024-06-28</td> </tr> </tbody> </table> <p><small>DISCLAIMER: THIS DRAWING IS AN INSTRUMENT OF SERVICE FOR THE PROJECT SHOWN. THE DRAWING AND DESIGN ARE EXCLUSIVE PROPERTY OF THE ENGINEERING COMPANY AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE ENGINEER'S WRITTEN CONSENT. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THIS DRAWING AND WHERE DISCREPANCIES OCCUR THIS SHALL BE REPORTED TO THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.</small></p>		No.	Description	Date	A	ISSUE FOR REVIEW	2024-06-14	B	ISSUE FOR REVIEW	2024-06-20	C	FINAL SCHEMATIC	2024-06-28	<p>drawing title: <b>ELEVATIONS</b></p> <p>client name: ERIF SUSTAINABLE SOLUTIONS</p> <p>project name: STANDARD DETAILS</p> <p>description: 240185</p> <p>project no.: 240185</p> <p>drawing status: <b>PRELIMINARY</b></p> <p>all dimensions are in: IMPERIAL [METRIC]</p> <p>scale: 1" = 10'-0"</p>	<p>drawn by: MAE</p> <p>chkd by: RAS</p> <p>date: 2024-06-14</p> <p>version: RAS</p> <p>rev: C</p> <p>Drawing No.: <b>301</b></p>
No.	Description	Date													
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B	ISSUE FOR REVIEW	2024-06-20													
C	FINAL SCHEMATIC	2024-06-28													



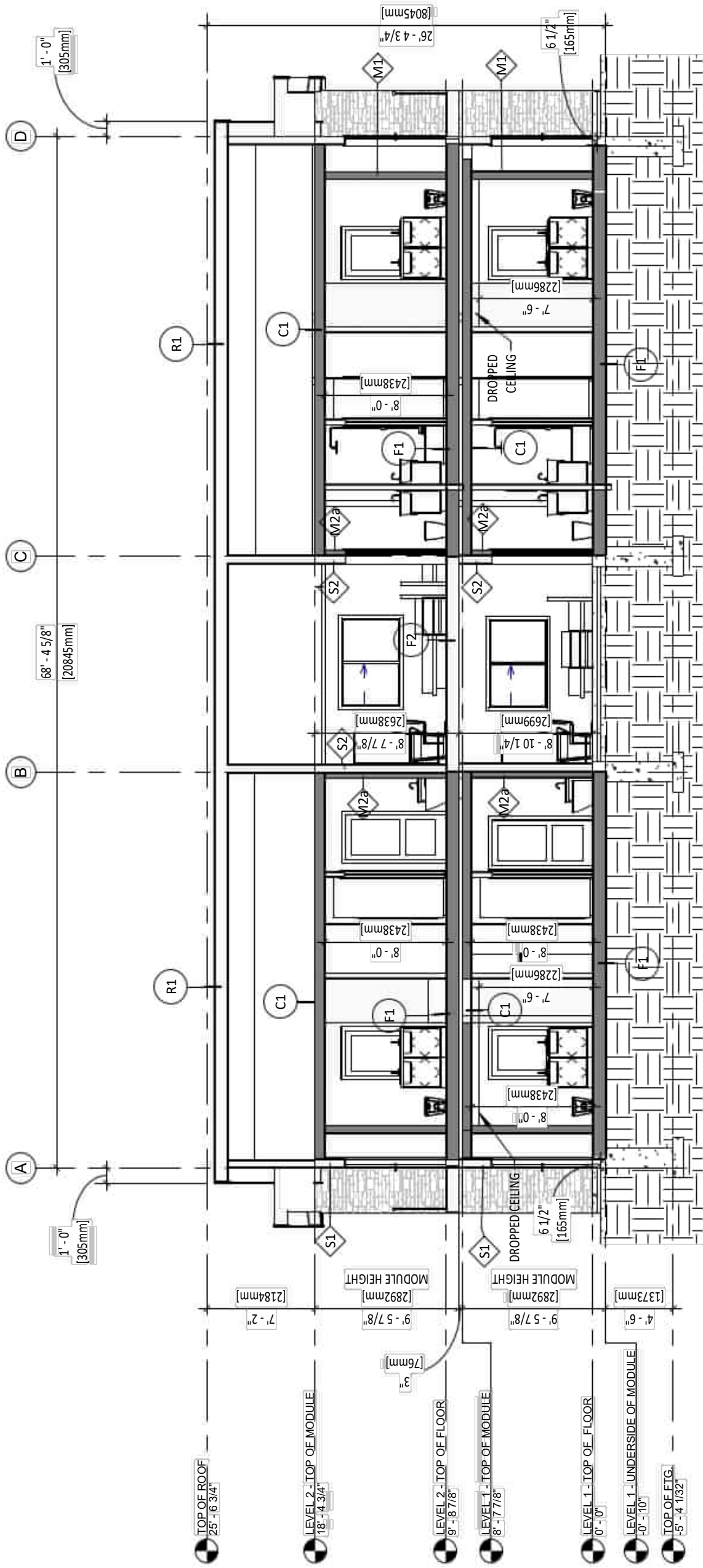


SECTION 1  
1/8" = 1'-0"

Appendix D

 <p>STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>				Engineers Seal:	Revision Schedule <table border="1"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-14</td> </tr> <tr> <td>B</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-20</td> </tr> <tr> <td>C</td> <td>FINAL SCHEMATIC</td> <td>2024-06-28</td> </tr> </tbody> </table> <p><small>CONTRACTOR: THIS DRAWING IS AN INSTRUMENT OF SERVICE FOR THE PROJECT SPECIFIED. THE DRAWING AND DESIGN ARE EXCLUSIVE PROPERTY OF THE ARCHITECTED ENGINEERING COMPANY AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE ARCHITECT'S WRITTEN CONSENT. NOTE: THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REQUIREMENTS SHOWN ON THIS DRAWING AND MAKE ANY CORRECTIONS BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.</small></p>		No.	Description	Date	A	ISSUE FOR REVIEW	2024-06-14	B	ISSUE FOR REVIEW	2024-06-20	C	FINAL SCHEMATIC	2024-06-28	client name: <b>ERIF SUSTAINABLE SOLUTIONS</b> project name: STANDARD DETAILS description: project no.: 240185 drawing status: <b>PRELIMINARY</b>	drawing title: <b>SECTION</b>	drawn by: MAE chkd by: RAS date: 2024-06-14 version: RAS rev: C Drawing No.:
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B	ISSUE FOR REVIEW	2024-06-20																			
C	FINAL SCHEMATIC	2024-06-28																			
all dimensions are in: IMPERIAL [METRIC]					scale: 1/8" = 1'-0"		400														





SECTION 2  
1  
1/8" = 1'-0"

Appendix D

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	C
Drawing No.:	

client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	STANDARD DETAILS
description:	
project no.:	240185
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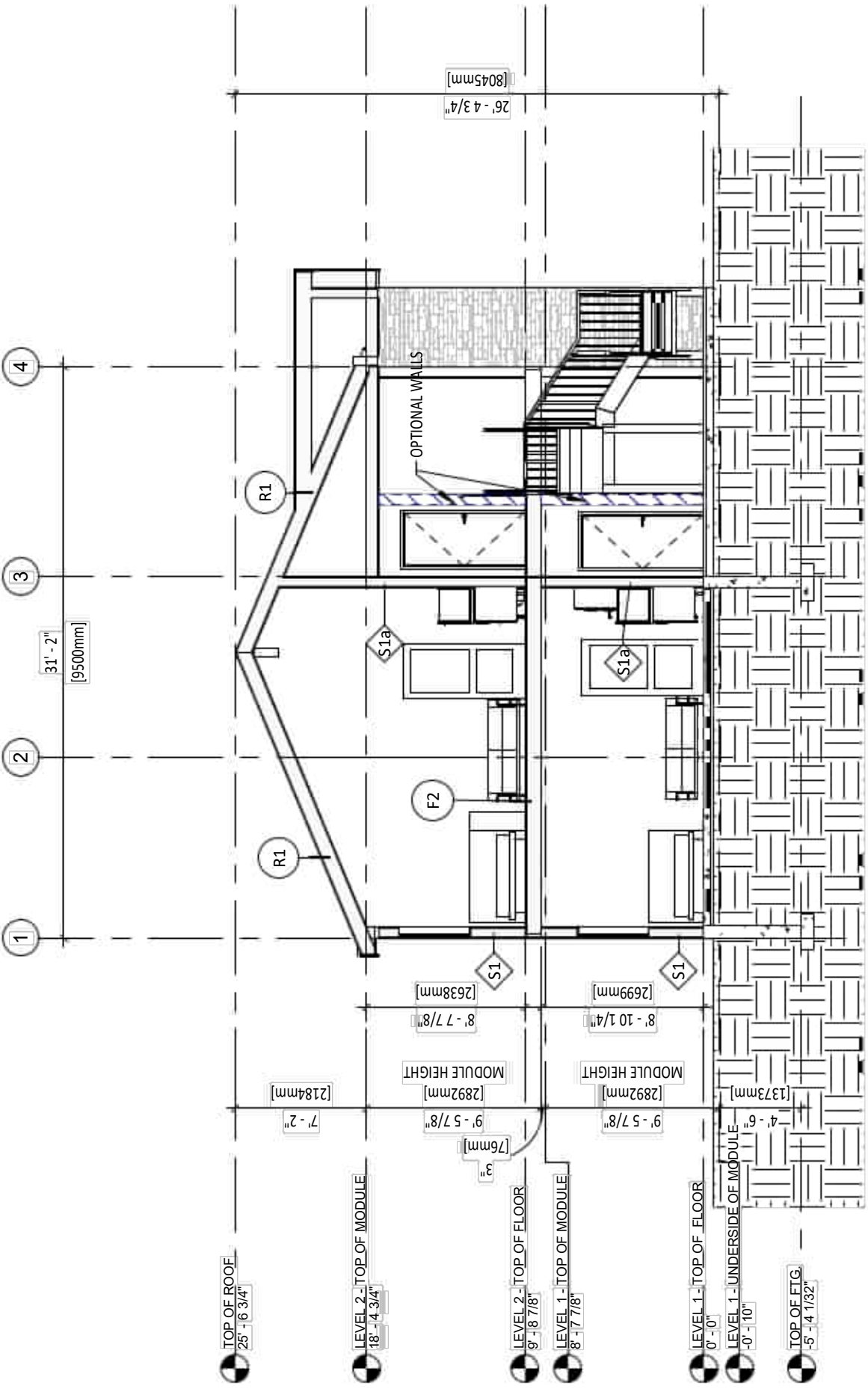
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No.	Date
A	2024-06-14
B	2024-06-20
C	2024-06-28

No.	Description	Date
A	ISSUE FOR REVIEW	2024-06-14
B	ISSUE FOR REVIEW	2024-06-20
C	FINAL SCHEMATIC	2024-06-28

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Engineers Seal:

STEENHOF Building Services Group  
40 Peter Street S.  
Orillia, ON L3V 5A9  
Tel: 705-325-5400 Fax: 705-325-8400



SECTION 3  
1/8" = 1'-0"

Appendix D

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	C
Drawing No.:	

client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	STANDARD DETAILS
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in:	IMPERIAL [METRIC]
scale:	1/8" = 1'-0"

No.	Description	Date
A	ISSUE FOR REVIEW	2024-06-14
B	ISSUE FOR REVIEW	2024-06-20
C	FINAL SCHEMATIC	2024-06-28

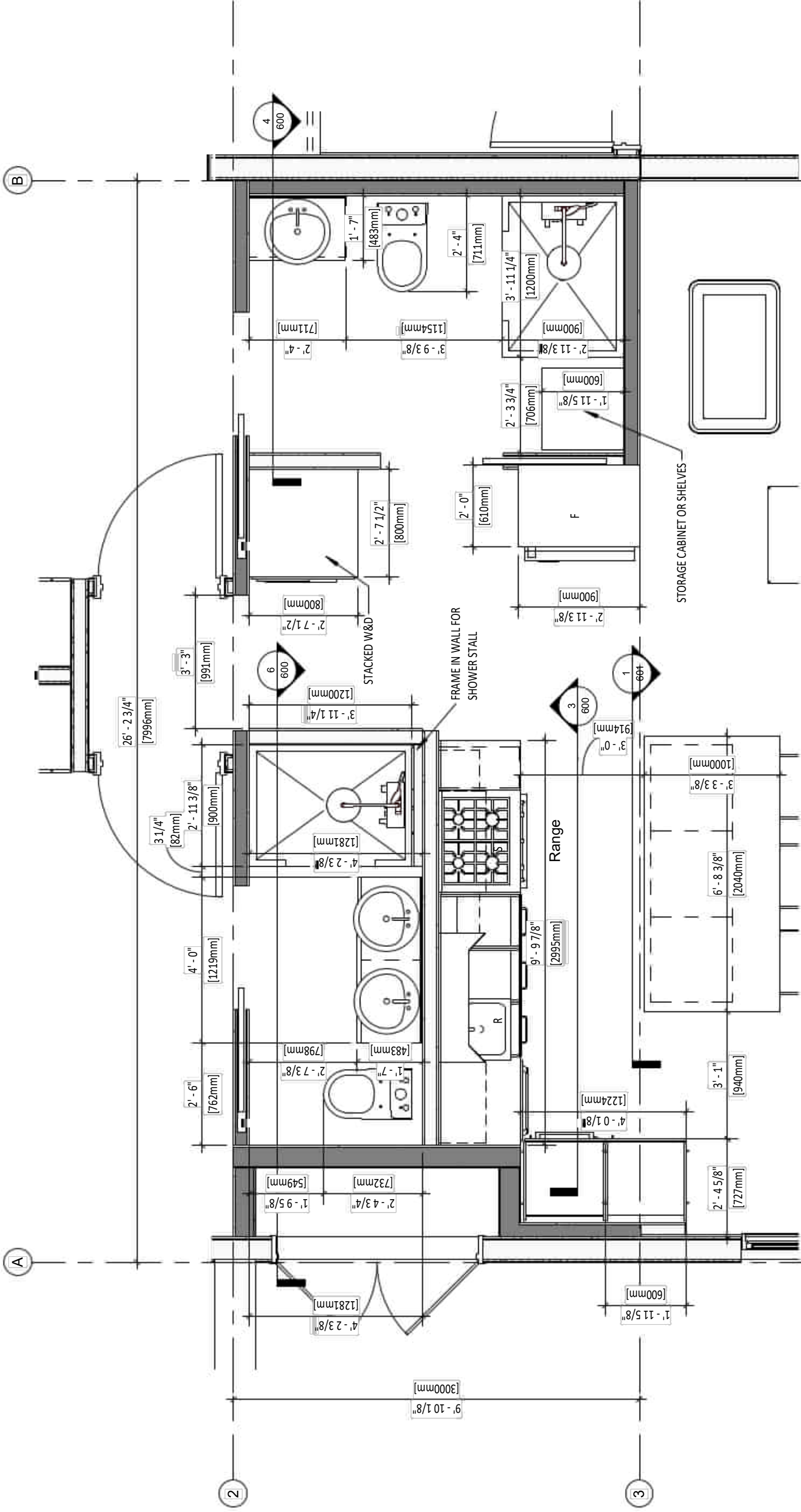
**Engineers Seal:**

**ERIF Sustainable Solutions**

**STEENHOF Building Services Group**  
40 Peter Street S.  
Orillia, ON L3V 5A9  
Tel: 705-325-5400 Fax: 705-325-8400

221 Minato Road (ERIF): OCP Amendment / Rezoning / Environmental DP Bruc...

Page 492 of 929



Appendix D

1 LEVEL 1 - MODULE A  
3/8" = 1'-0"

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	C
Drawing No.:	

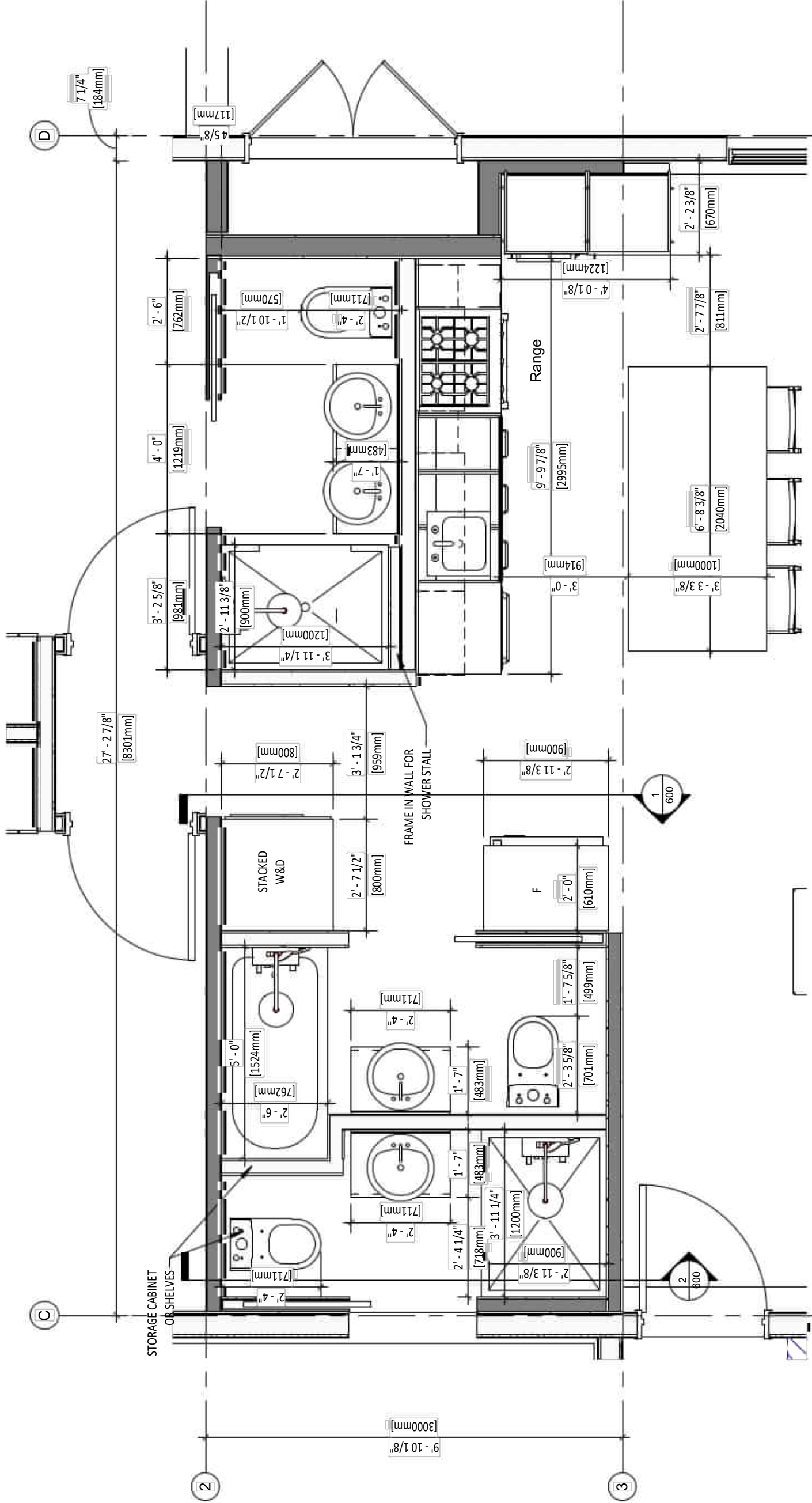
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project name:	STANDARD DETAILS
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in: IMPERIAL [METRIC]	
scale: 3/8" = 1'-0"	

No.	Description	Date
A	ISSUE FOR REVIEW	2024-06-14
B	ISSUE FOR REVIEW	2024-06-20
C	FINAL SCHEMATIC	2024-06-28

Engineers Seal:	

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 40 Peter Street S.
   
 Orillia, ON L3V 5A9
   
 Tel: 705-325-5400 Fax: 705-325-8400





Appendix D

LEVEL 1 - MODULE B

3/8" = 1'-0"

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	C
Drawing No.:	

client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	STANDARD DETAILS
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in:	IMPERIAL [METRIC]
scale:	3/8" = 1'-0"

drawing title:	MODULE B ENLARGED
----------------	-------------------

No.	Description	Date
A	ISSUE FOR REVIEW	2024-06-14
B	ISSUE FOR REVIEW	2024-06-20
C	FINAL SCHEMATIC	2024-06-28

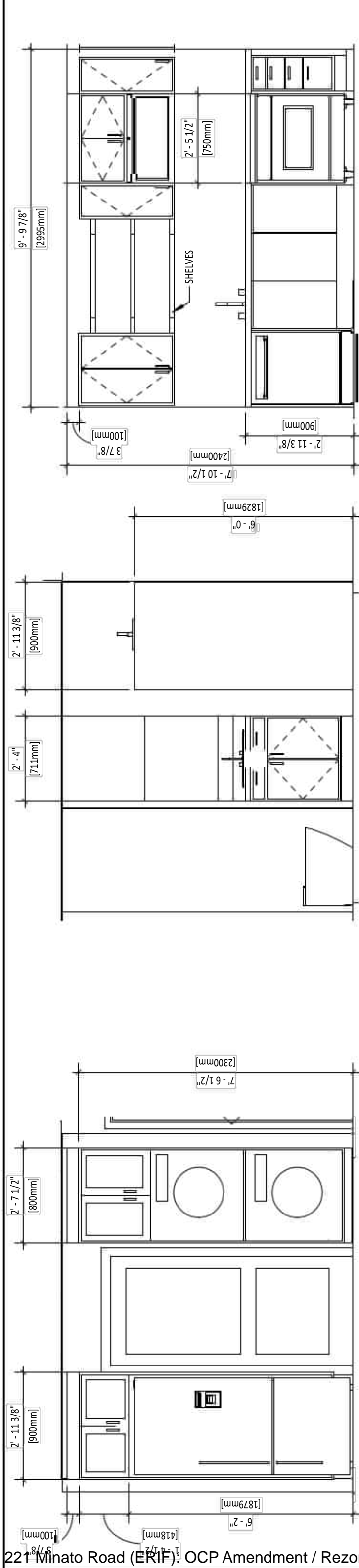
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Engineers Seal:



**STEENHOF**  
BUILDING SERVICES GROUP  
STEENHOF Building Services Group  
40 Peter Street S.  
Orillia, ON L3V 5A9  
Tel: 705-325-5400 Fax: 705-325-8400

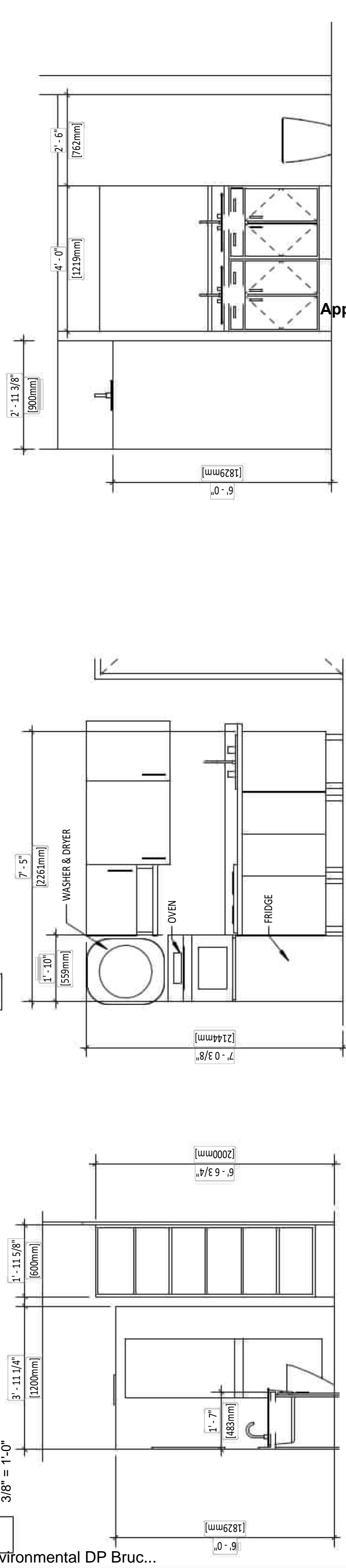




1 WASHER/DRYER/FRIDGE MILLWORK  
3/8" = 1'-0"

2 MODULE B BATHROOM  
3/8" = 1'-0"

3 KITCHEN MILLWORK  
3/8" = 1'-0"



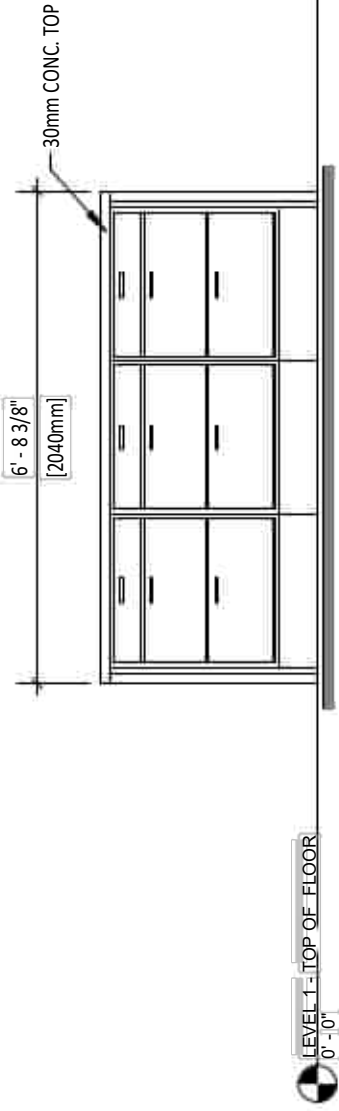
4 MODULE A BATHROOM  
3/8" = 1'-0"

5 3RD SUITE KITCHEN  
3/8" = 1'-0"

6 MASTER BATHROOM  
3/8" = 1'-0"

Appendix D

<p>STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>															
<p>client name: <b>ERIF SUSTAINABLE SOLUTIONS</b></p> <p>project name: STANDARD DETAILS</p> <p>description: 240185</p> <p>project no.: 240185</p> <p>drawing status: <b>PRELIMINARY</b></p>		<p>drawing title: <b>INTERIOR MILLWORK ELEVATIONS</b></p> <p>client name: MAE</p> <p>chkd by: RAS</p> <p>date: 2024-06-14</p> <p>version: RAS</p> <p>rev: C</p> <p>Drawing No.: 600</p>													
<p>Revision Schedule</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-14</td> </tr> <tr> <td>B</td> <td>ISSUE FOR REVIEW</td> <td>2024-06-20</td> </tr> <tr> <td>C</td> <td>FINAL SCHEMATIC</td> <td>2024-06-28</td> </tr> </tbody> </table> <p><small>DISCLAIMER: THIS DRAWING IS AN INSTRUMENT OF SERVICE FOR THE PROJECT SPECIFIED. THE DRAWING AND DESIGN ARE EXCLUSIVE PROPERTY OF THE ARCHITECTED ENGINEERING COMPANY AND MAY NOT BE USED IN WHOLE OR IN PART WITHOUT THE ARCHITECT'S WRITTEN CONSENT. NOTE: THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND REQUIREMENTS SHOWN ON THIS DRAWING AND MAKE CORRECTIONS AS NECESSARY BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.</small></p>		No.	Description	Date	A	ISSUE FOR REVIEW	2024-06-14	B	ISSUE FOR REVIEW	2024-06-20	C	FINAL SCHEMATIC	2024-06-28	<p>all dimensions are in: IMPERIAL [METRIC]</p> <p>scale: 3/8" = 1'-0"</p>	
No.	Description	Date													
A	ISSUE FOR REVIEW	2024-06-14													
B	ISSUE FOR REVIEW	2024-06-20													
C	FINAL SCHEMATIC	2024-06-28													



LEVEL 1 - TOP OF FLOOR  
0' - 0"

1 ISLAND ELEVATION  
3/8" = 1'-0"

Appendix D

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	C
Drawing No.:	

drawing title:	INTERIOR MILLWORK ELEVATIONS
client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	STANDARD DETAILS
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in:	IMPERIAL [METRIC]
scale:	3/8" = 1'-0"

Revision Schedule	
No.	Date
A	2024-06-14
B	2024-06-20
C	2024-06-28

No.	Description	Date
A	ISSUE FOR REVIEW	2024-06-14
B	ISSUE FOR REVIEW	2024-06-20
C	FINAL SCHEMATIC	2024-06-28

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NOTE: THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REQUIREMENTS SHOWN ON THIS DRAWING AND MAKE NECESSARY ADJUSTMENTS BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.  
FOR THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH ANY PORTION OF THE WORK IN THE CONTRACT.



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40 Peter Street S.  
Orillia, ON L3V 5A9  
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## DWG INDEX - ARCHITECTURAL

SHEET #	TITLE	REV #	DESCRIPTION
101	SCHEDULES - SIP ASSEMBLIES	A	ISSUE FOR REVIEW
102	SCHEDULES - MODULE ASSEMBLIES	A	ISSUE FOR REVIEW
103	DOOR SCHEDULE + WINDOW SCHEDULE	A	ISSUE FOR REVIEW
200	FOUNDATION PLAN	A	ISSUE FOR REVIEW
201	COMPLEX - FLOOR PLAN - LEVEL 1	A	ISSUE FOR REVIEW
202	COMPLEX - FLOOR PLAN - LEVEL 2	A	ISSUE FOR REVIEW
300	ELEVATIONS	A	ISSUE FOR REVIEW
301	ELEVATIONS	A	ISSUE FOR REVIEW
400	SECTION	A	ISSUE FOR REVIEW
401	SECTION	A	ISSUE FOR REVIEW
402	SECTION	A	ISSUE FOR REVIEW
500	MODULE A ENLARGED	A	ISSUE FOR REVIEW
501	MODULE B ENLARGED	A	ISSUE FOR REVIEW
502	MODULE C ENLARGED	A	ISSUE FOR REVIEW
600	INTERIOR MILLWORK ELEVATIONS	A	ISSUE FOR REVIEW

TOTAL # SHEETS: 15



Appendix D

<p style="font-size: 8px; margin-top: 5px;"> <b>STEENHOF Building Services Group</b>                  40 Peter Street S.                  Orillia, ON L3V 5A9                  Tel: 705-325-5400 Fax: 705-325-8400             </p>		Engineers Seal:	Revision Schedule <table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-07-4</td> </tr> </tbody> </table>	No.	Description	Date	A	ISSUE FOR REVIEW	2024-07-4
No.	Description	Date							
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client name: <b>ERIF SUSTAINABLE SOLUTIONS</b> project name: BALD EAGLE 3 description:		drawing title: <b>COVER SHEET - ARCHITECTURAL</b>							
drawing status: <b>PRELIMINARY</b> project no.: 240185		drawing No.:							
all dimensions are in: IMPERIAL [METRIC]		scale:							
drawn by: MAE chkd by: RAS date: 2024-06-14 version: RAS rev: A		Drawing No.: <b>100</b>							



WALL ASSEMBLY LEGEND - SIP PANELS		R-VALUE
<b>TYPE MARK</b> S1	<b>WALL ASSEMBLY PLAN VIEW</b>  -EXTERIOR FINISH - HORIZONTAL SIDING -7/16" OSB SHEATHING -5 5/8" RIGID INSULATION -7/16" OSB SHEATHING -1/2" TYPE X GWB (25 Min)	23.2
<b>TYPE MARK</b> S1a	<b>EXTERIOR WALL PANEL SIDING</b>  -EXTERIOR FINISH - PANEL SIDING -7/16" OSB SHEATHING -5 5/8" RIGID INSULATION -7/16" OSB SHEATHING -1/2" TYPE X GWB (25 Min)	23.2
<b>TYPE MARK</b> S2	<b>6 1/2" INTERIOR WALL PANEL - DRYWALL BOTH SIDES</b>  -1/2" TYPE X GWB (25 Min) -7/16" OSB SHEATHING -5 5/8" RIGID INSULATION -7/16" OSB SHEATHING -1/2" TYPE X GWB (25 Min)	
<b>TYPE MARK</b> S2a	<b>4 1/2" INTERIOR WALL PANEL - DRYWALL BOTH SIDES</b>  -1/2" TYPE X GWB (25 Min) -7/16" OSB SHEATHING -3 5/8" RIGID INSULATION -7/16" OSB SHEATHING -1/2" TYPE X GWB (25 Min)	15.4

CEILING ASSEMBLY LEGEND		R-VALUE
<b>TYPE MARK</b> C1 CEILING	<b>CEILING ASSEMBLY SECTION VIEW</b>  -1/2" SHEATHING -2x8 JOISTS @ 16" O.C -1/2" DRYWALL, MUD & TAPE.	37.8
<b>ROOF ASSEMBLY LEGEND - SIP PANELS</b>		
<b>TYPE MARK</b> R1 ROOF	<b>ROOF ASSEMBLY SECTION VIEW</b>  -7/16" SHEATHING -9 3/8" RIGID INSULATION -7/16" SHEATHING -1/2" DRYWALL, MUD & TAPE.	37.8
<b>FLOOR ASSEMBLY LEGEND</b>		
<b>TYPE MARK</b> F1 FLOOR	<b>FLOOR ASSEMBLY - MODULE - SECTION VIEW</b>  -7/16" OSB SHEATHING -9 3/8" RIGID INSULATION -7/16" SHEATHING	37.8
<b>TYPE MARK</b> F2 FLOOR	<b>FLOOR ASSEMBLY SECTION VIEW</b>  -3/4" SHEATHING -2x10 JOISTS @ 16" O.C -5/8" TYPE X GWB	R-VALUE

Appendix D

 STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400		client name: <b>ERIF SUSTAINABLE SOLUTIONS</b>	drawing title: <b>SCHEDULES - SIP ASSEMBLIES</b>	drawn by: MAE chkd by: RAS date: 2024-06-14 version: RAS rev: A Drawing No.:
		project name: BALD EAGLE 3 description: 240185 project no.: 240185	drawing status: <b>PRELIMINARY</b>	all dimensions are in: IMPERIAL [METRIC] scale: 3/4" = 1'-0"

**REVISION SCHEDULE**

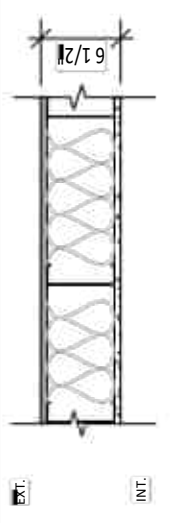

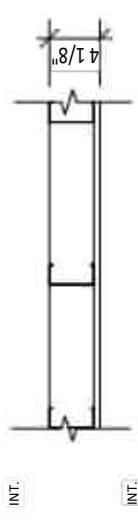
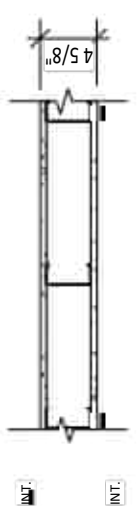
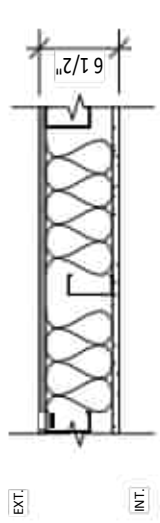
No.	Description	Date
A	ISSUE FOR REVIEW	2024-07-4

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Appendix D


WALL ASSEMBLY LEGEND - MODULE			R-VALUE
TYPE MARK	WALL ASSEMBLY PLAN VIEW	DESCRIPTION	
M1 NEXUS MODULE - EXTERIOR WALL		-1/2" PLYWOOD SHEATHING -5 1/2" STEEL STUD -R22 BAT INSULATION -1/2" TYPE X GWB (25 Min)	
M2 INTERIOR MODULE WALL - PERIMETER		-1/2" TYPE X GWB -3 5/8" STEEL STUD -1/2" TYPE X GWB	
M2a INTERIOR MODULE WALL (DRYWALL ON ONE SIDE)		-3 5/8" STEEL STUD -1/2" TYPE X GWB	
M3 INTERIOR MODULE WALL - INTERIOR		-1/2" TYPE X GWB -3 5/8" STEEL STUD -1/2" TYPE X GWB	
M4 SUITE PARTITION WALL		-1/2" TYPE X GWB -3 5/8" STEEL STUD STAGGERED -R22 BAT INSULATION -1/2" TYPE X GWB	


drawn by: MAE	chkd by: RAS	date: 2024-06-14	version: RAS	rev: A
Drawing No.:				

client name: ERIF SUSTAINABLE SOLUTIONS	drawing title: SCHEDULES - MODULE ASSEMBLIES
project name: BALD EAGLE 3	
description: 240185	
project no.:	
drawing status: PRELIMINARY	
all dimensions are in: IMPERIAL [METRIC]	
scale: 3/4" = 1'-0"	

Revision Schedule	
No.	Description
A	ISSUE FOR REVIEW
	Date: 2024-07-4

Engineers Seal:



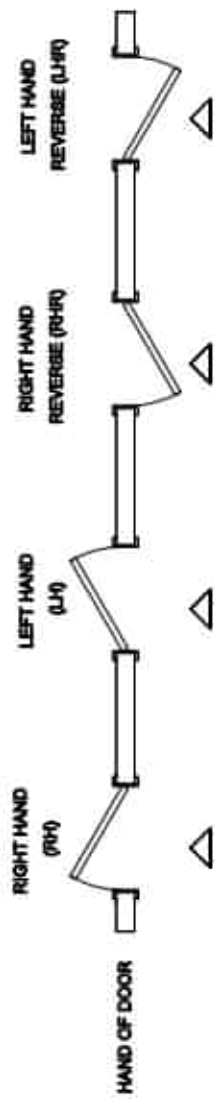
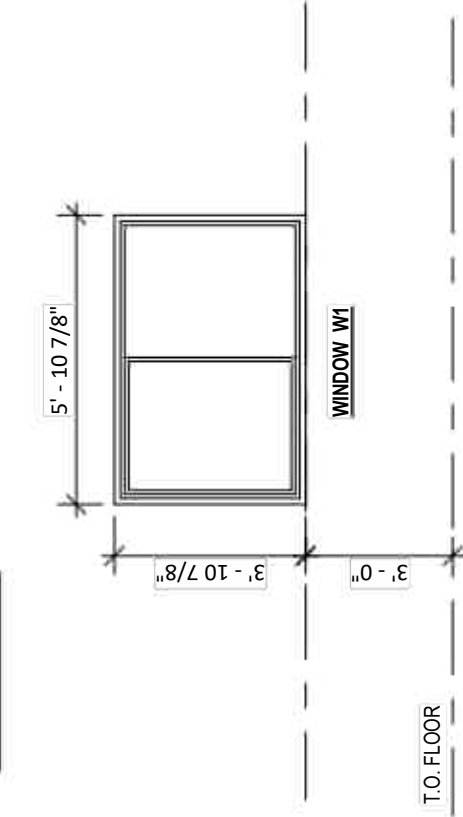


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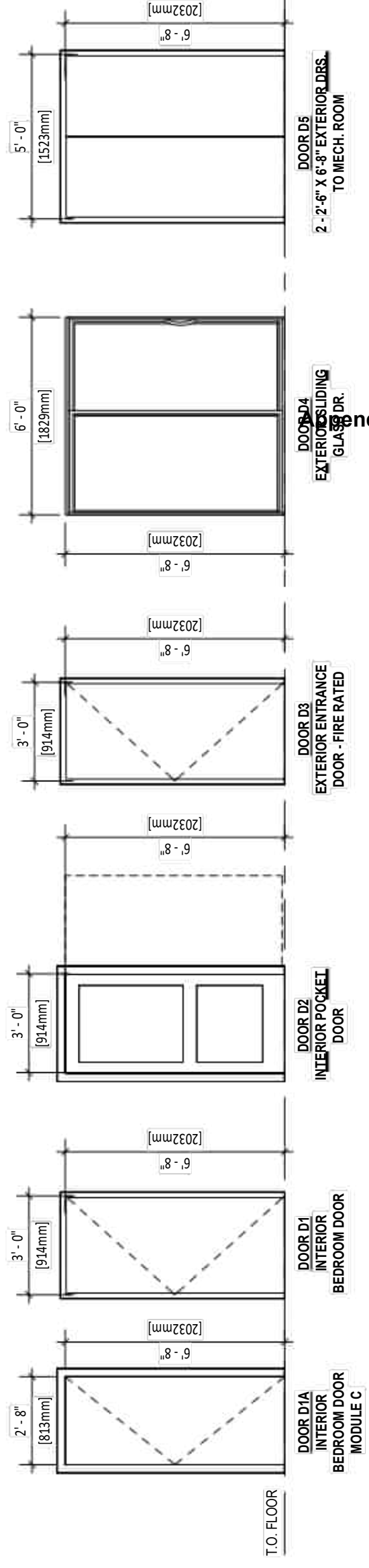
WINDOW SCHEDULE			
Type Mark	COUNT	WINDOW SIZE	
		WIDTH	HEIGHT
W1	16	5' - 10 13/16"	3' - 10 13/16"
Grand total: 16			

**WINDOW TYPES:**



DOOR SCHEDULE			
DOOR NUMBER	COUNT	DOOR SIZE	
		WIDTH	HEIGHT
D1	6	3' - 0"	6' - 8"
D1A	2	2' - 8"	6' - 8"
D2	11	3' - 0"	6' - 8"
D3	6	3' - 0"	6' - 8"
D4	3	6' - 0"	6' - 8"
D5	4	5' - 0"	6' - 8"
Grand total: 32			

**DOOR TYPES:**



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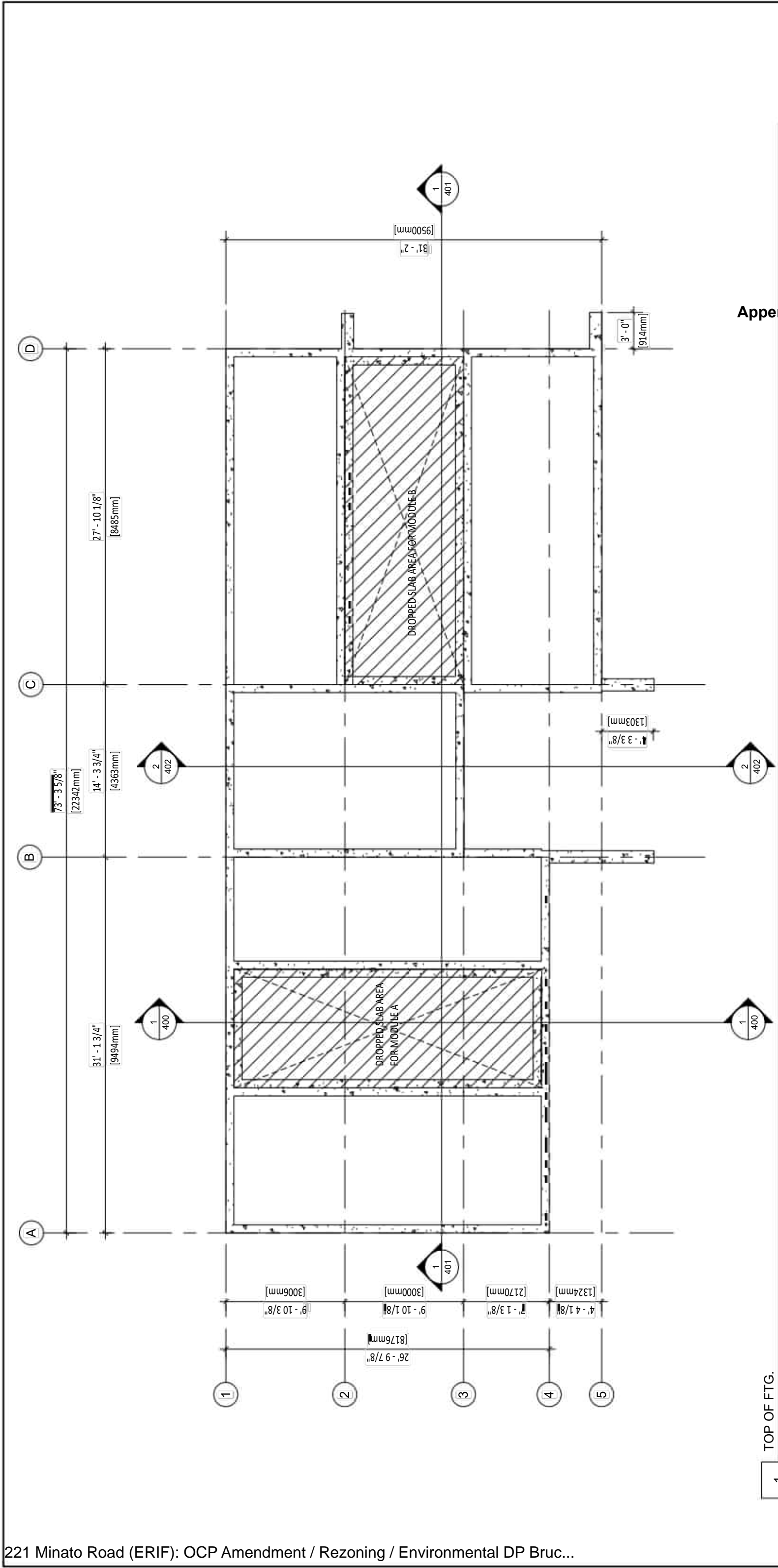
Revision Schedule	
No.	Date
A	2024-07-4
ISSUE FOR REVIEW	

client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	BALD EAGLE 3
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in: IMPERIAL [METRIC]	
scale: As indicated	

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	A
Drawing No.: 103	



drawing title: **DOOR SCHEDULE + WINDOW SCHEDULE**

ERIF SUSTAINABLE SOLUTIONS

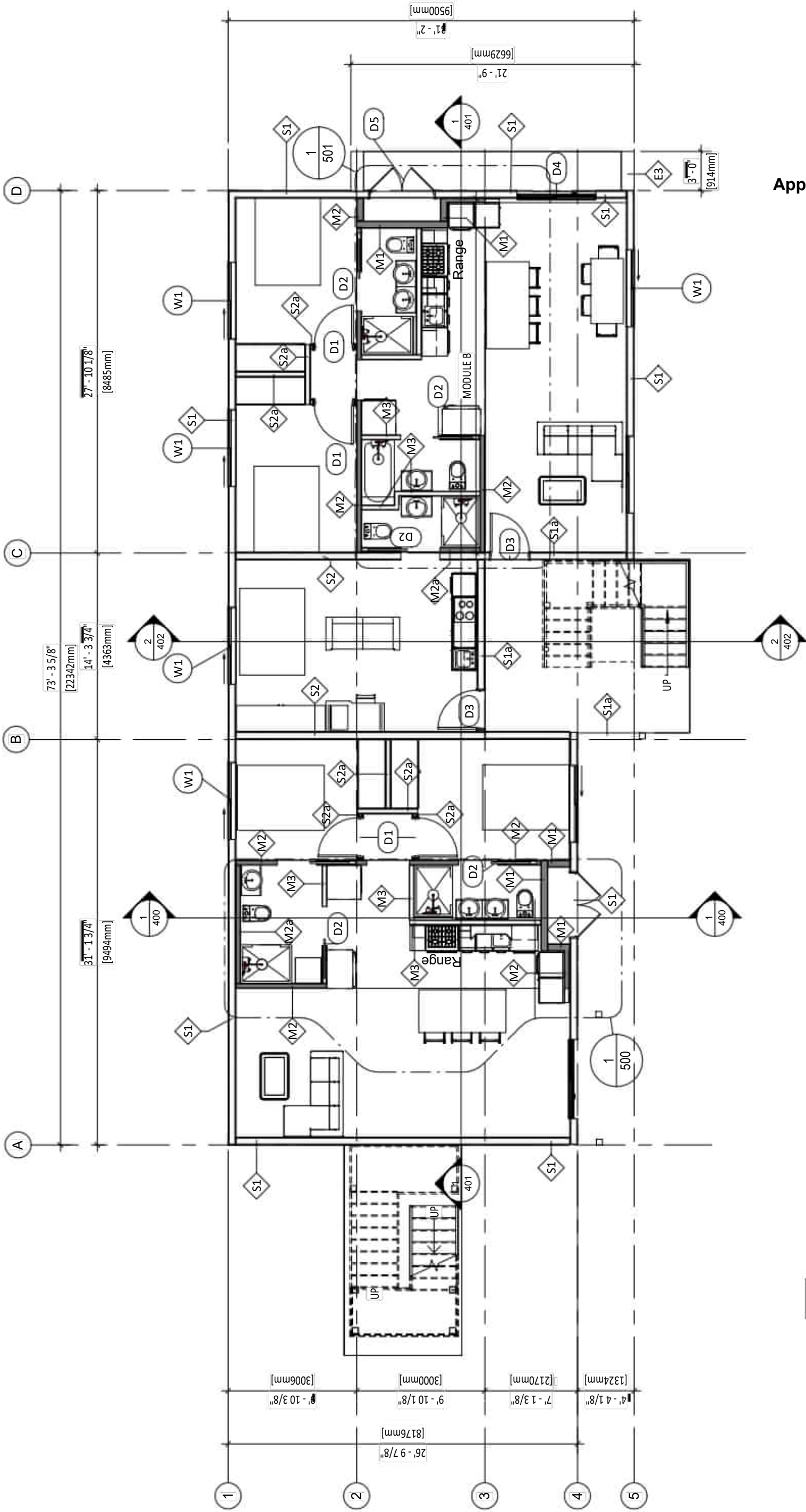


Appendix D

1 TOP OF FTG.  
1/8" = 1'-0"

 <p><b>STEENHOF Building Services Group</b> 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>				<p>Engineers Seal:</p>							
<p>client name: <b>ERIF SUSTAINABLE SOLUTIONS</b></p> <p>project name: BALD EAGLE 3</p> <p>description: 240185</p> <p>project no.: 240185</p> <p>drawing status: <b>PRELIMINARY</b></p>		<p>drawing title: <b>FOUNDATION PLAN</b></p>		<p>drawn by: MAE</p> <p>chkd by: RAS</p> <p>date: 2024-06-14</p> <p>version: RAS</p> <p>rev: A</p> <p>Drawing No.:</p>							
<p>Revision Schedule</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-07-4</td> </tr> </tbody> </table>		No.	Description	Date	A	ISSUE FOR REVIEW	2024-07-4	<p>all dimensions are in: IMPERIAL [METRIC]</p> <p>scale: 1/8" = 1'-0"</p>		<p>200</p>	
No.	Description	Date									
A	ISSUE FOR REVIEW	2024-07-4									







1 LEVEL 1 - T.O. FLOOR

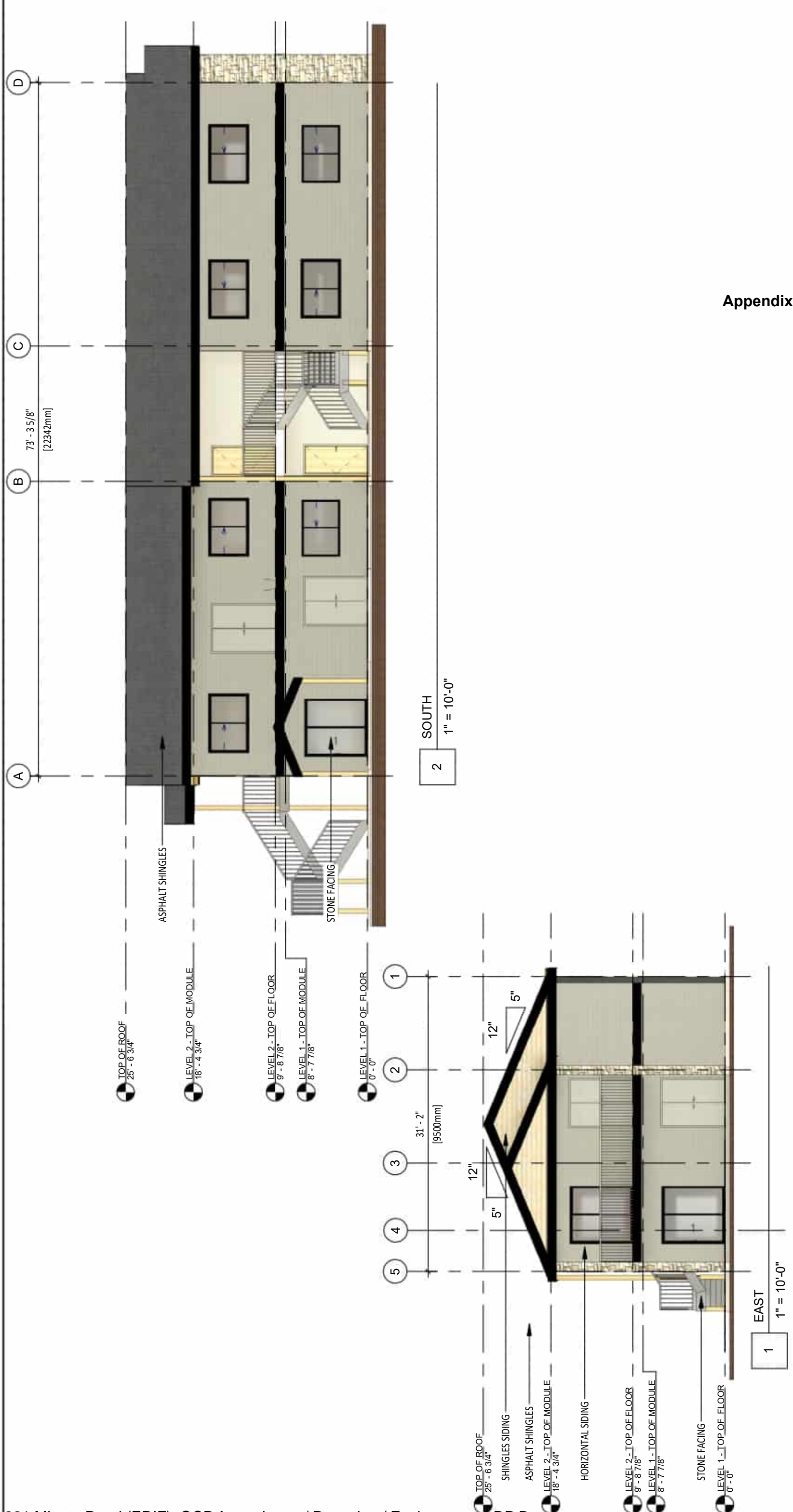
1/8" = 1'-0"

Appendix D

 <p>STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>				Engineers Seal:	
drawing title: <b>COMPLEX - FLOOR PLAN</b>		client name: <b>ERIF SUSTAINABLE SOLUTIONS</b>		drawn by: MAE	
- LEVEL 1		project name: BALD EAGLE 3		chkd by: RAS	
all dimensions are in: IMPERIAL [METRIC]		description:		date: 2024-06-14	
scale: 1/8" = 1'-0"		drawing status:		version: RAS	
Drawing No.:		project no.: 240185		rev: A	
Drawing No.:		drawing status:		Drawing No.:	







Appendix D

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	A
Drawing No.:	

client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	BALD EAGLE 3
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in: IMPERIAL [METRIC]	
scale: 1" = 10'-0"	

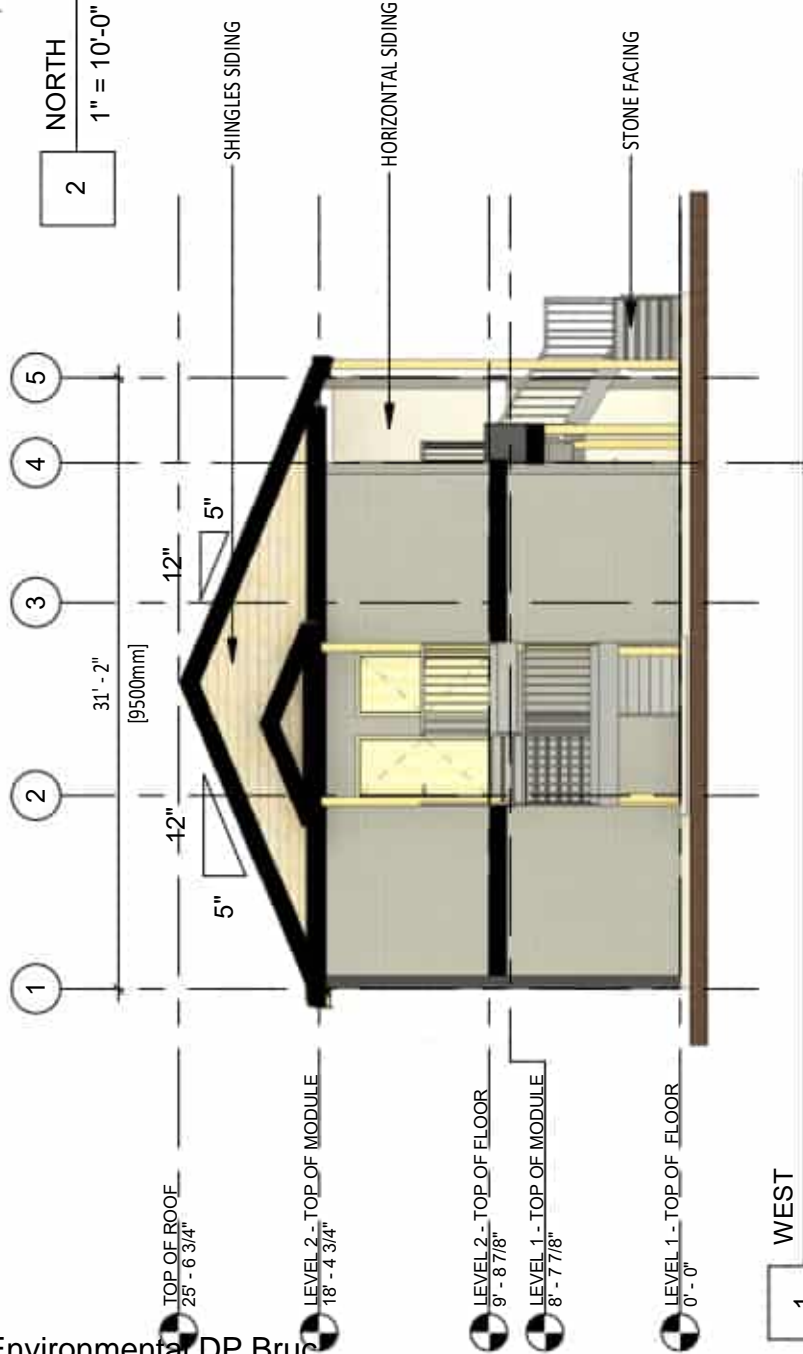
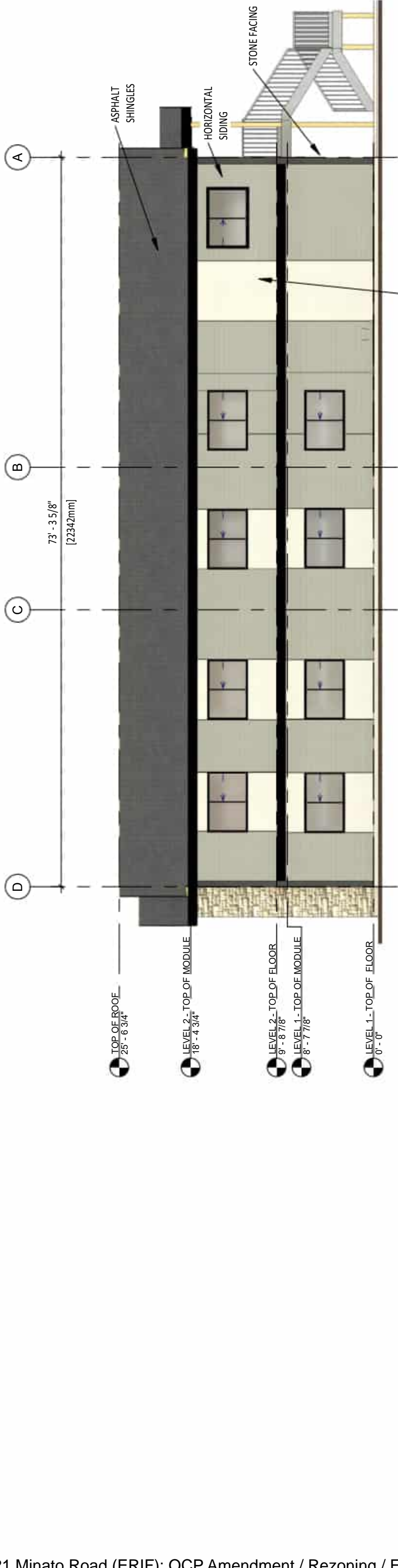
Revision Schedule	
No.	Date
A	2024-07-4
ISSUE FOR REVIEW	

Engineers Seal:

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client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	BALD EAGLE 3
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in: IMPERIAL [METRIC]	
scale: 1" = 10'-0"	



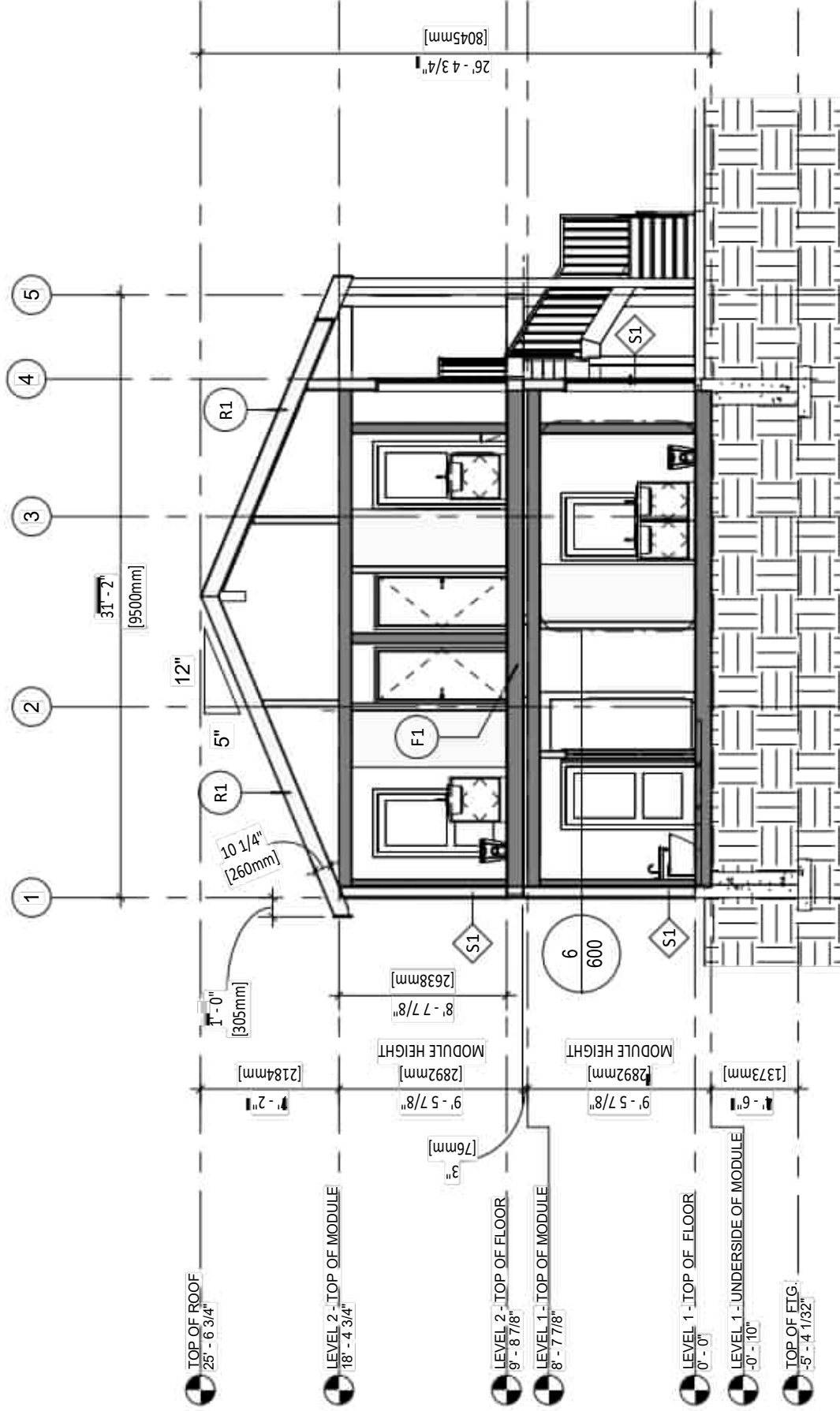
Appendix D

drawing title: <b>ELEVATIONS</b>		client name: <b>ERIF SUSTAINABLE SOLUTIONS</b>		drawn by: MAE	
project name: BALD EAGLE 3		description:		chkd by: RAS	
project no.: 240185		drawing status: <b>PRELIMINARY</b>		date: 2024-06-14	
drawing no.:		drawing status: <b>PRELIMINARY</b>		version: RAS	
drawing no.:		drawing status: <b>PRELIMINARY</b>		rev: A	
drawing no.:		drawing status: <b>PRELIMINARY</b>		Drawing No.:	
drawing no.:		drawing status: <b>PRELIMINARY</b>		all dimensions are in: IMPERIAL [METRIC]	
drawing no.:		drawing status: <b>PRELIMINARY</b>		scale: 1" = 10'-0"	

Engineers Seal:







SECTION 1  
1/8" = 1'-0"

Appendix D

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	A
Drawing No.:	

drawing title:	SECTION
client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	BALD EAGLE 3
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in:	IMPERIAL [METRIC]
scale:	1/8" = 1'-0"

Revision Schedule	
No.	Date
A	2024-07-4
ISSUE FOR REVIEW	

Engineers Seal:

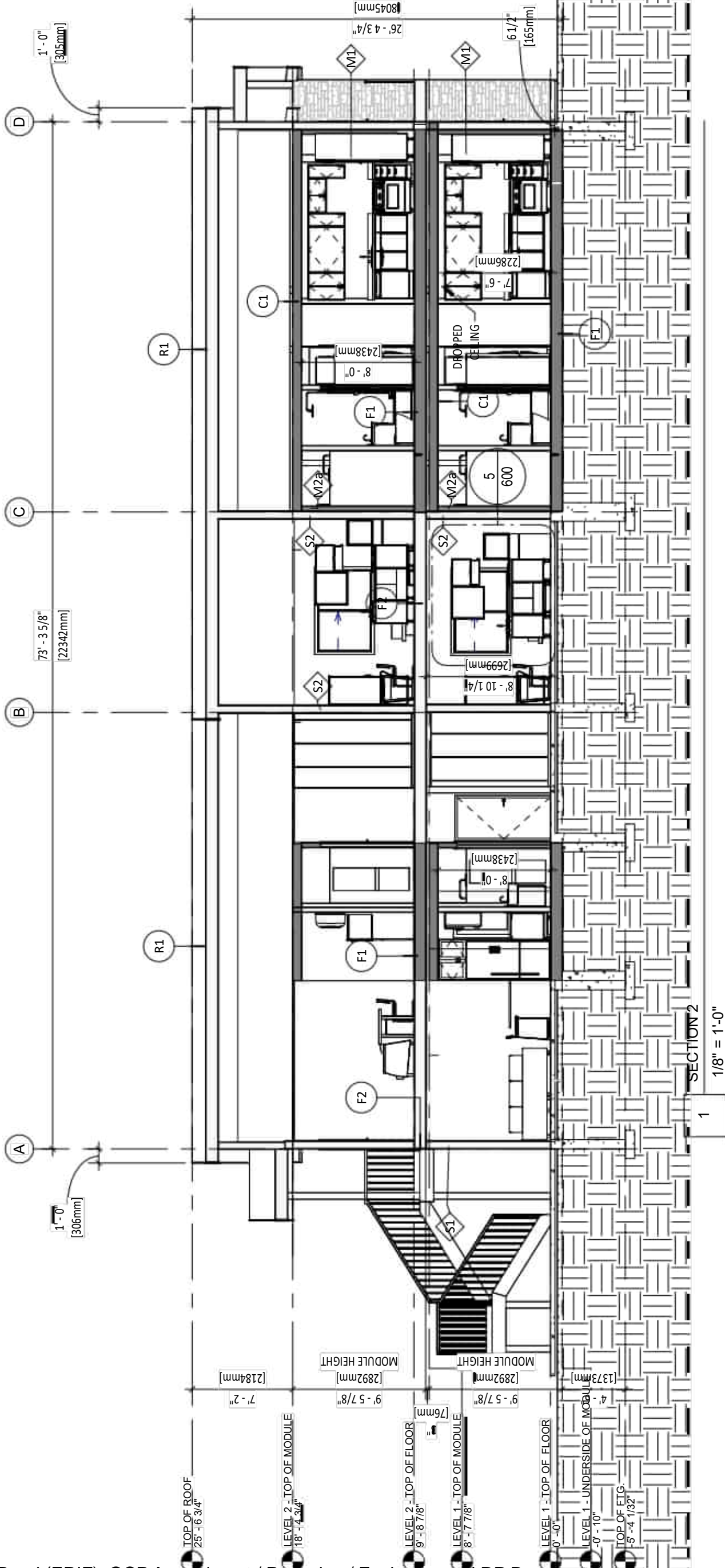
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Appendix D

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rev:	A
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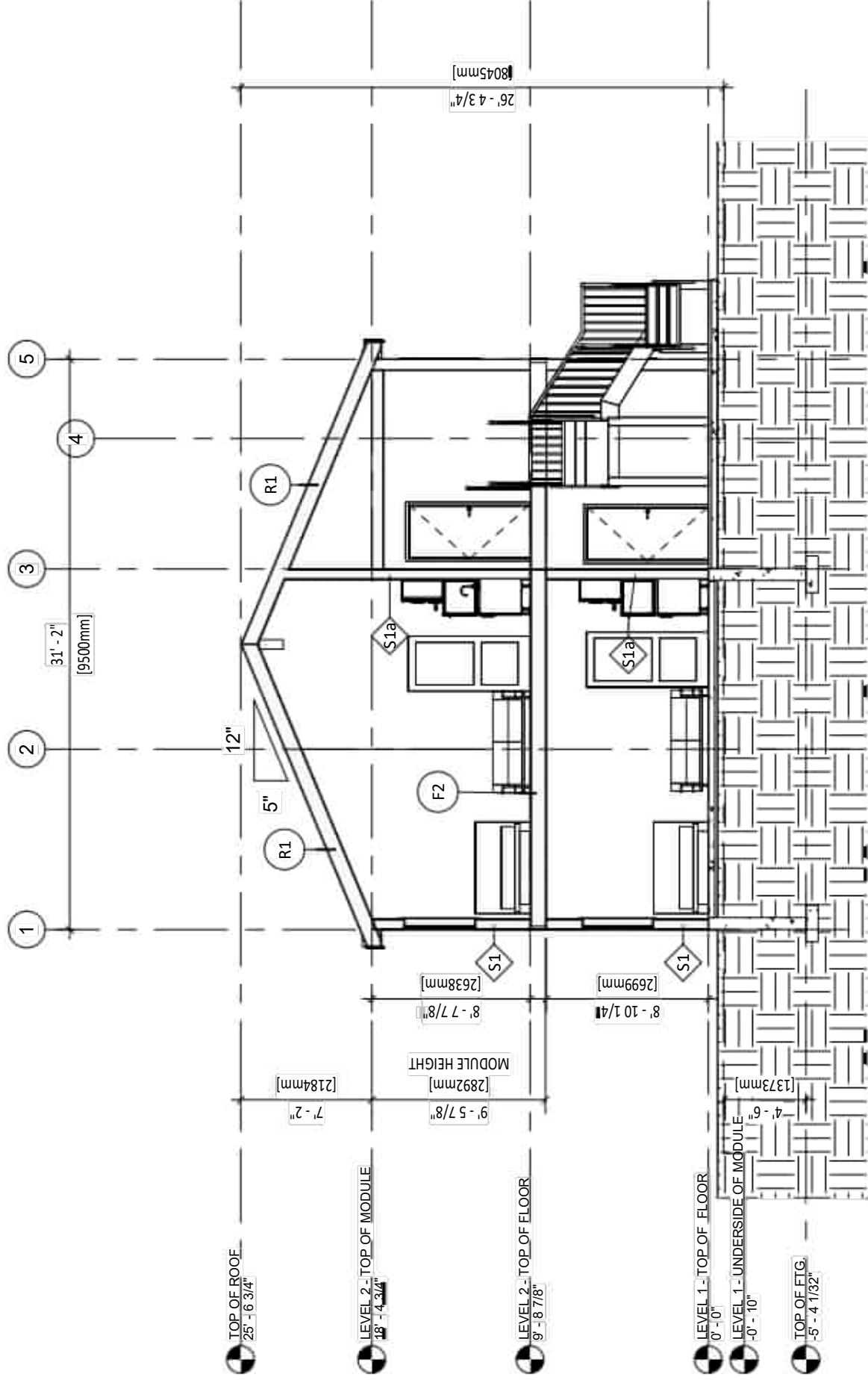
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client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	BALD EAGLE 3
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in:	IMPERIAL [METRIC]
scale:	1/8" = 1'-0"

Revision Schedule	
No.	Date
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SECTION 3  
1/8" = 1'-0"

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rev:	A
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drawing title:	SECTION
client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	BALD EAGLE 3
description:	2024-07-4
project no.:	240185
drawing status:	PRELIMINARY
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Revision Schedule	
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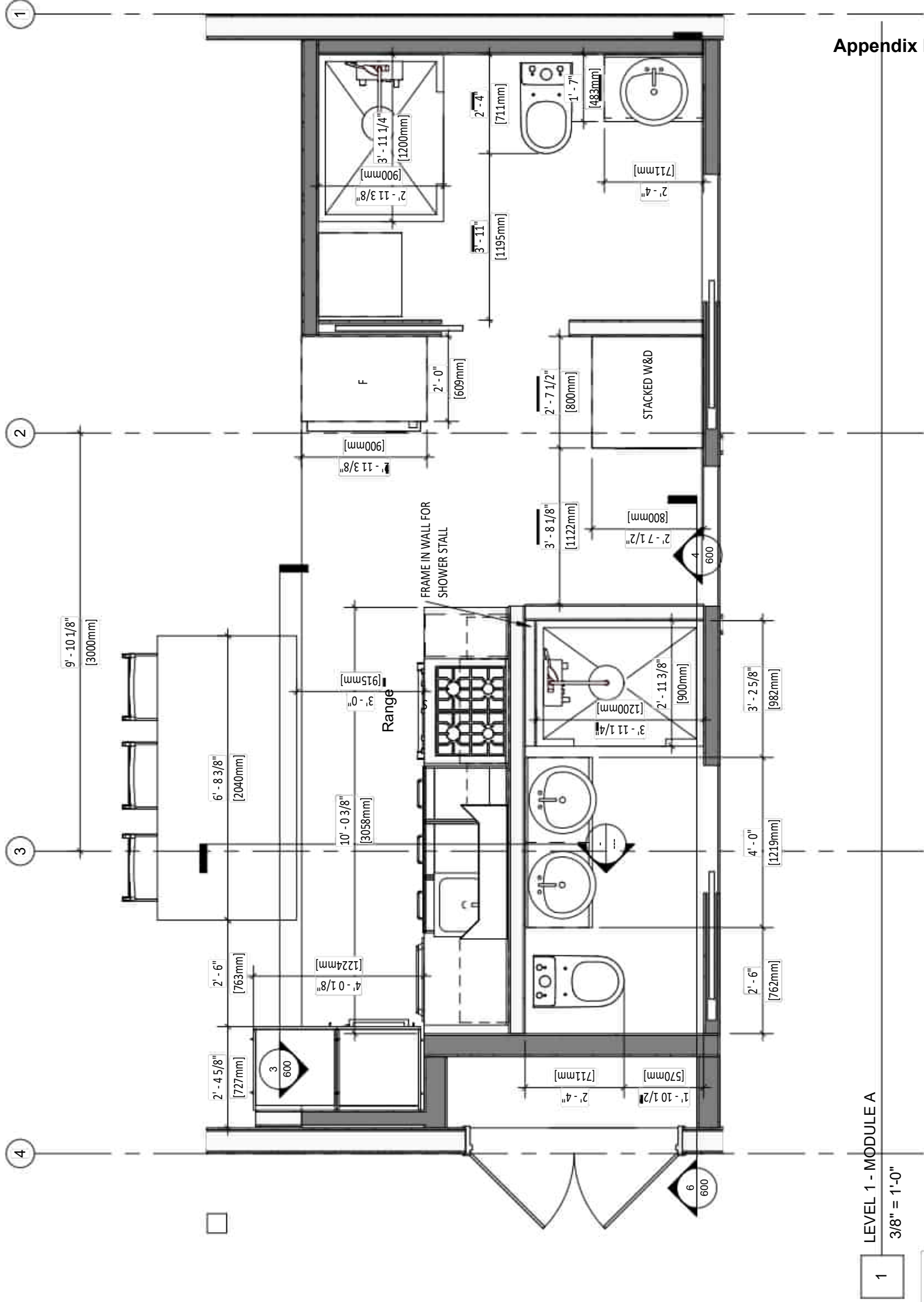
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221 Minato Road (ERIF): OCP Amendment / Rezoning / Environmental DP Bruc...



Appendix D

1 LEVEL 1 - MODULE A  
3/8" = 1'-0"

drawn by:	MAE
chkd by:	RAS
date:	2024-06-14
version:	RAS
rev:	A
Drawing No.:	

client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	BALD EAGLE 3
description:	
project no.:	240185
drawing status:	<b>PRELIMINARY</b>
all dimensions are in:	IMPERIAL [METRIC]
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No.	Date
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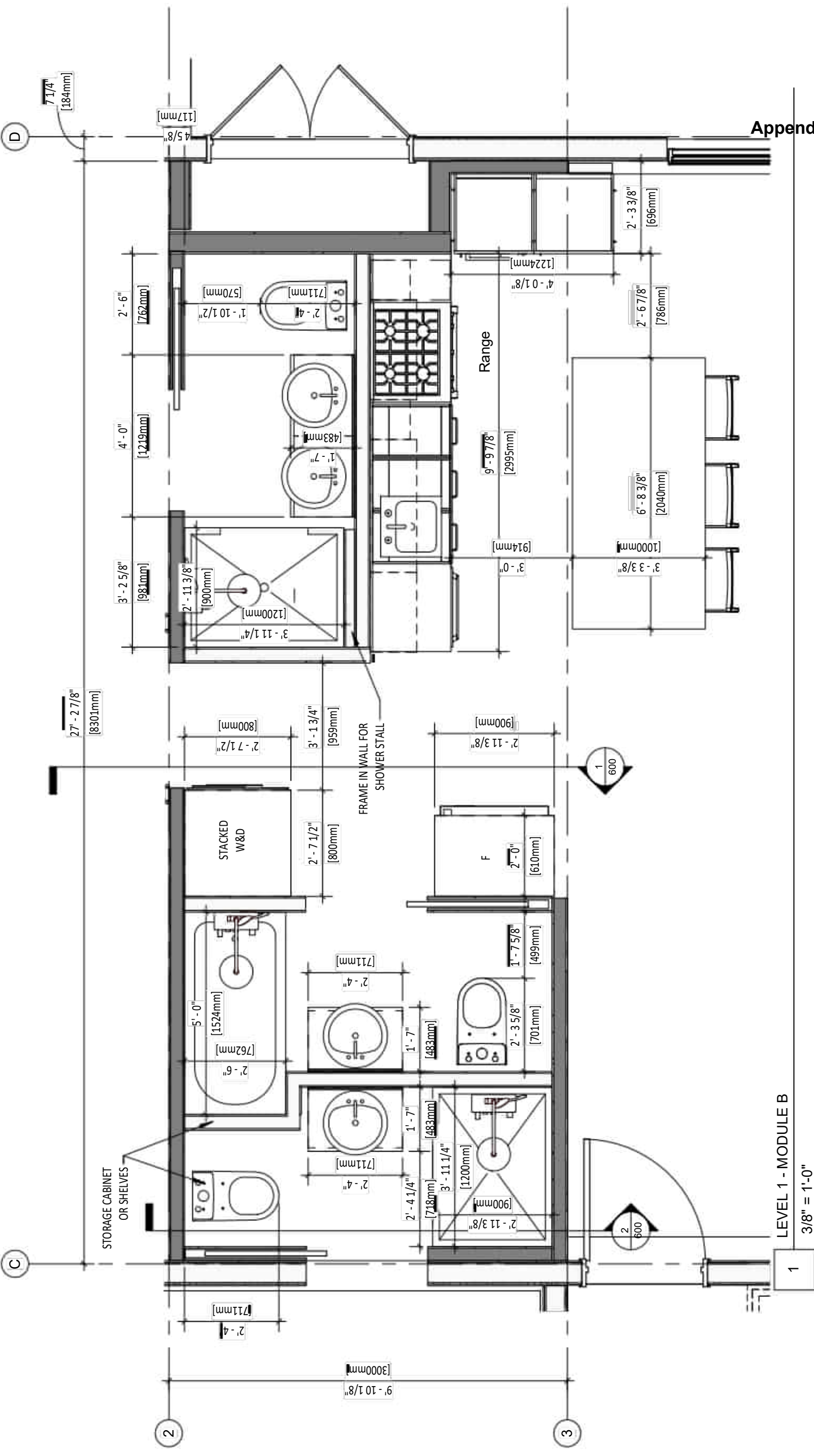


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Appendix D

LEVEL 1 - MODULE B  
3/8" = 1'-0"

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date:	2024-06-14
version:	RAS
rev:	A
Drawing No.:	

drawing title:	MODULE B ENLARGED
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client name:	ERIF SUSTAINABLE SOLUTIONS
project name:	BAIRD EAGLE 3
description:	
project no.:	240185
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all dimensions are in: IMPERIAL [METRIC]	
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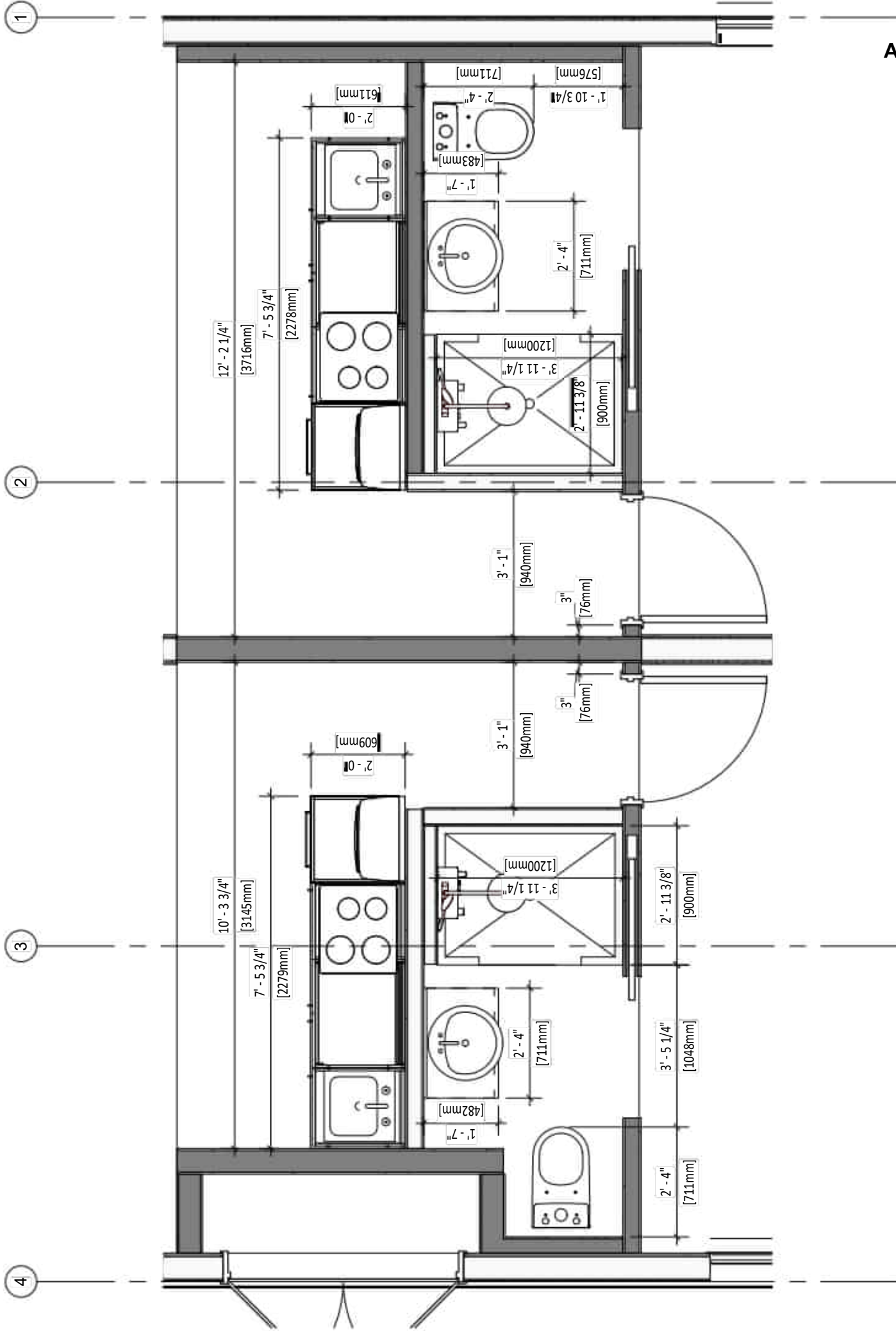
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Appendix D

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version:	RAS
rev:	A
Drawing No.:	

drawing title:  
**MODULE C ENLARGED**

client name:  
**ERIF SUSTAINABLE SOLUTIONS**

project name: BALD EAGLE 3

description: 240185

project no.: 240185

drawing status:  
**PRELIMINARY**

all dimensions are in: IMPERIAL [METRIC]  
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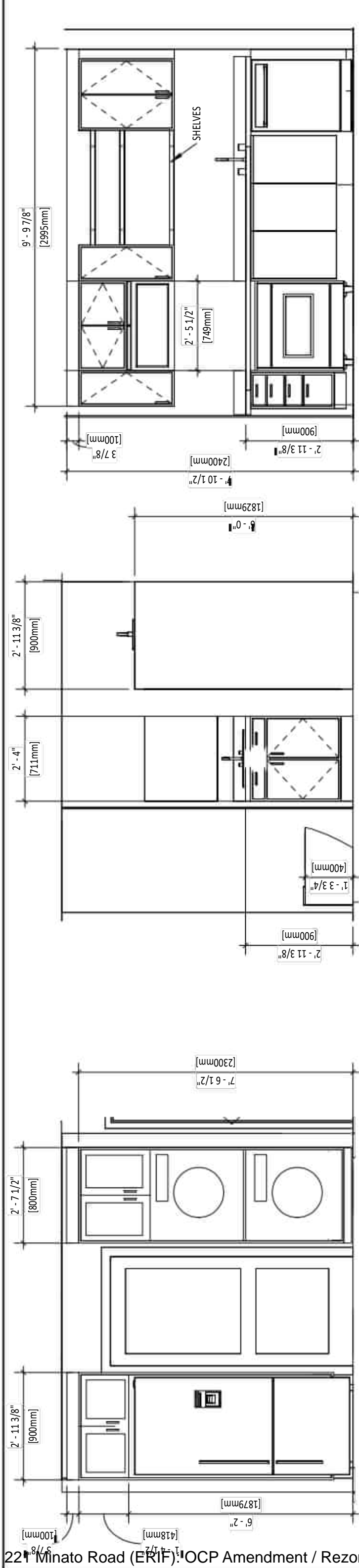
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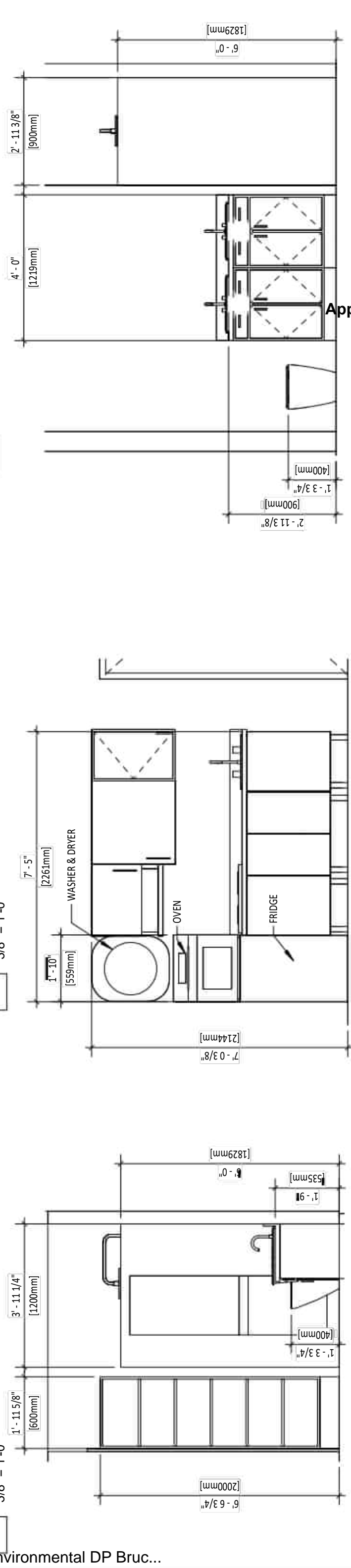
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1 WASH/DRYER/FRIDGE MILLWORK  
3/8" = 1'-0"

2 MODULE B BATHROOM  
3/8" = 1'-0"

3 KITCHEN MILLWORK  
3/8" = 1'-0"



4 MODULE A BATHROOM  
3/8" = 1'-0"

5 3RD SUITE KITCHEN  
3/8" = 1'-0"

6 MASTER BATHROOM  
3/8" = 1'-0"

Appendix D

<p>STEENHOF Building Services Group 40 Peter Street S. Orillia, ON L3V 5A9 Tel: 705-325-5400 Fax: 705-325-8400</p>		<p>ERIF Sustainable Solutions</p>		<p>client name: ERIF SUSTAINABLE SOLUTIONS project name: BALD EAGLE 3 description: 2024-07-4 project no.: 240185</p>		<p>drawing title: INTERIOR MILLWORK ELEVATIONS</p>		<p>drawn by: MAE chkd by: RAS date: 2024-06-14 version: RAS rev: A</p>							
<p>Engineers Seal:</p>		<p>Revision Schedule</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ISSUE FOR REVIEW</td> <td>2024-07-4</td> </tr> </tbody> </table>		No.	Description	Date	A	ISSUE FOR REVIEW	2024-07-4	<p>all dimensions are in: IMPERIAL [METRIC] scale: 3/8" = 1'-0"</p>		<p>Drawing No.:</p>		<p>600</p>	
No.	Description	Date													
A	ISSUE FOR REVIEW	2024-07-4													





Appendix D



WATERFRONT HOME





Appendix D





Appendix D



01 PERSPECTIVES  
A1

**ENTRY FOYER AREA 30m<sup>2</sup>**  
**GARAGE APACE 190m<sup>2</sup>**



**02** GROUND FLOOR PLAN  
**A1** 1:100

**LIVING AREA 150m<sup>2</sup>**  
**BALCONY 65m<sup>2</sup>**



**02 1st FLOOR PLAN**  
**A1 1:100**



**LIVING AREA 95m<sup>2</sup>**  
**BALCONY 15m<sup>2</sup>**



Appendix D

**03 2nd FLOOR PLAN**  
**A1** 1:100





**TOTAL LIVING AREA 275m<sup>2</sup>**  
**TOTAL BALCONY 80m<sup>2</sup>**  
**GARAGE AREA 190m<sup>2</sup>**

Appendix D

04 ROOF PLAN  
 A1 1:100



Appendix D

04 LEFT ELEVATION  
A1 1:100



Appendix D

04 FRONT ELEVATION

A1 1:100



Appendix D

04 REAR ELEVATION

A1 1:100





Appendix D

04 RIGHT ELEVATION

A1 1:100

# Tree Management Plan

**Prepared by:** AMP Timber Rigging LTD

David Gemmell  
 ISA Certified # PN-8827A  
 TRAQ-Qualified  
 Certified Danger Tree Assessor Id# P2527

**Prepared for:** District of Ucluelet

**Location:** 221 Minato rd, Ucluelet, BC

**Site Visit Date:** September 12, 13, 2024

**Scope of Assignment:**

The objective of the assignment is to identify hazard trees

**Methodology:**

- Trees at the site were visually examined by a certified ISA arborist and a certified wildlife tree assessor.
- The documentation process for identifying danger trees is set out in the BC Dangerous Tree Assessor's Workbook ([https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/wildlife-wildlife-habitat/wildlife-trees/wdtac\\_manual\\_wildfire\\_march2020\\_final.pdf](https://www2.gov.bc.ca/assets/gov/environment/plants-animals-and-ecosystems/wildlife-wildlife-habitat/wildlife-trees/wdtac_manual_wildfire_march2020_final.pdf)) and has been followed in this assessment.

**Summary of Site Assessment:**

The site has 30m setback from the foreshore that has been dedicated as park for the extension of the Wild Pacific Trail. A 10m riparian setback from a stream in the centre of the property is dedicated as park. A 10m wide land dedication along the west side of Minato Road property boundary is for a trail connecting and positioned outside of any development. The remaining 16 acres is buildable area where the vegetation would be removed.

The Sitka Spruce Survey was performed at the site and trees with DBH of at least 60cm were documented. The Archaeological Survey identified culturally modified tree, 2 areas of potential, and one traditional use site. Culturally Modified Tree (CMT) will be protected with a wooden railing to prevent pedestrian and construction risk.

The trees at the site were visually inspected by ISA Certified Arborist, David Gemmell and Certified Danger Tree Assessor, Joe Corlazzoli. The site shows signs of significant clearing of trees in the past leaving very few trees of greater diameter and good health to be retained. There was a high number of danger trees at the site most likely due to damage during clearing. The Sitka Spruce Survey identified 4 trees with DBH exceeding 60 cm within the building area. However, on close assessment the physical health and safety of the trees has been compromised due to the substantial damage to the structural root system. Those trees are recommended for removal.

Based on the site assessment we propose the following plan:

- Remove the trees within the building zone as since no trees were healthy enough to be preserved
- Remove trees within the parkland dedication and setbacks only if they are identified as hazard trees that pose risk to workers in the area.
- Prepare management plan for remaining trees within the setbacks

**Limitations and Disclosure:**

This Assessment is based on the circumstances and observations as they existed at the time of the site inspection of the Client's Property. The opinions in this Assessment are given based on observations made and using generally accepted methods and professional judgment; however, because trees and plants are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this Assessment are valid only as at the date any such testing, observations and analysis took place and no guarantee, warranty, representation or opinion is offered or made by AMP Timber Rigging LTD as to the length of the validity of the results, observations, recommendations and analysis contained within this Assessment. As a result the Client shall not rely upon this Assessment, save and except for representing the circumstances and observations, analysis and recommendations that were made as at the date of such inspections. Clients may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand, conditions are often hidden within trees or below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments like any medicine, cannot be guaranteed. Treatment, pruning and removal of trees may involve considerations beyond the scope of the arborist's services, such as property boundaries, property ownership, site lines, disputes between neighbours, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures. Trees can be managed, they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk is to eliminate all trees

If there are any questions or concerns regarding this tree report please contact Dave Gemmell at 250-668-9711

# CREUS Engineering Ltd

610 – EAST TOWER, 221 ESPLANADE WEST, N. VANCOUVER, BC V7M 3J3  
P: 604-987-9070 F: 604-987-9071 www.creus.ca

Civil Engineers & Project Managers

July 30, 2024

File No. 24600

ERIF  
Campbell River, BC  
V9W 5Y1

**Attention: Juliette Green**

## **221 Minato Rd Ucluelet - Sewage Management Proposal**

Creus Engineering was approached several years ago to provide input on proposed development at Minato Road in Ucluelet. This involved conceptual overview input on feasibility from a Civil Engineering perspective. One area that was identified that required resolution was the capacity of the overall Ucluelet sanitary system.

We understand that Economic Restoration Infrastructure Fund (ERIF) is proposing a new development comprising of single family and multi-family homes at 221 Minato Road in Ucluelet. Creus has visited this site in 2022 with the past project manager, Mr Chris Bozman, but this memorandum has been prepared on desktop review only. ERIF has sought input from Creus to provide a conceptual solution for sewage disposal. In particular identifying a concept for management of peak flows where they exceed system capacity, especially as an interim solution, if required, while the District of Ucluelet (DOU) undertakes planned infrastructure upgrades to their sanitary system.

### **1. About Creus**

CREUS is a partnership of Engineers, Project Managers and Technologists who strive to use the best technology, knowledge, experience and creativity to provide solutions to real world development issues. The core team has over 70 years of in-depth experience in the development industry holding senior positions in engineering, construction, general contracting, development, project management and positions in the regulatory industry. Our field of expertise is in designing systems for Stormwater Management, Sedimentation and Erosion Control as well as sewage solutions in challenging sites.

Kevin Healy has over 35 years of experience with senior positions in the construction, engineering, and the development industry. He has experienced land development from the perspective of a municipal employee, earthworks sub-contractor, general contractor, developer, and Consulting Engineer. As a Director of Creus, he leads the approvals and construction on projects with tough topography and tight environmental, political, and jurisdictional restrictions. An example project was in Cypress Mountain Resort where he managed the design, tendering, construction and commissioning of the water treatment, distribution and storage system and the sewage storage and pumping system jointly with Cypress and BC Parks. Some examples of Creus's past projects are in Appendix A.

### **2. Background**

Several reports have been prepared for 221 Minato Rd from 2022 to 2024 giving an overview of the sanitary infrastructure and demand generated by the proposed development of this site. ERIF advises these reports include:

- Water and Sanitary demands – Impact on Infrastructure (Link: <https://drive.google.com/file/d/110EzXl36LSvRhn87atWr-p0DbFY2TB6m/view?usp=sharing> ) completed by Koers & Assoc Engineering (Mitchell Brook, Chris Downey) in March 2024 (Koers 2024)



- Preliminary Servicing Review (Link: <https://drive.google.com/file/d/1bt6VFIQqYp1XF0BglAo-yhB48ANGGjRw/view?usp=sharing> ) completed by McGill and Associates (Brodie Couch, Mike Lange) in September 2023 (McGill 2023)
- Sanitary Model – (Link: <https://drive.google.com/file/d/113d71XucgoGH6EIHPZkii3U0ItShZybB/view?usp=sharing> ) completed by Koers & Assoc Engineering (Mitchell Brook) in March 2022 (Koers 2022)

The most recent report is an overview of demand for residential dwellings that was modelled for 221 Minato Rd by Koers and Associates in March 2024. The detailed modelling in this existing report has been reviewed by Creus to inform the proposed conceptual sewage concept.

ERIF’s proposed development is largely consistent with previous proposals for use of the site for residential dwellings, with the addition of a commercial precinct. Therefore, the modelling in Koer’s 2024 report has informed the development of the conceptual sewage response. Further modelling will need to be undertaken to refine the modelling for each stage for ERIFs Masterplan and as required in a later phase of detailed design. This will be required to define potential deficiencies in the system capacity and also identify periods where there is excess capacity on a diurnal and seasonal basis.

**3. Koers & Associates 2024 Report**

The most recent report on the existing sewage infrastructure was prepared by Koers & Assoc Engineering (Mitchell Brook, Chris Downey) entitled ‘Water and Sanitary Sewer Analysis – Impact on District Infrastructure’ (19 March 2024 – File Number 0361-242-01, Rev 1). The report was prepared for a previous District Group masterplan for the site, but the modelling of demand is equivalent for the purpose of evaluation conceptual solutions to that required for the updated Masterplan proposed by ERIF. A comparison of the two Masterplans is shown in Table 2 below. The Koer’s 2024 report was prepared to model water and sanitary demand for 300 residences and a population of 716 people. The ERIF Masterplan is based on 216 dwellings (made up of 205 apartments and 11 waterfront homes) and a commercial precinct.

Stage 1 demand modelling for the District Group plans allowed for 165 units and a population of 412 people. The ERIF proposed Masterplan is similar with Stage 1-4 including 160 units and 368 people. For the purposes of identifying concept solution this has been used as an equivalent base and Creus has used a preliminary review of this report to identify potential concept solutions.

**Table 2 – Comparison of dwellings in Koer’s 2024 modelling for District Group and Current ERIF Masterplan**

	<b>District Group (Koers 2024 Model)</b>	<b>Current ERIF Master Plan</b>
Initial Stage Dwellings	165 Units	160 Units
Initial Stage Population	412 people	363 people
Total Dwellings	300 Residences	216 Dwellings
Total Projected Population	716 people	Total population TBC

Koers 2024 Report projected sanitary sewer demand flow based on 300 units/ 716 population requiring 15.8L/s in dry weather peak flow ranging to 16.5L/s in wet weather peak flow. For the initial stage development of 165 units / 412 population sewage demand would require 9L/s in dry weather peak flow, ranging to 9.4L/s in wet weather peak flow. This is shown in the table below excerpted from Koer’s report.

**Image 2 – Koer’s modelling of population and demand flows**

**Table 7 – Development Design Flows**

No. of Dwelling Units	Service Population (i)	Dry Weather Design Peak Flow		Infiltration & Inflow Allowance		Wet Weather Design Peak Flow (L/s)
		Per Capita (ii) (L/s per capita)	Total (L/s)	Per Area (iii) (L/s per ha)	Total (iv) (L/s)	
100	250	0.022	5.5	0.13	0.3	5.8
165	412	0.022	9.0	0.13	0.4	9.4
300	716	0.022	15.8	0.13	0.7	16.5

**Notes:**

- (1) See Table 2.
- (2) District of Ucluelet Engineering Design Standard and Specification, Schedule B, 1.1 Sewage Quantity (1.91 m<sup>3</sup>/day per capita for design population range of 500 – 1,000).
- (3) District of Ucluelet Engineering Design Standard and Specification, Schedule B, 1.1 Sewage Quantity (11.2 m<sup>3</sup>/day per ha).
- (4) Based on an estimated buildable site area of approximately 5.7 ha. And assumed area of 1.9 ha for 100 units and 3.1 ha for 165 units.

The Koer's 2024 Report sets out existing sewer system capacity, then assesses peak flows to four key downstream pump stations: Peninsula Rd Pump Station, Forbes Rd Pump Station, Big Beach Pump Station and Helen Rd Pump Station. The report confirms that upgrade of existing infrastructure is required to manage the projected peak flow from the proposed development of 221 Minato Rd. Koers 2024 reports concludes that a complete development of 300 units/ 716 people would require upgrade of pumps to higher flow rate units in some pump stations.

#### 4. Proposed Infrastructure Upgrade by the District of Ucluelet

ERIF has advised that the District of Ucluelet has a budget and rollout plan for the upgrade of their existing sanitary infrastructure. Koer's 2024 Report also describes some of the proposed upgrades in the Ucluelet Sanitary Master Plan including Helen Rd Pump Station upgrades. ERIF advised their June 2024 discussions with DOU about the infrastructure capacity indicate that the planned upgrade works will enable the infrastructure to meet the demands required for the development.

Therefore, the intent of the concept in this memorandum is to recommend an interim solution that can ensure that sewage from the proposed development at 221 Minato Road does not exceed the System capacity. The concept is to retain release sewage flows based on system capacity and retain partial flows on site when the municipal system is at capacity and released at rates that the system can accommodate. This would result in partial releases throughout the day based on preliminary review of the Koers report with release of stored sewage in time periods of off-peak flow when the system has capacity. The Koers report does not identify diurnal deficiencies and capacity but comments on daily flows which is standard procedure. The daily flow regime is assumed based on general operating conditions of standard municipal systems. These windows of capacity in the system would enable the release of flow to be controlled to reduce the demand on these pump stations in peak demand periods. The proposed model could respond to the current capacity limitations of the DOU infrastructure and would enable the system to adapt to the updated capacity of each pump station as upgrades are rolled out by the municipality over time.

#### 5. Proposed Sewage Concept

ERIF has advised that DOU has plans for the rollout of infrastructure upgrades and intend for the development to connect to this system. On initial review of the 2024 report, the upgrades would address the Minato developments requirements. ERIF's indicated an objective to address potential timing conflicts in the infrastructure upgrade schedule as it relates to development. The concept would need to be sized and coordinated based on contracted vs planned upgrades. The ERIF objectives were identified as:

- Provide an interim solution to ensure early-stage development can commence if there is any delay to DOU infrastructure upgrades.
- Ensure the system is responsive to the increase in capacity of the DOU infrastructure over time as the proposed upgrades are rolled out;

- To potentially be maintained as an on-site 'back up' system in event of works on the sewer line or extreme demand on local infrastructure capacity, such as high rainfall storm event during the height of tourist season.
- The proposed concept could also serve as a backup sewage management system in the event of peak demand on municipality infrastructure such as wet weather and peak tourist season.

The proposed conceptual sewage design is premised on the expectation that the sewage generated at 221 Minato Road will be feeding into the DOU infrastructure, but will typically be managed with variable release based on available system capacity. Retained sewage would be released based on feedback from the system. Initial overview of the capacity and flows indicated

1. **On Site Storage:** An on-site storage system with capacity to manage deficiencies in capacity for a projected peak days of sewage demand. Detailed flow data from the pump stations would be required to model the diurnal daily limitation and periods of capacity. The size of the collection system and type of users and infiltration and inflow characteristics of the system will determine the diurnal flow pattern. Given the system configuration it is expected that the system would run at full capacity for 2-4 hours two to three times a day. There would generally be significant capacity in pipes and pump station during the night time hours but also during periods during the day. As such storage would not represent a full day average system deficiency storage, but would likely be 20-40% of that amount. This can not be determined at this time without better understanding of the flow data, actual pump runs background flow data. It would also depend on the phase in process of development which is expected to be based on expected infrastructure upgrades. From very preliminary review a starting point might be a 20,000 gallon tank which would be designed to double in height if the development pace vs infrastructure upgrade schedule demands. The parameters for required storage would need to be resolved with the DOU engineering and operational staff, their consultants and the development team to resolve a reasonable level of redundancy that the variable release system would provide. This would need to be reassessed at each level of development. The tank would likely be an above grade glass fused to steel, though epoxy coated steel may be applicable if the service life is known to be short. The tank would be equipped with a variable speed pump, agitation system and odour control system. The system would be designed for low impact with minimal odour concerns due to being a small pump, minimal treatment on site and a short term hold of sewage for the period to off-peak release.
2. **Sewage release:** Release of sewage to the municipality sanitary infrastructure will be variable based on capacities in the system. The preliminary review of the Koers report appears to support in early periods of development that some flow would be allowed at most times. Where inflow exceeds the available outflow it would be detained. During windows of capacity in the system the variable pump would increase flow. In off-peak times significant outflow can be accommodated. There is generally significant capacity available during night periods. Capacity of each element of the system would have to be evaluated to determine the storage required however it is expected. The available release would be updated as downstream infrastructure is updated.
3. **Monitoring Capacity:** To ensure the system is responsive to the capacity of municipality infrastructure, information would have to be provided from the information control system in the existing sanitary system. Generally, this information is obtained using a SCADA system. Koers has indicated some deficiencies in the control and reporting system now form some of the system elements. That system information would be required to actually size and model the variable release concept. The SCADA would typically communicate includes sensors of levels in the wet well, pressure in system, which pumps are functioning and the current flow rates. Operator input can refine the 'comfort zone' for each pump station such as typical demand, flow rate based on their knowledge of the age of the system and other data.
4. **Operation Considerations:** The variable release is seeking to optimize the use of the downstream system. This results in more run hours on the pump, but less overdemand

situations. All systems require down periods for maintenance and repair. These are sometimes scheduled during the current off-peak periods. The storage capacity can be managed to actually assist in flow management to allow for those works.

The concept combines these components of on-site storage, off-peak flow and utilizing the collected data supplied by the municipality's monitoring of their sanitary infrastructure. This model enables the proposed system at 221 Minato Road to be responsive to ensure flow rate and timing is released according to the capacity of the DOU sanitary system, even as it changes over time with planned upgrades.

This concept proposal is based on a similar system used successfully in the Cypress Mountain Ski Resort in District of West Vancouver, which provided a reliable sewage solution for over ten years, while the municipality infrastructure was upgraded utilizing a similar variable release.

## 6. Conclusions

This memorandum recommends working together to detail a variable release concept with storage that can be increased over time to bridge any peak flow constraints of the system. This could start with upgrades to the existing controls systems and say a 20,000 gallons of storage where release would be tied to capacities in the system and reflect upgrades in the system as they are brought on line. The variable release would be part of the overall system upgrade process and would be reanalyzed at each stage of development. The demand flow has been used from initial review of Koer's 2024 Report, and consideration of the proposed dwellings in ERIF's 2021 Masterplan. The proposed population and residences in Stages 1-4 for ERIF's Masterplan are similar to the flow demand modelled by Koer's for the District Group Masterplan in March 2024 to provide a reasonable starting point to this discussion.

Additional modelling and flow measurement would need to be undertaken to confirm demands, diurnal capacity in the system and level of confidence in scheduling of upgrades. This concept is proposed in parallel to the rollout of infrastructure upgrade planned by the District of Ucluelet. Creus recommends further discussion with DOU and their consultant to formulate a plan to move forward with additional flow monitoring and modelling to determine the extents of the system that would be necessary to provide a reasonable level of redundancy to manage peak flow and over capacity periods in the system.

If you have further questions in this regard, please do not hesitate to contact me

Respectfully yours,

**CREUS Engineering Ltd.**

Kevin Healy, P.Eng.  
Director  
Permit to Practice 1001543



**Appendix A – Creus Past Projects**

**Harbourside Waterfront, North Vancouver, BC**Client: **Concert Properties and Knightsbridge Properties**

**Description:** Concert Properties and Knightsbridge Properties are proposing to redevelop the Harbourside waterfront lands in North Vancouver. The proposed development generally consists of 13 residential buildings, 1 rental housing building, 3 office buildings, 1 hotel building, and ground floor commercial components in 5 of the buildings. The project will involve a major redevelopment of the site including re-grading of the existing site roads. The total site area is approximately 4.9ha.



**CREUS Member Roles:** CREUS is responsible for all the site servicing, roadworks, erosion and sediment control design and monitoring, and Stormwater Management elements of the project.

**Categories:** Mixed-Use Development, Stormwater, Waterfront

**Dollarton Highway, Dollarton Highway, North Vancouver, BC**Client: **Noble Holdings**

**Description:** a 5-acre waterfront residential development on a hillside neighborhood. This project has involved the design, preliminary approvals and detailed design for the 7-lot development.

**CREUS Member Roles:** CREUS members were the original and continue to be the Engineer of record for all the detailed Civil, sediment and erosion control and Stormwater Management elements of the project and managed the tender and construction of the works and provided inspections on all civil works. CREUS was responsible for the seawall, the concrete pier and private marina, stormwater outfall, as well as foreshore protection. Creus worked with the environmental consultant to mitigate impacts on contaminated sites and avoid requirements for removals of contaminated sediments from historical marine industrial activities on the site.



**Categories:** Residential, Marine / Environmental

**Furry Creek, SLRD, BC**Client: **Tanac Land Developments and Park Lane Homes**

**Description:** 1,000-acre mixed use waterfront developments on a mountainside with numerous creeks, highway, hydro, rail issues. This project has involved the design of civil services, roads, pump stations, reservoirs, golfcourse integration, golf course renovations and improvements, approvals and site preparation construction and inspection.



**CREUS Member Roles:** A CREUS member was the Development Manager during the early portions of the development, directly managing the design, approvals, tendering construction management, subdivision and operational agreements for roads and services, highway interchange, hydro substation upgrade, fibre optic servicing, water system implementation, sewage treatment plant, sewage outfall, award winning creek and foreshore restoration works, marketing sales centre, show home, member of Advisory Design Panel, subdivision of more than half of the current subdivisions, completion of the golf course and renovations. CREUS members were also involved as Engineer of record for the detailed Civil design, sediment and erosion control and Stormwater Management elements of the last three phases of development



**Categories:** Project Management, Integrated Mixed Use Development Projects, Highway Works



# MEMORANDUM

Date: September 18, 2024  
 To: Juliette Green, ERIF  
 From: MJ Oh, Transportation Technologist and Andy Kading, P.Eng., WATT Consulting Group  
 Our File No: 3839.B01  
 Subject: 221 Minato Road TIA Update – Phase 1 Analysis

## 1.0 INTRODUCTION

WATT Consulting Group was retained by ERIF to conduct a traffic analysis for a newly changed development plan at 221 Minato Road in Ucluelet, BC. The ERIF’s proposed development is 250 residential units plus commercial spaces (variety store / general office). This memo is focused on the Phase 1 of the development which includes 192 residential units and the commercial space. See **Figure 1** for the proposed concept site plan.

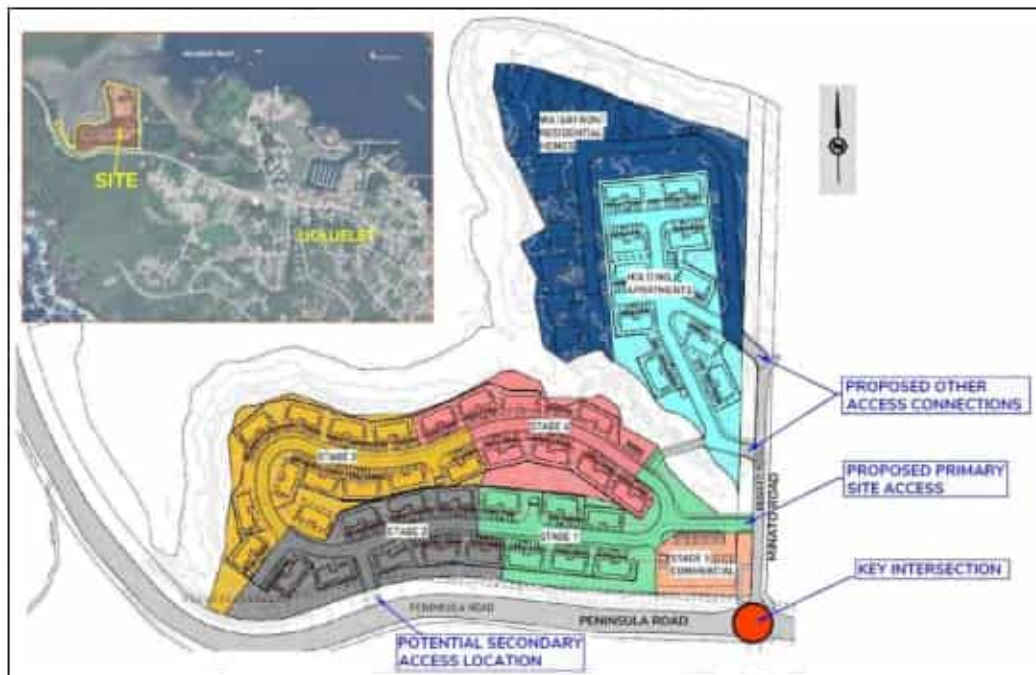


Figure 1: Concept Site Plan



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This study reviews traffic conditions at the key intersection of Peninsula Road / Minato Road, assesses the need for any mitigation measures, and reviews the opening day and 10-year horizon traffic operations.

2.0 POST DEVELOPMENT ANALYSIS

2.1 Proposed Land Use

The proposed residential development (at full buildout) consists of 250 residential units plus 10,592 sq.ft of commercial space (variety store / general office). Phase 1 comprises development Stages A-E, which only excludes the 58 Market Apartments in Lot 4. **Table 1** summarizes the proposed land use breakdown for Phase 1.

Table 1: Proposed Land Use Breakdown for Phase 1 (Stage A-E)

Proposed Land Use Type	Density <sup>[1]</sup>
High Density Residential	75 Multi-family Units (Low-Rise)
Non-Profit Residential	107 Multi-family Units (Low-Rise)
Single-Family Residential	10 Waterfront Single-family Homes
<b>Total</b>	<b>192 Dwelling Units</b>
Retail - Variety Store	5,296 sq.ft (Ground Floor)
Office - General Office Building	5,296 sq.ft (Second Floor)

Notes:

1. Based on the proposed ERIF’s Master Plan (September 2024)
2. Excludes 58 market rental apartments in final Phase 2

2.2 Site Access

For Phase 1, a primary site access and other access connections will be provided only from Minato Road. The proposed primary site access (see **Figure 1**) is located on Minato Road 60m north of Peninsula Road. For Phase 1, all site trips use only the Minato Road / Peninsula Road intersection as an access point. A potential secondary site access is

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considered on Peninsula Road for the long term (Phase 2). This second access is not studied here but is discussed below.

2.3 Trip Generation

The proposed development (Phase 1) includes a total of 182 multi-family units (Low-Rise), 10 single-family homes, a variety store of maximum 5,296 sq.ft, and a general office building of maximum 5,296 sq.ft. Vehicular trip generation rates for the proposed development are based on the ITE Trip Generation Manual (11th Edition). The trip generation forecast for the site is provided in Table 2. The proposed development is forecast to generate 145 two-way trips during the adjacent street’s weekday PM peak hour.

Table 2: Peak Hour Trip Generation

ITE Land Use		Weekday PM			Generated Trips		
Code	Description	Rate	In	Out	Total	In	Out
220	Multi-Family Housing (Low-Rise) 182 Units	0.51	63%	37%	93	59	34
210	Single-Family Housing 10 Units	0.94	63%	37%	9	6	3
814	Variety Store 5,296 sq.ft	6.7/1000 sq.ft	51%	49%	35	18	17
710	General Office Building 5,296 sq.ft	1.44/1000 sq.ft	17%	83%	8	1	7
<b>Total</b>					<b>145</b>	<b>84</b>	<b>61</b>

2.4 Trip Assignment

The trips generated by the proposed development were distributed and assigned based on existing traffic patterns on Peninsula Road, and key destinations / origins for traffic in

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the area. Peninsula Road runs east-west at Minato Road. To the west is Tofino or Port Alberni.

The following is the site's trip distribution for the PM peak hour:

- 60% of site trips total are from / to Peninsula Road West
- 40% of site trips total are from / to Peninsula Road East (Ucluelet)

The resulting trip assignment for the PM peak hour is shown in **Figure 2**.

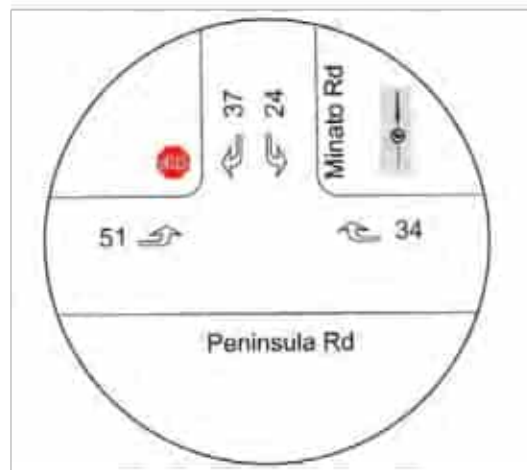


Figure 2: Trip Assignment (PM Peak Hour)

## 2.5 Opening Day Post Development Analysis Result

For the opening day analysis, background through volumes on Peninsula Road are based on traffic counts taken from the Ministry of Transportation and Infrastructure (MoTI) count station (P-13-8EW) located at the Highway 4 and Tofino-Ucluelet Highway intersection.

To test a high-use summer-traffic scenario, summer peak hour volumes (measured in July/August 2018/2019) before the pandemic period were used. The MoTI's count site (0.5 km south of Route 4) is located on Ucluelet Road 5.5 km north of Minato Road.

The opening day post development conditions were analyzed by adding the development trips to the background traffic volumes. See **Figure 3** for opening day post development volumes during the PM peak hour.

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No capacity issues were found based on the post-development (Phase 1) Synchro analysis results at the study intersection of Peninsula Road / Minato Road. All movements are expected to operate at LOS A/B for all movements during the Opening Day PM peak hour with the development (Phase 1). The eastbound left 95th percentile queue length was estimated at 11m on Peninsula Road at Minato Road. For potential safety improvements at the intersection, the need for turn lanes is discussed in **Section 3.0**.

See for **Table 3** for opening day post development conditions for the study intersection.

Table 3: Opening Day Intersection Operations with Phase 1

Movement	v/c Ratio	LOS	Delay (s)	95% Queue (m)
Peninsula Rd / Minato Rd				
EBLT	0.05	A	7.7	11.0
WBTR	-	A	0	-
SBLR	0.13	B	11.8	15.4

Notes: Estimated 95<sup>th</sup> percentile queue lengths based on SimTraffic results

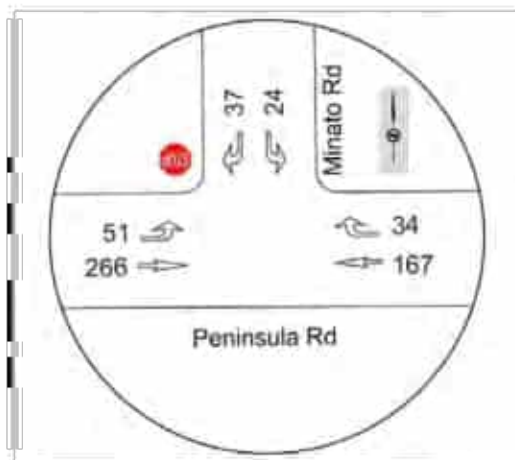


Figure 3: Post Development PM Peak Hour Volumes

2.6 10-Year Horizon Post Development Analysis Result

For the 10-Year Horizon analysis, a 3.5% annual growth rate was used to obtain future background through-volumes on Peninsula Road from the opening day background



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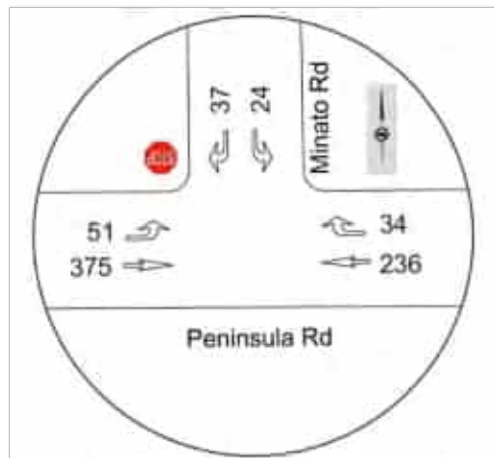
scenario. A 3.5% annual average growth rate on Ucluelet Road was estimated based on AADT data between 2010 and 2019 from the MoTI's count data. See for **Figure 4** for 10-year horizon post development volumes.

Analysis revealed no capacity issues at the study intersection in the long term. The intersection of Peninsula Road / Minato Road will continue to operate at LOS A/B for all movements during the 10-year horizon post development PM peak hour. No queuing issues are projected for the long term, with the addition of development traffic (Phase 1). See for **Table 4** for 10-year horizon post development conditions for the key intersection.

**Table 4: 10-Year Horizon Post Development Intersection Operations with Phase 1**

Movement	v/c Ratio	LOS	Delay (s)	95% Queue (m)
<b>Peninsula Rd / Minato Rd</b>				
EBLT	0.05	A	7.9	11.3
WBTR	-	A	0	-
SBLR	0.15	B	13.6	15.3

Notes: Estimated 95<sup>th</sup> percentile queue lengths based on SimTraffic results



**Figure 4: 10-Year Horizon Post Development PM Peak Hour Volumes**

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3.0 TURN LANE WARRANT ANALYSIS

3.1 Left Turn Lane Warrant Review

While the traffic conditions are excellent along the Peninsula Road approaches, left-turning vehicles may introduce safety and delay concerns that merit the consideration of an eastbound left turn lane at Minato Road. Therefore, a left-turn lane warrant analysis was conducted for eastbound Peninsula Road traffic at the study intersection. The warrant procedure used is from the BC MoTI's Left Turn Lane Warrant Manual and is based on PM peak hour volumes in the opening year and 10-year horizon post development.

3.1.1 Left Turn Lane Warrant Review for Opening Day

At Peninsula Road / Minato Road, an eastbound left turn lane is not warranted in the short term based on the opening day post development PM peak hour volumes (50 km/h, 20% left turn ratio). A westbound left turn lane is not required on Peninsula Road at Minato Road due to the T-intersection configuration. See Figure 5 for the Left Turn Lane Warrant review for Opening Day with Phase 1.



Figure 5: Left Turn Lane Warrant Review - Opening Day with Phase 1

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3.1.2 Left Turn Lane Warrant Review for Long Term

A left turn lane warrant analysis was also conducted for the Peninsula Road / Minato Road intersection with 10-year horizon volumes. In the 10-year horizon post development year, an eastbound left turn lane is warranted on Peninsula Road at Minato Road (50 km/h, 15% left turn ratio). The need for the turn lane is based mainly on the increase in background traffic. See **Figure 6** for the left turn lane warrant review with 10-year horizon post development volumes.

As such a 15 m long left turn lane is recommended as part of the intersection design.



Figure 6: Left Turn Lane Warrant Review for 10-Horizon Post Development (Phase1)

The warrant analysis was also checked for a “trigger point” which requires a left turn lane as the development (Phase 1) progresses. In general, around 80% of the total trips (and be extension the number of units) is the trigger point for the left turn lane. That 80% mark can be reached any number of ways when considering the multi-family units / waterfront homes / commercial. Below several trigger point scenarios are explored:

**Scenario 1 trigger:** When multi-family reaches 162 units + all the commercial space but excluding 10 waterfront homes, the turn lane is triggered.

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**Scenario 2 trigger:** When multi-family reaches 142 units + 10 waterfront homes are built + all the commercial space, the turn lane is triggered.

**Scenario 3 trigger** When 100% of the residential units (182 multi-family units + 10 waterfront homes) and up to 33% of the proposed commercial space, the turn lane is triggered.

In summary, a trigger point for an eastbound left turn lane would be approximately 80% of the full build-out (Phase 1). However, when the intersection is upgraded with four legs in the future, dedicated left turn lanes will likely be implemented for both directions on Peninsula Road.

At full build out in the 10-year horizon the left turn lane is warranted.

### 3.2 Right Turn Lane

The MoTI's turn lane warrant manual does not provide volume warrant charts for a right turn lane. Estimated turning volumes at Peninsula Road / Minato Road exceed MoTI's private access definition (turning volumes total >100 vph and right turn volume >30 vph). Therefore, the intersection of Peninsula Road / Minato Road should be designed based on the drawings in MoTI's Supplement to TAC Geometric Design Guide (Figure 710.F Rural Local Intersection).

For a westbound right lane treatment, a direct taper should be used rather than a parallel right deceleration lane as the speed is low (50km/h), right turning volumes are relatively low (<40 vph), and no queueing issues were found. The intersection should be designed such that the westbound right lane has a direct taper of 55m, and that the raised islands see in in Figure 7.10F are excluded; the islands are not needed due to the low speed and low volume of traffic estimated at Minato Road, and their presence will increase the crossing distance and complexity for people accessing the multiuse trail.

### 3.3 Acceleration Lane

The right turn movement from Minato Road would not require the need for an acceleration lane along the westbound of Peninsula Road. Analysis results show LOS A/B for the right turn movement from Minato Road. It is expected that on Peninsula Road, estimated westbound through volumes are not significant, with 270 vph (projected 2034 volumes). The traffic conditions (moderate volumes and 50 km/h speed) will contain enough gap



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opportunities that right turning vehicles turning onto Peninsula Road will not need the acceleration lane.

### 3.4 The Peninsula Road / Minato Road Intersection

#### 3.4.1 4-leg Future

The intersection of Minato Road and Peninsula Road is intended to become a four-approach intersection with future development south of the intersection. This affects the intersection's final form and the need/design of the left turn lane discussed above.

An ultimate intersection design likely includes left turn lanes for the westbound approach, which would make for a symmetrical intersection eastbound/westbound. Because of the space requirements of developing left turn lanes the east/west symmetry is both logical and recommended.

At the time of turn lane construction in the future all turn lane dimension noted here should be reevaluated.

#### 3.4.2 Roundabout

A roundabout is also an option for the intersection, reasons for a roundabout at this location are as follows:

- From a traffic volume perspective, the intersection would be a good candidate.
- A roundabout at this location would act as a gateway for the town of Ucluelet and would help “set the tone” for traffic entering town.
- Safety outcomes of roundabouts.
- MoTI has a roundabout first policy.
- Opportunity for placemaking and area-defining public art.

One important aspect of roundabouts that should be noted involves their cost: A fully designed roundabout, with high quality landscaping, ornamental street lighting, full pedestrians crossing, etc. can cost upwards of \$4 million, which is likely cost prohibitive for a small municipality. However, roundabouts offer many design options including mini-roundabouts, lower-cost version, and temporary version. Some examples of lower cost options can be seen below. These examples show that the municipality could construct a lower cost roundabout as a long-term interim step, gaining the benefits of a roundabout, without incurring large costs right away. In the future the roundabout could be upgraded as desired.

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Lower Cost Roundabout Examples (Top: Friday Harbor, WA USA. Bottom: Victoria, BC at Cook Street and Southgate Street)

The final form of the intersection should be determined by the controlling entities with consultation of a professional transportation engineer. This should be discussed in the context of the left turn lane noted above, which is only required in the 10-years post-development scenario, giving ample time to consider the intersection's form.

## 4.0 SAFETY REVIEW

### 4.1 Sightline Review

Sightlines were reviewed at Minato Road (stop location) for safety concerns. See **Figure 7** for a sightline review for vehicles exiting from Minato Road.

The Transportation Association of Canada (TAC) specifies sightline distances for vehicles turning onto a road from a stop condition for both left and right turns. For left turns from a stop on a 50km/h roadway 105m of clear sightline is needed, and 95m is needed for a right turn.

The sightline review showed clear sightlines well beyond the 105m threshold, with no obstructions, significant roadway curvature, or other impediments; sightlines have been

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met for both left and right turns from a stop condition. Within the figure there are Google Street View images showing the sightlines from the view of vehicles approaching Minato Road from both the east and west. These images show the clear sightlines from both a horizontal and vertical perspective. There is a small hill to the west of Minato Road, but the crest of the hill (and any corresponding visual impediments due to it) is more than 120m from the mouth of Minto Road, well beyond the 105m of clear sightline.

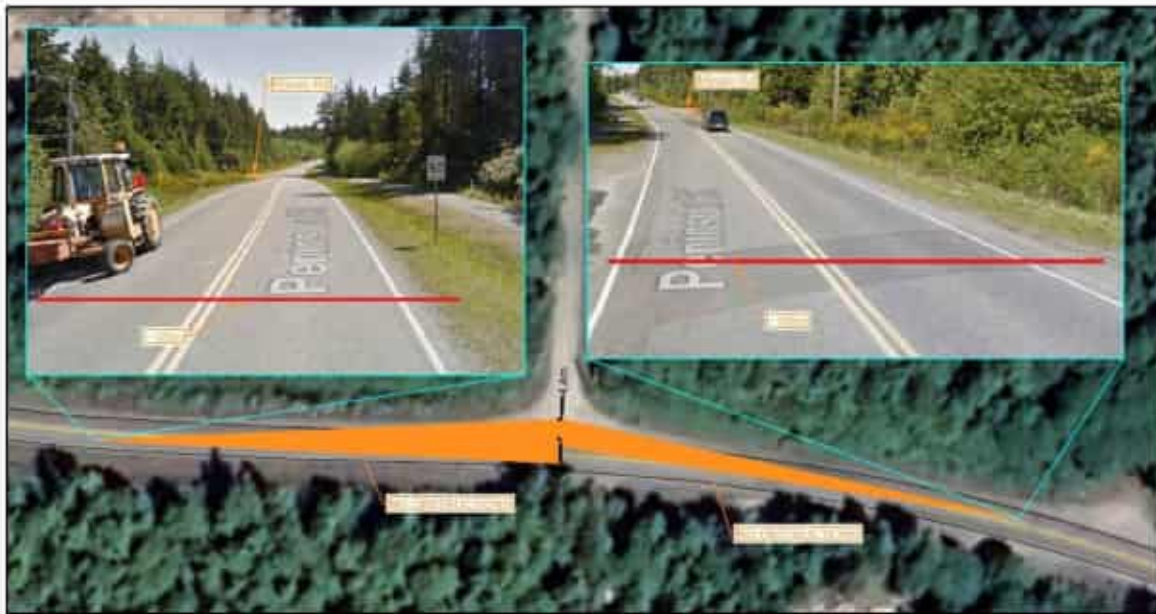


Figure 7: Sightline Review for Vehicles Exiting from Minato Road

4.2 Active Transportation Connections

Directly south of the development along Peninsula Road, the Wild Pacific Trail pathway runs east-west from Tofino into Ucluelet. This multi-use pathway is usable for both pedestrians and cyclists and provides safe and extensive connectivity to destinations within Ucluelet all the way to the neighbouring community of Tofino.

Currently, no official or close-by crossing opportunities from the development to the multi-use pathway exist. The intersection of Peninsula Road / Minato Road is currently 3-legged, but it may be upgraded to a 4-legged with a new side street to the south in the future developments. This location would be a good candidate for a pedestrian crossing point due to the active transportation demand anticipated in the future. Needs for pedestrian crossing facility were assessed based on two guidelines: (1) Pedestrian

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Crossing Control Manual for BC (1994) and (2) TAC's Pedestrian Crossing Control Guide (2017).

#### 4.2.1 Crossing Control Manual for BC (1994)

On Peninsula Road at Minato Road, a pedestrian crossing facility is not warranted based on the *Pedestrian Crossing Control Manual for BC*. However, there is an arguable point of view in evaluating needs for a crossing device in the BC manual.

In the manual, the pedestrian crossing warrant chart is based on crossing opportunities; a pedestrian crossing device is not warranted regardless of crossing pedestrian counts if crossing opportunities are greater than 120 per hour, which is the case here.

It should be noted the design is 30 years old and much has changed in the realm of active transportation and pedestrian design in the last 30 years. The recommendations of the Guide are outdated to the point that other methodology should be examined.

#### 4.2.2 TAC Pedestrian Crossing Control Guide (2017)

The TAC's *Pedestrian Crossing Control Guide (Third Edition, Draft Final, 2017)* suggests more reasonable criteria determining needs for pedestrian crossing facilities.

The TAC's Guide provides a demand assessment for appropriate treatments based on minimum daily volume (1,500 veh/day), speed limit, distance to the adjacent crossings, on a pedestrian desired line and characteristics of pedestrian.

The subject point is located on a pedestrian desire line with a strong connectivity for the future roadway network. On Peninsula Road, it is reported average daily traffic (ADT) exceeds 5,000 vehicles during the summer high season period.

Based on the TAC's pedestrian crossing guide (Decision Support Tool – Preliminary Assessment & Treatment Selection Matrix, page 35 & 37), a crosswalk with side-mounted signs and zebra markings is recommended on at Peninsula Road at Minato Road for access to the south side of Peninsula Road to aid residents in safely accessing the Wild Pacific Trail.

### 4.3 Considerations for Secondary Site Access from Peninsula Road

With the development (Phase 1), a secondary access from Peninsula Road would be not required from a capacity analysis perspective. However, the municipality was supportive of a newly proposed Peninsula Road access in emergency use or construction phase with directional restriction. Due to insufficient sight distances for 70 km/h, a secondary site



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access from Peninsula Road would be used for emergency vehicles or construction with a right in / right out control. If a temporary Peninsula Access is used with a full movement as part of construction process, the road speed limit should be lowered to 50 km/h with appropriate signage.

## 5.0 CONCLUSION

The proposed development (Phase 1) will generate 145 trips during the PM peak hour. The impact analysis was undertaken with summer peak hour volumes as a worst-case scenario. At the study intersection of Peninsula Road / Minato Road, no capacity issue were found with the development in the short and long terms. All movements will operate at LOS A/B during the PM peak hour in the long term. However, Minato Road should be upgraded to the a municipal road standard based on the design standards for local roads.

At the intersection, a typical highway intersection design treatment would be required based on the MoTI design standards. An eastbound left turn lane is not warranted based on the opening day post development (Phase 1) volumes. However, the left turn lane is warranted based on 2034 post development volumes. The trigger point for the left turn lane would be 80% of the full buildout. When the intersection is upgraded with four legs in the future, left turn lanes would be implemented for both directions on Peninsula Road. A westbound right lane should be installed with a 55m direct taper. No sightline issues were found at the Peninsula Road / Minato Road.

Around the site, new trail connections will be provided for pedestrians and cyclists. A paved multi-use trail passes along the south side of Peninsula Road. The intersection of Peninsula Road / Minato Road would be a good candidate location for pedestrian crossing due to the strong connectivity demand for active transportation in the future. A zebra marked crosswalk should be implemented with side-mounted signs on Peninsula Road at Minato Road for safety based on the TAC's Pedestrian Crossing Control Guide.

## 6.0 RECOMMENDATIONS

The following recommendations are made for the proposed development:

- At Peninsula Road / Minato Road, an eastbound left turn lane (15m storage) is required in the 10-year long term scenario with Phase 1 of the development. The

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- trigger point for the left turn lane is an 80% progress level of the proposed Phase 1 completion.
- At Peninsula Road / Minato Road, a westbound right lane is required with a 55m direct taper.
  - Minato Road upgrade as per municipal cross section standards for local roads.
  - A zebra marked pedestrian crosswalk with side-mounted signs across Peninsula Road at Minato Road.
  - A secondary site access from Peninsula Road is considered for emergency use or during the construction phase with a right in / right out only condition. If a full movement access from Peninsula Road is required as part of the construction process, the road speed limit should be lowered to 50 km/h with appropriate signage (Trucks Entering Roadway ahead signs, flaggers as needed, etc.) be added as per a well-designed Traffic Management Plan.
  - The final form of the Peninsula Road / Minato Road intersection should be carefully considered as either a roundabout or with dedicated left turn lanes implemented for both directions when the intersection is upgraded to four legs in the long term.

Sincerely,

**WATT Consulting Group****Andy Kading, P.Eng.***Senior Transportation Engineer*

C 236-464-3263

E akading@wattconsultinggroup.com

Attn: Jodie Thompson  
ERIF

September 9, 2024

This letter summarizes the initial results of the preliminary field reconnaissance (PFR) carried out by the Yuułuʔiłʔatḥ Government - Ucluelet First Nation (UFN) Department of Culture, Language & Heritage on August 29, 2024. This PFR took place at 221 Minato Road in response to a proposed residential development on private lands, as requested by ERIF.

The initial results of this PFR are as follows:

- One (1) previously unregistered archaeological culturally modified tree (CMT) was visited and recorded by the UFN field crew. This CMT consists of a standing western red cedar showing a plank removal notch and kindling collection scars with clear toolmarks. This CMT is protected by the Heritage Conservation Act (HCA).
- Two (2) areas of potential were visited and documented by the UFN field crew. These areas consist of low-lying flat landforms suitable for temporary occupation immediately within the tree line, above the shoreline and contain moderate potential for subsurface archaeological material such as shell midden.
- One (1) traditional use site consisting of seven (7) contemporary tapered bark stripped western red cedars was encountered during this survey. None of the seven (7) bark strip features pre-date 1846 and are therefore not protected by the HCA,
- One (1) Yuułuʔiłʔatḥ named place was identified immediately adjacent this study area.

Due to the high cultural significance of this area, any further development planning will require further consultation with the Yuułuʔiłʔatḥ Government – Ucluelet First Nation.

Further details concerning this survey will be included in the corresponding PFR report.

Sincerely,

Carey Cunneyworth  
Director of Culture, Language & Heritage



John Rankin  
Interim Director of Operations



# 221 Minato Road

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## Development Permit: Landscape Architecture

PREPARED FOR:

DISTRICT OF UCLUELET PLANNING, DEVELOPMENT AND BYLAW SERVICES

200 MAIN STREET

UCLULET, BC V0R 3A0

PREPARED BY:



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September 17, 2024



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## 1.0 INTRODUCTION

The following is intended to provide general guidelines for the implementation of the soft landscape components of the proposed multi-family residential and commercial project located at 221 Minato Road. These guidelines are based on the 5-Stage Architectural DP application submission prepared by ERIF Sustainable Solutions and Formosis Architecture.

The subject area is in the District of Ucluelet (Ucluelet) Development Permit Area (DPA) IV – Multi-Family, Commercial, and Mixed Use, DPA V – Terrestrial (Mature Forest) and DPA VI – Streams and Riparian Areas. This summary focuses on DPA IV and Bear-Human Conflict Management from a soft landscape planting perspective. MacDonald Gray Consultants Inc. (MacDonald Gray) will work directly with the project Environmental Consultant (QEP) during the detailed design process to meet the objectives outlined in DPA V and DPA VI .

### 1.1 DPA GENERAL GUIDELINES AND DPA IV – MULTI-FAMILY, COMMERCIAL, AND MIXED USE

DPA IV is intended to ensure new developments preserve and enhance the natural beauty and rich ecological qualities of Ucluelet. Soft landscape guidelines in the General Guidelines applying to all Form and Character DPA's, DPA IV – Multi-Family, Commercial, and Mixed Use that will be applied to the landscape plan for the 221 Minato Road project include:

1. Landscaping will soften the building appearance and present a human-scale presence at the pedestrian level;
2. Landscape areas including native species tree planting will be interspersed in parking areas;
3. Soften the visual impact of blank walls with planting;
4. Appropriate landscape to soften transition between land uses of different intensity or types;
5. Landscape planting schemes will provide definition and clarity within the public realm:
  - a. Define the edges of outdoor space;
  - b. Signify a particular spot such as entrances and gateways;
  - c. Highlight pedestrian corridors;
  - d. Delineate private and semi-private space from public space;
  - e. Beautify a streetscape.
6. Planting will be designed to maintain drivers' sight lines;
7. Native trees and plants will be used where appropriate;
8. All landscaping will be in accordance with the latest Canadian Nursery Landscape Association (CSLA)/ Canadian Society of Landscape Architects (CSLA) Canadian Landscape Standard (previously the BC Landscape Standard);

9. Integrated vegetated bioswales in parking areas;
10. Screen parking areas from the street and/ or neighbouring residential buildings with substantial landscaping;
11. Native landscaping in common areas;
12. Robust visual buffers of parking, loading and service areas by way of retained and enhanced native vegetation along all boundaries.

## 1.2 CANDIDATE PLANT LIST

The following list of plants is 'Table 5. Recommended Native Plant Species for Landscaping' compiled by Wanda McAvoy, taken directly from the District of Ucluelet – Human-Bear Conflict Management Plan prepared by Barbara Beasley, Ph.D.

Plant species and pot sizes for use in the landscape will be selected based on availability, exposure, location and appropriateness for the applications outlined in the DPA guidelines above.

Table 1. Candidate Plant List

Common Name	Botanical Name	Attractant Level	Comments
<b>Evergreen Trees</b>			
Western Red Cedar	<i>Thuja plicata</i>	Low	Moist to wet sites; low to mid elevations; BC provincial tree; coniferous
Western Hemlock	<i>Tsuga heterophylla</i>	Low	Dry to wet sites; low to mid elevations; coniferous
Douglas Fir	<i>Pseudotsuga menziesii</i>	Medium	Dry to moist sites; low elevations; coniferous
Amabilis Fir	<i>Abies amabilis</i>	Medium	"
Scrub/Shore Pine	<i>Pinus contorta</i>	Low	Highly adaptable to coastal BC; low to mid elevations; coniferous
Lodgepole Pine	<i>Pinus contorta latifolia</i>	Low	"
Western White Pine	<i>Pinus monticola</i>	Low	"
Pacific/Western Yew	<i>Taxus brevifolia</i>	Low	Similar to western red cedar
Sitka Spruce	<i>Picea sitchensis</i>	Low	Dry to moist sites; likes full sun; coniferous
<b>Deciduous Trees</b>			
Red Alder	<i>Alnus rubra</i>	Medium	Moist sites; mid to sub-alpine elevations
Sitka Alder	<i>Alnus sinuate/sitchensis</i>	Medium	"
Bigleaf/Broadleaf Maple	<i>Acer macrophyllum</i>	Low	Dry to moist sites
Vine Maple	<i>Acer circnatum</i>	Low	Moist sites with drainage; shade tolerant; low to mid elevations; bright fall colours in full sun
<b>Shrubs Lacking Berries</b>			
Labrador Tea	<i>Ledum groenlandicum</i>	Medium	Moist sites; low to mid elevations; small white flowers June-July; succeeded by dry, hairy fruits
Mock Orange	<i>Philadelphus lewisii</i>	Low	Moist & rocky sites; low elevations; likes shade; showy orange-white blossoms in June
Shrubby Cinquefoil	<i>Potentilla fruticosa</i>	Low	Moist to rocky sites; bright yellow blooms June-Sept.; widely planted as ornamentals
Water Birch	<i>Betula occidentalis</i>	Low	Moist sites along margins of lakes/streams
Falsebox	<i>Pachistima myrsinites</i>	Low	Low-growing evergreen in damp coniferous forests; reddish flowers bloom in small tight clusters along stem
Hardhack	<i>Spiraea douglasii</i>	Low	Damp, open areas at low to mid elevations; showy pink flowers bloom in dense, cylindrical clusters
False Azalea	<i>Menziesia ferruginea</i>	Low	Shady to open forests; acidic humus, moist slopes and streambanks.
Pacific Ninebark	<i>Physocarpus capitatus</i>	Low	Often found in dense thickets; white flowers grow in tight, round, terminal clusters Apr-June; red-brown seed husks in fall; wet, open places; coastal marshes, streambanks, lake margins or understory of moist woods



Common Name	Botanical Name	Attractant Level	Comments
Sweet Gale	<i>Myrica gale</i>	Low	Low, bushy; long narrow, leathery leaves; fragrant, yellow waxy glands release scent when lightly brushed; flowers are born in catkins, in many clustered terminal spikes; male & female flowers occur on separate plants Apr-June, before leaves; along coast in swamps, bogs, lakeshores & estuaries
Oceanspray	<i>Holodiscus discolor</i>	Low	Sun to Semi-Shade; foamy sprays of creamy flowers in mid-summer; lilac-like clusters; flowers turn brown & remain on plant over winter; grows in open dry woods, clearings, thickets, logged areas, ravine edges, coastal bluffs & roadsides
False Azalea	<i>Menziesia ferruginea</i>	Low	Erect to straggly, shady to open coniferous woods, acidic humus.
<b>Evergreen Shrubs Lacking Berries</b>			
Juniper, Common/Mountain/Creeping	<i>Juniperus communis</i> <i>Juniperus horizontalis</i>	Medium	Prickly; good for xeriscape; many cultivars available
Mahonia/Oregon Grape	<i>Mahonia aquifolium</i>	Low	Dry to moist sites; well-drained; low to mid elevations
Pacific Rhododendron	<i>Rhododendron macrophyllum</i>	Low	Spectacular floral display in late spring; moist to dry sites; sun/shade; grows well in coniferous/mixed forests
California Wax-Myrtle	<i>Myrica californica</i>	Low	Coastal forest edges.
<b>Ferns</b>			
Maidenhair Fern	<i>Adiantum pedatum</i>	Low	Humus rich soils close to streams or waterfalls; low to mid elevations; deciduous; damp shade; graceful & delicate
Lady Fern	<i>Athyrium filix-femina</i>	Low	Moist to wet; all elevations; forest to meadow; shade; deciduous; dense clumps; lacy, bright green fronds
Deer Fern	<i>Blechnum spicant</i>	Low	Moist to wet forests; all elevations; evergreen; dark green fronds; drought tolerant; part sun to deep shade
Sword Fern	<i>Polystichum munitum</i>	Low	Moist forest; low to mid elevations; magnificent ornamental evergreen with glossy, dark green, leathery fronds; dense clumps; sun to shade
Licorice Fern	<i>Polypodium glycyrrhiza</i>	Low	Sometimes summer deciduous & winter evergreen; shade/sun; wet, mossy ground; grows on stumps, rocks & trees-often on bigleaf maple
Spiny Wood Fern	<i>Dryopteris expansa</i>	Low	Semi-evergreen; vigorous; triangular-shaped fronds; moist soil in filtered shade

Common Name	Botanical Name	Attractant Level	Comments
<b>Perennials/Wildflowers &amp; Ground Covers</b>			
Wild Lily-of-the-Valley	<i>Maianthemum dilatatum</i>	Low	Groundcover/wildflower with delicate clusters of white flowers
Wild Ginger	<i>Asarum caudatum</i>	Low	Mat-forming evergreen perennial; purple-brown flowers in Apr.; sweet scent; partial shade to sun; moist well-drained soil
Foxglove	<i>Digitalis purpurea</i>	Low	Wildflower; purple/pink/white;
Goat's Beard	<i>Aruncus dioicus</i>	Low	Wildflower; cream flower sprays; damp shade
Douglas Aster	<i>Aster douglasii</i>	Low	Purple wildflower, disturbed open areas
Western Bleeding Heart	<i>Dicentra formosa</i>	Low	Moist, shade
Western Trillium	<i>Trillium ovatum</i>	Low	Moist, shaded open areas
Nodding Onion	<i>Allium cernuum</i>	Low	Dry open woods and exposed grassy places, rocky crevices and sandy soils
Pearly Everlasting	<i>Anaphalis margaritacea</i>	Low	Wildflower, yellow centres and white petals, disturbed soil.
Indian Paintbrush	<i>Castilleja</i>	Low	Wildflower, perennial, scarlet bracts.
Bog Rosemary	<i>Andromeda polifolia</i> (Heath family)	Low	Low-spreading evergreen with small pink flowers, boggy, acidic soils
Yellow Monkey Flower	<i>Mimulus guttatus</i>	Low	Yellow figwort flower, wet ledges, crevices, weeping rock faces
Lupine	<i>Lupinus polyphyllus</i>	Low	Blue to violet pea-like flowers, perennial, moist to wet open habitats and disturbed sites.
Stream Violet	<i>Viola glabella</i>	Low	Yellow wildflower, heart-shaped leaves, moist forests and clearings, along streams
Foamflower	<i>Tiarella trifoliata</i>	Low	Delicate white flowers, moist shade, seepage areas.
Fawn Lily	<i>Erythronium</i>	Low	Pink fawn lilies require open to dense moist woodlands.
Gentian	<i>Gentianella</i>	Low	King Gentian has blue flowers, Swamp Gentian has white flowers, both grow in boggy areas or wet ditches.
Moss Campion	<i>Silene acaulis</i>	Low	Showy pink, lilac or purple flowers; moist rock crevices.
Yellow Marsh-Marigold	<i>Caltha palustris</i> var. <i>palustris</i>	Low	Wetland plant; deep yellow, buttercup like flower July-Aug.
Phlox	<i>Phlox</i> spp.	Low	Perennial, showy pink to lavender or white flowers. Herbaceous border; sun
Coltsfoot	<i>Petasites palmatus</i>	Medium	Tall ground cover; damp in full sun/partial shade; large deeply divided basal leaves; pale pink flower heads in spring; rhizomus
Buck-Bean	<i>Menyanthes trifoliata</i>	Medium	Semi-aquatic; shallow ditches/bog areas; tubular white flowers with glistening hairs on upper surface & feathery appearance in May-June

Common Name	Botanical Name	Attractant Level	Comments
Common Yarrow	<i>Achillea millefolium</i>	Low	Aromatic herb; unusual fern-like leaves; dense clusters of round, yellow-centered, daisy-like flowers June-Aug.
Red/Western Columbine	<i>Aquilegia Formosa</i>	Low	Wildflower; lowlands to timberline; nodding crimson/yellow flowers May-Aug.; soft, lime green ferny leaves
Twinflower	<i>Linnaea borealis</i>	Low	Forest; acid soils; low elevation to timberline; charming low evergreen ground cover about 1. high; tiny evergreen leaves with small trumpet-shaped pink flowers; partial-full shade

### 1.3 ESTIMATE OF PLANT QUANTITIES

The following table is a summary of approximate soft landscaped areas by lot, see Appendix 'A':

Table 2. Approximate Soft Landscaped Areas

Lot Number	Description	Area (sq.m)
1	Attainable	7,422
2	Housing	4,378
3	Waterfront Homes	7,860
4	Commercial	222
5	Market Rentals	6,542

The following table provides an estimated number of plants per lot based on an average spacing by plant category. This table assumes 70% of the estimated area will be planted with deciduous and evergreen woody shrubs, and 30% will be planted with groundcovers and perennials. Tree species will be selected suit available soil volumes, and located to avoid future conflicts with buildings, surface and underground utilities, drivers' sight lines and appropriateness for the applications outlined in the DPA guidelines above.

Table 3. Estimate of Plant Quantities and Average Spacing by Lot

Lot Number	Trees (avg. 9m on-centre)	Shrubs (avg. 1.2m O.C.)	Perennials/ Groundcover (avg. 0.9m O.C.)
1	105	3,530	2,650
2	65	2,085	1,560
3	115	3,740	2,805
4	5	105	80
5	95	3,115	2,335

## 2.0 CONCLUSION

This soft landscape summary will be used as a basis for preparing detailed landscape architecture plans for the project. The landscape architecture components of the project will be designed in such a way that supports the objectives outlined in Ucluelet's OCP Bylaw, DPA IV – Multi-Family, Commercial, and Mixed Use and Zoning Bylaw No. 1160, Division 600 – Landscaping and Screening.

The detailed landscape design will enhance the natural environment and maintain the coastal village character of Ucluelet. The Landscape Architecture plans will include trees, shrubs, groundcover, perennials, lawns, bark mulch, decorative boulders and gravel, decorative paving, planters, fences, non-load bearing exterior structures and walls not exceeding 1.2m in height. All landscape elements will fully and suitably be arranged to enhance the appearance of the development, or where required in Ucluelet policies and guidelines, to effectively screen a building, the lot, portion of the lot, storage or other use. The landscape design will also be integrated with the stormwater management plan as prepared by the project Civil Engineer.

MacDonald Gray understands that the natural beauty and rich ecological qualities of Ucluelet are of the utmost value to its residents, guests, and future generations. The coastal environment and wild character of the area will be the guiding inspiration behind the Landscape Architecture design.



### 3.0 APPENDIX 'A' - SOFT LANDSCAPE AREAS PLAN



ALL RIGHTS RESERVED. PROPERTY OF THE ARCHITECTS. USE OR REPRODUCTION PROHIBITED WITHOUT PRIOR WRITTEN PERMISSION.

THE CONTRACTOR SHALL REVIEW THE DOCUMENTS FOR CONFORMANCE WITH CODES AND BY-LAWS AND SHALL ADVISE THE ARCHITECTS OF ANY DISCREPANCIES. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND OMISSIONS TO THE DESIGNER.

DO NOT SCALE THE DRAWINGS.

THIS DRAWING IS INTENDED FOR INFORMATION ONLY. THE CONTRACTOR AND ANY PERSON USING THIS DRAWING FOR INFORMATION ARE ADVISED TO REFER TO CIVIL, STRUCTURAL, MECHANICAL, SPRINKLER, ELECTRICAL, LANDSCAPE AND INTERIOR DESIGN DISCIPLINE DRAWINGS FOR INFORMATION RELATING TO THOSE DISCIPLINES.

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Project Number: 2412

DRAWING ISSUED: 01 ISSUED FOR REZONING/DP 2024-09-19

PROJECT: MINATO  
221 MINATO ROAD

DRAWING: PLANTED LANDSCAPE AREAS

LOCATION: UCLUELET  
DRAWN BY: KC

DATE: 2024-09-19  
SCALE: 1 : 750

DWG. NO.: A210

4  
A450

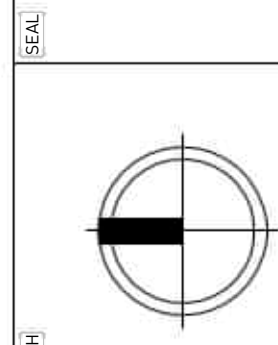
2  
A450

Appendix D

MINATO ROAD

PENINSULA ROAD

EXISTING ASPHALT ROAD SURFACE  
EXISTING ASPHALT PATH  
EXISTING TRAIL  
EXISTING CONCRETE BARRIER



PROJECT: MINATO  
221 MINATO ROAD

DRAWING: PLANTED LANDSCAPE AREAS

LOCATION: UCLUELET  
DRAWN BY: KC

DATE: 2024-09-19  
SCALE: 1 : 750

DWG. NO.: A210





District Group  
200 – 8809 Heather Street  
Vancouver, BC  
V6P 3T1

March 5, 2024  
File: 23265  
R0

Attention: Jessica Tempesta

**Re: Geotechnical Investigation Report – Proposed Multi Family Development  
221 Minato Road, Ucluelet, British Columbia**

## 1.0 INTRODUCTION

We understand that a new development is proposed at the above-referenced site in Ucluelet, BC. Based on preliminary information provided to us, the approximately 25 acre site would be completed as a 2 phase subdivision. We anticipate 26 single-family detached residences and a 72-unit apartment complex would be included in Phase 1. Phase 2 is expected to include 49 single-family detached residences along with a 72-unit apartment complex. Loading for the development is expected to be light to moderate, with wood framed construction above grade and reinforced concrete construction for foundations and any below grade structures. We further expect that new on site utilities and roads would be included as part of this development. We are in receipt of a geotechnical investigation report for the site previously prepared by others.

This report presents our recommendations for the design and construction of the proposed development and temporary excavations based on our field investigation, review of geotechnical investigations completed by others, and our experience in the immediate area. This report has been prepared exclusively for District Group, for their use, the use of others on their design and construction team, and for the District of Ucluelet and the Alberni-Clayoquot Regional District for use in the development and permitting process.

## 2.0 SITE DESCRIPTION

The site is located on the northeast side of the Ucluelet Peninsula. The site is bounded by Ucluelet Inlet to the north and west, Minato Road and private forested property to the east, and Peninsula Road to the south. A creek separates proposed Phases 1 and 2 of the project.

The property is irregular in shape, approximated as a backwards “L” with the western segment encompassing Phase 1 and the northern segment encompassing Phase 2. The two phases are separated by a creek. Phase 1 has a centrally located peak along its southern boundary with an elevation of 17 m geodetic as measured by Ebbwater Consulting in a 2020 Flood Mapping Report. This peak slopes gently to the sea at the western and northern boundaries of Phase 1, and to the creek on its western boundary.

Phase 2 is generally flat with much of the area lying at approximately 8 m geodetic as measured by Ebbwater Consulting in a 2020 Flood Mapping Report. Phase 2 exhibits gentle slopes to the sea along its western and northern boundaries.

Large portions of the site have undergone extensive clearing of trees and vegetation; along with topsoil in some large portions of Phase 2. Localized areas remain forested and/or covered in topsoil. The site is currently improved with temporary roads. The site and surrounding improvements are shown on our Drawing No: 23265-02, following the text of this report.

### 3.0 FIELD INVESTIGATION

GeoPacific completed an investigation of the soil and groundwater conditions at the site on February 5<sup>th</sup>, 2024 using a tracked excavator supplied and operated by Crow Excavating & Trucking of Tofino, BC. The site investigation included 9 test pits.

The test pits were excavated to depths between 1.1 m and 3.0 m below current local grades. The pits were located, supervised, and logged by a member of our geotechnical staff. Soil samples were collected for routine laboratory testing.

Prior to our investigation, a BC one call was placed and Municon West Coast cleared the utilities at the test hole locations. All test holes were backfilled and sealed in accordance with provincial abandonment requirements following classification, sampling, and logging.

The locations of the test pits completed by GeoPacific Consultants Ltd. are shown on our Drawing 23265-02, following the text of this report. The test pit logs are presented in Appendix A.

### 4.0 SUBSURFACE CONDITIONS

#### 4.1 Published Geological Information

According to the Geological Survey of Canada's Surficial Geology Map 2013-NVI-1-1, the region under investigation is situated in the Pacific Rim Complex. The Pacific Rim Complex is described as, "mudstone-rich melange; pillow lava, tuff and chert; green, aphanitic volcanic breccia and massive flows, small diorite intrusions, grey limestone lenses".

#### 4.2 Soil Conditions

##### TOPSOIL

Topsoil was encountered just below the surface at all test pit locations excavated within Phase 1, along with TP24-05. It extended to depths ranging from 0.3 m to 0.9 m. It was composed of compact silty sand with some organic clays/peaty material and trace gravel. Rootlets and decaying plant matter were present. It was noted to be dark red-brown in color and was moist.

##### Sandy SILT (FILL)

Loose to dense fill composed of sandy silt with some gravel and trace clay, sourced on site, was encountered just below the surface at TP24-07 and TP24-08. It was extended to depths of 0.3 m and 0.8 m, respectively. The fill was noted to be moist and contain rootlets. It was grey in color at TP24-07. At TP24-08 it was noted to be dark-brown, peaty, and contain large wood chunks.

##### Silty SAND and GRAVEL

Very dense silty sand and gravel with trace cobbles was encountered just below the surface at TP24-06 extending to a depth of 1.2 m. The silty sand and gravel was partially cemented in conglomerate chunks and was difficult to excavate. It was grey-brown in color and contained trace moisture.



## SILT

The surficial layer of topsoil, fill, or silty sand and gravel at all test pit locations was underlain by hard silt with some sand and some clay. At TP24-09 the silt was encountered from surface. This stratum extended to depths ranging from 0.9 m to 2.4 m below grade. The silt was grey in color with streaks of brown weathered material throughout; except at TP24-06 where the silt was noted to be clayey with trace sand and was blue-grey in color. This stratum contained some moisture.

## Silty SAND and GRAVEL

Very dense silty sand and gravel with some cobbles was encountered beneath the silt layer extending to depths ranging from 1.8 m below grade to beyond the termination depths of some test pits; >3.0 m below grade. The cobbles increased in size to boulders with depth. The silty sand and gravel was grey in color and was moist to wet.

## BEDROCK

The silty sand and gravel is underlain by bedrock. It is seen outcropping in some areas throughout the site and was encountered or inferred at all test pits except TP24-01. The depth of bedrock encountered is shown in Table 1.

**Table 1: Depth to Bedrock**

Test Pit	Depth (m bgs)
TP24-01	>3.0
TP24-02	2.1
TP24-03	3.0 (Inferred)
TP24-04	2.4
TP24-05	0.9
TP24-06	2.7 (Inferred)
TP24-07	1.8
TP24-08	2.3
TP24-09	2.9 (Inferred)

## 4.3 Groundwater Conditions

The static groundwater table was not encountered during our investigation. Perched groundwater was observed above the bedrock. We expect perched groundwater will form above the less permeable strata, particularly above the bedrock, but also above the hard silt, following periods of significant precipitation. Groundwater levels may vary seasonally with generally higher levels during the wetter months of the year.

## 5.0 DISCUSSION

Based on preliminary information provided to us, the approximately 25-acre site would be completed as a 2 phase subdivision. We anticipate 26 single-family detached residences and a 72-unit apartment complex would be included in Phase 1. Phase 2 is expected to include 49 single-family detached residences along with a 72-unit apartment complex. Loading for the development is expected to be light to moderate, with wood framed construction above grade and reinforced concrete construction for foundations and any below grade structures. We further expect that new on site utilities and roads would be included as part of this development.

We expect that the proposed buildings may be supported on conventional strip and pad footings bearing on native hard silt, very dense sand and gravel, or directly on bedrock.

The soils on site are not considered liquefiable or subject to cyclic strain softening during the 2018 British Columbia Building Code (BCBC) design earthquake.

We confirm from a geotechnical standpoint that the proposed development is feasible and safe for the intended use provided the following recommendations are implemented in the design and construction of the development.

## 6.0 RECOMMENDATIONS

### 6.1 Site Preparation

Prior to construction of foundations, grade supported slabs and pavement structures, all materials considered to compromise the design recommendations following this section are to be removed. These materials include but are not limited to vegetation, topsoil, fill, organic material, debris, refuse, and loose or otherwise disturbed soils. It should be noted that stripping depths will vary across the site due to the undulating nature of the bedrock and variability of site stripping already completed. Some rock chipping/minor blasting is anticipated to expose competent bedrock and to develop a suitably level building grade where bedrock is at or above founding grades.

The minimum stripping depths for foundations, floor slabs and pavement structures may be locally up to 1.0 m.

Any grade reinstatement beneath building foundations to be supported directly on competent bedrock should be done with lean-mix concrete with a minimum compressive strength of 5 MPa at 28 days. Grade reinstatement beneath floor slabs and non-structural walls can be done with engineered fill, or possibly blast rock sourced on-site. If blast rock is to be used it should be process to a maximum 300 mm minus and placed on the prepared subgrade in lifts no greater than 600 mm in thickness prior to compaction with a vibratory drum roller. The 300 mm minus grading fill should be capped with a minimum of 150 mm of engineered fill, as described below.

In the context of this report, “engineered fill” is generally described as clean sand to sand and gravel containing silt and clay less than 5% by weight, compacted in 300 mm loose lifts to a minimum of 95% of the Modified Proctor (ASTM D1557) maximum dry density at a moisture content that is within 2% of optimum for compaction. Density testing should be conducted on each compacted lift of engineered fill to confirm that its density meets the required standard. Density testing results should be forwarded to the geotechnical engineer for review.

Groundwater encountered during construction can be expected to vary seasonally. Any groundwater encountered should be controlled as part of the site preparation work. We expect that the groundwater encountered during construction could be controlled using usual techniques, such as trenching and pumps and sumps.

*The geotechnical engineer shall be contacted for the review of stripping and engineered fill placement and compaction.*

### 6.2 Conventional Foundations

As noted in Section 5.1, we expect that building foundations for at-grade construction can be supported on conventional pad and strip footings founded on native hard silt, very dense sand and gravel, or directly on bedrock.

Conventional pad and strip footings supported on competent bedrock can be designed using a Serviceability Limit State (SLS) bearing pressure of 1.0 MPa. Pad and strip footings bearing on the native silt or sand and gravel can be designed based on a Serviceability Limit State (SLS) bearing pressure of 250 kPa. Where pad and strip footings are placed directly on compacted blast rock fill or engineered fill, an SLS bearing pressure of 150 kPa may be utilized.

Factored Ultimate Limit State (ULS) bearing pressures, for transient loads such as those induced by wind and earthquakes, may be taken as 1.5 x the SLS bearing pressure provided above.

The silt at founding depths is considered sensitive to moisture. The exposed subgrade soils should be protected using lean mix concrete to preserve its bearing qualities and ensure that the subgrade remains free of ponded water prior to the pouring of concrete for footings. Any softened or disturbed subgrade should be removed and replaced with lean mix concrete.

Irrespective of bearing pressures, footings should not be less than 450 mm in width for strip footings and not less than 600 mm in width for square or rectangular pad footings. Footings should also be buried a minimum of 450 mm below the surface for frost protection.

Post construction settlement of foundations designed as recommended should be less than 25 mm total and 20 mm over a 10 m differential.

Adjacent footings constructed at differing elevation should be offset from each other by a minimum distance of twice the difference in elevation 2:1 (H:V). For example, two foundations separated by 1.0 m in elevation should be offset horizontally from each other by a minimum distance of 2.0 m as measured from the inside edges of those foundations. Foundations constructed within 2:1 (H:V) of each other may impose additional vertical and horizontal forces on lower foundation, columns, and/or foundation walls. GeoPacific Consultants Ltd. should review foundation layouts which do not achieve the minimum 2:1 (H:V) offset.

*The geotechnical engineer shall be contacted for the review of all foundation subgrades prior to footing construction.*

### 6.3 Slab-On-Grade Floors

In order to provide suitable support for slab-on-grade floors, we recommend that any fill placed under the slab should be “engineered fill” as described in Section 6.1 above.

The floor slabs should be directly underlain by a minimum of 150 mm of 19 mm clear crushed gravel fill to inhibit upward migration of moisture beneath the slab. The crushed gravel fill should be compacted to a minimum of 95% of the ASTM D1557 (Modified Proctor) maximum dry density at a moisture content that is within 2% of optimum for compaction. A moisture barrier should be installed directly beneath the slab directly above the free draining granular material.

*The geotechnical engineer shall be contacted for the review of the slab subgrade and under slab materials and compaction.*

### 6.4 Foundation Drainage

In the case of grade supported construction, a perimeter drainage system is not required from a geotechnical perspective provided that the slabs-on-grade are maintained at a minimum of 150 mm above exterior grades and exterior site grading slopes down and away from the building.

In the case of construction with below grade structures, a perimeter drainage system will be required for the below grade structures to prevent the development of water pressure on the foundation walls and floor slab.

All drains should be designed to prevent migration of fines and should be hydraulically connected to the under-slab fill to ensure that water pressures cannot develop beneath the slab. Large groundwater flows are not expected and we suggest that the perimeter drainage system be preliminarily designed for a groundwater inflow rate of 10-15 litres/minute, per 5000 square metres of footprint.

The mechanical designer should confirm the actual groundwater flow during construction at the end of the subgrade preparation.

### 6.5 Seismic Design of Foundations

The subgrade conditions underlying the site may be classified as “Site Class C” as defined in Table 4.1.8.4.A of the 2018 British Columbia Building Code (BCBC). Peak ground acceleration on firm ground for the approximate site location is 0.700 g (Natural Resources Canada, Site Coordinates: 48.949°, -125.569°)

We do not expect any of the soils used to support building foundations to be prone to liquefaction or strain softening during cyclic loading caused by the design earthquake defined in the 2018 BCBC.

### 6.6 Utility Installation

There are no civil design plans available at present, however we anticipate storm sewer, sanitary sewer, water and other private utilities will be installed to service the buildings. We expect conventional open trench construction for new utilities. Some shoring may be required locally for deeper installation.

Site utilities may be required beneath the slabs-on-grade. The design of these systems must consider the locations and elevations of the foundations. The service trenches and excavations required for the installation of the underground pipes, vaults and/or manholes must be located outside of a 1.5:1 (H:V) slope measured downward from the edge of adjacent foundations.

We recommend that all excavations and trenches be sloped or shored as per the latest Workers Compensation Board (WCB) regulations. Any excavation in excess of 1.2 m in depth requiring worker entry must be reviewed by a professional geotechnical engineer. We recommend that all service trenches be backfilled with clean granular material, which conforms to municipal standards, compacted to 95% Modified Proctor (ASTM D1557) maximum dry density, with a moisture content within 2% of optimum for compaction. If for any reasons the backfill becomes saturated prior to compaction, it must be removed and replaced with dry fill.

We would expect little seepage from excavations advanced through the native silt. However, some perched groundwater should be expected in any excavation advanced into the silty sand and gravel as well as at the contact between the fill placed during site preparation and the underlying silt, particularly during the wetter winter and spring months. All excavations and trenching must conform to the latest Occupational Health and Safety Regulations of Work Safe BC.

*Excavations deeper than 1.2 m must be reviewed by a professional engineer prior to worker entry.*



## 6.7 New On-Site Roads and Parking

The minimum asphalt pavement structure recommended for on-site roads and parking is presented in Table 2 below.

**Table 2: Recommended Minimum Pavement Structure for On-Site Works**

Material	Thickness (mm)	CBR
Asphaltic Concrete	65	N/A
19 mm Minus Crushed Aggregate Base Course	100	80
75 mm Minus Sand and Gravel Sub-Base Course	250	20

In areas where heavy loading is expected, such as drive aisles and access roads, we recommend that the asphalt thickness be increased to 100 mm.

All base and subbase course materials should be systematically compacted in thin lifts to a minimum density equivalent to 95% of their Modified Proctor maximum dry density, at water contents within 2% of their optimum moisture contents for compaction, determined in accordance with ASTM D1557. The base and subbase materials should meet municipal requirements for gradation and density. Density testing should be conducted on these materials and the results forwarded to the geotechnical engineer for review.

*The geotechnical engineer shall be contacted for the review of road and parking structure fill materials and compaction.*

## 6.8 Temporary Excavation and Backfill

We expect that temporary excavations would be sloped where possible since it is more economical to do so. Expected allowable slope cuts are shown in Table 3. We expect that vertical cuts in the native soils may be supported using lock blocks. Unsupported vertical cuts in the native soils may be possible but will need to be reviewed at the time of excavation.

**Table 3: Recommended Minimum Pavement Structure for On-Site Works**

Material	Allowable Slope Cut
Topsoil / Fill	1:1 (H:V)
Hard Silt	1:2 (H:V)
Very Dense Sand & Gravel	1:1 (H:V)

*Temporary cut slopes in excess of 1.2 m in height must be covered in polyethylene sheeting and require review by a professional engineer in accordance with Work Safe BC guidelines, prior to worker entry.*

Shoring may be required for excavations in close proximity to property lines or utilities. The extent of the shored sections of the excavation will depend on the existing topography as well as the final design layout and elevations for the proposed structure and existing adjacent structures.

*GeoPacific will prepare an excavation/shoring design upon request.*

Moderate seepage during the wetter months should be expected due to the formation of perched water tables. We expect that inflows may be handled with sumps and sump pumps.

## 6.9 Lateral Pressures on Foundation Walls

Earth pressures against the foundation walls are dependent on factors such as, available lateral restraint along the

wall, surcharge loads, backfill materials, compaction of the backfill and drainage conditions. For a sloped excavation with drained backfill conditions, assuming granular backfill with a friction angle of 35 degrees and unit weight of 18 kN/m<sup>3</sup>, we recommend that the foundation walls be designed to resist the following lateral earth pressures:

- Static: Triangular soil pressure distribution of 5H kPa, where H is equal to the total wall height in metres.
- Seismic: Inverted triangular soil pressure distribution of 4H kPa, where H is equal to the total wall height in metres.

The preceding loading recommendations assume that the synthetic drainage material provides a drained cavity around the perimeter of the foundation. We expect that the perimeter drainage system will be hydraulically connected to the synthetic drainage material and sufficiently lower the groundwater level such that hydrostatic pressures against the foundation walls are eliminated.

Any additional surcharge loads not specifically described herein should be added to the earth pressure given. All earth pressures are based upon unfactored soil parameters and are assumed to be unfactored loads.

*The geotechnical engineer should be contacted for the review of all backfill materials and procedures.*

## 6.10 Flood Considerations

Flooding can occur by overland transport of surface water from a stream or river (estuarine flooding) or from a coastal storm surge or tsunami. Estuarine flooding requires the presence of a channel or draw that can concentrate surface water. The site is in proximity to a creek and is therefore at risk of estuarine flooding.

Coastal inundation (flooding) due to a storm surge or tsunami is possible at the proposed site. Based on the “District of Ucluelet Coastal Flood Mapping” report prepared for the District of Ucluelet by Ebbwater Consulting (2020), the site is located in flood zone 15. In flood zone 15, the flood construction level (FCL) considering a 1 m sea level rise and 0.6 m freeboard is equal to 4.5 m for a 1 in 200 year flood event. We recommend that all building slab elevations are designed to be situated above this FCL.

Ebbwater Consulting (2020) references a Flood Planning Level (FPL) for flood risk due to tsunami. For the District of Ucluelet, the FPL for tsunami related flooding was determined to be 20.0 m, with no safety factor for uncertainty in the model. As a tsunami is considered a natural disaster with a low return period, it is not considered feasible to design buildings to be tsunami resilient, nor to be situated above the FPL. We expect the District of Ucluelet’s tsunami warning system and emergency management procedures would be implemented as part of the subdivision planning process.

## 7.0 DESIGN REVIEWS AND CONSTRUCTION INSPECTIONS

The preceding sections make recommendations for the design and construction of the proposed residential development. These reviews are carried out to ensure that our intentions have been adequately communicated. It is also important that any contractor(s) working on the site review this document prior to commencing their work.

It is the responsibility of the contractor to contact GeoPacific a minimum of 48 hours in advance to notify us that a field review is required. In summary, field reviews are required for the following aspects of the work:

- |               |                                                       |
|---------------|-------------------------------------------------------|
| 1. Stripping  | Review of stripping depths prior to preload placement |
| 2. Excavation | Review of excavation in excess of 1.2 m               |

- |                    |                                                                   |
|--------------------|-------------------------------------------------------------------|
| 3. Engineered Fill | Review of fill materials, placement and compaction                |
| 4. Foundation      | Review of foundation subgrade                                     |
| 5. Slab-on-Grade   | Review of subgrade and fill material                              |
| 6. Excavations     | Review of excavations over 1.2 m in height requiring worker entry |
| 7. Proof Rolling   | Review of proof rolling                                           |

**8.0 CLOSURE**

This report has been prepared exclusively for District Group for the purpose of providing geotechnical recommendations for the design and construction of the proposed residential development and related earthworks. The report remains the property of GeoPacific Consultants Ltd. And unauthorized use of, or duplication of, this report is prohibited.

We are pleased to be of assistance to you on this project and we trust that our comments and recommendations are both helpful and sufficient for your current purposes. If you would like further details or would like clarification of any of the above, please do not hesitate to call.

For:  
**GeoPacific Consultants Ltd.**

Reviewed By:



Nathan Anderson, B.Sc., GIT  
Geoscientist-in-Training



Daniel Kokan, M.Eng., P.Eng  
Project Engineer



**LEGEND:**

⊕ TP24-XX - TEST PIT (TP) LOCATION

**SITE PLAN**

1:2500

\*TEST LOCATIONS ARE APPROXIMATE

REVISIONS:

- A. XXX
- B. XXX
- C. XXX

FILE NO.:

23265

DWG. NO.:

23265-02



**GEO PACIFIC**  
CONSULTANTS

DATE: 2024-02-20

DRAWN BY: NA	APPROVED BY: DK	REVIEWED BY: DK
-----------------	--------------------	--------------------

SCALE:

MINATO ROAD - UCLUELET  
MINATO ROAD, UCLUELET, BC  
SITE PLAN



**APPENDIX A – SOIL LOGS**

**Test Hole Log: TP24-01**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1775 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot) • 10 20 30 40 •	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	4.0				
0		<b>TOPSOIL</b> Compact silty-clayey SAND. Trace gravel, trace cobbles. Dark red-brown in color. Moist. Rootlets and decaying forest debris present.	0.0				
3	1	<b>SILT</b> Hard SILT, some clay, some sand. Grey in color with streaks of weathered brown. Some moisture. Holds together in hard chunks.	0.9				
5	2	<b>Silty SAND and GRAVEL</b> Very dense silty SAND and GRAVEL. Some cobbles with size increasing to boulders at depth. Grey in color. Wet.	1.5				
10	3	End of Borehole	2.9				Perched Water - 9.5'

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A1  
Page: 1 of 1

**Test Hole Log: TP24-02**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1779 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot) • 10 20 30 40 •	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	2.5				
0		<b>TOPSOIL</b> Compact silty-clayey SAND. Trace gravel, trace cobbles. Dark red-brown in color. Moist. Rootlets and decaying forest debris present.	0.0				
1			1.9				
2		<b>SILT</b> Hard SILT, some sand, some clay. Grey in color with streaks of weathered brown. Some moisture. Holds together in hard chunks.	0.6				
3							
4							
5							
6			0.7				
6		<b>Silty SAND and GRAVEL</b> Very dense silty SAND and GRAVEL. Some cobbles. Grey in color. Wet.	1.8				Perched Water - 6'
7			0.4				
7		<b>BEDROCK</b> Bedrock.	2.1				Excavator Refusal - Bedrock
8			0.2				
8		End of Borehole	2.3				
9							
10							

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A2  
Page: 1 of 1

**Test Hole Log: TP24-03**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1775 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot)	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	7.0				
0		<b>TOPSOIL</b> Compact silty-clayey SAND. Trace gravel, trace cobbles. Dark red-brown in color. Moist. Rootlets and decaying forest debris present.	0.0				
1			6.4				
2		<b>SILT</b> Hard SILT, some clay, some sand. Grey in color with streaks of weathered brown. Some moisture. Holds together in hard chunks.	0.6				
3							
4							
5							
6							
7			4.9				
8		<b>Silty SAND and GRAVEL</b> Very dense silty SAND and GRAVEL. Some cobbles with size increasing to boulders at depth. Grey in color. Wet.	2.1				
9							
10			4.0				
		End of Borehole	3.0				Perched Water - 10' Excavator Refusal - Inferred Bedrock

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A3  
Page: 1 of 1



**Test Hole Log: TP24-04**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1779 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot) • 10 20 30 40 •	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	11.0				
0		<b>TOPSOIL</b> Compact silty-clayey SAND. Trace gravel, trace cobbles. Dark red-brown in color. Moist. Rootlets and decaying forest debris present.	0.0				
1		<b>SILT</b> Hard SILT, some clay, some sand. Grey in color with streaks of weathered brown. Some moisture. Holds together in hard chunks.	10.7 0.3				
2							
3							
4							
5							
6		<b>Silty SAND and GRAVEL</b> Very dense silty SAND and GRAVEL. Some cobbles with size increasing to boulders at depth. Grey in color. Wet.	9.2 1.8				
7							
8		<b>BEDROCK</b> Bedrock.	8.7 2.3 8.6 2.4				Excavator Refusal - Bedrock
9		End of Borehole					
10							

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A4  
Page: 1 of 1

**Test Hole Log: TP24-05**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1779 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot) • 10 20 30 40 •	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	9.0				
0		<b>TOPSOIL</b> Compact silty-clayey SAND. Trace gravel, trace cobbles. Dark red-brown in color. Moist. Rootlets and decaying forest debris present.	0.0				
1			8.5				
2		<b>SILT</b> Hard SILT, some clay, some sand. Grey in color with streaks of weathered brown. Some moisture. Holds together in hard chunks.	0.5				
3	1		8.1				
4		<b>BEDROCK</b> Bedrock.	0.9				
5			7.9				
6			1.1				
7							
8							
9							
10	3						Excavator Refusal - Bedrock

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A5  
Page: 1 of 1

**Test Hole Log: TP24-06**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1779 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot)	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	5.0				
0.0		<b>Silty SAND and GRAVEL</b> Very dense silty SAND and GRAVEL, trace cobbles, trace clay. Grey-brown in color. Trace moisture. Partially cemented in conglomerate chunks.	0.0				
1							
2							
3							
4		<b>Clayey SILT</b> Hard clayey SILT. Trace sand. Blue-grey in color. Some moisture. Holds together in large chunks.	3.8				
5			1.2				
6							
7							
8		<b>Gravelly-Clayey SILT</b> Very dense gravelly-clayey SILT, some sand. Some large cobbles. Blue-grey in color. Wet	2.6				
9			2.4				
10			2.3				
			2.7				
		End of Borehole					
							Perched Water - 9'
							Excavator Refusal - Inferred Bedrock

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A6  
Page: 1 of 1

**Test Hole Log: TP24-07**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1779 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot) • 10 20 30 40 •	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	3.0				
0		<b>Sandy SILT (FILL)</b> Loose to dense sandy SILT. Some gravel, trace clay. Grey in color. Moist. Rootlets / grass present.	0.0				
1		<b>SILT</b> Hard SILT, some clay, some sand. Grey in color with streaks of weathered brown. Some moisture. Holds together in hard chunks.	2.7				
0.3			0.3				
4		<b>Silty SAND and GRAVEL</b> Very dense silty SAND and GRAVEL. Some cobbles with size increasing to boulders at depth. Grey in color. Wet.	1.8				
1.2			1.2				
6		<b>BEDROCK</b> Bedrock.	1.8				
1.0			1.0				
2		End of Borehole	2.0				
7							
10							

Perched Water - 5.5'  
Excavator Refusal - Bedrock

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A7  
Page: 1 of 1



**Test Hole Log: TP24-08**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1779 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot) • 10 20 30 40 •	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	3.0				
0		<b>Sandy SILT (FILL)</b> Compact sandy SILT. Some gravel, trace clay. Dark brown in color. Peaty. Moist. Rootlets, grass, large wood chunks present.	0.0				
1							
2							
2.2		<b>SILT</b> Hard SILT, some clay, some sand. Grey in color with streaks of weathered brown. Some moisture. Holds together in hard chunks.	0.8				Perched Water - 2.5'
3							
4							
5							
6			1.2				
6		<b>Silty SAND and GRAVEL</b> Very dense silty SAND and GRAVEL. Some cobbles with size increasing to boulders at depth. Grey in color. Wet.	1.8				
7							
7			0.7				
7			2.3				Excavator Refusal - Bedrock
8		<b>BEDROCK</b> Bedrock.	0.6				
8			2.4				
		End of Borehole					
9							
10							

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A8  
Page: 1 of 1

**Test Hole Log: TP24-09**

File: 23265

Project: Ucluelet - Minato

Client: District Developments Corp.

Site Location: 221 Minato Road, Ucluelet, BC



1775 West 75th Avenue, Vancouver, BC, V6P 6P2  
Tel: 604-439-0922 Fax: 604-439-9189

INFERRED PROFILE				Moisture Content (%)	DCPT (blows per foot)	Groundwater / Well	Remarks
Depth	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)				
0		Ground Surface	6.0				
0 to 4.6		<b>SILT</b> Hard SILT, some clay, some sand. Grey in color with streaks of weathered brown. Some moisture. Holds together in hard chunks.	0.0				
4.6 to 3.1		<b>Silty SAND and GRAVEL</b> Very dense silty SAND and GRAVEL. Some cobbles with size increasing to boulders at depth. Grey in color. Wet.	1.4				
3.1 to 2.9		End of Borehole	2.9				

Perched Water - 9'  
Excavator Refusal - Inferred Bedrock

Logged: NA  
Method: Mechanical Excavation  
Date: 2024-02-05

Datum: Existing Grade  
Figure Number: A9  
Page: 1 of 1



District Group  
200 – 8809 Heather Street  
Vancouver, BC  
V6P 3T1

September 5, 2023  
File: 23265  
R0

Attention: Jessica Tempesta

**Re: Geotechnical Investigation Report – Proposed Multi Family Development  
221 Minato Road, Ucluelet, British Columbia**

## **1.0 INTRODUCTION**

We understand that a new development is proposed at the above-referenced site in Ucluelet, BC. Based on conceptual site plans prepared by Formosis Architecture, the approximately 25 acre site would be completed as a 2 phase subdivision. We anticipate 98 units of rental housing, 27 single family homes, 40 stacked townhomes, 47 waterfront homes, and 2 amenity buildings would be contemplated for this development. Loading for the development is expected to be light to moderate, with wood framed construction above grade and reinforced concrete construction below grade. We further expect that new on site utilities and roads would be included as part of this development. We are in receipt of a geotechnical investigation report for the site previously prepared by others.

This report presents the results of an investigation of the soil and groundwater conditions at the proposed development site and makes geotechnical recommendations for the design and construction of the proposed development. This report has been prepared exclusively for District Group, for their use and the use of others in their design team for this project as described. We also expect the District of Ucluelet would rely on this report during their development and permitting process.

## **2.0 SITE DESCRIPTION**

The site is located on the northeast side of the Ucluelet Peninsula. The site is bounded by Ucluelet Inlet to the north and west, Minato Road and private forested property to the east, and Peninsula Road to the south. A creek separates proposed Phases 1 and 2 of the project.

Phase 1 of the project, located west of the creek, features a centrally located peak with a geodetic elevation of approximately 14 m. The slopes adjacent to the peak have a gradual incline, leveling off at roughly 8 m towards the east and 3 m towards the west. Phase 2, northeast of the creek, is relatively flat with the terrain gently undulating between approximately 6 m and 9 m geodetic elevation with grades generally decreasing towards the shoreline of Ucluelet Inlet.

The site is currently improved with temporary roads throughout the property and is heavily forested. The site and surrounding improvements are shown on our Drawing No: 23265- 01, following the text of this report.

## **3.0 FIELD INVESTIGATION**

The subsurface ground conditions at the site were previously investigated by others on December 3, 2021. At this time, a total of eleven test pits were completed at the site.

## 4.0 SUBSURFACE CONDITIONS

### 4.1 Published Geological Information

The general surficial geology of the region under investigation, according to the Geological Survey of Canada's Surficial Geology Map 2013-NVI-1-1, is situated in the Pacific Rim Complex and is described as, "mudstone-rich melange; pillow lava, tuff and chert; green, aphanitic volcanic breccia and massive flows, small diorite intrusions, grey limestone lenses".

### 4.2 Soil Conditions

#### TOPSOIL

The topsoil or peat soils were encountered from ground surface to a depth of 0.1 to 1.5 m below existing grades. Generally comprised of organic residuals and dark brown to black in color.

#### CLAYEY SILT (TILL)

The topsoil was noted to be underlain by stiff to hard clayey silt (till) with some gravel. some rounded gravel and cobble were observed within this stratum.

#### BEDROCK

The clayey silt is expected to be underlain by bedrock. Bedrock was not observed in any of the test pits; however, outcrops were identified in discrete locations along the cut bank within the Phase 1 boundary.

### 4.3 Groundwater Conditions

Based on our previous experience in the area and previous investigations by others, the static groundwater table is not expected to be encountered within the proposed development grades for the site. However, we expect some perched groundwater may form within the surficial soils above the relatively impermeable clayey silt (till). Perched groundwater levels may vary seasonally with generally higher levels in the wetter months and after periods of significant precipitation.

## 5.0 DISCUSSION

We understand that the proposed development will include 98 rental housing, 27 single family homes, 40 stacked townhomes, 47 waterfront homes, and 2 amenity buildings. All buildings are expected to be constructed at or slightly above existing grade using a mixture of reinforced concrete construction for the foundations and light wood frame construction above grade.

We expect that the proposed buildings may be supported on conventional strip and pad footings bearing on native stiff to hard clayey silt with some gravel noted at the test pit locations or directly on bedrock.

The soils on site are not considered liquefiable or subject to cyclic strain softening during the 2018 British Columbia Building Code (BCBC) design earthquake.

We confirm from a geotechnical standpoint that the proposed development is feasible and safe for the intended use provided the following recommendations are implemented in the design and construction of the development.



## 6.0 RECOMMENDATIONS

### 6.1 Site Preparation

Prior to construction of foundations, grade supported slabs and pavement structures, all materials considered to compromise the design recommendations following this section are to be removed. These materials include but are not limited to vegetation, topsoil, fill, organic material, debris, refuse, and loose or otherwise disturbed soils. Our minimum stripping depths for foundations, floor slabs and pavement structures are expected to be governed by the parkade elevations rather than the thickness of unsuitable soils.

*Any grade reinstatement beneath the grade supported slabs should be done with “Engineered Fill”. In the context of this report, “Engineered Fill” is generally defined as **clean sand to sand and gravel containing silt and clay less than 5 % by weight**, compacted in 300 mm loose lifts to a minimum of 98% of the ASTM D698 (Standard Proctor) maximum dry density at a moisture content that is within 2% of optimum for compaction. Grade reinstatement beneath building foundations should consist of 5MPa lean mix concrete.*

Groundwater encountered during construction can be expected to vary seasonally. Any groundwater encountered should be controlled as part of the site preparation work. We expect that the groundwater encountered during construction could be controlled using usual techniques, such as trenching and pumps and sumps.

### 6.2 Building Foundations

Based on the preliminary design information provided and the soil conditions encountered on site, we envisage that footings will be founded on stiff to hard clayey silt with some gravel or locally bedrock, as described in Section 4.2 above.

We recommend that foundations placed on a subgrade of clayey silt may be designed using a serviceability limit state (SLS) bearing pressure of 150 kPa, and a factored ultimate limit state (ULS) bearing pressure of 225 kPa for use under short term transient loading such as those induced by wind or earthquakes.

Foundations bearing on engineered fill can be designed using an SLS bearing pressure of 120 kPa and a factored ULS bearing pressure of 180 kPa.

Foundations bearing directly on bedrock can be designed for a serviceability limit state (SLS) bearing pressure of 1 MPa, and a factored ultimate limit state (ULS) bearing pressure of 1.5 MPa.

We expect that the settlement of footings designed as recommended should be within the normally acceptable limits of 25 mm total and 2 mm per m differential. Irrespective of bearing pressures, footings should not be less than 450 mm in width for strip foundations and not less than 600 mm in width for square or rectangular foundations. Foundations should also be buried a minimum of 460 mm below the surface for frost protection.

Adjacent foundations constructed at differing elevations should be offset from each other by a minimum distance of twice the difference in elevation 2:1 (H:V). For example, two foundations separated by 1.0 m in elevation should be offset horizontally from each other by a minimum distance of 2.0 m as measured from the inside edges of those foundations. Foundations constructed within 2:1 (H:V) of each other may impose additional vertical and horizontal forces on lower foundations, columns, and/or foundation walls. GeoPacific should review foundation layouts which do not achieve the minimum 2:1 (H:V) offset.

*Foundation subgrades of all buildings must be reviewed by a geotechnical engineer prior to footing construction.*

### 6.3 Building Slab-On-Grade Floors

In order to provide suitable support for slab-on-grade floors, we recommend that any fill placed under the slab should consist of *engineered fill* as described in Section 6.1 above.

The floor slab should be directly underlain by a minimum of 150 mm of 19 mm clear crushed gravel fill to inhibit upward migration of moisture beneath the slab. The crushed gravel fill should be compacted to a minimum of 98% of the ASTM D1557 (Modified Proctor) maximum dry density at a moisture content that is within 2% of optimum for compaction. A moisture barrier should be installed directly beneath the slab directly above the free draining granular material.

*Compaction of the slab-on-grade fill must be reviewed by the geotechnical engineer.*

### 6.4 Foundation Drainage

A perimeter drainage system will be required for the below grade structure to prevent the development of water pressure against the foundation walls and floor slabs.

All drains should be designed to prevent migration of fines and should be hydraulically connected to the under-slab fill to ensure that water pressures cannot develop beneath the slab. Groundwater inflows into the excavation area are expected to be negligible (less than 10 to 20 liters/minute) for the entire excavation. These flow rates should be confirmed at the time of construction.

### 6.5 Seismic Design of Foundations

The subgrade conditions underlying the site may be classified as "Site Class C" as defined in Table 4.1.8.4.A of the 2018 British Columbia Building Code (BCBC). Peak ground acceleration on firm ground for the approximate site location is 0.700 g (Natural Resources Canada, Site Coordinates: 48.948 degrees north, 125.568 degrees west).

We do not expect any of the soils used to support building foundations to be prone to liquefaction or strain softening during cyclic loading caused by the design earthquake defined in the 2018 BCBC.

### 6.6 Utility Installation

There are no civil design plans available at present, however we anticipate storm sewer, sanitary sewer, water and other private utilities may be installed to service the buildings. We expect conventional open trench construction for new utilities. Some shoring may be required locally for deeper installation. We recommend that any trenches be sloped or shored as per the latest Work Safe BC regulations. We recommend that all service trenches be backfilled with clean granular material, compacted to 95% of the ASTM D1557 (Modified Proctor) maximum dry density at a moisture content that is within 2% of optimum for compaction. Groundwater encountered in utility trenches can likely be controlled using gravity methods such as pumped sumps.

### 6.7 New On Site Roads and Parking

The minimum asphalt pavement structure recommended for on-site roads and parking is presented in Table 1 below.

<b>Table 1: Recommended <u>Minimum</u> Pavement Structure for On Site Roads And Parking Areas</b>	
<b>MATERIAL</b>	<b>THICKNESS (mm)</b>
Asphaltic Concrete	75
19 mm Minus Crushed Gravel Base Course	150
75 mm Minus Select Granular Subbase Course	300

In areas where heavy loading is expected, such as drive aisles and access roads, we recommend that the asphalt thickness be increased to 100 mm.

All base and subbase course materials should be systematically compacted in thin lifts to a minimum density equivalent to 95% of their Modified Proctor maximum dry density, at water contents within 2% of their optimum moisture contents for compaction, determined in accordance with ASTM D1557. The base and subbase materials should meet municipal requirements for gradation and density. Density testing should be conducted on these materials and the results forwarded to the geotechnical engineer for review.

*The geotechnical engineer shall be contacted for the review of road and parking structure fill materials and compaction.*

### **6.8 Temporary Excavation and Backfill**

We expect that temporary excavations would be sloped where possible since it is more economical to do so. Slope cuts may be cut at a slope no steeper than 1:1 (H:V) in the surficial, topsoil and other fills, and 3:4 (H:V) in the underlying very stiff to hard clayey silt and glacial till. Temporary slope requirements may be subject to change due to the present groundwater conditions during excavation. Temporary cut slopes in excess of 1.2m in height require inspection by a professional engineer in accordance with WorkSafe BC guidelines, prior to entry.

*The geotechnical engineer shall be contacted for the review of temporary excavations.*

### **6.9 Lateral Pressures on Foundation Walls**

Earth pressures against the foundation walls are dependent on factors such as, available lateral restraint along the wall, surcharge loads, backfill materials, compaction of the backfill and drainage conditions. For a sloped excavation with drained backfill conditions, assuming granular backfill with a friction angle of 35 degrees and unit weight of 18 kN/m<sup>3</sup>, we recommend that the foundation walls be designed to resist the following lateral earth pressures:

- Static: Triangular soil pressure distribution of 5H kPa, where H is equal to the total wall height in metres.
- Seismic: Inverted triangular soil pressure distribution of 4H kPa, where H is equal to the total wall height in metres.

The preceding loading recommendations assume that the synthetic drainage material provides a drained cavity

around the perimeter of the foundation. We expect that the perimeter drainage system will be hydraulically connected to the synthetic drainage material and sufficiently lower the groundwater level such that hydrostatic pressures against the foundation walls are eliminated.

Any additional surcharge loads not specifically described herein should be added to the earth pressure given. All earth pressures are based upon unfactored soil parameters and are assumed to be unfactored loads.

*The geotechnical engineer should be contacted for the review of all backfill materials and procedures.*

### 6.10 Tidal Flooding & Tsunamis

Flooding can occur by overland transport of surface water from a stream or river (estuarine flooding) or from a coastal storm surge or tsunami. Estuarine flooding requires the presence of a channel or draw that can concentrate surface water. The site is in proximity to a creek and is therefore at risk of estuarine flooding.

Coastal inundation (flooding) due to a storm surge or tsunami is possible at the proposed site. Based on the coastal flood mapping study prepared for the District of Ucluelet by others, the site is located in flood zone 15. In flood zone 15, the flood construction level (FCL) considering a 1m sea level rise and 0.6 m freeboard is equal to 4.5 m for a 1 in 200 year flood event. We recommend that all building slab elevations are designed to be situated above this FCL.

The above noted coastal flood mapping study references a Flood Planning Level (FPL) for flood risk due to tsunami. For the District of Ucluelet, the FPL for tsunami related flooding was determined to be 20.0 m, with no safety factor for uncertainty in the model. As a tsunami is considered a natural disaster with a low return period, it is not considered feasible to design buildings to be tsunami resilient, nor to be situated above the FPL. We expect the District of Ucluelet's tsunami warning system and emergency management procedures would be implemented as part of the subdivision planning process.

## 7.0 DESIGN REVIEWS AND CONSTRUCTION INSPECTIONS

The preceding sections make recommendations for the design and construction of the proposed residential development. These reviews are carried out to ensure that our intentions have been adequately communicated. It is also important that any contractor(s) working on the site review this document prior to commencing their work.

It is the responsibility of the contractor to contact GeoPacific a minimum of 48 hours in advance to notify us that a field review is required. In summary, field reviews are required for the following aspects of the work:

- |                  |                                                                   |
|------------------|-------------------------------------------------------------------|
| 1. Stripping     | -Review of stripping depth to suitable subgrade materials         |
| 2. Fill          | -Review of materials, placement and compaction of engineered fill |
| 3. Subgrade      | -Review of foundation subgrades                                   |
| 4. Slab-on-grade | -Review of slab-on-grade fill compaction                          |
| 5. Excavation    | -Review of temporary slopes and soil conditions                   |



**8.0 CLOSURE**

This report has been prepared exclusively for District Group for the purpose of providing geotechnical recommendations for the design and construction of the proposed residential development and related earthworks. The report remains the property of GeoPacific Consultants Ltd. And unauthorized use of, or duplication of, this report is prohibited.

We are pleased to be of assistance to you on this project and we trust that our comments and recommendations are both helpful and sufficient for your current purposes. If you would like further details or would like clarification of any of the above, please do not hesitate to call.

For:  
**GeoPacific Consultants Ltd.**

Reviewed By:



Pourya Asadi Farsani, B.Sc., M.Sc., EIT.  
Geotechnical Engineer-in-Training

Daniel Kokan, M.Eng., P.Eng  
Project Engineer



Appendix D

REFERENCE: GOOGLE EARTH	REVISIONS:
	A.
	B.
FILE NO.: 23265	
DWG. NO.: 23265-01	

**SITE PLAN**  
1:4500

PROPOSED MULTI FAMILY DEVELOPMENT  
221 MINATO ROAD, UCLUELET, BRITISH COLUMBIA  
SITE PLAN

DATE: SEPTEMBER 5, 2023	REVIEWED BY: D.K.
DRAWN BY: P.A.F.	APPROVED BY: D.K.
SCALE: AS SHOWN	



Ucluelet District Lot 286 – Flood Construction and Tsunami Inundation  
Levels for Proposed Development  
Final Draft Report



*28 January 2022*



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EGBC Permit Number: 1000929

Project Number: P217



### Disclaimer

This document has been prepared by Ebbwater Consulting Inc. for the exclusive use and benefit of Minato Developments. It has been developed in accordance with generally accepted engineering practices and with full understanding of applicable natural hazard guidelines in the Province of British Columbia.

The contents may be used and relied upon by the officers and employees of Minato Developments. However, Ebbwater Consulting Inc. denies any liability to other parties who access and use this report.

### Acknowledgements

This report was written by Jessica Cochran, M.Sc., E.I.T. (Texas) and reviewed by Tamsin Lyle, M.Eng., MRM, P. Eng. (Principal) of Ebbwater Consulting Inc.

We would like to acknowledge that this report was written at the Ebbwater office and home offices, which are located on unceded and Traditional Territory of the Coast Salish people.



### Certification

Name, Qualifications, and Project Role	Organization	Signature
<b>Tamsin Lyle, M.Eng., MRM, P.Eng.</b> Senior Reviewer	Ebbwater	<i>(Signature and Stamp to be provided at project conclusion)</i>
<b>Jessica Cochran, M.Sc., E.I.T. (Texas)</b> Contributor	Ebbwater	<i>(Signature provided to be provided at project conclusion)</i>

### Revision History

Revision No.	Date	Description	Remarks
<b>1</b>	17 Jan 2022	Draft Report	Shared with client
<b>2</b>	28 Jan 2022	Final Draft Report	Incorporates comments provided by the client and provides additional policy context.

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## 1 Introduction

Minato Developments (Minato) is proposing the rezoning and development of a 25-acre (10-hectare) site at Ucluelet District Lot 286, shown at 221 Minato Road in Figure 1-1. The 2021 Draft Site Concept details a mix of single- and multi-family homes, rentals, and vacation homes (Formosis Architecture, 2021). During the preliminary planning stage, Minato Developments documented the tsunami hazard at the site as an issue to be studied further and discussed.

The District of Ucluelet (District, DOU) regulations relating to flood hazards are in flux due to new information and a changing climate. The District suggested that Minato engage Ebbwater Consulting Inc. (Ebbwater) to consider flood construction and tsunami inundation levels at the site and ensure that the development would align with forthcoming regulations.

This document outlines the assessment for flood construction and tsunami inundation levels for the development site shown in Figure 1-1, based on the publicly available 2020 District of Ucluelet (DOU) Report (Ebbwater Consulting Inc. and Cascadia Coast Research Ltd., 2020).



Figure 1-1 Development site location

### 1.1 Development Site Location

The DOU spans the Ucluth Peninsula on the west coast of Vancouver Island. While the western and southern sides of the peninsula are exposed to the open ocean, the eastern side along the Ucluelet Inlet is more sheltered. The 25-acre development site is located along this more sheltered stretch (Figure 1-1).

The proposed development includes 84 rental housing units, 50 family homes, 67 vacation homes or suites, and 2 amenity buildings according to the Draft Site Concept. The proposed units are distributed outside of the local setbacks (i.e., the 30.0 m coastal setback and 10.0 m environmental or creek setback as well as the roadway setbacks).

The development site is bound by the inlet to the north and Peninsula Road to the south. The site is bisected by a creek as shown in Figure 2-1. West of the creek varies in elevation from a higher section at approximately 14.0 metre (m) geodetic elevation toward Peninsula Road (Frontera Geotechnical, 2021) to the lower shoreline. Northeast of the creek gradually slopes from a lower 9.0 m geodetic elevation near Minato Road down to the shoreline and creek.

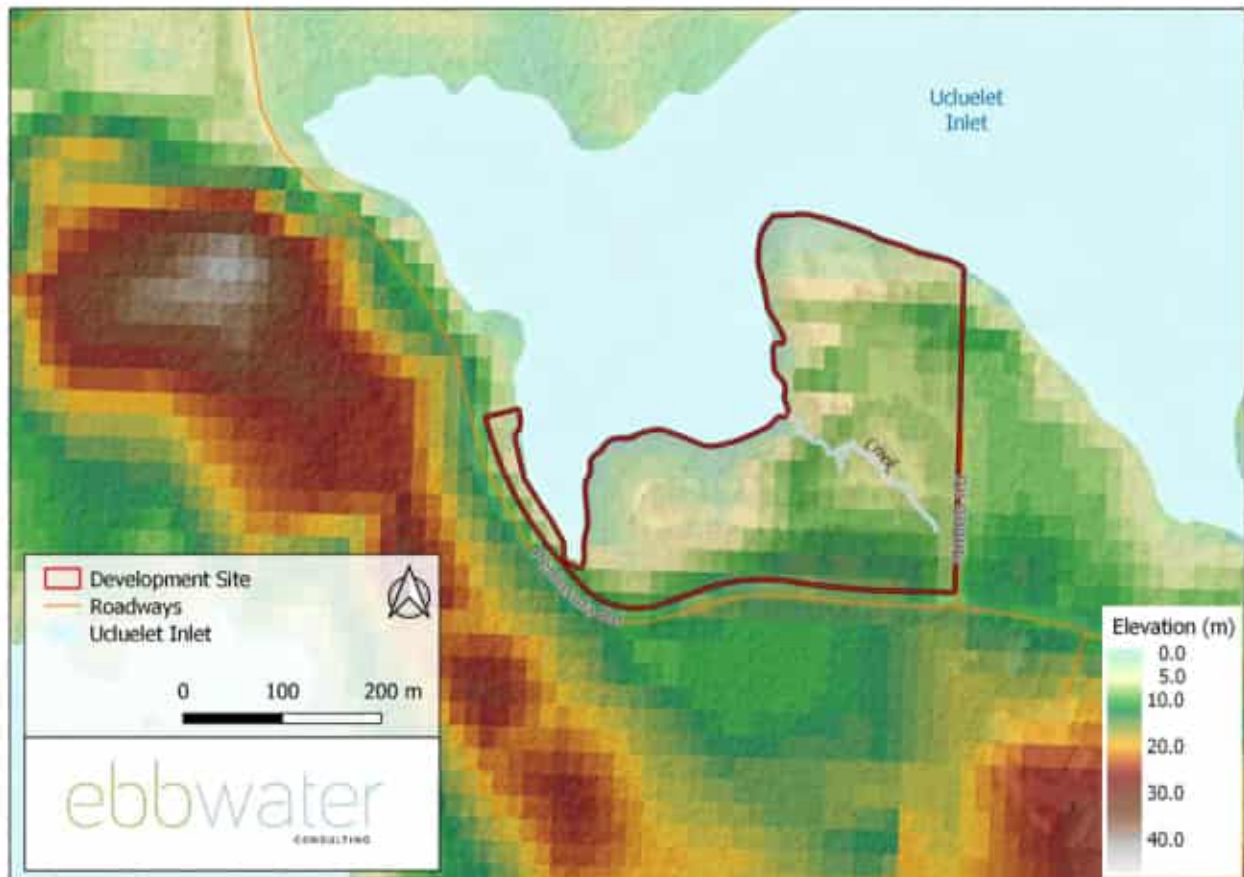


Figure 1-2 Development site elevation in m CGVD28 (2017 10-m CDEM). Update with 2015 LiDAR provided by DOU.

## 2 Policy Context

As noted in the introduction, natural hazards policy for coastal areas is in flux within the District. This is also true for the Province of BC. The following provides some brief context on existing and changing regulations and guidance.



## 2.1 British Columbia Policy Context

The Province of BC grants local governments authority to manage hazards under the *Local Government Act*, which authorizes a local government to designate land as a flood plain, to specify the flood construction level for that floodplain and specify setbacks or landfill and structural supports within the floodplain.

In support of the above legislation, the Province has also prepared the *Flood Hazard Area Land Use Management Guideline*, which provides additional information on how to define and designate a floodplain, as well as information on acceptable building practices (i.e. how to apply an FCL in practice). This document was originally released in 2004 around the same time as the *Local Government Act* was promulgated. It was revised in 2018 in recognition of climate change and sea level rise. Changes were made to help local governments better define future flood plain areas. Changes to reflect best practice policy for the use of flood hazard areas (e.g., spatial variation in policy, use of property-level flood protection and/or flood-resilient design) have not been made to date. Specific guidance relevant to the project site follows below.

Further, we note that natural hazards policy in BC is in flux. In the wake of recent damaging flood and wildfire events, BC is proposing to update the Emergency Program Act (EPA), to better reflect the direction of the Sendai Framework (the international blueprint for disaster risk reduction), to which BC is a signatory. The EPA modernisation timeline has been derailed by the COVID19 disaster, and no new dates for engagement and ultimately promulgation have been defined. However, it is the authors' understanding that BC wishes to continue moving towards a risk-based approach to hazard management. That is, an approach that considers likelihood and potential consequences of a hazard event as opposed to defining a hazard severity standard (e.g., the 0.5% AEP flood event).

### 2.1.1 Coastal Flood

In 2011, the Government of BC commissioned a number of reports that provide guidance for land use planning and mapping in consideration of coastal flood hazards and SLR (Ausenco Sandwell 2011a, 2011b, 2011c; Kerr Wood Leidal 2011). Collectively, these documents are referred to as the *Provincial Guidelines*. The guidance in these documents was further refined in the Association of Engineers and Geoscientists British Columbia (APEGBC, now EGBC) Professional Practice Guidelines for Flood Mapping in BC, released in 2017 and referred to in this report as the *Professional Practice Guidelines* (APEGBC, 2017).

The *Provincial Guidelines* define a number of key water levels to be used in flood planning and mapping (see also Section 4.1).

**Designated Flood Level (DFL).** The DFL is the still water level resulting from a chosen flood hazard event or designated storm.

**DFL =**

**Future SLR Allowance**

**+ High Tide (HHWLT)**

**+ Total Storm Surge (deep water storm surge + estimated wind set-up  
+ inter-annual climate variation)**

**Flood Construction Reference Plane (FCRP).** The FCRP is the maximum level that flood water is predicted to reach, based on analysis.

**FCRP =**

**Designated Flood Level (DFL)**

**+ Estimated Wave Effect**

**Flood Construction Level (FCL).** The FCL is an elevation relative to the Canadian Geodetic Vertical Datum (CGVD), and it is used in planning to establish the elevation of the underside of a wooden floor system (or top of concrete slab) for habitable buildings. It includes a freeboard (for safety) to account for uncertainties in the analysis.

**FCL =**

**Flood Construction Reference Plane (FCRP)**

**+ Freeboard**

The FCL is extended from the shoreline horizontally landward, until the land surface elevation reaches the FCL. All land with an elevation below the FCL landward of the shoreline is considered within the FCL extent.

### 2.1.2 Tsunami

Ucluelet is in Zone C of the Tsunami Notification Zones for BC (GeoBC, 2015) and therefore subject to significant tsunami hazard. Guidelines for areas subject to significant tsunami hazard are in Flood Hazard Area Land Use Management Guidelines (Amended 2018), Section 3.5.6. The following is stated in direct regard to tsunami hazards:

- Tsunami setbacks and elevations should be required for new lots created through the subdivision approval process. Tsunami hazard requirements and regulations for existing lots may be determined by local governments on a site specific or regional basis.
- The “standard” setbacks and elevations in sections 3.5.5.1 to 3.5.5.4 [of the guidelines] above apply to all coastal areas outside of the Strait of Georgia, except for new subdivisions subject to significant tsunami hazards, in which case the tsunami setbacks and elevations shall apply. Where the tsunami hazard is low, the greater FCLs and setbacks shall apply.
- A subdivision application in a tsunami prone area must include a report by a suitably qualified Professional Engineer, experienced in coastal engineering who must formulate safe building conditions for each proposed lot based on a review of recent Tsunami hazard literature including the report, “Modelling of Potential Tsunami Inundation Limits and Run-Up”, by AECOM for the Capital Regional District, dated June 14, 2013, plus the historical report, “Evaluation of Tsunami Levels Along the British Columbia Coast”, by Seaconsult Marine Research Ltd., dated March 1988.

At a minimum, building conditions should protect improvements from damage from a tsunami of equal magnitude to the 28 March 1964 tsunami that resulted from the Prince William Sound, Alaska earthquake and a possible Cascadia Subduction Zone earthquake.

- Setback requirements should be established on a site-specific basis and consider tsunami hazards. The setback must be sufficient to protect buildings and must be at least 30.0 m from the Year 2100 estimated natural boundary.
- FCL requirements should be established on a site-specific basis and consider tsunami hazards. Reductions to these requirements should only be considered where the building can be built to the Tsunami FCL on bedrock.

## 2.2 Nearby Guidelines

The nearby District of Tofino (Tofino) completed modern coastal flood mapping in 2019, a year before the DOU. These maps were and integrated some findings in the nearby District of Tofino Official Community Plan to support planning and emergency management (in compliance with Part 14 of the *Local Government Act*). Tofino also recently passed a [Floodplain Bylaw](#) to support risk reduction from coastal floods. Both Ucluelet and Tofino are peninsulas on the west coast of Vancouver Island and therefore at risk to similar hazards such as coastal floods, tsunami, and sea level rise.

- Current [tsunami] protocol is to move to high ground if shaking is felt and not to wait for an official warning. A safe planning level has been designated to be above 20 m, however, preliminary tsunami modelling and mapping is required to confirm this, identify high ground (safe areas), and help in determining the most effective evacuation routes.
- Community resiliency is improved by locating future development in areas that are less susceptible to the impacts of sea level rise, coastal flooding, and tsunami inundation and reducing pressure on emergency evacuation routes. (p. 43)
- Prioritize evacuation planning and the development of evacuation options to mitigate the impacts of tsunami hazard. (p. 45)

## 3 District of Ucluelet Policy

As for all Local Governments the DOU sets out policy related to development generally, and development within hazardous areas within its Official Community Plan, and related bylaws and regulations. The current OCP, from 2011, is currently being updated. A draft version of the OCP from 2020 is available.

### 3.1 Land Use Policy

The long-range land use plan, in the draft OCP, at the development site currently shows three categories (Figure 2-2). The area is split evenly between parks and open space and residential. The parks and open space landuse follows the three types of setbacks mentioned. The residential plan is for single and multi-family landuse.



Figure 3-1 Long-range land use plan at the development site based on the DOU Draft Official Community Plan.

### 3.2 Natural Hazards Policy

As it currently reads, the draft OCP outlines general concerns for flood hazards, explaining that the sea level on the west coast of Vancouver Island will rise approximately one metre by 2100. Therefore, development along the coastline must minimize negative impacts that rising sea levels may have on the built environment and the safety of residents.

Relevant policies related to coastal flood and tsunami include:

- “establish and undertake the work, as necessary, to refine Flood Construction Levels (FCLs) to ensure new development and infrastructure avoids the impacts of rising sea levels” (Policy 2.34).
- “conduct flood risk mapping for sea level rise and use results to communicate and manage risks” (Policy 2.50)
- The development of Development Permit Areas (DPA) for hazardous areas, including flood. (DPA VIII). Several guidelines related to the DPA are also included, which describe the need for a qualified professional to provide a report, and also certify the land safe for the use intended.

The draft OCP also notes the following:



- Pg 48, the DOU notes that parks and open space designated areas often have high habitat value and/or flood potential.
- Pg. 91, the DOU will consider a floodplain bylaw to clarify expectations for flood construction levels.
- Pg. 121 (within the DPA explanatory notes) “It is the District policy that it is in the public interest for new subdivisions and developments to be planned to avoid area of potential flood risk.”

#### 4 Coastal Hazards at the Project Site

The DOU supports the policy process with research and projects. Therefore, to account for climate change and future sea level rise, the 2020 DOU Flood Mapping Project was completed to develop updated flood hazard information. Ucluelet is currently working to apply the 2020 DOU Report flood mapping results into regulations and bylaws with the goal of reducing community risk to flooding. A brief background on the calculations, limitation and results from the report follow.

The flood hazard modelling and mapping conducted under the DOU project looked at multiple coastal storm events as well as tsunamis. For the coastal storms, historic and projected future wind and wave conditions were established, and these were then used to force computer models of the region. The more localised effects of coastal storms which vary depending on the aspect and shape of the local shoreline, were then calculated.

The flood hazard modelling and mapping relied on characterizing the Ucluelet shoreline, which was done by cutting transects at intervals along the shore to represent contiguous reaches, where the conditions that affect how water moves onshore (slope and aspect) are relatively similar.

This slope along the shore was characterized by 48 cross-shore transects at 500-m intervals around the inlet and peninsula for the flood mapping project calculations. Among the transects, one intersected the development site, rather than only characterizing the nearby or adjacent lots, representing the surface elevation for the development site and reach. Still, variability in shore slope conditions, such as that due to erosion or changes in sea level rise, will result in variability in the storm hazard calculations, rendering the results less reliable.

Variability in shore slope conditions within the development site will result in variability in the storm hazard calculations that has not been captured (Ebbwater Consulting Inc. and Cascadia Coast Research Ltd., 2020). The slopes across both sides of the site are low to moderately sloped. Figure 2-2 shows the location and elevation of the transect used for calculations in the DOU Report, Transect No. 24. The slope of the transect is approximately 5.2% (from 115 m to 270 m distance). Of that, the slope down to the shoreline is slightly steeper at 9.3% (from 230 to 270 m distance). The shore slope around the development site tends to be slightly steeper, estimated from the last 5-30 m at the shoreline, closer to a 30% slope, as the land descends toward the inlet. If the site were less steep than the representative transect, then the calculations may not be appropriate for the site. However, since the development site shore slopes are generally steeper, calculations should be appropriately conservative.

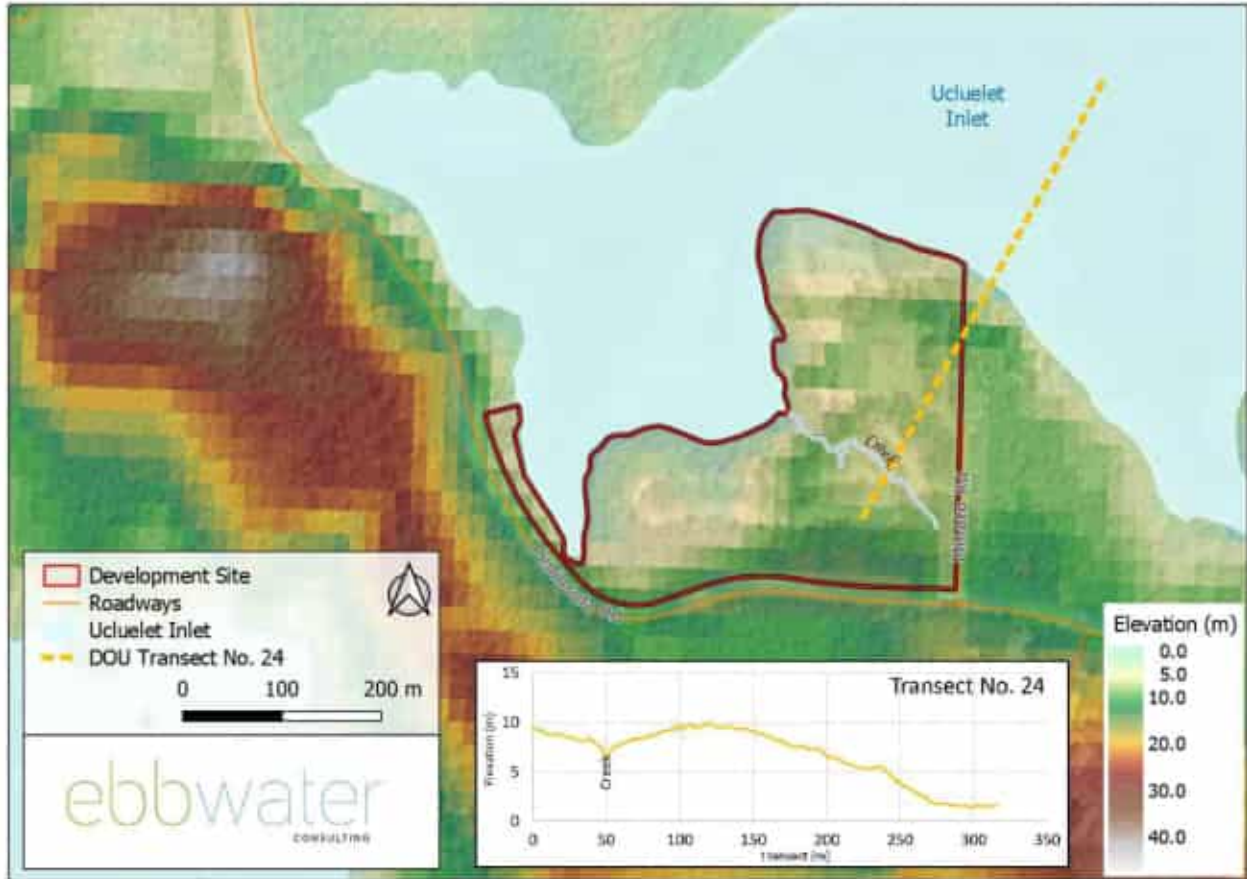


Figure 4-1 Development site elevation (m CGVD28) with transect slopes.

For the complete methodology, results, and limitations of all reporting and mapping products, refer to the 2020 DOU Report (Ebbwater Consulting Inc. and Cascadia Coast Research Ltd., 2020).

#### 4.1 Flood Construction Level for Coastal Storms

One of the measures used in policy to reduce risk is Flood Construction Levels, which describe the height of water for a flood scenario. FCL maps are based on hazard maps and a safety factor (i.e., the flood construction reference plane plus freeboard allowance). These FCL components, illustrated in Figure 4-1, were used to produce the maps in the 2020 DOU Report - Coastal Flood Hazard Map Atlas.

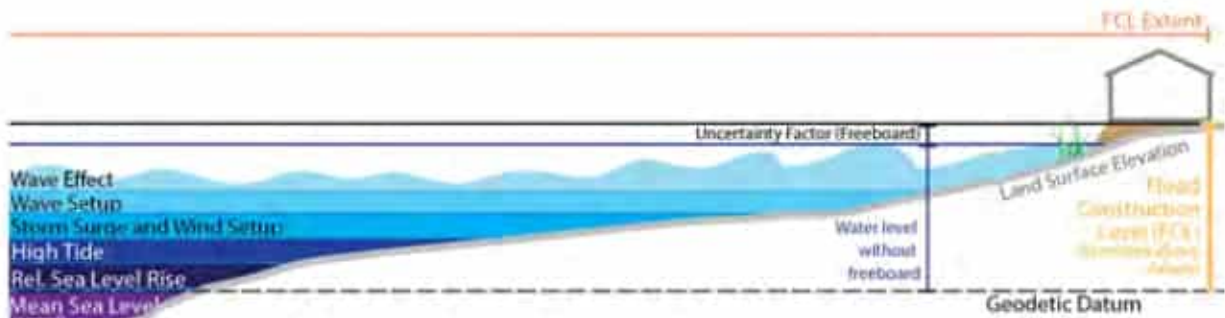


Figure 4-2 Components of total water level (MFLNRORD, 2018).

The atlas is thorough and provides different map types, such as the FCL and Sea Level Rise Planning Area maps, for a range of timeframes. To support short-term and long-term strategic planning and permitting, the mandated FCL maps were developed for both the near future and future scenarios (0.5 m and 1.0 m RSLR). We reviewed the more conservative future (1.0 m RSLR) scenario for the development site, to weigh the longer-term design life of the new development.

There is a wide range of FCLs throughout the DOU (4.0 to 12.0+ m) due to the complex shoreline variation around the peninsula. Therefore, the FCLs are grouped in zones to represent areas of similar hydraulic conditions and planning considerations. Figure 4-2 shows the future FCL coastal storm hazard by FCL zone and a flood hazard boundary line.

The development area, located on the more protected shoreline of the Ucluelet Inlet, is subject to Zone 15 with an elevation of 4.5 m for the future scenario, which is shown by the lowest FCL (tan, 4.5 m CGVD 2013) for Ucluelet. By contrast, the open-ocean shore of the peninsula is subject to elevated FCLs, as shown in the lower left corner of the figure. The difference in shoreline characteristics are considered in zoning. The flood hazard boundary shows the edge of the FCL. For the development site, the flood hazard boundary is contained within the proposed 30.0 m coastal setback. Therefore, the FCL is not an issue for the development site (see also Figure 4).

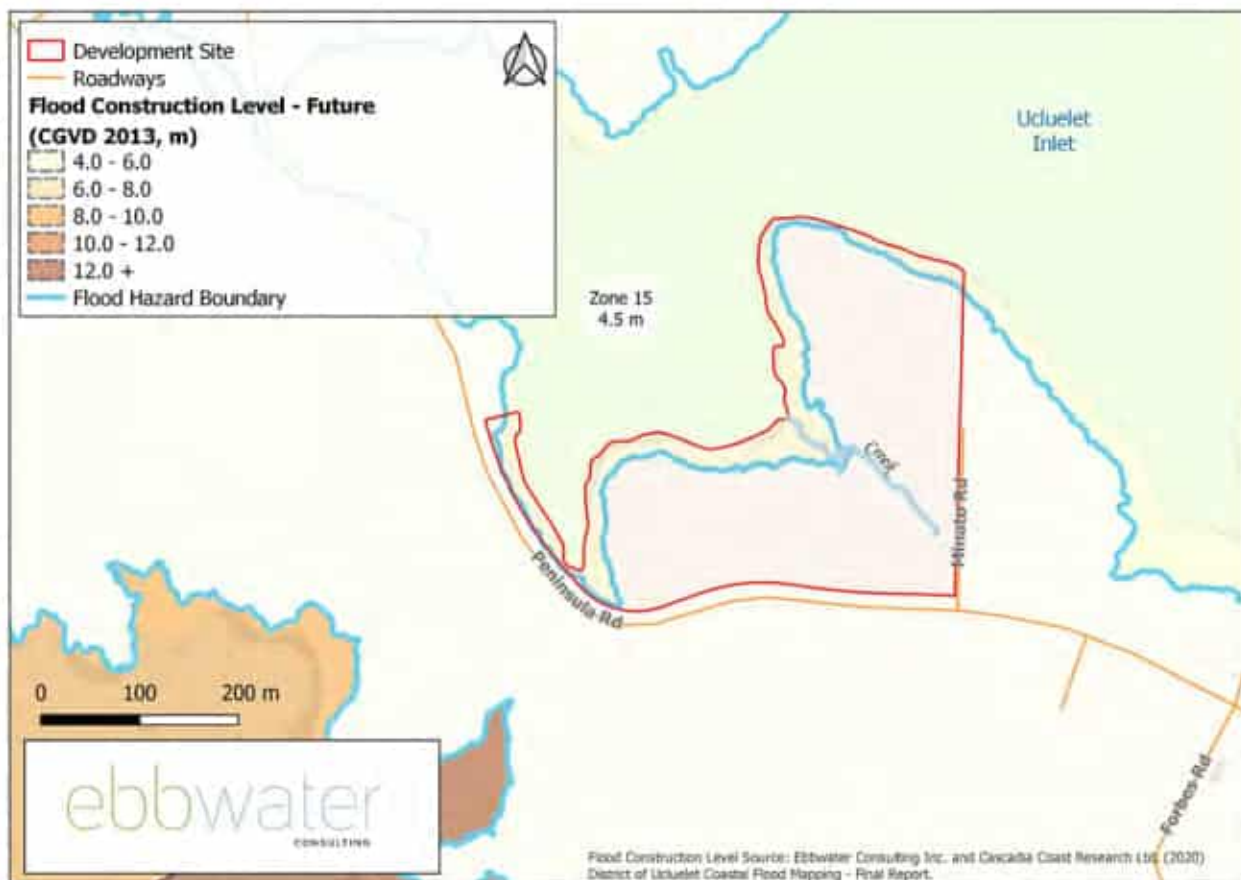


Figure 4-3 Coastal Storm Flood Planning Support Map for Flood Construction Level – zones for rare event (future - 0.5% Annual Exceedance Probability (AEP) + 1.0 m RSLR + 0.6 m freeboard).

The estimated FCRP and FCL for rare event coastal storm hazards is presented in Table 4-1. The FCLs based on three RSLR scenarios (0.0 m, 1.0 m, and 2.0 m) are shown for context. However, the future scenario of 1.0 m RSLR is the most applied scenario in BC, as it is referenced in the 2018 Flood Hazard Area Land Use Management Guidelines (MFLNRORD, 2018). The 1.0 m RSLR scenario is a reasonable and conservative basis for evaluating the coastal storm hazard.

Within Ucluelet Inlet, tides are often the largest contributor to high water levels and storm surge is the second. Waves rarely exceed 0.5 m in the sheltered areas on the inlet.

**Table 4-1** Estimated coastal storm hazard FCRP and FCL for a rare event (0.5% AEP) and 0.0 m to 2.0 m RSLR.

Event	RSLR scenario (m)	FCRP (m CGVD28)	FCL (m CGVD28)
Near Future	0.5 m	2.7-3.0	4.2
<b>Future</b>	1.0 m	3.7-3.9	<b>4.5</b>
Far Future	2.0 m	4.7-4.9	5.5

*FCRP = Tide + RSLR + Storm Surge + Wind Setup + Wave Runup*  
*FCRP read from 2020 DOU Report - transects 24-25*  
*FCL = FCRP + Freeboard (0.6 m)*





Figure 4-4: Coastal Storm Flood Planning Support Map for Flood Construction Level – zones for rare event (future - 0.5% Annual Exceedance Probability (AEP) + 1.0 m RSLR + 0.6 m freeboard) overlaid on the Draft Site Concept. Note that the Draft Site Concept georefer

## 4.2 Tsunami Hazard

The complete tsunami flood hazard map series is also publicly available as part of the 2020 DOU Report - Coastal Flood Hazard Map Atlas. The report found that the tsunami flood construction reference plane was defined mostly by the “G2018-S-A splay rupture” scenario, which produced the largest tsunami wave.

The destructive nature of tsunamis as well as their relative infrequency means that they do not naturally fit within the definition of FCL provided in the Provincial Guidelines. For planning support purposes, the 2020 DOU Report proposed a tsunami flood planning level based on 1.0 m RSLR, and a 50% safety factor to the maximum tsunami amplitude.

All tsunami flood planning support maps were completed for the future (1.0 m RSLR) scenario. This tsunami hazard scenario (1.0 m RSLR) is shown in Figure 4-4 and summarized in Table 4-2. The tsunami hazard for the development site indicates risk to approximately 60% of the proposed structures, as shown in Table 4-3 and Figure 4-6. While the majority of rental houses are outside of the tsunami hazard area, all other types have over 50% of proposed structures within the tsunami hazard area for 2.0 to 4.0 m.

Only the higher elevation along Peninsula Road is outside of the specified tsunami hazard zone. The extents of the tsunami planning level is 18.0 m CGVD2013 without a safety factor and 26.0 m with a safety factor. For even the less conservative approach, the development site lot is under the 18.0 m elevation.

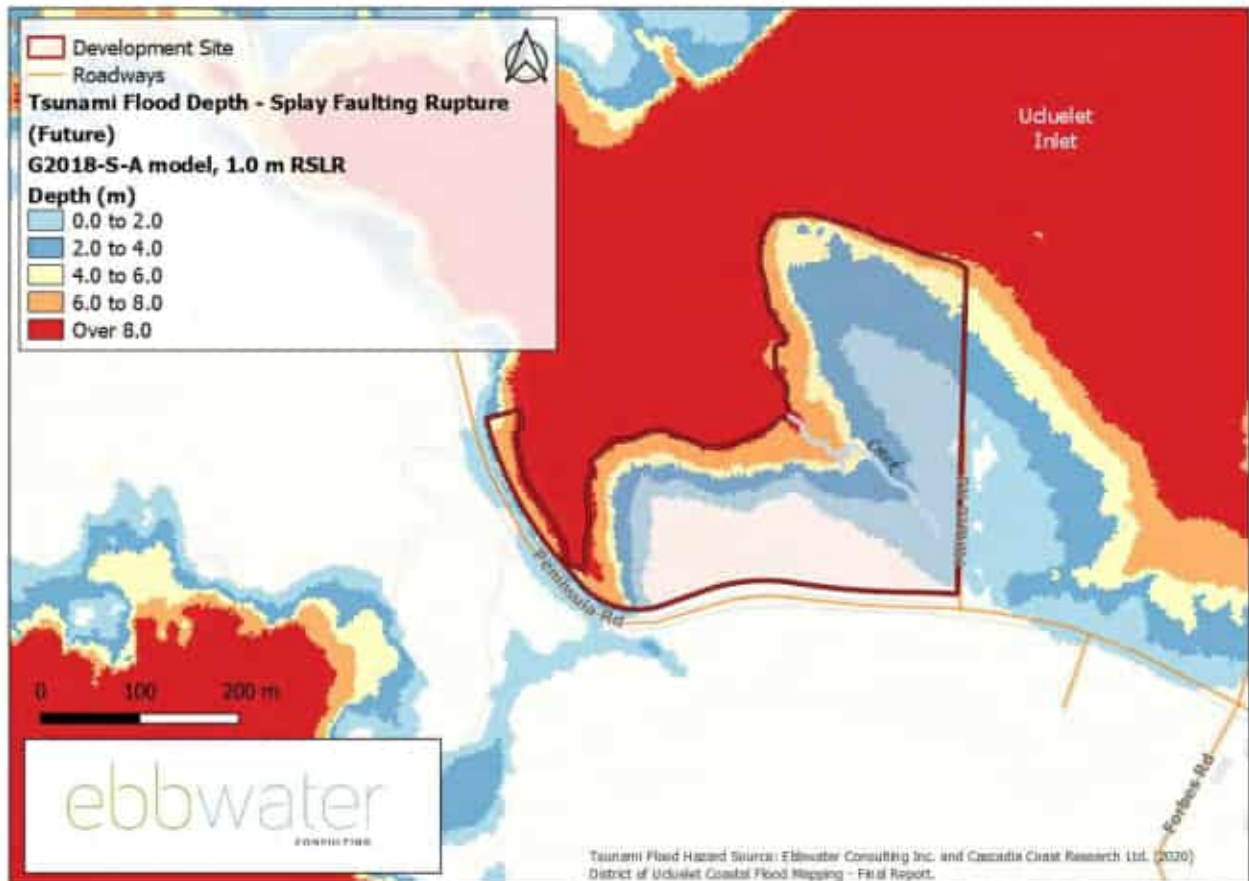


Figure 4-5: Estimated planning level extents for tsunami hazard.

Table 4-2 Estimated tsunami hazard levels for 0.0 m, 1.0 and 2.0 m RSLR based on maximum tsunami amplitude within the development site (transect 24) for splay faulting rupture G2018-S-A model.

RSLR scenario (m)	Tsunami amplitude (m)	FCRP (m CGVD28)	Planning level (m CGVD28)
0.0 m	4.2	8.4	Not assessed
1.0 m	4.5	9.6	11.9
2.0 m	4.7	10.8	Not assessed

*FCRP = Tide - Vertical Land Movement + RSLR + Tsunami Amplitude*  
*FCRP read from 2020 DOU Report – Appendix A transect 24*  
*Planning Level = FCRP + 50% of Tsunami Amplitude*  
*Tide = 2.0 m CGVD28, Vertical land movement = - 2.1 m*

Table 4-3 Estimated number of proposed structures within the tsunami hazard scenario (1.0 m RSLR, splay faulting rupture G2018-S-A) by depth.

Proposed Structures	Count, total	Count, ground-level	Not affected	0-2 m	2-4 m	4-6 m	6-8 m
Rental houses, stacked	84	42	35	7			
Family homes	50	50	4	18	<b>28</b>		
Vacation homes	67	67		2	<b>39</b>	19	7
Amenity buildings	2	2		<b>1</b>	<b>1</b>		
sum	203	161	39	28	68	19	7
percent			24%	17%	42%	12%	4%

*Rental Houses are stacked, so only 50% are on the ground level.*  
*Bold values show that greater than 50% of the given building type is within the given flood category.*  
*Percent calculation uses count of ground-level structures (161).*

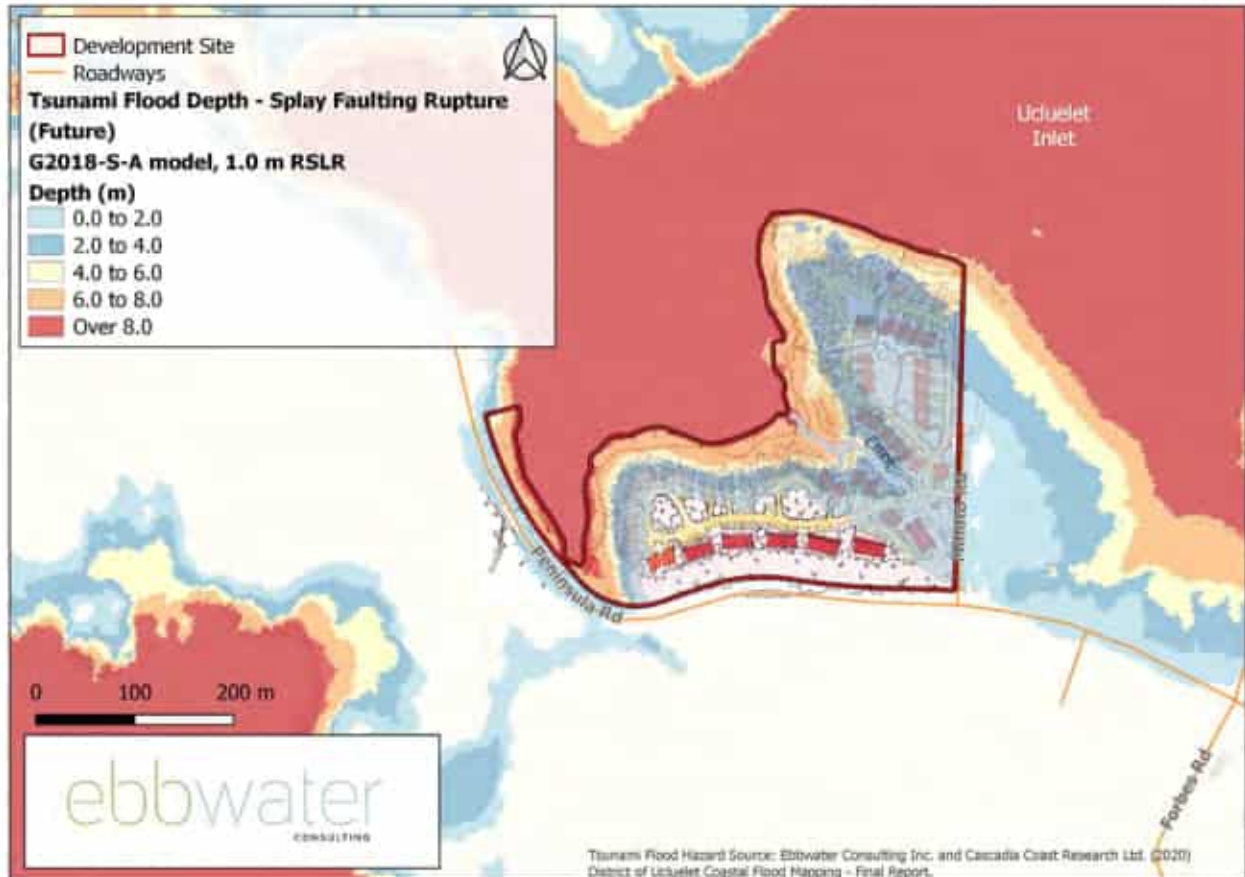


Figure 4-6: Estimated planning level extents for tsunami hazard overlaid on the Draft Site Concept. Note that the Draft Site Concept georeferencing was estimated.

## 5 Discussion

This report documents the current known flood hazard at the project site. This work shows that, given the current draft concept layout, all properties are outside the coastal flood hazard area. However, the significant tsunami hazard at the site, affects 76% of the proposed development structures.

The destructive nature of tsunamis as well as their relative infrequency means that they do not naturally fit within the definition of FCL provided in the Provincial Guidelines. For planning support purposes, the Ucluelet project proposed a tsunami flood planning level based on 1 m RSLR, and a 50% safety factor to the maximum tsunami amplitude.

Tsunamis and coastal storm events have different hazard profiles and mitigative measures to reduce the risk from these events should be designed to reflect the specific hazard and risk profiles. For example, tsunamis, although more damaging and consequential than coastal storms, are less likely to occur. Further, there are mitigative actions that can be taken to reduce risk-to-life (e.g., warning and evacuation systems, safe havens, etc.). Careful consideration of the best use of land and the risk tolerance of land users using the principle of “as low as reasonably practicable” (ALARP) should apply (EGBC, 2018).



## 6 Next Steps

Given that a strict application of the draft OCP policies will effectively sterilize a majority of the development site and dramatically reduce the number of housing units, we suggest that the client work collaboratively with the DOU to work towards an ALARP approach for the site, and potentially for the broader DOU policy. Specifically, this might include discussions related to:

- Reducing risk to life and safety through appropriate warning mechanisms ([Early Earthquake Warning](#), Tsunami Sirens, Up-to-date and well publicised evacuation plans, etc.).
- Reducing damage potential for high-value and/or critical structures through the application of forthcoming international guidelines on design standards for tsunami loading.
- Legal and financial mechanisms to enable and support the above in perpetuity.

## 7 Technical Limitations

Uncertainties exist, the flood mapping project provided a simplified representation of a complex reality. This section summarizes limitations to consider when using the 2020 DOU Report flood mapping results, as well as some additional limitations related to the preparation of this report.

### 7.1 Coastal Storm Modelling (2020)

- The accuracy of the coastal storm flood estimates relies on the accuracy of the hind-cast. The use of the hind-cast to estimate probability of future coastal storm flooding assumed that the future climate at the DOU will be like the historic climate (assumption of climate stationarity). Also, extrapolation from the 40-year hind-cast introduced uncertainties for the frequency-response curves, especially for the very large events that required the greatest degree of extrapolation.
- There is inherent uncertainty in RSLR values, which have a degree of variation in currently predicted levels. The RSLR values are based on established guidance that is liable to change in the future as predictions are adjusted and the effects of climate change increase.
- The simplified combined method was used to evaluate the storm hazard. This approach is the more conservative method to evaluated standard FCLs (MFLNRORD, 2018) as it does not capture the probabilistic nature of coastal flooding and does not represent a particular Annual Exceedance Probability.

### 7.2 Tsunami Modelling (2020)

- The accuracy of the tsunami flood estimates relies on the accuracy of the tsunami modelling, including the deformation model of the fault rupture, bathymetry data, and assumptions about the tidal level at the time of the fault rupture. Efforts were made to produce conservative, worst-case scenario results. The levels could potentially be even worse with, for instance, additional storm surge, or mitigated by a lower tide level.
- The tsunami hazard results are extracted from one of six rupture models from the Ucluelet project. The project site is approximately 2.5 km east of the Ucluelet project boundary and has similar coastline exposure. The model was created and optimized for the Ucluelet project and not the project site.
- The tsunami hazard assessment did not include resonance analysis to consider whether the inlet has the potential to amplify tsunami response and increase the hazard, as was observed further

down the inlet in the 1964 tsunami at Port Alberni. A resonance study was conducted for the District of Ucluelet project, and it was not deemed a concern.

- A HHWLT of 2.0 m was assumed to coincide with the tsunami event. This likely represents a worst-case tidal condition, but it could potentially be even worse with, for instance, additional storm surge. The tsunami hazard could also be less severe if it coincides with a lower tide level.

### 7.3 Flood Mapping (2020)

- When producing the flood hazard maps, uncertainties are introduced DEM creation. Although the vertical accuracy of the LiDAR was generally high, estimated better than 15 cm vertically and 1 m horizontally, small inaccuracies may be introduced. The LiDAR data was collected in 2015, and changes to observed elevations may have occurred since from erosion, sediment accumulation, construction, etc.
- In addition to the general uncertainty from the coastal modelling and hind-casting, there is a limitation caused by the interpolation of results between representative transects across the shoreline. Although the shoreline is sub-divided into 48 characteristic reaches, variation in shoreline type, slope, and orientation still exists within each reach.
- There is a difference in the datum used to produce the water elevations at transects (CGVD28) and that used to map flood elevations (CGVD2013). This is due to not being able to source hind-cast data in the newer datum reference. The differences between the two datums differs across the study area, in the range of 15 and 17 cm, which is relatively small when compared to uncertainties due to modelling and is within the tolerance for error.

### 7.4 Limitations of this FCL assessment

All assessments, whether preliminary or detailed will have underlying assumptions and limitations. The limitations of this assessment include:

- No site visit was conducted to look at the project site. The consultant team relied on previous reporting (and site visits) conducted in support of the 2020 DOU project.
- Only one transect was used to evaluate the storm hazard wave runup. It should be noted that variability in shore slope conditions within the project area will result in variability in wave runup that has not been captured.

## 8 References

BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (BC MFLNRORD). (2018). Amended flood hazard area land use management guidelines. Available online: [https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/integrated-flood-hazard-mgmt/flood\\_hazard\\_area\\_land\\_use\\_guidelines\\_2017.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/integrated-flood-hazard-mgmt/flood_hazard_area_land_use_guidelines_2017.pdf)

District of Tofino. (2021). District of Tofino Official Community Plan Bylaw No. 1290, 2021. Available online: <https://tofino.civicweb.net/filepro/documents/4210?preview=113587>

District of Ucluelet. (2020). 2020 Draft Official Community Plan. Available online: [https://ucluelet.ca/images/OCP\\_2020\\_draft\\_7.3.pdf](https://ucluelet.ca/images/OCP_2020_draft_7.3.pdf)

Ebbwater Consulting Inc. and Cascadia Coast Research Ltd. (2020) *District of Ucluelet Coastal Flood*

*Mapping - Final Report*. Prepared for the District of Ucluelet. Available online: <https://ucluelet.ca/community/sustainability-climate-action/flood-mapping/technical-flood-mapping-reports>

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GeoBC. (2015). Tsunami Notification Zones for BC map. Produced for Emergency Management BC. Available online: [https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/tsunami\\_zone\\_province\\_final.pdf](https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/tsunami_zone_province_final.pdf)



## Memo

To: Joshua Hunt, CEO, Economic  
Restoration Infrastructure Fund

From: Stantec Consulting Ltd.  
Burnaby, BC.

Project/File:  
111700812

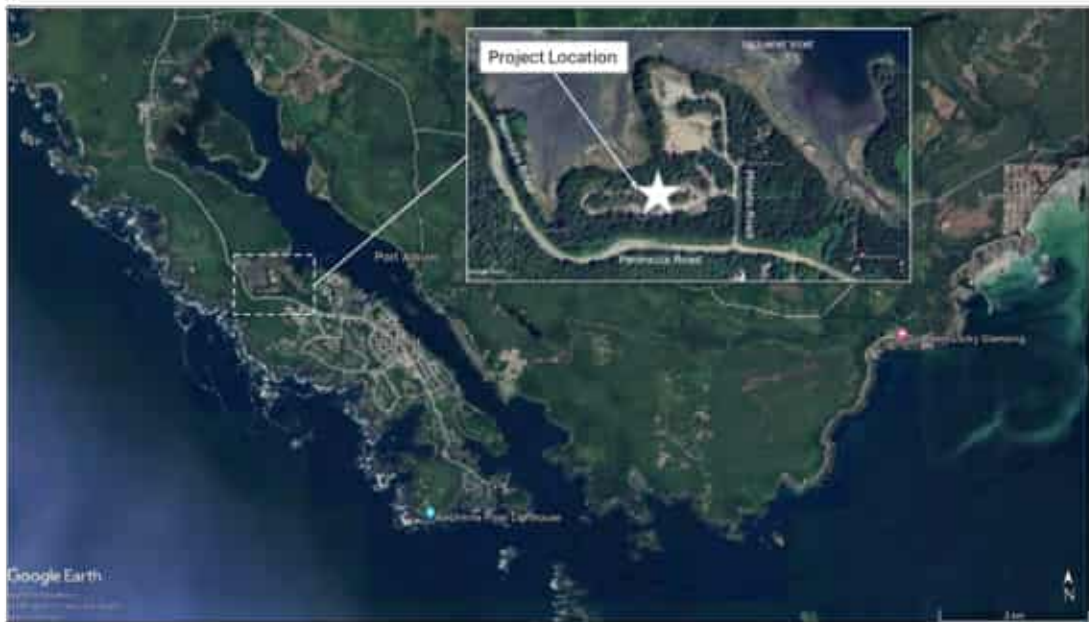
Date: July 30, 2024

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**Title: Summary Memo for Structural Mitigation Feasibility Study at the Minato  
Developments located in the District of Ucluelet**

## Introduction

Economic Restoration Infrastructure Fund (ERIF) is proposing a new development comprising of single family and multi-family homes at 221 Minato Road in Ucluelet. Stantec Consulting Ltd. (Stantec) was retained by ERIF to conduct a background review to determine whether a structural mitigation would be feasible to address the identified tsunami risk at the proposed new development. This desktop review is based on professional practice guidelines and current flood hazard legislation. If structural mitigation is found to be feasible, a scope to develop associated design concepts will be prepared (the Review).



**Figure 1: Project Location (Source of Background Image: Google Earth Aerial Image – May 2023)**



## 1.1 Background

ERIF is proposing a new development comprising of single family and multi-family homes at 221 Minato Road in Ucluelet. The development includes 13 four-plexes, 15 six-plexes, 16 seven-plexes, 1 helicopter hanger, 11 waterfront homes, and a commercial precinct. All the proposed properties are outside of the coastal flood hazard area<sup>1</sup>; however, parts of the proposed development are located within the tsunami flood hazard area identified by Appendix C of the District of Ucluelet (DoU) Coastal Flood Mapping Final Report<sup>2</sup>. The DoU Tsunami Risk Tolerance – Interim Policy (2024) requires new residential and commercial buildings on new lots to be located at a minimum elevation equivalent to the lot specific tsunami flood reference plane and requires a report prepared by a qualified professional engineer experienced in coastal engineering to determine the tsunami flood reference plane for the site and formulate safe building conditions for each lot.

In 2022, a report completed by Ebbwater Consulting Inc. determined the flood construction and tsunami inundation levels for the proposed development site located at 221 Minato Road in Ucluelet<sup>3</sup>. This assessment found that the site is impacted by potential tsunami hazard, and recommended that the developer work collaboratively with the DoU to explore non-structural and structural mitigations to reduce the tsunami risk, and allow the development to be deemed “Safe for the intended use” as defined by EGBC using the principle of “as low as reasonably practicable”.

## 1.2 Information Sources

The Review was completed based on the following list of technical documents, guidelines and assessments reports provided by ERIF and publicly available.

Information provided by ERIF:

- Geotechnical Investigation Report – Proposed Multi Family Development 221 Minato Road, Ucluelet, British Columbia (File Number: 23265) completed by GeoPacific Consultants in 2024 (GeoPacific 2024).
- Geotechnical Investigation Report – Proposed Multi Family Development 221 Minato Road, Ucluelet, British Columbia (File Number: 23265) completed by GeoPacific Consultants in 2023 (GeoPacific 2023).
- Preliminary Geotechnical Report, Proposed Comprehensive Development, 221 Minato Road, Ucluelet, BC (File Number: 1748) completed by Frontera Geotechnical Inc. in 2021 (Frontera 2021).

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<sup>1</sup> Ebbwater Consulting Inc. and Cascadia Coast Research Ltd. (2020) District of Ucluelet Coastal Flood Mapping - Final Report. Prepared for the District of Ucluelet

<sup>2</sup> District of Ucluelet Coastal Flood Mapping Appendix C: Map Series 4/4: Tsunami Flood Planning Support, prepared by Ebbwater Consulting Inc.

<sup>3</sup> Ebbwater Consulting Inc. (2022). Ucluelet District Lot 286 – Flood Construction and Tsunami Inundation Levels for Proposed Development Final Report.

- Ucluelet District Lot 286 – Flood Construction and Tsunami Inundation Levels for Proposed Development Final Draft Report completed by Ebbwater Consulting Inc. in 2022 (Ebbwater 2022).
- Ebbwater Consulting Inc. and Cascadia Coast Research Ltd. (2020) District of Ucluelet Coastal Flood Mapping - Final Report. Prepared for the District of Ucluelet. Available online: <https://ucluelet.ca/community/sustainability-climate-action/flood-mapping/technical-flood-mapping-reports>
- District of Ucluelet Coastal Flood Mapping Appendix C: Coastal Flood Hazard Map Atlas – Map Series 4/4: Tsunami Flood Planning Support completed by Ebbwater Consulting Inc. in 2020 (Ebbwater 2020).
- ERIF. (2024). 221 Minato Road Eagles Nest Proposed Site Plan, Updated Master Plan.
- ERIF. (2024). “Overview of Contour Levels - 221 Minato.pptx” PowerPoint Slides.

Publicly available information reviewed included:

- Tsunami Risk Tolerance – Interim Policy published by The Corporation of the District of Ucluelet in 2024 (Ucluelet 2024).
- BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (BC MFLNRORD). (2018). Amended flood hazard area land use management guidelines. Available online: [https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/integrated-flood-hazard-mgmt/flood\\_hazard\\_area\\_land\\_use\\_guidelines\\_2017.pdf](https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/integrated-flood-hazard-mgmt/flood_hazard_area_land_use_guidelines_2017.pdf)
- EGBC. (2018). Professional Practice Guidelines – Legislated Flood Assessments in a Changing Climate in BC. Version 2.1. Engineers & Geoscientists British Columbia. <https://doi.org/10.1002/ejic.201200009>
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- Natural Hazard Science (2020). “Tsunami Preparedness and Mitigation Strategies” report by James D. Goltz and Katsuya Yamori published in 28 February 2020. Available online: <https://doi.org/10.1093/acrefore/9780199389407.013.324>

- United States Environmental Protection Agency (1990). "The Feasibility Study: Detailed Analysis of Remedial Action Alternatives" article published in March 1990. Available online: [87701.pdf \(epa.gov\)](#)

### 1.3 Scope of Work

The overall scope of work included the following:

- Background review to assess whether a structural mitigation method option is feasible to mitigate the tsunami hazard posed to the proposed development and adheres to current flood hazard legislation and professional practice guidelines.
- High-level feasibility assessment.

This report summarized the key findings from the background review and assessment on whether a structural mitigation is feasible for reducing the tsunami risk posed to the proposed development.

## 2 Summary of Background Review

The list of technical documents, previous assessment reports, professional practice guidelines and flood hazard legislation listed in Section 1.2 were reviewed and key findings are presented in this section.

### 2.1 Geotechnical Assessment

Three geotechnical assessment reports were provided to Stantec by ERIF. Information relating to the existing soil conditions was gathered from the latest version of the geotechnical assessment completed by GeoPacific Consultants (GeoPacific 2024). As stated in Section 4.0 - Subsurface Conditions of the Geotechnical report (GeoPacific 2024), the existing soil conditions within the project site were described as follow:

- Surficial layer is consisted of one of the following three materials:
  - 1) Topsoil - composed of compact silty sand with some organic clays/peaty material and trace gravel. Rootlets and decaying plant matter were present. It was noted be dark red brown in color and was moist.
  - 2) Sandy Silt (Fill) – loose to dense fill composed of sandy silt with some gravel and trace clay, sourced on site. The fill was noted to be moist and contain rootlets.
  - 3) Silty Sand and Gravel – Very dense silty sand and gravel with trace cobbles. The silty sand and gravel were partially cemented in conglomerate chunks and was difficult to excavate. It was grey-brown in color and contained trace moisture.
- Silt - The surficial layer was underlain by hard silt with some sand and some clay. The silt was grey in color with streaks of brown weathered material throughout; except at the test pit TP24-

06 where the silt was noted to be clayey with trace sand and was blue grey in color. This stratum contained some moisture.

- Silty Sand and Gravel - Beneath the silt layer, very dense silty sand and gravel with some cobbles was encountered. The cobbles increased in size to boulders with depth. The silty sand and gravel were grey in color and was moist to wet.
- Bedrock – The silty sand and gravel is underlain by bedrock. It was seen outcropping in some areas throughout the site and was encountered or inferred at all test pits except TP24-01. The depth of bedrock ranges from 0.9 m to >3.0 m based on the 9 test pits excavated.

Furthermore, static ground water table was not encountered in any of the 9 test pits. Perched groundwater was observed above the bedrock. It is expected that perched groundwater will form above the less permeable strata, particularly above the bedrock, but also above the hard silt, following periods of significant precipitation. Groundwater levels may vary seasonally with generally higher levels during the wetter months of the year (GeoPacific 2024).

The soils within the Project site are also not expected to be liquefiable or subject to cyclic strain softening caused by the design earthquake defined in the 2018 British Columbia Building Code (BCBC 2018) (GeoPacific 2024).

## **2.2 Coastal and Tsunami Hazards Assessment**

As stated within the “Flood Construction and Tsunami Inundation Levels for Proposed Development” final draft report completed by Ebbwater Consulting (Ebbwater 2022), all properties are outside the coastal flood hazard area, i.e. the proposed development structures are above the coastal Flood Construction Level (FCL) and setback 30 m or more from the existing natural boundary (see Figure 2).





**Figure 2: Coastal Storm Flood Planning Support Map for Flood Construction Level<sup>4</sup>**

The following list of the key findings were presented relating to tsunami hazards:

- Ucluelet is in Zone C of the Tsunami Notification Zones for BC (GeoBC, 2015) and therefore subject to significant tsunami hazard.
- The tsunami Flood Construction Reference Plane was defined mostly by the “G2018-S-A splay rupture” scenario which produced the largest tsunami wave as concluded in the 2020 DoJ report – Coastal Flood Hazard Map Atlas (Ebbwater 2020).
- The tsunami Flood Construction Reference Plane (FCRP) is defined as:
 
$$\text{FCRP} = \text{Tide} - \text{Vertical Land Movement} + \text{RSLR} + \text{Tsunami Amplitude}$$
- For planning support purposes, Ebbwater (2020) indicates that a Planning Level should be used which increases the FCRP by a safety factor equivalent to 50% of the maximum tsunami amplitude. Table 1 presents the FCRP and Planning Level elevations with 1.0 m of relative sea

<sup>4</sup> Based on Figure 4-4 from the “Flood Construction and Tsunami Inundation Levels for Proposed Development” Final Draft Report Completed by Ebbwater Consulting Inc. (Ebbwater 2022)

level rise (RSLR), and maximum tsunami amplitude within the development site for the G2018-S-A splay faulting rupture model.

**Table 1: Estimated Tsunami Hazard Levels for the 1.0 m RSLR scenario – Based on Table 4-2 from the “Flood Construction and Tsunami Inundation Levels for Proposed Development” Final Draft Report Completed by Ebbwater Consulting Inc. (Ebbwater 2022)**

RSLR scenario	Tsunami Amplitude (m)	FCRP (m CGVD28)	Planning Level (m CGVD28)
1.0 m	4.5	9.6	11.9

Note:

*FCRP = Tide – Vertical Land Movement + RSLR + Tsunami Amplitude*

*FCRP read from 2020 Dou Report (Ebbwater 2020) – Appendix A transect 24*

*Planning Level = FCRP + 50% of Tsunami Amplitude*

*Tide = 2.0 m CGVD28, Vertical land movement = -2.1 m*

Based on the email communication (forwarded to Stantec on July 23rd, 2024) between Joshua Hunt, CEO of ERIF, and Bruce Greig, Director of Community Planning for the District of Ucluelet), the FCRP of 9.6 m as identified within the Ebbwater report (Ebbwater 2022) is acceptable for use as the Tsunami Flood Reference Plane (TFRP), which complies with the minimum acceptable elevation for new residential and commercial buildings on new lots as stated within the DoU interim tsunami risk tolerance policy (Ucluelet 2024). Therefore, the feasibility study conducted for identifying structural mitigation options (Section 3) will be based on a TFRP of 9.6 m.

### 3 Feasibility of Structural Mitigation Options

Through Stantec’s internal discussion with personnel having expertise in designing coastal hazard mitigation structures, and based on the geotechnical and tsunami hazard assessment information detailed in Section 2, the following structural mitigation options could be feasible at the project site to mitigate tsunami hazards while complying to the current interim policy on tsunami risk tolerance (DoU 2024):

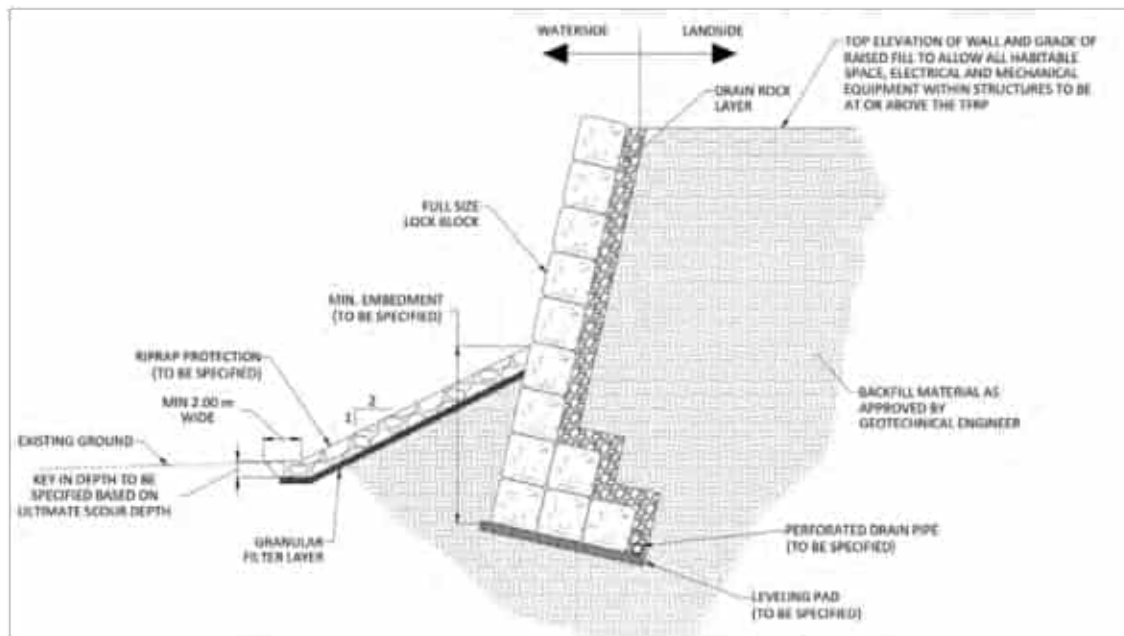
- Option 1 - Raised foundation pad with mechanically stabilized Earth (MSE) wall and foreshore erosion protection.
- Option 2 - Raised foundation pad with retaining wall (i.e. concrete or sheet piles).
- Option 3 - Adapt building style to accommodate tsunami forces.

Note that the first two design options require the existing ground within the structure footprints or the portion of the development within the tsunami inundation zone be raised to an elevation that allows all habitable space and mechanical and electrical equipment to be at or above the TFRP of 9.6 m and supplemented with a retaining wall around the raised fill. In contrast, the third design option involves adapting the building style to accommodate the impact forces imposed by the tsunami while ensuring the building’s habitable space is above the TFRP.

**Options 1 & 2**

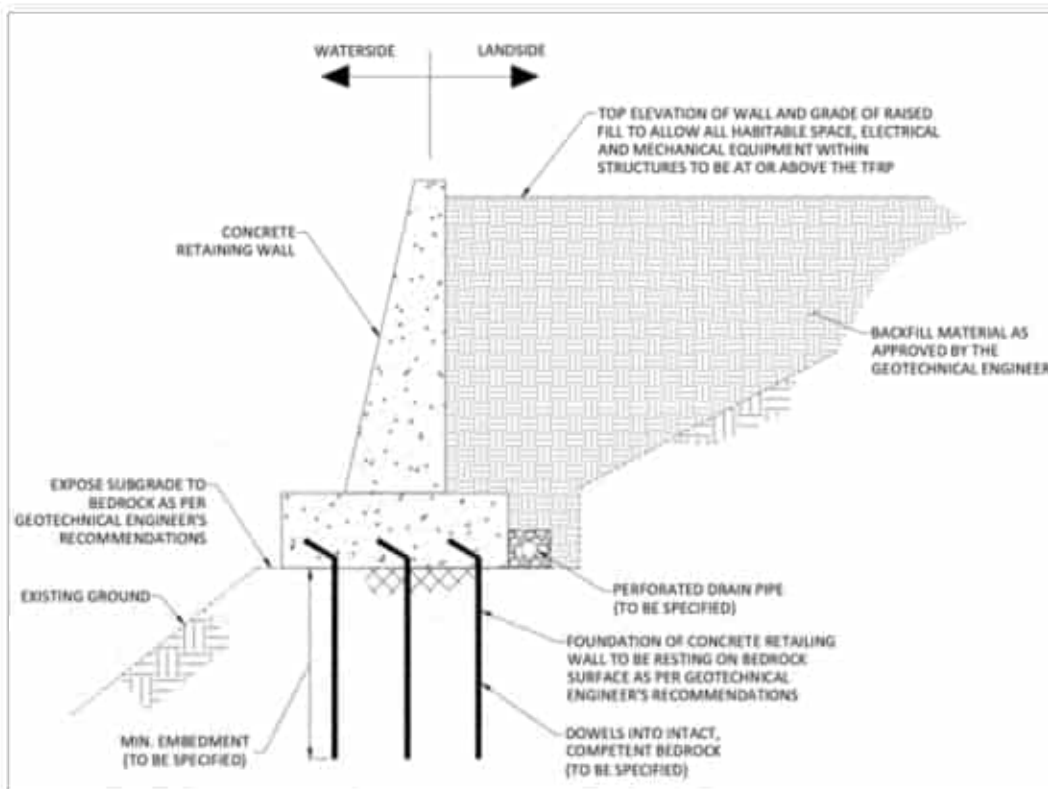
Typical sections that present the Option 1 and 2 concepts are depicted in Figure 3 and Figure 4, respectively. These concept diagrams are for purposes of discussion only and are not detailed engineering plans. Design of the retaining structure would be developed in future stages of the project based on design codes and site-specific conditions. The footprint of the structures would need to be raised with suitable fill material to an elevation that allows all habitable space and mechanical and electrical equipment to be located at or above the TFRP of 9.6 m. This raised fill would then be retained by a wall designed based on site specific geotechnical and tsunami wave forces. Alternatively, the entire footprint of the development located within the tsunami inundation zone could be raised and protected with a retaining wall. The depth of fill will vary depending on the location of the structure and existing ground elevation with respect to the TFRP. Foreshore riprap protection may be required for all retaining wall structures to prevent undermining of the wall foundation.

The current contour mapping shows elevations range across the areas of the site proposed for development between 7.8 m to up to and exceeding 9.6 m<sup>5</sup>. In the proposed waterfront homes, a lower level being non-habitable spaces that incorporates an adaptive building style to accommodate tsunami forces (i.e. a garage with break away walls) with all habitable spaces set above 9.6 m may be sufficient to meet the DoU requirements on tsunami risk tolerance. The level of the retaining wall structure and fill are designed to elevate the lowest lying sites to ensure habitable spaces are above 9.6 m. For example, for structures requiring level access placed at a 7.8 m site level, the retaining wall structure and fill method can raise the habitable spaces by 1.8 m to reach the required TFRP of 9.6 m.



**Figure 3: Conceptual Typical Section for Option 1 with MSE Wall**

<sup>5</sup> Based on “Overview of Contour Levels - 221 Minato.pptx” PowerPoint Slides provided by ERIF (2024).



**Figure 4: Conceptual Typical Section for Option 2 with Concrete Retaining Wall**

### **Option 3**

An alternative approach to mitigating the tsunami risk by changing the development grades and providing foreshore revetments would be adapting the structure designs to accommodate impacts from the tsunami wave while locating habitat space and mechanical and electrical equipment at or above the TFRP and having the structure comply with the BC Building Codes (BCBC). Such approaches have been successfully implemented on Camano Island within the state of Washington, United States. The homes were designed with the following unique features<sup>6</sup>:

- The home's main two floors were about nine feet above the ground, a unique setup made possible through a series of sturdy support columns strategically located within the building superstructure.
- A steel frame further reinforces the pillar system.
- Gaps between the columns are filled in with clear glass doors that, like garage doors, slide shut from overhead, disguising the lower level as an ordinary room.

<sup>6</sup> Referenced from the "This House is Built to Withstand the Force of a Tsunami" article published by Smithsonian Magazine on January 22<sup>nd</sup>, 2014. Available online: [This House is Built to Withstand the Force of a Tsunami | Smithsonian \(smithsonianmag.com\)](https://www.smithsonianmag.com/science-nature/this-house-is-built-to-withstand-the-force-of-a-tsunami/)



- The glass doors are fashioned so that, in the event of a tsunami-like catastrophe, the force of the flooding should cause them to breakaway with ease. Allowing the rush of water to flow through the bottom chamber and out the opposite side disperses the brunt force and reduces pressure on the columns.

**Future Evaluation of Concepts**

The options presented in this Review are general concepts that could be used for developing a structural mitigation required to adhere to DoJ interim tsunami risk tolerance policy based on the defined TFRP. The ultimate structural mitigation developed during a future phase of design could incorporate elements from any of the options or the required structural mitigation may vary for each structure based on location and inundation level within the development. The feasibility of any option would be based on site specific conditions (wave forces, geotechnical conditions) and considerations (material availability, cost) that could be explored and defined during a future design phase. Following the development of more detailed designs, a multiple criteria analysis could be developed to compare and evaluate the options to one another based on ERIF’s specific requirements. Stantec has developed a list of criteria that could be referenced during a future phase of design to evaluate the feasibility of the structural mitigation options discussed herein (see Table 2). They were developed based on the following technical documents:

- Natural Hazards (2022). “A Comprehensive Review of Structural Tsunami Countermeasures” article published online on 16 May 2022. Available online: <https://link.springer.com/content/pdf/10.1007/s11069-022-05367-y.pdf>
- Natural Hazard Science (2020). “Tsunami Preparedness and Mitigation Strategies” report by James D. Goltz and Katsuya Yamori published in 28 February 2020. Available online: <https://doi.org/10.1093/acrefore/9780199389407.013.324>
- United States Environmental Protection Agency (1990). “The Feasibility Study: Detailed Analysis of Remedial Action Alternatives” article published in March 1990. Available online: [87701.pdf \(epa.gov\)](87701.pdf)

**Table 2: Potential Evaluation Criteria for Assessing Feasibility of Design Options**

Evaluation Criteria	Description
Effectiveness	Assess the ability of the proposed mitigation structure to withstand against forces imposed by a tsunami. (i.e. ensuring adequate elevation to stay above tsunami inundation level, structures can withstand tsunami forces, habitable space and mechanical and electrical equipment located above the TFRP)
Cost	Analyze the cost of implementing structural and non-structural tsunami mitigation methods. The cost would include but not limited to the following aspects: construction, designing, long-term maintenance and repairs to any damage incurred during its life cycle. A cost-benefit analysis should also be conducted.
Environmental Impact	Evaluate the potential environmental consequences of the mitigation measure. This includes the impact on nearby coastal habitat, riparian area and affected vegetations.

Regulatory Compliance	Assess whether proposed mitigation measure follows applicable local, provincial and federal regulations and design standards.
Resilience and Adaptability	Assess the resilience and adaptability of the structural mitigation system to uncertainties caused by climate change. These uncertainties include but not limited to sea level rise, increased frequency of more extreme coastal storm events.
Emergency Preparedness	Assess how well the mitigation measure integrate with other non-structural mitigation measures such as: evacuation plan, early warning system and public awareness program.

## 4 Conclusion and Recommendations

The tsunami hazard currently identified at the development site located at 221 Minato Road in Ucluelet (Ebbwater 2022) could potentially be mitigated by utilizing any or a combination of the structural mitigation options presented in Section 3 while complying to the following policy and guidelines:

- Minimum elevation requirement (i.e. TFRP of 9.6m) for new residential and commercial buildings on new lots as stated within the DoU interim policy relating to tsunami risk tolerance (Ucluelet 2024), and;
- Professional practice guideline (EGBC 2018).

The structural mitigation options presented in Section 3 were:

- Option 1 - Raised foundation pad with mechanically stabilized Earth (MSE) wall and foreshore erosion protection.
- Option 2 - Raised foundation pad with retaining wall (i.e. concrete or sheet piles).
- Option 3 - Adapt building style to accommodate tsunami forces.

It should be noted that the typical section details relating to design options 1 & 2, and features described for design option 3 are general concepts and are not yet refined for site specific conditions. Exact design specifications, dimensions and configurations could be defined during future design phases. The details shown herein may not reflect the final design and are for discussion and reference purposes only. Feasibility of these structural design options should be confirmed with detailed assessment during future phase of the project considering existing coastal, and geotechnical reports and structural design work for the proposed buildings.

In addition, conceptual wave modelling will be undertaken to support development of the final design while noting the surge force induced by a tsunami is significantly reduced by the development site being situated within the inlet and not the oceanfront. The final design will also be developed adhering to the

latest technical guidelines and standards, and as a minimum, meeting the ASCE/SEI 7-16<sup>7</sup> standards as stated within the DoU interim policy relating to tsunami risk tolerance (Ucluelet 2024).

It is also extremely important to recognize the inherent uncertainties associated with tsunami hazards and while structural mitigations must be implemented to comply with the current DoU tsunami policy and address tsunami hazard risks, the following list of non-structural tsunami mitigation strategies should also be developed to supplement the structural mitigation measures. They include but not limited to the following<sup>8</sup>:

- Public awareness program.
- Installation of an early warning system.
- An evacuation plan for communities located within inundation areas affected by the tsunami hazard.
- Ongoing collaboration and communication with local stakeholders and affected communities to ensure they are adhering to the mitigation strategies developed.

Note that the following list of assumptions and limitations are associated with this memo:

- No site visit was conducted.
- The Review was based on available background information – no wave, hydraulic, or hydrological modelling was included.
- An assessment of coastal flood hazards was not included.
- Preparation of a Flood Assurance Statement was not included.
- Geotechnical, structural, environmental, and archeological assessments required to develop structural mitigation designs were not included.
- The structural design options presented within this memo are based on the flood hazard legislation and professional practice guidelines and technical assessments that were completed at the time this memo was written.

Based on the Review, the options presented in Section 3 of this report are feasible design concepts to provide the structural mitigation required to adhere to DoU's interim tsunami risk tolerance policy based on the defined TFRP of 9.6 m. The next phase of work would include further assessment and design, considering the existing reports on coastal and geotechnical conditions, reviewing the updated environmental assessment and structural design work. A multiple criteria analysis matrix and cost estimates for the proposed options would allow ERIF to evaluate and compare each option. This process will inform ERIF in selecting the most appropriate design option/s for the varying levels and areas of the development site to be incorporated into detailed designs for construction. It is understood

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<sup>7</sup> "Minimum Design loads and Associated Criteria for Buildings and Other Structures" Standards published by American Society of Civil Engineers

<sup>8</sup> Referenced from Section 2 – Tsunami Mitigation Strategies of the "Tsunami Mitigation Measures" journal published by the Canadian Association for Earthquake Engineering during the 11th Canadian Conference on Earthquake Engineering (CAOEE)

that scope, including the geotechnical engineering assessment/design and structural engineering of the buildings would be provided by ERIF.

This memo was reviewed by a qualified professional engineer experienced in coastal engineering.

Best regards,

**STANTEC CONSULTING LTD.**



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THURBER ENGINEERING LTD.

## Phase I Environmental Site Assessment

221 Minato Road, Ucluelet, BC

**Client Name:** District Developments Corp.

**Date:** August 25, 2023

**File:** 38416



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## EXECUTIVE SUMMARY

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Thurber Engineering Ltd. (Thurber) was retained by District Developments Corp. (District) to conduct a Phase I Environmental Site Assessment (ESA) of the property at 221 Minato Road, in Ucluelet, British Columbia (hereafter referred to as the "Site").

The purpose of this assessment was to identify the potential for soil, groundwater and/or soil vapour contaminant concerns at the Site based on a review of the current and historical land use at the Site and surrounding area.

This report was prepared for the exclusive use of District. Any use which a third party makes of this report, or any reliance on decisions based on it are the responsibility of such third parties. Thurber accepts no responsibility for damage incurred by third parties as a result of decisions made or actions taken based on this report. It is a condition of this report that Thurber's performance of its professional services is subject to the attached Statement of Limitations and Conditions.

This report was carried out through a review of readily available information including a historical records review, interviews with persons familiar with the Site and a Site inspection. This document was completed in accordance with Canadian Standards Association (CSA) Z768-01, Phase I Environmental Site Assessment, dated 2001 and the general requirements of Section 58(1)(a) of the BC Contaminated Sites Regulation (CSR).

The Site consists of an undeveloped, partially cleared lot. Gravel roads had been constructed throughout the Site. The Site appeared to be used for residential purposes and storage.

The Site and surrounding properties slope down to the north. The regional topography slopes down to the north towards Ucluelet Inlet. Groundwater at the Site is inferred to flow down to the north based on regional topography.

The historical review indicated the Site had been forested since at least the 1930s. The northern portion of the Site was cleared and gravel roads were constructed across the Site in the late 2010s. Since the Site has been cleared, it has appeared to have been used for residential purposes and the storage of vehicles, boats, and equipment.

The surrounding area was historically forested, undeveloped land. Ucluelet Inlet is present to the north of the Site and the surrounding area to the east, south, and west has remained largely forested. A few residential properties have been developed to the east of the Site beginning in the 1950s.



A Site Registry listing related to the Village of Ucluelet Landfill was reported at 85 m west of the Site. Based on the listing information and review of aerial photographs, it is possible that the coordinates provided were incorrect, and this operation was actually located 300 m to the southwest of the Site. Based on the distance from the Site and the reported restoration work, this activity presents a low potential to impact the Site.

Our review of the Site history did not indicate any activities or operations at the Site as listed in Schedule 2 of the CSR and no Areas of Potential Environmental Concern were identified.

Based on the results of this Phase I ESA, Thurber concludes there is a low potential for soil, groundwater and/or soil vapour contamination at the Site.

Further investigation is not recommended at this time.



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Federal Contaminated Sites Inventory

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Site Photographs



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## 1. INTRODUCTION

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Thurber Engineering Ltd. (Thurber) was retained by District Developments Corp. (District) to conduct a Phase I Environmental Site Assessment (ESA) of the property at 221 Minato Road, in Ucluelet, British Columbia (hereafter referred to as the “Site”).

The purpose of this assessment was to identify the potential for soil, groundwater and/or soil vapour contaminant concerns at the Site based on a review of the current and historical land use at the Site and surrounding area.

Our scope of services included the following:

- A review of the geological and hydrogeological setting of the Site;
- A review of historical information sources for the Site and surrounding lands including:
  - aerial photographs
  - street-level imagery
  - fire insurance plans
  - regional district land use maps
  - city directories
  - storage tanks records
- A search of the Site Registry;
- A review of previous environmental reports;
- Interviews with persons who are knowledgeable about the Site; and
- An inspection of the Site and surrounding lands to identify potential sources of contamination.

A search of the current land title was completed; however, a search of historical land titles was not undertaken as sufficient information on historical land use and activities was obtained from other sources.

This document was completed in accordance with Canadian Standards Association (CSA) Z768-01, Phase I Environmental Site Assessment, dated 2001 and reaffirmed in 2016, and the general requirements of Section 58(1)(a) of the BC Contaminated Sites Regulation (CSR). This report was prepared for due diligence purposes and is not intended to support an application to the Ministry of Environment and Climate Change Strategy (ENV) for a regulatory instrument.

This report was prepared for the exclusive use of District. Any use which a third party makes of this report, or any reliance on decisions based on it are the responsibility of such third parties.



Thurber accepts no responsibility for damage incurred by third parties as a result of decisions made or actions taken based on this report. It is a condition of this report that Thurber's performance of its professional services is subject to the attached Statement of Limitations and Conditions.

## 2. SITE DESCRIPTION

### 2.1 Location

The general location of the study area is shown on Figure 1 in Appendix A. The irregular-shaped property is located at the northwest corner of the intersection of Peninsula Road and Minato Road (see Figure 2 in Appendix A).

*Table 1: Site Information*

CATEGORY	SITE INFORMATION
Current Address	221 Minato Road, Ucluelet, BC
Legal Description	Lot B, District Lot 286, Clayoquot District, Plan VIP79908
Site PID	026-487-764
Coordinates	Latitude 48°56'52.8", Longitude 125°34'10.5"
Owner	Minato Development Corp., Inc. No. BC1281485 since November 2021 based on current land title (see Appendix C)
Current Tenants	Residential
Site Area	100, 600 m <sup>2</sup>
Municipal Zoning	RU: Rural Residential
No. Buildings on Site	Three sheds
Approx. Age of Buildings	4 years (late 2010s)
Utilities	Hydro
Source of Potable Water	None
Emergency Generators	None
Percentage of Site Developed	There are three sheds that occupy less than 1% of the Site. The remainder of the Site is partially cleared land with gravel roads, boats, RVs, vehicles, equipment, and a pond.

We understand that a residential development has been proposed for the Site.



## 2.2 Geological Setting

The available Geoscience BC map indicates that the Site is underlain by shallow bedrock belonging to the Pacific Rim Complex, which comprises Triassic to Cretaceous-age mudstone-rich melange and volcanic rock including pillow lava, tuff, and chert.

The Site and surrounding properties slope down to the north. The regional topography slopes down to the north towards Ucluelet Inlet.

Soil stockpiles were observed during the Site visit. As discussed in Section 4.1, these piles likely relate to on-Site clearing and grading activities rather than imported fill.

## 2.3 Hydrogeological Setting

iMapBC was used to locate nearby water bodies, groundwater wells and underlying aquifers. No groundwater wells were identified within a 500 m radius of the Site (refer to Appendix B).

The Site is underlain by the Ucluelet Peninsula aquifer, classified as a moderately productive, moderate vulnerability aquifer.

No surface water intakes were identified in the area of the Site.

The nearest surface water body is a small pond on the northern portion of the Site and Ucluelet Inlet, located adjacent to the north. The groundwater flow direction in the vicinity is unknown, but it is inferred to flow to the north and west based on regional topography.

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## 3. HISTORICAL REVIEW

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The information sources described in the subsections below were reviewed to identify the historical activities that occurred at the Site and on surrounding lands.

A discussion of identified operations of concern and their potential to impact the Site is included in Section 6. A listing of references is included at the end of the text of this report.

### 3.1 City Directories

No city directories were available from the Vancouver Public Library (VPL) for Ucluelet.





### 3.2 Fire Insurance Plans

No fire insurance plans were available from Special Collections Branch at the VPL for the Site or surrounding area.

### 3.3 Air Photographs

Air photographs were obtained from the UBC Geographic Information Centre and Google Earth and reviewed by Thurber. It should be noted that accurate details could not be obtained from the 1938 air photographs due to the angle of the photo.

**Table 2: Site Air Photographs**

YEAR(S)	SITE
1938, 1950,	The Site appears to be undeveloped, forested land. A small area on the northeast portion of the Site adjacent to Minato Road had been cleared. No structures are present on the Site.
1954, 1967, 1970, 1975, 1981, 1986, 1989, 1993, 2005, 2010, 2012, 2016.	The Site appears to be undeveloped, forested land. No structures are present on the Site.
2019	The northern portion of the Site has been cleared and roads are visible through the central portion of the Site.
2021, 2023	Roads are visible throughout the northern and central portion of the Site. The remainder of the Site remains forested.

**Table 3: Surrounding Land Air Photographs**

YEAR(S)	NORTH	EAST	SOUTH	WEST
1938	Ucluelet Inlet	Forested land.	Peninsula Road, then forested land.	Peninsula Road, then a forested land.
1950,		Residential and forested land.		
1954, 1967, 1970, 1975, 1981, 1986, 1989		Forested land.		
1993		Minato Road, and forested land.		
2005		Residential and forested land.	Forested land. An industrial area is present 130 m to the southeast.	
2010, 2012, 2016, 2019, 2021, 2023				



### 3.4 Street Level Imagery

Web-based images of the Site and surrounding area were reviewed for the years 2009 to 2014.

*Table 4: Street Level Imagery*

YEAR(S)	SITE
2009, 2011, 2014	The Site appears to be undeveloped, forested land. No structures are visible on the Site.
YEAR(S)	NORTH
No web-based images were available for Ucluelet Inlet to the north.	
YEAR(S)	EAST
2009, 2011, 2014	The properties to the east of the Site appeared to be undeveloped, forested land.
YEAR(S)	SOUTH
2009, 2011, 2014	The properties to the south of the Site appeared to be undeveloped, forested land.
YEAR(S)	WEST
2009, 2011, 2014	The properties to the west of the Site appeared to be undeveloped, forested land. A trailhead was observed along Peninsula Road.

### 3.5 Storage Tank Records

The municipality does not keep records regarding underground storage tank (USTs) removals; therefore, no records could be retrieved.

A BC One Call e-ticket request was submitted to receive Fortis BC information on the natural gas connection on the Site. The information received indicates that there is no natural gas connection to the Site or surrounding area.

### 3.6 Site Registry

The Site Registry is a database maintained by the ENV that contains information on the contaminant status of listed properties. The Registry was searched using a 500 m radius from the Site.

The Site itself was not listed. There was one property listed on the Registry, Site ID: 3100. There is no civic address for the listing. The location is described as 1.5 miles north of Ucluelet Village on the highway and the coordinates provided are approximately 85 m to the west of the Site. The listing pertains to the Village of Ucluelet Landfill and was most recently updated in January 2002.



Records on inspections from 1971 and 1979 are shown on the Registry. Landfill restoration work was completed in April 1985 and a permit abandonment notice was received in May 1985.

No evidence of landfilling activities was identified in this area in the review of aerial photographs. However, indications of possible landfilling activities were observed further east along Peninsula Road, closer to Ucluelet from 1967 to 1981. It is possible that the coordinates for the registry listing are incorrect, and the landfilling activities occurred more than 300 m to the southeast the Site.

The search results are included in Appendix D.

### **3.7 Federal Contaminated Sites Inventory**

The Federal Contaminated Sites Inventory is a database maintained by the Federal government that contains information on the on the contaminant status of Federal land across Canada. The inventory was searched using the Site co-ordinates on the Online Map Navigator to identify properties within a 500 m radius of the Site.

No properties were identified on the inventory within a 500 m radius of the Site. A copy of the search results is provided in Appendix E.

### **3.8 Previous Environmental Reports**

No environmental reports were provided by District.

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## **4. SITE VISIT AND INTERVIEWS**

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### **4.1 Site**

A Site visit was conducted by Alex Harden, Environmental EIT, on August 22, 2023. We were unaccompanied during the visit. The visit included a walk-through of accessible areas of the Site and an inspection of publicly accessible areas of adjacent properties. Portions of the Site adjacent to Ucluelet Inlet were densely vegetated and on steep slopes and could not be accessed. Select photos taken during the visit are included in Appendix F.



The Site consists of an undeveloped, partially cleared lot. The Site appeared to be used for residential purposes and storage. Gravel roads have been constructed throughout the Site.

The central and northern portions of the Site have been cleared and are used for storage of boats, vehicles, RVs, and a sea can. One of the RVs appeared to be used as a residence. The remainder of vehicles and sheds appeared to be unoccupied and used for storage.

Two excavators, a greenhouse, multiple sheds, a treehouse, a portable sawmill, wood debris, and construction debris were present across the Site. Piles of mulch and soil, likely from on-Site clearing and grading activities, were present in the centre of the Site.

A portable sawmill was present in the centre of the Site. The equipment did not appear to be for commercial use. Three small jerry cans were stored beside the sawmill. No evidence of leaks or spills were observed.

Several drainage ditches had been constructed around the Site and a bridge was present on the western edge of the Site. A small pond was present on the northern portion of the Site.

Two above ground concrete tanks, three propane tanks, and three small jerry cans were observed at the Site. Thurber did not observe or find any evidence of above or below ground storage tanks associated with heating oil.

No other items of potential environmental concern were noted within the Site.

**4.2 Surrounding Properties**

The Site is located in an undeveloped and residential area. A listing of adjacent properties occupants is summarized in the following table:

**Table 5: Surrounding Land Use**

	<b>NORTH</b>	<b>EAST</b>	<b>SOUTH</b>	<b>WEST</b>
Adjacent Operation	Ucluelet Inlet	Forested and residential area	Peninsula Road, then forested area. Industrial operations were observed further to the southeast.	Peninsula Road and forested area with walking trails.
Inferred Groundwater Gradient with respect to the Site	Down-gradient	Up-gradient	Up-gradient	Down-gradient





An industrial area with operations including a topsoil and gravel supplier, Ucluelet Rent-It Center, was present 75 m to the southeast of the Site. Based on the distance from the Site and nature of the operation, these properties present a low potential to impact the Site.

No items of concern were identified pertaining to current surrounding property uses.

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## 5. HAZARDOUS MATERIALS

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Given that there were no permanent buildings or structures at the Site prior to 2016, it is unlikely that polychlorinated biphenyls, asbestos containing materials, lead based paints are present on the Site.

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## 6. DISCUSSION

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### 6.1 Site

The historical review indicated the Site had been forested since at least the 1930s. The northern and central portions of the Site was cleared, and gravel roads were constructed across the Site in the late 2010s. Since the Site has been cleared, it has been used for residential purposes and the storage of vehicles, boats, sheds, and equipment.

No areas or operations of potential environmental concern were identified at the Site.

### 6.2 Surrounding Lands

The surrounding area was historically forested, undeveloped land. Ucluelet Inlet is present to the north of the Site and the surrounding area to the east, south, and west has remained largely forested. A few residential properties have been present to the east of the Site beginning in the 1950s.

A Site Registry listing related to the Village of Ucluelet Landfill was reported as 85 m west of the Site. Based on the listing information and review of aerial photographs, it is likely that this operation was located 300 m to the southwest of the Site. Based on the distance from the Site and the reported restoration work, this activity presents a low potential to impact the Site.



### 6.3 Schedule 2 Activities

Schedule 2 of the CSR is a list of commercial and industrial activities that the ENV considers a potential risk to the environment. Based on our historical review and our Site observations, no Schedule 2 Activities were identified at the Site.

Although no Schedule 2 activity was identified, the municipality may still request a Site Disclosure Statement (SDS) during permit application for its own records. If this is requested, it is recommended that Thurber be contracted to complete the form on behalf of the owner.

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## 7. CONCLUSIONS

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Based on the results of this Phase I ESA, Thurber did not identify any Areas of Potential Environmental Concern. As such, there is a low potential for soil, groundwater and/or soil vapour contamination at the Site.

Further investigation is not recommended at this time.



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## 8. SIGNATURES/CLOSURE

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We trust this information meets your present needs. If you have any questions, please contact the undersigned at your convenience.

A handwritten signature in black ink, appearing to read 'Alex Harden', enclosed in a thin black rectangular border.

Alex Harden, EIT  
Environmental Engineer

A handwritten signature in black ink, appearing to read 'Travis Deeter', enclosed in a thin black rectangular border.

Travis Deeter, P.Ag., CSAP  
Senior Environmental Scientist

Date: **August 25, 2023**

File: **38416**



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## 9. REFERENCES

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- BC Online Site Registry. <<https://www.bconline.gov.bc.ca/main.html>>.
- City Directories and Fire Insurance Plans accessed at the Special Collections Department at the Vancouver Public Library or the University of British Columbia, Vancouver, BC
- District of Ucluelet Community Map. UkeeMap GIS Map.  
<http://cgis.com/cpal/Default.aspx?Map=Ucluelet>
- CSA Standard Z768-01 (November 2001), Phase I Environmental Site Assessment.
- Google Street View. [www.google.ca/maps](http://www.google.ca/maps). Accessed on August 17, 2023
- iMapBC. <https://maps.gov.bc.ca/ess/hm/imap4m/>
- Ministry of Environment and Climate Change Strategy, Environmental Management Act, Contaminated Sites Regulation (BC Reg 375/96), including amendments up to 133/2022 dated March 1, 2023.
- Geology, Northern Vancouver Island Project, Geoscience BC Map 2013-NVI-1-1 Scale 1:500,000. 2013.
- University of British Columbia. Geographic Information Centre, Vancouver, BC



## STATEMENT OF LIMITATIONS AND CONDITIONS

### 1. STANDARD OF CARE

This Report has been prepared in accordance with generally accepted engineering or environmental consulting practices in the applicable jurisdiction. No other warranty, expressed or implied, is intended or made.

### 2. COMPLETE REPORT

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment are a part of the Report, which is of a summary nature and is not intended to stand alone without reference to the instructions given to Thurber by the Client, communications between Thurber and the Client, and any other reports, proposals or documents prepared by Thurber for the Client relative to the specific site described herein, all of which together constitute the Report.

IN ORDER TO PROPERLY UNDERSTAND THE SUGGESTIONS, RECOMMENDATIONS AND OPINIONS EXPRESSED HEREIN, REFERENCE MUST BE MADE TO THE WHOLE OF THE REPORT. THURBER IS NOT RESPONSIBLE FOR USE BY ANY PARTY OF PORTIONS OF THE REPORT WITHOUT REFERENCE TO THE WHOLE REPORT.

### 3. BASIS OF REPORT

The Report has been prepared for the specific site, development, design objectives and purposes that were described to Thurber by the Client. The applicability and reliability of any of the findings, recommendations, suggestions, or opinions expressed in the Report, subject to the limitations provided herein, are only valid to the extent that the Report expressly addresses proposed development, design objectives and purposes, and then only to the extent that there has been no material alteration to or variation from any of the said descriptions provided to Thurber, unless Thurber is specifically requested by the Client to review and revise the Report in light of such alteration or variation.

### 4. USE OF THE REPORT

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client. NO OTHER PARTY MAY USE OR RELY UPON THE REPORT OR ANY PORTION THEREOF WITHOUT THURBER'S WRITTEN CONSENT AND SUCH USE SHALL BE ON SUCH TERMS AND CONDITIONS AS THURBER MAY EXPRESSLY APPROVE. Ownership in and copyright for the contents of the Report belong to Thurber. Any use which a third party makes of the Report, is the sole responsibility of such third party. Thurber accepts no responsibility whatsoever for damages suffered by any third party resulting from use of the Report without Thurber's express written permission.

### 5. INTERPRETATION OF THE REPORT

- a) Nature and Exactness of Soil and Contaminant Description: Classification and identification of soils, rocks, geological units, contaminant materials and quantities have been based on investigations performed in accordance with the standards set out in Paragraph 1. Classification and identification of these factors are judgmental in nature. Comprehensive sampling and testing programs implemented with the appropriate equipment by experienced personnel may fail to locate some conditions. All investigations utilizing the standards of Paragraph 1 will involve an inherent risk that some conditions will not be detected and all documents or records summarizing such investigations will be based on assumptions of what exists between the actual points sampled. Actual conditions may vary significantly between the points investigated and the Client and all other persons making use of such documents or records with our express written consent should be aware of this risk and the Report is delivered subject to the express condition that such risk is accepted by the Client and such other persons. Some conditions are subject to change over time and those making use of the Report should be aware of this possibility and understand that the Report only presents the conditions at the sampled points at the time of sampling. If special concerns exist, or the Client has special considerations or requirements, the Client should disclose them so that additional or special investigations may be undertaken which would not otherwise be within the scope of investigations made for the purposes of the Report.
- b) Reliance on Provided Information: The evaluation and conclusions contained in the Report have been prepared on the basis of conditions in evidence at the time of site inspections and on the basis of information provided to Thurber. Thurber has relied in good faith upon representations, information and instructions provided by the Client and others concerning the site. Accordingly, Thurber does not accept responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of misstatements, omissions, misrepresentations, or fraudulent acts of the Client or other persons providing information relied on by Thurber. Thurber is entitled to rely on such representations, information and instructions and is not required to carry out investigations to determine the truth or accuracy of such representations, information and instructions.
- c) Design Services: The Report may form part of design and construction documents for information purposes even though it may have been issued prior to final design being completed. Thurber should be retained to review final design, project plans and related documents prior to construction to confirm that they are consistent with the intent of the Report. Any differences that may exist between the Report's recommendations and the final design detailed in the contract documents should be reported to Thurber immediately so that Thurber can address potential conflicts.
- d) Construction Services: During construction Thurber should be retained to provide field reviews. Field reviews consist of performing sufficient and timely observations of encountered conditions in order to confirm and document that the site conditions do not materially differ from those interpreted conditions considered in the preparation of the report. Adequate field reviews are necessary for Thurber to provide letters of assurance, in accordance with the requirements of many regulatory authorities.

### 6. RELEASE OF POLLUTANTS OR HAZARDOUS SUBSTANCES

Geotechnical engineering and environmental consulting projects often have the potential to encounter pollutants or hazardous substances and the potential to cause the escape, release or dispersal of those substances. Thurber shall have no liability to the Client under any circumstances, for the escape, release or dispersal of pollutants or hazardous substances, unless such pollutants or hazardous substances have been specifically and accurately identified to Thurber by the Client prior to the commencement of Thurber's professional services.

### 7. INDEPENDENT JUDGEMENTS OF CLIENT

The information, interpretations and conclusions in the Report are based on Thurber's interpretation of conditions revealed through limited investigation conducted within a defined scope of services. Thurber does not accept responsibility for independent conclusions, interpretations, interpolations and/or decisions of the Client, or others who may come into possession of the Report, or any part thereof, which may be based on information contained in the Report. This restriction of liability includes but is not limited to decisions made to develop, purchase or sell land.



**APPENDIX A**

Drawings

Appendix D

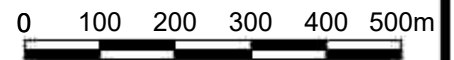


NOTES:

- 1. AERIAL IMAGE TAKEN FROM GOOGLE EARTH.

LEGEND:

 SITE BOUNDARY



DISTRICT DEVELOPMENTS CORP.

**GENERAL SITE LOCATION**

121 MINATO ROAD

UCLUELET, BC

DESIGNED	DRAWN	APPROVED	DATE	SCALE	PROJECT No.	FIGURE NO.	REV.
			AUG 23 2023	1:1	38416	1	



Appendix D

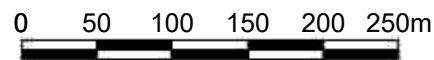



NOTES:

1. AERIAL IMAGE TAKEN FROM GOOGLE EARTH.
2. LOT LINES TAKEN FROM IMAPBC OPEN DATA CATALOGUE.

LEGEND:

SITE BOUNDARY



 <b>THURBER ENGINEERING LTD.</b>	DISTRICT DEVELOPMENTS CORP.		<b>SITE AND SURROUNDING LAND USE</b>				
	121 MINATO ROAD		UCLUELET, BC				
	DESIGNED	DRAWN	APPROVED	DATE	SCALE	PROJECT No.	FIGURE No.
Minato Road (ERIF): OCP Amendment / Rezoning / Environmental DP		11/12/2023		1:1000	38416	2	642 of 929





**APPENDIX B**

Water Resources



iMapBC Mapping

**Legend**

Groundwater Wells - All

ARTESIAN\_COND



Well



Aquifers - All

MATERIAL

Unconsolidated

Bedrock



1 : 18,056

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CAUTION: Maps obtained using this site are not designed to assist in navigation. These maps may be generalized and may not reflect current conditions. Uncharted hazards may exist. DO NOT USE THESE MAPS FOR NAVIGATIONAL PURPOSES.

Datum: NAD83

Projection: WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere

Key Map of British Columbia

**Appendix D**





#### Legend

- Registered Water Well
- Aquifer Boundary



#### Aquifer Description (Mapping Report - 2018):

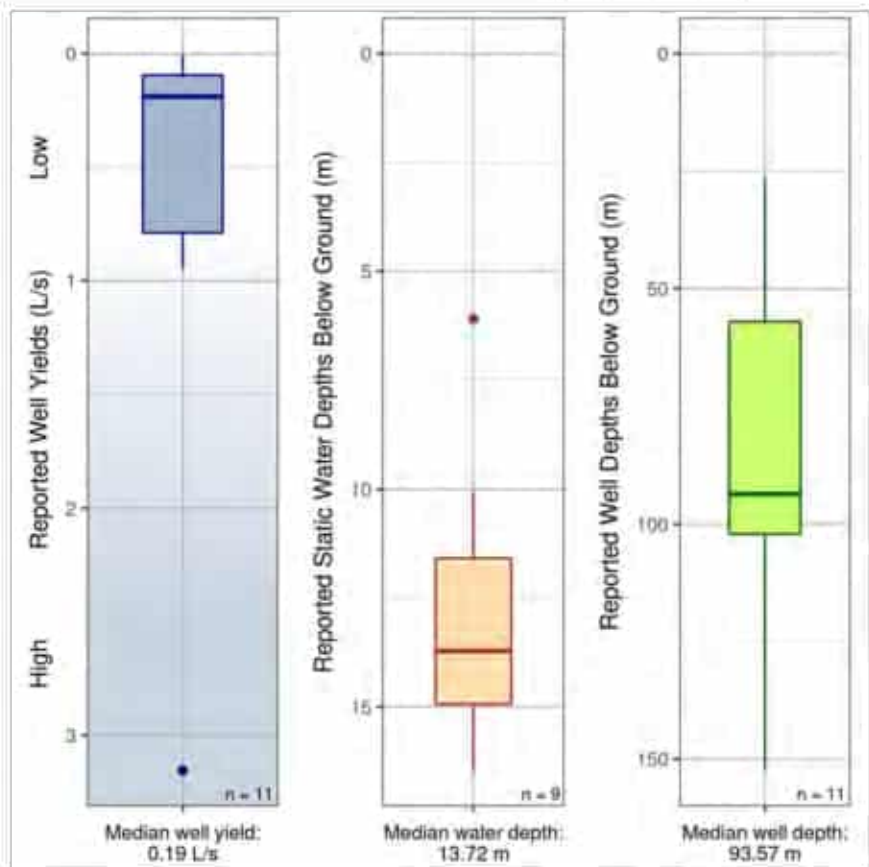
Fractured crystalline (igneous intrusive or meta-morphic, meta-sedimentary, meta-volcanic, volcanic) rock aquifer (subtype = 6b).

#### Aquifer Details

Region	West Coast
Water District	Alberni
Aquifer Area	10 km <sup>2</sup>
No. Wells Correlated	11
Vulnerability to Contamination	Moderate
Productivity	Moderate
Aquifer Classification	IIB
Hydraulic Conductivity *	Unknown
Transmissivity *	Unknown
Storativity *	Unknown
No. Water Licences Issued to Wells	Unknown
Observation Wells (Active, Inactive)	None

\* min - max

For Hydraulic Connection see [guidance document](#)



**Disclaimer:** Use of information from Aquifer factsheets (accessed by BC government website) is subject to limitation of liability provisions (further described on that website). That information is provided by the BC government as a public service on an "as is" basis, without warranty of any kind, whether express or implied, and its use is at your own risk. Under no circumstances will the BC government, or its staff, agents and contractors, be responsible or liable to any person or business entity, for any direct, indirect, special, incidental, consequential or any other loss or damages to any person or business entity based on this factsheet or any use of information from it.

Detailed methods for all figures are described in the companion document ([Aquifer Factsheet - Companion Document.pdf](#)).

Factsheet generated: 2022-07-27. Aquifers online: <https://apps.nrs.gov.bc.ca/gwells/aquifers>.



**APPENDIX C**

Current Land Title



**TITLE SEARCH PRINT**

File Reference: 38416

Appendix D 2023-01-14:40

Requestor: Alex Harden

**\*\*CURRENT INFORMATION ONLY - NO CANCELLED INFORMATION SHOWN\*\***

**Land Title District**

Land Title Office

VICTORIA

VICTORIA

**Title Number**

From Title Number

CA9507545

CA9333289

**Application Received**

2021-11-15

**Application Entered**

2021-11-24

**Registered Owner in Fee Simple**

Registered Owner/Mailing Address:

MINATO DEVELOPMENT CORP., INC.NO. BC1281485

2842 - 140 STREET

SURREY, BC

V4P 2H9

**Taxation Authority**

Ucluelet, District of

**Description of Land**

Parcel Identifier:

026-487-764

Legal Description:

LOT B DISTRICT LOT 286 CLAYOQUOT DISTRICT PLAN VIP79908

**Legal Notations**

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE CA8633160

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE CB536927 EXPIRES 2023-04-26

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE WX2153294

**Charges, Liens and Interests**

Nature:

COVENANT

Registration Number:

EV124432

Registration Date and Time:

2003-10-17 09:41

Registered Owner:

CORPORATION OF THE DISTRICT OF UCLUELET

Remarks:

INTER ALIA

PART

**TITLE SEARCH PRINT**

File Reference: 38416

Nature: COVENANT  
Registration Number: CA8532151  
Registration Date and Time: 2020-10-29 14:12  
Registered Owner: DISTRICT OF UCLUELET

Nature: MORTGAGE  
Registration Number: CA9620859  
Registration Date and Time: 2022-01-05 12:57  
Registered Owner: JONATHAN MARA  
LESLIE JOAN MARA  
AS JOINT TENANTS

Nature: ASSIGNMENT OF RENTS  
Registration Number: CA9620860  
Registration Date and Time: 2022-01-05 12:57  
Registered Owner: JONATHAN MARA  
LESLIE JOAN MARA  
AS JOINT TENANTS

Nature: MORTGAGE  
Registration Number: CA9883770  
Registration Date and Time: 2022-04-27 16:41  
Registered Owner: GUARDIAN ANGEL CONSULTANTS LTD.  
INCORPORATION NO. BC0806482

Nature: ASSIGNMENT OF RENTS  
Registration Number: CA9883771  
Registration Date and Time: 2022-04-27 16:41  
Registered Owner: GUARDIAN ANGEL CONSULTANTS LTD.  
INCORPORATION NO. BC0806482

Nature: COVENANT  
Registration Number: CB365207  
Registration Date and Time: 2022-11-30 15:14  
Registered Owner: DISTRICT OF UCLUELET

Nature: PRIORITY AGREEMENT  
Registration Number: CB365208  
Registration Date and Time: 2022-11-30 15:14  
Remarks: GRANTING CB365207 PRIORITY OVER CA9620859 AND  
CA9620860

Nature: PRIORITY AGREEMENT  
Registration Number: CB365209  
Registration Date and Time: 2022-11-30 15:14  
Remarks: GRANTING CB365207 PRIORITY OVER CA9883770 AND  
CA9883771

**TITLE SEARCH PRINT**

File Reference: 38416

2023-09-14 14:40  
Appendix D  
Requestor: Alex Harden

**Duplicate Indefeasible Title**                      NONE OUTSTANDING

**Transfers**                                              NONE

**Pending Applications**                              NONE



**APPENDIX D**

Site Registry Findings



# Area Search Results

**Coordinates & Area Size:** 48deg 56min 52.8sec 125deg 34min 10.5sec Small Area

Report Type	Site ID	Updated Date	Address/City	Pending
Choose a Report Type ▼	3100	2002-01-17	UNKNOWN, UCLUELET	<a href="#">Download</a>

Showing 1 to 1 of 1 entries

**Appendix D**

[Back](#)

[Email Search Results](#)





**APPENDIX E**

Federal Contaminated Sites Inventory



# Treasury Board of Canada Secretariat


[Home](#) > [OCG](#) > [Real Property Management](#) > [FCSI](#) > DFRP/FCSI - Map Navigator

## DFRP/FCSI - Map Navigator

**Area:** Ucluelet, Alberni-Clayoquot C **Content:** 0 Federal Property, 0 Federal Building, 0 Federal Contaminated Site



### Layers

-   Federal Properties
-   Federal Buildings
-  Federal Contaminated Sites
-  Economic Region
-  Census Divisions
-  Census Subdivisions
-  Metropolitan Areas
-  Federal Electoral Districts
-  Treaty Areas

<sup>1</sup> This layer is visible only when the map scale is smaller than 1:3,000,000.

<sup>2</sup>  Suspected  Active  Closed

<sup>3</sup> Google base maps are only available when the map scale is smaller than 1:60,000.

IMPORTANT NOTE: The tables below are currently not synchronized with the map content.  
Please click on the following button if you want to update the tables content: [UPDATE TABLES](#)

**Federal Properties (0) / Parcels (0) | Federal Buildings (0) | Federal Contaminated Sites (0) |**

No record found.





**APPENDIX F**

Site Photographs



PHOTOS



Figure 1. View of the Site facing west. Photo credit: Alex Harden



Figure 2. View of the Site facing southeast. Photo credit: Alex Harden



PHOTOS



Figure 3. View of the Site facing north. Photo credit: Alex Harden



Figure 4. View of the Site facing south. Photo credit: Alex Harden





PHOTOS



Figure 5. View of the Site facing east. Photo credit: Alex Harden



Figure 6. View of the Site facing north. Photo credit: Alex Harden





PHOTOS



Figure 7. View of the Site facing north. Photo credit: Alex Harden



Figure 8. View of the Site facing west. Photo credit: Alex Harden



PHOTOS



**Figure 9. View of the inlet to the north of the Site. Photo credit: Alex Harden**



**Figure 10. View of the properties to the east of the Site. Photo credit: Alex Harden**





PHOTOS



Figure 11. View of the properties to the south of the Site. Photo credit: Alex Harden



Figure 12. View of the properties to the west of the Site. Photo credit: Alex Harden

DISTRICT OF UCLUELET

Zoning Bylaw Amendment Bylaw No. XXXX, 2024

A bylaw to amend the "District of Ucluelet Zoning Bylaw No. 1160, 2013 and 1312, 2022".

(Zoning amendments for the proposed development of 221 Minato Road - Lot B, Plan  
VIP79908 Clayoquot District, District Lot 286 ).

WHEREAS Section 4 79 and other parts of the *local Government Act* authorize zoning  
and other development regulations;

NOW THEREFORE the Council of the District of Ucluelet, in open meeting assembled, enacts as follows;

**1. Text Amendment:**

The District of Ucluelet Zoning Bylaw No. 1160, 2013, as amended, is hereby further amended as follows:

- A. By adding within Division 100 - Enactment and Interpretation. Section 103 definitions, such that new definitions are added in alphabetical order reading as follows:

**"Height"** means the shortest vertical distance from the average elevation of the existing grade, if homes are required to be sited above the Flood Construction Level due to sea level rise (FCL) or above the Tsunami Risk Level (TRL), then the height is to be taken from the higher of the existing grade or the FCL or TRL.

**"Residential Rental Tenure"** means the occupation of a *dwelling unit* for *residential* purposes under a tenancy agreement according to the *Residential Tenancy Act* for a period of at least 4 months and excludes occupation of a dwelling by the owner.

**"Rental Multiple Family"** means a *building*, or a group of *buildings* on the same *lot*, each containing three or more *dwelling units* for *residential* use only under a long-term *residential rental tenure*.

**"Single Family Waterfront"**, means a detached *building* consisting of at least one dwelling on the same *lot* for both *residential* and *vacation* use for the primary dwelling and suite/s. While designed for single family occupation, the inclusion of at least one suite permits residential rental tenures and vacation use.

- B. By adding a new Comprehensive Development zone, to Schedule B – The Zones that directly follows CD-6 Zone - FORMER PROPOSED DEVELOPMENT OF 221 MINATO ROAD such that the new section reads as follows:

"CD-6 Zone - MINATO ROAD"

*This Zone is intended for the development of a mix of multi-family and single-family residential development providing for a mix of sizes, types and tenures including affordable rental, market rental, attainable home ownership and market ownership homes along with a small commercial precinct and limited vacation rental use.*





**CD-6.1 Permitted Uses:**

The following uses are permitted within the corresponding Development Areas shown in the CD-6 Zone Plan, but *secondary permitted* uses are only permitted in conjunction with a *principal permitted use*:

Development Area	Principal Use	Building Form	Secondary Uses
Lot 1	Multiple Family	Apartment	Home Occupation Secondary Suite
Lot 2	Rental Multiple Family	Apartment	Home Occupation
Lot 3	Single Family Waterfront	House	Home Occupation Secondary Suite Vacation Rental
Lot 4	Retail Trade & Services*	Commercial/Retail	CS-2.1 Uses
Lot 5	Multiple Family	Apartment	Home Occupation Secondary Suite Vacation Rental

\*Includes all CS2.1 Uses such as Office, Retail including supermarket, Personal Services, Convenience Store, Community Use, Bistro/Café, Take Out Food Services.

**CD-6.2 Lot Regulations:**

**CD-6.2.1 Minimum Lot Size:**

Minimum Lot Frontage is 10.00m.

Development Area	Principal Use	Proposed Lot Area	Minimum Lot Size
Lot 1	Multiple Family	19,000 m2	<b>16,000m2</b>
Lot 2	Rental Multiple Family	17,800 m2	<b>16,000m2</b>
Lot 3	Single Family Waterfront	14,700 m2	<b>13,000m2</b>
Lot 4	Retail Trade & Services	2,300 m2	<b>2000m2</b>
Lot 5	Rental Multiple Family	13,100 m2	<b>12,000m2</b>
TOTAL		66,900 m2	

**CD-6.3 Density**

**CD-6.3.1 Maximum Density:**

Development Area	Principal Use	Density (max # of buildings)	Density (max. # dwelling units)	Density (per unit/ha)
Lot 1	Multiple Family	18	75	39.5 unit / ha
Lot 2	Rental Multiple Family	16	107	60.1 unit / ha
Lot 3	Single Family Waterfront	10	10	6.8 unit / ha
Lot 4	Retail Trade & Services	2	-	-
Lot 5	Rental Multiple Family	10	58	44.3 unit / ha
TOTAL		55	250	37.4 units / ha

**CD-6.4 Maximum Size (Gross Floor Area):**

Development Area	Principal Use	Building Footprint	Total Gross Floor Area (m2)	Proposed Lot Coverage	Maximum Lot Coverage
Lot 1	Multiple Family – Part 1	1,289 m2	6633	17 %	<b>25%</b>
	Multiple Family – Part 2	2,027 m2			
Lot 2	Rental Multiple – Part 1	1,141 m2	6094	18 %	<b>25%</b>
	Rental Multiple – Part 2	1,906 m2			
Lot 3	Single Family Waterfront	1,500 m2	2750	10 %	<b>15%</b>
Lot 4	Retail Trade & Services	600 m2	1120	25 %	<b>50%</b>
Lot 5	Rental Multiple Family	1,884 m2	3768	14%	<b>25%</b>
TOTAL		10,348 m2	20365	15%	

**CD-6.5 Maximum Size of Accessory Buildings**

**CD-6.5.1** on lots containing a *Single Family*: 30 m2 (323 ft2) combined total.

**CD-6.5.2** on lots containing a *Multiple Family or Rental Multiple Family*: 50 m2 (538 ft2) combined total.

**CD-6.5.3** on lots containing a *Commercial*: 100 m2 (1077 ft2) combined total.

**CD-6.6 Maximum Heights**

Development Area	Principal Use	Principal	Accessory
Lot 1	Multiple Family	8.0 m	5.5 m
Lot 2	Rental Multiple Family	8.0 m	5.5 m
Lot 3	Single Family Waterfront	11.5 m	5.5 m
Lot 4	Retail Trade & Services	11.5 m	5.5 m
Lot 5	Rental Multiple Family	8.0 m	5.5 m

**CD-6.7 Minimum Setbacks:**

For ALL buildings there is a phase Strata lot line of 0.0m.

The following minimum setbacks apply, as measured from the *front lot line, rear lot line, and side lots line(s)* respectively:

Development Area	Principal Use	Front	Rear	Side Interior	Side Exterior	Phased Strata Lot Line
<b>Proposed Setback</b>						
Lot 1	Multiple Family	10.0 m	3.3 m	0.7 m	1.5 m	0.0 m
Lot 2	Rental Multiple Family	10.0 m	1.5 m	0.6 m	6.5 m	0.0 m
Lot 3	Single Family Waterfront	5.1 m	1.3 m	4.5 m	4.5 m	0.0 m
Lot 4	Retail Trade & Services	4.5 m	23.0 m	9.5 m	3.0 m	0.0 m
Lot 5	Rental Multiple Family	3.9 m	4.0 m	7.5 m	7.5 m	0.0 m
<b>Minimum Setback</b>						
Lots 1/2/5	Multiple Family	3.0 m	1.0 m	0.5 m	1.0 m	0.0 m
Lot 3	Single Family	4.0 m	1.0 m	3.0 m	3.0 m	0.0 m
Lot 4	Retail Trade & Services	4.0 m	3.0 m	1.5 m	2.0 m	0.0 m

**CD- 6.8 Parking Requirements:**

The following minimum car spaces apply:

For Multiple Family in Lots 1, 2 and 5: one space per dwelling and one visitor park per multi-family multiplex building.

For Lot 3 Single Family Waterfront: 3 spaces per lot.

For Lot 4 Commercial: 15 spaces per lot

**2. Map Amendment:**

Schedule A (Zoning Map) of District of Ucluelet Zoning Bylaw No.1312,2022 as amended, is hereby further amended by changing the zoning designation of areas of Lot B, District Lot 286, Clayoquot District Plan VIP79908 (222 Minato Road: PID: 026-487-7864), from “CD-6: Comprehensive Development 6 Zone- FORMER PROPOSED DEVELOPMENT OF 221 MINATO ROAD” to areas designated as “CD-6: Comprehensive Development 6 Zone – MINATO ROAD”



<b>Amend and Replace Draft Covenant Restrictions</b>
------------------------------------------------------

This report documents the proposed resolution of the 2023 Covenant Restrictions on 221 Minato with a proposal that these be agreed as satisfied, amended or waived by mutual agreement.

### **2022 Covenant Restrictions – Satisfied, Amended and Waived by Agreement**

The original Covenant Restrictions are here:

[https://drive.google.com/file/d/1itHg9RNp9qMW\\_WjAc98OHc3oR07oJTrG/view?usp=sharing](https://drive.google.com/file/d/1itHg9RNp9qMW_WjAc98OHc3oR07oJTrG/view?usp=sharing)

This table seeks to respond to each 2022 Covenant Restriction as satisfied, amended or waived, and any follow up actions.

#	Section	Type	Restriction	Satisfied	Action
1	2(b)(i)	Archaeological Assessment	(i) an archaeological assessment of the site and the proposed development with recommendations for any mitigation measures, design changes and/or permitting requirements to protect archaeological and cultural resources;	<b>SATISFIED</b> – September 2024 lodged Interim Archaeological Report by Yuułuʔiłʔatḥ Government - Ucluelet First Nation (UFN) Department of Culture, Language & Heritage	ERIF to supply 'Final' Report when received before Build Permit approval.
2	2(b)(ii)	Environmental Assessment	an assessment by a Qualified Environmental Professional (QEP) of the ecological resources of the Lands and surrounding ecosystem, with recommendations for how the proposed development can avoid and/or mitigate impacts on terrestrial and marine ecosystems or enhance the existing ecological function of the site;	<b>SATISFIED</b> – ✓ September 2024 lodged Interim Environmental Assessment by Aquaparian Environmental Consulting. ✓ EXTRA August 25 2023 Thurber Engineering Environmental Site Assessment found "no areas of potential environmental concern" (contamination).	<b>SATISFIED</b>
3	2(b)(iii)	Grading and Rainwater Plan	(iii) grading and rainwater management plans for the proposed development of the Lands (incorporating the recommendations of the QEP and landscape plans for the proposed development);	<b>SATISFIED</b> – ✓ September 2024 supplied by Herold Engineering including incorporating Aquaparian input on benched natural drainage to middle Creek.	<b>SATISFIED</b> Compliance with standard sediment control plan
4	2(b)(iv)	Traffic	(iv) engineering analysis and design for safe vehicular and pedestrian access to the proposed residential development on the Lands in a location and configuration to the satisfaction of both the District and BC Ministry of Transportation and Infrastructure;	<b>SATISFIED</b> ✓ September 2024 updated Traffic Report by Watt Consulting Engineers. ✓ EXTRA Jan 10 2024 Watt Consulting Traffic Assessment Update recommends extending the 50kph zone, second access off Peninsula, 20m taper	<b>SATISFIED</b> Negotiate Ministry of Transportation and Infrastructure approval

## Appendix D

				westbound right lane and pedestrian crossing Peninsula. ✓ Feb 28 2022 Watt Consulting Traffic Study and report.	
5	2(b)(v)	Engineering for Water, Sanitary, Roads and Pathways	(v) engineering analysis and design of off-site works and services required to ensure that District infrastructure will accommodate the impact of the proposed development on the Lands, including water, sanitary, roads and pathways;	✓ <b>SATISFIED</b> September 2024 updated Servicing Plan by Herold Engineers. ✓ EXTRA Mar 19 2024 Koers Engineering modelling water and sanitary demands ✓ Sept 27 2023 McGill Engineering review of sanitary, stormwater, water, power. ✓ March 19 2022 Koers Water flow study. ✓ March 18 2022 Koers Sanitary Modelling ✓ April 28 2022 BC Hydro confirmation of capacity	Awaiting DOU timelines for infrastructure upgrades so can determine full tie in or if required use Creus Interim Sanitary solution.
6	2(b)(vi)	Phasing and Servicing Plans	(vi) proposed phasing and servicing plans, identifying thresholds for when infrastructure upgrades (including road access, water, sewer, etc.) would be necessary before additional housing units are constructed;	✓ <b>SATISFIED</b> September 2024 updated Servicing Plan by Herold Engineers ✓ EXTRAS Mar 19 2024 Koers Engineering modelling water and sanitary demands ✓ Sept 27 2023 McGill Engineering review of sanitary, stormwater, water, power. ✓ March 19 2022 Koers Water flow study. ✓ March 18 2022 Koers Sanitary Modelling ✓ April 28 2022 BC Hydro confirmation of capacity	Approval of Phased Development Plan: -model infrastructure upgrades over time. -approval Interim Sanitary solution if delayed. -approval of Watt Consulting phased traffic works at 80% build out.
7	2(b)(vii)	Subdivision Layout and Titling (Strata)	(vii) proposed layout and approach to subdivision (including all proposed elements of fee-simple, bare land strata, or building stratas) identifying proposed property boundaries and the location and extent of public and private infrastructure, facilities, roads, pathways, parks, open space, etc.;	✓ <b>SATISFIED</b> September 2024 provided Draft Subdivision Plan from Williamson Surveyors.	Site plans will be enhanced by additional survey points.

## Appendix D

8	2(b)(viii)	Open recreation space design	(viii) more detailed plans for proposed road and open space design including plans for public / shared recreation and play infrastructure;	<b>SATISFIED</b> September 2024 provided plans, visual supports and Landscaping Plans.	Additional detailed Landscaping in Build Permit phase.
9	2(b)(ix)	Energy Measures	(ix) description of proposed green building measures including electrical vehicle charging at all units;	✓ <b>SATISFIED</b> September 2024 provided details of solar panels, EV charging to each lot, low waste methodology for build.	
10	2(b)(x)	Engineering for Tsunami	(x) engineering analysis of all aspects of the proposed development on the Lands located in areas identified as subject to tsunami flood hazard, according to District of Ucluelet Tsunami Risk Tolerance Interim Policy 8-5280-1.	✓ <b>SATISFIED</b> Late Sept 2024 will provide Kerr Webb Leidel Flood Assurance Statement confirming levels. ✓ July 2022 Stantec Tsunami resilient construction plan for retaining and lower levels. ✓ Jan 28 2022 Ebbwater Consulting Flood Planning Mapping Report	Structural and Geotech Engineer design of footings, retaining walls. Prepare Tsunami Risk Management Plan.
11	2(c)	Plan for Wild Pacific Trail	(c) The Grantor must provide to the District, and receive the Director's approval of, a detailed plan for the construction of gravel-surfaced pedestrian trails, viewing platforms, and associated infrastructure, to the District's Wild Pacific Trail standards, in the approximate alignment shown on the Development Plan (the "Trail Plan").	<b>PROPOSED WAIVED</b> The Parkland Dedication is now owned and controlled by DOU who are best placed to undertake trail construction if desired.	
12	2(d)	Criteria for Trail Plan	(d) The Trail Plan must: (i) specify trail alignments that achieve the following objectives: A. minimize impact on the natural environment B. minimize pedestrian encroachment into the salt marsh and intertidal areas; C. minimize tree removal; D. maximize the experience by trail users; E. fit the character of the existing municipal trail network; (ii) include stairs, bridges, boardwalks, ramps, railings and other similar trail structures as reasonably necessary to achieve the above-noted objectives; (iii) include view platform designs that are of a scale and quantity to allow future residents and trail users to	<b>PROPOSED WAIVED</b> The Parkland Dedication is now owned and controlled by DOU who are best placed to undertake trail construction if desired.	

			enjoy the views (minimum 800 sq ft in two separate platforms) (iv) including archaeological and environmental assessment and oversight as necessary during construction.		
13	2(e) (i)	Housing Agreement Covenant -10 affordable rental units	<p>(e) The Grantor must grant to the District and register on title to the Land, a housing agreement (or agreements) under s. 483 of the Local Government Act and a restrictive covenant (or covenants) under s. 219 of the Land Title Act, all to the satisfaction of the District’s Manager of Planning, to ensure the following:</p> <p>(i) At least ten rental housing units with rental rates restricted to ensure affordability for households earning a maximum of 80% of median income, with the following unit mix: four units with one bedroom, four units with two bedrooms, and two units with three bedrooms;</p>	<p>✓ <b>AMEND</b> clause tied to superseded unfeasible site plan. Drafted Housing Agreement and replaced clause in Covenant Restriction. designs meet and exceed criteria</p>	<p><b>AMEND</b> Covenant Restriction. Sign Housing Agreement managed by non-profit Housing Association</p>
14	2(e) (ii)	Housing Agreement Covenant -42% total units affordable	<p>(ii) At least 42% of the total units will be rental housing units with rental rates restricted to ensure affordability for households earning between 80% and 100% of median income, with the following unit mix: 40% of the units with one bedroom, 40% of the units with two bedrooms, and 20% of the units with three bedrooms;</p>	<p>✓ <b>AMEND</b> clause tied to superseded unfeasible site plan. Drafted Housing Agreement and replaced clause in Covenant Restriction. designs meet and exceed criteria</p>	<p><b>AMEND</b> Covenant Restriction. Sign Housing Agreement managed by non-profit Housing Association</p>
15	2(e) (iii)	Housing Agreement Covenant -32% of units affordable rental or sale	<p>(iii) At least 32% of the total units will be houses or townhouses with rental or sale prices restricted to be affordable for households earning up to 130% of median income, with a mix of unit sizes.</p> <p>and the District’s Manager of Planning may require the Grantor to include in the Housing Agreements additional terms and conditions respecting the timing and phasing of any development of the Lands, to ensure construction and occupancy of any Affordable Housing Units is reasonably proportionate to the</p>	<p>✓ <b>AMEND</b> clause tied to superseded unfeasible site plan. Drafted Housing Agreement and replaced clause in Covenant Restriction. designs meet and exceed criteria</p>	<p><b>AMEND</b> Covenant Restriction. Sign Housing Agreement managed by non-profit Housing Association</p>



			subdivision of lots and/or issuance of building permits for other residential uses on the Lands and without limiting the Planner’s discretion under this section, the Grantor agrees that Affordable Housing Units must comprise at least 65% of housing units construction in the first phase of development of the Lands.		
16	3	No a) occupation until T1 trail b) building zones BCD until T2 trail c) building EFG until T3 built.	<p>3. Despite any construction that may have been authorized after the Grantor has fulfilled its obligations under section 2 of this Agreement, the use or occupancy of any building on the Land is further restricted as follows:</p> <p>(a) No building on the Land shall be used or occupied until and unless the Grantor has completed the construction of the portion of trail in the area labeled T-1 in the Development Plan, in accordance with the Trail Plan;</p> <p>(b) No building on the areas of the Land labeled B, C and D on the Development Plan shall be used or occupied until and unless the Grantor has completed the construction of the portion of trail in the area labeled T-2 in the Development Plan, in accordance with the Trail Plan;</p> <p>(c) No building on the areas of the Land labeled E, F or G on the Development Plan shall be used or occupied until and unless the Grantor has completed the construction of the portion of trail in the area labeled T-3 on the Development Plan, in accordance with the Trail Plan.</p>	<b>PROPOSED WAIVED</b> The Parkland Dedication is now owned and controlled by DOU who are best placed to undertake trail construction if desired. Trail must not delay urgent development of Affordable homes.	

**Proposed 2024 New Covenant Restrictions**

**Redraft of Covenant Restrictions here: [ADD LINK](#)**

**PROJECT:** PROPOSED REZONING & SUBDIVISION  
**LOCATION:** 221 MINATO ROAD, UCLUELET  
**CLIENT:** ERIF

**DRAWING:** SITE PLAN OF POTENTIAL SUBDIVISION

**SCALE:** 1:750

**DRAWN:** SC / TJH

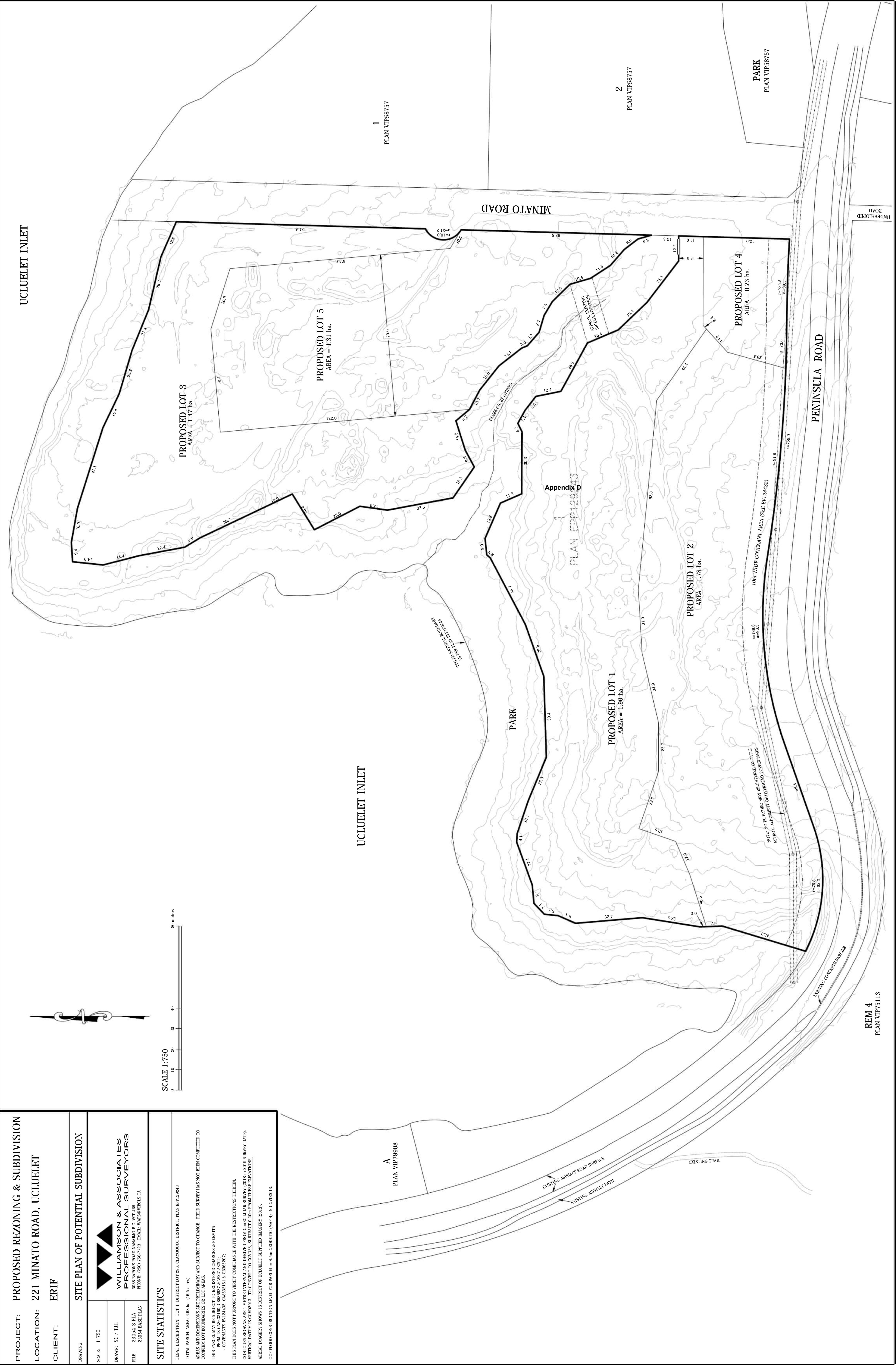
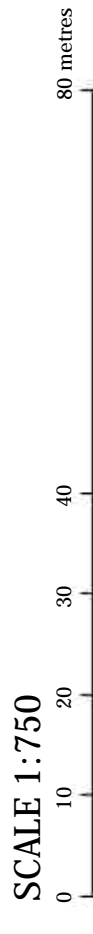
**FILE:** 23054-3 PLA  
23054 BASE PLAN



**WILLIAMSON & ASSOCIATES**  
**PROFESSIONAL SURVEYORS**  
 3088 BARONS ROAD NANAIMO B.C. V9T 4B5  
 PHONE: (250) 756-7723 EMAIL: WAPS@VIRGIS.CA

**SITE STATISTICS**

LEGAL DESCRIPTION: LOT 1, DISTRICT LOT 286, CLAYOQUOT DISTRICT, PLAN EPP129413  
 TOTAL PARCEL AREA: 6.08 ha. (16.5 acres)  
 AREAS AND DIMENSIONS ARE PRELIMINARY AND SUBJECT TO CHANGE. FIELD SURVEY HAS NOT BEEN COMPLETED TO CORNER LOT BOUNDARIES OR LOT AREAS.  
 THIS PARCEL MAY BE SUBJECT TO REGISTERED CHARGES & PERMITS:  
 - COVENANTS EY124432, C8852413 & C8862907.  
 THIS PLAN DOES NOT PURPORT TO VERIFY COMPLIANCE WITH THE RESTRICTIONS THEREIN.  
 CONTOURS SHOWN ARE 1 METRE INTERVAL AND DERIVED FROM GOREC LIDAR SURVEY (2018 to 2019 SURVEY DATE). VERTICAL DATUM IS CGVD2013. TO CONVERT TO CGVD2011, SUBTRACT 0.29m FROM THESE ELEVATIONS.  
 AERIAL IMAGERY SHOWN IS DISTRICT OF UCLUELET SUPPLIED IMAGERY (2019).  
 OCP FLOOD CONSTRUCTION LEVEL FOR PARCEL = 4.5m GEODETIC (MAP 4) IN COVD2013.



**DRAFT - PHASED DEVELOPMENT AGREEMENT**

**Section 516 Local Government Act/Section 219 Covenant**

This Agreement dated for reference the \_\_\_ day of \_\_\_\_\_ 2024.

BETWEEN:

**DISTRICT OF UCLUELET**

200 Main Street, Ucluelet, BC V0R 3A0

(the “**District**”)

AND:

**ERIF ECONOMIC RESTORATION INFRASTRUCTURE FUND INC.**, BC1319635.

2200, 885 Georgia St West, Vancouver, British Columbia, CA V6C 3E8

(the “**Developer**”)

**GIVEN THAT:**

- A. The Developer is contracted to become the owner of the Lands.
- B. The Developer has applied to amend the District of Ucluelet’s Zoning Bylaw Amendment Bylaw No. 1312, 2022 (the “**Zoning Bylaw**”) to permit the development on the Lands generally depicted on the Master Plan and in the Development Permit for the Lands.
- C. The owner has voluntarily provided Parkland in conjunction with the development of the Lands and no further parkland dedication is required.
- D. The Developer wishes to ensure that the provisions of the Zoning Amendment Bylaw continue to apply to the Lands for the Term.
- E. The Developer proposes to develop the Lands in five phases (hereinafter individually referred to as “Phase A through F” respectively and jointly referred to as the “**Phases**”), of which Phases are shown on the Phasing Plan.
- F. The Parties have agreed that the Lands will be developed in Phases and that all Works shall be provided in conjunction with the development of each of the Phases and in the sequence provided for in this Agreement.
- G. The Council of the District has, by the Phased Development Agreement Bylaw, authorized the making of this Agreement.
- H. Section 516 of the Local Government Act permits the entering into this Agreement pursuant to the Phased Development Agreement Bylaw; and
- I. The parties have agreed to register this Agreement in the Land Title Office under Section 219 of the *Land Title Act*.

**NOW THEREFORE** in consideration of the mutual promises set out in this Agreement, the Developer and the District agree pursuant to Section 516 of the *Local Government Act* as follows:

## **PART I – INTRODUCTION**

### **1. DEFINITIONS AND INTERPRETATION**

1.1 In this Agreement:

“**Affiliate**” has the meaning set out in the *Business Corporations Act*.

“**Agreement**” means this Phased Development Agreement.

“**Approving Officer**” means the subdivision approval official appointed for that purpose under the provisions of the *Land Title Act*.

“**Development**” means the development of the Lands as generally depicted on the Master Plan.

“**Dwelling Unit**” shall have the meaning set out in the Zoning Bylaw.

“**Lands**” means the parcels of land legally described in Schedule A.

“**Master Plan**” means the plan for the Development of the Lands and attached to the Agreement as Schedule B.

“**Parkland**” means the parks and open space areas as shown on the plan attached as Schedule B depicting the lands currently owned by the Municipality.

“**Phase**” means a phase of the Development as depicted on the Phasing Plan, including all Works contemplated or required in connection with that Phase.

“**Phase A – F**” means that Phase of the Development numbered as Phase A – F, as applicable, on the Phasing Plan.

“**Phased Development Agreement Bylaw**” means the bylaw authorizing the entering into of this Agreement pursuant to Section 516(1) of the Local Government Act.

“**Phasing Plan**” means the plan attached as Schedule C.

“**Security**” means cash or an unconditional, irrevocable and automatically renewing letter of credit issued by a chartered bank, to the satisfaction of the District.

“**Subdivide**”, “**Subdivided**” or “**Subdivision**” means to divide, apportion, consolidate, or subdivide the Lands or portion thereof, or the ownership or



right to possession or occupation of the Lands into two or more lots, strata lots, parcels, parts, portions, or shares, whether by plan, descriptive words or otherwise, under the *Land Title Act*, the *Strata Property Act*, or otherwise, and includes the creation, conversion, organization, or development of “cooperative interests” or “shared interest in land” as defined in the *Real Estate Development Marketing Act*;

“**Term**” means the term of this Agreement set out in 5.1.

“**Works**” shall have the meaning set out in Article 7; and

“**Zoning Bylaw**” means the District’s Zoning Bylaw No. 1312, 2022, as amended, in place as of the date of adoption of the Phased Development Agreement Bylaw.

- 1.2 The headings and captions are for convenience only and do not form a part of this Agreement and shall not be used to interpret, define or limit the scope, extent or intent of this Agreement or any of its provisions.
- 1.3 The word “including” when following any general term or statement is not to be construed as limiting the general term or statement to the specific items or matters set forth or to similar terms or matters but rather as permitting it to refer to other items or matters that could reasonably fall within its scope.
- 1.4 A reference to currency means Canadian currency.
- 1.5 A reference to a statute includes every regulation made pursuant thereto, all amendments to the statute or to any such regulation in force from time to time, and any statute or regulation that supplements or supersedes such statute or any such regulation.
- 1.6 A reference to time or date is to the local time or date in Ucluelet, British Columbia.
- 1.7 A word importing the masculine gender includes the feminine or neuter, and a word importing the singular includes the plural and vice versa.
- 1.8 A reference to approval, authorization, consent, designation, waiver, or notice means written approval, authorization, consent, designation, waiver or notice.
- 1.9 A reference to a section means a section of this Agreement unless a specific reference is provided to a statute.
- 1.10 The following Schedules are attached to and form part of this Agreement:
  - Schedule A Titles
  - Schedule B Master Plan
  - Schedule C Phasing Plan

**PART II – GENERAL CONDITIONS****2. APPLICATION OF AGREEMENT**

- 2.1 THE DEVELOPER COVENANTS AND AGREES with the District that the Lands shall not be Developed, Subdivided, built on, used or occupied for any purpose whatsoever, except in strict accordance with this Agreement.

**3. CONDITION PRECEDENT**

- 3.1 The obligations of the parties under this Agreement are subject to the Council of the District, in its sole and unfettered discretion, adopting the Amendment Bylaw, the Zoning Amendment Bylaw and the Phased Development Agreement Bylaw by on or before March 30, 2025, failing which this Agreement shall automatically terminate and be of no further force or effect. For certainty, the District confirms that it shall not register this Agreement on title to the Lands until the Amendment Bylaw, the Zoning Amendment Bylaw and the Phased Development Agreement Bylaw have been adopted.

**4. SPECIFIED BYLAW PROVISIONS**

- 4.1 For the Term, any amendment or repeal of the Specified Bylaw Provisions shall not apply to the Lands, unless:
- (a) the changes fall within the limits established by Section 516(6) of the *Local Government Act*, being:
    - (i) changes to enable the District to comply with an enactment of British Columbia or of Canada.
    - (ii) changes to comply with the order of a Court or arbitrator or another direction in respect of which the District has a legal requirement to obey.
    - (iii) changes that, in the opinion of the District, are necessary to address a hazardous condition of which the District was unaware at the time it entered into this Agreement; and
    - (iv) other changes that may be made as a result of an amendment to Section 516(6) of the *Local Government Act*.
  - (b) this Agreement has been terminated pursuant to Article 6; or
  - (c) the Developer has agreed in writing that the changes to the Specific Bylaw Provisions apply.

**5. TERM OF AGREEMENT**

- 5.1 Subject to Article 6, the Term of this Agreement is ten (10) years from the reference date of this Agreement.

## 6. TERMINATION

- 6.1 The parties may terminate this Agreement at any time by mutual written agreement, and subsequently subject to the Council of the District adopting a bylaw to terminate this Agreement in accordance with the same procedures, terms and conditions required to adopt the Phased Development Agreement Bylaw.

- 6.2 If the Developer does not comply with any of the provisions of this Agreement other than as a result of or due to an act or omission of the District, the District may at its option terminate this Agreement before the expiry of the Term by providing notice in writing to the Developer, provided that:

- (a) in the case of a failure on the Developer's part to pay a sum, the District has, at least sixty (60) days prior to giving such notice, advised the Developer in writing of the alleged failure to pay or to provide the Security (the "**Default Notice**") and the Developer has not corrected the failure to the reasonable satisfaction of the District within that sixty (60) day period.
- (b) in the case of any other failure on the Developer's part to comply with this Agreement, the District has, at least sixty (60) days prior to giving such notice, provided the Developer with a Default Notice in respect of such failure, and the Developer has not corrected the failure or deficiency in performance to the reasonable satisfaction of the District within that sixty (60) day period; or
- (c) if a failure or deficiency requires longer than sixty (60) days to remedy, the Developer has failed to substantially commence remedying such failure or deficiency within sixty (60) days after receipt of the Default Notice to the reasonable satisfaction of the District and further has failed to diligently pursue remedying the failure or deficiency thereafter.

## 7. SERVICING AGREEMENT

- 7.1 With respect to works and services, including the roads, not already constructed (the "**Works**") the Developer covenants and agrees that it will enter into a Works and services agreement with the District in accordance with the requirements of the District's Bylaw in effect as of the date of this Agreement.

## 8. DEVELOPMENT AND DEVELOPMENT PHASING

- 8.1 Without limiting the generality of Section 2.1, the Developer covenants that it shall not develop the Lands, disturb the surface of the Lands, cut or damage

vegetation on the Lands or Subdivide the Lands except in strict accordance with the terms of this Agreement and in accordance with the Master Plan, provided that this Agreement shall not prohibit the Developer from taking such steps from time to time and at any time during the Term as may reasonably be required to clear vegetation from roads, replace culverts, repair road washouts and otherwise address like matters with respect to the Lands.

- 8.2 Except as expressly provided in this Agreement, nothing in this Agreement shall relieve the Developer from any obligation or requirement arising under any applicable statute, bylaw or regulation in respect of the Subdivision and Development of the Lands, and without limiting the generality of the forgoing, the Developer shall remain fully responsible to ensure that the Development of the Lands is in full compliance with all requirements of the bylaws of the District including those respecting land development, zoning, subdivision and servicing. For certainty, nothing in this Agreement shall (a) relieve the District of the authority to utilize any contractual, statutory or common law remedy it may have to enforce this Agreement; or (b) be deemed to make the Developer responsible for ensuring bylaw compliance for any building construction completed on Subdivided portion of the lands transferred by the Developer to arm's length third parties.
- 8.3 Without limiting the generality of Section 8.2, in connection with any application for approval of Subdivision or Development of the Lands, the Developer must obtain all development permits required under the District's Official Community Plan, as amended from time to time, and in respect of any Subdivision must obtain the approval of the Approving Officer and must comply with all applicable enactments and bylaws in connection with that Subdivision.
- 8.4 The parties acknowledge that the Approving Officer is an independent statutory officer, and that nothing in this Agreement shall be interpreted as prejudicing or affecting the duties and powers of the Approving Officer in respect of any application to Subdivide the Lands.
- 8.5 The Developer shall develop Phase A and Phase B concurrently and Phase C, Phase D, Phase E and Phase F, all as shown on the Phasing Plan, sequentially, provided that the Developer may elect to proceed with any two sequential Phases concurrently (as examples and for illustrative purposes only, the Developer may elect to proceed with Phase D and Phase E concurrently, or may elect to proceed with Phase C and Phase D and Phase E concurrently).

### **PART III – DEVELOPMENT OF THE PHASES**



**9. COMPLETION OF A PHASE**

9.1 The Developer shall substantially complete each Phase of Development of the Lands, including any Works, and enter into all agreements necessary to secure such Works related to that Phase in accordance with the terms of this Agreement and as otherwise determined by the District, before proceeding to the next Phase of Development of the Lands.

9.2 A Phase shall be deemed to be substantially completed when:

- (a) the Developer has fulfilled all of the Developer's obligations under this Agreement related to such Phase; and
- (b) all Works relating to such Phase have been completed to the satisfaction of the District and its Approving Officer.

**10. TRAFFIC MANAGEMENT**

10.1 The Developer covenants and agrees with the District to design and construct an eastbound left turn lane (15m storage) required in the 10-year long term scenario with Phases A-E of the development.

**11. DEVELOPMENT PERMITS AND DEVELOPMENT COST CHARGES**

11.1 The Developer further covenants and agrees with the District:

- (a) that in addition to any requirements specified in this Agreement, any Development of Multiple Family Dwelling Units, or any commercial development, shall be required to obtain a development permit in accordance with the applicable Development Permit Guidelines of the District's Official Community Plan, as amended or replaced from time to time; and
- (b) at the time at which each application to Subdivide the Lands, or portion thereof, is made to the District's Approving Officer or a completed building permit application is made to the District, to pay to the District all applicable development cost charges at the rate set out in the District's Development Cost Charges Bylaws in effect at the date such application is made.

**PART IV – GENERAL TERMS AND CONDITIONS**

**12. BINDING EFFECT**

12.1 During the Term, this Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, administrators, executors, successors and permitted assignees.

**13. COSTS**

- 13.1 The Developer shall perform its obligations under this Agreement at its sole cost.
- 13.2 The Developer shall promptly on receipt of an invoice from the District reimburse the District for its legal fees incurred in relation to the Development of the Lands, including the drafting and negotiating of this Agreement and other necessary agreements.

**14. DISTRICT'S RIGHTS AND POWERS**

- 14.1 Whenever in this Agreement the District is required or entitled to exercise any discretion in the granting or consent or approval, or is entitled to make any determination, take any action or exercise any contractual right or remedy, the District may do so in accordance with the contractual provisions of this Agreement and no public law duty, whether arising from the principles of procedural fairness or the rules of natural justice or otherwise, shall have any application in the interpretation or implementation of this Agreement except to the extent that such duty arises as a matter of public law.
- 14.2 Except as expressly set out in this Agreement, nothing in this Agreement shall prejudice or affect the rights and powers of the District in the exercise of its functions under the Community Charter or the *Local Government Act*, or any of its bylaws, or those of the Approving Officer of the District under the *Land Title Act*, *Strata Property Act* or *Bare Land Strata Regulations*.

**15. DISPUTE RESOLUTION**

- 15.1 If a dispute arises between the parties in connection with this Agreement, the parties agree to use the following procedures as a condition precedent to any other party pursuing other available remedies:
- (a) either party may notify the other by written notice("Notice of Dispute") of the existence of a dispute and a desire to resolve the dispute by mediation.
  - (b) a meeting will be held promptly between the parties, attended by the individuals with decision-making authority regarding the dispute, to attempt in good faith to negotiate a resolution of the dispute.
  - (c) if, within forty-eight (48) hours after such meeting or further such period as is agreeable to the parties (the "Negotiation Period"), the parties have not succeeded in negotiating a resolution of the dispute, they agree to submit the dispute to mediation and to bear equally the costs of mediation.

- (d) the parties will jointly appoint a mutually acceptable mediator (who must be an expert in the subject matter of the dispute), within forty-eight (48) hours of the conclusion of the Negotiation Period.
- (e) the parties agree to participate in good faith in the mediation and negotiations for a period of 30 days following appointment of the mediator or for such longer period as the parties may agree; and
- (f) if the parties are not successful in resolving the dispute through mediation, either party may pursue recourse through the Courts, or, if the parties are agreeable, the dispute will be settled by a single arbitrator in accordance with the *Arbitration Act, 2020,c.2*.

15.2 In no event shall Section 15.1 be construed as impeding or affecting the District's authority to enforce its Zoning Bylaw and other regulatory bylaws.

**16. DISTRICT'S REPRESENTATIVE**

16.1 Any opinion, decision, act or expression of satisfaction or acceptance provided for in this Agreement may be taken or made by the District's Approving Officer unless expressly provided to be taken or made by another official of the District.

**17. GOVERNING LAW**

17.1 This Agreement shall be governed by and construed in accordance with the laws of the Province of British Columbia, which shall be deemed to be the proper law hereof.

**18. INSPECTION**

18.1 The Developer agrees that the District may, by its officers, employees, contractors and agents, enter upon the Lands and within all buildings and structures thereon at all reasonable times for the purpose of ascertaining compliance with this Agreement.

**19. WAIVER**

19.1 No provision of this Agreement is to be considered to have been waived by the District unless the waiver is expressed in writing by the District. The waiver by the District of any breach by any of the other parties of any provision is not construed as or constitutes a waiver of any further or other breach.

**20. SPECIFIC PERFORMANCE**

20.1 The Developer acknowledges and covenants and agrees with the District that because of the public interest in ensuring that all of the matters described in this Agreement are complied with, the public interest strongly favours the award of a prohibitory or mandatory injunction, or an order for specific

performance or other specific relief, by the Supreme Court of British Columbia at the instance of the District, in the event of an actual or threatened breach of this Agreement.

**21. DEVELOPER'S ACKNOWLEDGEMENTS**

21.1 The Developer acknowledges and agrees that:

- (a) nothing contained or implied herein shall prejudice or affect the rights and powers of the District in the exercise of its functions under any public and private statutes, bylaws, orders and regulations, all of which, may be fully and effectively exercised in relation to the Lands as if this Agreement had not been executed and delivered by the Developer.
- (b) this Agreement does not:
  - (i) affect or limit any enactment applying to the Lands; or
  - (ii) relieve the Developer from complying with any enactment.
- (c) the covenants set forth herein shall charge the Lands pursuant to Section 219 of the *Land Title Act* and shall be covenants the burden of which shall run with the Lands.
- (d) the benefit of all covenants made by the Developer herein shall accrue solely to the District and that this Agreement may be modified by agreement of the District with the Developer, or discharged by the District, pursuant to the provisions of Section 219 of the *Land Title Act*; and
- (e) the covenants, promises and agreements herein contained have been made as contractual obligations as well as being made pursuant to Section 219 of the Land Title Act and as such this Agreement shall be binding upon the Developer and their respective heirs, executors, administrators, successors and assigns.
- (f) there is an agreed commitment by the District and the Developer to provide a minimum of 30% Affordable/ Attainable housing on the Lands as outlined in Schedule E.

**22. INDEMNITY AND RELEASE**

22.1 The Developer shall indemnify and keep indemnified the District from any and all claims, causes of action, suits, demands, fines, penalties, costs, deprivation, reasonable expenses or legal fees whatsoever, whether based in law or equity, whether known or unknown, which anyone has or may have against the District or which the District incurs as a result of any loss, damage



or injury, including economic loss or deprivation, arising out of or connected with any breach by the Developer of this Agreement.

- 22.2 The Developer hereby releases, saves harmless and forever discharges the District of and from any claims, causes of action, suits, demands, fines, penalties, costs, deprivation, reasonable expenses or legal fees whatsoever which the Developer can or may have against the District, whether based in law or equity, whether known or unknown, for any loss, damage or injury, including economic loss or deprivation, that the Developer may sustain or suffer arising out of or connected with this Agreement, including the restrictions and requirements of this Agreement, and the development of the Lands as contemplated under this Agreement, or any breach by the Developer of any covenant in this Agreement, save and except as a result of any breach by the District of this Agreement.
- 22.3 The indemnity and release provisions of Sections 22.1 and 22.2 shall survive the expiry of the Term or earlier termination of this Agreement.

**23. ASSIGNMENT OF AGREEMENT**

- 23.1 The Developer shall be permitted to assign its interest in this Agreement as it relates to the Lands or any portion thereof with the prior written consent of the District, such consent to be in the sole and absolute discretion of the District provided that the Developer shall be entitled to assign this Agreement without the consent of, but with notice to, the District to (a) an Affiliate of the Developer, or (b) a successor developer of the whole of the Lands then owned by the Developer (such party constituting a member of a class of persons identified in this Agreement, as contemplated in section 517(5)(b) of the *Local Government Act*); each being an "Assignee", and no further assignment shall be permitted by an Assignee except with the consent of the District as described above.

**24. AMENDMENT OF AGREEMENT**

- 24.1 Subject to Section 24.2, the parties may in writing agree to Minor Amendments to this Agreement. For the purposes of this Agreement, a "Minor Amendment" is an amendment to Schedules B to D, inclusive.
- 24.2 The District may authorize a Minor Amendment by resolution of the District's Council, and without having to adopt a bylaw or hold a public hearing. Despite the previous sentence, prior to authorizing a Minor Amendment, the District's Council may convene a public hearing or other proceeding for the purpose of determining the opinion of members of the public to the proposed Minor Amendment, notwithstanding that such a hearing or other proceeding is not required by the Local Government Act, and the Developer agrees to

participate in such hearing or other proceeding for the purpose of providing information to the public on the proposed Minor Amendment.

**25. DISCHARGE OF AGREEMENT**

25.1 Provided the District is satisfied the obligations to be performed as set out in this Agreement with respect to such portion of the Lands have been delivered and performed, as applicable, and further provided the District is satisfied it is appropriate for this Agreement to be discharged from such portion of the Lands having regard to the future development potential of such portion of the Lands, the District shall execute in registrable form and deliver to the Developer a discharge of this Agreement, provided by the Developer to the District from:

- (a) title to all legal parcels within a Phase that has been substantially completed in accordance with Section 9; and
- (b) title to any strata lot or conventional subdivision lot concurrently with the deposit at the Land Title Office of the strata plan or conventional subdivision plan creating title to such strata lot or conventional subdivision lot.

**26. NOTICE**

26.1 Any notice permitted or required by this Agreement to be given to either party must be in writing and delivered or mailed to that party at the address set out above (or to any other address provided in writing).

**27. TIME**

27.1 Time is to be the essence of this Agreement.

**28. RELATIONSHIP OF PARTIES**

28.1 No provision of this Agreement shall be construed to create a partnership or joint venture relationship, an employer-employee relationship, a landlord-tenant, or a principal-agent relationship as between the District and the Developer.

**29. INTEGRATION**

29.1 This Agreement, including the Schedules, contains the entire agreement and understanding of the parties with respect to the matters contemplated by this Agreement and supersedes all prior and contemporaneous agreements between them with respect to such matters.

**30. SURVIVAL**

30.1 All representations and warranties set forth in this Agreement and all provisions of this Agreement, the full performance of which is not required

prior to a termination of this Agreement, shall survive any such termination and be fully enforceable thereafter.

**31. NOTICE OF VIOLATIONS**

31.1 Each party shall promptly notify the other party of any matter which is likely to continue or give rise to a violation of its obligations under this Agreement.

**32. SEVERABILITY**

32.1 Each article of this Agreement shall be severable. If any provision of this Agreement is held to be illegal or invalid by a Court of competent jurisdiction, the provision may be severed, and the illegality or invalidity shall not affect the validity of the remainder of this Agreement.

**33. COUNTERPARTS**

33.1 This Agreement may be executed in counterparts with the same effect as if both parties had signed the same document. Each counterpart shall be deemed to be an original. All counterparts shall be construed together and shall constitute one and the same Agreement.

**IN WITNESS WHEREOF** the parties hereto have set their hands and seals as of the day and year first above written.

<b>DISTRICT OF UCLUELET</b> by its authorized	)	<b>ERIF ECONOMIC RESTORATION</b> )
Signatories:	)	<b>INFRASTRUCTURE FUND INC</b> )
_____	)	by its authorized Signatory: )
Mayor	)	)
_____	)	_____ )
Corporate Officer	)	Director

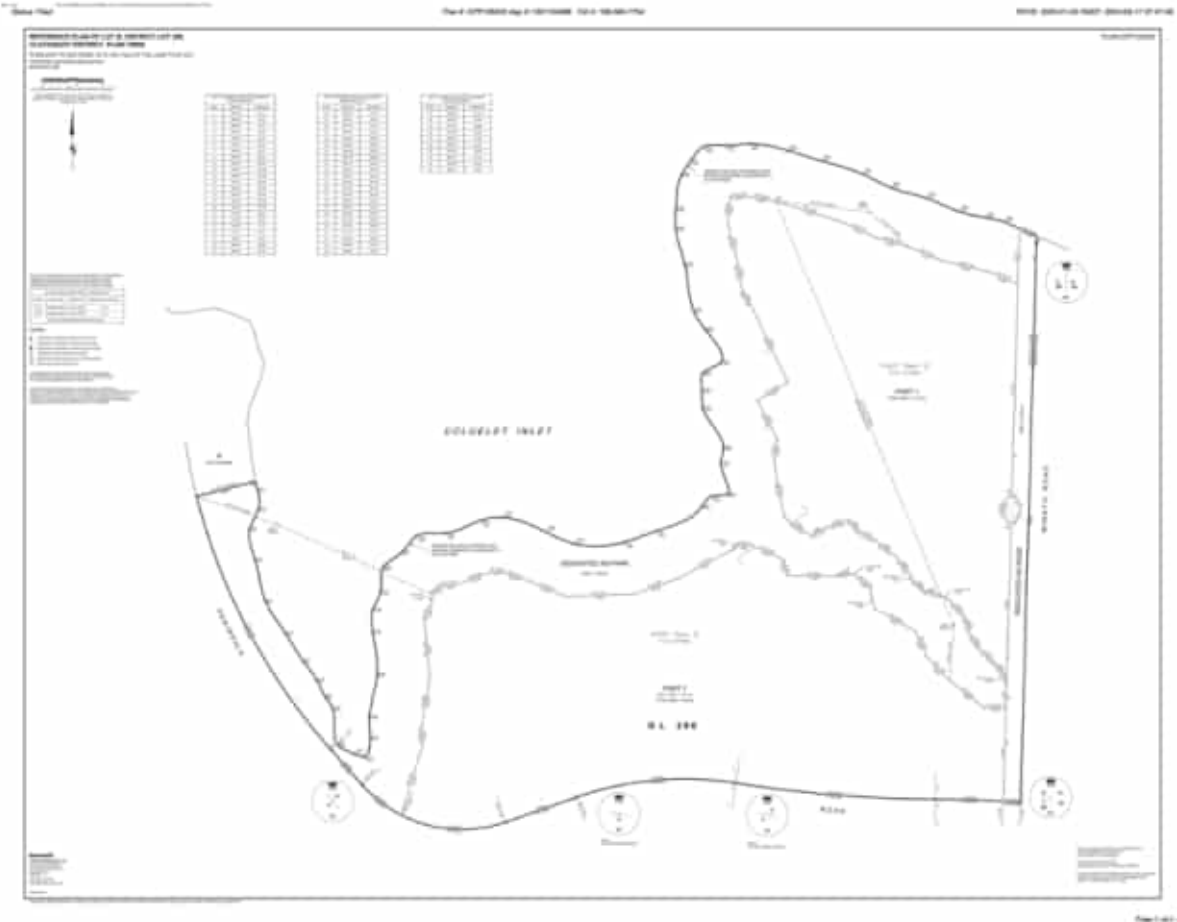
**SCHEDULE A**

THE LANDS

Parcel Identifier: 032-135-084

Lot 1 District Lot 286 Clayoquot District Plan Epp129243.





LAND TITLE OFFICE  
**STATE OF TITLE CERTIFICATE**  
Certificate Number: ST5M075460

Lukas Jones  
261 Portsmouth Drive  
Victoria BC V8C1S1  
Pick-up by: Lukas Jones

A copy of this State of Title Certificate held by the land title office can be viewed for a period of one year at <https://openfile.ca/cst> (access code 205902).

I certify this to be an accurate reproduction of the number **CB1104098** at 07:47 the 17th day of September, 2024.



<b>Title Issued Under</b>	SECTION 88 LAND TITLE ACT
<b>Land Title District</b> Land Title Office	VICTORIA VICTORIA
<b>Title Number</b> From Title Number	CB1104098 CA9007545
<b>Application Received</b>	2024-01-05
<b>Application Entered</b>	2024-01-15
<b>Registered Owner in Fee Simple</b> Registered Owner/Mailing Address:	MINATO DEVELOPMENT CORP., INC. NO. BC1281488 2842 - 140 STREET SURREY, BC V4P 2H9
<b>Taxation Authority</b>	Uckwast, District of

LAND TITLE OFFICE  
**STATE OF TITLE CERTIFICATE**

Certificate Number: STSR4075460

**Description of Land**

Parcel Identifier: 032-135-084  
 Legal Description:  
 LOT 1 DISTRICT LOT 286 CLAYOQUOT DISTRICT PLAN EPP129243

**Legal Notations**

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE CA8633160

THIS TITLE MAY BE AFFECTED BY A PERMIT UNDER PART 14 OF THE LOCAL GOVERNMENT ACT, SEE WX2153294

**Charges, Liens and Interests**

Nature: COVENANT  
 Registration Number: EV124432  
 Registration Date and Time: 2003-10-17 09:41  
 Registered Owner: CORPORATION OF THE DISTRICT OF UCLUELET  
 Remarks: INTER ALIA  
 PART

Nature: COVENANT  
 Registration Number: CA8532151  
 Registration Date and Time: 2020-10-29 14:12  
 Registered Owner: DISTRICT OF UCLUELET

Nature: MORTGAGE  
 Registration Number: CA9620859  
 Registration Date and Time: 2022-01-05 12:57  
 Registered Owner: JONATHAN MARA  
 LESLIE JOAN MARA  
 AS JOINT TENANTS

Nature: ASSIGNMENT OF RENTS  
 Registration Number: CA9620860  
 Registration Date and Time: 2022-01-05 12:57  
 Registered Owner: JONATHAN MARA  
 LESLIE JOAN MARA  
 AS JOINT TENANTS

Nature: MORTGAGE  
 Registration Number: CA9883770  
 Registration Date and Time: 2022-04-27 16:41  
 Registered Owner: GUARDIAN ANGEL CONSULTANTS LTD.  
 INCORPORATION NO. BC0806482

LAND TITLE OFFICE  
**STATE OF TITLE CERTIFICATE**

Certificate Number: STSR4075460

Nature:	ASSIGNMENT OF RENTS
Registration Number:	CA9883771
Registration Date and Time:	2022-04-27 16:41
Registered Owner:	GUARDIAN ANGEL CONSULTANTS LTD, INCORPORATION NO. BC0806482
Nature:	COVENANT
Registration Number:	CB365207
Registration Date and Time:	2022-11-30 15:14
Registered Owner:	DISTRICT OF UCLUELET
Nature:	PRIORITY AGREEMENT
Registration Number:	CB365208
Registration Date and Time:	2022-11-30 15:14
Remarks:	GRANTING CB365207 PRIORITY OVER CA9620859 AND CA9620860
Nature:	PRIORITY AGREEMENT
Registration Number:	CB365209
Registration Date and Time:	2022-11-30 15:14
Remarks:	GRANTING CB365207 PRIORITY OVER CA9883770 AND CA9883771
<b>Duplicate Indefeasible Title</b>	NONE OUTSTANDING
<b>Transfers</b>	NONE
<b>Pending Applications</b>	NONE

*This certificate is to be read subject to the provisions of section 23(2) of the Land Title Act(R.S.B.C. 1996 Chapter 250) and may be affected by sections 50 and 55-58 of the Land Act (R.S.B.C. 1996 Chapter 245).*



SCHEDULE B

MASTER PLAN.



**SCHEDULE C**  
**PHASING PLAN**



Stages	Build Form & Type	Title & Conditions
<b>Stage A</b>	<p><b>LOT 5: PART 1</b></p> <ul style="list-style-type: none"> <li>• Affordable Home Sales - Below-Market Homeownership</li> <li>• 7 Multiple Buildings</li> <li>• 29 Keys</li> <li>• 2 x 1-bedroom (22 x 2 bedrooms) (4 x 3 bedrooms)</li> </ul> <p>Note: Services (e.g., stormwater, landscaping) starting will be phased to align with construction phases</p>	<ul style="list-style-type: none"> <li>• <b>Zone Strata Titled</b></li> <li>• See Stage 1 &amp; Two Stage 2</li> <li>• Note: Strata not to be separated in court as will be strata titled and sold as 3 bedroom apartments</li> <li>• Note: 2 bedroom apartments include a studio apartment. Studio apartments available for long-term rental.</li> </ul>
<b>Stage B</b> Concurrent with Stage A	<p><b>LOT 3: Waterfront Home</b></p> <ul style="list-style-type: none"> <li>• 30 x Waterfront Family Home</li> </ul> <p>Note: Services (e.g., stormwater, landscaping) starting will be phased to align with construction phases</p>	<ul style="list-style-type: none"> <li>• <b>Pre Single Subdivision (Home Association)</b></li> <li>• Consistent with option for joint/intermittent living with self-contained studios available for long-term and short-term rentals.</li> <li>• <b>CONDITION:</b> Stage A construction concurrent with Stage B.</li> </ul>
<b>Stage C</b>	<p><b>LOT 4: Commercial Precinct</b></p> <ul style="list-style-type: none"> <li>• 600m<sup>2</sup> Ground Floor Retail - Cafe, Store, Etc.</li> <li>• 600m<sup>2</sup> Upper Floor Offices</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Held in one line.</b></li> <li>• <b>NOTE:</b> Phase D and E may be brought forward if government funding available and demand for rentals and sales is fully ramped up.</li> </ul>
<b>Stage D</b>	<p><b>LOT 2 - PART 1:</b></p> <ul style="list-style-type: none"> <li>• Affordable Rentals - 30% of Keys</li> <li>• Market Rentals</li> <li>• 4 Multiple Buildings</li> <li>• 33 Keys</li> <li>• 30 x 1 bedroom (21 x 2 bedrooms)</li> </ul> <p>Note: Services (e.g., stormwater, landscaping) starting will be phased to align with construction phases</p>	<ul style="list-style-type: none"> <li>• <b>Held in one line.</b></li> <li>• <b>CONDITION:</b> Subject to government funding and approval timing.</li> <li>• Three Stage 1 &amp; Two Stage 2</li> <li>• (Same floor plan but may be adaptively reused as 2-bedroom plus separate studio - not as a 3-bedroom)</li> </ul>
<b>Stage E</b>	<p><b>LOT 1: PART 2</b></p> <ul style="list-style-type: none"> <li>• Affordable Home Sales - Below-Market Homeownership</li> <li>• 1 Multiple Buildings</li> <li>• 46 Keys</li> <li>• 4 x 1-bedroom (22 x 2 bedrooms) (22 x 3 bedrooms)</li> <li>• Note: 3 bedroom apartments include a studio apartment.</li> <li>• Studio apartments available for long-term rental.</li> </ul> <p><b>LOT 2 - PART 2:</b></p> <ul style="list-style-type: none"> <li>• Affordable Rentals - 30% of Keys</li> <li>• Market Rentals</li> <li>• 12 Multiple Buildings</li> <li>• 63 Keys</li> <li>• 30 x 1 bedroom (22 x 2 bedrooms)</li> </ul> <p>Note: Services (e.g., stormwater, landscaping) starting will be phased to align with construction phases</p>	<p><b>LOT 1: PART 2 - Same Strata Titled</b></p> <ul style="list-style-type: none"> <li>• Nine Stage 1 &amp; Two Stage 2</li> <li>• Note: Studio not to be separated in court as will be strata titled and sold as 3 bedroom apartments.</li> <li>• Note: 2 bedroom apartments include a studio apartment. Studio apartments available for long-term rental.</li> <li>• <b>CONDITION:</b> Subject to and commencing after Affordable Homes in Lot 1 Part 1 are sold out.</li> </ul> <p><b>LOT 2 - PART 2</b></p> <ul style="list-style-type: none"> <li>• <b>Held in one line.</b></li> <li>• <b>CONDITION:</b> Subject to government funding and commencing when grant funding received in Lot 2 Part 1 fully issued.</li> <li>• (Same floor plan but may be adaptively reused as 2-bedroom plus separate studio - not as a 3-bedroom)</li> </ul>
<b>Stage F</b>	<p><b>LOT 6: Market Apartments:</b></p> <ul style="list-style-type: none"> <li>• Market rentals and sales.</li> <li>• 10 Multiple Buildings</li> <li>• 58 Keys</li> <li>• 22 x 1 bedroom (30 x 2 bedrooms) (5 x 3 bedrooms)</li> </ul> <p>Note: Services (e.g., stormwater, landscaping) starting will be phased to align with construction phases</p>	<ul style="list-style-type: none"> <li>• <b>Strata Titled</b></li> <li>• Apartments for long term and short term vacation rental.</li> </ul>

**SCHEDULE D****COMMITMENT TO AFFORDABLE / ATTAINABLE HOUSING****ERIF's Commitment to Community: A Heartfelt Mission**

At ERIF Housing Association (our not-for-profit arm), we believe true social impact begins by empowering communities through housing that is both accessible and sustainable. Our mission is to build vibrant, inclusive neighborhoods that embody the values of equality and opportunity.

With price-regulated, locally prioritized apartments, we're doing more than addressing Ucluelet's housing shortage—we're investing in its long-term prosperity. Serenity Landing is the cornerstone of this vision, offering a blend of affordable and market rentals, attainable homeownership, and market sales, all within a beautifully integrated community.

The Serenity Landing Attainable Homeownership Initiative is proof of our commitment to community growth, stability, and resilience. Born out of the need to replace BC Housing's canceled affordable homeownership program, and in close partnership with Ucluelet's municipality, mayor, and council, we've crafted a clear path for local families and businesses to secure high-quality homes at attainable, below-market prices.

We understand that a community's economic strength is linked to its people and the businesses they support. High-quality housing and an attractive lifestyle are key to retaining a skilled workforce. By prioritizing both, ERIF is fostering an environment where people can grow their futures and where the community's social good is at the heart of everything we do.

Together, we're transforming Ucluelet into a place where everyone can thrive, ensuring the future is built on a foundation of opportunity, connection, and community spirit.



**DISTRICT OF UCLUELET****Official Community Plan Amendment Bylaw No. 1366, 2024**

A bylaw to amend the District of Ucluelet Official Community Plan  
(221 Minato Road - Lot B District Lot 286 Clayoquot District Plan VIP79908  
Comprehensive Development).

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**WHEREAS** Section 471 of the Local Government Act identifies the purposes of an Official Community Plan as “a statement of objectives and policies to guide decisions on planning and land use management, within the area covered by the plan, respecting the purposes of local government”, and the District has adopted an Official Community Plan;

**NOW THEREFORE** the Council of the District of Ucluelet, in open meeting assembled, enacts as follows:

**1. Text Amendments:**

The “District of Ucluelet Official Community Plan Bylaw No. 1306, 2022”, as amended, is hereby further amended by inserting the following policy in alphanumerical order:

**“Policy 3.171b - 221 Minato Road**

In consideration of the community housing benefit provided by the proposed development of the property at 221 Minato Road, site clearing and construction is supported notwithstanding the following objectives and policies adopted in this plan:

- Policy 1.8
- Objective 2A
- Policy 2.1
- Policy 2.2
- Policy 3.163
- General environmental Development Permit Area guidelines E1, E4, E7 and guidelines within environmental Development Permit Areas V, VI and VII.”

**2. Map Amendments:**

The “District of Ucluelet Official Community Plan Bylaw No. 1306, 2022”, as amended, is hereby further amended as follows:

- A. Schedule ‘A’ Long Range Land Use Plan is hereby further amended by changing the designation of areas of Lot B District Lot 286 Clayoquot District Plan VIP79908 (PID 026-487-764), shown shaded on the map attached to this Bylaw as Appendix “A”, to Single Family Residential, Multi-Family Residential, Service Commercial, Tourist Commercial / Residential, and Parks & Open Space.



3. **Citation:**

This bylaw may be cited as “District of Ucluelet Official Community Plan Amendment Bylaw No. 1366, 2024”.

**READ A FIRST TIME** this    <sup>th</sup> day of                   , **2024**.

**Considered in conjunction with the District of Ucluelet Financial Plan and Waste Management Plan** under Section 477 of the *Local Government Act* this    day of                   , 2024.

**READ A SECOND TIME** this    day of                   , **2024**.

**PUBLIC HEARING** held this    day of                   , **2024**.

**READ A THIRD TIME** this    day of                   , **2024**.

**ADOPTED** this            day of                   , **2024**.

**CERTIFIED CORRECT:** “Official Community Plan Amendment Bylaw No. 1360, 2024”

---

Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

---

Duane Lawrence  
Corporate Officer

Appendix 'A'

Official Community Plan Amendment Bylaw No. 1366, 2024

OCP Schedule 'A' Long Range Land Use Plan

Amendments in the area of Lot B District Lot 286 Clayoquot District Plan VIP79908 - 221 Minato Road:

- SF = Single Family Residential
- MF = Multi-Family Residential
- SC = Service Commercial
- TC = Tourist Commercial / Residential
- P = Parks & Open Space





**DISTRICT OF UCLUELET**

**Zoning Amendment Bylaw No. 1367, 2024**

A bylaw to amend the "District of Ucluelet Zoning Bylaw No. 1160, 2013  
(221 Minato Road – Comprehensive Development)

**WHEREAS** Section 479 and other parts of the *Local Government Act* authorize zoning and other development regulations;

**NOW THEREFORE** the Council of the District of Ucluelet, in open meeting assembled, enacts as follows;

**1. Text Amendments:**

Schedule “B” of the District of Ucluelet Zoning Bylaw No. 1160, 2013, as amended, is hereby further amended as follows:

- A. By deleting the existing section CD-6 Zone – MINATO ROAD.
- B. By adding a new Comprehensive Development zone, to Schedule B – The Zones that directly follows CD-5 Zone – FORMER WEYCO FOREST LANDS such that the new section reads as follows:

**“CD-6 Zone – MINATO ROAD**

*This Zone is intended for the development of a mix of multi-family and single-family residential development including affordable rental, market rental, attainable ownership (under a housing agreement covenant) and market ownership homes, some with accessory vacation rental uses.*

**CD-6 Zone Plan (Development Areas):**



**CD-6.1 Definitions:**

Despite definitions defined elsewhere in this bylaw, the following definitions shall apply to uses within the CD-6 zone:

“**Height**” means the shortest vertical distance from the average elevation of the finished grade, if homes are required to be sited above the Flood Construction Level (FCL) or above the Tsunami Risk Level (TRL), then the height is to be taken from the higher of the existing grade or the FCL or TRL.

“**Single Family Waterfront**”, means a detached *building* consisting of at least one dwelling that may be used for both *residential* and *vacation rental* use within a principal dwelling or secondary suite. While designed for single family occupation, the inclusion of at least one secondary suite permits *residential rental tenures* and *vacation rental* use.

“**Vacation Rental**”, means the use of an otherwise *residential* dwelling unit for *commercial tourist accommodation* within a building containing at least one occupied *residential* dwelling.

**CD-6.2 Permitted Uses:**

The following uses are permitted within the corresponding Development Areas shown in the CD-6 Zone Plan, but *secondary permitted* uses are only permitted in conjunction with a *principal permitted use*:

Development Area	Principal Use	Building Form	Secondary Uses
Lot 1	Multiple Family	Apartment	Home Occupation Secondary Suite
Lot 2	Rental Multiple Family	Apartment	Home Occupation
Lot 3	Single Family Waterfront	House	Home Occupation Secondary Suite Vacation Rental
Lot 4	Principal uses permitted within the CS-2 Zone – SERVICE COMMERCIAL	Commercial/Retail	CS-2 Zone – SERVICE COMMERCIAL permitted uses
Lot 5	Multiple Family	Apartment	Home Occupation Secondary Suite Vacation Rental



**CD-6.3 Lot Regulations:**

**CD-6.3.1** Minimum Lot Frontage is 10.0m.

**CD-6.3.2 Minimum Lot Size:**

Development Area	Principal Use	Proposed Lot Area	Minimum Lot Size
Lot 1	Multiple Family	19,000 m2	<b>16,000m2</b>
Lot 2	Rental Multiple Family	17,800 m2	<b>16,000m2</b>
Lot 3	Single Family Waterfront	14,700 m2	<b>13,000m2</b>
Lot 4	Retail Trade & Services	2,300 m2	<b>2000m2</b>
Lot 5	Rental Multiple Family	13,100 m2	<b>12,000m2</b>
TOTAL		66,900 m2	

**CD-6.4 Density**

**CD-6.4.1 Maximum Density:**

Development Area	Principal Use	Density (max # of buildings)	Density (max. # dwelling units)	Density (per unit/ha)
Lot 1	Multiple Family	18	75	39.5 unit / ha
Lot 2	Rental Multiple Family	16	107	60.1 unit / ha
Lot 3	Single Family Waterfront	11	11	7.5 unit / ha
Lot 4	Retail Trade & Services	2	-	-
Lot 5	Rental Multiple Family	10	58	44.3 unit / ha
TOTAL		55	250	37.4 units / ha

**CD-6.5 Maximum Size (Gross Floor Area):**

Development Area	Principal Use	Building Footprint	Total Gross Floor Area (m2)	Proposed Lot Coverage	Maximum Lot Coverage
Lot 1	Multiple Family – Part 1	1,289 m2	6633	17 %	25%
	Multiple Family – Part 2	2,027 m2			
Lot 2	Rental Multiple – Part 1	1,141 m2	6094	18 %	25%
	Rental Multiple – Part 2	1,906 m2			
Lot 3	Single Family Waterfront	1,500 m2	2750	11 %	15%
Lot 4	Retail Trade & Services	600 m2	1120	25 %	50%
Lot 5	Rental Multiple Family	1,884 m2	3768	14%	25%
TOTAL		10,348 m2	20365	16%	

**CD-6.6 Maximum Size of Accessory Buildings**

**CD-6.6.1** on lots containing a *Single Family*: 30 m2 (323 ft2) combined total.

**CD-6.6.2** on lots containing a *Multiple Family or Rental Multiple Family*: 50 m2 (538 ft2) combined total.

**CD-6.6.3** on lots containing a *Commercial*: 100 m2 (1077 ft2) combined total.

**CD-6.7 Maximum Height**

Development Area	Principal Use	Principal	Accessory
Lot 1	Multiple Family	8.0 m	5.5 m
Lot 2	Rental Multiple Family	8.0 m	5.5 m
Lot 3	Single Family Waterfront	12.6 m	5.5 m
Lot 4	Retail Trade & Services	11.5 m	5.5 m
Lot 5	Rental Multiple Family	8.0 m	5.5 m

**CD-6.8 Minimum Setbacks:**

For all buildings there is a lot line setback of 0.0m between strata phases.

The following minimum setbacks apply, as measured from the *front lot line, rear lot line, and side lots line(s)* respectively:

Development Area	Principal Use	Front	Rear	Side Interior	Side Exterior	Phased Strata Internal Lot Line
Proposed Setback						
Lot 1	Multiple Family	10.0 m	3.3 m	0.7 m	1.5 m	0.0 m
Lot 2	Rental Multiple Family	10.0 m	1.5 m	0.6 m	6.5 m	0.0 m
Lot 3	Single Family Waterfront	5.1 m	1.3 m	4.5 m	4.5 m	0.0 m
Lot 4	Retail Trade & Services	4.5 m	23.0 m	9.5 m	3.0 m	0.0 m
Lot 5	Rental Multiple Family	3.9 m	4.0 m	7.5 m	7.5 m	0.0 m
Minimum Setback						
Lots 1/2/5	Multiple Family	3.0 m	1.0 m	0.5 m	1.0 m	0.0 m
Lot 3	Single Family	2.0 m	0.8 m	3.0 m	3.0 m	0.0 m
Lot 4	Retail Trade & Services	4.0 m	3.0 m	1.5 m	2.0 m	0.0 m

**CD-6.8 Parking Requirements:**

Despite the regulations ins section 505.1 Minimum Parking Requirements, the following shall apply within the CD-6 zone:

For *Multiple Family* in Lots 1, 2 and 5: one space per *dwelling unit* plus one visitor space per multi-family *building*.

For Lot 3 Single Family Waterfront: 3 spaces per lot.

For Lot 4 Commercial: 15 spaces per lot.”

**2. Citation:**

This bylaw may be cited as the “*District of Ucluelet Zoning Amendment Bylaw No. 1367, 2024*”.

**READ A FIRST TIME** this \*\* day of \*\*\*, 20\*\*.

**READ A SECOND TIME** this \*\* day of \*\*\*, 20\*\*.

**READ A THIRD TIME** this \*\* day of \*\*\*, 20\*\*.

**ADOPTED** this \*\* day of \*\*\*, 20\*\*.

**CERTIFIED CORRECT;** "District of Ucluelet Zoning Amendment Bylaw No. 1367, 2024".

---

Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

---

Duane Lawrence  
Corporate Officer







### Policies and objectives referenced in Ucluelet OCP Amendment Bylaw No. 1366, 2024:

- **Policy 1.8** Endeavour to understand and consider Indigenous perspectives when making decisions on land-use issues
- **Objective 2A** To develop carefully and use land wisely to ensure that the most sensitive and valuable environmental features are protected, and ecological functions are not irreparably disturbed.
- **Policy 2.1** Use the regulatory tools available to local governments to ensure new development responds to the community's goal of maintaining a healthy, diverse natural environment.
- **Policy 2.2** Maintain significant areas of natural green space and forest cover. Large scale clearing to accommodate development is not supported.
- **Policy 3.163** A 30-metre wide tree buffer with no development must be provided along both sides of the Pacific Rim Highway
- General environmental Development Permit Area guidelines E1, E4, E7 [Environmental DP areas]
- Guidelines within environmental Development Permit Areas **V** [Terrestrial Ecosystems (Mature Forest)] **VI** [Stream and Riparian Areas] and **VII** [Marine Shoreline]





# REPORT TO COUNCIL

Council Meeting: December 10, 2024  
 500 Matterson Drive, Ucluelet, BC V0R 3A0

**FROM:** MADELEINE HAYNES, PLANNING ASSISTANT **FILE No:** 3360-20 RZ24-12  
**SUBJECT:** ZONING AMENDMENT FOR 1983 ATHLONE ROAD **REPORT No:** 24-127  
**ATTACHMENT(S):** APPENDIX A – ZONING AMENDMENT BYLAW NO. 1359, 2024  
 APPENDIX B – NOVEMBER 12, 2024, REPORT TO COUNCIL

**RECOMMENDATION(S):**

1. **THAT** Council give first, second, and third reading of the *District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024*.
2. **THAT** Council adopt the *District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024*.

**BACKGROUND:**

During the November 12, 2024, Regular Council Meeting, *District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024 (Appendix “A”)* was introduced to Council. At this meeting, Council directed staff to give notice of first reading for the Bylaw. Notification was completed and Council is now in a position to consider up to three readings and adoption of Bylaw No. 1359.

Background information can be found in the [November 12, 2024, Regular Council Meeting Agenda](#) (item 6.3) and in **Appendix “B”**.

**ANALYSIS OF OPTIONS:**

<b>A</b>	Give first, second, and third readings for <i>Bylaw No. 1359</i>	<b>Pros</b>	<ul style="list-style-type: none"> <li>Would provide an opportunity for Council to discuss the Bylaw and its implications</li> </ul>
		<b>Cons</b>	<ul style="list-style-type: none"> <li>Unknown at this time.</li> </ul>
		<b>Implications</b>	<ul style="list-style-type: none"> <li>Would allow for the Bylaw to be adopted</li> </ul>
	Adopt <i>Bylaw No. 1359</i>	<b>Pros</b>	<ul style="list-style-type: none"> <li>Would allow the applicant to proceed to building permit</li> </ul>
		<b>Cons</b>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<b>Implications</b>	<ul style="list-style-type: none"> <li>Would allow for the application to proceed</li> </ul>





**DISTRICT OF UCLUELET**

**Zoning Amendment Bylaw No. 1359, 2024**

A bylaw to amend the “District of Ucluelet Zoning Bylaw No. 1160, 2013”.  
(1983 Athlone Road)

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**WHEREAS** the District of Ucluelet Council by Bylaw No. 1160, 2013, adopted the Zoning Bylaw and now deems it appropriate to amend the Zoning Bylaw;

**NOW THEREFORE** the Council of the District of Ucluelet, in open meeting assembled, enacts as follows:

**1. Text Amendment:**

Schedule B of the *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by adding a new subsection alphanumerically to the Vacation Rental (VR-1) zone such that the new section reads as follows:

“VR-1.1.2      Despite section VR-1.1.1 (2) above, *Accessory Residential Dwelling Unit* is permitted as a secondary use on the following lot:

(1) PID 018-515-371, Lot 1, District Lot 284, Clayoquot District, Plan VIP57627 [1983 Athlone Road]”

**2. Citation:**

This bylaw may be cited as “District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024”.

**FIRST NOTIFICATION OF FIRST READING** published this 27<sup>th</sup> day of **November, 2024.**

**SECOND NOTIFICATION OF FIRST READING** published this 4<sup>th</sup> day of **December, 2024.**

**READ A FIRST TIME** this    day of            , **2024.**

**READ A SECOND TIME** this    day of            , **2024.**

**READ A THIRD TIME** this    day of            , **2024.**

**ADOPTED** this    day of            , **2024.**

**CERTIFIED CORRECT:** "District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024."

---

Marilyn McEwen  
Mayor

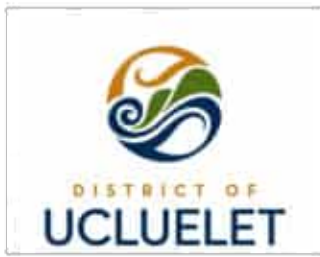
---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

---

Duane Lawrence  
Corporate Officer



## REPORT TO COUNCIL

Council Meeting: November 12, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

---

**FROM:** MADDIE HAYNES, PLANNING ASSISTANT

**FILE NO:** 3360-20 RZ24-12 & 3090-20 DVP 24-09

**SUBJECT: ZONING AMENDMENT AND DEVELOPMENT VARIANCE PERMIT  
AT 1983 ATHLONE ROAD**

**REPORT NO:** 24-115

**ATTACHMENT(S):** APPENDIX A - APPLICATION  
APPENDIX B – ZONING AMENDMENT BYLAW NO. 1359, 2024  
APPENDIX C – DEVELOPMENT VARIANCE PERMIT 24-09

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**RECOMMENDATION(S):**

**THAT** Council, with regard to the proposed re-zoning, allow an ADU at 1983 Athlone Road:

1. Direct staff to give notice of first reading to *District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024*.
2. Direct staff to give statutory notice to receive input on the Development Variance Permit 24-09.

**BACKGROUND:**

A re-zoning (REZ) application was received in August 2024, and a Development Variance Permit (DVP) application was received in October 2024 for the property located at 1983 Athlone Road (see **Figure 1**); PID 018515371, Lot 1, Plan VIP57627, District Lot 284, Clayoquot Land District (the “subject property”).

**ZONING & LAND USE**

The subject property is zoned for Vacation Rental (VR-1) use and is located within a neighbourhood of homes designated as Single Family Residential (R-1 and CD-1.1.1 zones). It is also directly adjacent to a District-owned property zoned Public Institutional (P-1). Currently, the property is developed as a Single-Family Dwelling (SFD).



Figure 1. Subject property

### DISCUSSION:

#### REZONING

The applicant has applied for a zoning amendment to allow *Accessory Residential Dwelling Unit (ADU)* as a secondary permitted use on the property. The intent of the applicant is to construct the ADU to allow multi-generational family to reside on the property and provide live-in care for a family member. The applicant has provided further details within an intent letter (See **Appendix A**).

Within the *Official Community Plan Bylaw No. 1306, 2022*, the subject property is designated as Single-Family. The proposed rezoning application aligns with planned long-term use, as well as policies for infill housing within existing neighbourhoods (see [OCP Policy 3.131](#)).

*Zoning Amendment Bylaw No. 1310, 2022*, included an amendment to allow ADUs as a secondary permitted use in all single-family residential zones aside from R-5 (Compact Single-Family Residential). ADUs were not included within the R-5 zone (which applies only to the Lot 13 attainable housing development) due to small lot sizes. As *Bylaw No. 1310* focused on residential zones, the VR-1 zone was not included within this amendment. However, given that the VR-1 zone also allows SFD as a principal use, it would be supportable to allow for the proposed ADU use.

#### VARIANCE

The applicant is requesting a variance to reduce the allowable VR-1 front yard setback by 1.5 meters, from 7.5 meters to 6 meters. This aligns with similar setback distances as per the recently adopted *Zoning Amendment Bylaw No. 1346, 2024* made to align with the provincial SSMUH site standards. The proposal complies with all other ADU-specific (Section 408) and current VR-1 zoning provisions.

SERVICING

The applicant will be required to complete minor work to connect both water and sewer services to the new structure. However, no major upgrades or service extension are needed, as adequate water and sewer capacity is available at the site’s frontage.

BUILDING

The subject building appears to be a two-storey, Part 9 dwelling for which a building permit under the current BC Building and Plumbing Code will be required.

FIRE SERVICES

The fire department does not have any immediate concerns with the application. The applicant is required to follow the District of Ucluelet’s Fire Services Development Design Guidelines regarding accessory dwelling units.

ANALYSIS OF OPTIONS:

A	Give notice of first reading to Bylaw No. 1359, and direct staff to give statutory notice for DVP24-02	<u>Pros</u>	<ul style="list-style-type: none"> <li>Allows the applicant to construct housing</li> <li>Provides infill housing in existing residential neighbourhood</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>Would allow the application to proceed</li> </ul>
B	Provide alternate direction	<u>Pros</u>	<ul style="list-style-type: none"> <li>Achieves the goals and objectives as identified by Council</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<u>Suggested Motion</u>	THAT Council ( <i>provide alternate direction here</i> ).
C	Reject the application	<u>Pros</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Does not allow the applicant to construct housing</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>The application would not proceed</li> </ul>
		<u>Suggested Motion</u>	<ul style="list-style-type: none"> <li>No motion required.</li> </ul>

POLICY OR LEGISLATIVE IMPACTS:

This application impacts the *District of Ucluelet Zoning Bylaw No. 1160, 2013* by adding a text amendment to section VR-1.1.2 (see **Appendix B**) and variance of section VR-1.6.1(2)(a) (see **Appendix C**). This application is consistent with the *Official Community Plan* and the *Local Government Act*.

It is important to note that *Bill 44 – 2023 Housing Statutes (Residential Development) Amendment Act, 2023* amended Section 464.3 of the *Local Government Act*, and now states that:



*“(3) A local government must not hold a public hearing on a proposed zoning bylaw if*

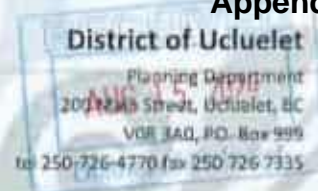
- (a) an official community plan is in effect for the area that is the subject of the zoning bylaw,*
- (b) the bylaw is consistent with the official community plan,*
- (c) the sole purpose of the bylaw is to permit a development that is, in whole or in part, a residential development, and*
- (d) the residential component of the development accounts for at least half of the gross floor area of all buildings and other structures proposed as part of the development,”*

Where a public hearing would have previously been held, this legislative change prohibits a public hearing for *District of Ucluelet Zoning Amendment Bylaw No. 1342, 2024*.

**NEXT STEPS:**

If Council proceeds to the first reading of *District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024* staff would undertake the necessary notifications to give notice of first reading of the bylaw, and also to enable public input on the accompanying Development Variance Permit. If the Bylaw is adopted, then subject to public input the Development Variance Permit 24-09 could then be approved by Council.

**Respectfully Submitted:** Madeleine Haynes, Planning Assistant  
Bruce Greig, Director of Community Planning  
Duane Lawrence, Chief Administrative Officer



# Development Application

## Type of Application

An application is submitted for one or more of the following:

- Official Community Plan Amendment
- Zoning Bylaw Amendment
- Development Permit (no variances)
- Development Permit (with variances)
- Development Permit Amendment
- Development Variance Permit
- Temporary Use Permit
- Board of Variance
- Strata Conversion
- Subdivision

## Description of Property

Civic Address (es): 1983 ATHLONE RD, UCLUELET, BC  
 Legal Description: Lot 1 Plan VIP57627 Block \_\_\_\_\_ Section 21 DL \_\_\_\_\_

## Applicant Information

Notice of Disclosure to Applicant(s): The following contact information will be available to the public and may be posted on the Districts' website to allow interested parties to contact you about this application.

Applicant name: CHANTALLE WILSON Company name: \_\_\_\_\_  
 Mailing address: 1983 ATHLONE RD, UCLUELET, BC Postal Code: V0R3A0  
 Tel : \_\_\_\_\_ Cell : \_\_\_\_\_  
 Email : \_\_\_\_\_ Fax : \_\_\_\_\_

The undersigned owner/authorized agent of the owner makes an application as specified herein, and declares that the information submitted in support of the application is true and correct in all respects.

Applicant Signature: *Chantalle Wilson* Date: Aug. 15 / 24

## Registered Owner(s)

List all registered owners. For strata properties, provide accompanying authorization from all strata owners (not just strata corp.). If the owner is an incorporated company/society, attach a current corporate/society search or "notice of directors".

Registered Owner (s) name: Victor Wilson, Susan Wilson, Chantalle Wilson  
 Mailing address: 1983 ATHLONE RD, UCLUELET, BC, POBOX 1062 Postal Code: V0R3A0  
 Tel : \_\_\_\_\_ Cell : \_\_\_\_\_  
 Email : \_\_\_\_\_ Fax : \_\_\_\_\_

Freedom of Information and Protection of Privacy Act (FOIPPA): Personal information is collected, used and disclosed under the authority of the Local Government Act, and section 26 (c) of the FOIPPA. The information will be used for the purpose of processing this application.

Owner Signature: *Chantalle Wilson* Date: Aug. 15 / 24

## Office Use Only:

Folio No.: <u>186-006</u>	File No.: <u>R224-12</u>	Date: <u>AUG 15 / 24</u>	Receipt No.: <u>75445</u>	Fee: <u>\$1500.00</u>
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District of Ucluelet Planning Department  
 200 Main Street,  
 POBox 999,  
 Ucluelet, BC,  
 V0R3A0



Date: August 14 2024

Attn: Bruce Greig, Mayor and Council  
 Re: Zoning Amendment, 1983 Athlone Rd, Ucluelet, BC.  
 LOT 1, SECTION 21, CLAYOQUOT DISTRICT, PLAN VIP57627, PID 018-515-371  
 Zoning VR-1

**Project Intent:**

This application is to request a zoning amendment to allow the construction of an Accessory Dwelling Unit on a property with VR-1 zoning.

The intent is to use the ADU to allow our multi-generational family to live together on the property to provide affordable live in care for a family member who has suffered a stroke and requires a caregiver be present.

The advantage of the ADU is that the separation of the dwelling unit would be more conducive to quiet respite for recovery rather than a secondary suite attached to the main house.

**Project Overview:**

1983 Athlone Rd is a relatively large property with an existing single family residence located on the eastern property line with substantial remaining property. Currently zoned VR-1 there is an existing single nightly rental unit in the lower level of the home.

The location of the residential housing unit is located at the western end of the property.

The size of lot would allow for a unit of 90m<sup>2</sup> to be built with associated designated yard space as well as one parking space.

The plans adhere to all size, setback, height, FAR and lot coverage requirements.

**Architecture:**

The ADU has been designed to fit seamlessly into the neighbourhood borrowing materials and architectural style of neighbouring residences.

The building is tucked into the western portion of the property and would be accessed via the existing gravel road stubbing off the cul-de-sac at the top of Athlone Rd.

There is a substantial separation between the proposed structure and the existing residence and it is anticipated this would not appear as an over densification of the property and would not negatively impact the form and character of the neighbourhood.

**In Conclusion:**

We hope to have your support to allow us to build this much needed housing on our property for the care of a family member which otherwise would not be possible under the current zoning.

Sincerely

Victor, Susan, Thalia and Chantalle Wilson

1983 Athlone Rd  
Uchuelet, BC  
V0R3A0

Site Plan of:  
**Lot 1, District Lot 284,  
 Clayoquot District, Plan VIP57627**

Parcel Identifier: 018-515-371  
 Civic address: 1983 Athlone Road, Ucluelet

**SCALE - 1 : 5 0 0**



All distances are in metres and decimals thereof

(plot on 8.5" x 11" sheet)

**LEGEND**

Assumed elevation of 50.0 meters based off a spike located just off the western portion of the property.

Average Natural Grade of Proposed Building = 49.27M

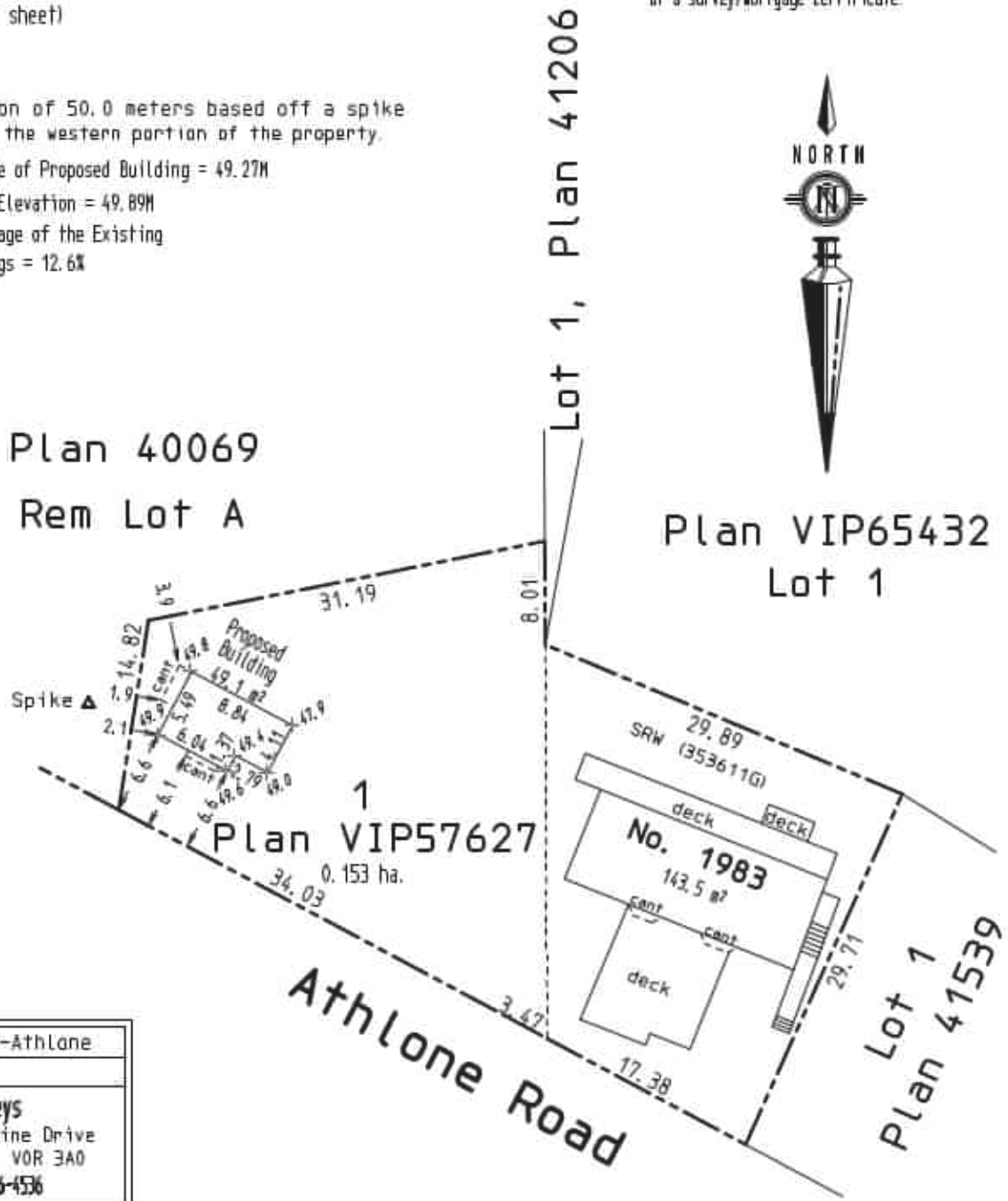
Proposed Main Floor Elevation = 49.89M

Percentage Lot Coverage of the Existing and Proposed Buildings = 12.6%

ALL SURVEY INFORMATION IN THIS DRAWING IS FOR GENERAL PURPOSES ONLY. THIS INFORMATION IS NOT TO BE USED IN ANY LEGAL MANNER. THE ENGAGEMENT OF A BRITISH COLUMBIA LAND SURVEYOR (BCLS) WILL BE REQUIRED TO CONFIRM ALL LEGAL INFORMATION IF REQUIRED.

The following non-financial charges are shown on the current title and may affect the property 353611G - Right of Way  
 Parcel dimensions shown hereon are derived from Land Title Office records.

This sketch represents a site improvement survey and is not intended for the purposes of a survey/mortgage certificate.

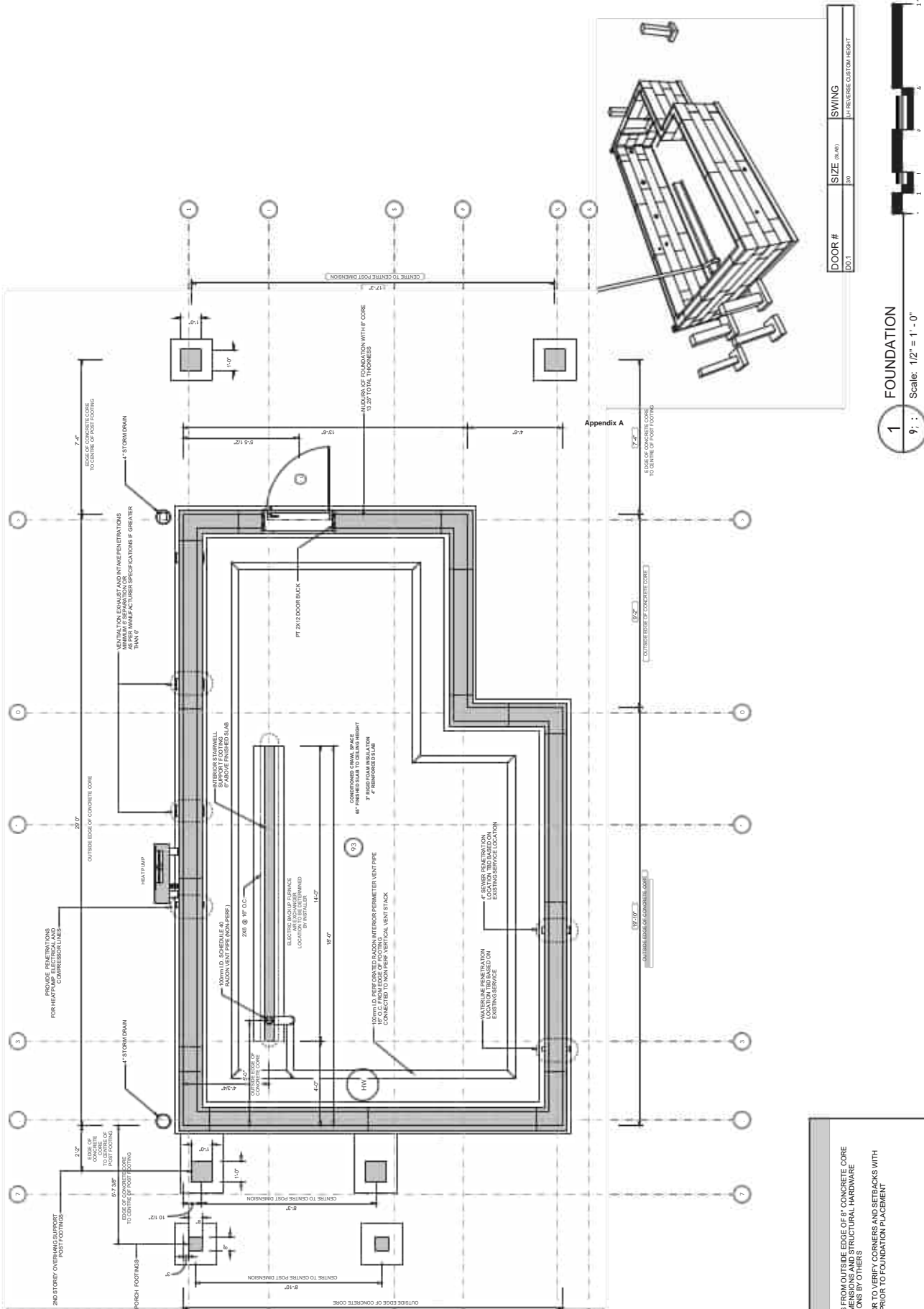


<b>FILE:</b> 254-Athlone
<b>DRG/DATE:</b> 2024-09-25
<b>AG Surveys</b>
545 - 110 Marine Drive
Ucluelet, BC V0R 3A0
phone (250) 266-4536



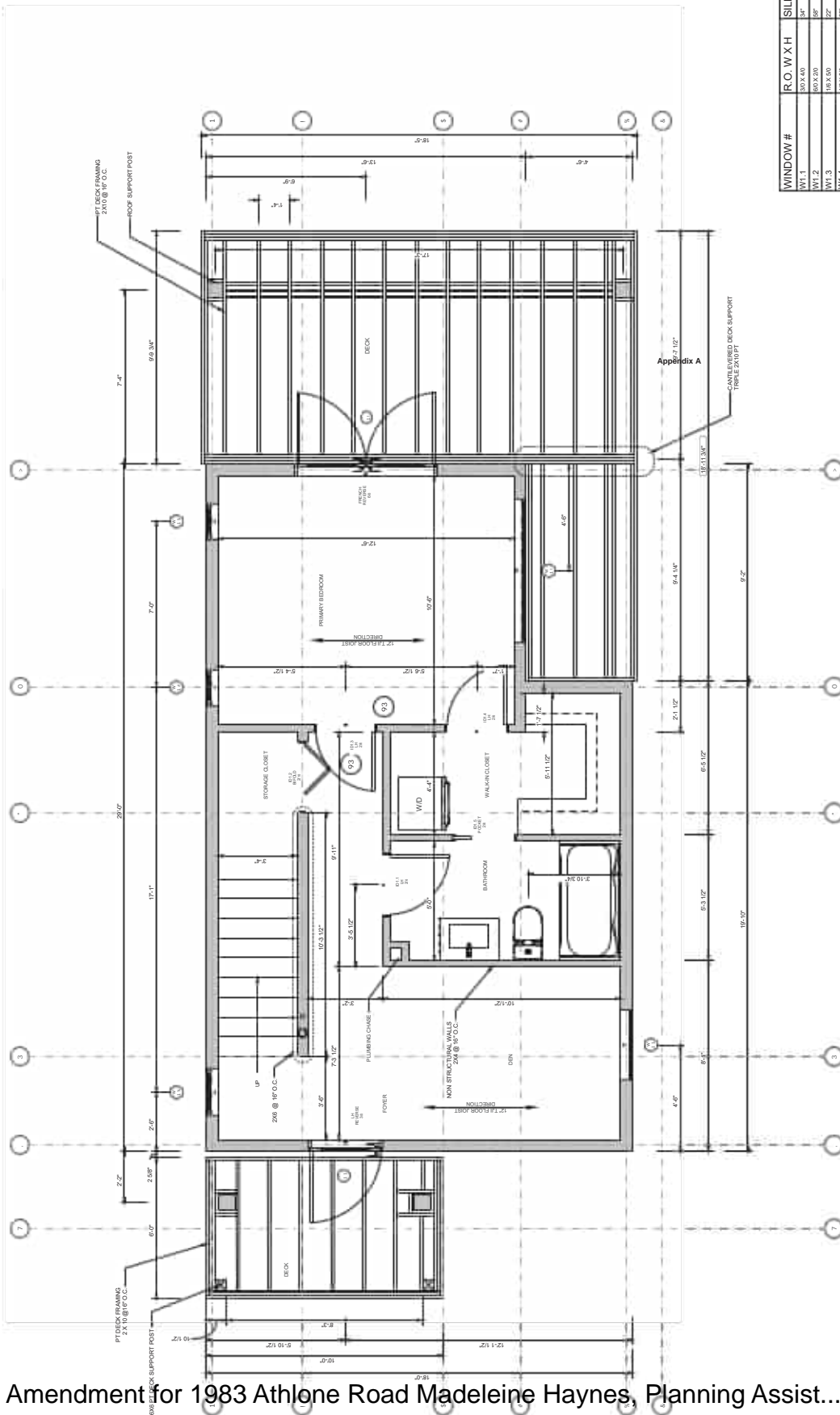






NOTES:  
 DIMENSIONS FROM OUTSIDE EDGE OF 8" CONCRETE CORE  
 FOOTING DIMENSIONS AND STRUCTURAL HARDWARE  
 SPECIFICATIONS BY OTHERS  
 CONTRACTOR TO VERIFY CORNERS AND SETBACKS WITH  
 SURVEYOR PRIOR TO FOUNDATION PLACEMENT

INTERCONNECTED SMOKE CARBON MONOXIDE  
 DETECTOR



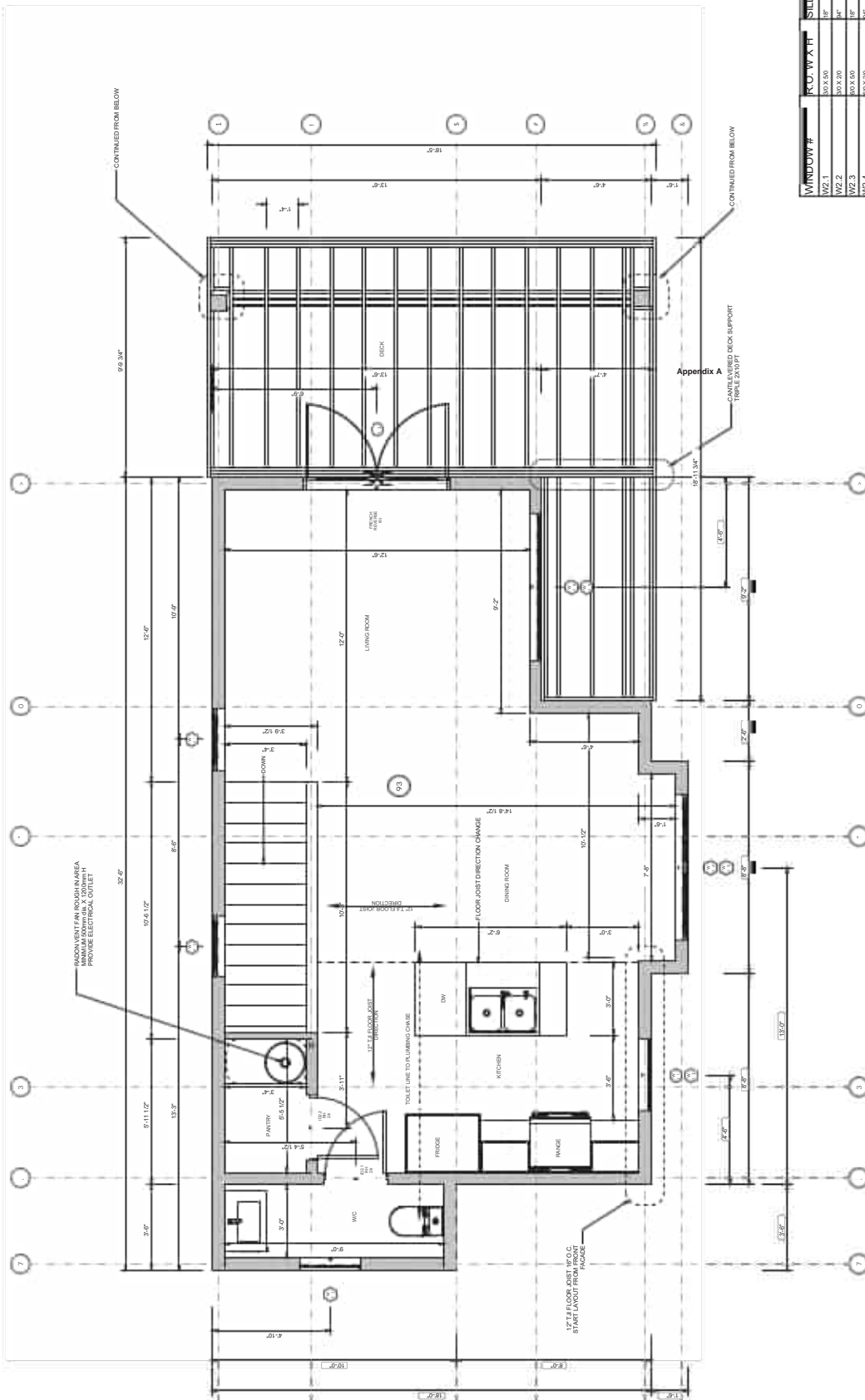
WINDOW #	R.O. W X H	SILL HEIGHT	(FROM SUBMITTAL)
W1.1	10' X 6'0"	34"	
W1.2	10' X 6'0"	34"	
W1.3	10' X 6'0"	34"	
W1.4	10' X 6'0"	34"	
W1.5	10' X 6'0"	34"	

DOOR #	SIZE (S.D.B.)	SWING
D1.1	3'0" X 8'0"	IN RECESS
D1.2	3'0" X 8'0"	IN RECESS
D1.3	3'0" X 8'0"	IN RECESS
D1.4	3'0" X 8'0"	IN RECESS
D1.5	3'0" X 8'0"	IN RECESS
D1.6	3'0" X 8'0"	IN RECESS
D1.7	3'0" X 8'0"	IN RECESS
D1.8	3'0" X 8'0"	IN RECESS
D1.9	3'0" X 8'0"	IN RECESS
D1.10	3'0" X 8'0"	IN RECESS
D1.11	3'0" X 8'0"	IN RECESS
D1.12	3'0" X 8'0"	IN RECESS
D1.13	3'0" X 8'0"	IN RECESS
D1.14	3'0" X 8'0"	IN RECESS
D1.15	3'0" X 8'0"	IN RECESS

1 FP1  
 Scale: 1/2" = 1'-0"

NOTES:  
 1. DIMENSIONS INCLUDE EXTERIOR SHEATHING  
 2. INTERIOR WALLS MEASURED FROM TO FRAMING  
 3. INTERCONNECTED SMOKE CARBON MONOXIDE  
 DETECTOR

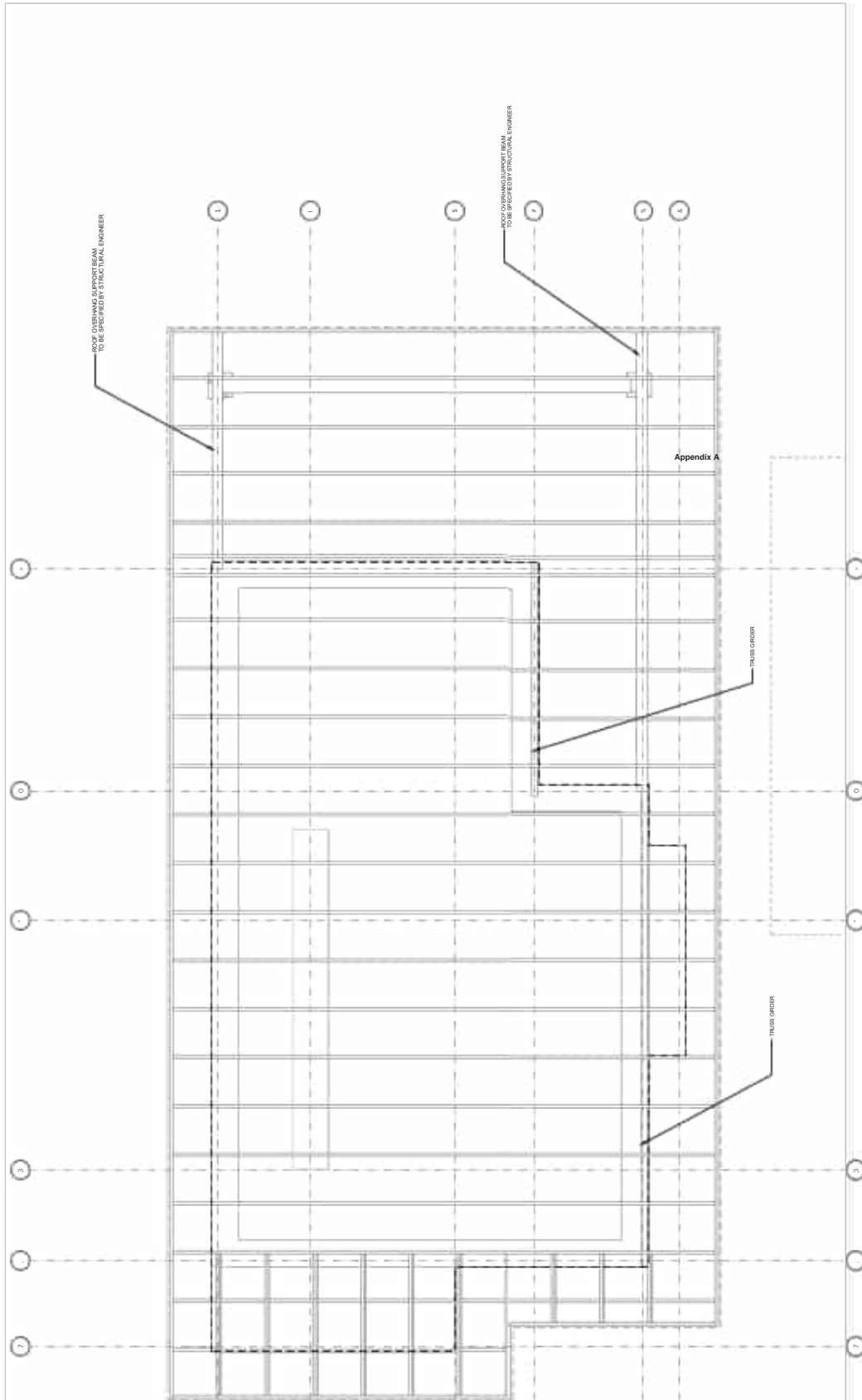


WINDOW #	RO' W X H'	SILL HEIGHT (FROM FINISH FLOOR)
W2.1	10'0 X 4'00	18"
W2.2	10'0 X 2'00	34"
W2.3	10'0 X 4'00	18"
W2.4	10'0 X 2'00	34"
W2.5	10'0 X 4'00	18"
W2.6	10'0 X 2'00	34"
W2.7	10'0 X 4'00	18"
W2.8	10'0 X 2'00	34"
W2.9	10'0 X 4'00	18"
W2.10	10'0 X 2'00	34"
W2.11	10'0 X 4'00	18"
W2.12	10'0 X 2'00	34"
W2.13	10'0 X 4'00	18"
W2.14	10'0 X 2'00	34"
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W2.20	10'0 X 2'00	34"
W2.21	10'0 X 4'00	18"
W2.22	10'0 X 2'00	34"
W2.23	10'0 X 4'00	18"
W2.24	10'0 X 2'00	34"
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W2.38	10'0 X 2'00	34"
W2.39	10'0 X 4'00	18"
W2.40	10'0 X 2'00	34"
W2.41	10'0 X 4'00	18"
W2.42	10'0 X 2'00	34"
W2.43	10'0 X 4'00	18"
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W2.45	10'0 X 4'00	18"
W2.46	10'0 X 2'00	34"
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W2.48	10'0 X 2'00	34"
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W2.59	10'0 X 4'00	18"
W2.60	10'0 X 2'00	34"
W2.61	10'0 X 4'00	18"
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W2.64	10'0 X 2'00	34"
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W2.66	10'0 X 2'00	34"
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W2.69	10'0 X 4'00	18"
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W2.71	10'0 X 4'00	18"
W2.72	10'0 X 2'00	34"
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W2.78	10'0 X 2'00	34"
W2.79	10'0 X 4'00	18"
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W2.82	10'0 X 2'00	34"
W2.83	10'0 X 4'00	18"
W2.84	10'0 X 2'00	34"
W2.85	10'0 X 4'00	18"
W2.86	10'0 X 2'00	34"
W2.87	10'0 X 4'00	18"
W2.88	10'0 X 2'00	34"
W2.89	10'0 X 4'00	18"
W2.90	10'0 X 2'00	34"
W2.91	10'0 X 4'00	18"
W2.92	10'0 X 2'00	34"
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W2.94	10'0 X 2'00	34"
W2.95	10'0 X 4'00	18"
W2.96	10'0 X 2'00	34"
W2.97	10'0 X 4'00	18"
W2.98	10'0 X 2'00	34"
W2.99	10'0 X 4'00	18"
W2.100	10'0 X 2'00	34"

1 FP2  
9:7 Scale: 1/2" = 1'-0"

NOTES:  
DIMENSIONS INCLUDE EXTERIOR SHEATHING  
INTERIOR WALLS MEASURED FROM TO FRAMING  
INTERCONNECTED SMOKE CARBON MONOXIDE  
DETECTOR

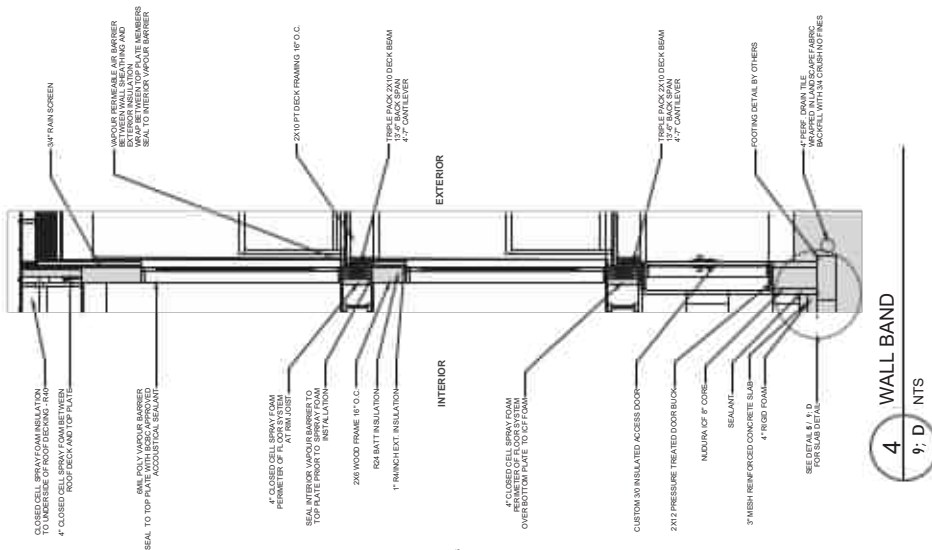




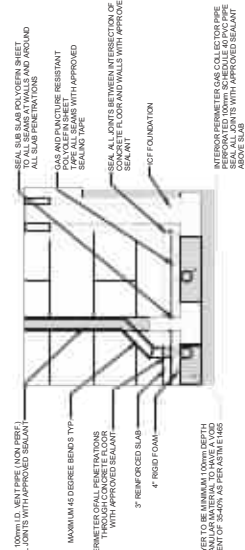
1 ROOF PLAN  
 9; E Scale: 1/2" = 1'-0"

NOTES:  
 TRUSS LAYOUT AND ENGINEERING TO BE PROVIDED  
 BY MANUFACTURER



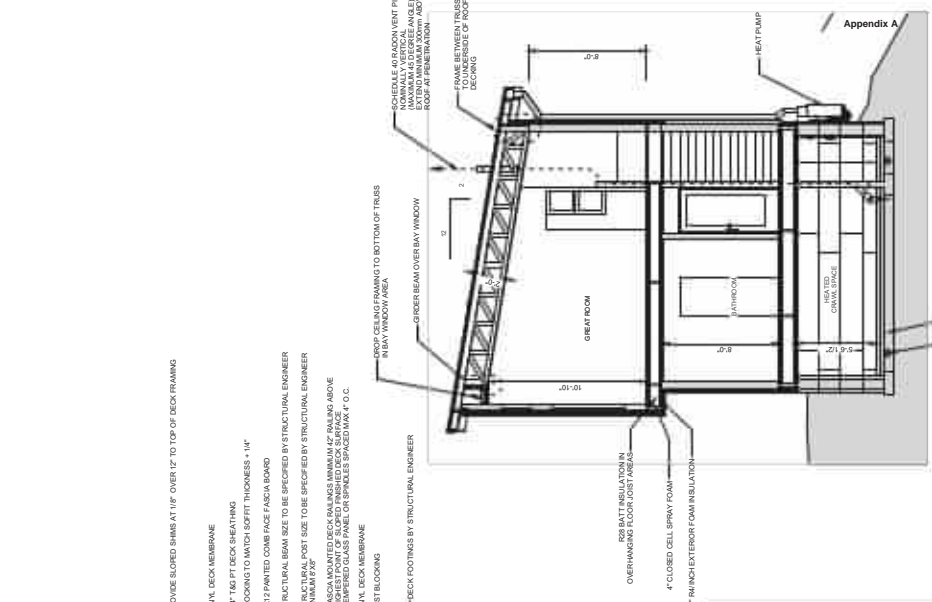


4 WALL BAND  
 9/ D NTS

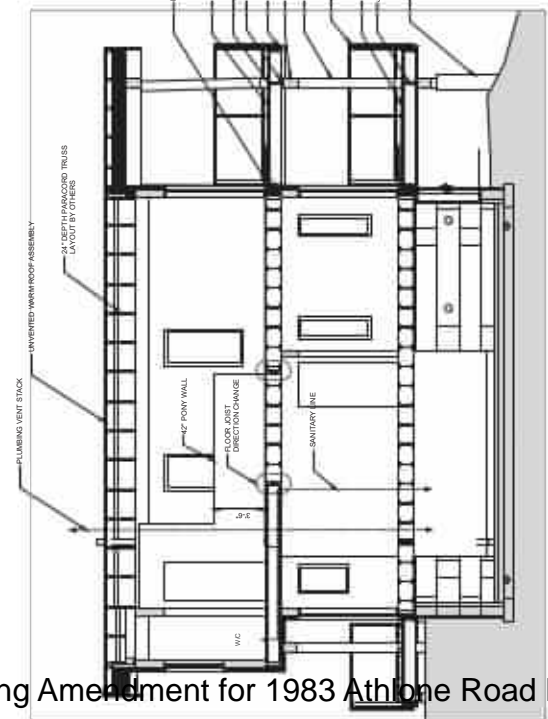
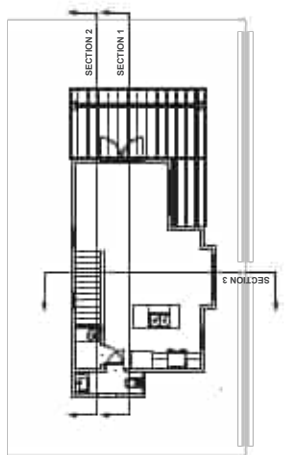


5 RADON VENTING  
 9/ D NTS

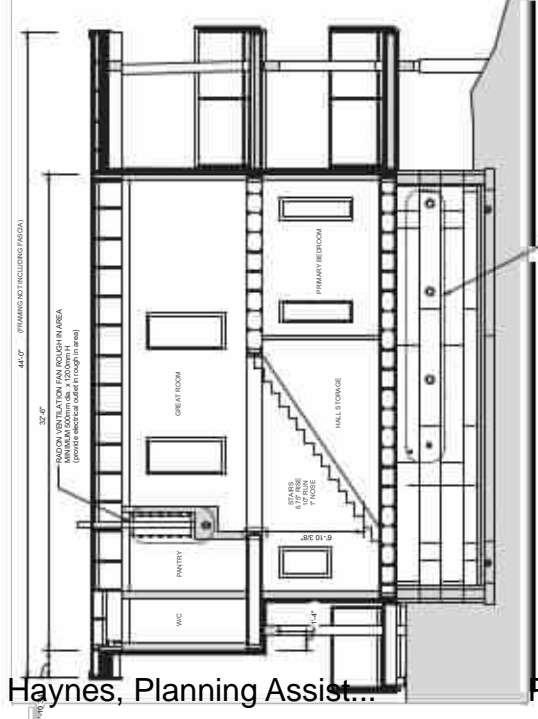
NOTE: REFER TO CAN/CSG B-148.1-2019



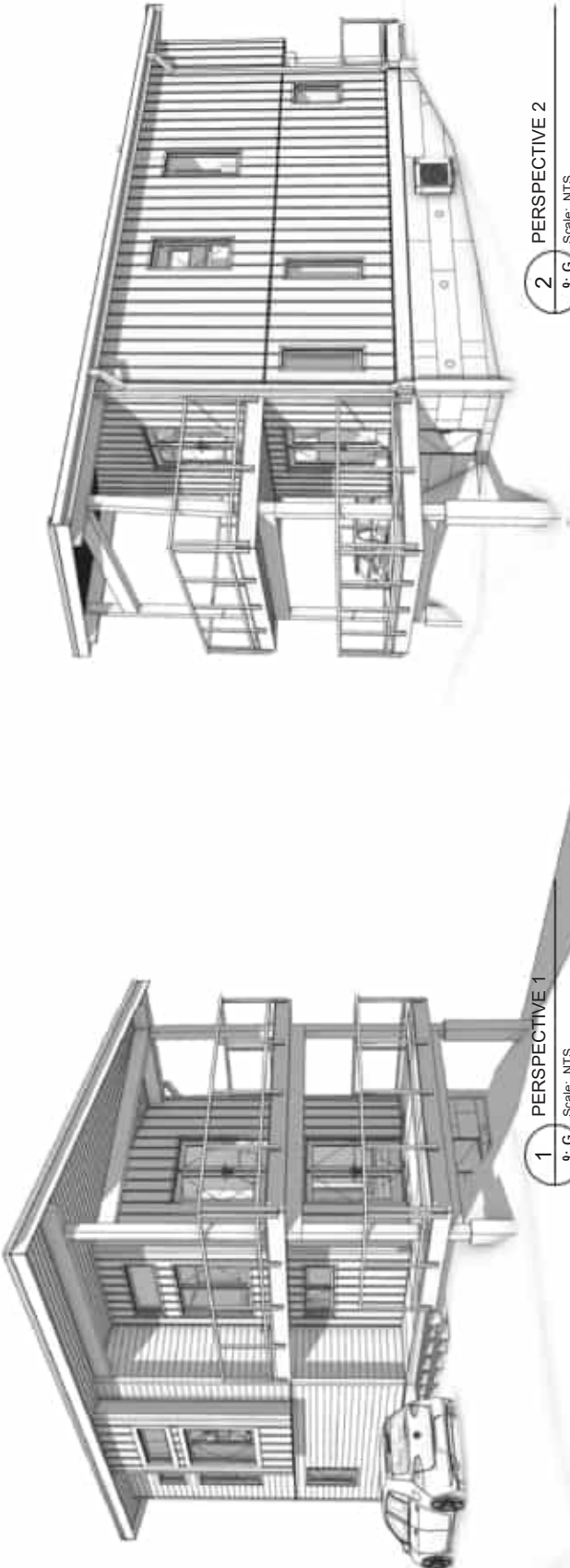
3 SECTION 3  
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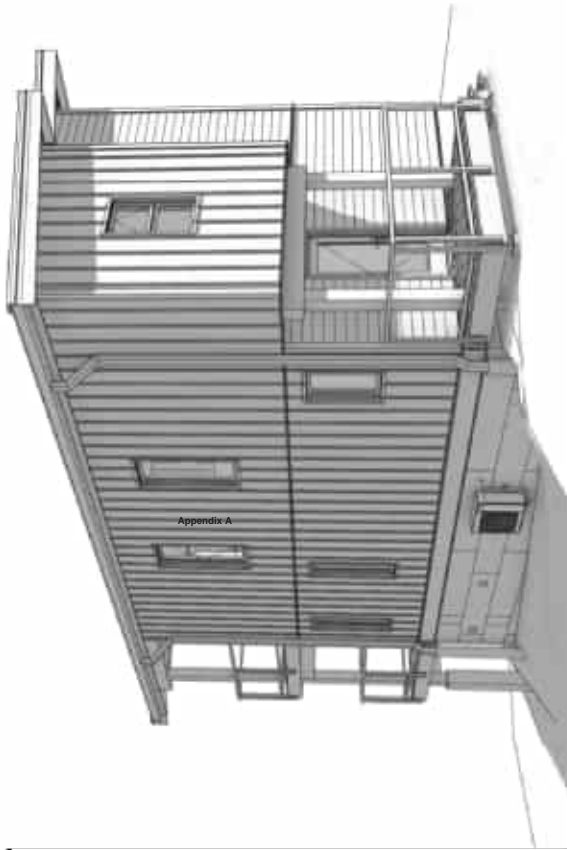
SECTION 1  
 Scale: 1/4\"/>



SECTION 2  
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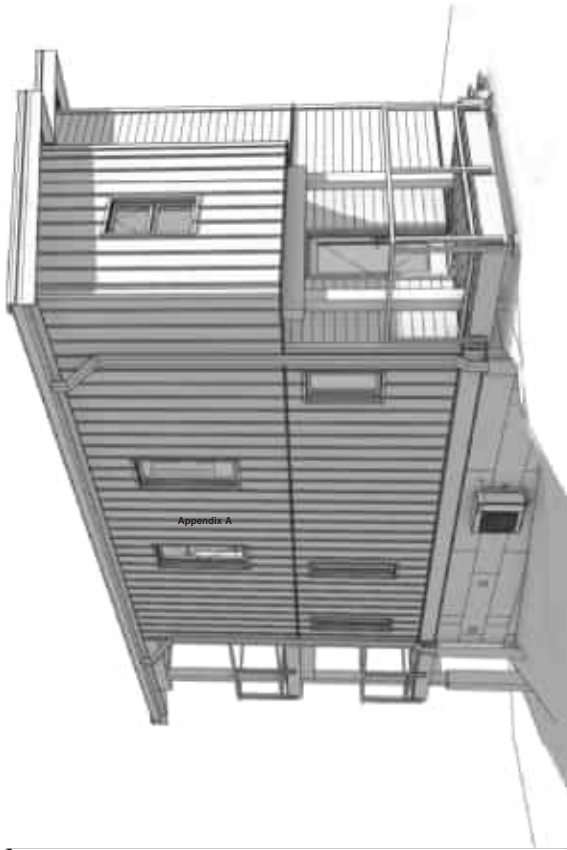
1 PERSPECTIVE 1  
 9' G Scale: NTS



2 PERSPECTIVE 2  
 9' G Scale: NTS



3 PERSPECTIVE 3  
 9' G Scale: NTS



4 PERSPECTIVE 4  
 9' G Scale: NTS

**DISTRICT OF UCLUELET**

**Zoning Amendment Bylaw No. 1359, 2024**

A bylaw to amend the “District of Ucluelet Zoning Bylaw No. 1160, 2013”.  
(1983 Athlone Road)

---

**WHEREAS** the District of Ucluelet Council by Bylaw No. 1160, 2013, adopted the Zoning Bylaw and now deems it appropriate to amend the Zoning Bylaw;

**NOW THEREFORE** the Council of the District of Ucluelet, in open meeting assembled, enacts as follows:

**1. Text Amendment:**

Schedule B of the *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by adding a new subsection alphanumerically to the Vacation Rental (VR-1) zone such that the new section reads as follows:

“VR-1.1.2 Despite section VR-1.1.1 (2) above, *Accessory Residential Dwelling Unit* is permitted as a secondary use on the following lot:

(1) PID 018-515-371, Lot 1, District Lot 284, Clayoquot District, Plan VIP57627 [1983 Athlone Road]”

**2. Citation:**

This bylaw may be cited as “District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024”.

**FIRST NOTIFICATION OF FIRST READING** published this    day of    , 2024.

**SECOND NOTIFICATION OF FIRST READING** published this    day of    , 2024.

**READ A FIRST TIME** this    day of    , 2024.

**READ A SECOND TIME** this    day of    , 2024.

**READ A THIRD TIME** this    day of    , 2024.

**ADOPTED** this    day of    , 2024.



**CERTIFIED CORRECT:** "District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024."

---

Marilyn McEwen  
Mayor

---

Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

---

Duane Lawrence  
Corporate Officer

## DEVELOPMENT VARIANCE PERMIT DVP24-09

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**Victor Wilson, Susan Wilson and Chantalle Holden** (the “Owners”)

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures, and other development thereon:

**1983 Athlone Road; PID 018515371, Lot 1, Plan VIP57627, District Lot 284, Clayoquot Land District** (the “Land”)

3. The work authorized by this Permit may only be carried out:

- a. in compliance with the requirements of the *District of Ucluelet Zoning Bylaw No. 1160, 2013* (“zoning bylaw”), except where specifically varied or supplemented by this development variance permit and,
- b. in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as identified on **Schedule A**:

**1. A Front Yard Setback of 6m whereas section VR-1.6.1(2)(a) of the zoning bylaw indicates a minimum of 7.5m.**

5. The above variance is granted for the proposed Accessory Dwelling Unit (ADU) as shown on **Schedule A**. Should the buildings be later removed or destroyed, this Development Variance Permit shall cease to apply and the zoning bylaw requirements in effect at the time shall apply.

6. The Owner shall substantially commence the development within 24 months of the date of issuance, after which this permit shall be null and void.

7. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.

8. This Permit is NOT a Building Permit.

**AUTHORIZING RESOLUTION** passed by the Municipal Council on the      <sup>th</sup> day of      , 2024.

**ISSUED** the      <sup>th</sup> day of      , 2024.

\_\_\_\_\_  
Bruce Greig  
Director of Community Planning







# REPORT TO COUNCIL

Council Meeting: December 10, 2024  
 500 Matterson Drive, Ucluelet, BC V0R 3A0

**FROM:** MADELEINE HAYNES, PLANNING ASSISTANT **FILE No:** 3090-20 DVP24-09  
**SUBJECT:** DEVELOPMENT VARIANCE PERMIT FOR 1983 ATHLONE ROAD **REPORT No:** 24-126  
**ATTACHMENT(S):** APPENDIX A – DEVELOPMENT VARIANCE PERMIT 24-09  
 APPENDIX B – NOVEMBER 12, 2024, REPORT TO COUNCIL

**RECOMMENDATIONS:**

THAT Council authorize the Director of Community Planning to execute and issue Development Variance Permit DVP24-09.

**BACKGROUND:**

During the November 12, 2024, Regular Council Meeting, Development Variance Permit 24-09 was presented to Council. The proposed permit would authorize a 6m front yard setback at 1983 Athlone Road, whereas 7.5m is required within the *District of Ucluelet Zoning Bylaw No. 1160, 2024*. Council directed staff to give statutory notice to receive input on the Development Variance Permit 24-09 (**Appendix “A”**); this notification was completed.

At an earlier time during this Council meeting, Council considered first, second, and third reading and adoption for the *District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024*. If the Bylaw was adopted, Council can now consider authorization of Development Variance Permit 24-09.

Background information for this application can be found in the [November 12, 2024, Regular Council Meeting Agenda](#) (item 6.3) and in **Appendix “B”**.

**ANALYSIS OF OPTIONS:**

<b>A</b>	Authorize issuance of DVP24-09	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Would allow applicant to achieve desired placement on-site for their proposed development</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• Approval would allow the application to proceed</li> </ul>
<b>B</b>	Provide Alternative Direction	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Would allow Council to meet their objective</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>• Unknown at this time</li> </ul>



C  Reject DVP24-09	<u>Suggested Motion</u>	THAT Council, with regard to DVP24-09, <i>[provide alternative direction here]</i>
	<u>Pros</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
	<u>Cons</u>	<ul style="list-style-type: none"> <li>Does not allow applicant's development to proceed as proposed</li> </ul>
	<u>Implications</u>	<ul style="list-style-type: none"> <li>Additional staff time will be required to follow up with applicant and consultants</li> </ul>
	<u>Suggested Motion</u>	THAT Council reject the application for DVP24-09.

**POLICY OR LEGISLATIVE IMPACTS:**

Notification has been completed for the Development Variance Permit DVP24-09 (see draft permit in **Appendix "A"**). Council should provide an opportunity for public comment on the requested variance.

This application is consistent with the *Local Government Act* and the *District of Ucluelet Official Community Plan Bylaw No. 1306, 2022*. If the application proceeds, the DVP would vary the *District of Ucluelet Zoning Bylaw No. 1160, 2013*.

**NEXT STEPS:**

If approved, the attached DVP would be signed by the Director of Community Planning, issued to the applicant, and notice will be filed with the Land Title Office.

Respectfully submitted:      Maddie Haynes, Planning Assistant  
                                                  John Towgood, Municipal Planner  
                                                  Duane Lawrence, CAO

## DEVELOPMENT VARIANCE PERMIT DVP24-09

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**Victor Wilson, Susan Wilson and Chantalle Holden** (the “Owners”)

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures, and other development thereon:

**1983 Athlone Road; PID 018515371, Lot 1, Plan VIP57627, District Lot 284, Clayoquot Land District** (the “Land”)

3. The work authorized by this Permit may only be carried out:

- a. in compliance with the requirements of the *District of Ucluelet Zoning Bylaw No. 1160, 2013* (“zoning bylaw”), except where specifically varied or supplemented by this development variance permit and,
- b. in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as identified on **Schedule A**:

**1. A Front Yard Setback of 6m whereas section VR-1.6.1(2)(a) of the zoning bylaw indicates a minimum of 7.5m.**

5. The above variance is granted for the proposed Accessory Dwelling Unit (ADU) as shown on **Schedule A**. Should the buildings be later removed or destroyed, this Development Variance Permit shall cease to apply and the zoning bylaw requirements in effect at the time shall apply.

6. The Owner shall substantially commence the development within 24 months of the date of issuance, after which this permit shall be null and void.

7. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.

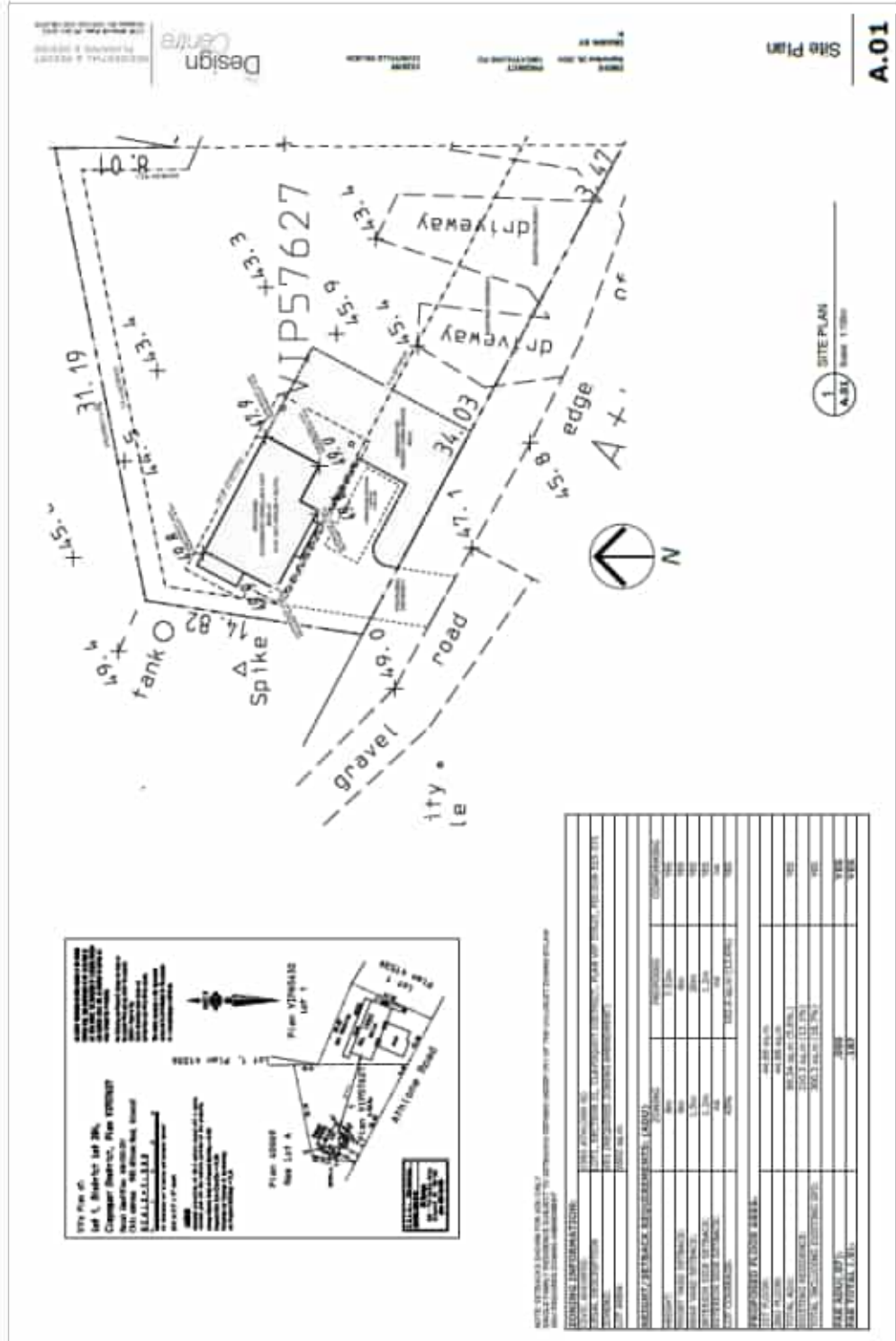
8. This Permit is NOT a Building Permit.

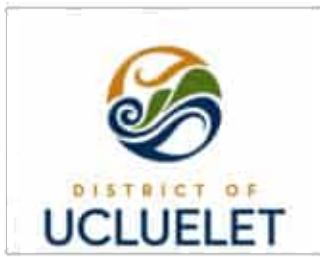
**AUTHORIZING RESOLUTION** passed by the Municipal Council on the      <sup>th</sup> day of      , 2024.

**ISSUED** the      <sup>th</sup> day of      , 2024.

\_\_\_\_\_  
Bruce Greig  
Director of Community Planning

**SCHEDULE A**





## REPORT TO COUNCIL

Council Meeting: November 12, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

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**FROM:** MADDIE HAYNES, PLANNING ASSISTANT

**FILE NO:** 3360-20 RZ24-12 & 3090-20 DVP 24-09

**SUBJECT: ZONING AMENDMENT AND DEVELOPMENT VARIANCE PERMIT  
AT 1983 ATHLONE ROAD**

**REPORT NO:** 24-115

**ATTACHMENT(S):** APPENDIX A - APPLICATION  
APPENDIX B – ZONING AMENDMENT BYLAW NO. 1359, 2024  
APPENDIX C – DEVELOPMENT VARIANCE PERMIT 24-09

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**RECOMMENDATION(S):**

**THAT** Council, with regard to the proposed re-zoning, allow an ADU at 1983 Athlone Road:

1. Direct staff to give notice of first reading to *District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024*.
2. Direct staff to give statutory notice to receive input on the Development Variance Permit 24-09.

**BACKGROUND:**

A re-zoning (REZ) application was received in August 2024, and a Development Variance Permit (DVP) application was received in October 2024 for the property located at 1983 Athlone Road (see **Figure 1**); PID 018515371, Lot 1, Plan VIP57627, District Lot 284, Clayoquot Land District (the “subject property”).

**ZONING & LAND USE**

The subject property is zoned for Vacation Rental (VR-1) use and is located within a neighbourhood of homes designated as Single Family Residential (R-1 and CD-1.1.1 zones). It is also directly adjacent to a District-owned property zoned Public Institutional (P-1). Currently, the property is developed as a Single-Family Dwelling (SFD).



Figure 1. Subject property

## DISCUSSION:

### REZONING

The applicant has applied for a zoning amendment to allow *Accessory Residential Dwelling Unit (ADU)* as a secondary permitted use on the property. The intent of the applicant is to construct the ADU to allow multi-generational family to reside on the property and provide live-in care for a family member. The applicant has provided further details within an intent letter (See **Appendix A**).

Within the *Official Community Plan Bylaw No. 1306, 2022*, the subject property is designated as Single-Family. The proposed rezoning application aligns with planned long-term use, as well as policies for infill housing within existing neighbourhoods (see [OCP Policy 3.131](#)).

*Zoning Amendment Bylaw No. 1310, 2022*, included an amendment to allow ADUs as a secondary permitted use in all single-family residential zones aside from R-5 (Compact Single-Family Residential). ADUs were not included within the R-5 zone (which applies only to the Lot 13 attainable housing development) due to small lot sizes. As *Bylaw No. 1310* focused on residential zones, the VR-1 zone was not included within this amendment. However, given that the VR-1 zone also allows SFD as a principal use, it would be supportable to allow for the proposed ADU use.

### VARIANCE

The applicant is requesting a variance to reduce the allowable VR-1 front yard setback by 1.5 meters, from 7.5 meters to 6 meters. This aligns with similar setback distances as per the recently adopted *Zoning Amendment Bylaw No. 1346, 2024* made to align with the provincial SSMUH site standards. The proposal complies with all other ADU-specific (Section 408) and current VR-1 zoning provisions.



SERVICING

The applicant will be required to complete minor work to connect both water and sewer services to the new structure. However, no major upgrades or service extension are needed, as adequate water and sewer capacity is available at the site’s frontage.

BUILDING

The subject building appears to be a two-storey, Part 9 dwelling for which a building permit under the current BC Building and Plumbing Code will be required.

FIRE SERVICES

The fire department does not have any immediate concerns with the application. The applicant is required to follow the District of Ucluelet’s Fire Services Development Design Guidelines regarding accessory dwelling units.

ANALYSIS OF OPTIONS:

A	Give notice of first reading to Bylaw No. 1359, and direct staff to give statutory notice for DVP24-02	<u>Pros</u>	<ul style="list-style-type: none"> <li>Allows the applicant to construct housing</li> <li>Provides infill housing in existing residential neighbourhood</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>Would allow the application to proceed</li> </ul>
B	Provide alternate direction	<u>Pros</u>	<ul style="list-style-type: none"> <li>Achieves the goals and objectives as identified by Council</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<u>Suggested Motion</u>	THAT Council ( <i>provide alternate direction here</i> ).
C	Reject the application	<u>Pros</u>	<ul style="list-style-type: none"> <li>Unknown at this time</li> </ul>
		<u>Cons</u>	<ul style="list-style-type: none"> <li>Does not allow the applicant to construct housing</li> </ul>
		<u>Implications</u>	<ul style="list-style-type: none"> <li>The application would not proceed</li> </ul>
		<u>Suggested Motion</u>	<ul style="list-style-type: none"> <li>No motion required.</li> </ul>

POLICY OR LEGISLATIVE IMPACTS:

This application impacts the *District of Ucluelet Zoning Bylaw No. 1160, 2013* by adding a text amendment to section VR-1.1.2 (see **Appendix B**) and variance of section VR-1.6.1(2)(a) (see **Appendix C**). This application is consistent with the *Official Community Plan* and the *Local Government Act*.

It is important to note that *Bill 44 – 2023 Housing Statutes (Residential Development) Amendment Act, 2023* amended Section 464.3 of the *Local Government Act*, and now states that:

*“(3) A local government must not hold a public hearing on a proposed zoning bylaw if*

- (a) an official community plan is in effect for the area that is the subject of the zoning bylaw,*
- (b) the bylaw is consistent with the official community plan,*
- (c) the sole purpose of the bylaw is to permit a development that is, in whole or in part, a residential development, and*
- (d) the residential component of the development accounts for at least half of the gross floor area of all buildings and other structures proposed as part of the development,”*

Where a public hearing would have previously been held, this legislative change prohibits a public hearing for *District of Ucluelet Zoning Amendment Bylaw No. 1342, 2024*.

**NEXT STEPS:**

If Council proceeds to the first reading of *District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024* staff would undertake the necessary notifications to give notice of first reading of the bylaw, and also to enable public input on the accompanying Development Variance Permit. If the Bylaw is adopted, then subject to public input the Development Variance Permit 24-09 could then be approved by Council.

**Respectfully Submitted:** Madeleine Haynes, Planning Assistant  
Bruce Greig, Director of Community Planning  
Duane Lawrence, Chief Administrative Officer

# Development Application

District of Ucluelet  
 Planning Department  
 200 2nd Street, Ucluelet, BC  
 V0R 3A0, P.O. Box 999  
 Tel: 250-726-4770 Fax: 250-726-7335

## Type of Application

An application is submitted for one or more of the following:

- Official Community Plan Amendment
- Zoning Bylaw Amendment
- Development Permit (no variances)
- Development Permit (with variances)
- Development Permit Amendment
- Development Variance Permit
- Temporary Use Permit
- Board of Variance
- Strata Conversion
- Subdivision

## Description of Property

Civic Address (es): 1983 ATHLONE RD, UCLUELET, BC  
 Legal Description: Lot 1 Plan VIP57627 Block \_\_\_\_\_ Section 21 DL \_\_\_\_\_

## Applicant Information

Notice of Disclosure to Applicant(s): The following contact information will be available to the public and may be posted on the Districts' website to allow interested parties to contact you about this application.

Applicant name: CHANTALLE WILSON Company name: \_\_\_\_\_  
 Mailing address: 1983 ATHLONE RD, UCLUELET, BC Postal Code: V0R3A0  
 Tel : \_\_\_\_\_ Cell : \_\_\_\_\_  
 Email : \_\_\_\_\_ Fax : \_\_\_\_\_

The undersigned owner/authorized agent of the owner makes an application as specified herein, and declares that the information submitted in support of the application is true and correct in all respects.

Applicant Signature: *Chantalle Wilson* Date: Aug. 15 / 24

## Registered Owner(s)

List all registered owners. For strata properties, provide accompanying authorization from all strata owners (not just strata corp.). If the owner is an incorporated company/society, attach a current corporate/society search or "notice of directors".

Registered Owner (s) name: Victor Wilson, Susan Wilson, Chantalle Wilson  
 Mailing address: 1983 ATHLONE RD, UCLUELET, BC, POBOX 1062 Postal Code: V0R3A0  
 Tel : \_\_\_\_\_ Cell : \_\_\_\_\_  
 Email : \_\_\_\_\_ Fax : \_\_\_\_\_

Freedom of Information and Protection of Privacy Act (FOIPPA): Personal information is collected, used and disclosed under the authority of the Local Government Act, and section 26 (c) of the FOIPPA. The information will be used for the purpose of processing this application.

Owner Signature: *Chantalle Wilson* Date: Aug. 15 / 24

## Office Use Only:

Folio No.: <u>186-006</u>	File No.: <u>R224-12</u>	Date: <u>AUG 15 / 24</u>	Receipt No.: <u>75445</u>	Fee: <u>\$1500.00</u>
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District of Ucluelet Planning Department  
200 Main Street,  
POBox 999,  
Ucluelet, BC,  
V0R3A0



Date: August 14 2024

Attn: Bruce Greig, Mayor and Council  
Re: Zoning Amendment, 1983 Athlone Rd, Ucluelet, BC.  
LOT 1, SECTION 21, CLAYOQUOT DISTRICT, PLAN VIP57627, PID 018-515-371  
Zoning VR-1

**Project Intent:**

This application is to request a zoning amendment to allow the construction of an Accessory Dwelling Unit on a property with VR-1 zoning.

The intent is to use the ADU to allow our multi-generational family to live together on the property to provide affordable live in care for a family member who has suffered a stroke and requires a caregiver be present.

The advantage of the ADU is that the separation of the dwelling unit would be more conducive to quiet respite for recovery rather than a secondary suite attached to the main house.

**Project Overview:**

1983 Athlone Rd is a relatively large property with an existing single family residence located on the eastern property line with substantial remaining property. Currently zoned VR-1 there is an existing single nightly rental unit in the lower level of the home.

The location of the residential housing unit is located at the western end of the property.

The size of lot would allow for a unit of 90m<sup>2</sup> to be built with associated designated yard space as well as one parking space.

The plans adhere to all size, setback, height, FAR and lot coverage requirements.

**Architecture:**

The ADU has been designed to fit seamlessly into the neighbourhood borrowing materials and architectural style of neighbouring residences.

The building is tucked into the western portion of the property and would be accessed via the existing gravel road stubbing off the cul-de-sac at the top of Athlone Rd.

There is a substantial separation between the proposed structure and the existing residence and it is anticipated this would not appear as an over densification of the property and would not negatively impact the form and character of the neighbourhood.

**In Conclusion:**

We hope to have your support to allow us to build this much needed housing on our property for the care of a family member which otherwise would not be possible under the current zoning.

Sincerely

Victor, Susan, Thalia and Chantalle Wilson

1983 Athlone Rd  
Uchuelet, BC  
V0R3A0



Site Plan of:  
**Lot 1, District Lot 284,  
 Clayoquot District, Plan VIP57627**

Parcel Identifier: 018-515-371  
 Civic address: 1983 Athlone Road, Ucluelet

**SCALE - 1 : 5 0 0**



All distances are in metres and decimals thereof

(plot on 8.5" x 11" sheet)

**LEGEND**

Assumed elevation of 50.0 meters based off a spike located just off the western portion of the property.

Average Natural Grade of Proposed Building = 49.27M

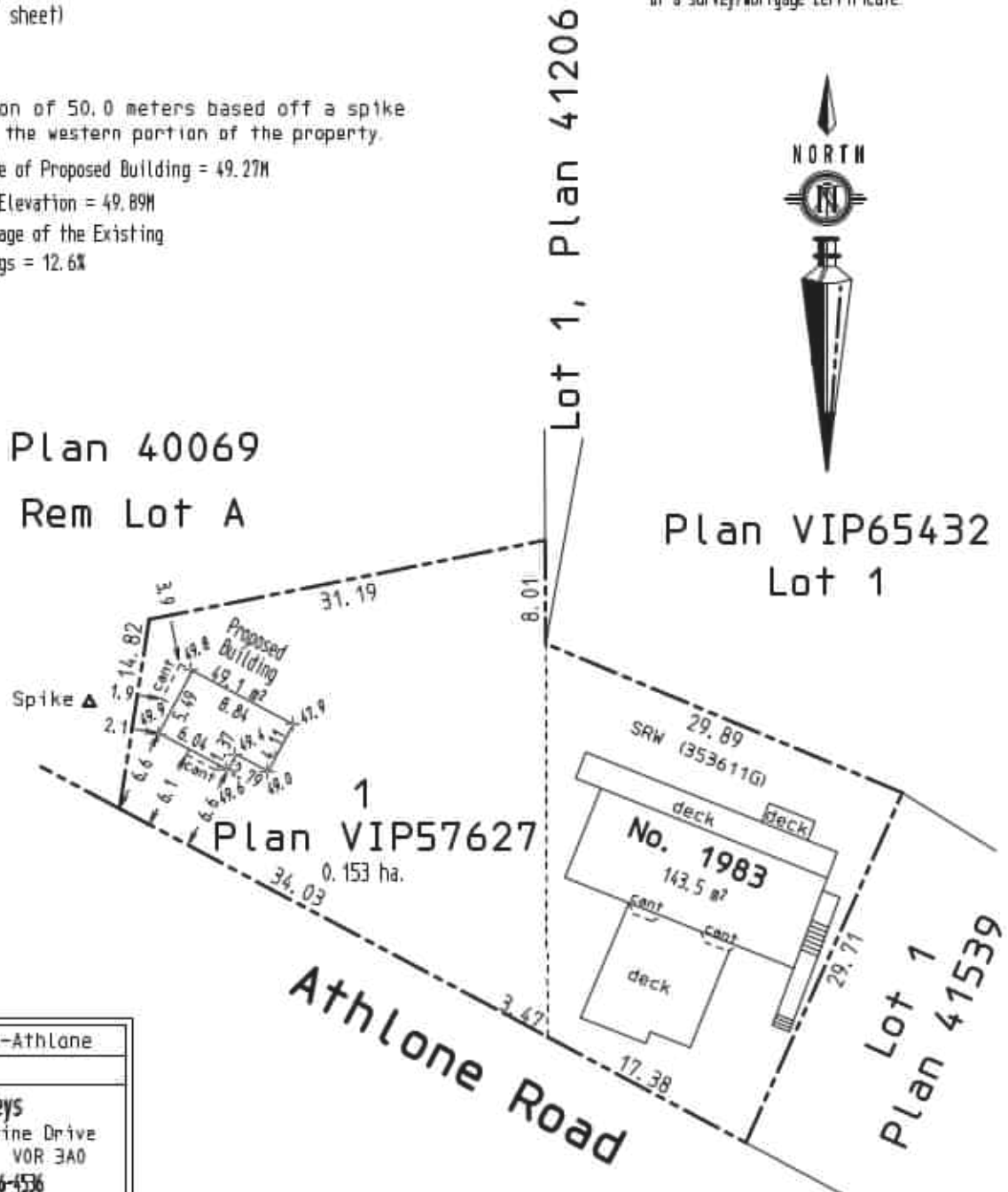
Proposed Main Floor Elevation = 49.89M

Percentage Lot Coverage of the Existing and Proposed Buildings = 12.6%

ALL SURVEY INFORMATION IN THIS DRAWING IS FOR GENERAL PURPOSES ONLY. THIS INFORMATION IS NOT TO BE USED IN ANY LEGAL MANNER. THE ENGAGEMENT OF A BRITISH COLUMBIA LAND SURVEYOR (BCLS) WILL BE REQUIRED TO CONFIRM ALL LEGAL INFORMATION IF REQUIRED.

The following non-financial charges are shown on the current title and may affect the property 353611G - Right of Way  
 Parcel dimensions shown herein are derived from Land Title Office records.

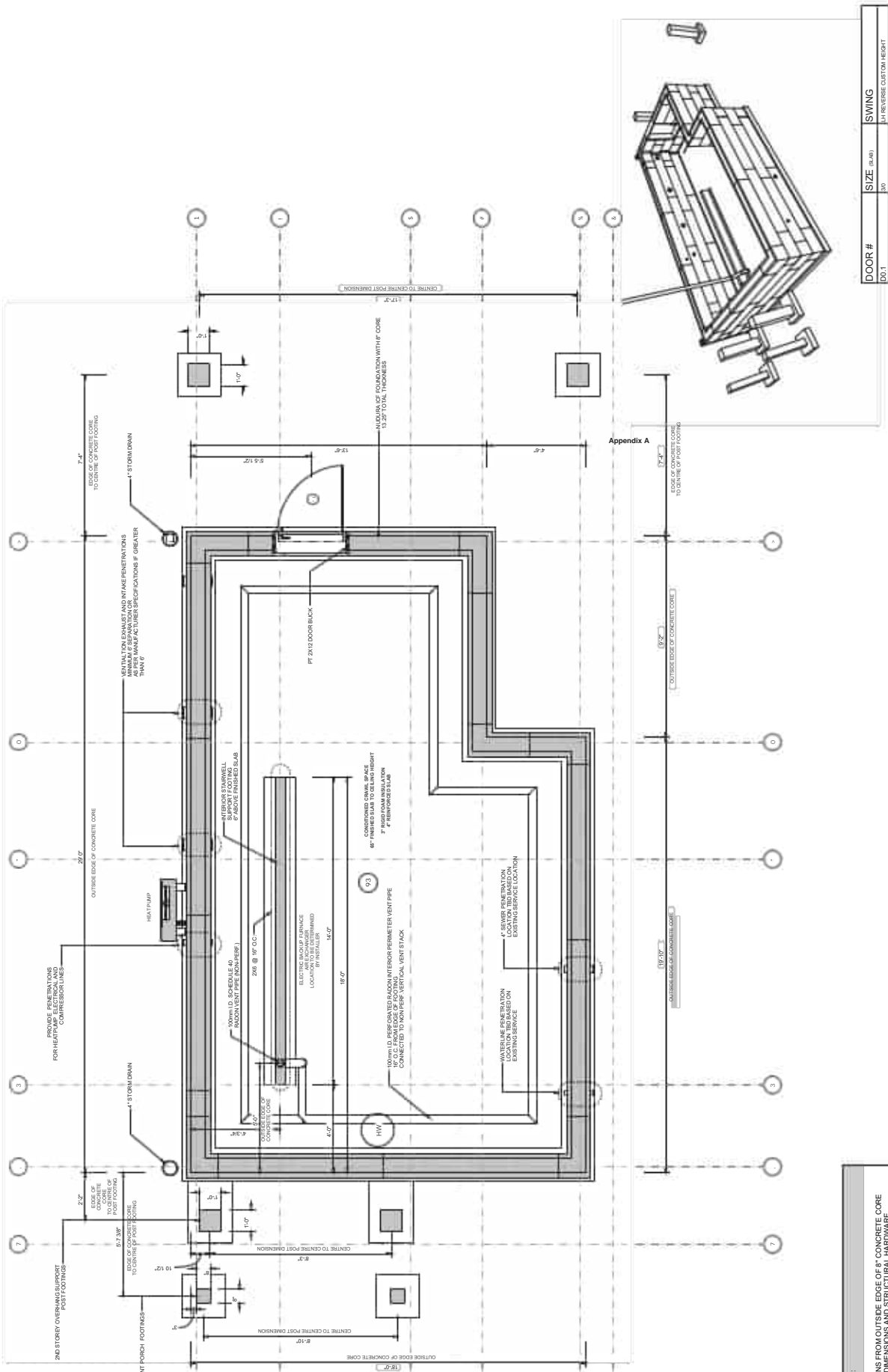
This sketch represents a site improvement survey and is not intended for the purposes of a survey/mortgage certificate.



<b>FILE:</b> 254-Athlone
<b>DWG/DATE:</b> 2024-09-25
<b>AG Surveys</b>
545 - 110 Marine Drive
Ucluelet, BC V0R 3A0
phone (250) 266-4536

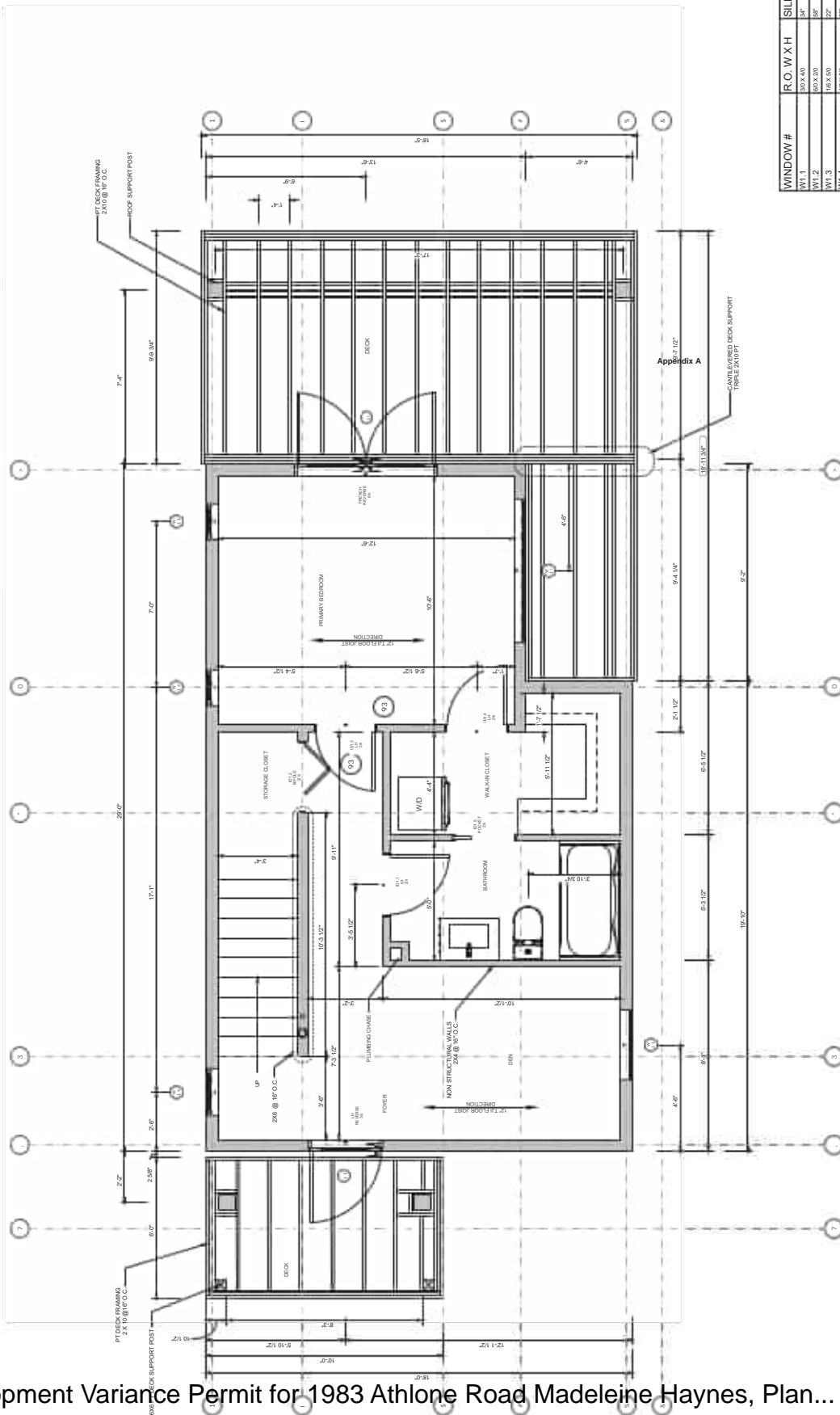






1 FOUNDATION  
 Scale: 1/2" = 1'-0"

NOTES:  
 DIMENSIONS FROM OUTSIDE EDGE OF 8" CONCRETE CORE  
 FOOTING DIMENSIONS AND STRUCTURAL HARDWARE  
 SPECIFICATIONS BY OTHERS  
 CONTRACTOR TO VERIFY CORNERS AND SETBACKS WITH  
 SURVEYOR PRIOR TO FOUNDATION PLACEMENT  
 INTERCONNECTED SMOKE CARBON MONOXIDE  
 DETECTOR



WINDOW #	R.O. W X H	SILL HEIGHT	FROM SUB. LOOK
W1.1	10' X 6.0'	34"	
W1.2	10' X 2.0'	36"	
W1.3	10' X 5.0'	22"	
W1.4	10' X 5.0'	22"	
W1.5	10' X 3.8'	40"	

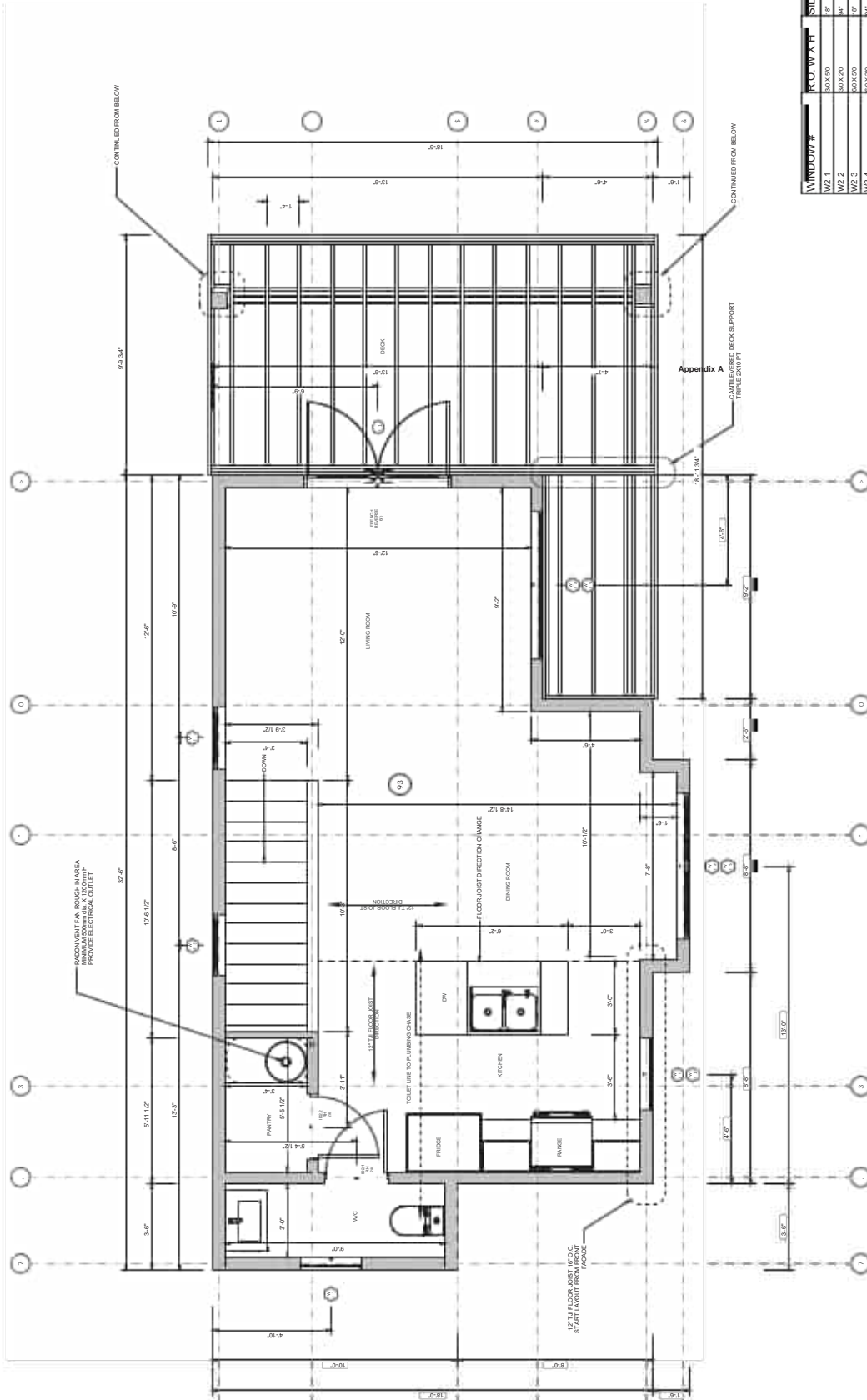
  

DOOR #	SIZE (S.W.)	SWING
D1.1	3'6"	IN RECESS
D1.2	3'6"	IN RECESS
D1.3	3'6"	IN RECESS
D1.4	3'6"	IN RECESS
D1.5	3'6"	IN RECESS
D1.6	3'6"	IN RECESS
D1.7	3'6"	IN RECESS
D1.8	3'6"	IN RECESS
D1.9	3'6"	IN RECESS
D1.10	3'6"	IN RECESS
D1.11	3'6"	IN RECESS
D1.12	3'6"	IN RECESS
D1.13	3'6"	IN RECESS
D1.14	3'6"	IN RECESS
D1.15	3'6"	IN RECESS

1 FP1  
 9: H Scale: 1/2" = 1'-0"

NOTES:  
 DIMENSIONS INCLUDE EXTERIOR SHEATHING  
 DIMENSIONS MEASURED FROM TO FRAMING  
 INTERCONNECTED SMOKE CARBON MONOXIDE  
 DETECTOR





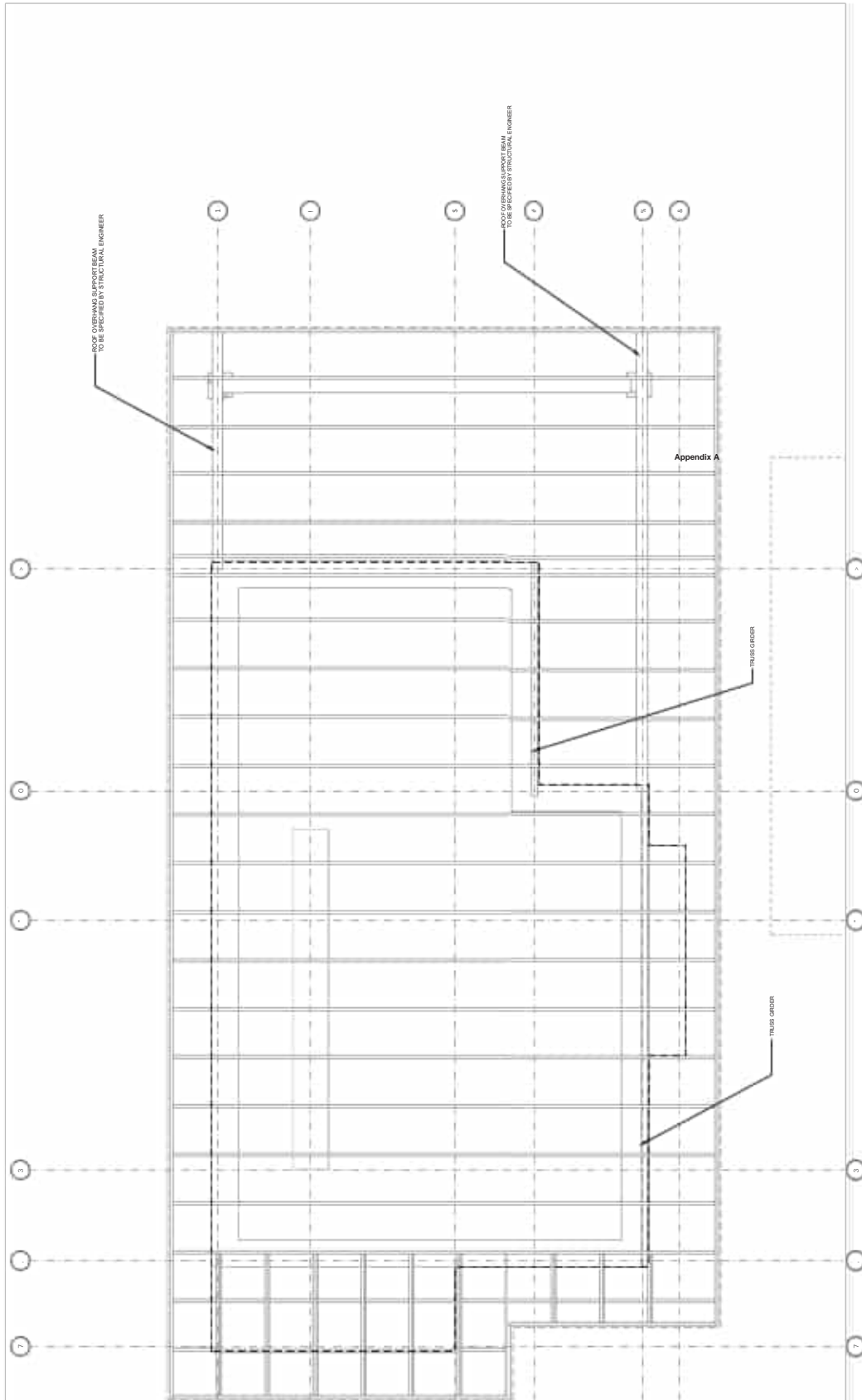
WINDOW #	RO	WX	H	SILL HEIGHT (FROM FINISH FLOOR)
W2.1	10	4.50	8'	8"
W2.2	10	4.50	8'	8"
W2.3	10	4.50	8'	8"
W2.4	10	4.50	8'	8"
W2.5	10	4.50	8'	8"
W2.6	10	4.50	8'	8"
W2.7	10	4.50	8'	8"
W2.8	10	4.50	8'	8"
W2.9	10	4.50	8'	8"
W2.10	10	4.50	8'	8"

DOOR #	SIZE (x, y)	SWING
D2.1	6'0"	FRENCH REVERSE
D2.2	6'0"	RH
D2.2.1	6'0"	RH

1 FP2  
9:7 Scale: 1/2" = 1'-0"

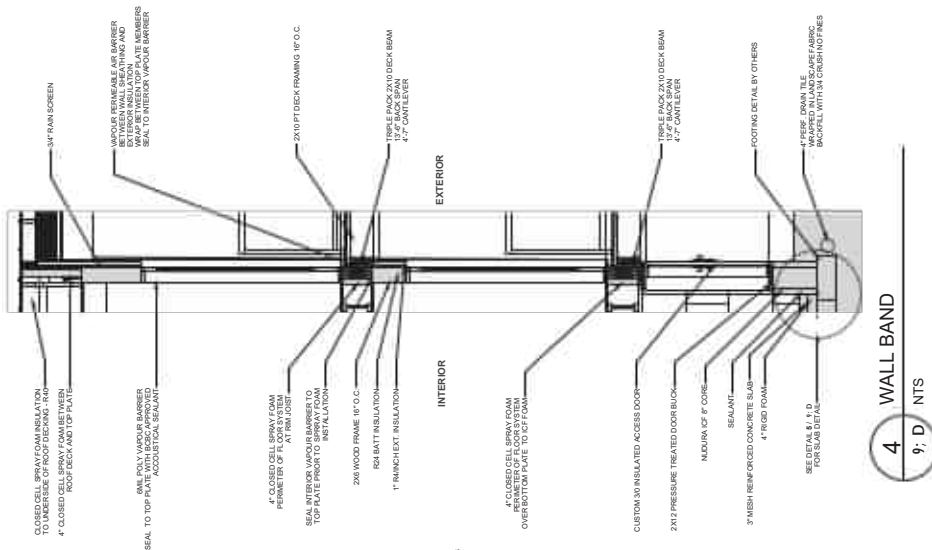
NOTES:  
1. DIMENSIONS INCLUDE EXTERIOR SHEATHING  
2. INTERIOR WALLS MEASURED FROM TO FRAMING  
3. INTERCONNECTED SMOKE CARBON MONOXIDE DETECTOR



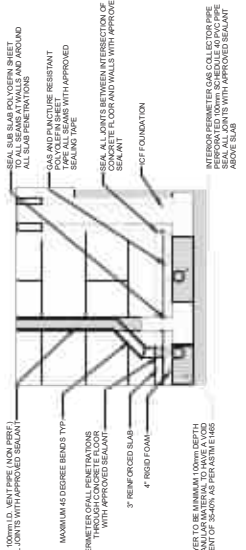
1 ROOF PLAN  
 9: E Scale: 1/2" = 1'-0"

NOTES:  
 TRUSS LAYOUT AND ENGINEERING TO BE PROVIDED BY TRUSS MANUFACTURER



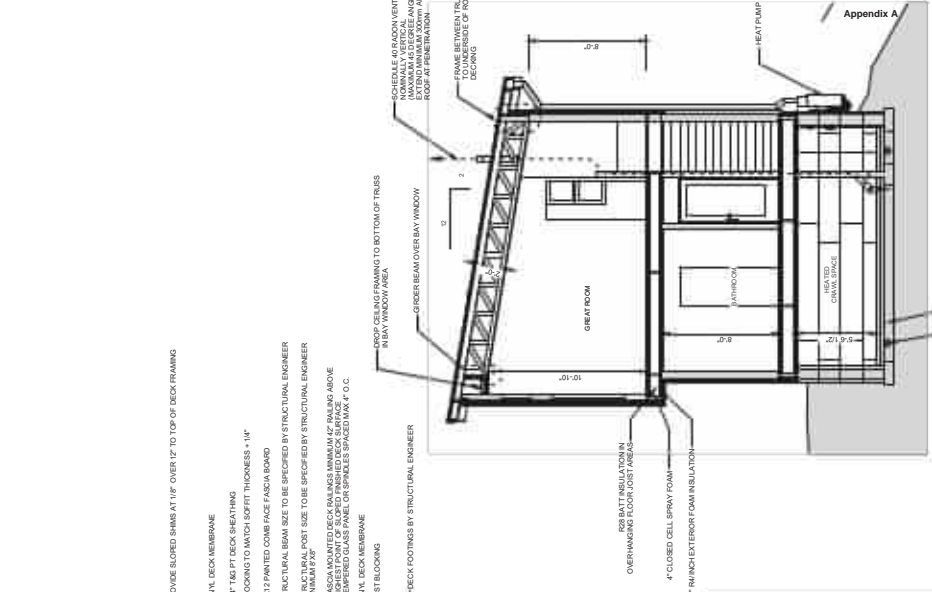


4 WALL BAND  
 9; D NTS

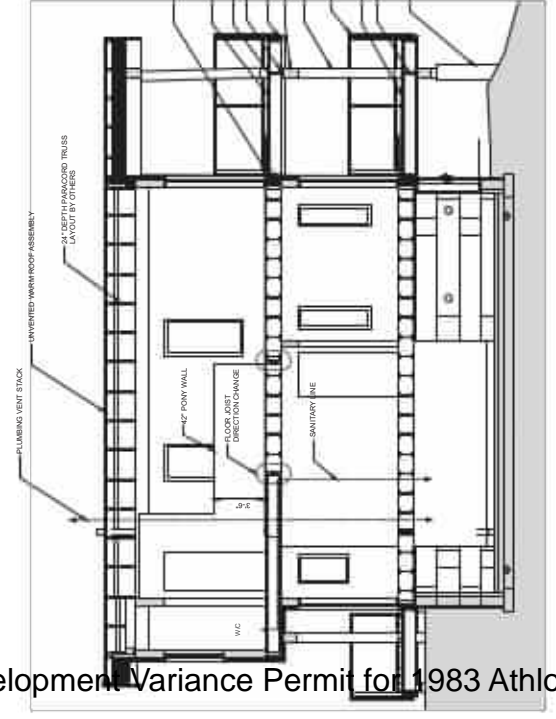
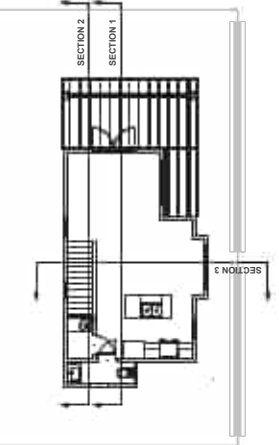


5 RADON VENTING  
 9; D NTS

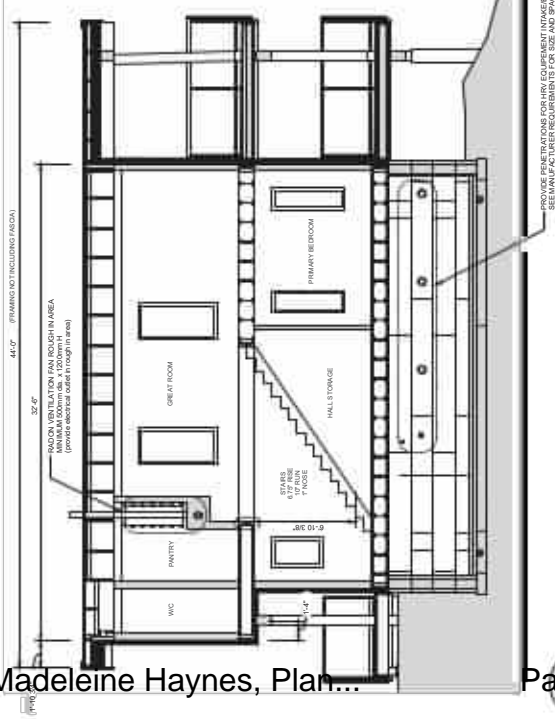
NOTE: REFER TO CANICGSB-148.1-2019



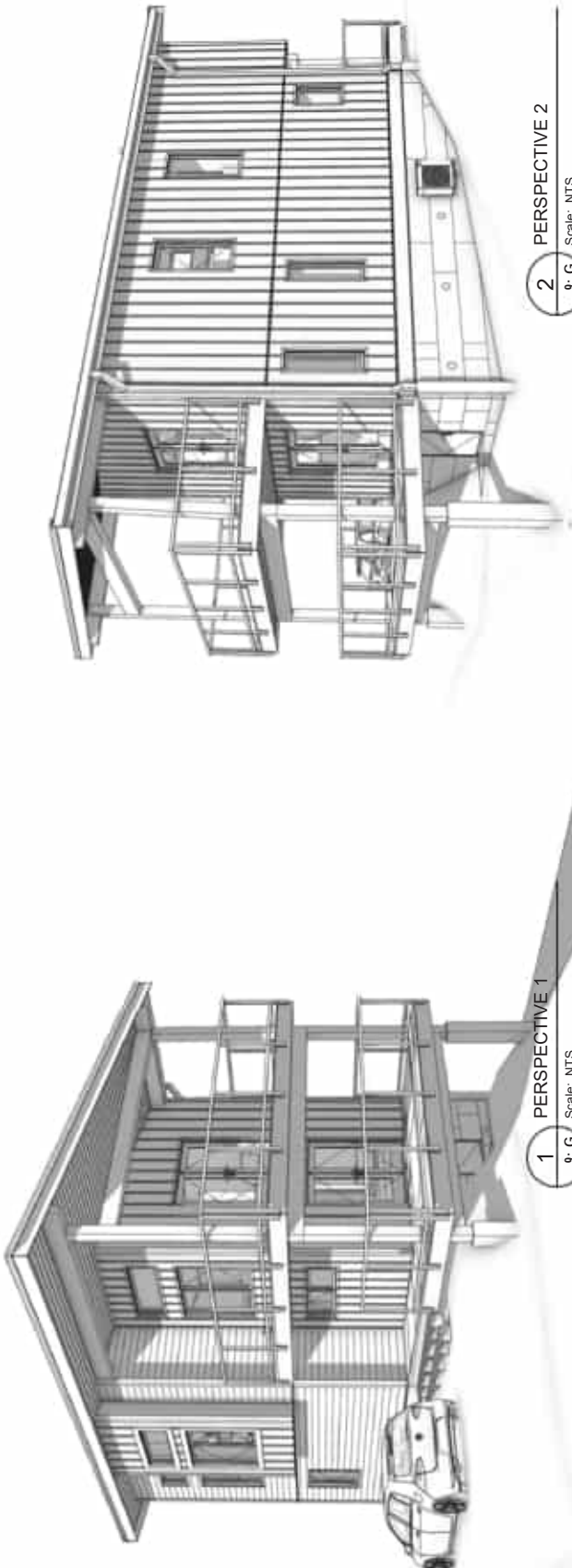
3 SECTION 3  
 9; D Scale: 1/4" = 1'-0"



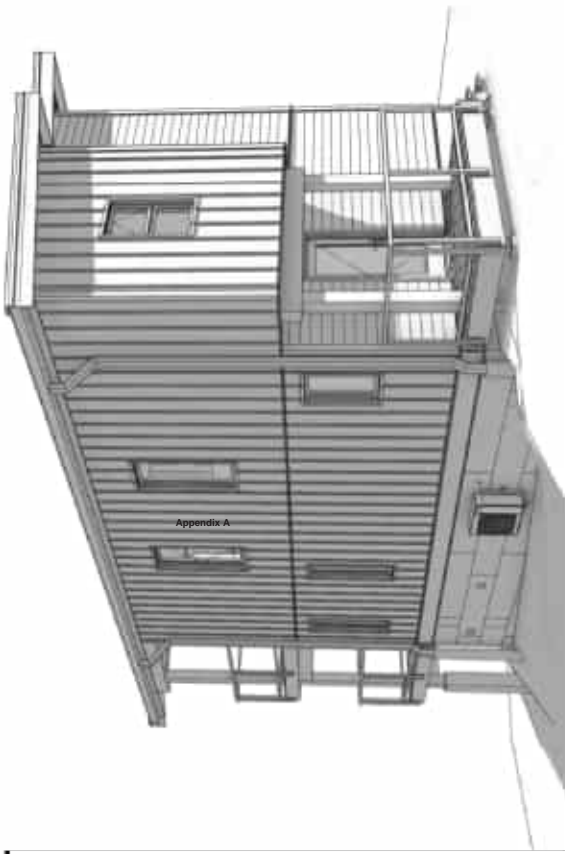
SECTION 1  
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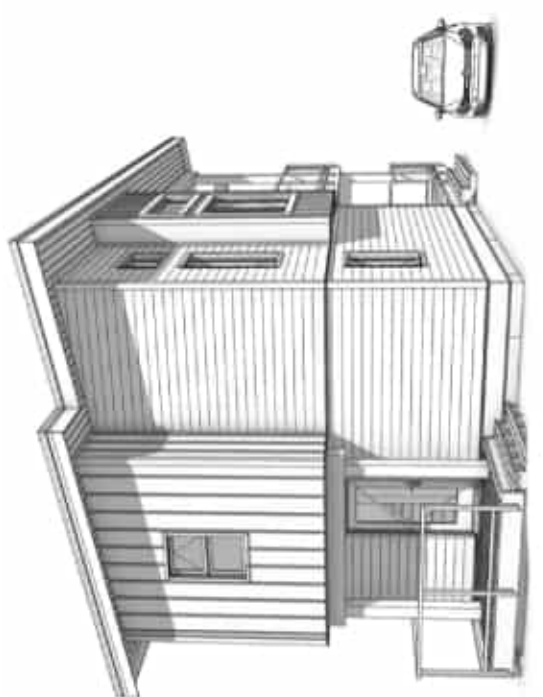
SECTION 2  
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1 PERSPECTIVE 1  
 9; G Scale: NTS



2 PERSPECTIVE 2  
 9; G Scale: NTS



3 PERSPECTIVE 3  
 9; G Scale: NTS

4 PERSPECTIVE 4  
 9; G Scale: NTS



**DISTRICT OF UCLUELET**

**Zoning Amendment Bylaw No. 1359, 2024**

A bylaw to amend the “District of Ucluelet Zoning Bylaw No. 1160, 2013”.  
(1983 Athlone Road)

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**WHEREAS** the District of Ucluelet Council by Bylaw No. 1160, 2013, adopted the Zoning Bylaw and now deems it appropriate to amend the Zoning Bylaw;

**NOW THEREFORE** the Council of the District of Ucluelet, in open meeting assembled, enacts as follows:

**1. Text Amendment:**

Schedule B of the *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as amended, is hereby further amended by adding a new subsection alphanumerically to the Vacation Rental (VR-1) zone such that the new section reads as follows:

“VR-1.1.2 Despite section VR-1.1.1 (2) above, *Accessory Residential Dwelling Unit* is permitted as a secondary use on the following lot:

(1) PID 018-515-371, Lot 1, District Lot 284, Clayoquot District, Plan VIP57627 [1983 Athlone Road]”

**2. Citation:**

This bylaw may be cited as “District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024”.

**FIRST NOTIFICATION OF FIRST READING** published this    day of    , 2024.

**SECOND NOTIFICATION OF FIRST READING** published this    day of    , 2024.

**READ A FIRST TIME** this    day of    , 2024.

**READ A SECOND TIME** this    day of    , 2024.

**READ A THIRD TIME** this    day of    , 2024.

**ADOPTED** this    day of    , 2024.

**CERTIFIED CORRECT:** "District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024."

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Marilyn McEwen  
Mayor

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Duane Lawrence  
Corporate Officer

**THE CORPORATE SEAL** of the  
District of Ucluelet was hereto  
affixed in the presence of:

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Duane Lawrence  
Corporate Officer

## DEVELOPMENT VARIANCE PERMIT DVP24-09

Pursuant to section 498 of the Local Government Act, R.S.B.C 2015 C.1 as amended:

1. This Development Variance Permit is issued to:

**Victor Wilson, Susan Wilson and Chantalle Holden** (the "Owners")

2. This Development Variance Permit applies to, and only to, those lands within the District of Ucluelet described below, and the buildings, structures, and other development thereon:

**1983 Athlone Road; PID 018515371, Lot 1, Plan VIP57627, District Lot 284, Clayoquot Land District** (the "Land")

3. The work authorized by this Permit may only be carried out:

- a. in compliance with the requirements of the *District of Ucluelet Zoning Bylaw No. 1160, 2013* ("zoning bylaw"), except where specifically varied or supplemented by this development variance permit and,
- b. in compliance with all federal, provincial, and municipal statutes, regulations, and bylaws.

4. This permit authorizes the following variances to *District of Ucluelet Zoning Bylaw No. 1160, 2013*, as identified on **Schedule A**:

- 1. A Front Yard Setback of 6m whereas section VR-1.6.1(2)(a) of the zoning bylaw indicates a minimum of 7.5m.**

5. The above variance is granted for the proposed Accessory Dwelling Unit (ADU) as shown on **Schedule A**. Should the buildings be later removed or destroyed, this Development Variance Permit shall cease to apply and the zoning bylaw requirements in effect at the time shall apply.

6. The Owner shall substantially commence the development within 24 months of the date of issuance, after which this permit shall be null and void.

7. Notice shall be filed in the Land Title Office under Section 503 of the Local Government Act, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.

8. This Permit is NOT a Building Permit.

**AUTHORIZING RESOLUTION** passed by the Municipal Council on the      <sup>th</sup> day of      , 2024.

**ISSUED** the      <sup>th</sup> day of      , 2024.

\_\_\_\_\_  
Bruce Greig  
Director of Community Planning









## REPORT TO COUNCIL

Council Meeting: December 10, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

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**FROM:** BRUCE GREIG, DIRECTOR OF COMMUNITY PLANNING

**FILE NO:** 6630-29 GROWTH

**SUBJECT:** ADDING MORE TOURIST ACCOMMODATION IN UCLUELET

**REPORT NO:** 24-123

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### RECOMMENDATIONS:

1. **THAT** Council indicate that as a starting point, and subject to public comment, it intends to amend the *Official Community Plan Bylaw No. 1306, 2022*, to reflect and accommodate a 30-year growth of \_\_\_\_\_ units of tourist accommodation, for long-range planning purposes.
2. **THAT** Council refer the above motion as a starting point for discussion with the Yuułuʔiłʔatḥ Government on what degree of tourism sector growth would be appropriate and sustainable within the traditional territory of the Yuułuʔiłʔatḥ.

### BACKGROUND:

An official community plan bylaw is adopted by a municipality to express the vision, values, objectives and policies which describe how the community sees itself, where it is going and what it plans to do in the foreseeable future. An official community plan bylaw (**OCP**) is a living document that is expected to be revisited and updated periodically, whether it is due to the passage of time or warranted by changing circumstances facing the community. Changing demographics, economic forces or new legislated requirements are typical catalysts for updating a community's OCP.

An OCP update is required in 2025 in response to new provincial housing legislation. All municipalities in BC are required to take steps to address the housing crisis. By December 31, 2024, municipalities are required to adopt a new or updated Housing Needs Report (**HNR**) aligned with new provincial criteria. An update and appendix to the *Ucluelet Housing Needs Report (2021)* was endorsed by Council at its [October 29, 2024](#), meeting.

In addition, all BC municipalities are required, by December 31, 2025, to update their OCP bylaw and Zoning bylaw to designate sufficient lands to meet the 20-year projected housing needs of the community as shown in the updated HNR.

A broad OCP bylaw and/or Zoning bylaw amendment process typically includes a robust process for public engagement and input to ensure amendments reflect the community's needs and desires.

In this context of an upcoming OCP amendment process, it is timely to seek Council direction on a number of building blocks that will combine to structure the draft OCP and Zoning bylaw amendments. At the end of this report staff have included a series of progressive steps that are intended to inform amendments to the OCP in 2025.

In a Committee-of-the-Whole meeting on [June 8, 2023](#), Council discussed the growth projections which informed the 2022 OCP. At that time Council discussion covered:

- Current growth and noted that it may trend closer to the medium projections than the “low(ish)” projections;
- The tools that can be used to influence growth and Council’s role in this sphere;
- Optimal growth levels;
- Housing affordability and economic implications;
- Infrastructure capacity and efficient infrastructure use;
- The impact of short-term accommodations on growth;
- Distinguishing the impact of B&Bs from hotels;
- Construction costs and housing affordability; and,
- Demand for attainable housing.

Recently, members of Council have indicated that elements of the 2022 OCP may not align with the desired Council direction. This report intends to prompt discussion and seek direction on the current Council alignment on one of the building blocks for the 2025 OCP amendment process: the amount of growth in the tourism accommodation sector that is supported by Council.

Future reports and discussions will seek direction on other building blocks such as: the pros and cons of various types and locations of tourism accommodation; various types and locations of residential housing; the types and locations of sufficient commercial and industrial lands to support the local economy; and the infrastructure and amenities to support the town in achieving its vision as a thriving community for the long term.

## DISCUSSION:

### **OFFICIAL COMMUNITY PLAN**

The 2022 OCP bylaw update process included a growth analysis that resulted in the bylaw endorsing a “low(ish)” growth scenario of roughly 1% annual growth. The tourist accommodation component of the endorsed growth scenario was 335 new units over the 30-year life of the plan (to 2050), or roughly 11 new units per year.

Changes to regulatory bylaws (Zoning bylaw, Business Licensing bylaw) have not been subsequently adopted by Councils to aim at the “low(ish)” growth target.

Since the adoption of the 2022 OCP bylaw, 155 units of new tourist accommodation have been created in Ucluelet (new business licences issued plus building permits issued and under construction). This is roughly 5 times the pace of the “low(ish)” growth target.

Development rates are never linear, but tend to be cyclical. The recent 30-year projections of growth based on the current regulations and trends are 1,209 new tourist accommodation units (an average of roughly 40 new units per year). This number was used in the recent [infrastructure analysis](#) that revisited the sewer master plan to update the anticipated future sanitary capacity needs of the community.

The key question for Council consideration, discussion and debate at this stage relates to **how much growth in the Tourist Accommodation sector does Ucluelet need &/or want over the short, medium and long term?** Other ways of approaching this are: What can the community, workforce, local infrastructure and the local environment sustain? What degree of tourism growth is the community comfortable with?

#### **REFERRAL TO YUULU?I?ATH:**

Referral and consultation with First Nations, neighbouring jurisdictions and affected agencies is a normal part of an OCP amendment process. Given the strong relationship between the District of Ucluelet and the Yuulu?i?ath Government, it would be appropriate to refer the draft direction of Council to the Yuulu?i?ath to respectfully seek feedback on their comfort with the anticipated amount of new tourist sector accommodation and activity that is being contemplated within their traditional territory as part of the regular Council and Yuulu?i?ath Executive community-to-community meetings. This would be consistent with respect to the adopted OCP policies 1.4, 1.8, 1.9 and Part 6 Regional Context:

*“Policy 1.4 Seek opportunities for mutual benefit when exploring topics of housing, economic development, transportation, utilities, tourism, emergency services and other matters which affect the wellbeing of our communities.*

*Policy 1.8 Endeavour to understand and consider Indigenous perspectives when making decisions on land-use issues.*

*Policy 1.9 Develop, in partnership with the Yuulu?i?ath Government, a protocol for referral and input on proposed developments and/or operations which might impact Yuulu?i?ath lands, resources and/or culture.*

#### **Part 6 Regional Context:**

*...The west coast has experienced rapid visitor growth and change in recent years. Acknowledging that the entire west coast subregion overlaps the traditional territories of*

*Nuu-Chah-Nulth peoples and nations, a co-developed regional strategy for sustainable development will include consideration of:*

- *environmental resilience and diversity*
- *social and cultural resilience for both indigenous and non-indigenous members of the community*
- *carrying capacity*
- *equity and opportunities for the economic development aspirations of both indigenous and non-indigenous communities*

*This may mean throttling back on the amount, and/or adjusting the types, of development within the municipal boundaries of Ucluelet and Tofino. At the same time the benefits of keeping towns compact can include reduced impact on the environment, efficient service delivery, and achieving the “critical mass” that can increase community energy, interactions and character.*

*Developing a strategy to meet the needs of the environment and the aspirations of all communities will be a balancing act.*

*This OCP incorporates, as a starting point, plans and policies directing a slower, lower approach to growth and development - appropriate to the current context in the west coast region. Map 9 shows the “Low(ish) Growth Scenario” analysis which informed the plan.*

**Objective 6C** *Consider municipal matters in the context of the whole west coast subregion and be a good neighbour to the communities of Tofino, First Nations, the Pacific Rim National Park Reserve and ACRD Electoral Area “C”.*

**Policy 6.2** *In consultation with neighbouring jurisdictions, develop and adopt a Regional Context Statement for Ucluelet to further define the long-term role of the community within the west coast subregion.*

**Policy 6.3** *In partnership with all neighbouring jurisdictions, develop a regional strategy for sustainable development of the west coast to meet the needs of the community and protect the ecology of this special place.”*

#### **POLICY OR LEGISLATIVE IMPACTS:**

Adoption of a motion from Council indicating a draft number of new tourist accommodation units that it endorses over the long term will provide a clear starting point for community discussion. It would also provide clarity on one piece of the overall development picture, as the community approaches updating its OCP bylaw in 2025. Council indicating a preferred number of new units would not set that number in stone; the overall growth target would be further clarified by subsequent discussions of housing, commercial and industrial growth. These would then focus a process of public engagement which could result in refinements of the OCP target to meet community expectations. Ultimately, aligning growth to the community target may require that Council make changes to the regulatory bylaws that directly shape the amount and pace of new development in Ucluelet.

**NEXT STEPS:**

Following endorsement of a draft tourism accommodation sector growth target by Council, staff suggest that the next steps would be:

- referral to Yuułu?i?ath Government for discussion and comment.
- report and Council discussion on the pros and cons of different types and locations for future tourist accommodation.
- report and Council discussion on the pros and cons of different types and locations for future housing (in the context of the updated HNR and provincial legislation).
- report and Council discussion on the desired process for OCP and Zoning bylaw amendments including opportunities for public input and engagement.
- report and Council discussion on draft OCP and Zoning bylaw amendments, incorporating Council and public input to date.
- formal bylaw amendment process including public hearing(s).

**Respectfully Submitted:** Bruce Greig, Director of Community Planning  
Duane Lawrence, Chief Administrative Officer







## REPORT TO COUNCIL

Council Meeting: December 10, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

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**FROM:** JAMES MACINTOSH, DIRECTOR OF ENGINEERING SERVICES

**FILE No:** 3900-25

**SUBJECT:** SUBDIVISION CONTROL BYLAW RFP

**REPORT No:** 24-125

**ATTACHMENT(s):** APPENDIX A – OCP SCHEDULE 'B' TRANSPORTATION NETWORK  
APPENDIX B – OCP SCHEDULE 'C' PARKS AND TRAIL NETWORK  
APPENDIX C – 2011 TRANSPORTATION PLAN 'FIGURE 8 TRANSPORTATION NETWORK'  
APPENDIX D – DRAFT STREETScape CROSS SECTIONS & COMMUNITY CLASSIFICATIONS MAP  
APPENDIX E – SUBDIVISION CONTROL BYLAW 1989, BYLAW No. 521

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### RECOMMENDATION(s):

**THAT** Council affirm that the process, support documents, and deliverables outlined in Report No. 24-125 align with Council's expectations for the development of a bylaw for Council consideration, which if adopted, would replace Ucluelet Subdivision Control Bylaw No. 521.

### BACKGROUND:

Adopted in 1989, Ucluelet's Subdivision Control Bylaw No. 521 is overdue for updating and replacement. A subdivision control bylaw establishes clear standards to guide how new developments integrate with a town's utilities, streetscapes, and infrastructure. It ensures roads, sidewalks, and public spaces support efficient transportation and connectivity while preserving the town's character and balancing aesthetic appeal with practical needs like drainage and utility access.

A subdivision control bylaw is essential for ensuring that new subdivisions integrate effectively with existing infrastructure, supporting cost-effective and sustainable development. However, outdated bylaws like Bylaw 521, which was adopted in 1989, may no longer align with current standards and best practices. This misalignment can contribute to inefficiencies, unclear guidelines, and challenges in integrating roads, utilities, and stormwater systems. Updating the bylaw is necessary to modernize development processes and ensure they meet the community's evolving needs. In 2023, the District of Ucluelet received funding from the Housing Accelerator Fund (HAF) to streamline development processes and support affordable, diverse, and climate-resilient communities. The replacement of Bylaw 521 was identified as one of the HAF projects to streamline development, and \$50,000 was dedicated from the HAF funding to this effort.

The updated bylaw will align with the Official Community Plan (OCP), which emphasizes low-impact design, environmental protection, and integrated transportation facilities. Key OCP policies include:

- **Policy 2.108:** Require vehicle, pedestrian, and bicycle facilities in all new developments.
- **Policy 2.84:** Incorporate low-impact design principles and minimize paved surfaces.
- **Policy 3.165:** Adopt features like open drainage, ecological landscaping, and pedestrian connectivity to enhance sustainability.
- **Policy 3.173:** Preserve trees and forest cover through arborist assessments.
- **Policy 4.5:** Update standards to reduce environmental impact, operational costs, and support multi-modal networks.

A key focus of the bylaw update is revising the town’s outdated road and streetscape classifications. Staff have initiated work on new streetscape cross-sections (**Appendix D**) to address long-standing issues with the layout and continuity of streets, sidewalks, pathways, bike lanes, utilities, and landscaping. The updated classifications will provide clear direction for arterial, collector, and local streets, with subcategories tailored to Ucluelet’s unique infrastructure needs and usage patterns.

The proposed classification system, which mirrors standard practices, will be refined through public engagement, Council, and consultant input. Foundational references such as the OCP’s Schedule B (Transportation Network), Schedule C (Parks and Trails Network), and the 2011 Transportation Plan will guide the process, ensuring the new classifications address current challenges while preparing for future development.

#### PROJECT SCOPE AND CRITICAL PATH

The project to replace Bylaw 521 will utilize the allocated \$50,000 to engage legal and technical professionals. A legal expert will draft the bylaw framework, while the design guidelines and technical specifications will be prepared by a prime consultant, who may engage other domain-specific experts.

The project, expected to take 4-6 months, includes:

1. **Document Review:** Analyze relevant plans, bylaws, and policies (e.g., OCP, master plans, existing bylaws).
2. **Draft Guidelines:** Develop updated design guidelines and technical specifications, including sustainable and innovative practices.
3. **Public Consultation:** Gather input on subjective elements like streetscape design through open houses and workshops.
4. **Council Engagement:** Present findings to the Committee of the Whole.

5. **Finalization:** Incorporate feedback into a finalized bylaw and design guidelines for Council's consideration.

This comprehensive approach ensures the updated bylaw reflects modern standards, integrates with existing infrastructure, and aligns with the community's vision for sustainable and functional development.

## THE BYLAW

The legal framework of Ucluelet's Subdivision Control Bylaw establishes the authority for requiring works and services necessary for land development and subdivision. To streamline the update, the District will be proposing to use Tofino's Subdivision and Development Servicing Standards [Bylaw No. 1201 \(2014\)](#) as a foundation. This approach leverages cost savings and ensures consistency for developers working across both communities. A legal expert will review and integrate relevant technical and non-technical sections of Tofino's bylaw, adapting elements to suit Ucluelet's unique needs and maintaining an appropriate level of detail. .

## THE DESIGN GUIDELINES AND SPECIFICATIONS

### TASK 1 – DOCUMENT REVIEW AND ANALYSIS:

- a) Review and incorporate Tofino's Bylaw No. 1201 (2014).
- b) Review existing and relevant District bylaws, policies, and plans, including:
  - a. Subdivision Control Bylaw 1989, Bylaw No 521
  - b. [District of Ucluelet Official Community Plan](#)
  - c. [Development Cost Charges Bylaw](#)
  - d. Storm Water Master Plan
  - e. [Water Master Plan](#)
  - f. [Sanitary Master Plan](#)
  - g. [Transportation Plan](#)
  - h. [Building Bylaw](#)
  - i. [Zoning Bylaw](#)
  - j. [Fire Services Development Design Guidelines](#)
  - k. [Tsunami Risk Tolerance – Interim Policy](#)
- c) Review existing street classifications, the unique historical and environmental setting of Ucluelet, and the rough sketches supplied as **Appendix D**.
- d) Recommend low-impact, green, and innovative options for inclusion in the project, covering:
  - a. Environmental best practice
  - b. Rainwater management best practice
  - c. Innovative standards such as rainwater gardens, infiltration swales, infiltration bulges, pervious paving

- d. Relevant sustainable design details for paved sidewalks and pathways
- e) Identify best practices from sources such as:
  - a. Master Municipal Construction Documents (MMCD)
  - b. BC Ministry of Transportation and Infrastructure (MOTI) Road Design Guidelines
  - c. BC Stormwater Source Control Guidelines
  - d. Stormwater Management Manual for BC
  - e. BC Water and Sewerage Standards
  - f. BC Building and Plumbing code
  - g. Accessibility and universal standards
  - h. Environmental standards
  - i. Archaeological best practices
  - j. Dark Sky street lighting principles
- f) Recommend where the specific streetscape classifications developed as part of this project are to occur in both existing neighborhoods and in new development.

**TASK 2 – PREPARATION OF DRAFT AMENDMENTS TO DESIGN GUIDELINES AND TECHNICAL SPECIFICATIONS**

- a) The consultant, in collaboration with staff, will review all relevant documentation, including existing infrastructure, policies, master plans, best practices, and desired streetscape options. Based on this input, the consultant will develop draft schedules, road cross-sections, and technical details.
- b) The consultant will prepare a draft amendment to the OCP’s Schedule B, identifying specific street sections and areas where upgrades are needed. For asymmetrical street cross-sections, the consultant will propose solutions, such as including sidewalks on one side.
- c) The consultant will design two road cross-section options for small residential neighborhoods (<650m<sup>2</sup> lots). One will be a lower-cost, curb-free design, while the other will feature fully curbed streets. Both designs will incorporate innovative features, such as rainwater gardens and infiltration swales.
- d) The consultant will prepare a Class-D level cost estimate for the two road cross-section options, clearly identifying the cost differential between the designs.

**TASK 3 – PUBLIC ENGAGEMENT AND COMMITTEE OF THE WHOLE DIRECTION**

- a) Working with staff, the consultant will coordinate an open house to present draft materials to the public and development community. The open house will solicit feedback on subjective elements like streetscape appearance and character.
- b) Following the open house, the consultant will work with staff to prepare materials for a Committee of the Whole presentation, seeking Council direction on incorporating public input into the final bylaw.



**TASK 4 – FINALIZATION**

- a) The legal expert will finalize the draft bylaw.
- b) The prime consultant will finalize the draft design guidelines and technical specifications.
- c) Staff will consolidate the bylaw, design guidelines and technical specification and present it to Council for consideration..

**OPTIONS SUMMARY**

**Option A, ‘Approve the Proposed Process with Standard Engagement,’** involves approving the proposed process, support documents, and deliverables as outlined. This includes one standard two-way open house to share concepts and gather public input, a typical engagement level consistent with other recent District projects. This approach ensures the project proceeds on schedule and within budget, minimizing delays.

**Option B, ‘Support the General Direction with Enhanced Engagement,’** supports the general direction but includes a recommendation for increased public engagement. This would involve two or more open houses and potentially workshops with specific community groups. Enhanced engagement would require an additional \$10,000 from the HAF funding, which is available for use if Council chooses. While this option provides opportunities for more inclusive community input, it may extend the timeline and increase costs.

**Option C, ‘Reject the Project,’** involves rejecting the proposed project, deferring, or halting the bylaw update process. While this avoids immediate costs, the town would continue to operate under an outdated bylaw, leading to inefficiencies, development delays, and higher future expenses. Additionally, rejecting the project would fail to meet a key condition of the HAF program, risking the associated funding benefits.

**ANALYSIS OF OPTIONS:**

<b>A</b>	Council affirms the direction	<b><u>Pros</u></b>	<ul style="list-style-type: none"> <li>• Maintains the current timeline and budget without requiring additional resources</li> </ul>
		<b><u>Cons</u></b>	<ul style="list-style-type: none"> <li>• Limits public engagement to standard practices, potentially missing opportunities for broader community involvement</li> </ul>
		<b><u>Implications</u></b>	<ul style="list-style-type: none"> <li>• The project would move forward on the anticipated timeline and within the currently available budget</li> </ul>
<b>B</b>	Council supports the general direction, with increased engagement	<b><u>Pros</u></b>	<ul style="list-style-type: none"> <li>• Allows for broader community involvement, potentially resulting in a bylaw more reflective of diverse perspectives</li> </ul>
		<b><u>Cons</u></b>	<ul style="list-style-type: none"> <li>• Increases the budget and may introduce delays to the timeline</li> </ul>
		<b><u>Implications</u></b>	<ul style="list-style-type: none"> <li>• Increased costs and time</li> </ul>

	<u>Suggested Motion</u>	<p><b>THAT</b> Council support the general direction of the proposed process, support documents, and deliverables, with the addition of enhanced public engagement, including two or more open houses and potential work shops with specific community groups; and,</p> <p><b>THAT</b> an additional \$10,000 to be allocated to the project from the Housing Accelerator Fun to support expanded engagement efforts.</p>
C Council rejects the direction	<u>Pros</u>	<ul style="list-style-type: none"> <li>• Immediate savings in costs, with no commitment to move forward</li> </ul>
	<u>Cons</u>	<ul style="list-style-type: none"> <li>• Continuing with an outdated bylaw will lead to inefficiencies, development delays, and possible increased costs in the future</li> <li>• Rejecting the bylaw update ignores a condition of the HAF program</li> </ul>
	<u>Implications</u>	<ul style="list-style-type: none"> <li>• The town risks missing out on opportunities for streamlined development, which could result in higher long-term costs and further delays</li> </ul>
	<u>Suggested Motion</u>	<ul style="list-style-type: none"> <li>• No motion is required</li> </ul>

**POLICY OR LEGISLATIVE IMPACTS:**

The project as described in this report would result in preparation of a bylaw for Council consideration which, if adopted would replace Ucluelet Subdivision Control Bylaw No. 521.

**NEXT STEPS:**

The Next steps would be for project to go to RFP and the successful proponent to complete the project as per the scope listed above in this report.

**Respectfully Submitted:** James Macintosh, Director of Engineering Services  
 Duane Lawrence, CAO





# DISTRICT OF UCLUELET

## Official Community Plan

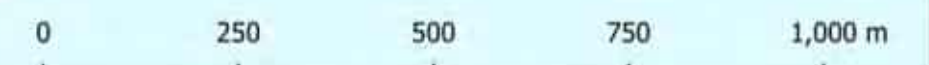
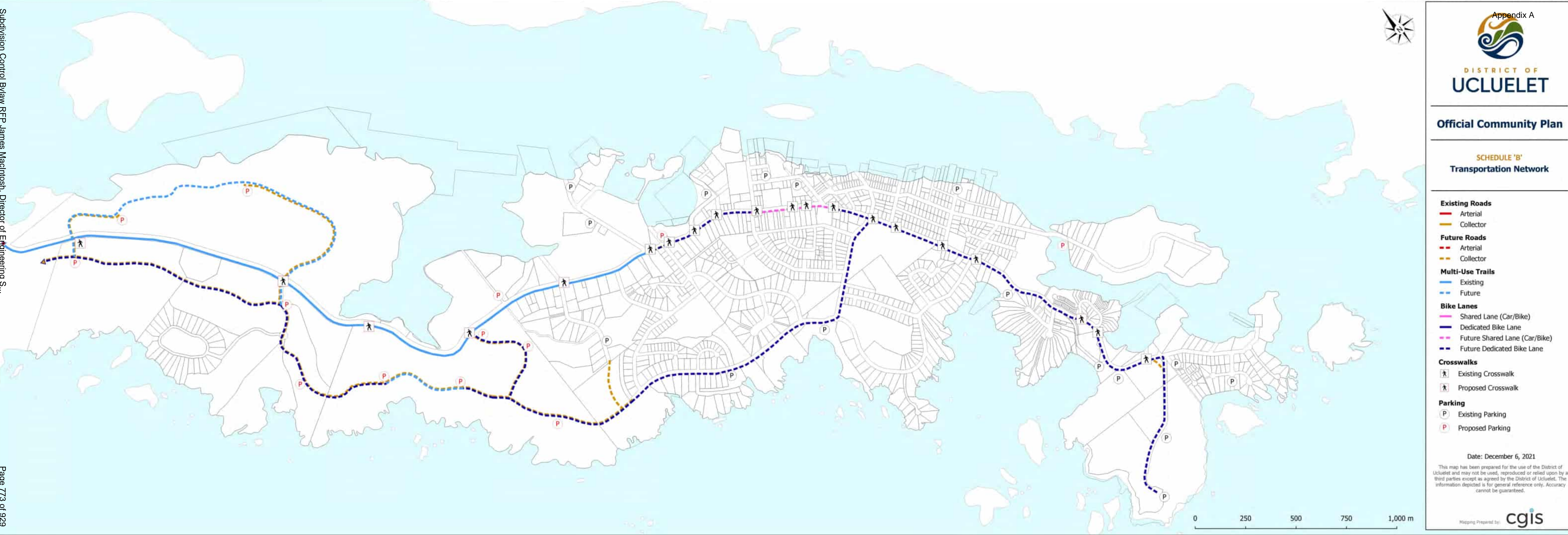
### SCHEDULE 'B' Transportation Network

- Existing Roads**
  - Arterial
  - Collector
- Future Roads**
  - Arterial
  - Collector
- Multi-Use Trails**
  - Existing
  - Future
- Bike Lanes**
  - Shared Lane (Car/Bike)
  - Dedicated Bike Lane
  - Future Shared Lane (Car/Bike)
  - Future Dedicated Bike Lane
- Crosswalks**
  - Existing Crosswalk
  - Proposed Crosswalk
- Parking**
  - Existing Parking
  - Proposed Parking

Date: December 6, 2021

This map has been prepared for the use of the District of Ucluelet and may not be used, reproduced or relied upon by a third parties except as agreed by the District of Ucluelet. The information depicted is for general reference only. Accuracy cannot be guaranteed.

Mapping Prepared by: **cgis**









# DISTRICT OF UCLUELET

## Official Community Plan

### SCHEDULE 'C' Parks & Trails Network

- Sidewalk - 2 Sides
- Future Sidewalk - 2 Sides
- Sidewalk - 1 Side
- Future Sidewalk - 1 Side
- Wild Pacific Trail
- Future Wild Pacific Trail
- Safe Harbour Trail
- Future Safe Harbour Trail
- Harbour Walk
- Future Harbour Walk
- Pedestrian Connectors
- Key Active Transportation Generators
- Park / Open Space
- Future Park / Open Space
- View Point
- Future View Point
- Future Park Facility

Date: December 6, 2021

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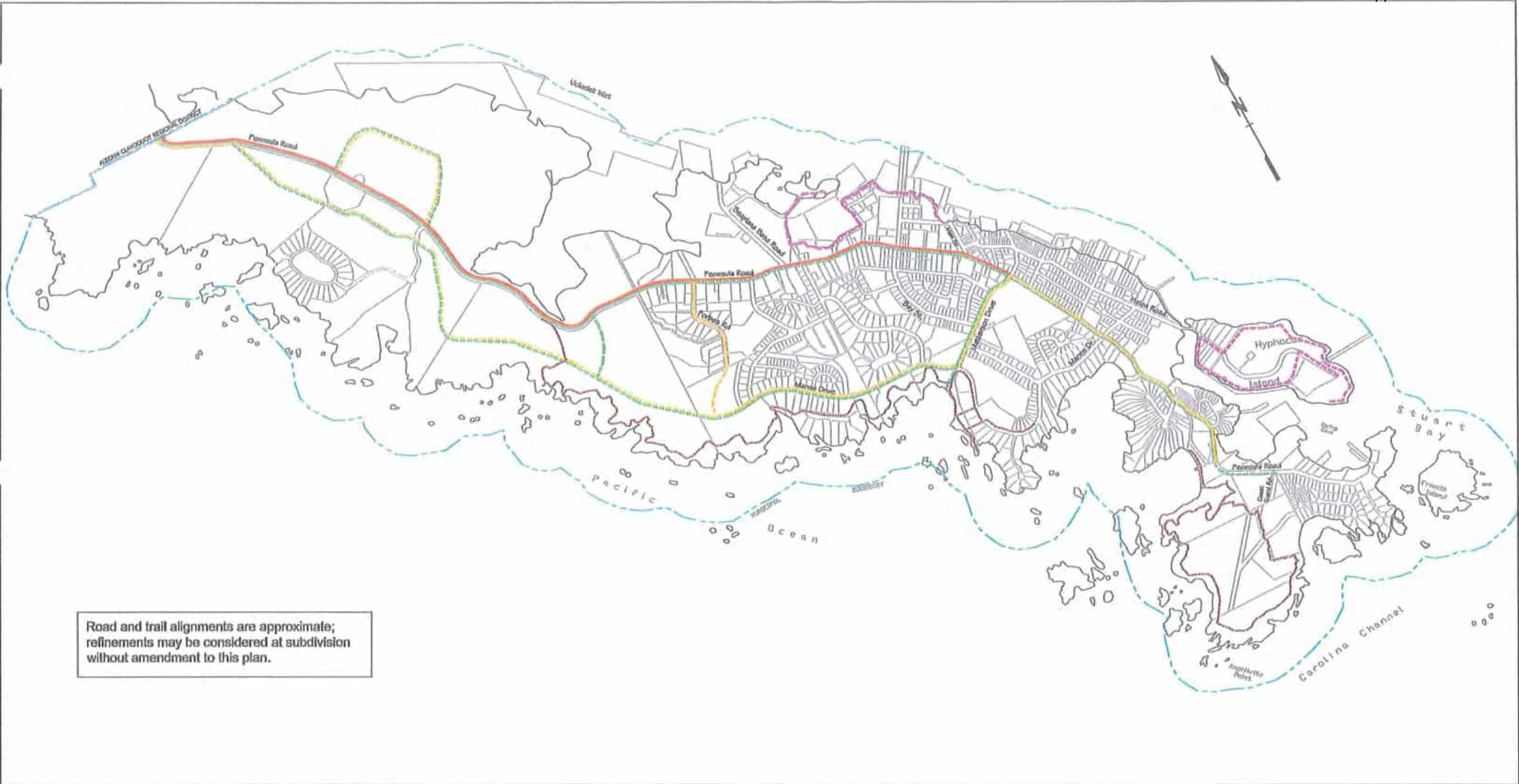
Mapping Prepared by:



On Peninsula Road the 1 sided sidewalk between Seaplane Base Road and Marine Drive is to be upgraded to 2 sided.







Road and trail alignments are approximate; refinements may be considered at subdivision without amendment to this plan.

**AECOM** Date: 4-Oct-11

This map has been prepared for the use of the District of Ucluelet and may not be used, reproduced or relied upon by third parties except as agreed by the District of Ucluelet. The information depicted is for general reference only. Accuracy cannot be guaranteed.

**Legend**

- Arterial - Existing
- Collector - Existing
- Collector - Proposed
- Pedestrian Trail - Proposed
- Multi Use Pathway - Existing
- - - Multi Use Pathway - Proposed
- - - - - Wild Pacific Trail

0 250 500 750 1,000 metres

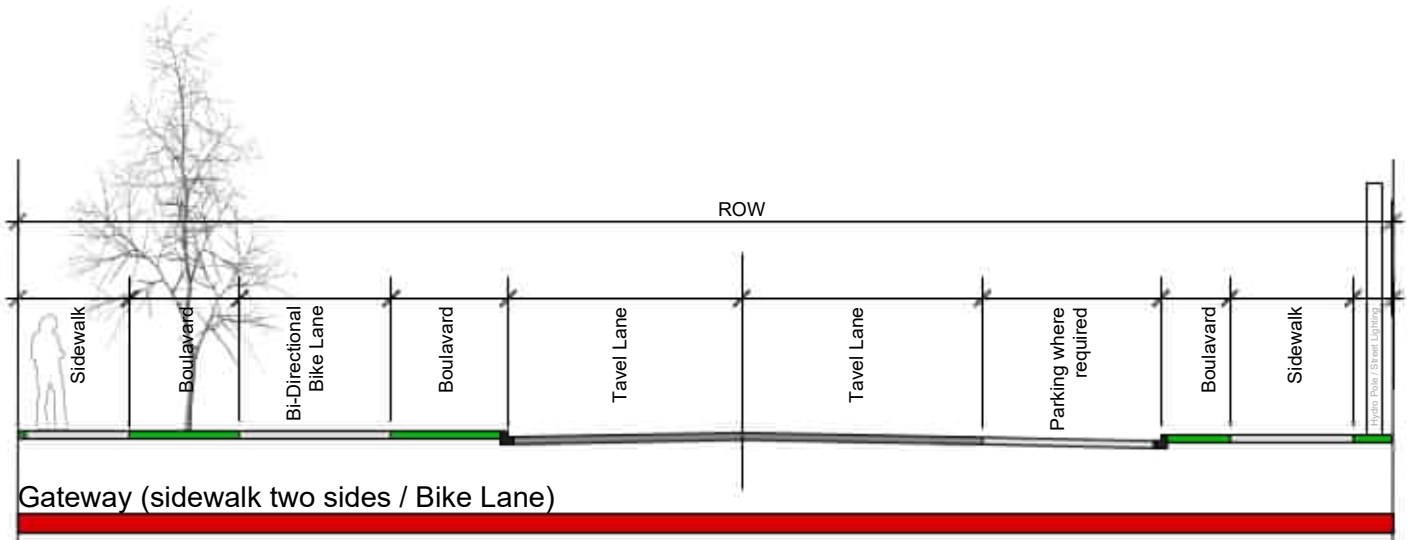
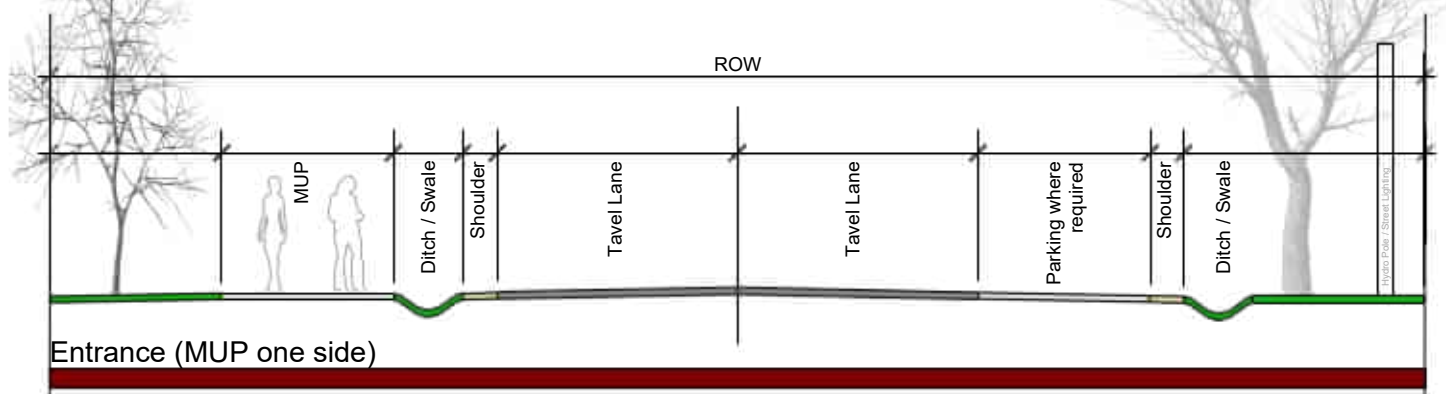
**District of Ucluelet**  
Official Community Plan  
BYLAW No. \*\*\*\*

**Figure 8:**  
**Transportation Network**

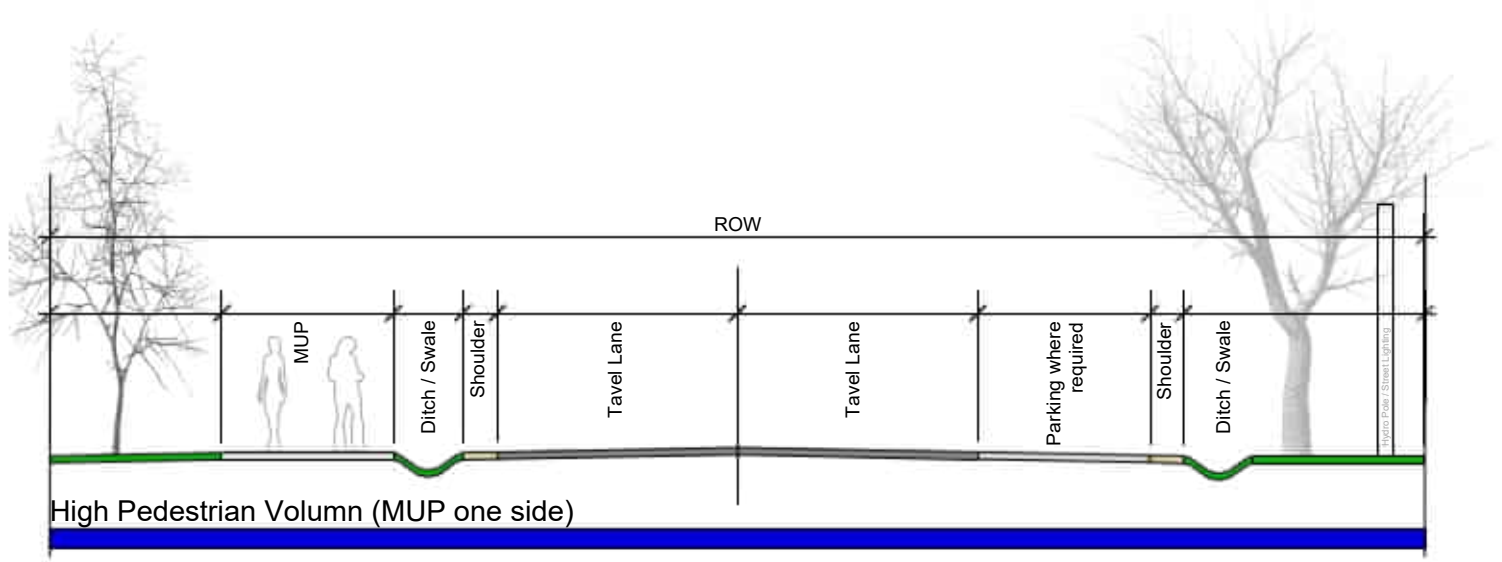
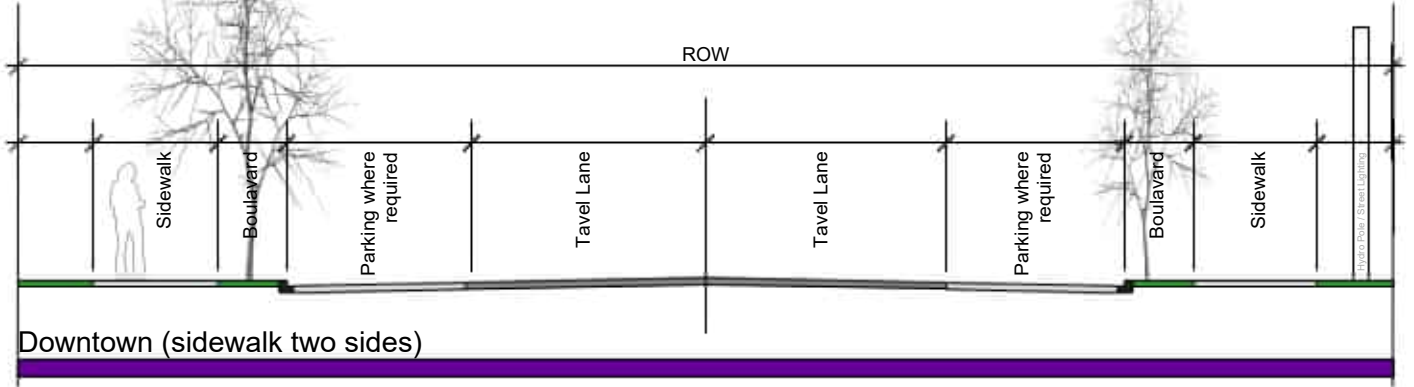
Figure 8: Transportation Network



# Arterial

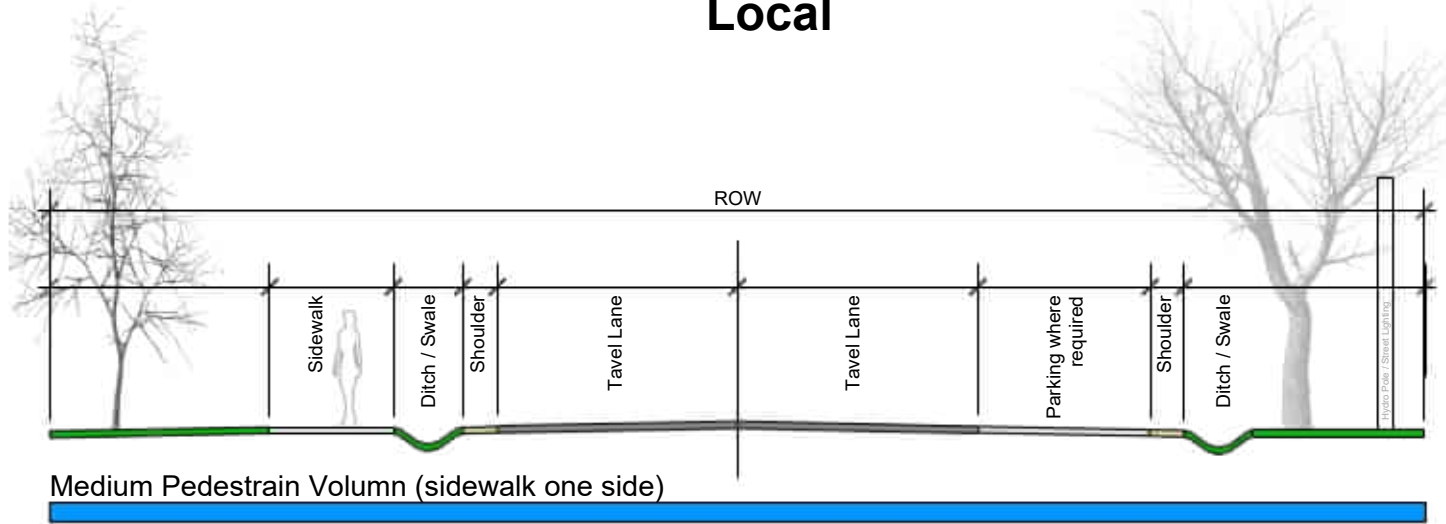


# Collector

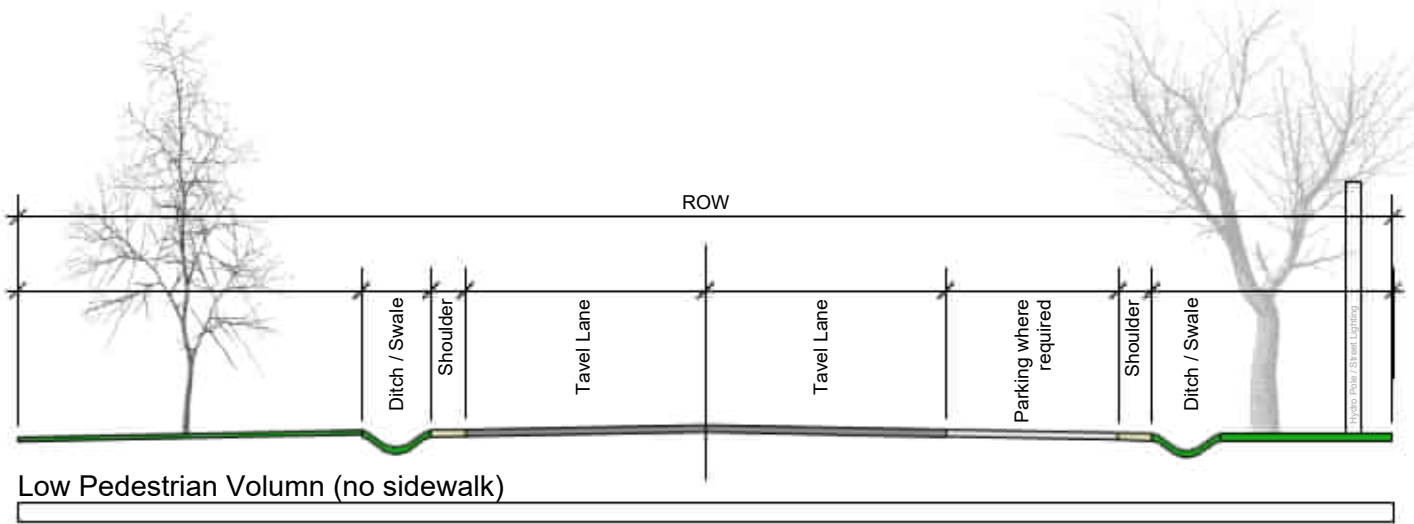




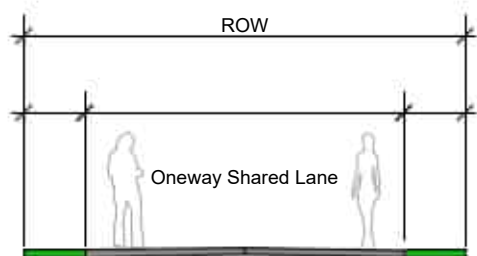
# Local



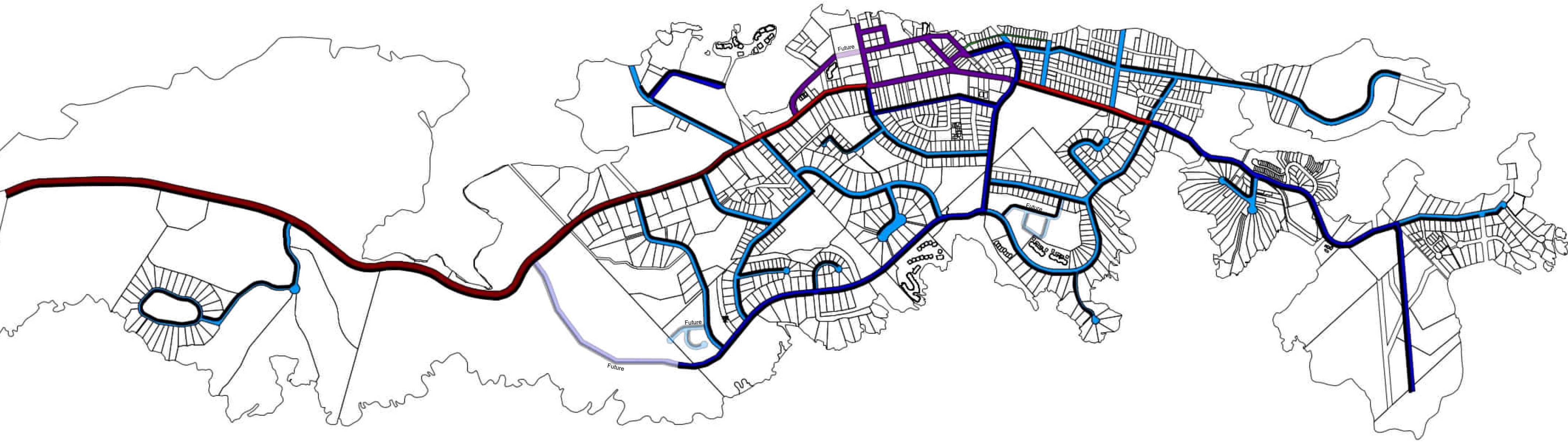
Medium Pedestrian Volume (sidewalk one side)



Low Pedestrian Volume (no sidewalk)



Imperial Lane (shared lane / woonerf)



<b>Arterial</b>	Entrance (MUP one side)	
	Gateway (sidewalk two sides / Cycle Track one side)	
<b>Collector</b>	Downtown (sidewalk two sides)	
	High Pedestrian Volumn (MUP one side)	
<b>Local</b>	Medium Pedestrain Volumn (sidewalk one side)	
	Low Pedestrian Volumn (no sidewalk)	
	Imperial Lane (shared lane / woonurf)	

**District of Ucluelet Draft Street Typology**

CORPORATION OF THE  
VILLAGE OF UCLUELET

SUBDIVISION CONTROL BYLAW 1989  
BYLAW NO. 521

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3	STANDARD BEDDING FOR CLASS A, B & C SEWER PIPE
4	STANDARD SEWER SERVICE CONNECTION
5	SEWER RISER SERVICE CONNECTION
6	STANDARD BUILDING SERVICE LOCATIONS
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**CORPORATION OF THE VILLAGE OF UCLUELET  
SUBDIVISION CONTROL BYLAW 1989  
BYLAW NO. 521**

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Whereas the Municipal Council may by bylaw under Sections 989, 990 and 991 of the Municipal Act regulate and require the provision of works and services as a condition of the approval of a subdivision;

Now therefore the Municipal Council of the Village of Ucluelet in open meeting assembled, enacts as follows:

**SECTION 1 - INTRODUCTION**

**1.1 TITLE**

This Bylaw may be cited for all purposes as the "Village of Ucluelet Subdivision Control Bylaw 1989 No. 521".

**1.2 SCHEDULES**

Schedules "A", "B", "C", "D", "E", "F" and "Drawings" are made part hereof.

**1.3 REPEAL**

The Corporation of the Village of Ucluelet Bylaw No. 351, and subsequent amendments, to provide for the control of the subdivision of land, are hereby repealed.

**1.4 INTERPRETATION/DEFINITIONS**

In this Bylaw unless the context otherwise requires:

**"Access"** is a means of approach to a parcel; typically considered a driveway.

**"Access Strip"** means that part of a Panhandle Lot that provides access to a highway.

**"Agreement"** means a Construction Agreement, a Maintenance Agreement or a Works and Services Agreement.

**"Applicant"** means a person applying for the approval of a subdivision whether as the owner of the property proposed to be subdivided or as authorized agent in writing of the owner.

**"Approving Officer"** means the person duly authorized by the Municipal Council to act as Approving Officer pursuant to the provisions of the Land Title Act and the Municipal Act.

**"Arterial Highway"** means a major highway serving as a major traffic route between areas of the Municipality.

...1

**"Boulevards"** means that portion of a highway between the curb lines or the lateral boundary lines of a roadway and the adjoining parcel or between curbs on median strips or islands, but does not include any curbs, sidewalks, ditches or driveways.

**"Clerk"** means the Clerk of the Municipality appointed under the Municipal Act.

**"Collector Highway"** means a highway serving several local highways and may serve as a connector between neighbourhoods.

**"Common Access"** means an access used by two or more adjoining parcels.

**"Community Sewer System"** means a sewage collection and disposal system that is owned and operated by the Municipality.

**"Community Water System"** means a system of waterworks approved, owned and operated by the Municipality, Improvement District or a water utility defined in the Water Utility Act.

**"Cul-de-sac"** means a street, the end of which is permanently closed, either by subdivision design (i.e. street and lot configuration) or by a natural feature (e.g. rock bluff).

**"Developer"** means the Applicant or his contractor or his authorized agent appointed in writing.

**"Final Approval"** means approval by the Approving Officer affixing his signature to the subdivision plan pursuant to Section 88 of the Land Title Act.

**"Frontage"** means that length of a lot boundary which immediately adjoins a highway other than a lane or a walkway.

**"Highway"** includes a public street, cul-de-sac, path, walkway, trail, lane, bridge, road, thoroughfare and any other way, but does not include a private right-of-way on private property and is measured from parcel line to parcel line.

**"Lane"** means a highway more than 3 metres but not greater than 8 metres in width, intended to provide "secondary" access to parcels of land, but a lane is not a partial highway.

**"Maintenance Period"** means the length of time that the works and services installed in connection with the proposed subdivision are to be maintained free of defects by the developer.

**"Medical Health Officer"** means the Medical Health Officer appointed under the Health Act for the Village of Ucluelet.

**"Municipality"** means the Corporation of the Village of Ucluelet, and its agents who are duly appointed.

**"Natural Boundary"** means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual, and so long continued as to mark on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation and the nature of soil.

...2

**"Owner"** means in respect of a parcel, the registered owner of an estate in fee simple or the registered holder of registered agreement for sale.

**"Panhandle Lot"** means any parcel which is serviced and gains highway frontage through the use of a narrow strip (access strip) which is an integral part of the parcel.

**"Parcel"** means a lot, block or other area in which land is held or into which land is subdivided.

**"Potable Water"** means water which is approved for drinking purposes by the Medical Health Officer.

**"Preliminary Approval"** means the approval given by the Approving Officer for the conceptual design of a subdivision but does not mean final approval of any aspect of the subdivision.

**"Professional Engineer"** means a person who is registered or duly licensed as such under the provisions of the Engineering Profession Act of British Columbia.

**"Proven Supply"** means that a minimum of 2000 litres per day of potable water has been proven to be available to the satisfaction of the Municipality.

**"Public Utility"** means the lawful distribution or distributor of electricity, gas, water, telephonic or television signals under the Utilities Commission Act, the Municipal Act, Water Utility Act or a Statute of Canada.

**"Residential Highway"** means a highway serving a residential neighbourhood not intended to carry traffic from one neighbourhood to another.

**"Right-of-Way"** includes land or an interest in land acquired for the purpose of:

- (1) public rights of passage with or without vehicles; or
- (2) constructing, maintaining, or operating any railway; or
- (3) erecting and maintaining any pole-line; or
- (4) laying, placing and maintaining drains, ditches, water courses, pipes, transmission lines, or wires for the conveyance, transmission, or transportation of water, gas electrical power, communication, or for the disposal of sewage;

or any right-of-way of a like nature or for any purpose necessary for the operation and maintenance of the undertaking.

**"Roadway"** means the travelled portion of the highway that is improved, designed or ordinarily used for vehicular traffic.

**"Rural Highway"** means a highway serving rural parcels of land not being an arterial highway.

...3

**"Security"** shall mean and include a cash deposit made to the Municipality, a certified cheque made payable to the Municipality or an irrevocable clean letter of credit approved by the Municipality.

**"Standards"** means the Village of Ucluelet Engineering Standards and Specifications, being schedules to this Bylaw.

**"Subdivision"** means any change in the existing area, shape, number or arrangement of a parcel or parcels, whether by plan or metes and bounds description under the Land Title Act or Condominium Act.

**"Subdivider"** means the owner of any parcel being subdivided.

**"Trunk Sewer"** means any sanitary sewer of a 250 mm diameter or greater.

**"Trunk Storm Sewer"** means any storm sewer of a 450 mm diameter or greater.

**"Trunk Water Main"** means any water supply main of a 250 mm diameter or greater.

**"Walkway"** means a highway intended to carry pedestrian traffic only.

**"Water Course"** means any natural drainage course or source of water, whether usually containing water or not, and includes any lake, river, creek, spring, ravine, swamp, gulch or source of ground water whether enclosed or in a conduit.

**"Works and Services"** means the highways, drainage, water and sewer systems, the sidewalks, boulevards, streetlighting and underground wiring or any other works to be provided for in a subdivision of land under this Bylaw.

**"Zone"** means a zone established by the "Corporation of the Village of Ucluelet Zoning Bylaw 1988, Bylaw No. 519", and its amendments thereto.

## **SECTION 2 - ADMINISTRATION**

### **2.1 ADMINISTRATION**

The regulations of this Bylaw shall apply to the whole of the area within the boundaries of the Village of Ucluelet.

**2.2** The Approving Officer shall be the Clerk.

### **2.3 INSPECTION**

The Approving Officer and his/her duly authorized representative is hereby authorized to enter, at all reasonable times, upon any properties subject to this Bylaw to ascertain whether this Bylaw is being obeyed.

### **2.4 DIRECT ENFORCEMENT**

Whenever a property owner is directed by this Bylaw to carry out a matter or thing, on default by that person, the matter or thing shall be done at the expense of the

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person in default, and the Municipality may recover the expense, with costs, in the same manner as municipal taxes. Any direction given to the Applicant shall be deemed to have been given to the owner.

## **2.5 SEVERABILITY**

If any portion of this Bylaw is held to be invalid by a court of competent jurisdiction, the validity of the remaining portions of this Bylaw shall not be affected.

## **SECTION 3 – COMPLIANCE**

### **3.1 VIOLATION**

Any person who violates any of the provisions of this Bylaw or who suffers or permits any act or thing to be done in contravention of this Bylaw, or who neglects to do or refrains from doing any act or thing which is required by any of the provisions of this Bylaw, shall be deemed to have violated the provisions of this Bylaw. Every day that the violation continues, it shall be considered a new violation.

### **3.2 PENALTY**

Any person who violates any of the provisions of this Bylaw shall, upon summary conviction thereof, be liable to a penalty of not more than TWO THOUSAND DOLLARS (\$2,000.00) for each violation.

### **3.3 CONTRAVENTION OF OTHER ENACTMENTS**

- a) Except where a setback in respect of a highway or where the dedication of roads, lanes, walkways or public use lands is concerned, no subdivision shall be created which would cause any existing building or structure or sewage disposal system or used source of potable water to contravene any building, zoning or other regulation in force.
- b) A subdivision which would create parcels that cause the contravention of any shape, dimension or area regulations set forth in any zoning or other bylaw, shall not be approved except where the Approving Officer deems that an existing contravention would not be increased or worsened by the subdivision and that additional contraventions would not be created.

## **SECTION 4 – WORKS AND SERVICES AND CONSTRUCTION STANDARDS**

### **4.1 GENERAL**

- (1) No person shall provide works and services to land except in conformity with this Bylaw.
- (2) All works and services required under this Bylaw shall be designed:
  - (a) by a Professional Engineer registered in the Province of British Columbia, and
  - (b) upon completion of all required works and services, the owner shall submit "as constructed" drawings and "Certification of the Works" installed, both completed by a Professional Engineer in accordance with the requirements of the Standards, to the Approving Officer. All aspects of the work shall be carried out in accordance with good engineering practice and shall meet the requirements of the Standards contained in Schedule "A" of this Bylaw.



- (3) The provisions of subsections 4.1(2) may be waived by Council when it is considered the works and services do not require the services of a Professional Engineer.
- (4) A highway proposed to be dedicated by a plan of subdivision shall not be shown on the plan, dedicated, laid out nor constructed unless the dimensions, location, alignment and gradient meet the requirements for highways prescribed in Schedule "E".
- (5) Where highways, sidewalks, boulevards, underground wiring system, water distribution system, sanitary sewer system and/or storm sewer system are provided as part of a subdivision, the works and services shall be located such that each system:
  - (a) provides individual service to all lots created by the subdivision,
  - (b) provides for further extension and connection of the system to lands and systems beyond the subdivision.
- (6) The works and services required by this Bylaw shall be provided, located and constructed at the expense of the owner of the land proposed to be subdivided and in accordance with the applicable Standards prescribed by schedules to this Bylaw.
- (7) All works and services constructed under this Bylaw shall, upon their acceptance by the Municipality, become the property of the Municipality, free and clear of all encumbrances.

#### **4.2 WORKS AND SERVICES REQUIRED WITHIN A SUBDIVISION**

##### **(a) Highways**

All new highways, including widening strips of existing highways, shall be cleared to their full width and shall be graded, paved, drained and otherwise provided, located and constructed, and shall have the dimensions, alignment and gradient in accordance with the applicable Standards prescribed in Schedule "E".

##### **(b) Sidewalks**

Where any parcel of land zoned Residential, Residential Multiple, Commercial or Public Institution is proposed to be subdivided to create parcels less than 0.8 hectares, sidewalks may be provided, located and constructed in accordance with the applicable Standards prescribed in Schedule "E" hereto. Sidewalks are mandatory if provided on adjacent lands.

##### **(c) Boulevards and Boulevard Crossings**

Where any parcel is proposed to be subdivided and new highways are created, boulevards and boulevard crossings shall be provided, located and constructed in accordance with the applicable Standards prescribed in Schedule "E" hereto.

##### **(d) Underground Wiring**

Where the owner of any parcel which is proposed to be subdivided, chooses to install underground wiring within the subdivision, the underground wiring

shall be provided, located and constructed in accordance with B.C. Hydro and Power Authority and B.C. Telephone Company specifications and in accordance with the applicable Standards prescribed in Schedule "F" hereto.

**(e) StreetLighting**

Where any parcel is proposed to be subdivided, the subdivision shall be provided with streetlighting, which shall be provided, located and constructed in accordance with the applicable Standards prescribed in Schedule "F" hereto.

**(f) Water Distribution**

Where any parcel is proposed to be subdivided, regardless of parcel size, a water distribution system shall be provided, located and constructed in accordance with the applicable Standards prescribed in Schedule "D" hereto, and shall be connected to the existing water distribution system of the Municipality in accordance with the applicable Standards prescribed in Schedule "D" hereto.

**(g) Sanitary Sewer System**

Where any parcel is proposed to be subdivided into parcels less than 2 hectares in area, the subdivision shall be provided with a sewage collection system, which shall be provided, located and constructed in accordance with the Standards prescribed in Schedule "B" hereto, and shall be connected to the existing sanitary sewer system of the Municipality in accordance with the Standards prescribed in Schedule "B" hereto. Where parcels are proposed to be larger than 2 hectares, connection must also be made to the municipal sanitary sewer system unless approved by the Health Authority or Waste Management Authority.

**(h) Storm Sewer System**

Where any parcel is proposed to be subdivided into parcels less than 0.8 hectares in area, the subdivision shall be provided with a piped storm drainage system, which shall be provided, located and constructed in accordance with the applicable Standards prescribed in Schedule "C" hereto, and shall be connected to the existing storm sewer system of the Municipality or to an adequate discharge point in accordance with the Standards prescribed in Schedule "C" hereto.

Notwithstanding, where any parcel is proposed to be subdivided into parcels 0.8 hectares in area or greater, a ditch and culvert system for drainage shall be provided, located and constructed in accordance with the applicable Standards prescribed in Schedule "C" hereto, provided that the depth of any ditch shall not exceed 1.2 metres. Where a ditch will exceed 1.2 metres, a piped system of storm drainage will be provided, located and constructed in accordance with the Standards prescribed in Schedule "C" hereto.

**(i) Gas Utilities**

Where the owner of any parcel which is proposed to be subdivided chooses to install gas utility piping within the subdivision, all related works shall be installed in accordance with the applicable government regulations and shall be provided, located and constructed in accordance with the applicable Standards prescribed in the schedules hereto.

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### **4.3 WORKS AND SERVICES REQUIRED OFF-SITE OF SUBDIVISION**

As a condition of the approval of a subdivision, the owner may be required to provide works and services in accordance with the following requirements on that portion of an existing highway adjacent to the land being subdivided up to the centreline of the highway. All required works and services shall be provided, located and constructed in accordance with the applicable Standards prescribed in Schedule "E" hereto.

- (1) Existing highways may be required to be constructed as follows:**
  - (a)** Where a subdivision is creating parcels less than 0.8 hectares in size and where finished road grades have been established on the existing highway fronting the subdivision, the street shall be constructed to the full standard for the classification of highway up to the centreline of the existing highway, including curb and gutter on one side. Unless otherwise provided for in this section, the total width of the travelled asphalt surface shall not be less than 7.5 m.
  - (b)** Where a subdivision is creating parcels 0.8 ha. in size or greater fronting an existing highway, the highway shall be constructed to provide a minimum asphalt width of 7.5 m. Concrete curb and gutter shall be required unless suitable drainage for the road, proposed parcels and tributary area can be provided by ditches.
  - (c)** Where finished grades have not been established, the standard for highway construction may be reduced by the Approving Officer.
- (2) Concrete sidewalks may be required to be constructed where the parcels being created are less than 0.8 hectares in area, and the following criteria apply:**
  - (a)** Finished sidewalk grades can be established.
  - (b)** The sidewalk will form part of an orderly pedestrian traffic route and logical extension of the sidewalk will be possible by connecting in the future with a sidewalk across the frontage of adjacent lots or by connecting by a sidewalk to an orderly pedestrian traffic route on the opposite side of the highway.
- (3) Asphalt walking shoulders may be approved to be constructed instead of concrete sidewalk where the following criteria apply:**
  - (a)** Finished concrete grades cannot be established, in cases where the parcels being created are less than 0.8 ha. in size; or
  - (b)** Parcels being created by the subdivision are 0.8 ha. in size or larger; and
  - (c)** An asphalt walking shoulder will form part of an orderly pedestrian route. Logical extension of the asphalt walking shoulder will be possible by connecting, in the future, with a sidewalk or asphalt walking shoulder across the frontage of adjacent parcels or by connecting by a crosswalk to an orderly pedestrian traffic route on the opposite side of the highway.

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- (4) Boulevards may be required to be constructed in existing highways immediately adjacent to all parcels being created.
- (5) Where underground hydro and telephone wiring exists in a highway fronting a subdivision, individual underground services shall be provided to the front property line of each parcel created by the subdivision.

Where no hydro power service exists, hydro power service shall be constructed along the frontage of the subdivision to provide individual service to each parcel created by the subdivision.

- (6) An ornamental streetlight system may be required to be provided when the lots being created are less than 0.8 ha. in size and where any of the following criteria apply:
  - (a) When an ornamental streetlight system:
    - (i) will form part of an orderly extension of an existing system in an existing highway fronting the subdivision;
    - (ii) will form part of an orderly extension of an ornamental streetlight system in new highways dedicated and constructed as part of the subdivision; or
    - (iii) can be extended in an orderly fashion along the existing highway with future development of adjacent land.
  - (b) Hydro service in the existing highway is an underground system.
  - (c) Streetlighting fronting the property is inadequate.
- (7) A piped storm sewer system may be required to be constructed when parcels being created by the subdivision are less than 0.8 ha. in size and the following criteria apply:
  - (a) there is an existing piped storm sewer system to which connection can be made; or
  - (b) there are drainage problems which cannot be resolved by the construction of ditches or works, other than piping.
- (8) A drainage system consisting of culverts and open ditches may be required to be constructed when the parcels being created are 0.8 ha. in size or greater, and the following criteria apply:
  - (a) there is an existing ditch or pipe system to which flow can be directed; and
  - (b) there are drainage problems on the new parcels that require redirection of drainage to the street.
- (9) The water distribution system may be required to be extended where the following criteria apply:
  - (a) the parcels being created require water service and fire hydrants under the requirements of this Bylaw; and

- (b) the existing water distribution system is designed to be extended in the existing highway fronting the subdivision.

If the existing water distribution system was designed to be extended along that side of the existing highway which abuts the property being subdivided, then the water system shall be extended the full width of the property being subdivided.

If the existing water distribution system was designed to be extended along the opposite side of the highway from the land being subdivided, or the water distribution system will not serve lands beyond the property being subdivided, the system shall be sufficiently extended to provide a service connection to the last parcel being created.

- (10) The sanitary sewer system may be required to be extended where the following criteria apply:

- (a) the parcels being created require sanitary sewer service under the requirements of this Bylaw; and
- (b) the sanitary sewer system is designed to be extended in the existing highway fronting the subdivision.

If the existing sanitary sewer was designed to be extended along that side of the highway which abuts the property being subdivided, then the sewer system shall be extended the full width of the property being subdivided.

If the existing sanitary sewer system was designed to be extended along the opposite side of the highway from the land being subdivided, or if the sewer system will not serve the lands beyond the property being subdivided, then the sewer system shall be extended sufficiently to provide a sewer connection to the last parcel being created.

#### SECTION 5 - RIGHTS-OF-WAY

- (1) When works and services required under the provisions of this by-law are not located within a designated highway and it is necessary for the maintenance and upkeep of such work or service by the Municipality, a Statutory Right-of-way shall be registered over the affected lands before such works or services are accepted by the Municipality.
- (2) The terms, conditions and covenants of the instrument registered under Section 214 of the Land Title Act for a Statutory Right-of-way may be in a form acceptable to the Municipality and the owner of the affected lands.
- (3) The costs of any Statutory Right-of-way required under this section shall be born by the subdivider and/or owner of the affected lands.



SECTION 6 - CITATION

This bylaw may be cited as the Village of Ucluelet Subdivision Services Control Bylaw 1989 No. 521, and shall come into force and take effect upon the registration thereof:

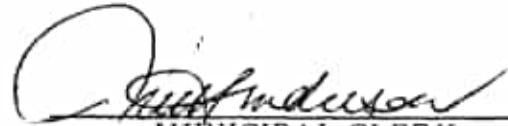
READ A FIRST TIME THIS 23rd DAY OF FEBRUARY , 1989.

READ A SECOND TIME THIS 23rd DAY OF FEBRUARY , 1989.

READ A THIRD TIME THIS 25th DAY OF MAY , 1989.

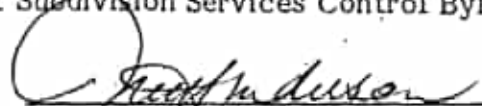
Reconsidered and finally adopted by a two-thirds majority of Council of the Corporation of the Village of Ucluelet this 10th day of AUGUST , 1989.

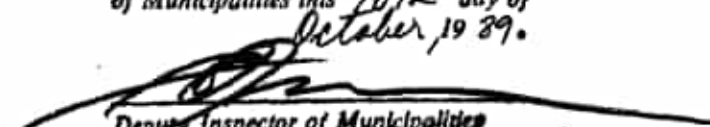
  
MAYOR

  
MUNICIPAL CLERK

I hereby certify that this is a true copy of Bylaw No. 521 of the Corporation of the Village of Ucluelet, cited as the "Village of Ucluelet Subdivision Services Control Bylaw 1989".

A true copy of By-Law No. 521  
registered in the office of the Inspector  
of Municipalities this 10th day of  
October, 1989.

  
MUNICIPAL CLERK

  
Deputy Inspector of Municipalities

SCHEDULE "A"

VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

GENERAL

SCHEDULE "A"VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

## GENERAL

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## 1. DETAILED DESIGN

The detailed design of all works and services shall be done by a registered Professional Engineer and shall conform to the preliminary review and these standards. The detailed design shall be submitted in triplicate to the Village for approval prior to construction.

The Village will review the detailed plans and specifications, mark these with any necessary corrections and return the plans and specifications to the Applicant either approved as noted or with a request for re-submission. Re-submissions shall be carried out as above until the Village approves the detailed plans and specifications.

It shall be the responsibility of the Applicant to ensure that all permits required are obtained prior to commencement of the work. When all approvals and permits have been received, the work may proceed. The Village will inspect the construction from time to time for conformity to these standards and the detailed plans and specifications. All connections to existing systems shall be made under the direction of the Village.

## 2. COMPLETION AND ACCEPTANCE

Once the work is completed, a statement signed by a registered Professional Engineer shall be submitted to the Village along with one set of reproducible "as-constructed" drawings certifying that the project has been constructed under his supervision, and that it is completed in accordance with the as-constructed plans and specifications.

The Village will then make a final inspection, and once it is satisfied the work is acceptable, will issue written permission to use the constructed system.

## 3. ENGINEERING DESIGN

The Applicant shall retain a Professional Engineer who shall be responsible for the design and preparation of drawings and specifications for all services as required by the Village.

### 3.1 SUBMISSION OF ENGINEERING DESIGN

The Professional Engineer shall submit three prints of each design drawing duly sealed to the Village. The Village reserves the right to request copies of all design notes, at their discretion. All streets shall be named on the drawings, names to have been approved by the Village prior to the submission of drawings.

One copy of a detailed acceptable cost estimate shall be submitted with the final engineering design.

### 3.2 DESIGN DRAWINGS

The size of drawing sheets shall be 594 mm x 841 mm. The English size 24" x 36" is also acceptable.

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The scale of drawings shall be as follows unless otherwise approved by the Village.

<b>Normally:</b>	<b>Horizontal 1:500</b>	<b>Vertical 1:50</b>
<b>Details:</b>	<b>Horizontal 1:200</b>	<b>Vertical 1:20</b>
<b>Structural Details:</b>	<b>1:20</b>	

All elevations shown on the plans shall be on the geodetic datum. Geodetic bench mark information is available from the Village.

All drawings shall be drafted in an acceptable manner in accordance with good drafting and engineering standards. A sample drawing is available from the Village.

#### 4. CONSTRUCTION

Upon receipt of design approval from the Village, the Applicant may proceed with installing the services subject to the following provisions.

- Underground subdivision services shall not be permitted to operate as part of the existing Village system until the subdivision services have been approved and accepted by the Village in writing.
- The Applicant or his Contractor shall not be permitted to operate or alter any portion of the existing Village system without the knowledge and consent of the Village Public Works Superintendent.
- The Professional Engineer shall be responsible for the layout and supervision of all services which are the responsibility of the Applicant.
- If the Professional Engineer wishes to make a change to the design either before or during the execution of the work, he shall first submit a print of the proposed revisions to the Village.
- The required services must be installed by a Contractor qualified to carry out the particular type of work required. The Village may request the Contractor's previous experience on similar projects.

#### 5. AS-CONSTRUCTED DRAWINGS

Within two weeks of completion of the utility installation and prior to acceptance by the Village, the Professional Engineer shall supply a reproducible set of "as-constructed" drawings, plus two sets of white prints duly certified. These drawings shall accurately represent the services as they were installed and shall reflect all changes from the design.

#### 6. PERMITS, NOTICES, LAWS AND RULES

The Applicant shall obtain and pay for all necessary permits or licences required for the execution of the work. The Applicant shall obtain all easements and

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easement agreements as well as bear associated costs. All easements are to be in the name of the Village. The Applicant shall give all necessary notices and pay all fees required by law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of public health. The Applicant shall be responsible for the safety of all workmen and equipment on the project in accordance with all applicable safety legislation passed by federal, provincial and local authorities governing construction safety.

7. FEES

7.1 Every application for subdivision of land where the construction of works and services under the provisions of this bylaw are required shall be accompanied by an examination fee of twenty-five dollars (\$25.00) for the first parcel created by the subdivision and ten dollars (\$10.00) for each additional parcel.

8. BUILDING PERMITS

No building permits shall be issued until the subdivision plan is registered, and all services other than those exempted as specified in the bylaw have been installed and accepted by the Village.

SCHEDULE "B"

VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

SANITARY SEWERS

SCHEDULE "B"VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

## SANITARY SEWERS

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## 1. SANITARY SEWER DESIGN

### 1.1 SEWAGE QUANTITY

Design sewage rates of flow shall be computed by adding the peak sewage flow to the peak storm water infiltration.

Peak storm water infiltration shall be calculated on the basis of 11.2 cubic metres per hectare per day of the tributary area. Peak sewage flow shall be established by multiplying the peak flow per capita by the design population where the peak flow per capita is established by the following table:

<u>Design Population</u>	<u>Peak Flow Per Capita (cu.m/day)</u>
0 - 100	3.00
100 - 200	2.63
200 - 500	2.18
500 - 1000	1.91
1000 - 2000	1.67
2000 - 5000	1.37

The design population shall be construed as being that population which contributes to the flow in each section of the system under design.

The design population shall be computed in compliance with the Village Official Community Plan or on the basis of the planned development, whichever is larger. In the absence of detailed design population information, the following densities shall be used:

Single Family Dwellings	-	37 Persons Per Hectare
Multiple Family Dwellings	-	111 Persons Per Hectare
Industrial and Commercial	-	Must be computed separately
Equivalent of		according to use.

Provisions shall not be made in the sanitary sewer system for the deliberate addition of storm water.

### 1.2 SEWAGE CHARACTERISTICS

<u>Sewage Quantity (ADWF) in Area</u>	<u>Constituent</u>	<u>Normal Average</u>	<u>Maximum Short Duration</u>
1. Less than 45 cubic metres per day.	BOD - 5 day, 20°C	1000 mg/1	2000 mg/1
	Suspended Solids	800 mg/1	2000 mg/1
	PH -	4 - 10.5	3.5 - 11
	Temperature	80°C	93°C
	Toxic Chemicals	as stated below	as stated below

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Sewage (ADWF)	Quantity in Area	Constituent	Normal Average	Maximum Short Duration
2.	45 cubic metres/day to 450 cubic metres/day	BOD - 5 day, 20°C Suspended Solids PH - Temperature Toxic Chemicals	400 mg/l 400 mg/l 5 - 9.5 65°C as stated below	1000 mg/l 1000 mg/l 4 - 10.5 80°C as stated below

The concentration of the following toxic substances at the point of discharge to a sewer system shall not exceed.

<u>Chemical</u>	<u>Maximum Concentration</u>
Arsenic	0.05 mg/l
Cadmium	0.005 mg/l
Chromium (Total)	1.00 mg/l
Copper	0.2 mg/l
Cyanide	0.1 mg/l
Iron	0.3 mg/l
Lead	0.05 mg/l
Nickel	0.3 mg/l
Phenols	0.2 mg/l
Zinc	0.5 mg/l

### 1.3 SEWER HYDRAULICS

A lateral sewer shall be considered any sanitary sewer that services only individual local roads and cul-de-sacs and discharges into a trunk main.

No lateral sewer shall be less than 200 mm in diameter except that 150 mm diameter will be acceptable in the final section of a lateral that cannot be extended.

No service connections shall be less than 100 mm in diameter. Service connections serving more than duplex family dwellings shall be sized in accordance with design flows and available grades. Service connections exceeding 30 metres measured horizontally between the lateral sewer and the property line shall be provided with adequate cleanout facilities.

Except under special circumstances, sewers shall be designed to provide a minimum velocity of .75 metres/sec. at peak flow.

All service connections shall be designed for a minimum velocity of 1.0 metres per second when flowing full.

Mannings roughness coefficient of 0.013 shall be used for design of lateral sewers and service connections.

Manholes shall be designed to incorporate a minimum elevation differential of 30 mm in addition to the normal grade of the lateral sewer, wherever a horizontal deflection exceeding 45 degrees occurs.

#### 1.4 DEPTHS

Depths of all lateral sewers shall be such that all basements in the area the sewer is intended to serve can be drained by gravity.

Minimum cover on lateral sewers shall be 1.5 metres in travelled roads and 1 metre elsewhere unless adequate concrete protection is used. Minimum cover on service connections within the right-of-way shall be .75 metres.

#### 1.5 MANHOLES

Manholes shall be located at grade changes, lateral size changes, at the upstream end of all lateral sewers, at junctions of all lateral sewers and at the junction of lateral sewers and service connections 150 mm in size and larger. Otherwise, distances between manholes shall not exceed 120 metres. Where the difference in elevation between incoming an outgoing sewers exceeds 600 mm, external drop structures shall be used. Wherever possible, internal drops between 250 mm and 600 mm shall be avoided. Pipes entering manholes shall be set crown to crown. Where flooding could occur over a sewer manhole, a watertight manhole frame and cover shall be used.

#### 1.6 CURVED SEWERS

Horizontal curves will be permitted where the right-of-way requires curvature for a constant offset and where the design velocity exceeds 0.9 metres per second. Vertical curves will be permitted under special circumstances where excessive cuts are to be avoided and where energy dissipation is required.

Radius of horizontal curvatures shall be uniform throughout the curves and shall not be less than 60 metres, or exceed the manufacturer's recommended deflection for the particular material being installed.

## 2. GRAVITY SANITARY SEWER INSTALLATION

### 2.1 SCOPE

The terms of work governed by this part of the specifications includes the excavation, backfilling, pipe laying, supply, delivery, and installation of sewer mains including building service connections and the maintenance of the sewer works, street and other surfaces.

### 2.2 EXCAVATION TO SUB-GRADE

- (a) Grade and Alignment - The trench shall be excavated so that the pipe can be laid to the alignment, grade and depth required and shall only be excavated as far in advance of the pipe laying as permitted by the Village. All excavation shall be made exactly to lines and grades as shown on the drawings. No deviation from authorized line and grade shall be made without the written authority of the Village.
- (b) Uniformity - The pipe bedding shall provide a uniform and continuous support for the pipe and fittings. Any overexcavation shall be backfilled with thoroughly compacted sand or gravel to sub-grade level.
- (c) Rock - Where excavation is made in rock, or where excavation is made in a material which cannot provide an even, uniform, and smooth surface, or where large stones are encountered in the trench, such material shall be removed to provide a clear distance between any part or projection of such material and the surface of all pipe and fittings of not less than 150 mm for 600 mm outside diameter pipe or less, and 225 mm for pipe having an outside diameter greater than 600 mm. The sub-grade shall then be formed by backfilling with an approved gravel. Bedding material shall be evenly graded from coarse to fine with a maximum size of 20 mm and a maximum of 10% (by weight) passing a 0.075 mm sieve, or as approved by the Village. The finished bedding surface shall be shaped by hand tools to provide a uniform and continuous support for the pipe. All rock blasting shall continue a minimum of 1.5 m beyond all ends of line.
- (d) Unstable Sub-Grade - Where, the sub-grade of the trench is unstable and will not properly support the pipe, or where it contains material harmful to the pipe such as ashes, refuse, vegetable or organic matter, such material shall be excavated to the width, depth and length required and shall be disposed of in a manner approved by the Village. The minimum depth of such excavation shall be 300 mm.

The sub-grade shall then be made by backfilling with an approved gravel compacted in maximum 150 mm layers. The finished sub-grade surface shall be shaped by hand tools to provide uniform and continuous support for the pipe.

Where the sub-grade cannot be made to properly support the pipe by replacing unsound material with compacted sand or gravel, a foundation for the pipe shall be constructed of pilings, timber, concrete or other material. All wood used for permanent pipe support shall be pressure treated. The design details of such a support structure must have prior approval of the Village before construction.

### 2.3 TRENCH WIDTH

The minimum width of trench below the crown of the pipe shall be not less than the nominal diameter of the pipe plus 400 mm and the maximum width of the trench shall be not more than the nominal diameter of the pipe plus 600 mm.

### 2.4 SAFETY REQUIREMENTS

Open cut trenches shall be shored and braced as required by the Accident Prevention Regulations of the Worker's Compensation Board and the Village Ordinances and as may be necessary to protect life, property, and the work.

### 2.5 BLASTING

Blasting for excavation will be permitted only with the approval of the Village and only when proper precautions are taken for the protection of persons or property. The procedure used in blasting shall conform to applicable Federal, Provincial and Municipal Laws.

### 2.6 PIPE MATERIALS

All materials shall conform to the following specifications and shall be subject to inspection and testing at the discretion of the Village.

- (a) Asbestos Cement Non-Pressure Sewer Pipe - Asbestos cement pipe shall conform to the latest ASTM designation C-428. Asbestos cement pipe manufactured according to these specifications shall be designated as Class 2400, Type II.
- (b) Polyvinyl Chloride (PVC) Sewer Pipe - Polyvinyl chloride sewer pipe shall conform to the latest ASTM designation D3034, CSA-B182.1 and CSA-B182.2; SDR 35 maximum for main piping, SDR 28 maximum for 100 diameter service piping.

- (c) Testing of Pipe Materials - All pipe is subject to testing and inspection. The basis of acceptance shall be conformation with the applicable ASTM specification. The Village may direct up to one percent (1%) of the pipe which is to be installed but not less than one standard length from each pipe size, tested to destruction, to determine its conformation with the accepted design, manufacture and its freedom from defects. The cost of all testing shall be borne by the Developer.

## 2.7 PIPE LAYING

- 2.7.1 Bedding - The sewer pipe shall be laid on the trench bottom using one of the following classes of bedding. Unless otherwise specified in the drawings or detailed specifications or unless maximum permitted trench widths are exceeded, Class C Bedding shall be used.

(a) Class C Bedding - The sewer pipe shall be bedded on the bottom of the trench on a layer of approved bedding material, as shown in the detailed drawings. Bell holes shall be provided for either method, and the barrel of the pipe shall be evenly supported throughout the entire length and shall have its lower quadrant in contact with the bedding material. Bedding material shall be placed and compacted to 150 mm above the crown of the pipe.

(b) Class B Bedding - The sewer pipe shall be bedded on the bottom of the trench with the surface of the sub-grade accurately shaped to fit the lower quadrant of the pipe and to support the barrel of the pipe uniformly. A cradle of concrete shall be poured around the pipe for the full width of the trench to a depth in accordance with detailed drawings. The concrete shall be thoroughly compacted around the pipe.

(c) Class A Bedding - The sewer pipe shall be bedded and cradled in concrete to the depths shown on the detailed drawings. The concrete shall be poured to the full width of the trench and thoroughly compacted around, over and under the pipe. The pipe must not be laid on hardened concrete unless a 25 mm (minimum) layer of fresh concrete is placed between the pipe bells and the hardened concrete. The pipe may be temporarily supported on sand bags or concrete blocks.

- 2.7.2 Laying - Pipe laying shall commence at the lowest point of the length being laid and the pipes shall be placed with the spigot ends pointing in the direction of the flow, unless otherwise permitted. No outlet is guaranteed at the lower end of any sewer main.



No pipe shall be laid in water or when the trench conditions are unsuitable. At the end of each working day and at times when pipe laying is not in progress, the open ends of the pipe shall be closed by a watertight plug. Water shall be drained or pumped from the trench to prevent the pipe from floating. Any pipe which has floated shall be removed from the trench and be re-laid as directed by the Village.

- 2.7.3 Jointing - Joints shall be made in accordance with the recommendations of the manufacturer or as specified herein.

Regardless of the type of joint used, before each joint is made, the lengths of pipe involved in the joint shall be cleaned inside and all dirt and other debris removed.

## 2.8 APPURTENANCES

Manholes, drop inlets, junctions, and risers, and other appurtenances shall be installed at the locations shown on the drawings. Installation shall be in accordance with the detailed drawings for each appurtenance.

## 2.9 MANHOLES

Manholes shall be constructed of precast concrete sections complete with ladder rungs as shown on the detailed drawings. Any other type of construction may be used only after written approval has been obtained from the Village.

The base of the manhole shall be poured in place concrete having a minimum compressive strength of 20.7 MPa at 28 days. The bases shall be constructed in accordance with the detailed drawings.

The manhole channelling shall be constructed according to the detailed drawings. The main pipe may be run through the manhole and the top half cut off after the sloped concrete benching has been placed in the manhole. Alternatively, the main channel shall be formed using a smooth faced form of the same diameter as the pipe. The finished floor shall be trowelled to a smooth finish and left free from fins and concrete droppings. Manhole benching shall be sloped at 12:1 to drain into flow channel.

Branch lines entering the manhole shall be channelled to join the main sewer at an acute angle with the flow through the manhole.

Manhole sections shall be joined using cement mortar. A layer of mortar shall be placed on the tongue of each section prior to lowering the following section into place. The mortar squeezed out of the joint shall be wiped off and the joint finished flush inside and out. All lifting holes shall be plugged with cement mortar and finished flush with the manhole wall.

The outside surface of all manholes shall be sealed with a silicone material or approved equal.

Ladder rungs shall be constructed of 19 mm diameter galvanized iron and set at 300 mm on centre.

Manholes, frames and covers shall be set to grade, with the cover 5 mm below finished grade.

## 2.10 CONCRETE

All concrete for bedding, manholes, drop inlets, junctions and risers, and other appurtenances shall have a compressive strength of not less than 20.7 MPa in 28 days or unless otherwise specified.

## 2.11 SANITARY SERVICE CONNECTIONS

2.11.1 Pipe Materials - Pipe used in the installation of sanitary services shall be asbestos cement or PVC sewer pipe, conforming to the material specifications detailed in Sections 2.6 (b) and 2.6 (c) of this schedule.

2.11.2 Pipe Laying - Each pipe shall be set to line and grade as approved on the design drawings.

2.11.3 Bends and Cleanouts - Where horizontal bends are required in the service pipe, these shall be made with long radius bends.

Where a horizontal bend greater than 45 degrees is required, a cleanout shall be constructed. Cleanouts shall also be installed as directed by the Village where the service connection exceeds 30 m in length.

2.11.4 Connection to the Sanitary Service and to the Main Sewer  
The connection to the sewer main shall be "Y" branches installed during construction of the main sewer, or by tapping the sewer main as permitted by the Village.

The service pipe shall be tapped into the upper half of the sewer main. Care shall be taken while tapping to ensure the sewer main will not be fractured, and all broken pipe and mortar shall be removed from inside the sewer main. The tapping shall be of the same diameter as the service pipe and connection shall be made using a strap on service saddle made of stainless steel or PVC. In no case shall the service pipe protrude into the sewer main. Where required by the Village, a riser shall be constructed.

- 2.11.5 Wooden Markers - Wooden markers shall be installed at all curb boxes, meter boxes, and/or termination of building services. The marker shall be 38 mm x 64 mm pressure treated wood and shall extend from the invert of the service to 600 mm above ground level. The top 600 mm shall be painted as directed by the Village.

## 2.12 INITIAL BACKFILLING

After the pipe has been satisfactorily bedded, the initial backfill shall be placed. The initial backfilling shall consist of sand, gravel or approved native material, free of any rocks or other deleterious material. The backfill shall be hand placed and tamped in 150 mm layers for the full width of the trench up to a level of 300 mm above the top of the pipe.

## 2.13 GENERAL BACKFILLING

After initial backfilling has been completed and approved, the trench shall be backfilled to one of the following classes:

- (a) Class 3 Backfilling - Class 3 backfilling shall consist of replacing excavated material in the trench and replacing any subsequent subsidence as it occurs for period of one year from the date of completion of the work. No boulders, rock greater than 200 mm in greatest dimension, organic material, debris, ice or snow shall be permitted in the trench. Surplus excavated material shall be mounded over the trench or shall be hauled away. If the material mounded over the trench is not sufficient to replace all subsidence, suitable material shall be imported.

To reduce the amount of subsidence, backfilling equipment or other suitable compacting equipment may be used in the trench to consolidate the backfill as it is placed. Equipment shall not be used until there is sufficient cover over the pipe to prevent damage. Class 3 backfilling shall only be used in easements where a roadway will not be constructed.

- (b) Class 2 Backfilling - Class 2 backfilling shall consist of replacing the excavated material in layers not exceeding 600 mm in thickness and compacting each layer by mechanical means to a density equivalent to that of the surrounding native material.

No boulders, rock greater than 200 mm in greatest dimension, organic material debris, ice or snow shall be permitted in the trench and these shall be hauled away. All surplus excavated material shall be hauled away to a suitable dump approved by the Village.

Any subsequent settlement that occurs during the maintenance period shall be corrected.

Class 2 backfill shall only be used with prior approval of the Village.

- (c) Class 1 Backfilling - Class 1 backfilling shall consist of backfilling the trench with sand or gravel mechanically compacted in even layers not exceeding 300 mm in thickness so there is no subsequent settlement in the trench. The backfill shall be compacted to a minimum density of ninety-five percent (95%) of the maximum dry density as determined by the Standard Proctor Test. All surplus excavated material shall be hauled away to a suitable dump approved by the Village. Any damage resulting from the subsidence of the backfill shall be repaired. This type of backfill shall be used for work within roadways, sidewalks and as required by the Village.

## 2.14 TESTING

Upon completion of the backfilling, sewer mains shall be tested for alignment, obstructions and infiltration. Testing shall be done to the satisfaction of and at no cost to the Village. The Village Works Superintendent shall be notified 48 hours in advance of each test.

2.14.1 Alignment - The sewer main shall be checked for alignment by means of a light test. For satisfactory alignment, the illuminated interior of the pipe shall not show any substantial misalignment, displaced pipe or other defects.

2.14.2 Obstructions - The sewer main shall be tested for obstructions using a pill test. The sewer main shall be deemed unobstructed if a wood or metal ball having a diameter of 50 mm less than the inside diameter of the pipe can be readily pulled through the sewer main.

2.14.3 Infiltration or Exfiltration - Each section of sewer main between manholes must be tested for exfiltration or infiltration, the method used to be at the discretion of the Village.

(a) Infiltration - The maximum amount of infiltration measured by test shall be at a rate not greater than 22 litres per millimetre of pipe diameter per kilometre per twenty-four hours. Should any test on any section of pipe exceed the allowable rate, the defect shall be located and repaired until the infiltration is within specified allowances.

(b) Exfiltration - The maximum amount of exfiltration measured by test shall be at a rate not greater than 22 litres per millimeter of pipe diameter per kilometre per twenty-four hours. The maximum internal pressure in any part of the system under test shall not be greater than 35 KPa. Should a test on any section of pipe indicate an exfiltration rate greater than the allowable, the defect shall be located and repaired until the exfiltration is within specified allowances. Exfiltration tests will not be permitted where the ground water table is above the pipe invert.

2.14.4 Air Testing - When an air test is required, in lieu of the water exfiltration test, the instructions of the manufacturer shall be followed. The minimum time requirements for air testing for the 3.5 KPa pressure drop, from 20.75 KPa to 17.25 KPa shall not be less than that shown in the table below.

<u>Pipe Size</u>	<u>Time</u>
100 mm	2 min. - 32 sec.
150 mm	3 min. - 50 sec.
200 mm	5 min. - 6 sec.
250 mm	6 min. - 22 sec.
300 mm	7 min. - 39 sec.
350 mm	8 min. - 56 sec.
375 mm	9 min. - 35 sec.
400 mm	10 min. - 12 sec.
450 mm	11 min. - 34 sec.
500 mm	12 min. - 45 sec.
525 mm	13 min. - 30 sec.

For larger diameter pipe, use the following:

Minimum time in seconds equals 1.54 times pipe diameter in millimetres.

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Should any test on any section of pipe line disclose an air loss rate greater than that permitted, the defect shall be located and repaired and the pipe retested until the air loss rate is within the specified allowance.

### 3. SANITARY FORCEMAINS

Sanitary sewer forcemains shall be installed and tested in accordance with Schedule D - Specification for Pressure Mains.

### 4. SANITARY PUMPING STATIONS

Where pumping stations are required on the sanitary sewer system, detailed design shall be submitted to the Village for their approval. Some general criteria to be included in the design are:

- (a) Duplex pump installations shall be required in all cases.
- (b) The minimum storage time in the wet well shall be 10 minutes.
- (c) The station shall be complete automated with standby power, alarm systems and controls as required by the Village.
- (d) All interior piping shall be fibreglass and all interior valves shall be galvanized steel or bronze.
- (e) All stations shall be of fibreglass construction unless otherwise approved.

SCHEDULE "C"

VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

STORM DRAINAGE

SCHEDULE "C"VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

## STORM DRAINAGE

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## 1. STORM SEWER DESIGN

### 1.1 STORM SEWER QUANTITY

Design storm water rates of flow shall be computed by using the Rational Method.

The time of concentration from the farthest contributory point shall be calculated considering the average slope of the land, ground roughness, shape of area, and overland distance.

The calculation of runoff shall be determined using the following general runoff coefficients:

<u>Area Component</u>	<u>Runoff Coefficient %</u>
Streets	90
Drives and Walks	85
Roofs	85
<u>Grass or Landscaped Areas</u>	
Sandy Soil, Less than 5% Slope	10
Sandy Soil, Greater than 5% Slope	20
Heavy Soil, Less than 5% Slope	25
Heavy Soil, Greater than 5% Slope	35

Storm water flow shall be calculated using the short duration intensity frequency curve for the Village of Ucluelet.

Storm sewer design calculations shall be submitted with the design drawings and must be approved by the Village. Adjacent contributory areas must be determined and included in the design calculations.

### 1.2 SEWER HYDRAULICS

Storm water facilities shall be designed to carry peak flows. Flows shall be calculated using the Rational Method assuming a five year return frequency for lateral and a 10 year return frequency for trunk mains. A lateral sewer shall be considered any storm sewer that services only individual local roads and cul-de-sacs and discharges into a trunk main.

No lateral sewer shall be less than 200 mm in diameter and no connection to a catch basin shall be less than 150 mm in diameter.

...1



No service connections shall be less than 100 mm in diameter. Service connections serving more than duplex family dwellings shall be sized in accordance with design flows and available grades. Service connections exceeding 30 m as measured horizontally between the lateral sewer and the property line shall be provided with adequate cleanout facilities.

Except under special circumstances, sewers shall be designed to provide a minimum velocity of .75 m/sec at peak flow.

All service connections shall be designed for a minimum velocity of 1.0 metres per second (3.5 feet per second) when flowing full.

Mannings roughness coefficient of 0.013 shall be used for design of lateral sewers and service connections.

Manholes shall be designed to incorporate a minimum elevation differential 30 mm of, in addition to the normal grade of the later sewer, wherever a horizontal deflection exceeding 45 degrees occurs.

### 1.3 DEPTHS

Depths of all sewers shall be such that the areas the sewer is intended to serve can be drained by gravity.

Minimum cover on sewers shall be 1.50 in travelled areas and 1 m elsewhere unless adequate concrete protection or other approved material is used.

Storm sewers may be installed in a common trench with gravity sanitary sewers, providing the maximum invert elevation difference is 300 mm and the minimum outside wall separation is 300 mm.

### 1.4 MANHOLES AND CATCH BASINS

#### (a) Manholes

Distances between manholes on sewer sizes 600 mm or less in diameter shall not exceed 120 metres.

Manholes shall be located at grade changes, at lateral size changes, at the upstream end of all lateral sewers and at the junctions of all lateral sewers.

Where the differences in elevation between incoming and outgoing sewers exceed 600 mm, external drop structures shall be installed.

Wherever possible, internal drops between 250 mm and 600 mm shall be avoided. Pipes entering manholes shall be set crown to crown.

...2

(b) Catch basins

Distances between catch basins shall not exceed 75 metres. Catch basins shall be spaced so as to adequately control roadway surface runoff. Catch basins shall be located at the low points of roads and at intersections to prevent runoff from crossing intersections and cross walks.

1.5 INLET AND OUTLET STRUCTURES

The inlet and outlet of storm sewers are to be protected from debris by suitable grates. All grates are to be at least the same diameter of the storm sewer and be sized to handle the design flow of the storm sewer.

All grates are to be anchored to a headwall as specified in the standard drawings. All grates shall be constructed from steel and hot dip galvanized.

1.6 CURVED SEWERS

Horizontal curves will be permitted where the right-of-way requires curvature for a constant offset and where the design velocity exceeds 0.9 metres per second. Vertical curves will be permitted under special circumstances where excessive cuts are to be avoided and where energy dissipation is required.

Radius of horizontal curvatures shall be uniform throughout the curves and shall be not less than 60 metres, or exceed the manufacturer's recommended deflection for the particular material being installed.

1.7 DITCHES AND CULVERTS

Open ditches where permitted, are to be designed to intercept surface water from the roadways, driveways and the backslopes. All ditches are to be V shaped. Ditches must be designed with the capacity to carry a ten year flood at a velocity that will not cause silting or erosion of the channel. In all cases, the maximum allowable velocity is 3 metres per second. Where velocities exceed 3 m/s, flumes or pavement, or rip-rap will be required.

The minimum diameter for culverts under roadways shall be 450 mm and for driveways 300 mm. Generally, the minimum depth of cover for all culverts shall be 300 mm.

Culvert pipe materials must be in accordance with the pipe materials as specified in Section 2.6 of this schedule. Corrugated steel culvert piping shall not be permitted. The inlet and outlet of all culverts are to be rip rapped as shown on the standard drawings.

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Open ditches will not be permitted through easement right-of-ways.

## 2. INSTALLATION OF STORM SEWERS

### 2.1 SCOPE

The items of work governed by this part of the specification cover excavation of trenches, tunnels, or pits to the required dimensions, sheeting, bracing and supporting the adjoining ground or structures where necessary, handling all drainage or ground water, providing barricades, guards and warning lights, supply of all pipes, fittings and other materials, labour supervision and equipment, laying and installation of pipe and fittings, manholes and appurtenances, backfill and compaction of trenches, and cleaning of the site of work.

### 2.2 EXCAVATION TO SUB-GRADE

- (a) Grade and Alignment - The trench shall be excavated so that the pipe can be laid to the alignment, grade and depth required and shall only be excavated as far in advance of the pipe laying as permitted by the Village. All excavation shall be made exactly to lines and grades as shown on the drawings. No deviation from authorized line and grade shall be made without the written authority of the Village.
- (b) Uniformity - The pipe bedding shall provide a uniform and continuous support for the pipe and fittings. Any overexcavation shall be backfilled with thoroughly compacted sand or gravel to sub-grade level.
- (c) Rock - Where excavation is made in rock, or where excavation is made in a material which cannot provide an even, uniform, and smooth surface, or where large stones are encountered in the trench, such material shall be removed to provide a clear distance between any part or projection of such material and the surface of all pipe and fittings of not less than 150 mm for 600 mm outside diameter pipe or less, and 225 mm for pipe having an outside diameter greater than 600 mm. The sub-grade shall then be formed by backfilling with an approved gravel. Bedding material shall be evenly graded from coarse to fine with a maximum size of 20 mm and a maximum of 10% (by weight) passing a 0.075 mm sieve, or as approved by the Village. The finished sub-grade surface shall be shaped by hand tools to provide a uniform and continuous support for the pipe. All rock blasting shall continue a minimum of 1.5 m beyond all ends of line.

...4

- (d) Unstable Sub-Grade - Where the sub-grade of the trench is unstable and will not properly support the pipe, or where it contains material harmful to the pipe such as ashes, refuse, vegetable or organic matter, such material shall be excavated to the width, depth and length required and shall be disposed of in a manner approved by the Village. The minimum depth of such excavation shall be 300 mm.

The sub-grade shall then be made by backfilling with an approved gravel compacted in maximum 150 mm layers. The finished sub-grade surface shall be shaped by hand tools to provide uniform and continuous support for the pipe.

Where the sub-grade cannot be made to properly support the pipe by replacing unsound material with compacted sand or gravel, a foundation for the pipe shall be constructed of pilings, timber, concrete or other material. All wood used for permanent pipe support shall be pressure treated. The design details of such a support structure must have prior approval of the Village before construction.

### 2.3 TRENCH WIDTH

The minimum width of trench below the crown of the pipe shall be not less than the nominal diameter of the pipe plus 400 mm and the maximum width of the trench shall be not more than the nominal diameter of the pipe plus 600 mm.

### 2.4 SAFETY REQUIREMENTS

Open cut trenches shall be shored and braced as required by the Accident Prevention Regulations of the Worker's Compensation Board and the Village Ordinances and as may be necessary to protect life, property, and work.

### 2.5 BLASTING

Blasting for excavation will be permitted only with the approval of the Village and only when proper precautions are taken for the protection of persons or property. The Developer's procedure in blasting shall conform to applicable Federal, Provincial and Municipal Laws.

### 2.6 PIPE MATERIALS

All materials shall conform to the following specifications and shall be subject to inspection and testing at the discretion of the Village.

- (a) Concrete Pipe - Non-reinforced concrete pipe shall conform to the latest ASTM Designation C14 Class 3. Pipe manufactured according to these specifications shall be "Extra Strength Non-Reinforced Concrete Pipe". Reinforced concrete pipe and fittings shall conform to ASTM C76 Class 3 or 4.

- (b) Asbestos-Cement Non-Pressure Sewer Pipe - Asbestos cement non-pressure sewer pipe shall conform to the latest ASTM Designation C428. Asbestos cement pipe manufactured according to these specifications shall be designated as Class 2400, Type II or Class 3600 for main piping.

Asbestos cement storm sewer pipe shall not be joined using plastic sleeve couplings.

- (c) Polyvinyl Chloride (PVC) Sewer Pipe - Polyvinyl chloride sewer pipe shall conform to the latest ASTM Designation D3034, CSA-B182.1, CSA-B182.2, SDR 35 maximum for main piping, SDR 28 maximum for 100 diameter service piping. 150 diameter and larger shall be SDR 35; 100 diameter shall be SDR 28.

- (d) Testing of Pipe Materials - All pipe is subject to testing and inspection. The basis of acceptance shall be conformation with the applicable ASTM specification. The Village may direct up to one percent (1%) of the pipe which is to be installed but not less than one standard length from each pipe size, tested to destruction, to determine its conformation with the accepted design, manufacture and its freedom from defects. The cost of all testing shall be borne by the Developer.

## 2.7 PIPE LAYING

- 2.7.1 Bedding - The sewer pipe shall be laid on the trench bottom using one of the following classes of bedding. Unless otherwise specified in the drawings or detailed specifications or unless maximum permitted trench widths are exceeded, Class C Bedding shall be used.

- (a) Class C Bedding - The sewer pipe shall be bedded on the bottom of the trench on a layer of approved bedding material, as shown in the detailed drawings. Bell holes shall be provided for either method, and the barrel of the pipe shall be evenly supported throughout the entire length and shall have its lower quadrant in contact with the bedding material. Bedding material shall be placed and compacted to 150 mm above the crown of the pipe.

- (b) Class B Bedding - The sewer pipe shall be bedded on the bottom of the trench with the surface of the sub-grade accurately shaped to fit the lower quadrant of the pipe and to support the barrel of the pipe uniformly. A cradle of concrete shall be poured around the pipe for the full width of the trench to a depth in accordance with detailed drawings. The concrete shall be thoroughly compacted around the pipe.

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(c) Class A Bedding - The sewer pipe shall be bedded and cradled in concrete to the depths shown on the detailed drawings. The concrete shall be poured to the full width of the trench and thoroughly compacted around, over and under the pipe. The pipe must not be laid on hardened concrete unless a 25 mm (minimum) layer of fresh concrete is placed between the pipe bells and the hardened concrete. The pipe may be temporarily supported on sand bags or concrete blocks.

2.7.2 Laying - Pipe laying shall commence at the lowest point of the length being laid and the pipes shall be placed with the spigot ends pointing in the direction of the flow, unless otherwise permitted. No outlet is guaranteed at the lower end of any storm sewer main.

No pipe shall be laid in water or when the trench conditions are unsuitable. At the end of each working day and at times when pipe laying is not in progress, the open ends of the pipe shall be closed by a watertight plug. Water shall be drained or pumped from the trench to prevent the pipe from floating. Any pipe which has floated shall be removed from the trench and be relaid as directed by the Village.

2.7.3 Jointing - Joints shall be made in accordance with the recommendations of the manufacturer or as specified herein.

Regardless of the type of joint used, before each joint is made, the lengths of pipe involved in the joint shall be cleaned inside and all dirt and other debris removed.

## 2.8 APPURTENANCES

Manholes, drop inlets, junctions and risers, catch basins and other appurtenances shall be installed at the locations shown on the drawings. Installations shall be in accordance with the detailed drawing for each appurtenance.

## 2.9 MANHOLES AND CATCH BASINS

Manholes and catch basins shall be constructed of precast concrete sections complete with ladder rungs as shown on the detailed drawings. Any other type of construction may be used only after written approval has been obtained from the Village.

The base of the manhole shall be poured in place concrete having a minimum compressive strength of 20.7 MPa at 28 days. The bases shall be constructed in accordance with the detailed drawings.

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The manhole channelling shall be constructed according to the detailed drawings. The main pipe may be run through the manhole and the top half cut off after the sloped concrete benching has been placed in the manhole. Alternatively, the main channel shall be formed using a smooth faced form of the same diameter as the pipe. The finished floor shall be trowelled to a smooth finish and left free from fins and concrete droppings. Manhole benching shall be sloped at 12:1 to drain into flow channel.

Branch lines entering the manholes shall be channelled to join the main sewer at an acute angle with the flow through the manhole.

Manhole sections shall be joined using cement mortar. A layer of mortar shall be placed on the tongue of each section prior to lowering the following section into place. The mortar squeezed out of the joint shall be wiped off and the joint finished flush inside and out. All lifting holes shall be plugged with cement mortar and finished flush with the manhole wall.

The outside surface of all manholes shall be sealed with a silicone treatment or approved equal.

Ladder rungs shall be constructed of 19 mm diameter galvanized iron and set at 300 mm on centre.

Manhole and catch basin frames and covers shall be set to grade, with the cover 5 mm below finished grade.

## 2.10 CONCRETE

All concrete for bedding, manholes, drop inlets, junctions and risers, catch basins and other appurtenances, shall have a compressive strength of not less than 20.7 MPa in 28 days or unless otherwise specified.

## 2.11 STORM SERVICE CONNECTIONS

2.11.1 Pipe Materials - Pipe used in the installation of storm services shall be asbestos cement or PVC sewer pipe, conforming to the material specifications detailed in Sections 2.6 (b) and 2.6 (c) of this specification.

2.11.2 Pipe Laying - Each pipe shall be set to line and grade as approved on the design. Minimum grade for a 100 mm service shall be two percent (2%) and for a 150 mm service shall be one percent (1%).

2.11.3 Bends and Cleanouts - Where horizontal bends are required in the service pipe, these shall be made with long radius bends. Where a horizontal bend greater than 45 degrees is required, a cleanout shall be constructed. Cleanouts shall also be installed as directed by the Village where the service connection exceeds 30 m in length.

- 2.11.4 Connecting the Storm Service to the Main Sewer - The connection to the sewer main shall be made with "Y" branches installed during construction of the main sewer, or by tapping the sewer main as permitted by the Village.

The service pipe shall be tapped into the upper half of the sewer main. Care shall be taken while tapping to ensure the sewer main will not be fractured and all broken pipe and mortar shall be removed from inside the sewer main. The tapping shall be of the same diameter as the service pipe and connection shall be made using a strap-on service saddle made of stainless steel or PVC. In no case shall the service pipe protrude into the main. Where required by the Village, a riser shall be constructed.

- 2.11.5 Wooden Markers - Wooden Markers shall be installed at all curb boxes, meter boxes, and/or termination of building services. The marker shall be 38 mm x 64 mm pressure treated wood and shall extend from the invert of the service to 600 mm above ground level. The top 600 mm shall be painted as directed by the Village.

## 2.12 INITIAL BACKFILLING

After the pipe has been satisfactorily bedded, the initial backfill shall be placed. The initial backfilling shall consist of sand, gravel or approved native material free of any rocks or other deleterious material. The backfill shall be hand placed and tamped in 150 mm layers for the full width of the trench up to a level 300 mm above the top of the pipe.

## 2.13 GENERAL BACKFILLING

After initial backfilling has been completed and approved, the trench shall be backfilled to one of the following classes:

- (a) Class 3 Backfilling - Class 3 backfilling shall consist of replacing excavated material in the trench and replacing any subsequent subsidence as it occurs for a period of one year from the date of completion of the work. No boulders, rock greater than 200 mm in greatest dimension, organic material, debris, ice or snow shall be permitted in the trench.

Surplus excavated material shall be mounded over the trench or shall be hauled away. If the material mounded over the trench is not sufficient to replace all subsidence, suitable material shall be imported.

To reduce the amount of subsidence, backfilling equipment or other suitable compacting equipment may be used in the trench to consolidate the backfill as it is placed. Equipment shall not be used until there is sufficient cover over the pipe to prevent damage.

Class 3 backfill shall only be used in easements where a roadway will not be constructed.

- (b) Class 2 Backfilling - Class 2 backfilling shall consist of replacing the excavated material in layers not exceeding 600 mm in thickness and compacting each layer by mechanical means to a density equivalent to that of the surrounding native material. No boulders, rock greater than 200 mm in greatest dimension, organic material, debris, ice or snow shall be permitted in the trench and these shall be hauled away. All surplus excavated material shall be hauled away to a suitable dump approved by the Village.

Any subsequent settlement that occurs during the maintenance period shall be corrected.

Class 2 backfill shall only be used with prior approval of the Village.

- (c) Class 1 Backfilling - Class 1 backfilling shall consist of backfilling the trench with sand or gravel mechanically compacted in even layers not exceeding 300 mm in thickness so there is no subsequent settlement in the trench. The backfill shall be compacted to a minimum density of ninety-five percent (95%) of the maximum dry density as determined by the Standard Proctor Test. All surplus excavated material shall be hauled away to a suitable dump approved by the Village. Any damage resulting from the subsidence of the backfill shall be repaired. This type of backfill shall be used for work within roadways, sidewalks and as required by the Village.

## 2.14 TESTING

Upon completion of the backfilling, sewer mains shall be tested for alignment and obstructions testing shall be done to the satisfaction and at no cost to the Village. The Village Works Superintendent shall be notified 48 hours in advance of each test.

- 2.14.1 Alignment - The sewer main shall be checked for alignment by means of a light test. For satisfactory alignment, the illuminated interior of the pipe shall not show any substantial misalignment, displaced pipe or other defects.

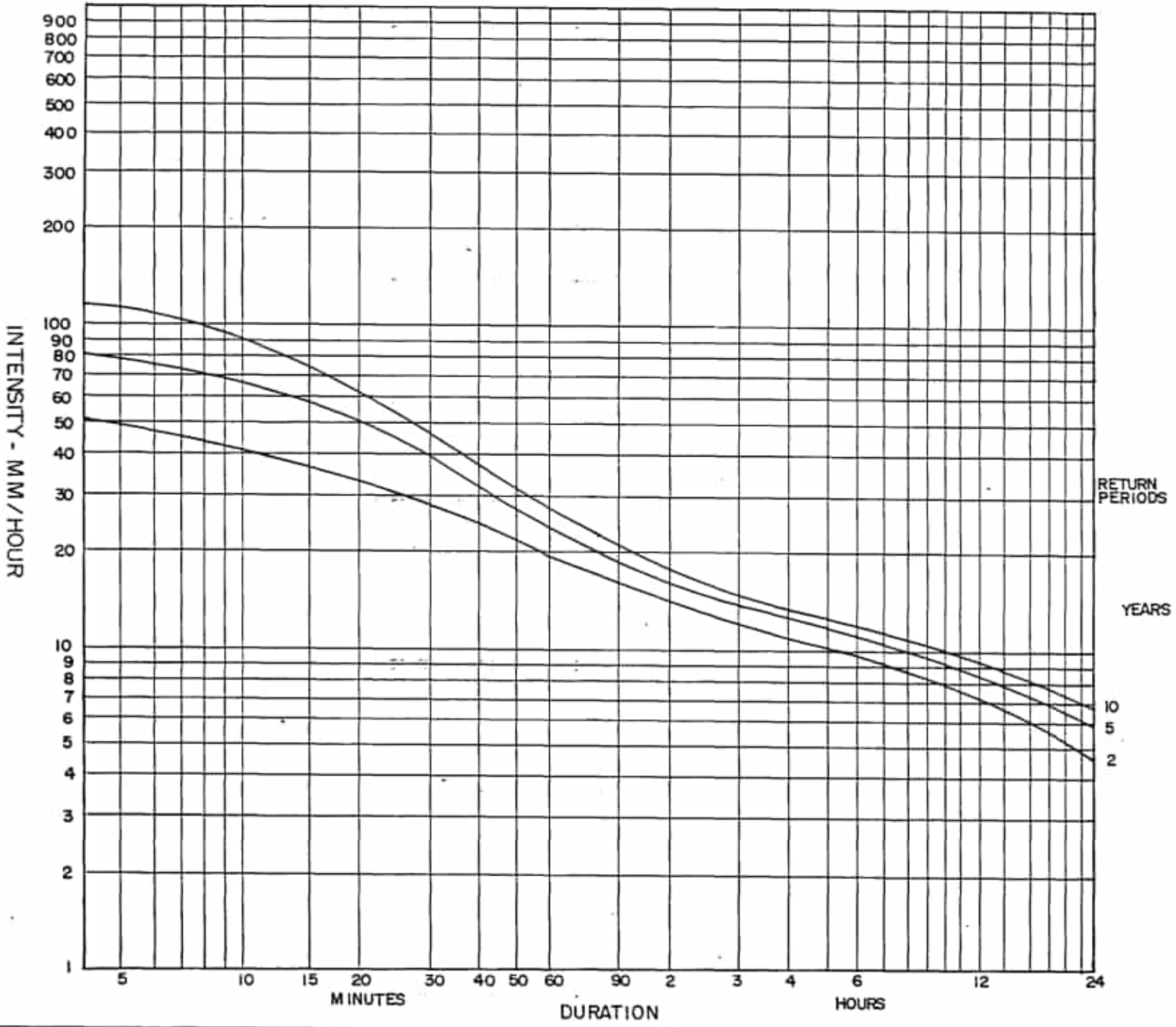
...10

2.14.2 Obstructions - The sewer main shall be tested for obstruction using a pill test. The sewer main shall be deemed unobstructed if a wood or metal ball having a diameter 50 mm less than the inside diameter of the pipe can be readily pulled through the sewer main.



SHORT DURATION RAINFALL INTENSITY-DURATION FREQUENCY DATA FOR UCLUJELET, B

Appendix E



CORPORATION of the VILLAGE of UCLUJELET

DATE: FEB. 20 SCALE: N.T.S. DRAWN BY: S. Mc.

APPROVED BY: Subdivision Control Bylaw RFP James MacIntosh, Director of Engineering S...

RAINFALL CURVES

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SCHEDULE "D"

VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

PRESSURE MAINS

SCHEDULE "D"VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

## PRESSURE MAINS

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## 1. DESIGN

### 1.1 WATER DEMANDS

The water distribution system shall be designed according to the following minimum demands:

#### 1.1.1 Residential

- Average flow per capita per day - 0.455 m<sup>3</sup>
- Maximum daily per capita - 1.135 m<sup>2</sup>
- Maximum peak per capita per day - 1.820 m<sup>3</sup>

#### 1.1.2 Commercial and Industrial

Heavy industrial, industrial parks and shopping centres must be accounted for separately in any proposed subdivision.

#### 1.1.3 Fire

Required fire flows shall be in accordance with the "Water Supply for Public Fire Protection" as published by the Insurers Advisory Organization. Design shall be based on the assumption that the fire demand can be coincidental with maximum daily demand.

### 1.2 WATER PRESSURES

The minimum design distribution pressure in all areas at peak demand is 200 KPa. Where these minimum design pressures cannot be maintained due to an increase in elevation or distance from the point of connection, a booster pump station and emergency storage shall be provided as part of the distribution system. The design and installation of a booster station must have the approval of the Village.

The maximum distribution line pressure shall be 830 KPa. where distribution pressures will exceed 830 KPa due to a drop in elevation, a pressure reducing station shall be installed as part of the distribution system. The design and installation of a pressure reducing station shall have the approval of the Village.

### 1.3 DESIGN POPULATION

Design population shall be computed using the following population densities or according to the planned development in the area to be served, whichever is larger.

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<u>Land Use</u>	<u>Population Density</u>
Single Family	37 persons per hectare
Multiple Family	11 persons per hectare
Commercial and Industrial	Must be computed separately according to use

#### 1.4 HYDRAULIC NETWORK

Depending upon the complexity and extent of the proposed distribution system, the Village may require a hydraulic network analysis diagram showing maximum design flows and pressures. The hydraulic network shall be designed to distribute the maximum design flows at the pressure specified.

#### 1.5 WATER DISTRIBUTION PIPING

Minor distribution and pipes in the grid system shall be minimum 150 mm diameter in residential districts. Dead end lines furnishing domestic supply only, and not serving hydrants, may be 100 mm in diameter with the approval of the Village. Where a water main ends in a dead end, a fire hydrant or blow off shall be provided for flushing purposes. If a blow off is used, it shall be a temporary blow off if there is a possibility the line could be extended in the future. If there is no possibility of future extension, a permanent blow off shall be used as shown in the detailed drawings. The blow pipe and valve shall not be less than half the diameter of the pipe it is intended to drain and in no case shall be less than 38 mm.

Hydrant distribution shall be in general conformance with the "Water Supply for Public Fire Protection", but in all cases spacing shall be such that the maximum distance from the hydrant to the centre of any property measured along the centreline of the road is 70 m.

An air release valve shall be provided at each high point of the watermain.

In general, valves shall be located at intersections and shall be so positioned that no more than 240 m is isolated in the case of line repairs. In larger trunk and feed mains where no interconnections are made, the spacing of valves should not exceed 610 m. Main valves should be placed at hydrant tees wherever possible.

## 2. WATER SYSTEM INSTALLATION

### 2.1 SCOPE

The terms of work governed by this part of the specifications includes excavation, backfilling, pipe laying, supply, delivery and installation of watermains including building service connections and the maintenance of the works street and other surfaces.

### 2.2 EXCAVATION TO SUB-GRADE

- (a) Grade and Alignment - The trench shall be excavated so that the pipe can be laid to the alignment, grade and depth required and shall only be excavated as far in advance of the pipe laying as permitted by the Village. All excavation shall be made exactly to lines and grades as shown on the drawings. No deviation from authorized line and grade shall be made without the written authority of the Village.
- (b) Uniformity - The pipe bedding shall provide a uniform and continuous support for the pipe and fittings on solid undisturbed ground. Any overexcavation below the required grade shall be backfilled with thoroughly compacted sand or gravel to sub-grade level.
- (c) Rock - Where excavation is made in rock, or where excavation is made in a material which cannot provide an even, uniform and smooth surface, or where large stones are encountered in the trench, such material shall be removed to provide a clear distance between any part or projection of such material and the surface of all pipe and fittings of not less than 150 mm for 600 mm outside diameter pipe or less, and 225 mm for pipe having an outside diameter greater than 600 mm. The sub-grade shall then be formed by backfilling with an approved gravel. Bedding material shall be evenly graded from coarse to fine with a maximum size of 20 mm and a maximum of 10% (by weight) passing a 0.075 mm sieve, or as approved by the Village. The finished sub-grade surface shall be shaped by hand tools to provide a uniform and continuous support for the pipe. All rock blasting shall continue a minimum of 1.5 m beyond all ends of line.
- (d) Unstable Sub-Grade - Where the sub-grade of the trench is unstable and will not properly support the pipe, or where it contains material harmful to the pipe such as ashes, refuse, vegetable or organic matter, such material shall be excavated to the width, depth and length required and shall be disposed of in a manner approved by the Village. The minimum depth of such excavation shall be 300 mm.

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The sub-grade shall then be made by backfilling with an approved gravel compacted in maximum 150 mm layers. The finished sub-grade surface shall be shaped by hand tools to provide a uniform and continuous support for the pipe.

Where the sub-grade cannot be made to properly support the pipe by replacing unsound material with compacted sand or gravel, a foundation for the pipe shall be constructed of pilings, timber, concrete or other material. All wood used for permanent pipe support shall be pressure treated. The design details of such a support structure must have prior approval of the Village before construction.

### 2.3 TRENCH WIDTH

The minimum width of trench below the crown of the pipe shall be not less than the nominal diameter of the pipe plus 400 mm and the maximum width of the trench shall not be more than the nominal diameter of the pipe plus 600 mm. Where the maximum trench width is exceeded, special bedding or other precautions shall be required.

### 2.4 DEPTH

Minimum depth of cover for watermains shall be 1.2 m unless adequate concrete protection is provided.

### 2.5 SAFETY REQUIREMENTS

Open cut trenches shall be shored and braced as required by the Accident Prevention Regulations of the Worker's Compensation Board and Village Ordinances, and as may be necessary to protect the life, property and the work.

### 2.6 BLASTING

Blasting for excavation will be permitted only with the approval of the Village and only when proper precautions are taken for the protection of persons or property. The Developer's procedure in blasting shall conform to applicable Federal, Provincial and Municipal laws.

### 2.7 MATERIALS

All materials in the watermain installation shall conform to the following specifications, and shall be subject to inspection and testing at the discretion of the Village.

#### 2.7.1 Pressure Main Materials

- (a) Polyvinyl Chloride (PVC) Pressure Pipe - PVC pressure pipe shall conform to AWWA Designation C900, ASTM Specification D1784 and CSA-B137.3. All PVC pipe shall have cast iron outside diameter dimensions. All pipe shall bear the underwriter's label.

- (b) Ductile Iron Pipe - Ductile iron pipe shall conform to AWWA C151. Unless otherwise specified on the drawings, pipe shall be suitable for a minimum 1035 KPa working pressure and shall have the following wall thicknesses including casting allowances.

<u>I.D. (mm)</u>	<u>WALL THICKNESS (mm)</u>
150	6.3
200	6.8
250	7.3
300	7.8
350	8.3

All pipe shall bear the underwriter's label. Ductile iron pipe shall be cement lined conforming to AWWA C104.

### 2.7.2 Water Service Materials

- (a) Copper Pipe - Building service connections shall be made using copper type K annealed copper in accordance with the latest ASTM Designation B88.
- (b) Polyethylene Pipe - High density polyethylene pipe shall conform to the latest ASTM Designation D2666. Pipe manufactured to these specifications shall be identified as Series 160 and have copper outside diameter. Compression connections on polyethylene pipe shall be made using stainless steel liners to prevent collapse of pipe at compression fitting.
- (c) Corporation Stops - Corporation stops shall conform to AWWA C800 with AWWA standard threaded inlet and compression outlet. Shut off head shall be tee head type.
- (d) Curb Stops - Curb stops shall have compression inlet and iron pipe thread outlets. curb stops shall be either "Ford" or "Mueller" type unless otherwise approved by the Village. Shut off head shall be solid tee type.

### 2.7.3 Appurtenances

- (a) Fire Hydrants - Hydrants shall be 150 mm in diameter, full bronze mounted suitable for a minimum working pressure of 1050 KPa and shall conform to the latest AWWA Designation C502. Hydrants shall be Terminal City Iron Works Ltd. No. C71P fitted with two 65 mm outlets and a pumper port.



- (b) Valves - Gate valves shall be iron body, bronze mounted, solid wedge, non-rising stem gate valves corresponding to the latest AWWA Designation C500. Valve ends shall be suitable for the pipe installed. Valves shall be complete with a 50 mm operating nut which opens counter clockwise. Valves shall be suitable for a minimum working pressure of 1050 KPa. Valves shall be flanged to fittings.
- (c) Fittings - Fittings and specials, including crosses, tees, elbows, bends, adaptors, plugs, caps, adjustable couplings, sleeves and any other special casting shall be cast iron conforming to the latest AWWA Designation C110 and ASTM designation or better with ends suitable for the pipe installed, designed for a minimum working pressure of 1035 KPa.

## 2.8 PIPE LAYING

### 2.8.1 Bedding

The watermain shall be laid on the trench bottom using one of the following classes of bedding. Unless otherwise specified, or unless maximum permitted trench widths are exceeded, Class C Bedding shall be used.

- (a) Class C Bedding - The watermain shall be bedded on the bottom of the trench on a layer of approved bedding material, as shown in the detailed drawings. Bell holes shall be provided for either method, and the barrel of the pipe shall be evenly supported throughout the entire length and shall have its lower quadrant in contact with the bedding material. Bedding material shall be placed and compacted to 150 mm above the crown of the pipe.
- (b) Class B Bedding - The watermain shall be bedded on the bottom of the trench with the surface of the sub-grade accurately shaped to fit the lower quadrant of the pipe and to support the barrel of the pipe uniformly. A cradle of concrete shall be poured around the pipe for the full width of the trench to a depth in accordance with detailed drawings. The concrete shall be thoroughly compacted around the pipe.

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- (c) Class A Bedding - The watermain shall be bedded and cradled in concrete to the depths shown on the detailed drawings. The concrete shall be poured to the full width of the trench and thoroughly compacted around, over and under the pipe. The pipe must not be laid on hardened concrete unless a 25 mm (minimum) layer of fresh concrete is placed between the pipe bell and the hardened concrete. The pipe may be temporarily supported on sand bags or concrete blocks.

### 2.8.2 Laying

Pipe laying shall commence at the lowest point of the length being laid and the pipes shall be placed with spigot ends pointing in the direction of the flow, unless otherwise permitted.

No pipe shall be laid in water or when the trench conditions are unsuitable. At the end of each working day and at times when pipe laying is not in progress, the open ends of the pipe shall be closed by a watertight plug. Water shall be drained or pumped from the trench to prevent the pipe from floating. Any pipe which has floated shall be removed from the trench and be relaid as directed by the Village.

### 2.8.3 Jointing

Joints shall be made in accordance with the recommendations of the manufacturer or as specified herein. Before any joints are made, prior approval shall be obtained for the method to be used and if requested, competence shall be demonstrated. Bell or coupling holes shall be provided at each joint to permit the jointing to be made properly. The ends of each pipe shall be wiped clean and dry before each joint is made.

Regardless of the type of joint used, before each joint is made the lengths of pipe involved in the joint shall be cleaned inside and all dirt and other debris removed.

## 2.9 APPURTENANCES

All valves, fittings, specials, hydrants, air release manholes, flushouts, and other appurtenances shall be installed at the location shown on the drawings. Installation shall be in accordance with the standard drawing for each appurtenance.

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2.9.1 Valves - Gate valves shall be installed at the location shown on the drawings. Each valve shall be provided with a valve box as specified on the standard drawing. The valve box shall be centered and plumb over the wrench nut of the valve, the riser pipe shall set evenly on the valve bonnet, shall be supported so it does not transmit shock or stress to the valve and shall be braced against lateral movement of the sides of the trench. The riser pipe shall be surrounded by 150 mm (minimum) of approved bedding material on all sides. The top of the valve box shall be adjusted to the elevation required by the Village. Valve boxes which are not plumb nor centered over the valve nut shall be dug up and reset properly.

2.9.2 Hydrants - Hydrants shall be installed at the locations shown on the drawings. All hydrants shall be plumb and shall have their nozzles parallel with or at right angles to the street, with pumper nozzles facing the street. Off-line hydrants shall be connected to the watermain by a hydrant lead conforming to the pipe material used for the mains. A 150 mm valve shall be installed in the hydrant lead. On-line hydrants shall be connected to the watermain by a tee. A concrete pad shall be installed below the hydrant. A sump pit shall be provided containing not less than 25 mm diameter .17 cubic metres of drain rock placed up to a level of 100 mm above the drain port.

## 2.10 REACTION BLOCKING

All plugs, caps, tees, crosses, reducers, valves, and bends deflecting 11-1/4 degrees or more, and all points where there is unrestrained thrust, shall be anchored to prevent movement by providing suitable reaction blocking or metal harness as shown on the drawings.

Reaction blocks shall be concrete having a compressive strength of not less than 20.7 MPa at 28 days.

Blocking shall be placed between undisturbed ground and the fitting to be anchored. The arrangement of the blocking shall be as shown on the standard drawing and all blocks shall be sized in accordance with good engineering practice for the prevailing soil conditions. The reaction blocking shall be so placed that the pipe and fittings will be accessible for repair.

A metal harness made of galvanized steel tie rods and concrete blocking shall be used for valves and vertical leads.

## 2.11 INITIAL BACKFILLING

After the pipe has been satisfactorily bedded, the initial backfill shall be placed. The initial backfilling shall consist of sand, gravel or approved native material, free of any rocks or other deleterious material. The backfill shall be hand placed and tamped in 150 mm layers for the full width of the trench up to a level 300 mm above the top of the pipe.

## 2.12 GENERAL BACKFILLING

After initial backfilling has been completed and approved, the trench shall be backfilled to one of the following classes:

- (a) Class 3 Backfilling - Class 3 backfilling shall consist of replacing excavated material in the trench and replacing any subsequent subsidence as it occurs for a period of one year from the date of completion of the work. No boulders, rock greater than 200 mm in greatest dimension, organic material, debris, ice or snow shall be permitted in the trench.

Surplus excavated material shall be mounded over the trench or shall be hauled away. If the material mounded over the trench is not sufficient to replace all subsidence, suitable material shall be imported.

To reduce the amount of subsidence, backfilling equipment or other suitable compacting equipment may be used in the trench to consolidate the backfill as it is placed. Equipment shall not be used until there is sufficient cover over the pipe to prevent damage. Class 3 backfill shall only be used in easements where a roadway will not be constructed.

- (b) Class 2 Backfilling - Class 2 backfilling shall consist of replacing the excavated material in layers not exceeding 600 mm (2 feet) in thickness and compacting each layer by mechanical means to a density equivalent to that of the surrounding native material.

No boulders, rock greater than 200 mm in greatest dimension, organic material, debris, ice or snow shall be permitted in the trench and these shall be hauled away. All surplus excavated material shall be hauled away to a suitable dump selected by the Developer and approved by the Village.

Any subsequent settlement that occurs during the maintenance period shall be corrected.

Class 2 backfill shall only be used with prior approval of the Village.

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- (c) Class 1 Backfilling - Class 1 backfilling shall consist of backfilling the trench with sand or gravel mechanically compacted in even layers not exceeding 300 mm in thickness so there is no subsequent settlement in the trench. The backfill shall be compacted to a minimum density of ninety-five percent (95%) of the maximum dry density as determined by the Standard Proctor Test. All surplus excavated material shall be hauled away to a suitable dump selected by the Developer and approved by the Village. Any damage resulting from the subsidence of the backfill shall be repaired. This type of backfill shall be used for work within roadways, sidewalks and as required by the Village.

## 2.13 BUILDING SERVICE WATER PIPE INSTALLATION

- (a) Bedding - Building service water pipe shall be bedded on a 100 mm layer of approved bedding material.
- (b) Laying - The building service water pipe shall be laid sufficiently slack to allow for settlement. All service water pipe shall be continuous from the watermain to the curb stops.
- (c) Curb Stops and Service Boxes - Curb stops and service boxes shall be installed as shown in the drawings and described in these specifications.
- (d) Connections to the Main - The building water pipe shall be tapped into the upper half of the watermain inclined at an angle of 45 degrees above the horizontal, leaving a suitable gooseneck. A corporation main stop shall be installed in the main in accordance with the manufacturer's specifications or instructions.

All water services shall be connected to the main by means of a double strap saddle.

- (e) Wooden Markers - Wooden markers shall be installed at all curb boxes, meter boxes, and/or termination of building services. The marker shall be 38 mm x 64 mm pressure treated wood and shall extend from the invert of the service to 600 mm above ground level. The top 600 mm shall be painted as directed by the Village.

## 2.14 TESTING

Before acceptance of the work, the entire system shall be subjected to a hydrostatic pressure test in the presence of the Village Public Works Superintendent.

The lines may be tested initially in sections prior to general backfilling with either air or water, but these tests will not be considered as being a satisfactory test of the whole system.

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All necessary labour, materials and equipment shall be provided for the test, including a suitable pump and measuring tank, pressure hoses, connection plugs, caps, gauges and all other apparatus necessary for filling the main, pumping to the required test pressure and recording the pressure and leakage losses.

- 2.14.1 Filling - The system shall be filled with water slowly and the air bled off at each hydrant and service. When the line has been filled and most of the air expelled, time should be allowed for the remaining air and water to reach a constant temperature. All damage to the pipe from freezing or other causes shall be repaired.
- 2.14.2 Pressure Test - After backfilling is completed, a final pressure test shall be carried out on all lines at 1.5 times the maximum expected operating pressure or a minimum of 1035 KPa whichever is greater. Each section between valves shall be brought to test pressure with the valves closed to test the valves under pressure. Test pressure shall be held without loss for five minutes before opening the valve and releasing the pressure into the next section.
- 2.14.3 Leakage Test - The test section with all intermediate valves open shall be brought up to test pressure and held for one hour. The pressure shall be maintained for one hour by pumping additional water into the test section from a measuring tank.

The test section will not be accepted if the leakage in litres measured by the above method exceeds the quantity determined by the following formula:

$$L = \frac{ND \sqrt{P}}{65000}$$

in which L is the allowable leakage in litres per hour, N is the number of pipe joints in the test section, D is the nominal diameter of the pipe in mm and P is the average test pressure in KPa gauge. If the leakage exceeds the allowable, the leaks and defects shall be located and repaired and the test repeated until leakage does not exceed the allowable (couplings shall be considered as being one joint for the above formula).

## 2.15 CONNECTION TO THE EXISTING SYSTEM

Prior to making such connections, all necessary arrangements shall be made with the Village Public Works Superintendent and those persons affected shall be notified of the duration of interruption to service. Operation of existing valves may only be done by the Village and the Village reserves the right to do all connections to the existing water system at the Developer's expense.

## 2.16 DISINFECTION

Prior to disinfection, all piping shall be flushed at as high a velocity as can be obtained from available water sources. Flushing water shall be discharged in a manner approved by the Village. Before being placed into service, all new watermains shall be chlorinated throughout their entire length in accordance with AWWA C601-68 Standard. The Developer shall arrange for bacterial sampling and testing. Village approval of the bacterial test results shall be required before the new works can be put into service. Chlorinated water shall be disposed of in a way that will not cause damage to vegetation or aquatic life in bodies of water or water courses. Points of discharge shall be approved by the Village.

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SCHEDULE "E"

VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

ROADS

SCHEDULE "E"VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

## ROADS

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## 1. DESIGN

### 1.1 DESIGN STANDARDS

All roads, lanes, boulevards, sidewalks shall be designed in accordance with the latest edition of the "Manual of Geometric Design Standards for Canadian Roads and Streets" as prepared by the Roads and Transportation Association of Canada or as defined in these specifications.

### 1.2 STREET GRADES

The minimum longitudinal gutter grade shall not be less than 0.5%. The maximum longitudinal grade for a local street shall not exceed 12%. Minimum transverse pavement slope shall be 2% from centreline to edge of pavement. All other horizontal and vertical alignment shall be in accordance with the Roads and Transportation Association of Canada Standards.

### 1.3 WIDTH OF RIGHT-OF-WAYS

The width of any right-of-ways shall be adequate to support the roadway, stabilize and drain the backslopes and accommodate all underground utilities. Generally, the width of all roads within the Village shall be:

#### 1.3.1 Major Roads

The right-of-way width of a major road as determined by the Village shall be a minimum of 20 m.

#### 1.3.2 Minor Roads

The right-of-way width for a minor road shall be a minimum of 15 m.

#### 1.3.3 Cul-de-Sacs

The minimum radius for the right of way of a cul-de-sac shall be 15 m.

Road classification will be at the discretion of the Village.

## 2. CONSTRUCTION OF GRANULAR SUB-BASE AND BASE COURSE

### 2.1 GENERAL

This work shall consist of sub-grade preparation including correction of unstable sub-grade sections supply of gravel or processed aggregates, hauling, placing and compacting the sub-base material, shaping to cross-section and profile all in accordance with these specifications and plans.

No sub-base gravel shall be placed on the sub-grade surface until the latter has been approved by the Village.

## 2.2 CLEARING

All right-of-ways must be cleared for their full width. In addition, all trees bordering the right-of-way are to be either topped, pruned or removed at the discretion of the Village. All stumps and other materials are to be disposed of in a manner approved by the Village.

## 2.3 SUB-GRADE PREPARATION

Prior to placing any sub-base or base course gravel over existing roadways, the Village may specify sub-grade preparation. This shall include cleaning and shaping side slopes of the sub-grade, scarifying the sub-grade, blading, mixing, watering, shaping compacting and rolling. All fill material used for sub-grade preparation shall be 300 mm (12 inch) minus and free of organic and deleterious matter.

Compaction of the fill material shall be to a minimum of 100% Standard Proctor Density.

## 2.4 SUB-BASE

### 2.4.1 Sub-Base Gravel Material

The gravel shall be free of coating of any character and shall be removed from areas where stripping of deleterious overburden has been approved by the Village.

The gravel shall conform to the following gradation specification.

<u>Total Passing</u>	<u>Percent</u>
75 mm square screen	100%
25 mm square screen	50 - 85%
No. 200 sieve (U.S. Standard)	2 - 10%

### 2.4.2 Compaction of Granular Sub-Base

Gravel shall be placed in layers not exceeding 200 mm. Each layer or lift of gravel shall be adequately consolidated with the use of vibratory type compactor. Where deemed necessary, water shall be used to aid compaction. A minimum compaction of 100% of Standard Proctor Density for the sub-base material shall be attained. The surface of the final layer of gravel shall be shaped and compacted to the proper grade and cross section.

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### 2.4.3 Granular Sub-Base Surface Tolerance

A blade grader shall be used in conjunction with the compaction roller or rollers to maintain an even and uniform compacted surface, shaped to the required lines.

The finished sub-base surface shall conform to grades with a tolerance of 15 mm.

## 2.5 BASE COURSE

### 2.5.1 Base Course General

This work shall consist of supply of crushed gravel, hauling, placing and compacting base course materials over the granular sub-base, all in accordance with the specifications and plans.

No base course gravel shall be placed on the sub-base surface until the latter has been approved by the Village.

### 2.5.2 Base Course Gravel Material

The base course gravel shall consist of sound, hard, durable particles of crushed, screened and blended gravel or broken rock, free of decomposed rock, shale, or other soft, thin, pliable or laminated pieces and shall contain no organic or deleterious materials.

The base course gravel shall conform to the following grading:

<u>Total Passing</u>	<u>Percent</u>
19 mm square screen	100%
No. 4 sieve (U.S. Standard)	40 - 65%
No. 30 sieve (U.S. Standard)	10 - 35%
No. 60 sieve (U.S. Standard)	5 - 25%
No. 200 sieve (U.S. Standard)	4 - 10%

Sixty percent (60%) of all material retained on the No. 4 sieve shall have at least one crushed face.

### 2.5.3 Placing Granular Base Course

The base course shall be spread in uniform layer over a previously shaped and compacted and approved sub-base, and shall be placed in layers of not more than 150 mm loose depth.

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#### 2.5.4 Compaction of Granular Base Course

Each layer shall be watered and mixed or aerated as directed by the Village to bring all the material to its optimum moisture content and shall be placed in layers not more than 150 mm loose depth. Each layer shall be compacted by the use of wobbly wheeled rollers. A blade grader shall be used in conjunction with the compaction rollers to obtain an even and properly shaped surface, conforming to the lines and grades as required.

Compaction of the granular base course is required to attain 100% of Standard Proctor Density in each layer.

#### 2.5.5 Proof Rolling

Each finished layer of subgrade, sub-base and base course shall be proof rolled using a single axle truck having a rear axle load of 8000 Kg and a tire pressure of 550 KPa. Should any displacement or rutting result from proof rolling, the displaced or rutted areas shall be excavated and replaced with compacted material as approved by the Village. Such areas will then be re-tested to confirm that displacement or rutting will not occur.

It shall be the responsibility of the Developer to supply a single axle, dual wheel truck and driver for the proof roll.

Proof rolling shall be scheduled so that the Village can have a representative in attendance.

#### 2.5.6 Granular Base Course Surface Tolerance

The finished base course surface shall conform to grades as staked within a tolerance of 12 mm along a 3 m straight edge. Care shall be taken along the gutters if such gutters are existing, to leave exactly the specified depth for the subsequent placing of the final asphalt layer(s).

### 3. CONSTRUCTION OF CONCRETE CURB AND GUTTER AND SIDEWALKS

#### 3.1 EXCAVATION AND FILL

##### 3.1.1 General Excavation

The excavation shall be made to provide proper grade, line and cross-section for the laying of concrete curb and gutter and sidewalks.

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Excavation shall include the removal and disposal of all material of whatever nature encountered taken within the boundaries necessary for the preparation and construction of concrete curb and gutter, sidewalk, catch basins and other structures to the required cross-sections, alignment and depth as shown on the plans.

Excavated materials from a natural gravel base area may be used as pit run gravel material for fills or embankments providing the use of such material has first been approved in writing by the Village.

All utility trenches over which any curb and gutter will cross must be well compacted. Any damages that may occur as a result of settling of these trenches must be corrected during the maintenance period.

Backfill will be required behind the curb and gutter section from the top of curb at a maximum grade of 5% for the first 1.5 metres.

The remainder to be graded at a maximum grade of 25% unless otherwise approved.

### 3.1.2 General Gravel Fill

Approved pit run gravel material shall be used in fills or embankment to replace unsuitable sub-grade material. Fills of 150 mm or less shall be made with base gravel, or other approved material properly mechanically compacted. The material shall be placed in 150 mm layers where applicable and each layer or lift of pit run gravel shall be adequately consolidated with the use of a vibratory type compactor.

## 3.2 BASE AND FORMS

### 3.2.1 Base

Before the concrete is placed, there shall be 75 mm compacted thickness of 19 mm minus crushed gravel placed and compacted on the finished sub-base. The material shall conform to the gradation specified.

The gravel shall be properly tamped and/or rolled to present as nearly as practicable a uniform bearing capacity throughout the entire width and length of the work.

### 3.2.2 Forms

Forms for curb and gutter and sidewalks shall be made of metal or timber properly seasoned and free from warps or other defects. If metal, they shall be of approved type and section. The forms shall be smooth and clean on the surface next to the concrete and may be oiled with Marvelube No. 30 or approved equal. The forms shall be well staked, braced or otherwise rigidly held true to the established lines and grades.

Any forms which have lost their shape or dimension or whose surfaces have become dented or rough, shall not be used.

The forms used for each type of construction shall be the same as the dimensions shown on the drawings.

## 3.3 CONCRETE

### 3.3.1 General

All concrete for the work shall attain a compressive strength of 30 MPa in 28 days. All concrete shall have a minimum slump of 37 mm, a maximum slump of 75 mm at the time of deposit in the forms.

### 3.3.2 Cement

Cement used on the work shall be Portland Cement and shall be a domestic product, bulk or bag cement may be used, but bulk cement shall be batched by an approved weighing device. The cement shall meet the requirements of CSA Standard CAN3-A5, Type 10 (Portland Cement).

### 3.3.3 Aggregates

(a) Fine Aggregate - Fine aggregate shall meet the requirements of CSA Standard CAN3-A23.1-5 except as modified by the following paragraphs:

Fine aggregate shall be natural sand, washed clean, having hard, strong, sharp, durable uncoated grains, and shall be free from injurious amounts of dust, lumps, soft or flaky particles, mica shale, alkali, organic matter, loam or other deleterious substance.

Sand containing more than 3% by weight of clay or loam shall be washed before using. Deleterious substances shall not exceed one percent (1%) of each substance and not more than five percent (5%) altogether. Should frequent rejections occur, no further sand will be accepted from that source, and another approved source will be required.

- (b) Coarse Aggregates - Coarse aggregates shall conform to the requirements of CSA Std. CAN3-A23.1-5 except as modified by the following paragraph:

Coarse aggregate shall consist of gravel or broken stone composed of strong, hard, durable, uncoated pebbles, or rock fragments, washed clean and free from injurious amounts of shale, coal, clay, soft fragments, dirt, glass and organic or other deleterious substances.

#### 3.3.4 Ready Mix Concrete

Ready mix concrete shall be mixed and delivered in accordance with the requirements set forth in A.S.T.M. Des: C94-58.

The rate of delivery of the mixed concrete shall be such that the interval between placing of successive batches shall not exceed 30 minutes, unless the last load completed the work to a proper expansion joint. The elapsed time between the introduction of mixing water to the cement and aggregates and depositing concrete in the work, shall not exceed 70 minutes.

#### 3.3.5 Placing of Concrete

After mixing, the concrete shall be transported rapidly to the place of deposit. Concreting operations shall be continuous until the section panel, or scheduled pour is completed. Should the concreting operations be unavoidably interrupted, expansion joints shall be formed at proper locations as herein specified.

The point of delivery of concrete shall be as close to the work as possible, and in no case more than 1 metre from the point of final deposit in the horizontal and vertical direction. Re-handling of concrete will not be permitted.

Concrete shall be deposited in a manner to prevent segregation of the materials. Freshly laid exposed concrete shall be protected in an approved manner against damage from the elements and construction operations harmful to concrete.

Special care shall be taken to place the concrete against the forms, particularly in corners, in order to prevent voids, pockets, rough areas and honeycombing. The concrete shall be tamped in such a manner as to work the coarse aggregate away from the forms and exposed surfaces. Vibrators and vibrator screens shall be used at the discretion of the Village.

Every precaution shall be taken to make all concrete masonry solid, compact, watertight, and smooth.

### 3.3.6 Curing

The surface of the concrete shall be protected from the sun and from the air by an approved membrane curing material which shall be accomplished by coating the entire exposed surface of the concrete with a liquid compound within a maximum of two hours after the placing of the concrete.

The membrane material shall contain a temporary color indicator and shall be applied uniformly by means of an approved pressure spray distributor at an average of 6 square metres per litre to give a minimum of 92% water retention in three days or a minimum of 68% water retention in 28 days.

The membrane material shall be so applied that the concrete surface is completely coated and sealed at one application. It shall conform to the requirements of A.S.T.M. Des: C309-58.

Under no circumstances shall any material be added to the curing compound as delivered by the manufacturer.

### 3.3.7 Admixtures

Calcium chloride meeting the specifications of A.S.T.M. Des: D98-59 may be used in the concrete at air temperatures below 4<sup>o</sup> C or at the discretion of the Village. It shall be added to the mix as a slurry with the water to a maximum of two percent (2%) by weight of cement.

Sufficient air entraining agent material shall be added to the concrete mix for entraining from four percent (4%) to six percent (6%) with an average of five percent (5%), of air in the concrete by volume. Determination of the volume of entrained air shall be made by means of an air meter of approved design. Air entraining admixtures for concrete shall conform to A.S.T.M. Des: C260-58T.

### 3.3.8 Cold Weather Concreting

During cold weather, concrete may be placed when the natural air temperature in the shade is 2<sup>o</sup> C and there are indications that the temperature is rising. If, however, the temperature in the shade is 4<sup>o</sup> C and is falling, no concrete shall be deposited. In no cases shall concrete be deposited on frozen sub-grade or sub-base.

If the concrete is placed in accordance with the above conditions and the temperature drops to 2<sup>o</sup> C within the next 24 hours, the concrete shall be adequately covered and protected to maintain it at 4<sup>o</sup> C. The period of protection shall be a minimum of 72 hours.

Concrete damaged by freezing shall be removed from the site and replaced with new concrete.

### 3.3.9 Concrete Tests

During the progress of the work, test cylinders will be made by the Village or a recognized Testing Laboratory appointed by the Village. The test cylinders shall receive, insofar as practicable, the same protection during the first 24 hours as is given to the construction they represent.

At all times cylinders shall be handled in a manner that will provide adequate protection against damage and ensure that test results will provide a sound basis for evaluation of concrete quality.

For every test made or as often as required by the Village, a slump test shall be made in accordance with CSA Std. CAN3-A23.2-5C and an air test in accordance with CSA Std. CAN3-A23.2-4C or 7C.

The cost of testing and inspections of the work shall be borne by the Developer.

## 3.4 CONCRETE CURB AND GUTTER

### 3.4.1 Placing

Concrete shall be placed in accordance with the details of Article 3.3.5 herein. all curb and gutter sections shall be finished with a steel trowel.

### 3.4.2 Stripping the Forms

The curb and gutter forms shall not be stripped less than 24 hours after the concrete has been placed. Adequate care shall be taken in removing forms to avoid spoiling or marring the concrete. Such patching as may be necessary shall be started immediately after removal of forms.



### 3.4.3 Expansion Joints

A 12 mm expansion joint shall be installed at 15 metre intervals at both sides of catch basins (1 m from centreline), at both ends of curb returns and both sides of all crossings which shall be through the entire depth of the curb and gutter. In addition, the 12 mm preformed expansion joint must conform to A.S.T.M. Des: C544-40. The edge of the joint shall be rounded off with an edger having an arc of a circle with a 6 mm radius.

The expansion joint material shall not protrude beyond the face of the finished concrete surface.

## 3.5 CONCRETE SIDEWALK

### 3.5.1 Placing

Concrete shall be placed in accordance with the details of Article 3.3.5 herein.

### 3.5.2 Finishing

After placing, the concrete shall be adequately worked with wood and steel trowels. Excessive trowelling is to be avoided. The edges shall be neatly rounded and a transverse joint not less than 30 mm deep shall be marked in the surface of the concrete at alternate 1.5 metre intervals. The area within the rectangles so formed shall be broom finished.

### 3.5.3 Stripping the Forms

The forms shall not be stripped less than 24 hours after the concrete has been placed. Adequate care shall be taken in removing the forms to avoid spoiling or marring the concrete. Such patching as may be necessary shall be started immediately after removal of forms.

### 3.5.4 Expansion Joints

The Developer shall install at 12 metre intervals, the 12 mm preformed expansion joint which shall extend through the full depth and width of the sidewalk. In addition, a 12 mm preformed expansion joint shall be installed where a sidewalk butts up against a structure. The type of preformed expansion joint shall conform to A.S.T.M. Des: D544.

### 3.5.5 Crossings

At lane and driveway crossings, the required sidewalk slab shall be of the thickness shown on the drawings and shall be laid the full width and required length of the crossing. The crossing shall be grooved and brushed longitudinally. At lane crossings a construction joint shall be placed opposite each property line and the required sidewalk slab shall be at the full thickness required for the crossing for the full distance between the construction joints.

### 3.6 BREAKING OUT

The Developer shall not break out any existing sidewalk and/or curb and gutter without first receiving approval to do so from the Village.

### 3.7 PROTECTION

The Developer shall supply and place all tarpaulins or other necessary material to protect the work from rain, dust, frost, or other similar weather action.

The Developer shall also barricade the work and keep all humans, animals, and vehicles off the work for a minimum period of 5 days after the finishing of the concrete has been completed. Any damage occurring to the work during this 5 day period regardless of origin, shall be replaced or repaired immediately.

### 3.8 CLEAN UP

#### 3.8.1 Backfilling and Backsloping

Where an excavation has been made wider than the finished concrete width, this area between the edge of the excavation and the finished concrete surface when both are level, shall be filled with suitable material and well compacted. This work shall be done at the end of the five day period following finishing of the concrete.

All curb and gutter shall be backfilled with suitable material firmly compacted to the top of the curb.

#### 3.8.2 Removal of Material and Refuse

All refuse shall be removed from each site before the concrete finishers move to another location.

### 3.8.3 Time for Clean Up

Complete clean up including the removal of all surplus excavation from backsloping, shall be made within two weeks from the time the excavation was started, excepting main streets, which shall be cleaned up immediately after the forms have been stripped. Clean up generally shall be approved by the Village.

### 3.9 PROTECTION AND ADJUSTMENT OF VALVES, MANHOLES AND CATCH BASINS

It will be the responsibility of the Developer to adjust all ground boxes on watermains, valves, catch basins, and all manholes on storm or sanitary sewers to the finished grade of roads or sidewalks. There will not be any tolerance in the shape of the finished surface in the vicinity of any valve box or manhole.

The methods or materials used in raising or lowering valve boxes, manholes, catch basins, etc. must be approved by the Village. The Developer will be responsible for maintaining these items during the maintenance period.

The Developer will be responsible for removing immediately, any earth, gravel, or debris and all materials that fall into a manhole or ground box, as a result of adjusting these appurtenances.

## 4. SPECIFICATIONS FOR HOT MIX ASPHALTIC PAVEMENT

### 4.1 DESCRIPTION

This specification shall apply to asphalt pavements composed of coarse and fine aggregate, mineral filler and hot asphalt cement, mixed in a central plant, placed on the base in accordance with these specifications and in conformity with the lines, grades, and typical cross section shown on the plans.

### 4.2 ASPHALT CEMENT

The asphalt cement used as the binder shall have a penetration of 85 - 100 and shall meet the specifications of the Asphalt Institute. The asphalt cement shall reach the mixer at a temperature of 135° - 150° C and shall be mixed in proportions with the mineral aggregate from tests made on the aggregate. The asphalt cement content of the mixture shall not be less than 5% or more than 7% by weight. The Village shall require a mix design prior to the placement of any asphalt pavement.

### 4.3 AGGREGATES

The crushed mineral aggregate shall meet the following specifications for grading and mix composition. The mineral aggregate delivered to the mixer shall be not less than 135° C and shall not exceed 150° C.

The coarse aggregate for asphaltic mixtures shall be crushed stone having a percentage wear by the Los Angeles abrasion machine test of not more than 35%. It must be clean, free from dust, elongated or flat fragments and all foreign matter.

The aggregate shall conform to the following gradation:

<u>Total Passing</u>	<u>Percent</u>
19 mm square screen	100%
12 mm square screen	80 - 100%
9 mm square screen	70 - 94%
No. 4 sieve (U.S. Standard)	50 - 80%
No. 8 sieve (U.S. Standard)	35 - 65%
No. 30 sieve (U.S. Standard)	18 - 40%
No. 50 sieve (U.S. Standard)	13 - 30%
No. 100 sieve (U.S. Standard)	8 - 20%
No. 200 sieve (U.S. Standard)	2 - 10%

The actual grading of the job mix when plotted shall so range from coarse to fine, that it will approximate, as closely as possible, the shape of the plotted average grading for the mix above. For the portion of aggregate passing the No. 4 sieve, gradings which range from the maximum of one sieve to the minimum of the next larger shall not be permitted. Sixty percent (60%) of the material retained on the No. 4 sieve shall have at least one crushed face.

#### 4.4 PROPERTIES OF ASPHALTIC CEMENT MIXES

The Village may from time to time conduct tests on the asphaltic hot mix material for the purpose of maintaining the highest possible quality. If materials are proven to be of inferior quality either due to temperature or physical characteristics from these tests, the Village shall reject any such material. In cases where asphaltic materials have already been laid and are later proven to be inferior, they shall be removed and replaced with a proper mix.

The laboratory-compacted mixtures, when compacted by the "Marshall Test Procedure" shall have the test properties shown on the following table:

Property of Compacted Paving Mixture (75 blows on each face)	Minimum	Maximum
Marshall Stability kgs. @ 60o C	450	---
Flow Index, units of .25 mm	8	16
Minimum percentage voids in mineral aggregate ** based on bulk S.G.	15	15
Percentage air voids ** in compacted mixture	3	3

\*Percentage voids in mineral aggregate to be calculated on the basis of A.S.T.M. bulk specific gravity for the aggregate.

\*\*Portion of bituminous cement absorbed into aggregate to be allowed for when calculating percentage air voids.

The above table provides the test requirements for laboratory compacted mixtures, however, quality control of job mixed and compacted mixtures shall be further evaluated with reference to the "Marshall Mix Design" recommendations available for each individual project.

The temperature of the asphalt mixture at the time of laying shall be 115° - 138° C.

Temperature variation between loads not to exceed plus or minus 11° C of preceding load. Asphalt mixes delivered at temperatures other than those specified shall not be accepted.

#### 4.5 TRANSPORTATION OF MIXTURES

The transportation of all asphaltic mixes to the work shall be done by trucks equipped with tight metal boxes. The inside of all boxes for hauling shall be cleaned of all foreign materials and lightly lubricated with thin oil. Excessive lubricant or use of gasoline, kerosene, diesel fuel or similar products will not be permitted. While in transit, the mixture shall be covered with tarpaulins.

...14



#### 4.6 PLACING OF ASPHALT PAVEMENT

The asphalt cement mixture shall be laid upon a dry, firm base and no mixture shall be laid when the air temperature is below 7° C or during periods of precipitation.

The asphaltic cement mixture shall be laid to the specified thickness applicable to the street or road classification as shown on the drawings or as directed by the Village. The mixture shall be spread for compaction by means of an approved self-propelled mechanical paver. The thickness requirement indicated in all cases refers to the compacted thickness of the finished surface layer. Paver speed shall be adjusted to minimize stoppages.

The design of the self-propelled mechanical spreader should meet the following minimum requirements; over all length and width 4.6 metres and 3 metres respectively centre to centre distance between tracks 2.1 metres width of crawler treads 250 mm. Also the spreader shall be capable of laying 3 metres width of asphaltic cement mixture without the use of any extensions.

After spreading, the mixture shall be thoroughly and uniformly rolled, as soon after being spread as it will bear the roller without checking or undue displacement.

Rolling of the first layer of the asphaltic mixture shall not be any closer than 150 mm from the edge of the longitudinal joint, consequently the adjacent layer shall be laid to the same uncompacted thickness as the former layer. The surface shall be rolled first by means of an approved tandem type roller weighing from 10 - 12.7 tonnes.

Rolling shall start longitudinally at the sides and proceed toward the centre of the mat. To prevent adherence of the asphaltic mixture to the rollers, the rollers shall be kept properly moistened but an excess of water shall not be permitted.

Rolling shall be carried on until all roller marks are eliminated and until no further compaction is possible.

Secondary rolling shall be done with an approved pneumatic tired roller. Finish rolling shall be by steel wheel roller and shall remove all marks left by pneumatic rolling. Finish rolling shall be accomplished with the minimum number of passes required to produce a satisfactory surface. After final rolling of the final surface course, the asphalt shall meet the gutter at an elevation of 3 mm above the top surface of the curb. The field density of the asphalt mixture shall at no place be less than 97% of the laboratory density.

Any defective areas shall be remedied immediately by removing the surface course mixture and replacing it with fresh hot mix which shall be compacted to conform with the surrounding area. At the end of each day's paving operation, transverse joints shall be cut perpendicular to the mat. On resuming laying of the paving mixture, the exposed edge shall be trimmed and painted with a thin coat of hot asphalt cement.

The surface of the finished asphalt mat shall, after the rollings, be smooth and true to the established profile, and crown; depressions exceeding 7 mm as measured with a 3 metre straight edge shall not be permitted.

#### 4.7 THICKNESS OF PAVEMENT

The maximum compacted thickness of any one layer of asphaltic hot mix shall not be greater than 75 mm. If the drawings show, or the Village specifies, that the asphalt surface course shall be greater than 75 mm, the asphaltic hot mix shall be placed in two layers of equal thickness.

When a second layer of surface course mixture is specified, the surface of the first layer shall first be thoroughly cleaned of dirt and other deleterious material by sweeping where necessary. A tack coat of SS-1 or SS-1h asphalt emulsion or as approved by the Village shall then be applied uniformly at a rate of .25 - .40 litres per square metre by means of an approved pressure distributor. After tack coat has cured, the second layer of surface course mix shall be spread and compacted in a manner similar to that detailed for the first layer.

#### 4.8 QUALITY CONTROL TESTING

The cost of initial testing, consisting of mix designs, sieve analysis, and other tests to establish control and determine whether the quality of materials proposed for the work meets these specifications, shall be borne by the Developer. The Village will outline the initial testing required and the Developer shall submit samples to an approved testing laboratory. The results shall be made available to the Village.

Once the materials are approved for the project, field testing to check the quality or performance of the work shall be conducted by the Village at the Developer's expense as required.

SCHEDULE "F"

VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

STREETLIGHTING

SCHEDULE "F"VILLAGE OF UCLUELET ENGINEERING  
STANDARDS AND SPECIFICATIONS

## STREETLIGHTING

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2.	Installation of Ornamental Streetlighting	1
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2.2.4	Photo Electric Controller	2
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2.2.6	Wiring	2
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## 1. DESIGN

### 1.1 LIGHTING LEVEL

In general, the ornamental streetlighting shall be designed in accordance with the Illuminating Engineering Society, Roadway Lighting Practice. The recommended average horizontal illumination shall be as follows:

Roadway Classification	<u>Area Classification</u>		
	Commercial Lux	Intermediate	Residential
Major and Expressway	21.5	28.6	10.76
Collector Local	12.9	18.4	18.4
	9.7	12.3	4.3

The levels recommended represent average horizontal illumination on the roadway, when the light source is at its lowest output and when the luminaire is in its dirtiest condition. (Maintenance factor 0.7.)

### 1.2 UNIFORMITY RATIO

The streetlighting system shall be designed so that the average illumination compared to the minimum (lowest lux value at any point on the roadway) shall not exceed a ratio of 3 to 1 for collector and expressway roads.

The average to minimum ratio shall not exceed 6 to 1 for residential areas.

### 1.3 LUMINAIRE MOUNTING HEIGHT

In general, luminaire mounting height shall be not less than 7.6 m measured from the centre of the street.

## 2. INSTALLATION OF ORNAMENTAL STREETLIGHTING

### 2.1 ELECTRICAL INSPECTION

The Developer shall have all drawings approved by the Electrical Inspector having jurisdiction. The Developer shall obtain all necessary electrical permits and clearances before proceeding with the work. All buried portions of the installation shall be subject to the inspection of the Electrical Inspector and the Village before any backfilling will be allowed.



The Developer upon completion of the installation of the complete system shall obtain a certificate of approval from the Electrical Inspection Authority having jurisdiction and shall supply such certificate to the Village.

## 2.2 MATERIALS

### 2.2.1 Luminaires

Luminaires shall be mercury vapour type with integral ballast rated 120/240 volts with external photo electric receptacle. Luminaires for resident areas shall be 250 watt with medium semi-cutoff Type II distribution. All luminaires shall be approved by the Canadian Standards Association.

### 2.2.2 Lamps

Lamps shall be 250 watt mercury vapour lamps, CGE H 250 x 37-5 or approved equal.

### 2.2.3 Poles

Streetlighting poles shall be fabricated from minimum 11 gauge AISC 1202 carbon steel. The poles shall be octagonal in cross section and be of single piece construction with one longitudinal weld. The welds shall be ground to produce a smooth surface free of indentations and blemishes.

The pole shall be finished by hot dipped galvanizing. Each pole shall be provided with a 100 mm x 175 mm handhole centered 250 mm above the base.

### 2.2.4 Photo Electric Controller

Unless otherwise required, each luminaire shall be individually controlled employing a photoelectric control relay compatible to the system voltage.

### 2.2.5 Conduit

Conduit shall be rigid polyvinyl chloride (PVC) minimum 31 mm diameter. Conduit shall meet the requirements of the Canadian Electrical Code.

### 2.2.6 Wiring

Wiring to light standards shall be RW90-X link, minimum size No. 12 AWG.

### 2.2.7 Fuses

Each light standard shall be separately fused and fuse holders shall be BOSSMAN "TRON" type HEB waterproof with not less than 15 AMP rating.

### 2.3 CONDUIT INSTALLATION

The PVC conduit shall be buried in a trench with its centreline not less than 600 mm below top of curb and sidewalk. If no curb or sidewalk is installed, the conduit shall be buried 900 mm below finished grade of centreline of the road. At all road and lane crossings, the conduit shall not be less than 900 mm below the top of crossing. The conduit shall be placed on a continuous layer of sand 75 mm below the conduit and then backfilled with 125 mm of sand. At all road and lane crossings, the backfill shall be pit run gravel mechanically compacted.

### 2.4 CONCRETE BASE

Concrete base shall be constructed as indicated in the drawings. The excavation shall be made only as large as necessary to accept a circular cardboard form. The form shall then be backfilled prior to placement of concrete. Wiring conduit shall be installed in place in the base form suitable for connection to the steel pole. Anchor bolts shall be positioned in the form using a bolt template. The template shall not be removed until the concrete has set. The concrete shall have a minimum strength 20.7 MPa at 28 days. Concrete shall be placed only after form position has been approved by the Village. Following the placement of concrete, the form shall be backfilled in layers not exceeding 300 mm to the design grade, with compaction provided to 95% Standard Proctor Density (minimum).

### 2.5 POLE MOUNTING

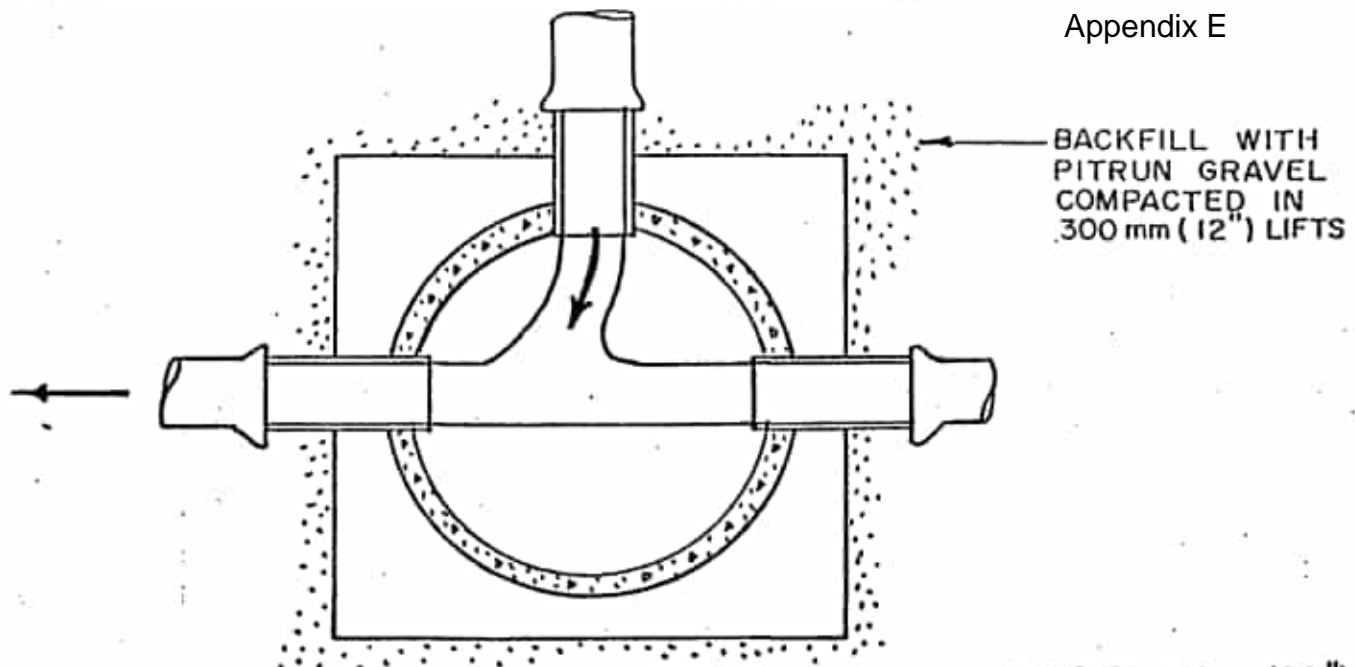
Poles shall not be mounted on concrete bases until 7 days after pouring bases. Prior to mounting poles, conduits shall be blown out with compressed air to remove all stones, dirt, water or other materials which may have entered.

The poles shall be erected vertically and bolted to the concrete base.

### 2.6 WIRING AT POLE BASE

Wiring and fittings at the handholes shall be in accordance with the Canadian Electrical Code. The work shall be executed in a neat workmanlike manner particularly at the handhole where several conductors enter the standard. All wiring shall be arranged so as to permit easy access to the fuseholder without disturbing other components.

**DRAWINGS**



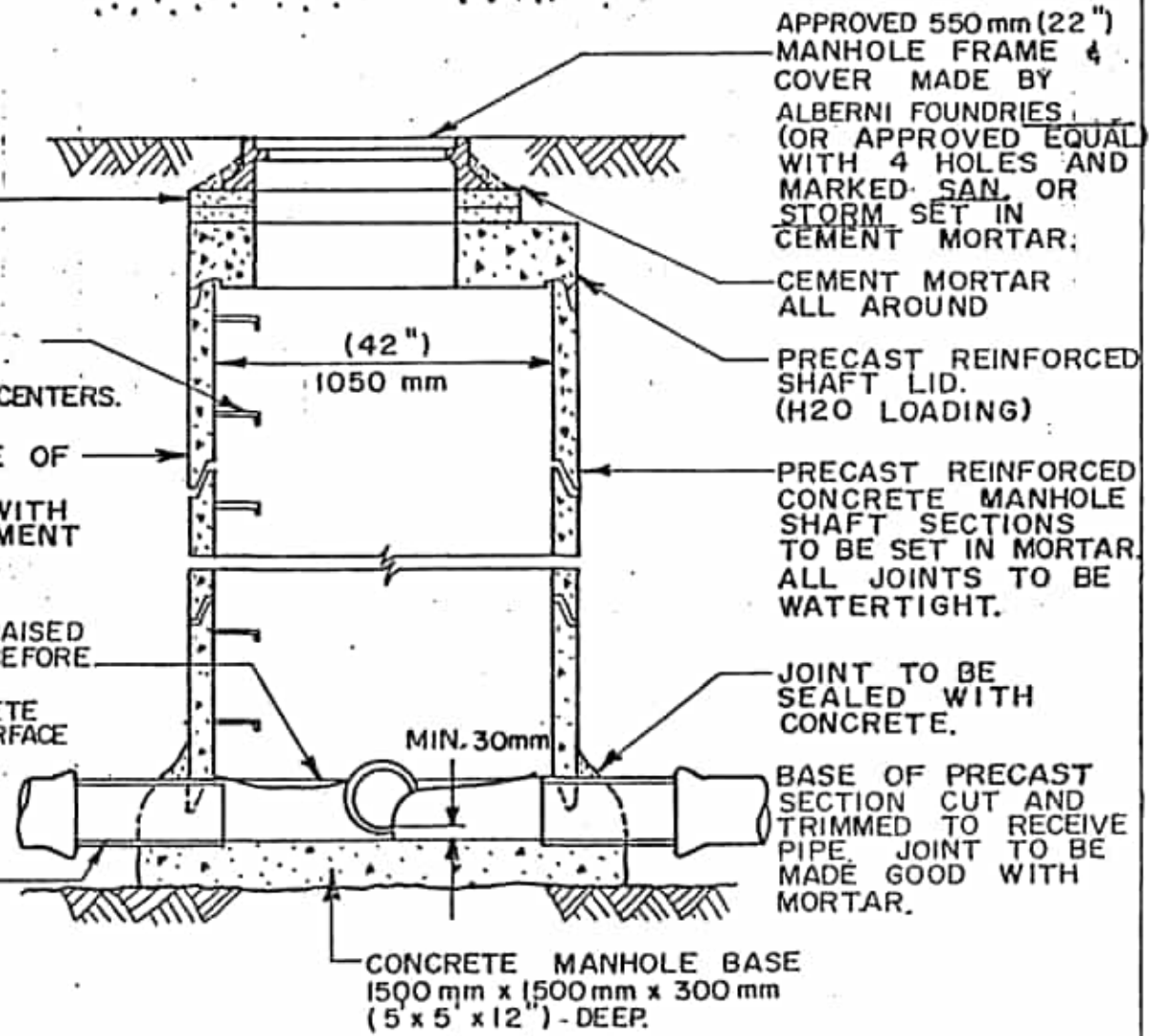
50 to 200 mm (2" to 8") BRICK LAYERS OR 100 mm (4") GROUND RING WITH PARGING.

19mm (3/4") Ø GALVANIZED SAFETY STEPS @ 300mm (12") CENTERS.

OUTSIDE SURFACE OF MANHOLE TO BE WATERPROOFED WITH SILICONE TREATMENT OR APPROVED EQUAL.

CHANNELING TO BE RAISED TO CROWN OF PIPE BEFORE SLOPED BENCHING. BENCH TO BE CONCRETE WITH TROWELLED SURFACE 12 TO 1 SLOPE.

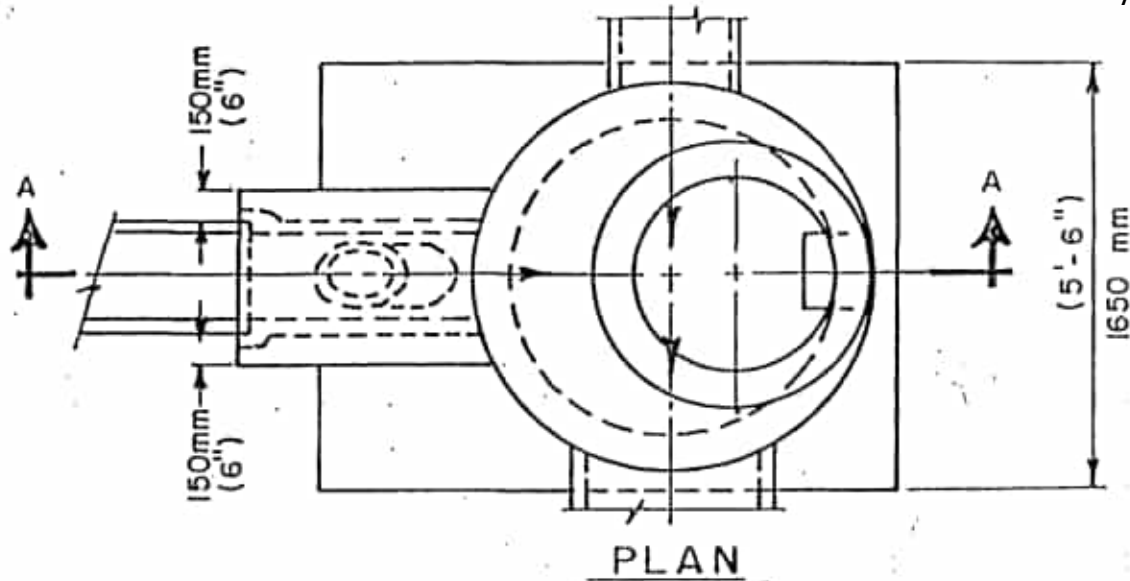
1m (3') MAX WITH A.C. PIPE



CORPORATION of the VILLAGE of UCLUELET.

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: LB.
APPROVED BY:		DRAWING NO. 1

# STANDARD MANHOLE

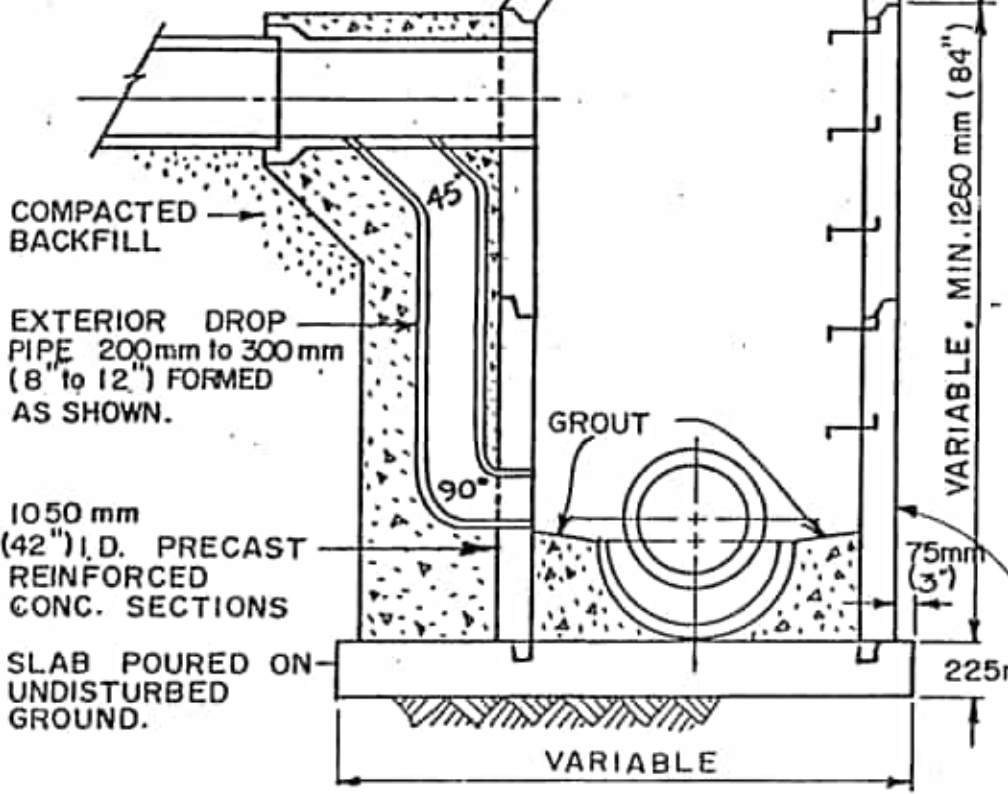


PLAN

C.I. FRAME & COVER  
AS SPECIFIED

50mm to 200mm (2" to 8")  
BRICK LAYERS.

19mm (3/4") Ø  
GALVANIZED RUNGS  
@ 300mm (12") O.C.



NOTE :

1. PRECAST CONE & PIPE SECTIONS TO ASTM C47
2. DROP SECTIONS TO BE USED WHERE DISTANCE FROM THE INCOMING PIPE INVERT TO THE BOTTOM OF THE MH EXCEEDS 600mm (2').
3. CONCENTRIC REDUCER SECTION MAY BE USED WHERE MH. HEIGHT EXCEEDS 2.5 m (8')

PIPE SIZE	
INFLOW	EXT. DROP
200 to 450 mm (8" to 18")	200mm (8")
525 to 750 mm (21" to 30")	250mm (10")
900 to 1200 mm (36" to 48")	450mm (18")

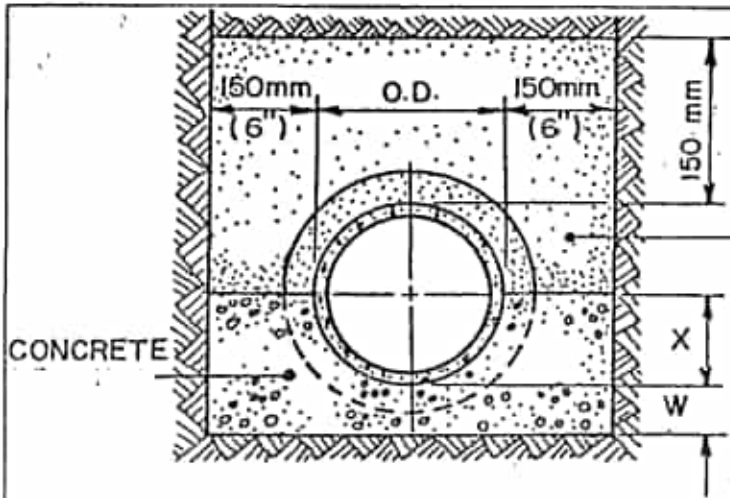
OUTSIDE SURFACE OF MANHOLE SHALL BE WATERPROOFED WITH AN APPROVED SILICONE MATERIAL.

CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N. T. S.	DRAWN BY: L. B.
APPROVED BY:	DRAWING NO.	2

STANDARD MANHOLE  
WITH DROP SECTION



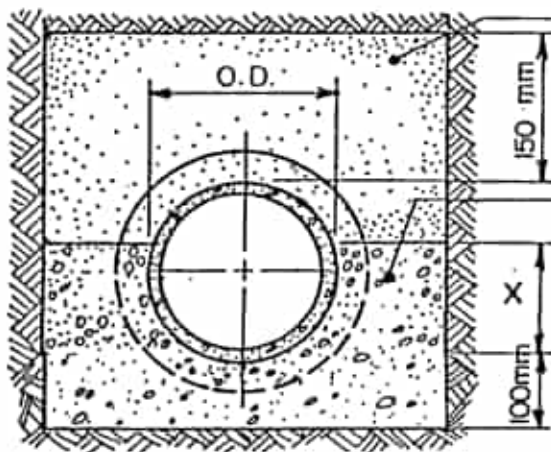


X	LOAD FACTOR
0.5 O.D.	3.0
0.75 O.D.	3.2

SIZE	W
150mm (6")	100mm (4")
200mm (8")	100mm (4")
250mm (10")	100mm (4")
300mm (12")	100mm (4")
375mm (15")	100mm (4")
450mm (18")	125mm (5")
525mm (21")	125mm (5")
600mm (24")	150mm (6")
675mm (27")	175mm (7")
750mm (30")	200mm (8")
825mm (33")	200mm (8")
900mm (36")	225mm (9")
975mm (39")	225mm (9")

HAND PLACED CONCRETE BEDDING HAND TAMPED TO 150 mm (0-6") ABOVE TOP OF PIPE

**CLASS A**  
CONCRETE ENCASED

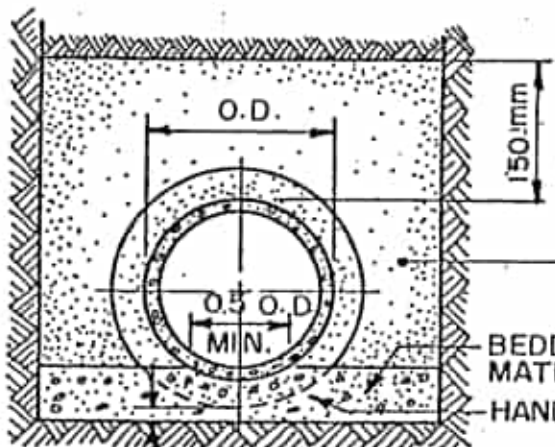


HAND PLACED APPROVED BEDDING MAT. HAND TAMPED TO 150 mm (0-6") ABOVE TOP OF PIPE.

CONCRETE BEDDING

X	LOAD FACTOR
0.375 O.D.	2.1
0.5 O.D.	2.3
0.75 O.D.	2.7
O.D. + 75mm (3")	3.2

**CLASS B**  
CONCRETE BEDDING



HAND PLACED APPROVED BEDDING MAT. HAND TAMPED TO 150 mm (0-6") ABOVE TOP OF PIPE.

BEDDING MATERIAL

HAND SHAPED FROM IMPORTED BEDDING MATERIAL

100mm (4") MIN OF BEDDING MATERIAL BELOW BELL.

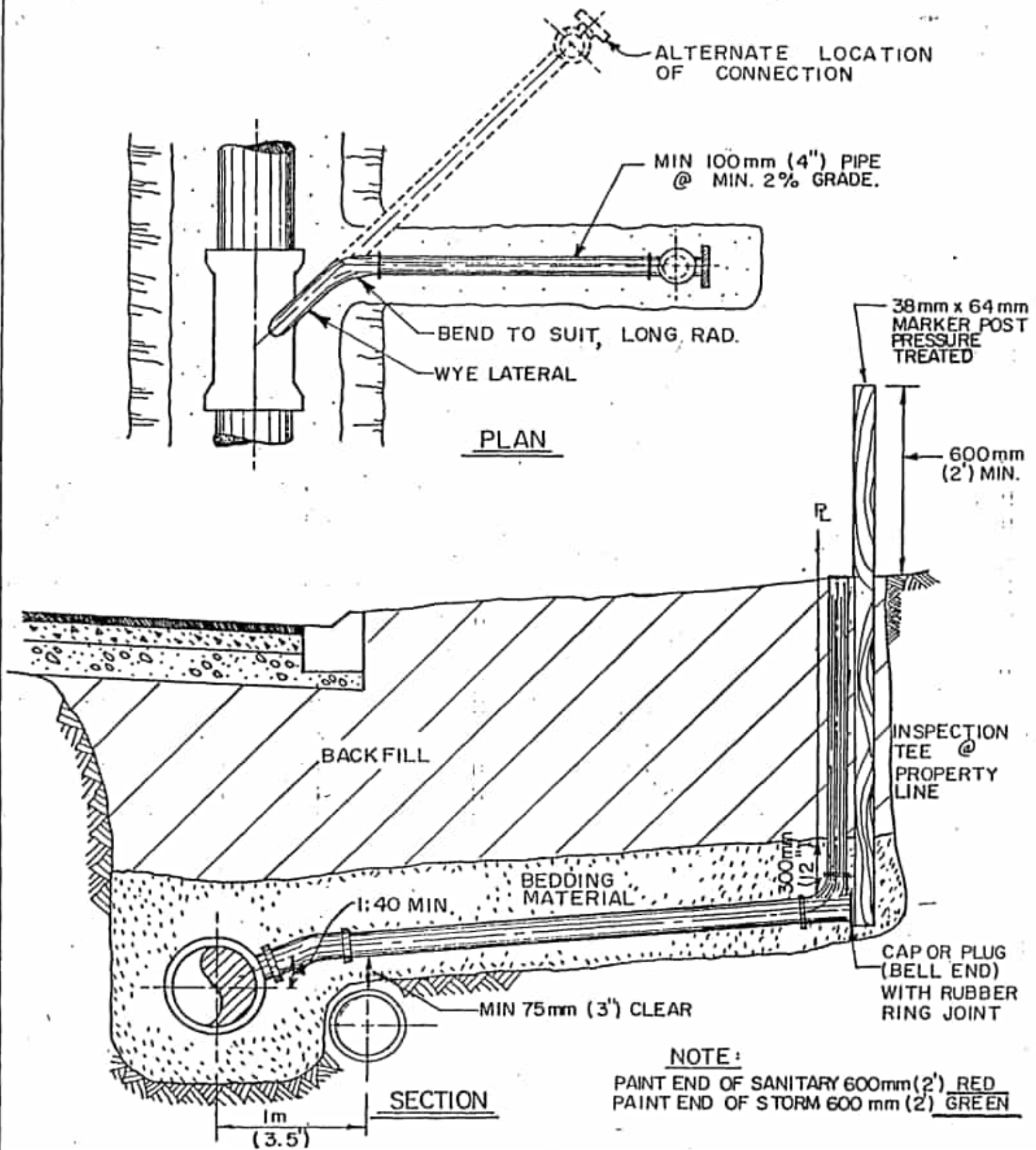
**CLASS C**  
(NORMAL BEDDING)

CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: L.B.
APPROVED BY:	DRAWING NO. 3	

STANDARD BEDDING  
FOR CLASS A, B, & C

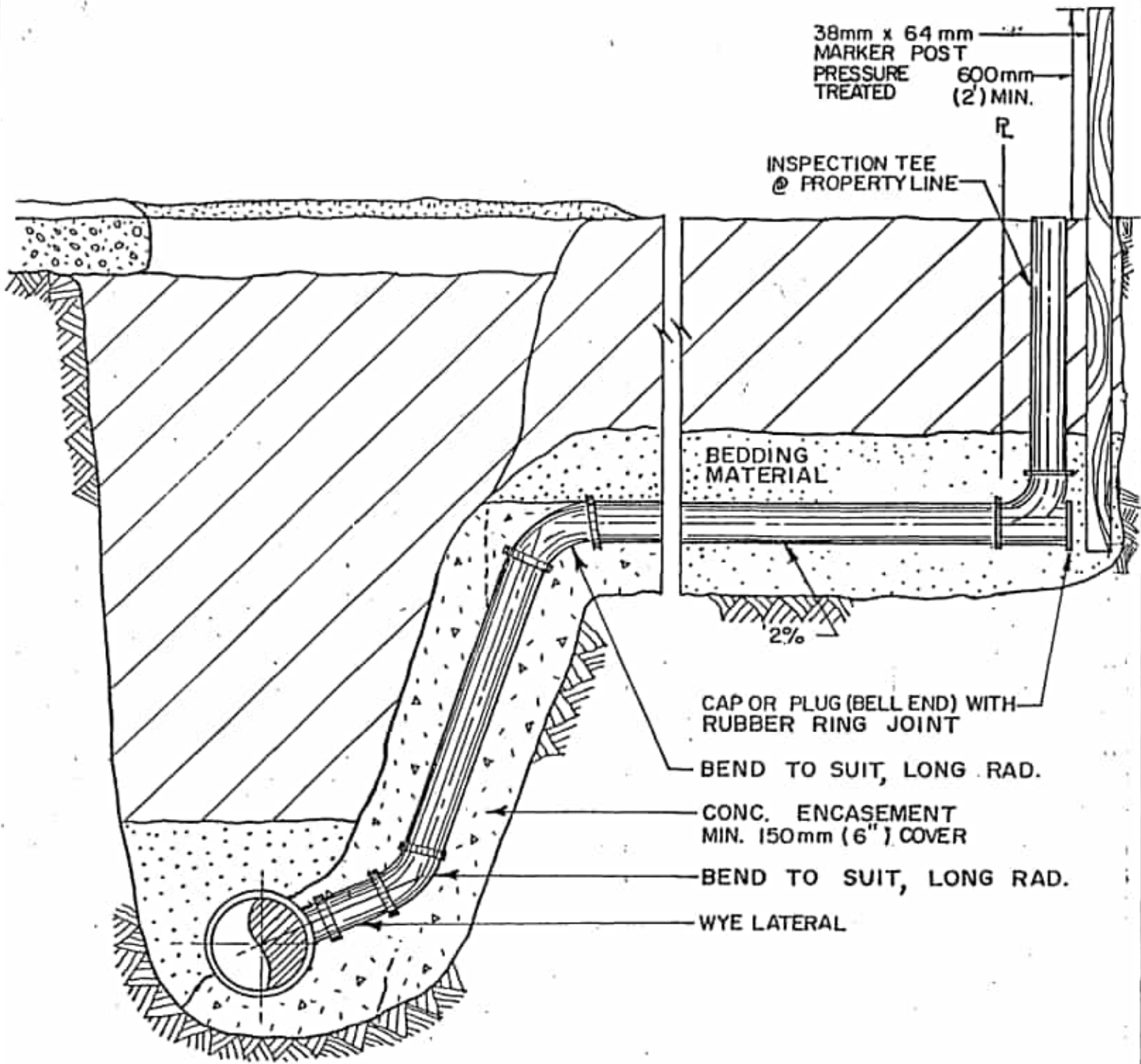
SEWER PIPES



CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: LB.
APPROVED BY:	DRAWING NO.	4

**STANDARD SEWER SERVICE CONNECTION**



- 38mm x 64mm MARKER POST PRESSURE TREATED
- 600mm (2) MIN.
- INSPECTION TEE @ PROPERTY LINE
- BEDDING MATERIAL
- 2%
- CAP OR PLUG (BELL END) WITH RUBBER RING JOINT
- BEND TO SUIT, LONG RAD.
- CONC. ENCASEMENT MIN. 150mm (6") COVER
- BEND TO SUIT, LONG RAD.
- WYE LATERAL

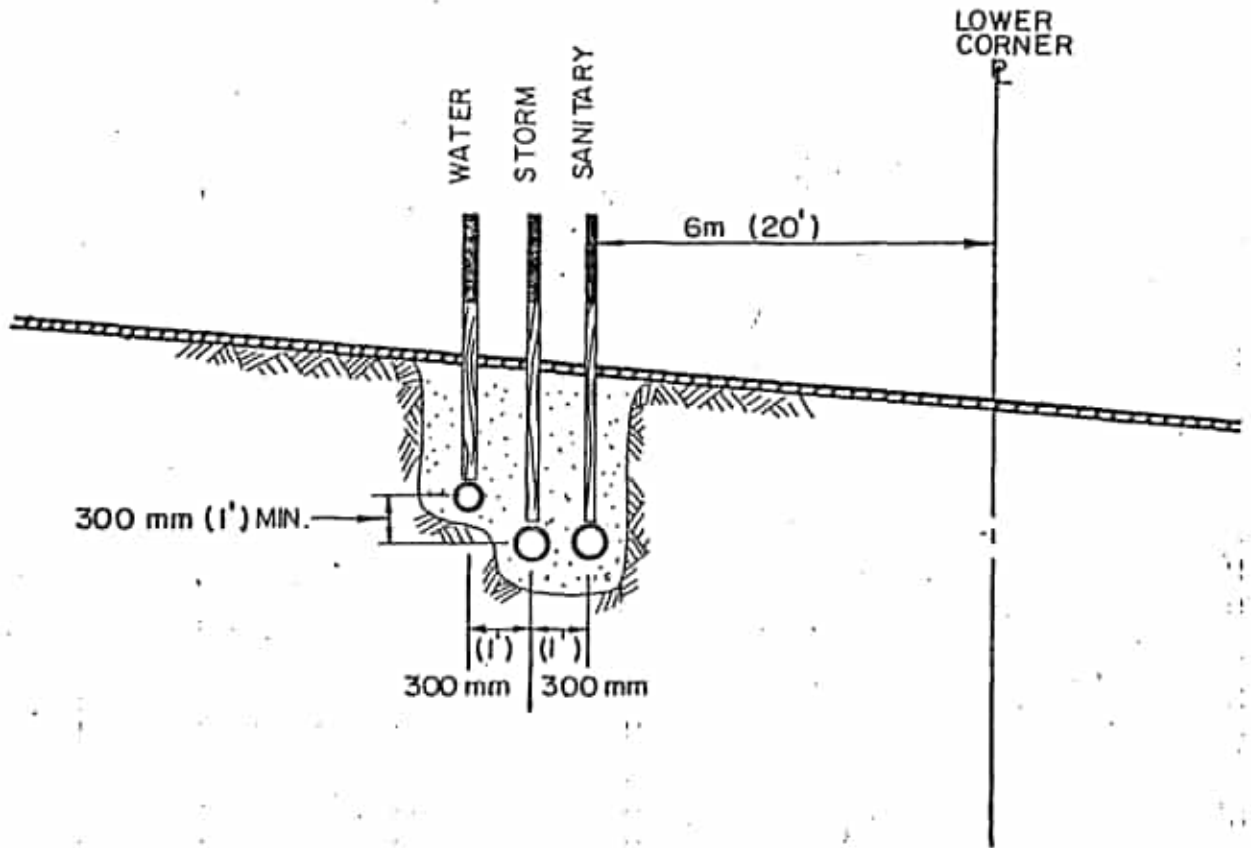
**NOTE:**

PAINT END OF SANITARY 600mm (2') RED  
 PAINT END OF STORM 600mm (2') GREEN

CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: LB
APPROVED BY:		DRAWING NO. 5

**SEWER RISER  
 SERVICE CONNECTION**



**NOTE :**

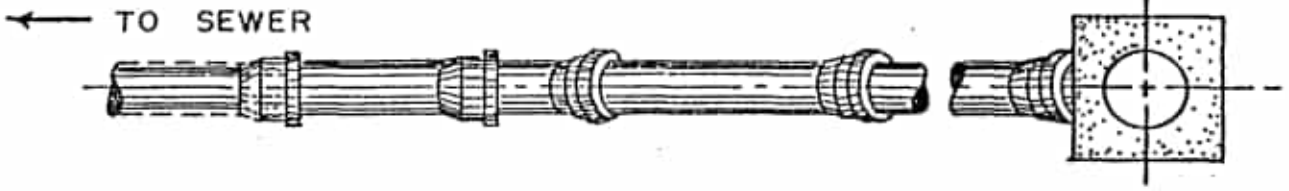
38mm x 64mm MARKER POSTS TO BE PRESSURE TREATED and TOP 600mm (2') TO BE PAINTED AS FOLLOWS:

- SANITARY - RED   x   TO INV.
- STORM - GREEN   x   TO INV.
- WATER - BLUE

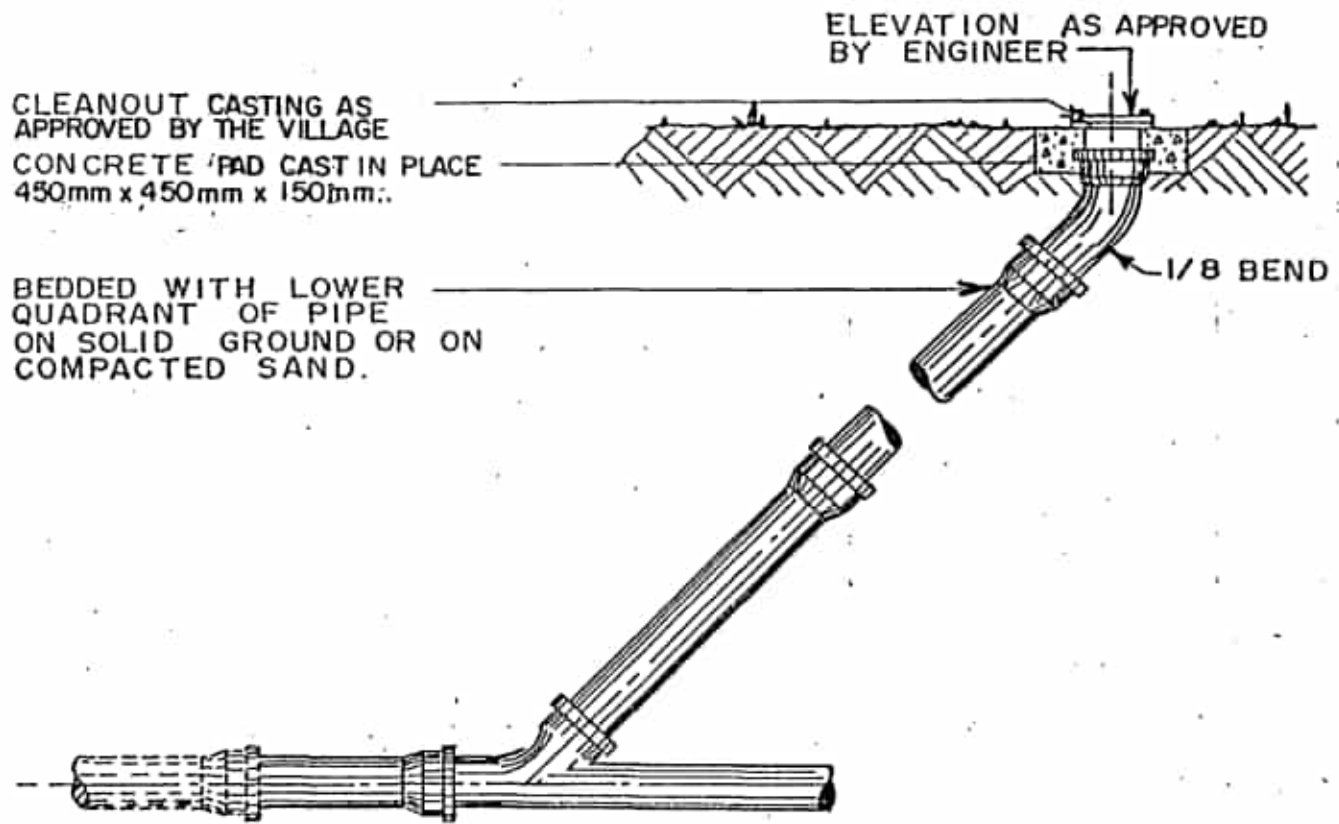
CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N. T. S.	DRAWN BY: R. L. J.
APPROVED BY:	DRAWING NO. 6	

STANDARD BUILDING SERVICE LOCATIONS



PLAN



ELEVATION

CORPORATION of the VILLAGE of UCLUELET

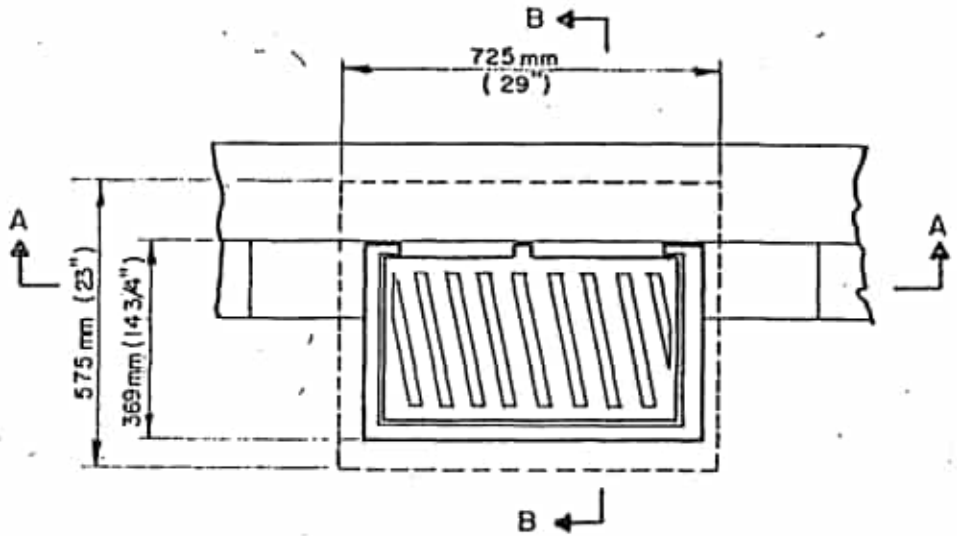
DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: LB
APPROVED BY:	DRAWING NO. 7	

SEWER CLEANOUT

WEL - 3311A - D.M.



CONCRETE TO BE 20 MPa  
AT 28 DAYS, MAX. SLUMP  
75mm (3").



PLAN

FRAME & GRATE  
VICTORIA FOUNDRY  
20 - 30 OR APPROVED  
EQUAL.

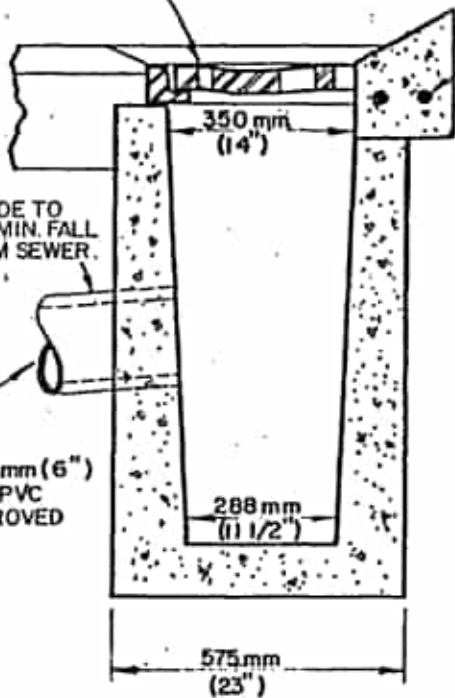
TO BE GROUTED WITH CONCRETE

CURB NOT TO BE POURED UNTIL  
CATCHBASIN IS INSTALLED.

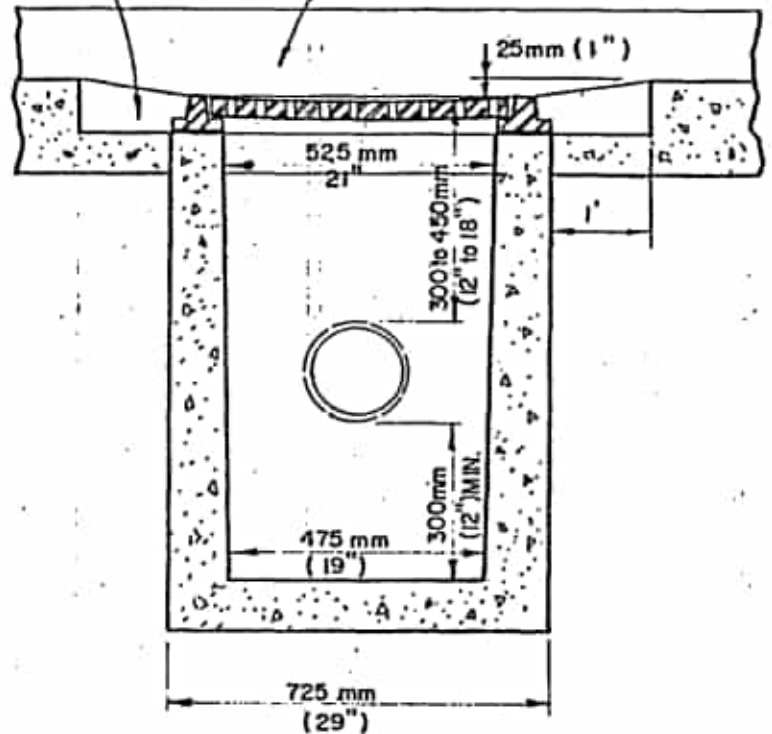
10m (#4) BARS 3m (10') LONG  
CENTERED ON CATCHBASIN

MIN. GRADE TO  
BE 1% MIN. FALL  
TO STORM SEWER.

MIN. 150mm (6")  
SDR 28 PVC  
OR APPROVED  
EQUAL.



SECTION B - B



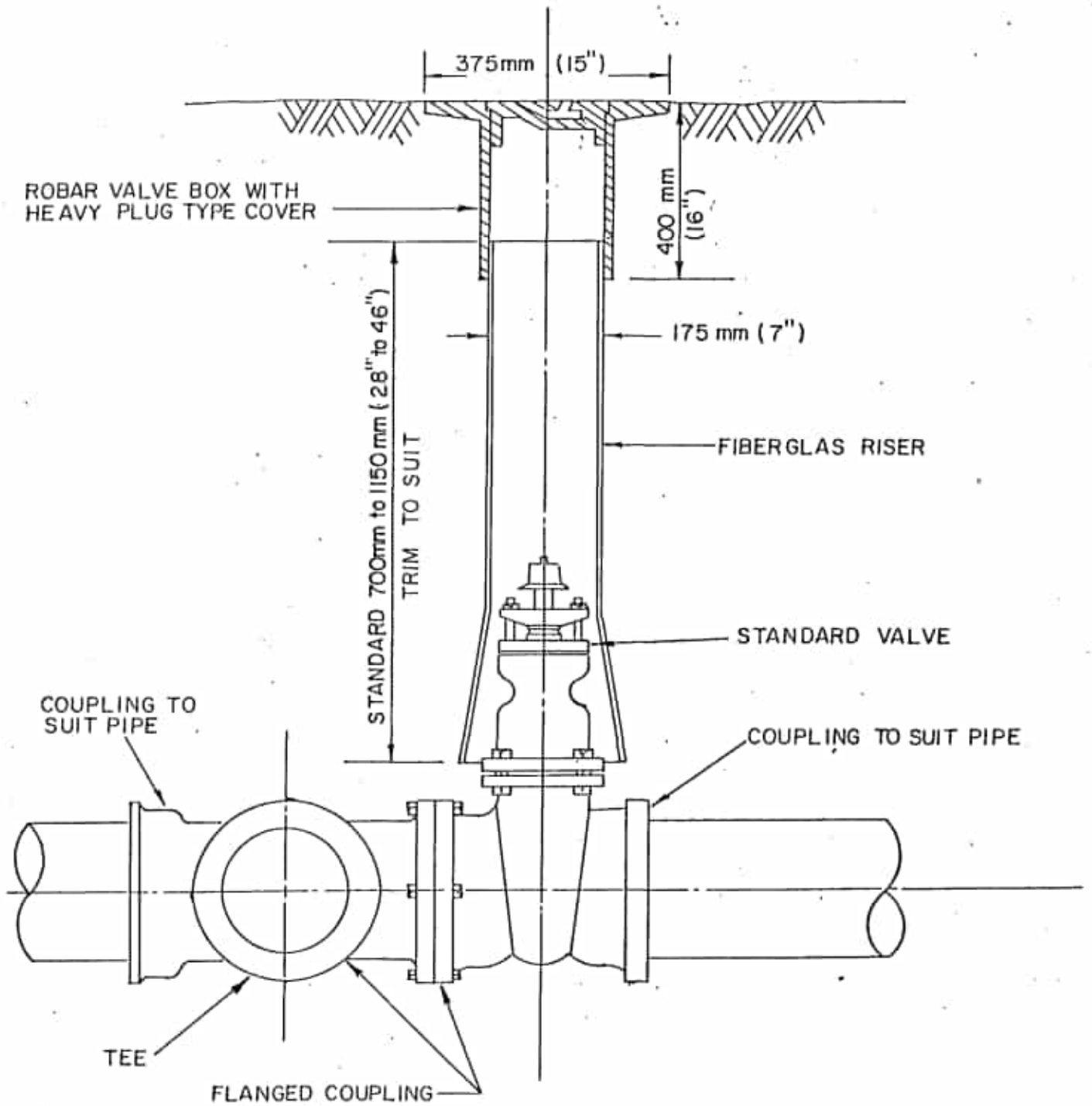
SECTION A - A

CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N. T. S.	DRAWN BY: S. W.
APPROVED BY:	DRAWING NO. 8	

STANDARD PRECAST  
CATCH BASIN

VALVE DETAIL



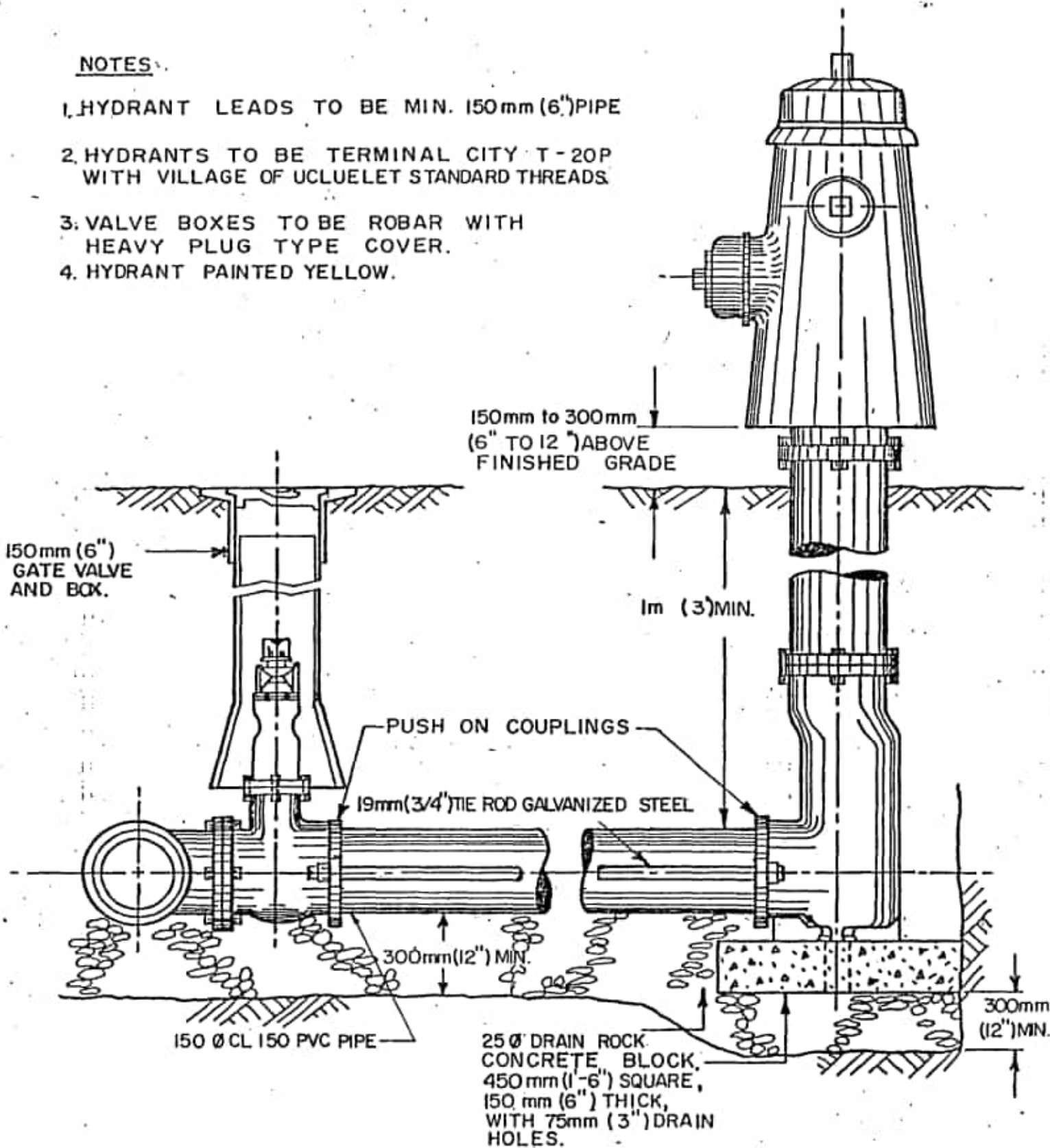
CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N. T. S.	DRAWN BY: R. L. J.
APPROVED BY:	DRAWING NO. 5	

STANDARD VALVE  
INSTALLATION

**NOTES**

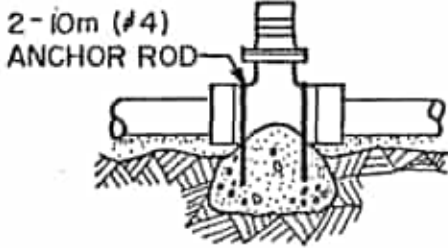
1. HYDRANT LEADS TO BE MIN. 150mm (6") PIPE
2. HYDRANTS TO BE TERMINAL CITY T-20P WITH VILLAGE OF UCLUELET STANDARD THREADS.
3. VALVE BOXES TO BE ROBAR WITH HEAVY PLUG TYPE COVER.
4. HYDRANT PAINTED YELLOW.



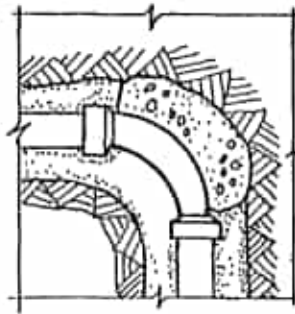
CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N. T. S.	DRAWN BY: LB.
APPROVED BY:		DRAWING NO. 10

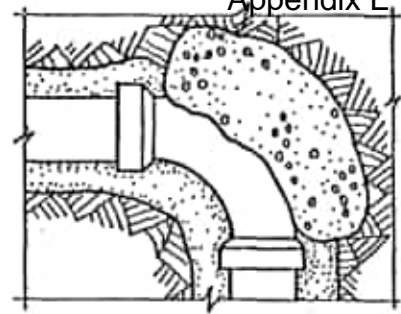
STANDARD HYDRANT :



GATE VALVE ANCHOR



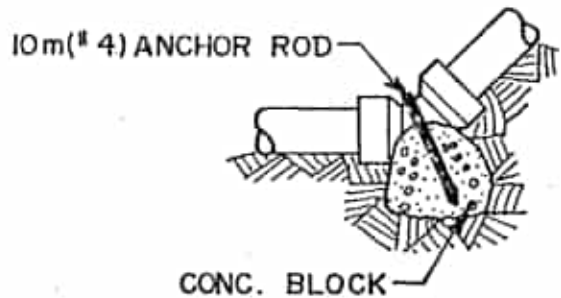
FOR SMALL PIPES



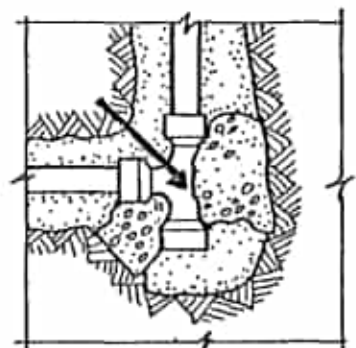
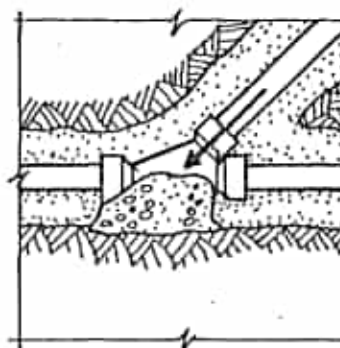
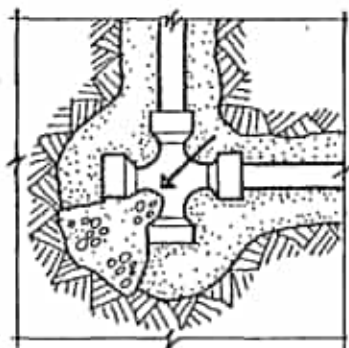
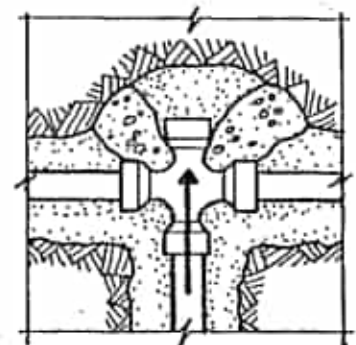
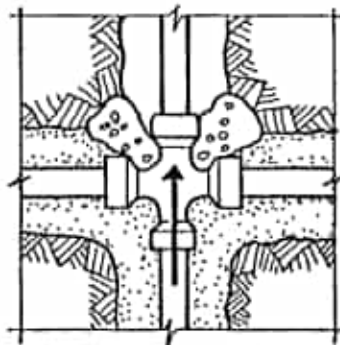
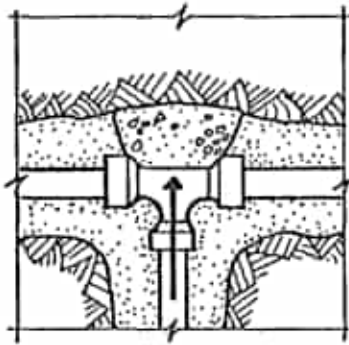
FOR LARGE PIPES

TYPICAL THRUST BLOCKS AT 90° BENDS

WORKING PRESSURE KPA	SIZE OF VALVE ( P.S.I.)	SIZE OF VALVE REQUIRING ANCHORAGE
345 - 690	(50-100)	300mm ( 12" ) AND UP
690 - 1035	(101 - 150)	200mm ( 8" ) AND UP
1035 - 1380	(151 - 200)	ALL SIZES



GATE VALVE ANCHORS



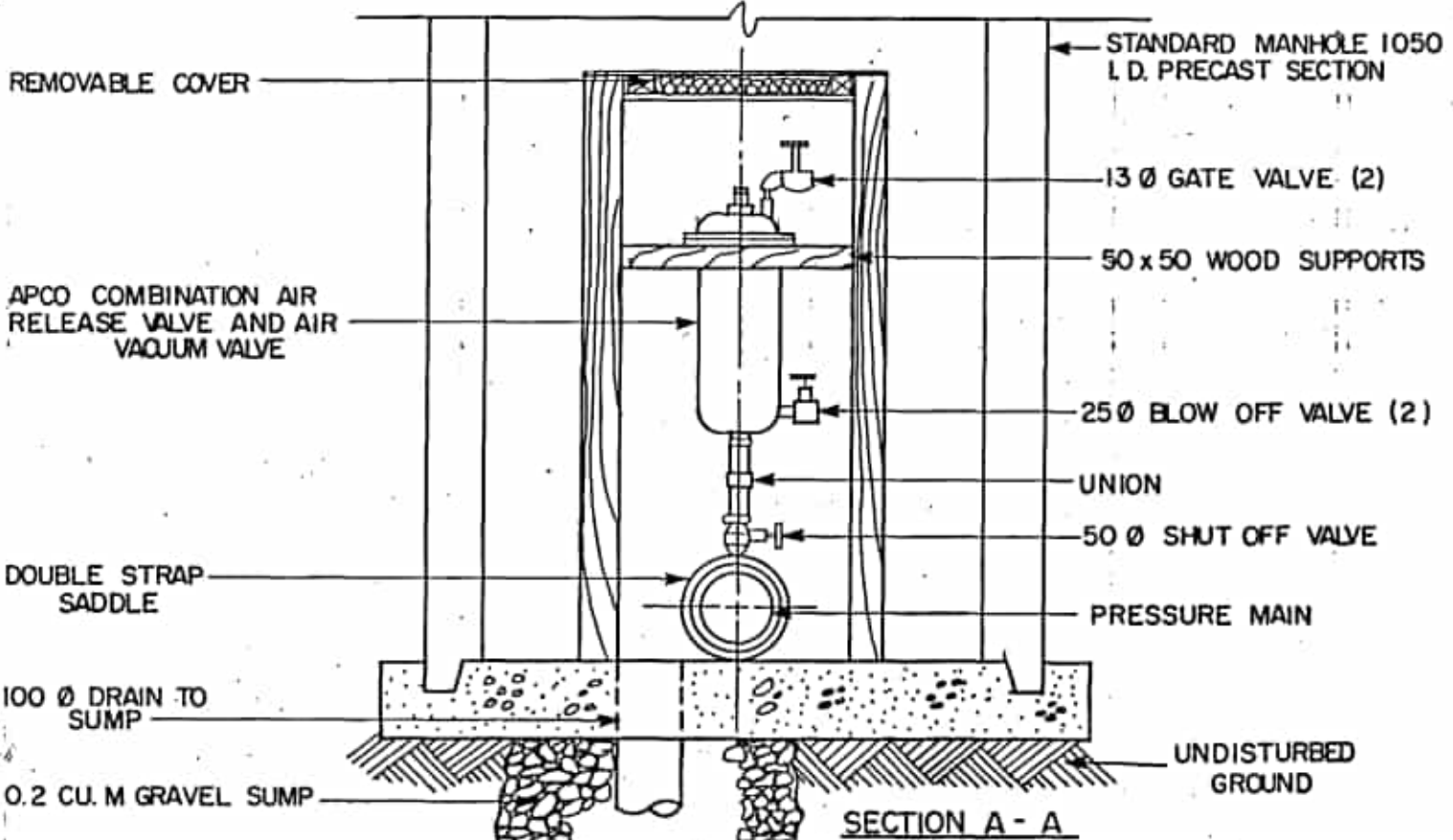
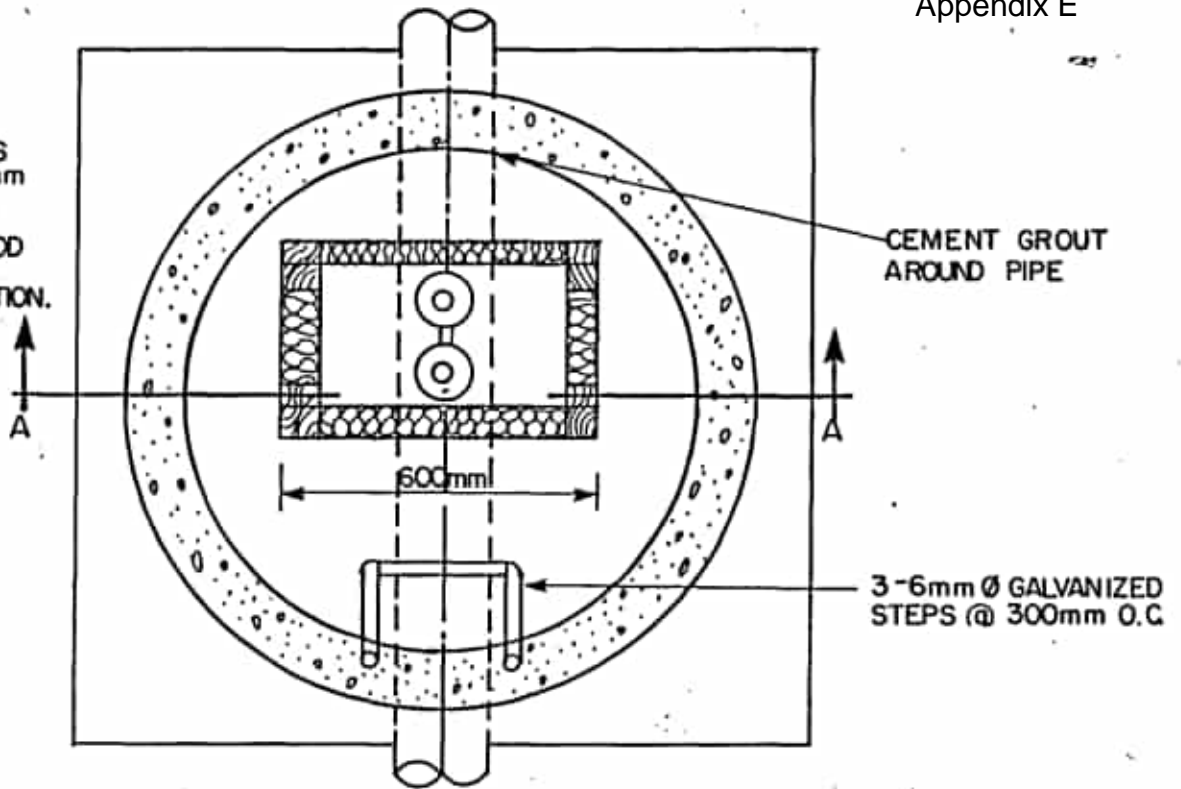
THRUST BLOCKS FOR FITTINGS

CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: L.B.
APPROVED BY:		DRAWING NO. 11

STANDARD THRUST  
BLOCK DETAILS

**NOTE:**  
 TOP AND FRONT PANELS  
 TO BE REMOVABLE, 50mm  
 FRAME CONSTRUCTION,  
 INSIDE AND OUTSIDE  
 SURFACES 10mm PLYWOOD  
 FILLED WITH RIGID  
 WATERPROOF INSULATION.  
 ALL WOOD TO BE  
 PAINTED WITH ASPHALT  
 PAINT.

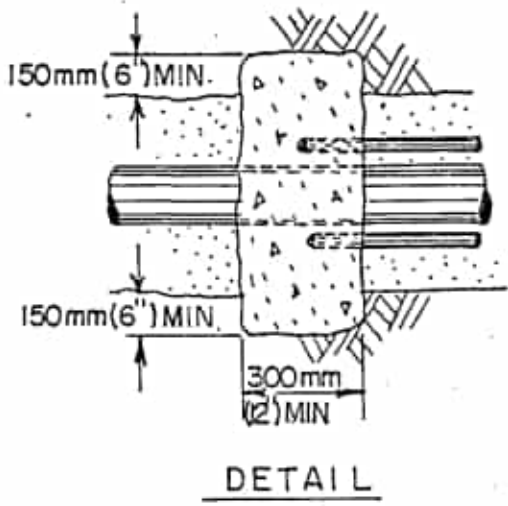


CORPORATION of the VILLAGE of UCLUELET

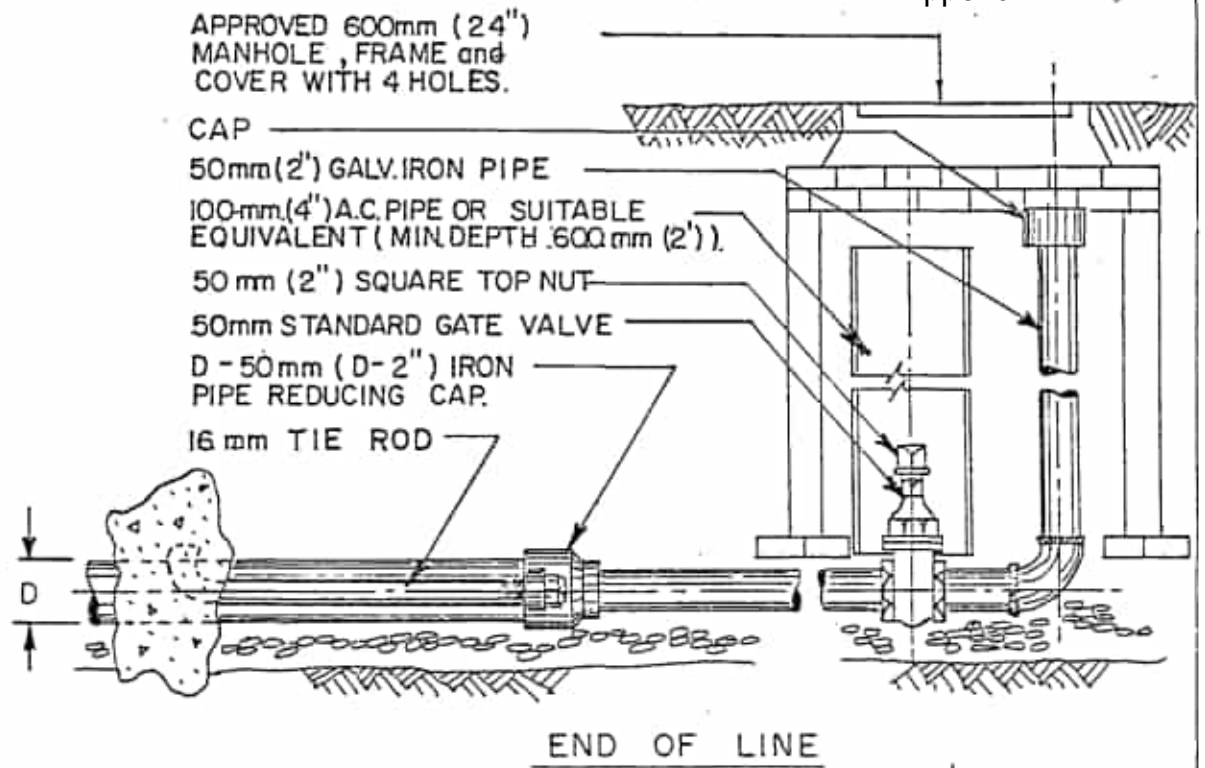
DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: L.B.
APPROVED BY:	DRAWING No. 12	

**AIR RELEASE MANHOLE**

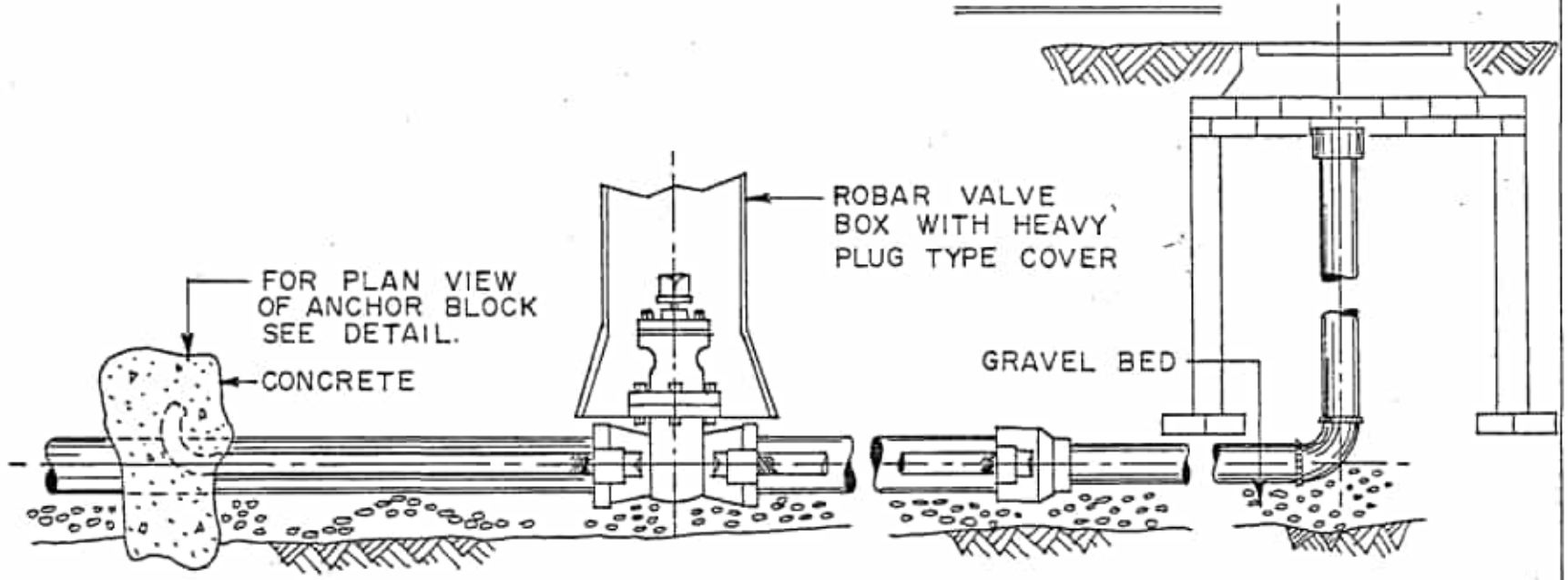




DETAIL



END OF LINE



TEMPORARY END OF LINE

(UNLESS OTHERWISE APPROVED)

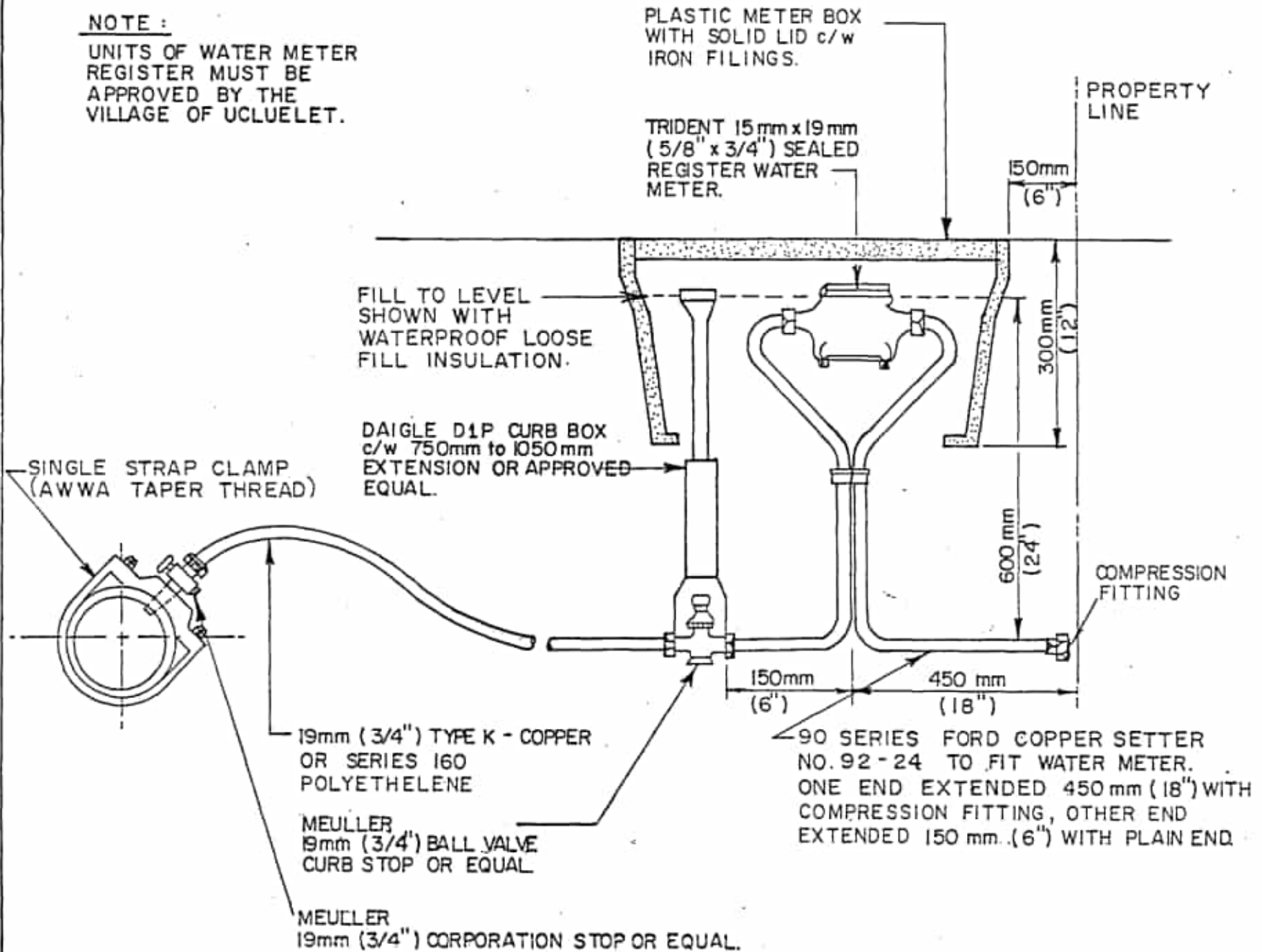
CORPORATION of the VILLAGE of UCLUELET

WATERMAIN

END OF LINE

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: LB
APPROVED BY:		DRAWING NO.: 13

**NOTE :**  
 UNITS OF WATER METER REGISTER MUST BE APPROVED BY THE VILLAGE OF UCLUELET.



CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989

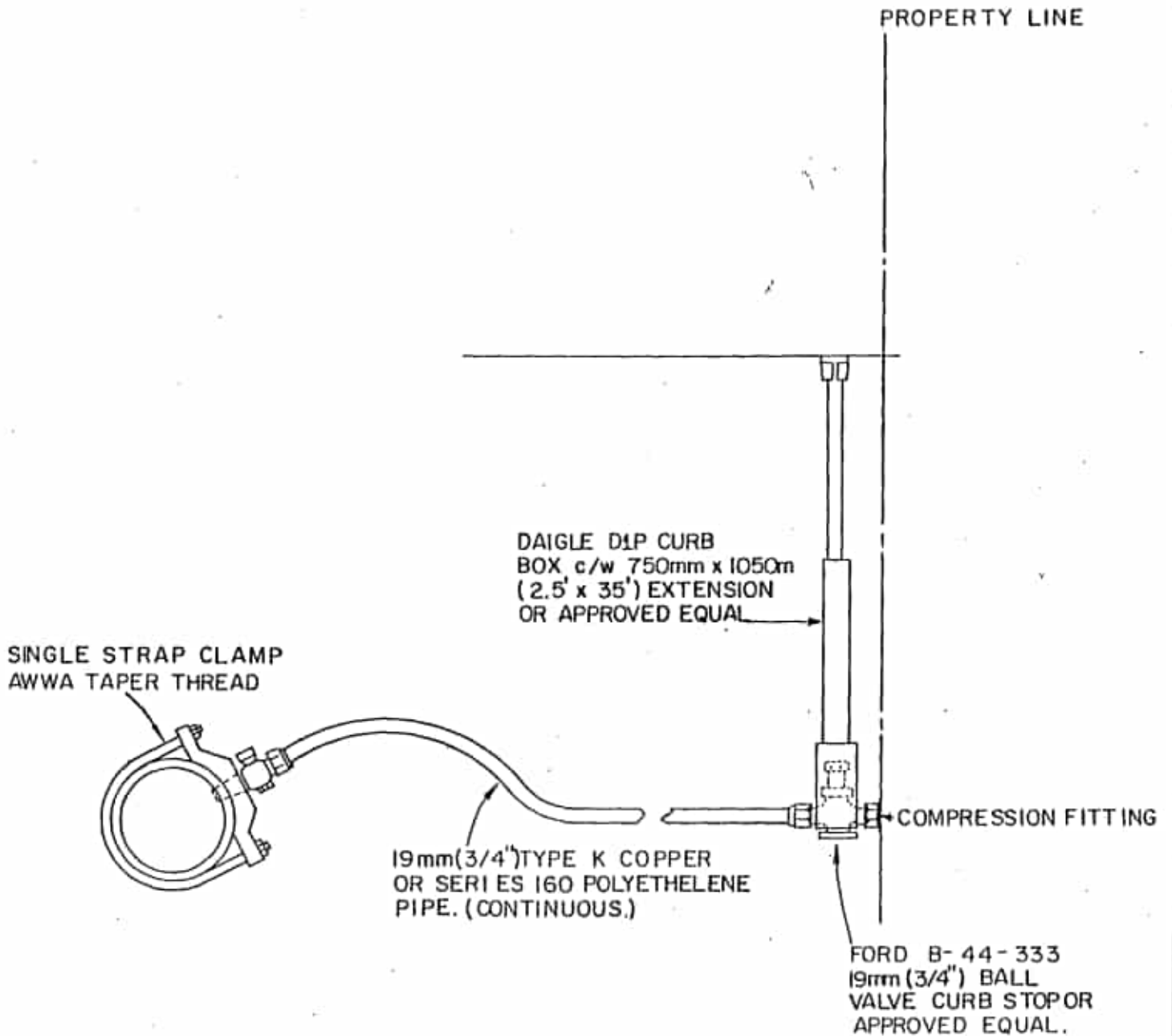
SCALE: N.T.S.

DRAWN BY: LB.

METERED WATER SERVICE CONNECTION

Subdivision Control Bylaw RFP James MacIntosh, Director of Engineering S... Page 887 of 929

MCIL - 3898A - 0/14



CORPORATION of the VILLAGE of UCLUELET

DATE:  
FEB. 20, 1989

SCALE:  
N. T. S.

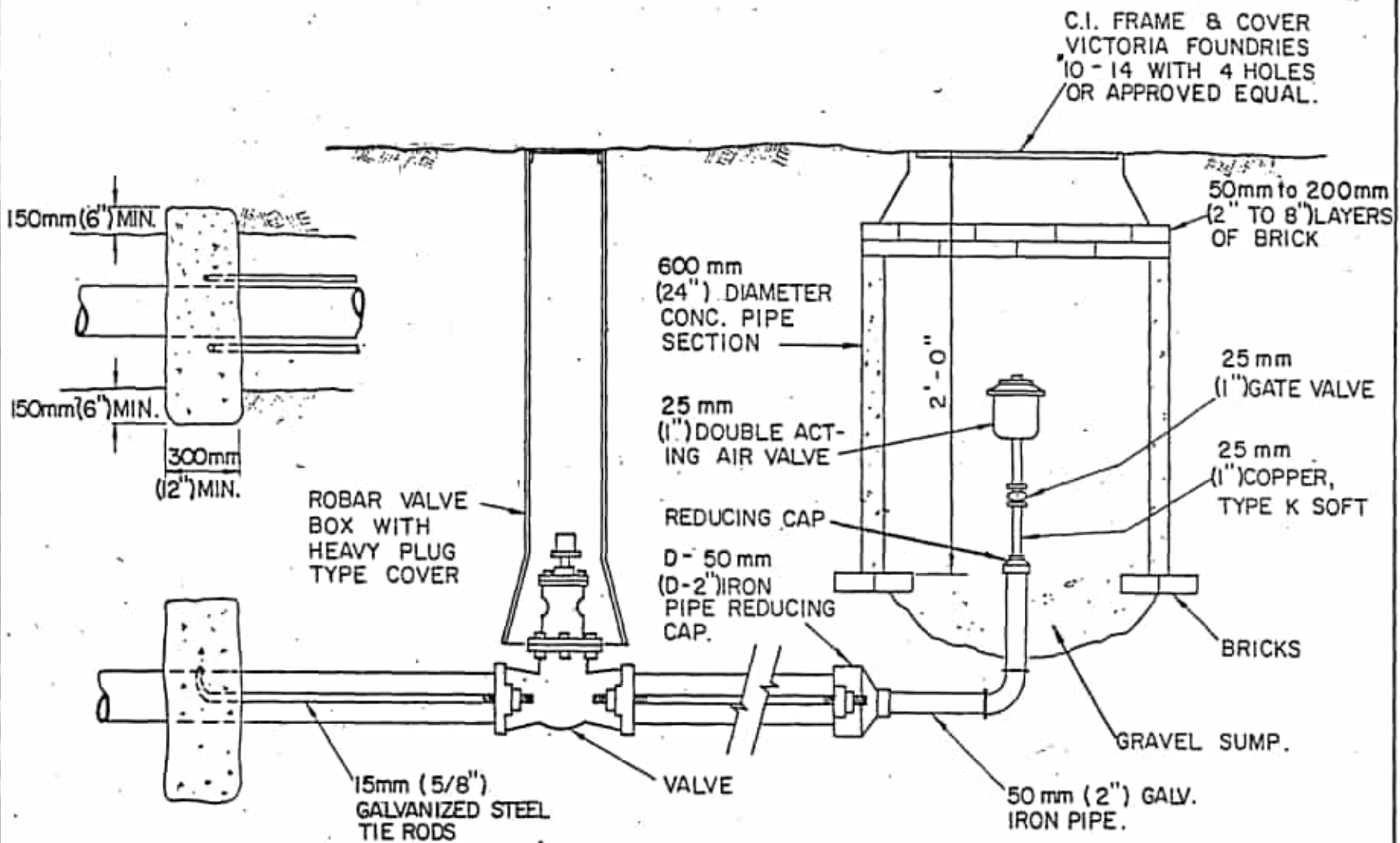
DRAWN BY:  
R. L. J.

UNMETERED WATER  
SERVICE CONNECTION.

APPROVED BY:

DRAWING NO.

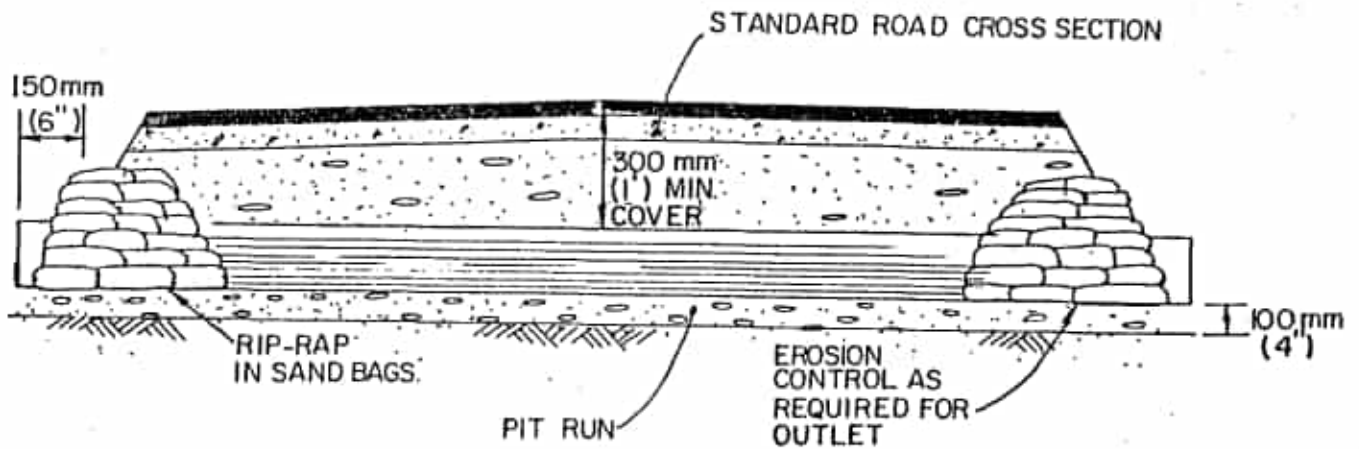
15



CORPORATION of the VILLAGE of UCLULET

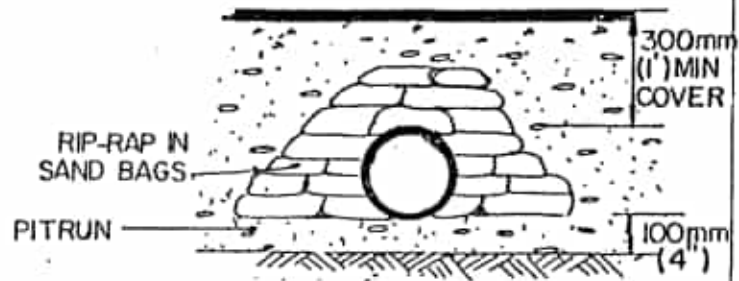
DATE:	FEB. 20, 1989	SCALE:	N. T. S.
APPROVED BY:		DRAWN BY:	
		DRAWING NO.:	16

TEMPORARY END OF  
LINE WITH AIR VALVE



**NOTE:**

1. RIP RAP TO BE GRAVEL AND CEMENT MIXTURE IN SAND BAGS. 5 PARTS GRAVEL 1 PART CEMENT.
2. MINIMUM SIZE 300 mm (12") DRIVEWAYS.  
450 mm (18") ROADS.

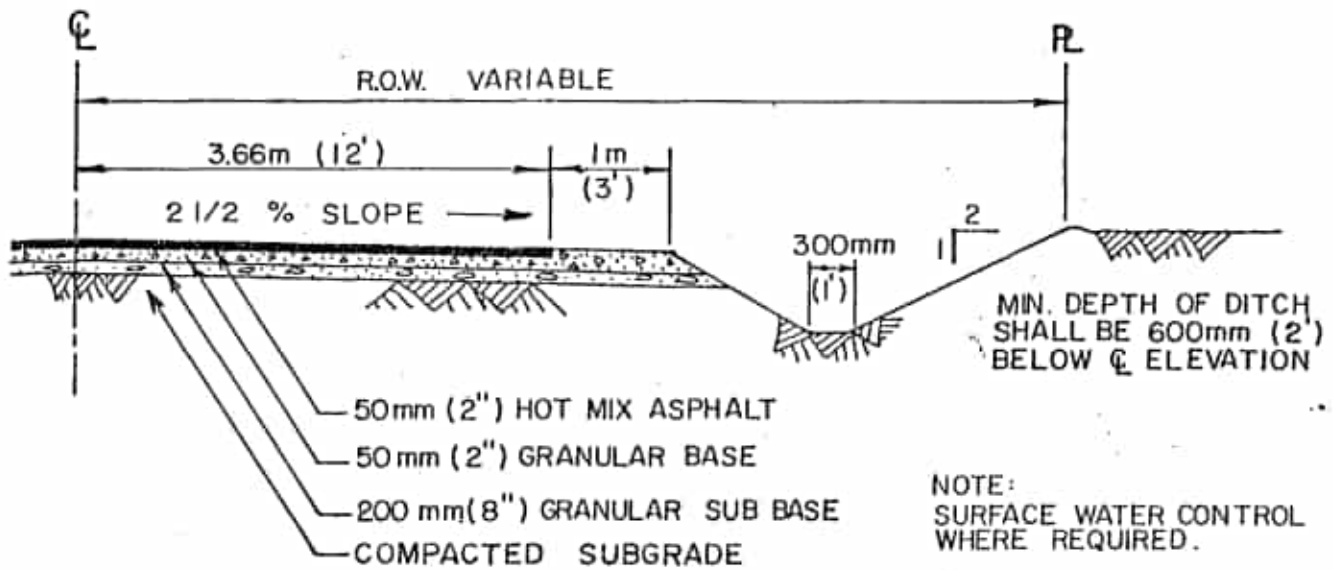


CORPORATION of the VILLAGE of UCLUELET

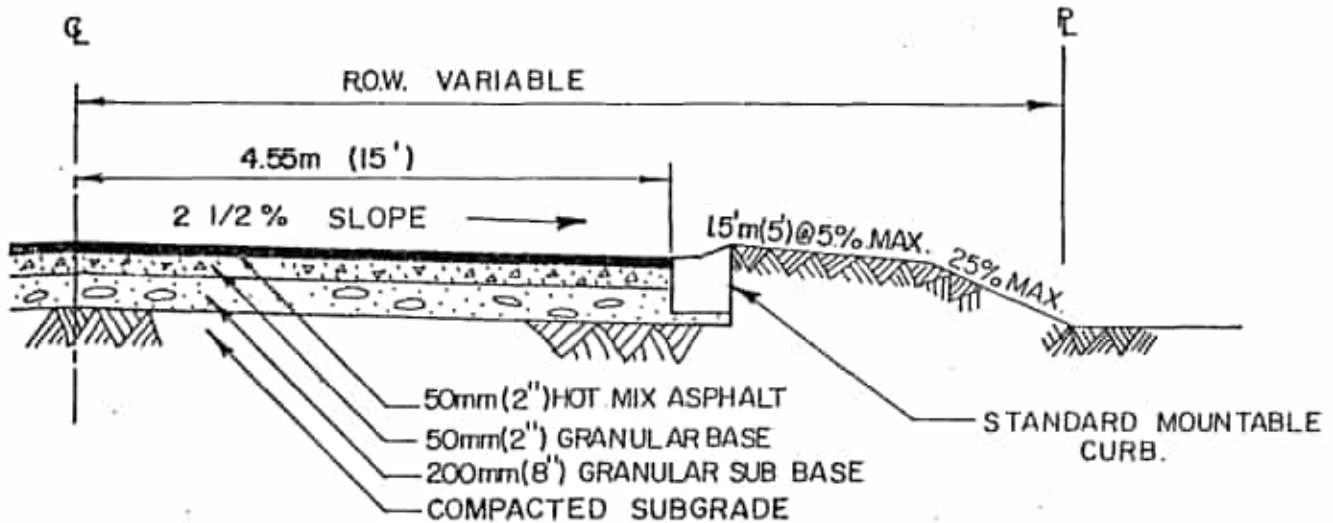
DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: R.L.J.
APPROVED BY:	DRAWING NO. 17	

**STANDARD CULVERT**





TYPICAL SECTION - RURAL ROAD



TYPICAL SECTION - LOCAL ROAD

CORPORATION of the VILLAGE of UCLUELET

DATE:  
FEB. 20, 1989

SCALE:  
N. T. S.

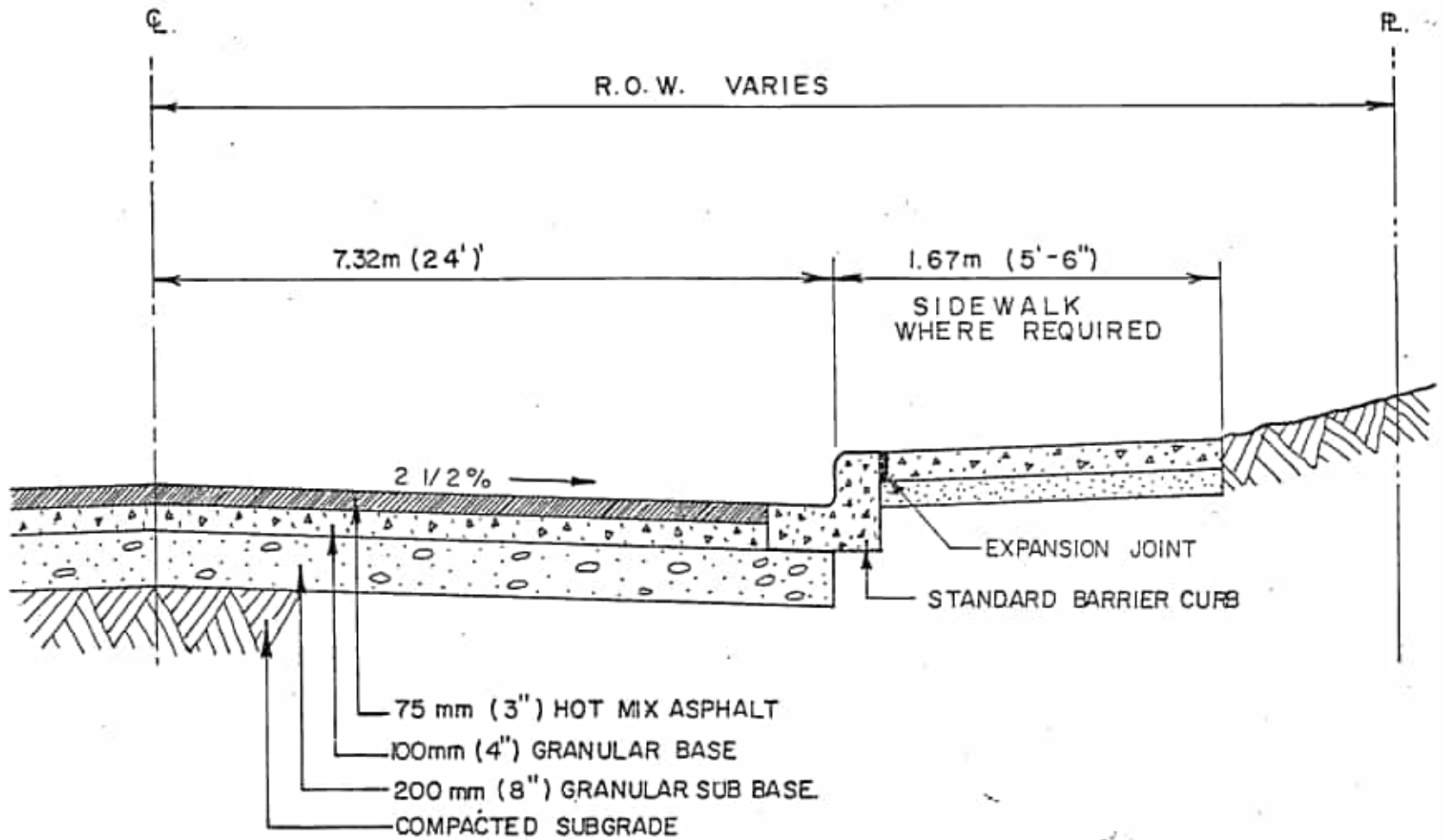
DRAWN BY:  
L. B.

TYPICAL ROAD SECTIONS  
RURAL ROAD & LOCAL ROAD

APPROVED BY:

DRAWING NO.

Subdivision Control Bylaw RFP James MacIntosh, Director of Engineering S... Page 89 of 929



TYPICAL SECTION  
COLLECTOR ROADWAY

CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989

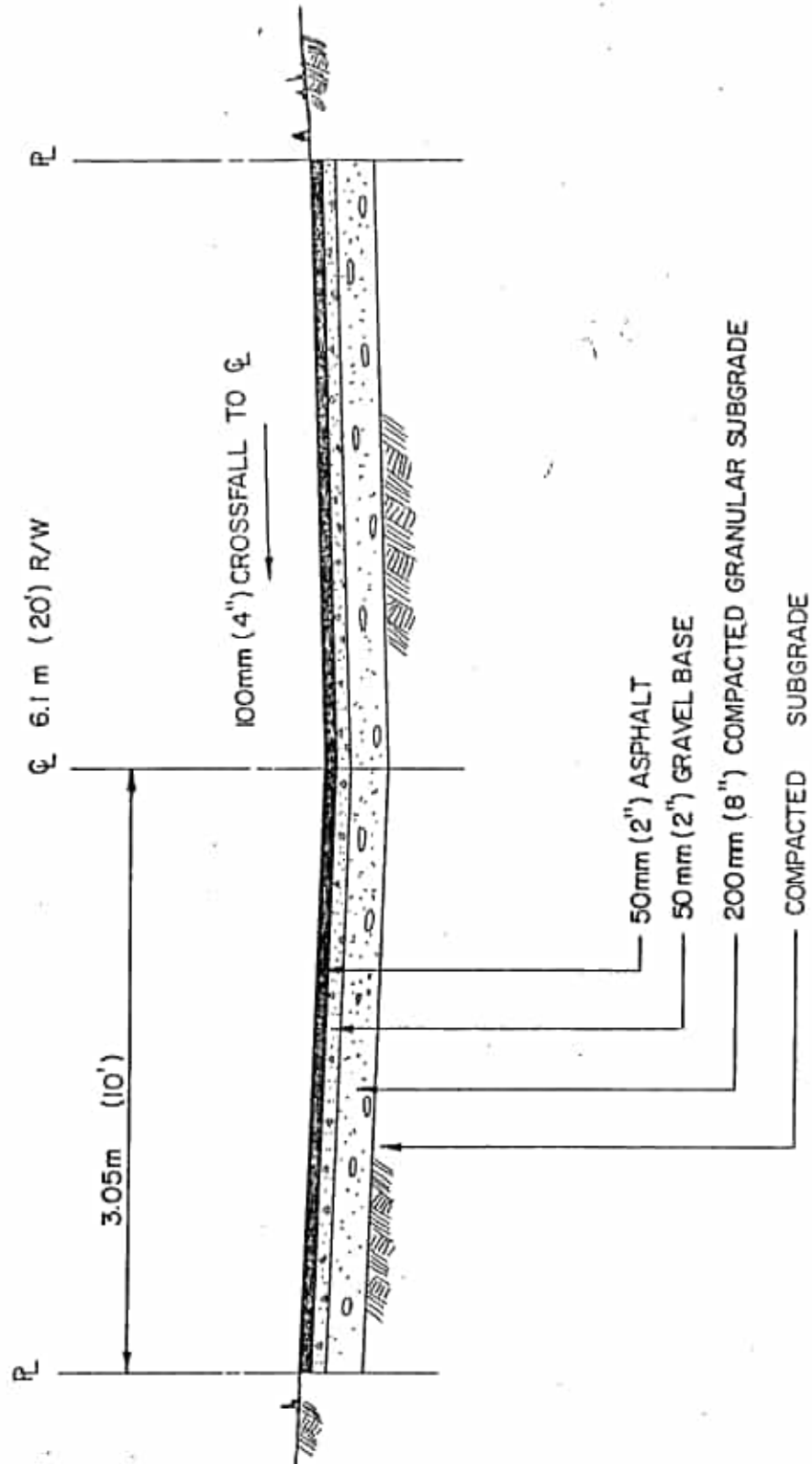
SCALE: N.T.S.

DRAWN BY: LB.

DRAWING NO. 19

TYPICAL SECTION

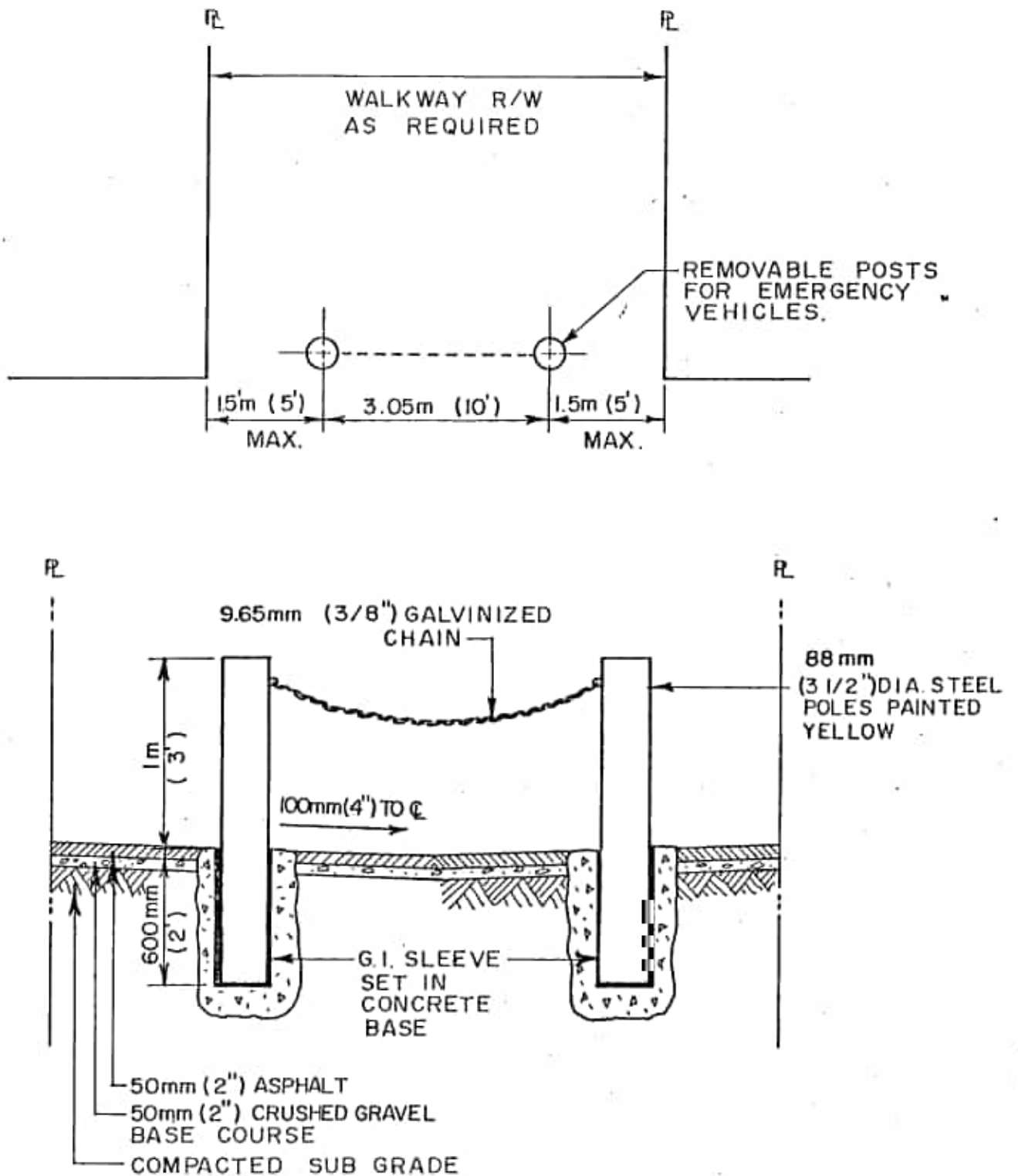
COLLECTOR ROADWAY



CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N. T. S.	DRAWN BY: S. W.
APPROVED BY:		DRAWING NO. 20

LANE DETAIL



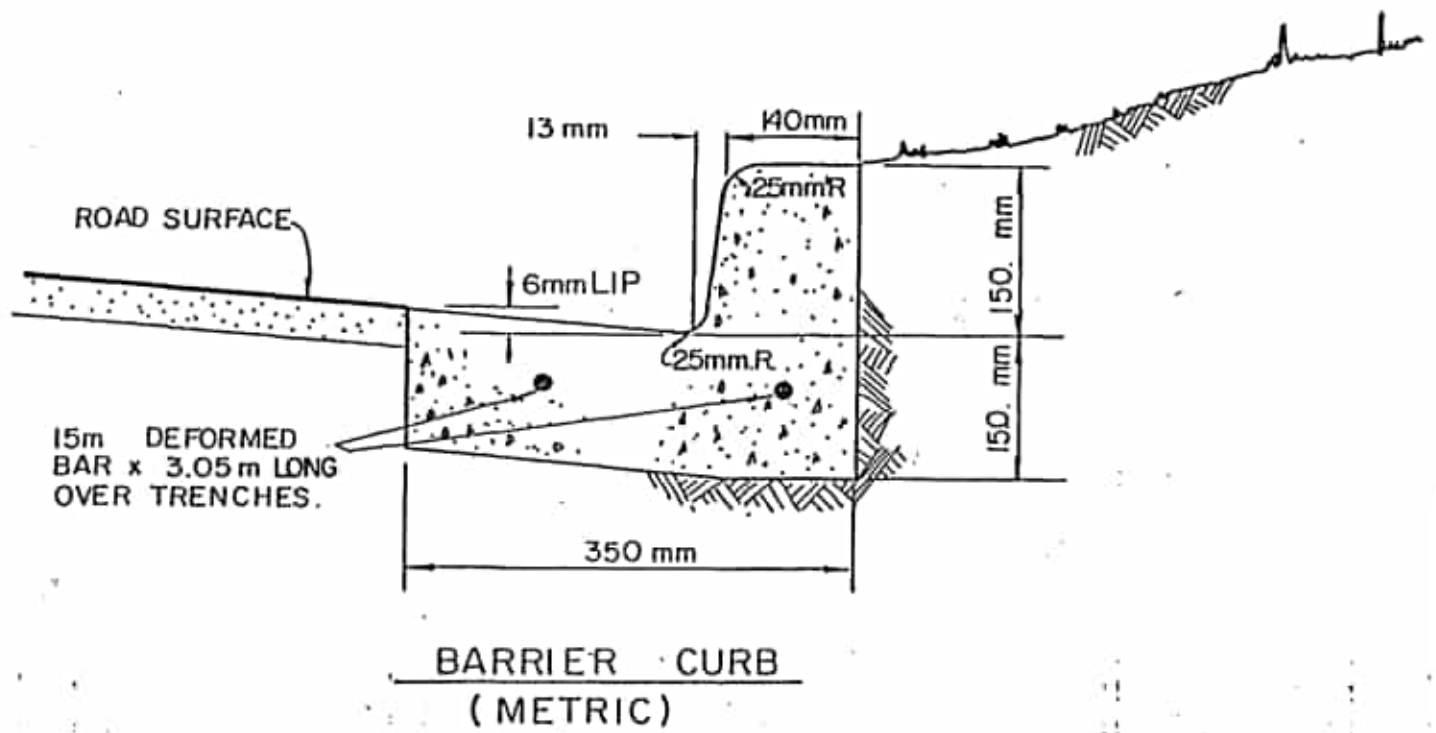
CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: LB.
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APPROVED BY:	DRAWING NO.:
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# WALKWAY DETAIL

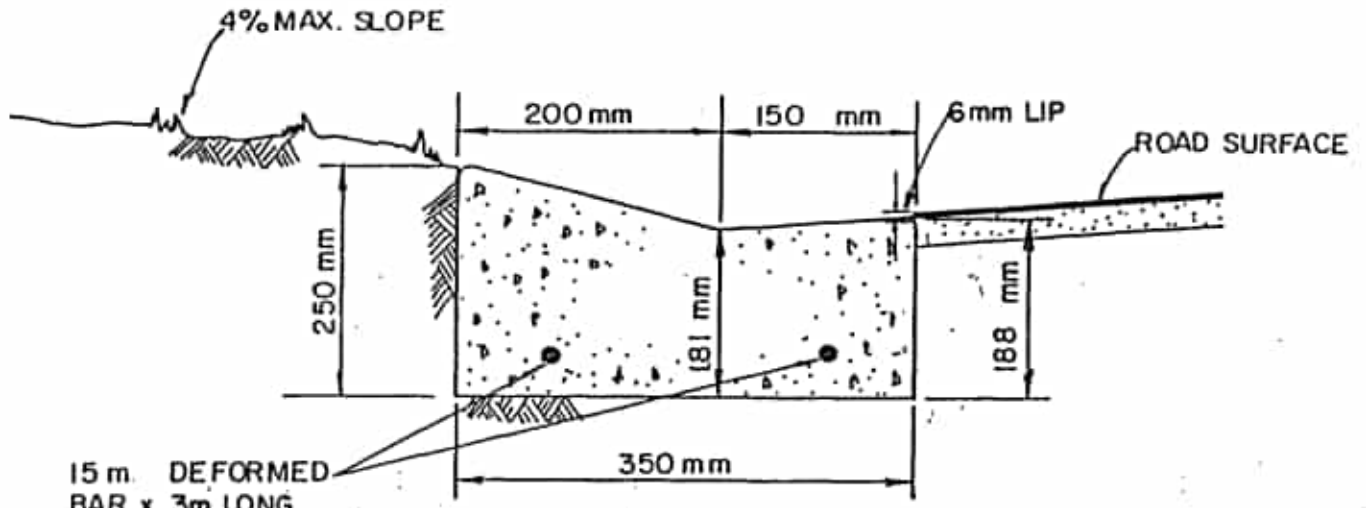
Subdivision Control Bylaw RFP James Macintosh, Director of Engineering S...



CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N. T. S	DRAWN BY: R. L. J.	<b>BARRIER CURB AND GUTTER DETAIL</b>
APPROVED BY:	DRAWING NO. 22		



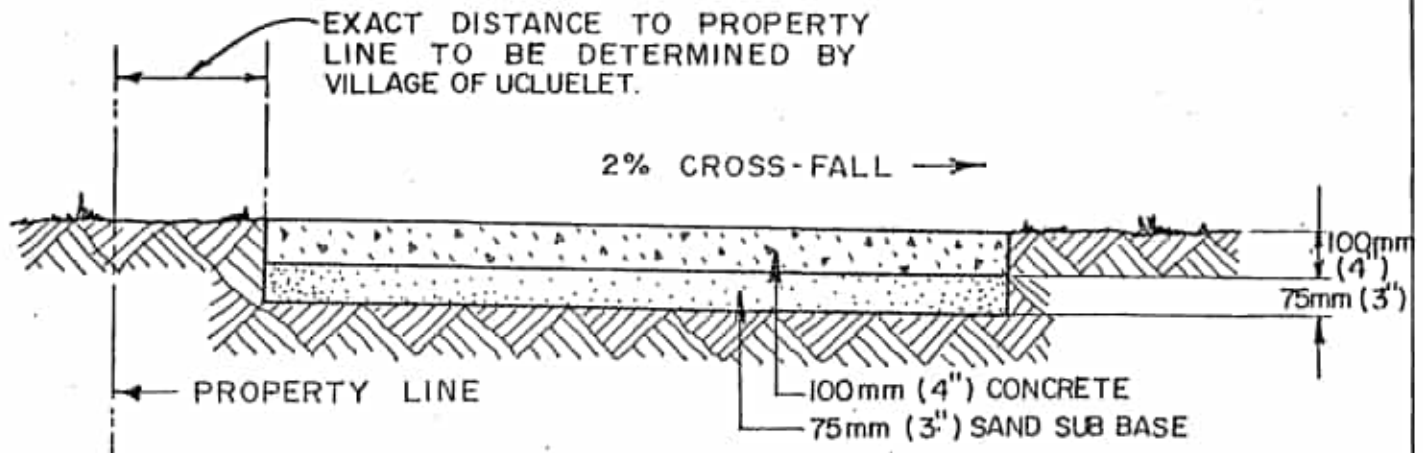


MOUNTABLE CURB  
( METRIC )

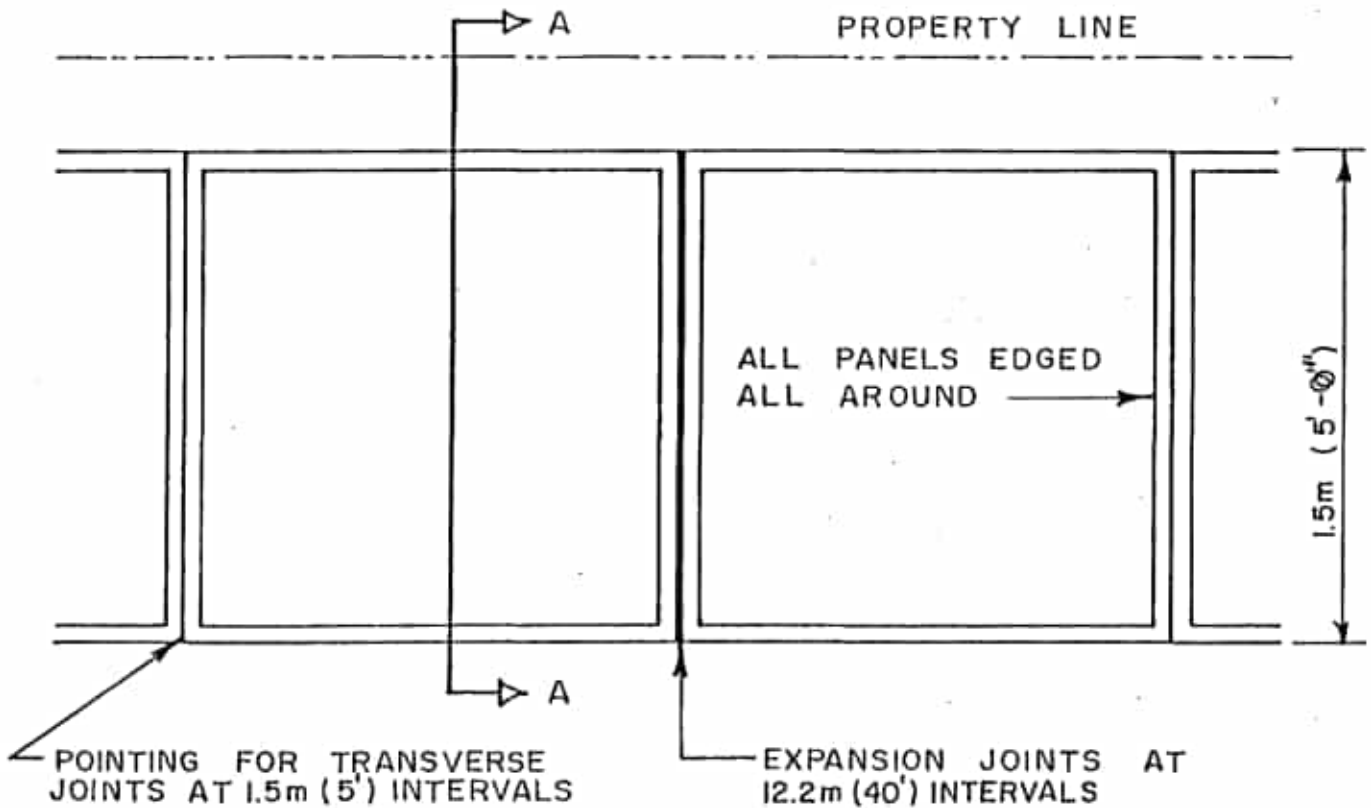
CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: R. L. J.
APPROVED BY:		DRAWING NO. 23

MOUNTABLE CURB  
AND GUTTER DETAIL



SECTION A - A

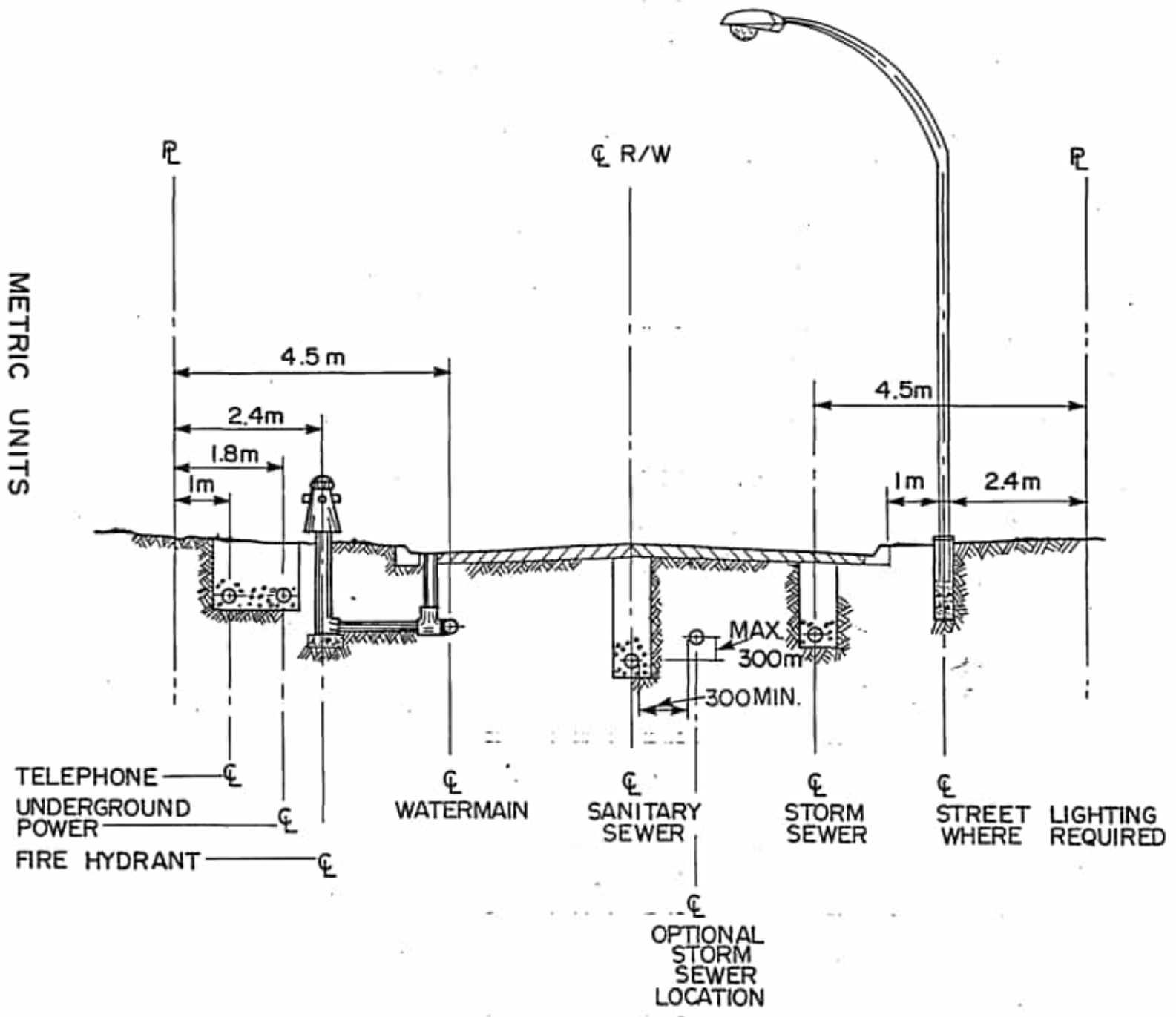


PLAN OF SIDEWALK

CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N.T.S.	DRAWN BY: LB
APPROVED BY:		DRAWING NO. 24

**SIDEWALK DETAILS**



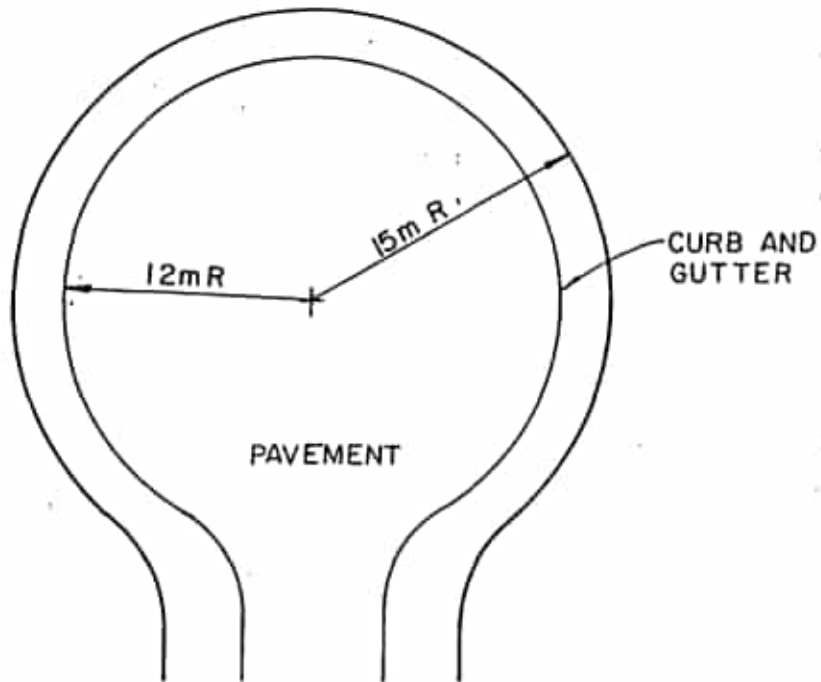
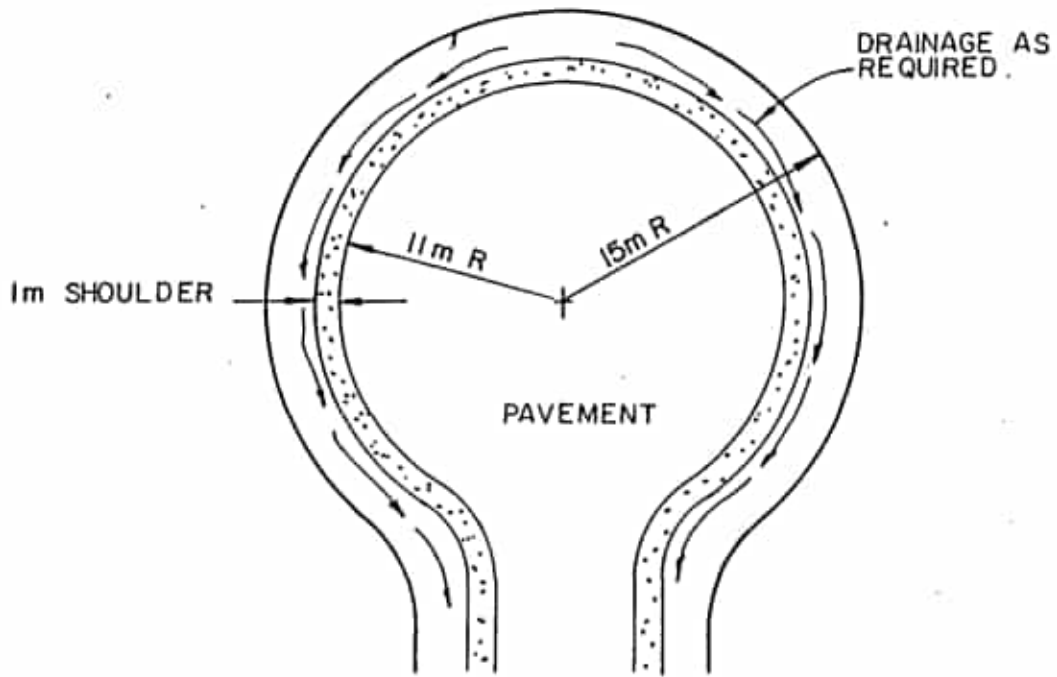
CORPORATION of the VILLAGE of UCLUULET

METRIC UNITS

UTILITY ALIGNMENT

15m R.O.W.

DATE:	SCALE:	DRAWN BY:
FEB. 20, 1989	N.T.S.	U.K.
APPROVED BY:		DRAWING NO:
		191 - 21
		25



METRIC UNITS

CORPORATION of the VILLAGE of UCLUELET

DATE:  
FEB. 20, 1989

SCALE:  
N. T. S.

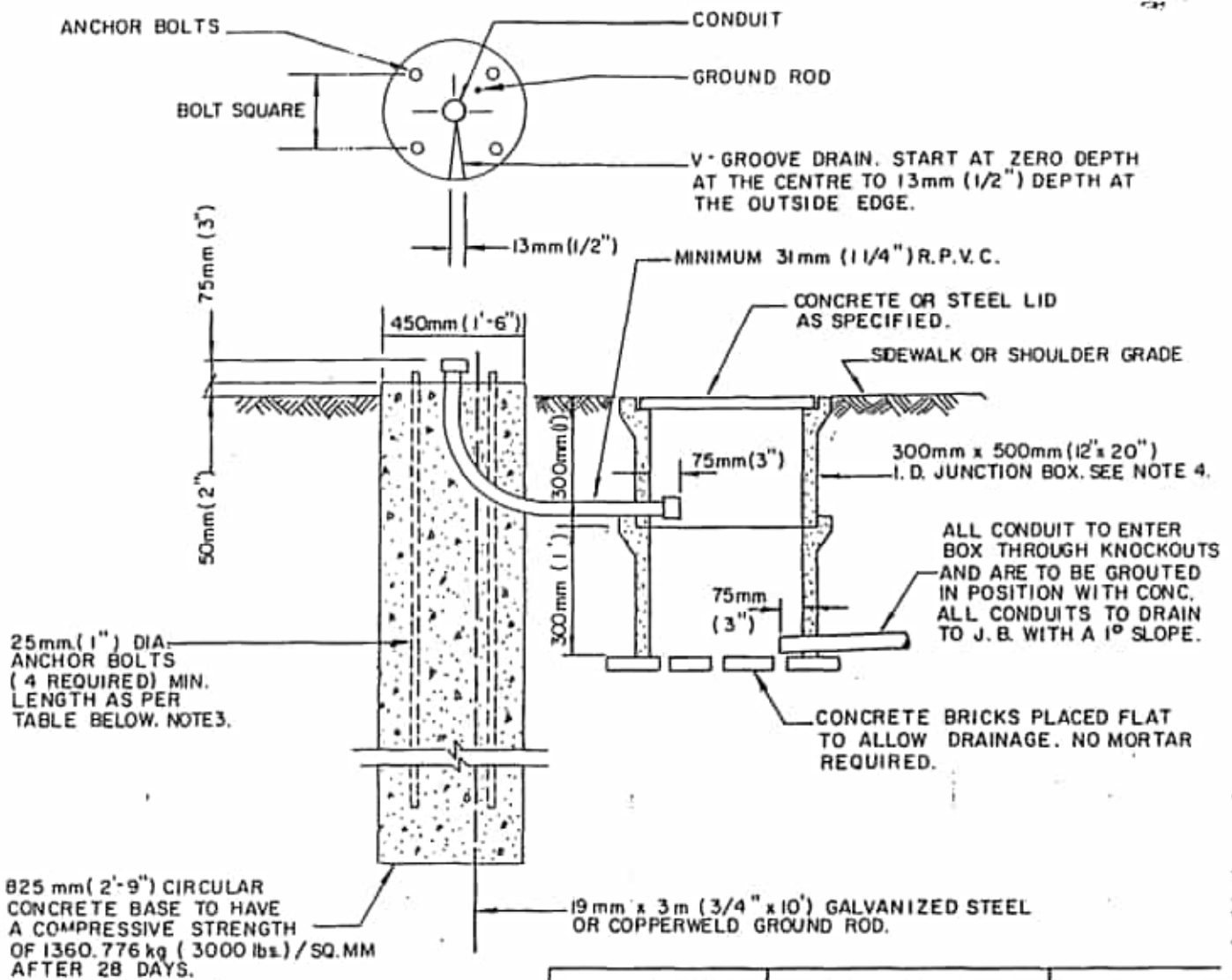
DRAWN BY:  
RLJ

APPROVED BY:

DRAWING NO

26

CUL DE SAC



NOMINAL POLE HEIGHT	ANCHOR BOLT		BASE DEPTH DIM. A
	MIN. LENGTH	MIN. SPACING	
7.6m - 10.6m (25' - 35')	1m (3')		1.2m (4')
12m (40')	1.2m (4')	213mm (8 1/2")	1.5m (5')

**NOTE:**

1. CONCRETE DIMENSIONS ARE SUITABLE WHERE THE ORIGINAL SOIL HAS A MINIMUM BEARING CAPACITY OF 907 kg (2000 lbs) / sq. m. AND DOES NOT CONSIST OF LOOSE GRANULAR SAND OR GRAVEL.
2. BASE SUITABLE FOR 7.6m - 12m (25' - 40') POLE.
3. TOP 1m (12") ANCHOR BOLTS SHALL BE GALVANIZED. NUTS SHALL BE OVERSIZED ACCORDINGLY. CONFIRM EXACT BOLT SPACING AND PROJECTION FROM MANUFACTURER'S SPECIFICATIONS.
4. PRECAST JUNCTION BOX SHALL BE A.E. CONCRETE CASINGS LTD. NO. 37 OR AS APPROVED.

CORPORATION of the VILLAGE of UCLUELET

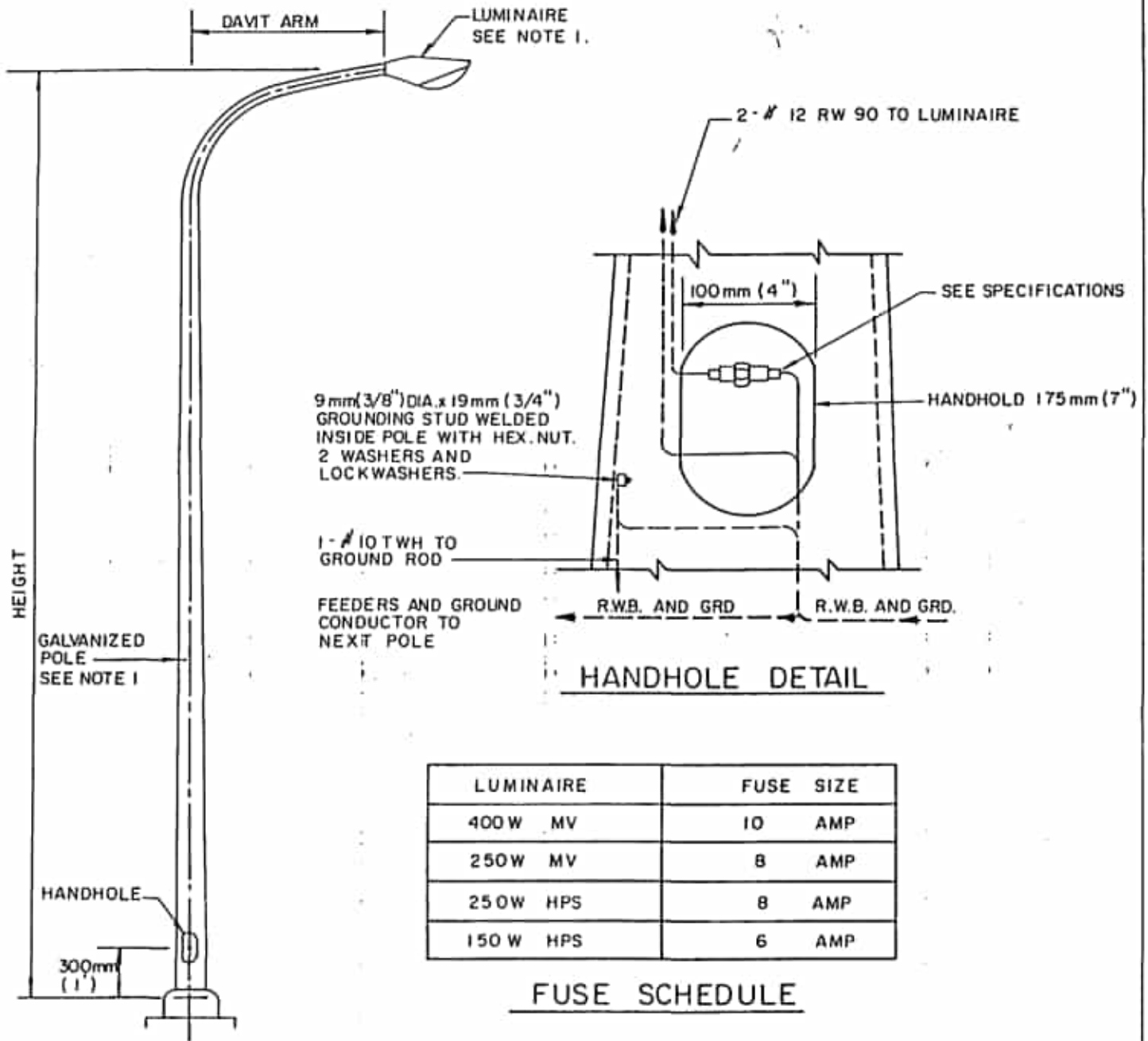
DATE FEB. 20, 1989	SCALE N. T. S.	DRAWN BY R. L. J.
APPROVED BY	DRAWING NO.	27

**CONCRETE BASE FOR STANDARD POLE**



NOTE

1. FOR POLE AND LUMINAIRE SEE ELECTRICAL SPECIFICATION.



LUMINAIRE	FUSE SIZE
400 W MV	10 AMP
250 W MV	8 AMP
250 W HPS	8 AMP
150 W HPS	6 AMP

FUSE SCHEDULE

CORPORATION of the VILLAGE of UCLUELET

DATE  
FEB. 20, 1989

SCALE  
N. T. S.

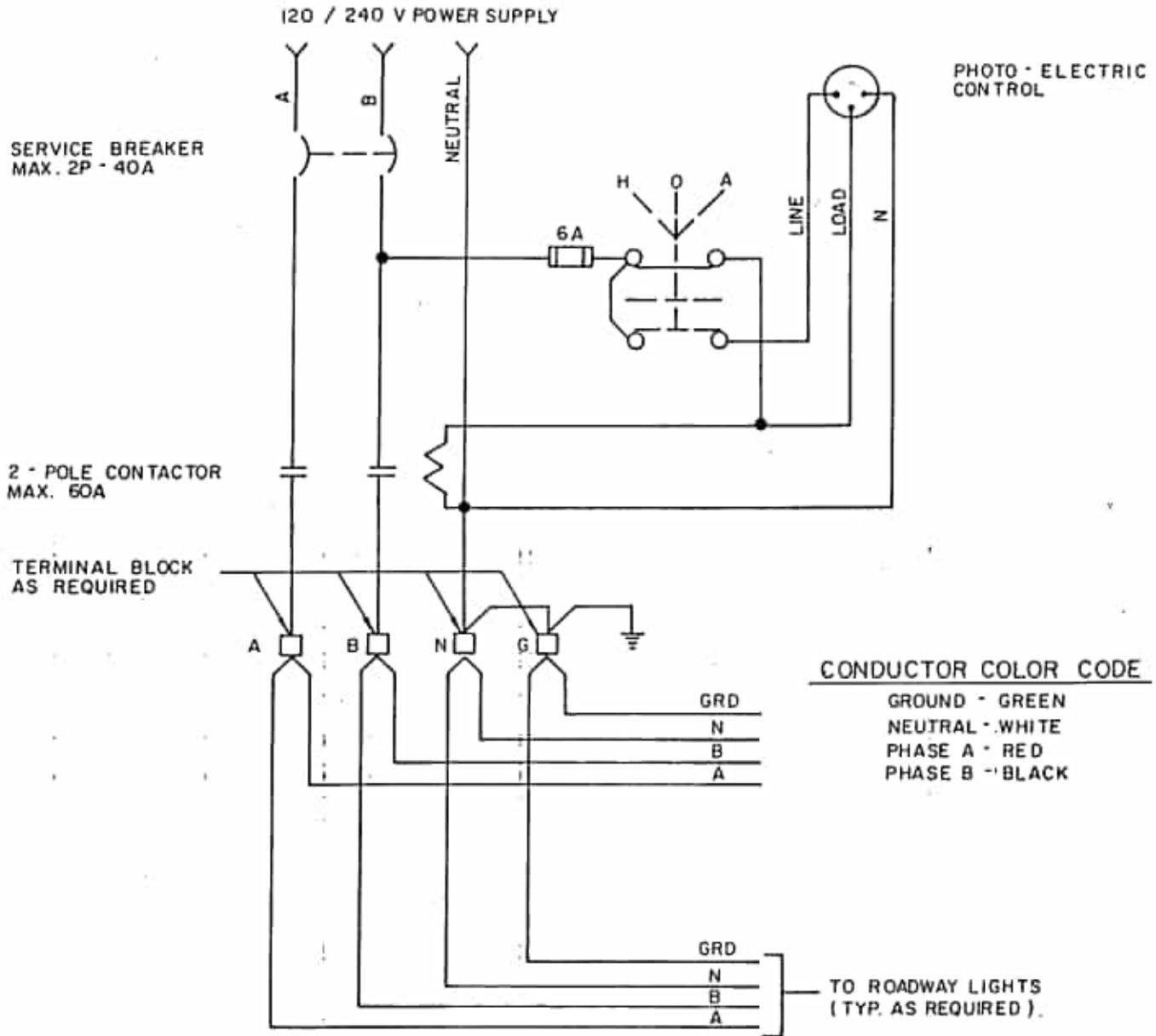
DRAWN BY  
R. L. J.

ROADWAY LIGHTING  
STANDARD POLE

APPROVED BY

DRAWING NO.

28



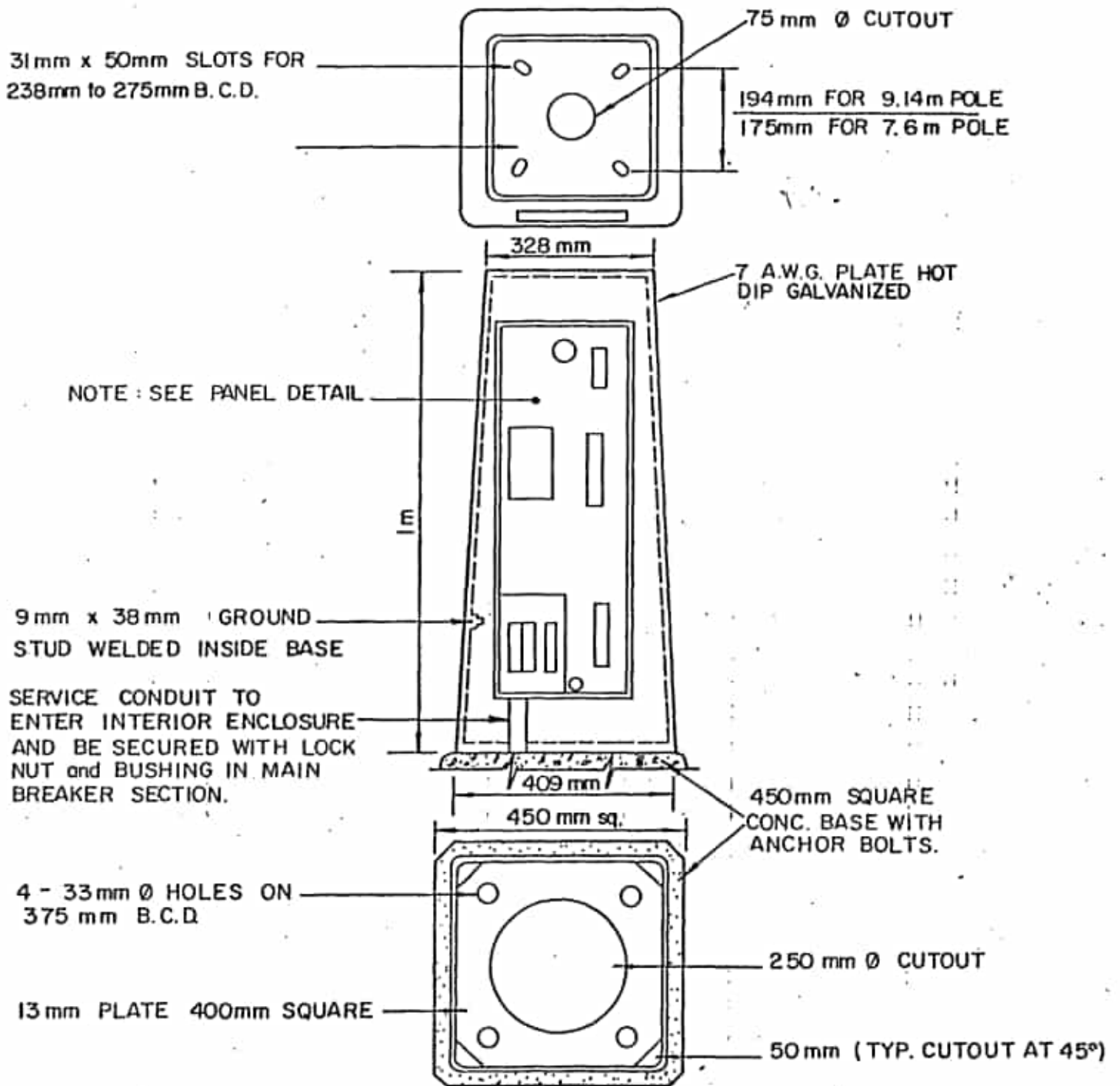
**NOTE :**

1. FOR ACTUAL SERVICE BREAKER AND CONTACTOR RATING REFER TO ELECTRICAL DRAWING.

CORPORATION of the VILLAGE of UCLUELET

DATE FEB. 20, 1989	SCALE N.T.S.	DRAWN BY R.L.J.
APPROVED BY	DRAWING NO 29	

**CONTROL SCHEMATIC and  
WIRING DIAGRAM FOR  
ROADWAY LIGHTING**

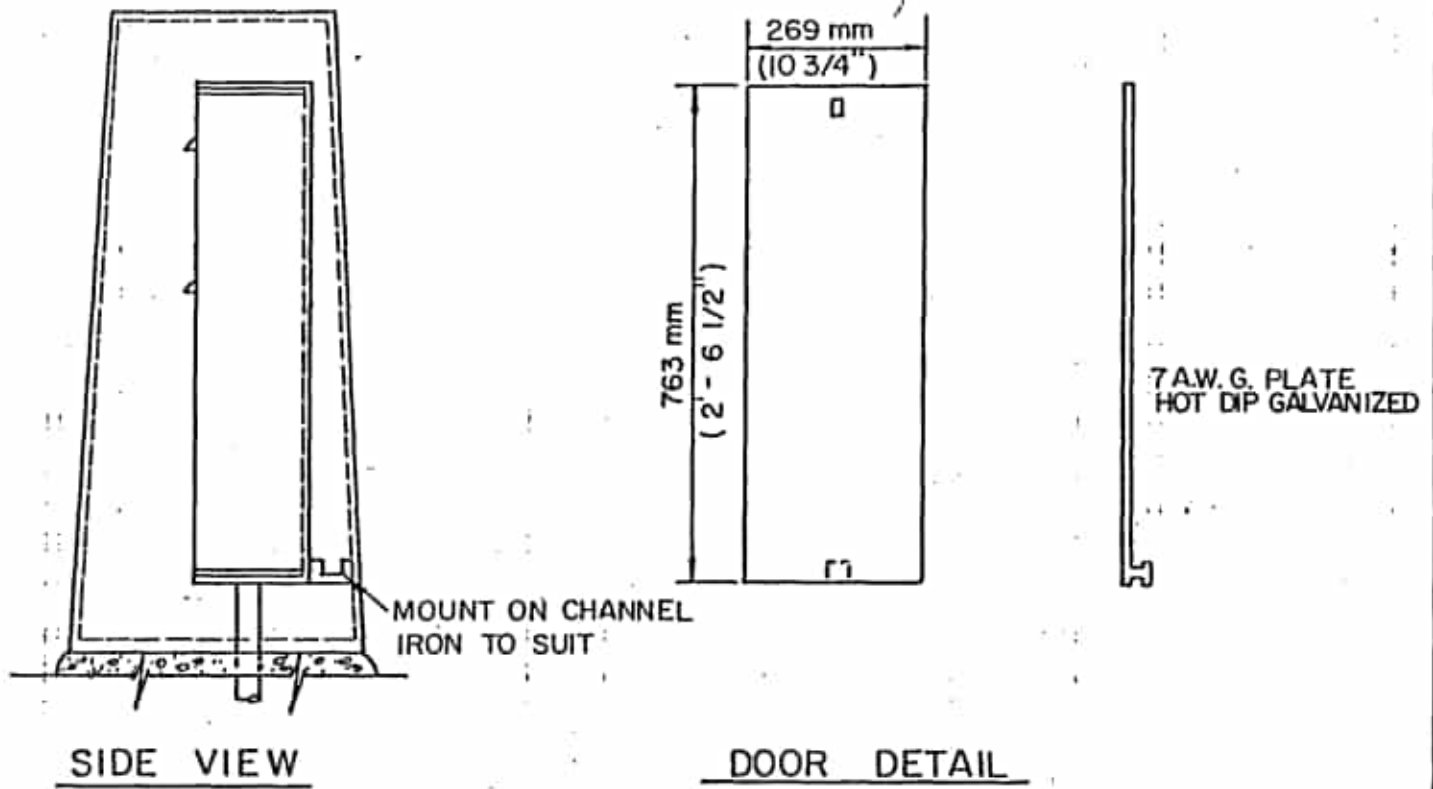


METRIC UNITS

CORPORATION of the VILLAGE of UCLUELET

DATE: FEB. 20, 1989	SCALE: N. T. S .	DRAWN BY: R.L.J.
APPROVED BY:		DRAWING NO. 30

SERVICE BASE  
DETAIL



CORPORATION of the VILLAGE of UCLUELET

DATE:  
FEB. 20, 1989

SCALE:  
N. T. S.

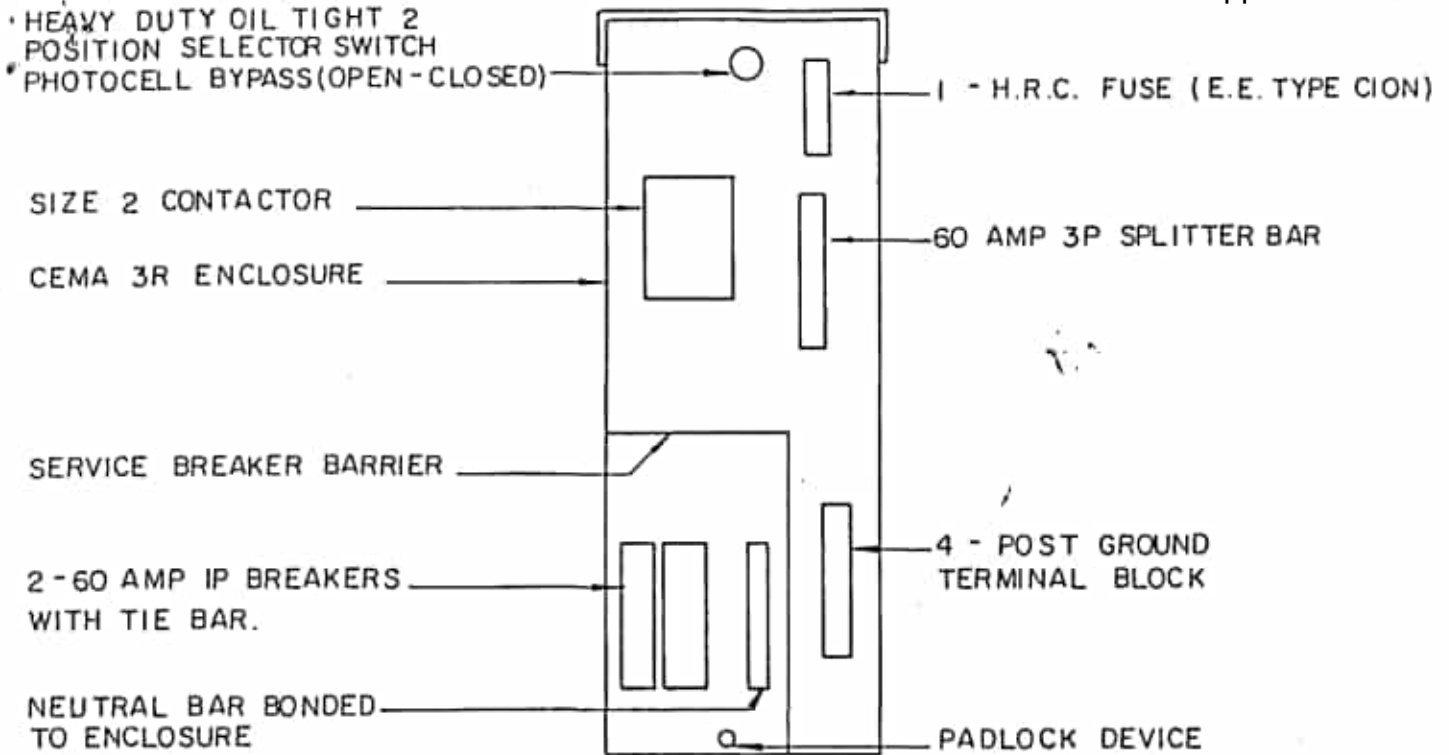
DRAWN BY:  
R. L. J.

APPROVED BY:

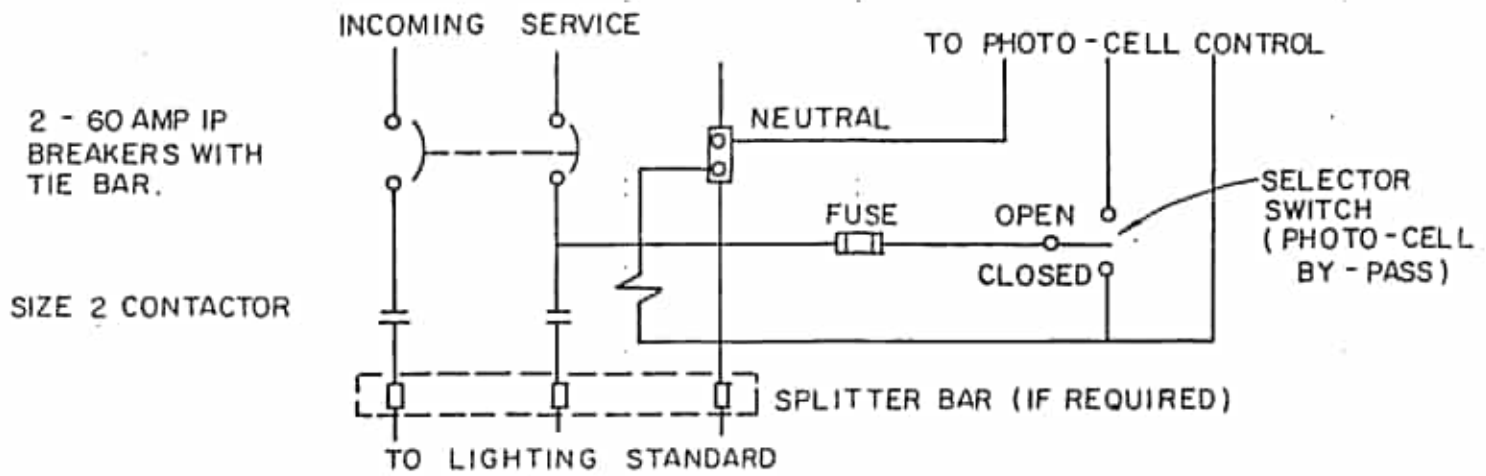
DRAWING NO.

31

SERVICE BASE  
ELEVATIONS



STREET LIGHTING PANEL



CONTROL DIAGRAM

CORPORATION of the VILLAGE of UCLUELET

DATE FEB. 20, 1989	SCALE N.T.S.	DRAWN BY R.H.B.
APPROVED BY	DRAWING NO.	32

SERVICE PANEL DETAILS





**From:** [Jenny Sheline](#)  
**To:** [Community Input Mailbox](#)  
**Cc:** [Info Ucluelet](#)  
**Subject:** Westerly Article November 20, 2024  
**Date:** November 25, 2024 3:09:36 PM  
**Attachments:** [Letter to Council 2024.docx](#)

---

**[External]**

Dear Mayor and Council:

Attached hereto, please find letter to Mayor and Council. I hesitated to speak out, but I believe the District/Planning Department has been unfairly targeted in the above noted article.

I write it with the greatest respect for 'all' members of council and 'Staff' of District of Ucluelet. Your jobs are difficult and as an outsider looking in, I wonder if there is actually 'listening and hearing/understanding' going on between Council and the District.

In an effort to lay blame - I see this as a red flag not necessarily of 'lack of communication' but 'lack of hearing'.

Respectfully,

Jenny Sheline

November 25, 2024

Mayor and Council  
Ucluelet, BC  
V0R 3A0

I am writing with regards to Westerly News article of November 20th, 2024.

I believe it to be unfair that some members of Council are attempting to target and lay sole blame on the District/Planning Department when projects past, present and future - have been delayed or cancelled. With regard to Section 20 of our By-Laws, which Council did not approve - giving authority to the Planning Department, the Planning Department has set rules and mandates they must follow and they cannot simply make a decision without due process. Over the years, many community members have been aware of project delays/cancellations due to the developer running out of funds or developers renegeing on promises they made to the District to allow a project to proceed or be completed. Also, construction complications arise or the developers become aware of provincial legislation affecting their project. Although this is beyond our Planning Department's control, they are mandated to disclose this legislative information to the developer.

I also would like to comment on the personal situation of some Council members. I know it is necessary and should be in good conscience that a council member recuse themselves from a vote on a proposed development - when the decision/outcome affects that person on a personal level.

I want to commend the District in orchestrating the work performed on Peninsula Road this year. This project was met with resistance by many locals, old and new. Having lived here for thirty years, I applaud this project and believe it to be a very progressive and attractive change to our community which is now widely accepted by our residents. Having worked in tourism here for many years, I still engage in conversations with visitors. After I have established they visited here over the years, I ask their opinion on the work done on Peninsula Road. To date, I have received only positive feedback. Although this project required infrastructural improvements, the Engineering and Planning Department should be proud of these improvements by their design. Also, I must mention the Bay Street four way stop. As I live on Bay Street, I know this is such a positive change and allows much easier access to Peninsula Road.

I strongly believe that our current Director of Community Planning, Bruce Grieg, has consistently worked with the best interests of Ukee at heart. In many instances he is following mandates created by previous Council. I have witness his presentations to Council when he has read his thoughtful, well composed and informative reports to Council regarding proposed development here in Ukee.

I do hope our Council and District Planning Commission are able to work together and be supportive of 'the other' and not have one party resort to a lengthy and one-sided Westerly article.

Respectfully,

Jenny Sheline  
1594 Bay Street  
Ucluelet, BC  
V0R 3A0

**From:** Judy Gray <judy@grayteam.ca>  
**Sent:** December 1, 2024 12:53 PM  
**To:** Community Input Mailbox; Info Ucluelet  
**Subject:** Ucluelet housing stats

**[External]**

Dear Mayor and Council,

The data is about the percentage of housing units put forward to the District that are actually granted permission to build. It's calculated by comparing the number of buildings permits issued to the number of proposed dwelling units put forward to the District. All the data used to calculate it is publicly available (links are below).

**Data Accuracy:**

Staff recently put forward their interim housing report to council. The key to debunking the information within it is remembering that Development Permits don't allow for construction, Building Permits do. Can't say that enough or in big enough print.

When it comes to understanding housing supply data there is a significant difference in what you can infer from Development Permit data and what you get from Building Permit data:

**Development Permits**

Development Permits tell you what type of housing the municipality is willing to consider in a location. An approved DP is a municipality's blessing to consider broader project planning; it does not guarantee project viability or municipal permission to proceed. At this early stage, projects remain subject to all kinds of variables (municipal, technical, and market changes). These projects may be years in the making, and statistically speaking, are unlikely to come to fruition.

A list of Development Permit approved and/or possible projects is at best a glimpse at possible housing types; the listed unit counts are proposed ideas, which may not be possible, and do not have municipal permission to proceed.

**Building Permits**

Building Permits are the number of dwelling units that have municipal permission to proceed. Projects that reach this stage have their technical information confirmed, and (most often) their financial funding in place. This is the real indicator of what's pending.

The Province uses Building permit information to assess a municipalities compliancy with housing needs mandates. It is an accurate and straightforward count of pending housing. All municipalities submit this information to the province, who publicly releases it.

The recent housing report staff put forward to council all but dismisses Building Permit data. An annual permit count is shown in Figure 1, but the information, or its importance to housing supply is not discussed. There is good reason for staff to avoid it; it shows that Building Permit counts are trending down, with 2024 being one of the lowest counts in 50 years.

### **Explanation:**

Again, no one can build without a Building Permit.

Staff have the Building Permit data they submit to the province, but they opt to use possible Development Permit's as the indicator of pending housing supply, which is incredibly misleading. The report presents a table showing 718 dwelling units they state "have approvals or applications in the works". Catch is that none of the listed projects have been issued a building permit.

As ugly as that is, it makes the stats simple. The percentage of dwelling unit applications the District supports is the number of Building Permits issued compared to the number of applications before staff.

- [Provincial Statistics Website](#) has Ucluelet's Building Permit counts ([11 as of July](#))
- [Ucluelet's Report to Council \(Oct. 29\)](#) has number of dwelling units before staff (718)

Percent of projects put forward that are supported by the District as of July =  $11/718 * 100 = 1.5\%$ .

Assuming their permitting rate for the latter months is similar, the District will approve about 3% of the applications put before them in 2024.



It gets uglier when you consider the projects the staff list as “approved or in the works” (Appendix A). Most are on the rocks/currently blocked by municipal processes and are 5+ years into the processes with the staff. This isn’t a case of these being new projects, it’s a municipal system no one can navigate.

This analysis only considers processes within the District’s control. The Province has mandated housing, the community is screaming for it, Council is actively trying to produce it... all the while Building Permit counts are trending down, with 2024 being one of the lowest.

**Judy Gray | REALTOR®** - Team Leader - CCIM – CRES

Personal Real Estate Corporation



RE/MAX Mid-Island Realty  
PO Box 195

109 -1917 Peninsula Rd

Ucluelet, BC V0R 3A0

[judy@grayteam.ca](mailto:judy@grayteam.ca)

[www.grayteam.ca](http://www.grayteam.ca)

**Phone: 250.900.8200**

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## INFORMATION REPORT

Council Meeting: December 10, 2024  
500 Matterson Drive, Ucluelet, BC V0R 3A0

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**FROM:** NANCY OWEN, EXECUTIVE ASSISTANT

**FILE NO:** 0550-20

**SUBJECT:** RESOLUTION TRACKING UPDATE

**REPORT NO:** 24-122

**ATTACHMENT(S):** APPENDIX A - RESOLUTION TRACKING - DECEMBER 2024

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### PURPOSE:

The purpose of this report is to provide Council with a status update on resolutions that have been adopted by Council.

### BACKGROUND:

The resolution tracking report, attached, provides Council with an overview of actions resulting from resolutions of Council. Resolutions are assigned to staff with the following progress designations:

- Assigned – action has not yet commenced;
- In Progress – action has been taken by Staff;
- Deferred – no action at this time;
- Complete – action has been completed; and
- No Further Action – no further action on this matter will be taken by District Staff.

Items will be removed from the list after actions are shown once as complete or no further action.

Respectfully submitted:

Nancy Owen, Executive Assistant  
Joseph Rotenberg, Manager of Corporate Services



Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
15-Jun-21	Resolution Tracking - May 2021	staff provide a report to Council with options for the investment of Barkley Community Forest Funds at an upcoming Council Meeting.	Staff to develop a legacy reserve fund as part of the statutory reserve policy.	Finance	Complete	BCF Investment plan to be developed and presented to council for consideration in the fall of 2024.
21-Sep-21	Dr. Carrie Marshall and Faye Missar, Coastal Family Resource Coalition Re: Harm Reduction	Council direct Staff to bring back the alcohol harm reduction information to at a future meeting for Council discussion.	Draft report and bring back alcohol related information for Council discussion.	Recreation	In progress and being researched	currently researching - report for early spring
19-Apr-22	Traffic Calming Next Steps		Prepare a draft traffic calming policy	Public Works	Assigned	The creation of a formal policy for speed has been deferred, or adjusted to a guideline
19-Apr-22	Update on Village Green: Main & Cedar Intersection	Council direct staff to explore costs for adding parking stalls within the current extents of the Cedar Road Parking Hub, for consideration in the 2023 budget.	Explore costs for exploring the addition of parking stalls within the Cedar Hub Parking Hub, for consideration in the 2023 budget.	Public Works	Assigned	Deferred to early 2025 JM 2024-12-05
31-Mar-22	Affordable Housing	Council direct staff to issue a request for proposal to engage a housing authority.  It was moved and seconded THAT the Committee of the Whole recommend that Council direct staff to issue a request for proposal to engage a housing authority.	Issue a request for proposal to engage a housing authority.	Administration	Deferred	Item will be action when affordable housing units are developed and in the control of the municipality
14-Jun-22	Trail Right of Way over 348 Pass of Melfort	Council, for the purposes of creating a public pathway over 348 Pass of Melfort, Strata Lot 10, Plan VIS5896, Section 1, Barclay Land District:  1. Direct District of Ucluelet staff to execute and register the S.218 Statutory Right of Way attached as Appendix A of staff report 22-78.  2. Direct District of Ucluelet staff to coordinate the environmental and estimating work required so that a public pathway over 348 Pass of Melfort and relocated elements of the Wild Pacific Trail can be considered and prioritized in future budgeting process.  It was moved and seconded THAT a letter of appreciation be forwarded to the property owners and some form of tribute to them be included in the trail construction.	Execute and register the S.218 Statutory Right of Way attached as Appendix A of staff report 22-78. Coordinate the environmental and estimating work required so that a public pathway over 348 Pass of Melfort and relocated elements of the Wild Pacific Trail can be considered and prioritized in future budgeting process. Forward a letter of appreciation to the property owners and include some form of tribute to them in the trail construction.	Planning	In Progress	Statutory Right of way has been registered.  Environmental work yet to be completed.  Tribute and letter will be completed at time of trail construction. Budget allocated towards trail project.
16-Aug-22	Fireworks Regulation Bylaw 1302, 2022	Council approves the Fireworks Fines & Penalties as presented in staff report No. 22-113 and directs staff to present an amendment to Municipal Ticket Information System Bylaw No. 949, 2004 to include these fines and penalties.	Draft MTI amendment bylaw and bring forward for Council review.	Administration	Assigned	Entire municipal ticketing bylaw is being reviewed and reworked. Expect to present reworked bylaw in early 2025.
15-Nov-22	Ucluelet Garbage Collection and Regulation Bylaw No. 960, 2004	Council direct staff to present an amendment to the District of Ucluelet Garbage Collection and Regulation Bylaw No. 960, 2004, to be considered at a future Council meeting, which allows for Bear Resistant Collection Carts to be stored outside provided that the container is anchored to prevent tipping or being dragged away by an adult bear.	Draft and present amendments to Bylaw No. 960, 2004 to allow for outdoor storage of garbage carts provided they are anchored.	Recreation	Assigned	Working with Wildsafe BC to draft a wildlife attractant bylaw in early spring - currently researching



Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
09-Feb-23	Development Permit for 449 Matterson Drive - Lot 16 Rental Building	Council authorize the Director of Community Planning to execute and issue Development Permit DP22-18 for the property at 449 Matterson Drive to allow the construction of a 48-unit rental apartment building and associated driveways, parking, and landscaping subject to:  a) Final registration of the subdivision of the Lot 16 property to create the proposed "lot A" apartment building parcel at 449 Matterson Drive;  b) Provision of all on and off-site works required to access and service the 48-unit rental apartment building including but not limited to: roads, sidewalks, landscaping, parking areas, potable water, sewer, storm water management, electrical and data services; and,  c) Provision of a landscape deposit for 125% of the estimated costs of hard and soft landscape improvements on the property.	Issue DP once subdivision is complete and other conditions are met.	Planning	On Hold	Timing of subdivision uncertain - depends on developer's direction.
28-Mar-23	Joanne Sales, Executive Director Broom Busters		Coordinate with Broom Busters regarding Broom removal.	Public Works	Assigned	Looking into this,nothing to report JM 2024-12-05
09-May-23	Rezoning Application 828 Odyssey Lane	Council direct Staff to provide a follow-up report on: allowed uses in the Guest House Zone; allowed number of units; and the residency requirement.	Present report to Council.	Planning	Assigned	Lower priority among other housing initiatives - will bring forward in conjunction with housing /tourist accommodation zoning changes.
09-May-23	Options for Mobile Vending Regulations	Council direct staff to explore options for locating food trucks on public lands in Ucluelet for discussion at a Committee-of-the-Whole meeting (in Fall of 2023 or later).	Present report.	Planning	Assigned	Lower priority behind housing initiatives - bring forward as capacity allows
09-May-23	Options for Mobile Vending Regulations	Council direct staff to draft bylaw and policy changes for improving the regulation and permitting of mobile vendors in the District of Ucluelet, for discussion at a Committee-of-the-Whole meeting (in Fall of 2023 or later).	Draft and present bylaw and policy changes.	Planning	Assigned	Lower priority behind housing initiatives - bring forward as capacity allows
09-May-23	Options for Mobile Vending Regulations	Council direct staff to prioritize developing a Mobile Vending Policy and reviewing the zoning options for future mobile vending uses ahead of processing individual mobile vendor applications.	Develop policy	Planning	Assigned	Lower priority behind housing initiatives - bring forward as capacity allows
27-Jun-23	DVP for Subdivision Servicing - Lot 16 Marine Drive/ 449 Matterson Drive	Council direct Staff to investigate transitioning the future road access point from Victoria Road into the Lot 16 development as an emergency access only.	Present report	Public Works / Fire	Deferred	On hold pending movement on development plans.
18-Jul-23	Development Variance Permit for 1333 Pine Road	Council direct Staff to prioritize presenting a report to Council on boulevard parking, including diagonal parking, on Pine Road and the impact on pedestrian and road safety.	Draft report: Council direction required on scope of study re: parking / road safety / access / street character.	Planning	Assigned	Review with strategic priorities; what level of priority?

Resolution Tracking Update Nancy Owen, Executive Assistant

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
18-Jul-23 Tracking Update Nancy Owen Executive Assistant	Proclamation Request - National Drowning Prevention Week Kaelan D'Sena, Communications, Lifesaving Society - BC & Yukon Branch	Council direct staff to develop a recognition, awareness and proclamation policy for Councils consideration.	Draft and present policy for Council consideration	Administration	Assigned	This project will form part of the 2025 work plan.
07-Nov-23	2024 Conference Attendance Schedule	Mayor and Council are authorized to attend and represent the District of Ucluelet at the conferences listed in the 2024 Conference Attendance Schedule attached as Appendix A to report No. 23 – 143.	Register Councillors to attend conferences and book accommodations.	Administration	Complete	
15-Feb-24	Short-Term Rental Accommodations Act : Opt-in Options	1. THAT Council not “opt in” to the Provincial principal residence requirement under the Short-Term Rental Accommodations Act for properties operating short-term rental accommodation at this time; and,  2. THAT Council direct staff to report back within the next year as greater detail becomes available on how the new legislation and regulations will apply to different classes of accommodation service providers in addition to hotels and motels.	Provide report in late 2024 or early 2025 on Short-term rental opt-in.	Planning	Assigned	Review with strategic priorities
15-Feb-24	Small Craft Harbour Head Lease Renewal	Council, acting as the Harbour Authority, authorize the Corporate Officer to execute the Head Lease as proposed by the Department of Fisheries Small Craft Harbour under Section 4 (2) of the Federal Real Property Regulations (SOR/92-502) and acting through the Regional Director of Small Craft Harbours by virtue of a delegation under Section 3 of the Federal Real Property and Federal Immovables Act (S.C.1991, chapter 50) for the term of five years 2022 to 2027 between the District of Ucluelet and Department of Fisheries Small Craft Harbour.	Sign and file lease	Administration	Complete	
15-Feb-24	Whiskey Dock Expansion Project Kevin Cortes, Harbour	Council, acting as the Harbour Authority, approve the Whiskey Dock Expansion project as described in Report No. 24-12 up to a maximum of \$30,000 for 2024.	Complete project	Harbour Authority	In progress	Completion for January 2025
30-Apr-24	Temporary Use Permit for Weyerhaeuser Worker Accommodation	Council authorize the Director of Community Planning to issue Temporary Use Permit 24-03 to allow eight RV camping spaces for worker accommodation for a period of 1 Year during the construction of the Weyerhaeuser “Ocean West Phase 5”, subject to confirmation that an onsite person will be there seven days a week to check on it and that permit includes that condition.	Update and issue permit	Planning	Abandoned	Weyerhaeuser may pursue a different TUP for that area fo land - pending.
30-Apr-24	Proposal for Conversion of Fraser Lane Into a One-Way Road	Council authorize the conversion of Fraser Lane into a one-way road.	Implement one way conversion of Fraser Lane	Public Works	Complete	Completed. The contractor is correcting a few small items that were installed incorrectly (clear signage). Parks is planning to landscape the bump out in front of Frankies. JM July 3
30-Apr-24	Authorization of Change Order for Resurfacing of Peninsula Road	Council authorize the Mayor and Corporate Officer to enter into and execute a change order to the Hazelwood Construction Services contract, not to exceed \$2,400,000 (inclusive of GST), for the resurfacing of Peninsula Road.	Sign change order	Public Works	Complete	

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
30-Apr-24 Tocking	Memorial Bench Process Vaida Siga	Council refer the request to establish a bench installation process to Staff.	Discuss this process with ACRD, Tofino, and National Parks Canada	Recreation	In Progress	Currently being researched
14-May-24 Update	Tennis Courts Paula Mason, Manager of Corporate Services, School District 70 Pacific Rim	Staff continue conversations with SD 70 regarding pursuing a partnership regarding the use of SD 70 land for a tennis court.	Continue to engage with SD 70 and report back to Council	Recreation	Assigned	spring 2025
14-May-24 Nancy Owen	Ucluelet Economic Development Corporation	Council direct Staff to present the documents required to dissolve the Ucluelet Economic Development Corporation for Council consideration at a future meeting.	Prepare and present documents required to dissolve	Administration	Assigned	Necessary accounting work underway. Report will be presented after accounting work is complete.
14-May-24 Executive	Zoning Amendments - Small-Scale Multi-unit Housing	Council direct Staff complete a report on amending the floor area ratio for multiple housing units on one property.	Present report	Planning	In Progress	along with Zoning amendments for 20-yr housing supply (per provincial legislation) 2025
28-May-24 Assistant	Council's Consideration of the Committee of the Whole's Recommendations Regarding Water Sustainability and Conservation	THAT Staff to investigate engaging a firm to complete a formal water conservation plan.	Investigate engaging firm to complete water conservation plan	Public Works	Assigned	Not started yet. JM 2024-12-05
28-May-24	Council's Consideration of the Committee of the Whole's Recommendations Regarding Water Sustainability and Conservation	THAT Staff present options for using water utility rates to encourage water conservation.	Present report on options for water utility rates	Public Works	Assigned	Not started yet. JM 2024-12-05
28-May-24	Council's Consideration of the Committee of the Whole's Recommendations Regarding Water Sustainability and Conservation	THAT Staff implement a water awareness and conservation communication campaign now.	Implement information campaign	Operations	Assigned	This will be prepared throughout the winter in preparation for spring 2025 JM 2024-12-05
28-May-24	Council's Consideration of the Committee of the Whole's Recommendations Regarding Water Sustainability and Conservation	THAT Staff present regulatory tools that implement water restrictions based on the proposed reservoir levels outlined in Report No. 24-47 including increasing the levels.	Present report on regulatory tools.	Public Works	Complete	Completed. JM July 3. Needs to be distributed with our communications update
11-Jun-24	Municipal Visitor Parking Program	THAT Council direct Staff to proceed with the implementation of a visitor parking program.	Review of proposals, complete reference checks and confirm best practices for implementation.	Administration	Complete	
25-Jun-24	Fire Services Development Design Policy No. 14-7320-2	THAT Council adopt District of Ucluelet Fire Services Development Design Policy No. 14-7320-2.	Publish and file policy	Administration	Complete	

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
09-Jul-24 Tracking Update Nancy Owen, Executive Assistant	Request for Reconsider - 1061 Helen Road Paul Zhan, Principal, Elite-Design	THAT Ucluelet Official Community Plan Amendment Bylaw No. 1337, 2024 and District of Ucluelet Zoning Amendment Bylaw No. 1322, 2024, be referred to a public hearing.	Give notice of Public Hearing	Planning	Complete	2nd PH held Sept. 3/24
	Development Application Procedures Bylaw No. 1350. 2024	THAT Council give first, second and third reading to District of Ucluelet Development Application Procedures Bylaw No. 1350, 2024.	Bring back bylaw for Council to consider adoption	Planning	Complete	
	ERIF Letters of Support	THAT Council authorize the Mayor to provide a letter of support to Economic Restoration Infrastructure Fund in support of their efforts to develop affordable sales and rental housing within the District of Ucluelet.	Sign and send letter of support	Administration	Complete	Support letters provided to ERIF
	Request for Reconsider - 1061 Helen Road	THAT Council postpone reconsideration of the motion to give District of Ucluelet Official Community Plan Amendment Bylaw No. 1337, 2024, third reading until the September 3rd, Regular Council Meeting.	Bring back this motion for reconsideration after a public hearing has heard.	Administration	Complete	Motion was considered again on September 3, 2024 and postponed until a report on widening the road in the area is presented.
	Info Guide and Amnesty for Legalizing Secondary Suites	THAT Council receive the draft guide to "Building or Legalizing a Secondary Suite", for information.	Publicize guide	Administration	Complete	
	Info Guide and Amnesty for Legalizing Secondary Suites	THAT Council adopt Secondary Suite Legalization Amnesty / Incentive policy 13-6723-01, waiving for a period of one year the building permit fee for legalising an existing secondary suite.	Publicize the amnesty program	Communications	Complete	
	Info Guide and Amnesty for Legalizing Secondary Suites	THAT Council adopt Secondary Suite Legalization Amnesty / Incentive policy 13-6723-01, waiving for a period of one year the building permit fee for legalising an existing secondary suite.	Sign, file and publish policy	Administration	Complete	
	Fire Department Apparatus Replacement	THAT Council approve the sole sourcing of a 2025 Fort Garry fire pumper apparatus from Fire Power Emergency Apparatus, for the base price of \$510,000.00; and,  THAT Council approve an overall project price not to exceed \$700,000.00 plus GST.	Purchase 2025 Fort Garry fire pumper	Environment-Emergency	In Progress	Negotiating with supplier
	Community Works Fund Agreement Renewal	THAT Council authorize the Mayor and CAO to execute the Community Works Fund Agreement Renewal with the Union of British Columbia Municipalities (UBCM).	Sign, send and file agreement	Administration	In Progress	Won't be executed until the province receives our 2023 Audited Financial Statements; documents submitted, waiting on return of signed copy of agreement
Attainable Housing Definition: Policy 13-6722-01	THAT Council adopt Attainable Housing Definition Policy 13-6722-01 to clarify the local working definition of "attainable" housing.	Sign, file and publish policy	Administration	In Progress		

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
30-Jul-24 Tracking Update Nancy Owen, Executive Assistant	Invitation to Meet with the Health Authorities of British Columbia during UBCM Convention Brigit Schmidt, Director, MUNI UBCM Convention Coordinator	THAT Council direct Staff to request a meeting with Island Health at the Union of British Columbia Annual Conference to discuss the following: housing for medical staff aging in place long-term care concerns and priorities related to the new medical center in Ucluelet support for mental health services	Request meeting with Island Health at UBCM	Administration	Complete	
30-Jul-24	Records Management Bylaw Update	THAT Records Management Bylaw No. 1353, 2024, be introduced, and given first, second and third reading.	Update readings and bring back for adoption	Administration	Complete	
30-Jul-24	Supporting Living Organ Donation by Municipal Employees Pia Schindler, Executive Director, the Kidney Foundation, BC & Yukon Branch	THAT Council direct Staff to prepare a report outlining the implications of joining the Kidney Foundation of Canada's Living Donor Circle of Excellence program.	Provide a report to Council on the Living Donor Circle of Excellence program to include the financial and human resource implications	Administration	Complete	
03-Sep-24	Rezoning and OCP Amendment for 1061 Helen	THAT Council defer consideration of the motion to give District of Ucluelet Official Community Plan Amendment Bylaw No. 1337, 2024 third reading, until Council receives a staff investigation into the feasibility of widening Helen Road.	Present a report Committee of the Whole on widening Helen Road on Hyphocus Island.	Public Works	Assigned	Staff preparing technical memo for consideration of roads suitability at levels of average day trips. Should be ready in January JM 2024-12-05
03-Sep-24	4-Way Stop at Peninsula Road and Bay Street (Verbal Report)	THAT District Staff present a report on the feasibility and justification for: a. the implementation of a blanket 30 km/hour speed limit in the community; b. the removal of the stop-sign on Peninsula Road at Bay Street (the ones on Bay Street can and should stay); and c. the removal of any other extraneous signage at intersections in the community.	Present report	Public Works	Assigned	Report will be provided in January JM 2024-12-05
03-Sep-24	Records Management Bylaw Update - Adoption	THAT Council adopt Records Management Bylaw No. 1353, 2024.	Print, sign, and file.	Administration	Complete	
03-Sep-24	July 30, 2024 Regular Council Meeting Minutes	THAT Council adopt the July 30, 2024, Regular Council Meeting Minutes as presented.	Print, sign, file and upload.	Administration	Complete	
03-Sep-24	June 11, 2024 Regular Council Meeting Minutes	THAT Council adopt the June 11, 2024, Regular Council Meeting Minutes as presented.	Print, sign, file and upload.	Administration	Complete	
03-Sep-24 Page 920 of 929	Josh Jenkins, Executive Director, Ucluelet Chamber of Commerce Re: Community Economic Development - Partnership with the District of Ucluelet	THAT Council refer the Chamber of Commerce's request to staff for a report to be presented at the September 24th Council meeting.	Bring back report for Council to consider.	Administration	Complete	Contribution agreement signed.



Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
03-Sep-24	Peninsula Road Paving Update and Line Paint Options	THAT Council authorize Option A of the highway line painting configuration to be completed as presented in Report No. 24-89.	Communicate paving and line painting schedule.	Public Works	Complete	
03-Sep-24	Peninsula Road Paving Update and Line Paint Options	THAT Council authorize Option A of the highway line painting configuration to be completed as presented in Report No. 24-89.	Complete paving, and line painting.	Public Works	Complete	
03-Sep-24	Request for Letter of Support for REDIP Funding Application Michelle Hall, Donor Relations & Biosphere Centre Campaign, Clayoquot Biosphere Trust	THAT Council issue a letter of support for Clayoquot Biosphere Trust's application to the Rural Economic Diversification and Infrastructure Program for funding to construct the Clayoquot Sound Biosphere Centre.	Issue letter of support.	Administration	Complete	
03-Sep-24	Mobile Vending Application - KIKAN	THAT Council approve the issuance of a mobile vending business license for the "KIKAN" food truck proposed to be located at 1708 Peninsula Road, Lot 1, Plan VIP5190, Clayoquot District.	Process and issue business licence.	Planning	In Progress	Pending VIHA certification and Fire inspection on site - tbd by owners' timing of relocation to ANAF site.
24-Sep-24	Living Organ Donor Support Policy	THAT Council adopt the District of Ucluelet Living Organ Donor Support Policy number 7-2550-1.	Print, sign, file and distribute	Administration	Complete	
24-Sep-24	Zoning Amendment and DVP for Lot 2 Plan EPP117265	THAT Council give first and second reading to District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024; and  THAT Council direct Staff to give notice for a public hearing to be held on District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 and Development Variance Permit 24-04.	Update bylaw readings	Administration	Complete	
24-Sep-24	ADU Covenant Authorization - 359 Marine Drive	THAT Council authorize the Mayor and Corporate Officer to execute the Section 219 restrictive covenant for 359 Marine Drive for registration at the Land Title Office.	Mayor and Corporate Officer to sign the covenant	Administration	Complete	
24-Sep-24	September 3, 2024, Regular Council Meeting Minutes	THAT the September 3, 2024, Regular Council Meeting Minutes be adopted as presented.	Print, sign, post and file minutes	Administration	Complete	
24-Sep-24	Permissive Tax Exemption Bylaw	THAT Council amend District of Ucluelet Permissive Tax Exemption Bylaw No. 1358, 2024 by: - deleting the word "and" at the end of section 2(i);  - deleting the word "." at the end of section 2(j) and inserting ",";  - inserting the heading " Exemption for Redd Fish Restoration Society " after section 2(j);  - inserting "Redd Fish Restoration Society – Roll No. 168000 being Lot A, Plan VIP23074, District Lot 282, Clayoquot Land District, PID 003-221-784, 1728 Peninsula RD, that is owned and used by Redd Fish Restoration Society for restoration, research and education." as section 2(k).	Amend bylaw	Finance	Complete	

Resolution Date: 03-Sep-24  
Meeting Item Description: Peninsula Road Paving Update and Line Paint Options  
Resolution: THAT Council authorize Option A of the highway line painting configuration to be completed as presented in Report No. 24-89.  
Action: Communicate paving and line painting schedule.  
Department Responsible: Public Works  
Status: Complete  
Comments/Actions:

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
24-Sep-24 Tracking Update Nancy Owen	Chamber of Commerce Economic Development Initiative	<p>THAT Council direct staff to provide a letter of support for the Chamber of Commerce 2024 Rural Economic Diversification and Infrastructure Program grant application in support of a Community Economic Development Capacity Building project;</p> <p>THAT Council direct staff to allocate \$35,000 to the Chamber of Commerce in support of the Community Economic Development Capacity Building project for 2024; and, THAT Council direct staff to include for consideration an allocation of \$35,000 in the 2025 and 2026 budgets for the development of an economic development agreement with the Chamber of Commerce.</p>	Bring back potential allocation of funds to the Chamber of Commerce for consideration in 2025 & 2026 budgets.	Finance	Complete	
24-Sep-24 Executive Assistant	Permissive Tax Exemption Bylaw	THAT Council give District of Ucluelet Permissive Tax Exemption Bylaw No. 1358, 2024, third reading, as amended.	Bring back amended bylaw for adoption	Finance	Complete	
24-Sep-24 Executive Assistant	August 27, 2024, Special Council Meeting Minutes	THAT the August 27, 2024, Special Council Meeting Minutes be adopted as presented.	Print, sign, post and file minutes	Administration	Complete	
24-Sep-24 Executive Assistant	Chamber of Commerce Economic Development Initiative	<p>THAT Council direct staff to provide a letter of support for the Chamber of Commerce 2024 Rural Economic Diversification and Infrastructure Program grant application in support of a Community Economic Development Capacity Building project;</p> <p>THAT Council direct staff to allocate \$35,000 to the Chamber of Commerce in support of the Community Economic Development Capacity Building project for 2024; and,</p> <p>THAT Council direct staff to include for consideration an allocation of \$35,000 in the 2025 and 2026 budgets for the development of an economic development agreement with the Chamber of Commerce.</p>	Letter of support	Administration	Complete	
24-Sep-24	Zoning Amendment and DVP for Lot 2 Plan EPP117265	<p>THAT Council give first and second reading to District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024; and</p> <p>THAT Council direct Staff to give notice for a public hearing to be held on District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 and Development Variance Permit 24-04.</p>	Give notice of public hearing, bring back bylaw and DVP for Council consideration	Planning	In Progress	Pubcli hearing Decemeber 10th.

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
24-Sep-24 Tracking Update Nancy Owen, Executive Assistant	Chamber of Commerce Economic Development Initiative	<p>THAT Council direct staff to provide a letter of support for the Chamber of Commerce 2024 Rural Economic Diversification and Infrastructure Program grant application in support of a Community Economic Development Capacity Building project;</p> <p>THAT Council direct staff to allocate \$35,000 to the Chamber of Commerce in support of the Community Economic Development Capacity Building project for 2024; and,</p> <p>THAT Council direct staff to include for consideration an allocation of \$35,000 in the 2025 and 2026 budgets for the development of an economic development agreement with the Chamber of Commerce.</p>	Allocate funds to the Chamber of Commerce for 2024	Finance	In Progress	Agreement signed.
10-Oct-24	Letter of Support Request - Yuułu?it?at? Government	THAT Council authorize a letter of support for Yuułu?it?at? Government's application to the Green and Inclusive Community Buildings grant program to fund the construction of a new community centre in hitac'u.	Sign, send and file letter of support	Administration	Complete	
10-Oct-24	Zoning Amendment and Development Variance Permit for 1768 Peninsula Road	THAT Council give first and second reading to District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024, and direct staff to give notice for a public hearing to receive input on the bylaw and on Development Variance Permit 24-08.	Update bylaw readings	Administration	Complete	
10-Oct-24	Temporary Use Permit 329 Forbes Road	THAT Council authorize the Director of Community Planning to issue Temporary Use Permit 24-04 to allow mobile vending use at 329 Forbes Road for a period of 3 years.	Issue TUP24-04	Planning	Complete	
10-Oct-24	Zoning Amendment and Development Variance Permit for 1768 Peninsula Road	THAT Council give first and second reading to District of Ucluelet Zoning Amendment Bylaw No. 1356, 2024, and direct staff to give notice for a public hearing to receive input on the bylaw and on Development Variance Permit 24-08.	Give notice and conduct public hearing, bring back bylaw and DVP for Council consideration	Planning	In Progress	
10-Oct-24	Temporary Use Permit 329 Forbes Road	THAT Council authorize the issuance of a business license for Mobile Vending for Long Beach Event Co. at 329 Forbes Rd.	Issue business license.	Planning	In Progress	pending Fire and Health inspections.
10-Oct-24	Alternate Appointment to Clayoquot Biosphere Trust Board of Directors	THAT Council direct Staff to commence the recruitment process for the Alternate Clayoquot Biosphere Trust Board of Directors position appointed by the District of Ucluelet.	Recruit for alternate board appointment	Administration	In Progress	
29-Oct-24	Municipal Visitor Parking Program	THAT Council direct staff to amend the municipal ticketing bylaw to include fines for parking violations in an amount of \$50.00 for the first offence, reduced to \$10 if paid on the day the ticket was issued, and \$150 for the second offence and all subsequent offences.	Draft amendment to the municipal ticketing information bylaw and bring back for Council consideration	Administration	Assigned	MTI Bylaw is being overhauled
29-Oct-24	Request for Letter of Support for Ucluelet Aquarium Rachel Baker, Interim Assistant Curator, Ucluelet Aquarium	THAT Council authorize a letter of support for the Ucluelet Aquarium's application to Rural Economic and Diversification Grant, for funding to complete essential upgrades to the Aquarium.	Provide letter of support to Ucluelet Aquarium for their grant application	Administration	Complete	

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
29-Oct-24	Permissive Tax Exemption Bylaw	THAT Council adopt District of Ucluelet Permissive Tax Exemption Bylaw No. 1358, 2024.	Sign, file and submit bylaw	Administration	Complete	
29-Oct-24	Five-Year Financial Plan Meeting Schedule (2025 - 2029)	THAT Council receive the Five-Year Financial Plan Meeting Schedule (2025 – 2029) as presented.	Post schedule and advertise the schedule	Administration	Complete	Schedule was updated at the November 26th meeting because of a conflict. Updated schedule is in th process of being updated.
29-Oct-24	October 10, 2024 Regular Council Meeting Minutes	THAT the October 10, 2024 Regular Council Meeting Minutes be adopted as presented.	Sign, file, and post minutes	Administration	Complete	
29-Oct-24	Ucluelet 2024 Interim Housing Needs Report	THAT Council endorse the 2024 Ucluelet Interim Housing Needs Report - Appendix to the 2021 Ucluelet Housing Needs Report / West Coast Housing Need and Demand Study.	Add the interim Housing Needs Report as an appendix the Housing Needs Report / West Coast Housing Need and Demand Study and publish the same online.	Planning	In Progress	Website update pending.
29-Oct-24	Municipal Visitor Parking Program	THAT Council authorize the purchase of a vehicle mounted license plate reader system to be utilized for parking enforcement.	Procure vehicle mounted license plate reader.	Administration	In Progress	To be included in service contract.
29-Oct-24	Municipal Visitor Parking Program	THAT Council authorize the Mayor and Corporate Officer to execute a revenue sharing agreement between HotSpot and the District of Ucluelet for the implementation and provision of a visitor parking program.	Execute and file the agreement	Administration	In Progress	Service Agreement under review.
29-Oct-24	Municipal Visitor Parking Program	THAT Council direct staff to draft a parking enforcement bylaw that: a. exempts Ucluelet, Yuukuʔiʔath, ACRD South Long Beach – Area C, Toquaht, Tla-o-qui-aht, Ahousaht, and Hesquiaht residents from the Ucluelet Visitor Parking Program;  b. exempts businesses from the Ucluelet Visitor Parking Program, subject to a \$50 annual registration fee; and,  c. exempts Tofino residents from the Ucluelet Visitor Parking Program, subject to a \$50 annual registration fee.	Draft bylaw	Administration	In progress	Under development - anticipate to be presented to Council in early 2025.
29-Oct-24	Barkley Community Forest Legacy Reserve Fund	THAT Council direct staff to develop a Barkley Community Forest Legacy Reserve policy that:  A. allocates fifty percent of the annual interest earned on investment income from the Barkley Community Forest Legacy Reserve Fund to the Grants in Aid program and reinvests the remainder of the investment income back into the legacy reserve;  B. allocates fifty percent of the future dividends received from the Barkley Community Forest to the Barkley Community Forest Legacy Reserve Fund;  C. authorizes staff to allocate up to \$100,000 of unallocated operational surplus annually to the Barkley Community Forest Legacy Reserve if feasible; and  D. allows for the acceptance of community donations to the Barkley Community Forest Legacy Reserve.	Draft and present policy to Council	Finance	In progress	

Resolution Date: Tracking Update Nancy Owen, Executive Assistant

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
29-Oct-24 Tracking Update	Barkley Community Forest Legacy Reserve Fund	THAT Council direct staff to prepare an allocation of \$1,500,000 from the Barkley Community Forest Reserve Fund to the Barkley Community Forest Legacy Reserve Fund for consideration in the 2025-2029 Financial Plan.	Integrate allocation into the Draft 2025-2029 Five Year Financial Plan.	Finance	In progress	
	Municipal Visitor Parking Program	THAT Council direct staff to include a 3-year temporary Bylaw Officer position in the 2025 to 2029 financial plan for consideration.	Bring back 3-year Bylaw Officer position to be considered in the in the 2025 to 2026 financial plan for consideration	Finance	In progress	
29-Oct-24 Nancy Owen, Executive Assistant	2025 AVICC AGM & Convention	THAT Council Authorize Mayor McEwen, Councillors Hoar, Anderson and Maftei to represent the District of Ucluelet at the 2025 AVICC Annual General Meeting and Convention; and  THAT Council direct Staff to complete all related accommodation and convention bookings.	Register Council members to attend the 2024 AVICC and book accomodations.	Administration	In progress	Hotels booked, conference registration opens in Feb 2025
12-Nov-24	Sanitary Sewer System Upgrades to Support Housing Development	THAT Council direct staff to initiate design procurement for sanitary system upgrades as outlined in Option A within report number 24-113 and include the sanitary system capital improvements within the 2025 to 2029 financial plan for consideration.	Develop RFP for design procurement for sanitary system upgrades	Public Works	Assigned	Scope of work be preapred for January procurement JM 2024-12-05
12-Nov-24	Sanitary Sewer System Upgrades to Support Housing Development	THAT Council direct staff to initiate design procurement for sanitary system upgrades as outlined in Option A within report number 24-113 and include the sanitary system capital improvements within the 2025 to 2029 financial plan for consideration.	Add sanitary system capital improvements to the 2025-2029 financial plan to bring back to Council for consideration	Finance	Assigned	
12-Nov-24	2025 Council Appointments	THAT Council adopt the 2025 council appointments, as set out in Appendix A to Report No. 24-112 .	Update appointments catalogue	Administration	Complete	
12-Nov-24	2025 Council Appointments	THAT Council appoint Councillors Anderson and Kennington as the District's Representatives on the Ucluelet Chamber of Commerce Economic Development Committee for the 2025 term.	Notify UCoC of appointments	Administration	Complete	
12-Nov-24	2025 Council Appointments	THAT Council appoint Mayor McEwen as the District's Representative on the Tourism Ucluelet's Board for the 2025 term.	Confirm reappointment with TU in Feb-Mar 2025 - send certified resolution	Administration	Complete	
12-Nov-24	2025 Council Appointments Nancy Owen, Executive Assistant	THAT Council appoint Councillor Kennington as the District of Ucluelet's Voting Delegate, Councillor Hoar as Alternate Voting Delegate Number One, and Mayor McEwen as Alternate Voting Delegate Number Two for the Municipal Insurance Association of British Columbia for the 2025 calendar year.	Send MIABC a certified resolution for the appointments	Administration	Complete	
12-Nov-24	2025 Council Appointments	THAT Council appoint Mayor McEwen as the Director and Councillor Maftei as the Alternate Director on the Alberni-Clayoquot Regional District Board of Directors for the 2025 calendar year.	Send certified resolution to ACRD	Administration	Complete	
12-Nov-24	Sealion Barrier Install at 52 Steps Dock	THAT the Harbour Authority agrees to undertake the ongoing care and maintenance of the 52 Steps Dock railing.	Notify DFO by certified resolution	Harbour Authority	complete	



Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
12-Nov-24 Tracking Update Nancy Owen, Executive Assistant	Zoning Amendment and DVP for Lot 2 Plan EPP117265	THAT Council amend District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024 by: a. removing subsections CS-5.7.1(2) and CS-5.7.1(3) from the bylaw's text amendment; and,  b. replacing the Future Subdivision Map with the map attached to staff report 24-114 as Appendix B.	Amend bylaw	Planning	Complete	
	Sealion Barrier Install at 52 Steps Dock	THAT Council, acting as the Harbour Authority, approve the installation of a permanent railing at 52 Steps Dock at an estimated cost of \$3000.	Notify DFO by certified resolution	Harbour Authority	In progress	target December 31 complete
	Zoning Amendment and Development Variance Permit at 1983 Athlone Road	THAT Council, with regard to the proposed re-zoning to allow an ADU at 1983 Athlone Road Direct staff to give statutory notice to receive input on the Development Variance Permit 24-09.	Give notice and bring back DVP for Council consideration	Planning	In Progress	Dec. 10th Council meeting
	Zoning Amendment and Development Variance Permit at 1983 Athlone Road	THAT Council, with regard to the proposed re-zoning to allow an ADU at 1983 Athlone Road Direct staff to give notice of first reading to District of Ucluelet Zoning Amendment Bylaw No. 1359, 2024.	Give notice of first reading, bring back Bylaw for council Consideration	Planning	In Progress	Dec. 10th Council meeting
	Zoning Amendment and DVP for Lot 2 Plan EPP117265	THAT Council direct Staff to give notice for a public hearing to be held on the amended District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024, and Development Variance Permit 24-04.	Give notice and conduct public hearing, bring back bylaw and DVP for Council consideration	Planning	In Progress	Dec. 10th Council meeting
	Zoning Amendment and DVP for Lot 2 Plan EPP117265	THAT Council give second reading to District of Ucluelet Zoning Amendment Bylaw No. 1355, 2024, as amended.	Bring back bylaw for Council Consideration	Planning	In Progress	Consider 3rd reading after public hearing
	Question Period	THAT Council direct staff to prioritize a report back to Council with options to consider resolving the Alliance Holdings Ltd. matter, once information from the District's Solicitor has been received.	Prioritize report to Council on options for resolving Alliance Holdings Ltd.'s buildings encroaching on District lands	Planning	In Progress	Jan-25
	2025 Council Appointments	THAT Council appoint Councillor Hoar as Trustee and Councillor Anderson as Alternate Trustee on the Vancouver Island Regional Library Board of Trustees for the 2025 calendar year.	Prepare and submit Trustee and Alternate appointments to VIRL, include certified resolution and VIRL forms	Administration	In Progress	Awaiting Councillor Anderson's documents for submission.
	2025-2029 Five-Year Financial Plan - Capital Projects (Verbal Report)		Post budget slides on website	Administration	Complete	
	October 29, 2024, Special Council Meeting Minutes	THAT the October 29, 2024, Special Council Meeting Minutes be adopted as presented.	Print, sign, file and upload	Administration	Complete	
2025 Conference Attendance Schedule	THAT Mayor and Council are authorized to attend and represent the District of Ucluelet at the conferences listed in the 2025 Conference Attendance Schedule attached as Appendix A to report No. 24-119.	Register conference attendance and book accommodations	Administration	Complete	Conferences registration and accommodation bookings are being made as registration opens	
2025 Annual Council Meeting Schedule Joseph Rotenberg, Manager of Corporate Services	THAT Council receive the revised Five-Year Financial Plan Meeting Schedule (2025 – 2029) as presented in Appendix B to Report No. 24-118.	Advertise updated budget schedule	Administration	Complete	Budget schedule has been posted on the District website and advertised through the UkeeMail.	

Resolution Date	Meeting Item Description	Resolution	Action	Department Responsible	Status	Comments/Actions
26-Nov-24	221 Minato Road - OCP & Subdivision Application - Flood Assurance Statement Joshua Hunt, CEO, ERIF Sustainable Solutions	THAT Council direct staff to prepare a letter acknowledging the risk assessment provided by Kerr Wood Leidel Consulting Engineers in their report 'Flood Assessment 221 Minator Road, Ucluelet' as acceptable, on the condition that the BC drafted waiver is signed protecting staff and Council from any liability.	Draft letter for execution by the Mayor.	Administration	Complete	Letters issued.
26-Nov-24	2025 Conference Attendance Schedule Joseph Rotenberg, Manager of Corporate Services	THAT Mayor and Council are authorized to attend and represent the District of Ucluelet at the conferences listed in the 2025 Conference Attendance Schedule attached as Appendix A to report No. 24-119.	Update budget	Administration	Complete	
26-Nov-24	221 Minato Road - OCP & Subdivision Application - Flood Assurance Statement Joshua Hunt, CEO, ERIF Sustainable Solutions	THAT Council has reviewed the Risk Assessment prepared by Kerr Wood Leidel for 221 Minato Road, Ucluelet and confirms that the risk set out in the report is acceptable including: 1. That the development may proceed in the absence of a standard dike. 2. That the development of Lot 3 with 11 houses represents a nominal increase to the housing density on the DoU tsunami floodplain. 3. That the risk of mortality associated with the development of Lot 3 at 1:142,000 annually is acceptable.	Draft letter for execution by the Mayor	Administration	Complete	Letters issued.
26-Nov-24	Management and Operations of Public Washrooms in the Ucluelet Aquarium Building Laura Griffith-Cochrane, Executive Director, Ucluelet Aquarium Society	THAT Staff report back on the Ucluelet Aquarium bathroom change.	Present report	Recreation	in progress	Janurary report
26-Nov-24	Resort Development Strategy for First Nations Projects	THAT Council direct staff to engage Yuułu?iŋ?at̓on formalizing support and guidance on proposed heritage and cultural awareness projects funded through the Resort Municipality Initiative in an amount up to \$95,202 as part of the 2022 - 2024 Resort Development Strategy.	Engage with YG related to proposed projects	Recreation	In progress	
26-Nov-24	2025 Annual Council Meeting Schedule	THAT Council adopt the 2025 Annual Council Meeting Schedule as presented in Appendix A to Report No. 24-118, and direct Staff to give notice of the 2025 Annual Council Meeting Schedule.	Give notice of the Council meeting schedule and advertise the schedule	Administration	In Progress	Schedule posted to the District's website. Notice of the meeting schedule will be given over the coming weeks.
26-Nov-24	ADU Covenant Authorization - 828 Rainforest Drive Maddie Haynes, Planning Assistant	THAT Council authorize the Mayor and Corporate Officer to execute the Section 219 restrictive covenant for 828 Rainforest Drive for registration at the Land Title Office.	Sign and register covenant	Planning	In Progress	Awaiting signatures

Resolution Date: Tracking Update: Nancy Owen, Executive Assistant





District of Ucluelet

PO Box 999

Ucluelet, BC

V0R 3A0

[jrotenberg@ucluelet.ca](mailto:jrotenberg@ucluelet.ca)

November 28, 2024

**Re: Appointment of Pacific Rim School District’s Representative to the District of Ucluelet**

To whom it may concern,

I trust this letter finds you well. On behalf of the Pacific Rim School District, I am writing to officially communicate the appointment of a representative to serve as the Pacific Rim School District’s representative to the District of Ucluelet for the upcoming year.

After careful consideration and consultation, the following Pacific Rim School District’s Board Trustee has been selected to represent our District:

- 1. **Name:** Trustee Cynthia Orr
- Position:** Representative
- Contact Information:** [corr@sd70.bc.ca](mailto:corr@sd70.bc.ca)

This appointment serves as a long-standing politician-to-politician line of communication between the two organizations, with the representative attending public Council meetings and bringing back/forth any information that might be timely or pertinent. Operational issues should still be addressed by each organization’s departmental counterparts, for example CAO/Superintendent, Finance/Finance, Corporate Services/Corporate Services.

This representative has been chosen for their dedication to education, community involvement, and the betterment of our schools. We are confident that their contributions will greatly benefit the collaborative efforts between the Pacific Rim School District and the District of Ucluelet. Furthermore, we look forward to a productive and mutually beneficial partnership throughout the upcoming year.

If there are any additional details or arrangements that need attention, please do not hesitate to contact our office.

Sincerely,

Paula Mason | Manager of Corporate Services | School District 70 Pacific Rim  
Direct 250.720.2770 | Office 250.723.3565  
4690 Roger Street, Port Alberni, BC V9Y 3Z4 | [www.sd70.bc.ca](http://www.sd70.bc.ca)

*Pacific Rim School District is situated on the ḥaḥuuti of the c̓išaa ḡaḥ, huupačas ḡ’ath, ḥaḡuukʷiḡaḥ, huuḥiiḡaḥ First Nations and yuuluḡiḡaḥ Government, and acknowledges that we work alongside all nuučaanūt Nations as well as the Métis Nation of British Columbia to serve the children and youth of the Alberni-Clayoquot region. The district strives to increase awareness, understanding and integration of nuučaanūt culture, history, and language in all Pacific Rim School District schools. It is part of our ongoing commitment to Truth and Reconciliation.*