Building/Plumbing Permit

Strathcona Regional District Building Bylaw No. 158
Electoral Area D
Jurisdiction 772

Permit #: PRM-2025-0039

Issued Date: 2026-04-30

Permit Type
Residential SDD - Mobile/manuf/locate

Roll #
05416.000

Property Address
4129 ISLAND HWY S

Legal Description
LOT C SECT 35 PLAN VIP13994 LNDDST 15

Project Value
$313,000.00

Fees
$2,084.50

Area of Work
1304 ft², 121.146 m²

Description
New Z240 mobile home

Conditions

Contacts

Type	Name	Company	Address 1	Phone Number	Mobile Number	Email
Builder/Contractor	Chris Andersen	Iconic Island Dwellings		[redacted]		[redacted]
Applicant, Property Owner	[redacted]		N/A - 4129 ISLAND HWY S	[redacted]	0	[redacted]
Property Owner	[redacted]		N/A - 4129 ISLAND HWY S	0	0	

Inspections

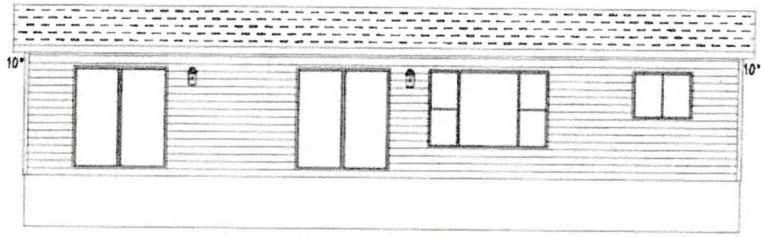
☐ Foundation
☐ Storm Drain/Dampproofing
☐ Final
☐ Services
☐ Occupancy

The person signing this permit form, if not the owner, acknowledges that their signature is as agent for the owner and that they are authorized to bind the owner, who is deemed to know of and understand the content of this permit

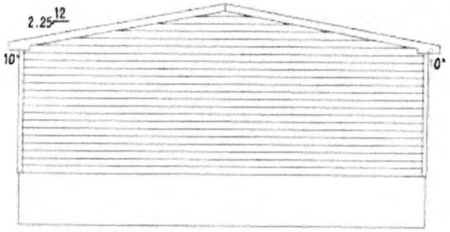
Every building permit shall expire and the right of the owner under the permit shall terminate if the work is not commenced within six (6) months, is suspended for a period of twelve (12) months, or is not completed within twenty four (24) months of date of issue.

[redacted]
Applicant Signature

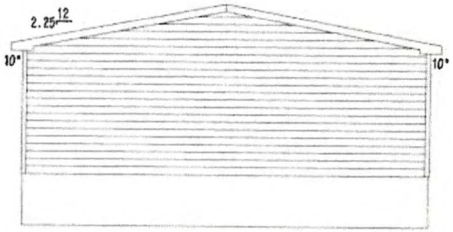
May 3/2026
Date



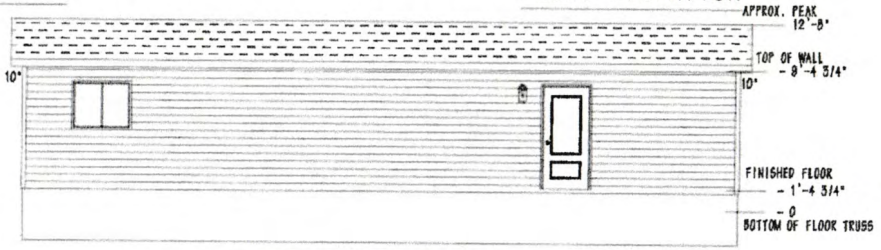
ROADSIDE ELEVATION



REAR ELEVATION



FRONT ELEVATION



CURBSIDE ELEVATION

SCALE 1/8" = 1'

DR#28164

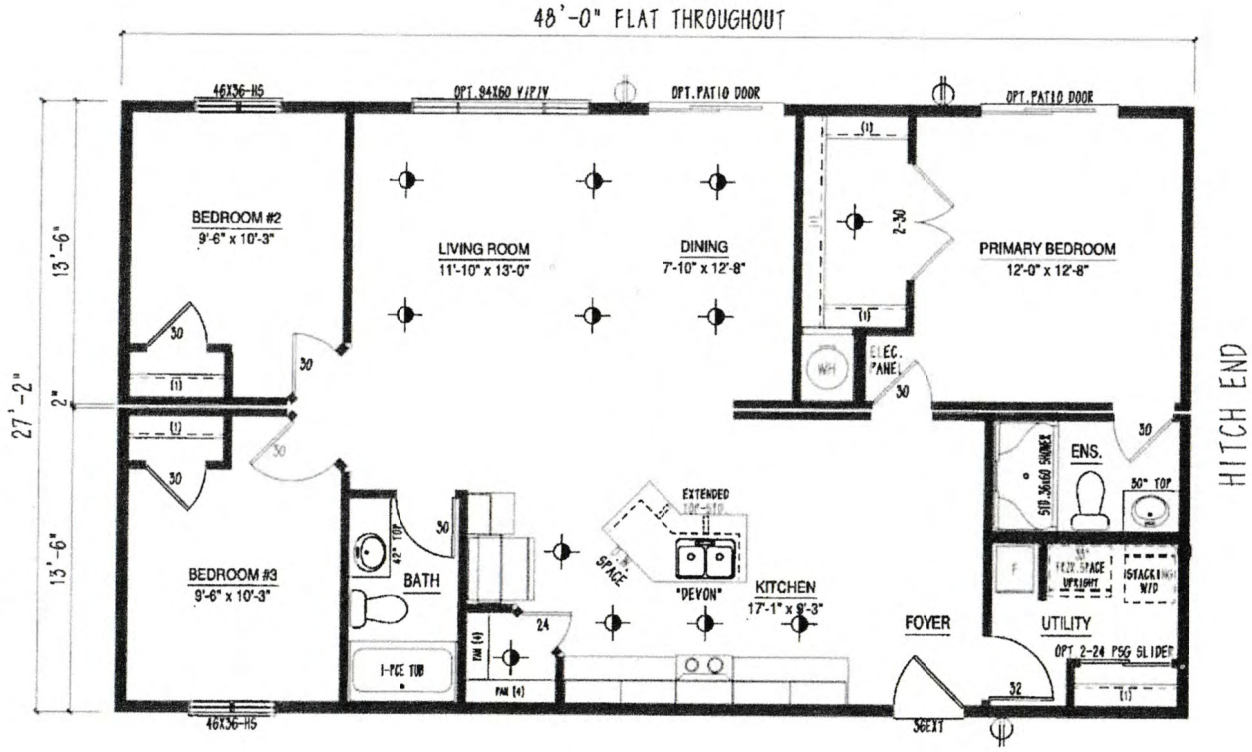
**NOTES: 1)TRIPLE M HOUSING HAS AN UNSURPASSED COMMITMENT TO PRODUCT QUALITY AND INNOVATION. IN ORDER TO MEET AND EXCEED MARKET DEMANDS TRIPLE M RESERVES THE RIGHT TO MODIFY PLANS, SPECIFICATIONS AND/OR PRODUCT FEATURES AT ANY TIME WITHOUT PRIOR NOTICE. DUE TO PROVINCIAL, STATE AND/OR OTHER DESIGN REQUIREMENTS SOME VARIATION IN STANDARD FEATURES MAY OCCUR. PLEASE CONSULT YOUR LOCAL TRIPLE M RETAILER FOR MORE INFORMATION.
2)COPYRIGHT BELONGS TO TRIPLE M HOUSING LTD. REPRODUCTION IN WHOLE OR IN PART REQUIRES WRITTEN PERMISSION BY SAME.

REVISIONS:

www.triplemhousing.com
LETHBRIDGE, AB. CANADA
BUS. (403) 320-8588

Triple M Housing

REF# ICONIC 2748 CUSTOM
TITLE: ELEVATIONS (STD)
DATE: 2025-10-23 DWN. FL
SCALE: AS NOTED CKD. CF
DWG. NO. QV-1851-25
SHEET: P1



DR#28164

**NOTES: 1)TRIPLE M HOUSING HAS AN UNSURPASSED COMMITMENT TO PRODUCT QUALITY AND INNOVATION. IN ORDER TO MEET AND EXCEED MARKET DEMANDS TRIPLE M RESERVES THE RIGHT TO MODIFY PLANS, SPECIFICATIONS AND/OR PRODUCT FEATURES AT ANY TIME WITHOUT PRIOR NOTICE. DUE TO PROVINCIAL, STATE AND/OR OTHER DESIGN REQUIREMENTS SOME VARIATION IN STANDARD FEATURES MAY OCCUR. PLEASE CONSULT YOUR LOCAL TRIPLE M RETAILER FOR MORE INFORMATION.
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REVISIONS:

www.triplemhousing.com
LETHBRIDGE, AB. CANADA
BUS. (403) 320-8588

Triple M Housing

REF#
TITLE: ICONIC 2748 CUSTOM
FLOOR PLAN (STD)
DATE: 2025-10-28 DWN. FL
SCALE: 3/16"=1'-0" CKD. CF
DWG. NO. QV-1851-25
SHEET: P3

Talbott pad, blocking and tie down details.



2x4x16” lateral support structurally screwed to support shims.

2x4x16” with hardwood shims.

8x8x16 cement blocks with 3/8” plywood spacer to reduce chance of block shattering.

10 MM rebar tie down points at no more than 24’ spacing and within 4’ from end of home.

6” cement pad with 10MM rebar 2’ on center. 6 mil poly under. Sloped edge to drain water. See skirting details for drip cap installation.

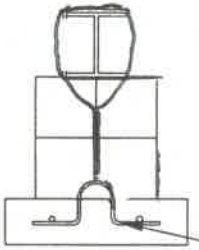


Tie down to be completed using 3/8” aircraft cable and 3/8” galvanized steel turnbuckle.

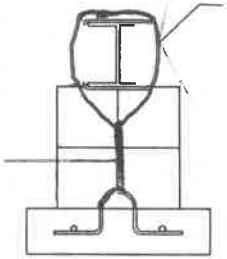








Tie Down Hooked Below
Longitudinal Rebar



Cable

Turnbuckle

See Sheet 3 for Detail and Specifications
Typ. 4 Places

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. K. MITCHELL
21378

21 September 2023 Permit to Practice 1003605

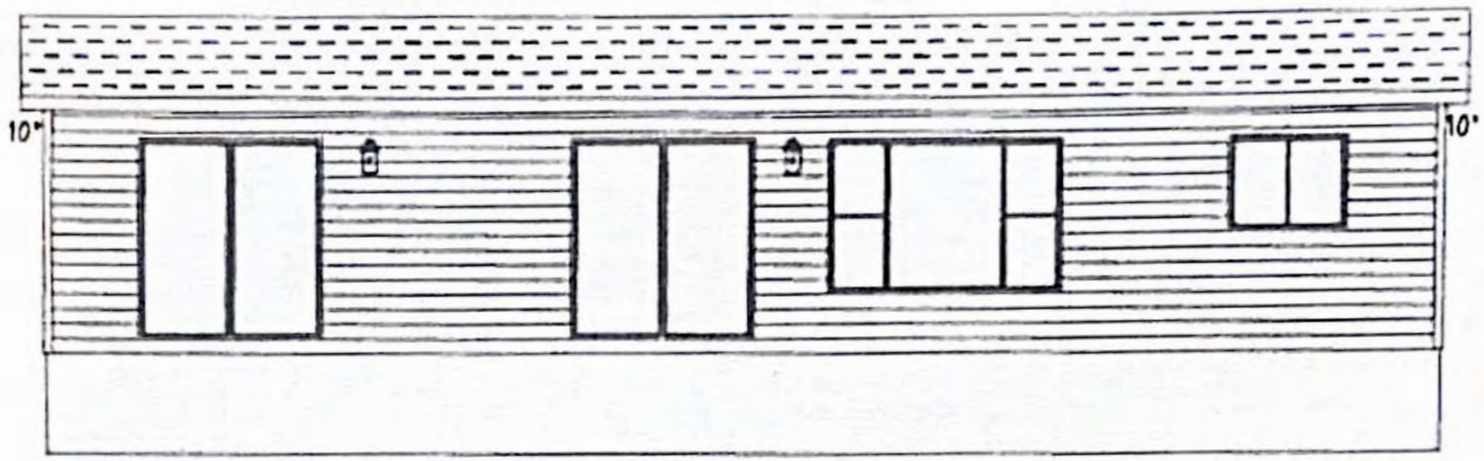
From previous Project.

DATE: 15 09 2023
Scale: 1/2" = 1.0'
Drawn: DBB
Project: Unit 22
Sheet 2 of 3

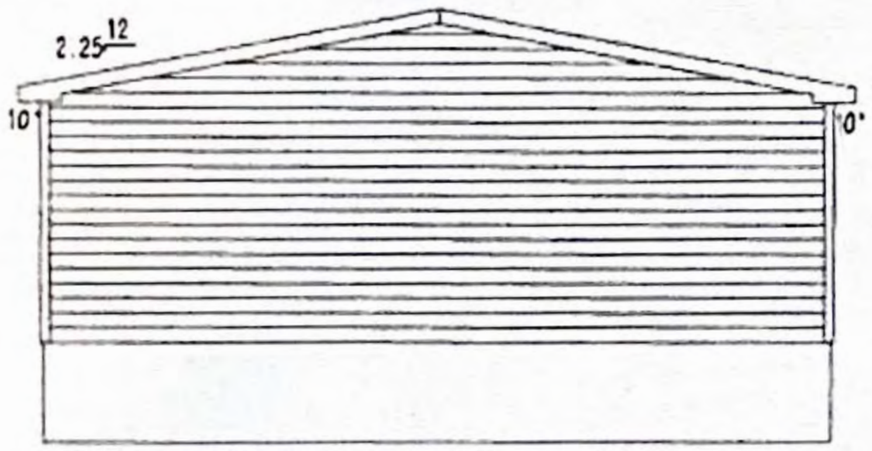
Steel Cable Tie Down Section @ Blocking

[redacted]

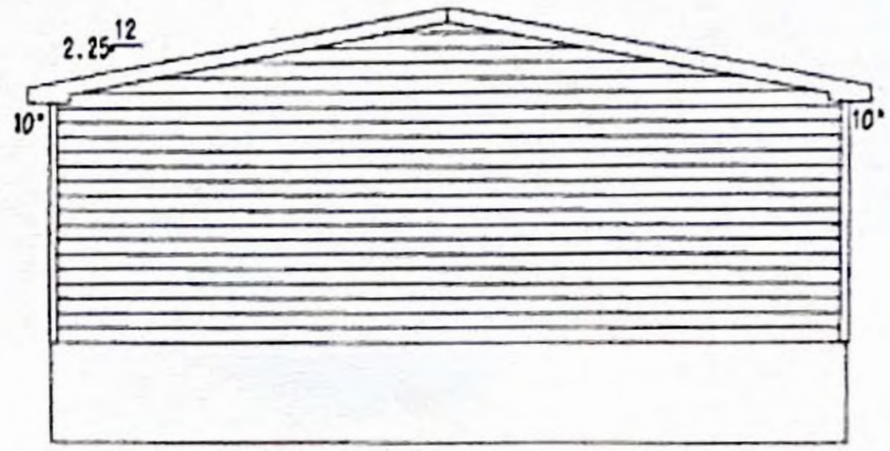
FILE COPY



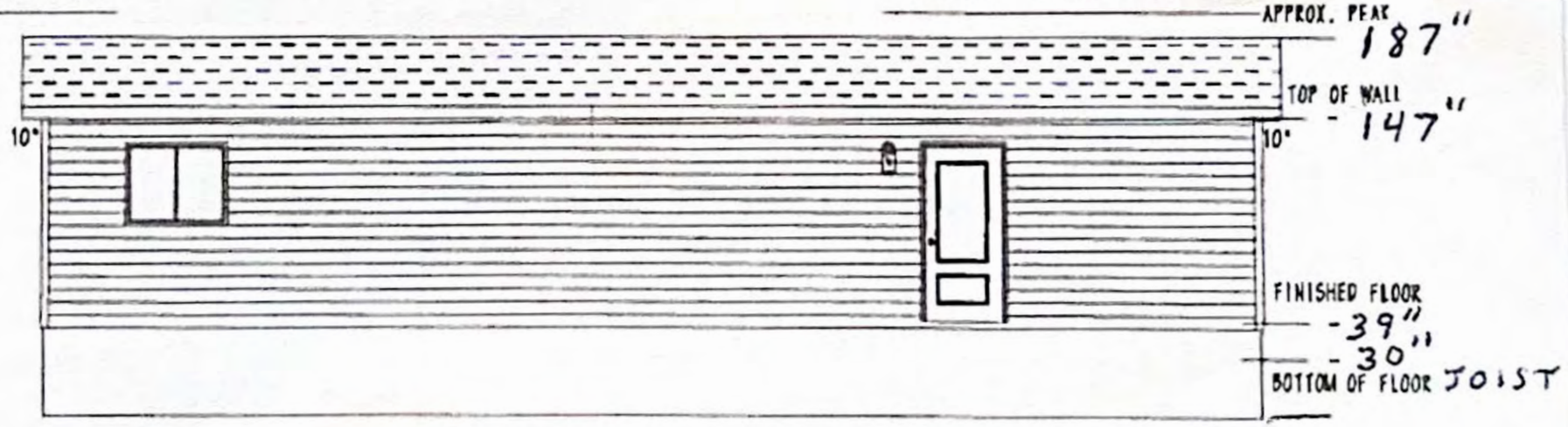
ROADSIDE ELEVATION



REAR ELEVATION



FRONT ELEVATION



CURBSIDE ELEVATION

SCALE 1/8" = 1'

Lewkowich Engineering Associates Ltd.

geotechnical • environmental, health & safety • materials testing

GEOTECHNICAL MEMO

[redacted]

File: E4084.02
4129 Island Highway South, Oyster Bay, BC V9H 1E9 **June 16, 2026**

Attention: [redacted]

PROJECT: NEW SINGLE-FAMILY RESIDENCE
ADDRESS: 4129 ISLAND HIGHWAY SOUTH, OYSTER BAY, SRD, BC; PID: 000-329-479
SUBJECT: SITE OBSERVATIONS – BEARING CONDITIONS, STRUCTURAL FILL

1. As requested, Lewkowich Engineering Associates Ltd. (LEA) visited the above noted property on May 8 and 19, 2026, to make observations and comment on subgrade soils, structural fill, and general bearing conditions as each relates to a new single-family residence.
2. The visits revealed an excavation measuring 14m by 10m and a maximum depth of 0.6m below surrounding grade. A 2.5m by 2.0m area at the west corner of the excavation required an additional 1.1m excavation below footing grade to remove a decommissioned septic tank. The exposed bearing grade consisted of SAND, some gravel, dense, light brown to grey, moist.
3. A 75mm screened pit run from Cougar Aggregates Ltd. was placed to reach desired footing elevation. The structural fill was placed in lifts of maximum 300mm thickness, compacted with a 225kg vibratory plate packer, and tested to confirm that 95% of ASTM D1557 Modified Proctor maximum dry density was reached.
4. Based on the observed conditions, it is the opinion of LEA that the bearing soil will provide a suitable base of support for the proposed construction of a new permanent single-family residence. Settlements should be within the ranges considered "normal" and "tolerable" for typical wood frame residential construction. These ranges are usually taken as being up to 25mm total, and up to 19mm differential between typical column spacing. The footings should be provided with at least 0.5m of soil cover for protection against frost.
5. Lewkowich Engineering Associates Ltd. appreciates the opportunity to be of service on this project. If you have any comments, or if we can be of further assistance, please contact us at your convenience.

Respectfully Yours,
Lewkowich Engineering Associates Ltd.

Devon Owen
Materials Technician

Reviewed By,
Permit to Practice Number: 1001802

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. P. BRUNELLE
47938
2026-06-16

Joe Brunelle, P.Eng.
Geotechnical Engineer

RECORD OF SEWERAGE SYSTEM

island health

Filing # (OFFICE USE ONLY) CR25/071

1. Property Information

☑ New Construction ☐ Alteration ☐ Repair ☐ Amendment – Original Filing #

Tax Assessment Roll # 772.05416.000

PID # 000-329-479

Legal Description (Plan, Lot, District Lot, Block Numbers)
LC SECT. 35 CMX LND DST TOWNSHIP 4 PL VIP 13994

Street (Civic) Address or General Location
4129 ISL. HWY. S

City OYSTER BAY / CAMPBELL RIVER

2. Owner Information

Name of Legal Owner [redacted]

Mailing Address 4129 ISL HWY S.

Phone [redacted]

City OYSTER BAY / CAMPBELL RIVER Prov BC Postal Code V9H 1E9

3. Authorized Person Information

Name of Authorized Person [redacted]

Mailing Address 7663 ISL HWY S

Phone [redacted]

City FANNY BAY Prov BC Postal Code V0R1W0

Registration # OWO543

Email [redacted]

4. Structure Information

Sewerage System Will Serve:
☑ Single Family Dwelling ☐ Other Structure *(specify)* _____ ☐ Other Dwelling *(specify)* _____

The sewerage system is designed for an estimated minimum daily domestic sewage flow of *(check one)*
☑ Less than or equal to 9,100 litres ☐ More than 9,100 litres but less than 22,700 litres

5. Site Information

Depth of native soil to seasonal high water table or restrictive layer *(cm)* +150

Information respecting the type, depth and porosity of the soil is attached ☑ Yes ☐ No

GPS Location of System *(decimal degrees)* Latitude 49.9025 Longitude 125.1671

Horizontal Accuracy *(m)* 5 ☑ Recreational GPS ☐ Differential GPS

6. Drinking Water Protection

Will the sewerage system be located less than 30 m from a well? ☐ Yes ☑ No

If yes, attach a professional's report and specify the intended distance _____ (m)

Distance of proposed sewerage system to the closest body of surface water +15 (m)

7. System Information

Sewerage treatment method ☐ Type 1 ☑ Type 2 ☐ Type 3

8. Legal or Regulatory Considerations

☑ Construction of the proposed sewerage system will not conflict with legal instruments registered on the property.

Is this filing submitted as the result of an order from the Health Authority? ☐ Yes *(attach a copy of the order)* ☑ No

9. Plot Plan and Specifications

Plot Plan (to scale) and specifications are attached ☑ Yes ☐ No

☑ The plans and specifications are consistent with Standard Practice

Source of Standard Practice: ☑ Ministry of Health Standard Practice Manual ☐ Other

10. Authorized Person's Signature

Signature [redacted]

Date DEC 4 / 2025

OFFICE USE ONLY

Filing Accepted Date DEC 0 9 2025

Receipt Number 129144

ONSITE WASTEWATER PRACTITIONER · REGISTERED · DARREN HUTTON · OWO543

Revised August 2018

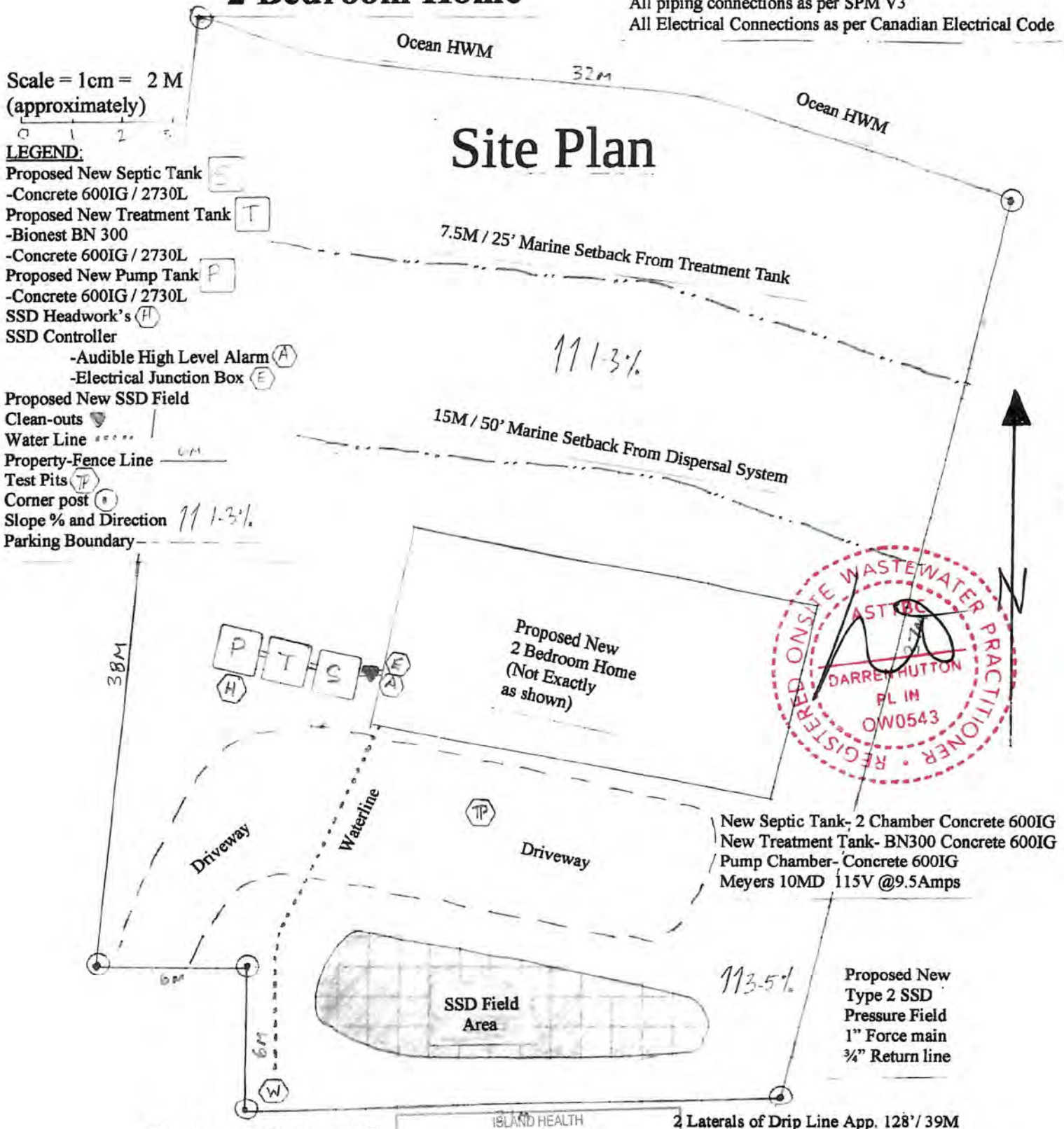
ISLAND HEALTH
FILING ACCEPTED
DEC 0 9 2025
This filing Does Not Constitute Approval for Further Subdivision

4129 Island Hwy S, Campbell River
LC SECT 35 CMX LND DST TOWNSHIP 4 PL VIP 13994
GPS: 49.9025 125.1671
2 Bedroom Home

All piping connections as per SPM V3
All Electrical Connections as per Canadian Electrical Code

Scale = 1cm = 2 M
(approximately)

Site Plan



LEGEND:
Proposed New Septic Tank (S)
-Concrete 600IG / 2730L
Proposed New Treatment Tank (T)
-Bionest BN 300
-Concrete 600IG / 2730L
Proposed New Pump Tank (P)
-Concrete 600IG / 2730L
SSD Headwork's (H)
SSD Controller
-Audible High Level Alarm (A)
-Electrical Junction Box (E)
Proposed New SSD Field
Clean-outs
Water Line
Property-Fence Line
Test Pits (TP)
Corner post
Slope % and Direction 11 1-3%
Parking Boundary

New Septic Tank- 2 Chamber Concrete 600IG
New Treatment Tank- BN300 Concrete 600IG
Pump Chamber- Concrete 600IG
Meyers 10MD 115V @9.5Amps

Proposed New
Type 2 SSD
Pressure Field
1" Force main
¾" Return line

2 Laterals of Drip Line App. 128'/ 39M
12"Emitter Spacing
12"Lateral Spacing
Total Infiltrative Area = 23.8 M2 or 256 FT2
EDSF=1000L/Day or 220IG/Day or 264 USG/Day

Island Hwy S

ISLAND HEALTH
FILING ACCEPTED
DEC 0 9 2025
This filing Does Not Constitute
Approval for Further Subdivision

Recap Waste Water Inc.
Septic Systems, Drainage, Land use and Development
Sniper81@shaw.ca / recapwastewater.com
7663 Island Highway South
Fanny Bay B.C.
1-250-703-1086

General Summary of the Sewerage System

Date DEC. 4 / 2025

Civic Address: 4129 ISL HWY S. OYSTER BAY / CAMPBELL RIVER

Legal Description: LC SECT. 35 CMX LND DST TOWNSHIP 4 PL VIP13994

Site Assessment and Soil Evaluation Results

Total Flow Rate: 220 G.P.D. 1000 L.P.D.

-Multiple residences EDSF #1 ____ / ____ EDSF #2 ____ / ____ EDSF #3 ____ / ____

Based on # of Bedrooms: 2 Total Floor Area Max. 2580 sqFT 240 sqM

-# of Bedrooms: ____ Total Floor Area Max ____ sqFT ____ sqM

Slope of Site at Dispersal Area: 3-5 % Restrictive Layer Depth: +150 CM

Restrictive Layer: NONE Perk Rate Average ___ -min/inch/cm OR ±550 k(fs) mm/day

Soil at Depth of Infiltrative Trenches (depth 0 to 30cm for Sand Mound)

Soil Texture SAND Structure SINGLE Consistence MOIST

General System Design Parameters

Tankage (Treatment Method)

System to be: Type I (II) III Distribution SUB SURFACE DRIP - PRESSURE

Septic (Trash) Tank to be 600 IG 2730 Litres

Pump Chamber to be 600 IG 2730 Litres

Septic Tank Total working Volume to be 600 IG 2730 Litres

Treatment Plant to be BIONEST BN 300

Manufacture BIONEST Model BN 300

Treatment Capacity 300 IG 1365 Litres

REGISTERED ONSITE WASTEWATER PRACTITIONER
ASTTBC
DARREN HUTTON
PL IN
OW0543

ISLAND HEALTH
FILING ACCEPTED
DEC 09 2025
This filing Does Not Constitute Approval for Further Subdivision

Recap Waste Water Inc.
Septic Systems, Drainage, Land use and Development
Sniper81@shaw.ca / recapwastewater.com
7663 Island Highway South
Fanny Bay B.C.
1-250-703-1086

Distribution Method

Depth of C33 sand below infiltration surface to be 1 inches 1 cm

Total Vertical Separation: I.S. to restrictive layer 1 inches +150 cm (60×0.7 SSD)

Hydraulic Loading Rate (HLR) Type I (II) III system _____ IG/sqFT/day 42 L/sqM/day

AIS = Flow Rate 1000 L.P.D divided by HLR 42 L/sqM/day = 23.8 sq M

Distribution area to be 2 laterals of 128 FT 39 M

Total being 256 L FT, 78 L M

Width of ~~Trenches / Bed~~ to be 4 INCHES 10 CM

~~Trenches / Laterals~~ to be 1 FT 0.3 M centers and ~~Center~~ (End) feed

Total Area of Infiltration Surface (AIS) = 256 sq FT 23.8 sq M

Pump to be: Manufacturer MEYERS Model 10MP Voltage 115v/9.5A

Orifice Sizing to be SSD WASTE FLOW PC 0.5 gph

Orifice Spacing to be 12" or 30 CM centers

Piping Laterals to be 12" or 30 CM

Manifold to be 1" Sch. 40

Force Main to be 1" Sch. 40 return 3/4" Sch. 40

Total Flow Rate 2.133 G.P.M. or _____ L.P.M

Lateral Flow Rate 1.066 G.P.M or _____ L.P.M

REGISTERED ONSITE WASTEWATER PRACTITIONER
ASTTBC
DARREN SUTTON
PL IN
OW0543

Design Rationale

- INSTALL ST/TP/PC TO RECEIVE GRAVITY SEWAGE FLOWS FROM NEW 2 BED
- ENSURE NO TRAFFIC (INSTALL W HEAVY LOAD LIDS)
- CONSTRUCT SF ACROSS GRADE NEAR HWY. EASEMENT

ISLAND HEALTH
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DEC 09 2025
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DDF IN IG 220 x1.2 264 = USG.

TANK FLOAT SETTING WORKSHEET JOB NAME _____ DATE _____

TANK SELECTED DANS 600 REG UNITS us gal / feet

INTERNAL FLOOR AREA = (L - 2 X wall thickness) X (W - 2 X wall thickness) = 26.8 SQ FEET

VOLUME IN ONE FOOT OF DEPTH = 26.8 CU FT X 7.48 = 200 US G PER FOOT

"V" = 1 ÷ VOLUME PER FOOT = 1 ÷ 200 = 0.005 FEET PER US GALLON

V" X VOLUME = HEIGHT HEIGHT - V" = VOLUME

V = 0.005
Units: FT / USG

ELEVATIONS From tank floor

Tank lid = 4.33

Invert inlet pipe = 3.67

Alarm reserve volume (1/2 DDF)
308.88
50% - RES 110 x1.2 132
67% EQ. IG 147.7 x1.2 176.88
MAX WL = 3.403
V + x ARV 1.54

Alarm float on = 1.863

Reserve volume
39.6 15% DDF
IG 33 x1.2 39.6
V + x RV .198

Pump on float = 1.665

Dose volume
33 .125 DDF
IG 27.5 x1.2 33
V + x DV .165

Pump off float = 1.5

Pump cooling
HT + PUMP 1.5

Sump = 0

CU FT X 7.48 = US GALS ~ CU IN X 0.00433 = US GALS
CU METERS X 1000 = LITERS ~ INCHES X 0.0254 = METERS

Tank dimensions
HT: 60
L: 96
W: 48
Wall thickness 4
Lid thickness 4
Base thickness: 4
Inlet invert: 48
Internal heights:
Inlet invert: 44
Tank lid: 52

RETAINED VOLUME
_____ = USG
÷ 1.2
_____ = IG

NOTES

REGISTERED ONSITE WASTEWATER PRACTITIONER
DARREN HUTTON
PL IN
OW0543

ISLAND HEALTH
FILING ACCEPTED
DEC 09 2025
This filing Does Not Constitute
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Sub Surface Drip Line
Cross Section

----- Lawn / Yard Surface -----

15-30 cm Cover
(Sand or Native Fill)

---------- Emitter----------
10 cm Blinding Layer
(Mound Sand or Clean Coarse Sand)

30-45 cm Native Soil

Limiting Layer
Low Perm. Soil or
Seasonal High Water

*Max Emitter Flow 2.5L / Hr or 0.66 USG / Hr

REGISTERED ONSITE WASTEWATER PRACTITIONER
ASTTBC
DARREN HUTTON
PL IN
OW0543

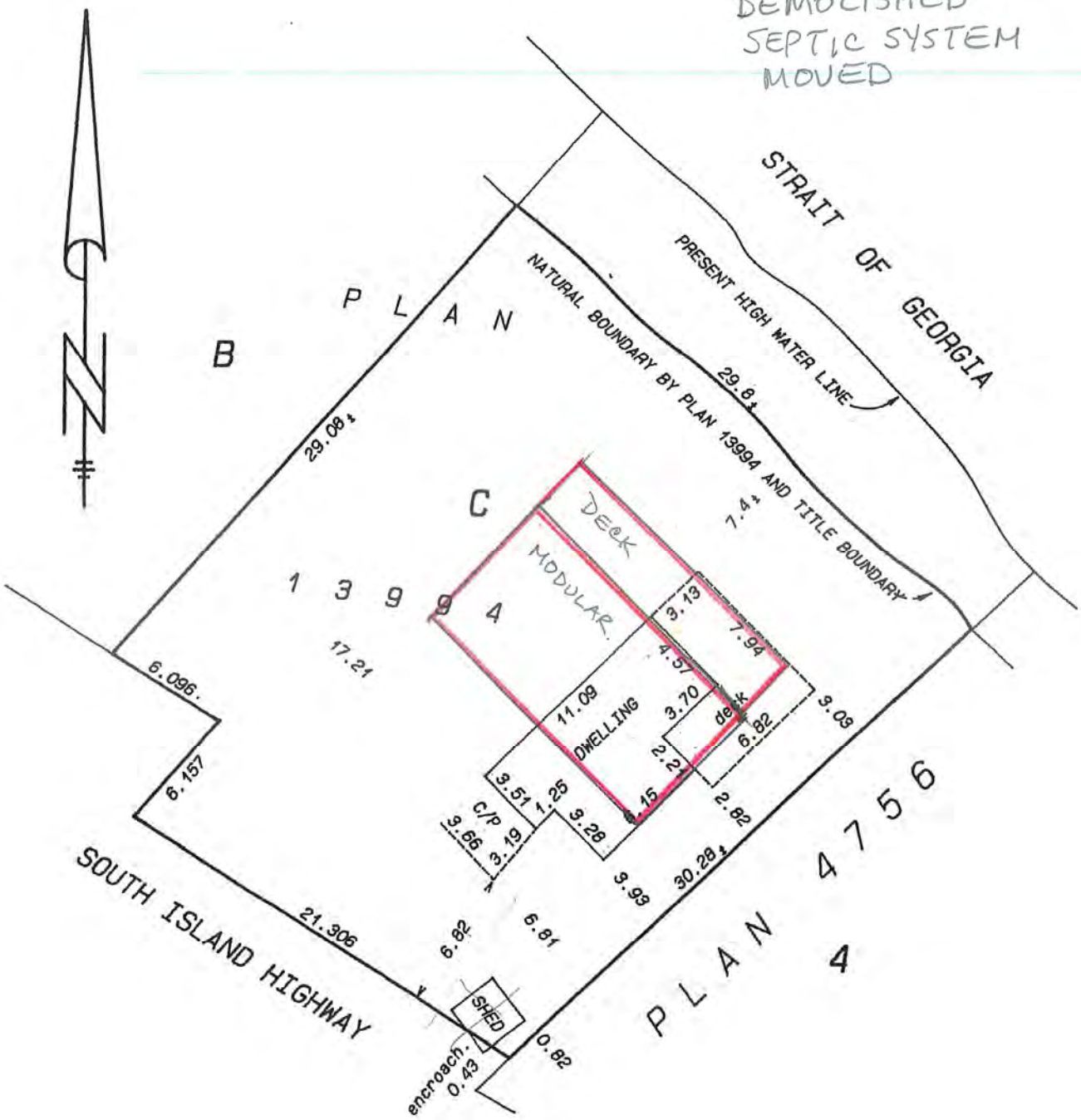
ISLAND HEALTH
FILING ACCEPTED
DEC 0 9 2025
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SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

MODULAR HOME
EXISTING COTTAGE
DEMOLISHED
SEPTIC SYSTEM
MOVED



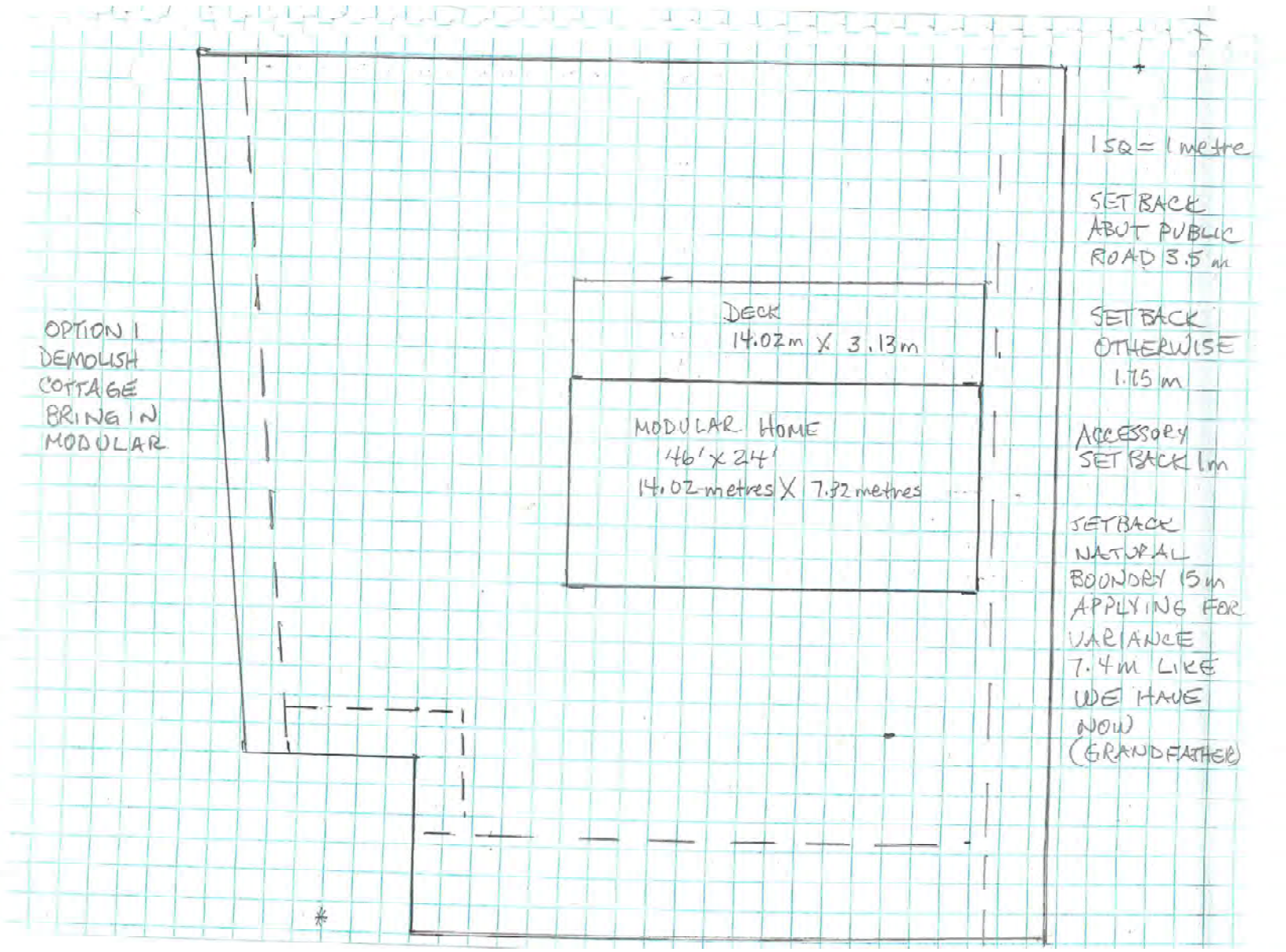
The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.


OPTION 1
DEMOLISH
COTTAGE
BRING IN
MODULAR
DECK
14.02m X 3.13m
MODULAR HOME
46' X 24'
14.02 metres X 7.32 metres
1SQ = 1 metre
SETBACK
ABUT PUBLIC
ROAD 3.5 m
SETBACK
OTHERWISE
1.75 m
ACCESSORY
SETBACK 1m
SETBACK
NATURAL
BOUNDRY 15m
APPLYING FOR
VARIANCE
7.4m LIKE
WE HAVE
NOW
(GRANDFATHER)

0 5 10 20 30

The intended plot size of this plan is 560mm in width by 432mm in height (C size) when plotted at a scale of 1:300.

This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any matter which would assume same.

This plan is intended for use as a topographic site plan. It is based on Land Title Office records and ties to surrounding survey evidence and does not represent a boundary survey. Critical lot dimensions, lot areas and building setbacks should be confirmed by a legal cadastral survey.

J.E. Anderson & Associates accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decision made, or actions taken based on this document.

Subject to charges, legal notations, and interests shown on: Title No. CB194110 (P.I.D. 000-329-479)

Distances and elevations are in metres

Elevations are geodetic based on control instrument 913428 And Referenced to Vertical Datum CGVD 2013

Elevations are at natural grade unless noted otherwise

N

SITE PLAN

[redacted]

LOT C, SECTION 35, TOWNSHIP 4, COMOX DISTRICT PLAN 13994

ADDRESS: 4129 S. ISLAND HIGHWAY CAMPBELL RIVER	
PROJECT SURVEYOR: CS	
DRAWN BY: MFCS	DATE: FEB 14, 2025
OUR FILE: 121268	REVISION: 1st

J.E. ANDERSON & ASSOCIATES
SURVEYORS - ENGINEERS
F-1258 CEDAR STREET,
CAMPBELL RIVER B.C. V9W 2W5
TEL: 250-287-4865
E-MAIL : campbellriver@jeanderson.com
VICTORIA-NANAIMO-PARKSVILLE-CAMPBELL RIVER

R:_Projects\121-268\00003\DWG\121268.dwg

LEGEND

- Denotes Standard Iron Post Found
- Denotes Utility Pole
- Denotes Typical Spot Elevation
- Denotes Elevation At Toe Of Wall
- Denotes Elevation At Top Of Wall
- Denotes Stake Set With Corresponding Number (Stakes Additionally Set At All CP's Found)
- Denotes Unmonumented Corner





GEOTECHNICAL ASSESSMENT

Proposed Single-Family Residence:
4129 Island Highway South, Oyster Bay, SRD, BC

Legal Address:
Lot C, Section 35, Township 4, Comox District, Plan 13994
PID: 000-329-479

Prepared For:
[redacted]
4129 Island Highway South,
Campbell River, BC V9H 1E9

Attention:
[redacted]

April 4, 2025

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DISCLAIMER, ACKNOWLEDGMENTS, AND LIMITATIONS

1. Lewkowich Engineering Associates Ltd. (LEA) acknowledges that this report, from this point forward referred to as "the Report," may be used by the Strathcona Regional District (SRD) as a precondition to the issuance of a development and/or building permit and that this Report and any conditions contained in the Report may be included in a restrictive covenant under Section 56 of the *Community Charter* or like statute and registered to the title of the subject property at the discretion of the SRD.
2. We have not acted for or as an agent of the SRD in the preparation of this Report.
3. This Report has been prepared in accordance with standard geotechnical engineering practice solely for and at the expense of Doralynne and Victor Hodgins.
4. The conclusions and recommendations submitted in this Report are based upon information from relevant publications, a visual site assessment of the subject property, observed and inferred subsurface conditions, current construction techniques, and generally accepted engineering practices. No other warranty, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the structure(s) becomes available, the recommendations may be altered or modified in writing by the undersigned.
5. The conclusions and recommendations of this Report are current as of the date of this Report and speak to the condition of the subject property. If there are any circumstances, such as a change in elevation, topography, or gradients within the subject property or properties in proximity to the subject lot, the comments and recommendations of this Report become void, and will require re-evaluation by the undersigned.
6. This Report does not provide environmental, biological, or archaeological assessments of the site.
7. Future construction shall be carried out within the requirements and recommendations of the Environmental Consultant (if applicable), any defined jurisdictional bylaws, or any existing restrictive covenants, whichever is more stringent. Any environmental and/or jurisdictional limitations may supersede the recommendations in this Report.
8. This Report was authored, to the best of our knowledge at the time of issuance, with considerations for local requirements specific to the SRD and their standards for the preparation of such reports, the 2024 British Columbia Building Code (BCBC), and current engineering standards. Updates to municipal bylaws, policies, or requirements of the SRD, and updates to the BCBC or professional practice guidelines may impact the validity of this Report.
9. This Report has been prepared by Joe Brunelle, P.Eng., and reviewed by Louis Chapdelaine, P.Geo. Brunelle and Chapdelaine are adequately experienced and are members in good standing with the Engineers and Geoscientists of British Columbia.

EXECUTIVE SUMMARY

1. The following is a brief synopsis of the property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
2. The subject property, 4129 Island Highway South, Oyster Bay, BC, from this point forward referred to as "the Property," is located on the east coast of Vancouver Island within the jurisdictional boundaries of the SRD. At the time of this Report, the proposed development for the Property consists of a re-development of a single-family residence.
3. A site-specific assessment was conducted to identify any potential geotechnical hazards for the proposed development. Our assessment determined that the Property is subject to ocean flooding hazard that exists along the Strait of Georgia.
4. The Report recommends (i.e., is in support of) a minimum coastal Flood Construction Level of 5.25m CGVD2013 and a horizontal floodplain setback of 15.0m landward from the estimated Year 2100 Natural Boundary, where the Year 2100 Natural Boundary is defined as the 3.4m CGVD2013 contour line.
5. The findings confirm the land is considered safe for the use intended, provided the recommendations in this Report are followed.

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List of Abbreviations and Acronyms Used in the Report

Abbreviation	Description
AEP	Annual Exceedance Probability
ASTM	American Society for Testing and Materials
BCBC	British Columbia Building Code
BGS	Below Ground Surface
CD	Chart Datum
CGVD2013	Canadian Geodetic Vertical Datum of 2013
CGVD28	Canadian Geodetic Vertical Datum of 1928
CHS	Canadian Hydrographic Service
CoCR	City of Campbell River
EGBC	Engineers and Geoscientists British Columbia
FB	Freeboard
FCL	Flood Construction Level
H	Horizontal
JEA	J.E. Anderson and Associates
LEA	Lewkowich Engineering Associates Ltd.
NB	Natural Boundary
PNB	Present Natural Boundary
SLR	Sea Level Rise
SLS	Service Limit State
SRD	Strathcona Regional District
ULS	Ultimate Limit State
V	Vertical

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1.0 INTRODUCTION

1.1 General

a. As requested, LEA has carried out a geotechnical assessment with respect to the proposed single-family residential development. This Report provides a summary of our findings and recommendations.

1.2 Background

a. We understand that the proposed development options for the Property consists of either:
   i. Option 1 – the removal of the existing residence and construction of a new modular residence; or
   ii. Option 2 – the construction of an addition to the existing single-family residence with renovation;

   See attached hand drawn sketches showing the proposed development concept alternatives.

b. The structures will preferably utilize conventional construction methods including cast-in-place concrete foundations and wood-framed superstructures.

c. We understand that the SRD requires a geotechnical assessment for permitting applications.

d. This Report is only applicable to the proposed development.

1.3 Assessment Methodology

a. Site reconnaissance was performed on December 17, 2024 and February 25, 2025, to visually assess conditions throughout the Property and along the coastal foreshore.

b. This assessment included a desktop review of relevant background information, including applicable SRD bylaws, provided development plans, registered covenants on title, aerial photographs, and published topography, geology, and floodplain mapping. A complete list of references is found at the end of this Report.

c. This assessment was prepared with consideration of EGBC professional practice guidelines – *Legislated Flood Assessments in a Changing Climate in BC*, including consideration of the implications of climate change.[1] Please refer to the attached *Flood Assurance Statement* for additional information. Also, this assessment was prepared with consideration for provincial *Flood Hazard Area Land Use Management Guidelines*[2] and SRD *Floodplain Management Bylaw No. 2782, 2005*.[3]

2.0 COVENANT REVIEW

a. As part of our assessment, we have performed a title search for the Property. At the time of this Report, there were no covenants registered to the title of the Property.

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3.0 SITE CONDITIONS

3.1 Physical Setting

a. The Property is in the community of Oyster Bay and within the jurisdiction of the SRD.

b. The Property is located on the northeast side of and accessed by Island Highway South which runs in a northwest-southeast orientation.

c. The Property is zoned as Country Residential Four (CR-4).[4,5] It is surrounded by similar CR-4 properties. *Figure 3.1* below shows the Property location with 2023 air photo.



Figure 3.1: Property location (from SRD *uMapIt*[5]).

3.2 Terrain and Features

a. The 0.12-hectare (0.29-acre)[5] Property is currently developed with a one [1]-storey single-family residence which was built in 1949.[6] A wood deck extends off the northeast oceanside of the residence.

b. Air photos from the CoCR *Air Photo History Map*[7] were reviewed and show the Property and adjacent shore mostly unchanged from 2002 to present day; the 2002 air photo was the earliest air photo in the collection to capture the Oyster Bay area.

c. The terrain of the Property showed a gentle sloping between 3° (23H:1V) to 8° (7H:1V) from Island Highway South to the shoreline at the northeast property boundary.

d. Vegetation within the Property consisted of mature coniferous and deciduous trees, grass lawn, and some ornamental bushes.

3.3 Adjacent Foreshore Conditions

a. The Property meets the shore of the Strait of Georgia at the northeast.

b. Developed residential oceanfront properties along this stretch of beach have employed shoreline protection structures (e.g. rock revetments or seawalls) to resist marine erosion. As the shoreline protection structures were likely built at or inland of the PNB, the PNB is estimated as the toe of the shoreline protection structures.

c. A segmental lock block seawall, about 1.2m tall has been installed at the boundary with the Strait of Georgia across the width of the Property. The lock block wall abuts rock revetments at both the northwest and southeast ends of its alignment.

d. The beach consists of a natural cobble-pebble beach shoreline. The beach was sloped at 7° (8H:1V) for approximately 15m H from the toe of the lock block seawall, then flattened to 2.2° (26H:1V) for more than 45m H; see *Photo 3.3* below showing shoreline conditions.



Photo 3.3: Northeast-facing beach conditions northeast of the Property, looking northwest, as observed December 17, 2024.

3.4 Regional Geology and Aquifers

a. Surficial geology mapping for the area is classified as Capilano Sediments consisting of sand, pebbly sand, gravel, sandy gravel in spits, bars, etc. marine (including glacio-marine) deposits up to 9m thick, possibly underlain by clay.[8]

b. Review of groundwater wells and aquifers in the *BC Water Resources Atlas*[9] indicates that Aquifer 411 and Aquifer 847 have been mapped to the area. Aquifer 847, named *Quinsam to Stories Beach*, is a sand and gravel layer associated with the Cowichan Head Formation. It is identified as a confined aquifer. Aquifer 411 is attributed to the fractured sedimentary bedrock. Wells have been mapped to the area though much of the older data and location reliability is fair to poor. The wells generally agree with the surficial mapping – sand and gravel deposits were found at surface, underlain by stoney clay, till/ hardpan, and/or sedimentary bedrock.

c. Bedrock geology for the area is classified as Upper Cretaceous Nanaimo Group Undivided Sedimentary Rocks.[10] The strata of the Nanaimo Group formation in the Comox/Georgia basin consists of alternating succession of shales, sandstones, conglomerates, and some coal.[11] Surficial geology mapping indicated bedrock outcrops along the shoreline in both northwest and southeast directions from the Property.[8] Based on well records in the area, depth to bedrock at the Property is estimated to be 5m to 20m BGS.

3.5 Soil Conditions

a. A shallow (1.0m depth BGS) test hole was hand dug adjacent to the north corner of the existing wood deck to investigate the near surface.

b. In general, the near surface soil conditions as observed in the Property are consistent with published surficial geology mapping.

c. Soil encountered in the hand dug hole consisted of:

   i. 0.0m to 0.4m: SAND, and ORGANICS (grass, rootlets), some silt, soft, dark brown, damp – sod layer; underlain by,

   ii. 0.4m to 1.0m: SAND, compact, grey, damp.

   The hole was terminated at the length of the shovel.

d. We expect these upper coarse-grained soils to be underlain by dense, stoney clay, glacial till, and/or sedimentary bedrock at depth.

e. Based on existing site grades we also expect there may be localized areas of fill or disturbed soil. We do not expect the presence of fill materials to have a detrimental impact on the proposed development, and any encountered fill or disturbed soil can be managed by field recommendations as part of the geotechnical assurance services during construction.

3.6 Groundwater Conditions

a. The hand dug hole did not encounter groundwater and no ponding water was seen at surface.

b. Groundwater levels are expected to be tidally influenced. Saltwater intrusion may be encountered below the freshwater unit. Groundwater levels can be expected to fluctuate with cycles of precipitation. Groundwater conditions at other times and locations can differ from those observed at the time of our assessment.

c. If groundwater flows or conditions are different than those encountered during the field investigations, additional measures may be required during construction. If unanticipated conditions are encountered contact the Geotechnical Engineer for review.

4.0 FLOOD HAZARD REVIEW

4.1 Vertical Datum

a. There are currently two vertical datums being used in Canada, the older CGVD28 and the newer CGVD2013. The FCL and elevations presented in this Report are in terms of CGVD2013, unless otherwise stated.

b. Conversion between CGVD28 and CGVD2013 was completed for this specific site using the online GPS·H calculator by Natural Resources Canada.[12] If needed, the conversion is calculated as:

$$z \text{ CGVD28} = z \text{ CGVD2013} - dH = z \text{ CGVD2013} - 0.125\text{m}$$

where dH is a localized offset in metres.

c. The building designer and construction contractor should be aware of the reference vertical datum to ensure the correct FCL is being used for the project.

4.2 Watercourses and Shore Characteristics

a. LEA understands that the proposed single-family residence is within 100m horizontal from the PNB of the Strait of Georgia (i.e. the sea), which triggers the application of the SRD *Floodplain Management Bylaw*.[3]

b. Mayfly Creek passes through a corrugated steel pipe culvert under the Island Highway approximately 240m to the southeast, then the creek turns northwestward at the beach and runs parallel to the shoreline for 50m where it drains to the Strait of Georgia. The orientation of the creek parallel to the shore with buildup of material on its south side is evidence of predominant wave approach from the east/ southeast and the northwestward littoral drift. Mayfly Creek originates from streams that feed the Mayfly Creek wetlands to the southwest. Hydrometric data is currently not available for Mayfly Creek.[13] However, the oceanic flood hazard is greater than the flood hazard of Mayfly Creek and has a higher FCL than the FCL for Mayfly Creek. Therefore, the flood hazard from Mayfly Creek is addressed by addressing the ocean flood

level.

c. Farther south (~1km from Property) a spit and lagoon has formed at Oyster Bay Shoreline Park. Its history dates back to the 1930s and 1940s when a relief then logging camp was set up to employ people during the depression. A causeway was built and at the same time a breakwater was built of old dismantled ships, then later with rock to protect a log booming operation from the predominant wave attack from the southeast. Sediment has progressively accumulated at Oyster Bay Shoreline Park since the log booming operation was built. This recent accreting land formation continues to protect Oyster Bay from the strongest winds and waves from the southeast as evidence by the observed calm waters and shallow bathymetry of the bay.

4.3 Bylaw Requirements

a. Upon review of SRD *Floodplain Management Bylaw No. 2782, 2005*,[3] we confirm the following applicable items:

   i. *"301 Floodplain Designation 1) The following land is designated as floodplain: … b) Land lower than the flood construction levels specified in Section 302; c) Land within the floodplain setbacks specified in Section 303.*

   ii. *302 Flood Construction Levels … 2) Where Floodplain Mapping is NOT available, the following elevations are specified as flood construction levels: ... f) 1.5 metres above the natural boundary of any other watercourse; g) 1.5 metres above the natural boundary of the sea...*

   iii. *303 Floodplain Setbacks 1) The following distances are specified as floodplain setbacks: … c) 15.0 metres from the natural boundary of any other watercourse; d) 15.0 metres from the natural boundary of the sea…"*

b. Additionally, the SRD *Floodplain Management Bylaw*[3] prescribes construction requirements and provides for site specific exemptions including additions that are less than 25% of the ground floor area but no closer to the water than existing.

5.0 COASTAL FLOOD HAZARD ANALYSIS

5.1 General

a. Provincial *Flood Hazard Area Land Use Guidelines*[2] recommend two methods, the Combined Method or the Probabilistic Method, to determine a coastal FCL that incorporates the issue of sea level rise and other mitigating factors. The Probabilistic Method was used for this site-specific assessment, where the water level along the shoreline is based on a probabilistic analysis of high tide and storm surge. A target 0.5% AEP (i.e., 200-year return period) coastal storm event was adopted for this assessment following the provincial

guidelines.[2]

b. The recommended FCL was selected based on the following LEA site-specific analysis.

c. A search at the time of writing this Report did not find regional coastal floodplain mapping that covers this area.

5.2 Tides

a. The Property is located nearest the tidal station at Mitlenatch (Station No. 07895) – on Mitlenatch Island. A summary of current published[14] tide levels is presented in *Table 5.2* below.

Table 5.2: Summary of Mitlenatch tide levels, Station No. 07895.

Tidal Condition	Tidal Water Level (CD)
Higher High Water Large Tide (HHWLT)	5.2 m
Higher High Water Mean Tide (HHWMT)	4.60 m
High Water Level (HWL)	4.33 m
Mean Water Level (MWL)	3.2 m
Low Water Level (LWL)	2.14 m
Lower Low Water Mean Tide (LLWMT)	1.27 m
Lower Low Water Large Tide (LLWLT)	0.04 m

b. The tidal levels published by Fisheries and Oceans Canada are referenced from a local low-water surface or a low-water datum called Chart Datum (CD). Subtracting the Mean Water Level from the CD will approximately convert the tidal levels to CGVD28. This conversion is generally accepted to be within the tolerance of error for FCL determination.

c. The design tidal elevation is calculated as follows:

HHWLT 5.2m CD – MWL 3.2m CD

= HHWLT 2.0m CGVD28

= HHWLT 2.13m CGVD2013

5.3 Sea Level Rise

a. Information prepared by the provincial government in 2011[15,16] regarding policy for coastal floodplain mapping assumes a 1.0m rise in sea level over a 100-year span from the Year 2000 to 2100, see *Figure 5.3* below.

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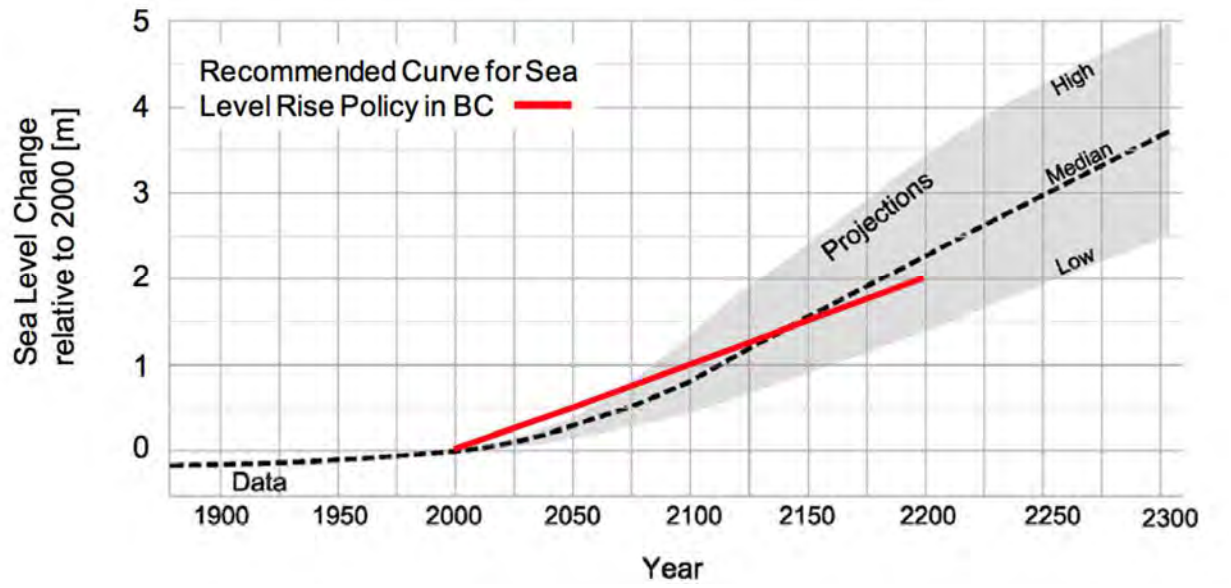


Figure 5.3: Recommended SLR curve for planning and design in BC.

b. In accordance with current guidelines 1.0 cm/year of SLR to the Year 2100 was included in our assessment, for a total SLR of 0.75m.

c. The assumed amount of SLR was based on information available at the time of their study and will be revaluated in the future as more information becomes available. Forecasting this far into the future carries significant uncertainties. Monitoring changes of SLR is beyond the scope of this Report. We expect local authorities to remain informed in order to adjust their flood management plans/guidelines accordingly.

5.4 Regional Adjustment – Isostatic Rebound

a. Future sea level is also affected by vertical land movement due to changes in the regional uplift or subsidence of the land surface (i.e., isotropic rebound, tectonic shifting, etc.). Areas where the land elevation is increasing (uplift/rebound) should decrease the allowance for SLR, while areas where the land elevation is decreasing (subsidence) should increase the allowance for SLR. Some refer to the combined effects of SLR and RA as Relative Sea Level Rise (RSLR).

b. Based on current information, this area of eastern Vancouver Island is rebounding at a rate of 3.0mm/year, as taken from an average of the Little River Tide Gauge Station No. 07993 and the Campbell River Tide Gauge Station No. 08074.[15,16] Therefore, the land is expected to rebound by 0.27m to the Year 2100. A rebound value of -0.27m was included in our assessment.

5.5 Storm Surge

a. Sea levels along the BC coast are not only affected by astronomical tide cycles, but also by storms. Storms may affect water levels due to changes in atmospheric pressure, strong winds acting on the water surface, and changes in ocean currents or temperature. The combined effect of all these factors is termed storm

surge (SS).

b. Storm surge can be estimated by an extreme value analysis of the difference between measured water level and predicted tide level. In absence of this information, provincial guidelines[2] provide suggested storm surge values which can be safely used for FCL determination. Based on a 200-year designated storm, the suggested design storm surge for this area of Vancouver Island is 1.25m.

c. However, not all storms occur during an HHWLT tide (king tide). The intent of the Probabilistic Method is to estimate the probability of a large storm occurring during an HHWLT tide. The RDN Coastal Floodplain Mapping Final Report[17] estimates the probability of a large storm occurring during an HHWLT tide is about 1 in 20 (5%) (based on provincial guidelines and preliminary analysis by Cascadia Coastal Research Ltd.). Therefore, the designated storm can be reduced to a more frequent, less intense, 10-year event (i.e., 200-year x 5%) when calculating an FCL that coincides with an HHWLT tide. The report provides a storm surge value of 0.92m for the coincident 10-year storm event.

5.6 Wave Effect

a. Breaking waves during the design storm event must also be considered, as breaking waves may further increase the depth of water along the shoreline as well as increase the risk of runup and/or overtopping leading to flooding.

b. Wave effect is site specific and dependent on local wind conditions, bathymetry, the presence of shoreline structures (e.g., natural banks or slopes, revetments, dikes, seawalls, etc.), as well as water levels at the time of the designated storm, which all contribute to the estimated wave runup.

c. The Property consists of a gently sloping foreshore beach with a shoreline protected from erosion by a lock block seawall structure, therefore wave runup was estimated using 1D calculation methods described in the European Overtopping Manual.[18] By applying these methods, wave runup is calculated in terms of a 2% exceedance value ($R_{u2\%}$).

d. Water levels along the shoreline were taken as the sum of the coincident 10-year storm surge, SLR, and regional rebound.

e. Deep water wave heights were based on 31 years (1992 to 2022) of wave data collected from the Fisheries and Oceans Canada, Halibut Bank buoy, located in the Strait of Georgia. The data was first analyzed to discount any data entries flagged as erroneous. Maximum wave heights for each year were plotted, then extrapolated to the designated storm event (i.e., 10-year coincident storm event).

f. Inland and foreshore slopes were determined for this specific Property based on available contour information, topographic surveys, and on-site measurements.

g. The wave runup analysis considered influence factors for surface roughness and oblique wave attack. Other influence factors were conservatively ignored.

h. A summary of design input values and estimated wave runup are presented in *Table 5.6* below.

Table 5.6: Summary of Estimated Wave Runup.

Significant Wave Height	Peak Wave Period	Still Water Level	Average Foreshore Slope	Slope of Structure	Wave Runup ($R_{u2\%}$)
2.87m	6.81 s	0.61m	16.5H:1V	89°	1.12m

5.7 Freeboard

a. A nominal FB value is typically added when calculating an FCL. The FB value accounts for uncertainties associated with value estimations used.

b. Provincial guidelines recommend a minimum freeboard value of 0.60m for the Probabilistic Method.[2]

5.8 Probabilistic Method FCL

a. The variables discussed in *Sections 5.2 to 5.7* are added together to determine an adequate ocean FCL, presented in the following *Table 5.8*.

Table 5.8: Ocean FCL determination using the "Probabilistic Method".

FCL Component	Description	Value (m)
HHWLT	Higher High Water Large Tide (CGVD2013) *19 year HHW average defined by CHS	2.13
SLR	Sea Level Rise (to year 2100)	0.75
RA	Regional Adjustment (to year 2100) *negative value indicates uplift is occurring	-0.27
SS	Storm Surge (10-year storm)	0.92
WE	Wave Effect (10-year storm)	1.12
FB	Freeboard	0.60
FCL	**Calculated CGVD2013 FCL**	**5.25**

6.0 FLOOD HAZARD RECOMMENDATIONS

6.1 Coastal FCL

a. Based on our review, as detailed in *Section 5.0* above, LEA recommends using the site-specific coastal flood level of 5.25m CGVD2013 as the minimum FCL for the proposed development. This minimum FCL elevation is typically defined as the top of the finished concrete slab-on-grade or the underside of wooden floor joists of flooring systems that are to be kept dry.

b. To achieve the FCL, we recommend structural methods, such as increasing the height of the foundation walls above suitable bearing grade.

c. Building materials that are resistant to damage by flood water should be used up to the FCL, at a minimum.

6.2 Coastal Setback

a. Floodplain setbacks are primarily established to keep development away from areas of potential erosion and to avoid restricting the floodway. They also help to protect structures from debris tossed on shore during storm events and to reduce weathering effects from salt spray.

b. Provincial guidelines[2] state that "*The building setback should be at least the greater of:*

   i. 15 m from the future estimated Natural Boundary of the sea at Year 2100, or

   ii. landward of the location where the natural ground elevation contour is equivalent to the Year 2100 FCL".

c. We understand that the future estimated Year 2100 NB would be the PNB elevation plus RSLR (SLR ± RA) to the Year 2100. The PNB elevation at the shore under consideration was measured at 2.92m CGVD2013 based on the attached JEA survey. The resulting Year 2100 NB is calculated here:

   2.92m CGVD2013 PNB + 0.75m SLR – 0.27m RA

   = 3.4m CGVD2013 Year 2100 NB

   This Year 2100 NB elevation contour appears to meet the existing lock block shoreline protection structures and/or the berm terrain immediately landward of the existing shoreline protection structures northeast of the Property and should be confirmed during construction.

d. The topographic elevation high that currently exists on the Property is at 5.1m CGVD2013 and the location where the Year 2100 FCL elevation of 5.25m CGVD2013 meets continuous ground elevation just beyond the Property to the southwest – on the northeast bank of the Island Highway as can be seen on the JEA survey. The 5.25m CGVD2013 FCL elevation contour is the more restrictive setback requirement; it is clear that the FCL setback criteria cannot be achieved within the Property considering the natural ground that currently exists. Following the SRD *Floodplain Management Bylaw,*[3] any proposed building site at the Property is within the designated floodplain and a site-specific floodplain setback relaxation or exemption will be required.

e. LEA recommends a reduced coastal setback defined as 15m from the estimated Year 2100 NB which is defined as the 3.4m CGVD2013 topographic contour northeast of the Property, as well as the recommendations contained in this Report; see *Figure 6.2* showing setback marked on the JEA survey.

f. Site specific relaxations or exemptions require the Property owner to acknowledge and accept that no Disaster Financial Assistance Funding is available for the building or its contents. No structures built within a floodplain can receive this kind of funding.

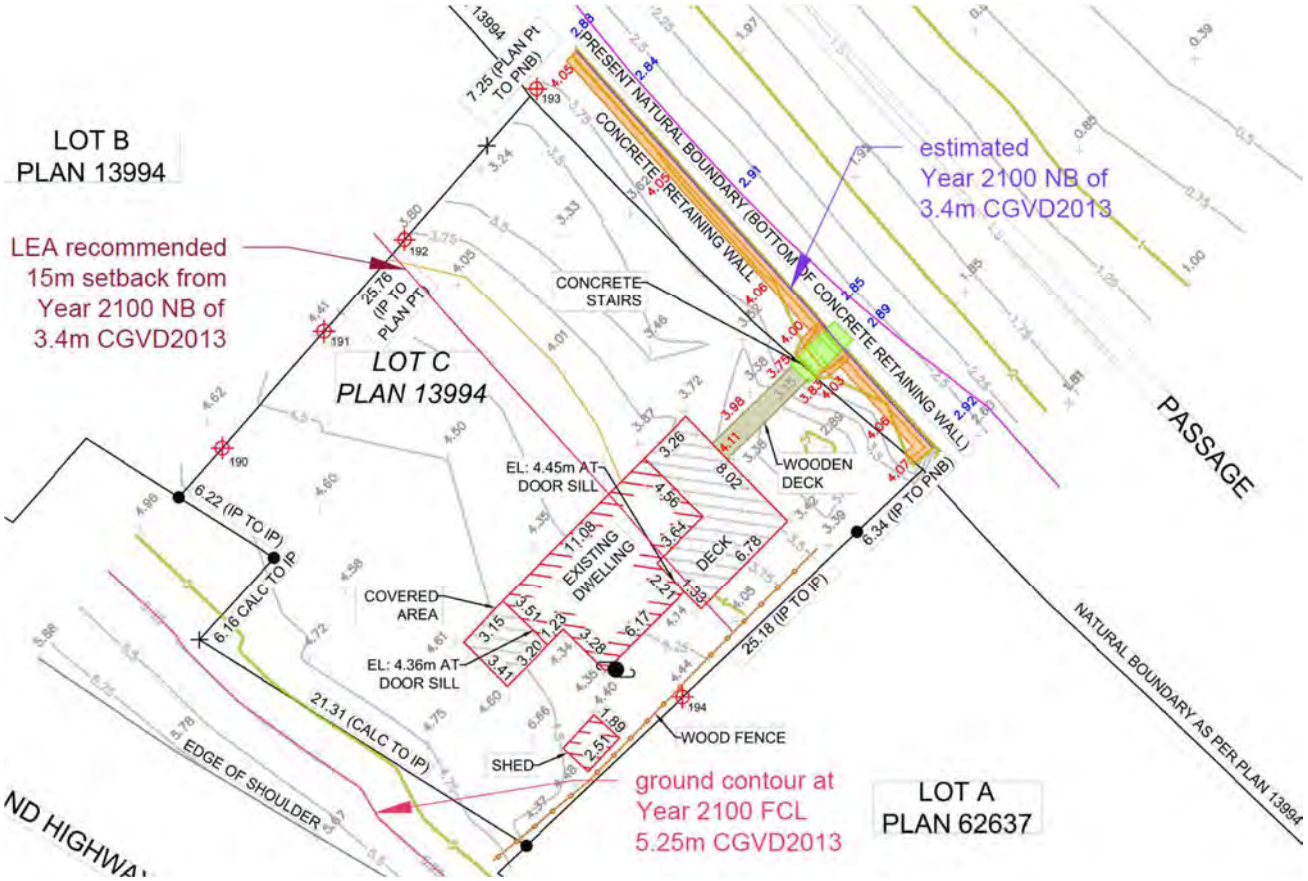


Figure 6.2: LEA recommended setback in plan, marked on JEA survey.

6.3 Floodwater and Inundation

a. The recommended coastal FCL and setback applies to any Habitable Area; defined as any room or space within a building or structure which can be used for human occupancy, commercial sales, or the storage of goods, possessions, or equipment (including furnaces) which would be subject to damage if flooded.

b. The FCL establishes the minimum elevation of the underside of a wooden floor system or top of concrete slab for any Habitable Area. During construction, all footing and floor elevations shall be confirmed by qualified survey personnel to ensure the finished floor grade is at or above the recommended minimum FCL geodetic elevation.

c. Provided any construction within the Property satisfies the minimum recommended FCL, we do not anticipate any damage to structures as a result of floodwater. However, any areas constructed below the recommended FCL, such as crawlspaces or garages, could be subject to flooding during less than design flood events. Following best construction practices, areas below the FCL should not be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.

6.4 Landfill and Site Grading

a. If structural fill materials are used for foundation support, at the discretion of the SRD, and include structural fill placed above existing site grades, further assessment may be required. Structural fill placed above existing grades may require protective measures from scour, erosion from flood flows, ice, and other debris.

b. We recommend the placement and compaction of any structural fill as described in *Section 8.2* of this Report.

c. Engineered fill should be placed around the foundation walls with a slope no greater than 2H:1V.

d. Perimeter yard areas should be sloped to direct potential flood water away from the proposed residence. Every effort must be made to not direct surface water to neighbouring properties.

6.5 Shoreline Protection

a. Sediment supplied from Mayfly Creek and Oyster River farther to the southeast likely contribute to sediment deposition in this area Oyster Bay.

b. The shoreline within the Property limits is currently defined by an existing lock block seawall structure. We assume the seawall was initially constructed to mitigate marine erosion and to maintain the alignment of the NB.

c. During our field review, the shoreline and seawall were inspected for signs of active erosion or deterioration, and none were observed. We expect the seawall will provide adequate marine erosion protection over the life of the proposed development provided it is maintained. No further shoreline protection measures are required at this time.

d. The existing seawall should be maintained in its current functioning condition. The seawall should not be removed or altered without engineering input.

e. It should be acknowledged that intertidal zones consisting of sand and gravel are typically suspectable to erosion or accretion by wave action and flooding, causing the alignment of the NB to slowly shift over time. Furthermore, SLR will likely expose the shoreline to increased water depths and wave action in the future, that may result in accelerated erosion of the foreshore area and will likely shift the NB inland over time.

f. The vertical nature of the seawall will reflect waves. SLR will expose the seawall to increased wave energy impacts and salt spray. Considering the calculated FCL is above the top of seawall elevation, SLR may gradually expose the seawall to possible overtopping occurrences which could compromise the seawall.

g. Evaluation of the rate and/or extent of potential future erosion along the foreshore area of the Property is beyond the scope of this Report. We recommend the condition of the seawall structure and alignment of

the NB be regularly monitored by the current and future property owners. Any notable scour, inland erosion caused by overtopping waves, or regression of the NB, specifically following a significant storm event, winter season, or otherwise, may jeopardize the integrity of the seawall and would require a reassessment of the foreshore conditions.

7.0 DESIGN PHASE

7.1 Foundation Design and Construction

a. Prior to construction, the new building area should be stripped to remove all unsuitable materials to provide an undisturbed natural subgrade for the footing support.

b. Foundation loads should be supported on natural undisturbed mineral soil or structural fill, approved for use as a bearing stratum by the Geotechnical Engineer, and may be designed using the following values. These values assume a minimum 0.5m footing embedment depth.

   i. For foundations constructed on non-cohesive soils classified as compact to dense naturally deposited inorganic sand or gravel, an SLS bearing pressure of 100 kPa and a ULS bearing pressure of 150 kPa may be used for design purposes.

   ii. For foundations constructed on undisturbed dense glacial till, or a minimum thickness of 0.65m of structural fill as outlined in *Section 8.2* of this Report, an SLS bearing pressure of 150 kPa and a ULS bearing pressure of 225 kPa may be used for design purposes.

c. Exterior footings should be provided with a minimum 0.5m depth of ground cover for frost protection purposes.

d. The Geotechnical Engineer should evaluate subsurface conditions at the time of construction to confirm that soil and/or groundwater conditions do not materially differ to those observed and inferred during the site reconnaissance and that footings are based on appropriate and properly prepared founding material.

7.2 Seismic Criteria

a. Based on the BCBC 2024, Division B, Part 4, Table 4.1.8.4.-B, *Site Classes, S, for Site Designation X_s*, the inferred subsurface conditions would be “Site Class D” (Stiff soil).

b. Please refer to the attached site-specific Seismic Hazard Calculation, from Natural Resources Canada.

•••

8.0 CONSTRUCTION PHASE

8.1 General Excavation – Future Building Sites

a. Prior to construction, all unsuitable materials should be removed to provide a suitable base of support. Unsuitable materials include any non-mineral material such as vegetation, topsoil, peat, fill, or other materials containing organic matter, as well as any soft, loose, or disturbed soils.

b. Prior to placement of concrete footings, any bearing soils that have been softened, loosened, or otherwise disturbed during construction, should be removed or else compacted following our recommendations for structural fill. Compaction will only be feasible if the soil has suitable moisture content and if there is access to heavy compaction equipment. If no structural fill is placed, a smooth-bladed clean up bucket should be used to finish the excavation.

c. Groundwater entering any excavations should be controlled with a perimeter ditch located just outside of the building areas, conveying water away from the excavation.

d. Trench and bulk excavation work should conform to Occupational Health and Safety guidelines. In general, excavations into fills, silt, clay, or sands at depths greater than 1.2m may be subject to sloughing or caving that would be considered hazardous. Excavations deeper than 1.2m should be reviewed in the field by the Geotechnical Engineer. For preliminary design purposes, we expect the near surface soils may be stable at a 3H:4V slope configuration, assuming no seepage. Dewatering should be implemented as needed.

8.2 Structural Fill

a. Where fill is required to raise areas that will support buildings, slabs, or pavements, structural fill should be used. The Geotechnical Engineer should first approve the exposed subgrade in fill areas, to confirm the removal of all unsuitable materials.

b. Structural fill should be inorganic sand and gravel. If structural fill placement is to be carried out in the wet season, material with a fines content limited to 5% passing the 75µm sieve should be used, as such a material will not be overly sensitive to moisture, allowing compaction during rainy periods of weather.

c. Structural fill should be compacted to a minimum of 95% of Modified Proctor maximum dry density (ASTM D1557) in foundation and floor slab areas, as well as in paved roadway and parking areas.

d. Structural fill under foundations, roadways, and pavements should include the zone defined by a plane extending down and outward a minimum 0.5m from the outer edge of the foundation at an angle of 45° from horizontal to ensure adequate subjacent support. This support zone is shown below in *Figure 8.2*.

•••

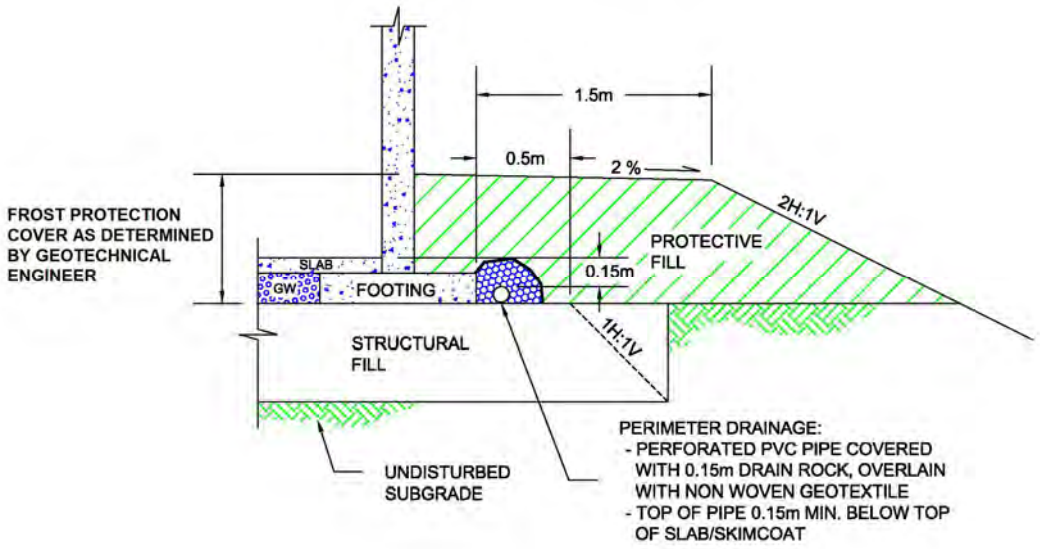


Figure 8.2: Typical section, structural fill.

e. Compaction of fill should include moisture conditioning as needed to bring the soil to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.

f. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a "jumping-jack," 200mm for a small roller, and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.

g. It should be emphasized that the long-term performance of buildings, slabs, and pavements is highly dependent on the correct placement and compaction of underlying structural fills. Consequently, we recommend that structural fill be observed and approved by the Geotechnical Engineer. This would include approval of the proposed fill materials and performing a suitable program of compaction testing during construction.

9.0 CONCLUSIONS

9.1 Local Government Conformance Statement

a. From a geotechnical point of view, and provided the recommendations in this Report are followed, the land is considered safe and suitable for the use intended (defined for the purposes of this Report as a new single-family residence and/or residential addition of conventional design and construction methods). Additionally, for floodplain bylaw exemption, as required by Section 524 of the *Local Government Act*, "the land may be used safely for the use intended" (new single-family residence and/or residential addition). This conclusion considers the probability of a geotechnical failure resulting in property damage of less than:

i. 0.5% AEP coastal flood event, including SLR to the Year 2100;

ii. 2% in 50 years for geotechnical hazards due to seismic events, including slope stability; and

iii. 10% in 50 years for all other geotechnical hazards.

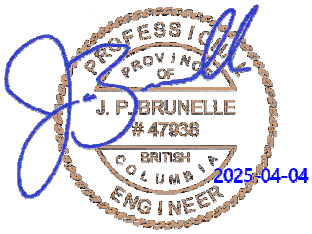
9.2 Geotechnical and Quality Assurance Statement

a. The SRD may request a Geotechnical Engineer to provide construction phase professional assurance services. Geotechnical Assurance services include review of the geotechnical components of the plans and supporting documents, and responsibility for field reviews of these components during construction.

10.0 CLOSURE

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

Respectfully Submitted,
Lewkowich Engineering Associates Ltd.
Permit to Practice Number: 1001802



Joe Brunelle, P.Eng.
Geotechnical Engineer

Reviewed By,



2025-04-04

Louis Chapdelaine, P.Geo.
Project Geoscientist

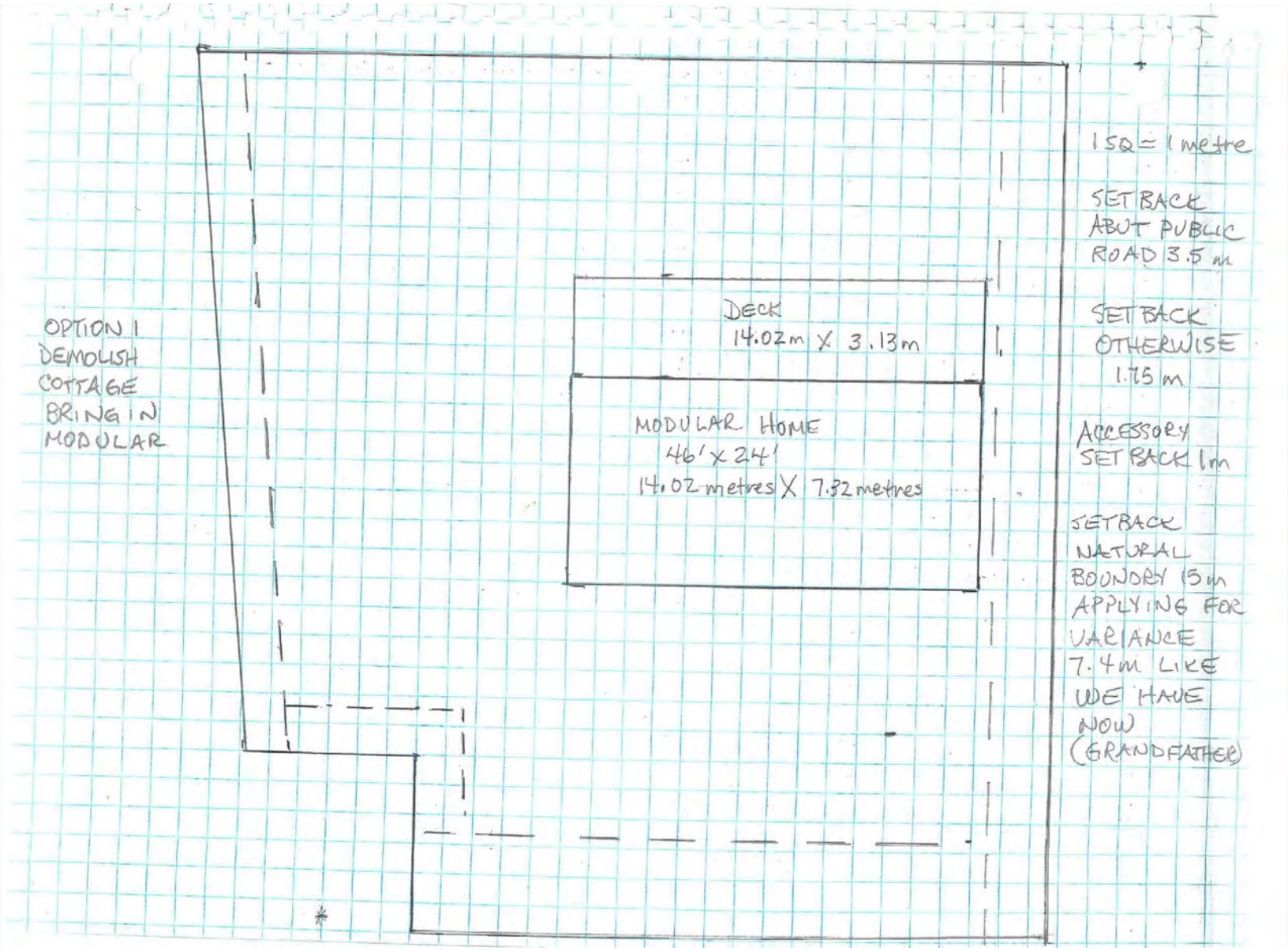
11.0 ATTACHMENTS

1. Client, development sketch titled *Option 1 – Demolish Existing and New Modular Single-Family Residence*.
2. Client, development sketch titled *Option 2 – Renovation with Addition to Existing Single-Family Residence*.
3. JEA, survey titled *Site Plan – Lot C, Section 35, Township 4, Comox District, Plan 13994*, file: 121269, dated February 10, 2025.
4. Natural Resources Canada, 2020 National Building Code of Canada Seismic Hazard Tool, Site: Lat. 49.903°, Lon. 125.167°, accessed March 27, 2025.
5. EGBC, *Flood Assurance Statement*, completed April 4, 2025.[1]

12.0 REFERENCES

1. Engineers and Geoscientists British Columbia, professional practice guidelines titled *Legislated Flood Assessments in a Changing Climate in BC*, version 2.1, updated August 28, 2018.

2. British Columbia Ministry of Water, Land and Air Protection, report titled *Flood Hazard Area Land Use Management Guidelines*, amended by British Columbia Ministry of Forest, Lands, Natural Resource Operations and Rural Development, January 1, 2018.
3. Strathcona Regional District, Bylaw No. 2782, titled *Floodplain Management Bylaw, 2005*, amended June 22, 2017.
4. Strathcona Regional District, Bylaw No. 1404, titled *Campbell River Area Zoning Bylaw, 1991*, amended October 30, 2024.
5. Strathcona Regional District, online map viewer *uMapIt*, 49.903N 125.167W, <https://strathconard.maps.arcgis.com/apps/webappviewer/index.html?id=3f13d8e946bb401d9fb17d90246af4b1>, accessed March 18, 2025.
6. BC Assessment, address *4129 Island Hwy S Campbell River V9H 1E9*, <https://www.bcassessment.ca//Property/Info/QTAwMDBLU01XMw==>, accessed January 21, 2025.
7. City of Campbell River, online map viewer *Airphotos*, 49.903N 125.167W, <https://webmap.campbellriver.ca/Html5Viewer/Index.html?viewer=Airphoto_History_Map.AirphotoHistoryViewer>, accessed March 18, 2025.
8. Fyles JG, Geologic Survey of Canada – Department of Mines and Technical Surveys, map titled *Surficial Geology Oyster River – Comox, Nanaimo, and Sayward Districts, British Columbia*, map 49-1959, sheets 92 F/14, date of mapping 1956-1957.
9. British Columbia Ministry of Environment and Climate Change Strategy, online map viewer *BC Water Resources Atlas*, 49.903N 125.167W, <https://maps.gov.bc.ca/ess/hm/wrbc/>, accessed March 18, 2025.
10. British Columbia Geological Survey, online map viewer *MapPlace 2*, Bedrock Geology, 49.903N 125.167W, <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mapplace>, accessed March 18, 2025.
11. Bednarski JM, Geological Survey of Canada, titled *Surficial Geology and Pleistocene stratigraphy from Deep Bay to Nanoose Harbour, Vancouver Island, British Columbia*, open file 7681, dated 2015.
12. Natural Resources Canada, webpage titled *GPS·H*, 49.903N 125.167W, <https://webapp.csrs-scrs.nrcan-rncan.gc.ca/geod/tools-outils/gpsh.php?locale=en#>, accessed March 26, 2025.
13. Government of Canada, online map viewer *Real-Time Hydrometric Data Map Search*, <https://wateroffice.ec.gc.ca/map/index_e.html?type=real_time>, accessed March 26, 2025.
14. Government of Canada, website titled *Mitlenatch – 07895*, <https://tides.gc.ca/en/stations/07895>, accessed March 26, 2025.
15. Ausenco Sandwell, prepared for British Columbia Ministry of Environment, 3 reports titled *Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use*, dated January 27, 2011.
16. Kerr Wood Leidal Associates Ltd., prepared for British Columbia Ministry of Forests, Lands and Natural Resource Operations, report titled *Coastal Floodplain Mapping – Guidelines and Specifications*, Final Report, file number 2785.001, dated June 2011.
17. Ebbwater Consulting Inc., prepared for Regional District of Nanaimo, report titled *Sea Level Rise Adaptation Program Coastal Floodplain Mapping,* Final Report, Revision 1, project number P180, dated October 21, 2021.
18. Van der Meer JW, Allsop NWH, Bruce T, De Rouck J, Kortenhaus A, Pullen T, Schüttrumpf H, Troch P, and Zanuttigh B, titled *EurOtop – Manual on wave overtopping of sea defences and related structures. An overtopping manual largely based on European research, but for worldwide application*, <www.overtopping-manual.com>, second edition, final version, dated December 2018.

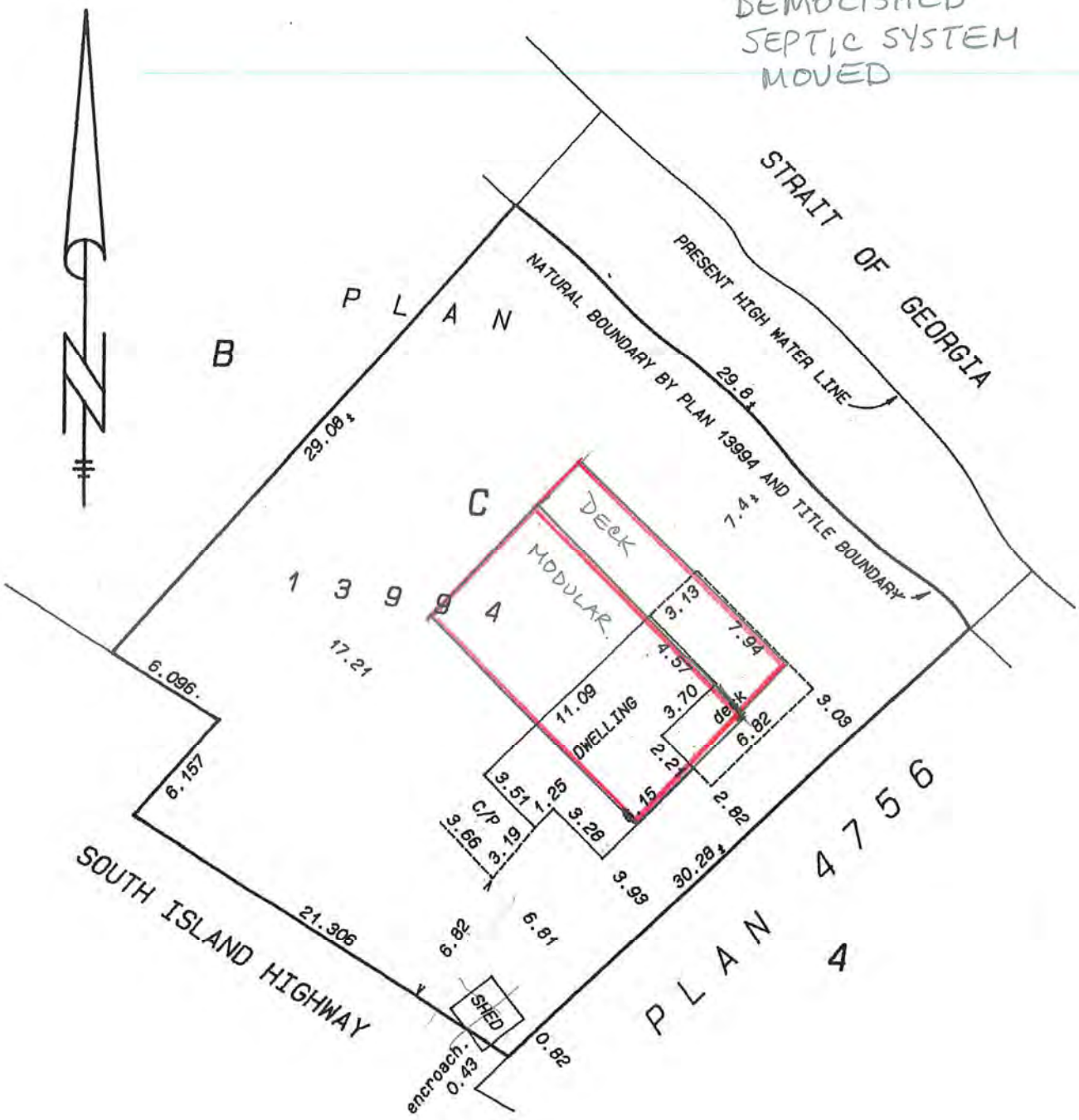

OPTION 1
DEMOLISH
COTTAGE
BRING IN
MODULAR
DECK
14.02m X 3.13m
MODULAR HOME
46' X 24'
14.02 metres X 7.32 metres
1 SQ = 1 metre
SETBACK
ABUT PUBLIC
ROAD 3.5 m
SETBACK
OTHERWISE
1.75 m
ACCESSORY
SETBACK 1m
SETBACK
NATURAL
BOUNDRY 15m
APPLYING FOR
VARIANCE
7.4m LIKE
WE HAVE
NOW
(GRANDFATHER)

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

MODULAR HOME
EXISTING COTTAGE
DEMOLISHED
SEPTIC SYSTEM
MOVED



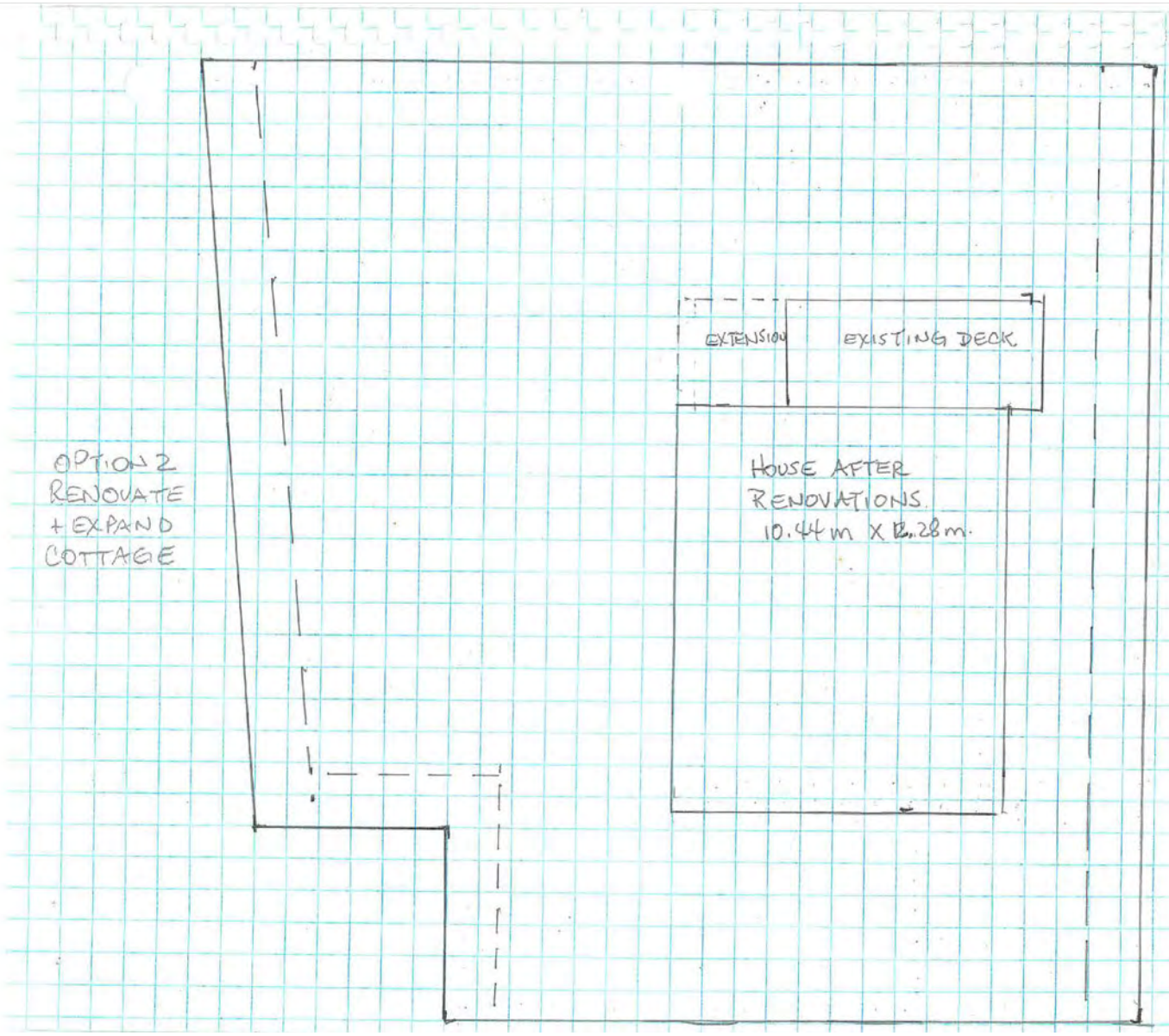
The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.



OPTION 2
RENOVATE + EXPAND COTTAGE

1 SQ = 1 metre

SETBACK PUBLIC ROAD 3.5 m
OTHERWISE SETBACK 1.75 m

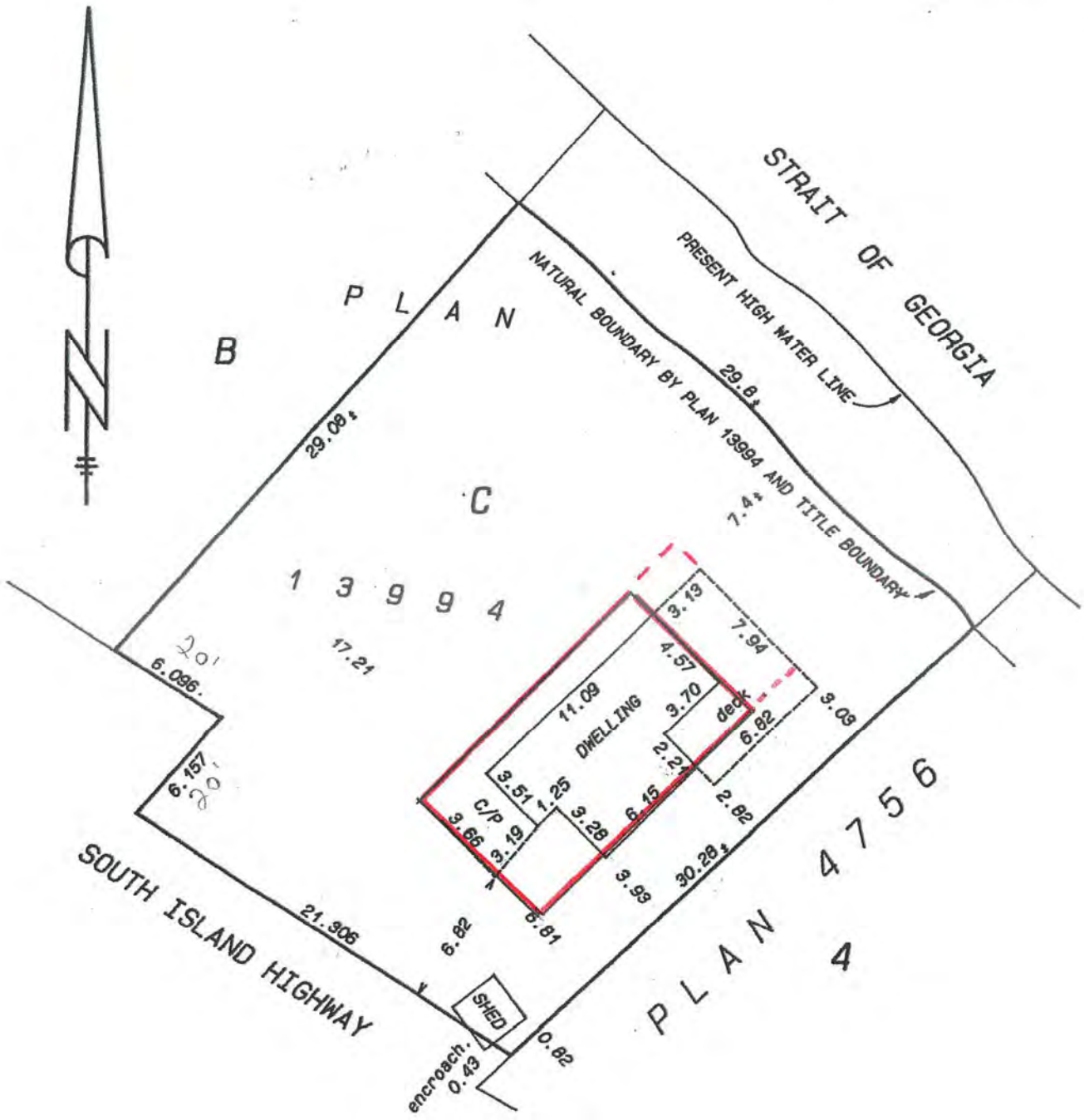
SETBACK FROM NATURAL BOUNDARY 15m
APPLYING FOR VARIANCE 7.4 metre SETBACK LIKE WE ALREADY HAVE.

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

HOME RENOVATION



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

0 5 10 20 30

The intended plot size of this plan is 560mm in width by 432mm in height (C size) when plotted at a scale of 1:300.

This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any matter which would assume same.

This plan is intended for use as a topographic site plan. It is based on Land Title Office records and ties to surrounding survey evidence and does not represent a boundary survey. Critical lot dimensions, lot areas and building setbacks should be confirmed by a legal cadastral survey.

J.E. Anderson & Associates accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decision made, or actions taken based on this document.

Subject to charges, legal notations, and interests shown on: Title No. CB194110 (P.I.D. 000-329-479)

Distances and elevations are in metres

Elevations are geodetic based on control instrument 913428 And Referenced to Vertical Datum CGVD 2013

Elevations are at natural grade unless noted otherwise

N

SITE PLAN

DODIE & VIC HODGINS

LOT C, SECTION 35, TOWNSHIP 4, COMOX DISTRICT PLAN 13994

ADDRESS: 4129 S. ISLAND HIGHWAY CAMPBELL RIVER	
PROJECT SURVEYOR: CS	
DRAWN BY: MTCS	DATE: FEB 14, 2025
OUR FILE: 121268	REVISION: 1st

J.E. ANDERSON & ASSOCIATES
SURVEYORS - ENGINEERS
F-1258 CEDAR STREET,
CAMPBELL RIVER B.C. V9W 2W5
TEL: 250-287-4865
E-MAIL : campbellriver@jeanderson.com
VICTORIA-NANAIMO-PARKSVILLE-CAMPBELL RIVER

R:_Projects\121-268\00003\DWG\121268.dwg

LEGEND

- Denotes Standard Iron Post Found
- Denotes Utility Pole
- Denotes Typical Spot Elevation
- Denotes Elevation At Toe Of Wall
- Denotes Elevation At Top Of Wall
- Denotes Stake Set With Corresponding Number (Stakes Additionally Set At All CP's Found)
- Denotes Unmonumented Corner



Government of Canada | Gouvernement du Canada

Canada.ca › Natural Resources Canada › Earthquakes Canada

2020 National Building Code of Canada Seismic Hazard Tool

This application provides seismic values for the design of buildings in Canada under Part 4 of the National Building Code of Canada (NBC) 2020 as prescribed in Article 1.1.3.1. of Division B of the NBC 2020.

Seismic Hazard Values

User requested values

Code edition	NBC 2020
Site designation X_S	X_D
Latitude (°)	49.903
Longitude (°)	-125.167

Please select one of the tabs below.

NBC 2020 Additional Values Plots API

Background Information

The 5%-damped spectral acceleration ($S_a(T,X)$, where T is the period, in s, and X is the site designation) and peak ground acceleration (PGA(X)) values are given in units of acceleration due to gravity (g, 9.81 m/s^2). Peak

ground velocity (PGV(X)) values are given in m/s. Probability is expressed in terms of percent exceedance in 50 years. Further information on the calculation of seismic hazard is provided under the *Background Information* tab.

The 2%-in-50-year seismic hazard values are provided in accordance with Article 4.1.8.4. of the NBC 2020. The 5%- and 10%-in-50-year values are provided for additional performance checks in accordance with Article 4.1.8.23. of the NBC 2020.

See the *Additional Values* tab for additional seismic hazard values, including values for other site designations, periods, and probabilities not defined in the NBC 2020.

NBC 2020 - 2%/50 years (0.000404 per annum) probability

$S_a(0.2, X_D)$	$S_a(0.5, X_D)$	$S_a(1.0, X_D)$	$S_a(2.0, X_D)$	$S_a(5.0, X_D)$	$S_a(10.0, X_D)$	$PGA(X_D)$	$PGV(X_D)$
0.887	1.12	0.852	0.59	0.186	0.0682	0.384	0.83

The log-log interpolated 2%/50 year $S_a(4.0, X_D)$ value is : **0.2464**

▶ Tables for 5% and 10% in 50 year values

Download CSV

⬅ Go back to the seismic hazard calculator form

Date modified: 2021-04-06

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: April 4, 2025

Strathcona Regional District

990 Cedar Street, Campbell River, BC V9W 7Z8

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"):

Lot C, Section 35, Township 4, Comox District, Plan 13994; 4129 Island Highway South, Oyster Bay, BC; PID: 000-329-479

Legal description and civic address of the Property

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

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

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

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

✓ 2. Collected and reviewed appropriate background information

✓ 3. Reviewed the Proposed Development on the Property

✓ 4. Investigated the presence of Covenants on the Property, and reported any relevant information

✓ 5. Conducted field work on and, if required, beyond the Property

✓ 6. Reported on the results of the field work on and, if required, beyond the Property

✓ 7. Considered any changed conditions on and, if required, beyond the Property

8. For a Flood Hazard analysis I have:

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

9. For a Flood Risk analysis I have:

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

FLOOD ASSURANCE STATEMENT

10. In order to mitigate the estimated Flood Hazard for the Property, the following approach is taken:
- ___ 10.1 A standard-based approach
- ___ 10.2 A Risk-based approach
- ✓ 10.3 The approach outlined in the guidelines, Appendix F: Flood Assessment Considerations for Development Approvals
- ___ 10.4 No mitigation is required because the completed flood assessment determined that the site is not subject to a Flood Hazard

11. Where the Approving Authority has adopted a specific level of Flood Hazard or Flood Risk tolerance, I have:
- ___ 11.1 Made a finding on the level of Flood Hazard or Flood Risk on the Property
- ___ 11.2 Compared the level of Flood Hazard or Flood Risk tolerance adopted by the Approving Authority with my findings
- ___ 11.3 Made recommendations to reduce the Flood Hazard or Flood Risk on the Property

12. Where the Approving Authority has not adopted a level of Flood Hazard or Flood Risk tolerance, I have:
- ✓ 12.1 Described the method of Flood Hazard analysis or Flood Risk analysis used
- ✓ 12.2 Referred to an appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk
- ✓ 12.3 Made a finding on the level of Flood Hazard of 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".

FLOOD ASSURANCE STATEMENT

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

April 4, 2025

Date

Joe Brunelle, P.Eng.

Prepared by

Louis Chapdelaine, P.Geo.

Reviewed by

Name (print)

Name (print)

Signature 2025-04-04

report signed by LC

Signature

2351B Rosewall Crescent, Courtenay, BC V9N 8R9

Address

250-334-0384

Telephone

jbrunelle@lewkowich.com

Email

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. P. BRUNELLE #47938

2025-04-04

(Affix PROFESSIONAL SEAL here)

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

I am a member of the firm Lewkowich Engineering Associates Ltd. - Permit to Practice Number: 1001802

and I sign this letter on behalf of the firm. (Name of firm)

Building/Plumbing Permit

Strathcona Regional District Building Bylaw No. 158
Electoral Area D
Jurisdiction 772

Permit #:
PRM-2025-0041

Issued Date:
2026-03-06

Permit Type
Residential SDD - Demolition/relocate

Roll #
05416.000

Property Address
4129 ISLAND HWY S

Legal Description
LOT C SECT 35 PLAN VIP13994 LNDDST 15

Project Value
$0.00

Fees
$60.00

Area of Work

Description
demolish SDD

Conditions

submit hazmat clearance letter

Contacts

Type	Name	Company Address 1	Phone Number	Mobile Number	Email
Applicant, Property Owner	HODGINS DORALYNNE M	N/A - 4129 ISLAND HWY S	[redacted]	0	[redacted]
Property Owner	HODGINS VICTOR G	N/A - 4129 ISLAND HWY S	0	0	

Inspections

☐ Final

The person signing this permit form, if not the owner, acknowledges that their signature is as agent for the owner and that they are authorized to bind the owner, who is deemed to know of and understand the content of this permit

Every building permit shall expire and the right of the owner under the permit shall terminate if the work is not commenced within six (6) months, is suspended for a period of twelve (12) months, or is not completed within twenty four (24) months of date of issue.

[redacted]
Applicant Signature

March 6, 2026
Date

Moore Asbestos Inc
3398 Mill Street
Cumberland, BC
V0R 1S0

Date: April 17th 2026

Prepared for: Doralynne Hodgins

Asbestos Clearance Letter for Moderate Risk Asbestos Abatement

Address: 4139 S Island Hwy, Strathcona D, B.C
Work Safe Notice of Project # 1071349
Waste manifest number: BC410670-6

Scope of Work

Moore Asbestos was hired to remove all of the asbestos-containing materials found on this property. This project was required to allow for subtrades to continue with the project

➔ Z0050-364-A28 – Cementitious Siding – Tremolite 40-45% - Associated with all The cementitious siding on the exterior of the building.
➔ Z0050-364-A29 – Vermiculite – PACM Typically, Actinolite or Tremolite Trace to 5% - Vermiculite observed in the attic- Material was misidentified in the field, and It is not present in the attic. REVISED HAZMAT ATTACHED TO REPORT

This job requires:

-Moderate Risk containment set up
-Drop sheets are used throughout to assist in sorting and organising
-HEPA-certified vacuums and a Negative Air machine prior to work starting
-Wet wiping, mopping, and vacuuming were used for cleanup

A visual inspection was conducted on April 17th, 2026, and confirmed that the required ACM identified in a report by Tsoulm and Tsable was safely removed during the abatement project by Moore Asbestos Inc

In Summary:

The area was effectively cleaned, HEPA vacuumed, wet-wiped, and mopped over in a manner that is compliant with WorkSafeBC regulations 6 and is safe to continue with the project.

2.0 CLOSURE

This report has been prepared by Moore Asbestos inc for the sole benefit of Doralynne Hodgins. This report may not be relied upon by any other person or entity without the express written consent of Moore Asbestos Inc.
The data and findings presented in this report are valid as of the date of the investigation. The passage of time, the manifestation of latent conditions, or the occurrence of future events may warrant further exploration at the property, analysis of the data, and re-evaluation of the findings, observations, and conclusions expressed in this report.
It is understood that the methods used for analysis by Current Environmental Solutions are those of the American Conference of Governmental Industrial Hygienists (ACGIH), The National Institute for Occupational Safety and Health (NIOSH), provincial WorkSafeBC, and /or other accepted scientific practices.
It is understood that the methods used for transportation and disposal through Moore Bins Ltd are those set out by the Province of BC through the Ministry of Environment, federal, and municipal regulations.
If any conditions become apparent that differ significantly from our understanding of conditions as presented in this report, we request that we be notified immediately to reassess the conclusions provided herein.
Should you have any questions or concerns regarding the above, please do not hesitate to contact Moore Asbestos Inc.

_____

Peter Moore
(250) 334-6324
mooreasbestos@gmail.com
Moore Asbestos Inc

Tsolum & Tsable Occupational Health & Safety Ltd.

Hazardous Materials Inspection Report

4129 Island Highway South, Campbell River, BC

File No: Z0050-364.01R1
April 14th, 2026

Prepared For:

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Cumberland, BC

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1.0 Introduction

Tsolum & Tsable Occupational Health & Safety Ltd. (TTOHS) was retained by Peter Moore of Moore Asbestos Ltd. (the Client) to conduct a hazardous materials inspection on a residential property located at 4129 Island Highway South, Campbell River , British Columbia (the site).

This hazardous materials inspection was completed in accordance with Section 20.112 of the Occupational Health and Safety Regulation (B.C. Reg 296/97).

The purpose of this hazardous materials inspection was to identify which materials, if any, contain asbestos and any other hazardous materials. This report includes a list of building materials that are confirmed or suspected of containing hazardous materials.

Hazardous materials are summarized in the table below.

Table 1.0 Hazardous Materials Summary

Hazardous Material	Type and Location
Asbestos (observed)	➔ *Z0050-364-A28 – Cementitious Siding – Tremolite 40-45% - Associated with all the cementitious siding on the exterior of the building.* ➔ ~~*Z0050-364-A29 – Vermiculite – PACM Typically, Actinolite or Tremolite Trace to 5% - Vermiculite observed in the attic.*~~ Material was misidentified in the field and is not present in the attic.
Asbestos (potentially concealed)	➔ *Materials commonly found to contain asbestos were observed or are suspected to be present (not sampled) including: Electrical cables, buried asbestos cement pipes, bell and spigot piping gaskets, incandescent light fixtures. (heat shields)*
Lead (observed)	➔ *Z0050-364-Pb1- Blue Field – Interior Trims – 996 PPM* ➔ *Z0050-364-Pb3 – White Paint – Interior Dining Room Chimney – 573 PPM*
Leachable Lead	➔ *Toxicity Characteristic Leaching Procedure analysis is required for samples with lead concentrations greater than 100ppm, prior to disposal.*
Lead (potentially concealed)	➔ *Elemental lead assumed to be present in seals on bell and spigot piping joints seals, solder on wiring and copper pipe joints, and roof vents and flashings.*
Mercury	➔ Fluorescent light bulbs/tubes were not observed. ➔ Mercury containing thermostats were not observed.
PCB	➔ Fluorescent light fixtures were not observed.
Radioactive Materials	➔ *Radioactive materials were observed in areas of planned works.*
AST/UST	➔ No AST/USTs were observed.
ODS	➔ *Sources of ODS were observed*.
Hantavirus / Rodent Droppings	➔ *Rodent droppings were observed.*

Mould	➔ *Mould was observed in the building.*
Arsenic	➔ *Suspect CCA treated wood was observed.*
UFFI	➔ No UFFI was observed.
Silica	➔ *Present in concrete, grout, mortar, fiberglass, brick, ceramic tile, exterior siding and other cementitious materials.*

Where hazardous materials were found, they can be presumed to be found in similar materials throughout the building.

Recommendations for each material are outlined in section 3.0.

Floor plans showing bulk sample locations and locations of identified hazardous materials (where practical) are provided in Appendix A.

Copies of the analytical reports are provided in Appendix C.

2.0 Scope of Work

We attended the site on December 4th, 2025. The scope of work was limited to:

- A visual inspection of the building for the presence of hazardous substances, including (but not limited to) asbestos containing materials (ACM), arsenic, lead based paints (LBP), lead containing products, radioactive materials, mould, rodent droppings and other sources of biological hazards, mercury, polychlorinated biphenyls (PCBs), ozone depleting substances (ODS), petroleum and controlled products.
- Bulk sampling and analysis of suspected ACM and LBP for the presence of asbestos and lead, respectively; and
- Make recommendations for further actions to take place prior to continued renovation.

The site is a single-family residential building slated for complete demolition, according to the homeowner.

The entirety of the building was considered in the scope of this survey.

Revision Information:

The purpose of this revision is to correct the misidentification of attic insulation as vermiculite.

2.1 Sampling Methodology

- Inspection and bulk sampling of building materials, as follows:
    - The home is a single floor, wood framed building on a poured concrete foundation. The home consists of an entryway, a bedroom, dining room, living room and kitchen.
    - ~~Vermiculite was observed in the attic. No samples were collected as the material is known to contain asbestos.~~ Materials were misidentified in the field and are not present in the attic.

- The interior walls of the home are all wood paneling which are either painted or have a wallpaper finish, with fiberglass insulation observed within. One (1) sample of the insulation paper backing was collected for analysis.
- The bedroom wall panels have one style of wallpaper. One (1) sample was collected for analysis.
- The dining room wall panels have a different style of wallpaper. One (1) sample was collected for analysis.
- The living room has pressed fiberboard paneling over wood paneling which has a layer of wallpaper on it. One (1) sample of the concealed wallpaper was collected for analysis.
- The entryway, bathroom, and kitchen have two layers of vinyl flooring. The top layer of vinyl flooring is consistent throughout these rooms. One (1) sample of the top layer of vinyl flooring was collected for analysis. The second layer observed appears to be paper remnants from previously removed sheet vinyl. One (1) sample of the second layer was collected for analysis.
- The bedroom, dining room, and living room all have carpet on underlay, held down with nail strips. A layer of vinyl floor tile was observed beneath the carpet in the bedroom. It was also observed under the carpet in the dining room. One (1) sample of vinyl floor tile was collected for analysis.
- A different style of vinyl floor tile was observed beneath the carpet in the living room. One (1) sample was collected for analysis.
- The kitchen sink has a spray-on mastic coating. One (1) sample was collected for analysis.
- The ceilings in the home consist of multiple styles of ceiling tiles and wood paneling. The dining room and bedroom have the same square 12”x12” style ceiling tile. Three (3) samples were collected for analysis. The living room has a brick pattern style ceiling tile. Three (3) samples were collected for analysis.
- The kitchen, entryway, and bathroom have wood paneling on the ceiling. No samples were collected from the ceilings here.
- One (1) sample of paint was collected from the interior trim for lead analysis.
- The bathroom has a newer ceramic tile shower surround, which was not sampled due to the age of the shower kit installed.
- The bathroom has a ceramic tile backsplash. Three (3) samples of the grout and glue were collected for analysis.
- Between the dining room and kitchen remains an old chimney stack. Three (3) samples of the mortar were collected for analysis. One (1) sample of the white paint on the chimney was collected for lead analysis.

- The living room has a brick fireplace with a slate stone hearth. Three (3) samples of the mortar and grout were collected for analysis from the interior. Three (3) samples of mortar were collected from the exterior brick of the chimney.
- The exterior finishes of the home consist of cementitious siding and wood lap siding on wood ship lap. One (1) sample of the cementitious siding was collected for analysis. One (1) sample of exterior paint was collected for analysis.
- The home has never vinyl windows with wood trim. No suspect materials were observed within the windows.
- The roof of the home is a single layer of newer asphalt shingle. No suspect materials were observed with regard to the roofing.
- It appears that the forced air furnace has been removed. No suspect materials were observed with respect to the HVAC system.

Table 2.1.1 Building Details

Building	Single-family residential
Subject Area	Throughout
Age	1946 (BC Assessment)
Construction	Traditional wood frame on poured concrete
HVAC	Furnace removed.
Basement / Crawlspace detail	Dirt bottom floor. No crawlspace
Interior Finish	Wood wall paneling, ceiling tile
Interior Flooring	Vinyl, carpet
Exterior Finish	Cementitious siding, wood lap siding, single layer of newer asphalt shingles, newer vinyl windows
Insulation	Vermiculite and fiberglass were observed

2.2 Regulatory Criteria

As per WorkSafeBC requirements, the subject area was surveyed for the presence of hazardous materials, including:

- Polychlorinated biphenyls (PCBs)
- Asbestos
- Mercury
- Arsenic
- Ozone depleting substances (ODS)
- Urea formaldehyde foam insulation (UFFI)

- Radioactive materials
- Above- or under- ground storage tanks (AST/UST)
- Lead
- Hantavirus – rodent droppings
- Silica
- Mould

Regulatory information for each material is provided in Appendix D.

3.0 Results and Recommendations

If any material suspected of containing asbestos or any other hazardous material not identified in the initial scope of work is disturbed, all work must cease immediately until the area is contained, and the hazard is evaluated by a qualified professional and the hazardous materials, if present, are safely managed by a qualified contractor.

Notification

The Client has been made aware of the results of this survey and instructed to have the items removed in accordance with regulations prior to continued renovation of the structure. This report must be posted onsite, and site personnel need to have read and understood the content of this report prior to the commencement of work.

Hidden Hazardous Materials

Although every effort was made to collect samples of all potentially hazardous materials, they may be present at the subject site but were not visible or available for inspection during the survey and are, therefore, not described in this report.

If any suspect hazardous materials that are not described in this report are encountered during additional renovation activities, all work must cease and the materials must be presumed to be hazardous and handled as such until testing determines the presence or absence of asbestos or other hazardous components, or the material is otherwise appropriately evaluated, and appropriate controls for the protection of workers and the public are put into place.

Recommendations

The following conclusions and recommendations have been based on the survey findings:

Prior to any additional renovation activities, TTOHS recommends the following actions:

1. Provide copies of this report to site personnel, including contractors. A copy of the survey must be immediately available at the site whenever workers are present.
2. The contractor must have an exposure control plan in place for each hazardous substance identified in this report as being in the way of the planned work.
3. Work must stop if additional suspect materials are encountered during the move. These suspect materials must be left undisturbed until testing determines the presence or absence of asbestos or other hazardous materials. In addition, work must also stop in the event these suspect materials are disturbed inadvertently.

A qualified person should be retained and present on site during any additional demolition to identify any previously unidentified hazardous building materials should they be discovered.

Respecting Lead, Arsenic, Mercury, and other heavy metals, please note that the local landfill authority may require additional Toxicity Characteristic Leaching Procedure (TCLP) data before accepting material as 'Non-Hazardous Waste' as defined by the BC Hazardous Waste Regulations.

The recommendations pertaining to each of the identified hazardous materials within the subject building are presented in the sub-sections below.

3.1 Asbestos

All asbestos containing materials must be removed by a qualified asbestos abatement contractor.

The following asbestos containing materials were identified:

Table 3.1.1 Summary of Asbestos Containing Materials

Material	Location	Asbestos	Estimated Quantity*	Procedures**
Cementitious Siding	Exterior	Tremolite 40-45%	600 ft^2	Moderate Risk (if removed mostly intact)
~~Vermiculite~~	~~Attic~~	~~PACM, Typically Actinolite/Tremolite 1-5%~~	~~1000 ft^2~~	~~High Risk~~
Revision Information: Previously noted vermiculite was misidentified in the field and is not actually present in the attic.				

Quantities listed are a rough approximation and only account for visible / accessible materials. Concealed amounts of ACM may be present.

****Risk assessment is general in nature. A full Risk Assessment will be required prior to abatement, as required by section 6.6 of the BC OHS Regulations.***

All procedures must be in accordance with BC Occupational Health and Safety Regulation (B.C. Reg 296/97), as exemplified in WorkSafeBC Publication BK27, 'Safe Work Practices for Handling Asbestos'.

If any materials suspected to be asbestos containing are discovered during the renovation, all work must stop until samples can be analyzed. If the materials are found to be asbestos containing, they must be removed by a qualified asbestos abatement contractor before any further work is carried out.

Prior to any work that may disturb any ACM, it is a regulatory requirement that a qualified person perform a Risk Assessment, in compliance with the Occupational Health & Safety

Regulation Part 6 “Substance Specific Requirements”. Identified ACMs must be removed and disposed of in accordance with the requirements of BC Reg. 296/97, by an experienced asbestos abatement contractor.

Suspected ACMs deemed visually similar to ACMs identified in this report and inaccessible ACMs not identified during this assessment should be considered asbestos containing and handled as such, unless proved otherwise, through analytical testing.

Ensure asbestos containing waste is handled, stored, and disposed of in accordance with the requirements of the Federal Transportation of Dangerous Goods Regulation and the BC Hazardous Waste Regulation (BC Reg 63/88).

If the building is not renovated/demolished in the short term, ACMs in good condition can be managed in place. Damaged ACMs should be addressed in accordance with the requirements of BC Reg. 296/97, as soon as possible.

3.2 Lead

Surface coatings which contain more than 90 ppm lead may pose a potential risk to workers. Materials with over 100 ppm lead must undergo additional TCLP testing prior to disposal to determine if they should be handled as hazardous waste.

Lead results are summarized in the table below. Any untested painted surfaces are presumed to be lead containing.

Table 3.2.1 Summary of Lead Results

Material	Location	Lead Concentration (ppm)	TCLP Results (mg/L)
Blue Field	Interior Trim	996	NT
Green	Exterior Paint	<80	NR
White	Interior - Chimney	573	NT

NR=Not Required NT=Not Tested

Elemental lead may be present in seals on bell and spigot piping joints seals, solder on wiring or plumbing systems, and in other fixtures such as flashings or roof vents.

Workers must be provided with appropriate PPE for the work they will be conducting. Materials with leachable lead must be sorted from general construction waste and disposed of according to Regulations.

Demolition, corrective action, or remedial work on paint applications containing any concentration of lead should be undertaken in a manner to avoid generating fine particulate matter or dust (i.e.: avoid sanding). The use of personal protective equipment is recommended to reduce the potential for over-exposure to lead dust.

When identified or suspected lead-containing materials (i.e.: paint, solder, caulking on bell fittings) within the subject building are to be removed prior to renovation activities, ensure compliance with the following:

- *Surface Coating Materials Regulations SOR/2016-193*
- *The occupational exposure control requirements of BC Reg 296/97*
- *The disposal requirements of BC Reg. 63/88*
- *The transportation requirements of the Federal Transportation of Dangerous Goods Regulation.*

If known or suspected lead-based paint will be disturbed (e.g.: by scraping, burning, sanding, etc.) the paint shall be removed in accordance with the WorkSafeBC Occupational Health & Safety Regulation to prevent worker exposure to lead dust. Some samples collected during this survey were found to have lead concentrations below WorkSafeBC criteria however other paints have higher lead content.

If the subject building is not renovated/demolished in the short term, lead-containing material can be managed in place.

3.3 Mercury

Fluorescent light bulbs/tubes were not observed.

Mercury containing thermostats were not observed.

No other mercury containing materials were observed.

Mercury containing materials must be removed prior to demolition activities and kept intact to prevent exposure to mercury fumes. They must be separated from general demolition waste and disposed of according to regulations. Workers should be protected with a half mask with a mercury vapour cartridge and chemical resistant gloves when handling or working near broken light tubes.

They should be removed, packaged for storage and transport or disposal/destruction at a licensed facility.

If the building is not renovated/demolished, mercury-containing materials identified within the subject building can be managed in place. No further action is currently required.

3.4 PCBs

Fluorescent light fixtures were not observed.

The fixtures must be removed prior to demolition activities and set aside and checked for PCB content prior to disposal.

Non-PCB containing ballasts must have a label affixed which states they do not contain PCBs. It may also be possible to determine PCB content by using guidelines in Environment Canada's document, "Identification of Light Ballasts Containing PCBs" (EPS 2/CC/2). If no determination can be made the ballasts must be assumed to contain PCBs. If they are determined to contain

PCB's they must be disposed of in accordance with the BC Ministry of Environment guidelines at an approved disposal facility.

If the subject building is not renovated/demolished, PCB containing ballasts can be managed in place, where they are operating and in good condition. No further action is currently required until such time that demolition activities are to be conducted, or until 2025 when PCB-containing items will require removal and disposal.

3.5 Radioactive Components

Smoke detectors were observed in the work area.

They must be removed prior to demolition activities and treated as if they contain radioactive materials unless additional information (i.e.: labels) proves otherwise.

Radioactive components that are identified for removal should be transported and disposed of in accordance with the following:

- The federal Transportation of Dangerous Goods Act
- The Nuclear Safety and Control Act (1997, c.9), Nuclear Substances and Radiation Devices Regulations (SOR/2000-207)

If the building is not renovated/demolished, radioactive components of the fire / smoke detection system can be managed in place. No further action is currently necessary.

3.6 Petroleum and Controlled Products

AST/USTs were not observed.

If found, any stored and abounded chemicals and controlled products must be removed and disposed of prior to work, in accordance with the BC Ministry of Environment Hazardous Waste Regulation (Environmental Management Act).

If USTs are discovered & part of planned works, it is also recommended that a site investigation be commissioned for contaminated soils.

3.7 ODSs

A kitchen fridge is present within areas of planned works.

Sources of ODS should be removed from the work area prior to demolition activities commencing. If slated for disposal it must be degassed by a licensed technician.

When ODS containing materials within the subject building are removed and disposed of, ODSs must be handled, recycled, stored, and/or disposed of in accordance with the requirements of the Federal Halocarbon Regulations (2003). If waste is to be disposed of in British Columbia, it must be disposed of in accordance with the British Columbia Waste Management Act – Ozone Depleting Substances and other Halocarbons Regulation (BC Reg. 387/99). These regulations require that all ODS must be collected, stored, and recycled, or collected and disposed of by a qualified technician.

ODS-containing equipment can be managed in place and must be serviced by licensed refrigeration technicians.

3.8 Hantavirus – Bird and Rodent Droppings

Rodent droppings were observed.

Workers should be notified of the presence of feces and be provided with respiratory protection and/or other personal protective equipment (PPE) as deemed necessary for the work that they will be conducting.

3.9 Mould

Mould was observed.

It may be present on hidden building materials & fabrics.

Workers should be notified of the presence of mould and be provided with respiratory protection and/or other personal protective equipment (PPE) as deemed necessary for the work that they will be conducting.

If renovations/demolition do not proceed in the short-term, identified mould and/or moisture-impacted building materials should be removed in accordance with applicable guidelines and procedures for safe work (i.e.: CCA 82).

When renovation/demolition of the subject building proceeds, building materials hidden from the initial hazardous materials survey should also be inspected as removed for the presence of fungal activity. During demolition, workers should be notified of the potential presence of mould and be provided with respiratory protection and/or other personal protective equipment (PPE) as deemed necessary for the work that they will be conducting).

3.10 Arsenic

Treated wood was observed in the exterior decking materials.

Although wood and wood dusts contaminated with arsenical pesticides do not require specialized disposal in BC, care must be exercised to minimize the potential for worker exposure to these materials through direct skin contact or through inhalation of dusts and fumes. Caution must be taken to ensure this material is not burned or composted if removed during demolition activities.

3.11 UFFI

No UFFI was observed during the investigation.

3.12 Crystalline Silica

When silica-containing materials (i.e.: concrete, grout, mortar, fiberglass insulation, ceramic, brick, etc.) within the subject building are to be removed or affected during renovation activities, workers should use caution to avoid creating airborne silica dust such that airborne silica dust concentrations do not exceed the exposure limit as stipulated by BC Reg 396/97 (0.025 mg/m^3).

This would include, but not be limited to, the following:

- *Providing workers with respiratory protection*
- *Wetting the surface of the materials to prevent dust emissions and/or HEPA equipped extraction systems attached to drills and other power equipment.*
- *Providing workers with facilities to properly wash prior to exiting the work area.*

If the building is not renovated/demolished, silica-containing materials identified with the subject building can be managed in place. No further action is currently required.

4.0 Closure

This report has been prepared by TTOHS OHS exclusively for the Client and is intended to provide a survey of the potential for the presence of hazardous materials on the site. The conclusions made in this report reflect TTOHS's best judgment in light of the information available at the time of preparation. No other warranty, expressed or implied, is made. This report may not be relied upon by any other person or entity without the express written consent of TTOHS and the Client. Any use that a third party makes of this report, or any reliance on decisions to be made based on it, is the responsibility of such third parties. TTOHS accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The findings of this report are based solely on data collected on site during this survey and on the conditions of the site during the completing of the work. TTOHS has relied on good faith on information proved by individuals and sources noted in the report. No other warranty, expressed or implied, is made.

If any conditions become apparent that differ significantly from our understanding of conditions as presented in this report, we request that we be notified immediately to reassess the conclusions provided herein.

This report is not intended for use as a scope of work for removal or as a specification section for inclusion in Tender Documents. Any unauthorized use of this report in that fashion is at the sole discretion and liability of the Owner.

We trust that the report meets your current requirements. Should you have any questions or concerns regarding the above, please do not hesitate to contact the undersigned.

Respectfully Submitted,

TSOLUM & TSABLE OCCUPATIONAL HEALTH & SAFETY LTD.

Prepared by:



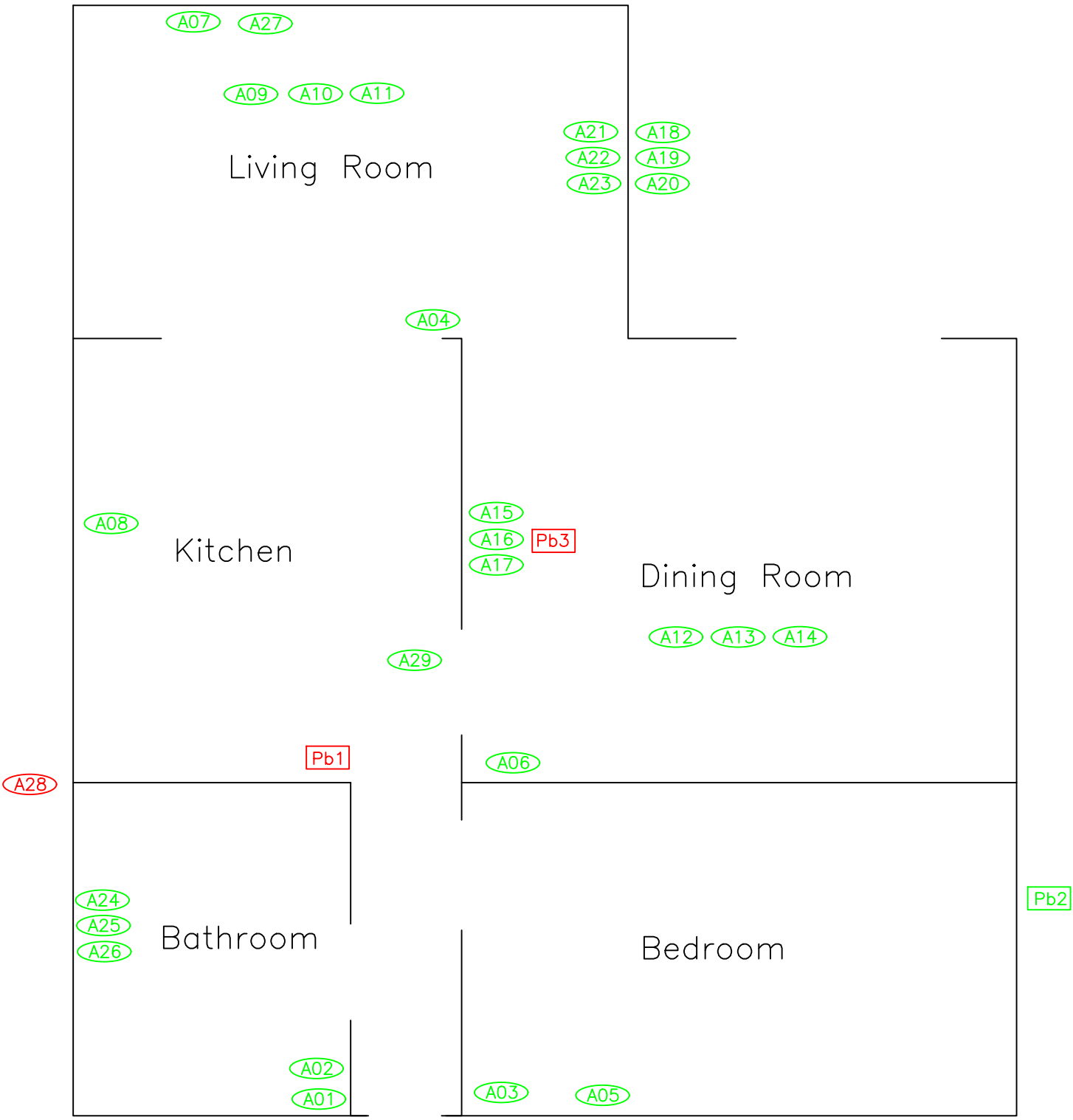
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Appendix A – Sample Site Plan



(AX) Positive Asbestos Sample

(AX) Negative Asbestos Sample

PbX Lead Paint Sample >90ppm

PbX Lead Paint Sample <90ppm

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
0				

TSOLUM & TSABLE
OCCUPATIONAL HEALTH & SAFETY

CLIENT NAME: Moore Asbestos Ltd. c/o Peter Moore

PROJECT LOCATION: 4126 Island Highway South Campbell River, BC

TITLE: **SAMPLING SITE PLAN**

DWN BY: SV | SCALE: NTS | DATE: 2026/04/14 | DWG No: | REV.:

CHK'D: GH | JOB FILE: Z0050-364.01R1

Figure 1

Appendix B – Sample Logs

APPENDIX B – BULK SAMPLE LOG

Client:	**Moore Asbestos Inc.**	**TTE Project #**	**Z0050-364.01R1**
Site Address:	**4129 Island Highway South, Campbell River, BC**	**Sample Date:**	**December 4th, 2025**
PO:		**Sampled By:**	**Steve Valentyne**

Sample #	HA #	Sample Type	Sample Location
A1		Vinyl Flooring	Bathroom - Concealed
A2		Sheet Vinyl Flooring	Bathroom
A3		Vinyl Floor Tile	Bedroom - Concealed
A4		Vinyl Floor Tile	Living Room - Concealed
A5		Wallpaper	Bedroom
A6		Wallpaper	Dining Room
A7		Insulation	Living Room
A8		Mastic	Kitchen Sink
A9		Ceiling Tile	Living Room
A10		Ceiling Tile	Living Room
A11		Ceiling Tile	Living Room
A12		Ceiling Tile	Dining Room
A13		Ceiling Tile	Dining Room
A14		Ceiling Tile	Dining Room
A15		Mortar	Chimney - Dining Room
A16		Mortar	Chimney - Dining Room
A17		Mortar	Chimney - Dining Room
A18		Mortar	Exterior Chimney
A19		Mortar	Exterior Chimney
A20		Mortar	Exterior Chimney
A21		Mortar + Grout	Living Room Fireplace + Hearth
A22		Mortar + Grout	Living Room Fireplace + Hearth
A23		Mortar + Grout	Living Room Fireplace + Hearth
A24		Grout + Glue	Bathroom - Backsplash
A25		Grout + Glue	Bathroom - Backsplash
A26		Grout + Glue	Bathroom - Backsplash
A27		Wallpaper	Living Room - Concealed
A28		Cementitious Siding	Exterior Cladding
A29		~~Vermiculite~~	**Material was misidentified** ~~Attic - PACM~~
PB1		Blue Field	Interior Trim
PB2		Green Field	Exterior Paint
PB3		White Field	Interior - Dining Room Chimney

Received By:
Nic Naaykens / Harshika Wickramanayaka

Appendix C – Analytical Results

Tsolum and Tsable Environmental Ltd.

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Courtenay, BC V9N 1N8
Tel: (250) 871-8638
Fax: (250) 871-8639
www.tsolum.com

Bulk Asbestos Certificate of Analysis

TTE Project #: Z0050-364
Report Version: v1

Samples analyzed by polarized light microscopy in accordance with EPA method 600/R-93/116
Quantifications at <0.25% is possible with this method

Client: Moore Asbestos Inc.
Site Address: 4129 Island Hwy South, Campbell River, BC
PO #

Sample Date: 04-Dec-25
Sampled By: TTE (SV)
Analysis Date: 10-Dec-25
Analyst: NN

Lab Sample Number	Sample Description	Location	Layer	Layer %	Asbestos %	Other Materials
Z0050-364-A1	Vinyl Flooring	Bathroom - Concealed	Vinyl - Tan	30	ND	Non-Fibrous
			Foam Core	35	ND	Non-Fibrous
			Paper Backing	30	ND	Fibrous (Cellulose)
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A2	Sheet Vinyl Flooring	Bathroom	Vinyl - Beige	30	ND	Non-Fibrous
			Foam Core	35	ND	Non-Fibrous
			Paper Backing	30	ND	Fibrous (Cellulose)
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A3	Vinyl Floor Tile	Bedroom - Concealed	Vinyl - Green/Tan	40	ND	Non-Fibrous
			Black Fibrous	40	ND	Fibrous (Cellulose)
			Adhesive	20	ND	Non-Fibrous
Z0050-364-A4	Vinyl Floor Tile	Living Room - Concealed	Vinyl - Tan	50	ND	Non-Fibrous
			Black Fibrous	50	ND	Fibrous (Cellulose)
Z0050-364-A5	Wallpaper	Bedroom	Wallpaper - Grey	100	ND	Fibrous (Cellulose)
Z0050-364-A6	Wallpaper	Dining Room	Wallpaper - White	100	ND	Fibrous (Cellulose)
Z0050-364-A7	Insulation	Living Room	Fibrous Yellow	20	ND	Fibrous (Cellulose)
			Adhesive	20	ND	Non-Fibrous
			Paper	60	ND	Fibrous (Cellulose)
Z0050-364-A8	Sink Mastic	Kitchen	Mastic - Grey	100	ND	Fibrous (Cellulose)
Z0050-364-A9	Ceiling Tile	Living Room	Paint - Off White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A10	Ceiling Tile	Living Room	Paint - Off White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A11	Ceiling Tile	Living Room	Paint - Off White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A12	Ceiling Tile	Dining Room	Paint - White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)

Notes:
* = Positive result may be due to contamination from adjacent asbestos containing layer
ND = Not Detected
FAR = Further Analysis Required

PAT PROGRAMS™
AIHA PROFICIENCY ANALYTICAL TESTING PROGRAMS
Lab ID:264415

Tsolum and Tsable Environmental Ltd.

800A 8th Street
Courtenay, BC V9N 1N8
Tel: (250) 871-8638
Fax: (250) 871-8639
www.tsolum.com

Sample Date: 04-Dec-25
Sampled By: TTE (SV)

Analysis Date: 10-Dec-25
Analyst: NN

Lab Sample Number	Sample Description	Location	Layer	Layer %	Asbestos %	Other Materials
Z0050-364-A13	Ceiling Tile	Dining Room	Paint - White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A14	Ceiling Tile	Dining Room	Paint - White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A15	Mortar	Chimney - Dining Room	Paint - Off White	10	ND	Non-Fibrous
			Cementitious	90	ND	Non-Fibrous
Z0050-364-A16	Mortar	Chimney - Dining Room	Paint - Off White	10	ND	Non-Fibrous
			Cementitious	90	ND	Non-Fibrous
Z0050-364-A17	Mortar	Chimney - Dining Room	Paint - Off White	10	ND	Non-Fibrous
			Cementitious	90	ND	Non-Fibrous
Z0050-364-A18	Mortar	Exterior Chimney	Cementitious	100	ND	Non-Fibrous
Z0050-364-A19	Mortar	Exterior Chimney	Cementitious	100	ND	Non-Fibrous
Z0050-364-A20	Mortar	Exterior Chimney	Cementitious	100	ND	Non-Fibrous
Z0050-364-A21	Mortar + Grout	Living Room Fireplace & Hearth	Cementitious White	50	ND	Non-Fibrous
			Cementitious Grey	50	ND	Non-Fibrous
Z0050-364-A22	Mortar + Grout	Living Room Fireplace & Hearth	Cementitious White	50	ND	Non-Fibrous
			Cementitious Grey	50	ND	Non-Fibrous
Z0050-364-A23	Mortar + Grout	Living Room Fireplace & Hearth	Cementitious White	50	ND	Non-Fibrous
			Cementitious Grey	50	ND	Non-Fibrous
Z0050-364-A24	Grout + Glue	Bathroom Backsplash	Ceramic - Tan	90	ND	Non-Fibrous
			Cementitious	5	ND	Non-Fibrous
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A25	Grout + Glue	Bathroom Backsplash	Ceramic - Tan	90	ND	Non-Fibrous
			Cementitious	5	ND	Non-Fibrous
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A26	Grout + Glue	Bathroom Backsplash	Ceramic - Tan	90	ND	Non-Fibrous
			Cementitious	5	ND	Non-Fibrous
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A27	Wallpaper	Living Room - Concealed	Wallpaper - Tan	95	ND	Fibrous (Cellulose)
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A28	Cementitious Siding	Exterior Walls	Paint - Green	5	ND	Non-Fibrous
			Cementitious	95	**YES - Tremolite 40-45%**	Non-Fibrous

Notes:
* = Positive result may be due to contamination from adjacent asbestos containing layer
ND = Not Detected
FAR = Further Analysis Required

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Lab ID:264415



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800A 8th Street
Courtenay, BC V9N 1N8
Tel: (250) 871-8638
Fax: (250) 871-8639
www.tsolum.com

Sample Date: 04-Dec-25
Sampled By: TTE (SV)

Analysis Date: 10-Dec-25
Analyst: NN

Lab Sample Number	Sample Description	Location	Layer	Layer %	Asbestos %	Other Materials
~~Z0050-364-A29~~	~~Vermiculite~~	~~Attic~~			~~**PACM**~~	

Material was misidentified in the field. No Vermiculite is present in the attic.

Notes:
* = Positive result may be due to contamination from adjacent asbestos containing layer
ND = Not Detected
FAR = Further Analysis Required

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Lab ID:264415

T&T OHS

800A 8th Street
Courtenay, BC V9N 1N8
Tel: (250) 871-8638
Fax: (250) 871-8639
www.tsolum.com

Lead Certificate of Analysis

TTOHS Project #: Z0050-364

Report Version: v1

Client: Moore Asbestos Inc.

Site Address: 4129 Island Highway South, Campbell River, BC

Client PO #:

Samples analyzed in accordace with TTE-AM-1000, Determination of Lead in Paint by Flame-AAS. Method Limit of Detection is 80 ppm

Sample Date: December 4, 2025
Sampled By: TTOHS (SV)
Analysis Date: December 9, 2025
Analyst: HW

Lab Sample Number	Sample Description	Location	***Concentration (ppm)	Concentration (% by weight)
Z0050-364.01 Pb1	Blue Field	Interior Trim	996	0.0996
Z0050-364.01 Pb2	Green Field	Exterior Paint	<80	<0.008
Z0050-364.01 Pb3	White Field	Interior - Dining Room Chimney	573	0.0573

Notes:

* Insufficient sample provided to perform QC reanalysis (< 200mg)

** Not enough sample provided to analyze (<100mg)

*** Matrix/ substrate interference possible

Appendix D – Applicable Statues and Regulations

The statutes and regulations relevant to the identification, removal, disposal or recycling of hazardous chemicals, wastes and building materials include the:

Occupational Health and Safety Regulation (BC Reg. 296/97 as amended by 404/2012);

Hazardous Waste Regulation (BC Reg. 63/88, amended by 63/2009);

Ozone Depleting Substances and other Halocarbons Regulation (BC Reg. 387/99 as amended by 317/2012);

Recycling Regulation (BC Reg. 449/2004, as amended by 88/2014);

PCB Regulations (SOR/2008-273 as amended by SOR/2011-301);

Canadian Environmental Protection Act (CEPA) (SC 1999, c 33 as amended by SI/2014-32);

Nuclear Safety and Control Act, Nuclear Substances and Radiation Devices Regulations (SOR/2000-207 as amended by SOR/2008-119); and,

Hazardous Products Act, Surface Coating Materials Regulations (SOR/2005-109 as amended by 2010-224).

Asbestos Containing Materials (ACM)

An asbestos containing material is defined as any manufactured article or other material that contains at least 0.5% asbestos (>0% for vermiculite insulation). Friable asbestos "means any material which, when dry, can be easily crumbled or powdered by hand pressure" as defined under the BC Occupational Health and Safety Regulation (BC Reg 296/97). Examples of potentially friable ACM includes sheet vinyl flooring, vermiculite insulation, and duct tape. Products known to contain non-friable asbestos include vinyl floor tile, drywall joint compound, and Transite cement products.

Asbestos in the workplace is defined as a "Designated Substance" under the Occupational Health and Safety Regulation (OSHR) published by the Workers Compensation Board (WCB) which governs safe handling of ACMs at the workplace. This regulation requires property owners to notify workers of the presence of friable ACMs, once their presence has been confirmed.

Due to its carcinogenic potential, asbestos is designated as an ALARA substance; worker exposure to this product must be kept "as low as reasonably achievable" (ALARA). All Asbestos containing materials must be abated by a qualified professional in accordance with the OSHR.

Waste handling and disposal of ACMs is governed by the OHSR, Waste Management Act (1988) and Hazardous Waste Regulation (HWR). The transportation of ACMs is governed by the Transportation of Dangerous Goods (TDG) Act / Regulation (July 2010).

Lead Based Paints (LBP)

Lead in the workplace is defined as a "Designated Substance" under the OHSR. The OHSR governs safe handling of lead in the workplace. This regulation requires owners of the Property to notify the workers, and post warning signs at the boundary of any work area where hazardous lead exposures could occur and/ or once the presence has been confirmed. As an ALARA substance, worker exposure must be kept as low as reasonably achievable.

Toxicity Characteristic Leaching Procedure (TCLP) testing of positively identified lead paint applications is typically required to determine if the painted applications are classified as a hazardous waste as outlined in the Ministry of Environments Special Waste Act.

The federal governments legislation, Surface Coating Materials Regulations – SOR/2016-193, section 2, defines lead based paint as "A surface coating material must not contain more than 90 mg/kg (90 ppm) total lead when a dried sample is tested in accordance with a method that conforms to good laboratory practices." Lead based paints over 600 ppm are considered an occupational safety hazard.

In addition to lead based paints, lead may be used in its pure metallic form or combined chemically with other elements to form lead compounds. Metallic lead is used to make products such as electric storage batteries, ammunition, lead solder, radiation shields, pipes, and sheathes for electric cables. Metallic lead is sometimes combined with other metals such as copper, tin, and antimony as lead alloys for use in the manufacture of a variety of metal products. Lead is commonly found in buildings in the solder used on copper domestic pipes, in the caulking on bell fittings of cast iron drainage pipes, and in electrical equipment.

Poly Chlorinated Biphenyls (PCBs)

PCBs were used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment. In fluorescent fixtures PCBs were usually found within the small capacitors inside the ballast that controls the lamp.

In Canada, polychlorinated biphenyls ("PCBs") were prohibited from being used in products, equipment, machinery, electrical transformers and capacitors, which were manufactured or imported into the country after July 1, 1980. However, older equipment in use after this date may still contain PCBs.

Polychlorinated biphenyls (PCB) are regulated under both federal (Canadian Environmental Protection Act) and BC Hazardous Waste Regulation and must

be treated as PCB waste and be stored and disposed of accordingly.

Although rare, paints have been known to contain PCBs. Older elevator motors, transformers and hydraulic systems may also have PCB-containing oil.

Mould and Other Microbial Contaminants

The OHSR applies to workplaces with mould showing on exposed or hidden surfaces, or where mould may be a factor in complaints regarding indoor air quality. Section 4.79 of the OHSR requires an investigation of a worker's complaint related to indoor air quality.

Microbial growth can be found on a wide range of wet building materials (most often paper or wood-based) in old or new buildings where there has been significant water damage. The removal of building materials impacted by mould growth may require workers with specific training and experience using work procedures that have been developed to protect workers and work areas from exposure to elevated concentrations of airborne mould.

Crystalline Silica

Silica is found in concrete, cement, mortar, ceramic wall and floor tiles, stucco finishes, and acoustic ceiling tiles.

Prolonged exposure to, and inhalation of, free crystalline silica, may result in a respiratory disease known as silicosis, which is characterized by progressive fibrosis of inner lung tissue and marked shortness of breath or impaired lung function.

Exposure to silica dust is governed the BC Occupational Health and Safety Regulation BC Reg. 297/97. According to the Regulation, the time weighted average exposure limit for airborne silica dust is 0.025 mg/m^3.

Studies show that when common construction work tasks involving the sanding, drilling, chipping, grinding, cutting, sawing, sweeping, and blasting of concrete and concrete products are conducted without using dust controls, workers are exposed to airborne silica concentrations at levels far above the occupational exposure limits.

Crystalline silica is an ALARA substance; worker exposure to this product must be kept "as low as reasonably achievable" (ALARA). Employers are required to develop an exposure control plan (ECP) when workers are or may be exposed to airborne concentrations of these materials in excess of 50% of the exposure limit.

Ozone Depleting Substances (ODS)

An ODS refers to any substance containing chlorofluorocarbon (CFC), hydro chlorofluorocarbon (HCFC), halon, or any other material capable of destroying oozing in the atmosphere. ODSs have been used in rigid polyurethane foam and insulation, laminates, aerosols, air conditioners, fire extinguishers, cleaning solvents and the sterilization of medical equipment. Federal regulations introduced in 1995 required the elimination of production and import of CFCs by 1 January 1996 (subject to certain essential uses) and a freeze on the production and import of HCFC-22 by 1 January 1996. These regulations also require the complete elimination of HCFC-22 by the year 2020.

While the regulations allow the continued use of halocarbon refrigerants, they strictly prohibit any person from releasing into the environment any halocarbon.

In the case of demolition, these materials will require proper recovery and disposal. The BC Ozone-Depleting Substances Regulations would also apply to any CFC/ODS abatement procedures. These regulations require that all ODS must be collected, stored and recycled, or collected and disposed appropriately by a licensed professional.

Mercury

Mercury is commonly found in buildings as mercury vapour in lighting, thermostats, thermometers, electrical switches, manometers (i.e. medical sphygmomanometers) and can also be found in minor amounts in fluorescent lamp tubes and vapour bulbs and may be present in stable forms in adhesives.

As a hazardous substance, transportation and disposal of this substance must be done in compliance with the federal Transportation of

Dangerous Goods (TDG) Regulations and the BC Hazardous Waste Regulation.

Radioactive Components

Some smoke alarms contain small sealed radioactive sources in the form of Americium 241. This material is sealed into a metal case within the smoke detector and must not be damaged or tampered with. As long as a smoke detector is used as directed and is not opened or damaged, it poses no radiation health risk to humans.

Ceramic tiles and some forms of granite sometimes contain radioactive materials. These materials should be checked prior to work being carried out on them to determine if radioactive materials are present.

UFFI

Urea formaldehyde-based thermal insulation is foamed in place and used to insulate buildings. Urea formaldehyde Foam Insulation (UFFI) was banned in 1978. It was prohibited due to the high levels of formaldehyde that were given off during the installation process, as well as the continued off-gassing of formaldehyde from poorly installed insulation. All such material was to have been removed and replaced. Standard real estate agreements currently contain a "No UFFI" clause and as a best management practice, all buildings containing UFFI should have the material removed. UFFI is still found in many buildings in BC.

Arsenic

Arsenic is a hazardous substance, and any maintenance or abatement involving materials containing arsenic or arsenic compounds must be done in compliance with the BC Occupational Health and Safety Regulations (BCOHSR).

Arsenic has long been used as a pesticide due to its toxic properties. Arsenical pesticides, often in the form of chromated copper arsenate (CCA), when applied with high pressure to wood, serve to extend the structural life of the material by making it resistant to mould, rot and insect infestation. Studies have shown that these materials have the ability to leach arsenic into the soil. Arsenic can also be present in small amounts in paint.

Aboveground / Underground Storage Tanks

Storage tanks containing fuels have the ability to leak over time and can result in soil and groundwater contamination. These tanks must be observed and checked over time to ensure they do not leak. Evidence of leaks must be investigated, and any potential contamination remediated. The Canadian Council of Ministers of the Environment (CCME) publishes a Code of Practice for the safe management of aboveground and underground storage tanks.

Hantavirus – Rodent Droppings

The Hantavirus is a virus associated with Hantavirus Pulmonary Syndrome, a disease caught through contact with the urine or droppings of infected rodents, or by being bitten or scratched by them.

The disease starts off like a cold or flu (fever, sore muscles, headaches, nausea, vomiting), but progresses to pneumonia-like conditions within a few days. The change in intensity of the symptoms is very rapid and can result in fluid build-up in the lungs and respiratory failure.

Possible exposure to Hantavirus is regulated under the BC Occupational Health and Safety Regulation. Employers with workers who have a risk of exposure must have an exposure control plan (ECP) in place prior to allowing their workers to come into contact with this material. As with all other hazardous substances, all personnel working around or with such materials must be made aware of their presence and be supplied with training in the potential health effects and means of avoiding exposures.

Appendix E – WorkSafe BC Sampling Density Requirements

Type of Material	Area of homogeneous Materials**	Minimum number of bulk samples to be collected***
Surfacing materials, including textured coatings, drywall mud, plasters, and stucco	Less than 90 m^2 (approximately 1,000 ft^2)	At least 3 samples of each type of surfacing material
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 5 samples of each type of surfacing material
	Greater than 450 m^2	At least 7 samples of each type of surfacing material
Sprayed insulation and blown-in insulation, including sprayed fireproofing	Less than 90 m^2 (approximately 1,000 ft^2)	At least 3 samples
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 5 samples
	Greater than 450 m^2	At least 7 samples
Loose vermiculite insulation (including vermiculite insulation within concrete masonry units, or CMUs)	Less than 90 m^2 (approximately 1,000 ft^2)	At least 3 samples
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 5 samples
	Greater than 450 m^2	At least 7 samples
Ceiling Tiles	Less than 90 m^2 (approximately 1,000 ft^2)	At least 3 samples
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 5 samples
	Greater than 450 m^2	At least 7 samples
Flooring, including vinyl sheet flooring (and backing) and floor tiles	Any size	At least 1 sample per flooring type in each room (and 1 from each layer of flooring)
Levelling compounds and mortars	Any size	At least 3 Samples
Asbestos Ropes, gaskets, wires, etc.	Any size	At least 1 sample
Mechanical insulation, including duct taping, pipe insulation, elbows and boiler/tank or vessel insulation	Any size	At least 3 samples

Mastics and putties, including; duct mastic (around penetrations) and window putty	Any size	At least 3 samples
Roofing materials, including felting and shingles	Less than 90 m^2 (approximately 1,000 ft^2)	At least 1 sample (each layer of material must be sampled)
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 2 samples (each layer of material must be sampled)
	Greater than 450 m^2	At least 3 samples (each layer of material must be sampled)
Asbestos cement (transite) board and pipe	Any size	At least 1 sample
Other sprayed materials	Any size	At least 1 sample per type of material
Other non-friable materials	Any size	At least 1 sample per type of material

* The information in this table is taken from: WorkSafeBC publication BK27 *Safe Work Practices for Handling Asbestos (2017).*

** Homogeneous material is considered uniform in texture and appearance, was installed at one time, and is likely to be of only one type of material or formulation.

*** If the material is assumed to contain asbestos, samples do not have to be collected. The professional judgment of a qualified person can be used to reduce the number of bulk samples of homogeneous materials. If fewer samples than the minimum recommended number are collected, surveyors should document the rationale for their position in the survey report.

Appendix F – Contractor Sign off Sheet

By signing below, you acknowledge that you have been informed as to the nature and location of all known and suspected hazardous materials including asbestos as per OHSR 20.112 that are found at the subject site. As the contractor, you will make every effort to undertake your work duties in a manner that will avoid disturbing or otherwise impacting these materials without following WorkSafe BC approved procedures. If through your work these applications are to be disturbed or have been inadvertently disturbed, it is your responsibility to inform the client named in this report.

In the event any additional suspect hazardous materials are encountered during renovation or demolition activities, work on those materials must stop immediately and remain undisturbed until testing confirms the presence or absence of asbestos or other hazardous material. If any material suspected of containing asbestos or another hazardous material is disturbed during the work, all work shall stop until the area is contained, the hazard evaluated by a qualified professional and the hazardous materials, if indeed present, is safely managed by a qualified contractor.

Company / Name	Signature	Date

Strathcona
REGIONAL DISTRICT

Agent Authorization Form

DATE	MAY 22/2026
LEGAL DESCRIPTION	(see Tax Assessment Notice or Certificate of Indefeasible Title)
STRATA LOT 4 DISTRICT LOT 167 SAYWARD DISTRICT STRATA PLAN VIS6824	
Street Name and Number (if known):	LOT 4 - 129 JOYCE RD, QUATHIASKI COVE QUADRA ISLAND, V0P 1N0
City/Town:	027-966-534

I / WE, [redacted]

Declare that I am / we are the registered owner(s) of the property described above and

PROVIDE AUTHORIZATION FOR: J. TOELLE CONSTRUCTION (MATT GRISWOLD) (MARSHALL TOELLE)

(Name of Agent)

TO ACT AS AGENT IN THE MATTER OF: To view and obtain copies of all plans and permits

(list scope of agency representation i.e. building permit, DP, etc. on above property

[redacted] [redacted] Signature of Owner(s)	MAY 22/2026 Date
Signature of Agent(s)	Date

Strathcona Regional District
990 Cedar Street, Campbell River, BC V9W 7Z8
Tel: 250-830-6700 • Toll Free: 1-877-830-2990 • Fax: 250-830-6710
Web: www.strathconard.ca

LTSA Land Title Act

Charge

General Instrument – Part 1

1. Application

Barbara J Burns
850B - 12th Avenue
Campbell River BC V9W 6B5
250 286-3636

2. Description of Land

PID/Plan Number	Legal Description
000-329-479	**LOT C, SECTION 35, TOWNSHIP 4, COMOX DISTRICT, PLAN 13994**

3. Nature of Interest

Type	Number	Additional Information
COVENANT		**s. 219**

4. Terms

Part 2 of this instrument consists of:

(b) Express Charge Terms Annexed as Part 2

5. Transferor(s)

VICTOR GLENN HODGINS

DORALYNNE MARY HODGINS

6. Transferee(s)

STRATHCONA REGIONAL DISTRICT
990 CEDAR STREET
CAMPBELL RIVER BC V9W 7Z8

7. Additional or Modified Terms

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LTSA Land Title Act

Charge

General Instrument – Part 1

8. Execution(s)

This instrument creates, assigns, modifies, enlarges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
BARBARA J. BURNS, M.A. *Notary Public* 850B - 12th AVENUE CAMPBELL RIVER, BC V9W 6B5 TEL: 250 286-3636 FAX: 250 286-6371	YYYY-MM-DD 2026-01-28	[redacted] **Victor Glenn Hodgins**
		[redacted] **Doralynne Mary Hodgins**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
A Commissioner for Taking Affidavits for British Columbia Edith Watson #301 – 990 Cedar Street Campbell River, BC V9W 7Z8 Ph: 250.830.6700 Commission Expires: Aug 31/28	YYYY-MM-DD 2026-02-25	**Strathcona Regional District** By their Authorized Signatory name: **MARK BAKER** CHAIR, Regional District name: THOMAS YATES Corporate Officer

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Electronic Signature

Your electronic signature is a representation that you are a designate authorized to certify this document under section 168.4 of the *Land Title Act*, RSBC 1996, c 250, that you certify this document under section 168.41 (4) of the Act, and that an execution copy, or a true copy of that execution copy, is in your possession.

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TERMS OF INSTRUMENT - PART 2

WHEREAS:

A. The Transferor is the registered owner in fee simple of:

PID: 000-329-479

Lot C, Section 35, Township 4, Comox District, Plan 13994

4129 Island Highway South, Campbell River, BC V9H 1E9

(the "**Land**")

B. The Transferee is the Strathcona Regional District;

C. The Transferee's Building Inspector has determined that the Land is subject to or is likely to be subject to flooding and has required the Transferor to provide the Building Inspector with a report or reports certified by a professional engineer or geoscientist, with experience in geotechnical study and geohazard assessments (the **"Qualified Professional"**), that the Land may be used safely for the use intended (the "**Reports**");

D. The Transferor has provided the Transferee with the report prepared by Joe Brunelle, P. Eng. dated April 4, 2025, which report is attached to this Agreement as Schedule "A" and has agreed to provide the Transferee with any further Reports of the Qualified Professional, as required by the Transferee or as necessary from time to time, certifying that the Land may be used safely for the use intended as a result of the construction to which the Report or further Report(s) relate; and

E. The Transferor acknowledges that it is in the public interest that the development and use of the Land be limited and wishes to grant this covenant and indemnity to the Transferee under Section 219 of the *Land Title Act* and Section 56 of the *Community Charter*.

NOW THEREFORE, in consideration of the premises and the covenants herein contained and for other valuable consideration, receipt and sufficiency of which is hereby acknowledged by the parties, the parties hereto covenant and agree with each other as follows:

1. In this Agreement, "construction" means construction of a building or other structure, or structural alteration of or addition to an existing building or other structure to which the Crossfield Report or further Reports relate.

2. The Transferor covenants and agrees not to use the Land nor construct any building or structure on the Land, nor make any structural alterations or additions to any existing building or structure on the Land, except in the manner determined and certified by the Engineer in the Floodplain Hazard Assessment as enabling the safe use of the Land for use intended. Without limiting the generality of the foregoing, the

Grantor shall construct all buildings or structures and perform all other construction on and development of the Land only in strict accordance with all requirements and guidelines set out in the Floodplain Hazard Assessment, including conditions as to:

a. the siting, structural design and maintenance of buildings structures or works,

b. the maintenance or planting of vegetation, and

c. the placement and maintenance of land fill.

3. The Transferor agrees and hereby acknowledges that no area below the required elevation shall be used for the storage of goods or for the installation of HVAC equipment or other fixed appliances susceptible to damage by floodwaters.

4. At the Transferor's expense, the Transferor must: do everything necessary to ensure that this Agreement, and the section 219 covenant it creates are registered against the Land at the Victoria Land Title Office; and secure priority of registration and pending charges and encumbrances of a financial nature against the Land.

5. The Transferor shall reimburse the Transferee for any expense that may be incurred by the Transferee as a result of a breach of any covenant under this Agreement.

6. The Transferor acknowledges that the Transferee does not represent to the Transferor or any other person that any buildings or structures constructed, or placed, or mobile homes located in accordance with the terms and conditions of this Agreement will not be damaged due to mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche.

7. The Transferor and the Transferee agree that the enforcement of this Agreement is entirely within the discretion of the Transferee and that the execution and registration of this Agreement against the title to the Land must not be interpreted as creating any duty on the part of the Transferee to the Transferor or to any other person to enforce any provision or the breach of any provision of this Agreement.

8. Nothing contained or implied herein prejudices or affects the rights and powers of the Transferee in the exercise of its functions under any public or private statutes, bylaws, orders and regulations, all of which may be fully and effectively exercised in relation to the Land as if the Agreement had not been executed and delivered by the Transferor, and in particular, without limiting the generality of the foregoing, the Building Inspector of the Transferee may request further or additional Reports be prepared by a Qualified Professional prior to the issuance of a building permit for the Land.

9. The Transferor covenants and agrees that the Transferee may withhold building permits and occupancy permits as necessary to ensure compliance with the covenants in this Agreement, and that the issuance of a building permit or occupancy

permit does not act as a representation or warranty by the Transferee that the covenants in this Agreement have been satisfied.

10. The Transferor hereby releases and forever discharges the Transferee of and from any claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever that the Transferor can or may have against the Transferee for any loss, damage, or injury that the Transferor may sustain or suffer arising out of or connected with:

(a) this Agreement;
(b) a breach of this Agreement by the Transferor;
(c) the restrictions and requirements under this Agreement;
(d) the issuance of a building permit under this Agreement;
(e) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(f) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

11. The Transferor shall indemnify and save harmless the Transferee from any and all claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever for any loss (including economic loss), damage, or injury:

(a) that any person might have as owner, occupier, or user of the Land;
(b) by any person who has an interest in or comes onto the Land; or
(c) by any person that suffers loss of life or injury to its person or property

where such loss (including economic loss), damage, or injury arises out of, or is connected with:

(d) a breach of this Agreement;
(e) a breach of this Agreement by the Transferor;
(f) the restrictions and requirements under this Agreement;
(g) the issuance of a building permit under this Agreement;
(h) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(i) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

12. Time is of the essence of this Agreement.

13. The Transferor covenants and agrees for itself, its heirs, executors, successors, and assigns, that it will at all times perform and observe the requirements and restrictions set out in this Agreement and they will be binding upon the Transferor as personal covenants only during the period of its respective ownership or any interest in the Land.

14. It is mutually understood, acknowledged and agreed by the parties hereto that the Transferee has made no representations, covenants, warranties, guarantees, promises, or agreements (oral or otherwise)

with the Transferor other than those contained in this Agreement.

15. The Transferor shall pay the legal fees of the Transferee in connection with the preparation and registration of this Agreement. This is a personal covenant between the parties.

16. The waiver by a party of any breach of this Agreement or failure on the part of the other party to perform in accordance with any of the terms or conditions of this Agreement must not be construed as a waiver of any future or continuing failure, whether similar or dissimilar, and no waiver will be effective unless it is in writing and signed by both parties.

17. Wherever the singular, masculine, and neuter are used throughout this Agreement, the same is to be construed as meaning the plural, feminine, or body corporate or politic as the context so requires.

18. No remedy under this Agreement is to be deemed exclusive but will, where possible, be cumulative with all other remedies at law or in equity.

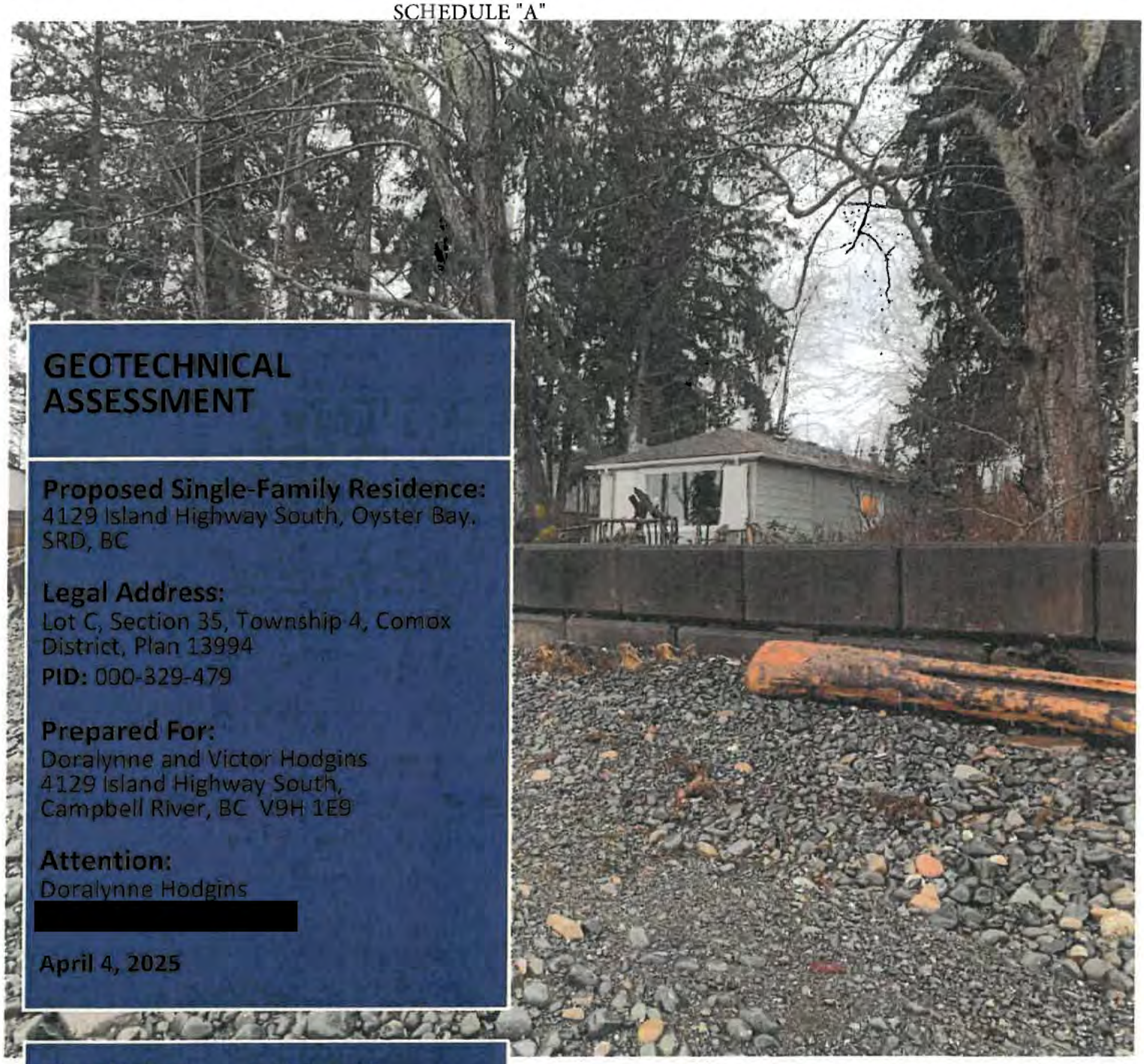
19. The restrictions and covenants herein contained run with the Land, are perpetual, continue to bind all of the Land when subdivided, and must be registered in the Victoria Land Title Office pursuant to Section 219 of the *Land Title Act* as covenants in favour of the Transferee as a first charge against the Land.

20. The Transferor agrees to execute all other documents and provide all other assurances necessary to give effect to the covenants contained in this Agreement.

21. If any part of this Agreement is found to be illegal or unenforceable, that part will be considered separate and severable and the remaining parts will not be affected thereby and will be enforceable to the fullest extent permitted by law.

22. This Agreement must be construed in accordance with, and governed by, the laws applicable in the Province of British Columbia.

23. This Agreement may be executed in counterpart with the same effect as if all parties had signed the same document. Each counterpart will be deemed to be an original. All counterparts will be construed together and constitute one and the same Agreement. This Agreement may be delivered by electronic means.



GEOTECHNICAL ASSESSMENT

Proposed Single-Family Residence:
4129 Island Highway South, Oyster Bay, SRD, BC

Legal Address:
Lot C, Section 35, Township 4, Comox District, Plan 13994
PID: 000-329-479

Prepared For:
Doralynne and Victor Hodgins
4129 Island Highway South,
Campbell River, BC V9H 1E9

Attention:
Doralynne Hodgins
[redacted]

April 4, 2025

File: E4084.01 Revision: 00

Prepared By:
Joe Brunelle, P.Eng.

Reviewed By:
Louis Chapdelaine, P.Geo.

Lewkowich Engineering Associates Ltd.
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Courtenay, BC V9N 8R9
250-334-0384 (Office)
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Permit to Practice Number: 1001802

LEA Lewkowich Engineering Associates Ltd.

EXECUTIVE SUMMARY

1. The following is a brief synopsis of the property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
2. The subject property, 4129 Island Highway South, Oyster Bay, BC, from this point forward referred to as "the Property," is located on the east coast of Vancouver Island within the jurisdictional boundaries of the SRD. At the time of this Report, the proposed development for the Property consists of a re-development of a single-family residence.
3. A site-specific assessment was conducted to identify any potential geotechnical hazards for the proposed development. Our assessment determined that the Property is subject to ocean flooding hazard that exists along the Strait of Georgia.
4. The Report recommends (i.e., is in support of) a minimum coastal Flood Construction Level of 5.25m CGVD2013 and a horizontal floodplain setback of 15.0m landward from the estimated Year 2100 Natural Boundary, where the Year 2100 Natural Boundary is defined as the 3.4m CGVD2013 contour line.
5. The findings confirm the land is considered safe for the use intended, provided the recommendations in this Report are followed.

▪▪▪

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3.0 SITE CONDITIONS

3.1 Physical Setting

a. The Property is in the community of Oyster Bay and within the jurisdiction of the SRD.

b. The Property is located on the northeast side of and accessed by Island Highway South which runs in a northwest-southeast orientation.

c. The Property is zoned as Country Residential Four (CR-4).[4,5] It is surrounded by similar CR-4 properties. *Figure 3.1* below shows the Property location with 2023 air photo.



Figure 3.1: Property location (from SRD *uMapIt*[5]).

3.2 Terrain and Features

a. The 0.12-hectare (0.29-acre)[5] Property is currently developed with a one [1]-storey single-family residence which was built in 1949.[6] A wood deck extends off the northeast oceanside of the residence.

b. Air photos from the CoCR *Air Photo History Map*[7] were reviewed and show the Property and adjacent shore mostly unchanged from 2002 to present day; the 2002 air photo was the earliest air photo in the collection to capture the Oyster Bay area.

c. The terrain of the Property showed a gentle sloping between 3° (23H:1V) to 8° (7H:1V) from Island Highway South to the shoreline at the northeast property boundary.

d. Vegetation within the Property consisted of mature coniferous and deciduous trees, grass lawn, and some ornamental bushes.

3.4 Regional Geology and Aquifers

a. Surficial geology mapping for the area is classified as Capilano Sediments consisting of sand, pebbly sand, gravel, sandy gravel in spits, bars, etc. marine (including glacio-marine) deposits up to 9m thick, possibly underlain by clay.[8]

b. Review of groundwater wells and aquifers in the *BC Water Resources Atlas*[9] indicates that Aquifer 411 and Aquifer 847 have been mapped to the area. Aquifer 847, named *Quinsam to Stories Beach*, is a sand and gravel layer associated with the Cowichan Head Formation. It is identified as a confined aquifer. Aquifer 411 is attributed to the fractured sedimentary bedrock. Wells have been mapped to the area though much of the older data and location reliability is fair to poor. The wells generally agree with the surficial mapping – sand and gravel deposits were found at surface, underlain by stoney clay, till/ hardpan, and/or sedimentary bedrock.

c. Bedrock geology for the area is classified as Upper Cretaceous Nanaimo Group Undivided Sedimentary Rocks.[10] The strata of the Nanaimo Group formation in the Comox/Georgia basin consists of alternating succession of shales, sandstones, conglomerates, and some coal.[11] Surficial geology mapping indicated bedrock outcrops along the shoreline in both northwest and southeast directions from the Property.[8] Based on well records in the area, depth to bedrock at the Property is estimated to be 5m to 20m BGS.

3.5 Soil Conditions

a. A shallow (1.0m depth BGS) test hole was hand dug adjacent to the north corner of the existing wood deck to investigate the near surface.

b. In general, the near surface soil conditions as observed in the Property are consistent with published surficial geology mapping.

c. Soil encountered in the hand dug hole consisted of:

   i. 0.0m to 0.4m: SAND, and ORGANICS (grass, rootlets), some silt, soft, dark brown, damp – sod layer; underlain by,

   ii. 0.4m to 1.0m: SAND, compact, grey, damp.

   The hole was terminated at the length of the shovel.

d. We expect these upper coarse-grained soils to be underlain by dense, stoney clay, glacial till, and/or sedimentary bedrock at depth.

e. Based on existing site grades we also expect there may be localized areas of fill or disturbed soil. We do not expect the presence of fill materials to have a detrimental impact on the proposed development, and any encountered fill or disturbed soil can be managed by field recommendations as part of the geotechnical assurance services during construction.

level.

c. Farther south (~1km from Property) a spit and lagoon has formed at Oyster Bay Shoreline Park. Its history dates back to the 1930s and 1940s when a relief then logging camp was set up to employ people during the depression. A causeway was built and at the same time a breakwater was built of old dismantled ships, then later with rock to protect a log booming operation from the predominant wave attack from the southeast. Sediment has progressively accumulated at Oyster Bay Shoreline Park since the log booming operation was built. This recent accreting land formation continues to protect Oyster Bay from the strongest winds and waves from the southeast as evidence by the observed calm waters and shallow bathymetry of the bay.

4.3 Bylaw Requirements

a. Upon review of SRD *Floodplain Management Bylaw No. 2782, 2005*,[3] we confirm the following applicable items:

   i. *"301 Floodplain Designation 1) The following land is designated as floodplain: ... b) Land lower than the flood construction levels specified in Section 302; c) Land within the floodplain setbacks specified in Section 303.*

   ii. *302 Flood Construction Levels ... 2) Where Floodplain Mapping is NOT available, the following elevations are specified as flood construction levels: ... f) 1.5 metres above the natural boundary of any other watercourse; g) 1.5 metres above the natural boundary of the sea...*

   iii. *303 Floodplain Setbacks 1) The following distances are specified as floodplain setbacks: ... c) 15.0 metres from the natural boundary of any other watercourse; d) 15.0 metres from the natural boundary of the sea..."*

b. Additionally, the SRD *Floodplain Management Bylaw*[3] prescribes construction requirements and provides for site specific exemptions including additions that are less than 25% of the ground floor area but no closer to the water than existing.

5.0 COASTAL FLOOD HAZARD ANALYSIS

5.1 General

a. Provincial *Flood Hazard Area Land Use Guidelines*[2] recommend two methods, the Combined Method or the Probabilistic Method, to determine a coastal FCL that incorporates the issue of sea level rise and other mitigating factors. The Probabilistic Method was used for this site-specific assessment, where the water level along the shoreline is based on a probabilistic analysis of high tide and storm surge. A target 0.5% AEP (i.e., 200-year return period) coastal storm event was adopted for this assessment following the provincial

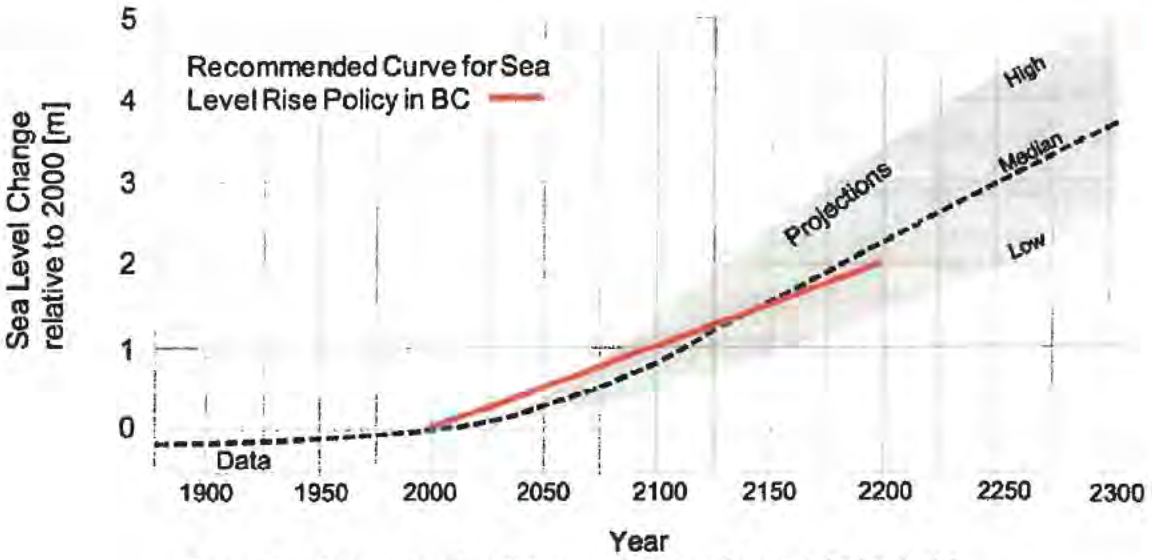


Figure 5.3: Recommended SLR curve for planning and design in BC.

b. In accordance with current guidelines 1.0 cm/year of SLR to the Year 2100 was included in our assessment, for a total SLR of 0.75m.

c. The assumed amount of SLR was based on information available at the time of their study and will be revaluated in the future as more information becomes available. Forecasting this far into the future carries significant uncertainties. Monitoring changes of SLR is beyond the scope of this Report. We expect local authorities to remain informed in order to adjust their flood management plans/guidelines accordingly.

5.4 Regional Adjustment – Isostatic Rebound

a. Future sea level is also affected by vertical land movement due to changes in the regional uplift or subsidence of the land surface (i.e., isotropic rebound, tectonic shifting, etc.). Areas where the land elevation is increasing (uplift/rebound) should decrease the allowance for SLR, while areas where the land elevation is decreasing (subsidence) should increase the allowance for SLR. Some refer to the combined effects of SLR and RA as Relative Sea Level Rise (RSLR).

b. Based on current information, this area of eastern Vancouver Island is rebounding at a rate of 3.0mm/year, as taken from an average of the Little River Tide Gauge Station No. 07993 and the Campbell River Tide Gauge Station No. 08074.[15,16] Therefore, the land is expected to rebound by 0.27m to the Year 2100. A rebound value of -0.27m was included in our assessment.

5.5 Storm Surge

a. Sea levels along the BC coast are not only affected by astronomical tide cycles, but also by storms. Storms may affect water levels due to changes in atmospheric pressure, strong winds acting on the water surface, and changes in ocean currents or temperature. The combined effect of all these factors is termed storm

h. A summary of design input values and estimated wave runup are presented in *Table 5.6* below.

Table 5.6: Summary of Estimated Wave Runup.

Significant Wave Height	Peak Wave Period	Still Water Level	Average Foreshore Slope	Slope of Structure	Wave Runup ($R_{u2\%}$)
2.87m	6.81 s	0.61m	16.5H:1V	89°	1.12m

5.7 Freeboard

a. A nominal FB value is typically added when calculating an FCL. The FB value accounts for uncertainties associated with value estimations used.

b. Provincial guidelines recommend a minimum freeboard value of 0.60m for the Probabilistic Method.[2]

5.8 Probabilistic Method FCL

a. The variables discussed in *Sections 5.2 to 5.7* are added together to determine an adequate ocean FCL, presented in the following *Table 5.8*.

Table 5.8: Ocean FCL determination using the "Probabilistic Method".

FCL Component	Description	Value (m)
HHWLT	Higher High Water Large Tide (CGVD2013) *19 year HHW average defined by CHS	2.13
SLR	Sea Level Rise (to year 2100)	0.75
RA	Regional Adjustment (to year 2100) *negative value indicates uplift is occurring	-0.27
SS	Storm Surge (10-year storm)	0.92
WE	Wave Effect (10-year storm)	1.12
FB	Freeboard	0.60
FCL	Calculated CGVD2013 FCL	5.25

6.0 FLOOD HAZARD RECOMMENDATIONS

6.1 Coastal FCL

a. Based on our review, as detailed in *Section 5.0* above, LEA recommends using the site-specific coastal flood level of 5.25m CGVD2013 as the minimum FCL for the proposed development. This minimum FCL elevation is typically defined as the top of the finished concrete slab-on-grade or the underside of wooden floor joists of flooring systems that are to be kept dry.

b. To achieve the FCL, we recommend structural methods, such as increasing the height of the foundation walls above suitable bearing grade.



Figure 6.2: LEA recommended setback in plan, marked on JEA survey.

6.3 Floodwater and Inundation

a. The recommended coastal FCL and setback applies to any Habitable Area; defined as any room or space within a building or structure which can be used for human occupancy, commercial sales, or the storage of goods, possessions, or equipment (including furnaces) which would be subject to damage if flooded.

b. The FCL establishes the minimum elevation of the underside of a wooden floor system or top of concrete slab for any Habitable Area. During construction, all footing and floor elevations shall be confirmed by qualified survey personnel to ensure the finished floor grade is at or above the recommended minimum FCL geodetic elevation.

c. Provided any construction within the Property satisfies the minimum recommended FCL, we do not anticipate any damage to structures as a result of floodwater. However, any areas constructed below the recommended FCL, such as crawlspaces or garages, could be subject to flooding during less than design flood events. Following best construction practices, areas below the FCL should not be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.

the NB be regularly monitored by the current and future property owners. Any notable scour, inland erosion caused by overtopping waves, or regression of the NB, specifically following a significant storm event, winter season, or otherwise, may jeopardize the integrity of the seawall and would require a reassessment of the foreshore conditions.

7.0 DESIGN PHASE

7.1 Foundation Design and Construction

a. Prior to construction, the new building area should be stripped to remove all unsuitable materials to provide an undisturbed natural subgrade for the footing support.

b. Foundation loads should be supported on natural undisturbed mineral soil or structural fill, approved for use as a bearing stratum by the Geotechnical Engineer, and may be designed using the following values. These values assume a minimum 0.5m footing embedment depth.

   i. For foundations constructed on non-cohesive soils classified as compact to dense naturally deposited inorganic sand or gravel, an SLS bearing pressure of 100 kPa and a ULS bearing pressure of 150 kPa may be used for design purposes.

   ii. For foundations constructed on undisturbed dense glacial till, or a minimum thickness of 0.65m of structural fill as outlined in *Section 8.2* of this Report, an SLS bearing pressure of 150 kPa and a ULS bearing pressure of 225 kPa may be used for design purposes.

c. Exterior footings should be provided with a minimum 0.5m depth of ground cover for frost protection purposes.

d. The Geotechnical Engineer should evaluate subsurface conditions at the time of construction to confirm that soil and/or groundwater conditions do not materially differ to those observed and inferred during the site reconnaissance and that footings are based on appropriate and properly prepared founding material.

7.2 Seismic Criteria

a. Based on the BCBC 2024, Division B, Part 4, Table 4.1.8.4.-B, *Site Classes, S, for Site Designation* X_s, the inferred subsurface conditions would be "Site Class D" (Stiff soil).

b. Please refer to the attached site-specific Seismic Hazard Calculation, from Natural Resources Canada.

•••

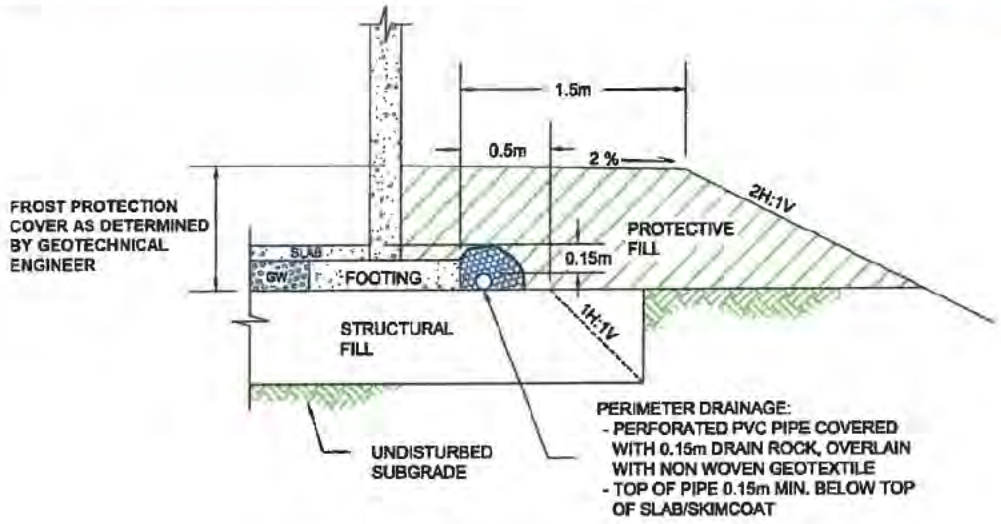


Figure 8.2: Typical section, structural fill.

e. Compaction of fill should include moisture conditioning as needed to bring the soil to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.

f. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a "jumping-jack," 200mm for a small roller, and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.

g. It should be emphasized that the long-term performance of buildings, slabs, and pavements is highly dependent on the correct placement and compaction of underlying structural fills. Consequently, we recommend that structural fill be observed and approved by the Geotechnical Engineer. This would include approval of the proposed fill materials and performing a suitable program of compaction testing during construction.

9.0 CONCLUSIONS

9.1 Local Government Conformance Statement

a. From a geotechnical point of view, and provided the recommendations in this Report are followed, the land is considered safe and suitable for the use intended (defined for the purposes of this Report as a new single-family residence and/or residential addition of conventional design and construction methods). Additionally, for floodplain bylaw exemption, as required by Section 524 of the *Local Government Act*, "the land may be used safely for the use intended" (new single-family residence and/or residential addition). This conclusion considers the probability of a geotechnical failure resulting in property damage of less than:

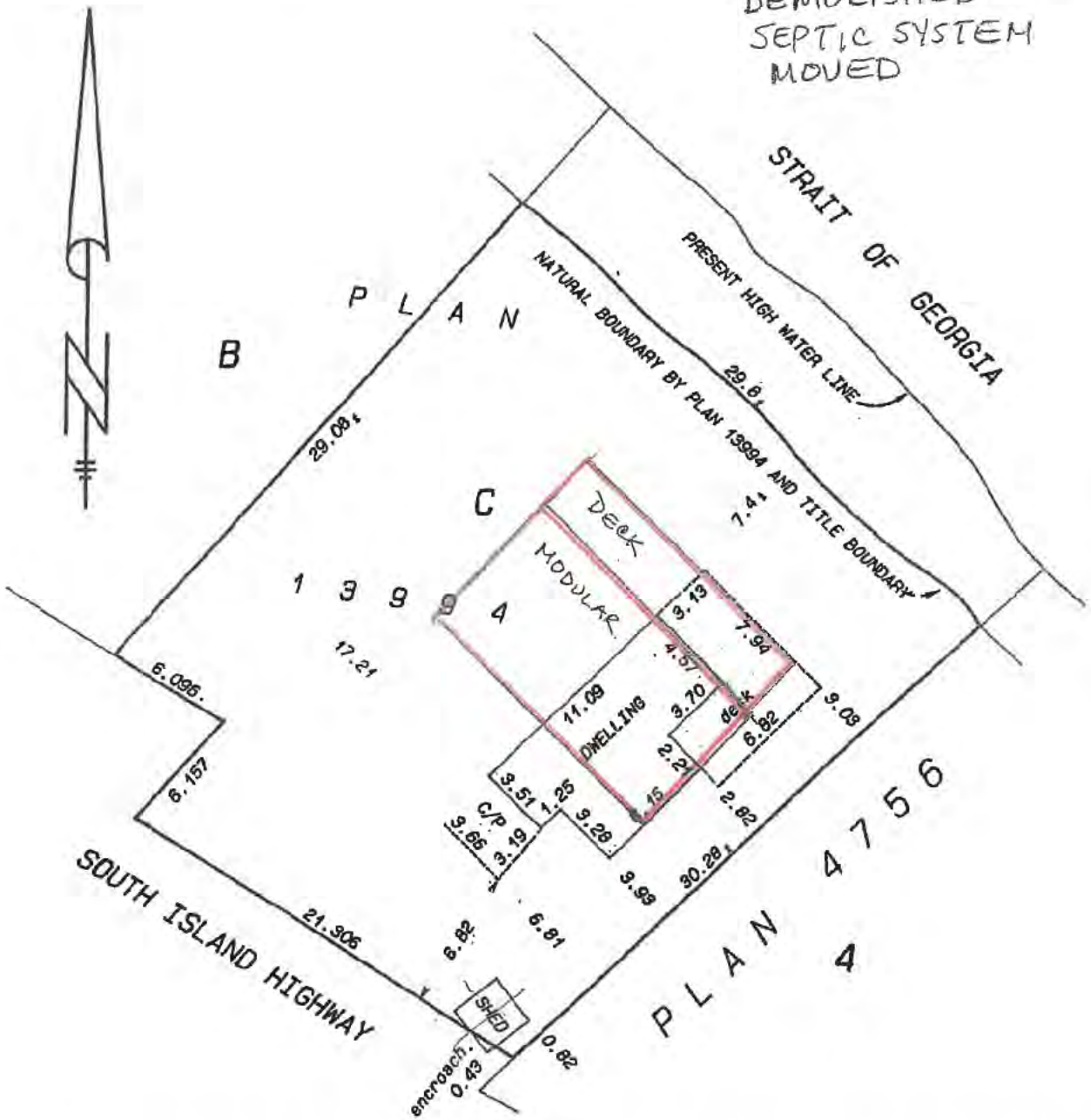
2. British Columbia Ministry of Water, Land and Air Protection, report titled *Flood Hazard Area Land Use Management Guidelines*, amended by British Columbia Ministry of Forest, Lands, Natural Resource Operations and Rural Development, January 1, 2018.
3. Strathcona Regional District, Bylaw No. 2782, titled *Floodplain Management Bylaw, 2005*, amended June 22, 2017.
4. Strathcona Regional District, Bylaw No. 1404, titled *Campbell River Area Zoning Bylaw, 1991*, amended October 30, 2024.
5. Strathcona Regional District, online map viewer *uMapIt*, 49.903N 125.167W, <https://strathconard.maps.arcgis.com/apps/webappviewer/index.html?id=3f13d8e946bb401d9fb17d90246af4b1>, accessed March 18, 2025.
6. BC Assessment, address *4129 Island Hwy S Campbell River V9H 1E9*, <https://www.bcassessment.ca//Property/Info/QTAwMDBLU01XMw==>, accessed January 21, 2025.
7. City of Campbell River, online map viewer *Airphotos*, 49.903N 125.167W, <https://webmap.campbellriver.ca/Html5Viewer/Index.html?viewer=Airphoto_History_Map.AirphotoHistoryViewer>, accessed March 18, 2025.
8. Fyles JG, Geologic Survey of Canada – Department of Mines and Technical Surveys, map titled *Surficial Geology Oyster River – Comox, Nanaimo, and Sayward Districts, British Columbia*, map 49-1959, sheets 92 F/14, date of mapping 1956-1957.
9. British Columbia Ministry of Environment and Climate Change Strategy, online map viewer *BC Water Resources Atlas*, 49.903N 125.167W, <https://maps.gov.bc.ca/ess/hm/wrbc/>, accessed March 18, 2025.
10. British Columbia Geological Survey, online map viewer *MapPlace 2*, Bedrock Geology, 49.903N 125.167W, <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mapplace>, accessed March 18, 2025.
11. Bednarski JM, Geological Survey of Canada, titled *Surficial Geology and Pleistocene stratigraphy from Deep Bay to Nanoose Harbour, Vancouver Island, British Columbia*, open file 7681, dated 2015.
12. Natural Resources Canada, webpage titled *GPS-H*, 49.903N 125.167W, <https://webapp.csrs-scrs.nrcan-rncan.gc.ca/geod/tools-outils/gpsh.php?locale=en#>, accessed March 26, 2025.
13. Government of Canada, online map viewer *Real-Time Hydrometric Data Map Search*, <https://wateroffice.ec.gc.ca/map/index_e.html?type=real_time>, accessed March 26, 2025.
14. Government of Canada, website titled *Mitlenatch – 07895*, <https://tides.gc.ca/en/stations/07895>, accessed March 26, 2025.
15. Ausenco Sandwell, prepared for British Columbia Ministry of Environment, 3 reports titled *Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use*, dated January 27, 2011.
16. Kerr Wood Leidal Associates Ltd., prepared for British Columbia Ministry of Forests, Lands and Natural Resource Operations, report titled *Coastal Floodplain Mapping – Guidelines and Specifications*, Final Report, file number 2785.001, dated June 2011.
17. Ebbwater Consulting Inc., prepared for Regional District of Nanaimo, report titled *Sea Level Rise Adaptation Program Coastal Floodplain Mapping*, Final Report, Revision 1, project number P180, dated October 21, 2021.
18. Van der Meer JW, Allsop NWH, Bruce T, De Rouck J, Kortenhaus A, Pullen T, Schüttrumpf H, Troch P, and Zanuttigh B, titled *EurOtop – Manual on wave overtopping of sea defences and related structures. An overtopping manual largely based on European research, but for worldwide application*, <www.overtopping-manual.com>, second edition, final version, dated December 2018.

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

MODULAR HOME
EXISTING COTTAGE
DEMOLISHED
SEPTIC SYSTEM
MOVED



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

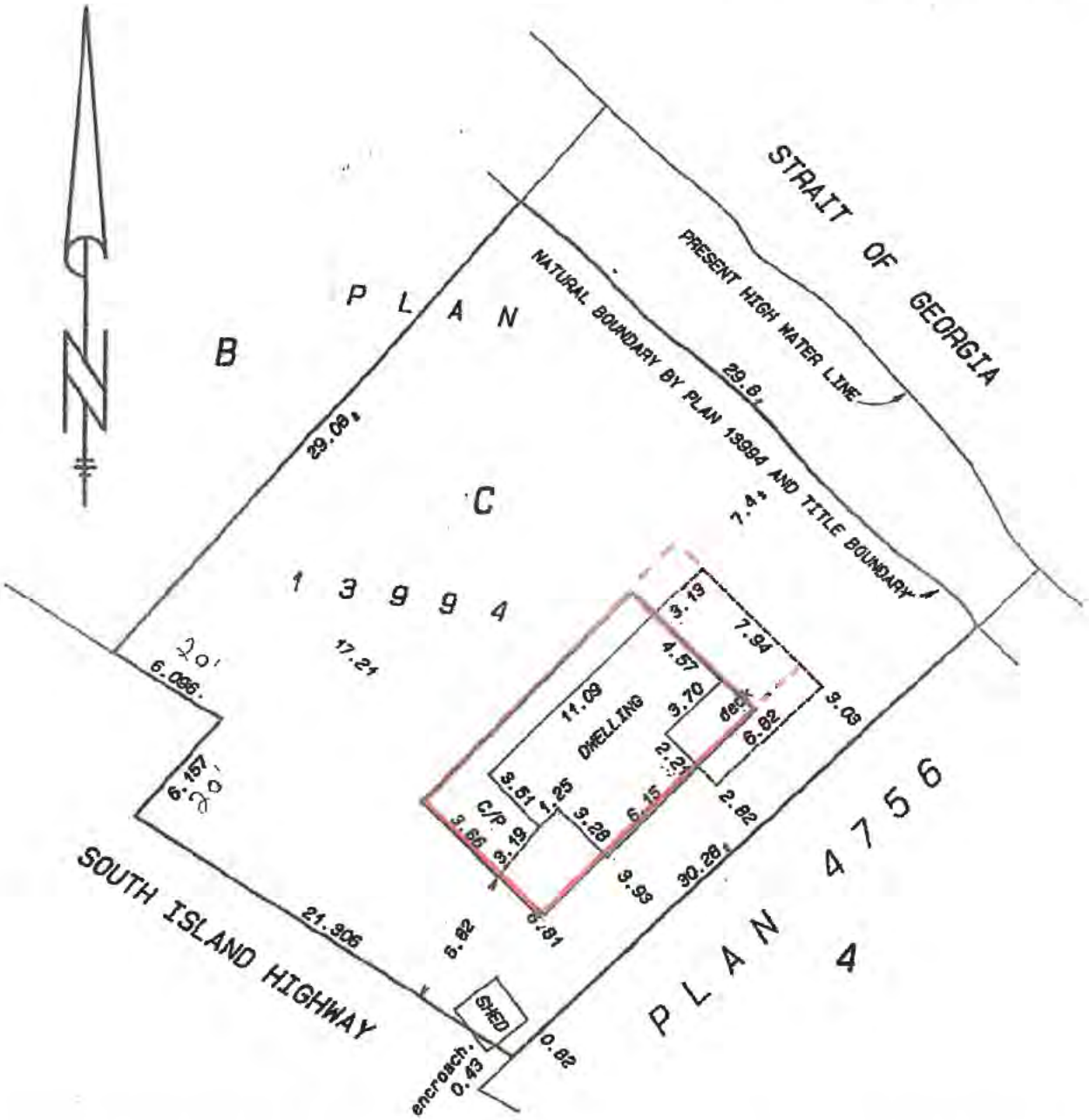
CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

HOME RENOVATION



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & GUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

Government of Canada / Gouvernement du Canada

2020 National Building Code of Canada Seismic Hazard Tool

This application provides seismic values for the design of buildings in Canada under Part 4 of the National Building Code of Canada (NBC) 2020 as prescribed in Article 1.1.3.1. of Division B of the NBC 2020.

Seismic Hazard Values

User requested values

Code edition	NBC 2020
Site designation X_S	X_D
Latitude (°)	49.903
Longitude (°)	-125.167

Please select one of the tabs below.

NBC 2020 Additional Values Plots API

Background Information

The 5%-damped spectral acceleration ($S_a(T,X)$, where T is the period, in s, and X is the site designation) and peak ground acceleration (PGA(X)) values are given in units of acceleration due to gravity (g, 9.81 m/s^2). Peak

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: April 4, 2025

Strathcona Regional District

990 Cedar Street, Campbell River, BC V9W 7Z8

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"):

Lot C, Section 35, Township 4, Comox District, Plan 13994; 4129 Island Highway South, Oyster Bay, BC; PID: 000-329-479

Legal description and civic address of the Property

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

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

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

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

✓ 2. Collected and reviewed appropriate background information

✓ 3. Reviewed the Proposed Development on the Property

✓ 4. Investigated the presence of Covenants on the Property, and reported any relevant information

✓ 5. Conducted field work on and, if required, beyond the Property

✓ 6. Reported on the results of the field work on and, if required, beyond the Property

✓ 7. Considered any changed conditions on and, if required, beyond the Property

8. For a Flood Hazard analysis I have:

✓ 8.1 Reviewed and characterized, if appropriate, Flood Hazard that may affect the Property

✓ 8.2 Estimated the Flood Hazard on the Property

✓ 8.3 Considered (if appropriate) the effects of climate change and land use change

✓ 8.4 Relied on a previous Flood Hazard Assessment (FHA) by others

___ 8.5 Identified any potential hazards that are not addressed by the Flood Assessment Report

9. For a Flood Risk analysis I have:

___ 9.1 Estimated the Flood Risk on the Property

___ 9.2 Identified existing and anticipated future Elements at Risk on and, if required, beyond the Property

___ 9.3 Estimated the Consequences to those Elements at Risk

FLOOD ASSURANCE STATEMENT

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

April 4, 2025

Date

Joe Brunelle, P.Eng.

Prepared by

Louis Chapdelaine, P.Geo.

Reviewed by

Name (print)

Name (print)

Signature 2025-04-04

report signed by LC

Signature

2351B Rosewall Crescent, Courtenay, BC V9N 8R9

Address

250-334-0384

Telephone

jbrunelle@lewkowich.com

Email

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. P. BRUNELLE 47938 2025-04-04

(AFFIX PROFESSIONAL SEAL here)

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

I am a member of the firm Lewkowich Engineering Associates Ltd. - Permit to Practice Number: 1001802

and I sign this letter on behalf of the firm. (Name of firm)

Strathcona
REGIONAL DISTRICT

SITE DECLARATION

Section 40.1 of the Environmental Management Act, requires a site profile to be completed with an application when the applicant knows, or reasonably should know, that a site has been used or is being used for commercial or industrial purposes. If any activities found in Schedule 2 of the Contaminated Sites Regulation apply to your property, you are required to complete a site profile. A copy of Schedule 2 activities is available at the front counter.

If any of the listed activities does not apply, simply complete the following declaration:

PROPERTY DESCRIPTION

Civic Address:	4129 S. ISLAND HWY CAMPBELL RIVER
Legal Description of Property:	LOT C PLAN VIP 13994
SECTION 35 TOWNSHIP 4 COMOX LAND DISTRICT	

NAME OF PROPERTY OWNER / AGENT

Surname:	HODGINS		Given Names:	DORALYNNE MARY	
Company (if applicable):					
Mailing Address:	4129 ISLAND HWY S.				
City:	CAMPBELL RIVER	Prov: BC	V9H 1E9	Tel:	[redacted]
Email:	[redacted]			Fax:	

DECLARATION

I declare that, based upon my current knowledge of the subject property, no Schedule 2 activities have been carried out.

Signature: [redacted]	**Date:** SEPT 18, 2025

Date Rec'd:	**File No.:**	**Electoral Area:**
PID:	**Folio:**	

Certified a true and correct copy of DP 5D 25 as approved by the Board of the Strathcona Regional District on the 25th day of February, 2026.

T. Yates, Corporate Officer
Date: March 4, 2026

Environmentally Sensitive Area (Foreshore) Development Permit

FILE: 3060-20/ DP 5D 25

ISSUED TO: DORALYNNE AND VICTOR HODGINS
4129 ISLAND HIGHWAY SOUTH
CAMPBELL RIVER, BC V9H 1E9

1. This Development Permit (DP 5D 25) is issued subject to compliance with all the bylaws of the Regional District applicable thereto, except as specifically varied or supplemented by this permit, for the removal of an existing dwelling and construction of ***a new detached dwelling unit*** on the subject property.

2. This development permit applies to only those lands within the regional district on the property described below:

   Legal Description: Lot C, Section 35, Township 4, Comox District, Plan 13994

   Parcel Identifier (PID): 000-329-479 **Folio:** 772 05416.000

   Civic Address: 4129 Island Highway South, Campbell River BC

3. The land described herein shall be developed in strict accordance with the following terms, conditions, and provisions of this permit, including:

   a) Registration of a Section 219 Restrictive Covenant on Title as a requirement of the site-specific exemption for flood relaxation and including Schedules A that:

      i. specifies conditions that would enable the land to be safely used for the use intended according to the terms of the Profession Engineer's report which will form part of the restrictive covenant;

      ii. acknowledges that no Disaster Financial Assistance Funding is available for the building or its contents; and

      iii. releases and indemnifies the Regional District from liability in the event any damage is caused by flooding or erosion.

   b) Schedule A, Geotechnical Assessment, dated April 4, 2025, authored by Lewkowich Engineering Associates Ltd.

4. This development permit shall lapse if development is not substantially commenced within **two (2)** years of the issue date of this permit (see below). Lapsed permits cannot be renewed; therefore, application for a new development permit must be made, and permit granted by the Strathcona Regional District board, to complete the remainder of the work.

5. This permit is ***NOT*** a building permit. A separate permit application is required for building construction.

DEVELOPMENT PERMIT DP 5D 25 approved the 25th day of February, 2026.

Corporate Officer

Date: March 2/26

LEA File: E4084.01

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: April 4, 2025

Strathcona Regional District

990 Cedar Street, Campbell River, BC V9W 7Z8

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"):

Lot C, Section 35, Township 4, Comox District, Plan 13994; 4129 Island Highway South, Oyster Bay, BC; PID: 000-329-479

Legal description and civic address of the Property

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

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

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

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

✓ 2. Collected and reviewed appropriate background information

✓ 3. Reviewed the Proposed Development on the Property

✓ 4. Investigated the presence of Covenants on the Property, and reported any relevant information

✓ 5. Conducted field work on and, if required, beyond the Property

✓ 6. Reported on the results of the field work on and, if required, beyond the Property

✓ 7. Considered any changed conditions on and, if required, beyond the Property

8. For a Flood Hazard analysis I have:

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

9. For a Flood Risk analysis I have:

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

FLOOD ASSURANCE STATEMENT

10. In order to mitigate the estimated Flood Hazard for the Property, the following approach is taken:
- ___ 10.1 A standard-based approach
- ___ 10.2 A Risk-based approach
- ✓ 10.3 The approach outlined in the guidelines, Appendix F: Flood Assessment Considerations for Development Approvals
- ___ 10.4 No mitigation is required because the completed flood assessment determined that the site is not subject to a Flood Hazard

11. Where the Approving Authority has adopted a specific level of Flood Hazard or Flood Risk tolerance, I have:
- ___ 11.1 Made a finding on the level of Flood Hazard or Flood Risk on the Property
- ___ 11.2 Compared the level of Flood Hazard or Flood Risk tolerance adopted by the Approving Authority with my findings
- ___ 11.3 Made recommendations to reduce the Flood Hazard or Flood Risk on the Property

12. Where the Approving Authority has not adopted a level of Flood Hazard or Flood Risk tolerance, I have:
- ✓ 12.1 Described the method of Flood Hazard analysis or Flood Risk analysis used
- ✓ 12.2 Referred to an appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk
- ✓ 12.3 Made a finding on the level of Flood Hazard of 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".

FLOOD ASSURANCE STATEMENT

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

April 4, 2025
Date

Joe Brunelle, P.Eng.
Prepared by

Name (print)

Signature

2351B Rosewall Crescent, Courtenay, BC V9N 8R9
Address

250-334-0384
Telephone

jbrunelle@lewkowich.com
Email

Louis Chapdelaine, P.Geo.
Reviewed by

Name (print)

report signed by LC
Signature

(Affix PROFESSIONAL SEAL here)

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

I am a member of the firm Lewkowich Engineering Associates Ltd. - Permit to Practice Number: 1001802
and I sign this letter on behalf of the firm. (Name of firm)

File:3060-20/DP 5D 25

March 13, 2026

Doralynne & Victor Hodgins
4129 Island Hwy S
Campbell River BC V9H 1E9

Re: Environmentally Sensitive Area Development Permit - Foreshore (DP 5D 25)

Please be advised that the Strathcona Regional District Board gave consideration to the environmentally sensitive area development permit at its meeting held on February 18, 2026. The decision of the Board was to issue the permit.

Should you have any questions concerning to the above, please contact me at 250-830-6705 or by email at kchamberlain@srd.com

Yours sincerely,

Keltie Chamberlain, MCP, RPP, MCIP
Development Planner II

990 Cedar Street, Campbell River, BC V9W 7Z8
Tel: 250-830-6700 Fax: 250-830-6710
Toll free: 1-877-830-2990 www.srd.ca

NOTICE OF REGISTRATION

Date of Issue:	March 13, 2026
Submitter's Name:	Edith Watson
File Reference:	DP 5D 25

The following application(s) have now reached final status:

LEGAL NOTATION	CB2670505	REGISTERED

We encourage you to review the registration details. In the event of an error, please email the LTSA Customer Service Centre at customerservice@ltsa.ca immediately.

Product support is available online at https://help.ltsa.ca. You can also call the Customer Service Centre for land title and survey practice matters, or Technical Support for all registry and product questions at 604-630-9630 or toll free at 1-877-577-LTSA (5872). Non-urgent support requests can be submitted online at https://ltsa.ca/contact-us-0.

Certified a true and correct copy of DP 5D 25 as approved by the Board of the Strathcona Regional District on the 25th day of February, 2026.

T. Yates, Corporate Officer
Date: March 4, 2026

Environmentally Sensitive Area (Foreshore) Development Permit

FILE: 3060-20/ DP 5D 25

ISSUED TO: DORALYNNE AND VICTOR HODGINS
4129 ISLAND HIGHWAY SOUTH
CAMPBELL RIVER, BC V9H 1E9

1. This Development Permit (DP 5D 25) is issued subject to compliance with all the bylaws of the Regional District applicable thereto, except as specifically varied or supplemented by this permit, for the removal of an existing dwelling and construction of ***a new detached dwelling unit*** on the subject property.

2. This development permit applies to only those lands within the regional district on the property described below:

Legal Description:	Lot C, Section 35, Township 4, Comox District, Plan 13994		
Parcel Identifier (PID):	000-329-479	**Folio:**	772 05416.000
Civic Address:	4129 Island Highway South, Campbell River BC		

3. The land described herein shall be developed in strict accordance with the following terms, conditions, and provisions of this permit, including:

   a) Registration of a Section 219 Restrictive Covenant on Title as a requirement of the site-specific exemption for flood relaxation and including Schedules A that:

      i. specifies conditions that would enable the land to be safely used for the use intended according to the terms of the Profession Engineer's report which will form part of the restrictive covenant;

      ii. acknowledges that no Disaster Financial Assistance Funding is available for the building or its contents; and

      iii. releases and indemnifies the Regional District from liability in the event any damage is caused by flooding or erosion.

   b) Schedule A, Geotechnical Assessment, dated April 4, 2025, authored by Lewkowich Engineering Associates Ltd.

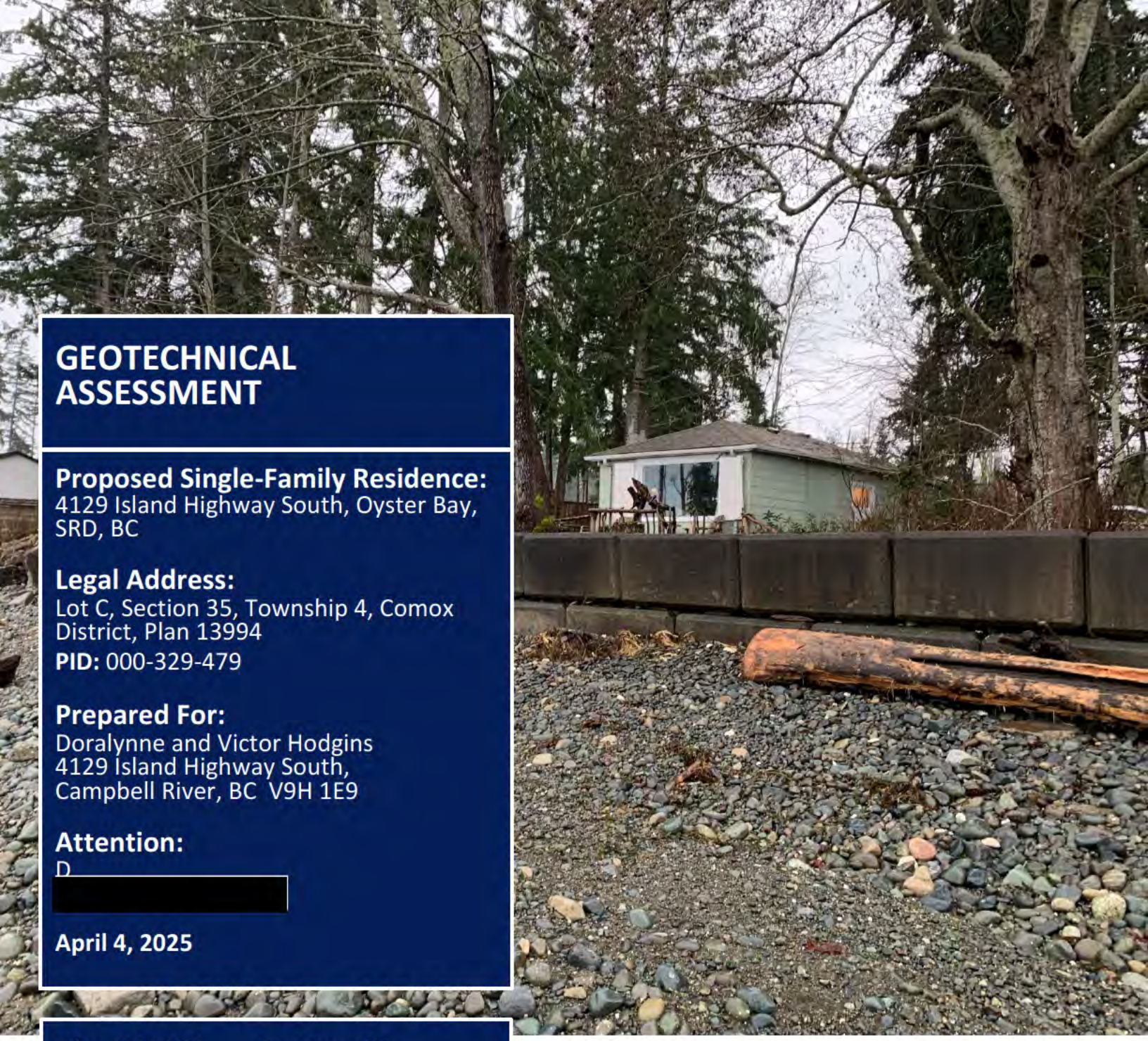
4. This development permit shall lapse if development is not substantially commenced within **two (2)** years of the issue date of this permit (see below). Lapsed permits cannot be renewed; therefore, application for a new development permit must be made, and permit granted by the Strathcona Regional District board, to complete the remainder of the work.

5. This permit is ***NOT*** a building permit. A separate permit application is required for building construction.

DEVELOPMENT PERMIT DP 5D 25 approved the 25th day of February, 2026.

Corporate Officer

Date: March 2/26



GEOTECHNICAL ASSESSMENT

Proposed Single-Family Residence:
4129 Island Highway South, Oyster Bay, SRD, BC

Legal Address:
Lot C, Section 35, Township 4, Comox District, Plan 13994
PID: 000-329-479

Prepared For:
Doralynne and Victor Hodgins
4129 Island Highway South,
Campbell River, BC V9H 1E9

Attention:
D
[redacted]

April 4, 2025

File: E4084.01 Revision: 00

Prepared By:
Joe Brunelle, P.Eng.

Reviewed By:
Louis Chapdelaine, P.Geo.

Lewkowich Engineering Associates Ltd.

Lewkowich Engineering Associates Ltd.
2351B Rosewall Crescent
Courtenay, BC V9N 8R9
250-334-0384 (Office)
250-334-9601 (Fax)
www.lewkowich.com

Permit to Practice Number: 1001802

DISCLAIMER, ACKNOWLEDGMENTS, AND LIMITATIONS

1. Lewkowich Engineering Associates Ltd. (LEA) acknowledges that this report, from this point forward referred to as "the Report," may be used by the Strathcona Regional District (SRD) as a precondition to the issuance of a development and/or building permit and that this Report and any conditions contained in the Report may be included in a restrictive covenant under Section 56 of the *Community Charter* or like statute and registered to the title of the subject property at the discretion of the SRD.
2. We have not acted for or as an agent of the SRD in the preparation of this Report.
3. This Report has been prepared in accordance with standard geotechnical engineering practice solely for and at the expense of Doralynne and Victor Hodgins.
4. The conclusions and recommendations submitted in this Report are based upon information from relevant publications, a visual site assessment of the subject property, observed and inferred subsurface conditions, current construction techniques, and generally accepted engineering practices. No other warranty, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the structure(s) becomes available, the recommendations may be altered or modified in writing by the undersigned.
5. The conclusions and recommendations of this Report are current as of the date of this Report and speak to the condition of the subject property. If there are any circumstances, such as a change in elevation, topography, or gradients within the subject property or properties in proximity to the subject lot, the comments and recommendations of this Report become void, and will require re-evaluation by the undersigned.
6. This Report does not provide environmental, biological, or archaeological assessments of the site.
7. Future construction shall be carried out within the requirements and recommendations of the Environmental Consultant (if applicable), any defined jurisdictional bylaws, or any existing restrictive covenants, whichever is more stringent. Any environmental and/or jurisdictional limitations may supersede the recommendations in this Report.
8. This Report was authored, to the best of our knowledge at the time of issuance, with considerations for local requirements specific to the SRD and their standards for the preparation of such reports, the 2024 British Columbia Building Code (BCBC), and current engineering standards. Updates to municipal bylaws, policies, or requirements of the SRD, and updates to the BCBC or professional practice guidelines may impact the validity of this Report.
9. This Report has been prepared by Joe Brunelle, P.Eng., and reviewed by Louis Chapdelaine, P.Geo. Brunelle and Chapdelaine are adequately experienced and are members in good standing with the Engineers and Geoscientists of British Columbia.

EXECUTIVE SUMMARY

1. The following is a brief synopsis of the property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
2. The subject property, 4129 Island Highway South, Oyster Bay, BC, from this point forward referred to as "the Property," is located on the east coast of Vancouver Island within the jurisdictional boundaries of the SRD. At the time of this Report, the proposed development for the Property consists of a re-development of a single-family residence.
3. A site-specific assessment was conducted to identify any potential geotechnical hazards for the proposed development. Our assessment determined that the Property is subject to ocean flooding hazard that exists along the Strait of Georgia.
4. The Report recommends (i.e., is in support of) a minimum coastal Flood Construction Level of 5.25m CGVD2013 and a horizontal floodplain setback of 15.0m landward from the estimated Year 2100 Natural Boundary, where the Year 2100 Natural Boundary is defined as the 3.4m CGVD2013 contour line.
5. The findings confirm the land is considered safe for the use intended, provided the recommendations in this Report are followed.

•••

List of Abbreviations and Acronyms Used in the Report

Abbreviation	Description
AEP	Annual Exceedance Probability
ASTM	American Society for Testing and Materials
BCBC	British Columbia Building Code
BGS	Below Ground Surface
CD	Chart Datum
CGVD2013	Canadian Geodetic Vertical Datum of 2013
CGVD28	Canadian Geodetic Vertical Datum of 1928
CHS	Canadian Hydrographic Service
CoCR	City of Campbell River
EGBC	Engineers and Geoscientists British Columbia
FB	Freeboard
FCL	Flood Construction Level
H	Horizontal
JEA	J.E. Anderson and Associates
LEA	Lewkowich Engineering Associates Ltd.
NB	Natural Boundary
PNB	Present Natural Boundary
SLR	Sea Level Rise
SLS	Service Limit State
SRD	Strathcona Regional District
ULS	Ultimate Limit State
V	Vertical

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1.0 INTRODUCTION

1.1 General

a. As requested, LEA has carried out a geotechnical assessment with respect to the proposed single-family residential development. This Report provides a summary of our findings and recommendations.

1.2 Background

a. We understand that the proposed development options for the Property consists of either:
   i. Option 1 – the removal of the existing residence and construction of a new modular residence; or
   ii. Option 2 – the construction of an addition to the existing single-family residence with renovation;

   See attached hand drawn sketches showing the proposed development concept alternatives.

b. The structures will preferably utilize conventional construction methods including cast-in-place concrete foundations and wood-framed superstructures.

c. We understand that the SRD requires a geotechnical assessment for permitting applications.

d. This Report is only applicable to the proposed development.

1.3 Assessment Methodology

a. Site reconnaissance was performed on December 17, 2024 and February 25, 2025, to visually assess conditions throughout the Property and along the coastal foreshore.

b. This assessment included a desktop review of relevant background information, including applicable SRD bylaws, provided development plans, registered covenants on title, aerial photographs, and published topography, geology, and floodplain mapping. A complete list of references is found at the end of this Report.

c. This assessment was prepared with consideration of EGBC professional practice guidelines – *Legislated Flood Assessments in a Changing Climate in BC*, including consideration of the implications of climate change.[1] Please refer to the attached *Flood Assurance Statement* for additional information. Also, this assessment was prepared with consideration for provincial *Flood Hazard Area Land Use Management Guidelines*[2] and SRD *Floodplain Management Bylaw No. 2782, 2005*.[3]

2.0 COVENANT REVIEW

a. As part of our assessment, we have performed a title search for the Property. At the time of this Report, there were no covenants registered to the title of the Property.

•••

3.0 SITE CONDITIONS

3.1 Physical Setting

a. The Property is in the community of Oyster Bay and within the jurisdiction of the SRD.

b. The Property is located on the northeast side of and accessed by Island Highway South which runs in a northwest-southeast orientation.

c. The Property is zoned as Country Residential Four (CR-4).[4,5] It is surrounded by similar CR-4 properties. *Figure 3.1* below shows the Property location with 2023 air photo.



Figure 3.1: Property location (from SRD *uMapIt*[5]).

3.2 Terrain and Features

a. The 0.12-hectare (0.29-acre)[5] Property is currently developed with a one [1]-storey single-family residence which was built in 1949.[6] A wood deck extends off the northeast oceanside of the residence.

b. Air photos from the CoCR *Air Photo History Map*[7] were reviewed and show the Property and adjacent shore mostly unchanged from 2002 to present day; the 2002 air photo was the earliest air photo in the collection to capture the Oyster Bay area.

c. The terrain of the Property showed a gentle sloping between 3° (23H:1V) to 8° (7H:1V) from Island Highway South to the shoreline at the northeast property boundary.

d. Vegetation within the Property consisted of mature coniferous and deciduous trees, grass lawn, and some ornamental bushes.

3.3 Adjacent Foreshore Conditions

a. The Property meets the shore of the Strait of Georgia at the northeast.

b. Developed residential oceanfront properties along this stretch of beach have employed shoreline protection structures (e.g. rock revetments or seawalls) to resist marine erosion. As the shoreline protection structures were likely built at or inland of the PNB, the PNB is estimated as the toe of the shoreline protection structures.

c. A segmental lock block seawall, about 1.2m tall has been installed at the boundary with the Strait of Georgia across the width of the Property. The lock block wall abuts rock revetments at both the northwest and southeast ends of its alignment.

d. The beach consists of a natural cobble-pebble beach shoreline. The beach was sloped at 7° (8H:1V) for approximately 15m H from the toe of the lock block seawall, then flattened to 2.2° (26H:1V) for more than 45m H; see *Photo 3.3* below showing shoreline conditions.



Photo 3.3: Northeast-facing beach conditions northeast of the Property, looking northwest, as observed December 17, 2024.

3.4 Regional Geology and Aquifers

a. Surficial geology mapping for the area is classified as Capilano Sediments consisting of sand, pebbly sand, gravel, sandy gravel in spits, bars, etc. marine (including glacio-marine) deposits up to 9m thick, possibly underlain by clay.[8]

b. Review of groundwater wells and aquifers in the *BC Water Resources Atlas*[9] indicates that Aquifer 411 and Aquifer 847 have been mapped to the area. Aquifer 847, named *Quinsam to Stories Beach*, is a sand and gravel layer associated with the Cowichan Head Formation. It is identified as a confined aquifer. Aquifer 411 is attributed to the fractured sedimentary bedrock. Wells have been mapped to the area though much of the older data and location reliability is fair to poor. The wells generally agree with the surficial mapping – sand and gravel deposits were found at surface, underlain by stoney clay, till/ hardpan, and/or sedimentary bedrock.

c. Bedrock geology for the area is classified as Upper Cretaceous Nanaimo Group Undivided Sedimentary Rocks.[10] The strata of the Nanaimo Group formation in the Comox/Georgia basin consists of alternating succession of shales, sandstones, conglomerates, and some coal.[11] Surficial geology mapping indicated bedrock outcrops along the shoreline in both northwest and southeast directions from the Property.[8] Based on well records in the area, depth to bedrock at the Property is estimated to be 5m to 20m BGS.

3.5 Soil Conditions

a. A shallow (1.0m depth BGS) test hole was hand dug adjacent to the north corner of the existing wood deck to investigate the near surface.

b. In general, the near surface soil conditions as observed in the Property are consistent with published surficial geology mapping.

c. Soil encountered in the hand dug hole consisted of:

   i. 0.0m to 0.4m: SAND, and ORGANICS (grass, rootlets), some silt, soft, dark brown, damp – sod layer; underlain by,

   ii. 0.4m to 1.0m: SAND, compact, grey, damp.

   The hole was terminated at the length of the shovel.

d. We expect these upper coarse-grained soils to be underlain by dense, stoney clay, glacial till, and/or sedimentary bedrock at depth.

e. Based on existing site grades we also expect there may be localized areas of fill or disturbed soil. We do not expect the presence of fill materials to have a detrimental impact on the proposed development, and any encountered fill or disturbed soil can be managed by field recommendations as part of the geotechnical assurance services during construction.

3.6 Groundwater Conditions

a. The hand dug hole did not encounter groundwater and no ponding water was seen at surface.

b. Groundwater levels are expected to be tidally influenced. Saltwater intrusion may be encountered below the freshwater unit. Groundwater levels can be expected to fluctuate with cycles of precipitation. Groundwater conditions at other times and locations can differ from those observed at the time of our assessment.

c. If groundwater flows or conditions are different than those encountered during the field investigations, additional measures may be required during construction. If unanticipated conditions are encountered contact the Geotechnical Engineer for review.

4.0 FLOOD HAZARD REVIEW

4.1 Vertical Datum

a. There are currently two vertical datums being used in Canada, the older CGVD28 and the newer CGVD2013. The FCL and elevations presented in this Report are in terms of CGVD2013, unless otherwise stated.

b. Conversion between CGVD28 and CGVD2013 was completed for this specific site using the online GPS·H calculator by Natural Resources Canada.[12] If needed, the conversion is calculated as:

$$z \text{ CGVD28} = z \text{ CGVD2013} - dH = z \text{ CGVD2013} - 0.125\text{m}$$

where dH is a localized offset in metres.

c. The building designer and construction contractor should be aware of the reference vertical datum to ensure the correct FCL is being used for the project.

4.2 Watercourses and Shore Characteristics

a. LEA understands that the proposed single-family residence is within 100m horizontal from the PNB of the Strait of Georgia (i.e. the sea), which triggers the application of the SRD *Floodplain Management Bylaw*.[3]

b. Mayfly Creek passes through a corrugated steel pipe culvert under the Island Highway approximately 240m to the southeast, then the creek turns northwestward at the beach and runs parallel to the shoreline for 50m where it drains to the Strait of Georgia. The orientation of the creek parallel to the shore with buildup of material on its south side is evidence of predominant wave approach from the east/ southeast and the northwestward littoral drift. Mayfly Creek originates from streams that feed the Mayfly Creek wetlands to the southwest. Hydrometric data is currently not available for Mayfly Creek.[13] However, the oceanic flood hazard is greater than the flood hazard of Mayfly Creek and has a higher FCL than the FCL for Mayfly Creek. Therefore, the flood hazard from Mayfly Creek is addressed by addressing the ocean flood

level.

c. Farther south (~1km from Property) a spit and lagoon has formed at Oyster Bay Shoreline Park. Its history dates back to the 1930s and 1940s when a relief then logging camp was set up to employ people during the depression. A causeway was built and at the same time a breakwater was built of old dismantled ships, then later with rock to protect a log booming operation from the predominant wave attack from the southeast. Sediment has progressively accumulated at Oyster Bay Shoreline Park since the log booming operation was built. This recent accreting land formation continues to protect Oyster Bay from the strongest winds and waves from the southeast as evidence by the observed calm waters and shallow bathymetry of the bay.

4.3 Bylaw Requirements

a. Upon review of SRD *Floodplain Management Bylaw No. 2782, 2005*,[3] we confirm the following applicable items:

   i. *"301 Floodplain Designation 1) The following land is designated as floodplain: … b) Land lower than the flood construction levels specified in Section 302; c) Land within the floodplain setbacks specified in Section 303.*

   ii. *302 Flood Construction Levels … 2) Where Floodplain Mapping is NOT available, the following elevations are specified as flood construction levels: ... f) 1.5 metres above the natural boundary of any other watercourse; g) 1.5 metres above the natural boundary of the sea...*

   iii. *303 Floodplain Setbacks 1) The following distances are specified as floodplain setbacks: … c) 15.0 metres from the natural boundary of any other watercourse; d) 15.0 metres from the natural boundary of the sea…"*

b. Additionally, the SRD *Floodplain Management Bylaw*[3] prescribes construction requirements and provides for site specific exemptions including additions that are less than 25% of the ground floor area but no closer to the water than existing.

5.0 COASTAL FLOOD HAZARD ANALYSIS

5.1 General

a. Provincial *Flood Hazard Area Land Use Guidelines*[2] recommend two methods, the Combined Method or the Probabilistic Method, to determine a coastal FCL that incorporates the issue of sea level rise and other mitigating factors. The Probabilistic Method was used for this site-specific assessment, where the water level along the shoreline is based on a probabilistic analysis of high tide and storm surge. A target 0.5% AEP (i.e., 200-year return period) coastal storm event was adopted for this assessment following the provincial

guidelines.[2]

b. The recommended FCL was selected based on the following LEA site-specific analysis.

c. A search at the time of writing this Report did not find regional coastal floodplain mapping that covers this area.

5.2 Tides

a. The Property is located nearest the tidal station at Mitlenatch (Station No. 07895) – on Mitlenatch Island. A summary of current published[14] tide levels is presented in *Table 5.2* below.

Table 5.2: Summary of Mitlenatch tide levels, Station No. 07895.

Tidal Condition	Tidal Water Level (CD)
Higher High Water Large Tide (HHWLT)	5.2 m
Higher High Water Mean Tide (HHWMT)	4.60 m
High Water Level (HWL)	4.33 m
Mean Water Level (MWL)	3.2 m
Low Water Level (LWL)	2.14 m
Lower Low Water Mean Tide (LLWMT)	1.27 m
Lower Low Water Large Tide (LLWLT)	0.04 m

b. The tidal levels published by Fisheries and Oceans Canada are referenced from a local low-water surface or a low-water datum called Chart Datum (CD). Subtracting the Mean Water Level from the CD will approximately convert the tidal levels to CGVD28. This conversion is generally accepted to be within the tolerance of error for FCL determination.

c. The design tidal elevation is calculated as follows:

HHWLT 5.2m CD – MWL 3.2m CD

= HHWLT 2.0m CGVD28

= HHWLT 2.13m CGVD2013

5.3 Sea Level Rise

a. Information prepared by the provincial government in 2011[15,16] regarding policy for coastal floodplain mapping assumes a 1.0m rise in sea level over a 100-year span from the Year 2000 to 2100, see *Figure 5.3* below.

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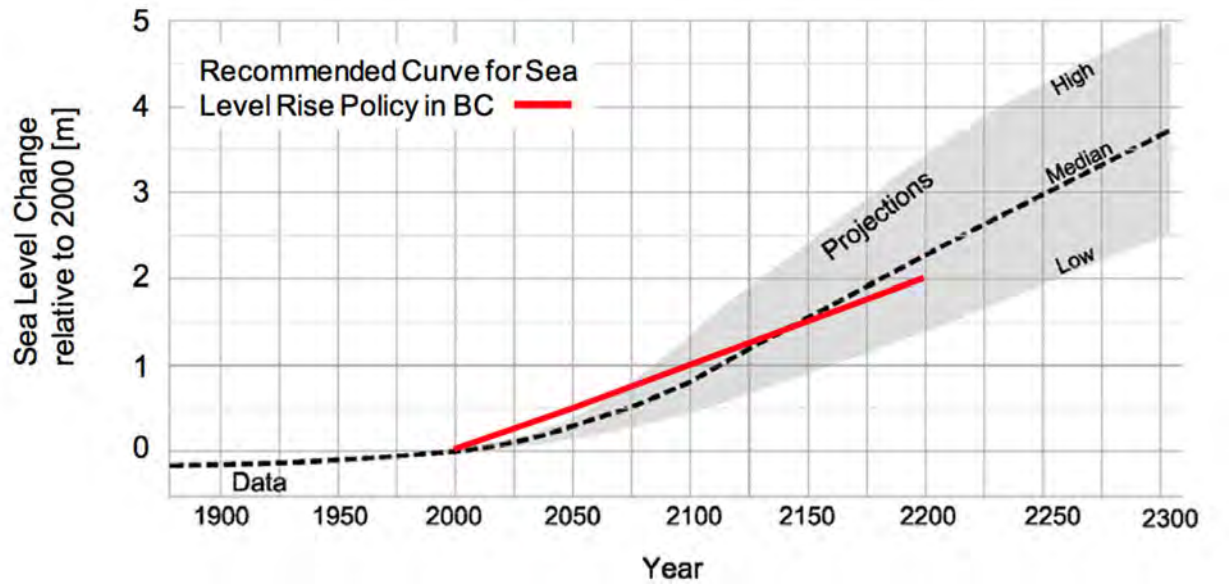


Figure 5.3: Recommended SLR curve for planning and design in BC.

b. In accordance with current guidelines 1.0 cm/year of SLR to the Year 2100 was included in our assessment, for a total SLR of 0.75m.

c. The assumed amount of SLR was based on information available at the time of their study and will be revaluated in the future as more information becomes available. Forecasting this far into the future carries significant uncertainties. Monitoring changes of SLR is beyond the scope of this Report. We expect local authorities to remain informed in order to adjust their flood management plans/guidelines accordingly.

5.4 Regional Adjustment – Isostatic Rebound

a. Future sea level is also affected by vertical land movement due to changes in the regional uplift or subsidence of the land surface (i.e., isotropic rebound, tectonic shifting, etc.). Areas where the land elevation is increasing (uplift/rebound) should decrease the allowance for SLR, while areas where the land elevation is decreasing (subsidence) should increase the allowance for SLR. Some refer to the combined effects of SLR and RA as Relative Sea Level Rise (RSLR).

b. Based on current information, this area of eastern Vancouver Island is rebounding at a rate of 3.0mm/year, as taken from an average of the Little River Tide Gauge Station No. 07993 and the Campbell River Tide Gauge Station No. 08074.[15,16] Therefore, the land is expected to rebound by 0.27m to the Year 2100. A rebound value of -0.27m was included in our assessment.

5.5 Storm Surge

a. Sea levels along the BC coast are not only affected by astronomical tide cycles, but also by storms. Storms may affect water levels due to changes in atmospheric pressure, strong winds acting on the water surface, and changes in ocean currents or temperature. The combined effect of all these factors is termed storm

surge (SS).

b. Storm surge can be estimated by an extreme value analysis of the difference between measured water level and predicted tide level. In absence of this information, provincial guidelines[2] provide suggested storm surge values which can be safely used for FCL determination. Based on a 200-year designated storm, the suggested design storm surge for this area of Vancouver Island is 1.25m.

c. However, not all storms occur during an HHWLT tide (king tide). The intent of the Probabilistic Method is to estimate the probability of a large storm occurring during an HHWLT tide. The RDN Coastal Floodplain Mapping Final Report[17] estimates the probability of a large storm occurring during an HHWLT tide is about 1 in 20 (5%) (based on provincial guidelines and preliminary analysis by Cascadia Coastal Research Ltd.). Therefore, the designated storm can be reduced to a more frequent, less intense, 10-year event (i.e., 200-year x 5%) when calculating an FCL that coincides with an HHWLT tide. The report provides a storm surge value of 0.92m for the coincident 10-year storm event.

5.6 Wave Effect

a. Breaking waves during the design storm event must also be considered, as breaking waves may further increase the depth of water along the shoreline as well as increase the risk of runup and/or overtopping leading to flooding.

b. Wave effect is site specific and dependent on local wind conditions, bathymetry, the presence of shoreline structures (e.g., natural banks or slopes, revetments, dikes, seawalls, etc.), as well as water levels at the time of the designated storm, which all contribute to the estimated wave runup.

c. The Property consists of a gently sloping foreshore beach with a shoreline protected from erosion by a lock block seawall structure, therefore wave runup was estimated using 1D calculation methods described in the European Overtopping Manual.[18] By applying these methods, wave runup is calculated in terms of a 2% exceedance value ($R_{u2\%}$).

d. Water levels along the shoreline were taken as the sum of the coincident 10-year storm surge, SLR, and regional rebound.

e. Deep water wave heights were based on 31 years (1992 to 2022) of wave data collected from the Fisheries and Oceans Canada, Halibut Bank buoy, located in the Strait of Georgia. The data was first analyzed to discount any data entries flagged as erroneous. Maximum wave heights for each year were plotted, then extrapolated to the designated storm event (i.e., 10-year coincident storm event).

f. Inland and foreshore slopes were determined for this specific Property based on available contour information, topographic surveys, and on-site measurements.

g. The wave runup analysis considered influence factors for surface roughness and oblique wave attack. Other influence factors were conservatively ignored.

h. A summary of design input values and estimated wave runup are presented in *Table 5.6* below.

Table 5.6: Summary of Estimated Wave Runup.

Significant Wave Height	Peak Wave Period	Still Water Level	Average Foreshore Slope	Slope of Structure	Wave Runup ($R_{u2\%}$)
2.87m	6.81 s	0.61m	16.5H:1V	89°	1.12m

5.7 Freeboard

a. A nominal FB value is typically added when calculating an FCL. The FB value accounts for uncertainties associated with value estimations used.

b. Provincial guidelines recommend a minimum freeboard value of 0.60m for the Probabilistic Method.[2]

5.8 Probabilistic Method FCL

a. The variables discussed in *Sections 5.2 to 5.7* are added together to determine an adequate ocean FCL, presented in the following *Table 5.8*.

Table 5.8: Ocean FCL determination using the "Probabilistic Method".

FCL Component	Description	Value (m)
HHWLT	Higher High Water Large Tide (CGVD2013) *19 year HHW average defined by CHS	2.13
SLR	Sea Level Rise (to year 2100)	0.75
RA	Regional Adjustment (to year 2100) *negative value indicates uplift is occurring	-0.27
SS	Storm Surge (10-year storm)	0.92
WE	Wave Effect (10-year storm)	1.12
FB	Freeboard	0.60
FCL	**Calculated CGVD2013 FCL**	**5.25**

6.0 FLOOD HAZARD RECOMMENDATIONS

6.1 Coastal FCL

a. Based on our review, as detailed in *Section 5.0* above, LEA recommends using the site-specific coastal flood level of 5.25m CGVD2013 as the minimum FCL for the proposed development. This minimum FCL elevation is typically defined as the top of the finished concrete slab-on-grade or the underside of wooden floor joists of flooring systems that are to be kept dry.

b. To achieve the FCL, we recommend structural methods, such as increasing the height of the foundation walls above suitable bearing grade.

c. Building materials that are resistant to damage by flood water should be used up to the FCL, at a minimum.

6.2 Coastal Setback

a. Floodplain setbacks are primarily established to keep development away from areas of potential erosion and to avoid restricting the floodway. They also help to protect structures from debris tossed on shore during storm events and to reduce weathering effects from salt spray.

b. Provincial guidelines[2] state that "*The building setback should be at least the greater of:*

   i. 15 m from the future estimated Natural Boundary of the sea at Year 2100, or

   ii. landward of the location where the natural ground elevation contour is equivalent to the Year 2100 FCL".

c. We understand that the future estimated Year 2100 NB would be the PNB elevation plus RSLR (SLR ± RA) to the Year 2100. The PNB elevation at the shore under consideration was measured at 2.92m CGVD2013 based on the attached JEA survey. The resulting Year 2100 NB is calculated here:

   2.92m CGVD2013 PNB + 0.75m SLR – 0.27m RA

   = 3.4m CGVD2013 Year 2100 NB

   This Year 2100 NB elevation contour appears to meet the existing lock block shoreline protection structures and/or the berm terrain immediately landward of the existing shoreline protection structures northeast of the Property and should be confirmed during construction.

d. The topographic elevation high that currently exists on the Property is at 5.1m CGVD2013 and the location where the Year 2100 FCL elevation of 5.25m CGVD2013 meets continuous ground elevation just beyond the Property to the southwest – on the northeast bank of the Island Highway as can be seen on the JEA survey. The 5.25m CGVD2013 FCL elevation contour is the more restrictive setback requirement; it is clear that the FCL setback criteria cannot be achieved within the Property considering the natural ground that currently exists. Following the SRD *Floodplain Management Bylaw,*[3] any proposed building site at the Property is within the designated floodplain and a site-specific floodplain setback relaxation or exemption will be required.

e. LEA recommends a reduced coastal setback defined as 15m from the estimated Year 2100 NB which is defined as the 3.4m CGVD2013 topographic contour northeast of the Property, as well as the recommendations contained in this Report; see *Figure 6.2* showing setback marked on the JEA survey.

f. Site specific relaxations or exemptions require the Property owner to acknowledge and accept that no Disaster Financial Assistance Funding is available for the building or its contents. No structures built within a floodplain can receive this kind of funding.

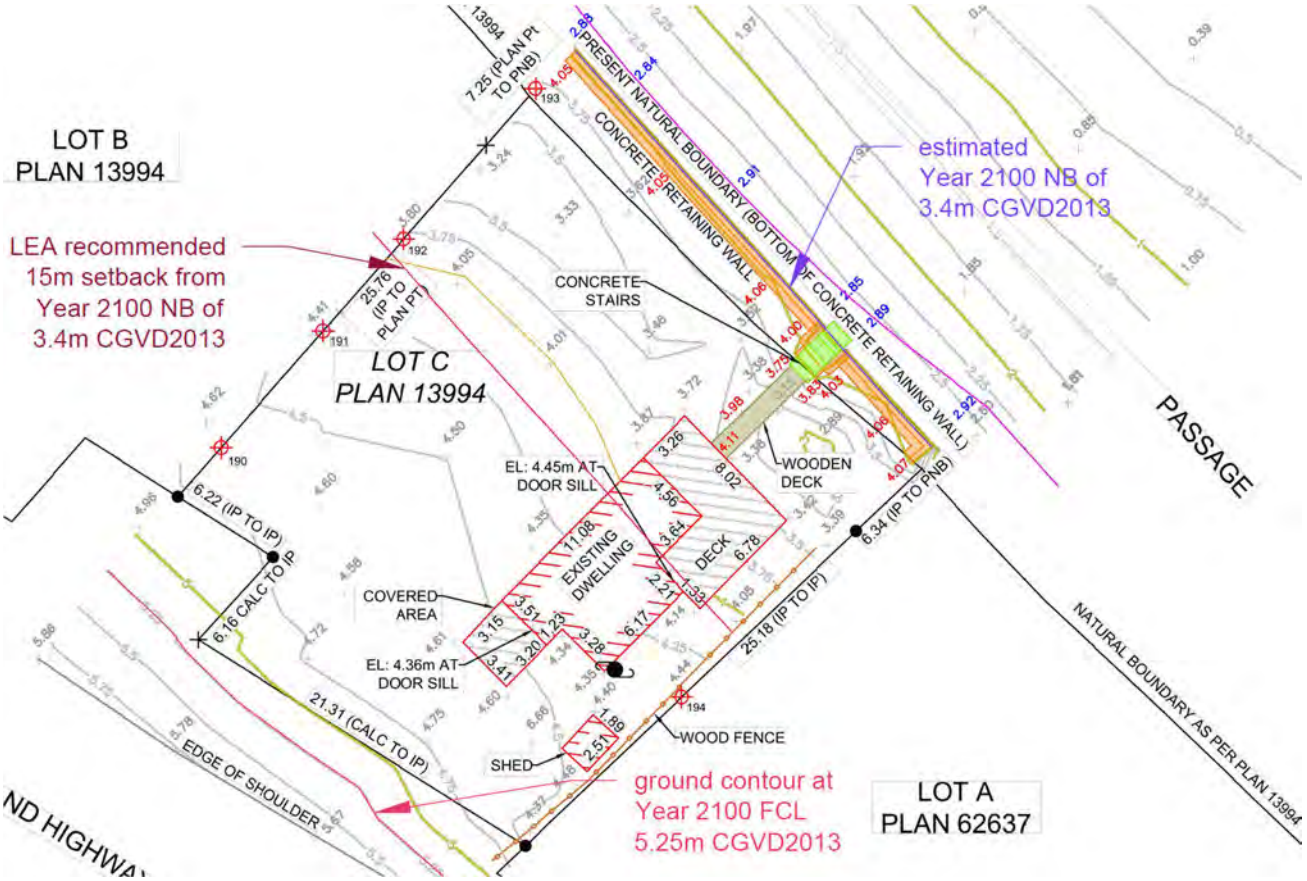


Figure 6.2: LEA recommended setback in plan, marked on JEA survey.

6.3 Floodwater and Inundation

a. The recommended coastal FCL and setback applies to any Habitable Area; defined as any room or space within a building or structure which can be used for human occupancy, commercial sales, or the storage of goods, possessions, or equipment (including furnaces) which would be subject to damage if flooded.

b. The FCL establishes the minimum elevation of the underside of a wooden floor system or top of concrete slab for any Habitable Area. During construction, all footing and floor elevations shall be confirmed by qualified survey personnel to ensure the finished floor grade is at or above the recommended minimum FCL geodetic elevation.

c. Provided any construction within the Property satisfies the minimum recommended FCL, we do not anticipate any damage to structures as a result of floodwater. However, any areas constructed below the recommended FCL, such as crawlspaces or garages, could be subject to flooding during less than design flood events. Following best construction practices, areas below the FCL should not be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.

6.4 Landfill and Site Grading

a. If structural fill materials are used for foundation support, at the discretion of the SRD, and include structural fill placed above existing site grades, further assessment may be required. Structural fill placed above existing grades may require protective measures from scour, erosion from flood flows, ice, and other debris.

b. We recommend the placement and compaction of any structural fill as described in *Section 8.2* of this Report.

c. Engineered fill should be placed around the foundation walls with a slope no greater than 2H:1V.

d. Perimeter yard areas should be sloped to direct potential flood water away from the proposed residence. Every effort must be made to not direct surface water to neighbouring properties.

6.5 Shoreline Protection

a. Sediment supplied from Mayfly Creek and Oyster River farther to the southeast likely contribute to sediment deposition in this area Oyster Bay.

b. The shoreline within the Property limits is currently defined by an existing lock block seawall structure. We assume the seawall was initially constructed to mitigate marine erosion and to maintain the alignment of the NB.

c. During our field review, the shoreline and seawall were inspected for signs of active erosion or deterioration, and none were observed. We expect the seawall will provide adequate marine erosion protection over the life of the proposed development provided it is maintained. No further shoreline protection measures are required at this time.

d. The existing seawall should be maintained in its current functioning condition. The seawall should not be removed or altered without engineering input.

e. It should be acknowledged that intertidal zones consisting of sand and gravel are typically suspectable to erosion or accretion by wave action and flooding, causing the alignment of the NB to slowly shift over time. Furthermore, SLR will likely expose the shoreline to increased water depths and wave action in the future, that may result in accelerated erosion of the foreshore area and will likely shift the NB inland over time.

f. The vertical nature of the seawall will reflect waves. SLR will expose the seawall to increased wave energy impacts and salt spray. Considering the calculated FCL is above the top of seawall elevation, SLR may gradually expose the seawall to possible overtopping occurrences which could compromise the seawall.

g. Evaluation of the rate and/or extent of potential future erosion along the foreshore area of the Property is beyond the scope of this Report. We recommend the condition of the seawall structure and alignment of

the NB be regularly monitored by the current and future property owners. Any notable scour, inland erosion caused by overtopping waves, or regression of the NB, specifically following a significant storm event, winter season, or otherwise, may jeopardize the integrity of the seawall and would require a reassessment of the foreshore conditions.

7.0 DESIGN PHASE

7.1 Foundation Design and Construction

a. Prior to construction, the new building area should be stripped to remove all unsuitable materials to provide an undisturbed natural subgrade for the footing support.

b. Foundation loads should be supported on natural undisturbed mineral soil or structural fill, approved for use as a bearing stratum by the Geotechnical Engineer, and may be designed using the following values. These values assume a minimum 0.5m footing embedment depth.

   i. For foundations constructed on non-cohesive soils classified as compact to dense naturally deposited inorganic sand or gravel, an SLS bearing pressure of 100 kPa and a ULS bearing pressure of 150 kPa may be used for design purposes.

   ii. For foundations constructed on undisturbed dense glacial till, or a minimum thickness of 0.65m of structural fill as outlined in *Section 8.2* of this Report, an SLS bearing pressure of 150 kPa and a ULS bearing pressure of 225 kPa may be used for design purposes.

c. Exterior footings should be provided with a minimum 0.5m depth of ground cover for frost protection purposes.

d. The Geotechnical Engineer should evaluate subsurface conditions at the time of construction to confirm that soil and/or groundwater conditions do not materially differ to those observed and inferred during the site reconnaissance and that footings are based on appropriate and properly prepared founding material.

7.2 Seismic Criteria

a. Based on the BCBC 2024, Division B, Part 4, Table 4.1.8.4.-B, *Site Classes, S, for Site Designation X_s*, the inferred subsurface conditions would be “Site Class D” (Stiff soil).

b. Please refer to the attached site-specific Seismic Hazard Calculation, from Natural Resources Canada.

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8.0 CONSTRUCTION PHASE

8.1 General Excavation – Future Building Sites

a. Prior to construction, all unsuitable materials should be removed to provide a suitable base of support. Unsuitable materials include any non-mineral material such as vegetation, topsoil, peat, fill, or other materials containing organic matter, as well as any soft, loose, or disturbed soils.

b. Prior to placement of concrete footings, any bearing soils that have been softened, loosened, or otherwise disturbed during construction, should be removed or else compacted following our recommendations for structural fill. Compaction will only be feasible if the soil has suitable moisture content and if there is access to heavy compaction equipment. If no structural fill is placed, a smooth-bladed clean up bucket should be used to finish the excavation.

c. Groundwater entering any excavations should be controlled with a perimeter ditch located just outside of the building areas, conveying water away from the excavation.

d. Trench and bulk excavation work should conform to Occupational Health and Safety guidelines. In general, excavations into fills, silt, clay, or sands at depths greater than 1.2m may be subject to sloughing or caving that would be considered hazardous. Excavations deeper than 1.2m should be reviewed in the field by the Geotechnical Engineer. For preliminary design purposes, we expect the near surface soils may be stable at a 3H:4V slope configuration, assuming no seepage. Dewatering should be implemented as needed.

8.2 Structural Fill

a. Where fill is required to raise areas that will support buildings, slabs, or pavements, structural fill should be used. The Geotechnical Engineer should first approve the exposed subgrade in fill areas, to confirm the removal of all unsuitable materials.

b. Structural fill should be inorganic sand and gravel. If structural fill placement is to be carried out in the wet season, material with a fines content limited to 5% passing the 75µm sieve should be used, as such a material will not be overly sensitive to moisture, allowing compaction during rainy periods of weather.

c. Structural fill should be compacted to a minimum of 95% of Modified Proctor maximum dry density (ASTM D1557) in foundation and floor slab areas, as well as in paved roadway and parking areas.

d. Structural fill under foundations, roadways, and pavements should include the zone defined by a plane extending down and outward a minimum 0.5m from the outer edge of the foundation at an angle of 45° from horizontal to ensure adequate subjacent support. This support zone is shown below in *Figure 8.2*.

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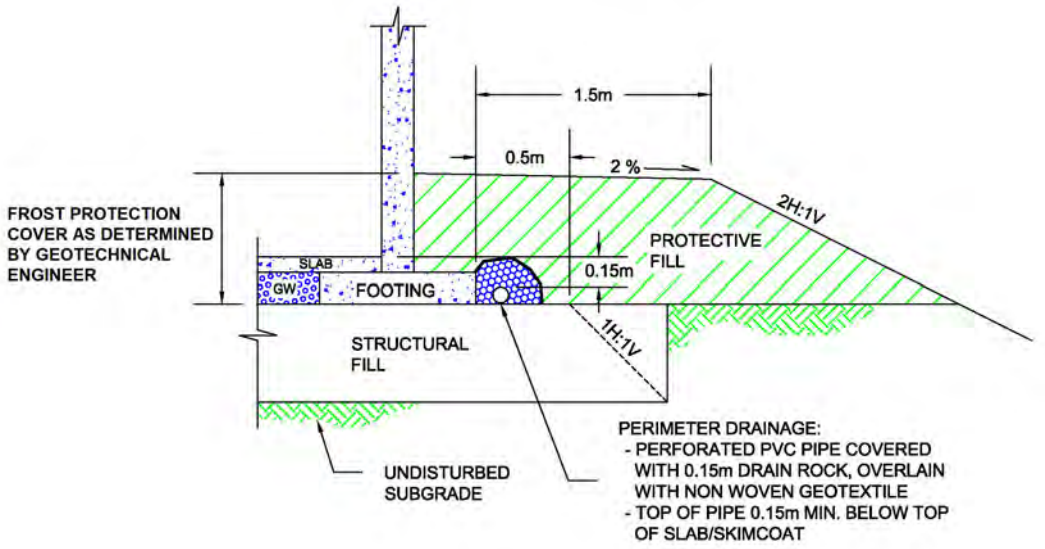


Figure 8.2: Typical section, structural fill.

e. Compaction of fill should include moisture conditioning as needed to bring the soil to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.

f. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a "jumping-jack," 200mm for a small roller, and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.

g. It should be emphasized that the long-term performance of buildings, slabs, and pavements is highly dependent on the correct placement and compaction of underlying structural fills. Consequently, we recommend that structural fill be observed and approved by the Geotechnical Engineer. This would include approval of the proposed fill materials and performing a suitable program of compaction testing during construction.

9.0 CONCLUSIONS

9.1 Local Government Conformance Statement

a. From a geotechnical point of view, and provided the recommendations in this Report are followed, the land is considered safe and suitable for the use intended (defined for the purposes of this Report as a new single-family residence and/or residential addition of conventional design and construction methods). Additionally, for floodplain bylaw exemption, as required by Section 524 of the *Local Government Act*, "the land may be used safely for the use intended" (new single-family residence and/or residential addition). This conclusion considers the probability of a geotechnical failure resulting in property damage of less than:

i. 0.5% AEP coastal flood event, including SLR to the Year 2100;

ii. 2% in 50 years for geotechnical hazards due to seismic events, including slope stability; and

iii. 10% in 50 years for all other geotechnical hazards.

9.2 Geotechnical and Quality Assurance Statement

a. The SRD may request a Geotechnical Engineer to provide construction phase professional assurance services. Geotechnical Assurance services include review of the geotechnical components of the plans and supporting documents, and responsibility for field reviews of these components during construction.

10.0 CLOSURE

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

Respectfully Submitted,
Lewkowich Engineering Associates Ltd.
Permit to Practice Number: 1001802

Reviewed By,

2025-04-04

Joe Brunelle, P.Eng.
Geotechnical Engineer

Louis Chapdelaine, P.Geo.
Project Geoscientist

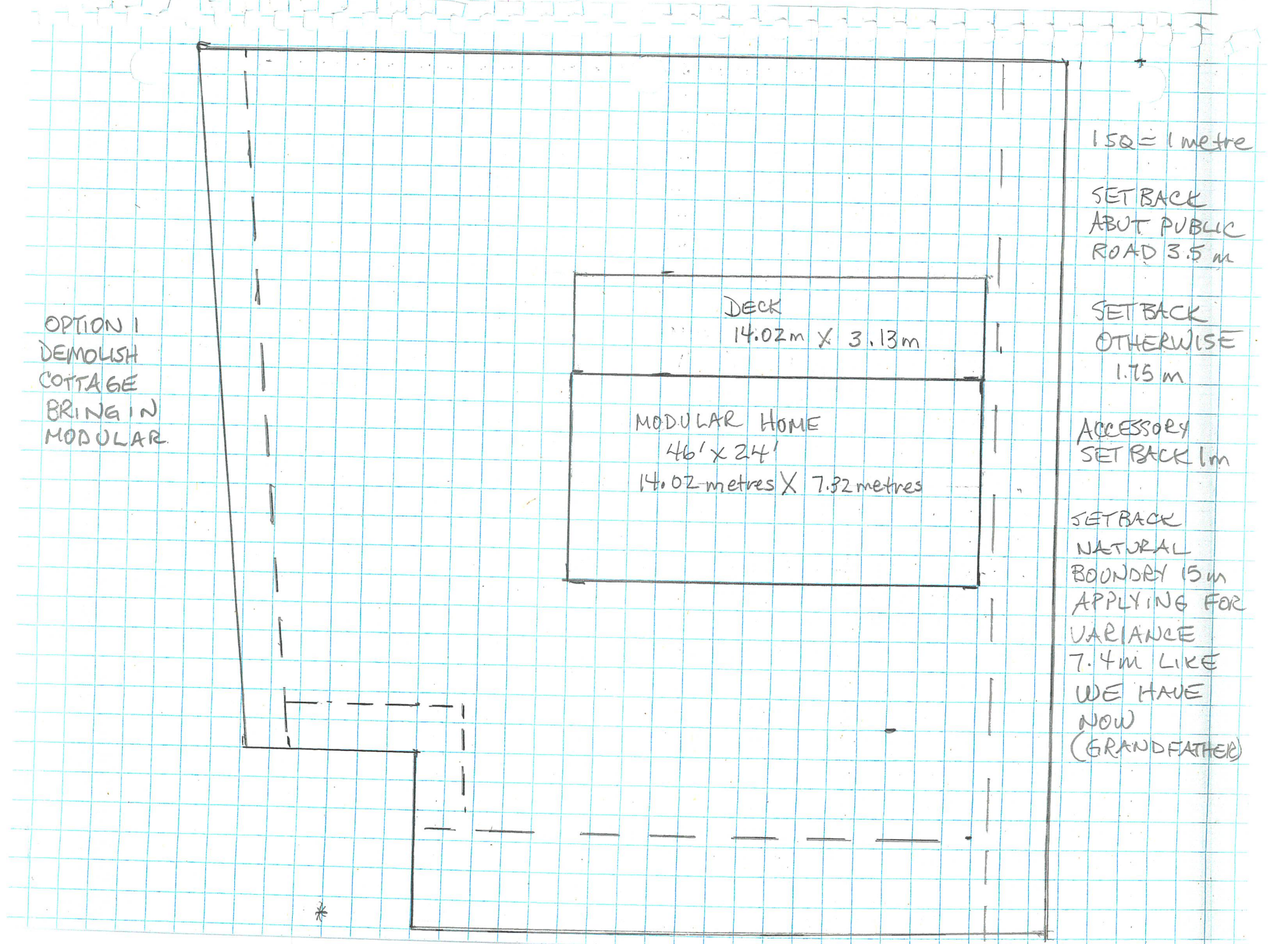
11.0 ATTACHMENTS

1. Client, development sketch titled *Option 1 – Demolish Existing and New Modular Single-Family Residence*.
2. Client, development sketch titled *Option 2 – Renovation with Addition to Existing Single-Family Residence*.
3. JEA, survey titled *Site Plan – Lot C, Section 35, Township 4, Comox District, Plan 13994*, file: 121269, dated February 10, 2025.
4. Natural Resources Canada, 2020 National Building Code of Canada Seismic Hazard Tool, Site: Lat. 49.903°, Lon. 125.167°, accessed March 27, 2025.
5. EGBC, *Flood Assurance Statement*, completed April 4, 2025.[1]

12.0 REFERENCES

1. Engineers and Geoscientists British Columbia, professional practice guidelines titled *Legislated Flood Assessments in a Changing Climate in BC*, version 2.1, updated August 28, 2018.

2. British Columbia Ministry of Water, Land and Air Protection, report titled *Flood Hazard Area Land Use Management Guidelines*, amended by British Columbia Ministry of Forest, Lands, Natural Resource Operations and Rural Development, January 1, 2018.
3. Strathcona Regional District, Bylaw No. 2782, titled *Floodplain Management Bylaw, 2005*, amended June 22, 2017.
4. Strathcona Regional District, Bylaw No. 1404, titled *Campbell River Area Zoning Bylaw, 1991*, amended October 30, 2024.
5. Strathcona Regional District, online map viewer *uMapIt*, 49.903N 125.167W, <https://strathconard.maps.arcgis.com/apps/webappviewer/index.html?id=3f13d8e946bb401d9fb17d90246af4b1>, accessed March 18, 2025.
6. BC Assessment, address *4129 Island Hwy S Campbell River V9H 1E9*, <https://www.bcassessment.ca//Property/Info/QTAwMDBLU01XMw==>, accessed January 21, 2025.
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10. British Columbia Geological Survey, online map viewer *MapPlace 2*, Bedrock Geology, 49.903N 125.167W, <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mapplace>, accessed March 18, 2025.
11. Bednarski JM, Geological Survey of Canada, titled *Surficial Geology and Pleistocene stratigraphy from Deep Bay to Nanoose Harbour, Vancouver Island, British Columbia*, open file 7681, dated 2015.
12. Natural Resources Canada, webpage titled *GPS·H*, 49.903N 125.167W, <https://webapp.csrs-scrs.nrcan-rncan.gc.ca/geod/tools-outils/gpsh.php?locale=en#>, accessed March 26, 2025.
13. Government of Canada, online map viewer *Real-Time Hydrometric Data Map Search*, <https://wateroffice.ec.gc.ca/map/index_e.html?type=real_time>, accessed March 26, 2025.
14. Government of Canada, website titled *Mitlenatch – 07895*, <https://tides.gc.ca/en/stations/07895>, accessed March 26, 2025.
15. Ausenco Sandwell, prepared for British Columbia Ministry of Environment, 3 reports titled *Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use*, dated January 27, 2011.
16. Kerr Wood Leidal Associates Ltd., prepared for British Columbia Ministry of Forests, Lands and Natural Resource Operations, report titled *Coastal Floodplain Mapping – Guidelines and Specifications*, Final Report, file number 2785.001, dated June 2011.
17. Ebbwater Consulting Inc., prepared for Regional District of Nanaimo, report titled *Sea Level Rise Adaptation Program Coastal Floodplain Mapping,* Final Report, Revision 1, project number P180, dated October 21, 2021.
18. Van der Meer JW, Allsop NWH, Bruce T, De Rouck J, Kortenhaus A, Pullen T, Schüttrumpf H, Troch P, and Zanuttigh B, titled *EurOtop – Manual on wave overtopping of sea defences and related structures. An overtopping manual largely based on European research, but for worldwide application*, <www.overtopping-manual.com>, second edition, final version, dated December 2018.

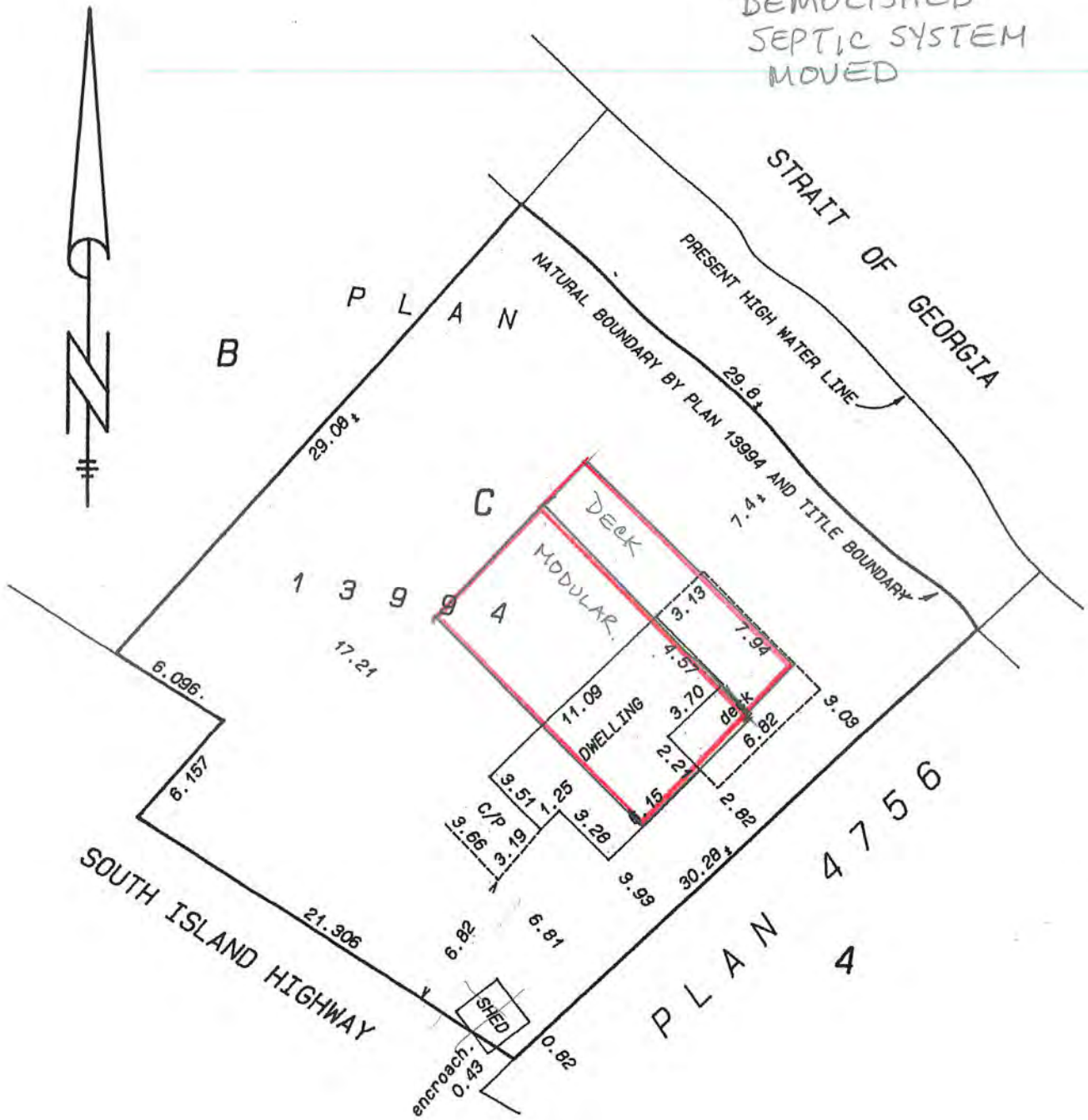

OPTION 1
DEMOLISH
COTTAGE
BRING IN
MODULAR
DECK
14.02m X 3.13m
MODULAR HOME
46' X 24'
14.02 metres X 7.32 metres
1SQ = 1 metre
SETBACK
ABUT PUBLIC
ROAD 3.5 m
SETBACK
OTHERWISE
1.75 m
ACCESSORY
SETBACK 1m
SETBACK
NATURAL
BOUNDRY 15m
APPLYING FOR
VARIANCE
7.4m LIKE
WE HAVE
NOW
(GRANDFATHER)

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

MODULAR HOME
EXISTING COTTAGE
DEMOLISHED
SEPTIC SYSTEM
MOVED



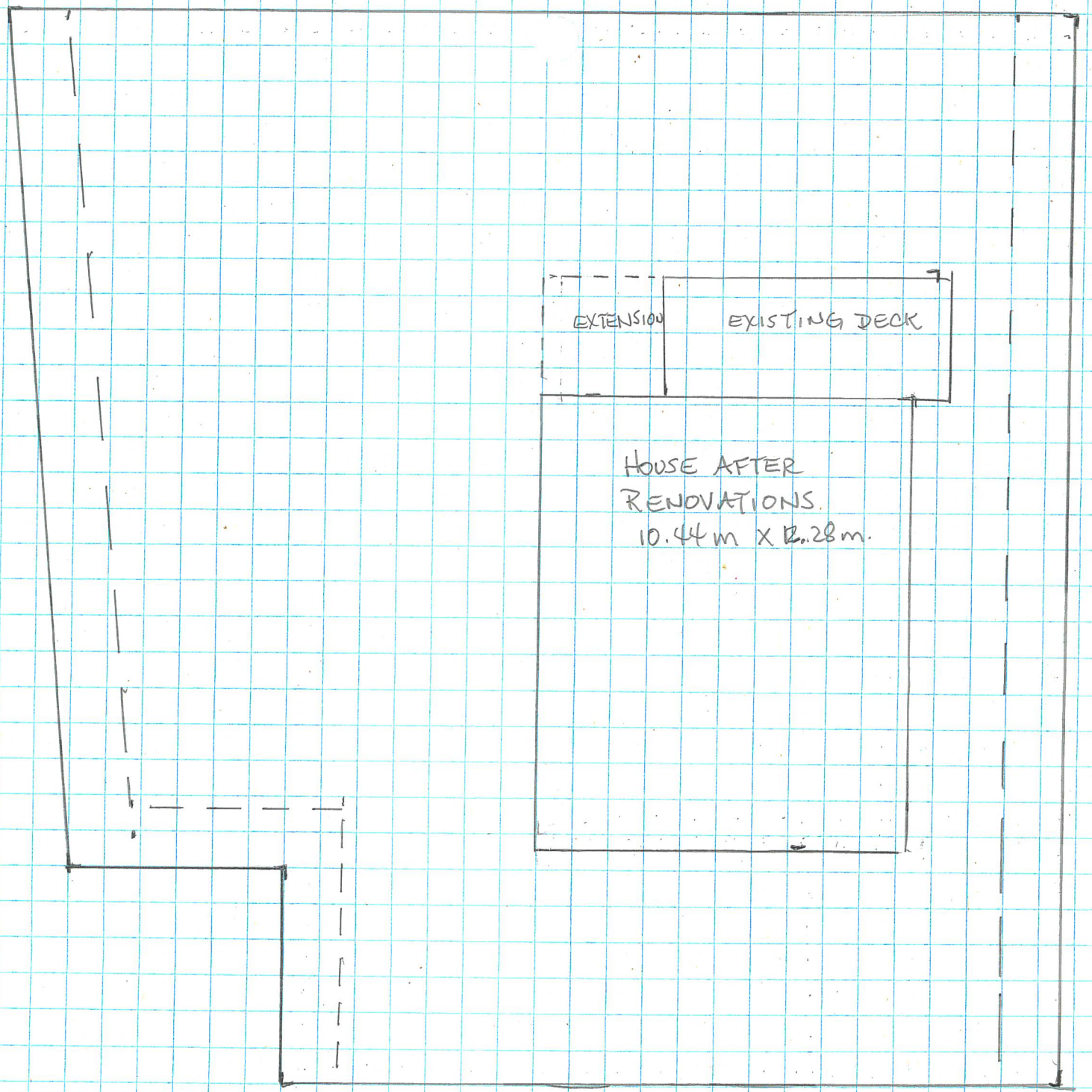
The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

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CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.



OPTION 2
RENOVATE
+ EXPAND
COTTAGE

1 SQ = 1 metre

SETBACK PUBLIC
ROAD 3.5 m
OTHERWISE
SETBACK 1.75 m

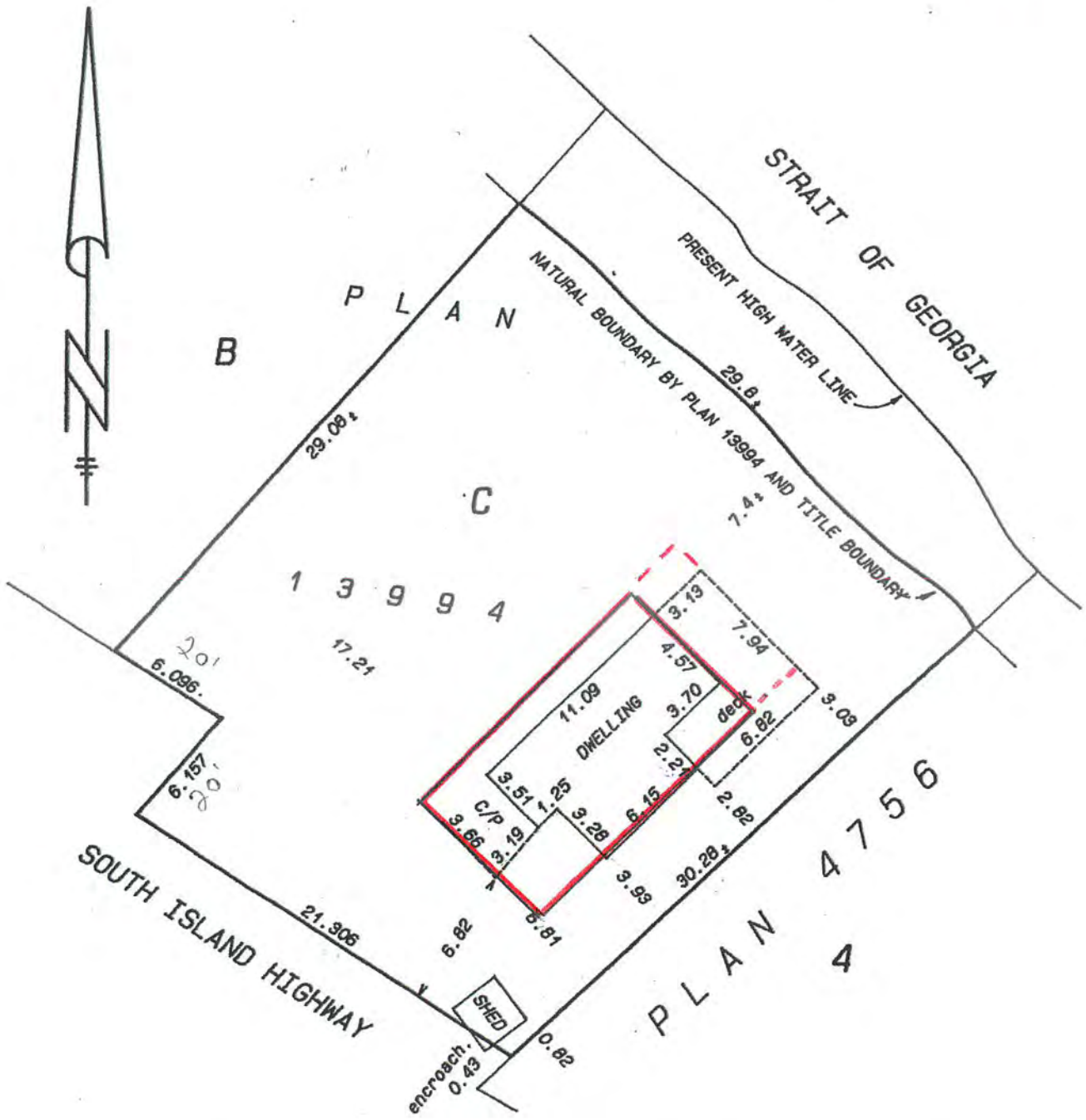
SETBACK FROM
NATURAL
BOUNDARY 15m
APPLYING FOR
VARIANCE
7.4 metre
SETBACK LIKE
WE ALREADY
HAVE.

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

HOME RENOVATION



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HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

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CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

0 5 10 20 30

The intended plot size of this plan is 560mm in width by 432mm in height (C size) when plotted at a scale of 1:300.

This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any matter which would assume same.

This plan is intended for use as a topographic site plan. It is based on Land Title Office records and ties to surrounding survey evidence and does not represent a boundary survey. Critical lot dimensions, lot areas and building setbacks should be confirmed by a legal cadastral survey.

J.E. Anderson & Associates accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decision made, or actions taken based on this document.

Subject to charges, legal notations, and interests shown on: Title No. CB194110 (P.I.D. 000-329-479)

Distances and elevations are in metres

Elevations are geodetic based on control monument 913426
And Referenced to Vertical Datum CGVD 2013

Elevations are at natural grade unless noted otherwise

N

SITE PLAN

DODIE & VIC HODGINS

LOT C, SECTION 35,
TOWNSHIP 4, COMOX DISTRICT
PLAN 13994

ADDRESS : 4129 S. ISLAND HIGHWAY, CAMPBELL RIVER	
PROJECT SURVEYOR : CS	
DRAWN BY : MT/CS	DATE : FEB 10, 2025
OUR FILE : 121269	REVISION : 1st

J.E. ANDERSON & ASSOCIATES
SURVEYORS – ENGINEERS
F-1250 CEDAR STREET,
CAMPBELL RIVER B.C. V9W 2W5
TEL: 250-287-4865
E-MAIL : campbellriver@jeanderson.com
VICTORIA-NANAIMO-PARKSVILLE-CAMPBELL RIVER

R:_Projects\121-269\06\03\DWGs\121269.dwg

LEGEND

- — Denotes Standard Iron Post Found
- — Denotes Utility Pole
- 11.12 — Denotes Typical Spot Elevation
- 11.12 — Denotes Elevation At Toe Of Wall
- 11.12 — Denotes Elevation At Top Of Wall
- 190 — Denotes Stake Set With Corresponding Number (Stakes Additionally Set At All OIP's Found)
- — Denotes Unmonumented Corner



Government of Canada | Gouvernement du Canada

Canada.ca › Natural Resources Canada › Earthquakes Canada

2020 National Building Code of Canada Seismic Hazard Tool

This application provides seismic values for the design of buildings in Canada under Part 4 of the National Building Code of Canada (NBC) 2020 as prescribed in Article 1.1.3.1. of Division B of the NBC 2020.

Seismic Hazard Values

User requested values

Code edition	NBC 2020
Site designation X_S	X_D
Latitude (°)	49.903
Longitude (°)	-125.167

Please select one of the tabs below.

NBC 2020 | Additional Values | Plots | API | Background Information

The 5%-damped spectral acceleration ($S_a(T,X)$, where T is the period, in s, and X is the site designation) and peak ground acceleration (PGA(X)) values are given in units of acceleration due to gravity (g, 9.81 m/s^2). Peak

ground velocity (PGV(X)) values are given in m/s. Probability is expressed in terms of percent exceedance in 50 years. Further information on the calculation of seismic hazard is provided under the *Background Information* tab.

The 2% in 50 year seismic hazard values are provided in accordance with Article 4.1.8.4. of the NBC 2020. The 5%- and 10%-in-50-year values are provided for additional performance checks in accordance with Article 4.1.8.23. of the NBC 2020.

See the *Additional Values* tab for additional seismic hazard values, including values for other site designations, periods, and probabilities not defined in the NBC 2020.

NBC 2020 - 2%/50 years (0.000404 per annum) probability

$S_a(0.2, X_D)$	$S_a(0.5, X_D)$	$S_a(1.0, X_D)$	$S_a(2.0, X_D)$	$S_a(5.0, X_D)$	$S_a(10.0, X_D)$	$PGA(X_D)$	$PGV(X_D)$
0.887	1.12	0.852	0.59	0.186	0.0682	0.384	0.83

The log log interpolated 2%/50 year $S_a(4.0, X_D)$ value is : **0.2464**

▶ Tables for 5% and 10% in 50 year values

Download CSV

← Go back to the seismic hazard calculator form

Date modified: 2021 04 06

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: April 4, 2025

Strathcona Regional District

990 Cedar Street, Campbell River, BC V9W 7Z8

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"):

Lot C, Section 35, Township 4, Comox District, Plan 13994; 4129 Island Highway South, Oyster Bay, BC; PID: 000-329-479

Legal description and civic address of the Property

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

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

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

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

✓ 2. Collected and reviewed appropriate background information

✓ 3. Reviewed the Proposed Development on the Property

✓ 4. Investigated the presence of Covenants on the Property, and reported any relevant information

✓ 5. Conducted field work on and, if required, beyond the Property

✓ 6. Reported on the results of the field work on and, if required, beyond the Property

✓ 7. Considered any changed conditions on and, if required, beyond the Property

8. For a Flood Hazard analysis I have:

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

9. For a Flood Risk analysis I have:

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

FLOOD ASSURANCE STATEMENT

10. In order to mitigate the estimated Flood Hazard for the Property, the following approach is taken:
___ 10.1 A standard-based approach
___ 10.2 A Risk-based approach
✓ 10.3 The approach outlined in the guidelines, Appendix F: Flood Assessment Considerations for Development Approvals
___ 10.4 No mitigation is required because the completed flood assessment determined that the site is not subject to a Flood Hazard

11. Where the Approving Authority has adopted a specific level of Flood Hazard or Flood Risk tolerance, I have:
___ 11.1 Made a finding on the level of Flood Hazard or Flood Risk on the Property
___ 11.2 Compared the level of Flood Hazard or Flood Risk tolerance adopted by the Approving Authority with my findings
___ 11.3 Made recommendations to reduce the Flood Hazard or Flood Risk on the Property

12. Where the Approving Authority has not adopted a level of Flood Hazard or Flood Risk tolerance, I have:
✓ 12.1 Described the method of Flood Hazard analysis or Flood Risk analysis used
✓ 12.2 Referred to an appropriate and identified provincial or national guideline for level of Flood Hazard or Flood Risk
✓ 12.3 Made a finding on the level of Flood Hazard of 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".

FLOOD ASSURANCE STATEMENT

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

April 4, 2025

Date

Joe Brunelle, P.Eng.

Prepared by

Louis Chapdelaine, P.Geo.

Reviewed by

Name (print)

Name (print)

report signed by LC

Signature

Signature

2351B Rosewall Crescent, Courtenay, BC V9N 8R9

Address

250-334-0384

Telephone

jbrunelle@lewkowich.com

Email

(Affix PROFESSIONAL SEAL here)

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

I am a member of the firm Lewkowich Engineering Associates Ltd. - Permit to Practice Number: 1001802

and I sign this letter on behalf of the firm.

(Name of firm)

SCALE 1:300

All distances are in metres.

EXISTING

4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

48'x27' MODULAR
14.63m X 8.23m

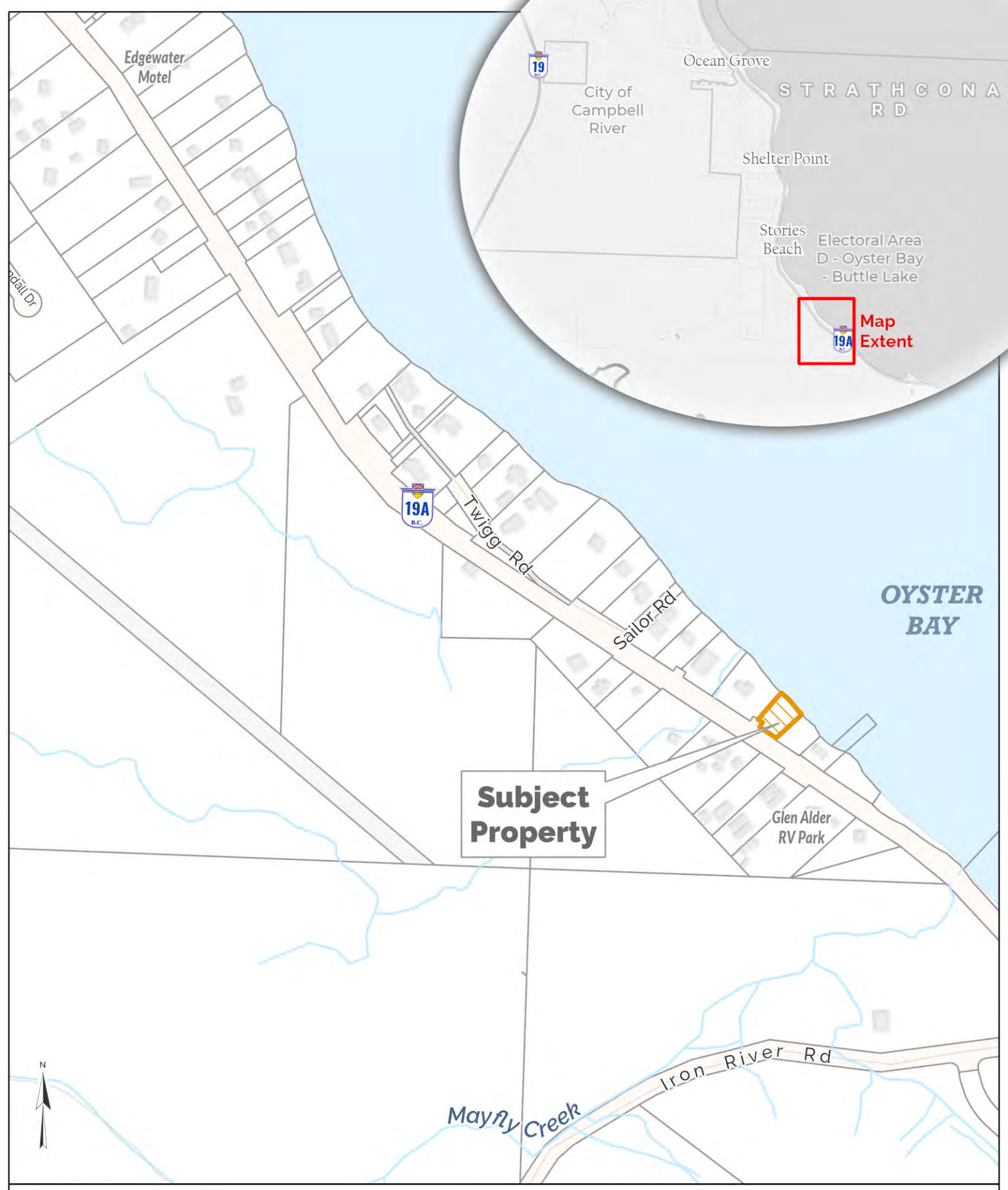


of this plan is for the
of interested parties
t for the re-establishment
boundaries.

ENYON & QUARMBY
VEYORS

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THIS DOCUMENT IS NOT VALID UNLESS
ORIGINALLY SIGNED AND SEALED.



DP 5D 25 - Hodgins

LOT C, PLAN VIP13994, SECTION 35, TOWNSHIP 4, COMOX LAND DISTRICT

1:5,000

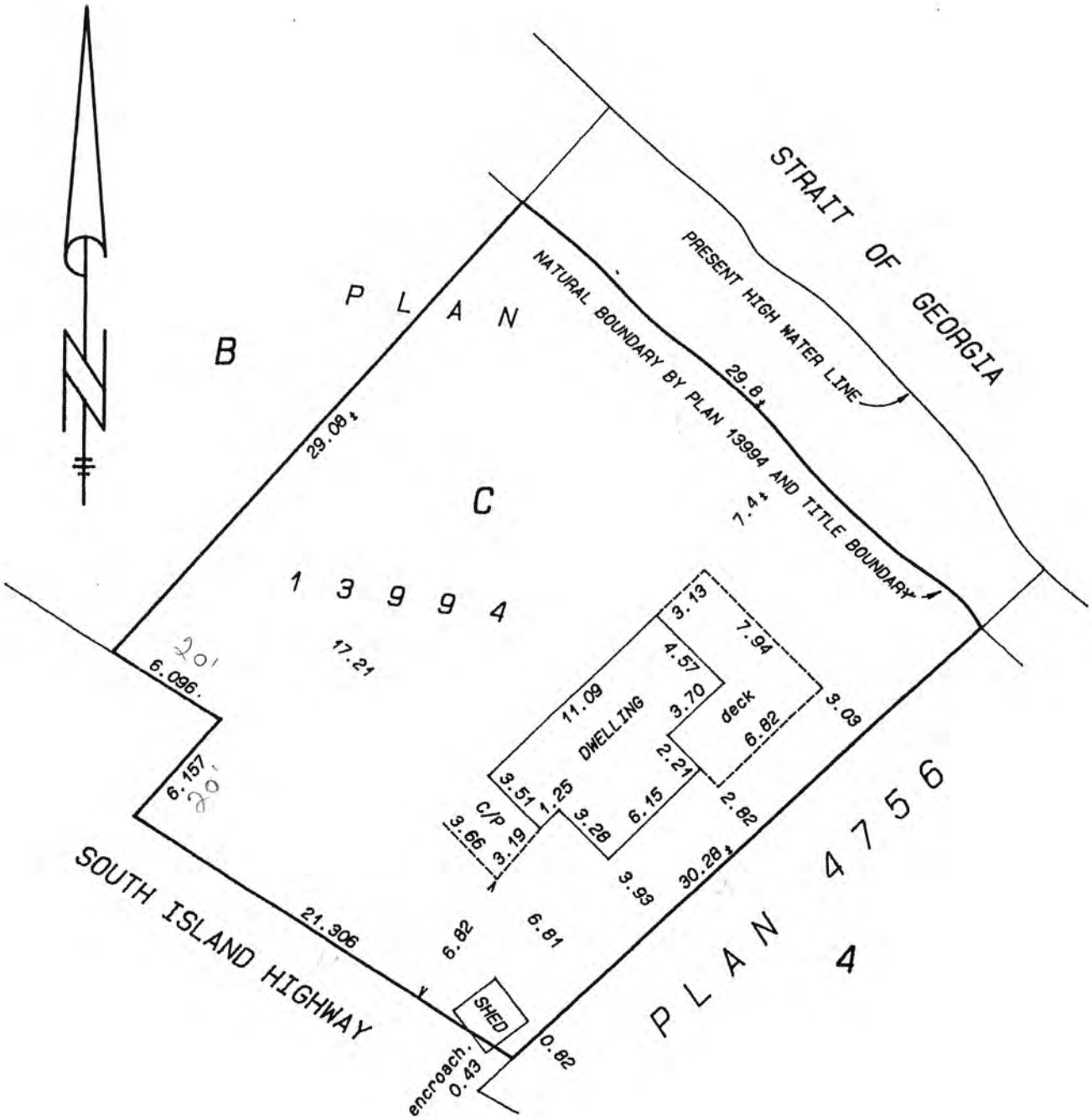
Jan 07, 2026

GIS: U:\proj\EA_D\SubjectProperties\EA_D_SubjProp.aprx

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.



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HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

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CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

From: [redacted]
To: Jennifer Barber
Subject: Trees
Date: April 17, 2026 6:25:02 PM

NOTICE: This email is from an external source.

Jen
We have to remove several trees on our property to accommodate our new modular. Above and Beyond advised they contacted SRD and were told it would be taken into consideration with the building permit. Sorry I was confused by their explanation. I know there is an application to remove trees. What is the procedure?

Dodie Hodgins

From: [redacted]
To: chris@iconicid.ca; Jennifer Barber
Subject: Asbestos removal 4129 Island Hwy South
Date: April 16, 2026 8:53:18 AM

NOTICE: This email is from an external source.

The asbestos removal is complete. However, the asbestos bin will be on site until next Wednesday. I have requested Habitat for Humanity to come Wednesday afternoon or Thursday to remove the windows so we can get the demolition started. Chris please let Lorne know I will let you both know when a solid plan from them is in place.

Dodie Hodgins

From:	Jennifer Barber
To:	chris@iconicid.ca
Cc:	[redacted]"; steve@iconicid.ca; kristy@iconicid.ca
Subject:	RE: Drawings
Date:	April 13, 2026 4:23:00 PM
Attachments:	image001.png image002.png image003.png

Ok, I thought it was going to be up about 4', that's why I was concerned.
Dodie, let me know when the demo is done and I'll issue the permit.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã^{3}moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

-

From: chris@iconicid.ca <chris@iconicid.ca>
Sent: April 13, 2026 1:15 PM
To: Jennifer Barber <jbarber@srd.ca>
Cc: 'Doralynne Hodgins' [redacted]; steve@iconicid.ca; kristy@iconicid.ca; 'Chris Andersen' <chris@iconicid.ca>
Subject: RE: Drawings

NOTICE: This email is from an external source.

Hi Jennifer,

The short answer is the strip footings end up being ground flush once backfilled with road crush similar to the picture attached. The flood height elevation to the underside of the floor joists will be achieved once the home is blocked. The home will also be tied to the strip footings using heavy cables and turnbuckles. I've also attached a picture for reference. The picture shows a set of separate strip footings for the decks but we will use sub grade footings instead of strip footings for those on this job.

The flood level was noted on the survey and we will have the surveyor verify the home achieved that height to the underside of the joists at the same time they verify the location is correct. The blocking, shims and steel support frame total height is 30-32 inches depending on the levelness of the ground around the home. I've marked up an elevation drawing for reference.

Please let me know if anything else is needed.

Cheers

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8





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From: Jennifer Barber <jbarber@srd.ca>
Sent: April 13, 2026 11:47 AM
To: Chris Andersen <chris@iconicid.ca>
Cc: 'Doralynne Hodgins [redacted] steve@iconicid.ca; kristy@iconicid.ca
Subject: RE: Drawings

Thanks Chris,
I still want to know how high this foundation will be. Can you send an elevation?

Jennifer Barber, RBO
Senior Building Official



Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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SRD.ca | Facebook | Instagram | YouTube

-

From: Chris Andersen <chris@iconicid.ca>
Sent: April 9, 2026 10:29 AM
To: Jennifer Barber <jbarber@srd.ca>
Cc: 'Doralynne Hodgins' [redacted]; steve@iconicid.ca; kristy@iconicid.ca; 'Chris Andersen' <chris@iconicid.ca>
Subject: Re: Drawings

NOTICE: This email is from an external source.

Hi Jennifer,

Sorry for the delay replying. The extra long weekend is always a time eater upon return.

I guess my best answer is the z240 homes come with a deformation resistant heavy steel structural frame under it for support. It is designed to be put on a compacted gravel pad and to have forces exerted on it in the event of some settling, which can be easily corrected with a jack and some shims. Anything above the gravel pad would be considered a better practice and rarely do we use only a gravel pad because having to relevel a home has a future cost to it. The strip footing design has become a common practice for most Z240 homes and an expectation from municipalities as it provides not only a more stable surface than just a small 24” square cement pad, it also provides a way to significantly secure the home to the ground without having to install deep ground anchors. Concrete strip footings weigh thousands of pound each and have an extremely stable footprint, protecting the house against seismic and wind events to a significant degree.

I’ve attached pictures of a typical strip footing foundation and how a Z240 home is blocked and anchored to them.

The Z240.10.19 setup guidelines are attached as well however they don’t provide guidance on installations above the bare minimum, which is the small pads under the blocks and earth anchors.

The tie down engineering is provided by the manufacturers of those components and we have made it also a best practice to use a larger cable and turnbuckle than meets the minimum requirement as well.

I hope this satisfies the expectation as I'm truly not sure why a structural engineer would be engaged to design something that is not a requirement for this type of home and setup.

I'm free to chat anytime.

Cheers

Chris Andersen

General Manager, Iconic Island Dwellings

Ph: 250-871-7766

chris@iconicid.ca www.iconicid.ca

Sent from my iPhone so please excuse the grammar it sometimes chooses for me.

On Apr 5, 2026, at 11:23 AM, Jennifer Barber <jbarber@srd.ca> wrote:

Hi Chris,
What is the height of this foundation? I'm still not convinced this can be done without a structural engineer.

Jennifer Barber, RBO
Senior Building Official

<image003.png>

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{ɯ} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã^{3}moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

From: chris@iconicid.ca <chris@iconicid.ca>
Sent: April 1, 2026 4:45 PM
To: 'Doralynne Hodgins [redacted] Jennifer Barber <jbarber@srd.ca>
Cc: steve@iconicid.ca; kristy@iconicid.ca
Subject: RE: Drawings

NOTICE: This email is from an external source.

Oops

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8
<image004.png>
<image005.png>
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From: chris@iconicid.ca <chris@iconicid.ca>
Sent: April 1, 2026 4:44 PM
To: 'Doralynne Hodgins' [redacted]; 'Jennifer Barber' <jbarber@srd.ca>
Cc: 'Chris Andersen' <chris@iconicid.ca>; 'steve@iconicid.ca' <steve@iconicid.ca>; 'kristy@iconicid.ca' <kristy@iconicid.ca>
Subject: RE: Drawings

Here's the fresh drawings. Please advise if there are any further items or supporting docs needed.

Cheers

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8
<image004.png>
<image005.png>
Information and any attachments contained in or attached to this email are intended solely for the individuals intended. Any redistribution without my express written consent is strictly prohibited and a breach of privacy. Consent can be gained by hitting reply and asking. Privacy is an automatic expectation of every email.

From: Doralynne Hodgins [redacted]
Sent: March 30, 2026 5:31 PM
To: chris@iconicid.ca
Subject: Drawings

Chris what is the status of the drawings

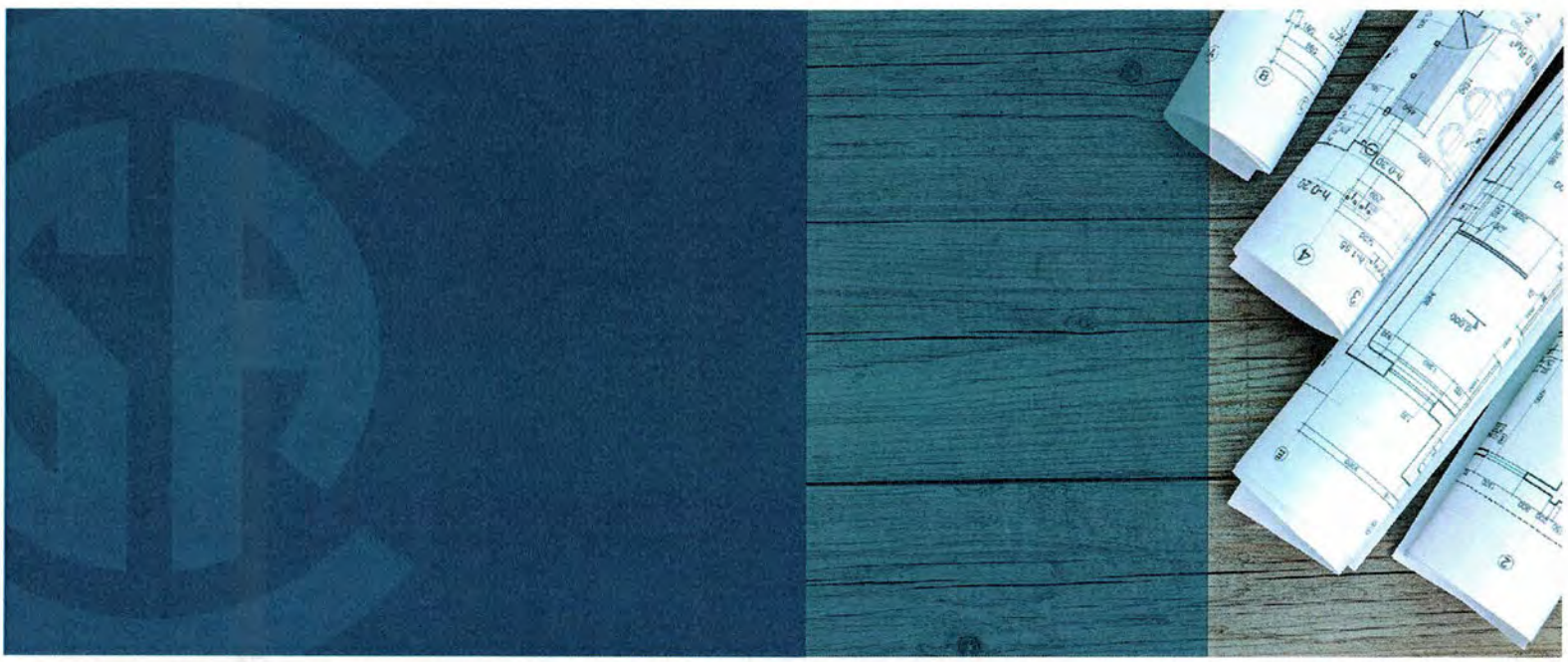
Dodie



CSA GROUP™

CSA Z240.10.1:19
National Standard of Canada

Site preparation, foundation, and installation of buildings



Standards Council of Canada
Conseil canadien des normes

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CSA Z240.10.1:19

Site preparation, foundation, and installation of buildings

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Preface

This is the fifth edition of CSA Z240.10.1, *Site preparation, foundation, and installation of buildings*. It supersedes the previous editions published in 2016 and 2008 under the title *Site preparation, foundation, and anchorage of manufactured homes*, in 1994 under the title *Site Preparation, Foundation, and Anchorage of Mobile Homes*, and in 1986 under the title *Recommended Practice for the Site Preparation, Foundation, and Anchorage of Mobile Homes*.

Significant changes to this edition address climate change adaptation with revisions and new provisions which include the following:

a) sources for climate data;
b) protection against effects of flooding;
c) deterioration resistance; and
d) addition of a new annex A on environmental design data and climate change.

This Standard is intended to be referenced by regulatory authorities, land-lease community owners, and building designers and installers so that proper on-site installation of buildings can be achieved.

CSA Group acknowledges that the development of this Standard was made possible by the financial support of the Standards Council of Canada.

This Standard was prepared by the Technical Committee on Prefabricated Buildings, Modules, and Panels, under the jurisdiction of the Strategic Steering Committee on Construction and Civil Infrastructure, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
4) *To submit a request for interpretation of this Standard, please send the following information to* **inquiries@csagroup.org** *and include "Request for interpretation" in the subject line:*
   a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
   b) *provide an explanation of circumstances surrounding the actual field condition; and*
   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

   Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at* **standardsactivities.csa.ca**.
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   a) *Standard designation (number);*
   b) *relevant clause, table, and/or figure number;*
   c) *wording of the proposed change; and*
   d) *rationale for the change.*

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CSA Z240.10.1:19
Site preparation, foundation, and installation of buildings

1 Scope

1.1 Application

This Standard applies to single- and multi-section buildings supported on longitudinal floor beams, or perimeter rim joists designed to perform as beams.

1.2 Issues addressed

This Standard specifies requirements for the following aspects of building installation:

a) site preparation;
b) permanent foundations;
c) anchorage to resist overturning and pier toppling due to wind;
d) connection of modules in multiple-section prefabricated buildings; and
e) skirting.

Note: *The term "prefabricated building" is used in this Standard to refer to manufactured homes, modular homes, and other factory-constructed buildings.*

1.3 Users

This Standard is intended to be used by builders, building officials, owners, and installers of

a) buildings installed on surface foundations including prefabricated buildings; and
b) multiple-section prefabricated buildings.

1.4 Terminology

1.4.1

In this Standard, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the Standard; "should" is used to express a recommendation or that which is advised but not required; and "may" is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

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1.4.2

In this Standard, "accepted engineering practice" is used to refer to practice in Canada including compliance of designs with the *National Building Code of Canada (NBC)*, Division B, Part 4 Structural Design or the applicable provincial, territorial, or municipal code.

1.5 Units of measure

The values given in SI units are the units of record for the purposes of this Standard. The values given in parentheses are for information and comparison only.

2 Reference publications

This Standard refers to the following publications. Where reference is made and the publication is in force at the installation location, it shall be to the edition and all amendments in force at the time of construction in the jurisdiction where the building will be placed for occupancy. Where such reference is made and the publication is not in force at the installation location, the reference shall be to the edition listed below, including all amendments published thereto.

CSA Group

CAN/CSA-O80 Series-15
Wood preservation

CAN/CSA-O80.1-15
Specification of treated wood

CAN/CSA-O80.3-15
Preservative formulations

Z240 MH Series-16
Manufactured homes

Z240.2.1-16
Structural requirements for manufactured homes

ASTM International

A153/A153M-09
Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

CGSB (Canadian General Standards Board)

CAN/CGSB 51.34-M86
Vapour barrier, polyethylene sheet for use in building construction

NRC (National Research Council Canada)

National Building Code of Canada, 2015

Other publications

Boyd, D.W. 1973. *Normal freezing and thawing degree-days for Canada, 1931-1960.* Ontario: Environment Canada, Atmospheric Environment.

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Brown, W.G. 1964. "Difficulties associated with predicting depth of freeze or thaw." *Canadian Geotechnical Journal* 1, no. 4 (November): 215-226.

3 Definitions

The following definitions shall apply in this Standard:

Design inland flood level — the greater of the 1-in-100- year flood elevation or as specified by the authority having jurisdiction.

Notes:

1) *Design inland flood level applies except on sea coasts.*
2) *British Columbia uses the 1-in-200 flood level; Saskatchewan uses the 1-in-500 flood level.*

Design wave-uprush level — the highest elevation reached by waves due to wind at the specified coastal flood level as applicable.

Erosion — removal of surface soil by moving water.

Flood zone — an area defined by data or a flood risk map as being subject to flooding.

Prefabricated building — a building partially or fully constructed in a factory.

Note: *See Annex B.*

Scour — removal of soil under and around objects in the path of water flow.

Storey — that portion of a building that is situated between the top of any floor and the top of the floor next above it, and if there is no floor above it, that portion between the top of such floor and the ceiling above it.

4 Compliance

4.1 Application

Within the limits of application stated in the respective Clauses,

a) site preparation shall comply with Clause 5;
b) foundations shall comply with Clause 6;
c) anchorage shall comply with Clause 7;
d) connection of modules in multiple-section prefabricated buildings shall comply with Clause 8; and
e) skirting shall comply with Clause 9.

Note: *Subject to limitations that can be imposed by the authority having jurisdiction, the referencing building codes and regulations permit materials, equipment, systems, or methods of construction not provided for in this Standard, on the condition that the solution provides at least the minimum level of performance required by this Standard. This is normally demonstrated by conformance with accepted engineering practice (e.g., compliance with Part 4 Structural Design in the applicable code/regulation) or testing that simulates conditions normally occurring in the service environment for the proposed use. For alternative solutions beyond the application of Part 4, the* National Building Code of Canada (NBC) *and building codes/regulations based on the* NBC *provide information on alternative solutions to the Code requirements and procedures for verification of equivalency. See* NBC *Division A, Appendix note A-1.2.1.1.(1)(b), and Division C, Section 2.3 and Appendix note A-2.3.1.*

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4.2 Environmental design data

The environmental values required for design in compliance with this Standard shall conform to the values established by the authority having jurisdiction or, in the absence of such data, as applicable with

a) the climatic values in provided in Table C-2, Climatic Design Data for Selected Locations in Canada, in Appendix C of *NBC*; and
b) where available, design inland flood levels and wave uprush levels from Environment and Climate Change Canada or provincial/territorial government offices.

Note: *See Annex A.*

5 Site preparation

Notes:

1) *See Figure B.1.*
2) *Where a building is installed in a flood zone, the site should be prepared so that access to the building is above the design flood level.*

5.1 Compliance

Where the building is installed on piles or piers, the building site shall be prepared in accordance with Clauses 5.2. to 5.5.

5.2 Material removal

The topsoil and all organic material shall be removed from the site below the building location.

5.3 Grading of excavated area

The base of the excavated site area shall be graded from the centre to the outside, or from side to side, with a minimum slope of 2%. Except where soils are free draining and water table conditions are such that no water will accumulate under the building, the base of the excavated site shall be above the level of the finished grade to prevent water accumulation under the building.

5.4 Granular fill and grading

5.4.1

The excavated area shall be filled with gravel or other suitable granular inorganic material to a level above the surrounding finished ground level.

The fill shall be graded with a minimum slope of 2% to promote drainage of water from under the building.

5.4.2

Except as provided in Clause 5.4.3, where the building is in a flood zone,

a) the granular fill described in Clause 5.4.1 shall not be more than 150 mm (6 in) above the finished ground level at the perimeter of the fill; and
b) no other structural fill shall be installed.

5.4.3

Clause 5.4.2 shall not apply where

a) the site will not be subject to water velocity greater than 1 m/s (3.2 ft/s) or wave action that will cause erosion or scour; or

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b) the fill is in accordance with good engineering practice and is protected from erosion and scour.

Note: *See Clause B.2.*

5.5 Ground cover

A ground cover meeting the requirements of Division B, Article 9.18.6.1, of the *NBC* shall be placed over the entire area below the building and shall extend 150 mm (6 in) beyond the perimeter to prevent upward migration of moisture into the space beneath the building.

6 Foundations

Note: *See Annex C.*

6.1 General

6.1.1 Compliance

Pile and pier foundations shall be designed and constructed in accordance with

a) Clauses 6.1.3 and 6.2; and

b) except as provided in Clause 6.1.2, Clauses 6.3 to 6.6 where the building

   i) is one-storey;

   ii) is not constructed with masonry, heavy roofing such as concrete or clay roof tile, or concrete floor topping; and

   iii) has a maximum specified uniformly distributed design live load on the floor of 2.4 kPa (50 lb/ft^2).

Notes:

1) *Perimeter wall foundations, reinforced concrete slab foundations, and foundations for buildings other than as described in Item b) of Clause 6.1.1 are addressed by the applicable provincial, territorial, or municipal regulations, or in the absence of such regulation, the* NBC.

2) *The application limit with respect to uniformly distributed floor load is consistent with the limit to application for Part 9 of the* NBC*, and the application limits with respect to storeys and light construction are consistent with limitations in the* NBC *for buildings on surface foundations.*

6.1.2 Footings and foundations for buildings in flood zones

Where the building is located in a flood zone, footings and foundations shall be designed in accordance with accepted engineering practice taking into consideration, as applicable,

a) bearing capacity of saturated soil;

b) water velocity and wave action; and

c) the effects of water velocity and wave action including erosion and scour.

6.1.3 Location of foundation support points

Foundation support points shall be located in accordance with the manufacturer's instructions.

Note: *See Clause C.2.*

6.2 Clearance

6.2.1 General

Foundations shall provide a vertical clearance of not less than 300 mm (12 in) between the top of the highest finished ground level under the building and the bottom of the floor joists.

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6.2.2 Foundations for buildings in flood zones

Where the building is located in a flood zone, foundation height shall be increased where necessary to provide a vertical clearance of not less than 100 mm (4 in) between the design inland flood level or wave uprush level where applicable, and the lowest element of the building superstructure with the exception of the chassis where present.

Note: *The lowest element might be part of the floor structure, the building envelope, or heating, plumbing or other service components.*

6.2.3 Access to foundations and services

Where heating, plumbing, or other equipment requiring service or replacement is located under the building or where foundation depth complies with Item b) of Clause 6.3.2, an access way with a height and width of not less than 600 mm (24 in) shall be provided to the equipment and foundation components for a distance of 900 mm (36 in) on the side or sides of the equipment or foundation components.

6.3 Depth of foundations

Note: *See Clause C.3.*

6.3.1

Except as specified in Clause 6.3.2, foundations for buildings shall extend below the level of expected frost penetration.

Notes:

1) *In the absence of local experience, the depth of frost penetration in areas not affected by permafrost may be estimated from Figures A.1 and A.2.*
2) *See also Clauses 6.4.2 and 6.4.3 for protection of piles.*

6.3.2

Foundations for buildings are not required to extend below the level of frost penetration, provided that

a) the foundation is supported on rock or coarse-grained granular material that is well drained to the depth of frost penetration; or
b) the building superstructure complies with the deformation resistance test requirements of Clause 14 of CSA Z240.2.1.

6.4 Piles

6.4.1 Compliance

Pile foundations shall

a) be designed for existing soil conditions in accordance with accepted engineering practice
   i) for existing soil conditions where the building is not located in a flood zone; or
   ii) saturated soil conditions where the building is located in a flood zone; and
b) comply with Clauses 6.4.2 to 6.4.5.

6.4.2 Footings for piles

Where piles are installed in frost susceptible soil, they shall incorporate structurally integral footings to resist frost jacking by:

a) constructing the pile and footing as a single component; or
b) structurally connecting to the pile to the footing.

Note: *See Clause C.3.2 on frost jacking.*

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6.4.3 Dimensions of reinforced concrete piles

Reinforced concrete piles shall

a) be at least 200 mm (8 in) in diameter if cylindrical; and
b) have a minimum dimension of 200 mm (8 in) if rectangular or square.

6.4.4 Frost protection of concrete and masonry piles

Concrete and masonry piles subject to adfreezing and frost jacking (see Clause C.3.2) shall be reinforced to resist the resulting tensile forces by at least four steel reinforcing bars not less than 15 m (49 ft), extending from the top of the piles down into the footing.

Note: *See Clause C.3.*

6.4.5 Preservative treatment of wood piles

Wood piles shall be pressure treated with a wood preservative as specified in CAN/CSA-O80.1, Table 2, Use Category 4.2.

6.4.6 Lateral restraint

Blocking or another form of lateral restraint shall be provided at the top of each pile on the exterior side of the longitudinal beams or rim joists to prevent lateral sliding of the longitudinal beams or rim joists (see Annex C).

6.5 Footings for piers

Note: *Although this Standard specifies requirements for concrete and wood footings, other materials (e.g., ABS plastic) may be used as an alternative (see Note to Clause 4.1 and Clause C.4.1).*

6.5.1 Compliance

Footings for piers shall be constructed to act as a structural unit and shall comply with Clauses 6.5.2 to 6.5.6.

6.5.2 Bearing for piers

When a building is supported on pier foundations, the piers shall bear on footings designed to carry all specified wind, snow, earthquake, live loads, and dead loads without excessive soil settlement or failure of the footing.

Note: *The prescriptive requirements in Clauses 6.5.3 to 6.5.6 for footings describe solutions that are deemed to comply with this performance requirement.*

6.5.3 Footing area

6.5.3.1 Permitted calculation of minimum footing area

Except as provided in Clause 6.5.3.2, the minimum footing area for piers may be determined using the formulas in Clause 6.5.3.3 and Tables 1 to 3, where

a) the footings are concrete or wood;
b) the footings are supported on soil with an allowable bearing pressure not less than 75 kPa (1566 lb/ft^2) (see Table 1); and
c) the maximum cantilever measured from the centre of the supporting beam is not greater than 50% of the maximum centre-to-centre distance between any two piers.

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Where a foundation bears on gravel, sand, or silt, and the water table is within a distance below the bearing surface equal to the width of the foundation, the allowable bearing pressure shall be 50% of that determined in Table 1.

6.5.3.2 Required engineering for minimum footing area

Footings shall be designed in compliance with accepted engineering practice where

a) footings are supported on filled ground, peat, or soils with an allowable bearing pressure less than 75 kPa (1566 lb/ft^2); or

b) soil or rock within a distance equal to twice the footing width below the bearing surface has a lower allowable bearing pressure than that at the bearing surface as shown in Table 1.

Note: *See also Clause 6.1.2 regarding design in flood zones.*

6.5.3.3 Determination of minimum footing area

Minimum footing area may be determined

a) in accordance with the following formulas

$A_f = (S + O + B/100) * A_t/P$

where

A_f = minimum footing area, m^2

S = specified snow load where the building will be installed, kPa

= $C_bS_s + S_r$

where

C_b = basic snow load roof factor

= 0.45 where the entire width of the roof does not exceed 4.3 m

= 0.55 for all other roofs

S_s = 1-in-50-year ground snow load, kPa

S_r = associated 1-in-50-year rain load, kPa

O = occupancy load

B = building load, kg/m^2

A_t = maximum tributary area supported by any pier, m^2

= $l_p * w_p$

where

l_p = maximum centre to centre spacing between piers along length of building, m

w_p = maximum centre to centre spacing between piers along width of building, m (See also Table 2).

P = allowable bearing pressure of the soil as specified in Table 1, kPa; or

b) where the building weighs not more than 1.9 kg/m^2 (0.39 lb/ft^2), by

i) calculating the specified snow load (S);

ii) determining the maximum tributary area (A_t) supported by any pier by calculation or by referring to Table 2; and

iii) referring to Table 3.

Notes:

1) *Where ground snow load and associated rain load are not available from the authority having jurisdiction in the location where the building will be installed, values provided in Appendix C of the NBC may be used.*

2) *See also Clause C.4.2.*

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Table 1
Allowable bearing pressure for soil or rock
(See Clauses 6.5.3.1 – 6.5.3.3.)

Type and condition of soil or rock	Maximum allowable bearing pressure, kPa
Soft clay	40
Loose sand or gravel	50
Firm clay	75
Dense or compact silt	100
Dense or compact sand or gravel	150
Stiff clay	150
Till	200
Clay shale	300
Sound rock	500

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Table 2
Sample of tributary areas supported by piers, A_t
(See Clauses 6.5.3.1 and 6.5.3.3.)

Maximum centre-to-centre spacing between piers, m (ft)		Tributary area, m²
1.8 (6)	1.8 (6)	3.3
1.8 (6)	2.4 (8)	4.5
2.4 (8)	2.4 (8)	5.9
2.4 (8)	3.05 (10)	7.4
3.05 (10)	3.05 (10)	9.3
3.05 (10)	3.66 (12)	11.1
3.66 (12)	3.66 (12)	13.4

Note: *Columns for centre-to-centre spacing apply to l_p and w_p or vice versa.*

Table 3
Minimum footing areas for piers (concrete and wood footings)
(See Clauses 6.5.3.1, 6.5.3.3, and C.4.2.2.)

Table 3a
Maximum specified snow load = 1.0 kPa

Tributary area, m²	Allowable soil bearing pressure, kPa					
	75	100	150	200	300	500
	Minimum footing area, m²					
3	0.21	0.16	0.11	0.08	0.05	0.03
4	0.28	0.21	0.14	0.11	0.07	0.04
5	0.35	0.27	0.18	0.13	0.09	0.05
6	0.42	0.32	0.21	0.16	0.11	0.06
7	0.49	0.37	0.25	0.19	0.12	0.07
8	0.57	0.42	0.28	0.21	0.14	0.08
9	0.64	0.48	0.32	0.24	0.16	0.10
10	0.71	0.53	0.35	0.27	0.18	0.11
11	0.78	0.58	0.39	0.29	0.19	0.12
12	0.85	0.64	0.42	0.32	0.21	0.13
13	0.92	0.69	0.46	0.34	0.23	0.14
14	0.99	0.74	0.49	0.37	0.25	0.15

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Table 3 (Continued)

Table 3b
Maximum specified snow load = 1.5 kPa

Tributary area, m²	Allowable soil bearing pressure, kPa					
	75	100	150	200	300	500
	Minimum footing area, m²					
3	0.23	0.17	0.12	0.09	0.06	0.03
4	0.31	0.23	0.15	0.12	0.08	0.05
5	0.39	0.29	0.19	0.15	0.10	0.06
6	0.46	0.35	0.23	0.17	0.12	0.07
7	0.54	0.41	0.27	0.20	0.14	0.08
8	0.62	0.46	0.31	0.23	0.15	0.09
9	0.70	0.52	0.35	0.26	0.17	0.10
10	0.77	0.58	0.39	0.29	0.19	0.12
11	0.85	0.64	0.43	0.32	0.21	0.13
12	0.93	0.70	0.46	0.35	0.23	0.14
13	1.01	0.75	0.50	0.38	0.25	0.15
14	1.08	0.81	0.54	0.41	0.27	0.16

Table 3c
Maximum specified snow load = 2.0 kPa

Tributary area, m²	Allowable soil bearing pressure, kPa					
	75	100	150	200	300	500
	Minimum footing area, m²					
3	0.25	0.19	0.13	0.09	0.06	0.04
4	0.34	0.25	0.17	0.13	0.08	0.05
5	0.42	0.32	0.21	0.16	0.11	0.06
6	0.50	0.38	0.25	0.19	0.13	0.08
7	0.59	0.44	0.29	0.22	0.15	0.09
8	0.67	0.50	0.34	0.25	0.17	0.10
9	0.76	0.57	0.38	0.28	0.19	0.11
10	0.84	0.63	0.42	0.32	0.21	0.13
11	0.92	0.69	0.46	0.35	0.23	0.14
12	1.01	0.76	0.50	0.38	0.25	0.15
13	1.09	0.82	0.55	0.41	0.27	0.16
14	1.18	0.88	0.59	0.44	0.29	0.18

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Table 3 (Continued)

Table 3d
Maximum specified snow load = 3.0 kPa

Tributary Area, m²	Allowable soil bearing pressure, kPa					
	75	100	150	200	300	500
	Minimum footing area, m²					
3	0.29	0.22	0.15	0.11	0.07	0.04
4	0.39	0.29	0.19	0.15	0.10	0.06
5	0.49	0.37	0.24	0.18	0.12	0.07
6	0.58	0.44	0.29	0.22	0.15	0.09
7	0.68	0.51	0.34	0.26	0.17	0.10
8	0.78	0.58	0.39	0.29	0.19	0.12
9	0.88	0.66	0.44	0.33	0.22	0.13
10	0.97	0.73	0.49	0.37	0.24	0.15
11	1.07	0.80	0.54	0.40	0.27	0.16
12	1.17	0.88	0.58	0.44	0.29	0.18
13	1.27	0.95	0.63	0.47	0.32	0.19
14	1.36	1.02	0.68	0.51	0.34	0.20

Table 3e
Maximum specified snow load = 4.0 kPa

Tributary area, m²	Allowable soil bearing pressure, kPa					
	75	100	150	200	300	500
	Minimum footing area, m²					
3	0.33	0.25	0.17	0.12	0.08	0.05
4	0.44	0.33	0.22	0.17	0.11	0.07
5	0.55	0.42	0.28	0.21	0.14	0.08
6	0.66	0.50	0.33	0.25	0.17	0.10
7	0.77	0.58	0.39	0.29	0.19	0.12
8	0.89	0.66	0.44	0.33	0.22	0.13
9	1.00	0.75	0.50	0.37	0.25	0.15
10	1.11	0.83	0.55	0.42	0.28	0.17
11	1.22	0.91	0.61	0.46	0.30	0.18
12	1.33	1.00	0.66	0.50	0.33	0.20
13	1.44	1.08	0.72	0.54	0.36	0.22
14	1.55	1.16	0.77	0.58	0.39	0.23

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Table 3 (Concluded)

Table 3f
Maximum specified snow load = 5.0 kPa

Tributary area, m²	Allowable soil bearing pressure, kPa					
	75	100	150	200	300	500
	Minimum footing area, m²					
3	0.37	0.28	0.19	0.14	0.09	0.06
4	0.50	0.37	0.25	0.19	0.12	0.07
5	0.62	0.47	0.31	0.23	0.16	0.09
6	0.74	0.56	0.37	0.28	0.19	0.11
7	0.87	0.65	0.43	0.33	0.22	0.13
8	0.99	0.74	0.50	0.37	0.25	0.15
9	1.12	0.84	0.56	0.42	0.28	0.17
10	1.24	0.93	0.62	0.47	0.31	0.19
11	1.36	1.02	0.68	0.51	0.34	0.20
12	1.49	1.12	0.74	0.56	0.37	0.22
13	1.61	1.21	0.81	0.60	0.40	0.24
14	1.74	1.30	0.87	0.65	0.43	0.26

Table 3g
Maximum specified snow load = 6.5 kPa

Tributary area, m²	Allowable soil bearing pressure, kPa					
	75	100	150	200	300	500
	Minimum footing area, m²					
3	0.43	0.32	0.22	0.16	0.11	0.06
4	0.58	0.43	0.29	0.22	0.14	0.09
5	0.72	0.54	0.36	0.27	0.18	0.11
6	0.86	0.65	0.43	0.32	0.22	0.13
7	1.01	0.76	0.50	0.38	0.25	0.15
8	1.15	0.86	0.58	0.43	0.29	0.17
9	1.30	0.97	0.65	0.49	0.32	0.19
10	1.44	1.08	0.72	0.54	0.36	0.22
11	1.58	1.19	0.79	0.59	0.40	0.24
12	1.73	1.30	0.86	0.65	0.43	0.26
13	1.87	1.40	0.94	0.70	0.47	0.28
14	2.02	1.51	1.01	0.76	0.50	0.30

Note: *Values in Table 3 may be interpolated.*

6.5.4 Fill under footings

The granular fill in the area of footings for piers shall be compacted.

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Where there is a likelihood of significant settlement, the minimum required gradient shall be maintained by

a) installing additional fill to allow for such settlement; or
b) installing the granular fill over a geotextile designed for the imposed loads and installed in accordance with the manufacturer's instructions to distribute the load over the excavated area.

Note: *Significant settlement can occur in soils susceptible to expansion and contraction due to changes in moisture content or freeze-thaw cycling. Under foundation loading, granular fill can also be driven into fine-grained soils causing settlement. Geotextiles are effective in maintaining separation between fill and native soil.*

6.5.5 Concrete footings for piers

6.5.5.1 Unreinforced concrete

Unreinforced concrete footings beneath piers shall be at least 100 mm (4 in) thick and shall not project beyond the pier by a distance greater than their thickness.

6.5.5.2 Reinforced concrete

Reinforced cast-in-place concrete footings and reinforced precast concrete footings shall provide strength equivalent to that of the footings specified in Clause 6.5.5.1.

6.5.6 Wood footings for piers

Wood footings beneath piers shall be

a) at least 89 mm (3-1/2 in) thick; and
b) pressure treated with a wood preservative as specified in CAN/CSA-O80.1, Table 2, Use Category 4.1.

Field-cut ends shall be treated by brushing or dipping in a copper naphthenate preservative solution complying with CAN/CSA-O80.3.

Note: *Wood may be lumber or plywood.*

6.6 Piers

Note: *Although this Standard specifies requirements for concrete masonry and wood piers, other materials (e.g., steel) may be used as an alternative (see Note to Clause 4.1 and Clause C.7.1)*

6.6.1 Load transfer

Piers shall be

a) supported on footings as specified in Clause 6.5; and
b) designed to transfer all specified wind, snow, earthquake, live, and dead loads to the footings.

6.6.2 Dimensions of piers

6.6.2.1 Maximum height to base ratio

Except as provided in Clause 7.1 with respect to wind, the height of piers above footings shall not exceed their horizontal dimension measured at right angles to the length of the building (i.e., a height-to-base ratio of 1.0).

Notes:

1) *The width of a wood-crib oriented diagonally to a width of a building may be considered as the distance from corner to corner of the pier. For example, a pier measuring 600 × 600 mm (24 × 24 in) and oriented diagonally may be deemed to be approximately 860 mm (34 in) wide, which will allow a maximum height of 860 mm (34 in) (see Figure C.4).*

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2) *The height-to-base ratio of piers may exceed the prescriptive maximum, provided that the calculation provided in Clause 7.1.2 shows that the design solution will result in a stable pier system (see also Clause C.7) and the seismic spectral response acceleration $S_a(0.2)$ is less than 0.70 (see Clause 6.6.2.2).*

6.6.2.2 Height to base ratio in higher earthquake load locations

Where the seismic spectral response acceleration $S_a(0.2)$, as provided in Appendix C of the *NBC*, is equal to or greater than 0.70, the height of piers above footings shall not exceed their horizontal dimension measured parallel to and at right angles to the length of the building.

6.6.3 Lateral restraint

Blocking or another form of lateral restraint shall be provided at the top of each pier on the exterior side of the longitudinal beams or rim joists to prevent lateral sliding of the longitudinal beams or rim joists (see Figures C.2 to C.9).

6.6.4 Concrete masonry piers

Concrete masonry piers shall be constructed with concrete masonry units that are

a) not less than 200 mm (8 in nominal) wide;
b) placed with their hollow cores in the vertical position; and
c) where the seismic spectral response acceleration $S_a(0.2)$, as provided in Appendix C of the *NBC*, is equal to or greater than 0.70 placed with
   i) the cores filled with mortar or concrete; or
   ii) the courses separated by not less than 15.9 mm (5/8 in) plywood treated in accordance with CAN/CSA-O80.1, Table 2, Use Category 2, with field-cut ends treated by brushing or dipping in a copper naphthenate preservative solution complying with CAN/CSA-O80.3.

6.6.5 Wood-crib piers

6.6.5.1 General

Wood-crib piers shall

a) be preservative treated; and
b) consist of sound lumber placed so that subsequent courses are at right angles to each other, with each layer fastened securely to the layer beneath.

Note: *Figure C.4 illustrates one example of this arrangement.*

6.6.5.2 Preservative treatment

6.6.5.2.1

Except as provided in Clause 6.6.5.2.2, preservative treatment shall comply with

a) for the first 150 mm (6 in),
   i) CAN/CSA-O80.1, Table 2, Use Category 3.2, where the footing is at least 50 mm (2 in) above the adjacent ground surface and the crib is separated from the footing by at least 0.15 mm (0.006 in) thick polyethylene film meeting the requirements of CAN/CGSB 51.34 or Type S roll roofing; or
   ii) CAN/CSA-O80.1, Table 2, Use Category 4.1 where the footing is less than 50 mm (2 in) above the adjacent ground surface and the crib is not separated from the footing by at least 0.15 mm (0.006 in) thick polyethylene film meeting the requirements of CAN/CGSB 51.34 or Type S roll roofing; or
b) for the remaining height, CAN/CSA-O80.1, Use Category 2.

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6.6.5.2.2

Where the building is located within the design inland flood level or the design wave-uprush level where applicable, preservative treatment shall comply with CAN/CSA O80.1, Table 2, Use Category 4.1.

6.6.5.2.3

Field-cut ends shall be treated by brushing or dipping in a copper naphthenate preservative solution complying with CAN/CSA-O80.3.

6.6.5.3 Fasteners

6.6.5.3.1

Fasteners used in wood-crib piers shall be

a) of sufficient length to penetrate at least 38 mm (1.5 in) into preceding courses of crib members; and
b) corrosion-resistant considering service conditions and wood preservative treatment.

Note: *Compliance with ASTM A153/A153M Class D is acceptable for corrosion protection with CCA-treated lumber. Stainless steel and epoxy-coated fasteners provide acceptable protection for ACQ-treated lumber.*

6.6.5.3.2

Corrosion protection complying with Table 4 is deemed to comply with Item b) of Clause 6.6.5.3.1.

Table 4
Corrosion resistance and service conditions for pier fasteners
(See Clause 6.6.5.3.2.)

	Exposure to fresh water only	Exposure to salt water
CCA-treated lumber	hot-dip galvanized complying with ASTM A153/A153M Class D*	stainless steel or epoxy-coated
ACQ-treated lumber	stainless steel or epoxy-coated	stainless steel or epoxy-coated

* *ASTM A153/A153M Class D applies to fasteners not more than* 9.52 mm *(3/8 in) in diameter and washers less than* 4.76 mm *(3/16 in) in thickness.*

7 Anchorage to resist overturning and pier toppling due to wind

Note: *See Annex D.*

7.1 Rating

7.1.1 Required rating

Buildings shall be rated with respect to their resistance to overturning and buildings with their supporting piers shall be rated with respect to pier toppling

a) under 1/50 hourly design wind pressures and assumed exposure factor (C_eC_t); and
b) when the building is installed in accordance with the manufacturer's instructions without anchorage.

Ratings shall be calculated according to accepted engineering practice.

Note: *For design wind pressures for various locations in Canada, see the* NBC, *Division B, Appendix C.*

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7.1.2 Calculated resistance

Where the building is installed on a flat site such that all piers are the same height (see Clause C.7.2), resistance to overturning and pier toppling under design wind pressures may be calculated using the following simplified formulas:

q_f (overturning) = $[0.005w/(0.69 + 10.4/BS)]/C_eC_t$

q_f (pier toppling) = $0.01w/[C_eC_t\ (1.2 + 2.4h/b)]$

where

q_f = allowable wind pressure, kPa

w = unit weight of the building, kg/m^2

B = outside width of the building (single- or multiple-section), m

S = spacing of longitudinal beams or rim joists (outside beams or rim joists on multiple-section buildings), m

C_eC_t = wind exposure factor as specified in Table 5

h = height of piers, m

b = width of piers, m

Notes:

1) *The constants in these formulas are based on an assumed live load of 14 kg/m^2 (2.9 lb/ft^2).*
2) *The factor of 10.4 in the overturning formula equals 1.12 H^2, where H is the overall height to eaves (assumed to be 3.05 m).*
3) *Tabular representations of building configurations and the allowable design wind loads, as based on the formulas in this Clause, can be found in Tables D.1 to D.3.*

Table 5
Wind exposure factor, C_eC_t
(See Clause 7.1.2.)

Exposure condition	C_eC_t
Escarpment — building is located on a hill or escarpment located within twice the hill or escarpment height from the edge of the hill or escarpment	1.0
Open terrain — building is located on open, level terrain with only scattered trees, buildings or other obstructions, open water or shorelines thereof	0.90
Intermediate terrain — where the terrain falls between the exposures described above and below	See *NBC*, Clause 4.1.7.1.(5)(c)
Rough terrain — which is suburban, urban or wooded terrain extending upwind from the building uninterrupted for at least 1 km	0.70

7.2 Required anchorage

7.2.1

Except as permitted by Clause 7.2.2, buildings shall be provided with ground anchorage.

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7.2.2

Ground anchorage shall not be required when

a) it can be shown by calculation as described in Clause 7.1.2 that a building will remain stable when subject to the specified wind load at the installation site; and
b) the seismic spectral response acceleration $S_a(0.2)$, as provided in Appendix C of the *NBC*, is less than 0.70.

7.3 Pull-out resistance

7.3.1 Minimum pull-out resistance

Ground anchorage shall have a pullout resistance of at least 2.0 kN/m (135 lb/ft) of building length.

Reinforced concrete or steel pile foundations extending below the depth of frost penetration may be deemed to provide the required pullout resistance, provided that the piles are attached to the building with a connection that provides a resistance of at least 2.0 kN/m (135 lb/ft) of building length.

Note: *See Clause D.4 for recommendations for buildings installed in tornado-prone areas.*

7.3.2 Determination of pull-out resistance

The pullout resistance of ground anchors shall be determined using accepted engineering practice.

7.4 Anchorage adjustment

Except where individual surface foundation units are used in areas subject to frost action, anchorage systems shall incorporate an adjustment that is drawn snug. In areas subject to frost action, ground anchorage systems shall provide free vertical movement of 75 to 100 mm (3 to 4 in) before resisting uplift forces in order to accommodate differential movement of individual foundation units while maintaining the integrity of the anchorage system.

7.5 Spacing

Ground anchors shall be spaced not more than 12 m (40 ft) apart.

7.6 Depth

Ground anchors shall be installed at a depth sufficient to preclude movement due to frost action and to develop the required pullout resistance.

Note: *Where the building is located in a flood zone, the resistance of saturated soil should be considered in determination of depth.*

7.7 Deterioration resistance

Ground anchorage systems shall be constructed of materials resistant to corrosion and decay considering service conditions.

Note: *Where the building is located in a flood zone, the level of deterioration resistance should consider saturated ground conditions. Where a building is in a coastal location, exposure to salt should be considered.*

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8 Connection of modules in multiple-section prefabricated buildings

Note: *See Annex E.*

8.1 Compliance

Where prefabricated buildings consist of more than one section, the sections shall be joined so that the integrity of the air barrier system, vapour barrier, insulation, weather protection, and structure is maintained at the interface and so that concealed spaces between sections are fire blocked.

8.2 Structural requirements

Mating floor and roof systems and exterior walls of multiple-section prefabricated buildings shall be fastened to each other in accordance with the manufacturer's instructions. Each section shall meet the requirements of Clause 7 of CSA Z240.2.1 when tested individually. However, when the sections are installed on surface foundations, movement at the mating points shall be accommodated by the joint design to ensure that the requirements of Clause 8.1 are not compromised.

Note: *Figures E.1 and E.2 illustrate methods of joining multiple-section units that satisfy the requirements of this Clause.*

8.3 Air barrier systems, vapour barriers, and insulation

Multiple-section prefabricated buildings shall be joined so that thermally insulated floor and roof systems and walls present a continuous barrier to the leakage of air, diffusion of water vapour and heat transfer from the interior of the building to the exterior and into wall spaces, floor spaces, or roof spaces.

8.4 Weathertightness

8.4.1 Roofing and flashing

Roofing and flashing at junctions of multiple-section prefabricated buildings shall be installed such that water is effectively shed and is prevented from entering the roof.

8.4.2 Sheathing membrane

Joints in the sheathing membranes of exterior walls at the junctions of multiple-section prefabricated buildings shall be lapped at least 100 mm (4 in). If applied horizontally, the upper sheets shall overlap the lower sheets.

8.4.3 Siding

End joints in horizontal siding at the junctions of multiple-section prefabricated buildings shall be staggered in accordance with the siding manufacturer's instructions.

8.5 Fire blocking of concealed spaces

Concealed spaces exceeding 25 mm (1 in) in width between mating walls of multiple-section prefabricated buildings shall be fire blocked in accordance with Subsection 9.10.15 of the *NBC*.

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9 Skirting

Note: *See Annex F.*

9.1 Installation

9.1.1

Where installed, skirting shall meet the following requirements:

a) Skirting shall be designed to accommodate at least 50 mm (2 in) of vertical movement of the soil surface due to frost action without transferring loads from the building to the ground.
b) Elements of skirting assemblies in contact with the ground shall be corrosion resistant or pressure preservative treated in accordance with CAN/CSA-O80.1, Table 2, Use Category 4.1. Field-cut ends of wood members shall be treated by brushing or dipping in a copper naphthenate preservative solution complying with CAN/CSA-O80.3.
c) The exterior surface of skirting assemblies shall be painted or otherwise made resistant to the weather.

Note: *See Figures F.1 to F.3 for illustrations of acceptable skirting details.*

9.1.2

Except where skirting is designed in accordance with good engineering practice, skirting for buildings in a flood zone shall be constructed with no fewer than two holes to equalize water pressure, where the holes:

a) are located
   i) on each of the upstream and downstream sides of the building; and
   ii) are not more than 300 mm (12 in) above finished ground level; and
b) provide a total net area not less than 0.35 m^2 per 50 mm^2 (0.5 in^2/0.5 ft^2) of enclosed area.

9.2 Ventilation of and access to crawl space

9.2.1

When skirting is used, crawl space ventilation and access shall comply with Articles 9.18.3.1. and 9.18.4.1. of the *NBC*.

Note: *Failure to provide adequate ventilation can allow moisture to build up under and enter the building. Such moisture can lead to decay within the crawl space and high humidity in the building, resulting in problems with condensation.*

9.2.2

Clothes dryers and other appliances shall not be vented into the crawl space.

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Annex A (informative)
Environmental design data and climate change

Notes:
1) *This Annex is not a mandatory part of this Standard.*
2) *See Clause 4.2.*

A.1 Climate change and design data

Design climate data for buildings is currently based on historical data. Evidence of climate change has been and continues to be widely documented. In Canada, these changes are affecting air and ground temperatures, rain and snow-fall amounts, wind speeds, water levels, and frequency of extreme weather events. These in turn are affecting loads on buildings and adversely affecting building sites and will continue to do so for the foreseeable future.

In response, projection data is being developed considering a range of green-house gas emissions scenarios. Because different scenarios result in greater or lesser impacts on different climate loads, more than one scenario may be used in developing projection data. Until generally accepted projection data is available, this Standard continues to rely on historical data.

Environment and Climate Change Canada's Canadian Centre for Climate Services (CCCS) provides an interface for distributing climate change information to Canadians. It supports climate change impact and adaptation research and stakeholders requiring scenario information for decision making and policy development through the provision of documents, observations, and future climate projections at https://www.canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services.html. A Climate Services Support Desk is offered through the CCCS website for specific requests.

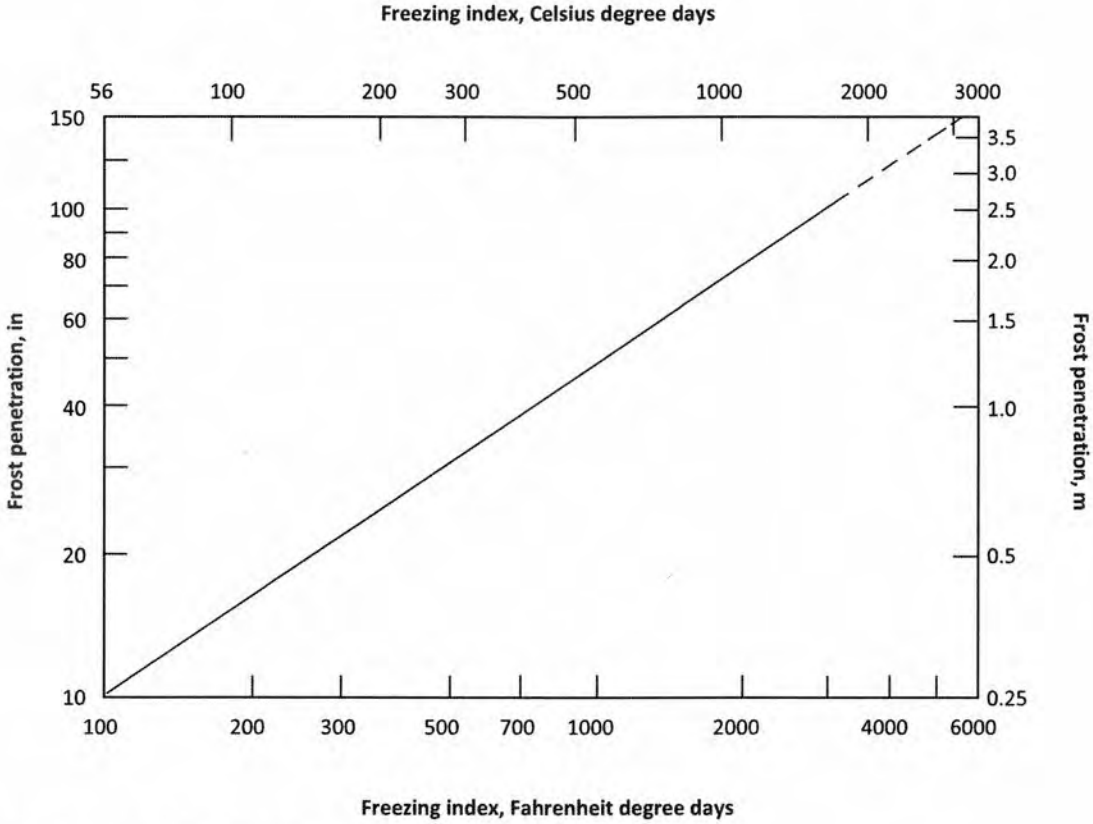
A.2 Frost depth

Refer to Figures A.1 and A.2 for climate information on the freezing index and frost penetration depths.

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Figure A.1
Relation between freezing index and depth of frost penetration
(See Clauses 6.3.1 and C.1.3.)

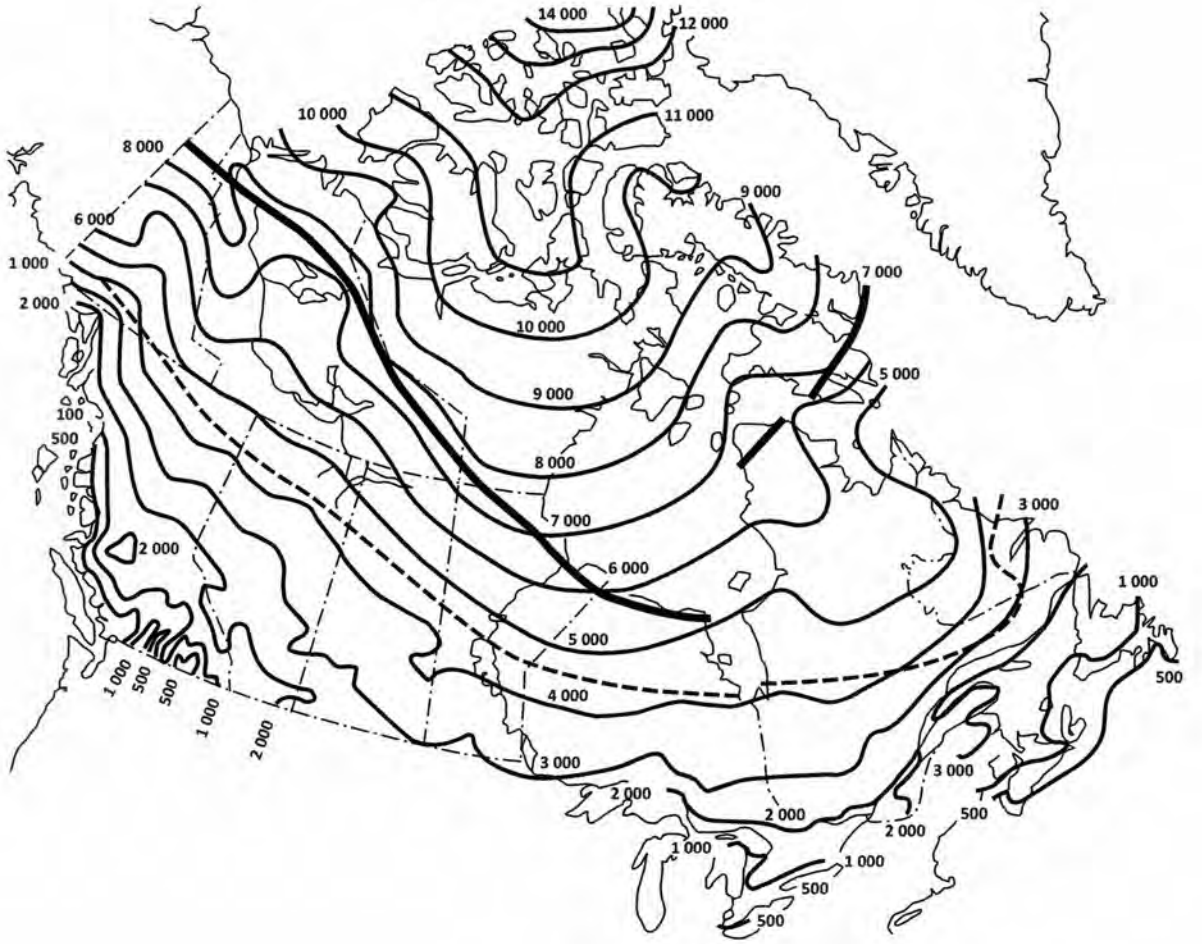


Note: *This Figure is taken from Brown (1964).*

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Figure A.2
Normal freezing index, degree-days °Fahrenheit
(See Clauses 6.3.1 and C.1.3.)



Legend:

- Southern boundary of discontinuous permafrost
- Southern boundary of continuous permafrost

Notes:

1) *This Figure is taken from Boyd (1973).*
2) *Annual total freezing degree days below 32 °F*
3) *1 degree-day °F / 1.8 = 1 degree-day °C*

A.3 Flood data

A.3.1 Inland

Environment and Climate Change Canada provides information on the Flood Damage Reduction Program (FDRP) as well as contact information for requesting a flood risk map. See http://www.ec.gc.ca/eau-water/default.asp?lang=en&n=0365F5C2-1.

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Where a community has not participated in the FDRP, the provincial or territorial ministry responsible for environment should be contacted. In Ontario, for example, conservation authorities have been established to regulate use in floodplains; these authorities have maps showing design flood levels and wave uprush levels.

While the Great Lakes are tidal, the increase in water level is not significant and so is not considered in this Standard.

A.3.2

Fisheries and Oceans Canada has archival records for tides and water levels for many stations. However, information on 1-in-100-year flood and extreme high levels is not readily available. (See http://geoportal-geoportail.gc.ca/eng/Maps/Viewer/2#fc for map of stations.) Until this data is available, coastal flooding cannot be addressed.

A.3.3 Storm surge

The increase in coastal and inland shoreline water levels due to surge can exacerbate flood damage. Storm surge is not currently addressed because of lack of data.

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Annex B (informative)
Site preparation

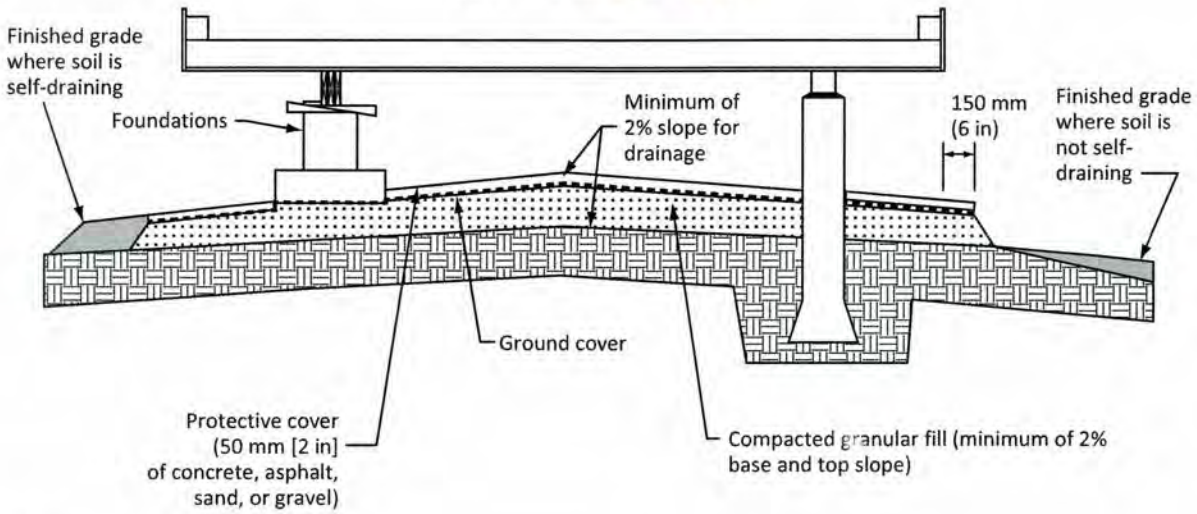
Notes:

1) *This Annex is not a mandatory part of this Standard.*
2) *See Clauses 3 and 5.4.3.*

B.1 General

A typical example of site preparation for concrete pile or surface pier foundation systems is shown in Figure B.1.

Figure B.1
Site preparation
(See Clauses 5 and B.1.)



Notes:

1) *The ground cover extends at least 150 mm (6 in) past the sides of the building and is covered by material to hold down and protect.*
2) *The backfill base and ground cover are graded centre to outside or from side to side with a minimum slope of 2%.*
3) *The surrounding finished grade slopes away from the building.*

B.2 Water velocity in flood zones

Riverine flood zones are typically divided into floodway and flood fringe areas. Flood fringe areas are generally defined as areas where flood water velocity does not exceed 1 m/s (3.2 ft/s).

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Annex C (informative)
Foundations

Notes:
1) *This Annex is not a mandatory part of this Standard.*
2) *See Clause 6.*

C.1 General

C.1.1
Foundations for buildings are designed to be capable of supporting the building, including all live and dead loads, in a manner that will not damage the building or the service connections.

C.1.2
Foundation design takes into account the bearing capacity of the soil on which foundation units are supported as well as the strength of the foundation unit that transfers the superstructure loads to the soil.

C.1.3
Foundations are designed to be compatible with the building to be supported, taking into account the weight of the building, locations of support points (as determined by the manufacturer's design), and service conditions including

a) climatic area (see Figures A.1 and A.2 for freezing and frost penetration data);
b) soil conditions; and
c) effects of flooding where the building is located in a flood zone.

With more frequent extreme weather events, the height of foundations for existing buildings in flood zones might not be sufficient. Height may be increased provided the resultant foundations comply with this Standard or the applicable provincial, territorial, or municipal regulations, or in the absence of such regulation, the *NBC* as applicable.

C.2 Foundation support points
Most buildings are designed to be supported along the longitudinal floor beams or perimeter rim joists designed to perform as beams that support the superstructure. The support points are designated by the building designer or manufacturer to avoid structural distress to the building.

C.3 Frost action

C.3.1 Frost heaving
Soils increase in volume when they freeze as a result of moisture being converted to ice. This increase in volume causes foundations to heave if the soil beneath the footings freezes.

C.3.2 Frost jacking
Moisture in soil can cause soil to freeze to the vertical surfaces of a foundation (adfreezing). As the freezing continues and the frost penetrates to a greater depth, the foundation can be lifted upward, even if the frost does not penetrate beneath the footings. In such cases, sand or gravel backfill around the foundation will reduce the effect of adfreezing and frost jacking.

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C.3.3 Soil effects on frost action

The degree of foundation movement as a result of frost action will depend on the amount of moisture in the soil, the nature of the soil, and the design of the foundation. Coarse-grained granular soil that is well drained to the depth of frost penetration will exhibit little if any movement from frost action. Poorly drained soil, however, can be subject to significant movement. Because clay and silt soils drain very slowly, both are subject to frost action. In certain soils (e.g., silt) freezing can cause ice lenses to build up in the soil. Moisture can be attracted from a considerable distance to these lenses, adding to the potential soil movement.

C.4 Footings

C.4.1 Footing area materials

C.4.1.1

This Standard provides requirements for footings made of concrete and wood. Other materials, such as moulded plastic, may be used as an alternative if they provide an equivalent level of performance. Footings other than those described in this Standard must be designed in accordance with accepted engineering practice taking into account the imposed building (pier), environmental loads, and soil conditions.

Properties that need to be addressed include, but are not limited to,

- strength — maximum symmetrical and asymmetrical loading (may be distributed, linear, or point); and
- stiffness — deflection.

Depending on the material and the configuration of the footing, additional properties may be assessed as needed, including, but not limited to,

- density;
- creep;
- soil exposure;
- moisture exposure;
- ultra-violet (UV) exposure;
- low temperature brittleness; and
- drainage.

C.4.1.2

C.4.1.2.1

Properties that need to be addressed include, but are not limited to,

a) strength — maximum symmetrical and asymmetrical loading (may be distributed, linear, or point); and
b) stiffness — deflection.

C.4.1.2.2

Depending on the material and the configuration of the footing, additional properties may be assessed as needed, including, but not limited to,

a) density;
b) creep;
c) soil exposure;

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d) moisture exposure;
e) ultra-violet (UV) exposure;
f) low temperature brittleness; and
g) drainage.

C.4.2 Minimum footing area

C.4.2.1 Calculation approach

The minimum footing areas specified in this Standard are determined from unfactored loads. The footing areas will be conservative for deformation-resistant buildings on rock or soil that is not moisture-susceptible. Where the soil is moisture-susceptible, piers can jack or settle, and be subjected to greater or lesser loads. Calculating footing area from unfactored loads using the largest tributary area for any pier provides a minimum acceptable level of safety. Calculating minimum areas in accordance with the requirements in Part 4 of the *NBC* will provide more precise minimum areas.

C.4.2.2 Occupancy load

A design live floor load of 2.4 kPa (50 lb/ft^2) was used to develop Table 3. If 1.9 kPa (40 lb/ft^2) is used, the minimum footing areas would be reduced from 0.0% to 15.4%. Most of the reductions would be well under 10% with the greater reductions occurring where snow loads are lower and allowable bearing pressure is higher so that the footing area is very small in any case.

C.5 Pile foundations

C.5.1

Where piles are used to support a building, their cross-section, length, and spacing vary depending on soil conditions.

C.5.2

Piles may be screwed into position, driven by pile-driving machines, or, in the cause of permafrost soils, steamed into position. In the last case, subsequent freezing firmly anchors the pile and provides the necessary support for the building.

C.5.3

Pile foundations should be designed and installed under the supervision of people experienced in pile foundation and installation for the applicable soil conditions.

C.6 Reinforced slab foundations

Reinforced slabs are sometimes used as foundations in manufactured home parks. Such slabs normally incorporate anchorage points embedded in the slab to resist wind forces. The design of such slabs should be undertaken by people experienced in such design and take into account local soil and wind conditions.

C.7 Piers

C.7.1 Metal piers

This Standard provides requirements for concrete masonry and lumber piers. Metal piers are also common in some regions. These piers are acceptable if they provide an equivalent level of performance.

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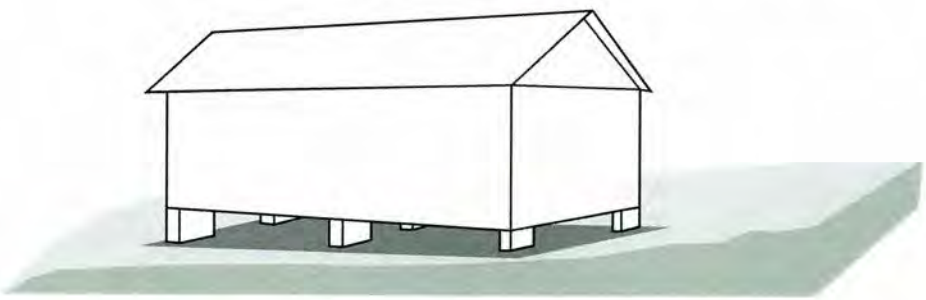
They must be designed in accordance with accepted engineering practice, taking into account the imposed building, climate and seismic loads, and soil conditions. The footings must also be designed for the loads imposed by the piers.

C.7.2 Pier stability

Where a building is installed on a sloped site, the minimum height-to-base ratio of 1:1, measured perpendicular to the length of the building, must be maintained. Pier bases must be no less than the greatest height or the pier dimensions can vary depending on the pier height. See Figure C.1.

A suitable height-to-base ratio for concrete or wood piers can be determined by applying the formula for pier toppling specified in Clause 7.1.2. In locations exposed to very high wind loads, greater stability can be obtained by decreasing the height-to-base ratio to as low as 0.67. If this is insufficient, another pier stability approach should be adopted (e.g., anchorage as specified in Clause 7).

Figure C.1
Variation in pier base dimensions depending on height
(See Clause C.7.2.)



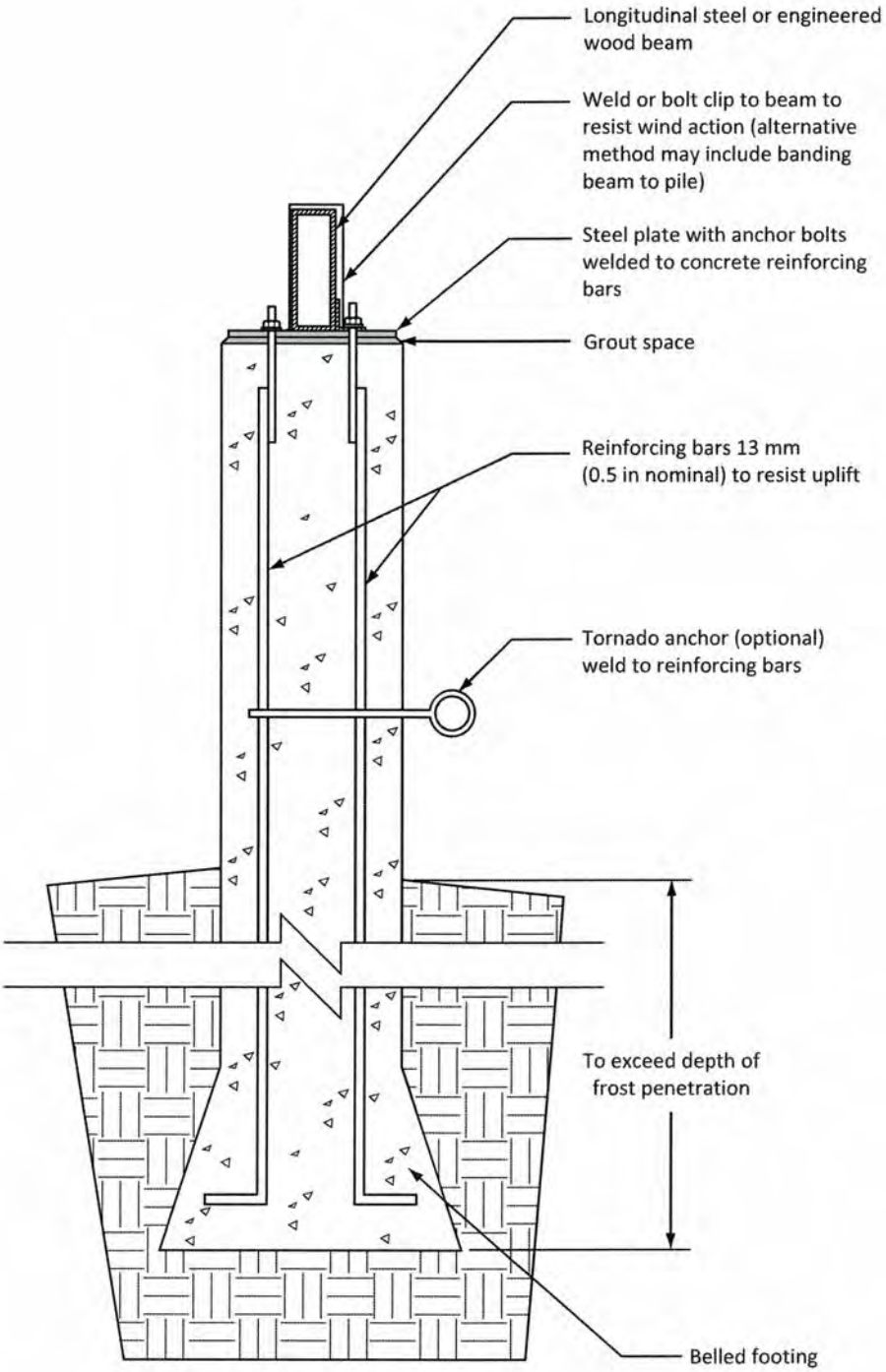
C.8 Foundation systems

Typical foundation systems (surface systems and/or systems with footings below frost level) are shown in Figures C.2 to C.9.

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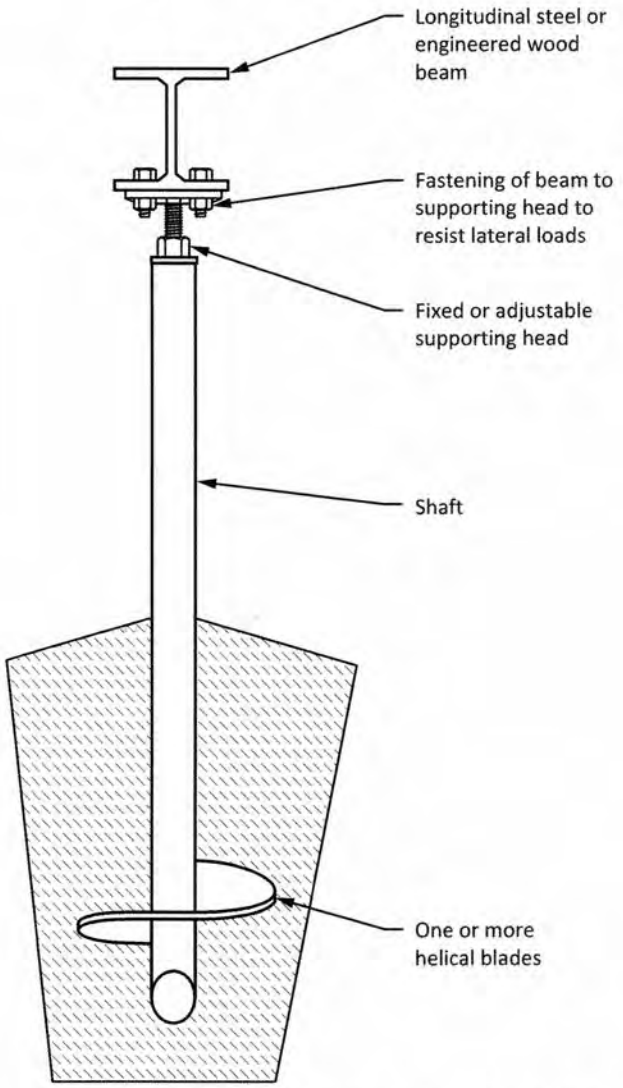
Figure C.2
Reinforced concrete pile designed to resist uplift
(See Clauses 6.6.3 and C.8.)



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Figure C.3
Screw pile
(See Clauses 6.6.3 and C.8.)

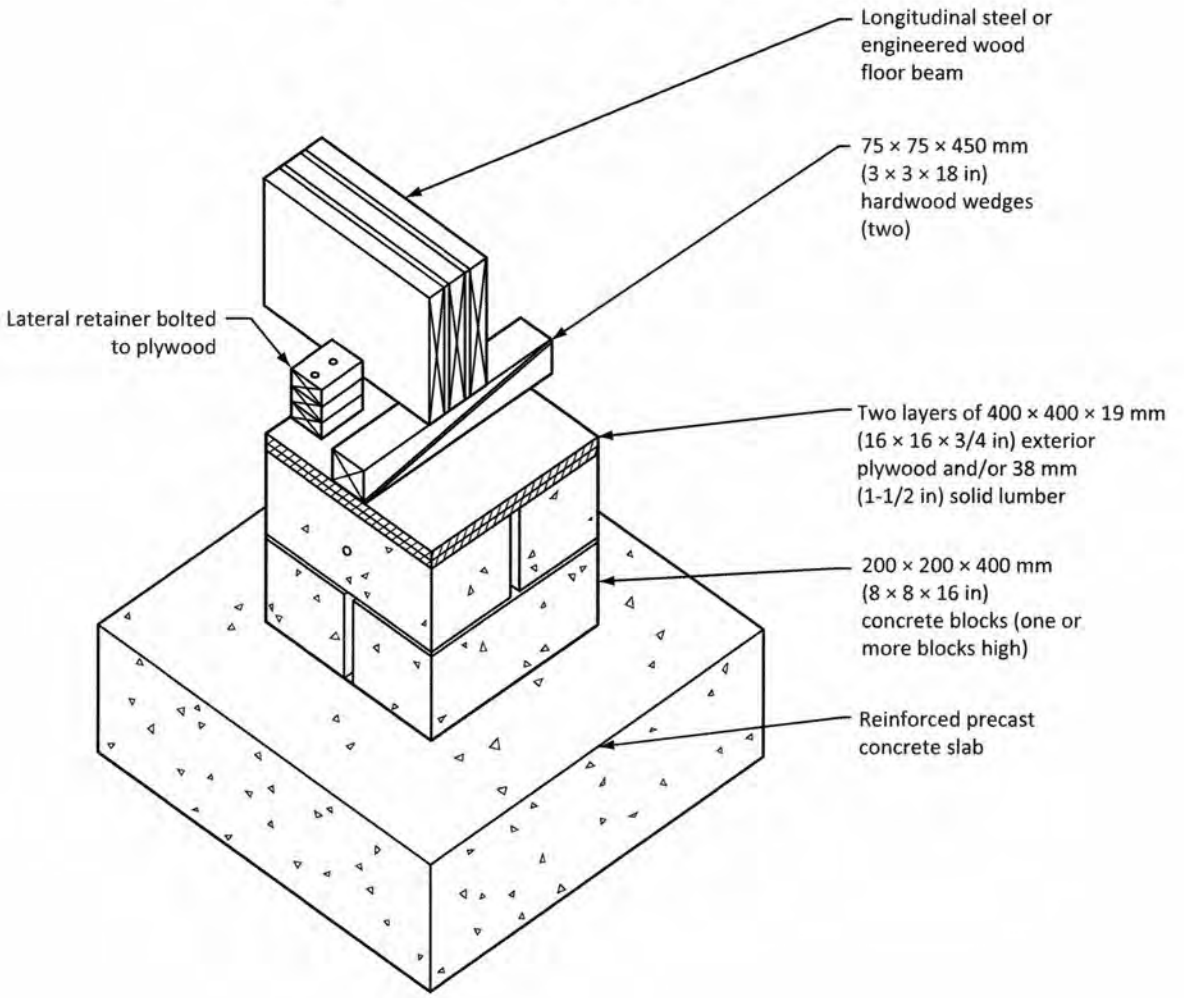


Note: *Fastening to wood beams will be with mechanical fasteners. Fastening to steel beams may be with mechanical fasteners or welded connections.*

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Figure C.4
Concrete block surface foundation system
(See Clauses 6.6.2.1, 6.6.3, 6.6.5.1, and C.8.)



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Figure C.5
Wood-crib pier foundation
(See Clauses 6.6.3 and C.8.)

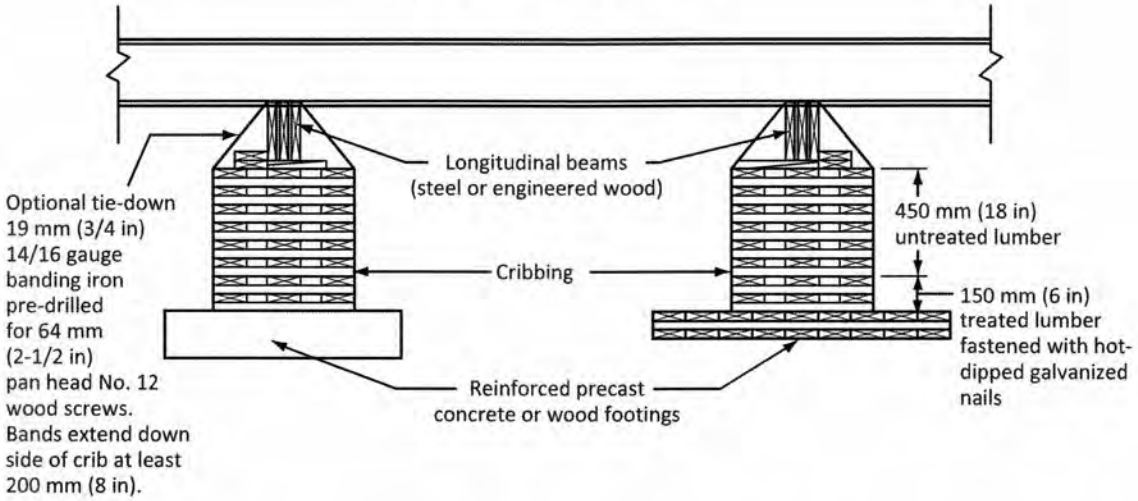
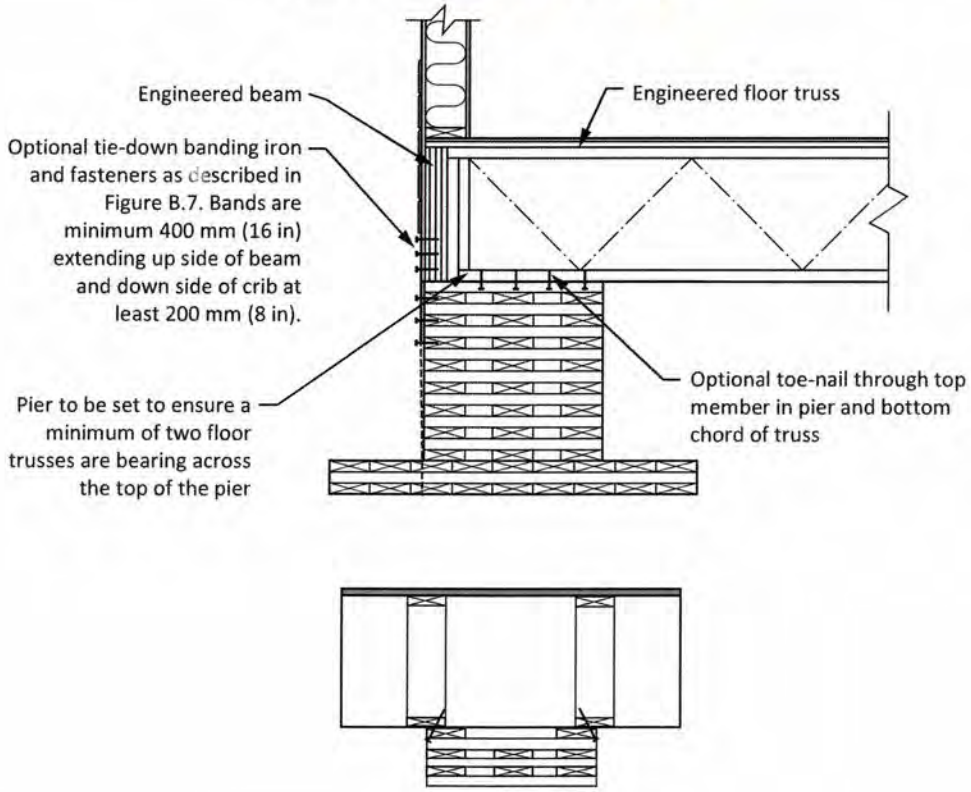


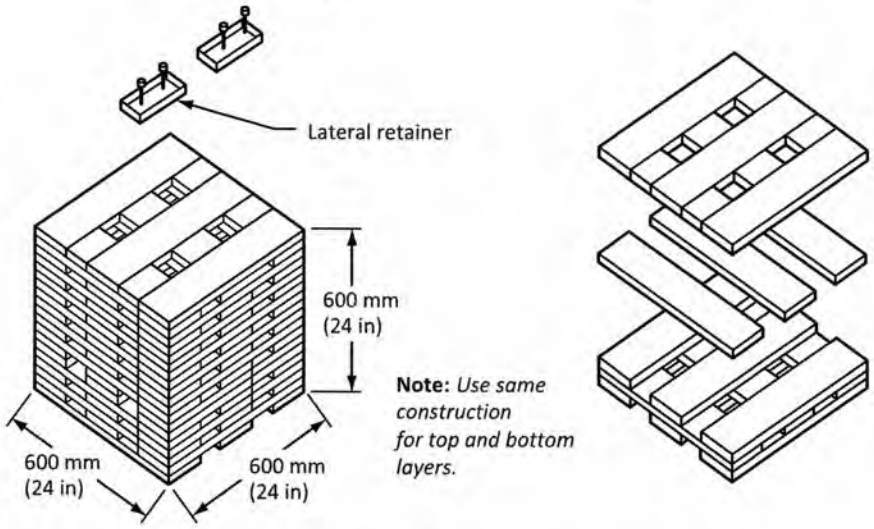
Figure C.6
Wood-crib pier foundation for structural perimeter beam and floor trusses
(See Clauses 6.6.3, 6.6.5, and C.8.)



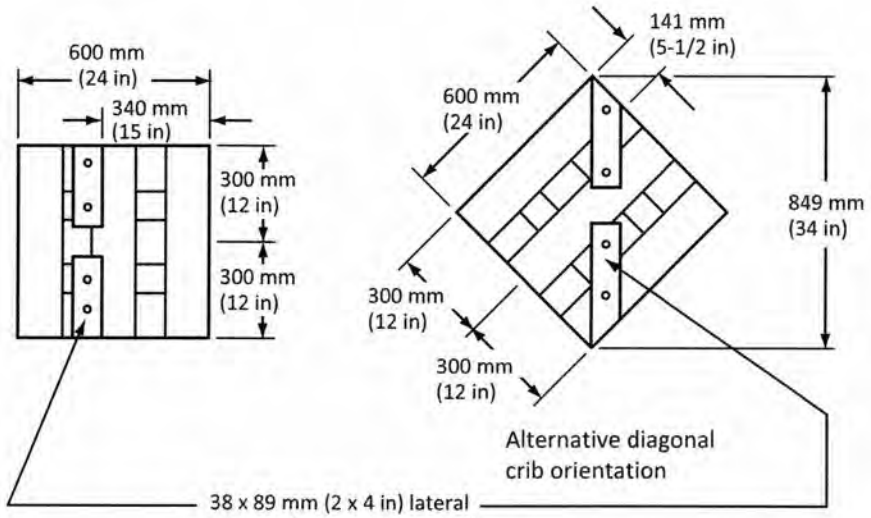
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Figure C.7
Wood-crib construction
(See Clauses 6.6.3 and C.8.)



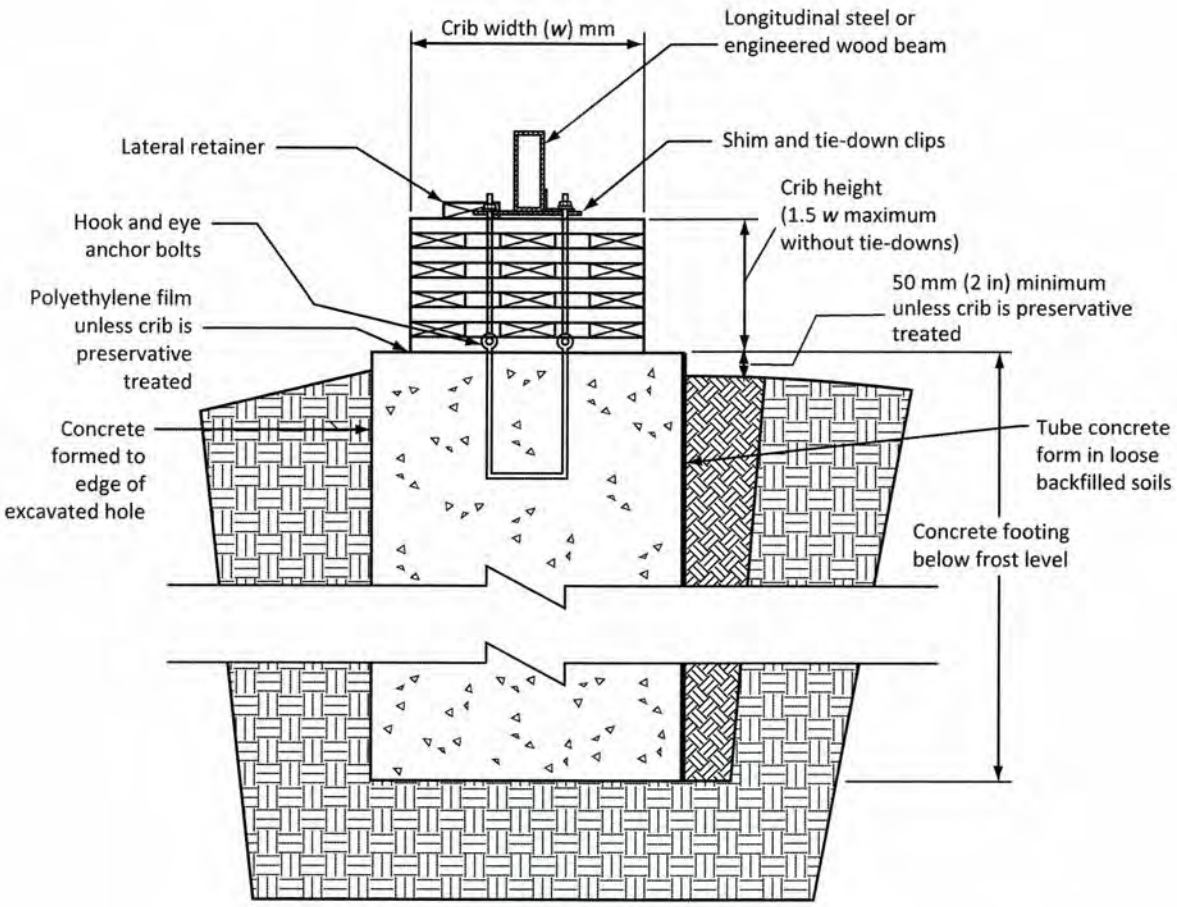
38 x 89 mm (2 x 4 in) or 38 x 140 mm (2 x 6 in)
construction with 89 mm (3-1/2 in) ardox nails



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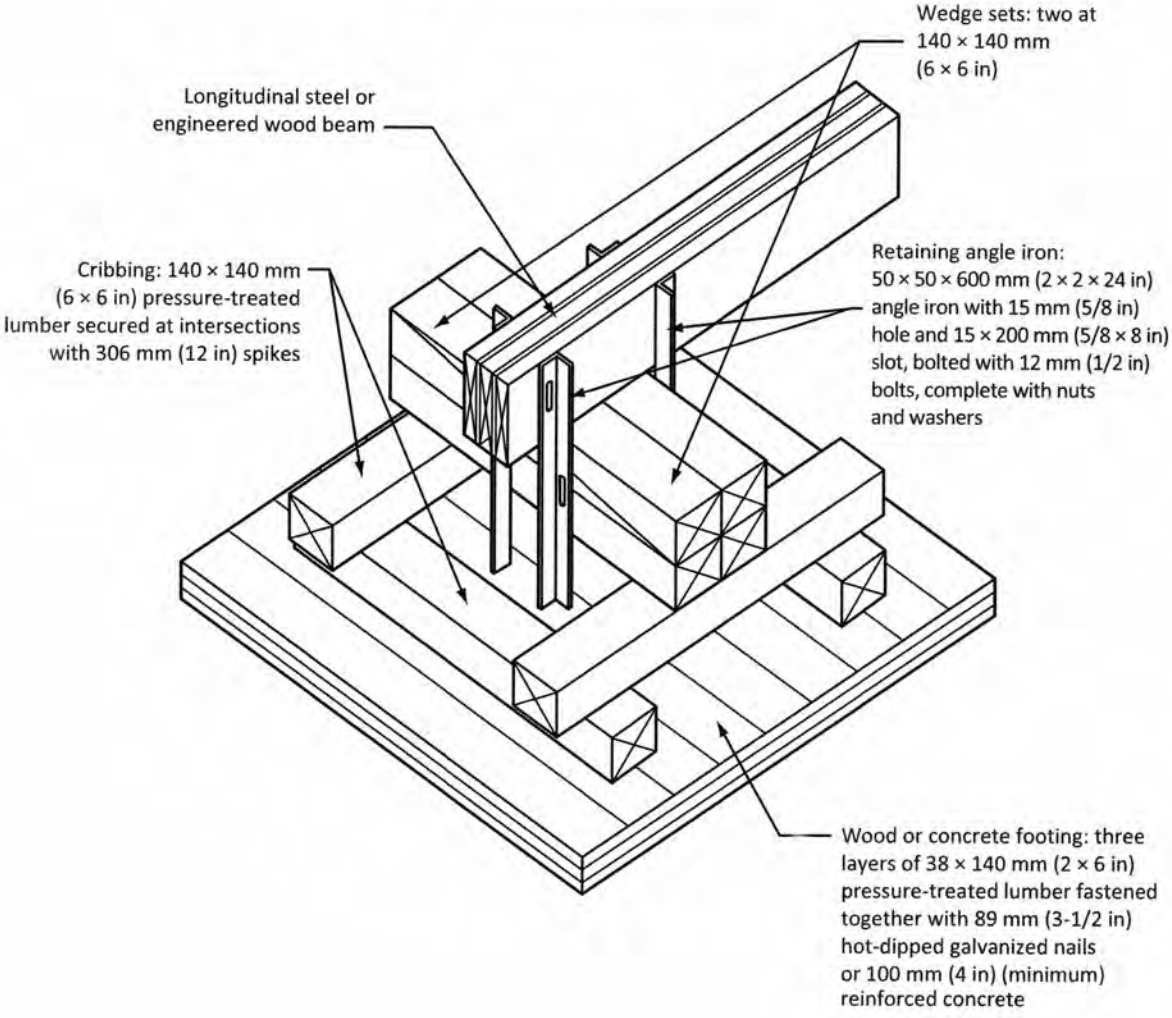
Figure C.8
Cast-in-place concrete footing and pad with anchorage
(See Clauses 6.6.3 and C.8.)



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Figure C.9
Alternative wood-crib construction
(See Clauses 6.6.3 and C.8.)



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Annex D (informative)
Anchorage systems

Notes:
1) *This Annex is not a mandatory part of this Standard.*
2) *See Clause 7.*

D.1 General

D.1.1
When wind overturn calculations or local regulations require buildings to be anchored, the anchorage system should be based on the manufacturer's instructions.

D.1.2
The following considerations are of importance to installers and building owners:
a) lateral displacement of buildings due to gusting winds, which can cause severe damage;
b) overturning and lateral displacement in strong winds, which can be controlled by adequate anchorage; and
c) site location, surrounding terrain, tree sheltering, and orientation to prevailing winds.

Table D.1
Overturning resistance (allowable specified wind load) of buildings on escarpment sites (C_eC_t = 1.0)
(See Clause 7.1.2.)

	Weight, kg/m²					
*BxS**	200	190	180	170	160	150
5	0.36	0.34	0.32	0.31	0.29	0.27
10	0.58	0.55	0.52	0.49	0.46	0.43
15	0.72	0.69	0.65	0.61	0.58	0.54
20	0.83	0.79	0.74	0.70	0.66	0.62
25	0.90	0.86	0.81	0.77	0.72	0.68
30	0.96	0.92	0.87	0.82	0.77	0.72
35	1.01	0.96	0.91	0.86	0.81	0.76
40	1.05	1.00	0.95	0.89	0.84	0.79
45	1.09	1.03	0.98	0.92	0.87	0.81
50	1.11	1.06	1.00	0.95	0.89	0.84

Note: *BxS* = width of building in metres multiplied by the spacing of supporting beams in metres.*

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Table D.2
Overturning resistance (allowable specified wind load) of buildings on open terrain (C_eC_t = 0.9)
(See Clause 7.1.2.)

	Weight, kg/m²					
*BxS**	200	190	180	170	160	150
5	0.40	0.38	0.36	0.34	0.32	0.30
10	0.64	0.61	0.58	0.55	0.51	0.48
15	0.80	0.76	0.72	0.68	0.64	0.60
20	0.92	0.87	0.83	0.78	0.73	0.69
25	1.00	0.95	0.90	0.85	0.80	0.75
30	1.07	1.02	0.96	0.91	0.86	0.80
35	1.13	1.07	1.01	0.96	0.90	0.84
40	1.17	1.11	1.05	0.99	0.94	0.88
45	1.21	1.15	1.09	1.03	0.97	0.90
50	1.24	1.18	1.11	1.05	0.99	0.93

Note: *BxS* = width of building in metres multiplied by the spacing of supporting beams in metres.*

Table D.3
Overturning resistance (allowable specified wind load) of buildings on open rough (C_eC_t = 0.7)
(See Clause 7.1.2.)

	Weight, kg/m²					
*BxS**	200	190	180	170	160	150
5	0.52	0.49	0.46	0.44	0.41	0.39
10	0.83	0.78	0.74	0.70	0.66	0.62
15	1.03	0.98	0.93	0.88	0.83	0.77
20	1.18	1.12	1.06	1.00	0.94	0.89
25	1.29	1.23	1.16	1.10	1.03	0.97
30	1.38	1.31	1.24	1.17	1.10	1.03
35	1.45	1.37	1.30	1.23	1.16	1.09
40	1.50	1.43	1.35	1.28	1.20	1.13
45	1.55	1.47	1.40	1.32	1.24	1.16
50	1.59	1.51	1.43	1.35	1.27	1.19

Note: *BxS* = width of building in metres multiplied by the spacing of supporting beams in metres.*

D.2 Frost action

Ground anchors used to resist wind forces should be at a depth sufficient to prevent movement from frost action. If a foundation unit moves upward as a result of frost action, and the ground anchors resist

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this movement, the building's superstructure or the ground anchor can be damaged. Therefore, a means of adjusting the anchor cable tension should be provided.

D.3 System types and arrangements

A variety of systems have been found to provide satisfactory anchorage, including

a) tie-downs incorporated as part of a reinforced concrete slab-on-grade;
b) concrete "deadman" anchor blocks; and
c) ground anchors (e.g., earth augers, duckbill anchors, and other proprietary systems).

Typical anchorage system arrangements are shown in Figure D.1.

D.4 Tornado protection

Experience has shown that unanchored buildings without basements can be life threatening during tornadoes, particularly when unanchored buildings are located close to one another. Damage as a result of a tornado can be greatly reduced when walls are effectively anchored to the ground.

To prevent uplift of a building during a tornado, vertical anchorage capable of a minimum ultimate uplift resistance of 3 kN/m (205 lbf/ft) should be provided from the base of each side wall into the ground.

The foundation supporting the building's frame should be designed so that, under lateral wind force, the building slides on its foundation without falling as a result of sliding off its supports or the supports toppling. This can be achieved by using

a) piers whose base dimension is at least equal to their height; and
b) a positive means of transferring, at ultimate resistance, a lateral force of 3 kN/m (205 lbf/ft) from the base of each side wall into the ground.

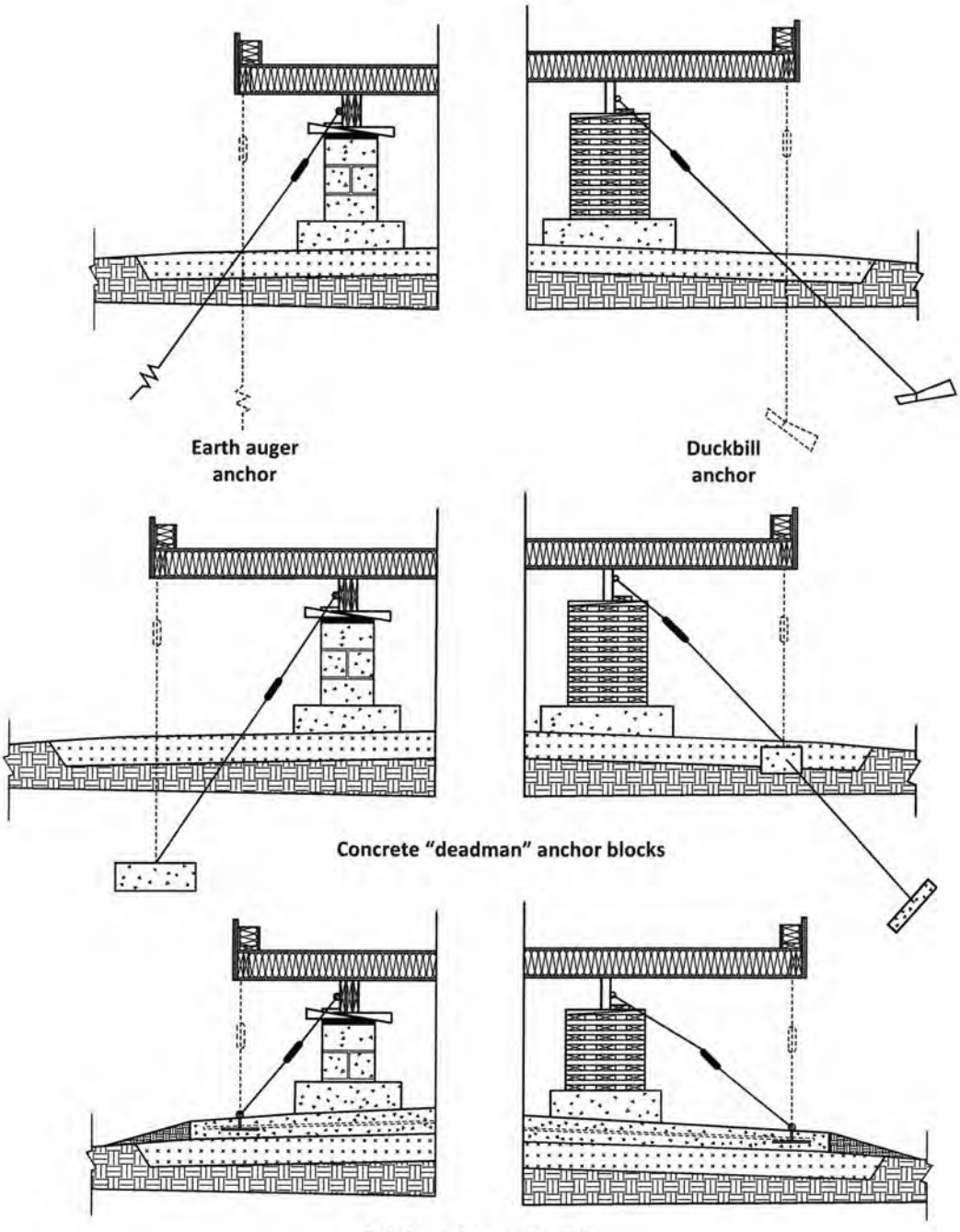
This anchorage should be provided for all buildings in tornado-susceptible areas. Two methods for providing anchorage are shown in Figure D.2.

Note: *Guidance for determining whether a locality is prone to tornadoes can be obtained from the Atmospheric Environment Service, Environment Canada, 4950 Dufferin Street, Toronto, Ontario M3H 5T4.*

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Figure D.1
Typical anchorage system arrangements
(See Clause D.3.)



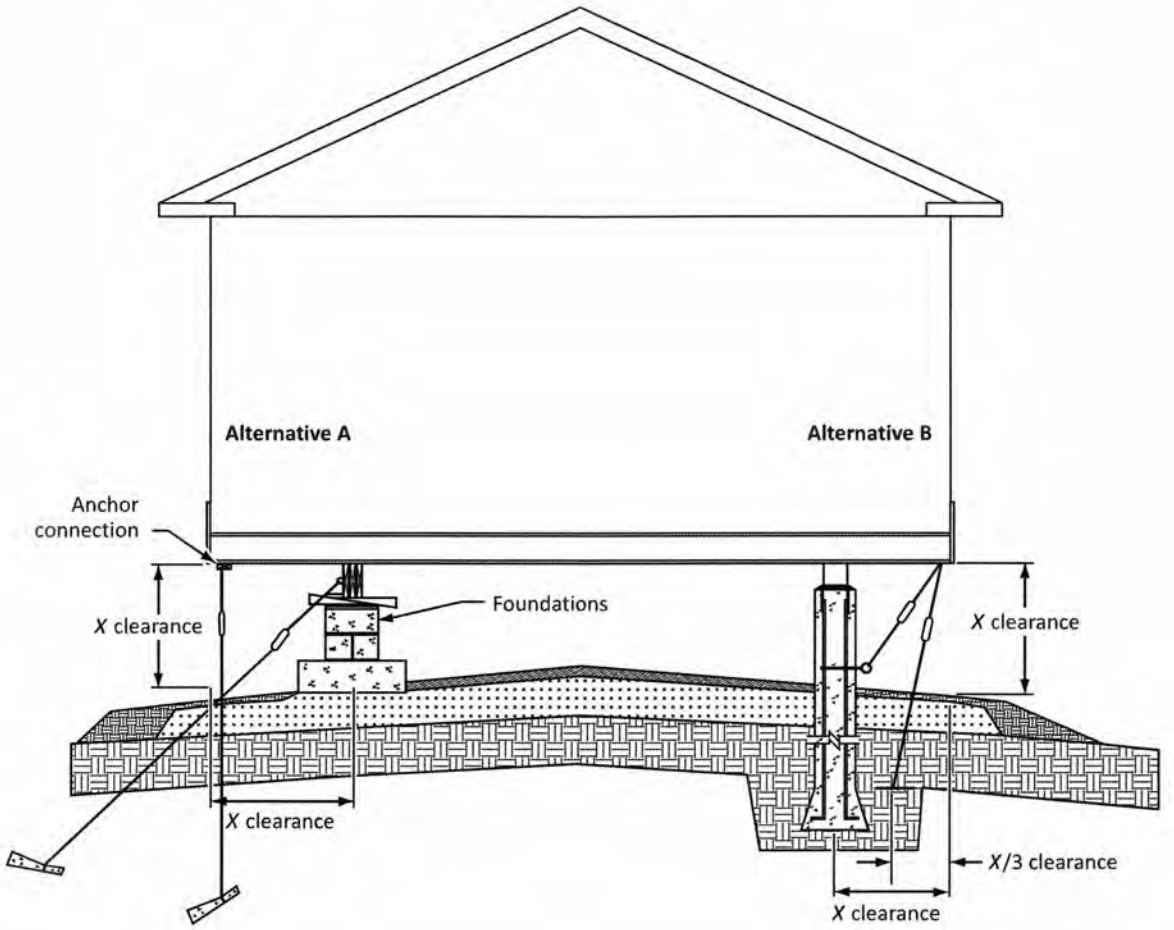
Notes:

1) *Diagonal tie-downs are effective in limiting lateral sliding on foundation piers.*
2) *Vertical tie-downs directly connected to the wall studs provide the most effective resistance to uplift and overturning forces and should be considered for use at high-wind-load sites, particularly on the prevailing windward sides of an installation.*

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Figure D.2
Anchorage for tornado protection
(See Clause D.4.)



Notes:

1) *The ultimate capacity of anchors and connections to the unit should be not less than* 17.8 kN *(4000 lb), with the anchors located not more than* 1200 mm *(4 ft) from the ends and spaced not more than* 3660 mm *(12 ft) on-centre along the sides of the unit.*
2) *Anchors should connect directly to wall studs to provide maximum restraint against uplift of the wall.*
3) *Anchors should be tightened to a minimum force of* 13.35 kN *(3000 lb) before adjustment to allow slack in the anchor cables.*
4) *For Alternative A, the slack should not exceed* 75 mm *(3 in) for diagonal cables and* 50 mm *(2 in) for vertical cables.*
5) *For Alternative B, the slack in the cables should not exceed* 50 mm *(2 in), although no slack is preferable.*
6) *For non-tornado areas, the spacing between anchors may be increased to* 7320 mm *(24 ft).*

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Annex E (informative)
Multiple-section units

Notes:
1) *This Annex is not a mandatory part of this Standard.*
2) *See Clause 8.*

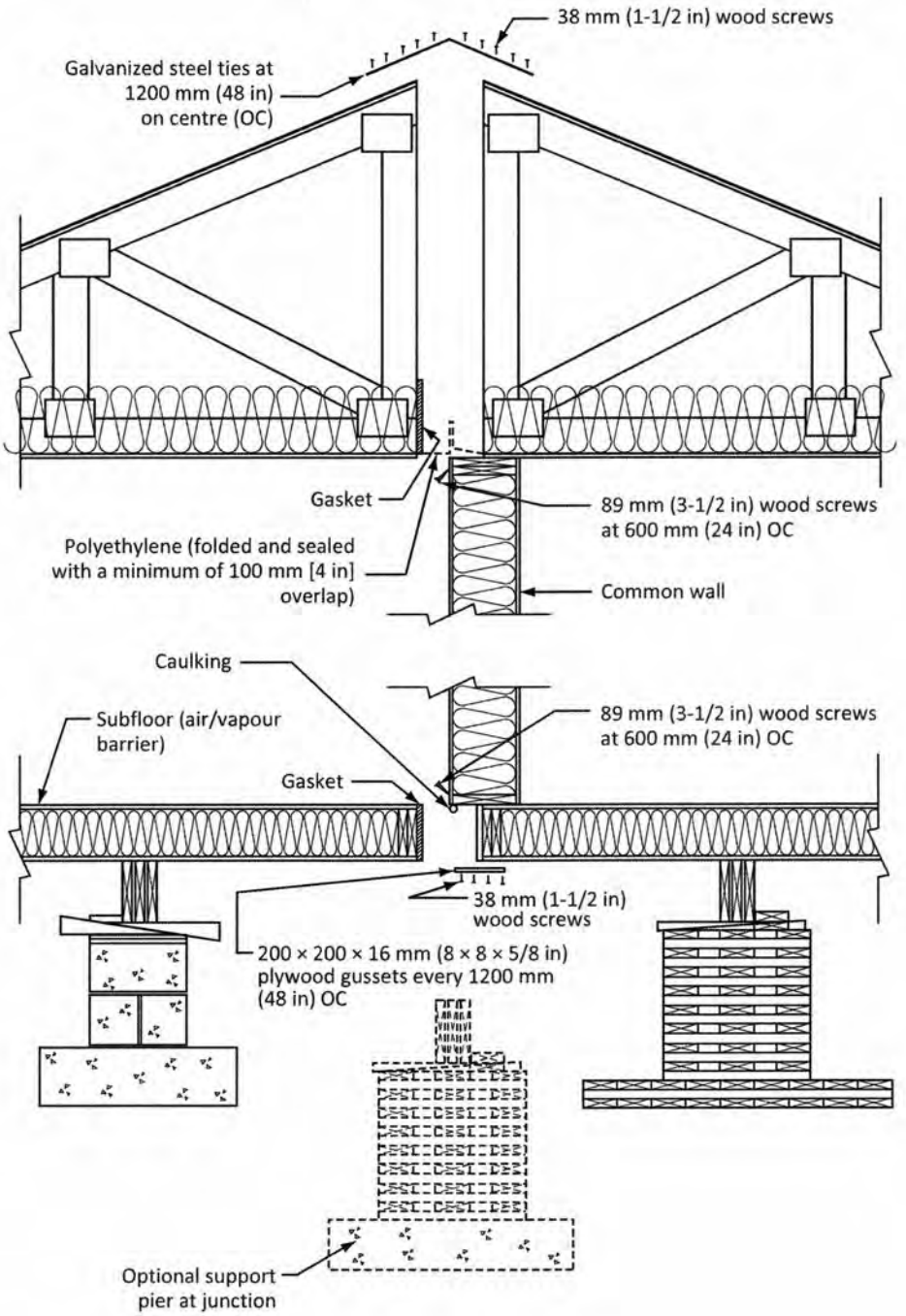
E.1 General

Typical construction details for the field connection of multiple-section units are shown in Figures E.1 and E.2.

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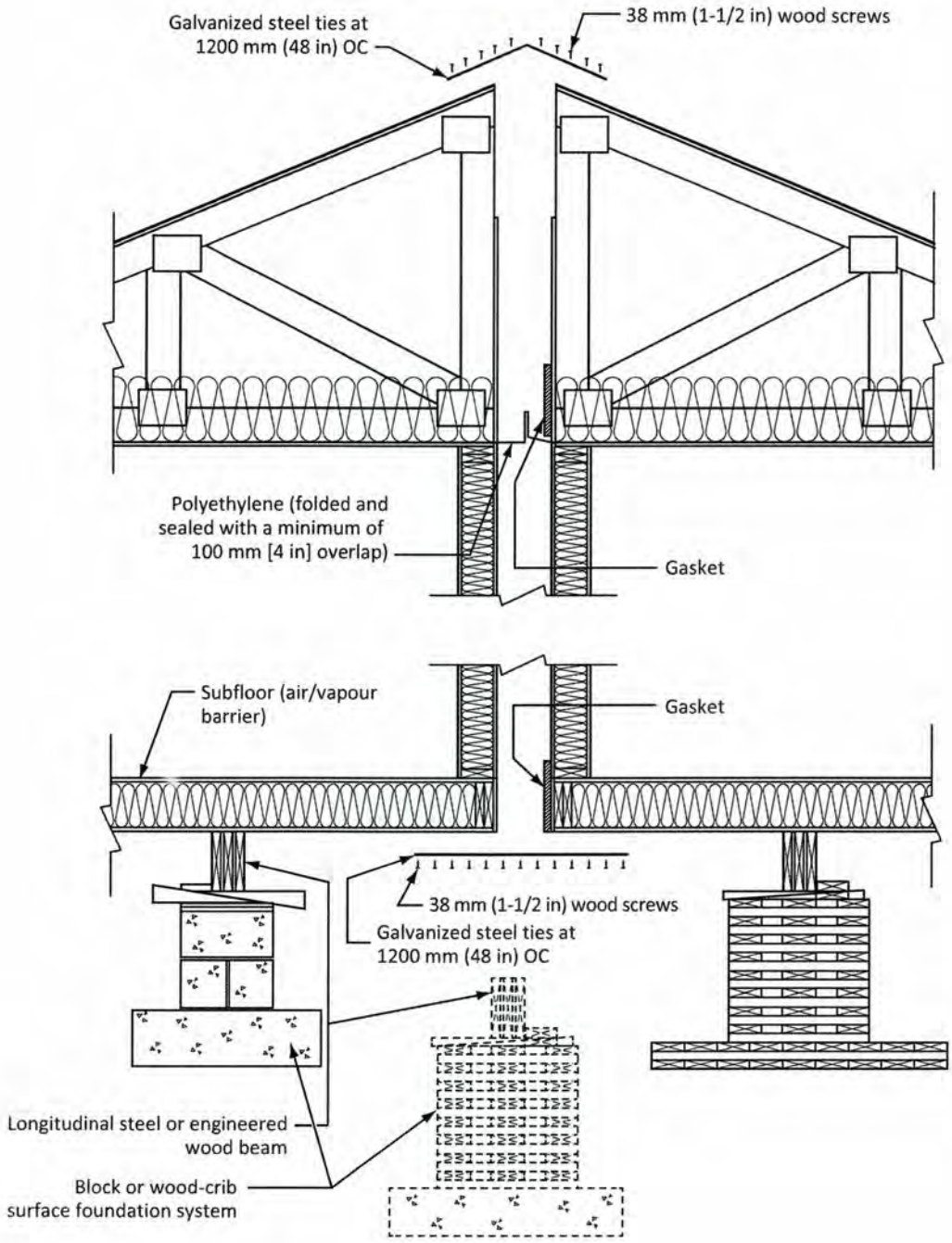
Figure E.1
Multiple-section set-up detail — Common mating wall
(See Clauses 8.2 and E.1.)



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Figure E.2
Multiple-section set-up detail — Double mating wall
(See Clauses 8.2 and E.1.)



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Annex F (informative)
Skirting

Notes:
1) *This Annex is not a mandatory part of this Standard.*
2) *See Clause 9.*

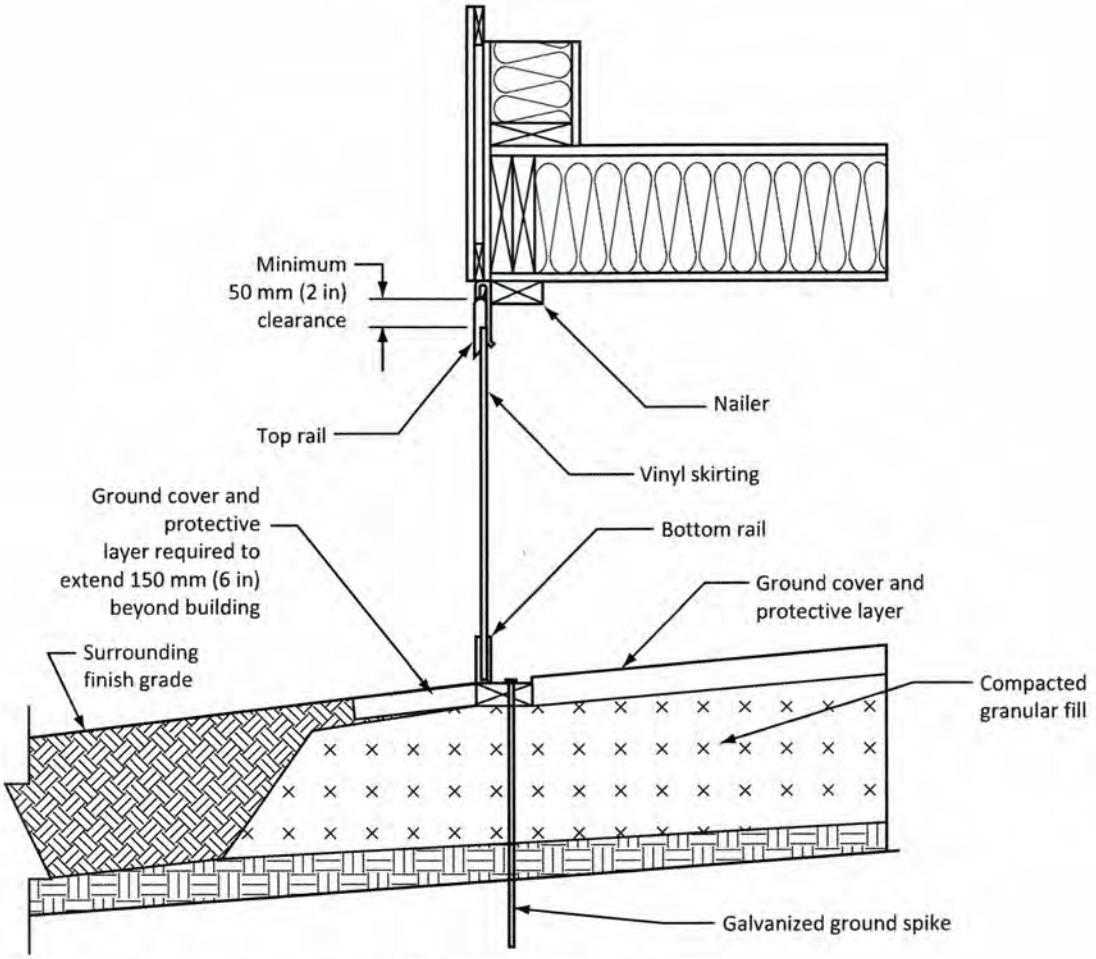
F.1 General
Skirting helps keep debris from accumulating under a building and should be used. Skirting also helps prevent penetration of cold air; however, it should not be considered adequate protection for exposed waterlines.

F.2 Designs
Skirting designs vary depending on the skirting material, lot contours, and foundation system. Some skirting systems include channels and take-up devices. Typical systems are shown in Figures F.1 to F.3.

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Figure F.1
Skirting system (Example 1)
(See Clauses 9.1.1 and F.2.)

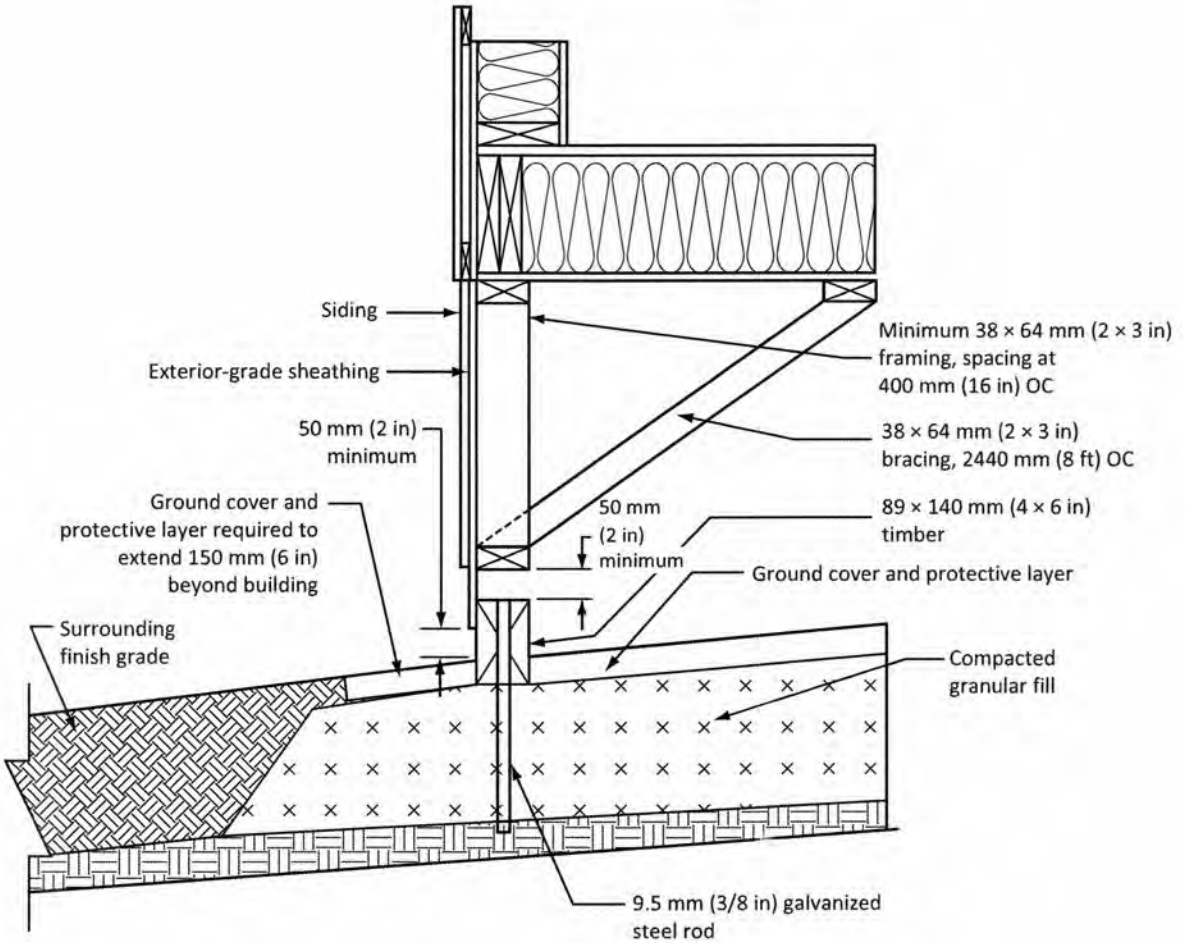


Note: *Movement should be provided for in soils susceptible to frost heave.*

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Figure F.2
Skirting system (Example 2)
(See Clauses 9.1.1 and F.2.)

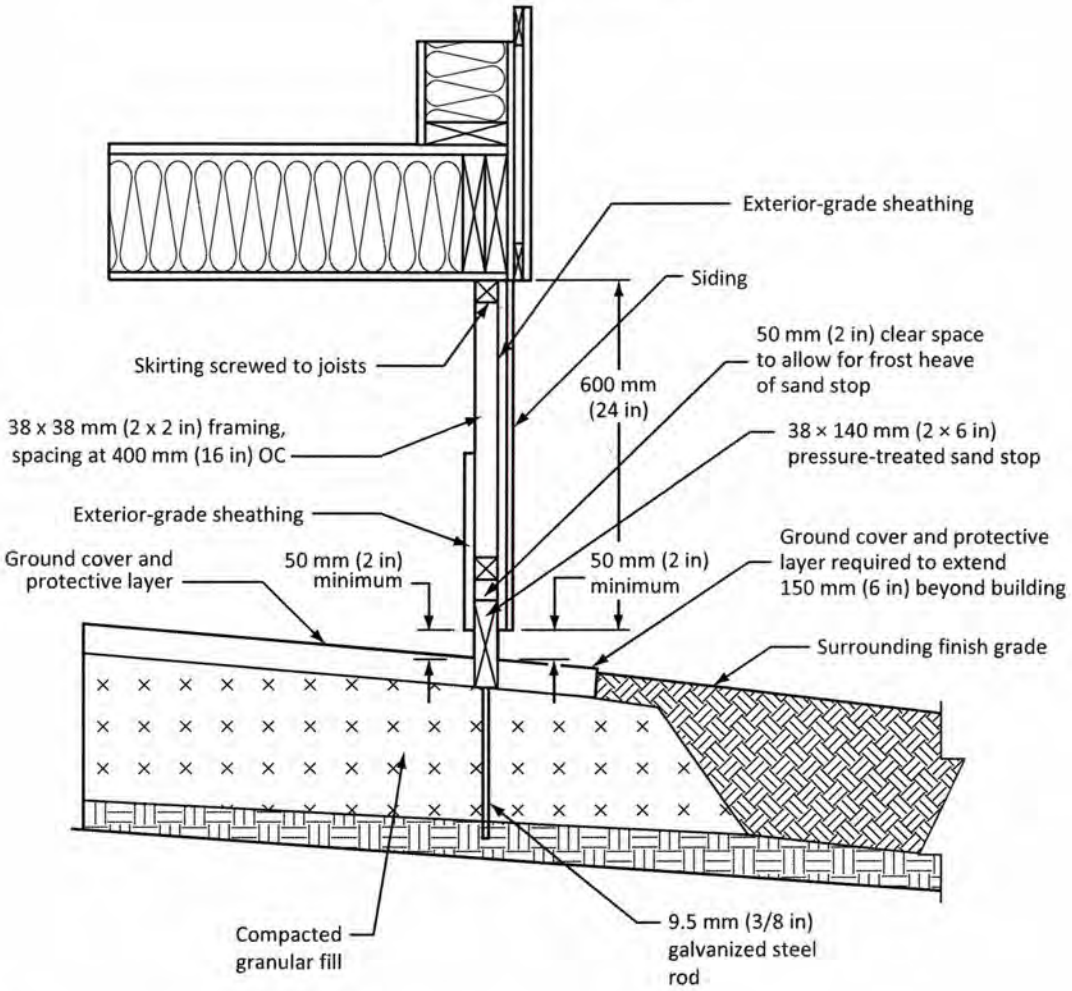


Notes:
1) *Movement should be provided for in soils susceptible to frost heave.*
2) *Wood in contact with the ground should be treated with a pressure preservative.*

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Figure F.3
Skirting system (Example 3)
(See Clauses 9.1.1 and F.2.)



Notes:

1) *Movement should be provided for in soils susceptible to frost heave.*
2) *Wood in contact with the ground should be treated with a pressure preservative.*

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Talbott pad, blocking and tie down details.

Iconic
ISLAND DWELLINGS



2x4x16" lateral support structurally screwed to support shims.

2x4x16" with hardwood shims.

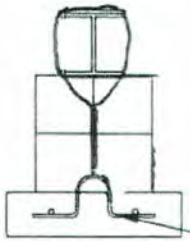
8x8x16 cement blocks with 3/8" plywood spacer to reduce chance of block shattering.

10 MM rebar tie down points at no more than 24' spacing and within 4' from end of home.

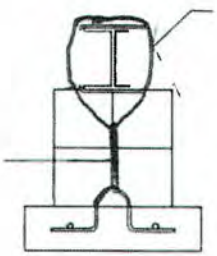
6" cement pad with 10MM rebar 2' on center. 6 mil poly under. Sloped edge to drain water. See skirting details for drip cap installation.



Tie down to be completed using 3/8" aircraft cable and 3/8" galvanized steel turnbuckle.



Tie Down Hooked Below
Longitudinal Rebar



See Sheet 3 for Detail and Specifications
Typ. 4 Places

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
J. A. MITCHELL
21376

21 September 2023 Permit to Practice 1003605

From previous Project.

DATE: 15 09 2023	
Scale: 1/2" = 1.0'	
Drawn: DBB	
Project: Unit 22	
Sheet	2 of 3

Steel Cable Tie Down Section @ Blocking

Betty Wasyliw

From: Doralynne Hodgins <[redacted]>
Sent: April 2, 2026 9:38 AM
To: Jennifer Barber
Subject: Re: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Thanks Jen. The abatement started yesterday. They say should be done b6 the 17th and then they will issue the Clearance certificate to submit to you.

Dodie

On Wed., Apr. 1, 2026, 5:04 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

Just got them, will review tomorrow.

Jennifer Barber, RBO
Senior Building Official

Strathcona
REGIONAL DISTRICT

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̵ᵂiłdax̵ᵂ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

-

From: Doralynne Hodgins <[redacted]>
Sent: Thursday, March 26, 2026 6:29 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Chris at Iconic promised me the drawings would be sent on March 6th. I have sent another notice but will call in the morning

Dodie

On Thu., Mar. 26, 2026, 1:24 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

I still don't have the drawings.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca
The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓ɨłdax̱ᵂ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

-

From: Doralynne Hodgins <[redacted]>
Sent: Friday, March 6, 2026 5:44 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Chris advised he would submit you drawings shortly.

If you don't hear next week let me know.
Thanks

Dodie

On Fri., Mar. 6, 2026, 2:21 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> No, the last time I had any communication with him was Dec. 11, 2025

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓ɨłdax̱ᵂ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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From: Doralynne Hodgins <[redacted]>
Sent: March 6, 2026 1:20 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Jen did you hear from Chris at Iconic in regards to the foundation drawings? I sent them an email reminder

Dodie

On Fri., Mar. 6, 2026, 1:17 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

Thanks Dodie

Jennifer Barber

Senior Building Official

Strathcona Regional District

jbarber@srd.ca

250-830-6713

From: Doralynne Hodgins [redacted]
Sent: Friday, March 6, 2026 1:15:17 PM
To: Email - building@srd.ca <building@srd.ca>
Subject: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Building/Plumbing Permit

Strathcona Regional District Building Bylaw No. 158
Electoral Area D
Jurisdiction 772

Permit #:
PRM-2025-0041

Issued Date:
2026-03-06

Permit Type
Residential SDD - Demolition/relocate

Roll #
05416.000

Property Address
4129 ISLAND HWY S

Legal Description
LOT C SECT 35 PLAN VIP13994 LNDDST 15

Project Value
$0.00

Fees
$60.00

Area of Work

Description
demolish SDD

Conditions

submit hazmat clearance letter

Contacts

Type	Name	Company Address 1	Phone Number	Mobile Number	Email
Applicant, Property Owner	HODGINS DORALYNNE M	N/A - 4129 ISLAND HWY S	2368540930	0	[redacted]
Property Owner	HODGINS VICTOR G	N/A - 4129 ISLAND HWY S	0	0	

Inspections

☐ Final

The person signing this permit form, if not the owner, acknowledges that their signature is as agent for the owner and that they are authorized to bind the owner, who is deemed to know of and understand the content of this permit

Every building permit shall expire and the right of the owner under the permit shall terminate if the work is not commenced within six (6) months, is suspended for a period of twelve (12) months, or is not completed within twenty four (24) months of date of issue.

[redacted]
Applicant Signature

March 6, 2026
Date

From:	chris@iconicid.ca
To:	[redacted] Jennifer Barber
Cc:	steve@iconicid.ca; kristy@iconicid.ca
Subject:	RE: Drawings
Date:	April 1, 2026 4:45:04 PM
Attachments:	image001.png image002.png Tie down engineering.pdf z240 Foundation Plan.pdf

NOTICE: This email is from an external source.

Oops

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8

Information and any attachments contained in or attached to this email are intended solely for the individuals intended. Any redistribution without my express written consent is strictly prohibited and a breach of privacy. Consent can be gained by hitting reply and asking. Privacy is an automatic expectation of every email.

From: chris@iconicid.ca <chris@iconicid.ca>
Sent: April 1, 2026 4:44 PM
To: 'Doralynne Hodgins' [redacted]>; 'Jennifer Barber' <jbarber@srd.ca>
Cc: 'Chris Andersen' <chris@iconicid.ca>; 'steve@iconicid.ca' <steve@iconicid.ca>; 'kristy@iconicid.ca' <kristy@iconicid.ca>
Subject: RE: Drawings

Here's the fresh drawings. Please advise if there are any further items or supporting docs needed.

Cheers

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8





Information and any attachments contained in or attached to this email are intended solely for the individuals intended. Any redistribution without my express written consent is strictly prohibited and a breach of privacy. Consent can be gained by hitting reply and asking. Privacy is an automatic expectation of every email.

From: Doralynne Hodgins [redacted]
Sent: March 30, 2026 5:31 PM
To: chris@iconicid.ca
Subject: Drawings

Chris what is the status of the drawings

Dodie

See Sheet 3 for Detail and Specifications
Typ. 4 Places

21 September 2023

DATE:	15 09 2023
Scale:	1/2" = 1.0'
Drawn:	DBB
Project:	Unit 22
Sheet	2 of 3

Steel Cable Tie Down
Section @ Blocking

Typical tie down method to pad anchors.



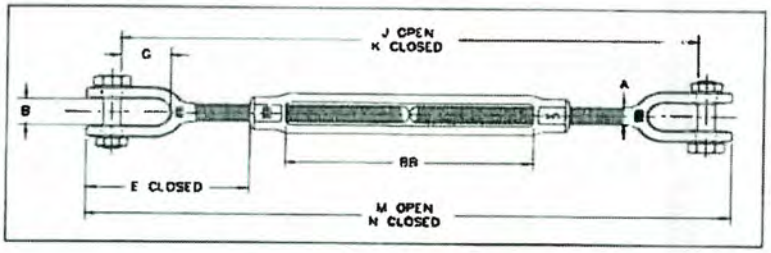
Fatigue Rated

HG-228



- End fittings are Quenched and Tempered or Normalized, bodies heat treated by normalizing.
- Hot Dip galvanized steel.
- TURNBUCKLES RECOMMENDED FOR STRAIGHT OR IN-LINE PULL ONLY.
- Forged jaw ends are fitted with bolts and nuts for 1/4" through 5/8", and pins and cotters on 3/4" through 2-3/4" sizes.
- Modified UNJ thread on end fittings for improved fatigue properties.
- Body has UNC threads.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these turnbuckles meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Fatigue Rated.

Meets the performance requirements of Federal Specifications FF-T-791b,Type 1, Form 1 - CLASS 7. and ASTM F-1145, except for those provisions required of the contractor.



HG-228 Jaw & Jaw

Thread Dia. & Take Up (in.)	HG-228 Stock No.	Working Load Limit (lbs)*	Weight Each (lbs.)	Dimensions (in)								
				A	B	E Closed	G	J Open	K Closed	M Open	N Closed	BB
† 1/4 x 4	1032493	500	.37	.25	.45	1.66	.64	11.19	7.19	12.18	8.18	4.07
† 5/16 x 4-1/2	1032518	800	.56	.31	.50	2.02	.87	13.07	8.57	14.12	9.62	4.58
† 3/8 x 6	1032536	1200	.85	.38	.53	2.11	.85	16.25	10.25	17.50	11.50	6.10
1/2 x 6	1032554	2000	1.82	.50	.64	3.22	1.07	16.65	12.05	20.14	14.14	6.03
1/2 x 9	1032572	2200	2.29	.50	.64	3.20	1.07	24.94	15.94	26.43	17.43	9.36
1/2 x 12	1032590	2200	2.71	.50	.64	3.20	1.07	30.94	18.94	32.43	20.43	12.36
5/8 x 6	1032616	3500	3.21	.63	.79	3.90	1.32	19.74	13.74	21.82	15.82	6.03
5/8 x 9	1032634	3500	3.95	.63	.79	3.89	1.32	26.08	17.08	28.16	19.16	9.39
5/8 x 12	1032652	3500	4.58	.63	.79	3.89	1.32	32.08	20.08	34.16	22.16	12.39
3/4 x 6	1032670	5200	4.80	.75	.97	4.71	1.52	21.09	15.09	23.68	17.68	6.13
3/4 x 9	1032698	5200	5.85	.75	.97	4.68	1.52	27.49	18.49	30.08	21.08	9.59
3/4 x 12	1032714	5200	6.72	.75	.97	4.68	1.52	33.49	21.49	36.08	24.08	12.59
3/4 x 18	1032732	5200	8.45	.75	.97	4.71	1.52	45.49	27.49	48.08	30.08	18.53
7/8 x 12	1032750	7200	9.37	.88	1.16	5.50	1.77	34.65	22.65	37.62	25.62	12.16
7/8 x 18	1032778	7200	11.8	.88	1.16	5.50	1.77	47.12	29.12	50.09	32.09	18.63
1 x 6	1032796	10000	10.4	1.00	1.34	6.09	2.05	23.82	17.82	27.18	21.18	6.18
1 x 12	1032812	10000	13.8	1.00	1.34	6.09	2.05	35.82	23.82	39.18	27.18	12.18
1 x 18	1032830	10000	17.1	1.00	1.34	6.09	2.05	47.82	29.82	51.18	33.18	18.18
1 x 24	1032858	10000	21.0	1.00	1.34	6.06	2.05	60.42	36.42	63.78	39.78	24.84
1-1/4 x 12	1032876	15200	21.9	1.25	1.84	8.09	2.82	39.37	27.37	43.58	31.58	12.06
1-1/4 x 18	1032894	15200	25.9	1.25	1.84	8.09	2.82	51.37	33.37	55.58	37.58	18.06
1-1/4 x 24	1032910	15200	29.8	1.25	1.84	8.09	2.82	63.93	39.93	68.14	44.14	24.62
1-1/2 x 12	1032938	21400	32.6	1.50	2.06	8.93	2.81	40.76	28.76	45.68	33.68	12.32
1-1/2 x 18	1032956	21400	38.0	1.50	2.06	8.93	2.81	52.76	34.76	57.68	39.68	18.32
1-1/2 x 24	1032974	21400	43.5	1.50	2.06	8.93	2.81	65.38	41.38	70.30	46.30	24.94
1-3/4 x 18	1033018	28000	53.5	1.75	2.60	9.36	3.35	53.35	35.35	59.16	41.16	18.37
1-3/4 x 24	1033036	28000	61.1	1.75	2.60	9.36	3.35	65.35	41.35	71.16	47.16	24.37
2 x 24	1033054	37000	95.3	2.00	2.82	11.80	3.74	69.64	45.64	76.72	52.72	24.48
2-1/2 x 24	1033072	60000	167	2.50	3.06	13.26	4.44	72.97	48.97	82.18	58.18	24.60
2-3/4 x 24	1033090	75000	199	2.75	3.69	14.92	4.19	74.75	50.75	85.50	61.50	24.65

*Proof Load is 2.5 times the Working Load Limit. Ultimate Load is 5 times the Working Load Limit.
† Mechanical Galvanized

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Crosby®

AdChoices | Steel Wire Rope | Cable Steel | Cable Rope | Nylon Rope
Custom Search - the most efficient way to navigate the Engineering ToolBox!

Wire Rope - Strength

6 strand x 19 wire (6x19) - minimum breaking strength, safe loads and weight

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Minimum breaking strength and safe load for Bright wire, uncoated, fiber core (FC) wire rope, improved plow steel (IPS):

Rope Diameter		Minimum Breaking Strength		Safe Load		Weight	
(in)	(mm)	(lb_f)	(kN)	(lb_f)	(kN)	(lb_m/ft)	(kg/m)
1/4	6.4	5450	24.4	1100	4.89	0.11	0.16
5/16	8	8520	37.9	1700	7.56	0.16	0.24
3/8	9.5	12200	54.3	2440	10.9	0.24	0.36
7/16	11.5	15540	73.6	3310	14.7	0.32	0.48
1/2	13	21400	95.2	4280	19.0	0.42	0.63
9/16	14.5	27000	120	5400	24.0	0.53	0.79
5/8	16	33400	149	6680	29.7	0.66	0.98
3/4	19	47600	212	9520	42.3	0.95	1.41
7/8	22	64400	286	12900	57.4	1.29	1.92
1	26	83600	372	16700	74.3	1.66	2.50
1 1/8	29	105200	468	21000	93.4	2.13	3.17
1 1/4	32	129200	575	25900	115	2.63	3.91
1 3/8	35	155400	691	31100	138	3.18	4.73
1 1/2	38	184000	818	36800	164	3.78	5.63
1 5/8	42	214000	852	42800	190	4.44	6.61
1 3/4	45	248000	1100	49600	221	5.15	7.66
1 7/8	48	282000	1250	56400	251	5.91	8.80
2	52	320000	1420	64000	285	6.72	10.0

Example - Maximum Safe Mass for a 3/8" Wire Rope

The relationship between mass and force (weight) can be expressed as

$$m = F / g \qquad (1)$$

where

F = force, weight (N)

m = mass (kg)

g = acceleration of gravity (9.81 m/s^2)

Maximum safe mass for a 3/8" wire rope where the safe load is 10.9 kN can be calculated as

$$m = (10.9\ 10^3\ N) / (9.81\ m/s^2)$$

$$= \underline{1111}\ kg$$

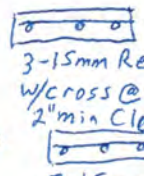
Sponsored Links

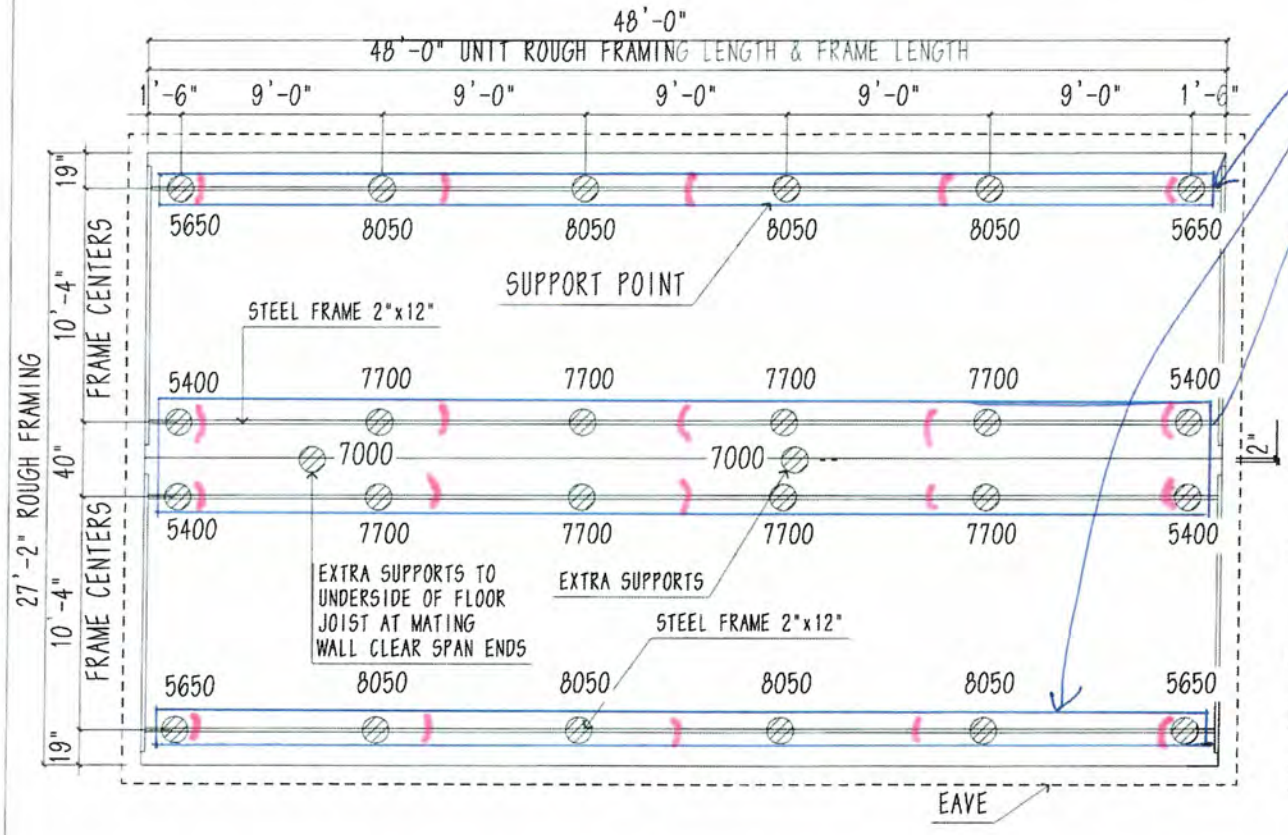
Hodgins

)- Tie downs (see supplementry)

24"x6" strip footing

64"x6" strip footings





FOUNDATION NOTES:

[1]. EACH SUPPORT POINT INDICATES THE TOTAL LOAD CALCULATED AS FOLLOWS:

DEAD LOAD OF STRUCTURE.....	40 LB/FT^2
FLOOR LIVE LOAD (MAXIMUM).....	40 LB/FT^2
ROOF DESIGN LOAD-- [55% GSL(80 LB/FT^2) + 100% RL(2.1 LB/FT^2)].....	46.1 LB/FT^2
CALCULATED DESIGN LOAD.....	126.1 LB/FT^2

[2]. MAX. CALCULATED LOAD PER SUPPORT POINT 9300 LBS.

[3]. THIS DRAWING INDICATES FOUNDATION SIZING AND MAXIMUM SUPPORT SPACING ONLY. FOUNDATON MUST BE DESIGNED TO SUIT LOCAL CONDITIONS AND DESIGN LOADS SHOWN.

[4]. BLOCKING AND TIE-DOWNS MUST CONFORM TO THE REQUIREMENTS OF CSA-Z240.10.1-19 SITE PREPARATION, FOUNDATION, AND ANCHORAGE OF MOBILE AND MODULAR HOMES.

[5]. PROVIDE COMPACT GRAVEL BASE IF WOOD SUPPORT BLOCKING IS USED.

[6]. ALL MATERIALS AND DESIGN CRITERIA MUST CONFORM WITH PART 9 OF THE APPLICABLE BUILDING CODE.

[7]. ALL LOADS ARE UNFACTORED.

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REVISIONS:

www.triplemhousing.com
LETHBRIDGE, AB. CANADA
BUS. (403) 320-8588
Triple M Housing

REF#: DR#28801

TITLE: FOUNDATION LAYOUT (STD)

DATE: 2026-04-01 DWN. SAJ

SCALE: 3/16"=1'-0" CKD. CF

DWG. NO QV-1851-25

SHEET: P7

Betty Wasyliw

From: Doralynne Hodgins <[redacted]>
Sent: March 27, 2026 9:06 AM
To: Jennifer Barber
Subject: Re: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Just talked to Chris at Iconic. He said there was an error in the drawings from the factory and forgot to let me know. He is contacting them to see what the hold up is.

Dodie

On Thu., Mar. 26, 2026, 1:24 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

I still don't have the drawings.

Jennifer Barber, RBO
Senior Building Official

Strathcona
REGIONAL DISTRICT

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓ildax̓ᵂ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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-

From: Doralynne Hodgins [redacted]
Sent: Friday, March 6, 2026 5:44 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Chris advised he would submit you drawings shortly.

If you don't hear next week let me know.
Thanks

Dodie

On Fri., Mar. 6, 2026, 2:21 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

No, the last time I had any communication with him was Dec. 11, 2025

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Doralynne Hodgins [redacted]
Sent: March 6, 2026 1:20 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Jen did you hear from Chris at Iconic in regards to the foundation drawings? I sent them an email reminder

Dodie

On Fri., Mar. 6, 2026, 1:17 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Thanks Dodie
>
> Jennifer Barber

Senior Building Official

Strathcona Regional District

jbarber@srd.ca

250-830-6713

From: Doralynne Hodgins [redacted]
Sent: Friday, March 6, 2026 1:15:17 PM
To: Email - building@srd.ca <building@srd.ca>
Subject: Building permit roll # 05416.000

NOTICE: This email is from an external source.

Building/Plumbing Permit

Strathcona Regional District Building Bylaw No. 158
Electoral Area D
Jurisdiction 772

Permit #:
PRM-2025-0041

Issued Date:
2026-03-06

Permit Type
Residential SDD - Demolition/relocate

Roll #
05416.000

Property Address
4129 ISLAND HWY S

Legal Description
LOT C SECT 35 PLAN VIP13994 LNDDST 15

Project Value
$0.00

Fees
$60.00

Area of Work

Description
demolish SDD

Conditions

submit hazmat clearance letter

Contacts

Type	Name	Company Address 1	Phone Number	Mobile Number	Email
Applicant, Property Owner	HODGINS DORALYNNE M	N/A - 4129 ISLAND HWY S	2368540930	0	[redacted]
Property Owner	HODGINS VICTOR G	N/A - 4129 ISLAND HWY S	0	0	

Inspections

☐ Final

The person signing this permit form, if not the owner, acknowledges that their signature is as agent for the owner and that they are authorized to bind the owner, who is deemed to know of and understand the content of this permit

Every building permit shall expire and the right of the owner under the permit shall terminate if the work is not commenced within six (6) months, is suspended for a period of twelve (12) months, or is not completed within twenty four (24) months of date of issue.

[redacted]
Applicant Signature

March 6, 2026
Date

Betty Wasyliw

From: Keltie Chamberlain
Sent: March 17, 2026 12:52 PM
To: Doralynne Hodgins
Cc: Jennifer Barber
Subject: 2026 03 17 - Enquiry re disaster financial assistance funding - DP 5D 25 - 4129 S Island Hwy

Good afternoon, Dory.

Thank you for your email. The Section 219 Covenant and the restrictions within are for protection when construction is in an ecologically sensitive area (30 metres from the natural present boundary of the ocean) or if a property may be subject to flood risk, erosion, or subsidence (building on a coastal area), and as a development permit condition for receiving a building permit, and to release the local government from liability if damage occurs to the property to hazards like flooding or erosion. This is a standard line item that, with a geotechnical engineer providing assurance that the property is suitable to build on, allows for a property owner to receive a building permit for construction that may be subject to the aforementioned. The covenant also ensures that construction is in accordance with the Geotechnical report.

The **Geotechnical report** (Section 6.2) indicates that the required Flood Construction Level (FCL) of 5.25 m is not achievable as it is off property and results in the reduced coastal setback, *defined as 15m from the estimated Year 2100 NB which is defined as the 3.4m CGVD2013 topographic contour northeast of the Property.* The relaxation requires that no *Disaster Financial Assistance Funding is available for the building or its contents. No structures built within a floodplain can receive this kind of funding.*

In addition, from the building inspector:
EXCERPT FROM COMMUNITY CHARTER

Requirement for geotechnical report

56 (1)For the purposes of this section:

"construction" means

(a)the new construction of a building or other structure, or

(b)the structural alteration of or addition to an existing building or other structure,

but does not include the repair of an existing building or other structure;

"qualified professional" means

(a)a professional engineer, or

(b)a professional geoscientist

with experience or training in geotechnical study and geohazard assessments.

(2)If

(a)a bylaw regulating the construction of buildings or other structures is in effect, and

(b)a building inspector considers that construction would be on land that is subject to or is likely to be subject to flooding, mud flows, debris flows, debris torrents, erosion, land slip, rockfalls, subsidence or avalanche,

the building inspector may require the owner of land to provide the building inspector with a report certified by a qualified professional that the land may be used safely for the use intended.

(3)If a qualified professional determines that the land may not be used safely for the use intended, a building inspector must not issue a building permit.

(4)A building inspector may issue a building permit in accordance with subsection (5) if a qualified professional certifies that the land may be used safely for the use intended if the land is used in accordance with the conditions specified in the professional's report.

(5)A building permit under subsection (4) may only be issued on the following conditions:

(a)the owner of the land covenants with the municipality to use the land only in the manner certified by the qualified professional as enabling the safe use of the land for the use intended;

(b)the covenant contains 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 under paragraph (a);

(c)the covenant is registered under section 219 of the *Land Title Act*.

Best regards,

Keltie Chamberlain, MCP, RPP, MCIP
Land Use Planner II, Community Services

Strathcona
REGIONAL DISTRICT

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6705
E: kchamberlain@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓wiłdax̱w people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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From: Doralynne Hodgins [redacted]
Sent: March 13, 2026 7:43 PM
To: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Re: DP 5D 25 - 4129 S Island Hwy

NOTICE: This email is from an external source.

After reviewing the Development Permit, there is one provision that sticks out dramatically. We were told many, many times that if our new home was outside the 15 meter setback

, the Disaster Financial Assistance Funding would be available to us. We changed our plans to accommodate this. Now, even though we have recognized and adhered to the 15 meter setback, you still say there is no funding in a disaster. Please provide the legal regulation that backs this provision as we will be seeking legal advice.

I have tried to find an email address of T Yates, Corporate Officer who signed this Development Permit. We wanted to hear his reasoning.

Dodie and Vic Hodgins

On Thu., Mar. 12, 2026, 4:33 p.m. Keltie Chamberlain, <kchamberlain@srd.ca> wrote:

> Hi Doralynne.
>
> Please find attached the Notice of Permit approval letter and the certified true copy of the Development Permit and its conditions.
>
> Best regards,
>
> **Keltie Chamberlain, MCP, RPP, MCIP**
>
> Land Use Planner II, Community Services
>
> Strathcona REGIONAL DISTRICT
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6705
> E: kchamberlain@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube

From: [redacted]
To: Jennifer Barber
Subject: Fwd: 4129 Island Highway South, Campbell River
Date: March 6, 2026 9:55:59 AM
Attachments: image001.png
Z0050-364.01 Hazmat Report.pdf

NOTICE: This email is from an external source.

Here is the hazmat assessment for our property. The plan is to have the cottage cleaned out and the abatement done early April. Will send certificate when complete.

Do we etransfer the 60.00?

I will get on Chris at Iconic for foundation drawings

Dodie

---------- Forwarded message ---------
From: **Moore Asbestos** <mooreasbestos@gmail.com>
Date: Sun., Jan. 4, 2026, 6:19 p.m.
Subject: Fwd: 4129 Island Highway South, Campbell River
To: Doralynne Hodgins [redacted]

Good evening Doralynne

Please see attached the hazmat for you property

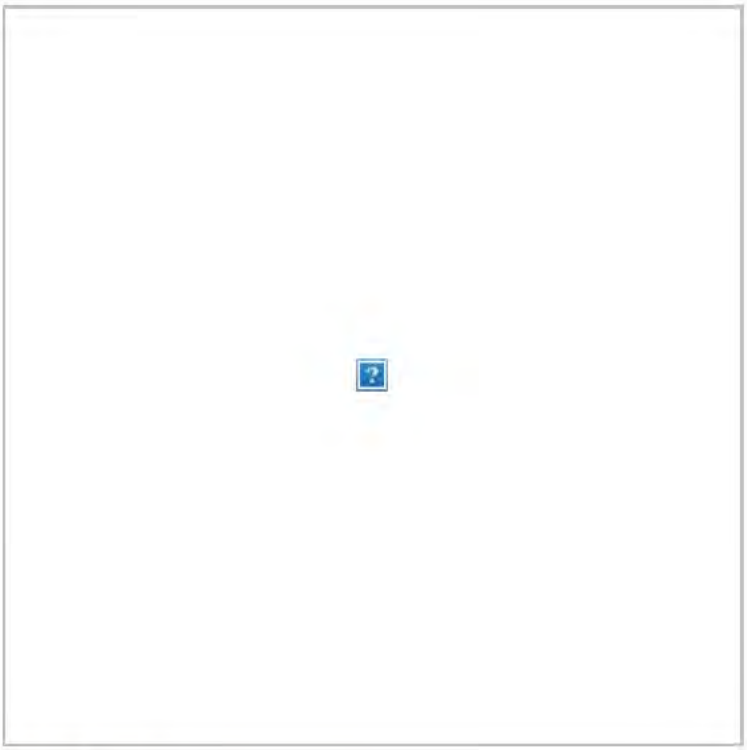
Will be sending the invoice shortly as well

Please let me know if you have any questions in regards to the hazmat report

---------- Forwarded message ---------
From: **Ryan Camp** <Rcamp@ttohs.com>
Date: Thu, Dec 11, 2025 at 10:37 AM
Subject: 4129 Island Highway South, Campbell River
To: Moore Asbestos <mooreasbestos@gmail.com>

Hey Pete,

The hazardous materials survey for this one is attached. Feel free to reach out if you have any questions.



Ryan Camp

Senior Environmental Consultant

800 8th Street, Courtenay, BC V9N 1N8

P: 250-871-8638 | **M:** 250-334-6595

rcamp@ttohs.com

www.ttohs.com

Tsolum & Tsable Occupational Health & Safety Ltd.

Tsolum & Tsable Occupational Health & Safety Ltd.

Hazardous Materials Inspection Report

4129 Island Highway South, Campbell River, BC

File No: Z0050-364.01
December 11th, 2025

Prepared For:

Moore Asbestos Inc
c/o Peter Moore
3398 Mill Street
Cumberland, BC

800A 8th Street, Courtenay, BC V9N 1N8 • Tel (250) 871-8638 • Fax (250) 871-8639
2213 Northfield Road, Nanaimo, BC V9S 3C3 • Tel (250) 585-2261 • Fax (250) 585-3374
2516 Bridge Street, Victoria, BC V8T 5H3 • Tel (250) 590-8638 • Fax (250) 590-8628
www.ttohs.com

1.0 Introduction

Tsolum & Tsable Occupational Health & Safety Ltd. (TTOHS) was retained by Peter Moore of Moore Asbestos Ltd. (the Client) to conduct a hazardous materials inspection on a residential property located at 4129 Island Highway South, Campbell River , British Columbia (the site).

This hazardous materials inspection was completed in accordance with Section 20.112 of the Occupational Health and Safety Regulation (B.C. Reg 296/97).

The purpose of this hazardous materials inspection was to identify which materials, if any, contain asbestos and any other hazardous materials. This report includes a list of building materials that are confirmed or suspected of containing hazardous materials.

Hazardous materials are summarized in the table below.

Table 1.0 Hazardous Materials Summary

Hazardous Material	Type and Location
Asbestos (observed)	➔ *Z0050-364-A28 – Cementitious Siding – Tremolite 40-45% - Associated with all the cementitious siding on the exterior of the building.* ➔ *Z0050-364-A29 – Vermiculite – PACM Typically, Actinolite or Tremolite Trace to 5% - Vermiculite observed in the attic.*
Asbestos (potentially concealed)	➔ *Materials commonly found to contain asbestos were observed or are suspected to be present (not sampled) including: Electrical cables, buried asbestos cement pipes, bell and spigot piping gaskets, incandescent light fixtures. (heat shields)*
Lead (observed)	➔ *Z0050-364-Pb1- Blue Field – Interior Trims – 996 PPM* ➔ *Z0050-364-Pb3 – White Paint – Interior Dining Room Chimney – 573 PPM*
Leachable Lead	➔ *Toxicity Characteristic Leaching Procedure analysis is required for samples with lead concentrations greater than 100ppm, prior to disposal.*
Lead (potentially concealed)	➔ *Elemental lead assumed to be present in seals on bell and spigot piping joints seals, solder on wiring and copper pipe joints, and roof vents and flashings.*
Mercury	➔ Fluorescent light bulbs/tubes were not observed. ➔ Mercury containing thermostats were not observed.
PCB	➔ Fluorescent light fixtures were not observed.
Radioactive Materials	➔ *Radioactive materials were observed in areas of planned works.*
AST/UST	➔ No AST/USTs were observed.
ODS	➔ *Sources of ODS were observed*.
Hantavirus / Rodent Droppings	➔ *Rodent droppings were observed.*
Mould	➔ *Mould was observed in the building.*

Arsenic	➔ *Suspect CCA treated wood was observed.*
UFFI	➔ No UFFI was observed.
Silica	➔ *Present in concrete, grout, mortar, fiberglass, brick, ceramic tile, exterior siding and other cementitious materials.*

Where hazardous materials were found, they can be presumed to be found in similar materials throughout the building.

Recommendations for each material are outlined in section 3.0.

Floor plans showing bulk sample locations and locations of identified hazardous materials (where practical) are provided in Appendix A.

Copies of the analytical reports are provided in Appendix C.

2.0 Scope of Work

We attended the site on December 4th, 2025. The scope of work was limited to:

- A visual inspection of the building for the presence of hazardous substances, including (but not limited to) asbestos containing materials (ACM), arsenic, lead based paints (LBP), lead containing products, radioactive materials, mould, rodent droppings and other sources of biological hazards, mercury, polychlorinated biphenyls (PCBs), ozone depleting substances (ODS), petroleum and controlled products.
- Bulk sampling and analysis of suspected ACM and LBP for the presence of asbestos and lead, respectively; and
- Make recommendations for further actions to take place prior to continued renovation.

The site is a single-family residential building slated for complete demolition, according to the homeowner.

The entirety of the building was considered in the scope of this survey.

2.1 Sampling Methodology

- Inspection and bulk sampling of building materials, as follows:
    - The home is a single floor, wood framed building on a poured concrete foundation. The home consists of an entryway, a bedroom, dining room, living room and kitchen.
    - Vermiculite was observed in the attic. No samples were collected as the material is known to contain asbestos.
    - The interior walls of the home are all wood paneling which are either painted or have a wallpaper finish, with fiberglass insulation observed within. One (1) sample of the insulation paper backing was collected for analysis.
    - The bedroom wall panels have one style of wallpaper. One (1) sample was collected for analysis.

- The dining room wall panels have a different style of wallpaper. One (1) sample was collected for analysis.
- The living room has pressed fiberboard paneling over wood paneling which has a layer of wallpaper on it. One (1) sample of the concealed wallpaper was collected for analysis.
- The entryway, bathroom, and kitchen have two layers of vinyl flooring. The top layer of vinyl flooring is consistent throughout these rooms. One (1) sample of the top layer of vinyl flooring was collected for analysis. The second layer observed appears to be paper remnants from previously removed sheet vinyl. One (1) sample of the second layer was collected for analysis.
- The bedroom, dining room, and living room all have carpet on underlay, held down with nail strips. A layer of vinyl floor tile was observed beneath the carpet in the bedroom. It was also observed under the carpet in the dining room. One (1) sample of vinyl floor tile was collected for analysis.
- A different style of vinyl floor tile was observed beneath the carpet in the living room. One (1) sample was collected for analysis.
- The kitchen sink has a spray-on mastic coating. One (1) sample was collected for analysis.
- The ceilings in the home consist of multiple styles of ceiling tiles and wood paneling. The dining room and bedroom have the same square 12”x12” style ceiling tile. Three (3) samples were collected for analysis. The living room has a brick pattern style ceiling tile. Three (3) samples were collected for analysis.
- The kitchen, entryway, and bathroom have wood paneling on the ceiling. No samples were collected from the ceilings here.
- One (1) sample of paint was collected from the interior trim for lead analysis.
- The bathroom has a newer ceramic tile shower surround, which was not sampled due to the age of the shower kit installed.
- The bathroom has a ceramic tile backsplash. Three (3) samples of the grout and glue were collected for analysis.
- Between the dining room and kitchen remains an old chimney stack. Three (3) samples of the mortar were collected for analysis. One (1) sample of the white paint on the chimney was collected for lead analysis.
- The living room has a brick fireplace with a slate stone hearth. Three (3) samples of the mortar and grout were collected for analysis from the interior. Three (3) samples of mortar were collected from the exterior brick of the chimney.

- The exterior finishes of the home consist of cementitious siding and wood lap siding on wood ship lap. One (1) sample of the cementitious siding was collected for analysis. One (1) sample of exterior paint was collected for analysis.
- The home has never vinyl windows with wood trim. No suspect materials were observed within the windows.
- The roof of the home is a single layer of newer asphalt shingle. No suspect materials were observed with regard to the roofing.
- It appears that the forced air furnace has been removed. No suspect materials were observed with respect to the HVAC system.

Table 2.1.1 Building Details

Building	Single-family residential
Subject Area	Throughout
Age	1946 (BC Assessment)
Construction	Traditional wood frame on poured concrete
HVAC	Furnace removed.
Basement / Crawlspace detail	Dirt bottom floor. No crawlspace
Interior Finish	Wood wall paneling, ceiling tile
Interior Flooring	Vinyl, carpet
Exterior Finish	Cementitious siding, wood lap siding, single layer of newer asphalt shingles, newer vinyl windows
Insulation	Vermiculite and fiberglass were observed

2.2 Regulatory Criteria

As per WorkSafeBC requirements, the subject area was surveyed for the presence of hazardous materials, including:

- Polychlorinated biphenyls (PCBs)
- Asbestos
- Mercury
- Arsenic
- Ozone depleting substances (ODS)
- Urea formaldehyde foam insulation (UFFI)
- Radioactive materials
- Above- or under- ground storage tanks (AST/UST)
- Lead
- Hantavirus – rodent droppings

- Silica
- Mould

Regulatory information for each material is provided in Appendix D.

3.0 Results and Recommendations

If any material suspected of containing asbestos or any other hazardous material not identified in the initial scope of work is disturbed, all work must cease immediately until the area is contained, and the hazard is evaluated by a qualified professional and the hazardous materials, if present, are safely managed by a qualified contractor.

Notification

The Client has been made aware of the results of this survey and instructed to have the items removed in accordance with regulations prior to continued renovation of the structure. This report must be posted onsite, and site personnel need to have read and understood the content of this report prior to the commencement of work.

Hidden Hazardous Materials

Although every effort was made to collect samples of all potentially hazardous materials, they may be present at the subject site but were not visible or available for inspection during the survey and are, therefore, not described in this report.

If any suspect hazardous materials that are not described in this report are encountered during additional renovation activities, all work must cease and the materials must be presumed to be hazardous and handled as such until testing determines the presence or absence of asbestos or other hazardous components, or the material is otherwise appropriately evaluated, and appropriate controls for the protection of workers and the public are put into place.

Recommendations

The following conclusions and recommendations have been based on the survey findings:

Prior to any additional renovation activities, TTOHS recommends the following actions:

1. Provide copies of this report to site personnel, including contractors. A copy of the survey must be immediately available at the site whenever workers are present.
2. The contractor must have an exposure control plan in place for each hazardous substance identified in this report as being in the way of the planned work.
3. Work must stop if additional suspect materials are encountered during the move. These suspect materials must be left undisturbed until testing determines the presence or absence of asbestos or other hazardous materials. In addition, work must also stop in the event these suspect materials are disturbed inadvertently.

A qualified person should be retained and present on site during any additional demolition to identify any previously unidentified hazardous building materials should they be discovered.

Respecting Lead, Arsenic, Mercury, and other heavy metals, please note that the local landfill authority may require additional Toxicity Characteristic Leaching Procedure (TCLP) data before accepting material as 'Non-Hazardous Waste' as defined by the BC Hazardous Waste Regulations.

The recommendations pertaining to each of the identified hazardous materials within the subject building are presented in the sub-sections below.

3.1 Asbestos

All asbestos containing materials must be removed by a qualified asbestos abatement contractor.

The following asbestos containing materials were identified:

Table 3.1.1 Summary of Asbestos Containing Materials

Material	Location	Asbestos	Estimated Quantity*	Procedures**
Cementitious Siding	Exterior	Tremolite 40-45%	600 ft^2	Moderate Risk (if removed mostly intact)
Vermiculite	Attic	PACM, Typically Actinolite/Tremolite 1-5%	1000 ft^2	High Risk

Quantities listed are a rough approximation and only account for visible / accessible materials. Concealed amounts of ACM may be present.

****Risk assessment is general in nature. A full Risk Assessment will be required prior to abatement, as required by section 6.6 of the BC OHS Regulations.***

All procedures must be in accordance with BC Occupational Health and Safety Regulation (B.C. Reg 296/97), as exemplified in WorkSafeBC Publication BK27, 'Safe Work Practices for Handling Asbestos'.

If any materials suspected to be asbestos containing are discovered during the renovation, all work must stop until samples can be analyzed. If the materials are found to be asbestos containing, they must be removed by a qualified asbestos abatement contractor before any further work is carried out.

Prior to any work that may disturb any ACM, it is a regulatory requirement that a qualified person perform a Risk Assessment, in compliance with the Occupational Health & Safety Regulation Part 6 "Substance Specific Requirements". Identified ACMs must be removed and disposed of in accordance with the requirements of BC Reg. 296/97, by an experienced asbestos abatement contractor.

Suspected ACMs deemed visually similar to ACMs identified in this report and inaccessible ACMs not identified during this assessment should be considered asbestos containing and handled as such, unless proved otherwise, through analytical testing.

Ensure asbestos containing waste is handled, stored, and disposed of in accordance with the requirements of the Federal Transportation of Dangerous Goods Regulation and the BC Hazardous Waste Regulation (BC Reg 63/88).

If the building is not renovated/demolished in the short term, ACMs in good condition can be managed in place. Damaged ACMs should be addressed in accordance with the requirements of BC Reg. 296/97, as soon as possible.

3.2 Lead

Surface coatings which contain more than 90 ppm lead may pose a potential risk to workers. Materials with over 100 ppm lead must undergo additional TCLP testing prior to disposal to determine if they should be handled as hazardous waste.

Lead results are summarized in the table below. Any untested painted surfaces are presumed to be lead containing.

Table 3.2.1 Summary of Lead Results

Material	Location	Lead Concentration (ppm)	TCLP Results (mg/L)
Blue Field	Interior Trim	996	NT
Green	Exterior Paint	<80	NR
White	Interior - Chimney	573	NT

NR=Not Required NT=Not Tested

Elemental lead may be present in seals on bell and spigot piping joints seals, solder on wiring or plumbing systems, and in other fixtures such as flashings or roof vents.

Workers must be provided with appropriate PPE for the work they will be conducting. Materials with leachable lead must be sorted from general construction waste and disposed of according to Regulations.

Demolition, corrective action, or remedial work on paint applications containing any concentration of lead should be undertaken in a manner to avoid generating fine particulate matter or dust (i.e.: avoid sanding). The use of personal protective equipment is recommended to reduce the potential for over-exposure to lead dust.

When identified or suspected lead-containing materials (i.e.: paint, solder, caulking on bell fittings) within the subject building are to be removed prior to renovation activities, ensure compliance with the following:

- *Surface Coating Materials Regulations SOR/2016-193*

- *The occupational exposure control requirements of BC Reg 296/97*
- *The disposal requirements of BC Reg. 63/88*
- *The transportation requirements of the Federal Transportation of Dangerous Goods Regulation.*

If known or suspected lead-based paint will be disturbed (e.g.: by scraping, burning, sanding, etc.) the paint shall be removed in accordance with the WorkSafeBC Occupational Health & Safety Regulation to prevent worker exposure to lead dust. Some samples collected during this survey were found to have lead concentrations below WorkSafeBC criteria however other paints have higher lead content.

If the subject building is not renovated/demolished in the short term, lead-containing material can be managed in place.

3.3 Mercury

Fluorescent light bulbs/tubes were not observed.

Mercury containing thermostats were not observed.

No other mercury containing materials were observed.

Mercury containing materials must be removed prior to demolition activities and kept intact to prevent exposure to mercury fumes. They must be separated from general demolition waste and disposed of according to regulations. Workers should be protected with a half mask with a mercury vapour cartridge and chemical resistant gloves when handling or working near broken light tubes.

They should be removed, packaged for storage and transport or disposal/destruction at a licensed facility.

If the building is not renovated/demolished, mercury-containing materials identified within the subject building can be managed in place. No further action is currently required.

3.4 PCBs

Fluorescent light fixtures were not observed.

The fixtures must be removed prior to demolition activities and set aside and checked for PCB content prior to disposal.

Non-PCB containing ballasts must have a label affixed which states they do not contain PCBs. It may also be possible to determine PCB content by using guidelines in Environment Canada's document, "Identification of Light Ballasts Containing PCBs" (EPS 2/CC/2). If no determination can be made the ballasts must be assumed to contain PCBs. If they are determined to contain PCB's they must be disposed of in accordance with the BC Ministry of Environment guidelines at an approved disposal facility.

If the subject building is not renovated/demolished, PCB containing ballasts can be managed in place, where they are operating and in good condition. No further action is currently required

until such time that demolition activities are to be conducted, or until 2025 when PCB-containing items will require removal and disposal.

3.5 Radioactive Components

Smoke detectors were observed in the work area.

They must be removed prior to demolition activities and treated as if they contain radioactive materials unless additional information (i.e.: labels) proves otherwise.

Radioactive components that are identified for removal should be transported and disposed of in accordance with the following:

- The federal Transportation of Dangerous Goods Act
- The Nuclear Safety and Control Act (1997, c.9), Nuclear Substances and Radiation Devices Regulations (SOR/2000-207)

If the building is not renovated/demolished, radioactive components of the fire / smoke detection system can be managed in place. No further action is currently necessary.

3.6 Petroleum and Controlled Products

AST/USTs were not observed.

If found, any stored and abounded chemicals and controlled products must be removed and disposed of prior to work, in accordance with the BC Ministry of Environment Hazardous Waste Regulation (Environmental Management Act).

If USTs are discovered & part of planned works, it is also recommended that a site investigation be commissioned for contaminated soils.

3.7 ODSs

A kitchen fridge is present within areas of planned works.

Sources of ODS should be removed from the work area prior to demolition activities commencing. If slated for disposal it must be degassed by a licensed technician.

When ODS containing materials within the subject building are removed and disposed of, ODSs must be handled, recycled, stored, and/or disposed of in accordance with the requirements of the Federal Halocarbon Regulations (2003). If waste is to be disposed of in British Columbia, it must be disposed of in accordance with the British Columbia Waste Management Act – Ozone Depleting Substances and other Halocarbons Regulation (BC Reg. 387/99). These regulations require that all ODS must be collected, stored, and recycled, or collected and disposed of by a qualified technician.

ODS-containing equipment can be managed in place and must be serviced by licensed refrigeration technicians.

3.8 Hantavirus – Bird and Rodent Droppings

Rodent droppings were observed.

Workers should be notified of the presence of feces and be provided with respiratory protection and/or other personal protective equipment (PPE) as deemed necessary for the work that they will be conducting.

3.9 Mould

Mould was observed.

It may be present on hidden building materials & fabrics.

Workers should be notified of the presence of mould and be provided with respiratory protection and/or other personal protective equipment (PPE) as deemed necessary for the work that they will be conducting.

If renovations/demolition do not proceed in the short-term, identified mould and/or moisture-impacted building materials should be removed in accordance with applicable guidelines and procedures for safe work (i.e.: CCA 82).

When renovation/demolition of the subject building proceeds, building materials hidden from the initial hazardous materials survey should also be inspected as removed for the presence of fungal activity. During demolition, workers should be notified of the potential presence of mould and be provided with respiratory protection and/or other personal protective equipment (PPE) as deemed necessary for the work that they will be conducting).

3.10 Arsenic

Treated wood was observed in the exterior decking materials.

Although wood and wood dusts contaminated with arsenical pesticides do not require specialized disposal in BC, care must be exercised to minimize the potential for worker exposure to these materials through direct skin contact or through inhalation of dusts and fumes. Caution must be taken to ensure this material is not burned or composted if removed during demolition activities.

3.11 UFFI

No UFFI was observed during the investigation.

3.12 Crystalline Silica

When silica-containing materials (i.e.: concrete, grout, mortar, fiberglass insulation, ceramic, brick, etc.) within the subject building are to be removed or affected during renovation activities, workers should use caution to avoid creating airborne silica dust such that airborne silica dust concentrations do not exceed the exposure limit as stipulated by BC Reg 396/97 (0.025 mg/m^3).

This would include, but not be limited to, the following:

- *Providing workers with respiratory protection*
- *Wetting the surface of the materials to prevent dust emissions and/or HEPA equipped extraction systems attached to drills and other power equipment.*
- *Providing workers with facilities to properly wash prior to exiting the work area.*

If the building is not renovated/demolished, silica-containing materials identified with the subject building can be managed in place. No further action is currently required.

4.0 Closure

This report has been prepared by TTOHS OHS exclusively for the Client and is intended to provide a survey of the potential for the presence of hazardous materials on the site. The conclusions made in this report reflect TTOHS's best judgment in light of the information available at the time of preparation. No other warranty, expressed or implied, is made. This report may not be relied upon by any other person or entity without the express written consent of TTOHS and the Client. Any use that a third party makes of this report, or any reliance on decisions to be made based on it, is the responsibility of such third parties. TTOHS accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The findings of this report are based solely on data collected on site during this survey and on the conditions of the site during the completing of the work. TTOHS has relied on good faith on information proved by individuals and sources noted in the report. No other warranty, expressed or implied, is made.

If any conditions become apparent that differ significantly from our understanding of conditions as presented in this report, we request that we be notified immediately to reassess the conclusions provided herein.

This report is not intended for use as a scope of work for removal or as a specification section for inclusion in Tender Documents. Any unauthorized use of this report in that fashion is at the sole discretion and liability of the Owner.

We trust that the report meets your current requirements. Should you have any questions or concerns regarding the above, please do not hesitate to contact the undersigned.

Respectfully Submitted,

TSOLUM & TSABLE OCCUPATIONAL HEALTH & SAFETY LTD.

Prepared by:



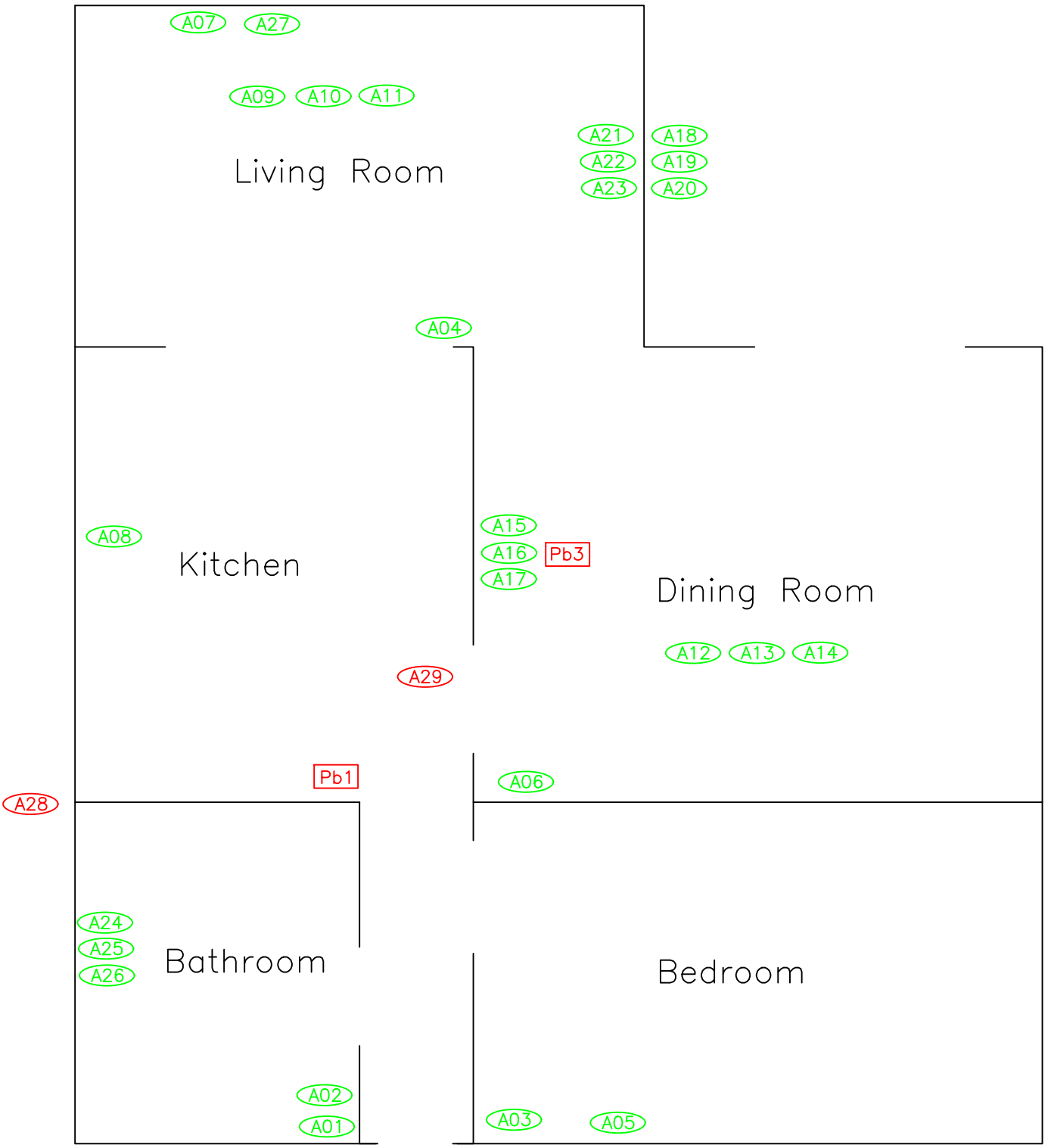
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Appendix A – Sample Site Plan



(AX) Positive Asbestos Sample

(AX) Negative Asbestos Sample

PbX Lead Paint Sample >90ppm

PbX Lead Paint Sample <90ppm

REFERENCE DRAWINGS

DWG. NO.	DATE	DESCRIPTION
–	–	–

REVISIONS

REV.	DATE	DESCRIPTION	BY	CHK
0				

TSOLUM & TSABLE
OCCUPATIONAL HEALTH & SAFETY

CLIENT NAME: Moore Asbestos Ltd. c/o Peter Moore

PROJECT LOCATION: 4126 Island Highway South Campbell River, BC

TITLE: **SAMPLING SITE PLAN**

DWN BY: SV | SCALE: NTS | DATE: 2025/12/11 | DWG No: | REV.:

CHK'D: GH | JOB FILE: Z0050-364.01

Figure 1

Appendix B – Sample Logs

APPENDIX B – BULK SAMPLE LOG

Client:	**Moore Asbestos Inc.**	**TTE Project #**	**Z0050-364.01**
Site Address:	**4129 Island Highway South, Campbell River, BC**	**Sample Date:**	**December 4th, 2025**
PO:		**Sampled By:**	**Steve Valentyne**

Sample #	HA #	Sample Type	Sample Location
A1		Vinyl Flooring	Bathroom - Concealed
A2		Sheet Vinyl Flooring	Bathroom
A3		Vinyl Floor Tile	Bedroom - Concealed
A4		Vinyl Floor Tile	Living Room - Concealed
A5		Wallpaper	Bedroom
A6		Wallpaper	Dining Room
A7		Insulation	Living Room
A8		Mastic	Kitchen Sink
A9		Ceiling Tile	Living Room
A10		Ceiling Tile	Living Room
A11		Ceiling Tile	Living Room
A12		Ceiling Tile	Dining Room
A13		Ceiling Tile	Dining Room
A14		Ceiling Tile	Dining Room
A15		Mortar	Chimney - Dining Room
A16		Mortar	Chimney - Dining Room
A17		Mortar	Chimney - Dining Room
A18		Mortar	Exterior Chimney
A19		Mortar	Exterior Chimney
A20		Mortar	Exterior Chimney
A21		Mortar + Grout	Living Room Fireplace + Hearth
A22		Mortar + Grout	Living Room Fireplace + Hearth
A23		Mortar + Grout	Living Room Fireplace + Hearth
A24		Grout + Glue	Bathroom - Backsplash
A25		Grout + Glue	Bathroom - Backsplash
A26		Grout + Glue	Bathroom - Backsplash
A27		Wallpaper	Living Room - Concealed
A28		Cementitious Siding	Exterior Cladding
A29		Vermiculite	Attic - PACM
PB1		Blue Field	Interior Trim
PB2		Green Field	Exterior Paint
PB3		White Field	Interior - Dining Room Chimney

Received By:
Nic Naaykens / Harshika Wickramanayaka

Appendix C – Analytical Results

Tsolum and Tsable Environmental Ltd.

800A 8th Street
Courtenay, BC V9N 1N8
Tel: (250) 871-8638
Fax: (250) 871-8639
www.tsolum.com

Bulk Asbestos Certificate of Analysis

TTE Project #: Z0050-364
Report Version: v1

Samples analyzed by polarized light microscopy in accordance with EPA method 600/R-93/116
Quantifications at <0.25% is possible with this method

Client: Moore Asbestos Inc.
Site Address: 4129 Island Hwy South, Campbell River, BC
PO #

Sample Date: 04-Dec-25
Sampled By: TTE (SV)
Analysis Date: 10-Dec-25
Analyst: NN

Lab Sample Number	Sample Description	Location	Layer	Layer %	Asbestos %	Other Materials
Z0050-364-A1	Vinyl Flooring	Bathroom - Concealed	Vinyl - Tan	30	ND	Non-Fibrous
			Foam Core	35	ND	Non-Fibrous
			Paper Backing	30	ND	Fibrous (Cellulose)
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A2	Sheet Vinyl Flooring	Bathroom	Vinyl - Beige	30	ND	Non-Fibrous
			Foam Core	35	ND	Non-Fibrous
			Paper Backing	30	ND	Fibrous (Cellulose)
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A3	Vinyl Floor Tile	Bedroom - Concealed	Vinyl - Green/Tan	40	ND	Non-Fibrous
			Black Fibrous	40	ND	Fibrous (Cellulose)
			Adhesive	20	ND	Non-Fibrous
Z0050-364-A4	Vinyl Floor Tile	Living Room - Concealed	Vinyl - Tan	50	ND	Non-Fibrous
			Black Fibrous	50	ND	Fibrous (Cellulose)
Z0050-364-A5	Wallpaper	Bedroom	Wallpaper - Grey	100	ND	Fibrous (Cellulose)
Z0050-364-A6	Wallpaper	Dining Room	Wallpaper - White	100	ND	Fibrous (Cellulose)
Z0050-364-A7	Insulation	Living Room	Fibrous Yellow	20	ND	Fibrous (Cellulose)
			Adhesive	20	ND	Non-Fibrous
			Paper	60	ND	Fibrous (Cellulose)
Z0050-364-A8	Sink Mastic	Kitchen	Mastic - Grey	100	ND	Fibrous (Cellulose)
Z0050-364-A9	Ceiling Tile	Living Room	Paint - Off White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A10	Ceiling Tile	Living Room	Paint - Off White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A11	Ceiling Tile	Living Room	Paint - Off White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A12	Ceiling Tile	Dining Room	Paint - White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)

Notes:
* = Positive result may be due to contamination from adjacent asbestos containing layer
ND = Not Detected
FAR = Further Analysis Required

PAT PROGRAMS™
AIHA PROFICIENCY ANALYTICAL TESTING PROGRAMS
Lab ID:264415

Tsolum and Tsable Environmental Ltd.

800A 8th Street
Courtenay, BC V9N 1N8
Tel: (250) 871-8638
Fax: (250) 871-8639
www.tsolum.com

Sample Date: 04-Dec-25
Sampled By: TTE (SV)

Analysis Date: 10-Dec-25
Analyst: NN

Lab Sample Number	Sample Description	Location	Layer	Layer %	Asbestos %	Other Materials
Z0050-364-A13	Ceiling Tile	Dining Room	Paint - White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A14	Ceiling Tile	Dining Room	Paint - White	10	ND	Non-Fibrous
			Tan Fibrous	90	ND	Fibrous (Cellulose)
Z0050-364-A15	Mortar	Chimney - Dining Room	Paint - Off White	10	ND	Non-Fibrous
			Cementitious	90	ND	Non-Fibrous
Z0050-364-A16	Mortar	Chimney - Dining Room	Paint - Off White	10	ND	Non-Fibrous
			Cementitious	90	ND	Non-Fibrous
Z0050-364-A17	Mortar	Chimney - Dining Room	Paint - Off White	10	ND	Non-Fibrous
			Cementitious	90	ND	Non-Fibrous
Z0050-364-A18	Mortar	Exterior Chimney	Cementitious	100	ND	Non-Fibrous
Z0050-364-A19	Mortar	Exterior Chimney	Cementitious	100	ND	Non-Fibrous
Z0050-364-A20	Mortar	Exterior Chimney	Cementitious	100	ND	Non-Fibrous
Z0050-364-A21	Mortar + Grout	Living Room Fireplace & Hearth	Cementitious White	50	ND	Non-Fibrous
			Cementitious Grey	50	ND	Non-Fibrous
Z0050-364-A22	Mortar + Grout	Living Room Fireplace & Hearth	Cementitious White	50	ND	Non-Fibrous
			Cementitious Grey	50	ND	Non-Fibrous
Z0050-364-A23	Mortar + Grout	Living Room Fireplace & Hearth	Cementitious White	50	ND	Non-Fibrous
			Cementitious Grey	50	ND	Non-Fibrous
Z0050-364-A24	Grout + Glue	Bathroom Backsplash	Ceramic - Tan	90	ND	Non-Fibrous
			Cementitious	5	ND	Non-Fibrous
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A25	Grout + Glue	Bathroom Backsplash	Ceramic - Tan	90	ND	Non-Fibrous
			Cementitious	5	ND	Non-Fibrous
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A26	Grout + Glue	Bathroom Backsplash	Ceramic - Tan	90	ND	Non-Fibrous
			Cementitious	5	ND	Non-Fibrous
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A27	Wallpaper	Living Room - Concealed	Wallpaper - Tan	95	ND	Fibrous (Cellulose)
			Adhesive	5	ND	Non-Fibrous
Z0050-364-A28	Cementitious Siding	Exterior Walls	Paint - Green	5	ND	Non-Fibrous
			Cementitious	95	**YES - Tremolite 40-45%**	Non-Fibrous

Notes:
* = Positive result may be due to contamination from adjacent asbestos containing layer
ND = Not Detected
FAR = Further Analysis Required

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Lab ID:264415

Tsolum and Tsable Environmental Ltd.

800A 8th Street
Courtenay, BC V9N 1N8
Tel: (250) 871-8638
Fax: (250) 871-8639
www.tsolum.com

Sample Date: 04-Dec-25
Sampled By: TTE (SV)

Analysis Date: 10-Dec-25
Analyst: NN

Lab Sample Number	Sample Description	Location	Layer	Layer %	Asbestos %	Other Materials
Z0050-364-A29	Vermiculite	Attic			**PACM**	

Notes:
* = Positive result may be due to contamination from adjacent asbestos containing layer
ND = Not Detected
FAR = Further Analysis Required

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Lab ID:264415

T&T OHS

800A 8th Street
Courtenay, BC V9N 1N8
Tel: (250) 871-8638
Fax: (250) 871-8639
www.tsolum.com

Lead Certificate of Analysis

TTOHS Project #: Z0050-364

Report Version: v1

Client: Moore Asbestos Inc.

Site Address: 4129 Island Highway South, Campbell River, BC

Client PO #:

Samples analyzed in accordace with TTE-AM-1000, Determination of Lead in Paint by Flame-AAS. Method Limit of Detection is 80 ppm

Sample Date: December 4, 2025
Sampled By: TTOHS (SV)
Analysis Date: December 9, 2025
Analyst: HW

Lab Sample Number	Sample Description	Location	***Concentration (ppm)	Concentration (% by weight)
Z0050-364.01 Pb1	Blue Field	Interior Trim	996	0.0996
Z0050-364.01 Pb2	Green Field	Exterior Paint	<80	<0.008
Z0050-364.01 Pb3	White Field	Interior - Dining Room Chimney	573	0.0573

Notes:

* Insufficient sample provided to perform QC reanalysis (< 200mg)

** Not enough sample provided to analyze (<100mg)

*** Matrix/ substrate interference possible

Appendix D – Applicable Statues and Regulations

The statutes and regulations relevant to the identification, removal, disposal or recycling of hazardous chemicals, wastes and building materials include the:

Occupational Health and Safety Regulation (BC Reg. 296/97 as amended by 404/2012);

Hazardous Waste Regulation (BC Reg. 63/88, amended by 63/2009);

Ozone Depleting Substances and other Halocarbons Regulation (BC Reg. 387/99 as amended by 317/2012);

Recycling Regulation (BC Reg. 449/2004, as amended by 88/2014);

PCB Regulations (SOR/2008-273 as amended by SOR/2011-301);

Canadian Environmental Protection Act (CEPA) (SC 1999, c 33 as amended by SI/2014-32);

Nuclear Safety and Control Act, Nuclear Substances and Radiation Devices Regulations (SOR/2000-207 as amended by SOR/2008-119); and,

Hazardous Products Act, Surface Coating Materials Regulations (SOR/2005-109 as amended by 2010-224).

Asbestos Containing Materials (ACM)

An asbestos containing material is defined as any manufactured article or other material that contains at least 0.5% asbestos (>0% for vermiculite insulation). Friable asbestos "means any material which, when dry, can be easily crumbled or powdered by hand pressure" as defined under the BC Occupational Health and Safety Regulation (BC Reg 296/97). Examples of potentially friable ACM includes sheet vinyl flooring, vermiculite insulation, and duct tape. Products known to contain non-friable asbestos include vinyl floor tile, drywall joint compound, and Transite cement products.

Asbestos in the workplace is defined as a "Designated Substance" under the Occupational Health and Safety Regulation (OSHR) published by the Workers Compensation Board (WCB) which governs safe handling of ACMs at the workplace. This regulation requires property owners to notify workers of the presence of friable ACMs, once their presence has been confirmed.

Due to its carcinogenic potential, asbestos is designated as an ALARA substance; worker exposure to this product must be kept "as low as reasonably achievable" (ALARA). All Asbestos containing materials must be abated by a qualified professional in accordance with the OSHR.

Waste handling and disposal of ACMs is governed by the OHSR, Waste Management Act (1988) and Hazardous Waste Regulation (HWR). The transportation of ACMs is governed by the Transportation of Dangerous Goods (TDG) Act / Regulation (July 2010).

Lead Based Paints (LBP)

Lead in the workplace is defined as a "Designated Substance" under the OHSR. The OHSR governs safe handling of lead in the workplace. This regulation requires owners of the Property to notify the workers, and post warning signs at the boundary of any work area where hazardous lead exposures could occur and/ or once the presence has been confirmed. As an ALARA substance, worker exposure must be kept as low as reasonably achievable.

Toxicity Characteristic Leaching Procedure (TCLP) testing of positively identified lead paint applications is typically required to determine if the painted applications are classified as a hazardous waste as outlined in the Ministry of Environments Special Waste Act.

The federal governments legislation, Surface Coating Materials Regulations – SOR/2016-193, section 2, defines lead based paint as "A surface coating material must not contain more than 90 mg/kg (90 ppm) total lead when a dried sample is tested in accordance with a method that conforms to good laboratory practices." Lead based paints over 600 ppm are considered an occupational safety hazard.

In addition to lead based paints, lead may be used in its pure metallic form or combined chemically with other elements to form lead compounds. Metallic lead is used to make products such as electric storage batteries, ammunition, lead solder, radiation shields, pipes, and sheathes for electric cables. Metallic lead is sometimes combined with other metals such as copper, tin, and antimony as lead alloys for use in the manufacture of a variety of metal products. Lead is commonly found in buildings in the solder used on copper domestic pipes, in the caulking on bell fittings of cast iron drainage pipes, and in electrical equipment.

Poly Chlorinated Biphenyls (PCBs)

PCBs were used widely as coolants and lubricants in transformers, capacitors, and other electrical equipment. In fluorescent fixtures PCBs were usually found within the small capacitors inside the ballast that controls the lamp.

In Canada, polychlorinated biphenyls ("PCBs") were prohibited from being used in products, equipment, machinery, electrical transformers and capacitors, which were manufactured or imported into the country after July 1, 1980. However, older equipment in use after this date may still contain PCBs.

Polychlorinated biphenyls (PCB) are regulated under both federal (Canadian Environmental Protection Act) and BC Hazardous Waste Regulation and must

be treated as PCB waste and be stored and disposed of accordingly.

Although rare, paints have been known to contain PCBs. Older elevator motors, transformers and hydraulic systems may also have PCB-containing oil.

Mould and Other Microbial Contaminants

The OHSR applies to workplaces with mould showing on exposed or hidden surfaces, or where mould may be a factor in complaints regarding indoor air quality. Section 4.79 of the OHSR requires an investigation of a worker's complaint related to indoor air quality.

Microbial growth can be found on a wide range of wet building materials (most often paper or wood-based) in old or new buildings where there has been significant water damage. The removal of building materials impacted by mould growth may require workers with specific training and experience using work procedures that have been developed to protect workers and work areas from exposure to elevated concentrations of airborne mould.

Crystalline Silica

Silica is found in concrete, cement, mortar, ceramic wall and floor tiles, stucco finishes, and acoustic ceiling tiles.

Prolonged exposure to, and inhalation of, free crystalline silica, may result in a respiratory disease known as silicosis, which is characterized by progressive fibrosis of inner lung tissue and marked shortness of breath or impaired lung function.

Exposure to silica dust is governed the BC Occupational Health and Safety Regulation BC Reg. 297/97. According to the Regulation, the time weighted average exposure limit for airborne silica dust is 0.025 mg/m^3.

Studies show that when common construction work tasks involving the sanding, drilling, chipping, grinding, cutting, sawing, sweeping, and blasting of concrete and concrete products are conducted without using dust controls, workers are exposed to airborne silica concentrations at levels far above the occupational exposure limits.

Crystalline silica is an ALARA substance; worker exposure to this product must be kept "as low as reasonably achievable" (ALARA). Employers are required to develop an exposure control plan (ECP) when workers are or may be exposed to airborne concentrations of these materials in excess of 50% of the exposure limit.

Ozone Depleting Substances (ODS)

An ODS refers to any substance containing chlorofluorocarbon (CFC), hydro chlorofluorocarbon (HCFC), halon, or any other material capable of destroying oozing in the atmosphere. ODSs have been used in rigid polyurethane foam and insulation, laminates, aerosols, air conditioners, fire extinguishers, cleaning solvents and the sterilization of medical equipment. Federal regulations introduced in 1995 required the elimination of production and import of CFCs by 1 January 1996 (subject to certain essential uses) and a freeze on the production and import of HCFC-22 by 1 January 1996. These regulations also require the complete elimination of HCFC-22 by the year 2020.

While the regulations allow the continued use of halocarbon refrigerants, they strictly prohibit any person from releasing into the environment any halocarbon.

In the case of demolition, these materials will require proper recovery and disposal. The BC Ozone-Depleting Substances Regulations would also apply to any CFC/ODS abatement procedures. These regulations require that all ODS must be collected, stored and recycled, or collected and disposed appropriately by a licensed professional.

Mercury

Mercury is commonly found in buildings as mercury vapour in lighting, thermostats, thermometers, electrical switches, manometers (i.e. medical sphygmomanometers) and can also be found in minor amounts in fluorescent lamp tubes and vapour bulbs and may be present in stable forms in adhesives.

As a hazardous substance, transportation and disposal of this substance must be done in compliance with the federal Transportation of

Dangerous Goods (TDG) Regulations and the BC Hazardous Waste Regulation.

Radioactive Components

Some smoke alarms contain small sealed radioactive sources in the form of Americium 241. This material is sealed into a metal case within the smoke detector and must not be damaged or tampered with. As long as a smoke detector is used as directed and is not opened or damaged, it poses no radiation health risk to humans.

Ceramic tiles and some forms of granite sometimes contain radioactive materials. These materials should be checked prior to work being carried out on them to determine if radioactive materials are present.

UFFI

Urea formaldehyde-based thermal insulation is foamed in place and used to insulate buildings. Urea formaldehyde Foam Insulation (UFFI) was banned in 1978. It was prohibited due to the high levels of formaldehyde that were given off during the installation process, as well as the continued off-gassing of formaldehyde from poorly installed insulation. All such material was to have been removed and replaced. Standard real estate agreements currently contain a "No UFFI" clause and as a best management practice, all buildings containing UFFI should have the material removed. UFFI is still found in many buildings in BC.

Arsenic

Arsenic is a hazardous substance, and any maintenance or abatement involving materials containing arsenic or arsenic compounds must be done in compliance with the BC Occupational Health and Safety Regulations (BCOHSR).

Arsenic has long been used as a pesticide due to its toxic properties. Arsenical pesticides, often in the form of chromated copper arsenate (CCA), when applied with high pressure to wood, serve to extend the structural life of the material by making it resistant to mould, rot and insect infestation. Studies have shown that these materials have the ability to leach arsenic into the soil. Arsenic can also be present in small amounts in paint.

Aboveground / Underground Storage Tanks

Storage tanks containing fuels have the ability to leak over time and can result in soil and groundwater contamination. These tanks must be observed and checked over time to ensure they do not leak. Evidence of leaks must be investigated, and any potential contamination remediated. The Canadian Council of Ministers of the Environment (CCME) publishes a Code of Practice for the safe management of aboveground and underground storage tanks.

Hantavirus – Rodent Droppings

The Hantavirus is a virus associated with Hantavirus Pulmonary Syndrome, a disease caught through contact with the urine or droppings of infected rodents, or by being bitten or scratched by them.

The disease starts off like a cold or flu (fever, sore muscles, headaches, nausea, vomiting), but progresses to pneumonia-like conditions within a few days. The change in intensity of the symptoms is very rapid and can result in fluid build-up in the lungs and respiratory failure.

Possible exposure to Hantavirus is regulated under the BC Occupational Health and Safety Regulation. Employers with workers who have a risk of exposure must have an exposure control plan (ECP) in place prior to allowing their workers to come into contact with this material. As with all other hazardous substances, all personnel working around or with such materials must be made aware of their presence and be supplied with training in the potential health effects and means of avoiding exposures.

Appendix E – WorkSafe BC Sampling Density Requirements

Type of Material	Area of homogeneous Materials**	Minimum number of bulk samples to be collected***
Surfacing materials, including textured coatings, drywall mud, plasters, and stucco	Less than 90 m^2 (approximately 1,000 ft^2)	At least 3 samples of each type of surfacing material
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 5 samples of each type of surfacing material
	Greater than 450 m^2	At least 7 samples of each type of surfacing material
Sprayed insulation and blown-in insulation, including sprayed fireproofing	Less than 90 m^2 (approximately 1,000 ft^2)	At least 3 samples
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 5 samples
	Greater than 450 m^2	At least 7 samples
Loose vermiculite insulation (including vermiculite insulation within concrete masonry units, or CMUs)	Less than 90 m^2 (approximately 1,000 ft^2)	At least 3 samples
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 5 samples
	Greater than 450 m^2	At least 7 samples
Ceiling Tiles	Less than 90 m^2 (approximately 1,000 ft^2)	At least 3 samples
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 5 samples
	Greater than 450 m^2	At least 7 samples
Flooring, including vinyl sheet flooring (and backing) and floor tiles	Any size	At least 1 sample per flooring type in each room (and 1 from each layer of flooring)
Levelling compounds and mortars	Any size	At least 3 Samples
Asbestos Ropes, gaskets, wires, etc.	Any size	At least 1 sample
Mechanical insulation, including duct taping, pipe insulation, elbows and boiler/tank or vessel insulation	Any size	At least 3 samples

Mastics and putties, including; duct mastic (around penetrations) and window putty	Any size	At least 3 samples
Roofing materials, including felting and shingles	Less than 90 m^2 (approximately 1,000 ft^2)	At least 1 sample (each layer of material must be sampled)
	Between 90 and 450 m^2 (approximately 5,000 ft^2)	At least 2 samples (each layer of material must be sampled)
	Greater than 450 m^2	At least 3 samples (each layer of material must be sampled)
Asbestos cement (transite) board and pipe	Any size	At least 1 sample
Other sprayed materials	Any size	At least 1 sample per type of material
Other non-friable materials	Any size	At least 1 sample per type of material

* The information in this table is taken from: WorkSafeBC publication BK27 *Safe Work Practices for Handling Asbestos (2017).*

** Homogeneous material is considered uniform in texture and appearance, was installed at one time, and is likely to be of only one type of material or formulation.

*** If the material is assumed to contain asbestos, samples do not have to be collected. The professional judgment of a qualified person can be used to reduce the number of bulk samples of homogeneous materials. If fewer samples than the minimum recommended number are collected, surveyors should document the rationale for their position in the survey report.

Appendix F – Contractor Sign off Sheet

By signing below, you acknowledge that you have been informed as to the nature and location of all known and suspected hazardous materials including asbestos as per OHSR 20.112 that are found at the subject site. As the contractor, you will make every effort to undertake your work duties in a manner that will avoid disturbing or otherwise impacting these materials without following WorkSafe BC approved procedures. If through your work these applications are to be disturbed or have been inadvertently disturbed, it is your responsibility to inform the client named in this report.

In the event any additional suspect hazardous materials are encountered during renovation or demolition activities, work on those materials must stop immediately and remain undisturbed until testing confirms the presence or absence of asbestos or other hazardous material. If any material suspected of containing asbestos or another hazardous material is disturbed during the work, all work shall stop until the area is contained, the hazard evaluated by a qualified professional and the hazardous materials, if indeed present, is safely managed by a qualified contractor.

Company / Name	Signature	Date

From: Jennifer Barber
To: [redacted]
Subject: RE: Registered Form C s 219 - 4129 Island Hwy S
Date: March 6, 2026 8:20:00 AM
Attachments: image001.png
image002.png

The demo permit is only $60. If you send the hazmat report I can at least issue that to get you going. We'll need the hazmat clearance letter once the trailer is cleaned up and gone, at which point I can issue the building permit. For the building permit, we still need the foundation plans, I never did get anything from Iconic.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓iɬdax̓ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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-

From: Doralynne Hodgins [redacted]
Sent: March 5, 2026 3:50 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Fwd: Registered Form C s 219 - 4129 Island Hwy S

NOTICE: This email is from an external source.

Please find enclosed registered covenant that SRD required. I believe that the only requirement for the building permit is the remittance of the 2140.00 payment. Please advise

Dodie Hodgins

---------- Forwarded message ---------
From: **Barbara Burns** <barb@oceansidenotary.ca>

Date: Thu., Mar. 5, 2026, 3:28 p.m.
Subject: RE:Registered Form C s 219 - 4129 Island Hwy S
To: Doralynne Hodgins [redacted]>
Cc: planning@srd.ca <planning@srd.ca>, kchamberlain@srd.ca <kchamberlain@srd.ca>

Please find registered document attached.
Kind Regards,

Barbara J. Burns, M.A.

Notary Public
850B – 12th Ave.
Campbell River, BC V9W 6B5
Ph: 250-286-3636
Fax: 250-286-6371
www.oceansidenotary.ca
IDENTIFICATION: We require 2 pieces of identification, at least one of which must be valid unexpired **PICTURE** identification, when witnessing signatures on any documents

SOCIAL INSURANCE NUMBER: For ALL real estate **PURCHASERS** who are Canadian citizens or permanent residents, the Province of British Columbia requires that we obtain proof of your Social Insurance Number.

From: Doralynne Hodgins [redacted]
Sent: March 5, 2026 1:42 PM
To: Barbara Burns <barb@oceansidenotary.ca>
Subject: Fwd: SRD Signed LTSA Form C - 4129 Island Hwy S

Here is the signed co enact. Please register

Dodie Hodgins

---------- Forwarded message ---------
From: **Shayla Burnham** <sburnham@srd.ca>
Date: Thu., Mar. 5, 2026, 10:28 a.m.
Subject: SRD Signed LTSA Form C - 4129 Island Hwy S
To: [redacted]
Cc: Email - planning@srd.ca <planning@srd.ca>, Keltie Chamberlain <kchamberlain@srd.ca>

Good morning,

Please find attached signed LTSA Form C to forward to your legal team for registration.

Thank you,

Shayla Burnham
Property Services Representative

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6718
E: sburnham@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̱wiłdax̱ᵘ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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From: [redacted]
To: Jennifer Barber
Subject: Re: Development permit
Date: February 26, 2026 6:23:11 PM
Attachments: image001.png
Outlook-r1otvgza.png
Outlook-r1otvgza.png
image001.png

NOTICE: This email is from an external source.

Keltie's last email said she would have it ready for signature at yesterday's meeting so hopefully it was signed. It goes back to our Notary for registration. That should complete the building permit 4xct for the fee

Dodie

On Thu., Feb. 26, 2026, 10:43 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Ah, ok, sounds good.
> I'm not sure about the covenant, Keltie was taking care of that.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓ɯɨɬdax̱̓ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins <[redacted]>
> **Sent:** Wednesday, February 25, 2026 5:06 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Development permit
>
> **NOTICE:** This email is from an external source.
>
> Did the covenant get signed?

Now the DP has been approved, we need to clear out our cottage. We have a company that will come in after that and do the abatement and issue a certificate. We couldn't do anything until the DP was approved

Dodie

On Wed., Feb. 25, 2026, 2:51 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Yes, that was your DP, it has been approved.
>
> What's happening with the hazmat?
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓wiłdax̓ᵚ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Wednesday, February 25, 2026 1:38:40 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Development permit
>
> **NOTICE:** This email is from an external source.

Keltie advised that our permit approval was on the board agenda today. We watched. There was 1 recommendation but there was no name. Was that us? The board approved it. Keltie is away until March 4th and she will draft an approval letter if it was approved.

Can you please find out if that was us on the agenda or not?

Thanks

Dodie

From:	Jennifer Barber
To:	Keltie Chamberlain
Subject:	FW: Hodgins S 219 4129 Island Highway S CR
Date:	January 29, 2026 11:20:00 AM
Attachments:	image001.png image002.png 1_Form C (Charge)_20260123124059 partially signed.pdf

---

Ok, this one's definitely signed.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã^{3}moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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-

From: Barbara Burns <barb@oceansidenotary.ca>
Sent: January 29, 2026 11:17 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: RE: Hodgins S 219 4129 Island Highway S CR

NOTICE: This email is from an external source.

I am so sorry!
I seem to not be firing on all cylinders
Please see signed one attached.
Have a great weekend!

Barbara J. Burns, M.A.
Notary Public
850B – 12th Ave.
Campbell River, BC V9W 6B5
Ph: 250-286-3636
Fax: 250-286-6371

www.oceansidenotary.ca
IDENTIFICATION: We require 2 pieces of identification, at least one of which must be valid unexpired **PICTURE** identification, when witnessing signatures on any documents

SOCIAL INSURANCE NUMBER: For ALL real estate **PURCHASERS** who are Canadian citizens or permanent residents, the Province of British Columbia requires that we obtain proof of your Social Insurance Number.

From: Jennifer Barber <jbarber@srd.ca>
Sent: January 29, 2026 10:49 AM
To: Barbara Burns <barb@oceansidenotary.ca>
Subject: Re: Hodgins S 219 4129 Island Highway S CR

Hi Barbara,
This is not the signed copy.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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-

From: Barbara Burns <barb@oceansidenotary.ca>
Sent: Wednesday, January 28, 2026 1:17 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: RE: Hodgins S 219 4129 Island Highway S CR

NOTICE: This email is from an external source.

Good Afternoon Jennifer,
Please see the form attached with the Hodgins signature. Please let me know if you require anything further.
Have a great rest of your week!

Barbara J. Burns, M.A.

Notary Public
850B – 12th Ave.
Campbell River, BC V9W 6B5
Ph: 250-286-3636
Fax: 250-286-6371
www.oceansidenotary.ca
IDENTIFICATION: We require 2 pieces of identification, at least one of which must be valid unexpired **PICTURE** identification, when witnessing signatures on any documents

SOCIAL INSURANCE NUMBER: For ALL real estate **PURCHASERS** who are Canadian citizens or permanent residents, the Province of British Columbia requires that we obtain proof of your Social Insurance Number.

From: Jennifer Barber <jbarber@srd.ca>
Sent: January 27, 2026 9:01 AM
To: Barbara Burns <barb@oceansidenotary.ca>
Subject: RE: Hodgins S 219 4129 Island Highway S CR

Hi Barbara,
This looks great, no changes required.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̵ɨɬdax̵ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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From: Barbara Burns <barb@oceansidenotary.ca>
Sent: January 27, 2026 8:50 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: FW: Hodgins S 219 4129 Island Highway S CR

NOTICE: This email is from an external source.

Sorry I got your email wrong the first time!
Please see below
Kind Regards

Barbara J. Burns, M.A.

Notary Public
850B – 12th Ave.
Campbell River, BC V9W 6B5
Ph: 250-286-3636
Fax: 250-286-6371
www.oceansidenotary.ca
IDENTIFICATION: We require 2 pieces of identification, at least one of which must be valid unexpired **PICTURE** identification, when witnessing signatures on any documents

SOCIAL INSURANCE NUMBER: For ALL real estate **PURCHASERS** who are Canadian citizens or permanent residents, the Province of British Columbia requires that we obtain proof of your Social Insurance Number.

From: Barbara Burns
Sent: January 23, 2026 12:48 PM
To: 'jbarbar@srd.ca' <jbarbar@srd.ca>; 'kchamberlain@srd.ca' <kchamberlain@srd.ca>
Subject: Hodgins S 219 4129 Island Highway S CR

Good Afternoon Jen & Keltie,
Please see attached a draft s 219 for the Hodgins. They mentioned that you wanted to review it prior to them signing.
Please let me know if you have any questions or need any changes.
Have a great weekend!

Barbara J. Burns, M.A.

Notary Public
850B – 12th Ave.
Campbell River, BC V9W 6B5
Ph: 250-286-3636
Fax: 250-286-6371
www.oceansidenotary.ca

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SOCIAL INSURANCE NUMBER: For ALL real estate **PURCHASERS** who are Canadian citizens or permanent residents, the Province of British Columbia requires that we obtain proof of your Social Insurance Number.

LTSA Land Title Act

Charge

General Instrument – Part 1

1. Application

Barbara J Burns
850B - 12th Avenue
Campbell River BC V9W 6B5
250 286-3636

2. Description of Land

PID/Plan Number	Legal Description
000-329-479	**LOT C, SECTION 35, TOWNSHIP 4, COMOX DISTRICT, PLAN 13994**

3. Nature of Interest

Type	Number	Additional Information
COVENANT		**s. 219**

4. Terms

Part 2 of this instrument consists of:

(b) Express Charge Terms Annexed as Part 2

5. Transferor(s)

VICTOR GLENN HODGINS

DORALYNNE MARY HODGINS

6. Transferee(s)

STRATHCONA REGIONAL DISTRICT
990 CEDAR STREET
CAMPBELL RIVER BC V9W 7Z8

7. Additional or Modified Terms

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8. Execution(s)

This instrument creates, assigns, modifies, enlarges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
BARBARA J. BURNS, M.A. *Notary Public* 850B - 12th AVENUE CAMPBELL RIVER, BC V9W 6B5 TEL: 250 286-3636 FAX: 250 286-6371	YYYY-MM-DD 2026-01-28	[redacted] **Victor Glenn Hodgins** [redacted] **Doralynne Mary Hodgins**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
	YYYY-MM-DD	**Strathcona Regional District** By their Authorized Signatory **name** **name**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Electronic Signature

Your electronic signature is a representation that you are a designate authorized to certify this document under section 168.4 of the *Land Title Act*, RSBC 1996, c 250, that you certify this document under section 168.41 (4) of the Act, and that an execution copy, or a true copy of that execution copy, is in your possession.

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TERMS OF INSTRUMENT - PART 2

WHEREAS:

A. The Transferor is the registered owner in fee simple of:

PID: 000-329-479

Lot C, Section 35, Township 4, Comox District, Plan 13994

4129 Island Highway South, Campbell River, BC V9H 1E9

(the "**Land**")

B. The Transferee is the Strathcona Regional District;

C. The Transferee's Building Inspector has determined that the Land is subject to or is likely to be subject to flooding and has required the Transferor to provide the Building Inspector with a report or reports certified by a professional engineer or geoscientist, with experience in geotechnical study and geohazard assessments (the "**Qualified Professional**"), that the Land may be used safely for the use intended (the "**Reports**");

D. The Transferor has provided the Transferee with the report prepared by Joe Brunelle, P. Eng. dated April 4, 2025, which report is attached to this Agreement as Schedule "A" and has agreed to provide the Transferee with any further Reports of the Qualified Professional, as required by the Transferee or as necessary from time to time, certifying that the Land may be used safely for the use intended as a result of the construction to which the Report or further Report(s) relate; and

E. The Transferor acknowledges that it is in the public interest that the development and use of the Land be limited and wishes to grant this covenant and indemnity to the Transferee under Section 219 of the *Land Title Act* and Section 56 of the *Community Charter*.

NOW THEREFORE, in consideration of the premises and the covenants herein contained and for other valuable consideration, receipt and sufficiency of which is hereby acknowledged by the parties, the parties hereto covenant and agree with each other as follows:

1. In this Agreement, "construction" means construction of a building or other structure, or structural alteration of or addition to an existing building or other structure to which the Crossfield Report or further Reports relate.

2. The Transferor covenants and agrees not to use the Land nor construct any building or structure on the Land, nor make any structural alterations or additions to any existing building or structure on the Land, except in the manner determined and certified by the Engineer in the Floodplain Hazard Assessment as enabling the safe use of the Land for use intended. Without limiting the generality of the foregoing, the

Grantor shall construct all buildings or structures and perform all other construction on and development of the Land only in strict accordance with all requirements and guidelines set out in the Floodplain Hazard Assessment, including conditions as to:

a. the siting, structural design and maintenance of buildings structures or works,

b. the maintenance or planting of vegetation, and

c. the placement and maintenance of land fill.

3. The Transferor agrees and hereby acknowledges that no area below the required elevation shall be used for the storage of goods or for the installation of HVAC equipment or other fixed appliances susceptible to damage by floodwaters.

4. At the Transferor's expense, the Transferor must: do everything necessary to ensure that this Agreement, and the section 219 covenant it creates are registered against the Land at the Victoria Land Title Office; and secure priority of registration and pending charges and encumbrances of a financial nature against the Land.

5. The Transferor shall reimburse the Transferee for any expense that may be incurred by the Transferee as a result of a breach of any covenant under this Agreement.

6. The Transferor acknowledges that the Transferee does not represent to the Transferor or any other person that any buildings or structures constructed, or placed, or mobile homes located in accordance with the terms and conditions of this Agreement will not be damaged due to mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche.

7. The Transferor and the Transferee agree that the enforcement of this Agreement is entirely within the discretion of the Transferee and that the execution and registration of this Agreement against the title to the Land must not be interpreted as creating any duty on the part of the Transferee to the Transferor or to any other person to enforce any provision or the breach of any provision of this Agreement.

8. Nothing contained or implied herein prejudices or affects the rights and powers of the Transferee in the exercise of its functions under any public or private statutes, bylaws, orders and regulations, all of which may be fully and effectively exercised in relation to the Land as if the Agreement had not been executed and delivered by the Transferor, and in particular, without limiting the generality of the foregoing, the Building Inspector of the Transferee may request further or additional Reports be prepared by a Qualified Professional prior to the issuance of a building permit for the Land.

9. The Transferor covenants and agrees that the Transferee may withhold building permits and occupancy permits as necessary to ensure compliance with the covenants in this Agreement, and that the issuance of a building permit or occupancy

permit does not act as a representation or warranty by the Transferee that the covenants in this Agreement have been satisfied.

10. The Transferor hereby releases and forever discharges the Transferee of and from any claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever that the Transferor can or may have against the Transferee for any loss, damage, or injury that the Transferor may sustain or suffer arising out of or connected with:

(a) this Agreement;
(b) a breach of this Agreement by the Transferor;
(c) the restrictions and requirements under this Agreement;
(d) the issuance of a building permit under this Agreement;
(e) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(f) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

11. The Transferor shall indemnify and save harmless the Transferee from any and all claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever for any loss (including economic loss), damage, or injury:

(a) that any person might have as owner, occupier, or user of the Land;
(b) by any person who has an interest in or comes onto the Land; or
(c) by any person that suffers loss of life or injury to its person or property

where such loss (including economic loss), damage, or injury arises out of, or is connected with:

(d) a breach of this Agreement;
(e) a breach of this Agreement by the Transferor;
(f) the restrictions and requirements under this Agreement;
(g) the issuance of a building permit under this Agreement;
(h) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(i) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

12. Time is of the essence of this Agreement.

13. The Transferor covenants and agrees for itself, its heirs, executors, successors, and assigns, that it will at all times perform and observe the requirements and restrictions set out in this Agreement and they will be binding upon the Transferor as personal covenants only during the period of its respective ownership or any interest in the Land.

14. It is mutually understood, acknowledged and agreed by the parties hereto that the Transferee has made no representations, covenants, warranties, guarantees, promises, or agreements (oral or otherwise)

with the Transferor other than those contained in this Agreement.

15. The Transferor shall pay the legal fees of the Transferee in connection with the preparation and registration of this Agreement. This is a personal covenant between the parties.

16. The waiver by a party of any breach of this Agreement or failure on the part of the other party to perform in accordance with any of the terms or conditions of this Agreement must not be construed as a waiver of any future or continuing failure, whether similar or dissimilar, and no waiver will be effective unless it is in writing and signed by both parties.

17. Wherever the singular, masculine, and neuter are used throughout this Agreement, the same is to be construed as meaning the plural, feminine, or body corporate or politic as the context so requires.

18. No remedy under this Agreement is to be deemed exclusive but will, where possible, be cumulative with all other remedies at law or in equity.

19. The restrictions and covenants herein contained run with the Land, are perpetual, continue to bind all of the Land when subdivided, and must be registered in the Victoria Land Title Office pursuant to Section 219 of the *Land Title Act* as covenants in favour of the Transferee as a first charge against the Land.

20. The Transferor agrees to execute all other documents and provide all other assurances necessary to give effect to the covenants contained in this Agreement.

21. If any part of this Agreement is found to be illegal or unenforceable, that part will be considered separate and severable and the remaining parts will not be affected thereby and will be enforceable to the fullest extent permitted by law.

22. This Agreement must be construed in accordance with, and governed by, the laws applicable in the Province of British Columbia.

23. This Agreement may be executed in counterpart with the same effect as if all parties had signed the same document. Each counterpart will be deemed to be an original. All counterparts will be construed together and constitute one and the same Agreement. This Agreement may be delivered by electronic means.



GEOTECHNICAL ASSESSMENT

Proposed Single-Family Residence:
4129 Island Highway South, Oyster Bay, SRD, BC

Legal Address:
Lot C, Section 35, Township 4, Comox District, Plan 13994
PID: 000-329-479

Prepared For:
Doralynne and Victor Hodgins
4129 Island Highway South,
Campbell River, BC V9H 1E9

Attention:
Doralynne Hodgins
[redacted]

April 4, 2025

File: E4084.01 Revision: 00

Prepared By:
Joe Brunelle, P.Eng.

Reviewed By:
Louis Chapdelaine, P.Geo.

Lewkowich Engineering Associates Ltd.

Lewkowich Engineering Associates Ltd.
2351B Rosewall Crescent
Courtenay, BC V9N 8R9
250-334-0384 (Office)
250-334-9601 (Fax)
www.lewkowich.com

Permit to Practice Number: 1001802

EXECUTIVE SUMMARY

1. The following is a brief synopsis of the property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
2. The subject property, 4129 Island Highway South, Oyster Bay, BC, from this point forward referred to as "the Property," is located on the east coast of Vancouver Island within the jurisdictional boundaries of the SRD. At the time of this Report, the proposed development for the Property consists of a re-development of a single-family residence.
3. A site-specific assessment was conducted to identify any potential geotechnical hazards for the proposed development. Our assessment determined that the Property is subject to ocean flooding hazard that exists along the Strait of Georgia.
4. The Report recommends (i.e., is in support of) a minimum coastal Flood Construction Level of 5.25m CGVD2013 and a horizontal floodplain setback of 15.0m landward from the estimated Year 2100 Natural Boundary, where the Year 2100 Natural Boundary is defined as the 3.4m CGVD2013 contour line.
5. The findings confirm the land is considered safe for the use intended, provided the recommendations in this Report are followed.

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3.0 SITE CONDITIONS

3.1 Physical Setting

a. The Property is in the community of Oyster Bay and within the jurisdiction of the SRD.

b. The Property is located on the northeast side of and accessed by Island Highway South which runs in a northwest-southeast orientation.

c. The Property is zoned as Country Residential Four (CR-4).[4,5] It is surrounded by similar CR-4 properties. *Figure 3.1* below shows the Property location with 2023 air photo.



Figure 3.1: Property location (from SRD *uMapIt*[5]).

3.2 Terrain and Features

a. The 0.12-hectare (0.29-acre)[5] Property is currently developed with a one [1]-storey single-family residence which was built in 1949.[6] A wood deck extends off the northeast oceanside of the residence.

b. Air photos from the CoCR *Air Photo History Map*[7] were reviewed and show the Property and adjacent shore mostly unchanged from 2002 to present day; the 2002 air photo was the earliest air photo in the collection to capture the Oyster Bay area.

c. The terrain of the Property showed a gentle sloping between 3° (23H:1V) to 8° (7H:1V) from Island Highway South to the shoreline at the northeast property boundary.

d. Vegetation within the Property consisted of mature coniferous and deciduous trees, grass lawn, and some ornamental bushes.

3.4 Regional Geology and Aquifers

a. Surficial geology mapping for the area is classified as Capilano Sediments consisting of sand, pebbly sand, gravel, sandy gravel in spits, bars, etc. marine (including glacio-marine) deposits up to 9m thick, possibly underlain by clay.[8]

b. Review of groundwater wells and aquifers in the *BC Water Resources Atlas*[9] indicates that Aquifer 411 and Aquifer 847 have been mapped to the area. Aquifer 847, named *Quinsam to Stories Beach*, is a sand and gravel layer associated with the Cowichan Head Formation. It is identified as a confined aquifer. Aquifer 411 is attributed to the fractured sedimentary bedrock. Wells have been mapped to the area though much of the older data and location reliability is fair to poor. The wells generally agree with the surficial mapping – sand and gravel deposits were found at surface, underlain by stoney clay, till/ hardpan, and/or sedimentary bedrock.

c. Bedrock geology for the area is classified as Upper Cretaceous Nanaimo Group Undivided Sedimentary Rocks.[10] The strata of the Nanaimo Group formation in the Comox/Georgia basin consists of alternating succession of shales, sandstones, conglomerates, and some coal.[11] Surficial geology mapping indicated bedrock outcrops along the shoreline in both northwest and southeast directions from the Property.[8] Based on well records in the area, depth to bedrock at the Property is estimated to be 5m to 20m BGS.

3.5 Soil Conditions

a. A shallow (1.0m depth BGS) test hole was hand dug adjacent to the north corner of the existing wood deck to investigate the near surface.

b. In general, the near surface soil conditions as observed in the Property are consistent with published surficial geology mapping.

c. Soil encountered in the hand dug hole consisted of:

   i. 0.0m to 0.4m: SAND, and ORGANICS (grass, rootlets), some silt, soft, dark brown, damp – sod layer; underlain by,

   ii. 0.4m to 1.0m: SAND, compact, grey, damp.

   The hole was terminated at the length of the shovel.

d. We expect these upper coarse-grained soils to be underlain by dense, stoney clay, glacial till, and/or sedimentary bedrock at depth.

e. Based on existing site grades we also expect there may be localized areas of fill or disturbed soil. We do not expect the presence of fill materials to have a detrimental impact on the proposed development, and any encountered fill or disturbed soil can be managed by field recommendations as part of the geotechnical assurance services during construction.

level.

c. Farther south (~1km from Property) a spit and lagoon has formed at Oyster Bay Shoreline Park. Its history dates back to the 1930s and 1940s when a relief then logging camp was set up to employ people during the depression. A causeway was built and at the same time a breakwater was built of old dismantled ships, then later with rock to protect a log booming operation from the predominant wave attack from the southeast. Sediment has progressively accumulated at Oyster Bay Shoreline Park since the log booming operation was built. This recent accreting land formation continues to protect Oyster Bay from the strongest winds and waves from the southeast as evidence by the observed calm waters and shallow bathymetry of the bay.

4.3 Bylaw Requirements

a. Upon review of SRD *Floodplain Management Bylaw No. 2782, 2005*,[3] we confirm the following applicable items:

   i. *"301 Floodplain Designation 1) The following land is designated as floodplain: ... b) Land lower than the flood construction levels specified in Section 302; c) Land within the floodplain setbacks specified in Section 303.*

   ii. *302 Flood Construction Levels ... 2) Where Floodplain Mapping is NOT available, the following elevations are specified as flood construction levels: ... f) 1.5 metres above the natural boundary of any other watercourse; g) 1.5 metres above the natural boundary of the sea...*

   iii. *303 Floodplain Setbacks 1) The following distances are specified as floodplain setbacks: ... c) 15.0 metres from the natural boundary of any other watercourse; d) 15.0 metres from the natural boundary of the sea..."*

b. Additionally, the SRD *Floodplain Management Bylaw*[3] prescribes construction requirements and provides for site specific exemptions including additions that are less than 25% of the ground floor area but no closer to the water than existing.

5.0 COASTAL FLOOD HAZARD ANALYSIS

5.1 General

a. Provincial *Flood Hazard Area Land Use Guidelines*[2] recommend two methods, the Combined Method or the Probabilistic Method, to determine a coastal FCL that incorporates the issue of sea level rise and other mitigating factors. The Probabilistic Method was used for this site-specific assessment, where the water level along the shoreline is based on a probabilistic analysis of high tide and storm surge. A target 0.5% AEP (i.e., 200-year return period) coastal storm event was adopted for this assessment following the provincial

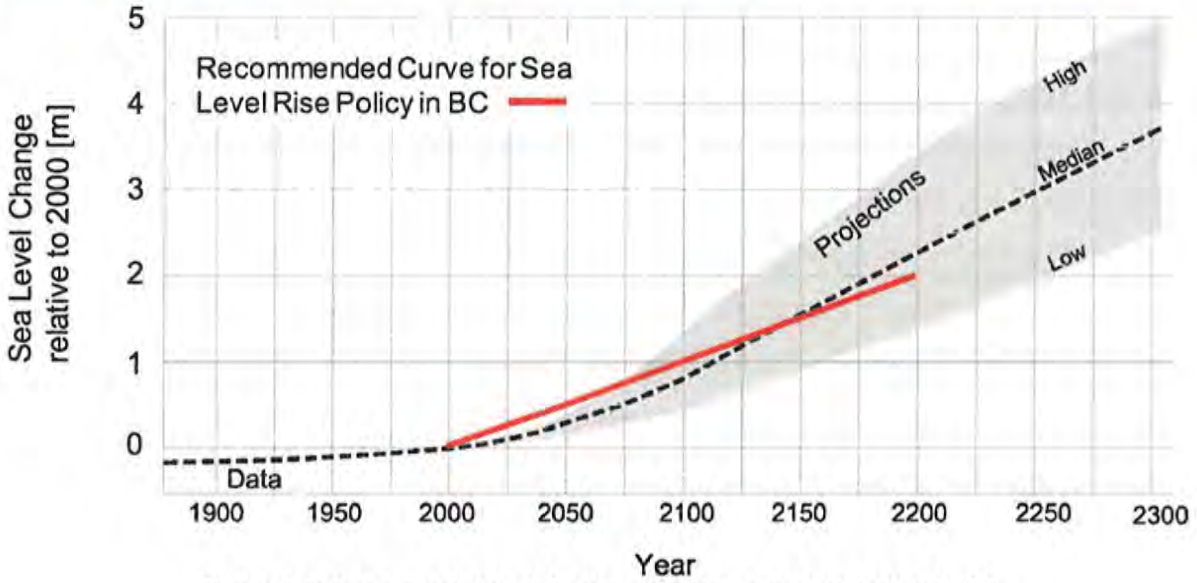


Figure 5.3: Recommended SLR curve for planning and design in BC.

b. In accordance with current guidelines 1.0 cm/year of SLR to the Year 2100 was included in our assessment, for a total SLR of 0.75m.

c. The assumed amount of SLR was based on information available at the time of their study and will be revaluated in the future as more information becomes available. Forecasting this far into the future carries significant uncertainties. Monitoring changes of SLR is beyond the scope of this Report. We expect local authorities to remain informed in order to adjust their flood management plans/guidelines accordingly.

5.4 Regional Adjustment – Isostatic Rebound

a. Future sea level is also affected by vertical land movement due to changes in the regional uplift or subsidence of the land surface (i.e., isotropic rebound, tectonic shifting, etc.). Areas where the land elevation is increasing (uplift/rebound) should decrease the allowance for SLR, while areas where the land elevation is decreasing (subsidence) should increase the allowance for SLR. Some refer to the combined effects of SLR and RA as Relative Sea Level Rise (RSLR).

b. Based on current information, this area of eastern Vancouver Island is rebounding at a rate of 3.0mm/year, as taken from an average of the Little River Tide Gauge Station No. 07993 and the Campbell River Tide Gauge Station No. 08074.[15,16] Therefore, the land is expected to rebound by 0.27m to the Year 2100. A rebound value of -0.27m was included in our assessment.

5.5 Storm Surge

a. Sea levels along the BC coast are not only affected by astronomical tide cycles, but also by storms. Storms may affect water levels due to changes in atmospheric pressure, strong winds acting on the water surface, and changes in ocean currents or temperature. The combined effect of all these factors is termed storm

h. A summary of design input values and estimated wave runup are presented in *Table 5.6* below.

Table 5.6: Summary of Estimated Wave Runup.

Significant Wave Height	Peak Wave Period	Still Water Level	Average Foreshore Slope	Slope of Structure	Wave Runup ($R_{u2\%}$)
2.87m	6.81 s	0.61m	16.5H:1V	89°	1.12m

5.7 Freeboard

a. A nominal FB value is typically added when calculating an FCL. The FB value accounts for uncertainties associated with value estimations used.

b. Provincial guidelines recommend a minimum freeboard value of 0.60m for the Probabilistic Method.[2]

5.8 Probabilistic Method FCL

a. The variables discussed in *Sections 5.2 to 5.7* are added together to determine an adequate ocean FCL, presented in the following *Table 5.8*.

Table 5.8: Ocean FCL determination using the "Probabilistic Method".

FCL Component	Description	Value (m)
HHWLT	Higher High Water Large Tide (CGVD2013) *19 year HHW average defined by CHS	2.13
SLR	Sea Level Rise (to year 2100)	0.75
RA	Regional Adjustment (to year 2100) *negative value indicates uplift is occurring	-0.27
SS	Storm Surge (10-year storm)	0.92
WE	Wave Effect (10-year storm)	1.12
FB	Freeboard	0.60
FCL	**Calculated CGVD2013 FCL**	**5.25**

6.0 FLOOD HAZARD RECOMMENDATIONS

6.1 Coastal FCL

a. Based on our review, as detailed in *Section 5.0* above, LEA recommends using the site-specific coastal flood level of 5.25m CGVD2013 as the minimum FCL for the proposed development. This minimum FCL elevation is typically defined as the top of the finished concrete slab-on-grade or the underside of wooden floor joists of flooring systems that are to be kept dry.

b. To achieve the FCL, we recommend structural methods, such as increasing the height of the foundation walls above suitable bearing grade.

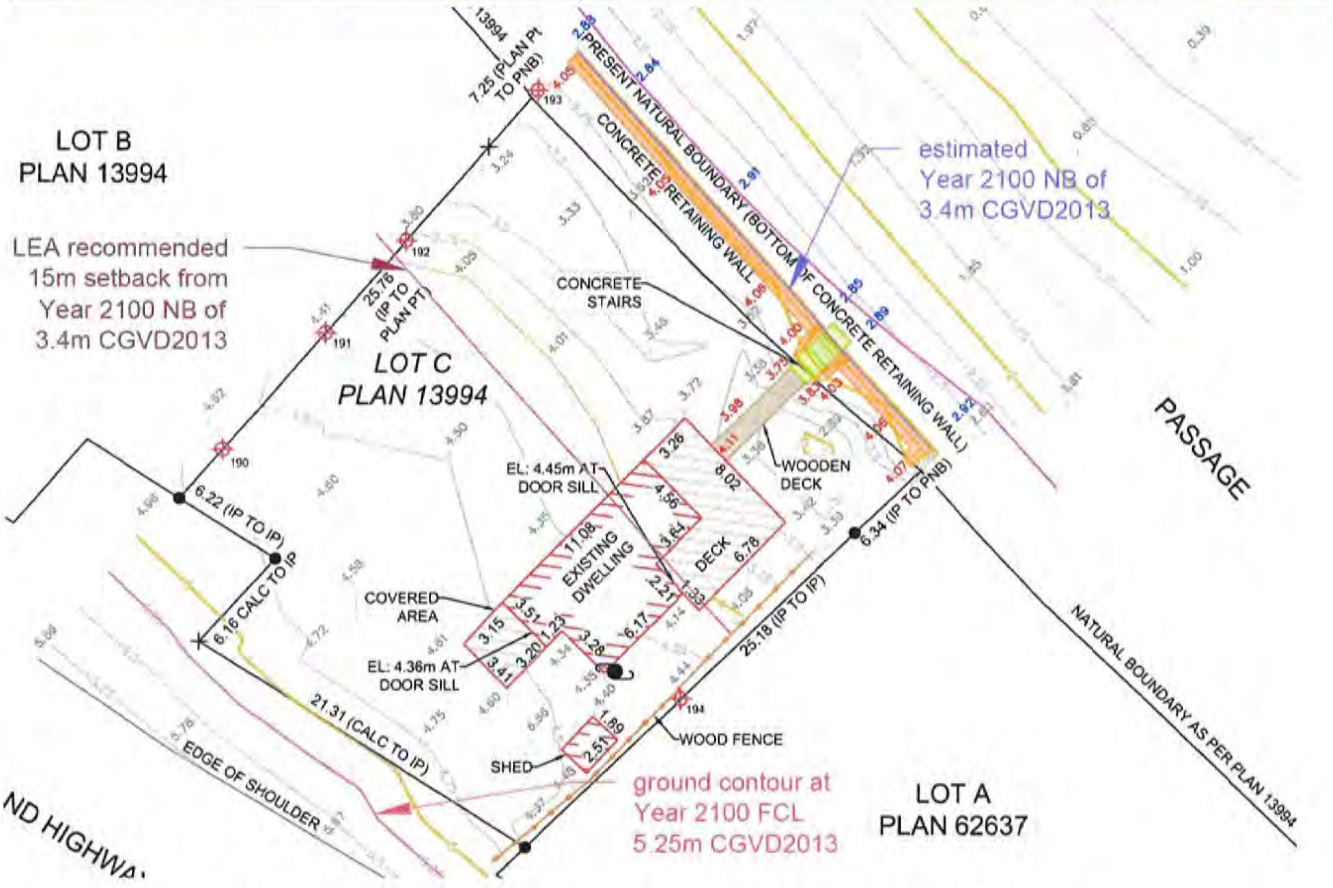


Figure 6.2: LEA recommended setback in plan, marked on JEA survey.

6.3 Floodwater and Inundation

a. The recommended coastal FCL and setback applies to any Habitable Area; defined as any room or space within a building or structure which can be used for human occupancy, commercial sales, or the storage of goods, possessions, or equipment (including furnaces) which would be subject to damage if flooded.

b. The FCL establishes the minimum elevation of the underside of a wooden floor system or top of concrete slab for any Habitable Area. During construction, all footing and floor elevations shall be confirmed by qualified survey personnel to ensure the finished floor grade is at or above the recommended minimum FCL geodetic elevation.

c. Provided any construction within the Property satisfies the minimum recommended FCL, we do not anticipate any damage to structures as a result of floodwater. However, any areas constructed below the recommended FCL, such as crawlspaces or garages, could be subject to flooding during less than design flood events. Following best construction practices, areas below the FCL should not be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.

the NB be regularly monitored by the current and future property owners. Any notable scour, inland erosion caused by overtopping waves, or regression of the NB, specifically following a significant storm event, winter season, or otherwise, may jeopardize the integrity of the seawall and would require a reassessment of the foreshore conditions.

7.0 DESIGN PHASE

7.1 Foundation Design and Construction

a. Prior to construction, the new building area should be stripped to remove all unsuitable materials to provide an undisturbed natural subgrade for the footing support.

b. Foundation loads should be supported on natural undisturbed mineral soil or structural fill, approved for use as a bearing stratum by the Geotechnical Engineer, and may be designed using the following values. These values assume a minimum 0.5m footing embedment depth.

   i. For foundations constructed on non-cohesive soils classified as compact to dense naturally deposited inorganic sand or gravel, an SLS bearing pressure of 100 kPa and a ULS bearing pressure of 150 kPa may be used for design purposes.

   ii. For foundations constructed on undisturbed dense glacial till, or a minimum thickness of 0.65m of structural fill as outlined in *Section 8.2* of this Report, an SLS bearing pressure of 150 kPa and a ULS bearing pressure of 225 kPa may be used for design purposes.

c. Exterior footings should be provided with a minimum 0.5m depth of ground cover for frost protection purposes.

d. The Geotechnical Engineer should evaluate subsurface conditions at the time of construction to confirm that soil and/or groundwater conditions do not materially differ to those observed and inferred during the site reconnaissance and that footings are based on appropriate and properly prepared founding material.

7.2 Seismic Criteria

a. Based on the BCBC 2024, Division B, Part 4, Table 4.1.8.4.-B, *Site Classes, S, for Site Designation X_s*, the inferred subsurface conditions would be "Site Class D" (Stiff soil).

b. Please refer to the attached site-specific Seismic Hazard Calculation, from Natural Resources Canada.

•••

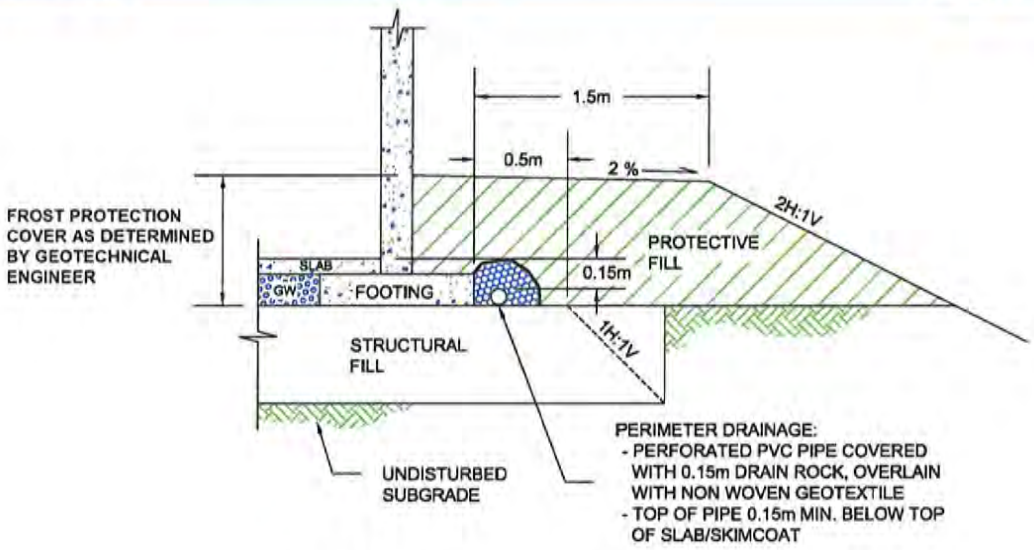


Figure 8.2: Typical section, structural fill.

e. Compaction of fill should include moisture conditioning as needed to bring the soil to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.

f. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a "jumping-jack," 200mm for a small roller, and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.

g. It should be emphasized that the long-term performance of buildings, slabs, and pavements is highly dependent on the correct placement and compaction of underlying structural fills. Consequently, we recommend that structural fill be observed and approved by the Geotechnical Engineer. This would include approval of the proposed fill materials and performing a suitable program of compaction testing during construction.

9.0 CONCLUSIONS

9.1 Local Government Conformance Statement

a. From a geotechnical point of view, and provided the recommendations in this Report are followed, the land is considered safe and suitable for the use intended (defined for the purposes of this Report as a new single-family residence and/or residential addition of conventional design and construction methods). Additionally, for floodplain bylaw exemption, as required by Section 524 of the *Local Government Act*, "the land may be used safely for the use intended" (new single-family residence and/or residential addition). This conclusion considers the probability of a geotechnical failure resulting in property damage of less than:

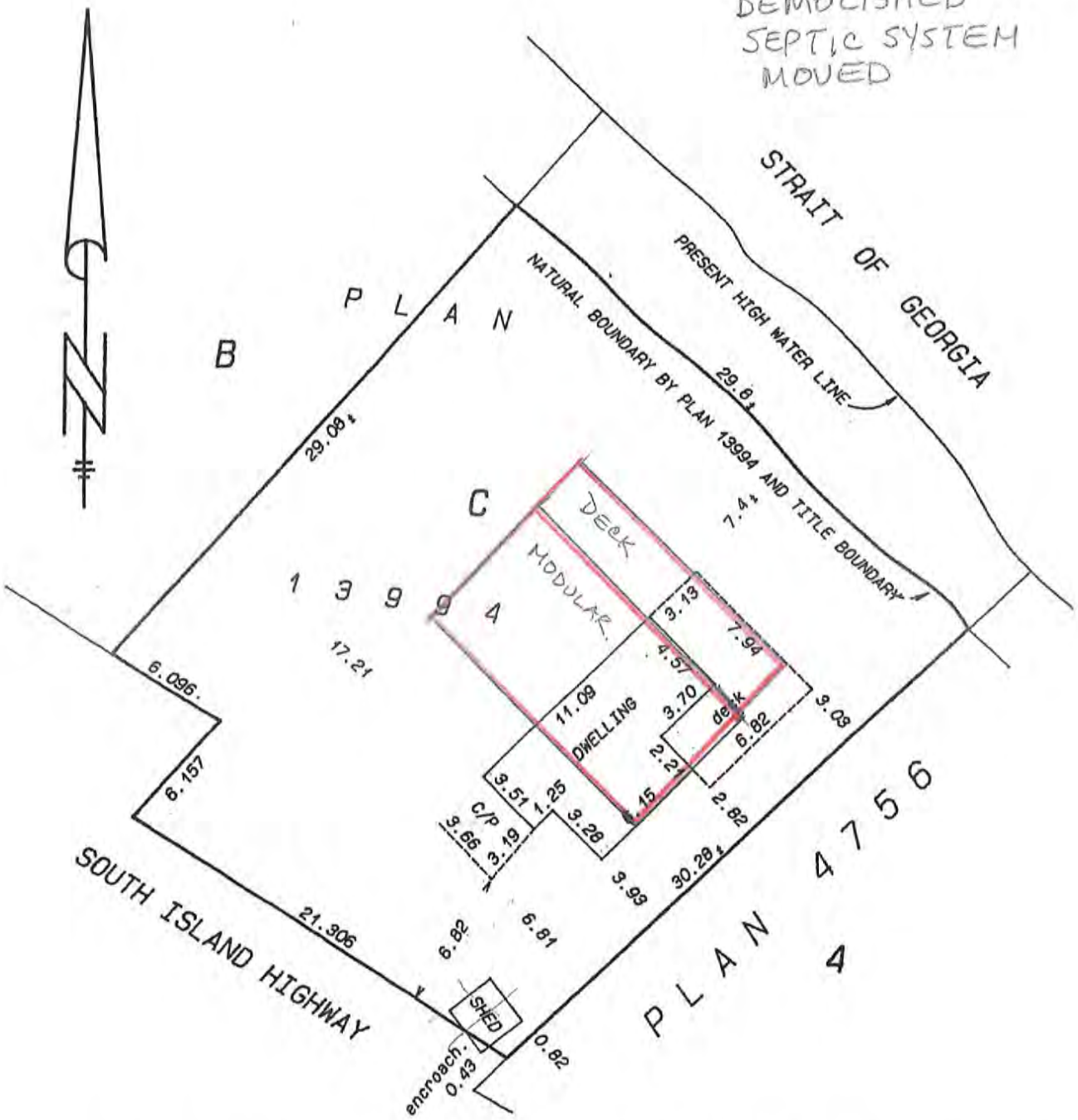
2. British Columbia Ministry of Water, Land and Air Protection, report titled *Flood Hazard Area Land Use Management Guidelines*, amended by British Columbia Ministry of Forest, Lands, Natural Resource Operations and Rural Development, January 1, 2018.
3. Strathcona Regional District, Bylaw No. 2782, titled *Floodplain Management Bylaw, 2005*, amended June 22, 2017.
4. Strathcona Regional District, Bylaw No. 1404, titled *Campbell River Area Zoning Bylaw, 1991*, amended October 30, 2024.
5. Strathcona Regional District, online map viewer *uMapIt*, 49.903N 125.167W, <https://strathconard.maps.arcgis.com/apps/webappviewer/index.html?id=3f13d8e946bb401d9fb17d90246af4b1>, accessed March 18, 2025.
6. BC Assessment, address *4129 Island Hwy S Campbell River V9H 1E9*, <https://www.bcassessment.ca//Property/Info/QTAwMDBLU01XMw==>, accessed January 21, 2025.
7. City of Campbell River, online map viewer *Airphotos*, 49.903N 125.167W, <https://webmap.campbellriver.ca/Html5Viewer/Index.html?viewer=Airphoto_History_Map.AirphotoHistoryViewer>, accessed March 18, 2025.
8. Fyles JG, Geologic Survey of Canada – Department of Mines and Technical Surveys, map titled *Surficial Geology Oyster River – Comox, Nanaimo, and Sayward Districts, British Columbia*, map 49-1959, sheets 92 F/14, date of mapping 1956-1957.
9. British Columbia Ministry of Environment and Climate Change Strategy, online map viewer *BC Water Resources Atlas*, 49.903N 125.167W, <https://maps.gov.bc.ca/ess/hm/wrbc/>, accessed March 18, 2025.
10. British Columbia Geological Survey, online map viewer *MapPlace 2*, Bedrock Geology, 49.903N 125.167W, <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mapplace>, accessed March 18, 2025.
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12. Natural Resources Canada, webpage titled *GPS·H*, 49.903N 125.167W, <https://webapp.csrs-scrs.nrcan-rncan.gc.ca/geod/tools-outils/gpsh.php?locale=en#>, accessed March 26, 2025.
13. Government of Canada, online map viewer *Real-Time Hydrometric Data Map Search*, <https://wateroffice.ec.gc.ca/map/index_e.html?type=real_time>, accessed March 26, 2025.
14. Government of Canada, website titled *Mitlenatch – 07895*, <https://tides.gc.ca/en/stations/07895>, accessed March 26, 2025.
15. Ausenco Sandwell, prepared for British Columbia Ministry of Environment, 3 reports titled *Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use*, dated January 27, 2011.
16. Kerr Wood Leidal Associates Ltd., prepared for British Columbia Ministry of Forests, Lands and Natural Resource Operations, report titled *Coastal Floodplain Mapping – Guidelines and Specifications*, Final Report, file number 2785.001, dated June 2011.
17. Ebbwater Consulting Inc., prepared for Regional District of Nanaimo, report titled *Sea Level Rise Adaptation Program Coastal Floodplain Mapping,* Final Report, Revision 1, project number P180, dated October 21, 2021.
18. Van der Meer JW, Allsop NWH, Bruce T, De Rouck J, Kortenhaus A, Pullen T, Schüttrumpf H, Troch P, and Zanuttigh B, titled *EurOtop – Manual on wave overtopping of sea defences and related structures. An overtopping manual largely based on European research, but for worldwide application*, <www.overtopping-manual.com>, second edition, final version, dated December 2018.

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

MODULAR HOME
EXISTING COTTAGE
DEMOLISHED
SEPTIC SYSTEM
MOVED



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

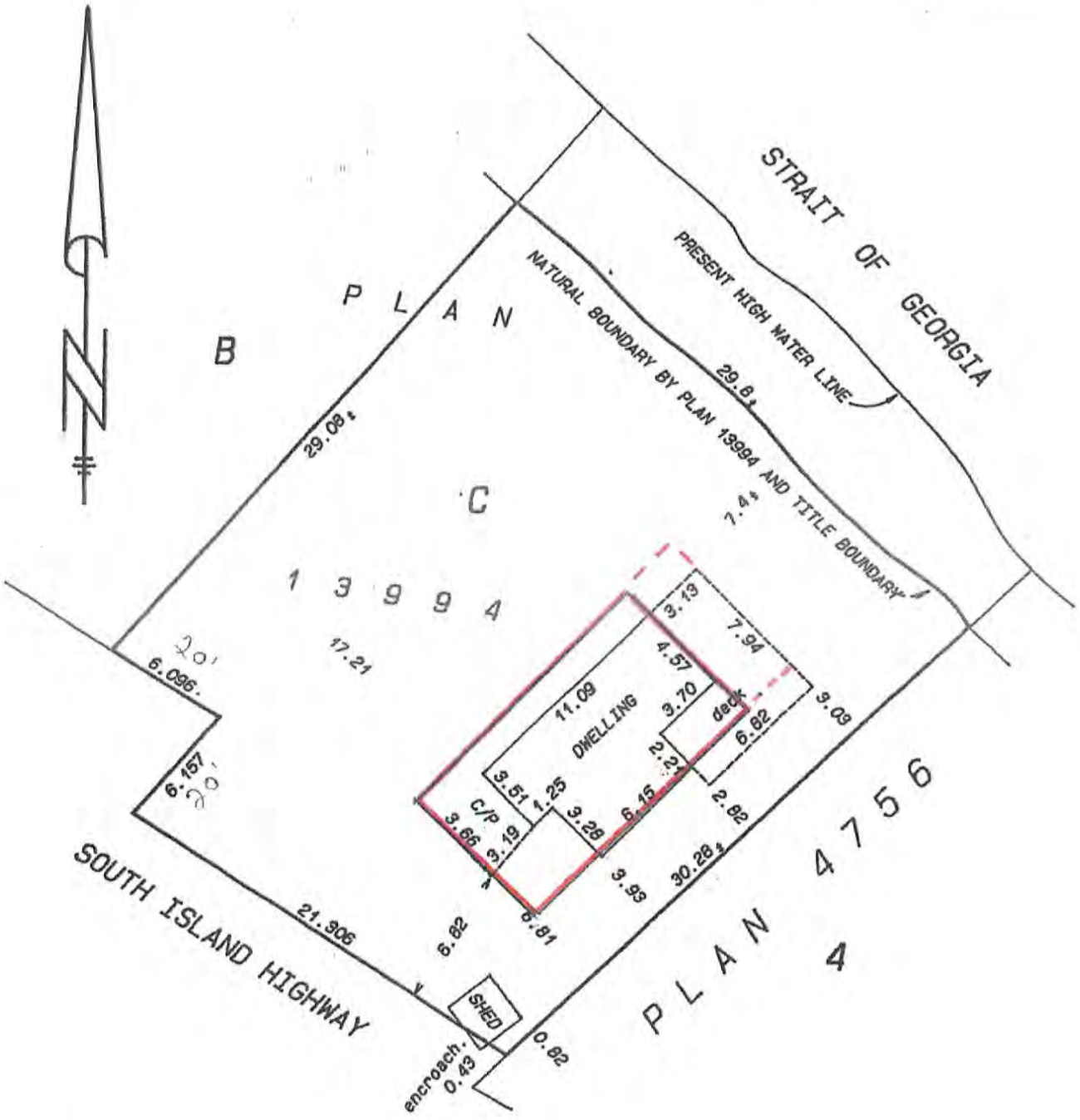
CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

HOME RENOVATION



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

Government of Canada / Gouvernement du Canada

2020 National Building Code of Canada Seismic Hazard Tool

This application provides seismic values for the design of buildings in Canada under Part 4 of the National Building Code of Canada (NBC) 2020 as prescribed in Article 1.1.3.1. of Division B of the NBC 2020.

Seismic Hazard Values

User requested values

Code edition	NBC 2020
Site designation X_S	X_D
Latitude (°)	49.903
Longitude (°)	-125.167

Please select one of the tabs below.

NBC 2020 Additional Values Plots API

Background Information

The 5%-damped spectral acceleration ($S_a(T,X)$, where T is the period, in s, and X is the site designation) and peak ground acceleration (PGA(X)) values are given in units of acceleration due to gravity (g, 9.81 m/s^2). Peak

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

Strathcona Regional District

990 Cedar Street, Campbell River, BC V9W 7Z8

Jurisdiction and address

Date: April 4, 2025

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"):

Lot C, Section 35, Township 4, Comox District, Plan 13994; 4129 Island Highway South, Oyster Bay, BC; PID: 000-329-479

Legal description and civic address of the Property

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

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

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

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

✓ 2. Collected and reviewed appropriate background information
✓ 3. Reviewed the Proposed Development on the Property
✓ 4. Investigated the presence of Covenants on the Property, and reported any relevant information
✓ 5. Conducted field work on and, if required, beyond the Property
✓ 6. Reported on the results of the field work on and, if required, beyond the Property
✓ 7. Considered any changed conditions on and, if required, beyond the Property
8. For a Flood Hazard analysis I have:
   - ✓ 8.1 Reviewed and characterized, if appropriate, Flood Hazard that may affect the Property
   - ✓ 8.2 Estimated the Flood Hazard on the Property
   - ✓ 8.3 Considered (if appropriate) the effects of climate change and land use change
   - ✓ 8.4 Relied on a previous Flood Hazard Assessment (FHA) by others
   - ___ 8.5 Identified any potential hazards that are not addressed by the Flood Assessment Report
9. For a Flood Risk analysis I have:
   - ___ 9.1 Estimated the Flood Risk on the Property
   - ___ 9.2 Identified existing and anticipated future Elements at Risk on and, if required, beyond the Property
   - ___ 9.3 Estimated the Consequences to those Elements at Risk

FLOOD ASSURANCE STATEMENT

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

April 4, 2025

Date

Joe Brunelle, P.Eng.

Prepared by

Name (print)

Signature 2025-04-04

2351B Rosewall Crescent, Courtenay, BC V9N 8R9

Address

250-334-0384

Telephone

jbrunelle@lewkowich.com

Email

Louis Chapdelaine, P.Geo.

Reviewed by

Name (print)

report signed by LC

Signature

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. P. BRUNELLE # 47936 2025-04-04

(AFFIX PROFESSIONAL SEAL here)

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

I am a member of the firm Lewkowich Engineering Associates Ltd. - Permit to Practice Number: 1001802

and I sign this letter on behalf of the firm. (Name of firm)

From:	Jennifer Barber
To:	Keltie Chamberlain
Subject:	Re: Hodgins S 219 4129 Island Highway S CR
Date:	January 29, 2026 10:48:16 AM
Attachments:	image001.png image002.png Outlook-1jz3ievc.png

Duh, I didn't even look at it, she sent the original. Stand by.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓ɨłdax̓ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

From: Keltie Chamberlain <kchamberlain@srd.ca>
Sent: Thursday, January 29, 2026 8:48 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: RE: Hodgins S 219 4129 Island Highway S CR

Do you have another version that is signed by the Hodgins?
Keltie

From: Jennifer Barber <jbarber@srd.ca>
Sent: January 28, 2026 5:23 PM
To: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Fw: Hodgins S 219 4129 Island Highway S CR

Over to you

Jennifer Barber
Senior Building Official

Strathcona Regional District
jbarber@srd.ca
250-830-6713

From: Barbara Burns <barb@oceansidenotary.ca>
Sent: Wednesday, January 28, 2026 1:17:20 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: RE: Hodgins S 219 4129 Island Highway S CR

NOTICE: This email is from an external source.

Good Afternoon Jennifer,
Please see the form attached with the Hodgins signature. Please let me know if you require anything further.
Have a great rest of your week!

Barbara J. Burns, M.A.

Notary Public
850B – 12th Ave.
Campbell River, BC V9W 6B5
Ph: 250-286-3636
Fax: 250-286-6371
www.oceansidenotary.ca
IDENTIFICATION: We require 2 pieces of identification, at least one of which must be valid unexpired **PICTURE** identification, when witnessing signatures on any documents

SOCIAL INSURANCE NUMBER: For ALL real estate **PURCHASERS** who are Canadian citizens or permanent residents, the Province of British Columbia requires that we obtain proof of your Social Insurance Number.

From: Jennifer Barber <jbarber@srd.ca>
Sent: January 27, 2026 9:01 AM
To: Barbara Burns <barb@oceansidenotary.ca>
Subject: RE: Hodgins S 219 4129 Island Highway S CR

Hi Barbara,
This looks great, no changes required.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District

990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Barbara Burns <barb@oceansidenotary.ca>
Sent: January 27, 2026 8:50 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: FW: Hodgins S 219 4129 Island Highway S CR

NOTICE: This email is from an external source.

Sorry I got your email wrong the first time!
Please see below
Kind Regards

Barbara J. Burns, M.A.

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From: Barbara Burns
Sent: January 23, 2026 12:48 PM
To: 'jbarbar@srd.ca' <jbarbar@srd.ca>; 'kchamberlain@srd.ca' <kchamberlain@srd.ca>
Subject: Hodgins S 219 4129 Island Highway S CR

Good Afternoon Jen & Keltie,
Please see attached a draft s 219 for the Hodgins. They mentioned that you wanted to review it

prior to them signing.

Please let me know if you have any questions or need any changes.

Have a great weekend!

Barbara J. Burns, M.A.

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From: Barbara Burns
To: Jennifer Barber
Subject: RE: Hodgins S 219 4129 Island Highway S CR
Date: January 28, 2026 1:17:34 PM
Attachments: image001.png
image002.png
1_Form C (Charge)_20260123124059 partially signed.pdf

NOTICE: This email is from an external source.

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Please see the form attached with the Hodgins signature. Please let me know if you require anything further.
Have a great rest of your week!

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-

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Land Title Act

Charge

General Instrument Part 1

1. Application

Barbara J Burns
850B - 12th Avenue
Campbell River BC V9W 6B5
250 286-3636

2. Description of Land

PID/Plan Number	Legal Description
000-329-479	**LOT C, SECTION 35, TOWNSHIP 4, COMOX DISTRICT, PLAN 13994**

3. Nature of Interest

Type	Number	Additional Information
COVENANT		**s. 219**

4. Terms

Part 2 of this instrument consists of:

(b) Express Charge Terms Annexed as Part 2

5. Transferor(s)

VICTOR GLENN HODGINS

DORALYNNE MARY HODGINS

6. Transferee(s)

STRATHCONA REGIONAL DISTRICT
990 CEDAR STREET
CAMPBELL RIVER BC V9W 7Z8

7. Additional or Modified Terms

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8. Execution(s)

This instrument creates, assigns, modifies, enlarges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
Barbara J Burns **Notary Public** 850B - 12th Avenue Campbell River BC V9W 6B5	YYYY-MM-DD **2026-01-28**	**Victor Glenn Hodgins** **Doralynne Mary Hodgins**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
BC V9W 6B5	YYYY-MM-DD	**Strathcona Regional District** By their Authorized Signatory **name** **name**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Electronic Signature

Your electronic signature is a representation that you are a designate authorized to certify this document under section 168.4 of the *Land Title Act*, RSBC 1996, c 250, that you certify this document under section 168.41 (4) of the Act, and that an execution copy, or a true copy of that execution copy, is in your possession.

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TERMS OF INSTRUMENT - PART 2

WHEREAS:

A. The Transferor is the registered owner in fee simple of:

PID: 000-329-479

Lot C, Section 35, Township 4, Comox District, Plan 13994

4129 Island Highway South, Campbell River, BC V9H 1E9

(the "**Land**")

B. The Transferee is the Strathcona Regional District;

C. The Transferee's Building Inspector has determined that the Land is subject to or is likely to be subject to flooding and has required the Transferor to provide the Building Inspector with a report or reports certified by a professional engineer or geoscientist, with experience in geotechnical study and geohazard assessments (the "**Qualified Professional**"), that the Land may be used safely for the use intended (the "**Reports**");

D. The Transferor has provided the Transferee with the report prepared by Joe Brunelle, P. Eng. dated April 4, 2025, which report is attached to this Agreement as Schedule "A" and has agreed to provide the Transferee with any further Reports of the Qualified Professional, as required by the Transferee or as necessary from time to time, certifying that the Land may be used safely for the use intended as a result of the construction to which the Report or further Report(s) relate; and

E. The Transferor acknowledges that it is in the public interest that the development and use of the Land be limited and wishes to grant this covenant and indemnity to the Transferee under Section 219 of the *Land Title Act* and Section 56 of the *Community Charter*.

NOW THEREFORE, in consideration of the premises and the covenants herein contained and for other valuable consideration, receipt and sufficiency of which is hereby acknowledged by the parties, the parties hereto covenant and agree with each other as follows:

1. In this Agreement, "construction" means construction of a building or other structure, or structural alteration of or addition to an existing building or other structure to which the Crossfield Report or further Reports relate.

2. The Transferor covenants and agrees not to use the Land nor construct any building or structure on the Land, nor make any structural alterations or additions to any existing building or structure on the Land, except in the manner determined and certified by the Engineer in the Floodplain Hazard Assessment as enabling the safe use of the Land for use intended. Without limiting the generality of the foregoing, the

Grantor shall construct all buildings or structures and perform all other construction on and development of the Land only in strict accordance with all requirements and guidelines set out in the Floodplain Hazard Assessment, including conditions as to:

a. the siting, structural design and maintenance of buildings structures or works,

b. the maintenance or planting of vegetation, and

c. the placement and maintenance of land fill.

3. The Transferor agrees and hereby acknowledges that no area below the required elevation shall be used for the storage of goods or for the installation of HVAC equipment or other fixed appliances susceptible to damage by floodwaters.

4. At the Transferor's expense, the Transferor must: do everything necessary to ensure that this Agreement, and the section 219 covenant it creates are registered against the Land at the Victoria Land Title Office; and secure priority of registration and pending charges and encumbrances of a financial nature against the Land.

5. The Transferor shall reimburse the Transferee for any expense that may be incurred by the Transferee as a result of a breach of any covenant under this Agreement.

6. The Transferor acknowledges that the Transferee does not represent to the Transferor or any other person that any buildings or structures constructed, or placed, or mobile homes located in accordance with the terms and conditions of this Agreement will not be damaged due to mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche.

7. The Transferor and the Transferee agree that the enforcement of this Agreement is entirely within the discretion of the Transferee and that the execution and registration of this Agreement against the title to the Land must not be interpreted as creating any duty on the part of the Transferee to the Transferor or to any other person to enforce any provision or the breach of any provision of this Agreement.

8. Nothing contained or implied herein prejudices or affects the rights and powers of the Transferee in the exercise of its functions under any public or private statutes, bylaws, orders and regulations, all of which may be fully and effectively exercised in relation to the Land as if the Agreement had not been executed and delivered by the Transferor, and in particular, without limiting the generality of the foregoing, the Building Inspector of the Transferee may request further or additional Reports be prepared by a Qualified Professional prior to the issuance of a building permit for the Land.

9. The Transferor covenants and agrees that the Transferee may withhold building permits and occupancy permits as necessary to ensure compliance with the covenants in this Agreement, and that the issuance of a building permit or occupancy

permit does not act as a representation or warranty by the Transferee that the covenants in this Agreement have been satisfied.

10. The Transferor hereby releases and forever discharges the Transferee of and from any claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever that the Transferor can or may have against the Transferee for any loss, damage, or injury that the Transferor may sustain or suffer arising out of or connected with:

(a) this Agreement;
(b) a breach of this Agreement by the Transferor;
(c) the restrictions and requirements under this Agreement;
(d) the issuance of a building permit under this Agreement;
(e) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(f) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

11. The Transferor shall indemnify and save harmless the Transferee from any and all claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever for any loss (including economic loss), damage, or injury:

(a) that any person might have as owner, occupier, or user of the Land;
(b) by any person who has an interest in or comes onto the Land; or
(c) by any person that suffers loss of life or injury to its person or property

where such loss (including economic loss), damage, or injury arises out of, or is connected with:

(d) a breach of this Agreement;
(e) a breach of this Agreement by the Transferor;
(f) the restrictions and requirements under this Agreement;
(g) the issuance of a building permit under this Agreement;
(h) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(i) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

12. Time is of the essence of this Agreement.

13. The Transferor covenants and agrees for itself, its heirs, executors, successors, and assigns, that it will at all times perform and observe the requirements and restrictions set out in this Agreement and they will be binding upon the Transferor as personal covenants only during the period of its respective ownership or any interest in the Land.

14. It is mutually understood, acknowledged and agreed by the parties hereto that the Transferee has made no representations, covenants, warranties, guarantees, promises, or agreements (oral or otherwise)

with the Transferor other than those contained in this Agreement.

15. The Transferor shall pay the legal fees of the Transferee in connection with the preparation and registration of this Agreement. This is a personal covenant between the parties.

16. The waiver by a party of any breach of this Agreement or failure on the part of the other party to perform in accordance with any of the terms or conditions of this Agreement must not be construed as a waiver of any future or continuing failure, whether similar or dissimilar, and no waiver will be effective unless it is in writing and signed by both parties.

17. Wherever the singular, masculine, and neuter are used throughout this Agreement, the same is to be construed as meaning the plural, feminine, or body corporate or politic as the context so requires.

18. No remedy under this Agreement is to be deemed exclusive but will, where possible, be cumulative with all other remedies at law or in equity.

19. The restrictions and covenants herein contained run with the Land, are perpetual, continue to bind all of the Land when subdivided, and must be registered in the Victoria Land Title Office pursuant to Section 219 of the *Land Title Act* as covenants in favour of the Transferee as a first charge against the Land.

20. The Transferor agrees to execute all other documents and provide all other assurances necessary to give effect to the covenants contained in this Agreement.

21. If any part of this Agreement is found to be illegal or unenforceable, that part will be considered separate and severable and the remaining parts will not be affected thereby and will be enforceable to the fullest extent permitted by law.

22. This Agreement must be construed in accordance with, and governed by, the laws applicable in the Province of British Columbia.

23. This Agreement may be executed in counterpart with the same effect as if all parties had signed the same document. Each counterpart will be deemed to be an original. All counterparts will be construed together and constitute one and the same Agreement. This Agreement may be delivered by electronic means.



GEOTECHNICAL ASSESSMENT

Proposed Single-Family Residence:
4129 Island Highway South, Oyster Bay, SRD, BC

Legal Address:
Lot C, Section 35, Township 4, Comox District, Plan 13994
PID: 000-329-479

Prepared For:
Doralynne and Victor Hodgins
4129 Island Highway South,
Campbell River, BC V9H 1E9

Attention:
Doralynne Hodgins
[redacted]

April 4, 2025

File: E4084.01 Revision: 00

Prepared By:
Joe Brunelle, P.Eng.

Reviewed By:
Louis Chapdelaine, P.Geo.

Lewkowich Engineering Associates Ltd.
2351B Rosewall Crescent
Courtenay, BC V9N 8R9
250-334-0384 (Office)
250-334-9601 (Fax)
www.lewkowich.com

Permit to Practice Number: 1001802

LEA Lewkowich Engineering Associates Ltd.

EXECUTIVE SUMMARY

1. The following is a brief synopsis of the property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
2. The subject property, 4129 Island Highway South, Oyster Bay, BC, from this point forward referred to as "the Property," is located on the east coast of Vancouver Island within the jurisdictional boundaries of the SRD. At the time of this Report, the proposed development for the Property consists of a re-development of a single-family residence.
3. A site-specific assessment was conducted to identify any potential geotechnical hazards for the proposed development. Our assessment determined that the Property is subject to ocean flooding hazard that exists along the Strait of Georgia.
4. The Report recommends (i.e., is in support of) a minimum coastal Flood Construction Level of 5.25m CGVD2013 and a horizontal floodplain setback of 15.0m landward from the estimated Year 2100 Natural Boundary, where the Year 2100 Natural Boundary is defined as the 3.4m CGVD2013 contour line.
5. The findings confirm the land is considered safe for the use intended, provided the recommendations in this Report are followed.

•••

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3.0 SITE CONDITIONS

3.1 Physical Setting

a. The Property is in the community of Oyster Bay and within the jurisdiction of the SRD.

b. The Property is located on the northeast side of and accessed by Island Highway South which runs in a northwest-southeast orientation.

c. The Property is zoned as Country Residential Four (CR-4).[4,5] It is surrounded by similar CR-4 properties. *Figure 3.1* below shows the Property location with 2023 air photo.



Figure 3.1: Property location (from SRD *uMapIt*[5]).

3.2 Terrain and Features

a. The 0.12-hectare (0.29-acre)[5] Property is currently developed with a one [1]-storey single-family residence which was built in 1949.[6] A wood deck extends off the northeast oceanside of the residence.

b. Air photos from the CoCR *Air Photo History Map*[7] were reviewed and show the Property and adjacent shore mostly unchanged from 2002 to present day; the 2002 air photo was the earliest air photo in the collection to capture the Oyster Bay area.

c. The terrain of the Property showed a gentle sloping between 3° (23H:1V) to 8° (7H:1V) from Island Highway South to the shoreline at the northeast property boundary.

d. Vegetation within the Property consisted of mature coniferous and deciduous trees, grass lawn, and some ornamental bushes.

3.4 Regional Geology and Aquifers

a. Surficial geology mapping for the area is classified as Capilano Sediments consisting of sand, pebbly sand, gravel, sandy gravel in spits, bars, etc. marine (including glacio-marine) deposits up to 9m thick, possibly underlain by clay.[8]

b. Review of groundwater wells and aquifers in the *BC Water Resources Atlas*[9] indicates that Aquifer 411 and Aquifer 847 have been mapped to the area. Aquifer 847, named *Quinsam to Stories Beach*, is a sand and gravel layer associated with the Cowichan Head Formation. It is identified as a confined aquifer. Aquifer 411 is attributed to the fractured sedimentary bedrock. Wells have been mapped to the area though much of the older data and location reliability is fair to poor. The wells generally agree with the surficial mapping – sand and gravel deposits were found at surface, underlain by stoney clay, till/ hardpan, and/or sedimentary bedrock.

c. Bedrock geology for the area is classified as Upper Cretaceous Nanaimo Group Undivided Sedimentary Rocks.[10] The strata of the Nanaimo Group formation in the Comox/Georgia basin consists of alternating succession of shales, sandstones, conglomerates, and some coal.[11] Surficial geology mapping indicated bedrock outcrops along the shoreline in both northwest and southeast directions from the Property.[8] Based on well records in the area, depth to bedrock at the Property is estimated to be 5m to 20m BGS.

3.5 Soil Conditions

a. A shallow (1.0m depth BGS) test hole was hand dug adjacent to the north corner of the existing wood deck to investigate the near surface.

b. In general, the near surface soil conditions as observed in the Property are consistent with published surficial geology mapping.

c. Soil encountered in the hand dug hole consisted of:

   i. 0.0m to 0.4m: SAND, and ORGANICS (grass, rootlets), some silt, soft, dark brown, damp – sod layer; underlain by,

   ii. 0.4m to 1.0m: SAND, compact, grey, damp.

   The hole was terminated at the length of the shovel.

d. We expect these upper coarse-grained soils to be underlain by dense, stoney clay, glacial till, and/or sedimentary bedrock at depth.

e. Based on existing site grades we also expect there may be localized areas of fill or disturbed soil. We do not expect the presence of fill materials to have a detrimental impact on the proposed development, and any encountered fill or disturbed soil can be managed by field recommendations as part of the geotechnical assurance services during construction.

level.

c. Farther south (~1km from Property) a spit and lagoon has formed at Oyster Bay Shoreline Park. Its history dates back to the 1930s and 1940s when a relief then logging camp was set up to employ people during the depression. A causeway was built and at the same time a breakwater was built of old dismantled ships, then later with rock to protect a log booming operation from the predominant wave attack from the southeast. Sediment has progressively accumulated at Oyster Bay Shoreline Park since the log booming operation was built. This recent accreting land formation continues to protect Oyster Bay from the strongest winds and waves from the southeast as evidence by the observed calm waters and shallow bathymetry of the bay.

4.3 Bylaw Requirements

a. Upon review of SRD *Floodplain Management Bylaw No. 2782, 2005*,[3] we confirm the following applicable items:

   i. *"301 Floodplain Designation 1) The following land is designated as floodplain: ... b) Land lower than the flood construction levels specified in Section 302; c) Land within the floodplain setbacks specified in Section 303.*

   ii. *302 Flood Construction Levels ... 2) Where Floodplain Mapping is NOT available, the following elevations are specified as flood construction levels: ... f) 1.5 metres above the natural boundary of any other watercourse; g) 1.5 metres above the natural boundary of the sea...*

   iii. *303 Floodplain Setbacks 1) The following distances are specified as floodplain setbacks: ... c) 15.0 metres from the natural boundary of any other watercourse; d) 15.0 metres from the natural boundary of the sea..."*

b. Additionally, the SRD *Floodplain Management Bylaw*[3] prescribes construction requirements and provides for site specific exemptions including additions that are less than 25% of the ground floor area but no closer to the water than existing.

5.0 COASTAL FLOOD HAZARD ANALYSIS

5.1 General

a. Provincial *Flood Hazard Area Land Use Guidelines*[2] recommend two methods, the Combined Method or the Probabilistic Method, to determine a coastal FCL that incorporates the issue of sea level rise and other mitigating factors. The Probabilistic Method was used for this site-specific assessment, where the water level along the shoreline is based on a probabilistic analysis of high tide and storm surge. A target 0.5% AEP (i.e., 200-year return period) coastal storm event was adopted for this assessment following the provincial

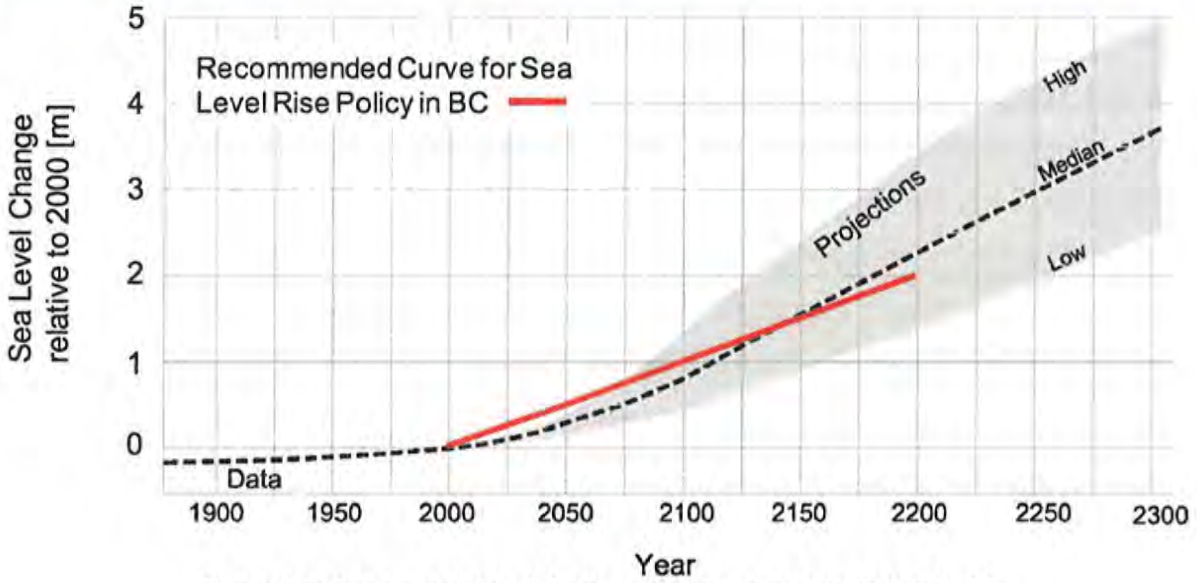


Figure 5.3: Recommended SLR curve for planning and design in BC.

b. In accordance with current guidelines 1.0 cm/year of SLR to the Year 2100 was included in our assessment, for a total SLR of 0.75m.

c. The assumed amount of SLR was based on information available at the time of their study and will be revaluated in the future as more information becomes available. Forecasting this far into the future carries significant uncertainties. Monitoring changes of SLR is beyond the scope of this Report. We expect local authorities to remain informed in order to adjust their flood management plans/guidelines accordingly.

5.4 Regional Adjustment – Isostatic Rebound

a. Future sea level is also affected by vertical land movement due to changes in the regional uplift or subsidence of the land surface (i.e., isotropic rebound, tectonic shifting, etc.). Areas where the land elevation is increasing (uplift/rebound) should decrease the allowance for SLR, while areas where the land elevation is decreasing (subsidence) should increase the allowance for SLR. Some refer to the combined effects of SLR and RA as Relative Sea Level Rise (RSLR).

b. Based on current information, this area of eastern Vancouver Island is rebounding at a rate of 3.0mm/year, as taken from an average of the Little River Tide Gauge Station No. 07993 and the Campbell River Tide Gauge Station No. 08074.[15,16] Therefore, the land is expected to rebound by 0.27m to the Year 2100. A rebound value of -0.27m was included in our assessment.

5.5 Storm Surge

a. Sea levels along the BC coast are not only affected by astronomical tide cycles, but also by storms. Storms may affect water levels due to changes in atmospheric pressure, strong winds acting on the water surface, and changes in ocean currents or temperature. The combined effect of all these factors is termed storm

h. A summary of design input values and estimated wave runup are presented in *Table 5.6* below.

Table 5.6: Summary of Estimated Wave Runup.

Significant Wave Height	Peak Wave Period	Still Water Level	Average Foreshore Slope	Slope of Structure	Wave Runup ($R_{u2\%}$)
2.87m	6.81 s	0.61m	16.5H:1V	89°	1.12m

5.7 Freeboard

a. A nominal FB value is typically added when calculating an FCL. The FB value accounts for uncertainties associated with value estimations used.

b. Provincial guidelines recommend a minimum freeboard value of 0.60m for the Probabilistic Method.[2]

5.8 Probabilistic Method FCL

a. The variables discussed in *Sections 5.2 to 5.7* are added together to determine an adequate ocean FCL, presented in the following *Table 5.8*.

Table 5.8: Ocean FCL determination using the "Probabilistic Method".

FCL Component	Description	Value (m)
HHWLT	Higher High Water Large Tide (CGVD2013) *19 year HHW average defined by CHS	2.13
SLR	Sea Level Rise (to year 2100)	0.75
RA	Regional Adjustment (to year 2100) *negative value indicates uplift is occurring	-0.27
SS	Storm Surge (10-year storm)	0.92
WE	Wave Effect (10-year storm)	1.12
FB	Freeboard	0.60
FCL	**Calculated CGVD2013 FCL**	**5.25**

6.0 FLOOD HAZARD RECOMMENDATIONS

6.1 Coastal FCL

a. Based on our review, as detailed in *Section 5.0* above, LEA recommends using the site-specific coastal flood level of 5.25m CGVD2013 as the minimum FCL for the proposed development. This minimum FCL elevation is typically defined as the top of the finished concrete slab-on-grade or the underside of wooden floor joists of flooring systems that are to be kept dry.

b. To achieve the FCL, we recommend structural methods, such as increasing the height of the foundation walls above suitable bearing grade.

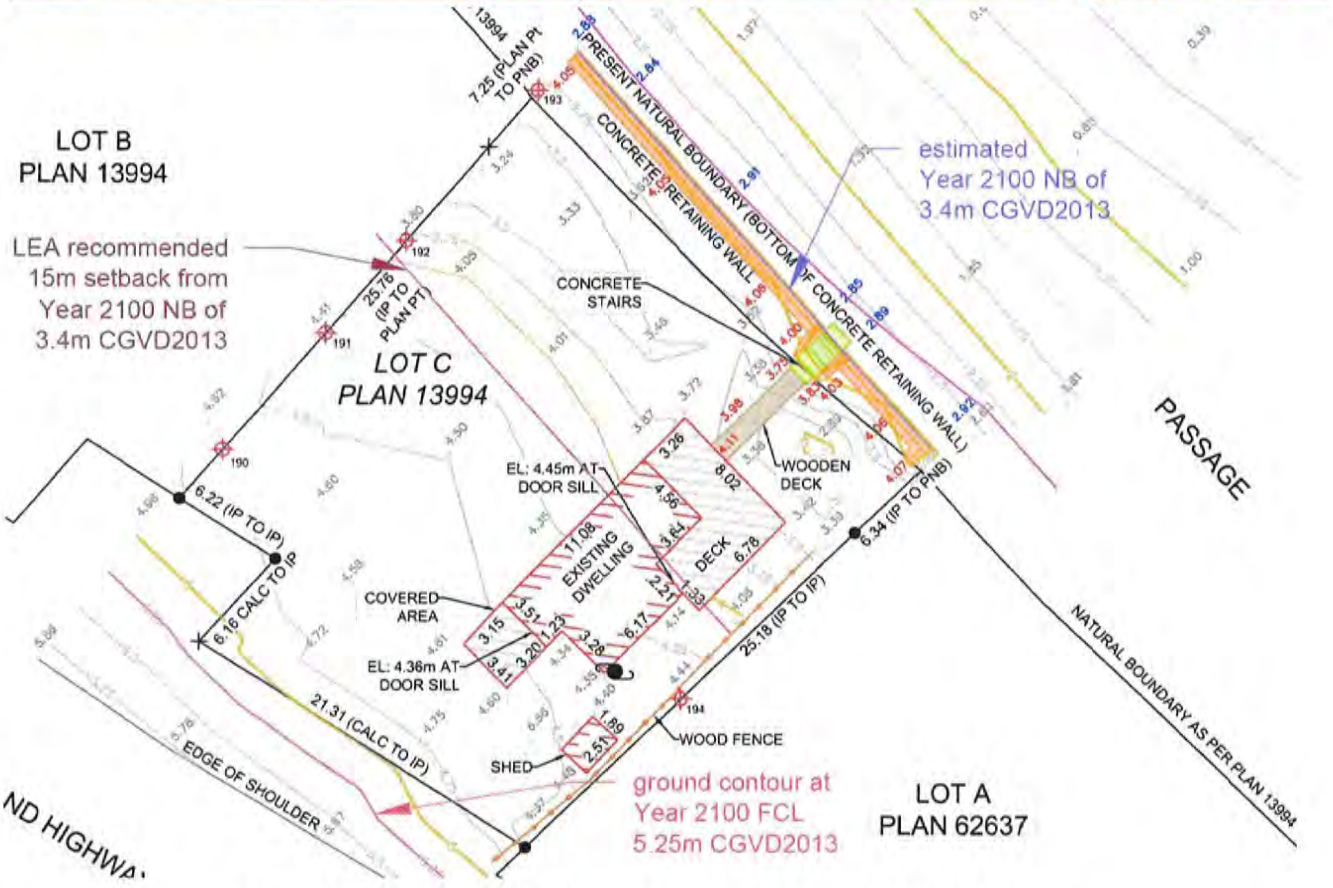


Figure 6.2: LEA recommended setback in plan, marked on JEA survey.

6.3 Floodwater and Inundation

a. The recommended coastal FCL and setback applies to any Habitable Area; defined as any room or space within a building or structure which can be used for human occupancy, commercial sales, or the storage of goods, possessions, or equipment (including furnaces) which would be subject to damage if flooded.

b. The FCL establishes the minimum elevation of the underside of a wooden floor system or top of concrete slab for any Habitable Area. During construction, all footing and floor elevations shall be confirmed by qualified survey personnel to ensure the finished floor grade is at or above the recommended minimum FCL geodetic elevation.

c. Provided any construction within the Property satisfies the minimum recommended FCL, we do not anticipate any damage to structures as a result of floodwater. However, any areas constructed below the recommended FCL, such as crawlspaces or garages, could be subject to flooding during less than design flood events. Following best construction practices, areas below the FCL should not be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.

the NB be regularly monitored by the current and future property owners. Any notable scour, inland erosion caused by overtopping waves, or regression of the NB, specifically following a significant storm event, winter season, or otherwise, may jeopardize the integrity of the seawall and would require a reassessment of the foreshore conditions.

7.0 DESIGN PHASE

7.1 Foundation Design and Construction

a. Prior to construction, the new building area should be stripped to remove all unsuitable materials to provide an undisturbed natural subgrade for the footing support.

b. Foundation loads should be supported on natural undisturbed mineral soil or structural fill, approved for use as a bearing stratum by the Geotechnical Engineer, and may be designed using the following values. These values assume a minimum 0.5m footing embedment depth.

   i. For foundations constructed on non-cohesive soils classified as compact to dense naturally deposited inorganic sand or gravel, an SLS bearing pressure of 100 kPa and a ULS bearing pressure of 150 kPa may be used for design purposes.

   ii. For foundations constructed on undisturbed dense glacial till, or a minimum thickness of 0.65m of structural fill as outlined in *Section 8.2* of this Report, an SLS bearing pressure of 150 kPa and a ULS bearing pressure of 225 kPa may be used for design purposes.

c. Exterior footings should be provided with a minimum 0.5m depth of ground cover for frost protection purposes.

d. The Geotechnical Engineer should evaluate subsurface conditions at the time of construction to confirm that soil and/or groundwater conditions do not materially differ to those observed and inferred during the site reconnaissance and that footings are based on appropriate and properly prepared founding material.

7.2 Seismic Criteria

a. Based on the BCBC 2024, Division B, Part 4, Table 4.1.8.4.-B, *Site Classes, S, for Site Designation X_s*, the inferred subsurface conditions would be "Site Class D" (Stiff soil).

b. Please refer to the attached site-specific Seismic Hazard Calculation, from Natural Resources Canada.

•••

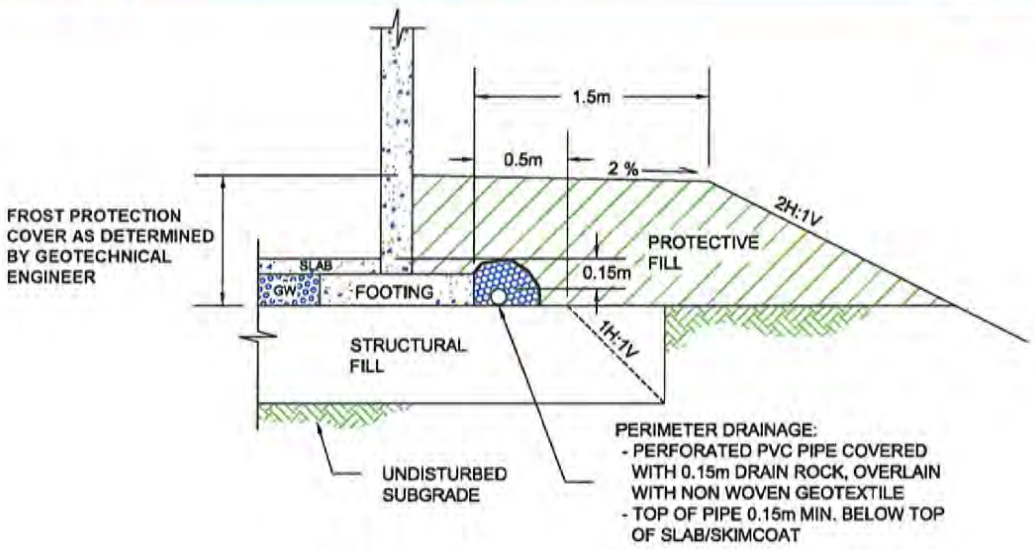


Figure 8.2: Typical section, structural fill.

e. Compaction of fill should include moisture conditioning as needed to bring the soil to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.

f. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a "jumping-jack," 200mm for a small roller, and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.

g. It should be emphasized that the long-term performance of buildings, slabs, and pavements is highly dependent on the correct placement and compaction of underlying structural fills. Consequently, we recommend that structural fill be observed and approved by the Geotechnical Engineer. This would include approval of the proposed fill materials and performing a suitable program of compaction testing during construction.

9.0 CONCLUSIONS

9.1 Local Government Conformance Statement

a. From a geotechnical point of view, and provided the recommendations in this Report are followed, the land is considered safe and suitable for the use intended (defined for the purposes of this Report as a new single-family residence and/or residential addition of conventional design and construction methods). Additionally, for floodplain bylaw exemption, as required by Section 524 of the *Local Government Act*, "the land may be used safely for the use intended" (new single-family residence and/or residential addition). This conclusion considers the probability of a geotechnical failure resulting in property damage of less than:

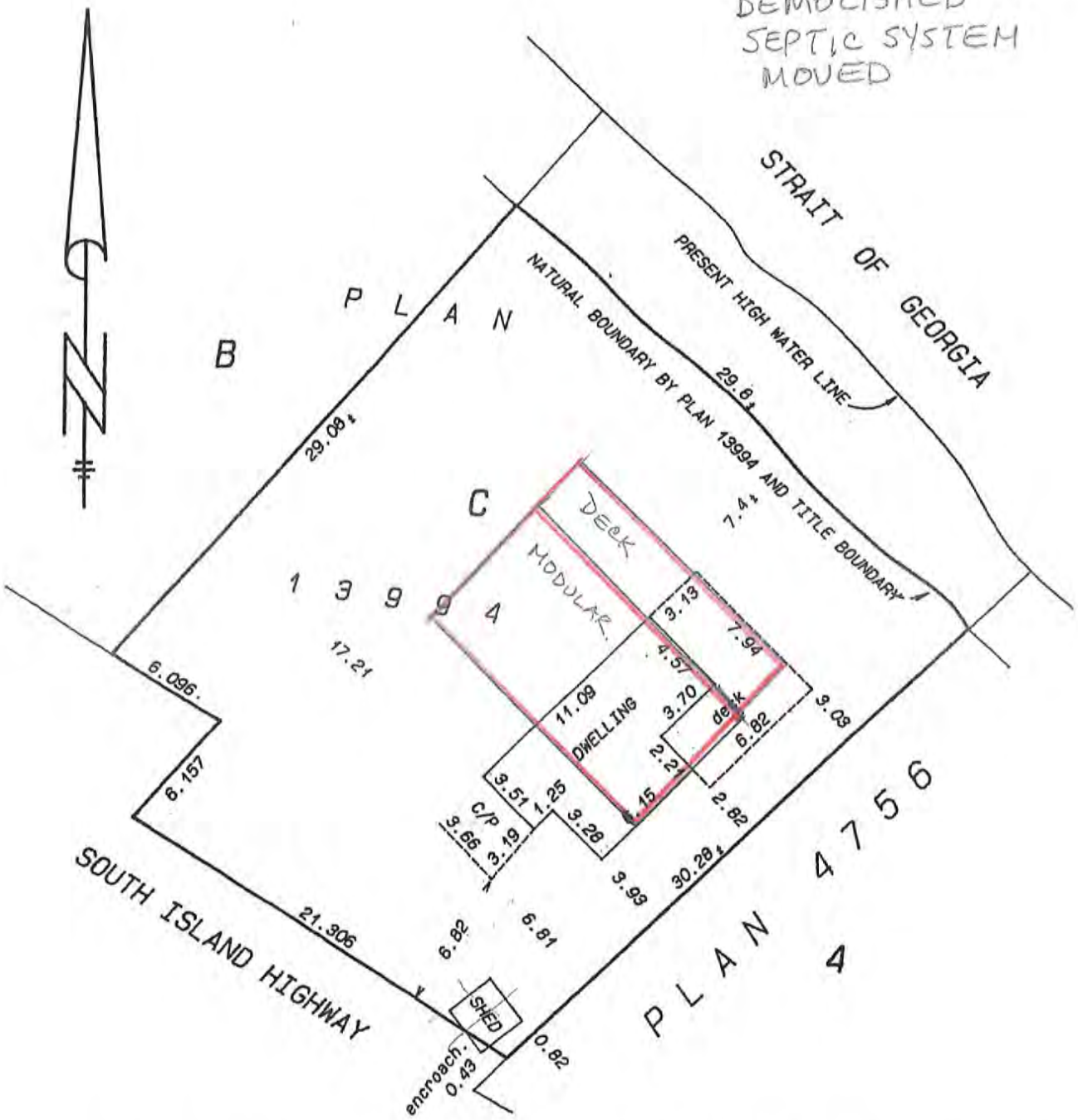
2. British Columbia Ministry of Water, Land and Air Protection, report titled *Flood Hazard Area Land Use Management Guidelines*, amended by British Columbia Ministry of Forest, Lands, Natural Resource Operations and Rural Development, January 1, 2018.
3. Strathcona Regional District, Bylaw No. 2782, titled *Floodplain Management Bylaw, 2005*, amended June 22, 2017.
4. Strathcona Regional District, Bylaw No. 1404, titled *Campbell River Area Zoning Bylaw, 1991*, amended October 30, 2024.
5. Strathcona Regional District, online map viewer *uMapIt*, 49.903N 125.167W, <https://strathconard.maps.arcgis.com/apps/webappviewer/index.html?id=3f13d8e946bb401d9fb17d90246af4b1>, accessed March 18, 2025.
6. BC Assessment, address *4129 Island Hwy S Campbell River V9H 1E9*, <https://www.bcassessment.ca//Property/Info/QTAwMDBLU01XMw==>, accessed January 21, 2025.
7. City of Campbell River, online map viewer *Airphotos*, 49.903N 125.167W, <https://webmap.campbellriver.ca/Html5Viewer/Index.html?viewer=Airphoto_History_Map.AirphotoHistoryViewer>, accessed March 18, 2025.
8. Fyles JG, Geologic Survey of Canada – Department of Mines and Technical Surveys, map titled *Surficial Geology Oyster River – Comox, Nanaimo, and Sayward Districts, British Columbia*, map 49-1959, sheets 92 F/14, date of mapping 1956-1957.
9. British Columbia Ministry of Environment and Climate Change Strategy, online map viewer *BC Water Resources Atlas*, 49.903N 125.167W, <https://maps.gov.bc.ca/ess/hm/wrbc/>, accessed March 18, 2025.
10. British Columbia Geological Survey, online map viewer *MapPlace 2*, Bedrock Geology, 49.903N 125.167W, <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mapplace>, accessed March 18, 2025.
11. Bednarski JM, Geological Survey of Canada, titled *Surficial Geology and Pleistocene stratigraphy from Deep Bay to Nanoose Harbour, Vancouver Island, British Columbia*, open file 7681, dated 2015.
12. Natural Resources Canada, webpage titled *GPS·H*, 49.903N 125.167W, <https://webapp.csrs-scrs.nrcan-rncan.gc.ca/geod/tools-outils/gpsh.php?locale=en#>, accessed March 26, 2025.
13. Government of Canada, online map viewer *Real-Time Hydrometric Data Map Search*, <https://wateroffice.ec.gc.ca/map/index_e.html?type=real_time>, accessed March 26, 2025.
14. Government of Canada, website titled *Mitlenatch – 07895*, <https://tides.gc.ca/en/stations/07895>, accessed March 26, 2025.
15. Ausenco Sandwell, prepared for British Columbia Ministry of Environment, 3 reports titled *Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use*, dated January 27, 2011.
16. Kerr Wood Leidal Associates Ltd., prepared for British Columbia Ministry of Forests, Lands and Natural Resource Operations, report titled *Coastal Floodplain Mapping – Guidelines and Specifications*, Final Report, file number 2785.001, dated June 2011.
17. Ebbwater Consulting Inc., prepared for Regional District of Nanaimo, report titled *Sea Level Rise Adaptation Program Coastal Floodplain Mapping,* Final Report, Revision 1, project number P180, dated October 21, 2021.
18. Van der Meer JW, Allsop NWH, Bruce T, De Rouck J, Kortenhaus A, Pullen T, Schüttrumpf H, Troch P, and Zanuttigh B, titled *EurOtop – Manual on wave overtopping of sea defences and related structures. An overtopping manual largely based on European research, but for worldwide application*, <www.overtopping-manual.com>, second edition, final version, dated December 2018.

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

MODULAR HOME
EXISTING COTTAGE
DEMOLISHED
SEPTIC SYSTEM
MOVED



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

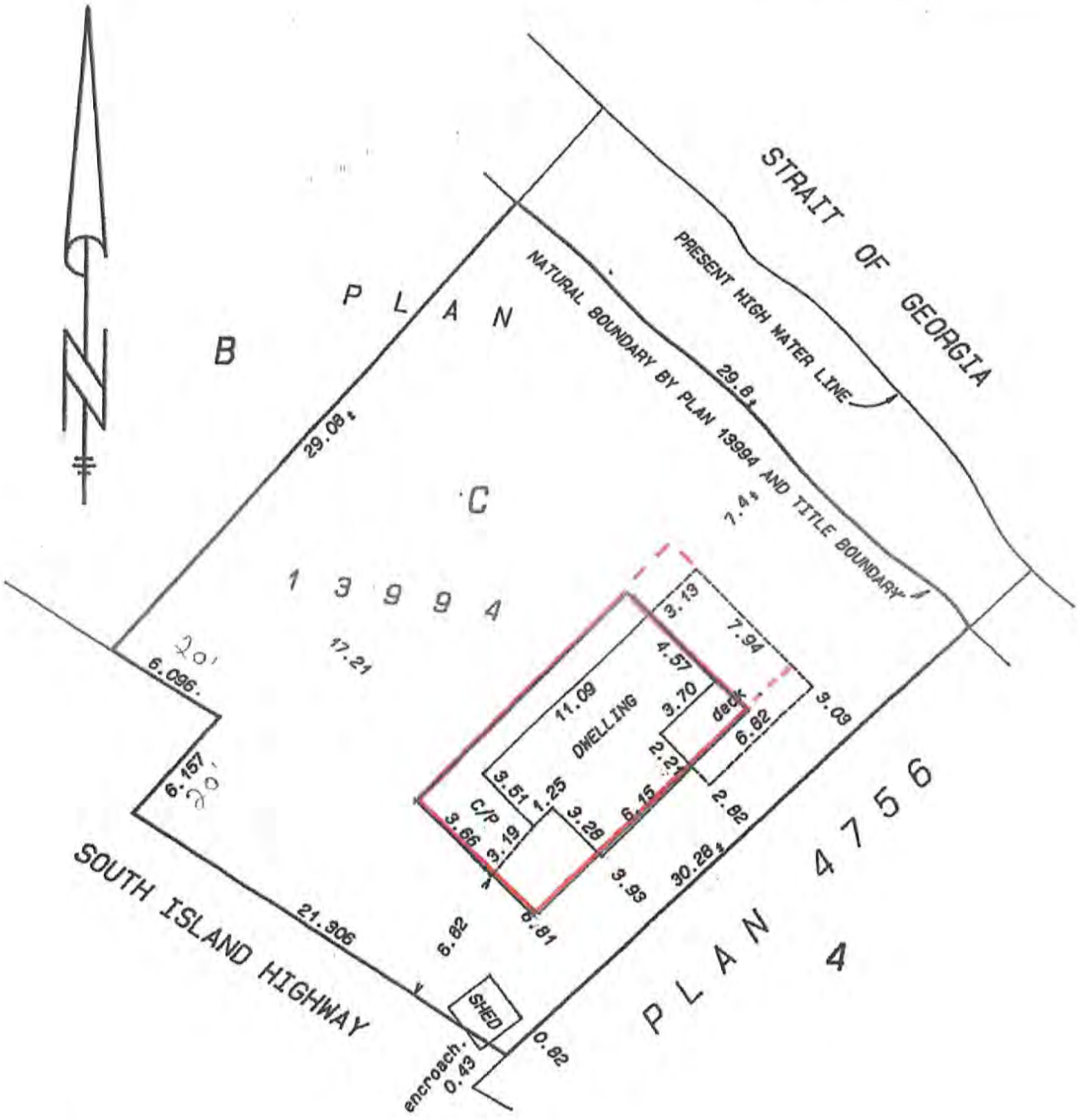
CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

HOME RENOVATION



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

Government of Canada / Gouvernement du Canada

2020 National Building Code of Canada Seismic Hazard Tool

This application provides seismic values for the design of buildings in Canada under Part 4 of the National Building Code of Canada (NBC) 2020 as prescribed in Article 1.1.3.1. of Division B of the NBC 2020.

Seismic Hazard Values

User requested values

Code edition	NBC 2020
Site designation X_S	X_D
Latitude (°)	49.903
Longitude (°)	-125.167

Please select one of the tabs below.

NBC 2020 Additional Values Plots API

Background Information

The 5%-damped spectral acceleration ($S_a(T,X)$, where T is the period, in s, and X is the site designation) and peak ground acceleration (PGA(X)) values are given in units of acceleration due to gravity (g, 9.81 m/s^2). Peak

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

Strathcona Regional District

990 Cedar Street, Campbell River, BC V9W 7Z8

Jurisdiction and address

Date: April 4, 2025

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"):

Lot C, Section 35, Township 4, Comox District, Plan 13994; 4129 Island Highway South, Oyster Bay, BC; PID: 000-329-479

Legal description and civic address of the Property

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

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

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

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

✓ 2. Collected and reviewed appropriate background information
✓ 3. Reviewed the Proposed Development on the Property
✓ 4. Investigated the presence of Covenants on the Property, and reported any relevant information
✓ 5. Conducted field work on and, if required, beyond the Property
✓ 6. Reported on the results of the field work on and, if required, beyond the Property
✓ 7. Considered any changed conditions on and, if required, beyond the Property
8. For a Flood Hazard analysis I have:
   - ✓ 8.1 Reviewed and characterized, if appropriate, Flood Hazard that may affect the Property
   - ✓ 8.2 Estimated the Flood Hazard on the Property
   - ✓ 8.3 Considered (if appropriate) the effects of climate change and land use change
   - ✓ 8.4 Relied on a previous Flood Hazard Assessment (FHA) by others
   - ___ 8.5 Identified any potential hazards that are not addressed by the Flood Assessment Report
9. For a Flood Risk analysis I have:
   - ___ 9.1 Estimated the Flood Risk on the Property
   - ___ 9.2 Identified existing and anticipated future Elements at Risk on and, if required, beyond the Property
   - ___ 9.3 Estimated the Consequences to those Elements at Risk

FLOOD ASSURANCE STATEMENT

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

April 4, 2025

Date

Joe Brunelle, P.Eng.

Prepared by

Name (print)

Signature 2025-04-04

2351B Rosewall Crescent, Courtenay, BC V9N 8R9

Address

250-334-0384

Telephone

jbrunelle@lewkowich.com

Email

Louis Chapdelaine, P.Geo.

Reviewed by

Name (print)

report signed by LC

Signature

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. P. BRUNELLE # 47936 2025-04-04

(AFFIX PROFESSIONAL SEAL here)

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

I am a member of the firm Lewkowich Engineering Associates Ltd. - Permit to Practice Number: 1001802

and I sign this letter on behalf of the firm. (Name of firm)

Betty Wasyliw

From: Doralynne Hodgins [redacted]
Sent: January 19, 2026 11:04 AM
To: Keltie Chamberlain
Cc: Jennifer Barber
Subject: Re: 4129 South Island Highway - Floodplain covenant and Board signatures for registration

NOTICE: This email is from an external source.

And how long does a review take? Is the signer the reviewer or is it someone who works there everyday?

On Mon., Jan. 19, 2026, 9:46 a.m. Keltie Chamberlain, <kchamberlain@srd.ca> wrote:

Good morning, Doralynne.

The notary should send a copy to the SRD for review prior to your signing. Please arrange that with them. The date is shown as February 25th. I can't say that is the date that the Chair will sign as Corporate executes the signature.

Best regards,

Keltie Chamberlain, MCP, RPP, MCIP

Land Use Planner II, Community Services

Strathcona Regional District

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6705
E: kchamberlain@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓wiłdax̱w people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

From: Doralynne Hodgins [redacted]
Sent: January 16, 2026 9:45 PM
To: Keltie Chamberlain <kchamberlain@srd.ca>
Cc: Jennifer Barber <jbarber@srd.ca>
Subject: Re: 4129 South Island Highway - Floodplain covenant and Board signatures for registration

NOTICE: This email is from an external source.

We have an appt with notary next Wednesday. Can you give me a date in February for the meeting and when the chair will be I to sign the covenant

Dodie

On Thu., Jan. 15, 2026, 2:11 p.m. Keltie Chamberlain, <kchamberlain@srd.ca> wrote:

Hi Doraynne,

Jennifer has asked that I get in touch with you regarding your application. You are required to have the Covenant registered on Title prior to the SRD issuance of a building permit. I am planning on taking your Environmentally Sensitive Area Development Permit (ESA DP) application to the Electoral Area Services Committee and Regional Board for consideration at the February meeting.

The report to the Board requests that they approve that staff to execute the Covenant if they approve the proposal. I anticipate that they will not have issue with approving your application.

Jen is suggesting that you have the document drafted prior to the meeting so that the registration process is quicker for you and therefore you receive your building permit more quickly. The Covenant must be signed by the Regional Board Chair, who is in the SRD office building approximately oncer per month for the meeting. It is then that the documents are signed by the Chair. So, if you have the document prepared by the Board meeting date, it can be signed the same day. Otherwise, it would be a month prior to the Board Chairs next opportunity to sign the document. I recommend that you have your legal council prepare the document at your earliest convenience.

Please let me know if you have any further questions. It may be helpful for you to visit the office, and I can go through things with you if you'd like.

Best regards,

Keltie Chamberlain, MCP, RPP, MCIP

Land Use Planner II, Community Services

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6705
E: kchamberlain@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓wiłdax̱w people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

From: Doralynne Hodgins [redacted]
Sent: January 15, 2026 12:25 PM
To: Jennifer Barber <jbarber@srd.ca>
Cc: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Re: 4129 SIH

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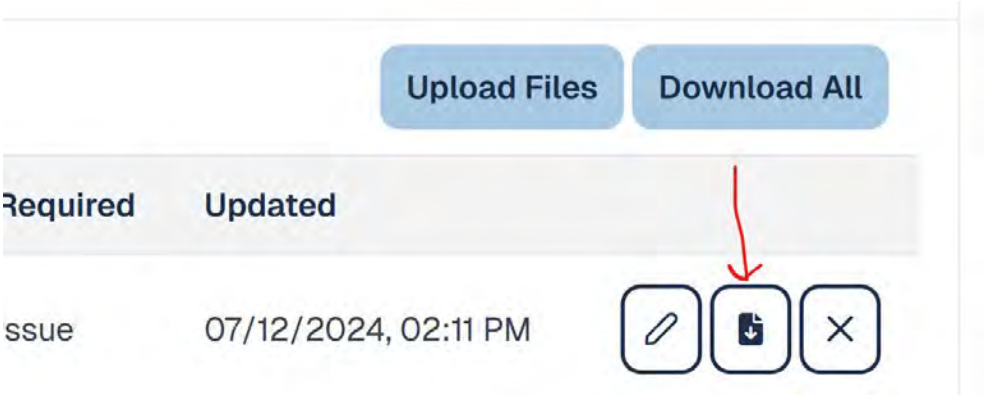
Thanks Jen. I see the download button.

Why would a covenant take months to register. The document would take a short time to be completed and returned to SRD for signature. Filing can be done the same day as it is signed. SRD has taken months and

months and now another month to have our DP approved. Why would we register a covenant against our property if the DP isn't approved?

Dodie

On Thu., Jan. 15, 2026, 10:05 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> You should see a download button on the side of the attachment:
>
> 
>
>
> If you click it the fille will be downloaded to your computer. I'm just not sure where you'll find it on your tablet, I was doing this on a desktop.
>
> I suggest you get started on the covenant soon as it will take months for it to be registered.

Jennifer Barber, RBO
Senior Building Official

Strathcona
REGIONAL DISTRICT

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca
The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã^{3}moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

From: Doralynne Hodgins <dodiehga@gmail.com>
Sent: Wednesday, January 14, 2026 3:25 PM
To: Jennifer Barber <jbarber@srd.ca>

Cc: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Re: 4129 SIH

NOTICE: This email is from an external source.

Jen

How do I print attachments that I have uploaded to your digital process?

Also we will register the covenant against our property once the DP is approved.

Keltie

When we had the Geo Tech engineer come to do the geo tech report, we were unsure which of the 2 options would be viable. Once we had the report and discussed with the engineer we felt we could live within the parameters and decided the best option was demolishing the cottage and bringing in a modular. All our documentation on the digital process has been only the one option. The geo tech engineer looked at both options for us. We decided which one was best and then moved forward with the digital DP. There are not 2 options in our DP application.

Thanks both of you for your help.

Dodie

On Mon., Jan. 12, 2026, 10:42 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
>
> There are generic requirements for permits on the website, but sometimes there are additional requirements. In your case, there was the requirement for an ESA DP because your property is waterfront. As part of the DP, you were required to submit a report establishing the floodplain elevation. This report includes a requirement for a covenant to be registered on title, see extract below. I'm also re-attaching the sample wording which your notary can use. I can't issue the building permit without this. Also, Iconic was in touch regarding the foundation design. They had promised a drawing which I still don't have. I'll get in touch with them again.

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)
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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]

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I hope this helps clarify the process.

Jennifer Barber, RBO
Senior Building Official

Strathcona
REGIONAL DISTRICT

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Doralynne Hodgins[redacted]
Sent: January 11, 2026 11:04 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: 4129 SIH

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Jen I went o the Citywude portal. The Development Permit was all completed and submitted Oct 16.

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-

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Sent: Friday, January 9, 2026 4:24 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: 4129 SIH

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To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: 4129 SIH

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What covenant are you talking about? It's been so long in this process I can't remember

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From: Jennifer Barber
Sent: September 19, 2025 10:08 AM
To: Doralynne Hodgins [redacted]
Subject: RE: Re:

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I'm sending sample wording for a flood plain covenant. You'll need to take this and the geo report to a notary for registration on title. Your notary will likely have a different template which is fine as long as it contains the wording in 2 and 3 of the sample.

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Subject: Re:

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>
> Jennifer
>
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>
> Senior Building Official
>
> Strathcona Regional District
>
> jbarber@srd.ca
>
> 250-830-6713
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Wednesday, September 17, 2025 5:43:18 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:**
>
> NOTICE: This email is from an external source.
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> Jen

At our meeting with Keltie this afternoon, she advised we do not need the QEP report after all. She advised that if we were in agreement with the Geo Tech recommendation of lowering the floodplain elevation to 3 meters from 5 meters we would need a relaxation permit. My husband explained that the modular will be at 5 meters above sea level. Kellie said we would not need the relaxation permit if we provided a diagram showing the elevation of the modular. Kellie advised that this would be in your expertise. Can you please advise what exactly you want on the diagram? We are contacting the modular builder and the foundation contractor and want to be clear what we are asking of them.

Also can I ask you what the Contaminated Sites Compliance Cert is? Is this something we get after the hazmat company assesses and remediate?

Thanks for your help

Dodie

Betty Wasyliw

From: Jennifer Barber
Sent: January 16, 2026 3:26 PM
To: Doralynne Hodgins
Subject: RE: 4129 SIH

Great, thanks Dodie.

Jennifer Barber, RBO
Senior Building Official

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From: Doralynne Hodgins [redacted]
Sent: January 16, 2026 11:25 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: 4129 SIH

NOTICE: This email is from an external source.

I sent Chris at Iconic an email for him to contact you in this regard.

Dodie

On Thu., Jan. 15, 2026, 1:59 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

Keltie will respond to the covenant timelines.
I haven't heard anything form Iconic re: the foindation. Can you contact them to see what's heppening?

Jennifer Barber, RBO
Senior Building Official

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-

From: Doralynne Hodgins [redacted]
Sent: Thursday, January 15, 2026 12:25 PM
To: Jennifer Barber <jbarber@srd.ca>
Cc: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Re: 4129 SIH

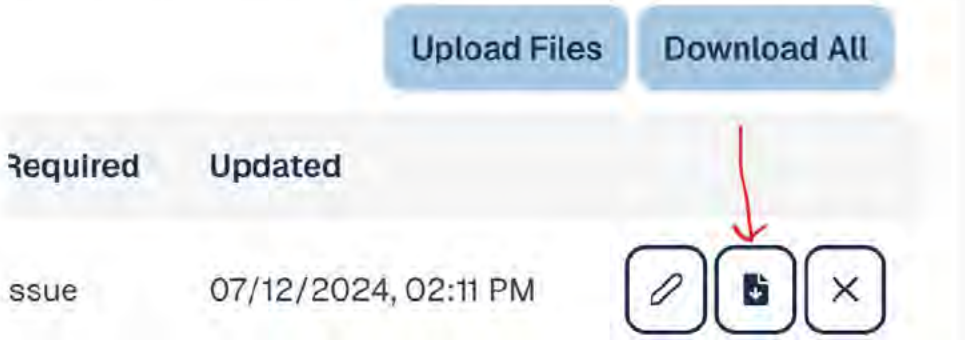
NOTICE: This email is from an external source.

Thanks Jen. I see the download button.
Why would a covenant take months to register. The document would take a short time to be completed and returned to SRD for signature. Filing can be done the same day as it is signed. SRD has taken months and months and now another month to have our DP approved. Why would we register a covenant against our property if the DP isn't approved?

Dodie

On Thu., Jan. 15, 2026, 10:05 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

You should see a download button on the side of the attachment:



If you click it the fille will be downloaded to your computer. I'm just not sure where you'll find it on your tablet, I was doing this on a desktop.
I suggest you get started on the covenant soon as it will take months for it to be registered.

Jennifer Barber, RBO
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From: Doralynne Hodgins[redacted]
Sent: Wednesday, January 14, 2026 3:25 PM
To: Jennifer Barber <jbarber@srd.ca>
Cc: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Re: 4129 SIH

NOTICE: This email is from an external source.

Jen

How do I print attachments that I have uploaded to your digital process?
Also we will register the covenant against our property once the DP is approved.

Keltie

When we had the Geo Tech engineer come to do the geo tech report, we were unsure which of the 2 options would be viable. Once we had the report and discussed with the engineer we felt we could live within the parameters and decided the best option was demolishing the cottage and bringing in a modular. All our documentation on the digital process has been only the one option. The geo tech engineer looked at both options for us. We decided which one was best and then moved forward with the digital DP. There are not 2 options in our DP application.

Thanks both of you for your help.

Dodie

On Mon., Jan. 12, 2026, 10:42 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
>
> There are generic requirements for permits on the website, but sometimes there are additional requirements. In your case, there was the requirement for an ESA DP because your property is waterfront. As part of the DP, you were required to submit a report establishing the floodplain elevation. This report includes a requirement for a covenant to be registered on title, see extract below. I'm also re-attaching the sample wording which your notary can use. I can't issue the building permit without this. Also, Iconic was in touch regarding the foundation design. They had promised a drawing which I still don't have. I'll get in touch with them again.

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)
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Also can I ask you what the Contaminated Sites Compliance Cert is? Is this something we get after the hazmat company assesses and remediate?

Thanks for your help

Dodie

From: Keltie Chamberlain
To: [redacted]; Jennifer Barber
Subject: RE: Hodgins New Home
Date: January 14, 2026 11:05:03 AM
Attachments: Re Hodgins New Home.msg
image001.png

Good morning, Doralynne.

Thank you for your email. In addition to the information provided by Jen, I can provide the following in response.

The SRD was considering the application for the meeting, however, due to the complexity of the proposal and the Geotechnical Report having two options for development (1. a renovation of the existing home and 2. A new modular home), management did not put the staff report on the agenda. The report is with management for review and I anticipate it will be considered for the February meeting. Applications are reviewed in order or receipt and there is a large volume of applications and we have had two staff vacancies, which has resulted in longer timelines.

The ESA DP addresses the Foreshore Development Permit Area. The Geotechnical Report provides recommendations for the development of the land, and that includes that a Restrictive Covenant is registered on Title. The report addresses the Floodplain Management Bylaw and requests that a floodplain relaxation is approved by the Regional Board. The report also provides a Flood Construction Level of 5.25 m. Jen can advise you on the foundation plan you refer to.

Best regards,

Keltie Chamberlain, MCP, RPP, MCIP
Land Use Planner II, Community Services

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6705
E: kchamberlain@srd.ca

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From: Doralynne Hodgins [redacted]
Sent: January 13, 2026 10:33 AM
To: Jennifer Barber <jbarber@srd.ca>; Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Hodgins New Home

NOTICE: This email is from an external source.

Jen and Keltie:

As I am not sure which responsibilities are delegated to each of you so I am including you both. After reading the emails you have sent me in the past few days, I have questions and information I need to share.

1. Keltie your last email advised that our Development Permit would be on this month's agenda for approval. Jen your last email said our Development Permit may be on the February agenda. The Development Permit was submitted on Oct 16th for approval. Why was it not on the agenda for November, December or January? We were advised that the approval process was 6 to 8 weeks. Now we are being told 12 weeks or longer? Please advise.

2. Jen in your email you state the ESA DP. We know that DP is Development Permit but what is ESA? You also talk about a report establishing the flood plain elevation. Is that the Geo Tech report? And is a copy of the Geo Tech report to be registered along with the covenant?

3. The foundation design has changed. We are not sure if Iconic advised you on this. We are not going with a 3 foot concrete foundation. This foundation came with a $50,000 price tag. We are going with the more conventional strip foundation. Iconic can provide you with details Jen.

Doralynne Hodgins

From:	Jennifer Barber
To:	"chris@iconicid.ca"
Subject:	RE: 4129 Island Hwy S - new Z240 TM DETs
Date:	January 12, 2026 12:32:00 PM
Attachments:	image001.png image002.png image003.png

Hi Chris,
I never did get the plan. I need it rebranded for this build.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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-

From: Jennifer Barber
Sent: December 11, 2025 10:14 AM
To: chris@iconicid.ca
Subject: RE: 4129 Island Hwy S - new Z240 TM DETs

If you can provide something like this, yes, for sure I would accept it.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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-

From: chris@iconicid.ca <chris@iconicid.ca>
Sent: December 10, 2025 5:04 PM
To: Jennifer Barber <jbarber@srd.ca>
Cc: 'Chris Andersen' <chris@iconicid.ca>
Subject: RE: 4129 Island Hwy S - new Z240 TM DETs

NOTICE: This email is from an external source.

The RDN provided the Part 9 info for us on a build in French creek similar to the one you are working on for the Hodgins. Are we able to use this type of information along with a Geotech assurance of bearing? It would sure be great on these simple rectangle homes of ours when we have them. It was the first time I have done one without an engineer and it has been soooo nice even though the footings are really massive under the center wall. Time saving is the big one.

Cheers

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8



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From: Jennifer Barber <jbarber@srd.ca>
Sent: December 10, 2025 4:24 PM
To: chris@iconicid.ca
Subject: RE: 4129 Island Hwy S - new Z240 TM DETs

This isn't all that helpful, it says on TM-DET-B1 "perimeter foundation designed by others to suit local conditions"
I need a foundation design and center columns design.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: chris@iconicid.ca <chris@iconicid.ca>
Sent: December 10, 2025 4:03 PM
To: Jennifer Barber <jbarber@srd.ca>
Cc: 'Chris Andersen' <chris@iconicid.ca>
Subject: RE: 4129 Island Hwy S - new Z240 TM DETs

NOTICE: This email is from an external source.

Attached are the TM DETs.

We prefer to use the TM DET B9 instead of the B2 because the framed center wall is much easier to crane a home on to and fasten to.

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8

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From: Jennifer Barber <jbarber@srd.ca>
Sent: December 10, 2025 2:11 PM
To: chris@iconicid.ca
Subject: RE: 4129 Island Hwy S - new Z240

I got the attached but it's not enough for permit. Do you have TM-DET-B1 and BB2 referenced on the plans? I could probably do this under Part 9 if I get enough detail.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: chris@iconicid.ca <chris@iconicid.ca>
Sent: December 10, 2025 12:21 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: RE: 4129 Island Hwy S - new Z240

NOTICE: This email is from an external source.

The factory will provide a foundation drawing with load weights and points still.

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8

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From: Jennifer Barber <jbarber@srd.ca>
Sent: December 10, 2025 10:30 AM
To: Chris Andersen <chris@iconicid.ca>
Subject: 4129 Island Hwy S - new Z240

Hi Chris,
I just realized this will be on a foundation. Are you getting engineered drawings?

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From:	Jennifer Barber
To:	chris@iconicid.ca
Subject:	RE: 4129 Island Hwy S - new Z240
Date:	December 10, 2025 2:10:00 PM
Attachments:	Foundation.pdf image001.png image002.png image003.png

---

I got the attached but it's not enough for permit. Do you have TM-DET-B1 and BB2 referenced on the plans? I could probably do this under Part 9 if I get enough detail.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: chris@iconicid.ca <chris@iconicid.ca>
Sent: December 10, 2025 12:21 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: RE: 4129 Island Hwy S - new Z240

NOTICE: This email is from an external source.

The factory will provide a foundation drawing with load weights and points still.

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8

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From: Jennifer Barber <jbarber@srd.ca>
Sent: December 10, 2025 10:30 AM
To: Chris Andersen <chris@iconicid.ca>
Subject: 4129 Island Hwy S - new Z240

Hi Chris,
I just realized this will be on a foundation. Are you getting engineered drawings?

Jennifer Barber, RBO
Senior Building Official

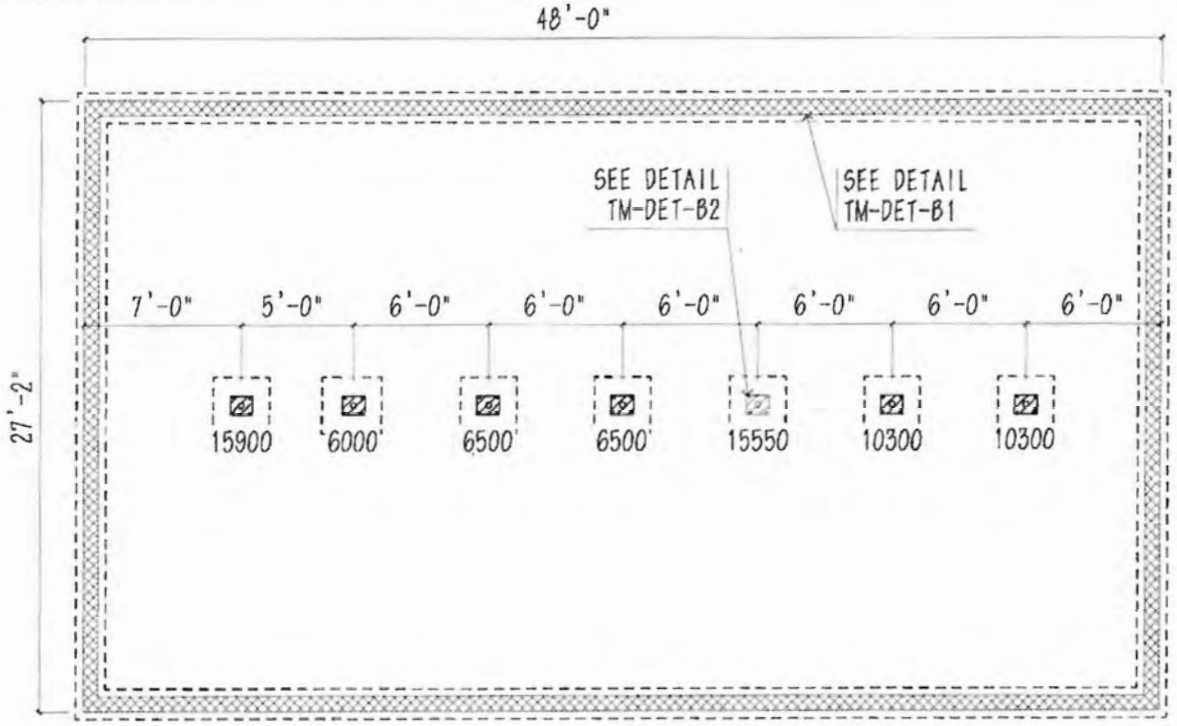
Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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1. THIS DRAWING IS TO INDICATE FOUNDATION SIZING AND MINIMUM SUPPORT SPACING ONLY. FOUNDATIONS/FOOTINGS/PILINGS MUST BE DESIGNED TO SUIT LOCAL SITE CONDITIONS.
2. **IMPORTANT** IT IS THE RESPONSIBILITY OF OTHERS TO OBTAIN A PROFESSIONAL ENGINEERS DESIGN/SEAL ON ANY FOUNDATION OR PILING DIAGRAM IF THE LOCAL INSPECTION AGENCY AND/OR PERMIT OFFICE REQUIRES IT.
3. REFER TO DETAIL NUMBERS TM-DET-B5 OR B11 & TM-DET-B6 OR B12 FOR PILING CONNECTION DETAILS.
4. REFER TO DETAIL NUMBERS TM-DET-B1 & TM-DET-B2 FOR FOUNDATION CONNECTION DETAILS.
5. NOTE: ALL LOADS ARE UNFACTORED.



FOUNDATION NOTES:

[1]. EACH SUPPORT POINT INDICATES THE TOTAL LOAD CALCULATED AS FOLLOWS:

DEAD LOAD OF STRUCTURE.....	40 LB/FT^2
FLOOR LIVE LOAD (MAXIMUM).....	40 LB/FT^2
ROOF DESIGN LOAD-- [55% GSL(80 LB/FT^2) + 100% RL(2.1 LB/FT^2)].....	46.1 LB/FT^2
CALCULATED DESIGN LOAD.....	126.1 LB/FT^2

[2]. MAX. CALCULATED LOAD PER SUPPORT POINT 15 900 LBS.

[3]. THIS DRAWING INDICATES FOUNDATION SIZING AND MAXIMUM SUPPORT SPACING ONLY. FOUNDATON MUST BE DESIGNED TO SUIT LOCAL CONDITIONS AND DESIGN LOADS SHOWN

[4]. BLOCKING AND TIE-DOWNS MUST CONFORM TO THE REQUIREMENTS OF CSA-Z240.10.1-19 SITE PREPARATION, FOUNDATION, AND ANCHORAGE OF MOBILE AND MODULAR HOMES.

[5]. PROVIDE COMPACT GRAVEL BASE IF WOOD SUPPORT BLOCKING IS USED.

[6]. ALL MATERIALS AND DESIGN CRITERIA MUST CONFORM WITH PART 9 OF THE APPLICABLE BUILDING CODE.

[7]. ALL LOADS ARE UNFACTORED

DR#28164

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REF#	ICONIC 2748 CUSTOM
TITLE:	FOUNDATION LAYOUT (STD)
DATE:	2025-10-23 DWN. FL SHEET:
SCALE:	3/16"=1'-0" CKD. CP
DWG. NO.	QV-1851-25 P5

From: chris@iconicid.ca
To: Jennifer Barber
Subject: RE: 4129 Island Hwy S - new Z240
Date: December 10, 2025 12:20:44 PM
Attachments: image002.png
image003.png
image004.png

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Being a flat lot, can we build a part 9 crawlspace without an engineer? We just did one in Parksville with only a Geotech and I'll admit it was a crazy amount of footings but way more convenient than dealing with an engineer.

Chris Andersen
General Manager
chris@iconicid.ca www.iconicid.ca
1355 Comox Road, Courtenay, B.C. V9N 3P8





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From: Jennifer Barber <jbarber@srd.ca>
Sent: December 10, 2025 10:30 AM
To: Chris Andersen <chris@iconicid.ca>
Subject: 4129 Island Hwy S - new Z240

Hi Chris,
I just realized this will be on a foundation. Are you getting engineered drawings?

Jennifer Barber, RBO
Senior Building Official



Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Jennifer Barber
To: [redacted]
Subject: RE: Citywide portal - building permit
Date: December 10, 2025 10:20:00 AM
Attachments: image001.png
image002.png
image003.png

If this is going to be on a crawlspace we need engineered drawings. I'll contact Chris to see what they had planned.
I can't issue the building permit until the Development permit and demo permit are done.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Doralynne Hodgins [redacted]
Sent: December 10, 2025 10:15 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Citywide portal - building permit

NOTICE: This email is from an external source.

Is all the requirements in place for the building permit? Just pay the fee?

Dodie

On Tue., Dec. 9, 2025, 4:21 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
> I just got the sewer filing. Did you get the hazmat assessment?
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓wiłdax̓ᵚ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
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> ---
>
> **From:** Jennifer Barber
> **Sent:** October 21, 2025 8:30 AM
> **To:** Doralynne Hodgins <dodiehga@gmail.com>

Subject: RE: Citywide portal - building permit

It's the paperwork for the septic system

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Doralynne Hodgins [redacted]
Sent: October 20, 2025 6:31 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Citywide portal - building permit

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What's the sewer filing? That wasn't there before

Dodie

On Mon., Oct. 20, 2025, 2:23 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
> I didn't realize this was a Z240, I thought it was an A277, which goes on a foundation. I've revised the list; if you go back in now you'll see all you need is the sewer filing and the building plans/specs.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̵ɨldax̵ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins <dodiehga@gmail.com>
> **Sent:** October 20, 2025 1:30 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Citywide portal - building permit
>
> NOTICE: This email is from an external source.

So after a bit I got the application to work. I uploaded the Owners acknowledgement and site plan.
I have contacted Iconic and have been advised that as the mod ular is CSA approved and a Z 240 we won't need the Engineer certificate and the Energuide Report. Iconic is looking into these requirements. Is this info for Keltie or you? I am still confused as to whom does what.

Thanks for your help

Dodie

On Fri., Oct. 17, 2025, 10:03 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Ok, thanks Dodie
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̵ɨdax̵ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** October 17, 2025 9:31 AM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Citywide portal - building permit
>
> **NOTICE:** This email is from an external source.
>
> I am not home today. I will try and work on it this weekend and get back to you next week.
> Thanks
>
> Dodie
>
> On Fri., Oct. 17, 2025, 8:28 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:
>
> > I assume the reason I don't see it is because you didn't click submit; you have saved your work but not submitted the application.
> > Continue with the remainder of documents, or if you don't have them, click next, type or draw your signature (about half way down the page), scroll to the bottom of the screen and click the 'I agree' button, then click submit. The next time you log in you'll see the application with an orange triangle. Click on the down arrow and you'll see the documents you've added as well as what's still required.
> >
> > Would you like me to stop by today?
> >
> > **Jennifer Barber, RBO**
> > *Senior Building Official*
> >
> > **Strathcona Regional District**

990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

*The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig*ᵂ*iɬdax*ᵂ *people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Å³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*

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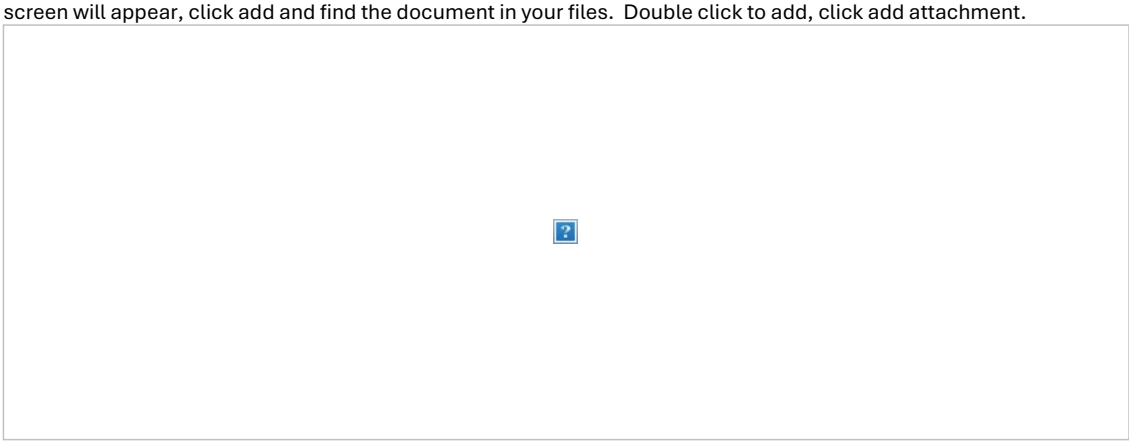
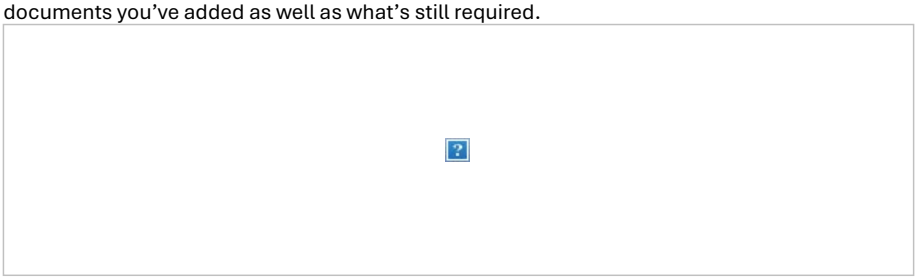
From: Doralynne Hodgins [redacted]
Sent: October 16, 2025 6:40 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Citywide portal - building permit

NOTICE: This email is from an external source.

Jen there is an application saved on the system. When I click on building permit it comes up.
I had started and saved. Not sure why you don't see the application

Dodie

On Thu., Oct. 16, 2025, 11:26 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> I can help you, no problem. You must have exited the application without saving as there's no application showing. Once you have completed the basics, save the application. At that point you can leave and come back as many times as you like to add information or view progress.
> The type of permit you are applying for is Residential SDD – Mobile/manuf/locate. Once you've entered the required info, the required documents will populate. The upload button is on the right. Click upload, the add attachment screen will appear, click add and find the document in your files. Double click to add, click add attachment.
>
> 
>
> Continue with the remainder of documents, or if you don't have them, click next, type or draw your signature (about half way down the page), scroll to the bottom of the screen and click the 'I agree' button, then click submit. The next time you log in you'll see the application with an orange triangle. Click on the down arrow and you'll see the documents you've added as well as what's still required.
>
> 
>
> I've attached the owner's undertaking, the others are:
> Energuide report – check with Iconic, they may have an energy advisor they work with. If not, there's a list attached. Richard Bice seems to be the main one working here.

Engineers cert of insurance – You need structural drawings form an engineer, which will also include the insurance document ad the
Schedule B Assurance of design and commitment for field review
Assurance of professional design and commitment for field review
Summary of design and field review requirements from Iconic
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If you are having trouble, just submit the basics and we can work together to get the rest. I can always come back to your house if you need help.

Jennifer Barber, RBO
Senior Building Official

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From: Doralynne Hodgins [redacted]
Sent: October 16, 2025 10:10 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Citywide portal - building permit

NOTICE: This email is from an external source.

Jen
I have started the digital process for the building permit. When I started, the system gave me a list of document requirements which I have written down. Now I can't find the list on the digital system.

First of all I can't find any information on what the following requirements are and where I can find applicable info and forms

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Energuide report
Engineers cert of insurance
Assurance of professional design and commitment for field review
Summary of design and field review requirements
Manufacturers specification sheet

We have ordered the design drawings from Iconic and hopefully they will suffice for some of these.

Also I can't see where the citywide system will allow the uploading of attachments that will be required.

Can you help me on this please?

Dodie

From: [redacted]
To: Jennifer Barber
Subject: Re: Citywide portal - building permit
Date: December 10, 2025 10:10:26 AM
Attachments: image001.png
image002.png
image003.png
image003.png
image001.png
image002.png

NOTICE: This email is from an external source.

The modular will be on a 3 foot crawl space.
Chris at Iconic is managing our sub contractors. The foundation contractor is Lorne but I don't have a last name or company name

Dodie

On Wed., Dec. 10, 2025, 9:32 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> I talked to Keltie about it yesterday, she was going to look into it today.
>
> I just reviewed the specs and drawings from Iconic and it looks like this is on a foundation. Who have you been dealing with there?
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
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>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins[redacted]
> **Sent:** December 9, 2025 9:10 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Citywide portal - building permit
>
> **NOTICE:** This email is from an external source.
>
> The company came last week. The owner is coming next Monday to discuss removal and assessment.
>
> The Development permit was submitted Oct 16th but we haven't heard yet
>
> Dodie

On Tue., Dec. 9, 2025, 4:21 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
>
> I just got the sewer filing. Did you get the hazmat assessment?
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
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>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Jennifer Barber
> **Sent:** October 21, 2025 8:30 AM
> **To:** Doralynne Hodgins[redacted]
> **Subject:** RE: Citywide portal - building permit
>
> It’s the paperwork for the septic system
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
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>
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>
> ---

From: Doralynne Hodgins [redacted]
Sent: October 20, 2025 6:31 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Citywide portal - building permit

NOTICE: This email is from an external source.

What's the sewer filing? That wasn't there before

Dodie

On Mon., Oct. 20, 2025, 2:23 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
>
> I didn't realize this was a Z240, I thought it was an A277, which goes on a foundation. I've revised the list; if you go back in now you'll see all you need is the sewer filing and the building plans/specs.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}ildax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube

From: Doralynne Hodgins [redacted]
Sent: October 20, 2025 1:30 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Citywide portal - building permit

NOTICE: This email is from an external source.

So after a bit I got the application to work. I uploaded the Owners acknowledgement and site plan.

I have contacted Iconic and have been advised that as the mod ular is CSA approved and a Z 240 we won't need the

Engineer certificate and the Energuide Report. Iconic is looking into these requirements. Is this info for Keltie or you? I am still confused as to whom does what.

Thanks for your help

Dodie

On Fri., Oct. 17, 2025, 10:03 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Ok, thanks Dodie
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig*ildax* people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins[redacted]
> **Sent:** October 17, 2025 9:31 AM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Citywide portal - building permit
>
> **NOTICE:** This email is from an external source.
>
> I am not home today. I will try and work on it this weekend and get back to you next week.
>
> Thanks
>
> Dodie
>
> On Fri., Oct. 17, 2025, 8:28 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:
>
> > I assume the reason I don't see it is because you didn't click submit; you have saved your work but not submitted the application.

Continue with the remainder of documents, or if you don't have them, click next, type or draw your signature (about half way down the page), scroll to the bottom of the screen and click the 'I agree' button, then click submit. The next time you log in you'll see the application with an orange triangle. Click on the down arrow and you'll see the documents you've added as well as what's still required.

Would you like me to stop by today?

Jennifer Barber, RBO
Senior Building Official

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From: Doralynne Hodgins [redacted]
Sent: October 16, 2025 6:40 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Citywide portal - building permit

NOTICE: This email is from an external source.

Jen there is an application saved on the system. When I click on building permit it comes up.

I had started and saved. Not sure why you don't see the application

Dodie

On Thu., Oct. 16, 2025, 11:26 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> I can help you, no problem. You must have exited the application without saving as there's no application showing. Once you have completed the basics, save the application. At that point you can leave and come back as many times as you like to add information or view progress.
>
> The type of permit you are applying for is Residential SDD – Mobile/manuf/locate. Once you've entered the required info, the required documents will populate. The upload button is on the right. Click upload, the add attachment screen will appear, click add and find the document in your files. Double click to add, click add attachment.



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I've attached the owner's undertaking, the others are:

Energuide report – check with Iconic, they may have an energy advisor they work with. If not, there's a list attached. Richard Bice seems to be the main one working here.

Engineers cert of insurance – You need structural drawings form an engineer, which will also include the insurance document ad the
Schedule B Assurance of design and commitment for field review

Assurance of professional design and commitment for field review

Summary of design and field review requirements from Iconic

Manufacturers specification sheet from Iconic

If you are having trouble, just submit the basics and we can work together to get the rest. I can always come back to your house if you need help.

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From: Doralynne Hodgins[redacted]
Sent: October 16, 2025 10:10 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Citywide portal - building permit

NOTICE: This email is from an external source.

Jen

I have started the digital process for the building permit. When I started, the system gave me a list of document requirements which I have written down. Now I can't find the list on the digital system.

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Engineers cert of insurance

Assurance of professional design and commitment for field review

Summary of design and field review requirements

Manufacturers specification sheet

We have ordered the design drawings from Iconic and hopefully they will suffice for some of these.

Also I can't see where the citywide system will allow the uploading of attachments that will be required.

Can you help me on this please?

Dodie

From: [redacted]
To: Jennifer Barber
Subject: Re: Demolition permit
Date: October 29, 2025 11:54:12 AM
Attachments: image001.png
image001.png

NOTICE: This email is from an external source.

Working on that. I have found the demolition permit on the digital program. We haven't had the assessment/removal process done but soon

Dodie

On Wed., Oct. 29, 2025, 8:30 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
>
> Do you have the hazmat assessment/clearance letter? I can do the application manually if you email me the stuff.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
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>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** October 27, 2025 12:24 PM
> **To:** Jennifer Barber <jbarber@srd.ca>

Subject: Re: Demolition permit

NOTICE: This email is from an external source.

That type is not listed and the program won't let me type it in

Dodie

On Mon., Oct. 27, 2025, 12:09 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> The type is Residential SDD-Demolition/relocate
>
> Get Outlook for iOS
>
> ---
>
> **From:** Doralynne Hodgins[redacted]
> **Sent:** Sunday, October 26, 2025 6:50:11 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Demolition permit
>
> **NOTICE:** This email is from an external source.
>
> I can't find this permit on the portal. The website said contact SRD
>
> Dodie
>
> On Sun., Oct. 26, 2025, 5:13 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:
>
> > The application process is the same, apply through the portal. All we need is a hazmat assessment to test for asbestos, lead, etc. If they find anything, we'll also need everything removed and a clearance letter.

Let me know if you need names of companies who do this.

Jennifer

Get Outlook for iOS

From: Doralynne Hodgins [redacted]
Sent: Saturday, October 25, 2025 11:56:45 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Demolition permit

NOTICE: This email is from an external source.

Jen can you provide me with the Demolition Permit application form and information on the requirements and documents that must be submitted.

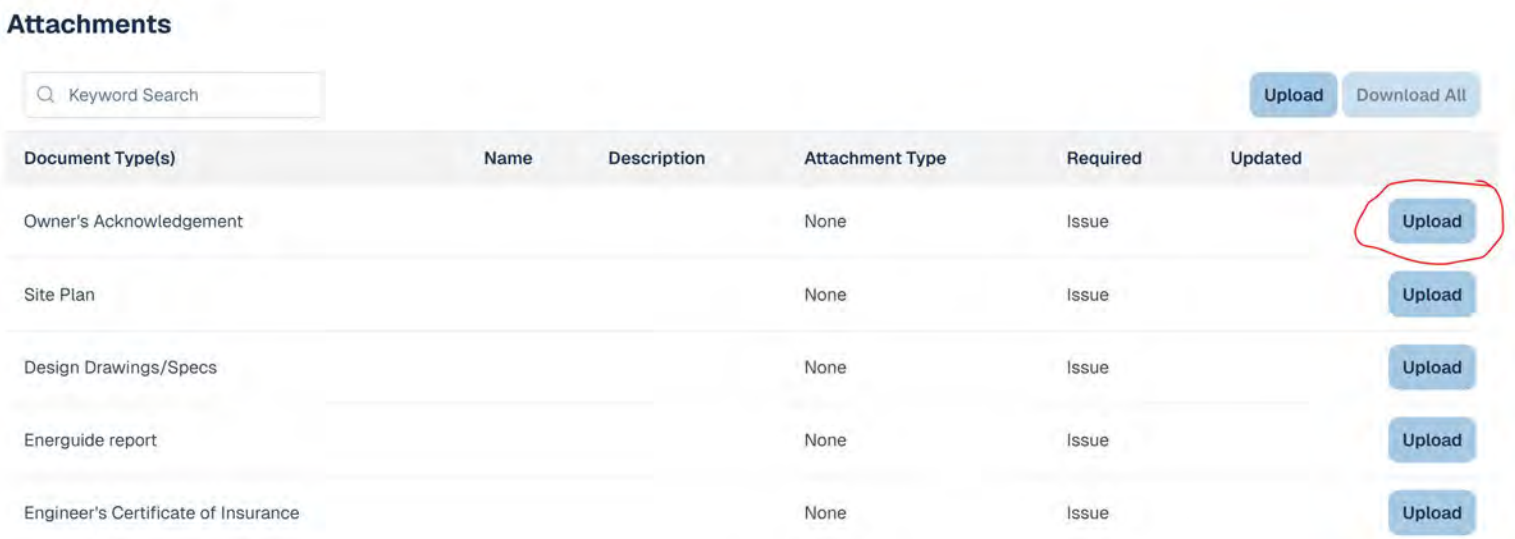
Thanks

Dodie

Betty Wasyliw

From: Jennifer Barber
Sent: October 16, 2025 11:26 AM
To: Doralynne Hodgins
Subject: RE: Citywide portal - building permit
Attachments: Owner's Acknowledgement of Responsibility & Undertakings (fillable).pdf; energy advisors.PNG

I can help you, no problem. You must have exited the application without saving as there's no application showing. Once you have completed the basics, save the application. At that point you can leave and come back as many times as you like to add information or view progress.
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From: Doralynne Hodgins [redacted]
Sent: October 16, 2025 10:10 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Citywide portal - building permit

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Jen
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Also I can't see where the citywide system will allow the uploading of attachments that will be required.

Can you help me on this please?

Dodie

Owner's Acknowledgement of Responsibility and Undertakings

BP#: _____

To: The Building Official
Strathcona Regional District
990 Cedar Street Campbell
River, BC V9W 7Z8

Date: _____

Re: _____
Name of Project (Print)

_____
Address of Project (Print)

_____
Legal Description of Project (Print)

The undersigned hereby acknowledges that:

a) Neither the issuance of a permit under the building bylaw, the review and acceptance of the design, drawings, plans or specifications, nor inspections made by or on behalf of the regional district, shall constitute a representation or warranty that the building code or the building bylaw have been complied with or the *building* or *structure* meets any standard of materials or workmanship, and no person shall rely on any of those acts as establishing compliance with the building code, the building bylaw or other applicable enactments respecting safety or any standard of construction.

b) The *owner* (and where the *owner* is acting through a representative, the representative) has the full and sole responsibility to carry out the work in respect of which the permit was issued in full compliance with the building code, the building bylaw, and or other applicable enactments respecting safety.

c) The regional district will rely solely on *field reviews* undertaken by the *registered professionals* and the letters of assurance submitted pursuant of the building bylaw as assurance that the construction substantially conforms to the design and that the construction substantially complies with the building code, the building bylaw, and other applicable enactments respecting safety in circumstances where letters of assurance have been required in accordance with the building bylaw.

I certify that I am the *owner* as defined in the British Columbia Building Code.

Name (Print)

Signed

Date

(If the *owner* is a firm or corporation, complete the following.)

I am an Authorized Signatory of this firm or corporation and am signing on their behalf.

Name of Firm or Corporation (Print)

Title of Signing Officer (Print)

(Affix CORPORATE SEAL here)

campbell river

Program Qualified	Company Name or Affiliation	Name	Email & Phone	Service Organization(s)	Services
✓	Focused Energy Assessments	Darrell Eason	book@focusedenergy.ca 250-650-4661	City Green Solutions	ERS
✓	Bernhardt Contracting Ltd	Dallas Hordichuck	energy@bernhardtcontracting.com 250-857-2432	CHBA BC	ERS
✓	Anew Ideas	Chris Wiebe	cwiebe@energyexperts.ca 250-714-2274	Verdatech	ERS
✓	Airtight Energy Advisors	Bruce Gray	bruce.gray@energyadvisor.pro 250-740-5791	CHBA-BC EnerTech Solutions	ERS
✓	Capital Home Energy	Richard Bice	richard@capitalhomeenergy.com 250-244-1888	Total Home Solutions	ERS
✓	Bernhardt Contracting Ltd	Mark Bernhardt	energy@bernhardtcontracting.com 250-857-2432	CHBA BC	ERS
✓	Red leaf Home Inspections	Paul Moquin	paul@redleafhomeinspections.com 250-218-8452	Total Home Solutions	ERS
✓	HomeTech Energy Solutions	Nicky Hancock	nicky@hometechenergy.com 1-866-561-0708	DW Energy Advisors Hometech Energy Solutions	ERS

From: Jennifer Barber
To: [redacted]
Subject: RE: Re:
Date: October 1, 2025 10:02:00 AM
Attachments: image001.png

She says she hasn't had time to review yet, she'll be in touch.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã^{3}moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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-

From: Doralynne Hodgins [redacted]
Sent: October 1, 2025 9:52 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Re:

NOTICE: This email is from an external source.

Ok, thanks.

On Wed., Oct. 1, 2025, 9:00 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
> No, Keltie is here, she's just really busy. I'll talk to her and see where this is at.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**

990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Doralynne Hodgins [redacted]
Sent: September 30, 2025 10:57 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Re:

NOTICE: This email is from an external source.

I have sent Keltie 2 emails with no response. Is she away? I need to get this going

Dodie

On Fri., Sep. 19, 2025, 10:41 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> You need to speak to Keltie, not my wheelhouse.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> 
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
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>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins <dodiehga@gmail.com>

Sent: September 19, 2025 10:36 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Re:

NOTICE: This email is from an external source.

Now that we do not need a QEP report, have we submitted everything needed for the Development permit?

Dodie

On Fri., Sep. 19, 2025, 10:07 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Thanks Dodie, that works for Building Permit. We'll just need confirmation after they pour the foundation.
> I'm sending sample wording for a flood plain covenant. You'll need to take this and the geo report to a notary for registration on title. Your notary will likely have a different template which is fine as long as it contains the wording in 2 and 3 of the sample.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã^{3}moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins[redacted]
> **Sent:** September 19, 2025 8:19 AM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re:
>
> **NOTICE:** This email is from an external source.
>
> The site declaration was uploaded last night.

The Geo Tech report included a new survey which established a benchmark. I would not think that we would have to hire another surveyor to give you the same info that is in the Geo Tech report. Once we have the contractor in place, I will have them develop a diagram of the 5 meter benchmark in our construction. I was just asking what info was needed on the diagram so we don't have any further delays

Dodie

On Thu., Sep. 18, 2025, 12:02 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> You need a surveyor to establish a benchmark. This gives the foundation contractor the height to build to. Your contractor should be able to help with this.
> There's a form on the Planning site called 'site declaration' you need to fill out. This is for properties that may have had contamination from industrial activity.
> Jennifer
>
> Jennifer Barber
> Senior Building Official
> Strathcona Regional District
> jbarber@srd.ca
> 250-830-6713
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Wednesday, September 17, 2025 5:43:18 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:**
>
> **NOTICE:** This email is from an external source.
>
> Jen
> At our meeting with Keltie this afternoon, she advised we do not need the QEP report after all. She advised that if we were in agreement with the Geo Tech recommendation of lowering the floodplain elevation to 3 meters from 5 meters we would need a relaxation permit. My husband explained that the modular will be at 5 meters above sea level. Kellie said we would not need the relaxation permit if we provided a diagram showing the elevation of the modular. Kellie

advised that this would be in your expertise. Can you please advise what exactly you want on the diagram? We are contacting the modular builder and the foundation contractor and want to be clear what we are asking of them.

Also can I ask you what the Contaminated Sites Compliance Cert is? Is this something we get after the hazmat company assesses and remediate?

Thanks for your help

Dodie

From: Jennifer Barber
To: [redacted]
Subject: RE: Re:
Date: September 19, 2025 10:07:00 AM
Attachments: image001.png
sample floodplain.docx

Thanks Dodie, that works for Building Permit. We'll just need confirmation after they pour the foundation.
I'm sending sample wording for a flood plain covenant. You'll need to take this and the geo report to a notary for registration on title. Your notary will likely have a different template which is fine as long as it contains the wording in 2 and 3 of the sample.

Jennifer Barber, RBO
Senior Building Official

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T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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-

From: Doralynne Hodgins [redacted]
Sent: September 19, 2025 8:19 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re:

NOTICE: This email is from an external source.

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Dodie

On Thu., Sep. 18, 2025, 12:02 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

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> Jennifer
>
> Jennifer Barber
> Senior Building Official
> Strathcona Regional District
> jbarber@srd.ca
> 250-830-6713
>
> ---
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>
> Also can I ask you what the Contaminated Sites Compliance Cert is? Is this something we get after the hazmat company assesses and remediate?
>
> Thanks for your help

Dodie

Land Title Act

Charge

General Instrument – Part 1

1. Application

File 5000

2. Description of Land

PID/Plan Number Legal Description

3. Nature of Interest

Type	Number	Additional Information
Section 219 COVENANT		

4. Terms

Part 2 of this instrument consists of:

(b) Express Charge Terms Annexed as Part 2

5. Transferor(s)

6. Transferee(s)

STRATHCONA REGIONAL DISTRICT
990 CEDAR STREET
CAMPBELL RIVER BC V9W 7Z8

7. Additional or Modified Terms

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8. Execution(s)

This instrument creates, assigns, modifies, enlarges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
	YYYY-MM-DD	

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
	YYYY-MM-DD	**Strathcona Regional District** By their Authorized Signatory **Name:**

Officer Certification

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c.124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

Electronic Signature

Your electronic signature is a representation that you are a designate authorized to certify this document under section 168.4 of the *Land Title Act*, RSBC 1996 c.250, that you certify this document under section 168.41(4) of the act, and that an execution copy, or a true copy of that execution copy, is in your possession.

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TERMS OF INSTRUMENT - PART 2

WHEREAS:

A. The Transferor is the registered owner in fee simple of:

_____

(the "**Land**")

B. The Transferee is the Strathcona Regional District;

C. The Transferee's Building Inspector has determined that the Land is subject to or is likely to be subject to flooding and has required the Transferor to provide the Building Inspector with a report or reports certified by a professional engineer or geoscientist, with experience in geotechnical study and geohazard assessments (the "**Qualified Professional**"), that the Land may be used safely for the use intended (the "**Reports**");

D. The Transferor has provided the Transferee with the report prepared by _____dated _____, which report is attached to this Agreement as Schedule "A" and has agreed to provide the Transferee with any further Reports of the Qualified Professional, as required by the Transferee or as necessary from time to time, certifying that the Land may be used safely for the use intended as a result of the construction to which the Report or further Report(s) relate; and

E. The Transferor acknowledges that it is in the public interest that the development and use of the Land be limited and wishes to grant this covenant and indemnity to the Transferee under Section 219 of the *Land Title Act* and Section 56 of the *Community Charter*.

NOW THEREFORE, in consideration of the premises and the covenants herein contained and for other valuable consideration, receipt and sufficiency of which is hereby acknowledged by the parties, the parties hereto covenant and agree with each other as follows:

1. In this Agreement, "construction" means construction of a building or other structure, or structural alteration of or addition to an existing building or other structure to which the Crossfield Report or further Reports relate.

2. The Transferor covenants and agrees not to use the Land nor construct any building or structure on the Land, nor make any structural alterations or additions to any existing building or structure on the Land, except in the manner determined and certified by the Engineer in the Floodplain Hazard Assessment as enabling the safe use of the Land for use intended. Without limiting the generality of the foregoing, the Grantor shall construct all buildings or structures and perform all other construction on and development of the Land only in strict accordance with all requirements and guidelines set out in the Floodplain Hazard Assessment, including conditions as to:

a. the siting, structural design and maintenance of buildings structures or works,

b. the maintenance or planting of vegetation, and

c. the placement and maintenance of land fill.

3. The Transferor agrees and hereby acknowledges that no area below the required elevation shall be used for the storage of goods or for the installation of HVAC equipment or other fixed appliances susceptible to damage by floodwaters.

4. At the Transferor's expense, the Transferor must: do everything necessary to ensure that this Agreement, and the section 219 covenant it creates are registered against the Land at the Victoria Land Title Office; and secure priority of registration and pending charges and encumbrances of a financial nature against the Land.

5. The Transferor shall reimburse the Transferee for any expense that may be incurred by the Transferee as a result of a breach of any covenant under this Agreement.

6. The Transferor acknowledges that the Transferee does not represent to the Transferor or any other person that any buildings or structures constructed, or placed, or mobile homes located in accordance with the terms and conditions of this Agreement will not be damaged due to mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche.

7. The Transferor and the Transferee agree that the enforcement of this Agreement is entirely within the discretion of the Transferee and that the execution and registration of this Agreement against the title to the Land must not be interpreted as creating any duty on the part of the Transferee to the Transferor or to any other person to enforce any provision or the breach of any provision of this Agreement.

8. Nothing contained or implied herein prejudices or affects the rights and powers of the Transferee in the exercise of its functions under any public or private statutes, bylaws, orders and regulations, all of which may be fully and effectively exercised in relation to the Land as if the Agreement had not been executed and delivered by the Transferor, and in particular, without limiting the generality of the foregoing, the Building Inspector of the Transferee may request further or additional Reports be prepared by a Qualified Professional prior to the issuance of a building permit for the Land.

9. The Transferor covenants and agrees that the Transferee may withhold building permits and occupancy permits as necessary to ensure compliance with the covenants in this Agreement, and that the issuance of a building permit or occupancy

permit does not act as a representation or warranty by the Transferee that the covenants in this Agreement have been satisfied.

10. The Transferor hereby releases and forever discharges the Transferee of and from any claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever that the Transferor can or may have against the Transferee for any loss, damage, or injury that the Transferor may sustain or suffer arising out of or connected with:

(a) this Agreement;
(b) a breach of this Agreement by the Transferor;
(c) the restrictions and requirements under this Agreement;
(d) the issuance of a building permit under this Agreement;
(e) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(f) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

11. The Transferor shall indemnify and save harmless the Transferee from any and all claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever for any loss (including economic loss), damage, or injury:

(a) that any person might have as owner, occupier, or user of the Land;
(b) by any person who has an interest in or comes onto the Land; or
(c) by any person that suffers loss of life or injury to its person or property

where such loss (including economic loss), damage, or injury arises out of, or is connected with:

(d) a breach of this Agreement;
(e) a breach of this Agreement by the Transferor;
(f) the restrictions and requirements under this Agreement;
(g) the issuance of a building permit under this Agreement;
(h) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(i) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

12. Time is of the essence of this Agreement.

13. The Transferor covenants and agrees for itself, its heirs, executors, successors, and assigns, that it will at all times perform and observe the requirements and restrictions set out in this Agreement and they will be binding upon the Transferor as personal covenants only during the period of its respective ownership or any interest in the Land.

14. It is mutually understood, acknowledged and agreed by the parties hereto that the Transferee has made no representations, covenants, warranties, guarantees, promises, or agreements (oral or otherwise)

with the Transferor other than those contained in this Agreement.

15. The Transferor shall pay the legal fees of the Transferee in connection with the preparation and registration of this Agreement. This is a personal covenant between the parties.

16. The waiver by a party of any breach of this Agreement or failure on the part of the other party to perform in accordance with any of the terms or conditions of this Agreement must not be construed as a waiver of any future or continuing failure, whether similar or dissimilar, and no waiver will be effective unless it is in writing and signed by both parties.

17. Wherever the singular, masculine, and neuter are used throughout this Agreement, the same is to be construed as meaning the plural, feminine, or body corporate or politic as the context so requires.

18. No remedy under this Agreement is to be deemed exclusive but will, where possible, be cumulative with all other remedies at law or in equity.

19. The restrictions and covenants herein contained run with the Land, are perpetual, continue to bind all of the Land when subdivided, and must be registered in the Victoria Land Title Office pursuant to Section 219 of the *Land Title Act* as covenants in favour of the Transferee as a first charge against the Land.

20. The Transferor agrees to execute all other documents and provide all other assurances necessary to give effect to the covenants contained in this Agreement.

21. If any part of this Agreement is found to be illegal or unenforceable, that part will be considered separate and severable and the remaining parts will not be affected thereby and will be enforceable to the fullest extent permitted by law.

22. This Agreement must be construed in accordance with, and governed by, the laws applicable in the Province of British Columbia.

23. This Agreement may be executed in counterpart with the same effect as if all parties had signed the same document. Each counterpart will be deemed to be an original. All counterparts will be construed together and constitute one and the same Agreement. This Agreement may be delivered by electronic means.

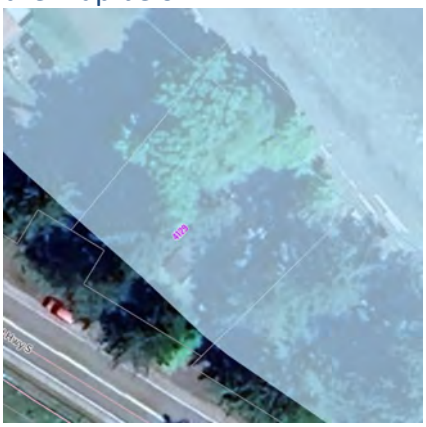
Betty Wasyliw

From: Keltie Chamberlain
Sent: September 8, 2025 3:35 PM
To: Doralynne Hodgins
Cc: Jennifer Barber
Subject: Environmentally Sensitive Area Development Permit (ESA DP) Foreshore.
Attachments: Development-Permit-Application-Package-fillable-revised (2).pdf

Good afternoon, Dodie

Thank you for submitting your development permit application. Could you please fill out the application in full attached to the guide? We also need a copy of the survey that you provided a picture of. Thank you.

The property has an Environmentally Sensitive Area Development Permit AREA (ESA DPA) as shown in light blue in the map below.



There was a Development Permit issued in 2008, which was specifically for the retaining wall installation. It expired two years after it was issued, which would have been Sept. 8, 2010. Environmental reports are considered if less than five years old. I didn't find a report with the previous DP.

For your information regarding ESA DPs and the guidelines for development:

Development Permit Area Guidelines:

Development permits in Part V of this Plan should be issued in accordance with the following guidelines:

1. Where encroachment into the DPA is deemed unavoidable, the development or land/vegetation altering activity:
    a. must take a form that minimizes the area of encroachment into the DPA.
    b. must be located to cause the least impact on the environmental values of the DPA and so as not to impact negatively upon the adjacent habitat.
    c. must be conducted at a time of year and use construction methods that minimize the impact on the DPA.
    d. must be clearly identified and labeled on a site plan.
    e. where required (i.e. watercourse, eagle nest, heron rookery), must include a biophysical and/or RAPR assessment by a qualified environmental professional and/or BC Registered Professional Biologist and supporting specialists when necessary that addresses the development in relation to the environmentally sensitive area.
    f. may require environmental monitoring by a BC Registered Professional Biologist.
    g. may require leave strips, vegetative buffers, permanent or temporary fencing measure to ensure no encroachment occurs.

h. may require the preparation and implementation of a ‘Stormwater Management Plan’ and/or ‘Sediment and Erosion Plan’, which may require additional works and/or protective measures to control drainage or erosion and protect banks.
i. may require the planting of native species of vegetation and trees or the retention or replanting of vegetation, in order to preserve, protect, restore or enhance the natural features and environmental values of the DPA.
j. may require the preparation and implementation of a professional ‘Landscape Plan’.
k. may require the support of additional professional reports and/or the registration of a restrictive covenant on a case-by-case basis.

2. Owners of land adjacent to watercourses may be encouraged to enter into a Conservation Covenant with the Regional District, the Province, and/or a non-governmental organization registered to hold such covenants, for the conservation of the leave strip.
3. Discharge from swimming pools, hot tubs, spas, liquid toxins, and deleterious substances should not be directed into any water course (including culverts, conduits, and ditches), but rather disposed of in a manner which meets the approval of senior agencies.
4. Other than shoreline protection devices, no buildings, structures, driveways, paving, septic fields, irrigation and water systems, swimming pools, hot tubs, spas and retaining walls should be permitted within 15.0 metres (49.2 feet) of the natural boundary of Georgia Strait.

Best regards,

Keltie Chamberlain, MCP, RPP, MCIP
Land Use Planner II, Community Services

Strathcona REGIONAL DISTRICT

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6705
E: kchamberlain@srd.ca

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Land Title Act

Charge

General Instrument – Part 1

1. Application

File 5000

2. Description of Land

PID/Plan Number Legal Description

3. Nature of Interest

Type	Number	Additional Information
Section 219 COVENANT		

4. Terms

Part 2 of this instrument consists of:

(b) Express Charge Terms Annexed as Part 2

5. Transferor(s)

6. Transferee(s)

STRATHCONA REGIONAL DISTRICT
990 CEDAR STREET
CAMPBELL RIVER BC V9W 7Z8

7. Additional or Modified Terms

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Witnessing Officer Signature	Execution Date	Transferor / Transferee / Party Signature(s)
	YYYY-MM-DD	

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WHEREAS:

A. The Transferor is the registered owner in fee simple of:

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(the "**Land**")

B. The Transferee is the Strathcona Regional District;

C. The Transferee's Building Inspector has determined that the Land is subject to or is likely to be subject to flooding and has required the Transferor to provide the Building Inspector with a report or reports certified by a professional engineer or geoscientist, with experience in geotechnical study and geohazard assessments (the "**Qualified Professional**"), that the Land may be used safely for the use intended (the "**Reports**");

D. The Transferor has provided the Transferee with the report prepared by _____dated _____, which report is attached to this Agreement as Schedule "A" and has agreed to provide the Transferee with any further Reports of the Qualified Professional, as required by the Transferee or as necessary from time to time, certifying that the Land may be used safely for the use intended as a result of the construction to which the Report or further Report(s) relate; and

E. The Transferor acknowledges that it is in the public interest that the development and use of the Land be limited and wishes to grant this covenant and indemnity to the Transferee under Section 219 of the *Land Title Act* and Section 56 of the *Community Charter*.

NOW THEREFORE, in consideration of the premises and the covenants herein contained and for other valuable consideration, receipt and sufficiency of which is hereby acknowledged by the parties, the parties hereto covenant and agree with each other as follows:

1. In this Agreement, "construction" means construction of a building or other structure, or structural alteration of or addition to an existing building or other structure to which the Crossfield Report or further Reports relate.

2. The Transferor covenants and agrees not to use the Land nor construct any building or structure on the Land, nor make any structural alterations or additions to any existing building or structure on the Land, except in the manner determined and certified by the Engineer in the Floodplain Hazard Assessment as enabling the safe use of the Land for use intended. Without limiting the generality of the foregoing, the Grantor shall construct all buildings or structures and perform all other construction on and development of the Land only in strict accordance with all requirements and guidelines set out in the Floodplain Hazard Assessment, including conditions as to:

a. the siting, structural design and maintenance of buildings structures or works,

b. the maintenance or planting of vegetation, and

c. the placement and maintenance of land fill.

3. The Transferor agrees and hereby acknowledges that no area below the required elevation shall be used for the storage of goods or for the installation of HVAC equipment or other fixed appliances susceptible to damage by floodwaters.

4. At the Transferor's expense, the Transferor must: do everything necessary to ensure that this Agreement, and the section 219 covenant it creates are registered against the Land at the Victoria Land Title Office; and secure priority of registration and pending charges and encumbrances of a financial nature against the Land.

5. The Transferor shall reimburse the Transferee for any expense that may be incurred by the Transferee as a result of a breach of any covenant under this Agreement.

6. The Transferor acknowledges that the Transferee does not represent to the Transferor or any other person that any buildings or structures constructed, or placed, or mobile homes located in accordance with the terms and conditions of this Agreement will not be damaged due to mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche.

7. The Transferor and the Transferee agree that the enforcement of this Agreement is entirely within the discretion of the Transferee and that the execution and registration of this Agreement against the title to the Land must not be interpreted as creating any duty on the part of the Transferee to the Transferor or to any other person to enforce any provision or the breach of any provision of this Agreement.

8. Nothing contained or implied herein prejudices or affects the rights and powers of the Transferee in the exercise of its functions under any public or private statutes, bylaws, orders and regulations, all of which may be fully and effectively exercised in relation to the Land as if the Agreement had not been executed and delivered by the Transferor, and in particular, without limiting the generality of the foregoing, the Building Inspector of the Transferee may request further or additional Reports be prepared by a Qualified Professional prior to the issuance of a building permit for the Land.

9. The Transferor covenants and agrees that the Transferee may withhold building permits and occupancy permits as necessary to ensure compliance with the covenants in this Agreement, and that the issuance of a building permit or occupancy

permit does not act as a representation or warranty by the Transferee that the covenants in this Agreement have been satisfied.

10. The Transferor hereby releases and forever discharges the Transferee of and from any claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever that the Transferor can or may have against the Transferee for any loss, damage, or injury that the Transferor may sustain or suffer arising out of or connected with:

(a) this Agreement;
(b) a breach of this Agreement by the Transferor;
(c) the restrictions and requirements under this Agreement;
(d) the issuance of a building permit under this Agreement;
(e) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(f) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

11. The Transferor shall indemnify and save harmless the Transferee from any and all claims, causes of action, suits, demands, expenses, costs and legal fees whatsoever for any loss (including economic loss), damage, or injury:

(a) that any person might have as owner, occupier, or user of the Land;
(b) by any person who has an interest in or comes onto the Land; or
(c) by any person that suffers loss of life or injury to its person or property

where such loss (including economic loss), damage, or injury arises out of, or is connected with:

(d) a breach of this Agreement;
(e) a breach of this Agreement by the Transferor;
(f) the restrictions and requirements under this Agreement;
(g) the issuance of a building permit under this Agreement;
(h) the use of the Land as a result of the issuance of a building permit to construct, place, build, alter, or add to a building or structure on the Land; or
(i) as a result of mud flows, debris flows, debris torrents, erosion, land slip, rock falls, subsidence or avalanche on the Land.

12. Time is of the essence of this Agreement.

13. The Transferor covenants and agrees for itself, its heirs, executors, successors, and assigns, that it will at all times perform and observe the requirements and restrictions set out in this Agreement and they will be binding upon the Transferor as personal covenants only during the period of its respective ownership or any interest in the Land.

14. It is mutually understood, acknowledged and agreed by the parties hereto that the Transferee has made no representations, covenants, warranties, guarantees, promises, or agreements (oral or otherwise)

with the Transferor other than those contained in this Agreement.

15. The Transferor shall pay the legal fees of the Transferee in connection with the preparation and registration of this Agreement. This is a personal covenant between the parties.

16. The waiver by a party of any breach of this Agreement or failure on the part of the other party to perform in accordance with any of the terms or conditions of this Agreement must not be construed as a waiver of any future or continuing failure, whether similar or dissimilar, and no waiver will be effective unless it is in writing and signed by both parties.

17. Wherever the singular, masculine, and neuter are used throughout this Agreement, the same is to be construed as meaning the plural, feminine, or body corporate or politic as the context so requires.

18. No remedy under this Agreement is to be deemed exclusive but will, where possible, be cumulative with all other remedies at law or in equity.

19. The restrictions and covenants herein contained run with the Land, are perpetual, continue to bind all of the Land when subdivided, and must be registered in the Victoria Land Title Office pursuant to Section 219 of the *Land Title Act* as covenants in favour of the Transferee as a first charge against the Land.

20. The Transferor agrees to execute all other documents and provide all other assurances necessary to give effect to the covenants contained in this Agreement.

21. If any part of this Agreement is found to be illegal or unenforceable, that part will be considered separate and severable and the remaining parts will not be affected thereby and will be enforceable to the fullest extent permitted by law.

22. This Agreement must be construed in accordance with, and governed by, the laws applicable in the Province of British Columbia.

23. This Agreement may be executed in counterpart with the same effect as if all parties had signed the same document. Each counterpart will be deemed to be an original. All counterparts will be construed together and constitute one and the same Agreement. This Agreement may be delivered by electronic means.

From: Jennifer Barber
To: [redacted]
Cc: Keltie Chamberlain
Subject: RE: Building permit
Date: September 3, 2025 9:47:00 AM
Attachments: image001.png

Hi Dodie,
You have applied for an ESA DP and the QEP assessment is required for that process. I'm really not the right person to advise you on this, you need to speak to Keltie who, unfortunately is sick and likely won't be back for the rest of the week.
I suggest you put the assessment on hold until Keltie looks at what was done previously by your sister.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hÃ¢â,¬â„¢, Klahoose, KÃ¢â,¬â„¢ÃƒÂ³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, TlaÃ¢â,¬â„¢amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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-

From: Doralynne Hodgins [redacted]
Sent: September 2, 2025 6:31 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit

NOTICE: This email is from an external source.

Is there a report description or name that the QEP completes? Is that an Environmental Development Permit? That's not listed on the digital process, just says a QEP report

Dodie

On Sun., Aug. 31, 2025, 10:37 a.m. Doralynne Hodgins, [redacted] wrote:

> Jennifer
> We have been working with SRD for over 3 years to get this project done. First John Neill told us we would need a variance permit for 250.00. We completed the paperwork and he took it to his boss. They came back and said no we needed a Geo Tech report. So it took 6 months to get an engineer out to complete the Geo Tech report at the cost of 10,000.00. At no time did John or his boss say we would need other reports. Now we are being told that a QEP has to be done. From the very beginning in 2022 we have asked for a complete list of what we needed. Everytime we complete a step then another step is called for. This is very frustrating.
>
> In 2008, my sister applied for and received an Environmentally Sensitive Areas Development Permit on this property when she installed cement blocks to curb the property erosion impacted during high tide. The file was 3060-20/DP 2D 08. DOF had no concerns for fish life. It was also stated that a good job was done in maintaining the riparian area. Nothing has changed. We are the only property in our neighborhood that has preserved the riparian. The other properties brought in large rocks to prevent erosion and got rid of the riparian area. But SRD didn't say anything to them. Nothing had changed. Can these reports not be used?
>
> Dodie
>
> On Sat., Aug. 30, 2025, 2:41 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:
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> > Yes, you will need a QEP to review the site.
> >
> > **Jennifer Barber, RBO**
> > *Senior Building Official*
> >
> > **Strathcona Regional District**
> > 990 Cedar St. Campbell River, BC V9W 7Z8
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From: Doralynne Hodgins [redacted]
Sent: August 30, 2025 10:21 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit

NOTICE: This email is from an external source.

So are you saying I have to hire someone else to conduct a QEP?

Dodie

On Fri., Aug. 29, 2025, 11:40 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> No, a QEP looks at environmental impacts, list attached.
> I uploaded the geo report for you.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
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>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** August 28, 2025 2:17 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Building permit
>
> **NOTICE:** This email is from an external source.
>
> Thanks Jen.

Is the QEP report the Geo Tech report I sent to SRD in April? Since you already have it I won't have to upload with my application will I?

Dodie

On Fri., Aug. 22, 2025, 9:06 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
> Zoning is CR-4, legal description is LOT C, PLAN VIP13994, SECTION 35, TOWNSHIP 4, COMOX LAND DISTRICT
> Let me know if you need anything else.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
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>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** August 21, 2025 6:21 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Building permit
>
> **NOTICE:** This email is from an external source.
>
> That's great, thanks.
>
> On Thu., Aug. 21, 2025, 4:58 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:
>
> > It’s mobile/ manuf/locate. I’ll send the zoning and legal description tomorrow when I’m back in the office.

Jennifer Barber
Senior Building Official
Strathcona Regional District
jbarber@srd.ca
250-830-6713

From: Doralynne Hodgins [redacted]
Sent: Thursday, August 21, 2025 4:48:33 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Building permit

NOTICE: This email is from an external source.

Jennifer
I started the Building permit on the portal. Is the application type Residential - New or Residential -Mobile/Manuf/Locate? Or something else.

And I don't know the Zone either.
Thanks
Dodie

From: [redacted]
To: Jennifer Barber
Subject: Fwd: QEP assessment 4129 S Isl Hgw
Date: September 2, 2025 6:08:37 PM
Attachments: image001.jpg
image001.jpg
4129 S Isl Hgw UMapit SRD.pdf

NOTICE: This email is from an external source.

Is this right? I requested info on a QEP. Is this the same or is there yet another report required. Now I am confused

Dodie

---------- Forwarded message ---------
From: **Jo Gagnon** <jgagnon@pacificus.ca>
Date: Tue., Sep. 2, 2025, 5:29 p.m.
Subject: RE: QEP assessment 4129 S Isl Hgw
To: [redacted]
Cc: Doug McCorquodale <doug@pacificus.ca>

Hello,

Thank you for contacting us regarding proposed development at your property. I have reviewed the Strathcona Regional District uMapit and it appears that because property is within 30 m of the foreshore, the SRD will require an Environmental Development Permit (ESA DPA) for any demolition or new development — including the installation of a modular home if soil disturbance is involved.

We can assist by completing the necessary biophysical assessment to support your permit application. This would include a site visit, documentation of existing conditions, and preparation of a report with mitigation recommendations (including setback recommendations) for SRD review.

I can follow up with a cost estimate this week. Our earliest availability for a field assessment following approval would be September 5th, 2025. In the meantime, please feel free to forward any available site plans or survey information you may have.

Thank you,

Jo Gagnon, BSc.

Pacificus Biological Services Ltd.

670 Island Hwy., Campbell River, B.C. V9W 2C3

250-286-0005 office

jgagnon@pacificus.ca | www.pacificus.ca



From: Doug McCorquodale <doug@pacificus.ca>
Sent: September 2, 2025 11:27 AM
To: Jo Gagnon <jgagnon@pacificus.ca>
Subject: FW: QEP assessment

Thoughts?

From: Doralynne Hodgins [redacted]
Sent: Monday, September 1, 2025 6:36 PM
To: Doug McCorquodale <doug@pacificus.ca>
Subject: QEP assessment

We have been given your names from SRD. They advised we need a QEP report before they can approve the demolishing our cottage and bring in a new modular home. We have been dealing with SRD for over 3 years and want to comply with their regulations as soon as possible.

Can you please advise us on the approximate cost and what your time frame would be?

Thanking you in advance

Dodie and Vic Hodgins

4129 Island Hwy South

Campbell River

4129 S Isl Hgw uMapIt



9/2/2025, 4:59:11 PM

Property
Survey Plan

1:2,281

0 100 200 400 ft
0 30 60 120 m

Digital Road Atlas (DRA) - Master Partially-Attributed Roads

Maxar

SRD GIS
©Strathcona Regional District

From: Jennifer Barber
To: Keltie Chamberlain
Subject: RE: 4129 Island Hwy S
Date: September 2, 2025 11:34:00 AM
Attachments: image001.png

Actually, scrap that, I looked at the new site plan she sent and it appears to meet the 15m setback. There's still the ESA issue though.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Jennifer Barber
Sent: September 2, 2025 11:31 AM
To: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: FW: 4129 Island Hwy S

I'm going to be away the rest of the week so I dug into this one a bit. It appears Aniko and John decided the new modular would be grandfathered if it was within the footprint of the existing home. Not sure how they got there, I thought the legislation said 75% above foundation as determined by the building inspector. Aniko may remember. We also know John hadn't been asking for ESA DPs for some reason only he knows. The ESA DP from 2008 has long since expired, again, Aniko has extended the deadline in the past so may do so again.
The geo covenant has to be registered on title so I'll deal with that, the remainder is your riddle to solve.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
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From: Jennifer Barber
Sent: September 2, 2025 8:48 AM
To: Doralynne Hodgins [redacted]
Cc: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: 4129 Island Hwy S

Hi Dodie,
I didn't know there was background on your property. Keltie and I will look into it and get back to you.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Doralynne Hodgins [redacted]
Sent: August 31, 2025 10:37 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit

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Jennifer
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Dodie

On Sat., Aug. 30, 2025, 2:41 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Yes, you will need a QEP to review the site.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
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> SRD.ca | Facebook | Instagram | YouTube

From: Doralynne Hodgins[redacted]
Sent: August 30, 2025 10:21 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit

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> SRD.ca | Facebook | Instagram | YouTube
>
> **From:** Doralynne Hodgins[redacted]
> **Sent:** August 28, 2025 2:17 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Building permit
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> **NOTICE:** This email is from an external source.
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> Thanks Jen.
> Is the QEP report the Geo Tech report I sent to SRD in April? Since you already have

it I won't have to upload with my application will I?

Dodie

On Fri., Aug. 22, 2025, 9:06 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
> Zoning is CR-4, legal description is LOT C, PLAN VIP13994, SECTION 35, TOWNSHIP 4, COMOX LAND DISTRICT
> Let me know if you need anything else.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
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> **Strathcona Regional District**
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> ---
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> **From:** Doralynne Hodgins [redacted]
> **Sent:** August 21, 2025 6:21 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Building permit
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> On Thu., Aug. 21, 2025, 4:58 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:
>
> > It’s mobile/ manuf/locate. I’ll send the zoning and legal description tomorrow when I’m back in the office.

Jennifer Barber
Senior Building Official
Strathcona Regional District
jbarber@srd.ca
250-830-6713

From: Doralynne Hodgins [redacted]
Sent: Thursday, August 21, 2025 4:48:33 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Building permit

NOTICE: This email is from an external source.

Jennifer
I started the Building permit on the portal. Is the application type Residential - New or Residential -Mobile/Manuf/Locate? Or something else.

And I don't know the Zone either.
Thanks
Dodie

From: Jennifer Barber
To: [redacted]
Subject: RE: Building permit
Date: August 29, 2025 11:40:00 AM
Attachments: 2025.07.15-Qualified-Environmental-Professionals-QEPs.pdf
image001.png

No, a QEP looks at environmental impacts, list attached.
I uploaded the geo report for you.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓ɨɬdax̓ᵚ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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-

From: Doralynne Hodgins [redacted]
Sent: August 28, 2025 2:17 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit

NOTICE: This email is from an external source.

Thanks Jen.
Is the QEP report the Geo Tech report I sent to SRD in April? Since you already have it I won't have to upload with my application will I?

Dodie

On Fri., Aug. 22, 2025, 9:06 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
> Zoning is CR-4, legal description is LOT C, PLAN VIP13994, SECTION

35, TOWNSHIP 4, COMOX LAND DISTRICT

Let me know if you need anything else.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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SRD.ca | Facebook | Instagram | YouTube

From: Doralynne Hodgins [redacted]
Sent: August 21, 2025 6:21 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: Building permit

NOTICE: This email is from an external source.

That's great, thanks.

On Thu., Aug. 21, 2025, 4:58 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> It's mobile/ manuf/locate. I'll send the zoning and legal description tomorrow when I'm back in the office.
>
> Jennifer Barber
> Senior Building Official
> Strathcona Regional District
> jbarber@srd.ca
> 250-830-6713
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Thursday, August 21, 2025 4:48:33 PM
> **To:** Jennifer Barber <jbarber@srd.ca>

Subject: Building permit

NOTICE: This email is from an external source.

Jennifer
I started the Building permit on the portal. Is the application type Residential - New or Residential -Mobile/Manuf/Locate? Or something else.

And I don't know the Zone either.
Thanks
Dodie

QUALIFIED ENVIRONMENTAL PROFESSIONALS (QEPs)

QEP	COMPANY	PHONE	EMAIL ADDRESS
CAMPBELL RIVER AREA			
Wayne Wall R. P. Bio	Graham/Wall Consulting	250-287-9977	w.wall@shaw.ca
Monica Stewardson R.P. Bio	Mainstream Biological Consulting Inc.	250-287-2462 250-203-3516	info@mainstreambio.ca
Isaac Anderton R. P. Bio	Strategic Natural Resource Consulting	250-287-2246	isacc.anderton@snsrc.ca
Doug McCorquodale R.P. Bio	Pacificus Biological Services Ltd.	250-286-0005	doug@pacificus.ca
Jeremy Araki P. Eng	Onsite Engineering Ltd. Partners with EcoLogic Consultants Ltd.	250-287-9174 (ext 200) 604-803-7146	jaraki@onsite-eng.ca consult@ecologicconsultants.com
MID ISLAND AREA			
Warren Fleenor, B.Sc, R.P. Bio	Current Environmental Courtenay, B.C.	250-871-1944	info@currentenv.ca
Rupert Wong, R.P. Bio	Current Environmental Courtenay, B.C.	250-871-1944	info@currentenv.ca
	Mimulus Biological Consultants Courtenay, B.C.	250-338-7733	mimulus.bc@gmail.com
Arin Yeomans-Routledge, R.P.Bio	Weaver Technical Corp Courtenay, B.C.	250-816-8085	arin@weavertechnical.com
Kayt Chambers R.P. Bio	Baynes Sound Environmental Cumberland, B.C.	250-650-5143	kayt.chambers@gmail.com
Jeremy Appleton	Sartori Environmental Inc Nanaimo, B.C	778-872-2322	jeremy@sartorienv.com

QUALIFIED ENVIRONMENTAL PROFESSIONALS (QEPs)
SOUTH ISLAND (Victoria)

QEP	COMPANY	PHONE	EMAIL ADDRESS
Jeremy Nilson, R. P. Bio	Keystone Environmental Victoria, B.C.	604-679-6585	jnilson @keystoneenvironmental.ca

Note: This QEP List is for information purposes only and updated periodically. The Strathcona Regional District does not endorse any particular QEP. For more information please visit: www.gov.bc.ca/env/

From: [redacted]
To: Jennifer Barber
Subject: Re: FW: Registering to use Citywide Portal #CSUP00006189
Date: August 21, 2025 2:29:38 PM
Attachments: image001.png
image001.png

NOTICE: This email is from an external source.

We can. Just got home. I installed Firefox and still can't get registered.
Google Chrome app is only for I Pads and I phones. Not going to buy these

On Thu., Aug. 21, 2025, 11:23 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Just an fyi, I ripped a strip off these guys and copied a manager. She has come up with a solution which I can walk you through this afternoon. Are we meeting at your property?
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Citywide Support <support@psdcitywide.com>
> **Sent:** August 21, 2025 10:26 AM
> **To:** [redacted]
> **Cc:** jklein@psdcitywide.com; Jennifer Barber <jbarber@srd.ca>
> **Subject:** Re: Registering to use Citywide Portal #CSUP00006189

NOTICE: This email is from an external source.

New reply for the ticket #CSUP00006189

Thank you for replying Jess,

Have a wonderful day Jennifer and Doralynne. Please submit a new request if there are any issues.

-Ryan

#CSUP00006189
Citywide Support

From: [redacted]
To: Jennifer Barber
Subject: Re: Registering to use Citywide Portal #CSUP00006189
Date: August 20, 2025 3:34:08 PM
Attachments: image001.png
image001.png

NOTICE: This email is from an external source.

Lol I am glad it's not just me

On Wed., Aug. 20, 2025, 3:09 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Oh for crying out loud. We're going around in circles.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
> SRD.ca | Facebook | Instagram | YouTube
>
> ---
>
> **From:** Doralynne Hodgins[redacted]
> **Sent:** August 20, 2025 3:01 PM
> **To:** Jennifer Barber <jbarber@srd.ca>
> **Subject:** Fwd: Registering to use Citywide Portal #CSUP00006189
>
> **NOTICE:** This email is from an external source.

---------- Forwarded message ---------
From: **Citywide Support** <support@psdcitywide.com>
Date: Wed., Aug. 20, 2025, 10:32 a.m.
Subject: Re: Registering to use Citywide Portal #CSUP00006189
To: [redacted]

New reply for the ticket #CSUP00006189

Hello Doralynne Hodgins,

Thank you for contacting Citywide support,

I appreciate you reaching out to us explaining that you are not able to register for the Citywide Portal account.
We are aware of this issue, please reach out to your municipality and they can get in contact with us in order to further troubleshoot and resolve the issue.

Regards,

Sandeep

#CSUP00006189
Citywide Support

From: Jennifer Barber
To: [redacted]
Subject: RE: E4084 - 4129 South Island Highway, Oyster Bay, SRD
Date: August 20, 2025 3:08:00 PM
Attachments: image001.png

Agreed, just thought you might want to live in it until the new home was built, then demolish it.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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-

From: Doralynne Hodgins [redacted]
Sent: August 20, 2025 3:00 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: E4084 - 4129 South Island Highway, Oyster Bay, SRD

NOTICE: This email is from an external source.

Sorry tied up all day.
I know you classify it as building but I just wanted you to know we can't live in the cottage while it's being demolished.

On Wed., Aug. 20, 2025, 10:20 a.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
> Is there somewhere we could meet today to look at the portal together?
> Bringing in the modular and putting it on a foundation is considered ‘building’.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Doralynne Hodgins [redacted]
Sent: August 20, 2025 10:00 AM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: E4084 - 4129 South Island Highway, Oyster Bay, SRD

NOTICE: This email is from an external source.

We are not building. We are demolishing the cottage and bringing in a modular.
I am still trying to register for the portal so hopefully support can assist quickly

Dodie

On Mon., Aug. 18, 2025, 4:12 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi again Dodie,
> I contacted support; this is what they're saying:
> Currently, there are no reported issues from my team on the portal! Can you have the user send us screenshots and/or a screen recording of what they are exactly encountering? We also advise that they use Google Chrome to access the portal because it pairs well with the portal.
> Their email is support@psdcitywide.com
>
> The other option would be to come in with the device you're using and we could troubleshoot it together. Do you have email on your phone for instance? Or I could come to you.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Jennifer Barber
Sent: August 18, 2025 10:16 AM
To: 'Doralynne Hodgins' [redacted]
Subject: RE: E4084 - 4129 South Island Highway, Oyster Bay, SRD

Hi Dodie,
I'll contact support about the verify button, I've never heard of this issue before.
Yes, you need the ESA DP prior to applying for permits. You'll need a site plan but not building plans. If you need to live in the cottage while you're building, we will issue the building permit for the new build if you pay a security of $10,000.
Once you have access to the portal, you'll see the list of documents required for permit.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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From: Doralynne Hodgins <dodiehga@gmail.com>

Sent: August 17, 2025 6:38 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: E4084 - 4129 South Island Highway, Oyster Bay, SRD

NOTICE: This email is from an external source.

I have gone to Citywide Portal to register for digital permit processing. I have received an email back to verify my email address. The email has a verify button. Clicking on it does nothing. Is there a problem with your system?
It has taken us awhile to get things arranged and want to start this process finally.

Do I need a Development permit first and do I need the modular drawings for this?

If you can provide me with a list of permits we need and in the order we need them, would be appreciated.

I think I can follow the digital process, being a retired Govt Agent, and fa,lliad with processes. I went through the portal instructions and they seem pretty clear.

Dodie Hodgins

On Wed., Jun. 11, 2025, 3:36 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> I forgot to tell you about the application process. Building Permit applications are now through our portal, which can be found here:
> https://srd.ca/services/building/
> This can be used for the demolition (Residential SDD – demolition/relocate) as well as the new modular (Residential SDD – Mobile/manuf/locate).
> Give me a call if you run into problems and I'll walk you through it.
>
> **Jennifer Barber, RBO**
> *Senior Building Official*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6713 | C: 250-203-3625
> E: jbarber@srd.ca
>
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Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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From: Jennifer Barber
Sent: June 11, 2025 3:24 PM
To: [redacted]
Cc: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: FW: E4084 - 4129 South Island Highway, Oyster Bay, SRD

Hi Dodie,
Yes, you need a demolition permit for the old cottage which includes a hazmat report and clearance letter (asbestos, lead, etc.). I can send a couple of names if you need them.
Keltie – do you want the ESA DP prior to issuing this permit?

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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SRD.ca | Facebook | Instagram | YouTube

We are trying to get a cost before we go ahead. We have been told by a demolition company that we need a permit to demolish our cottage. Is there a form and what is the cost? Do we apply for this prior to obtaining the building permit?
Dodie Hodgins

On Wed., Apr. 23, 2025, 9:21 a.m. Keltie Chamberlain, <kchamberlain@srd.ca> wrote:

> Good morning.

Thank you for the report. It will be reviewed as part of the application. I've forwarded the email to Jen Barber to answer BP questions, and the ESA DP cost is $250.00.

Best regards,

Keltie Chamberlain, MCP, RPP, MCIP

Development Planner II

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6705
E: kchamberlain@srd.ca

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From: Doralynne Hodgins [redacted]
Sent: April 22, 2025 5:12 PM
To: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Fwd: E4084 - 4129 South Island Highway, Oyster Bay, SRD

NOTICE: This email is from an external source.

Kellie

Further to your email of today's date, please find enclosed the Geotechnical report conducted on our property by Lewkowich Engineering Associates Ltd. I do have an extra hard copy if you want us to drop off to you.

We are in the process of obtaining info and costing for modulars so we can make application with attached drawings of our proposal.

Can you please tell me the application cost for the ESA Development permit and a Building Permit application.

Thanks

Dodie and Vic Hodgins

---------- Forwarded message ---------
From: **Joe Brunelle - Lewkowich Engineering** <jbrunelle@lewkowich.com>
Date: Fri., Apr. 4, 2025, 4:19 p.m.
Subject: E4084 - 4129 South Island Highway, Oyster Bay, SRD
To: Doralynne Hodgins [redacted]
Cc: Tony Williamson - Lewkowich Engineering <twilliamson@lewkowich.com>, Dawn O'Maley - Lewkowich Engineering <domaley@lewkowich.com>

Hi Dodie,

Please find attached the geotechnical assessment for 4129 South Island Highway. Thanks for your patience on this one as it required more effort/ review than we normally anticipate.

Sincerely,

Joe Brunelle, P.Eng.

Lewkowich Engineering Associates Ltd.

2351B Rosewall Crescent, Courtenay, BC V9N 8R9

250-334-0384

From: Jennifer Barber
To: [redacted]
Subject: RE: FW: E4084 - 4129 South Island Highway, Oyster Bay, SRD
Date: June 12, 2025 9:40:00 AM
Attachments: image001.png

Building Permit applications are now through our portal, which can be found here:
https://srd.ca/services/building/
This can be used for the demolition (Residential SDD – demolition/relocate) as well as the new modular (Residential SDD – Mobile/manuf/locate).
Give me a call if you run into problems and I'll walk you through it.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

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-

From: Doralynne Hodgins [redacted]
Sent: June 11, 2025 7:39 PM
To: Jennifer Barber <jbarber@srd.ca>
Subject: Re: FW: E4084 - 4129 South Island Highway, Oyster Bay, SRD

NOTICE: This email is from an external source.

Is there an application form? And regulations on the permit?

Dodie

On Wed., Jun. 11, 2025, 3:24 p.m. Jennifer Barber, <jbarber@srd.ca> wrote:

> Hi Dodie,
> Yes, you need a demolition permit for the old cottage which includes a hazmat report and

clearance letter (asbestos, lead, etc.). I can send a couple of names if you need them. Keltie – do you want the ESA DP prior to issuing this permit?

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
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We are trying to get a cost before we go ahead. We have been told by a demolition company that we need a permit to demolish our cottage. Is there a form and what is the cost? Do we apply for this prior to obtaining the building permit?
Dodie Hodgins

On Wed., Apr. 23, 2025, 9:21 a.m. Keltie Chamberlain, <kchamberlain@srd.ca> wrote:

> Good morning.
>
> Thank you for the report. It will be reviewed as part of the application. I've forwarded the email to Jen Barber to answer BP questions, and the ESA DP cost is $250.00.
>
> Best regards,
>
> **Keltie Chamberlain, MCP, RPP, MCIP**
>
> Development Planner II

Strathcona Regional District
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T: 250-830-6705
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From: Doralynne Hodgins [redacted]
Sent: April 22, 2025 5:12 PM
To: Keltie Chamberlain <kchamberlain@srd.ca>
Subject: Fwd: E4084 - 4129 South Island Highway, Oyster Bay, SRD

NOTICE: This email is from an external source.

Kellie

Further to your email of today's date, please find enclosed the Geotechnical report conducted on our property by Lewkowich Engineering Associates Ltd. I do have an extra hard copy if you want us to drop off to you.

We are in the process of obtaining info and costing for modulars so we can make application with attached drawings of our proposal.

Can you please tell me the application cost for the ESA Development permit and a Building Permit application.

Thanks

Dodie and Vic Hodgins

---------- Forwarded message ---------
From: **Joe Brunelle - Lewkowich Engineering** <jbrunelle@lewkowich.com>
Date: Fri., Apr. 4, 2025, 4:19 p.m.
Subject: E4084 - 4129 South Island Highway, Oyster Bay, SRD
To: Doralynne Hodgins [redacted]
Cc: Tony Williamson - Lewkowich Engineering <twilliamson@lewkowich.com>, Dawn O'Maley - Lewkowich Engineering <domaley@lewkowich.com>

Hi Dodie,

Please find attached the geotechnical assessment for 4129 South Island Highway. Thanks for your patience on this one as it required more effort/ review than we normally anticipate.

Sincerely,

Joe Brunelle, P.Eng.

Lewkowich Engineering Associates Ltd.

2351B Rosewall Crescent, Courtenay, BC V9N 8R9

250-334-0384

From: Jennifer Barber
To: [redacted]
Subject: FW: E4084 - 4129 South Island Highway, Oyster Bay, SRD
Date: April 23, 2025 9:11:00 AM
Attachments: E4084.01 - Geotechnical Assessment - 4129 Island Highway South, Oyster Bay, SRD - 2025-04-04 - eSealJB.pdf
image001.png

Hi Dodie,
There is no application fee for a building permit, the permit costs are based on construction value. For modulars, I use the foundation value plus ½ value of the modular. The fee is $50 + $6.50 per thousand.

Jennifer Barber, RBO
Senior Building Official

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6713 | C: 250-203-3625
E: jbarber@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓ɨdax̌ people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'hâ€™, Klahoose, Kâ€™Ã³moks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tlaâ€™amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

SRD.ca | Facebook | Instagram | YouTube

-

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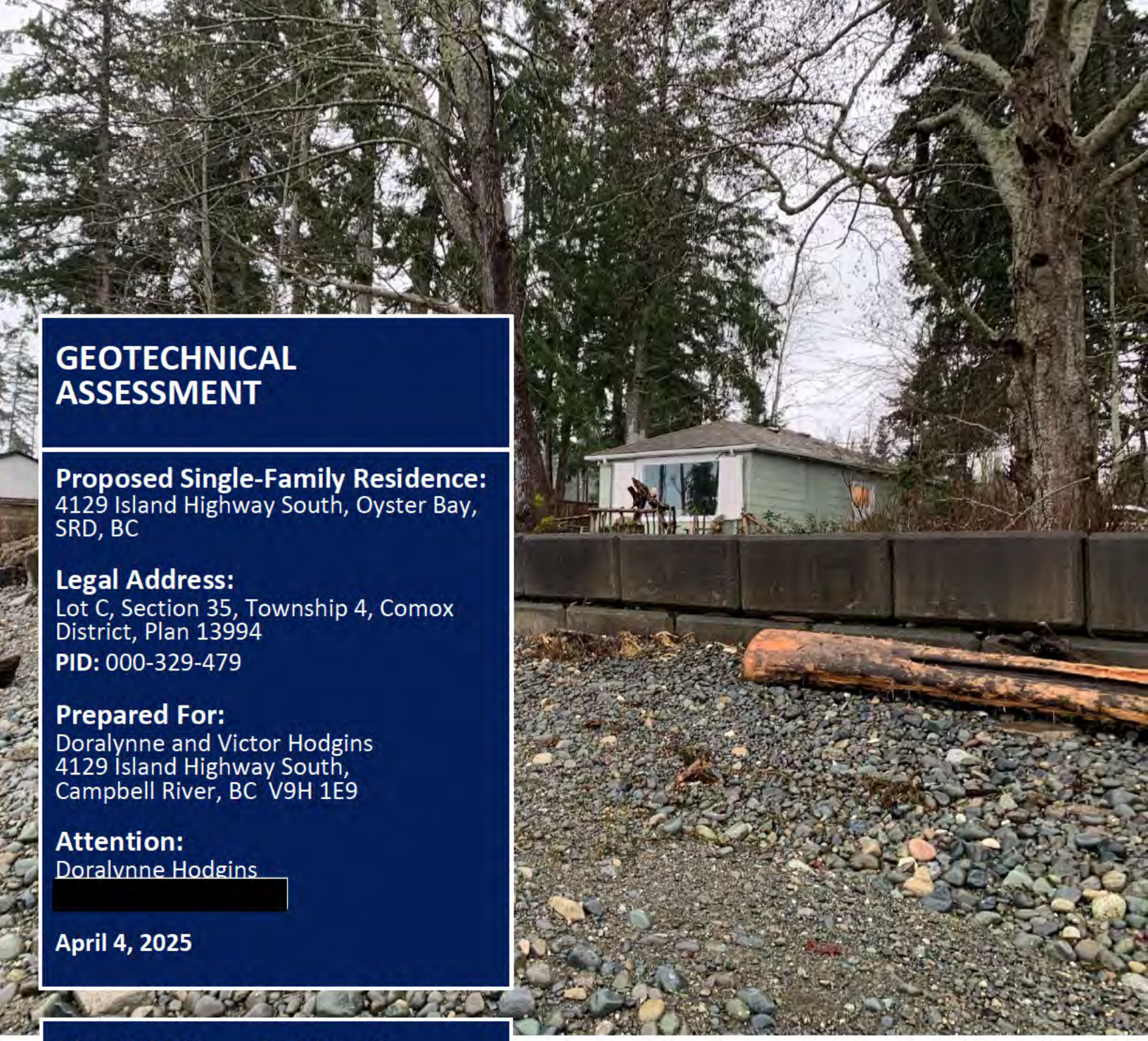
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Sincerely,
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Lewkowich Engineering Associates Ltd.
2351B Rosewall Crescent, Courtenay, BC V9N 8R9
250-334-0384



GEOTECHNICAL ASSESSMENT

Proposed Single-Family Residence:
4129 Island Highway South, Oyster Bay, SRD, BC

Legal Address:
Lot C, Section 35, Township 4, Comox District, Plan 13994
PID: 000-329-479

Prepared For:
Doralynne and Victor Hodgins
4129 Island Highway South,
Campbell River, BC V9H 1E9

Attention:
Doralynne Hodgins
[redacted]

April 4, 2025

File: E4084.01 Revision: 00

Prepared By:
Joe Brunelle, P.Eng.

Reviewed By:
Louis Chapdelaine, P.Geo.

Lewkowich Engineering Associates Ltd.

Lewkowich Engineering Associates Ltd.
2351B Rosewall Crescent
Courtenay, BC V9N 8R9
250-334-0384 (Office)
250-334-9601 (Fax)
www.lewkowich.com

Permit to Practice Number: 1001802

DISCLAIMER, ACKNOWLEDGMENTS, AND LIMITATIONS

1. Lewkowich Engineering Associates Ltd. (LEA) acknowledges that this report, from this point forward referred to as "the Report," may be used by the Strathcona Regional District (SRD) as a precondition to the issuance of a development and/or building permit and that this Report and any conditions contained in the Report may be included in a restrictive covenant under Section 56 of the *Community Charter* or like statute and registered to the title of the subject property at the discretion of the SRD.
2. We have not acted for or as an agent of the SRD in the preparation of this Report.
3. This Report has been prepared in accordance with standard geotechnical engineering practice solely for and at the expense of Doralynne and Victor Hodgins.
4. The conclusions and recommendations submitted in this Report are based upon information from relevant publications, a visual site assessment of the subject property, observed and inferred subsurface conditions, current construction techniques, and generally accepted engineering practices. No other warranty, expressed or implied, is made. If unanticipated conditions become known during construction or other information pertinent to the structure(s) becomes available, the recommendations may be altered or modified in writing by the undersigned.
5. The conclusions and recommendations of this Report are current as of the date of this Report and speak to the condition of the subject property. If there are any circumstances, such as a change in elevation, topography, or gradients within the subject property or properties in proximity to the subject lot, the comments and recommendations of this Report become void, and will require re-evaluation by the undersigned.
6. This Report does not provide environmental, biological, or archaeological assessments of the site.
7. Future construction shall be carried out within the requirements and recommendations of the Environmental Consultant (if applicable), any defined jurisdictional bylaws, or any existing restrictive covenants, whichever is more stringent. Any environmental and/or jurisdictional limitations may supersede the recommendations in this Report.
8. This Report was authored, to the best of our knowledge at the time of issuance, with considerations for local requirements specific to the SRD and their standards for the preparation of such reports, the 2024 British Columbia Building Code (BCBC), and current engineering standards. Updates to municipal bylaws, policies, or requirements of the SRD, and updates to the BCBC or professional practice guidelines may impact the validity of this Report.
9. This Report has been prepared by Joe Brunelle, P.Eng., and reviewed by Louis Chapdelaine, P.Geo. Brunelle and Chapdelaine are adequately experienced and are members in good standing with the Engineers and Geoscientists of British Columbia.

EXECUTIVE SUMMARY

1. The following is a brief synopsis of the property, assessment methods, and findings presented in the Report. The reader must read the Report in its entirety; the reader shall not rely solely on the information provided in this summary.
2. The subject property, 4129 Island Highway South, Oyster Bay, BC, from this point forward referred to as "the Property," is located on the east coast of Vancouver Island within the jurisdictional boundaries of the SRD. At the time of this Report, the proposed development for the Property consists of a re-development of a single-family residence.
3. A site-specific assessment was conducted to identify any potential geotechnical hazards for the proposed development. Our assessment determined that the Property is subject to ocean flooding hazard that exists along the Strait of Georgia.
4. The Report recommends (i.e., is in support of) a minimum coastal Flood Construction Level of 5.25m CGVD2013 and a horizontal floodplain setback of 15.0m landward from the estimated Year 2100 Natural Boundary, where the Year 2100 Natural Boundary is defined as the 3.4m CGVD2013 contour line.
5. The findings confirm the land is considered safe for the use intended, provided the recommendations in this Report are followed.

•••

List of Abbreviations and Acronyms Used in the Report

Abbreviation	Description
AEP	Annual Exceedance Probability
ASTM	American Society for Testing and Materials
BCBC	British Columbia Building Code
BGS	Below Ground Surface
CD	Chart Datum
CGVD2013	Canadian Geodetic Vertical Datum of 2013
CGVD28	Canadian Geodetic Vertical Datum of 1928
CHS	Canadian Hydrographic Service
CoCR	City of Campbell River
EGBC	Engineers and Geoscientists British Columbia
FB	Freeboard
FCL	Flood Construction Level
H	Horizontal
JEA	J.E. Anderson and Associates
LEA	Lewkowich Engineering Associates Ltd.
NB	Natural Boundary
PNB	Present Natural Boundary
SLR	Sea Level Rise
SLS	Service Limit State
SRD	Strathcona Regional District
ULS	Ultimate Limit State
V	Vertical

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1.0 INTRODUCTION

1.1 General

a. As requested, LEA has carried out a geotechnical assessment with respect to the proposed single-family residential development. This Report provides a summary of our findings and recommendations.

1.2 Background

a. We understand that the proposed development options for the Property consists of either:
   i. Option 1 – the removal of the existing residence and construction of a new modular residence; or
   ii. Option 2 – the construction of an addition to the existing single-family residence with renovation;

   See attached hand drawn sketches showing the proposed development concept alternatives.

b. The structures will preferably utilize conventional construction methods including cast-in-place concrete foundations and wood-framed superstructures.

c. We understand that the SRD requires a geotechnical assessment for permitting applications.

d. This Report is only applicable to the proposed development.

1.3 Assessment Methodology

a. Site reconnaissance was performed on December 17, 2024 and February 25, 2025, to visually assess conditions throughout the Property and along the coastal foreshore.

b. This assessment included a desktop review of relevant background information, including applicable SRD bylaws, provided development plans, registered covenants on title, aerial photographs, and published topography, geology, and floodplain mapping. A complete list of references is found at the end of this Report.

c. This assessment was prepared with consideration of EGBC professional practice guidelines – *Legislated Flood Assessments in a Changing Climate in BC*, including consideration of the implications of climate change.[1] Please refer to the attached *Flood Assurance Statement* for additional information. Also, this assessment was prepared with consideration for provincial *Flood Hazard Area Land Use Management Guidelines*[2] and SRD *Floodplain Management Bylaw No. 2782, 2005*.[3]

2.0 COVENANT REVIEW

a. As part of our assessment, we have performed a title search for the Property. At the time of this Report, there were no covenants registered to the title of the Property.

•••

3.0 SITE CONDITIONS

3.1 Physical Setting

a. The Property is in the community of Oyster Bay and within the jurisdiction of the SRD.

b. The Property is located on the northeast side of and accessed by Island Highway South which runs in a northwest-southeast orientation.

c. The Property is zoned as Country Residential Four (CR-4).[4,5] It is surrounded by similar CR-4 properties. *Figure 3.1* below shows the Property location with 2023 air photo.



Figure 3.1: Property location (from SRD *uMapIt*[5]).

3.2 Terrain and Features

a. The 0.12-hectare (0.29-acre)[5] Property is currently developed with a one [1]-storey single-family residence which was built in 1949.[6] A wood deck extends off the northeast oceanside of the residence.

b. Air photos from the CoCR *Air Photo History Map*[7] were reviewed and show the Property and adjacent shore mostly unchanged from 2002 to present day; the 2002 air photo was the earliest air photo in the collection to capture the Oyster Bay area.

c. The terrain of the Property showed a gentle sloping between 3° (23H:1V) to 8° (7H:1V) from Island Highway South to the shoreline at the northeast property boundary.

d. Vegetation within the Property consisted of mature coniferous and deciduous trees, grass lawn, and some ornamental bushes.

3.3 Adjacent Foreshore Conditions

a. The Property meets the shore of the Strait of Georgia at the northeast.

b. Developed residential oceanfront properties along this stretch of beach have employed shoreline protection structures (e.g. rock revetments or seawalls) to resist marine erosion. As the shoreline protection structures were likely built at or inland of the PNB, the PNB is estimated as the toe of the shoreline protection structures.

c. A segmental lock block seawall, about 1.2m tall has been installed at the boundary with the Strait of Georgia across the width of the Property. The lock block wall abuts rock revetments at both the northwest and southeast ends of its alignment.

d. The beach consists of a natural cobble-pebble beach shoreline. The beach was sloped at 7° (8H:1V) for approximately 15m H from the toe of the lock block seawall, then flattened to 2.2° (26H:1V) for more than 45m H; see *Photo 3.3* below showing shoreline conditions.



Photo 3.3: Northeast-facing beach conditions northeast of the Property, looking northwest, as observed December 17, 2024.

3.4 Regional Geology and Aquifers

a. Surficial geology mapping for the area is classified as Capilano Sediments consisting of sand, pebbly sand, gravel, sandy gravel in spits, bars, etc. marine (including glacio-marine) deposits up to 9m thick, possibly underlain by clay.[8]

b. Review of groundwater wells and aquifers in the *BC Water Resources Atlas*[9] indicates that Aquifer 411 and Aquifer 847 have been mapped to the area. Aquifer 847, named *Quinsam to Stories Beach*, is a sand and gravel layer associated with the Cowichan Head Formation. It is identified as a confined aquifer. Aquifer 411 is attributed to the fractured sedimentary bedrock. Wells have been mapped to the area though much of the older data and location reliability is fair to poor. The wells generally agree with the surficial mapping – sand and gravel deposits were found at surface, underlain by stoney clay, till/ hardpan, and/or sedimentary bedrock.

c. Bedrock geology for the area is classified as Upper Cretaceous Nanaimo Group Undivided Sedimentary Rocks.[10] The strata of the Nanaimo Group formation in the Comox/Georgia basin consists of alternating succession of shales, sandstones, conglomerates, and some coal.[11] Surficial geology mapping indicated bedrock outcrops along the shoreline in both northwest and southeast directions from the Property.[8] Based on well records in the area, depth to bedrock at the Property is estimated to be 5m to 20m BGS.

3.5 Soil Conditions

a. A shallow (1.0m depth BGS) test hole was hand dug adjacent to the north corner of the existing wood deck to investigate the near surface.

b. In general, the near surface soil conditions as observed in the Property are consistent with published surficial geology mapping.

c. Soil encountered in the hand dug hole consisted of:

   i. 0.0m to 0.4m: SAND, and ORGANICS (grass, rootlets), some silt, soft, dark brown, damp – sod layer; underlain by,

   ii. 0.4m to 1.0m: SAND, compact, grey, damp.

   The hole was terminated at the length of the shovel.

d. We expect these upper coarse-grained soils to be underlain by dense, stoney clay, glacial till, and/or sedimentary bedrock at depth.

e. Based on existing site grades we also expect there may be localized areas of fill or disturbed soil. We do not expect the presence of fill materials to have a detrimental impact on the proposed development, and any encountered fill or disturbed soil can be managed by field recommendations as part of the geotechnical assurance services during construction.

3.6 Groundwater Conditions

a. The hand dug hole did not encounter groundwater and no ponding water was seen at surface.

b. Groundwater levels are expected to be tidally influenced. Saltwater intrusion may be encountered below the freshwater unit. Groundwater levels can be expected to fluctuate with cycles of precipitation. Groundwater conditions at other times and locations can differ from those observed at the time of our assessment.

c. If groundwater flows or conditions are different than those encountered during the field investigations, additional measures may be required during construction. If unanticipated conditions are encountered contact the Geotechnical Engineer for review.

4.0 FLOOD HAZARD REVIEW

4.1 Vertical Datum

a. There are currently two vertical datums being used in Canada, the older CGVD28 and the newer CGVD2013. The FCL and elevations presented in this Report are in terms of CGVD2013, unless otherwise stated.

b. Conversion between CGVD28 and CGVD2013 was completed for this specific site using the online GPS·H calculator by Natural Resources Canada.[12] If needed, the conversion is calculated as:

$$z \text{ CGVD28} = z \text{ CGVD2013} - dH = z \text{ CGVD2013} - 0.125\text{m}$$

where dH is a localized offset in metres.

c. The building designer and construction contractor should be aware of the reference vertical datum to ensure the correct FCL is being used for the project.

4.2 Watercourses and Shore Characteristics

a. LEA understands that the proposed single-family residence is within 100m horizontal from the PNB of the Strait of Georgia (i.e. the sea), which triggers the application of the SRD *Floodplain Management Bylaw*.[3]

b. Mayfly Creek passes through a corrugated steel pipe culvert under the Island Highway approximately 240m to the southeast, then the creek turns northwestward at the beach and runs parallel to the shoreline for 50m where it drains to the Strait of Georgia. The orientation of the creek parallel to the shore with buildup of material on its south side is evidence of predominant wave approach from the east/ southeast and the northwestward littoral drift. Mayfly Creek originates from streams that feed the Mayfly Creek wetlands to the southwest. Hydrometric data is currently not available for Mayfly Creek.[13] However, the oceanic flood hazard is greater than the flood hazard of Mayfly Creek and has a higher FCL than the FCL for Mayfly Creek. Therefore, the flood hazard from Mayfly Creek is addressed by addressing the ocean flood

level.

c. Farther south (~1km from Property) a spit and lagoon has formed at Oyster Bay Shoreline Park. Its history dates back to the 1930s and 1940s when a relief then logging camp was set up to employ people during the depression. A causeway was built and at the same time a breakwater was built of old dismantled ships, then later with rock to protect a log booming operation from the predominant wave attack from the southeast. Sediment has progressively accumulated at Oyster Bay Shoreline Park since the log booming operation was built. This recent accreting land formation continues to protect Oyster Bay from the strongest winds and waves from the southeast as evidence by the observed calm waters and shallow bathymetry of the bay.

4.3 Bylaw Requirements

a. Upon review of SRD *Floodplain Management Bylaw No. 2782, 2005*,[3] we confirm the following applicable items:

   i. *"301 Floodplain Designation 1) The following land is designated as floodplain: … b) Land lower than the flood construction levels specified in Section 302; c) Land within the floodplain setbacks specified in Section 303.*

   ii. *302 Flood Construction Levels … 2) Where Floodplain Mapping is NOT available, the following elevations are specified as flood construction levels: ... f) 1.5 metres above the natural boundary of any other watercourse; g) 1.5 metres above the natural boundary of the sea...*

   iii. *303 Floodplain Setbacks 1) The following distances are specified as floodplain setbacks: … c) 15.0 metres from the natural boundary of any other watercourse; d) 15.0 metres from the natural boundary of the sea…"*

b. Additionally, the SRD *Floodplain Management Bylaw*[3] prescribes construction requirements and provides for site specific exemptions including additions that are less than 25% of the ground floor area but no closer to the water than existing.

5.0 COASTAL FLOOD HAZARD ANALYSIS

5.1 General

a. Provincial *Flood Hazard Area Land Use Guidelines*[2] recommend two methods, the Combined Method or the Probabilistic Method, to determine a coastal FCL that incorporates the issue of sea level rise and other mitigating factors. The Probabilistic Method was used for this site-specific assessment, where the water level along the shoreline is based on a probabilistic analysis of high tide and storm surge. A target 0.5% AEP (i.e., 200-year return period) coastal storm event was adopted for this assessment following the provincial

guidelines.[2]

b. The recommended FCL was selected based on the following LEA site-specific analysis.

c. A search at the time of writing this Report did not find regional coastal floodplain mapping that covers this area.

5.2 Tides

a. The Property is located nearest the tidal station at Mitlenatch (Station No. 07895) – on Mitlenatch Island. A summary of current published[14] tide levels is presented in *Table 5.2* below.

Table 5.2: Summary of Mitlenatch tide levels, Station No. 07895.

Tidal Condition	Tidal Water Level (CD)
Higher High Water Large Tide (HHWLT)	5.2 m
Higher High Water Mean Tide (HHWMT)	4.60 m
High Water Level (HWL)	4.33 m
Mean Water Level (MWL)	3.2 m
Low Water Level (LWL)	2.14 m
Lower Low Water Mean Tide (LLWMT)	1.27 m
Lower Low Water Large Tide (LLWLT)	0.04 m

b. The tidal levels published by Fisheries and Oceans Canada are referenced from a local low-water surface or a low-water datum called Chart Datum (CD). Subtracting the Mean Water Level from the CD will approximately convert the tidal levels to CGVD28. This conversion is generally accepted to be within the tolerance of error for FCL determination.

c. The design tidal elevation is calculated as follows:

HHWLT 5.2m CD – MWL 3.2m CD

= HHWLT 2.0m CGVD28

= HHWLT 2.13m CGVD2013

5.3 Sea Level Rise

a. Information prepared by the provincial government in 2011[15,16] regarding policy for coastal floodplain mapping assumes a 1.0m rise in sea level over a 100-year span from the Year 2000 to 2100, see *Figure 5.3* below.

•••

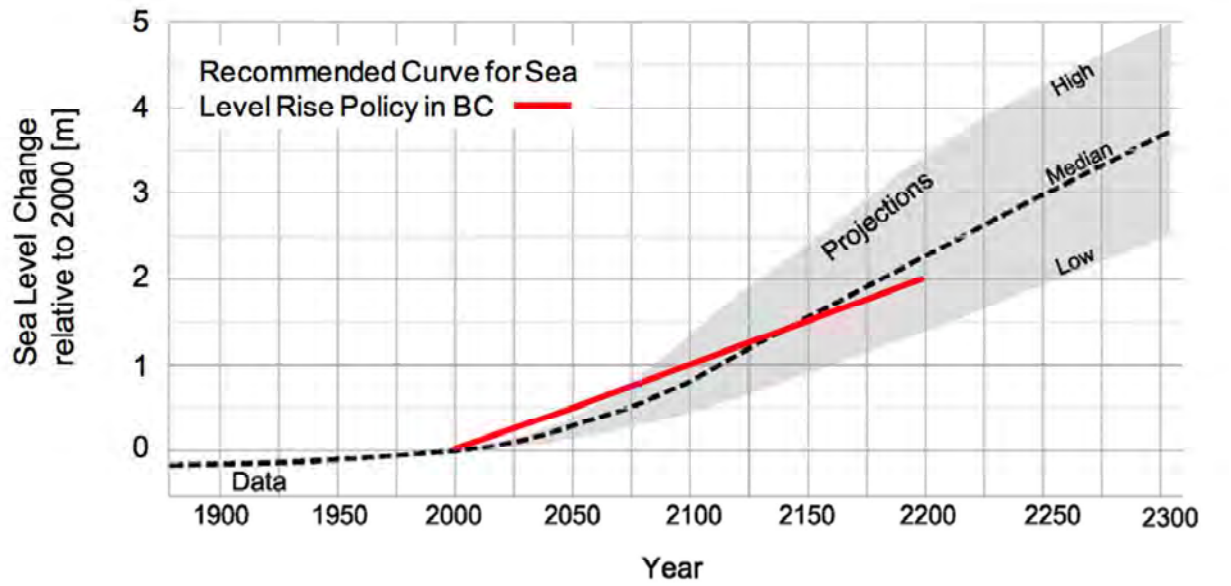


Figure 5.3: Recommended SLR curve for planning and design in BC.

b. In accordance with current guidelines 1.0 cm/year of SLR to the Year 2100 was included in our assessment, for a total SLR of 0.75m.

c. The assumed amount of SLR was based on information available at the time of their study and will be revaluated in the future as more information becomes available. Forecasting this far into the future carries significant uncertainties. Monitoring changes of SLR is beyond the scope of this Report. We expect local authorities to remain informed in order to adjust their flood management plans/guidelines accordingly.

5.4 Regional Adjustment – Isostatic Rebound

a. Future sea level is also affected by vertical land movement due to changes in the regional uplift or subsidence of the land surface (i.e., isotropic rebound, tectonic shifting, etc.). Areas where the land elevation is increasing (uplift/rebound) should decrease the allowance for SLR, while areas where the land elevation is decreasing (subsidence) should increase the allowance for SLR. Some refer to the combined effects of SLR and RA as Relative Sea Level Rise (RSLR).

b. Based on current information, this area of eastern Vancouver Island is rebounding at a rate of 3.0mm/year, as taken from an average of the Little River Tide Gauge Station No. 07993 and the Campbell River Tide Gauge Station No. 08074.[15,16] Therefore, the land is expected to rebound by 0.27m to the Year 2100. A rebound value of -0.27m was included in our assessment.

5.5 Storm Surge

a. Sea levels along the BC coast are not only affected by astronomical tide cycles, but also by storms. Storms may affect water levels due to changes in atmospheric pressure, strong winds acting on the water surface, and changes in ocean currents or temperature. The combined effect of all these factors is termed storm

surge (SS).

b. Storm surge can be estimated by an extreme value analysis of the difference between measured water level and predicted tide level. In absence of this information, provincial guidelines[2] provide suggested storm surge values which can be safely used for FCL determination. Based on a 200-year designated storm, the suggested design storm surge for this area of Vancouver Island is 1.25m.

c. However, not all storms occur during an HHWLT tide (king tide). The intent of the Probabilistic Method is to estimate the probability of a large storm occurring during an HHWLT tide. The RDN Coastal Floodplain Mapping Final Report[17] estimates the probability of a large storm occurring during an HHWLT tide is about 1 in 20 (5%) (based on provincial guidelines and preliminary analysis by Cascadia Coastal Research Ltd.). Therefore, the designated storm can be reduced to a more frequent, less intense, 10-year event (i.e., 200-year x 5%) when calculating an FCL that coincides with an HHWLT tide. The report provides a storm surge value of 0.92m for the coincident 10-year storm event.

5.6 Wave Effect

a. Breaking waves during the design storm event must also be considered, as breaking waves may further increase the depth of water along the shoreline as well as increase the risk of runup and/or overtopping leading to flooding.

b. Wave effect is site specific and dependent on local wind conditions, bathymetry, the presence of shoreline structures (e.g., natural banks or slopes, revetments, dikes, seawalls, etc.), as well as water levels at the time of the designated storm, which all contribute to the estimated wave runup.

c. The Property consists of a gently sloping foreshore beach with a shoreline protected from erosion by a lock block seawall structure, therefore wave runup was estimated using 1D calculation methods described in the European Overtopping Manual.[18] By applying these methods, wave runup is calculated in terms of a 2% exceedance value ($R_{u2\%}$).

d. Water levels along the shoreline were taken as the sum of the coincident 10-year storm surge, SLR, and regional rebound.

e. Deep water wave heights were based on 31 years (1992 to 2022) of wave data collected from the Fisheries and Oceans Canada, Halibut Bank buoy, located in the Strait of Georgia. The data was first analyzed to discount any data entries flagged as erroneous. Maximum wave heights for each year were plotted, then extrapolated to the designated storm event (i.e., 10-year coincident storm event).

f. Inland and foreshore slopes were determined for this specific Property based on available contour information, topographic surveys, and on-site measurements.

g. The wave runup analysis considered influence factors for surface roughness and oblique wave attack. Other influence factors were conservatively ignored.

h. A summary of design input values and estimated wave runup are presented in *Table 5.6* below.

Table 5.6: Summary of Estimated Wave Runup.

Significant Wave Height	Peak Wave Period	Still Water Level	Average Foreshore Slope	Slope of Structure	Wave Runup ($R_{u2\%}$)
2.87m	6.81 s	0.61m	16.5H:1V	89°	1.12m

5.7 Freeboard

a. A nominal FB value is typically added when calculating an FCL. The FB value accounts for uncertainties associated with value estimations used.

b. Provincial guidelines recommend a minimum freeboard value of 0.60m for the Probabilistic Method.[2]

5.8 Probabilistic Method FCL

a. The variables discussed in *Sections 5.2 to 5.7* are added together to determine an adequate ocean FCL, presented in the following *Table 5.8*.

Table 5.8: Ocean FCL determination using the "Probabilistic Method".

FCL Component	Description	Value (m)
HHWLT	Higher High Water Large Tide (CGVD2013) *19 year HHW average defined by CHS	2.13
SLR	Sea Level Rise (to year 2100)	0.75
RA	Regional Adjustment (to year 2100) *negative value indicates uplift is occurring	-0.27
SS	Storm Surge (10-year storm)	0.92
WE	Wave Effect (10-year storm)	1.12
FB	Freeboard	0.60
FCL	**Calculated CGVD2013 FCL**	**5.25**

6.0 FLOOD HAZARD RECOMMENDATIONS

6.1 Coastal FCL

a. Based on our review, as detailed in *Section 5.0* above, LEA recommends using the site-specific coastal flood level of 5.25m CGVD2013 as the minimum FCL for the proposed development. This minimum FCL elevation is typically defined as the top of the finished concrete slab-on-grade or the underside of wooden floor joists of flooring systems that are to be kept dry.

b. To achieve the FCL, we recommend structural methods, such as increasing the height of the foundation walls above suitable bearing grade.

c. Building materials that are resistant to damage by flood water should be used up to the FCL, at a minimum.

6.2 Coastal Setback

a. Floodplain setbacks are primarily established to keep development away from areas of potential erosion and to avoid restricting the floodway. They also help to protect structures from debris tossed on shore during storm events and to reduce weathering effects from salt spray.

b. Provincial guidelines[2] state that "*The building setback should be at least the greater of:*

   i. 15 m from the future estimated Natural Boundary of the sea at Year 2100, or

   ii. landward of the location where the natural ground elevation contour is equivalent to the Year 2100 FCL".

c. We understand that the future estimated Year 2100 NB would be the PNB elevation plus RSLR (SLR ± RA) to the Year 2100. The PNB elevation at the shore under consideration was measured at 2.92m CGVD2013 based on the attached JEA survey. The resulting Year 2100 NB is calculated here:

   2.92m CGVD2013 PNB + 0.75m SLR – 0.27m RA

   = 3.4m CGVD2013 Year 2100 NB

   This Year 2100 NB elevation contour appears to meet the existing lock block shoreline protection structures and/or the berm terrain immediately landward of the existing shoreline protection structures northeast of the Property and should be confirmed during construction.

d. The topographic elevation high that currently exists on the Property is at 5.1m CGVD2013 and the location where the Year 2100 FCL elevation of 5.25m CGVD2013 meets continuous ground elevation just beyond the Property to the southwest – on the northeast bank of the Island Highway as can be seen on the JEA survey. The 5.25m CGVD2013 FCL elevation contour is the more restrictive setback requirement; it is clear that the FCL setback criteria cannot be achieved within the Property considering the natural ground that currently exists. Following the SRD *Floodplain Management Bylaw,*[3] any proposed building site at the Property is within the designated floodplain and a site-specific floodplain setback relaxation or exemption will be required.

e. LEA recommends a reduced coastal setback defined as 15m from the estimated Year 2100 NB which is defined as the 3.4m CGVD2013 topographic contour northeast of the Property, as well as the recommendations contained in this Report; see *Figure 6.2* showing setback marked on the JEA survey.

f. Site specific relaxations or exemptions require the Property owner to acknowledge and accept that no Disaster Financial Assistance Funding is available for the building or its contents. No structures built within a floodplain can receive this kind of funding.

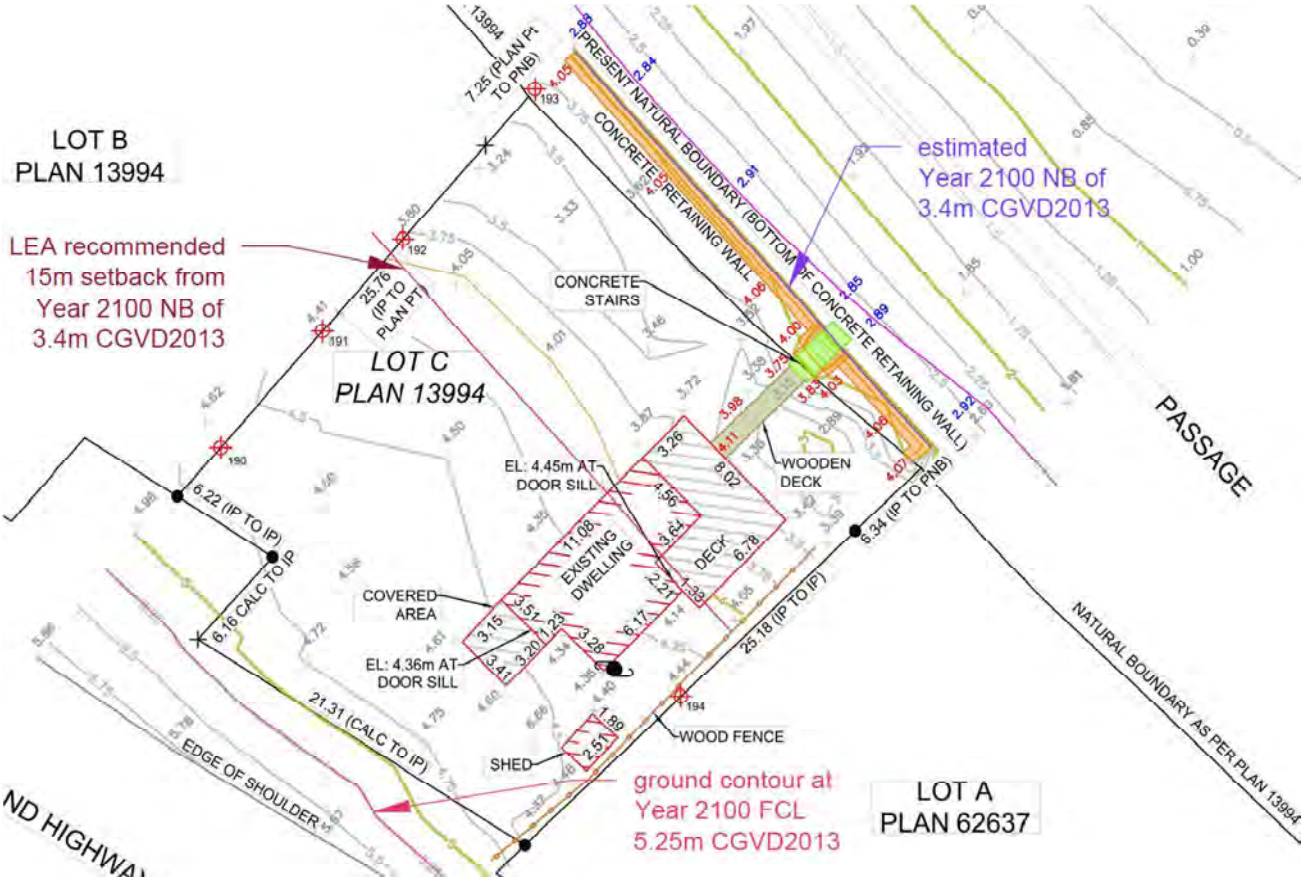


Figure 6.2: LEA recommended setback in plan, marked on JEA survey.

6.3 Floodwater and Inundation

a. The recommended coastal FCL and setback applies to any Habitable Area; defined as any room or space within a building or structure which can be used for human occupancy, commercial sales, or the storage of goods, possessions, or equipment (including furnaces) which would be subject to damage if flooded.

b. The FCL establishes the minimum elevation of the underside of a wooden floor system or top of concrete slab for any Habitable Area. During construction, all footing and floor elevations shall be confirmed by qualified survey personnel to ensure the finished floor grade is at or above the recommended minimum FCL geodetic elevation.

c. Provided any construction within the Property satisfies the minimum recommended FCL, we do not anticipate any damage to structures as a result of floodwater. However, any areas constructed below the recommended FCL, such as crawlspaces or garages, could be subject to flooding during less than design flood events. Following best construction practices, areas below the FCL should not be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.

6.4 Landfill and Site Grading

a. If structural fill materials are used for foundation support, at the discretion of the SRD, and include structural fill placed above existing site grades, further assessment may be required. Structural fill placed above existing grades may require protective measures from scour, erosion from flood flows, ice, and other debris.

b. We recommend the placement and compaction of any structural fill as described in *Section 8.2* of this Report.

c. Engineered fill should be placed around the foundation walls with a slope no greater than 2H:1V.

d. Perimeter yard areas should be sloped to direct potential flood water away from the proposed residence. Every effort must be made to not direct surface water to neighbouring properties.

6.5 Shoreline Protection

a. Sediment supplied from Mayfly Creek and Oyster River farther to the southeast likely contribute to sediment deposition in this area Oyster Bay.

b. The shoreline within the Property limits is currently defined by an existing lock block seawall structure. We assume the seawall was initially constructed to mitigate marine erosion and to maintain the alignment of the NB.

c. During our field review, the shoreline and seawall were inspected for signs of active erosion or deterioration, and none were observed. We expect the seawall will provide adequate marine erosion protection over the life of the proposed development provided it is maintained. No further shoreline protection measures are required at this time.

d. The existing seawall should be maintained in its current functioning condition. The seawall should not be removed or altered without engineering input.

e. It should be acknowledged that intertidal zones consisting of sand and gravel are typically suspectable to erosion or accretion by wave action and flooding, causing the alignment of the NB to slowly shift over time. Furthermore, SLR will likely expose the shoreline to increased water depths and wave action in the future, that may result in accelerated erosion of the foreshore area and will likely shift the NB inland over time.

f. The vertical nature of the seawall will reflect waves. SLR will expose the seawall to increased wave energy impacts and salt spray. Considering the calculated FCL is above the top of seawall elevation, SLR may gradually expose the seawall to possible overtopping occurrences which could compromise the seawall.

g. Evaluation of the rate and/or extent of potential future erosion along the foreshore area of the Property is beyond the scope of this Report. We recommend the condition of the seawall structure and alignment of

the NB be regularly monitored by the current and future property owners. Any notable scour, inland erosion caused by overtopping waves, or regression of the NB, specifically following a significant storm event, winter season, or otherwise, may jeopardize the integrity of the seawall and would require a reassessment of the foreshore conditions.

7.0 DESIGN PHASE

7.1 Foundation Design and Construction

a. Prior to construction, the new building area should be stripped to remove all unsuitable materials to provide an undisturbed natural subgrade for the footing support.

b. Foundation loads should be supported on natural undisturbed mineral soil or structural fill, approved for use as a bearing stratum by the Geotechnical Engineer, and may be designed using the following values. These values assume a minimum 0.5m footing embedment depth.

   i. For foundations constructed on non-cohesive soils classified as compact to dense naturally deposited inorganic sand or gravel, an SLS bearing pressure of 100 kPa and a ULS bearing pressure of 150 kPa may be used for design purposes.

   ii. For foundations constructed on undisturbed dense glacial till, or a minimum thickness of 0.65m of structural fill as outlined in *Section 8.2* of this Report, an SLS bearing pressure of 150 kPa and a ULS bearing pressure of 225 kPa may be used for design purposes.

c. Exterior footings should be provided with a minimum 0.5m depth of ground cover for frost protection purposes.

d. The Geotechnical Engineer should evaluate subsurface conditions at the time of construction to confirm that soil and/or groundwater conditions do not materially differ to those observed and inferred during the site reconnaissance and that footings are based on appropriate and properly prepared founding material.

7.2 Seismic Criteria

a. Based on the BCBC 2024, Division B, Part 4, Table 4.1.8.4.-B, *Site Classes, S, for Site Designation* X_s, the inferred subsurface conditions would be “Site Class D” (Stiff soil).

b. Please refer to the attached site-specific Seismic Hazard Calculation, from Natural Resources Canada.

•••

8.0 CONSTRUCTION PHASE

8.1 General Excavation – Future Building Sites

a. Prior to construction, all unsuitable materials should be removed to provide a suitable base of support. Unsuitable materials include any non-mineral material such as vegetation, topsoil, peat, fill, or other materials containing organic matter, as well as any soft, loose, or disturbed soils.

b. Prior to placement of concrete footings, any bearing soils that have been softened, loosened, or otherwise disturbed during construction, should be removed or else compacted following our recommendations for structural fill. Compaction will only be feasible if the soil has suitable moisture content and if there is access to heavy compaction equipment. If no structural fill is placed, a smooth-bladed clean up bucket should be used to finish the excavation.

c. Groundwater entering any excavations should be controlled with a perimeter ditch located just outside of the building areas, conveying water away from the excavation.

d. Trench and bulk excavation work should conform to Occupational Health and Safety guidelines. In general, excavations into fills, silt, clay, or sands at depths greater than 1.2m may be subject to sloughing or caving that would be considered hazardous. Excavations deeper than 1.2m should be reviewed in the field by the Geotechnical Engineer. For preliminary design purposes, we expect the near surface soils may be stable at a 3H:4V slope configuration, assuming no seepage. Dewatering should be implemented as needed.

8.2 Structural Fill

a. Where fill is required to raise areas that will support buildings, slabs, or pavements, structural fill should be used. The Geotechnical Engineer should first approve the exposed subgrade in fill areas, to confirm the removal of all unsuitable materials.

b. Structural fill should be inorganic sand and gravel. If structural fill placement is to be carried out in the wet season, material with a fines content limited to 5% passing the 75µm sieve should be used, as such a material will not be overly sensitive to moisture, allowing compaction during rainy periods of weather.

c. Structural fill should be compacted to a minimum of 95% of Modified Proctor maximum dry density (ASTM D1557) in foundation and floor slab areas, as well as in paved roadway and parking areas.

d. Structural fill under foundations, roadways, and pavements should include the zone defined by a plane extending down and outward a minimum 0.5m from the outer edge of the foundation at an angle of 45° from horizontal to ensure adequate subjacent support. This support zone is shown below in *Figure 8.2*.

•••

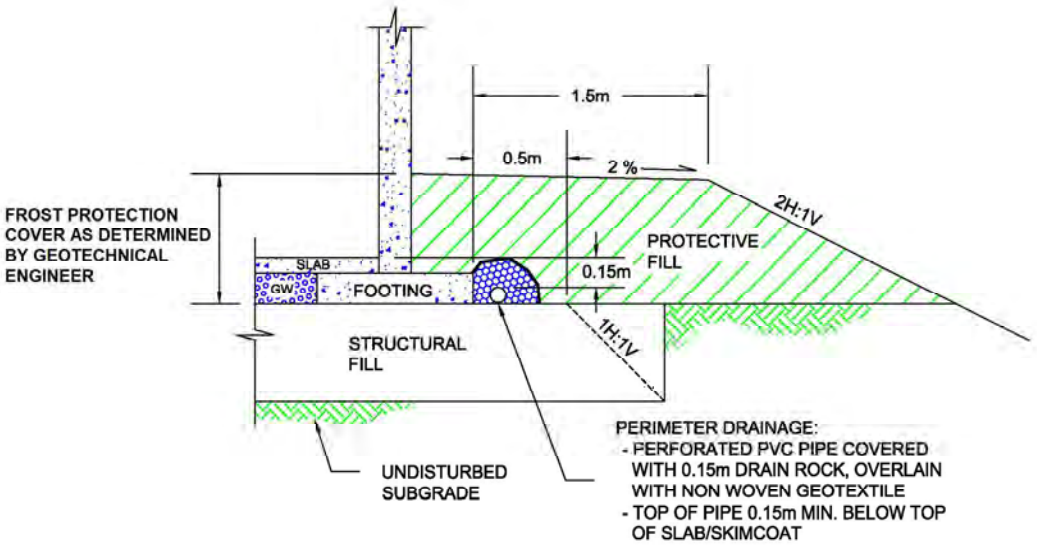


Figure 8.2: Typical section, structural fill.

e. Compaction of fill should include moisture conditioning as needed to bring the soil to the optimum moisture content and compacted using vibratory compaction equipment in lift thicknesses appropriate for the size and type of compaction equipment used.

f. A general guideline for maximum lift thickness is no more than 100mm for light hand equipment such as a "jumping-jack," 200mm for a small roller, and 300mm for a large roller or heavy (>500 kg) vibratory plate compactor or a backhoe mounted hoe-pac or a large excavator mounted hoe-pac, as measured loose.

g. It should be emphasized that the long-term performance of buildings, slabs, and pavements is highly dependent on the correct placement and compaction of underlying structural fills. Consequently, we recommend that structural fill be observed and approved by the Geotechnical Engineer. This would include approval of the proposed fill materials and performing a suitable program of compaction testing during construction.

9.0 CONCLUSIONS

9.1 Local Government Conformance Statement

a. From a geotechnical point of view, and provided the recommendations in this Report are followed, the land is considered safe and suitable for the use intended (defined for the purposes of this Report as a new single-family residence and/or residential addition of conventional design and construction methods). Additionally, for floodplain bylaw exemption, as required by Section 524 of the *Local Government Act*, "the land may be used safely for the use intended" (new single-family residence and/or residential addition). This conclusion considers the probability of a geotechnical failure resulting in property damage of less than:

i. 0.5% AEP coastal flood event, including SLR to the Year 2100;

ii. 2% in 50 years for geotechnical hazards due to seismic events, including slope stability; and

iii. 10% in 50 years for all other geotechnical hazards.

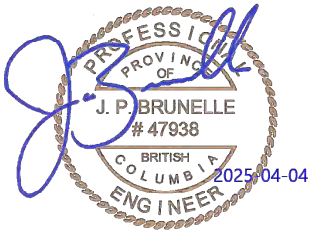
9.2 Geotechnical and Quality Assurance Statement

a. The SRD may request a Geotechnical Engineer to provide construction phase professional assurance services. Geotechnical Assurance services include review of the geotechnical components of the plans and supporting documents, and responsibility for field reviews of these components during construction.

10.0 CLOSURE

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

Respectfully Submitted,
Lewkowich Engineering Associates Ltd.
Permit to Practice Number: 1001802



Joe Brunelle, P.Eng.
Geotechnical Engineer

Reviewed By,



2025-04-04

Louis Chapdelaine, P.Geo.
Project Geoscientist

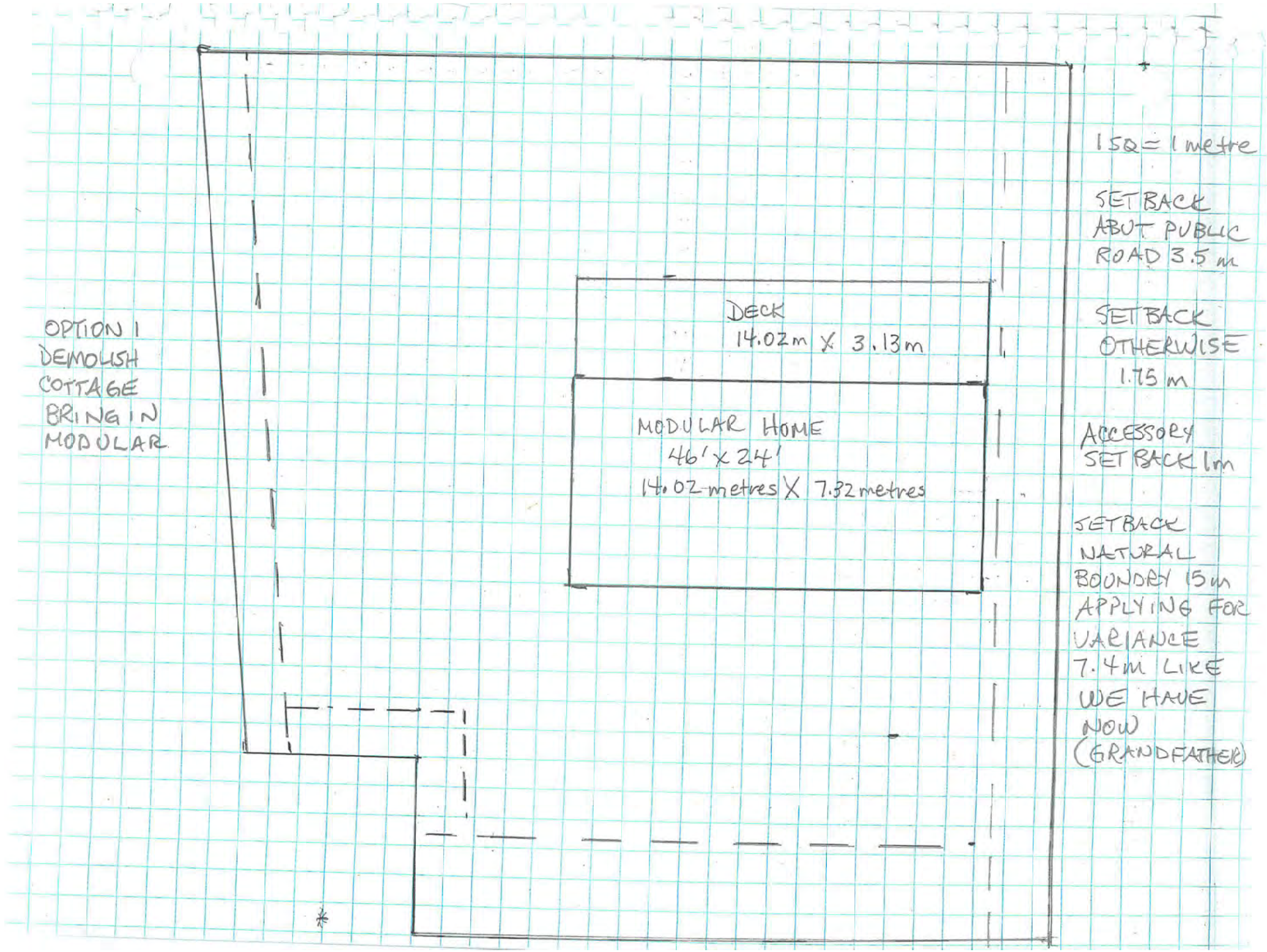
11.0 ATTACHMENTS

1. Client, development sketch titled *Option 1 – Demolish Existing and New Modular Single-Family Residence*.
2. Client, development sketch titled *Option 2 – Renovation with Addition to Existing Single-Family Residence*.
3. JEA, survey titled *Site Plan – Lot C, Section 35, Township 4, Comox District, Plan 13994*, file: 121269, dated February 10, 2025.
4. Natural Resources Canada, 2020 National Building Code of Canada Seismic Hazard Tool, Site: Lat. 49.903°, Lon. 125.167°, accessed March 27, 2025.
5. EGBC, *Flood Assurance Statement*, completed April 4, 2025.[1]

12.0 REFERENCES

1. Engineers and Geoscientists British Columbia, professional practice guidelines titled *Legislated Flood Assessments in a Changing Climate in BC*, version 2.1, updated August 28, 2018.

2. British Columbia Ministry of Water, Land and Air Protection, report titled *Flood Hazard Area Land Use Management Guidelines*, amended by British Columbia Ministry of Forest, Lands, Natural Resource Operations and Rural Development, January 1, 2018.
3. Strathcona Regional District, Bylaw No. 2782, titled *Floodplain Management Bylaw, 2005*, amended June 22, 2017.
4. Strathcona Regional District, Bylaw No. 1404, titled *Campbell River Area Zoning Bylaw, 1991*, amended October 30, 2024.
5. Strathcona Regional District, online map viewer *uMapIt*, 49.903N 125.167W, <https://strathconard.maps.arcgis.com/apps/webappviewer/index.html?id=3f13d8e946bb401d9fb17d90246af4b1>, accessed March 18, 2025.
6. BC Assessment, address *4129 Island Hwy S Campbell River V9H 1E9*, <https://www.bcassessment.ca//Property/Info/QTAwMDBLU01XMw==>, accessed January 21, 2025.
7. City of Campbell River, online map viewer *Airphotos*, 49.903N 125.167W, <https://webmap.campbellriver.ca/Html5Viewer/Index.html?viewer=Airphoto_History_Map.AirphotoHistoryViewer>, accessed March 18, 2025.
8. Fyles JG, Geologic Survey of Canada – Department of Mines and Technical Surveys, map titled *Surficial Geology Oyster River – Comox, Nanaimo, and Sayward Districts, British Columbia*, map 49-1959, sheets 92 F/14, date of mapping 1956-1957.
9. British Columbia Ministry of Environment and Climate Change Strategy, online map viewer *BC Water Resources Atlas*, 49.903N 125.167W, <https://maps.gov.bc.ca/ess/hm/wrbc/>, accessed March 18, 2025.
10. British Columbia Geological Survey, online map viewer *MapPlace 2*, Bedrock Geology, 49.903N 125.167W, <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/british-columbia-geological-survey/mapplace>, accessed March 18, 2025.
11. Bednarski JM, Geological Survey of Canada, titled *Surficial Geology and Pleistocene stratigraphy from Deep Bay to Nanoose Harbour, Vancouver Island, British Columbia*, open file 7681, dated 2015.
12. Natural Resources Canada, webpage titled *GPS·H*, 49.903N 125.167W, <https://webapp.csrs-scrs.nrcan-rncan.gc.ca/geod/tools-outils/gpsh.php?locale=en#>, accessed March 26, 2025.
13. Government of Canada, online map viewer *Real-Time Hydrometric Data Map Search*, <https://wateroffice.ec.gc.ca/map/index_e.html?type=real_time>, accessed March 26, 2025.
14. Government of Canada, website titled *Mitlenatch – 07895*, <https://tides.gc.ca/en/stations/07895>, accessed March 26, 2025.
15. Ausenco Sandwell, prepared for British Columbia Ministry of Environment, 3 reports titled *Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use*, dated January 27, 2011.
16. Kerr Wood Leidal Associates Ltd., prepared for British Columbia Ministry of Forests, Lands and Natural Resource Operations, report titled *Coastal Floodplain Mapping – Guidelines and Specifications*, Final Report, file number 2785.001, dated June 2011.
17. Ebbwater Consulting Inc., prepared for Regional District of Nanaimo, report titled *Sea Level Rise Adaptation Program Coastal Floodplain Mapping,* Final Report, Revision 1, project number P180, dated October 21, 2021.
18. Van der Meer JW, Allsop NWH, Bruce T, De Rouck J, Kortenhaus A, Pullen T, Schüttrumpf H, Troch P, and Zanuttigh B, titled *EurOtop – Manual on wave overtopping of sea defences and related structures. An overtopping manual largely based on European research, but for worldwide application*, <www.overtopping-manual.com>, second edition, final version, dated December 2018.

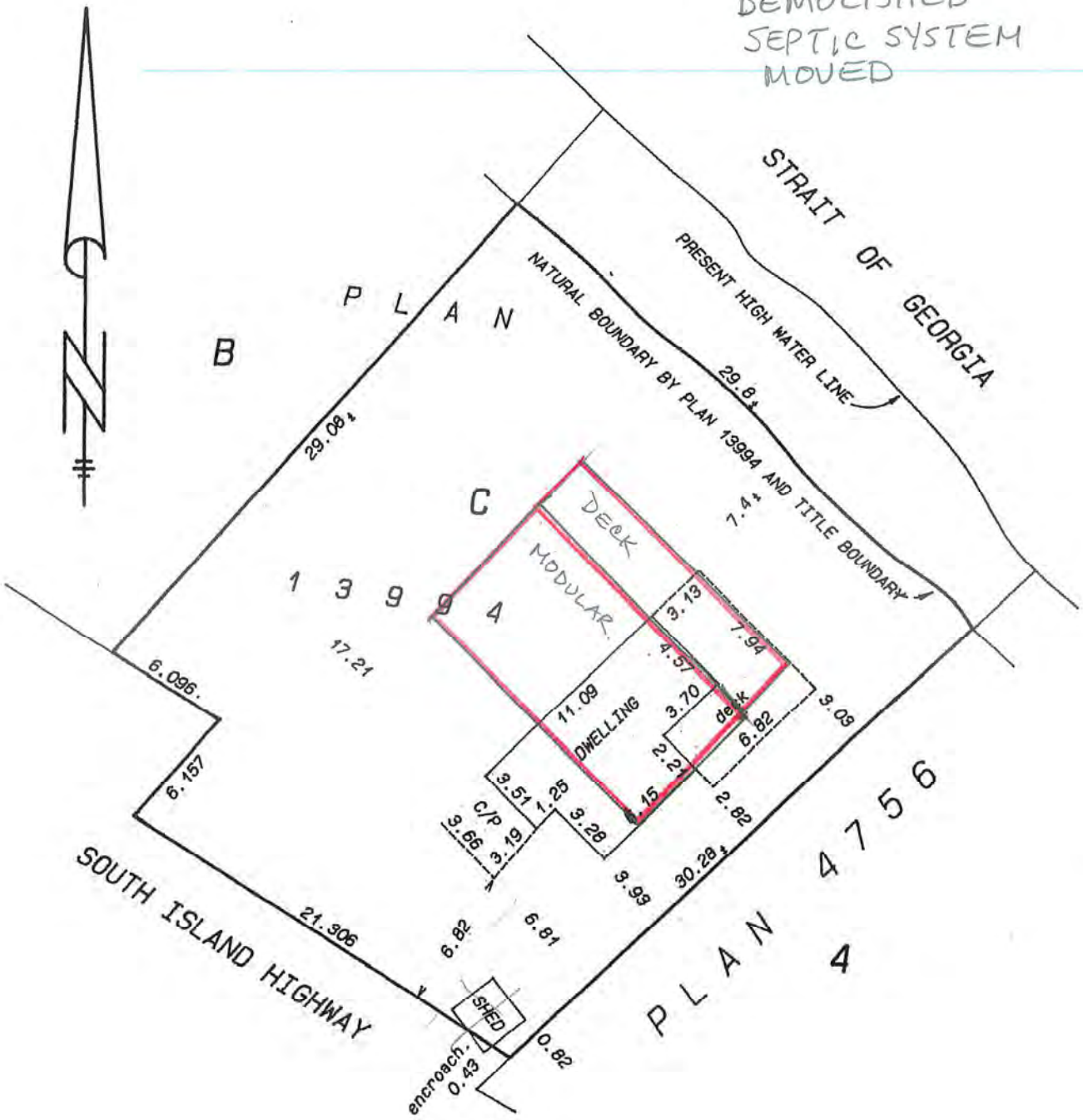

OPTION 1
DEMOLISH
COTTAGE
BRING IN
MODULAR
DECK
14.02m X 3.13m
MODULAR HOME
46' X 24'
14.02 metres X 7.32 metres
1SQ = 1 metre
SETBACK
ABUT PUBLIC
ROAD 3.5 m
SETBACK
OTHERWISE
1.75 m
ACCESSORY
SETBACK 1m
SETBACK
NATURAL
BOUNDRY 15m
APPLYING FOR
VARIANCE
7.4m LIKE
WE HAVE
NOW
(GRANDFATHER)

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

MODULAR HOME
EXISTING COTTAGE
DEMOLISHED
SEPTIC SYSTEM
MOVED



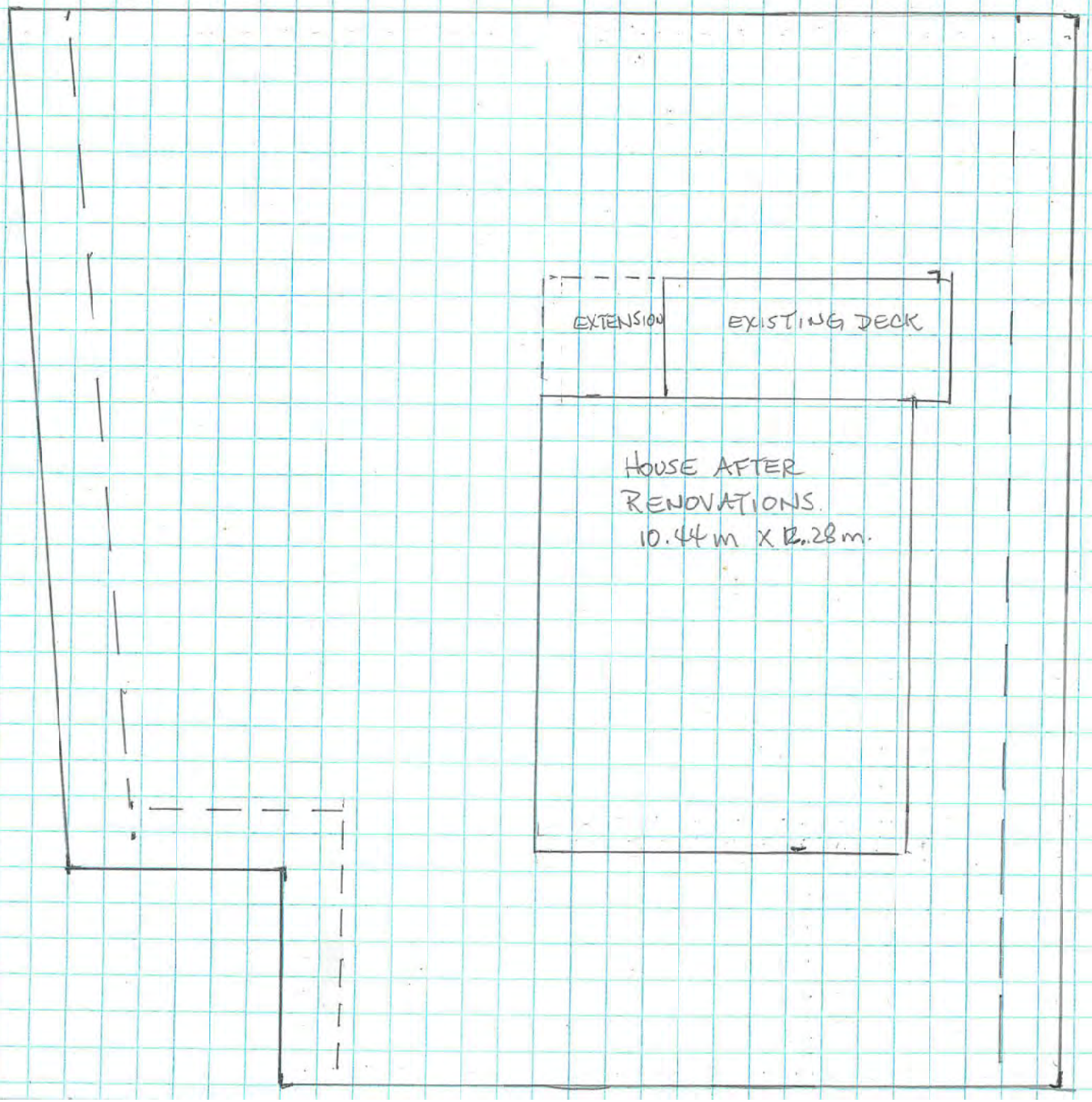
The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.



OPTION 2
RENOVATE
+EXPAND
COTTAGE

1 SQ = 1 metre

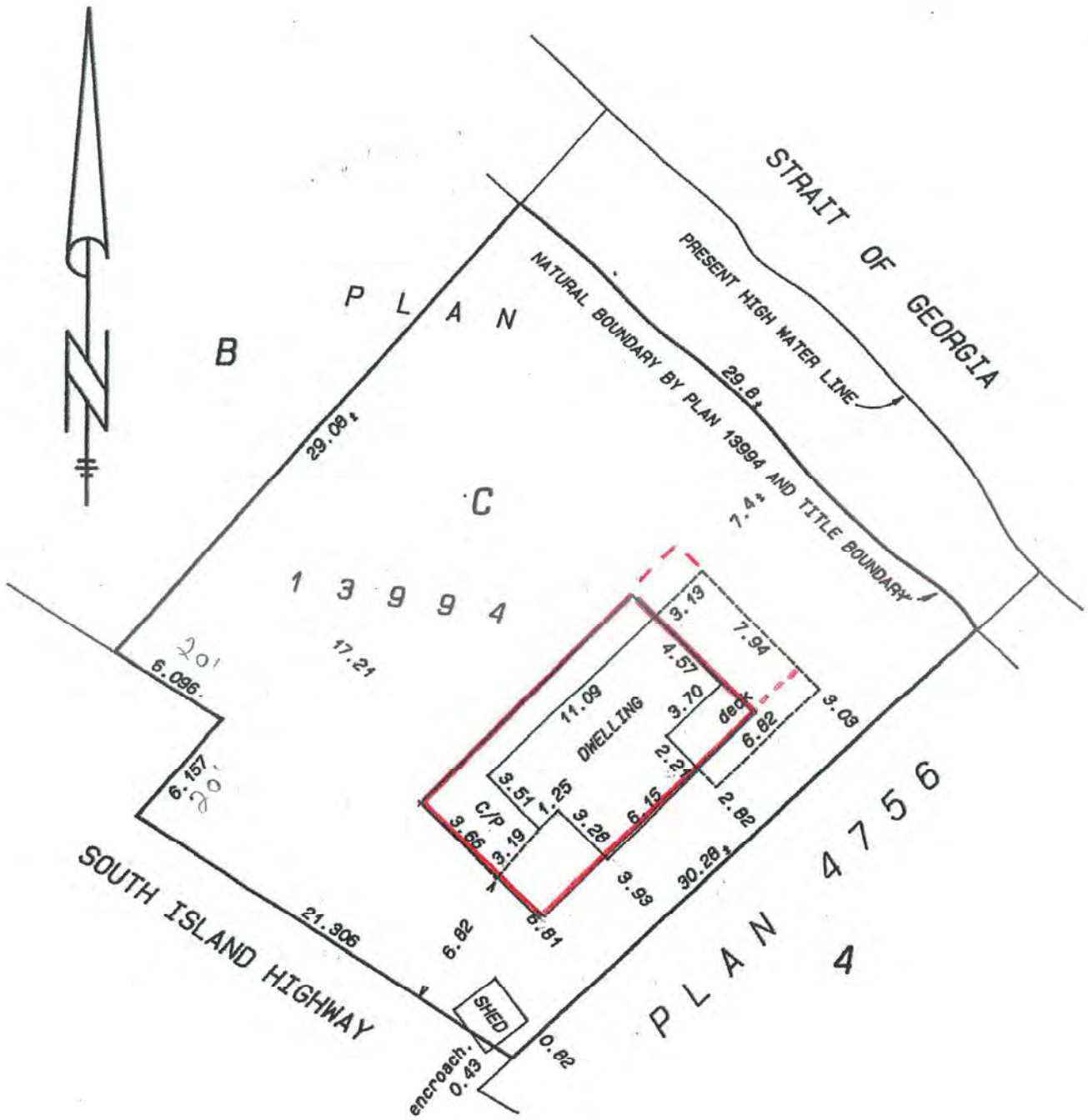
SETBACK PUBLIC
ROAD 3.5 m
OTHERWISE
SETBACK 1.75 m

SETBACK FROM
NATURAL
BOUNDARY 15m
APPLYING FOR
VARIANCE
7.4 metre
SETBACK LIKE
WE ALREADY
HAVE.

SCALE 1:300
All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

HOME RENOVATION



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

THIS DOCUMENT IS NOT VALID UNLESS ORIGINALLY SIGNED AND SEALED.

CERTIFIED CORRECT THIS 31st DAY OF MAY, 1994.

0 5 10 20 30

The intended plot size of this plan is 560mm in width by 432mm in height (C size) when plotted at a scale of 1:300.

This sketch does not constitute a redefinition of the legal boundaries hereon described and is not to be used in any matter which would assume same.

This plan is intended for use as a topographic site plan. It is based on Land Title Office records and ties to surrounding survey evidence and does not represent a boundary survey. Critical lot dimensions, lot areas and building setbacks should be confirmed by a legal cadastral survey.

J.E. Anderson & Associates accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decision made, or actions taken based on this document.

Subject to charges, legal notations, and interests shown on: Title No. CB194110 (P.I.D. 000-329-479)

Distances and elevations are in metres

Elevations are geodetic based on control monument 913426 And Referenced to Vertical Datum CGVD 2013

Elevations are at natural grade unless noted otherwise

N

SITE PLAN

DODIE & VIC HODGINS

LOT C, SECTION 35, TOWNSHIP 4, COMOX DISTRICT PLAN 13994

ADDRESS : 4129 S. ISLAND HIGHWAY, CAMPBELL RIVER

PROJECT SURVEYOR : CS

DRAWN BY : MT/CS	DATE : FEB 10, 2025
OUR FILE : 121269	REVISION : 1st

J.E. ANDERSON & ASSOCIATES
SURVEYORS – ENGINEERS
F-1250 CEDAR STREET,
CAMPBELL RIVER B.C. V9W 2W5
TEL: 250-287-4865
E-MAIL : campbellriver@jeanderson.com
VICTORIA-NANAIMO-PARKSVILLE-CAMPBELL RIVER

R:_Projects\121-269\06\03\DWGs\121269.dwg

LEGEND

- Denotes Standard Iron Post Found
- Denotes Utility Pole
- Denotes Typical Spot Elevation
- Denotes Elevation At Toe Of Wall
- Denotes Elevation At Top Of Wall
- Denotes Stake Set With Corresponding Number (Stakes Additionally Set At All O/P's Found)
- Denotes Unmonumented Corner



Government of Canada | Gouvernement du Canada

Canada.ca › Natural Resources Canada › Earthquakes Canada

2020 National Building Code of Canada Seismic Hazard Tool

This application provides seismic values for the design of buildings in Canada under Part 4 of the National Building Code of Canada (NBC) 2020 as prescribed in Article 1.1.3.1. of Division B of the NBC 2020.

Seismic Hazard Values

User requested values

Code edition	NBC 2020
Site designation X_S	X_D
Latitude (°)	49.903
Longitude (°)	-125.167

Please select one of the tabs below.

NBC 2020 | Additional Values | Plots | API

Background Information

The 5%-damped spectral acceleration ($S_a(T,X)$, where T is the period, in s, and X is the site designation) and peak ground acceleration (PGA(X)) values are given in units of acceleration due to gravity (g, 9.81 m/s^2). Peak

ground velocity (PGV(X)) values are given in m/s. Probability is expressed in terms of percent exceedance in 50 years. Further information on the calculation of seismic hazard is provided under the *Background Information* tab.

The 2%-in-50-year seismic hazard values are provided in accordance with Article 4.1.8.4. of the NBC 2020. The 5%- and 10%-in-50-year values are provided for additional performance checks in accordance with Article 4.1.8.23. of the NBC 2020.

See the *Additional Values* tab for additional seismic hazard values, including values for other site designations, periods, and probabilities not defined in the NBC 2020.

NBC 2020 - 2%/50 years (0.000404 per annum) probability

$S_a(0.2, X_D)$	$S_a(0.5, X_D)$	$S_a(1.0, X_D)$	$S_a(2.0, X_D)$	$S_a(5.0, X_D)$	$S_a(10.0, X_D)$	$PGA(X_D)$	$PGV(X_D)$
0.887	1.12	0.852	0.59	0.186	0.0682	0.384	0.83

The log-log interpolated 2%/50 year $S_a(4.0, X_D)$ value is : **0.2464**

▶ Tables for 5% and 10% in 50 year values

Download CSV

⬅ Go back to the seismic hazard calculator form

Date modified: 2021-04-06

LEA File: E4084.01

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: April 4, 2025

Strathcona Regional District

990 Cedar Street, Campbell River, BC V9W 7Z8

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"):

Lot C, Section 35, Township 4, Comox District, Plan 13994; 4129 Island Highway South, Oyster Bay, BC; PID: 000-329-479

Legal description and civic address of the Property

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

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

[CHECK TO THE LEFT OF APPLICABLE ITEMS]

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

✓ 2. Collected and reviewed appropriate background information

✓ 3. Reviewed the Proposed Development on the Property

✓ 4. Investigated the presence of Covenants on the Property, and reported any relevant information

✓ 5. Conducted field work on and, if required, beyond the Property

✓ 6. Reported on the results of the field work on and, if required, beyond the Property

✓ 7. Considered any changed conditions on and, if required, beyond the Property

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

9. For a Flood Risk analysis I have:
   - ___ 9.1 Estimated the Flood Risk on the Property
   - ___ 9.2 Identified existing and anticipated future Elements at Risk on and, if required, beyond the Property
   - ___ 9.3 Estimated the Consequences to those Elements at Risk

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 of 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".

FLOOD ASSURANCE STATEMENT

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

April 4, 2025

Date

Joe Brunelle, P.Eng.

Prepared by

Name (print)

Signature 2025-04-04

2351B Rosewall Crescent, Courtenay, BC V9N 8R9

Address

250-334-0384

Telephone

jbrunelle@lewkowich.com

Email

Louis Chapdelaine, P.Geo.

Reviewed by

Name (print)

report signed by LC

Signature

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA J. P. BRUNELLE # 47938 2025-04-04

(AFFIX PROFESSIONAL SEAL here)

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

I am a member of the firm Lewkowich Engineering Associates Ltd. - Permit to Practice Number: 1001802

and I sign this letter on behalf of the firm. (Name of firm)

From: [redacted]
To: John Neill
Subject: Re: 4129 South Island Hwy.
Date: September 15, 2021 6:33:55 PM

NOTICE: This email is from an external source.

John:
I have enclosed another copy of our survey which shows the location of our septic system.
I didn't send a proposal to Barbara as I needed more information before we make a decision on which way we are going. I was born and raised on the property next door. My husband and I live in Nelson and want to move to our property. We want to add a bedroom, a bathroom and a utility room. We are looking at 3 options.
1. Remove the carport and porch and build an addition on the front side of the existing cottage,
2. Move the septic system across to the north edge of property and build the addition alongside the existing cottage.
3. Build a second story.

We are here at the property until Sunday and wanted some direction from your office so we can start planning for the Spring.

So our question is whether any of these options are available to us.

Doralynne

Sent from my Galaxy Tab® E

-------- Original message --------
From: John Neill <JNeill@srd.ca>
Date: 2021-09-15 4:14 PM (GMT-08:00)
To: [redacted]
Cc: Meredith Starkey <mstarkey@srd.ca>
Subject: 4129 South Island Hwy.

Doralynne,

Thank you for your message. Any development on this lot will trigger the need for an Environmentally Sensitive Areas development permit due to its proximity to the ocean (details attached, fee is $250 payable to the SRD). Building setbacks and lot coverage requirements for the CR-4 zone are also attached. Height is restricted to 9 metres to peak of roof for a main building and 6 metres for an accessory. Did the site plan you sent to Barb include the proposed new structure/addition?

Regards,

John W. Neill MCIP MRTPI

Planner

301-990 Cedar Street, Campbell River, BC V9W 7Z8

t. 250.830.6706 | 1877.830.2990

From: John Neill
To: [redacted]
Subject: RE: 4129 South Island Hwy.
Date: September 16, 2021 3:07:00 PM

Thanks Doralynne,

Option 1 may work with a variance as close as 4.5 metres from the front property line. A MoTI variance would also be required.

Option 2 – if the field can be moved to a different part of the property, you could develop as close as 1.75 metres from the north property line. Any development with 15 metres of the natural boundary of the ocean will trigger both an ESA DP (as will Option 1) and relief from the Floodplain Management Bylaw (attached). An engineer's report, covenant registration and a $500 application fee would apply for the relief application.

Option 3 – so long as the building footprint doesn't change, neither an ESA DP nor Floodplain relief would be required. An engineer or architect would need to certify any drawings for a second storey.

The encroaching shed should be brought into compliance

Regards,

John

From: [redacted]
Sent: Wednesday, September 15, 2021 18:34
To: John Neill <JNeill@srd.ca>
Subject: Re: 4129 South Island Hwy.

NOTICE: This email is from an external source.

John:
I have enclosed another copy of our survey which shows the location of our septic system.
I didn't send a proposal to Barbara as I needed more information before we make a decision on which way we are going. I was born and raised on the property next door. My husband and I live in Nelson and want to move to our property. We want to add a bedroom, a bathroom and a utility room. We are looking at 3 options.
1. Remove the carport and porch and build an addition on the front side of the existing cottage,
2. Move the septic system across to the north edge of property and build the addition alongside the existing cottage.
3. Build a second story.

We are here at the property until Sunday and wanted some direction from your office so we can start planning for the Spring.

So our question is whether any of these options are available to us.

Doralynne

Sent from my Galaxy Tab® E

-------- Original message --------
From: John Neill <JNeill@srd.ca>
Date: 2021-09-15 4:14 PM (GMT-08:00)
To: [redacted]
Cc: Meredith Starkey <mstarkey@srd.ca>
Subject: 4129 South Island Hwy.

Doralynne,

Thank you for your message. Any development on this lot will trigger the need for an Environmentally Sensitive Areas development permit due to its proximity to the ocean (details attached, fee is $250 payable to the SRD). Building setbacks and lot coverage requirements for the CR-4 zone are also attached. Height is restricted to 9 metres to peak of roof for a main building and 6 metres for an accessory. Did the site plan you sent to Barb include the proposed new structure/addition?

Regards,

John W. Neill MCIP MRTPI
Planner
301-990 Cedar Street, Campbell River, BC V9W 7Z8
t. 250.830.6706 | 1877.830.2990

From: John Neill
To: [redacted]
Subject: RE: 4129 South Island Hwy.
Date: September 17, 2021 2:56:00 PM
Attachments: BL2782.pdf

Here it is, Doralynne.

Regards,

John

From: [redacted]
Sent: Friday, September 17, 2021 14:02
To: John Neill <JNeill@srd.ca>
Subject: RE: 4129 South Island Hwy.

NOTICE: This email is from an external source.

John the Floodplain Management Bylaw was not attached to your email yesterday. Is it possible to get a copy?

Doralynne

Sent from my Galaxy Tab® E

-------- Original message --------
From: John Neill <JNeill@srd.ca>
Date: 2021-09-17 8:57 AM (GMT-08:00)
To: [redacted]
Subject: RE: 4129 South Island Hwy.

Sounds good!

From: [redacted]
Sent: Thursday, September 16, 2021 17:00
To: John Neill <JNeill@srd.ca>
Subject: RE: 4129 South Island Hwy.

NOTICE: This email is from an external source.

Thanks for the info. Now we have a place to start. Forgot to tell you the shed was removed in 1995.

Doralynne

Sent from my Galaxy Tab® E

-------- Original message --------
From: John Neill <JNeill@srd.ca>
Date: 2021-09-16 3:08 PM (GMT-08:00)
To: [redacted]
Subject: RE: 4129 South Island Hwy.

Thanks Doralynne,

Option 1 may work with a variance as close as 4.5 metres from the front property line. A MoTI variance would also be required.

Option 2 – if the field can be moved to a different part of the property, you could develop as close as 1.75 metres from the north property line. Any development with 15 metres of the natural boundary of the ocean will trigger both an ESA DP (as will Option 1) and relief from the Floodplain Management Bylaw (attached). An engineer's report, covenant registration and a $500 application fee would apply for the relief application.

Option 3 – so long as the building footprint doesn't change, neither an ESA DP nor Floodplain relief would be required. An engineer or architect would need to certify any drawings for a second storey.

The encroaching shed should be brought into compliance

Regards,

John

From: [redacted]
Sent: Wednesday, September 15, 2021 18:34
To: John Neill <JNeill@srd.ca>
Subject: Re: 4129 South Island Hwy.

NOTICE: This email is from an external source.

John:
I have enclosed another copy of our survey which shows the location of our septic system.
I didn't send a proposal to Barbara as I needed more information before we make a decision on which way we are going. I was born and raised on the property next door. My husband and I live in Nelson and want to move to our property. We want to add a bedroom, a bathroom and a utility room. We are looking at 3 options.
1. Remove the carport and porch and build an addition on the front side of the existing cottage,

2. Move the septic system across to the north edge of property and build the addition alongside the existing cottage.
3. Build a second story.

We are here at the property until Sunday and wanted some direction from your office so we can start planning for the Spring.

So our question is whether any of these options are available to us.

Doralynne

Sent from my Galaxy Tab® E

-------- Original message --------
From: John Neill <JNeill@srd.ca>
Date: 2021-09-15 4:14 PM (GMT-08:00)
To: [redacted]
Cc: Meredith Starkey <mstarkey@srd.ca>
Subject: 4129 South Island Hwy.

Doralynne,

Thank you for your message. Any development on this lot will trigger the need for an Environmentally Sensitive Areas development permit due to its proximity to the ocean (details attached, fee is $250 payable to the SRD). Building setbacks and lot coverage requirements for the CR-4 zone are also attached. Height is restricted to 9 metres to peak of roof for a main building and 6 metres for an accessory. Did the site plan you sent to Barb include the proposed new structure/addition?

Regards,

John W. Neill MCIP MRTPI
Planner
301-990 Cedar Street, Campbell River, BC V9W 7Z8
t. 250.830.6706 | 1877.830.2990

From: [redacted]
To: John Neill
Subject: 4129 Island Hwy South
Date: May 11, 2022 12:50:39 PM

NOTICE: This email is from an external source.

John:
Further to our discussions last fall on home renovations on the above mentioned property, we are still trying to evaluate our options. We are wondering if demolishing our cottage and either rebuilding or bringing in a modular home would also be an option.
We have contacted Tobin Laughlin of Rock Creek Environmental to determine the logistics of moving our septic system.
Once we have all the information we will decide which option and go forward from there.
Your assistance is appreciated.

Dodie Hodgins

From: Aaron Kinvig
To: John Neill
Subject: Re: Tree Removals - 4129 South Island Hwy, Campbell River, BC V9W 3M8, Canada.
Date: May 15, 2023 4:05:38 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image006.png
image007.png

NOTICE: This email is from an external source.

Hi John,

Thank you for the information, it's appreciated. I forwarded the information to Vic Hodgins (Property Owner) for him to fill out and pay the permit fee. I will wait to hear what the verdict is.

Thanks again and have a good week!

Best,

On Mon, May 15, 2023 at 11:12 AM John Neill <JNeill@srd.ca> wrote:

> Hello Aaron – yes, I can confirm a foreshore ESA DP is required for tree removal within 50 metres of the natural boundary of the ocean. I attach an application package for you. The fee will be $250, payable to the Strathcona Regional District.
>
> Best regards,
>
> Strathcona Regional District
> **John W. Neill MCIP MRTPI**
> **Planner**
> 301-990 Cedar Street, Campbell River, BC V9W 7Z8
> t. 250.830.6706 | 1877.830.2990
>
> ---
>
> **From:** Jacob Blanchard <jblanchard@srd.ca>
> **Sent:** Monday, May 15, 2023 10:39
> **To:** Aaron Kinvig <aaron@strathconatreecare.com>
> **Cc:** John Neill <JNeill@srd.ca>
> **Subject:** Re: Tree Removals - 4129 South Island Hwy, Campbell River, BC V9W 3M8, Canada.

Hi Aaron,

Thanks for reaching out with your inquiry. I've cc'ed John Neill, our Planner at the SRD, he is better equipped to answer your questions.

Regards,

Jacob

Jacob Blanchard, RBTech

Parks & Facilities Technician

990 Cedar Street, Campbell River, BC V9W 7Z8

e. jblanchard@srd.ca | t. 250.830.6722 | m. 250.203.2533

Please consider the environment before printing this email

From: Aaron Kinvig <aaron@strathconatreecare.com>
Sent: Friday, May 12, 2023 2:47 PM
To: Jacob Blanchard <jblanchard@srd.ca>
Subject: Tree Removals - 4129 South Island Hwy, Campbell River, BC V9W 3M8, Canada.

NOTICE: This email is from an external source.

Hey Jacob,

Hope you are well, the good weather seems to finally be here!!

I have a question for you and I'm wondering if you may be able to help? I have a client whose address is 4129 South Island Hwy, Campbell River. He's looking to remove multiple trees on his property and I'm wondering what restrictions may be on the property as it is ocean front. I

have not come across this situation in the Strathcona Regional District before.

Thanks in advance.

Best,



Annie Girdler

From: Doralynne Hodgins [redacted]
Sent: February 22, 2024 1:52 PM
To: Annie Girdler
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie
I am reading the regulations to say a building on a front property line that abuts a public highway must be 7.5 meters from the property line. Right now the building is 6.82 meters. Would this be grandfathered as well?
Dodie

On Tue., Feb. 20, 2024, 10:51 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

> Hi Dodie,
>
> That's great! Then please disregard the floodplain relief application. Look forward to hearing your proposal.
>
> Kindly,
>
> Annie Girdler
>
> Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Tuesday, February 20, 2024 10:32 AM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

I am not sure I know what you mean by use. It is a private residence now and would be a private residence afterwards

Dodie

On Tue., Feb. 20, 2024, 9:19 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

Hi Dodie,

The structure itself would be grandfathered, but the use would not. So if you are proposing to change the use, you would need to apply for Floodplain Relief and get a geotechnical assessment to prove that the new use would be safe in that location.

I've linked the floodplain relief application information here: https://srd.ca/wp-content/uploads/2023/03/Floodplain-Relaxation-Application-Package-Fillable-1.pdf

Kind regards,

Annie Girdler

Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Friday, February 16, 2024 7:41 PM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie, our cottage is not 15 meteres from the high water mark now so how can a new structure be? Are we grandfathered in?

Dodie

On Fri., Feb. 16, 2024, 11:34 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

Hi Dodie,

That section was repealed and replaced with Bylaw No. 273 Floodplain Management Bylaw. It simply requires a 15 meter setback from the natural boundary of the sea.

I hope this helps!

Kind regards,

Annie Girdler

Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Friday, February 16, 2024 11:06 AM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie as our lot is on the waterfront can you forward 4.5.5(ii-iii). I have attached our lot plan

Dodie

On Thu., Feb. 15, 2024, 4:07 p.m. Annie Girdler, <agirdler@srd.ca> wrote:

Hi Dodie,

As discussed, I am sending you your zoning regulations for your property at 4129 Island Highway South. Your zone is Country Residential 4 (attached). I encourage you to have a look at the "Siting of Buildings and Structures" section.

I look forward to discussing your proposal in person.

Kind regards,

Annie Girdler
Land Use Planner II

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6707
E: agirdler@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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Annie Girdler

From: John Neill
Sent: March 22, 2024 2:42 PM
To: Doralynne Hodgins
Cc: Annie Girdler
Subject: RE: 4129 Island Hwy South

Hi Dodie,

With respect to your cottage located on the foreshore, the structure would be considered as legally existing non-conforming, both with respect to siting (our Floodplain Bylaw requires all structures with contents damageable by floodwaters to be located a minimum of 15 metres from the natural boundary of the sea (7.5 metres if placed on natural bedrock), zoning setbacks and with respect to use (only one single family dwelling is permitted on a parcel that is 1200 square metres in area).

The *Local Government Act* permits you to repair a non-conforming structure, but not to replace it. A repair that would result in a structural alternation or an addition that would increase the degree of non-conformity (e.g. a larger structure) may be permitted on appeal to the Board of Variance, if a hardship can be demonstrated.

I hope this provides some clarity to the situation.

Best regards,

John

From: Annie Girdler <agirdler@srd.ca>
Sent: Friday, March 22, 2024 14:11
To: John Neill <JNeill@srd.ca>
Subject: FW: 4129 Island Hwy South

Hi John,

Please see Dodie's email below.

Kindly,

Annie Girdler
Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Friday, March 22, 2024 11:16 AM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie have you discussed our situation with John? I would like to send him an email and arrange a meeting next week.

Dodie

On Wed., Mar. 13, 2024, 8:36 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

Hi Dodie,

John is more experienced than I am, and he is returning next week. I will happily discuss this with him as it is possible I am not understanding the situation. We will be in touch. Thank you for your patience.

Kind regards,

Annie Girdler

Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Tuesday, March 12, 2024 5:53 PM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Thanks Annie.

We are quite confused now. When John approved us demolishing the cottage and bringing in a modular home, we were under the understanding that the 7.5meter set back from the natural boundaries would stay in effect. Now we understand from you that if we demolish the cottage, the 7.5 meter setback will be reminded back to 15 meters. That is half our property and would not allow a modularhome to be brought in. Can you please pass along the info we have provided you along to John? I believe he is returning soon and we can come in and discuss and look at our options.

Thank you for your information a d assistance Annie

Dodie

On Tue., Mar. 12, 2024, 1:11 p.m. Annie Girdler, <agirdler@srd.ca> wrote:

Any buildings within 15 metres of the natural boundary of the ocean would be considered in the floodplain.

Kindly,

Annie Girdler

Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Monday, March 11, 2024 7:56 PM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Where is the floodplain on our property?

Dodie

On Mon., Mar. 11, 2024, 4:25 p.m. Annie Girdler, <agirdler@srd.ca> wrote:

Hi Dodie,

My apologies for the delay in response.

And apologies if I was not clear in my previous responses regarding being grandfathered. Only the structures themselves that are outside of the current setback requirements would be grandfathered while they are still standing. But to demolish those structures would essentially remove that protection, meaning that compliance with the setbacks we discussed would be required for any new structure.

It sounds like the only permits you will need at this stage would be a Building Permit, however if you would like to vary your setbacks to accommodate new structures where your existing grandfathered structures are, then I believe you will also need to apply for a variance. Additionally, if the cottage within the floodplain area is to be demolished and reconstructed, then a floodlplain relief application would also be required.

Perhaps I am not understanding your proposal, so if you've had a previous discussion with John and he approved it then that is completely fine. I appreciate that you included the survey plan drawing.

Please let me know how you would like to proceed. I am happy to discuss further.

Kind regards,

Annie Girdler
Land Use Planner II

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6707
E: agirdler@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig̓wiłdax̱w people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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The contents of this email are PRIVILEGED and CONFIDENTIAL and for the sole use of the designated recipient. If this message has been misdirected, please delete it and advise me directly.

From: Doralynne Hodgins[redacted]
Sent: Friday, March 1, 2024 9:56 AM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie:

I have attached a copy of our property survey which I have notated the setbacks as per our discussions and regulations.

The west property line abuts the Island Hwy. According to regulations the setback is 7.5 meters. Currently the buildings is 6.82 meters from the property line. As the building has been there prior to 1991 I u derstand the 6.82 meters will be grandfathered.

The north and south property lines do not abut public roads so I have marked the setbacks at 1.75 meters.

The eastern natural boundary abuts the Georgia Strait. I understand the regulations are a 15 meter setback. However the existing cottage is 7.4 meters and I understand this setback will be grandfathered at 7.4 meters.

John Neill has given approval for the cottage to be demolished and a new modular be moved in. We have contacted a company who will come and complete a hazmat report and complete remediation work prior to the demolition of the cottage. We believe we needed this report done and work done before a demolition permit would be issued.

We have not made the final decision on the modular home. We are looking at a home 50 feet X 27 feet (15.24 meters X 8.22 meters). We are also looking at a garage which will be approximately 30 feet X 24 feet (9.14 meters X 7.31 meters). I haven't marked the home or garage on the property survey. We would like to ensure our understanding on the required setbacks are in line with SRD regulations. Once we have your approval we can proceed.

We had Tobin Laughlin at our property as we knew if we were bringing in a modular home we would have to move the septic system. At present the system is on the north side of the cottage. I believe the copy of the survey I sent you before had the system outlined on it. In case it didn't I have also attached a copy that shows the septic system. Tobin advised that SRD would like the system moved back away from the Georgia Strait. He believed the best place to accommodate our request and SRD's request would be in the northwest corner of our property with the field running towards the southwest corner.

Please advise if we have correctly understood SRD regulations. Please also advise necessary permits and fees required.

Thanking you in advance

Dodie and Vic Hodgins

On Thu., Feb. 22, 2024, 4:07 p.m. Annie Girdler, <agirdler@srd.ca> wrote:

Hi Dodie,

It depends on when the structure was built. If it was there before the Zoning Bylaw was adopted in 1991 then it would be grandfathered. If not, we would ask you to apply for a setback variance to bring it into compliance.

Hope that helps.

Kindly,

Annie Girdler

Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Thursday, February 22, 2024 1:52 PM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie

I am reading the regulations to say a building on a front property line that abuts a public highway must be 7.5 meters from the property line. Right now the building is 6.82 meters. Would this be grandfathered as well?

Dodie

On Tue., Feb. 20, 2024, 10:51 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

> Hi Dodie,
>
> That's great! Then please disregard the floodplain relief application. Look forward to hearing your proposal.
>
> Kindly,
>
> Annie Girdler
>
> Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Tuesday, February 20, 2024 10:32 AM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

I am not sure I know what you mean by use. It is a private residence now and would be a private residence afterwards

Dodie

On Tue., Feb. 20, 2024, 9:19 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

Hi Dodie,

The structure itself would be grandfathered, but the use would not. So if you are proposing to change the use, you would need to apply for Floodplain Relief and get a geotechnical assessment to prove that the new use would be safe in that location.

I've linked the floodplain relief application information here: https://srd.ca/wp-content/uploads/2023/03/Floodplain-Relaxation-Application-Package-Fillable-1.pdf

Kind regards,

Annie Girdler

Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Friday, February 16, 2024 7:41 PM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie, our cottage is not 15 meteres from the high water mark now so how can a new structure be? Are we grandfathered in?

Dodie

On Fri., Feb. 16, 2024, 11:34 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

Hi Dodie,

That section was repealed and replaced with Bylaw No. 273 Floodplain Management Bylaw. It simply requires a 15 meter setback from the natural boundary of the sea.

I hope this helps!

Kind regards,

Annie Girdler

Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Friday, February 16, 2024 11:06 AM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie as our lot is on the waterfront can you forward 4.5.5(ii-iii). I have attached our lot plan

Dodie

On Thu., Feb. 15, 2024, 4:07 p.m. Annie Girdler, <agirdler@srd.ca> wrote:

> Hi Dodie,
>
> As discussed, I am sending you your zoning regulations for your property at 4129 Island Highway South. Your zone is Country Residential 4 (attached). I encourage you to have a look at the "Siting of Buildings and Structures" section.

I look forward to discussing your proposal in person.

Kind regards,

Annie Girdler
Land Use Planner II

Strathcona Regional District
990 Cedar St. Campbell River, BC V9W 7Z8
T: 250-830-6707
E: agirdler@srd.ca

The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.

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The contents of this email are PRIVILEGED and CONFIDENTIAL and for the sole use of the designated recipient. If this message has been misdirected, please delete it and advise me directly.

From: [redacted]
To: John Neill
Subject: 4129 Island Hwy South
Date: June 3, 2024 3:53:00 PM

NOTICE: This email is from an external source.

John:

Further to our meeting earlier this year, please be advised we have approval to move our septic system. I have completed the application for variance and supporting documentation for submission. What is the fee?
I will bring in our application and fee.

Dodie Hodgins

From: John Neill
To: [redacted]
Subject: RE: 4129 Island Hwy South
Date: June 4, 2024 2:35:34 PM

Thanks, Dodie – a surveyor will need to verify the 15m setback from the natural boundary and the zoning setbacks from property lines for the proposed new structure. As long as you stay within the footprint of the existing cottage, a development permit will not be required.

Regards,

John

From: Doralynne Hodgins [redacted]
Sent: Tuesday, June 4, 2024 11:35 AM
To: John Neill <JNeill@srd.ca>
Subject: Re: 4129 Island Hwy South

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John:

Attached is our proposal.
Can you tell us if we are on the right track here? We have been told so many stories that we should get a lawyer to do this for us. Is that true?

Dodie

On Tue., Jun. 4, 2024, 10:20 a.m. John Neill, <JNeill@srd.ca> wrote:

> Hi Dodie – can you send over a sketch plan for your proposal and I will calculate planning fees.
>
> Thanks and regards,
>
> John
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Monday, June 3, 2024 3:53 PM
> **To:** John Neill <JNeill@srd.ca>
> **Subject:** 4129 Island Hwy South
>
> **NOTICE:** This email is from an external source.

John:

Further to our meeting earlier this year, please be advised we have approval to move our septic system. I have completed the application for variance and supporting documentation for submission. What is the fee?
I will bring in our application and fee.

Dodie Hodgins

From: John Neill
To: [redacted]
Subject: RE: 4129 Island Hwy South
Date: June 5, 2024 11:37:00 AM

Hi Dodie – I will confer with my colleagues to see if a Board of Variance order may be used to permit this change.

Regards,

John

From: Doralynne Hodgins [redacted]
Sent: Tuesday, June 4, 2024 5:26 PM
To: John Neill <JNeill@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

John I don't understand. We are asking for the setback to be grandfathered to the existing setback of 7.4 meters. We don't want a 15 meter setback because our property is only 30 meters deep and that would mean half our property is unusable.

The footprint of the existing cottage is 6590 square feet and the modular we want to bring in is 1300 square feet so we won't be staying with the existing footprint.

Dodie

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> Thanks, Dodie – a surveyor will need to verify the 15m setback from the natural boundary and the zoning setbacks from property lines for the proposed new structure. As long as you stay within the footprint of the existing cottage, a development permit will not be required.
>
> Regards,
>
> John
>
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> **Sent:** Tuesday, June 4, 2024 11:35 AM
> **To:** John Neill <JNeill@srd.ca>
> **Subject:** Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

John:

Attached is our proposal.
Can you tell us if we are on the right track here? We have been told so many stories that we should get a lawyer to do this for us. Is that true?

Dodie

On Tue., Jun. 4, 2024, 10:20 a.m. John Neill, <JNeill@srd.ca> wrote:

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> **Sent:** Monday, June 3, 2024 3:53 PM
> **To:** John Neill <JNeill@srd.ca>
> **Subject:** 4129 Island Hwy South
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> **NOTICE:** This email is from an external source.
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> John:
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> Further to our meeting earlier this year, please be advised we have approval to move our septic system. I have completed the application for variance and supporting documentation for submission. What is the fee?
> I will bring in our application and fee.
>
> Dodie Hodgins

From: John Neill
To: Annie Girdler
Subject: RE: 4129 Island Hwy South
Date: June 6, 2024 11:46:32 AM

Thanks, Annie! I'll tell them I'll need a BCLS certificate showing the proposed location of the new modular and we can then determine what approvals they may need.

Best regards,

John

From: Annie Girdler <agirdler@srd.ca>
Sent: Thursday, June 6, 2024 11:38 AM
To: John Neill <JNeill@srd.ca>
Subject: FW: 4129 Island Hwy South

Hi John,

I believe I may have been wrong about two dwellings existing. See survey attached.

Cheers,

Annie Girdler
Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Friday, March 1, 2024 9:56 AM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie:

I have attached a copy of our property survey which I have notated the setbacks as per our discussions and regulations.
The west property line abuts the Island Hwy. According to regulations the setback is 7.5 meters. Currently the buildings is 6.82 meters from the property line. As the building has been there prior to 1991 I u derstand the 6.82 meters will be grandfathered.
The north and south property lines do not abut public roads so I have marked the setbacks at 1.75 meters.

The eastern natural boundary abuts the Georgia Strait. I understand the regulations are a 15 meter setback. However the existing cottage is 7.4 meters and I understand this setback will be grandfathered at 7.4 meters.
John Neill has given approval for the cottage to be demolished and a new modular be moved in. We have contacted a company who will come and complete a hazmat report and complete remediation work prior to the demolition of the cottage. We believe we needed this report done and work done before a demolition permit would be issued.
We have not made the final decision on the modular home. We are looking at a home 50 feet X 27 feet (15.24 meters X 8.22 meters). We are also looking at a garage which will be approximately 30 feet X 24 feet (9.14 meters X 7.31 meters). I haven't marked the home or garage on the property survey. We would like to ensure our understanding on the required setbacks are in line with SRD regulations. Once we have your approval we can proceed.
We had Tobin Laughlin at our property as we knew if we were bringing in a modular home we would have to move the septic system. At present the system is on the north side of the cottage. I believe the copy of the survey I sent you before had the system outlined on it. In case it didn't I have also attached a copy that shows the septic system. Tobin advised that SRD would like the system moved back away from the Georgia Strait. He believed the best place to accommodate our request and SRD's request would be in the northwest corner of our property with the field running towards the southwest corner. Please advise if we have correctly understood SRD regulations. Please also advise necessary permits and fees required.

Thanking you in advance

Dodie and Vic Hodgins

On Thu., Feb. 22, 2024, 4:07 p.m. Annie Girdler, <agirdler@srd.ca> wrote:

> Hi Dodie,
>
> It depends on when the structure was built. If it was there before the Zoning Bylaw was adopted in 1991 then it would be grandfathered. If not, we would ask you to apply for a setback variance to bring it into compliance.
>
> Hope that helps.
>
> Kindly,
>
> Annie Girdler

Land Use Planner II

From: Doralynne [redacted]
Sent: Thursday, February 22, 2024 1:52 PM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Annie
I am reading the regulations to say a building on a front property line that abuts a public highway must be 7.5 meters from the property line. Right now the building is 6.82 meters. Would this be grandfathered as well?
Dodie

On Tue., Feb. 20, 2024, 10:51 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

> Hi Dodie,
>
> That's great! Then please disregard the floodplain relief application. Look forward to hearing your proposal.
>
> Kindly,
>
> Annie Girdler
> Land Use Planner II
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Tuesday, February 20, 2024 10:32 AM
> **To:** Annie Girdler <agirdler@srd.ca>
> **Subject:** Re: 4129 Island Hwy South
>
> **NOTICE:** This email is from an external source.
>
> I am not sure I know what you mean by use. It is a private residence now and would be a private residence afterwards
>
> Dodie
>
> On Tue., Feb. 20, 2024, 9:19 a.m. Annie Girdler, <agirdler@srd.ca> wrote:
>
> > Hi Dodie,

The structure itself would be grandfathered, but the use would not. So if you are proposing to change the use, you would need to apply for Floodplain Relief and get a geotechnical assessment to prove that the new use would be safe in that location.

I've linked the floodplain relief application information here: https://srd.ca/wp-content/uploads/2023/03/Floodplain-Relaxation-Application-Package-Fillable-1.pdf

Kind regards,

Annie Girdler
Land Use Planner II

From: Doralynne Hodgins [redacted]
Sent: Friday, February 16, 2024 7:41 PM
To: Annie Girdler <agirdler@srd.ca>
Subject: Re: 4129 Island Hwy South

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Annie, our cottage is not 15 meteres from the high water mark now so how can a new structure be? Are we grandfathered in?

Dodie

On Fri., Feb. 16, 2024, 11:34 a.m. Annie Girdler, <agirdler@srd.ca> wrote:

> Hi Dodie,
>
> That section was repealed and replaced with Bylaw No. 273 Floodplain Management Bylaw. It simply requires a 15 meter setback from the natural boundary of the sea.
>
> I hope this helps!
>
> Kind regards,
>
> Annie Girdler
> Land Use Planner II
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Friday, February 16, 2024 11:06 AM
> **To:** Annie Girdler <agirdler@srd.ca>
> **Subject:** Re: 4129 Island Hwy South

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Annie as our lot is on the waterfront can you forward 4.5.5(ii-iii). I have attached our lot plan

Dodie

On Thu., Feb. 15, 2024, 4:07 p.m. Annie Girdler, <agirdler@srd.ca> wrote:

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>
> As discussed, I am sending you your zoning regulations for your property at 4129 Island Highway South. Your zone is Country Residential 4 (attached). I encourage you to have a look at the “Siting of Buildings and Structures” section.
>
> I look forward to discussing your proposal in person.
>
> Kind regards,
>
> **Annie Girdler**
> *Land Use Planner II*
>
> **Strathcona Regional District**
> 990 Cedar St. Campbell River, BC V9W 7Z8
> T: 250-830-6707
> E: agirdler@srd.ca
>
> *The Strathcona Regional District respectfully acknowledges that our corporate office and Strathcona Gardens Recreation Complex are located on the traditional unceded territory of the Lig^{w}iłdax^{w} people. We also recognize that we operate within the traditional, treaty and unceded territories of the Ehattesaht / Chinehkint, Homalco, Ka:'yu:'k't'h' / Che: k'tles7et'h', Klahoose, K'ómoks, Kwiakah, Mowachaht / Muchalaht, Nuchatlaht, Tla'amin, Tlowitsis, We Wai Kai and Wei Wai Kum First Nations.*
>
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>
> The contents of this email are PRIVILEGED and CONFIDENTIAL and for the sole use of the designated recipient. If this message has been misdirected, please delete it and advise me directly.

From: Annie Girdler
To: Meredith Starkey; John Neill
Subject: RE: 4129 Island Hwy South
Date: June 7, 2024 1:16:24 PM

I will too. Thanks.

Annie Girdler
Land Use Planner II

From: Meredith Starkey <mstarkey@srd.ca>
Sent: Friday, June 7, 2024 12:47 PM
To: John Neill <JNeill@srd.ca>; Annie Girdler <agirdler@srd.ca>
Subject: RE: 4129 Island Hwy South

Hi John,

As discussed, yes, I'll join this meeting.

Thanks,
Meredith

From: John Neill <JNeill@srd.ca>
Sent: Friday, June 7, 2024 12:03 PM
To: Meredith Starkey <mstarkey@srd.ca>; Annie Girdler <agirdler@srd.ca>
Subject: FW: 4129 Island Hwy South

Meredith, Annie – would you like to be part of this meeting?

Best regards,

John

From: Doralynne Hodgins [redacted]
Sent: Friday, June 7, 2024 11:59 AM
To: John Neill <JNeill@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

Can we meet in your office next week?

Dodie

On Fri., Jun. 7, 2024, 9:10 a.m. John Neill, <JNeill@srd.ca> wrote:

> H Dodie – the usual process is to get the surveyor to use the plans of the new structure in order to locate it on the property and determine yards. We will need the setback from the present natural boundary (Strait of Georgia) as well as all property lines. If any part of the structure is closer than 15 metres from the natural boundary, then relief from our floodplain management bylaw will be required. Disturbance of soils to move the septic system will trigger the need for an environmentally sensitive areas development permit.
>
> Happy to discuss further.
>
> Thanks and regards,
>
> John
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Thursday, June 6, 2024 9:14 PM
> **To:** John Neill <JNeill@srd.ca>
> **Subject:** Re: 4129 Island Hwy South
>
> **NOTICE:** This email is from an external source.
>
> John
> I sent you a copy of the land surveyed that shows the natural boundary and the existing setback of 7.4 meters. The deck is at the setback. The existing deck needs replacing and will be in the same place. The modular will be back and attached to the deck.
>
> We don't understand your requirement for a new survey and how does a surveyor give a certificate on something not there. The survey would be the same as far as setbacks go.
>
> Can we come in and discus this. It seems that there are new requirements since our meeting earlier this year. You advised that we needed approval to move the septic system and then apply for a variance to grandfather the setback. It's just confusing.
>
> Dodie
>
> On Thu., Jun. 6, 2024, 4:10 p.m. John Neill, <JNeill@srd.ca> wrote:

Hi Dodie – this matter was discussed at a planning department staff meeting this morning. The first thing you will need to do is to get a BC Land Surveyor to provide a new survey certificate indicating the setback distances from the proposed modular to the property lines and the natural boundary of the sea. From this, we will be able to determine what variances and/or other approvals may be required.

Thanks and regards,

John

From: Doralynne Hodgins [redacted]
Sent: Tuesday, June 4, 2024 5:26 PM
To: John Neill <JNeill@srd.ca>
Subject: Re: 4129 Island Hwy South

NOTICE: This email is from an external source.

John I don't understand. We are asking for the setback to be grandfathered to the existing setback of 7.4 meters. We don't want a 15 meter setback because our property is only 30 meters deep and that would mean half our property is unusable.

The footprint of the existing cottage is 6590 square feet and the modular we want to bring in is 1300 square feet so we won't be staying with the existing footprint.

Dodie

On Tue., Jun. 4, 2024, 2:35 p.m. John Neill, <JNeill@srd.ca> wrote:

> Thanks, Dodie – a surveyor will need to verify the 15m setback from the natural boundary and the zoning setbacks from property lines for the proposed new structure. As long as you stay within the footprint of the existing cottage, a development permit will not be required.
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Attached is our proposal.
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>
> John
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Monday, June 3, 2024 3:53 PM
> **To:** John Neill <JNeill@srd.ca>
> **Subject:** 4129 Island Hwy South
>
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>
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> I will bring in our application and fee.
>
> Dodie Hodgins

From: John Neill
To: [redacted]
Cc: Meredith Starkey
Subject: RE: 4129 Island Hwy South
Date: June 7, 2024 9:10:17 AM

H Dodie – the usual process is to get the surveyor to use the plans of the new structure in order to locate it on the property and determine yards. We will need the setback from the present natural boundary (Strait of Georgia) as well as all property lines. If any part of the structure is closer than 15 metres from the natural boundary, then relief from our floodplain management bylaw will be required. Disturbance of soils to move the septic system will trigger the need for an environmentally sensitive areas development permit.

Happy to discuss further.

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Subject: Re: 4129 Island Hwy South

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> **Sent:** Tuesday, June 4, 2024 11:35 AM
> **To:** John Neill <JNeill@srd.ca>
> **Subject:** Re: 4129 Island Hwy South
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>
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>
> Dodie Hodgins

From: John Neill
To: Meredith Starkey
Subject: RE: Cottage
Date: July 2, 2024 2:30:55 PM

Thanks, Meredith - will do!

John

From: Meredith Starkey <mstarkey@srd.ca>
Sent: Tuesday, July 2, 2024 2:18 PM
To: John Neill <JNeill@srd.ca>
Subject: RE: Cottage

Thanks, John. I think this looks good, though as discussed, suggest putting these in step order.

-Meredith

From: John Neill <JNeill@srd.ca>
Sent: Tuesday, July 2, 2024 10:09 AM
To: Meredith Starkey <mstarkey@srd.ca>
Subject: RE: Cottage

Hi Meredith – here is a draft response to Dodie regarding her non-conformity issue at 4129 Island Hwy. S.

Dodie – if you position the modular and deck at the rear yard setback distance of 7.5 metres, you will not require a variance, just relief from the floodplain management bylaw and a foreshore environmentally sensitive areas development permit. The development permit is prepared 'in-house' and the required fee is $250.

You will, of course, require a building permit when the time comes to move the modular onto the lot.

Best regards,

John

From: Doralynne Hodgins [redacted]
Sent: Thursday, June 27, 2024 7:43 PM
To: John Neill <JNeill@srd.ca>
Subject: Cottage

NOTICE: This email is from an external source.

John can you provide us with a list of our requirements besides the Relaxation of Floodplain with the Geotechnical report and the Development Permit.
I have printed off the Development Permit with the guidelines and it appears that there may be other requirements. It's confusing and we want to get our ducks in a row.

Thanks

Dodie and Vic

From: John Neill
To: [redacted]
Subject: RE: 4129 Island Hwy South
Date: August 14, 2024 10:19:00 AM

Hi Dodie – I'll discuss this with my colleagues at tomorrow's staff meeting.

Regards,

John

From: Doralynne Hodgins [redacted]
Sent: Monday, August 12, 2024 11:48 AM
To: John Neill <JNeill@srd.ca>
Subject: 4129 Island Hwy South

NOTICE: This email is from an external source.

John:

In previous emails you have advised that renovation/reconstruction on our existing place would exempt us from the foreshore development permit. I'd that the Geotechnical report as well.?
I have attached our survey with a red line indicating what another option we are considering. Enclosing the carport and porch and squaring up the cottage. Adding a second storey is also being considered.

What would be our requirements?

Dodie and Vic Hodgins

From: John Neill
To: [redacted]
Cc: Meredith Starkey; Keltie Chamberlain
Subject: RE: 4129 Island Hwy South
Date: August 15, 2024 11:50:47 AM

Hi Dodie – after our discussion this morning, the conditions of my email of July 2 would still apply. Also, your proposed new footprint would trigger the need for a front yard setback variance, as well as a variance from the Ministry of Transportation who require an 8.5 metre setback at this location.

Best regards,

John

From: Doralynne Hodgins[redacted]
Sent: Monday, August 12, 2024 11:48 AM
To: John Neill <JNeill@srd.ca>
Subject: 4129 Island Hwy South

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John:

In previous emails you have advised that renovation/reconstruction on our existing place would exempt us from the foreshore development permit. I'd that the Geotechnical report as well.?
I have attached our survey with a red line indicating what another option we are considering. Enclosing the carport and porch and squaring up the cottage. Adding a second storey is also being considered.

What would be our requirements?

Dodie and Vic Hodgins

From: [redacted]
To: John Neill
Cc: Meredith Starkey; Keltie Chamberlain
Subject: Re: 4129 Island Hwy South
Date: August 15, 2024 12:07:48 PM

NOTICE: This email is from an external source.

So what the SRD is saying is regardless if we demolish the cottage or renovate the cottage, we require a Geotechnical report?
The foundation of the cottage extends under the deck on the oceanside so extending the walls of the cottage would not change the footprint.
The carport is setback over 7 meters from the highway already so if we took off the porch and carport and closed it in, keeping the setback at 8.5 meters then a variance would not be needed from Highways. The only area of concern would be the southwest side of the cottage where we wanted to square off the cottage. Is that right?

Dodie

On Thu., Aug. 15, 2024, 11:50 a.m. John Neill, <JNeill@srd.ca> wrote:

> Hi Dodie – after our discussion this morning, the conditions of my email of July 2 would still apply. Also, your proposed new footprint would trigger the need for a front yard setback variance, as well as a variance from the Ministry of Transportation who require an 8.5 metre setback at this location.
>
> Best regards,
>
> John
>
> ---
>
> **From:** Doralynne Hodgins [redacted]
> **Sent:** Monday, August 12, 2024 11:48 AM
> **To:** John Neill <JNeill@srd.ca>
> **Subject:** 4129 Island Hwy South
>
> **NOTICE:** This email is from an external source.

John:

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I have attached our survey with a red line indicating what another option we are considering. Enclosing the carport and porch and squaring up the cottage. Adding a second storey is also being considered.

What would be our requirements?

Dodie and Vic Hodgins

From: [redacted]
To: John Neill
Subject: 4129 island hwy south
Date: April 17, 2025 2:45:47 PM

NOTICE: This email is from an external source.

John:
After 7 months we finally have a Geotechnical report for our property in Oyster Bay. They have given their recommendations we can work with. What's the next step? A permit to demolish our cottage and bring in a new modular?

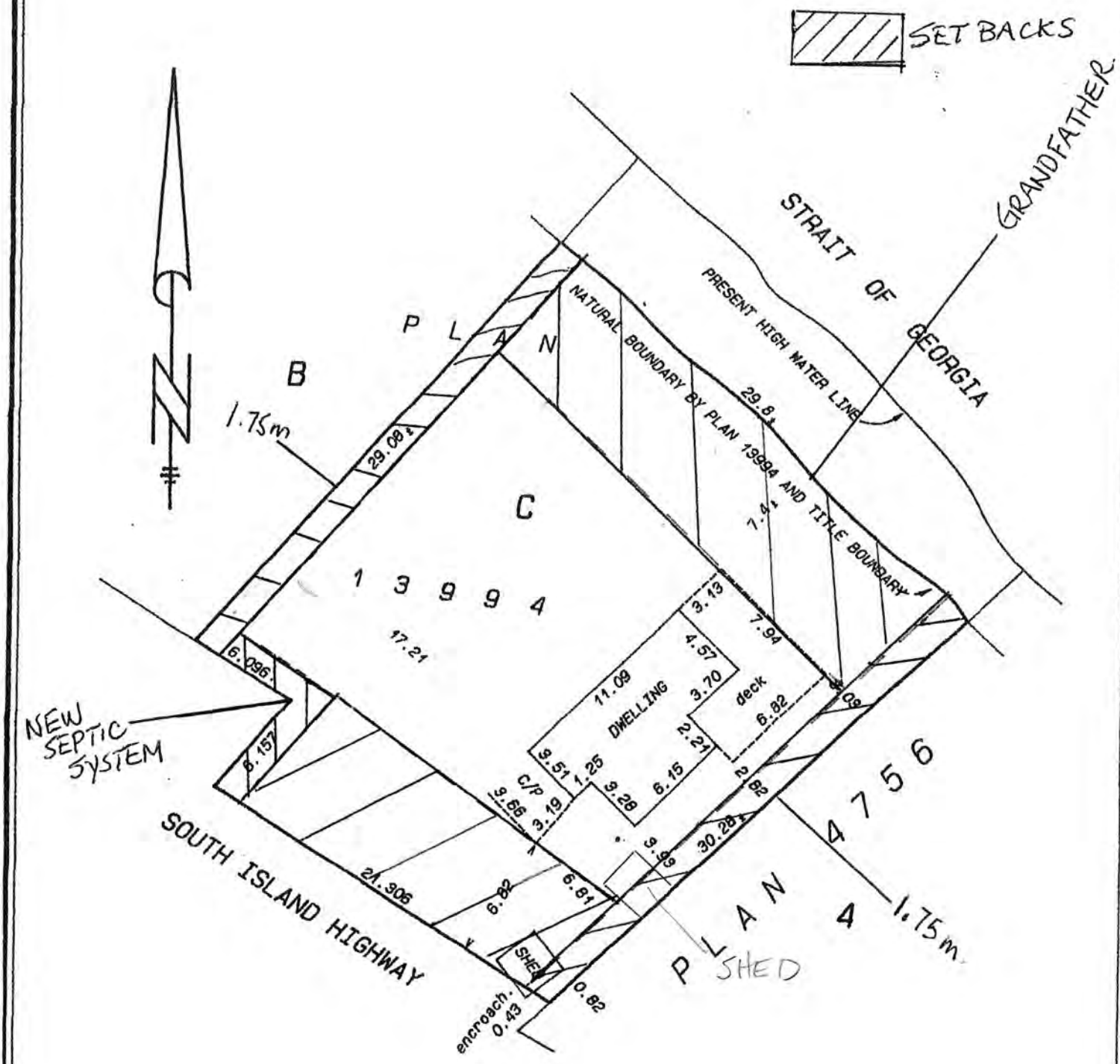
Dodie Hodgins

SCALE 1:300

All distances are in metres.

HODGINS COPY

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.



The purpose of this plan is for the protection of interested parties only and not for the re-establishment of property boundaries.

All clearance distances are shown to an accuracy of plus or minus 0.03 metres unless indicated otherwise.

HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8

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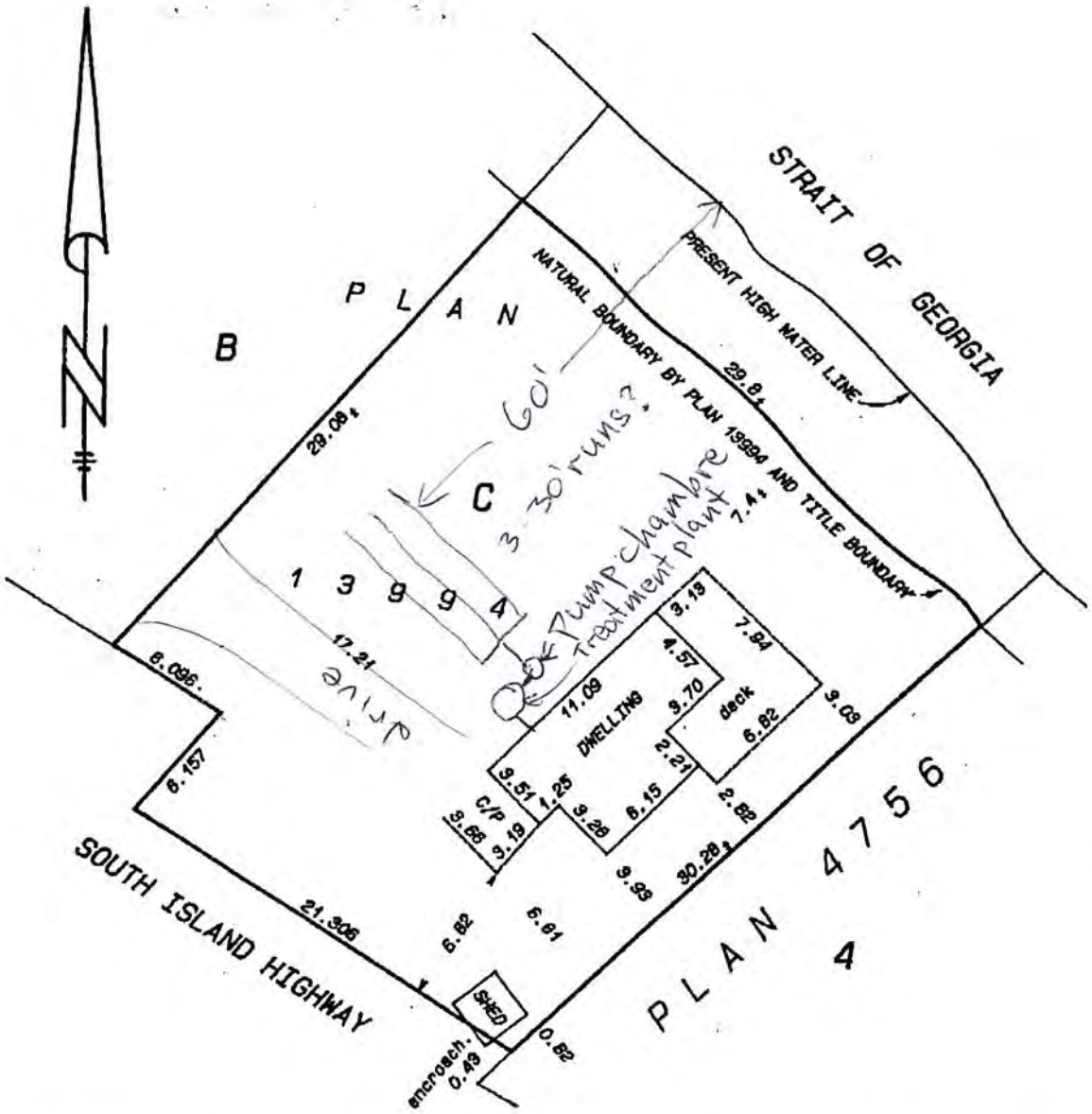
for sewage permit 51/03 yr#

SCALE 1:300

All distances are in metres.

CIVIC ADDRESS
4129 SOUTH ISLAND HIGHWAY,
CAMPBELL RIVER, B.C.

Phone 604 222-4620



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HANSON, KENYON & QUARMBY
B.C. LAND SURVEYORS
#103 -990 CEDAR STREET,
CAMPBELL RIVER, B.C.
V9W 7Z8
TELEPHONE 287-2257
FILE C0680

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