BOARD OF VARIANCE

Friday January 24, 2025

Sunshine Coast Regional District
1975 Field Road, Sechelt, B.C. and Online via Zoom

AGENDA

CALL TO ORDER 9:30 a.m.

AGENDA

1. Adoption of the Agenda — Page 1

MINUTES

2. Board of Variance Meeting Minutes of July 30, 2024 — Annex A pp 2 – 3
   (Receipt and Adoption)

REPORTS

3. Board of Variance Application BOV00026 — Annex B pp 4 - 26
   (13123 Narrows Road, Electoral Area A – Egmont/Pender Harbour)

4. Board of Variance Application BOV00027 — Annex C pp 27 - 75
   (8552 West Sakinaw Lakeshore, Electoral Area A – Egmont/Pender Harbour)

NEW BUSINESS

ADJOURNMENT

SUNSHINE COAST REGIONAL DISTRICT

BOARD OF VARIANCE
July 30, 2024

Minutes of the Board of Variance Hearing held at the Sunshine Coast Regional District Office located at 1975 Field Road, Sechelt, B.C. The meeting was held in-person in the Cedar Room.

PRESENT:	Member, Board of Variance	K. Engelland (Chair)
	Member, Board of Variance	K. Child
	Member, Board of Variance	T. Davies
ALSO PRESENT:	Planner II	N. Copes
	Senior Planner	S. Koberwitz
	Deputy Corporate Officer / Recorder	K. Wiebe
	Planning Technician III	D. Rajala
	Planning Technician II	K. Lamb
	Applicant/Owner BOV00025	R. Potter
	Public	1

CALL TO ORDER 9:30 a.m.

Introductions were made of those present at the meeting.

AGENDA The agenda was adopted as presented.

MINUTES The minutes of April 22, 2024 were received and adopted as presented.

REPORTS

Board of Variance Application: BOV00025
Subject Property: 5349 Backhouse Road, Halfmoon Bay
Legal Description: LOT 2 BLOCK A DISTRICT LOT 4537 PLAN 13497 PID: 0058-582-475

Staff provided a summary of the Board of Variance application BOV00025 and the rationale for the variance. The variance application is to reconstruct a home on an existing foundation and reconstruct a deck, which will be supported by existing posts. Both structures were destroyed by fire in 2024. To accommodate the proposal the applicant is requesting a variance to reduce the setback from the natural boundary of the ocean from 15.0 m to 10.5 m for a single-unit dwelling and 6.5 m for a deck structure. Staff noted that two letters in favor of the variance were received by owners of neighboring properties.

inspected for building compliance, but the setback was not confirmed.

The Chair invited questions and comments from the applicant and property owner.

Barbara Bolding, friend and neighbour to the applicant, of 10583 Mercer Road, voiced her support for the application. Ms. Bolding stated that the applicant is 91 years old, has been a resident of Halfmoon Bay for fifty years, and lives alone. Of note was Bolding's comment that the applicant is currently experiencing a hardship by having to reside in a 'fifth-wheel' trailer on the property in question. The applicant, Rosalie Potter, spoke to the discomfort of not having a proper bed to sleep in. Ms. Bolding noted that the rebuild of the home in question was an exact replica of the manufactured home that burned down and would not change the footprint of the previous structure.

The Board of Variance considered the application and made the following decision:

DECISION #02/24 **It was moved and seconded**

The Board of Variance recommended that the report titled Board of Variance Application BOV00025 (5349 Backhouse Road) – Electoral Area B be received for information;

AND THAT the Board of Variance considered the application in accordance with Section 542 of the *Local Government Act*;

AND FURTHER THAT Board of Variance Application BOV00025 requesting a variance to reduce the setback from the natural boundary of the ocean from 15.0 m to 10.5 m for a single-unit dwelling and 6.5m for a deck structure, be approved.

CARRIED

ADJOURNMENT 9:47 a.m.

Certified fair and correct:

~~K. Wiebe, Deputy Corporate Officer~~ Krista Engelland, Chair, Board of Variance

S. Reid, Corporate Officer

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Board of Variance – January 24, 2025

AUTHOR: Devin Rajala, Planning Technician III

SUBJECT: **Board of Variance Application BOV00026 (13123 Narrows Road) – Electoral Area A**

RECOMMENDATIONS

(1) THAT the report titled Board of Variance Application BOV00026 (13123 Narrows Road) – Electoral Area A be received for information;

(2) AND THAT the Board of Variance consider this application in conjunction with Section 542 of the *Local Government Act*;

BACKGROUND

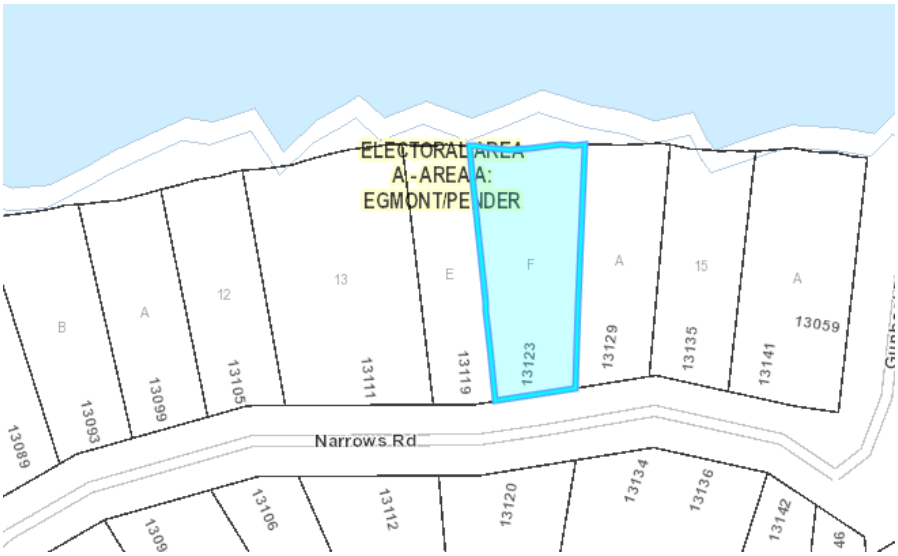
A Board of Variance application for the property at 13123 Narrows Road has been submitted to reconstruct a home and garage/workshop on an existing foundation, and construct new decks, one associated with the home with a reduced footprint further away from the shoreline and one associated with the garage with a slightly larger footprint extending towards the eastern property line. The former structures were destroyed by a fire on the property in June 2023.

To accommodate the proposal the applicant is requesting a variance to reduce the required setback of 15m from the natural boundary of the ocean to 5.6 m for the construction of a new single unit dwelling and 4.2 m for a new deck structure.

Table 1 Application Summary

Applicant:	Dakota Ridge Builders/John & Irene Rogers
Civic Address:	13123 Narrows Road
Legal Description:	LOT F BLOCK 5 DITRICT LOT 1024 PLAN 19228
Electoral Area:	A – Egmont/Pender Harbour
Parcel Area:	1,955 square meters
OCP Land Use:	Residential A
Land Use Zone:	R2 (Residential Two)
Application Intent:	The applicant is requesting a variance to reduce the required setback of 15m from the natural boundary of the ocean to 5.6 m for the construction of a new single unit dwelling and garage/workshop using the existing foundation and 4.2 m for a new deck structure.

Figure 1 Location Map

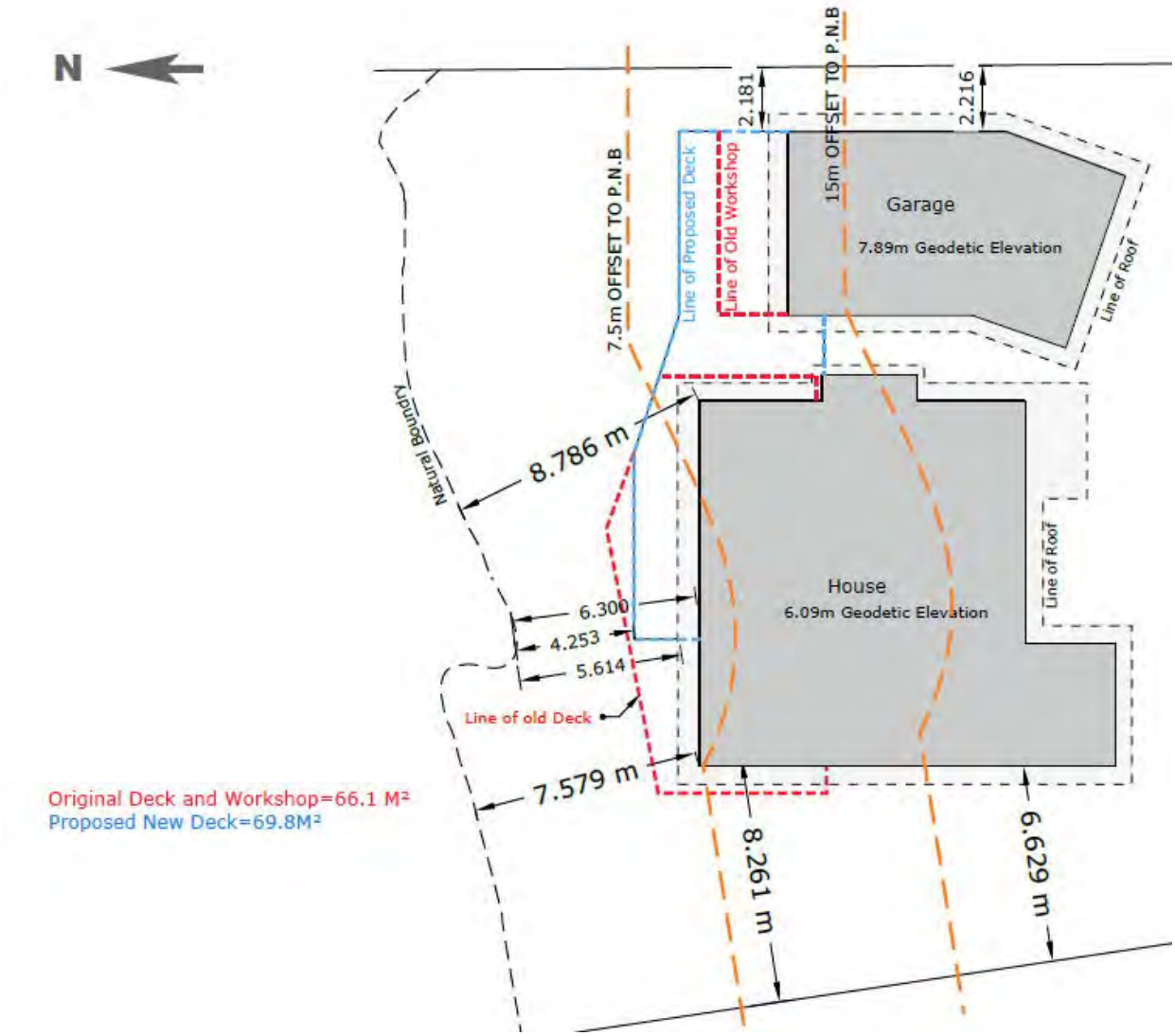


The lot was formerly home to a single unit dwelling and detached garage which were destroyed by a fire on June 16, 2023.

The applicant wishes to reconstruct a single unit dwelling and a garage/workshop using the existing foundations, located 5.6 m from the natural boundary of the ocean. The applicant also wishes to reconstruct deck structures, attached to the house and garage, that are located 4.2m from the natural boundary of the ocean. The footprint proposed for the reconstruction is the same as the original house with the exception of the decks, with a squared off deck for the home having a reduced footprint set further back from the natural boundary of the ocean, and with the deck for the house having a larger footprint with it being extended toward the east property line. The existing and proposed footprints are illustrated in Figure 2 and 3 below, with the original deck 66.1m^2 and the new deck being 69.8m^2.

Figure 2: Partial 2014 Orthophoto illustrating original footprint.

Figure 3: Proposed Site Plan, illustrating proposed footprint.



The property is within Development Permit Area #1A – Coastal Flooding and Development Permit Area #1B – Coastal Slopes. The proponent has submitted a development permit application. Issuance of the permit is conditional on the approval of the reduced setback that is the subject of this application.

A geotechnical engineer has determined that the existing foundations are safe for the construction of the new single unit dwelling, auxiliary building (garage) and deck structure. A geotechnical assessment, submitted in support of the required development permit process, indicates that the property is safe for the use intended with the proposed Flood Construction Level (FCL) of the basement slab at 6m (lower habitable floor area) exceeding the minimum recommended FCL of 4.75m.

DISCUSSION

Analysis

Zoning Bylaw 337 includes the following regulation:

515 (1) Not withstanding any other provision of this bylaw, and for the purpose of flood protection, no building or any part thereof, except a boathouse or wharf located solely on a waterbody, shall be constructed, reconstructed, moved, located or extended within:

(a) 15 m of the natural boundary of the ocean;

It is noted that the setback requirement of was increased from the natural boundary of the ocean was increased from 7.5m to 15m as part of bylaw amendments adopted November 28th, 2024.

Applicant's Rationale and Statement of Hardship

The applicant has provided the following information and statement of hardship in relation to the requested variance:

- The previous home and garage were destroyed by fire and the applicant is seeking to reconstruct using existing foundations
- The re-siting of the home would result in burdensome construction delays of up to an extra year with additional complications arising due to insurance claim time limits
- Demolition of existing foundations and need to rework current septic system would cause financial hardship
- The geotechnical report states that the property is safe for the use intended. The Flood Construction Level (FCL) of the basement slab at 6m (lower habitable floor area) exceeds the FCL recommended by the geotechnical engineer of 4.75m.
- The family will suffer personal hardship and opportunity costs as further delays keep them from enjoying their home with their friends, children and grandchildren.

Role of the Board of Variance

Section 540 of the Local Government Act allows the Board of Variance to consider variance to a bylaw respecting the siting, size, or dimensions of a structure. Therefore, it is considered that this application is within the purview of the Board of Variance.

Pursuant to Section 542 of the Local Government Act the Board of Variance must consider in their review of this application:

1. Is there a hardship?

The applicant has indicated that they are seeking to replace dwelling, garage and associated deck that was destroyed by fire. To rebuild to conform with setbacks would be

impactful given the location of the septic system and the financial burden. Whether this represents a hardship is at the discretion of the Board of Variance.

2. Does the variance result in inappropriate development of the site?

The proposed reconstruction does not exceed the footprint and approximate massing as the house that was in place prior to the fire. The only change to the footprint is for the decks, which sees a reduced deck footprint for the home further from the natural boundary of the ocean and an increased deck footprint for the deck attached to the garage extending closer towards the natural boundary of the lake and eastern property line.

3. Does the variance adversely affect the natural environment?

The proposed reconstruction is on the existing foundation and does not propose further land alteration outside of the existing disturbed area.

4. Does the variance affect the use and enjoyment of adjacent land?

The proposed construction would have the same impact on neighbouring properties as the house prior to the fire.

5. Does the variance alter the permitted uses or densities on a parcel?

The proposed construction does not alter permitted uses or densities.

The Board of Variance has the authority to approve or deny the application.

Notification

Notification was provided to adjacent neighbours in accordance with Section 541 of the Local Government Act and Sunshine Coast Regional District Board of Variance Bylaw No. 380, 1993. No comments have been received at the time of this report.

Members of the public will have the opportunity to provide comments at the Board of Variance meeting.

CONCLUSION

The requested variance is required to facilitate the reconstruction of a single unit dwelling using an existing foundation and an auxiliary building (garage/workshop) using an existing foundation, as well as the construction of a new decks for the home and garage. The proposed location of all the structures do not conform to setback regulations and therefore a variance is required for the proposal to proceed.

ATTACHMENTS

Attachment A – Site Photos
Attachment B – Variance Plan
Attachment C – Site Plan & Architectural Plans

Reviewed by:			
Manager	X – J. Jackson	Finance	
GM		Legislative	
CAO		Assistant Manager	X- K. Jones

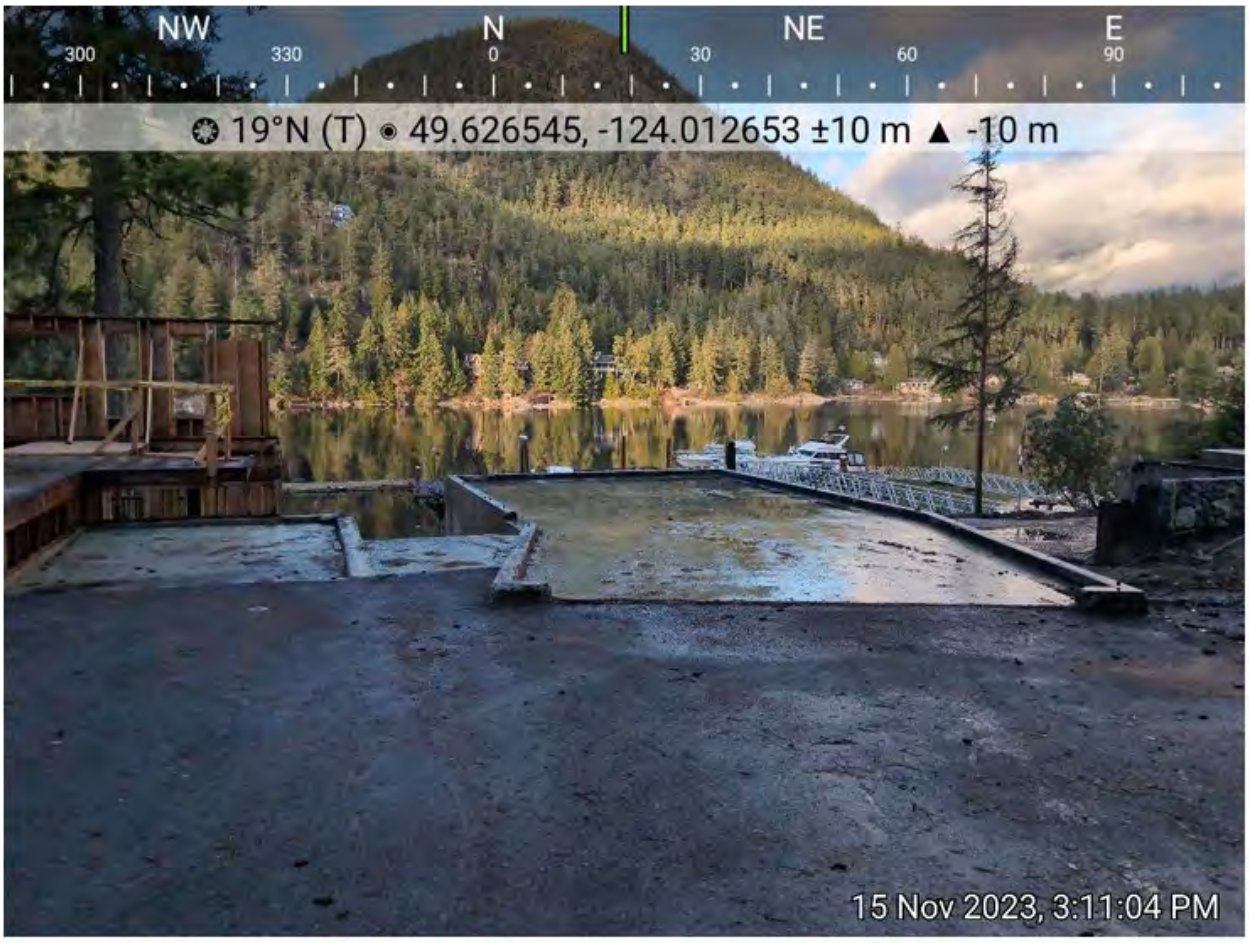
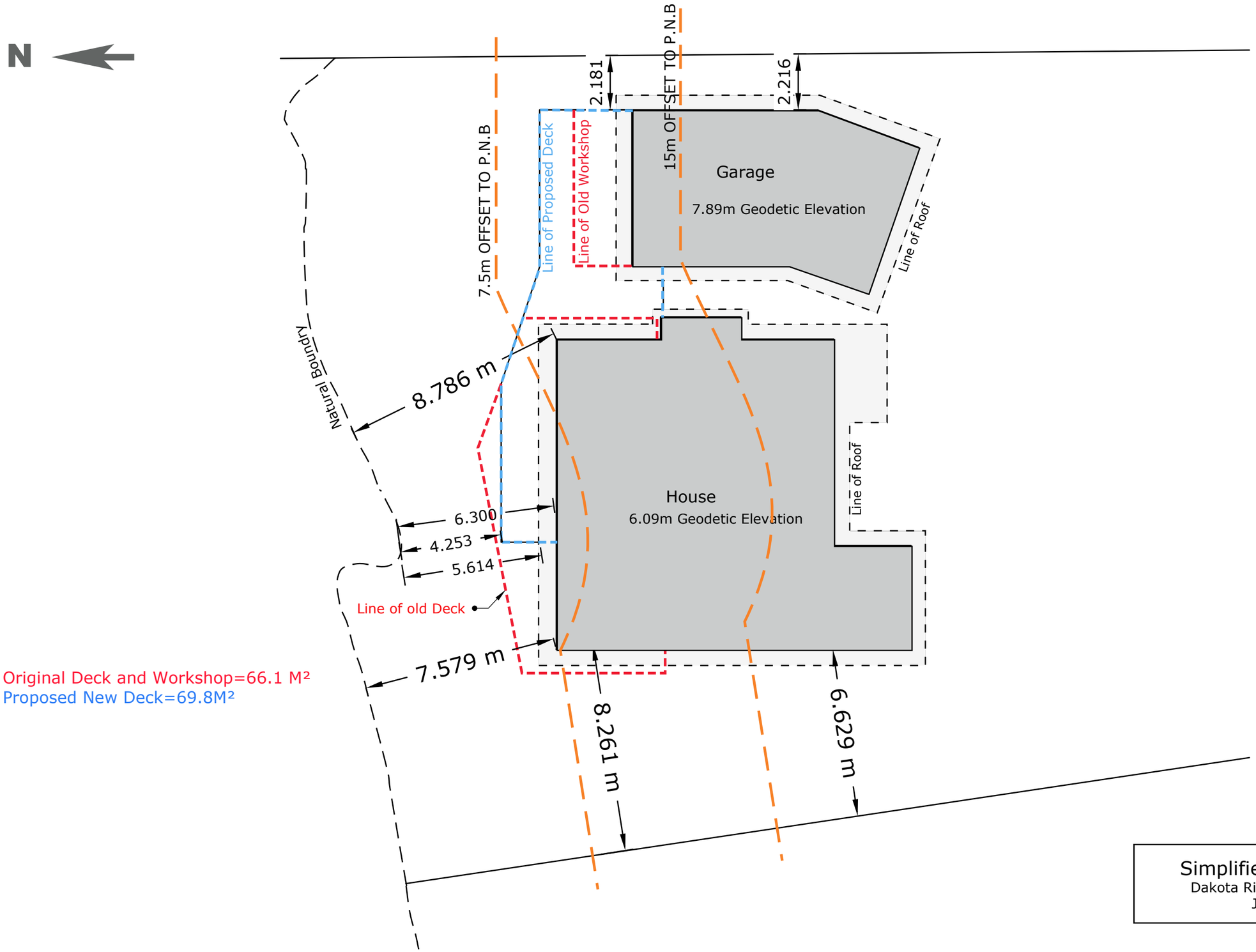


Figure 1: Existing Foundation

Figure 2: Remaining Framing

Figure 4: Former Residence and Workshop



Original Deck and Workshop=66.1 M²
Proposed New Deck=69.8M²

Simplified Variance Plan
Dakota Ridge Builders: Rogers
Jan.16 2025

John and Irene Rogers - 13123 Narrows Rd.

SIZE: 8X8 (7½"x7½" NOM.) U.N.O. SPECIES: SPECIES STYLE: TIMBER FRAME HYBRID NOTES/EXTRAS:	SNOW LOAD: 42 LBS. ENERGY CODE COMPLIANCE: N/A ENGINEERING REQUIRED: YES LOCATION: Madeira Park, BC COUNTY:
STREAMLINE DESIGN LTD. #102-2469 PAULINE ST. ABBOTSFORD, B.C. V2S 3S1 PHONE: (604) 854-2966 INFO@STREAMLINEDESIGN.CA	

Sheet Index

Sheet	Layout Name
A01	Cover Page
A02	Site Plan
A03	North Elevation
A04	East Elevation
A05	South Elevation
A06	West Elevation
A07	Foundation Layout
A08	Basement Plan
A09	First Floor Plan
A10	Roof Plan
A11	Wall Sections
A12	Details
A13	Moisture Mgmt Details

Applied Science Technologists and Technicians of British Columbia
23774
KEVIN SIMOES
Ctech

GENERAL NOTES:

DESIGN DATA:

Madeira Park: B.C.B.C. 2024
ROOF LIVE LOAD: 42 PSF W/ MAXIMUM 1/360 LIVE DEFLECTION
ROOF DEAD LOAD: 15 PSF W/ MAXIMUM 1/240 TOTAL DEFLECTION
FLOOR LIVE LOAD: 40 PSF
FLOOR DEAD LOAD: 10 PSF
DECK LOADS ARE: 10 PSF DEAD / 40 PSF LIVE / 42 PSF SNOW LOAD
WIND LOAD: (1/30) - 28 P.S.F. (BASIC)
SEISMIC: 473? lbs. (BASE SHEAR)
-LIVE LOAD IS THE WEIGHT THAT IS SUPERIMPOSED ON THE STRUCTURAL BY THE USE AND OCCUPANCY OF THE BUILDING FACTORS, SUCH AS FURNITURE, APPLIANCES & PEOPLE. ALSO INCLUDES LOCAL ENVIROMENTAL FACTORS SUCH AS WIND & SNOW LOADS.
-DEAD LOAD IS THE ACCUMULATIVE WEIGHT OF ALL STRUCTURAL MEMBERS, THE FIXTURES AND THE PERMANENTLY ATTACHED EQUIPMENT OF THE STRUCTURE AND ITS FOUNDATION

FOUNDATION:

SOIL BEARING PRESSURE IS ASSUMED TO BE A
MINIMUM OF 1500 P.S.F.
ALL FTGS. TO BEAR ON FIRM UNDISTURBED MATERIAL
ALL REINFORCED CONC. TO BE 3500 PSI (18MPa) @ 28 DAYS. DO NOT POUR ON FROZEN GROUND OR WATER
UNREINFORCED CONC. TO BE 2900 PSI (20MPa) FOR FLOORS OTHER THAN THOSE IN GARAGES AND CARPORTS AND 4350 PSI (30MPa) FOR GARAGE AND CARPORT FLOORS AND EXTERIOR STEPS.
FOOTINGS TO BE A MINIMUM OF 18" BELOW LOCAL FROST LINE.

SUGGESTED CONCRETE REINFORCEMENT TO BE VERIFIED BY ENG.:

FOOTINGS - 2-15M REBAR LONGITUDINALLY
CONCRETE WALLS - 15M REBAR HORIZONTALLY IN WALL @ 18" CENTERS +
(2) BARS AT TOP OF WALL CENTERED IN CONC. WALL
VERTICAL REBAR REINFORCEMENT TO BE 15M REBAR @ 18" O.C.
ALL DECK POSTS & LEAN-TO ROOF POSTS CONCRETE FOOTINGS WITH 15M REBAR ON 12" GRID
RECOMMEND WIRE MESH REINFORCEMENT IN ALL CONC. SLABS TO AVOID CRACKS
CONC. POST (SONOTUBE) VERTICAL REBAR REINFORCEMENT TO BE 4-15M REBAR & 10M TIES @ 6" O.C.
EXISTING CONC. SLAB AND FOOTINGS TO BE VERIFIED BY ENG.
FOR STRUCTURAL INTEGRITY AND LOAD CAPABILITIES

MATERIAL:

FRAMING MATERIAL TO BE DOUGLAS FIR No.2 OR BETTER FOR LOAD BEARING MEMBERS & HEM-FIR No.2 OR BETTER FOR NON-LOAD BEARING MEMBERS
PLYWOOD SHEATING TO BE STANDARD GRADE D-F/R OR SPRUCE. FLOOR SHEATING TO BE 3/4" TONGUE & GROOVE, GLUED & NAILED W/ 10d NAILS @ 6" O.C. EDGES & 10" O.C. FIELD.
ALL LINTELS TO BE 2-2X10's (D-F/R No.2) UNLESS OTHERWISE NOTED.
WOOD TRUSSES TO BE DESIGNED BY THE MANUFACTURER & TO BE APPROVED BY THE ENG.
PRIOR TO FABRICATION

STANDARD:

ALL WORKMANSHIP AND MATERIAL ARE TO MEET OR EXCEED THE REQUIREMENTS OF THE BC BUILDING CODE 2024, THE BC PLUMBING CODE, THE BC ELECTRICAL CODE, THE CANADIAN STANDARDS ASSOC. AND THE LOCAL BY-LAWS OF THE CITY/DISTRICT.
ALL WORKMANSHIP AND MATERIAL ARE TO MEET OR EXCEED THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE 2024, THE I.B.C. PLUMBING CODE, THE I.B.C. ELECTRICAL CODE, THE INTERNATIONAL STANDARDS ASSOC. AND THE LOCAL BY-LAWS OF THE CITY/COUNTY.

INSULATION AND VENTILATION

- MINIMUM REQUIREMENTS:
ROOF/CEILING R48
WALLS - 2x6 R24
ATTIC OR ROOF SPACES TO BE VENTED MINIMUM $^1/_{300}$ ($^1/_{150U.S.}$) OF AREA. UNHEATED CRAWLSPACES TO BE VENTED MINIMUM $^1/_{500}$ ($^1/_{300}$ U.S.) OF AREA W/TH CLOSABLE VENTS.
6 MIL POLY VAPOUR BARRIER SHALL BE INSTALLED TO THE WARM SIDE OF INSULATION.
PROVIDE BAFFLE FOR AIR SPACE (EQUAL TO SOFFIT VENTING) BETWEEN INSULATION AND ROOF SHEATHING AT EXTERIOR WALL LINE.
INSULATION REQUIREMENTS MAY VARY WITH HEATING SYSTEMS AND WITH LOCAL CONDITIONS. CHECK WITH LOCAL AUTHORITIES.
ALL ROOF SPACES SHALL BE VENTILATED WITH SOFFIT, ROOF, OR GABLE VENTS, OR A COMBINATION OF THESE, EQUALLY DISTRIBUTED BETWEEN TOP OF ROOF SPACE AND SOFFITS.

HEATING AND PLUMBING:

PLUMBING AND HEATING LAYOUTS TO BE PROVIDED BY MECHANICAL CONTRACTORS.
INSTALLATION OF ENTIRE HEATING SYSTEM, WHETHER ELECTRIC, FORCED AIR, OR HOT WATER, MUST COMPLY WITH MANUFACTURERS DIRECTIONS (WHERE APPLICABLE) AND CONFORM WITH LOCAL CODES AND REGULATIONS IN ALL RESPECTS.
FUEL BURNING APPLIANCES, INCLUDING FURNACES, FIREPLACES, AND STOVES, TO BE PROVIDED WITH 4" MIN. DIA. HORZ. COMBUSTION AIR SUPPLY FROM EXTERIOR & 6" VERTICAL AIR EXHAUST FLUE W/ 1" CLEARANCE TO NEAREST COMBUSTIBLE (6" TO NEAREST COMBUSTABLE IF COMBINED W/ HWTR. FLUE).
ALL TOILETS TO BE MAX. 4.8 L.P.F. OR DUAL-FLUSH
VENT DRYER TO OUTSIDE W/ A MAX. LENGTH OF 14 FEET WITH TWO 90-DEGREE ELBOWS.
PROVIDE STANDPIPE AND WATER TAPS FOR WASHER.
PROVIDE SEISMIC ANCHORAGE OF WATER HEATER AND VERTICALLY MOUNTED FURNACE.

FINISHING:

½" TYPE 'X' DRYWALL TO BE APPLIED UNDER STAIRS AND AT GARAGE WALLS ADJACENT TO DWELLING.
ALL INTERIOR AND EXTERIOR FINISHING SHALL BE SPECIFIED BY OWNER. ANY FINISHING SHOWN ON PLANS SHALL BE CONFIRMED BY OWNER.
EXTERIOR DOORS SHALL BE SOLID CORE AND WEATHER-STRIPPED. GARAGE DOORS TO DWELLING TO BE AS ABOVE AND SELF-CLOSING.
FLASH AT ALL HORIZONTAL CHANGES IN EXTERIOR FINISHINGS AND CAULK AROUND ALL UNFLASHED EXTERIOR OPENINGS. FLASH OVER ALL UNPROTECTED OPENINGS.
ALL GLASS DOORS TO HAVE TEMPERED GLASS.
OPENINGS IN PARTITIONS SHOWN WITHOUT DOORS ARE FULL HEIGHT UNLESS SHOWN AS AN ARCH. ARCHES ARE FRAMED 6'-1" HIGH UNLESS OTHERWISE NOTED.
COAT AND CLOTHES CLOSETS SHALL HAVE ONE ROD AND SHELF. LINEN CLOSETS SHALL HAVE 5 ADJUSTABLE SHELVES WHERE POSSIBLE. BROOM CLOSETS SHALL HAVE ONE SHELF.
ALL BATHROOMS SHALL HAVE A WALL MEDICINE CABINET OR ONE LOCKABLE DRAWER.

ERRORS, OMISSIONS & DISCREPANCIES:

-STREAMLINE DESIGN LTD. MAKES EVERY EFFORT TO PROVIDE COMPLETE AND ACCURATE HOME PLANS, HOWEVER IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK AND VERIFY ALL DIMENSIONS AND DETAILS BEFORE PROCEEDING WITH CONSTRUCTION. SHOULD ANY DISCREPANCIES BE FOUND ON THESE PLANS, PLEASE ADVISE OUR OFFICE AT YOUR EARLIEST CONVENIENCE. BY DOING SO WE WILL BE ABLE TO MAKE ANY NECESSARY CORRECTIONS TO THE DRAWINGS.
-CONTRACTOR IS RESPONSIBLE FOR SAFETY ON THE JOB SITE DURING CONSTRUCTION AND SHALL ENSURE COMPLIANCE TO CURRENT W.C.B. REGULATIONS AND WITH ALL LOCAL CODES AND ORDINANCES.
-GENERAL CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
-ALL DIMENSIONS TO TAKE PRECEDENCE OVER SCALE SHOWN ON SET OF PLANS ALL DIMENSIONS ARE CONSTRUCTION DIMENSIONS. VERIFY ALL ROUGH-IN DIMENSIONS FOR WINDOWS, DOORS, PLUMBING, ELECTRICAL, FIXTURES AND APPLIANCES PRIOR TO COMMITMENT OF WORK.
-CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS AND SPECIFICATIONS ON THIS SET OF PLANS. ALL BEAM, POST, MEMBER SIZES AND CONDITIONS TO BE CHECKED AND VERIFIED WITH THE STRUCTURAL DRAWINGS PRIOR TO COMMENCING ANY WORK.
-NOTIFY STREAMLINE DESIGN LTD. OF DISCREPANCIES. IF WORK IS STARTED PRIOR TO NOTIFICATION, CONTRACTORS PROCEED AT THEIR OWN RISK.
-CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO STREAMLINE DESIGN LTD. AND THE STRUCTURAL ENGINEER FOR APPROVAL, PRIOR TO FABRICATION OR CONSTRUCTION.

LIABILITY:

STREAMLINE DESIGN LTD WILL NOT BE LIABLE FOR:
-ANY INFORMATION COORDINATED WITH, OR PROVIDED BY, ANY ADDED CONSULTANTS. THIS INCLUDES ANY INFORMATION INCORPORATED INTO THE ARCHITECTURAL DRAWINGS, OR OTHERWISE, AND THE CONSULTANTS' POTENTIAL ERRORS OR OMMISIONS.
-THE FAILURE OF A CONTRACTOR, RETAINED BY THE CLIENTS, TO PERFORM WORK IN ACCORDANCE WITH THE DESIGN CONSTRUCTION DOCUMENTS.
-THE FAILURE OF A CONTRACTOR, RETAINED BY THE CLIENTS, TO PERFORM WORK IN ACCORDANCE WITH THE LOCAL ZONING BYLAW AND/OR BUILDING CODE COMPLIANCE.
-ANY PROJECT DECISIONS MADE BY THE CLIENT WITHOUT THE WRITTEN ADVICE OF STREAMLINE DESIGN LTD.
-STREAMLINE DESIGN LTD LIABILITY SHALL BE LIMITED TO THE CONTRACTED PRICE OF OUR WORKS WITH THE CLIENT.
-AT ALL TIMES IT IS THE SOLE RESPONSIBILITY OF THE CONTRATOR RETAINED BY THE CLIENTS, TO ENSURE THAT THE HOUSE, DRIVEWAY AND ANY SITE FEATURES ARE WITHIN THE PROPERTY BOUNDARIES AND SETBACKS.
-AT ALL TIMES IT IS THE SOLE RESPONSIBILITY OF THE CONTRATOR RETAINED BY THE CLIENTS, TO ENSURE THAT THE HOME, AND ANYTHING CONSTRUCTED, MEETS THE LOCAL BUILDING CODE AND BYLAWS.

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

Streamline Design Ltd.
#102-2469 PAULINE ST.
ABBOTSFORD, BC, V2S 3S1
PH: 604-854-2966 FAX: 604-854-2981
WWW.STREAMLINEDESIGN.CA

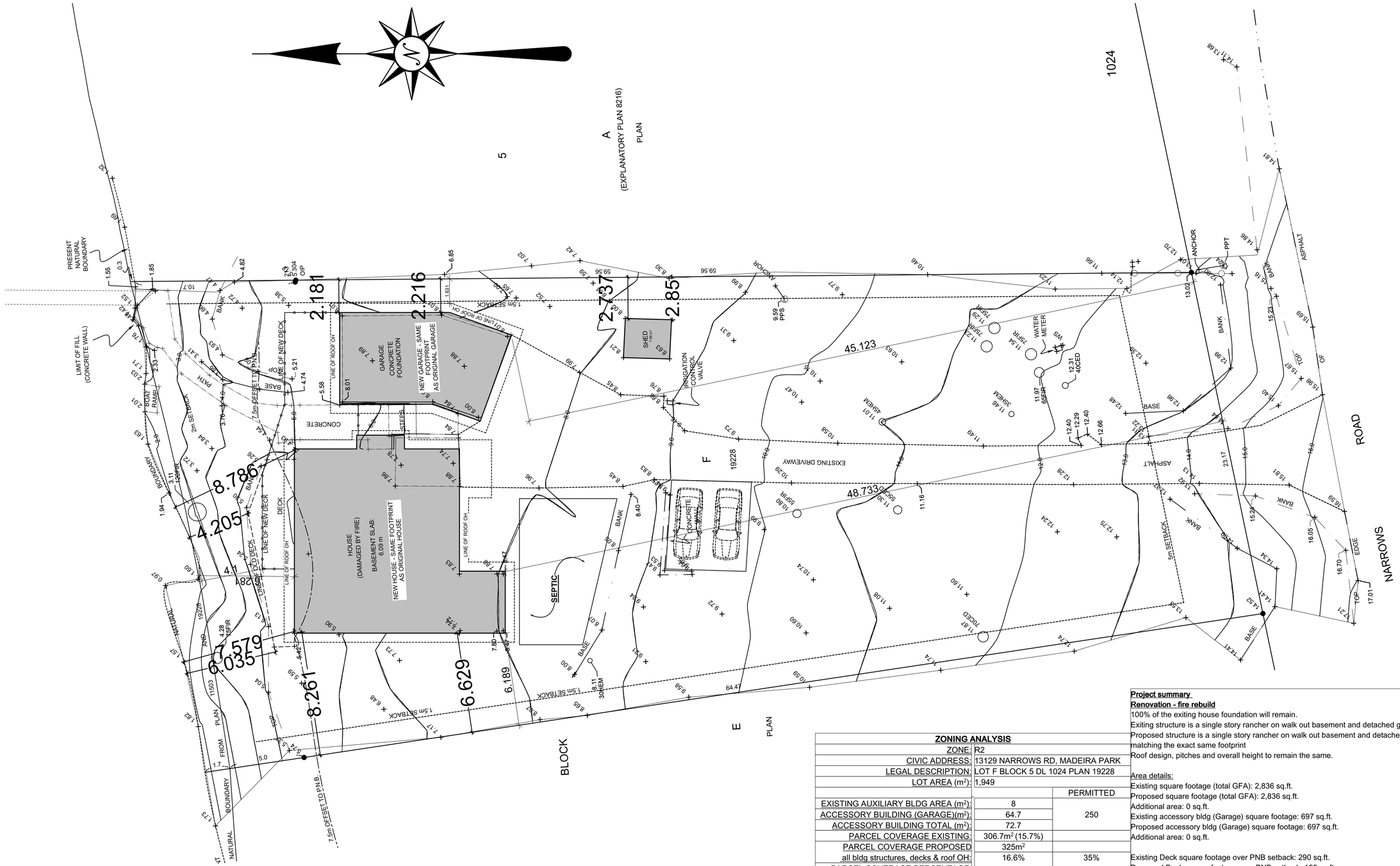
PROJECT #: 2411
SCALE: 1/4" = 1" U.N.O.
DATE: 2024-10-02
DESIGNER: K. SIMOES
TECHNICIAN: L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

DRAWING TITLE: Cover Page

SHEET:

A01 OF 13



SITE PLAN
SCALE: 1" = 10'

* NOTE: THIS SITE PLAN IS BASED ON INFORMATION PROVIDED BY SURVEYOR & INCLUDED IN ARCHITECTURAL DRAWINGS FOR SITING PURPOSES & BYLAW CONFORMANCE CALCULATIONS ONLY. GENERAL CONTRACTOR & SURVEYOR TO CONFIRM ALL INFORMATION INCLUDING BUT NOT LIMITED TO PROPERTY LINES, SETBACKS, TREE LOCATIONS, EASEMENTS, UTILITIES/SERVICES & ALL APPLICABLE LOCAL LAWS & BYLAWS PRIOR TO ANY CONSTRUCTION. STREAMLINE DESIGN LTD. IS NOT RESPONSIBLE FOR ANY DISCOVERIES, DISCREPANCIES, OR DEVIATIONS FROM THESE PLANS MADE BEFORE OR DURING CONSTRUCTION.

ZONING ANALYSIS		
ZONE:	R2	
CIVIC ADDRESS:	13129 NARROWS RD, MADEIRA PARK	
LEGAL DESCRIPTION:	LOT F BLOCK 5 DL 1024 PLAN 19228	
LOT AREA (m^2):	1,949	
		PERMITTED
EXISTING AUXILIARY BLDG AREA (m^2):	8	250
ACCESSORY BUILDING (GARAGE)(m^2):	64.7	
ACCESSORY BUILDING TOTAL (m^2):	72.7	
PARCEL COVERAGE EXISTING:	306.7m^2 (15.7%)	
PARCEL COVERAGE PROPOSED all bldg structures, decks & roof OH:	325m^2 16.6%	35%
PARCEL COVERAGE PERCENTAGE:		
SETBACKS - PRINCIPAL BUILDING		
	PROPOSED (m)	PERMITTED (m)
FRONT:	45.12	5
REAR:	4.25 (deck) & 5.64 (house)	7.5 PNB
SIDE (INT):	6.19 & 2.18	1.5
SIDE (EXT):	N/A	4.5
BUILDING HEIGHTS		
	PROPOSED (m)	PERMITTED (m)
PRINCIPAL BUILDING:	8.69	11
ACCESSORY BUILDING (GARAGE):	7.16	11
FLOOR AREA OF EXISTING STRUCTURES:	336.2m^2	
FLOOR AREA OF PLANNED STRUCTURES:	336.2m^2	

Project summary

Renovation - fire rebuild

100% of the exiting house foundation will remain.
Exiting structure is a single story rancher on walk out basement and detached garage
Proposed structure is a single story rancher on walk out basement and detached garage matching the exact same footprint
Roof design, pitches and overall height to remain the same.

Area details:
Existing square footage (total GFA): 2,836 sq.ft.
Proposed square footage (total GFA): 2,836 sq.ft.
Additional area: 0 sq.ft.
Existing accessory bldg (Garage) square footage: 697 sq.ft.
Proposed accessory bldg (Garage) square footage: 697 sq.ft.
Additional area: 0 sq.ft.

Existing Deck square footage over PNB setback: 290 sq.ft.
Proposed Deck square footage over PNB setback: 155 sq.ft.
Note the deck is being reduced in consideration of the 7.5m offset to present natural boundary.

Existing deck area: 312 sq.ft.
Proposed deck area: 550 sq.ft.

Existing auxiliary building area: 86 sq.ft.
Accessory building area to remain unchanged

Percentage of the existing above foundation structural components to be removed and/or replaced: 95%

Number of new storey(s) added to the original structure: Zero (0)
Number of new dwelling units being added to the original structure: Zero (0)

Current - single family dweling with detached garage.
Proposed - single family dweling with detached garage.

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

COMPLETE SET OF PLANS TO BE ENGINEERED

Streamline Design Ltd.
#102-2469 PAULINE ST.
ABBOTSFORD, BC, V2S 3S1
PH: 604-854-2866 FAX: 604-854-2861
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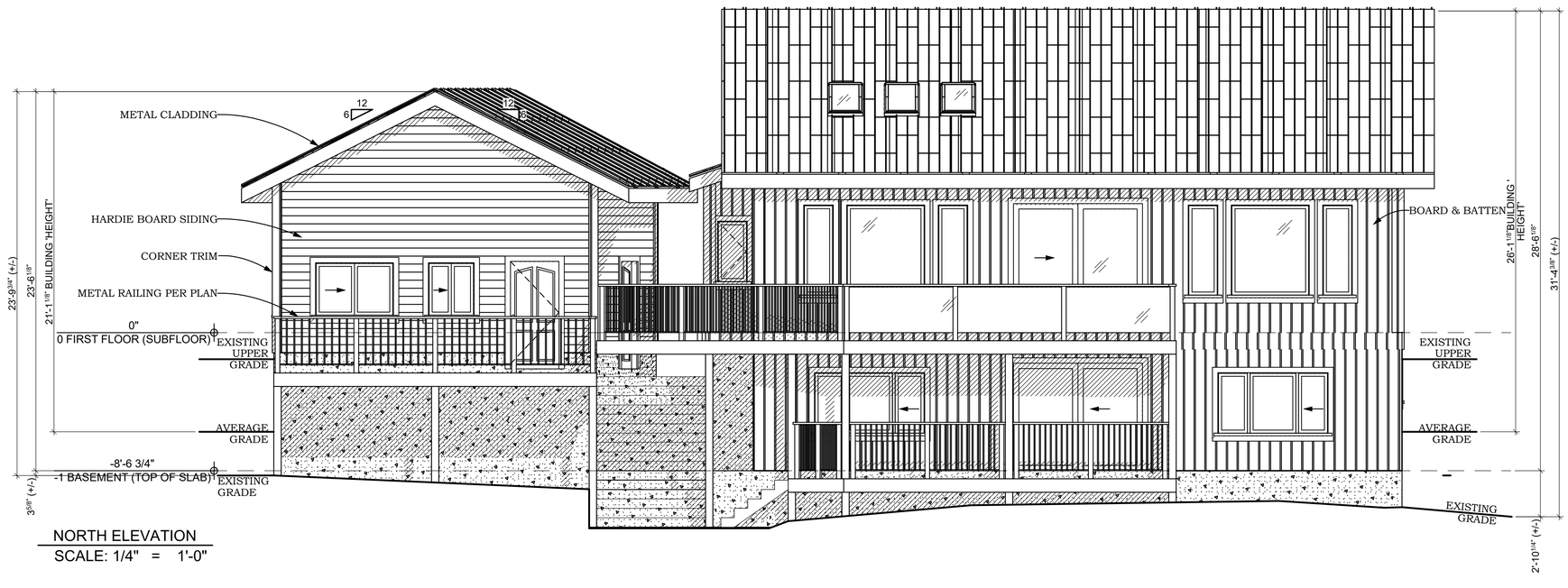
PROJECT #: 2411
SCALE: 1/4" = 1' U.N.O.
DATE: 2024-10-02
DESIGNER: K. SIMOES
TECHNICIAN: L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

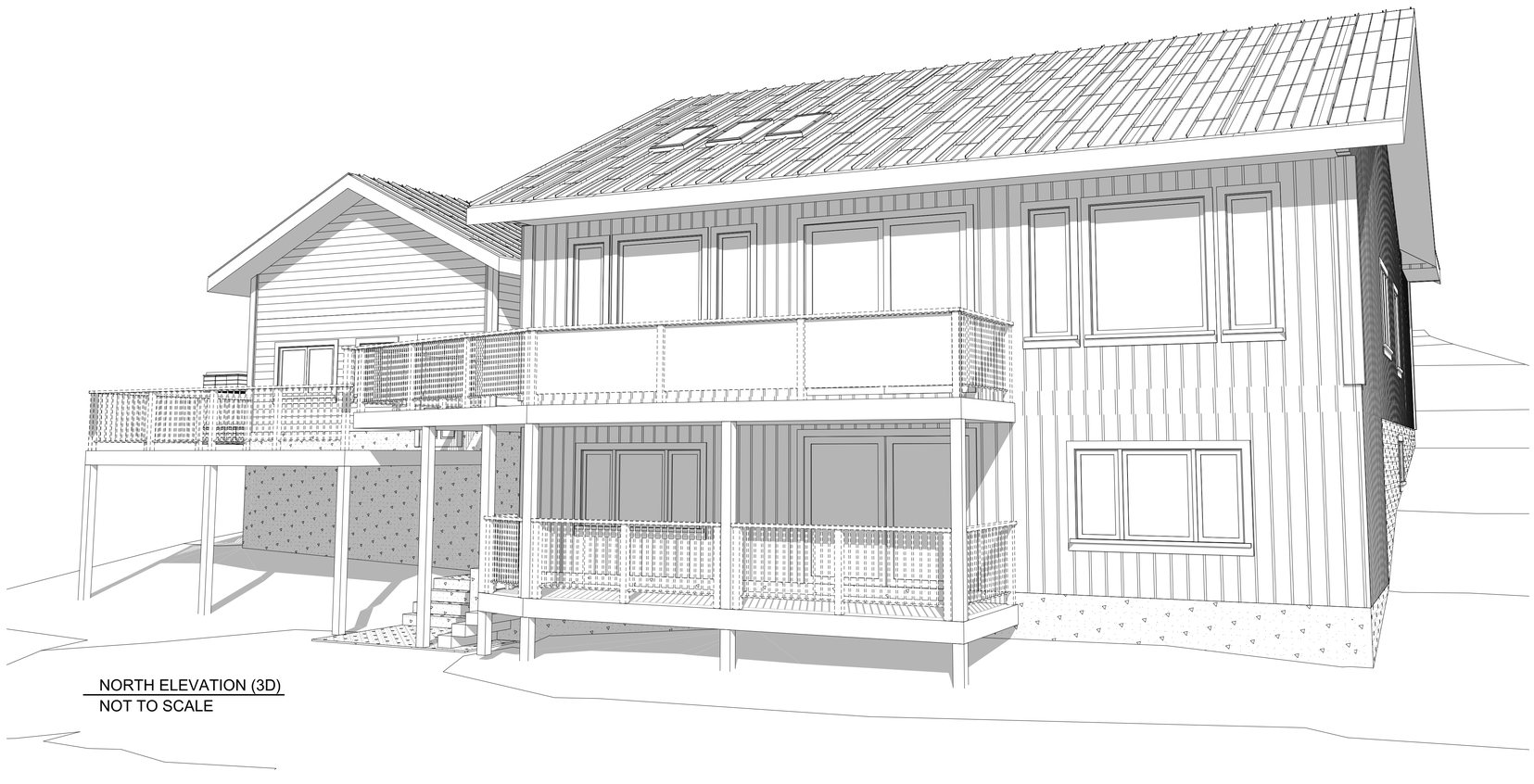
DRAWING TITLE: Site Plan

SHEET:

A02 OF 13



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



NORTH ELEVATION (3D)
NOT TO SCALE

WINDOW LIST				
ID	Qty	W x H Size	Front View	Notes
W1	1	3'-0"×1'-2"		
W2	2	3'-0"×4'-6"		
W3	3	2'-6"×4'-6"		
W4	1	4'-0"×4'-8"		SAFETY
W5	1	6'-0"×4'-2"		SLIDER
W6	4	2'-0"×5'-10"		
W7	2	5'-0"×5'-10"		
W8	1	6'-0"×4'-0"		SLIDER
W9	1	2'-0"×4'-0"		
W10	2	4'-0"×3'-6"		SLIDER
W11	1	3'-0"×3'-6"		
W12	1	5'-0"×3'-6"		SLIDER
W13	2	7'-0"×4'-0"		SLIDER
W14	1	4'-0"×2'-6"		
W15	1	6'-0"×4'-0"		NO GLASS

DOOR LIST				
ID	Qty	W x H Size	Front View	Notes
D1	1	3'-0"×6'-8"		SOLID CORE / TEMP. / 2'-0" SIDELIGHT
D2	1	6'-0"×6'-8"		TEMP.
D3	1	8'-0"×8'-0"		SLIDER / TEMP
D4	1	16'-3"×8'-0"		OVERHEAD GARAGE DOOR
D5	2	3'-0"×6'-8"		SOLID CORE
D6	1	2'-8"×6'-8"		SOLID CORE / TEMP.
D7	1	8'-0"×6'-8"		SLIDER / TEMP.

* NOTE: WINDOWS TO BE HARD COAT LOW-E, WOOD, VINYL CLAD, ARGON FILLED, DOUBLE PANE W/ ENERGY STAR RATING U.N.O.
* PLEASE NOTE, GENERAL CONTRACTOR TO DOUBLE CHECK WINDOW SIZES AND R.O. DIMENSIONS LISTED IN THE SCHEDULES W/ MANUFACTURES LISTED R.O. DIMENSIONS AND W/ OPENING DIMENSIONS IN FRAMING TO ENSURE A PERFECT FIT.
* NOTE: SEE ELEVATIONS FOR OPENING STYLE

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

#102-2469 PAULINE ST.
ABBOTSFORD, BC. V2S 3S1
PH: 604-854-2966 FAX: 604-854-2981
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Streamline Design Ltd.

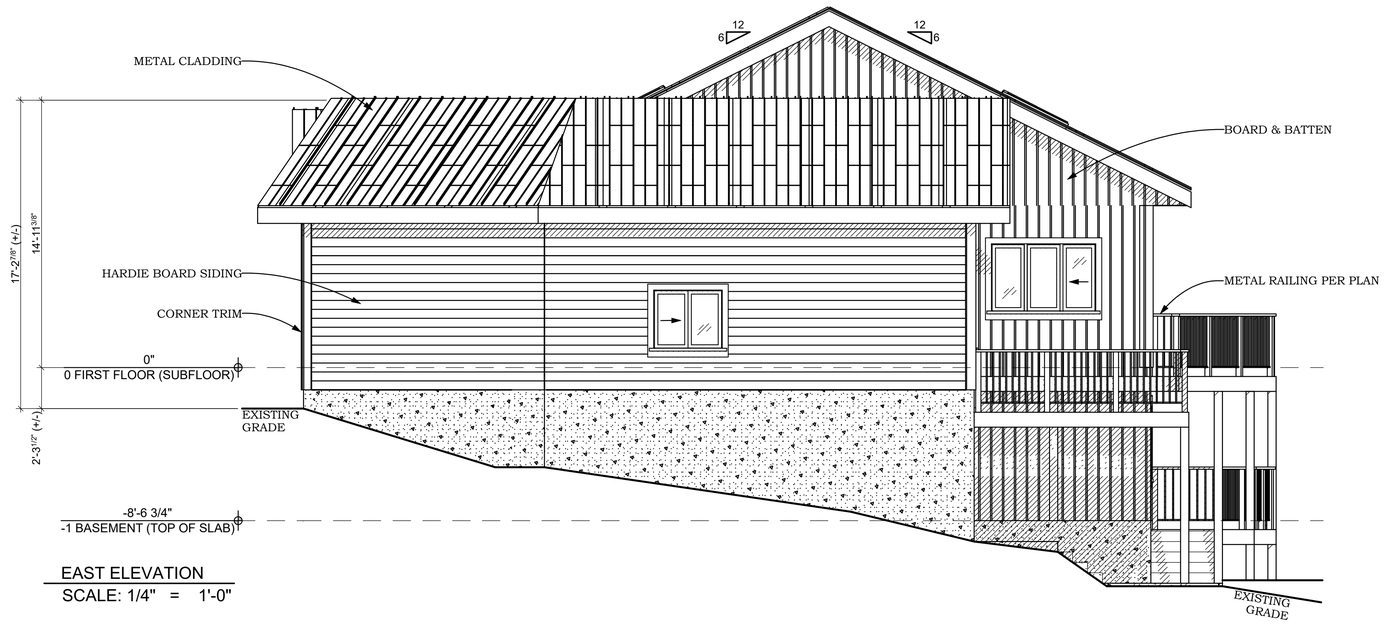
PROJECT #:	2411
SCALE:	1/4" = 1" U.N.O.
DATE:	2024-10-02
DESIGNER:	K. SIMOES
TECHNICIAN:	L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

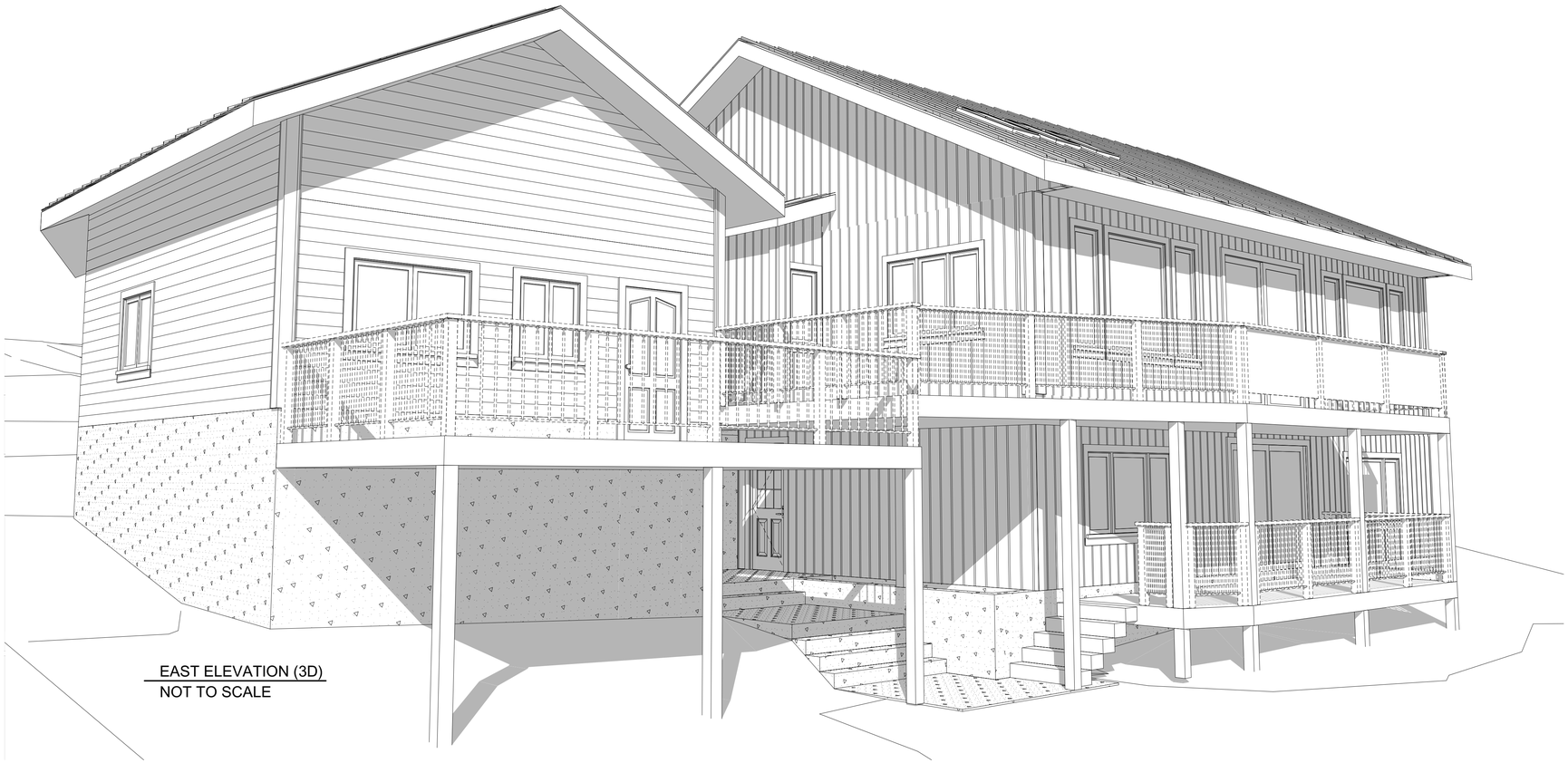
DRAWING TITLE: North Elevation

SHEET:

A03 OF 13



EAST ELEVATION
SCALE: 1/4" = 1'-0"



EAST ELEVATION (3D)
NOT TO SCALE

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

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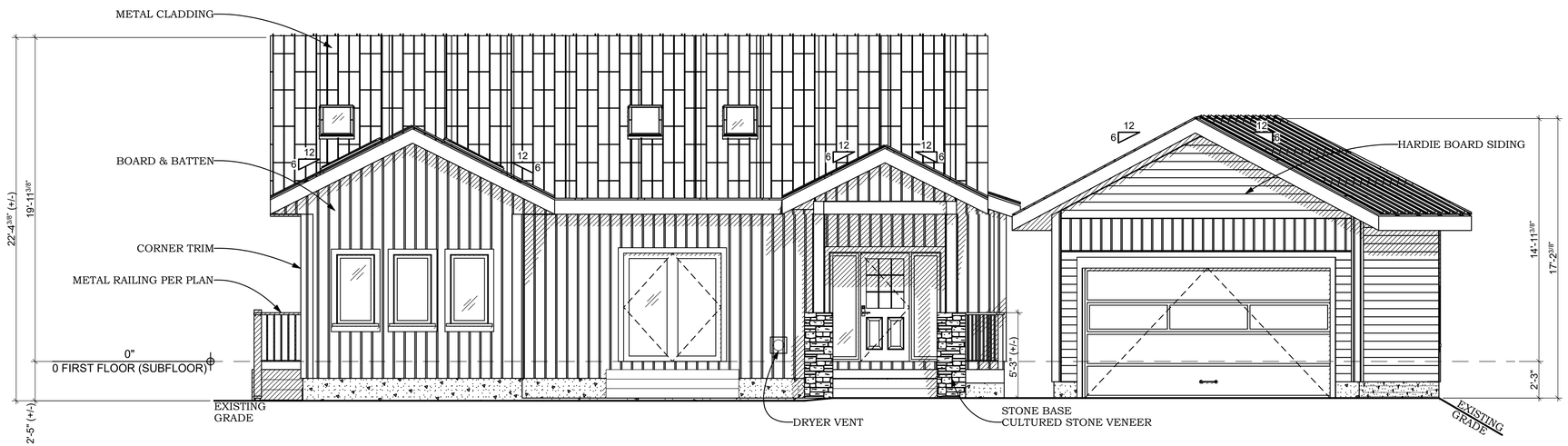
PROJECT #:	2411
SCALE:	1/4" = 1" U.N.O.
DATE:	2024-10-02
DESIGNER:	K. SIMOES
TECHNICIAN:	L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

DRAWING TITLE: East Elevation

SHEET:

A04 OF 13



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

SOUTH ELEVATION (3D)
NOT TO SCALE

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

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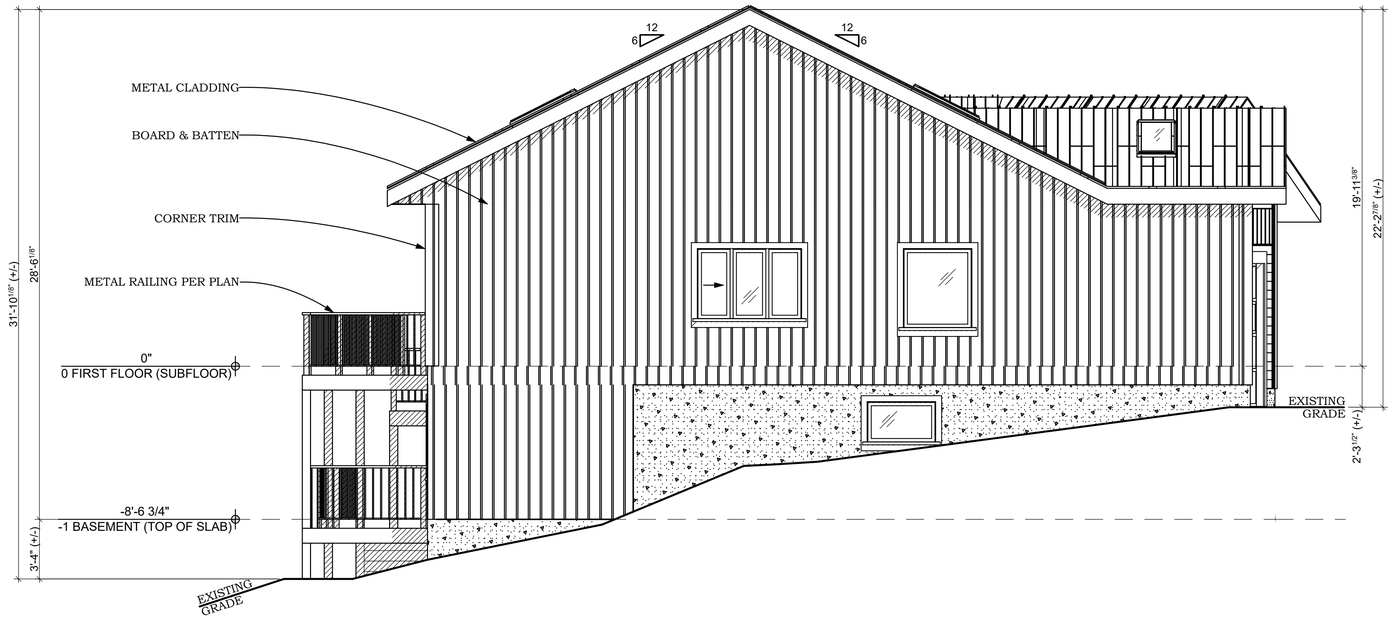
PROJECT #:	2411
SCALE:	1/4" = 1" U.N.O.
DATE:	2024-10-02
DESIGNER:	K. SIMOES
TECHNICIAN:	L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

DRAWING TITLE: South Elevation

SHEET:

A05 OF 13



WEST ELEVATION
SCALE: 1/4" = 1'-0"

WEST ELEVATION (3D)
NOT TO SCALE

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

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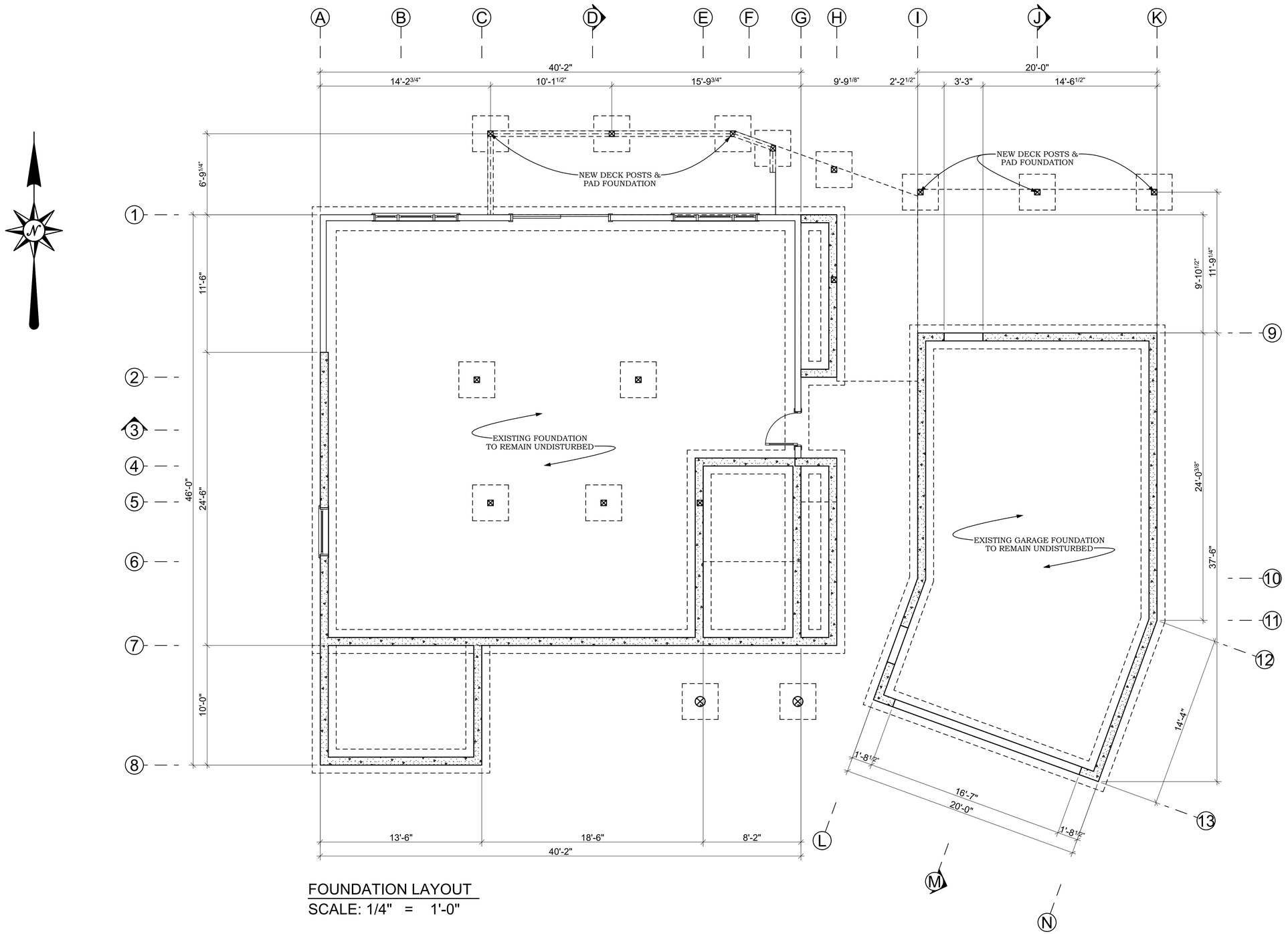
PROJECT #:	2411
SCALE:	1/4" = 1" U.N.O.
DATE:	2024-10-02
DESIGNER:	K. SIMOES
TECHNICIAN:	L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

DRAWING TITLE: West Elevation

SHEET:

A06 OF 13



FOUNDATION LAYOUT
SCALE: 1/4" = 1'-0"

INT. FRAMED WALLS TO BE:
2X4 @ 16" O.C.
W/ 1/2" G.W.B. EACH SIDE
FINISHED W/ LOW VOC PAINT
U.N.O.

DECK TO BE:
APPROVED SEALED DECKING
2X10 @ 16" O.C., P.T., FL. JSTS.
W/ X-BRIDGING @ 7' MAX.
CLG. FINISH TO OWNERS SPECS.

FIRST FLOOR SYSTEM TO BE:
FINISH FLOOR TO OWNERS SPECS.
ON 3/4" T&G PLYWOOD SUBFLOOR
2X10 @ 16" O.C. FL. JSTS.
W/ X-BRIDGING @ 7' MAX.
R24 BATT INSULATION
6 MIL POLY V.B. (SEALED W/ ACOUSTICAL SEALANT)
1/2" G.W.B. FINISHED W/ LOW VOC PAINT

FIRST FLOOR EXT. WALLS TO BE:
HARDIE BOARD SIDING
APPROVED MOISTURE MANAGEMENT
ON TYVEK AIR BARRIER OR EQUAL
ON 1/2" PLYWOOD SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B. (SEALED W/ ACOUSTICAL SEALANT)
1/2" G.W.B. FINISHED W/ LOW VOC PAINT

ROOF 1 TO BE:
METAL CLADDING
ON ICE AND WATER SHEILD
1/2" PLYWOOD SHEATHING
ON 2X CROSS STRAPPING
W/ EDGE CLIPS BETWEEN TRUSSES
MANUFACTURED TRUSSES (FLAT CLG.)
R48 MIN. BATT INSULATION
W/ 2" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED FASCIA TO VENTED RIDGE CAP)
ON 6 MIL POLY SEALED W/ ACOUSTICAL SEALANT
CLG. FINISH TO OWNERS SPECS.

ROOF 2 TO BE:
METAL CLADDING
ON ICE AND WATER SHEILD
1/2" PLYWOOD SHEATHING
ON 2X CROSS STRAPPING
W/ EDGE CLIPS BETWEEN TRUSSES
MANUFACTURED SCISSOR TRUSSES
R48 MIN. BATT INSULATION
W/ 2" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED FASCIA TO VENTED RIDGE CAP)
ON 6 MIL POLY SEALED W/ ACOUSTICAL SEALANT
CLG. FINISH TO OWNERS SPECS.

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

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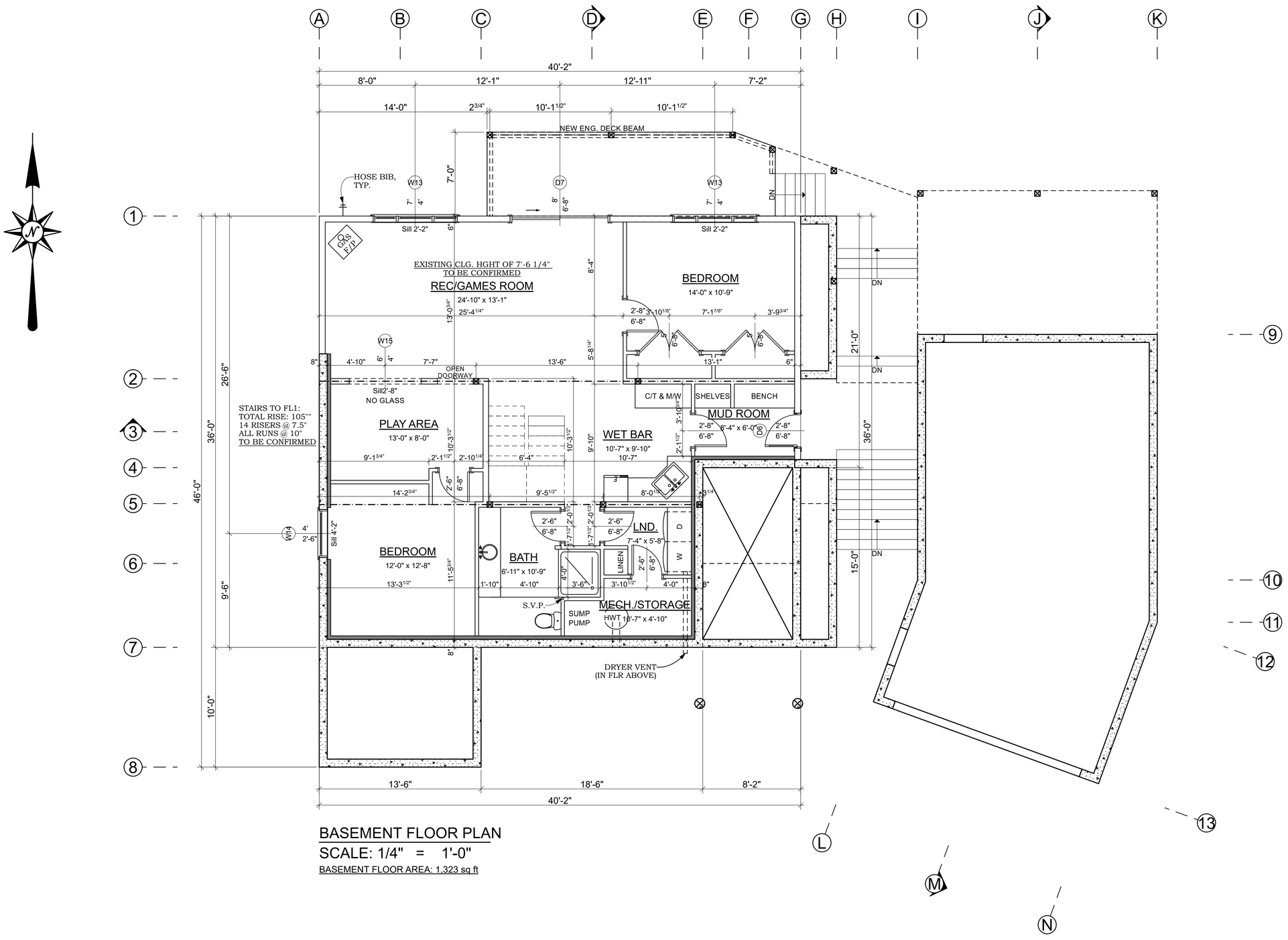
PROJECT #: 2411
SCALE: 1/4" = 1' U.N.O.
DATE: 2024-10-02
DESIGNER: K. SIMOES
TECHNICIAN: L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

DRAWING TITLE: Foundation Layout

SHEET:
A07 OF 13



BASEMENT FLOOR PLAN

SCALE: 1/4" = 1'-0"

BASEMENT FLOOR AREA: 1,323 sq ft

INT. FRAMED WALLS TO BE:
2X4 @ 16" O.C.
W/ 1/2" G.W.B. EACH SIDE
FINISHED W/ LOW VOC PAINT
U.N.O.

DECK TO BE:
APPROVED SEALED DECKING
2X10 @ 16" O.C., P.T., FL. JSTS.
W/ X-BRIDGING @ 7' MAX.
CLG. FINISH TO OWNERS SPECS.

FIRST FLOOR SYSTEM TO BE:
FINISH FLOOR TO OWNERS SPECS.
ON 3/4" T&G PLYWOOD SUBFLOOR
2X10 @ 16" O.C. FL. JSTS.
W/ X-BRIDGING @ 7' MAX.
R24 BATT INSULATION
6 MIL POLY V.B. (SEALED W/ ACOUSTICAL SEALANT)
1/2" G.W.B. FINISHED W/ LOW VOC PAINT

FIRST FLOOR EXT. WALLS TO BE:
HARDIE BOARD SIDING
APPROVED MOISTURE MANAGEMENT
ON TYVEK AIR BARRIER OR EQUAL
ON 1/2" PLYWOOD SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B. (SEALED W/ ACOUSTICAL SEALANT)
1/2" G.W.B. FINISHED W/ LOW VOC PAINT

ROOF 1 TO BE:
METAL CLADDING
ON ICE AND WATER SHEILD
1/2" PLYWOOD SHEATHING
ON 2X CROSS STRAPPING
W/ EDGE CLIPS BETWEEN TRUSSES
MANUFACTURED TRUSSES (FLAT CLG.)
R48 MIN. BATT INSULATION
W/ 2" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED FASCIA TO VENTED RIDGE CAP)
ON 6 MIL POLY SEALED W/ ACOUSTICAL SEALANT
CLG. FINISH TO OWNERS SPECS.

ROOF 2 TO BE:
METAL CLADDING
ON ICE AND WATER SHEILD
1/2" PLYWOOD SHEATHING
ON 2X CROSS STRAPPING
W/ EDGE CLIPS BETWEEN TRUSSES
MANUFACTURED SCISSOR TRUSSES
R48 MIN. BATT INSULATION
W/ 2" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED FASCIA TO VENTED RIDGE CAP)
ON 6 MIL POLY SEALED W/ ACOUSTICAL SEALANT
CLG. FINISH TO OWNERS SPECS.

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

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ABBOTSFORD, BC, V2S 3S1
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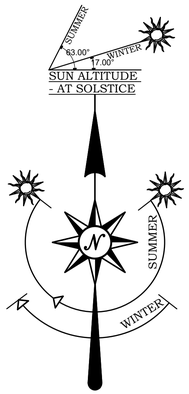
PROJECT #: 2411
SCALE: 1/4" = 1'U.N.O.
DATE: 2024-10-02
DESIGNER: K. SIMOES
TECHNICIAN: L.MCKINLAY

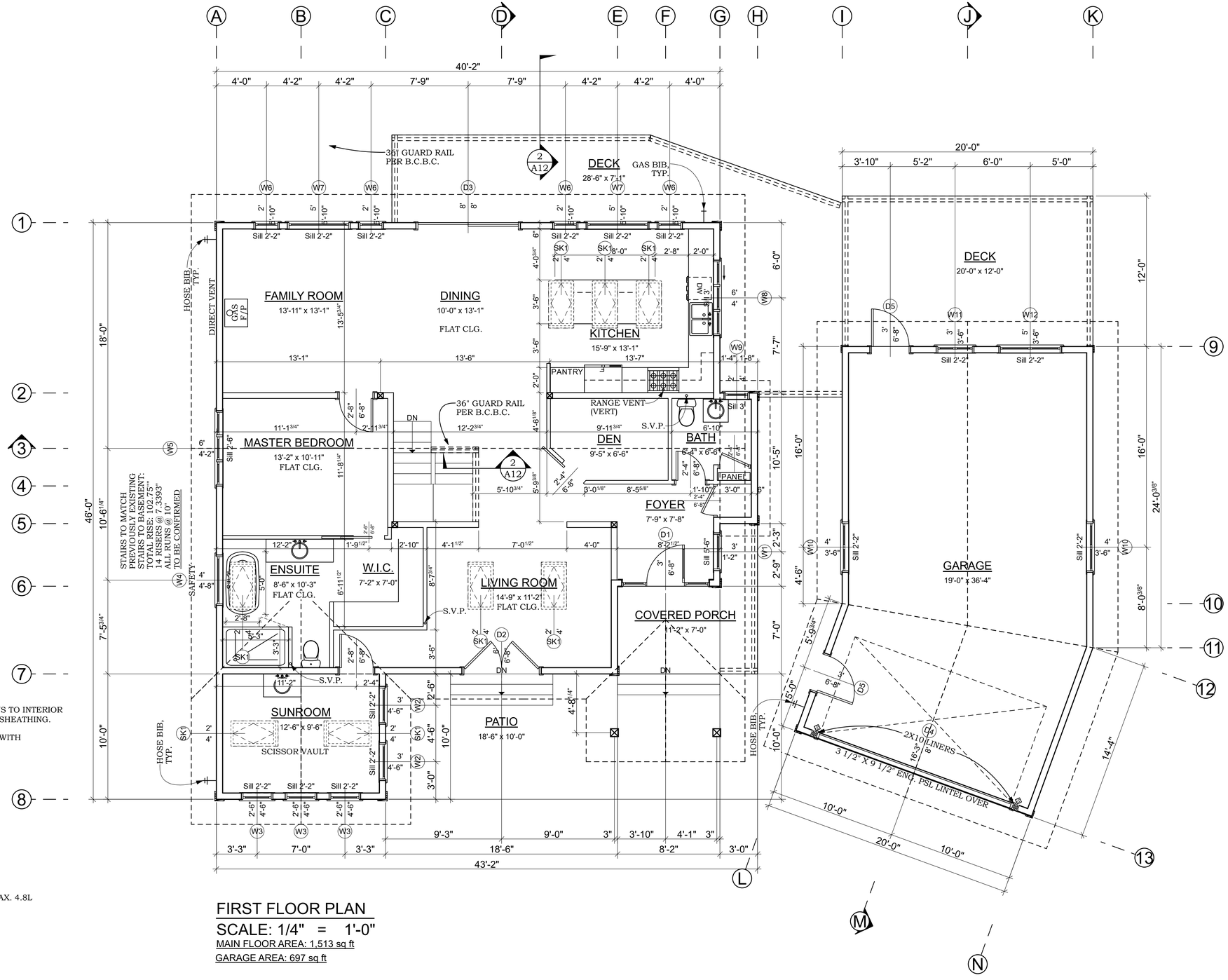
John and Irene Rogers
13123 Narrows Rd,
Madeira Park, BC V0N 2H1

DRAWING TITLE: Basement Plan

SHEET:

A08 OF 13





STAIRS TO MATCH PREVIOUSLY EXISTING
STAIRS TO BASEMENT:
TOTAL RISE: 102.75""
14 RISERS @ 7.3393"
ALL RUNS @ 10"
TO BE CONFIRMED

GENERAL NOTES:

ALL DIMENSIONS ARE CONSTRUCTION DIMENSIONS TO INTERIOR WALL ROUGH FRAMING & OUTSIDE OF EXTERIOR SHEATHING. CONTRACTOR BEFORE STARTING CONSTRUCTION
THIS BUILDING WAS DESIGNED IN ACCORDANCE WITH THE BRITISH COLUMBIA BUILDING CODE 2024

ALL LINTELS TO BE 2-2x10 D.F. #1 LINTEL UNLESS OTHERWISE NOTED

T.O.W: TOP OF WALL
T.O.W: 0 @ TOP OF SUBFLOOR (1ST FLOOR FRAMING SYSTEM)
T= TOP OF BEAM

INDICATES DIRECTION OF JOIST OR TRUSS ABOVE

INDICATES EXTENTS OF JOIST OR TRUSS RUN

INDICATES BEAM OR LINTEL ABOVE

X' DENOTES NUMBER OF STUDS IN B/U POST

ALL WATER CLOSETS TO BE HIGH EFFICIENCY, MAX. 4.8L PER FLUSH OR DUAL FLUSH

= HOSE BIB

INDICATES SOUND BARRIER WALL:
2X6 TOP AND BOTTOM PLATES
W/ 2X4 @ 16"O.C. STUDS STAGGERED
W/ R11 BATT INSULATION

SHEAR WALL: C/W 1/2" PLYWOOD W/ 2 1/2" NAILS @ 4" OR @ EDGE 8" O/C @ FIELD (SOLID BLOCKING ENTIRE PERIMETER OF THE PLYWOOD)

FIRST FLOOR PLAN

SCALE: 1/4" = 1'-0"

MAIN FLOOR AREA: 1,513 sq ft

GARAGE AREA: 697 sq ft

INT. FRAMED WALLS TO BE:
2X4 @ 16" O.C.
W/ 1/2" G.W.B. EACH SIDE
FINISHED W/ LOW VOC PAINT
U.N.O.

DECK TO BE:
APPROVED SEALED DECKING
2X10 @ 16" O.C., P.T., FL. JSTS.
W/ X-BRIDGING @ 7' MAX.
CLG. FINISH TO OWNERS SPECS.

FIRST FLOOR SYSTEM TO BE:
FINISH FLOOR TO OWNERS SPECS.
ON 3/4" T&G PLYWOOD SUBFLOOR
2X10 @ 16" O.C. FL. JSTS.
W/ X-BRIDGING @ 7' MAX.
R24 BATT INSULATION
6 MIL POLY V.B. (SEALED W/ ACOUSTICAL SEALANT)
1/2" G.W.B. FINISHED W/ LOW VOC PAINT

FIRST FLOOR EXT. WALLS TO BE:
HARDIE BOARD SIDING
APPROVED MOISTURE MANAGEMENT
ON TYVEK AIR BARRIER OR EQUAL
ON 1/2" PLYWOOD SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B. (SEALED W/ ACOUSTICAL SEALANT)
1/2" G.W.B. FINISHED W/ LOW VOC PAINT

ROOF 1 TO BE:
METAL CLADDING
ON ICE AND WATER SHEILD
1/2" PLYWOOD SHEATHING
ON 2X CROSS STRAPPING
W/ EDGE CLIPS BETWEEN TRUSSES
MANUFACTURED TRUSSES (FLAT CLG.)
R48 MIN. BATT INSULATION
W/ 2" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED FASCIA TO VENTED RIDGE CAP)
ON 6 MIL POLY SEALED W/ ACOUSTICAL SEALANT
CLG. FINISH TO OWNERS SPECS.

ROOF 2 TO BE:
METAL CLADDING
ON ICE AND WATER SHEILD
1/2" PLYWOOD SHEATHING
ON 2X CROSS STRAPPING
W/ EDGE CLIPS BETWEEN TRUSSES
MANUFACTURED SCISSOR TRUSSES
R48 MIN. BATT INSULATION
W/ 2" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED FASCIA TO VENTED RIDGE CAP)
ON 6 MIL POLY SEALED W/ ACOUSTICAL SEALANT
CLG. FINISH TO OWNERS SPECS.

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:		
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#102-2469 PAULINE ST.
ABBOTSFORD, BC, V2S 3S1
PH: 604-854-2866 FAX: 604-854-2861
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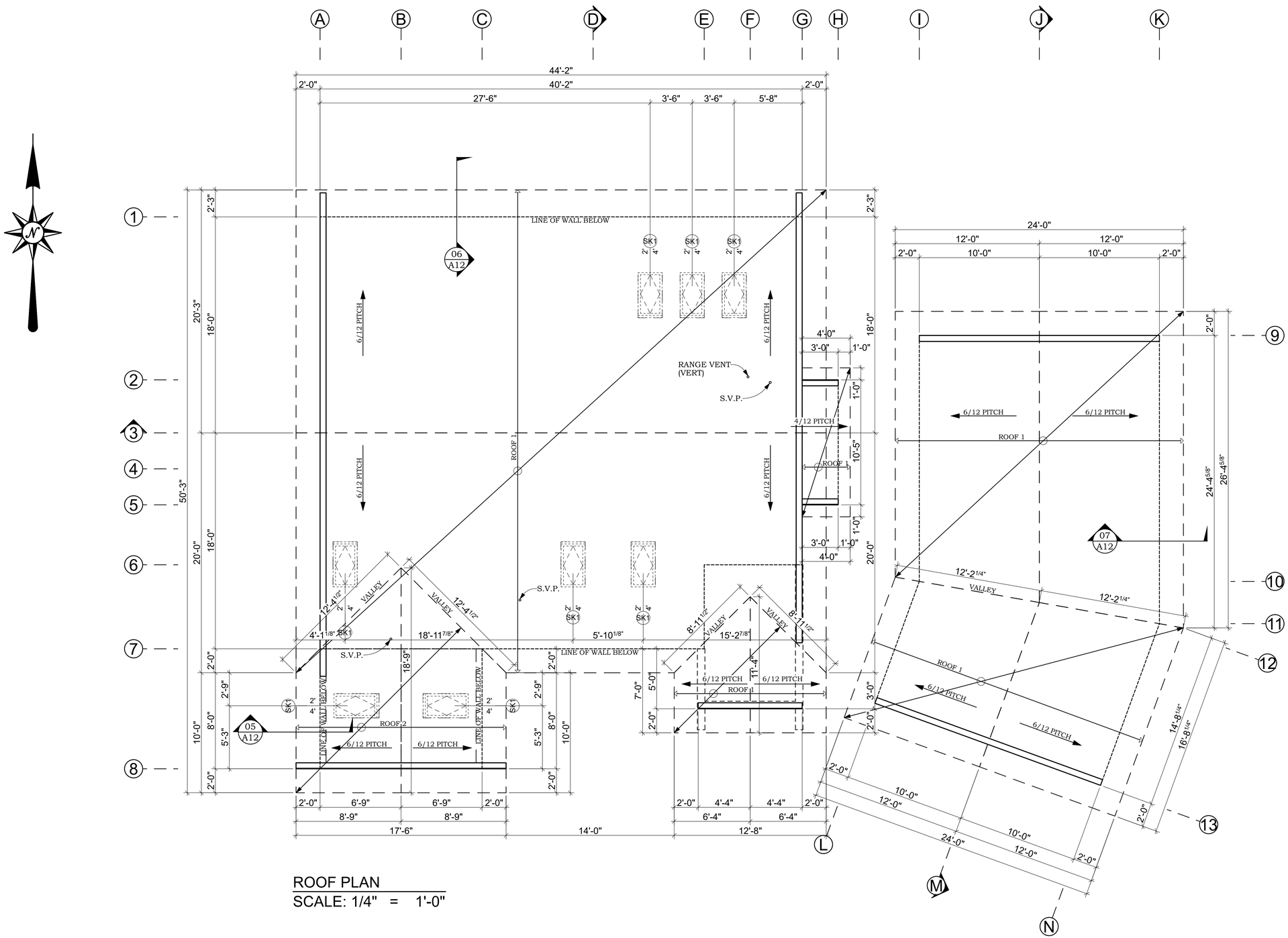
PROJECT #: 2411
SCALE: 1/4" = 1'-U.N.O.
DATE: 2024-10-02
DESIGNER: K. SIMOES
TECHNICIAN: L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

DRAWING TITLE: First Floor Plan

SHEET:

A09 OF 13



ROOF PLAN
SCALE: 1/4" = 1'-0"

INT. FRAMED WALLS TO BE:
2X4 @ 16" O.C.
W/ 1/2" G.W.B. EACH SIDE
FINISHED W/ LOW VOC PAINT
U.N.O.

DECK TO BE:
APPROVED SEALED DECKING
2X10 @ 16" O.C., P.T., FL. JSTS.
W/ X-BRIDGING @ 7' MAX.
CLG. FINISH TO OWNERS SPECS.

FIRST FLOOR SYSTEM TO BE:
FINISH FLOOR TO OWNERS SPECS.
ON 3/4" T&G PLYWOOD SUBFLOOR
2X10 @ 16" O.C. FL. JSTS.
W/ X-BRIDGING @ 7' MAX.
R24 BATT INSULATION
6 MIL POLY V.B. (SEALED W/ ACOUSTICAL SEALANT)
1/2" G.W.B. FINISHED W/ LOW VOC PAINT

FIRST FLOOR EXT. WALLS TO BE:
HARDIE BOARD SIDING
APPROVED MOISTURE MANAGEMENT
ON TYVEK AIR BARRIER OR EQUAL
ON 1/2" PLYWOOD SHEATHING
2X6 @ 16" O.C. FRAME WALL
R24 BATT INSULATION
6 MIL POLY V.B. (SEALED W/ ACOUSTICAL SEALANT)
1/2" G.W.B. FINISHED W/ LOW VOC PAINT

ROOF 1 TO BE:
METAL CLADDING
ON ICE AND WATER SHEILD
1/2" PLYWOOD SHEATHING
ON 2X CROSS STRAPPING
W/ EDGE CLIPS BETWEEN TRUSSES
MANUFACTURED TRUSSES (FLAT CLG.)
R48 MIN. BATT INSULATION
W/ 2" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED FASCIA TO VENTED RIDGE CAP)
ON 6 MIL POLY SEALED W/ ACOUSTICAL SEALANT
CLG. FINISH TO OWNERS SPECS.

ROOF 2 TO BE:
METAL CLADDING
ON ICE AND WATER SHEILD
1/2" PLYWOOD SHEATHING
ON 2X CROSS STRAPPING
W/ EDGE CLIPS BETWEEN TRUSSES
MANUFACTURED SCISSOR TRUSSES
R48 MIN. BATT INSULATION
W/ 2" AIRSPACE (ROOF VENTILATION FROM SCREENED VENTED FASCIA TO VENTED RIDGE CAP)
ON 6 MIL POLY SEALED W/ ACOUSTICAL SEALANT
CLG. FINISH TO OWNERS SPECS.

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
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Streamline Design Ltd.
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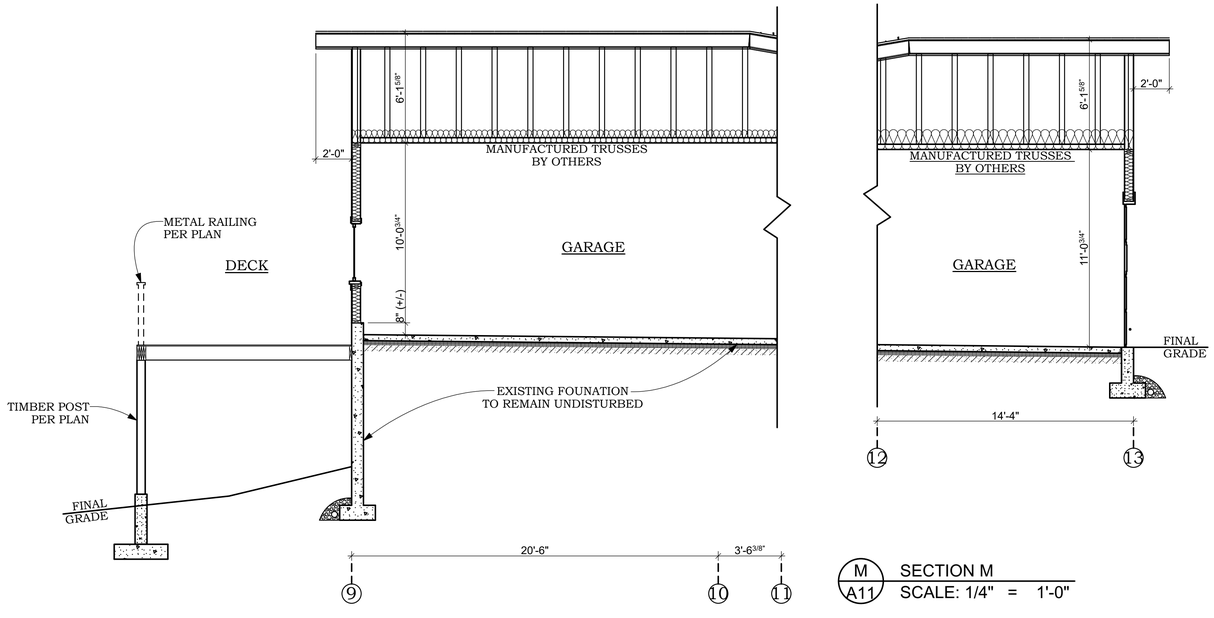
PROJECT #: 2411
SCALE: 1/4" = 1'-U.N.O.
DATE: 2024-10-02
DESIGNER: K. SIMOES
TECHNICIAN: L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd,
Madeira Park, BC V0N 2H1

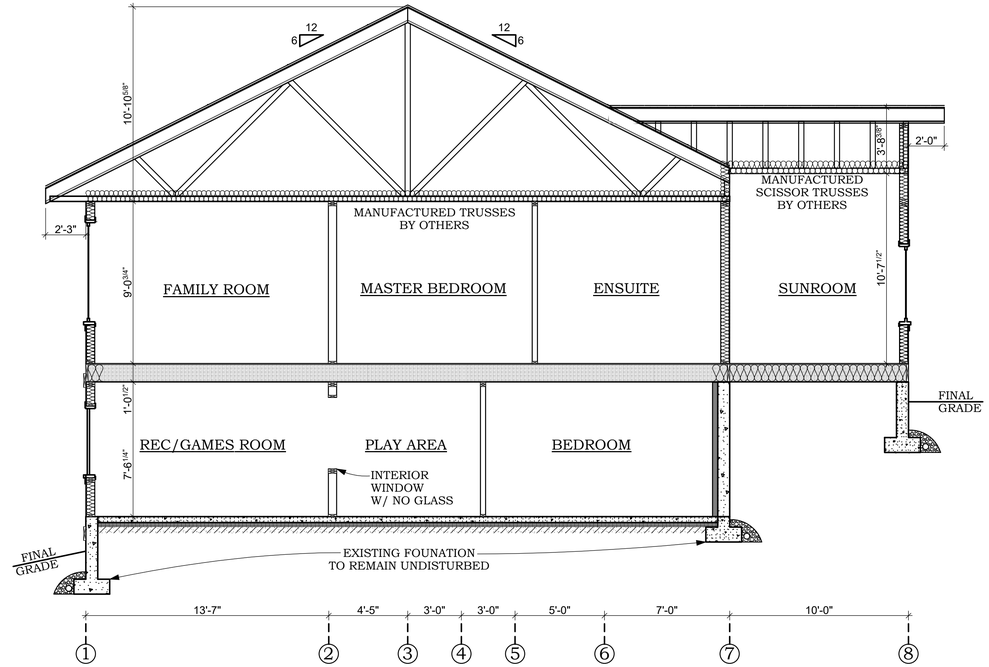
DRAWING TITLE: Roof Plan

SHEET:

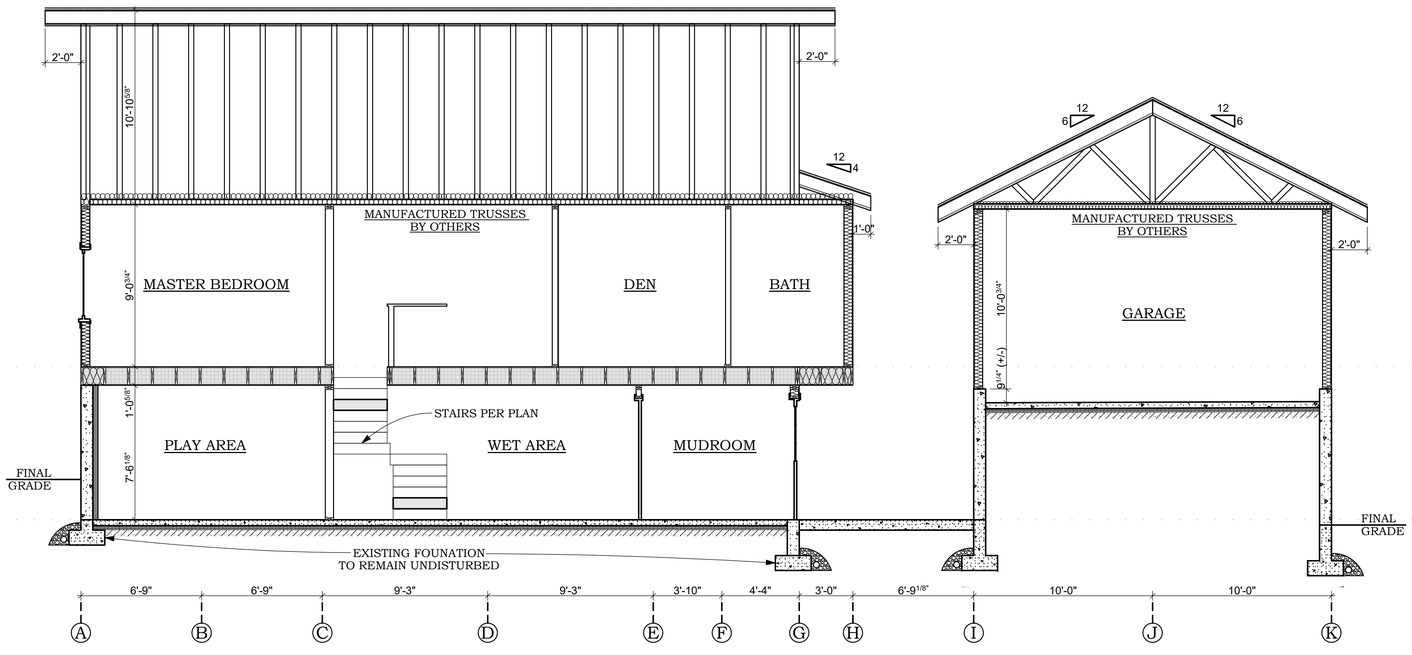


M / A11 SECTION M
SCALE: 1/4" = 1'-0"

J / A11 SECTION J
SCALE: 1/4" = 1'-0"



B / A11 SECTION B
SCALE: 1/4" = 1'-0"



3 / A11 SECTION 3
SCALE: 1/4" = 1'-0"

COMPLETE SET
OF PLANS TO
BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

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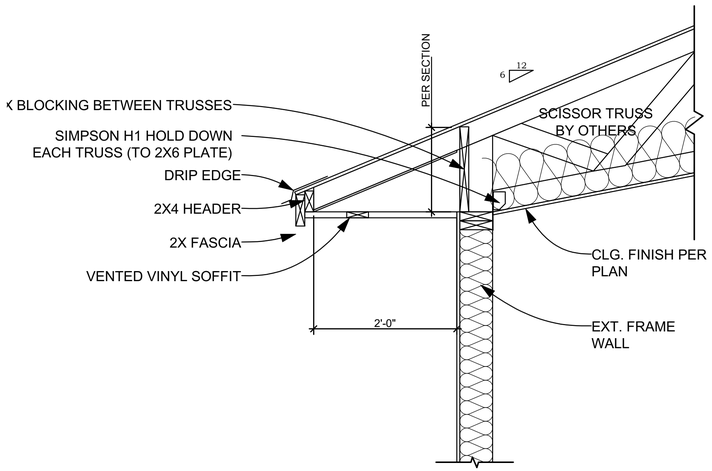
PROJECT #:	2411
SCALE:	1/4" = 1" U.N.O.
DATE:	2024-10-02
DESIGNER:	K. SIMOES
TECHNICIAN:	L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

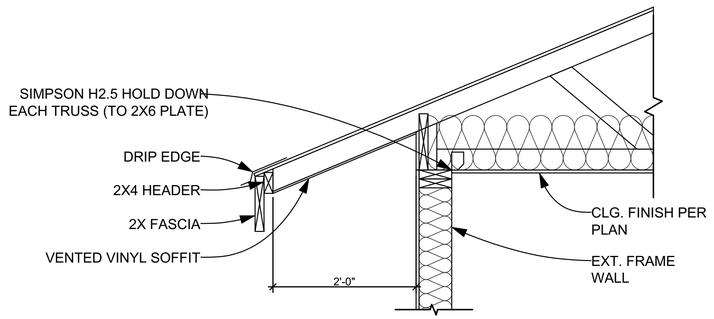
DRAWING TITLE: Wall Sections

SHEET:

A11 OF 13



05 A12 MAN. TRUSS TO FRAME WALL DETAIL
SCALE: 1" = 1'-0"



06 A12 MAN. TRUSS TO FRAME WALL DETAIL
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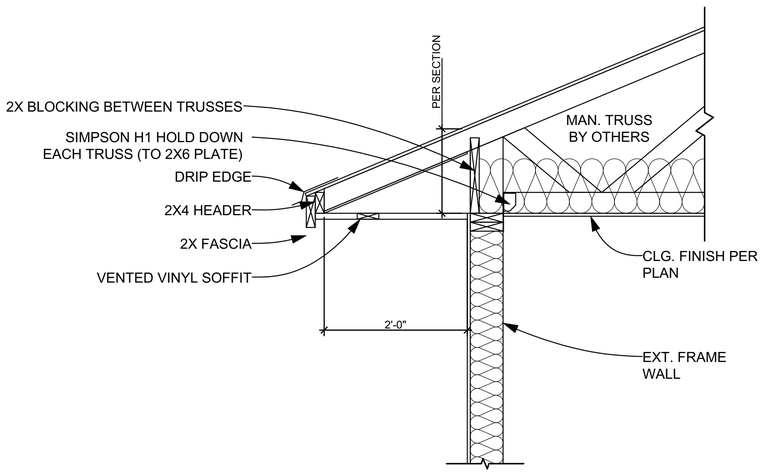
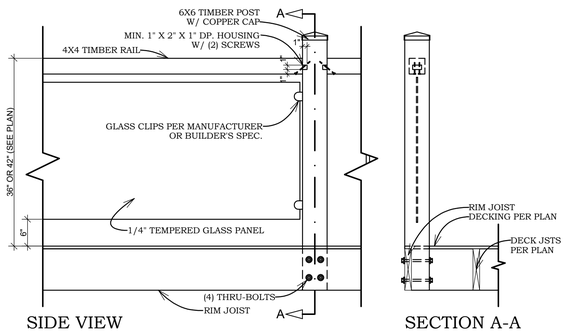


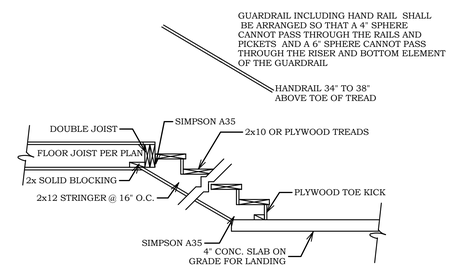
07 A12 MAN. TRUSS TO FRAME WALL DETAIL
SCALE: 1" = 1'-0"

GUARDRAILS SHALL BE PROVIDED AT THE OPEN SIDE OF LANDINGS, DECKS AND BALCONIES LOCATED MORE THAN 30" ABOVE ADJACENT SURFACES.
- HEIGHT OF THE GUARDRAIL ABOVE THE SUBFLOOR SHALL BE A MIN. OF 36" OR 42" PER PLAN
PROVIDER OF GUARD RAIL TO ENSURE TOP RAIL IS CAPABLE OF RESISTING 20 LBS. PER LINEAR FOOT
TIMBER POSTS TO BE MAX. 72" O.C. SPACING

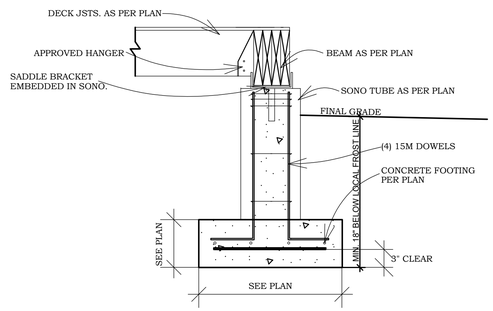


04 A12 GLASS RAILING DETAIL
SCALE: 3/4" = 1'-0"

NOTE: SUGGESTED DETAILS ONLY; STRUCTURAL ENGINEERING DRAWINGS/DETAILS TO TAKE PRECEDENCE.

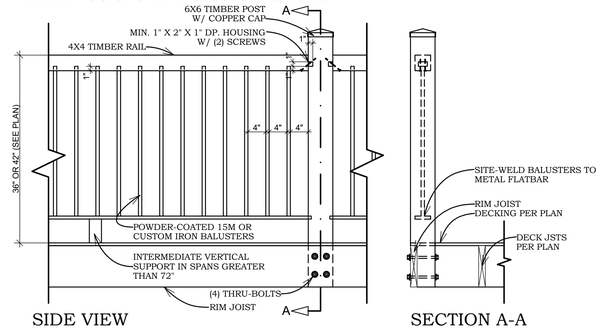


01 A12 FRAMED STAIR DETAIL
NOT TO SCALE



02 A12 EXT. DECK SUPPORT POST
SCALE: 1" = 1'-0"

GUARDRAILS SHALL BE PROVIDED AT THE OPEN SIDE OF LANDINGS, DECKS AND BALCONIES LOCATED MORE THAN 30" ABOVE ADJACENT SURFACES
- HEIGHT OF THE GUARDRAIL ABOVE THE NOSE OF THE TREADS SHALL BE A MIN. OF 36"
- RAILS TO BE SUCH THAT A 4" DIA. SPHERE CANNOT PASS THROUGH
- TRIANGLE AREA FORMED BY THE TREAD, RISER & GUARDRAIL SHALL BE OF A SIZE THAT A 6" SPHERE CANNOT PASS THROUGH
PROVIDER OF GUARD RAIL TO ENSURE TOP RAIL IS CAPABLE OF RESISTING 20 LBS. PER LINEAR FOOT APPLIED
PROVIDER OF GUARD RAIL TO ENSURE INTERMEDIATE RAILS & THEIR CONNECTIONS CAPABLE OF WITHSTANDING 25 LBS. PER SQ.FT. APPLIED HORIZONTALLY
TIMBER POSTS TO BE MAX. 96" O.C. SPACING



03 A12 TIMBER RAILING DETAIL
SCALE: 3/4" = 1'-0"

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

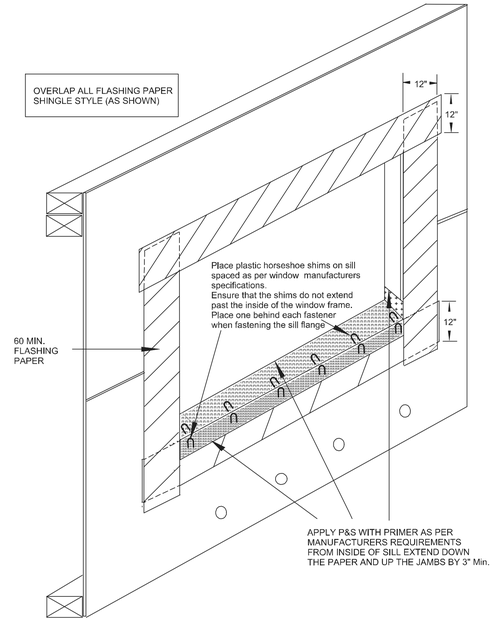
Streamline Design Ltd.
#102-2469 PAULINE ST.
ABBOTSFORD, BC, V2S 3S1
PH: 604-854-2966 FAX: 604-854-2981
WWW.STREAMLINEDESIGN.CA

PROJECT #: 2411
SCALE: 1/4" = 1'U.N.O.
DATE: 2024-10-02
DESIGNER: K. SIMOES
TECHNICIAN: L.MCKINLAY

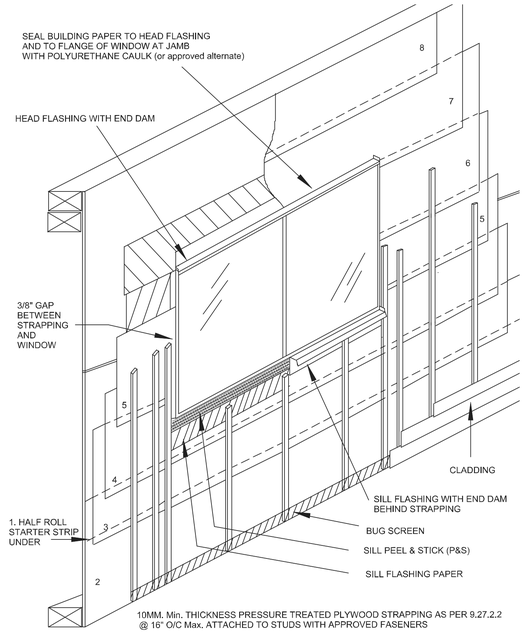
John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

DRAWING TITLE: Details

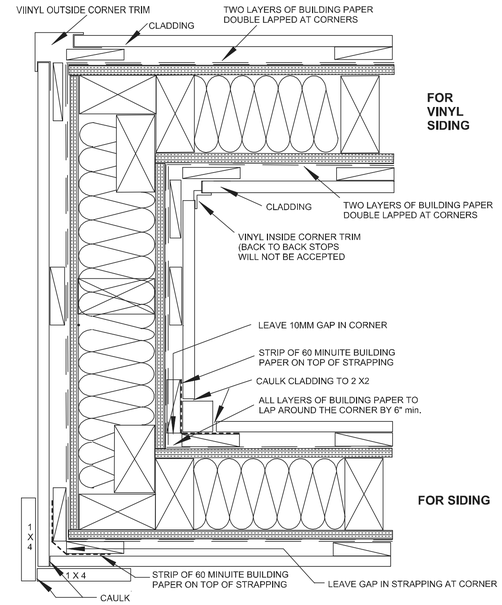
SHEET:



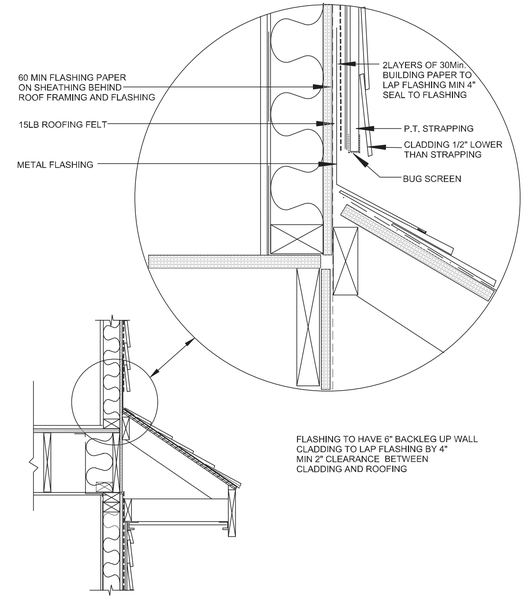
PEEL AND STICK FLASHING



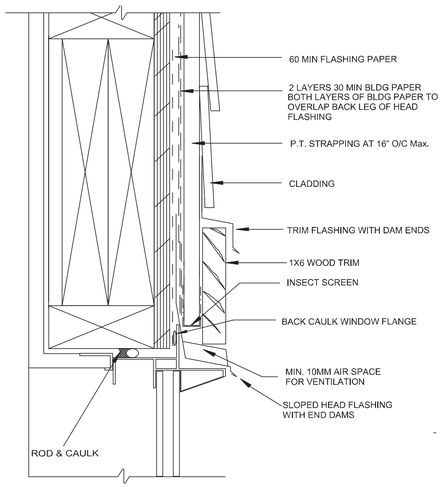
STRAPPING INSTALLATION



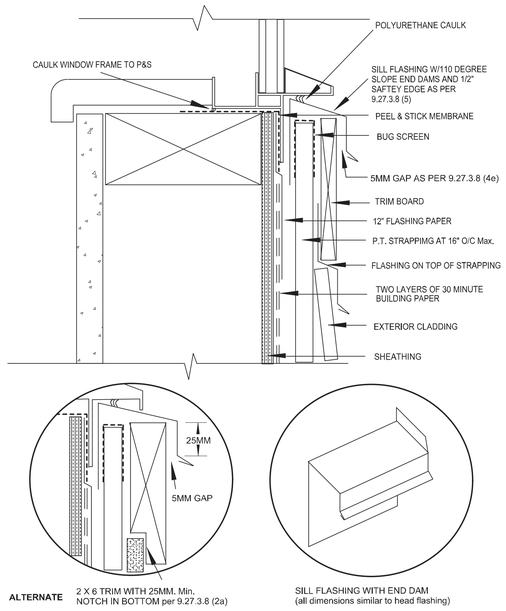
TYPICAL CORNERS



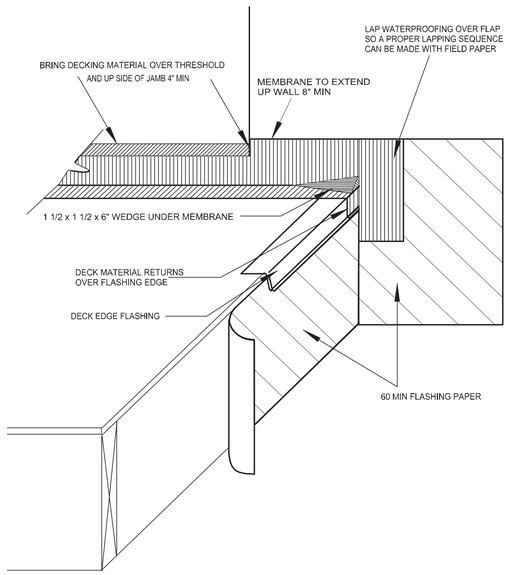
ROOF TO WALL



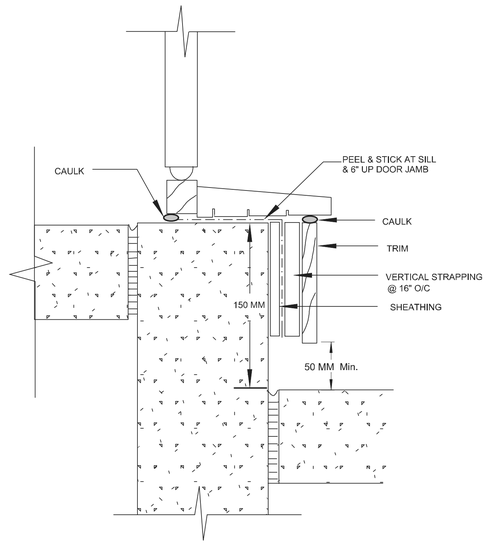
WINDOW HEAD



WINDOW SILL



DECK TO WALL



ENTRY DOOR SILL

COMPLETE SET OF PLANS TO BE ENGINEERED

REVISIONS:

#	DATE	DESCRIPTION
1		
2		
3		

Streamline Design Ltd.
#102-2469 PAULINE ST.
ABBOTSFORD, BC. V2S 3S1
PH: 604-854-2966 FAX: 604-854-2981
WWW.STREAMLINEDESIGN.CA

PROJECT #: 2411
SCALE: 1/4" = 1'U.N.O.
DATE: 2024-10-02
DESIGNER: K. SIMOES
TECHNICIAN: L.MCKINLAY

John and Irene Rogers
13123 Narrows Rd.
Madeira Park, BC V0N 2H1

DRAWING TITLE: Moisture Mgmt Details

SHEET:

A13 OF 13

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Board of Variance – January 24, 2025

AUTHOR: Sven Koberwitz, Senior Planner

SUBJECT: **BOARD OF VARIANCE APPLICATION BOV00027 (8552 WEST SAKINAW LAKESHORE WAY) – ELECTORAL AREA A**

RECOMMENDATIONS

(1) THAT the report titled Board of Variance Application BOV00027 (8552 West Sakinaw Lakeshore Way) – Electoral Area A be received for information;

(2) AND THAT the Board of Variance consider this application in conjunction with Section 542 of the *Local Government Act*.

BACKGROUND

A Board of Variance application has been submitted by the owners of 8552 West Sakinaw Lake Way to reduce the setback to the Sakinaw Lake from 20 metres to 15 metres, in order to allow for the construction of a single-unit dwelling 15 metres from the natural boundary of the lake

The subject property is a water access only lot located on Sakinaw Lake. Properties to the north, south and west are all developed with residential dwellings.

Table 1 Application Summary

Applicant:	Patricia and Randy Zimmerman
Civic Address:	8552 West Sakinaw Lakeshore Way
Legal Description:	LOT 15 DISTRICT LOT 3248 PLAN 11997
Electoral Area:	Area A: Pender Harbour / Egmont
Parcel Area:	~2084 m2 (~0.515 ac)
OCP Land Use:	Rural Residential B
Land Use Zone:	Rural Residential 1 (RU-1)
Application Intent:	To allow for the construction of a single-unit dwelling sited at 15 metres from the natural boundary of Sakinaw Lake.

The Board of Variance previously issued Order No. 109 in 2005 to reduce the setback from 20 metres to 13 metres to a previous owner to allow for a dwelling with a 92.5m^2 footprint.

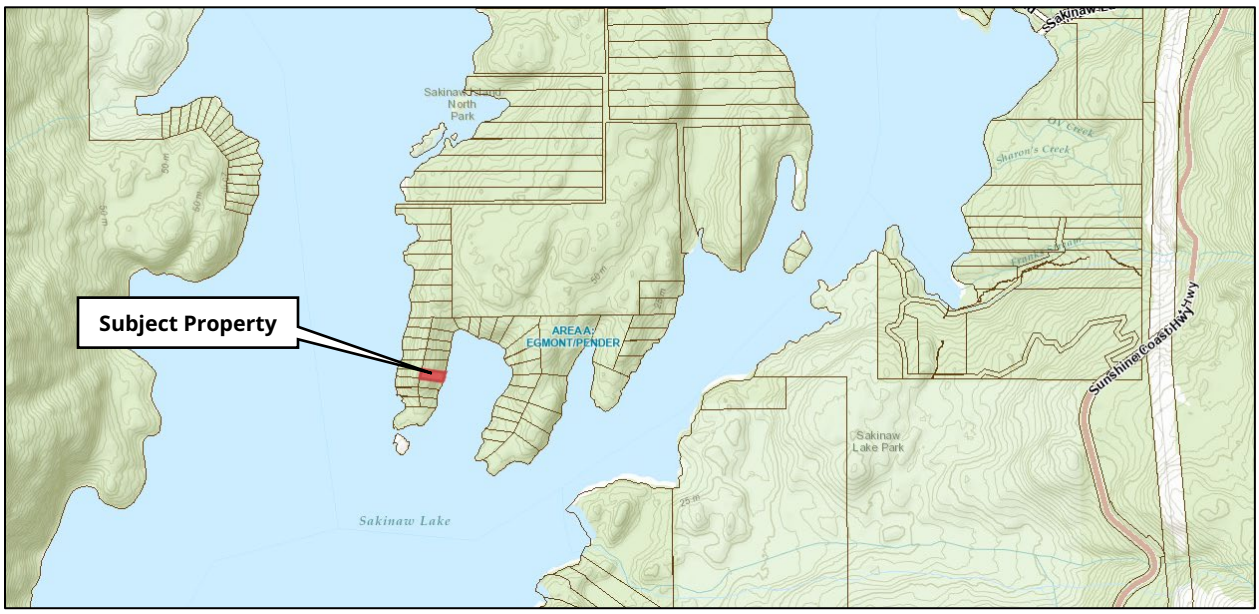
The current owner undertook land alteration (installation of septic field and clearing of building area) with the understanding that the previous Board of Variance Order constituted a valid approval for development. The owner was subsequently informed the order had expired as construction did not substantially start by 2007.

Table 2 Summary of Encroachments

Building Feature	Encroachment within 20 m setback
Living Space	13.8 m^2
Deck	83.7 m^2
Combined	97.5 m^2

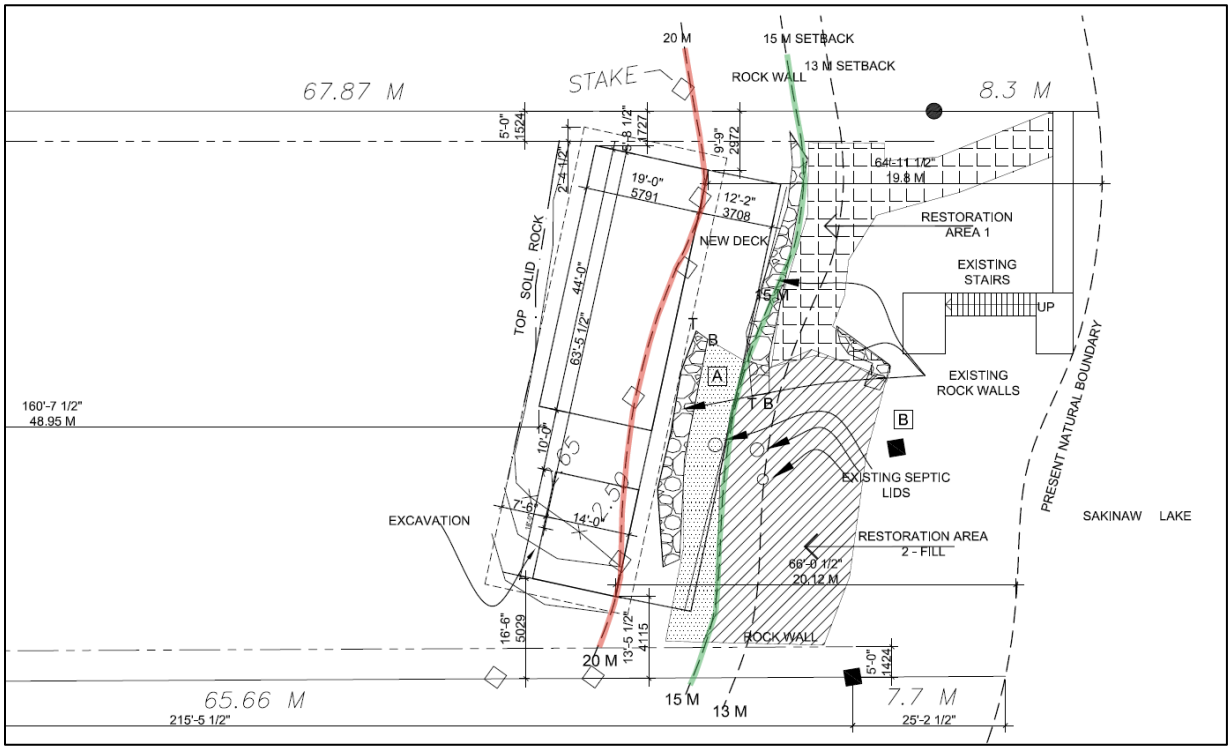
The owner now intends to proceed with a revised development plan consisting of a single unit dwelling sited at 15 metres from the natural boundary. The proposed dwelling has a building footprint of 120 m^2 (not including deck and overhangs), representing 5.8% parcel coverage and with a total floor area of 162 m^2. Most of the footprint of dwelling is located outside the 20m setback, with the 3.7m wide deck running along the lakefront elevation of the dwelling accounting for the majority of the proposed encroachment.

Figure 1 Location Map



The property is subject to Development Permit Area 4: Stream Riparian Assessment Areas. Unauthorized land alteration occurred prior to the issuance of a development permit for Riparian Assessment Areas. This work consisted of land clearing, including blasting, and the installation of a septic system within the 20-metre zoning setback and 30 metre Provincial Riparian Areas Protection Regulation (RAPR) Assessment Area.

Figure 2 Excerpt from Site Plan (20m setback in RED, 15m setback in GREEN)



A Remediation Approval process was initiated with the SCRD Planning Department to address the unauthorized land alteration.

The applicant has submitted and received approval from the RAPR team to proceed with the development as proposed, including the already installed septic system. The proposed development is considered acceptable under the hardship exceptions in the RAPR due to site constraints relating to steep slopes to the west of the development area.

Figure 3 Property Aerial and Elevation Contours

A development permit application has been received. Issuance of the permit is conditional on the approval of the reduced setback that is the subject of this application.

DISCUSSION

Analysis

Zoning Bylaw

Zoning Bylaw 337 includes the following regulation:

> *515(1) Not withstanding any other provision of this bylaw, and for the purpose of flood protection, no building or any part thereof, except a boathouse or wharf located solely on a waterbody, shall be constructed, reconstructed, moved, located or extended within:*
>
> *(c) 20 metres of the natural boundary of all other lakes (including Sakinaw Lake);*

Official Community Plan

The Pender Harbour / Egmont Official Community Plan provides policy related to protection of the natural environment and specifically to guide development adjacent to aquatic environments.

The following OCP policy should be noted:

> *(l) If a development permit has been issued within the 30-metre assessment area, the setback shall be no less than 20 metres for new construction adjacent to all lakes.*
>
> *(m) SCRD may give consideration to additions to existing lakefront dwellings that do not conform to the established lakefront setbacks through a development variance permit application to a maximum floor area of 28 square metres, including deck space, subject to the following considerations:*
>
> *i. the addition does not encroach any closer to the lake;*
>
> *ii. the parcel complies with current standards and requirements for a septic disposal system pursuant to the Sewerage System Regulation;*
>
> *iii. a qualified environmental professional in accordance with the Riparian Areas Regulation assesses the proposal, provides recommendations and identifies the streamside protection and enhancement area;*
>
> *iv. a covenant is registered on the title of the property to protect the native vegetation within the Streamside Protection and Enhancement Area (SPEA) and to confirm that the addition is on a one-time-only basis and all future buildings and structures shall meet the setbacks established within the zoning bylaw.*

While the OCP contains direction that all new development to be sited at least 20 metres from the boundary of all lakes there are situations where hardship may be a factor in meeting this setback. With that said, the above policy direction suggests that only additions would be considered within the setback area, and that new construction should seek design solutions to comply with the setback.

Further to the OCP policy, the province has also introduced formal hardship exemptions for development within a Streamside Protection and Enhancement Area (SPEA) in situations of hardship. RAPR contains a specific formula under Section 11 to determine if a property is subject to hardship based on the developable area and allowable footprint. In summary, the developable area excludes the SPEA and naturally and legally restricted areas on the property and if the developable area of the site is less than the allowable footprint for the site then a hardship exists.

Riparian Assessment

A Qualified Environmental Professional has submitted an assessment that evaluates site conditions and factors affecting the development potential of areas beyond the 20-metre setback. These factors include:

- Unsuitable soil conditions for septic systems (supported by Septic Engineer).
- Requirements for continuous power if septic system requires pumping.
- Steep terrain and fractured rock unsuitable for foundation without excessive land alteration.
- Difficult construction access.

The province has accepted and approved the RAPR Assessment and permitted the septic system within the 15 metre SPEA subject to restoration of previously disturbed areas. Restoration of the SPEA will be a condition of the development permit.

Applicant's Rationale and Statement of Hardship

As noted above, the applicant has provided the following rationale of hardship in support of their application, citing the challenge of developing on the portion of the lot fully outside of the 20m setback, due to:

- challenges for construction due to the steep topography and unstable nature of the land,
- unsuitable soil conditions for septic systems and the need for continuous power to allow for pumping.

Role of the Board of Variance

Section 540 of the Local Government Act allows the Board of Variance to consider variance to a bylaw respecting the siting, size, or dimensions of a structure. Pursuant to Section 542 of the Local Government Act the Board of Variance must consider the following questions in its consideration of this application. Staff have provided analysis to assist the Board of Variance in their consideration of the application.

1. **Is there a hardship?**

   In addition to the noted topographic and geotechnical characteristics of the lot, the Provincial RAPR team has reviewed and approved the submitted riparian assessment under the hardship exemption available under Section 11 of the RAPR. Whether these aspects represent a hardship is at the discretion of the Board of Variance.

2. **Does the variance result in inappropriate development of the site?**

   As noted above, the proposed development does not conform with Zoning Bylaw setbacks and OCP policy for construction in proximity to lakes. It is noted that the site has specific topographic and geotechnical conditions that would limit the feasibility of fully locating the dwelling, as proposed within the required 20m setback, though a structure with a smaller dwelling footprint with decreased floor area may decrease or eliminate encroachment. However, even if the dwelling floor area was decreased to reduce the encroachment, the feasibility of locating an attached deck to the house, as proposed, may prove to have limited practical design solutions. Additionally, as noted above, the project has received RAPR approval as proposed.

3. **Does the variance adversely affect the natural environment?**

   An approved RAPR Assessment prepared by a qualified environmental professional has been received in support of the proposed development. As part of the Provincial RAPR approval restoration of previously disturbed area is required.

4. **Does the variance affect the use and enjoyment of adjacent land?**

   Though the construction of a dwelling on a currently undeveloped parcel will have some impact on neighbouring properties, at a 15m setback from the natural boundary of the lake, the dwelling will be setback further from the lake than dwellings on existing adjacent properties. The variance is not anticipated to have any significant affect on the use and enjoyment of adjacent land, and at the time of authoring this report, staff have not heard any feedback suggesting it may.

5. **Does the variance alter the permitted uses or densities on a parcel?**

   The variance does not alter the permitted uses or density.

Notifications

Notification was provided to adjacent neighbours in accordance with Section 541 of the Local Government Act and Sunshine Coast Regional District Board of Variance Bylaw No. 380, 1993. No comments have been received at the time of this report. Members of the public will have the opportunity to provide comments at the Board of Variance meeting.

CONCLUSION

The variance is requested to allow the construction of a single-unit dwelling at the proposed 15 metre setback from Sakinaw Lake. This application has been submitted based on hardship related to site conditions that impact the ability to meet the required 20 metres setback.

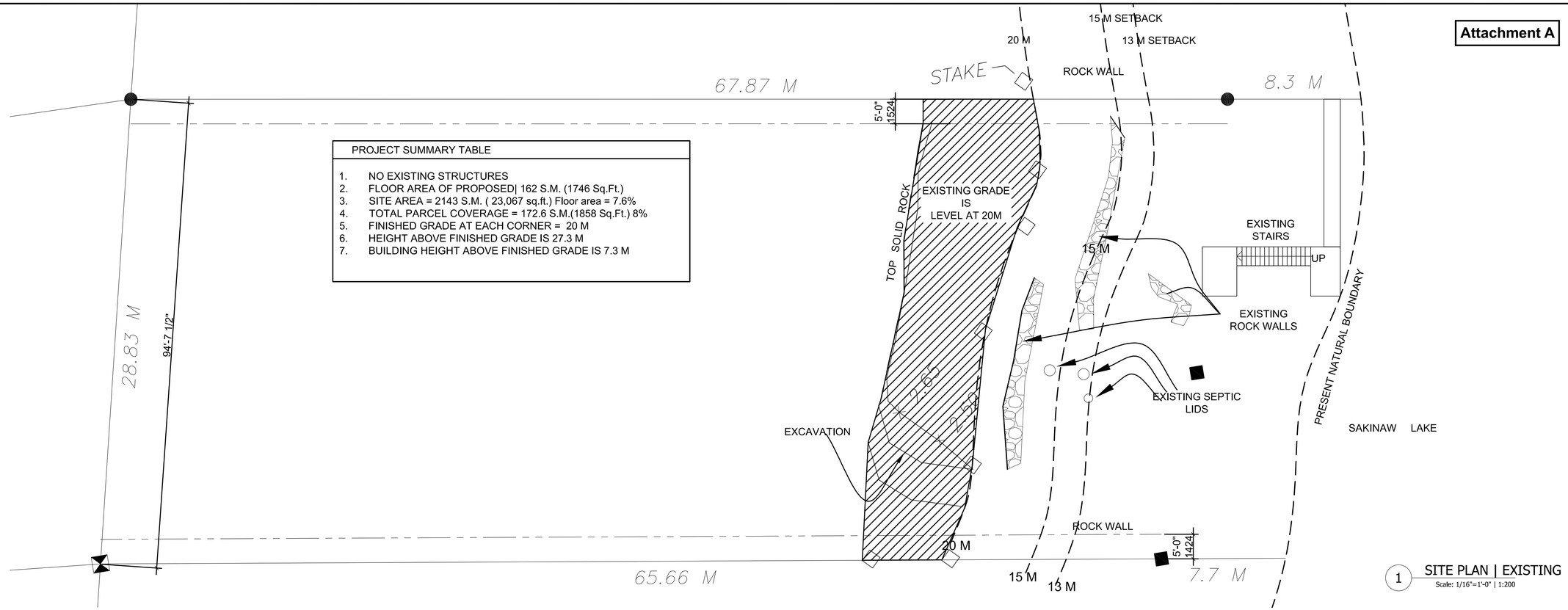
Attachments

Attachment A – Architectural Plans and Site Plan
Attachment B – Riparian Assessment

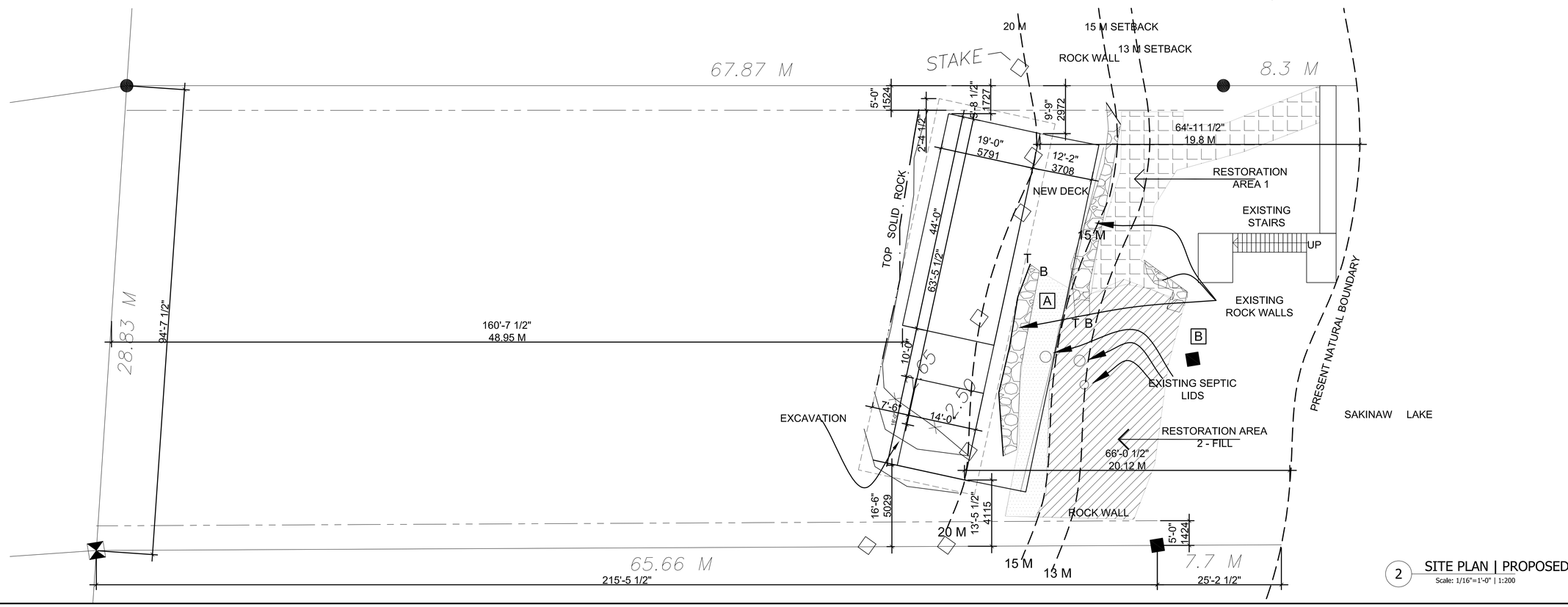
Reviewed by:			
Manager	X – J. Jackson	Finance	
GM		Legislative	
CAO/CFO		Assistant Manager	X – K. Jones

Attachment A

PROJECT SUMMARY TABLE
1. NO EXISTING STRUCTURES
2. FLOOR AREA OF PROPOSED| 162 S.M. (1746 Sq.Ft.)
3. SITE AREA = 2143 S.M. (23,067 sq.ft.) Floor area = 7.6%
4. TOTAL PARCEL COVERAGE = 172.6 S.M.(1858 Sq.Ft.) 8%
5. FINISHED GRADE AT EACH CORNER = 20 M
6. HEIGHT ABOVE FINISHED GRADE IS 27.3 M
7. BUILDING HEIGHT ABOVE FINISHED GRADE IS 7.3 M



1 SITE PLAN | EXISTING
Scale: 1/16"=1'-0" | 1:200



2 SITE PLAN | PROPOSED
Scale: 1/16"=1'-0" | 1:200

TYLER SCHMIDT ARCHITECT LTD.

1437 LAWSON AVENUE, WEST VANCOUVER, BC. CANADA. V7T-2E9.

TEL: (778) 279-6268

Seal:

No	Date	Revision/Issue
*	OCT.31.24	ISSUED FOR DP
*	JUN.09.24	ISSUED FOR BP
*	MAY.23.23	ISSUED FOR BP
*	FEB.21.23	ISSUED FOR REVIEW
*	NOV.4.22	ISSUED FOR REVIEW

Key Plan:

SEASONAL USE ONLY

PROJECT NAME

ZIMMERMAN CABIN

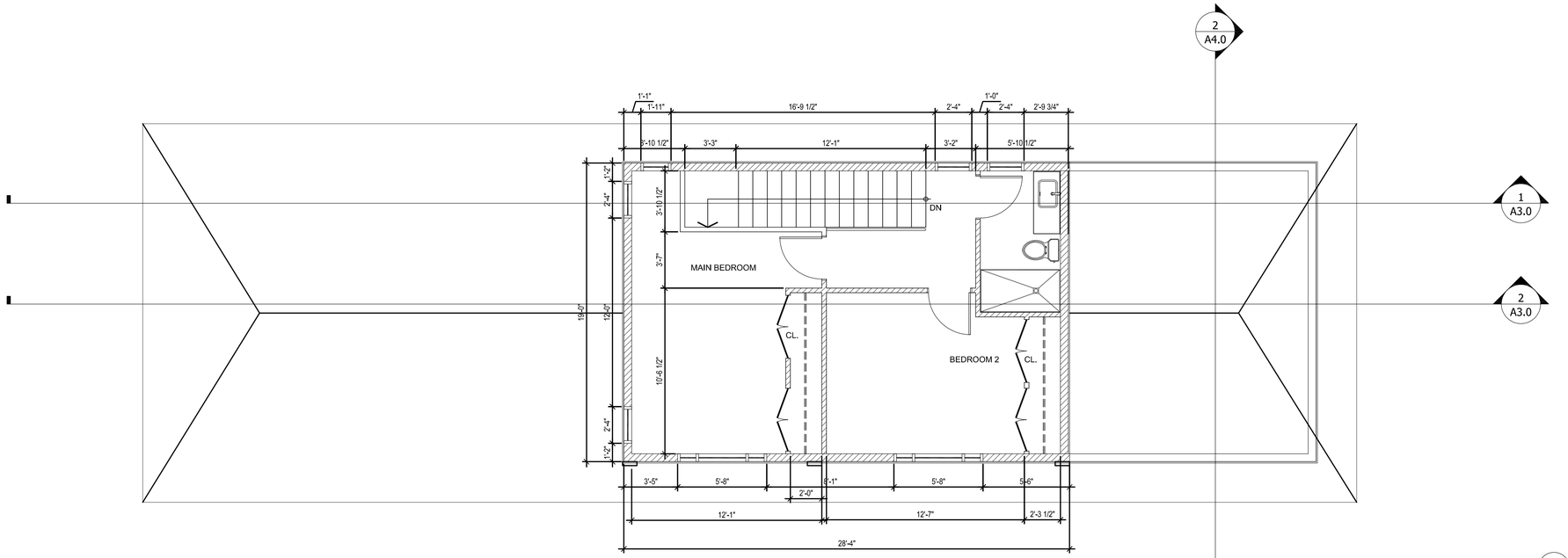
SAKINAW LAKE
SUNSHINE COAST, BC

PROJECT No:	22-116	DATE:	NOV.02.22
CLIENT No:			
DRAWN BY:	TWS	CHECKED BY:	TWS
SCALE:	AS NOTED		

DRAWING NUMBER: A2.0

Rev. No.:

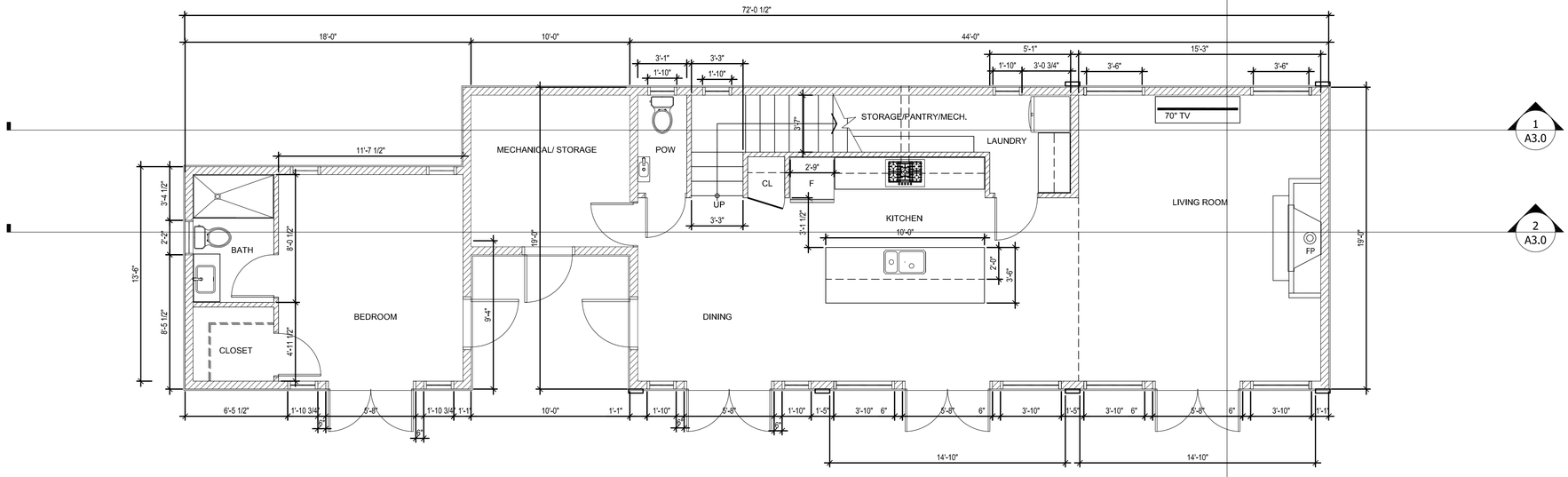
TITLE: SITE PLAN



UPPER FLOOR AREA: 50.4 S.M. (542 Sq.Ft.)

SITE COVERAGE: 172.4 S.M. (1856 Sq.Ft.)
TOTAL FLOOR AREA: 162 S.M. (1746 Sq.Ft.)

2 UPPER FLOOR
Scale: 1/4"=1'-0"



MAIN FLOOR AREA: 112 S.M. (1204 Sq.Ft.)

1 MAIN FLOOR
Scale: 1/4"=1'-0"

TYLER SCHMIDT ARCHITECT LTD.

1437 LAWSON AVENUE, WEST VANCOUVER, BC. CANADA. V7T-2E9.

TEL: (778) 279-6268

Seal:

No	Date	Revision/Issue
*	OCT.31.24	ISSUED FOR DP
*	MAY.23.23	ISSUED FOR BP
*	MAR.10.23	ISSUED FOR STRUCTURAL
*	FEB.28.23	ISSUED FOR REVIEW
*	FEB.21.23	ISSUED FOR REVIEW

Key Plan:

SEASONAL USE ONLY

PROJECT NAME

ZIMMERMAN CABIN

SAKINAW LAKE
SUNSHINE COAST, BC

PROJECT No:	22-116	DATE:	NOV.02.22
CLIENT No:			
DRAWN BY:	TWS	CHECKED BY:	TWS
SCALE:	1/4" = 1'-0"		

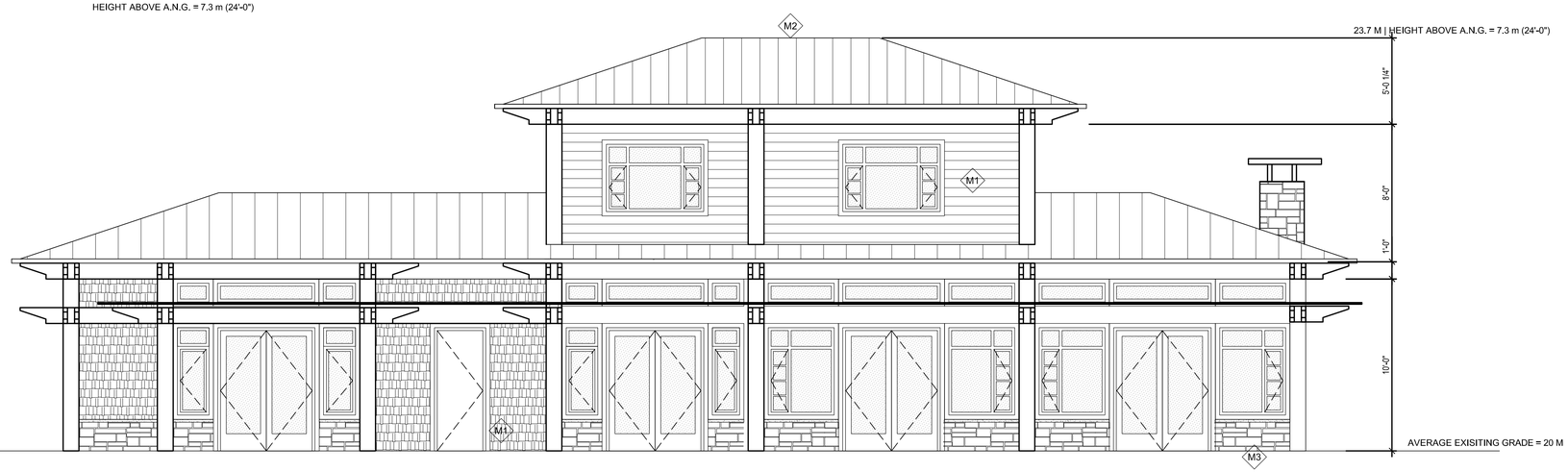
DRAWING NUMBER: A2.1

Rev. No.:

TITLE: PLANS

2 WEST WELEVATION
Scale: 1/4"=1'-0"

AVERAGE EXISITING GRADE = 20 M
AVERAGE FINISHED GRADE = 20 M
HEIGHT ABOVE A.N.G. = 7.3 m (24'-0")



MATERIALS LEGEND

- M1 HARDIPLANK RAIN SCREEN CLADDING
- M2 STANDING SEAM METAL ROOF
- M3 ASHLAR ROCK VENNEER ON RAINSCREEN

1 EAST ELEVATION
Scale: 1/4"=1'-0"

TYLER SCHMIDT ARCHITECT LTD.

1437 LAWSON AVENUE, WEST VANCOUVER, BC. CANADA. V7T-2E9.

TEL: (778) 279-6268

Seal:

No	Date	Revision/Issue
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*	MAR.10.23	ISSUED FOR STRUCT
*	FEB.28.23	ISSUED FOR REVIEW
*	FEB.21.23	ISSUED FOR REVIEW

Key Plan:

SEASONAL USE ONLY

PROJECT NAME
ZIMMERMAN CABIN

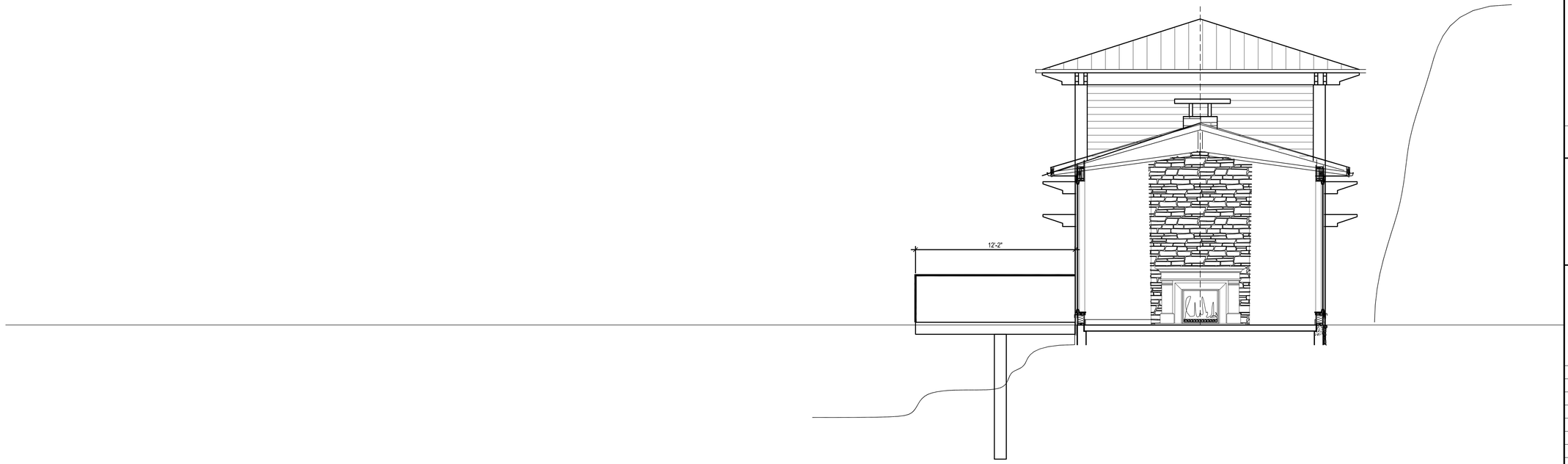
SAKINAW LAKE
SUNSHINE COAST, BC

PROJECT No:	22-116	DATE:	NOV.02.22
CLIENT No:			
DRAWN BY:	TWS	CHECKED BY:	TWS
SCALE:	1/4" = 1'-0"		

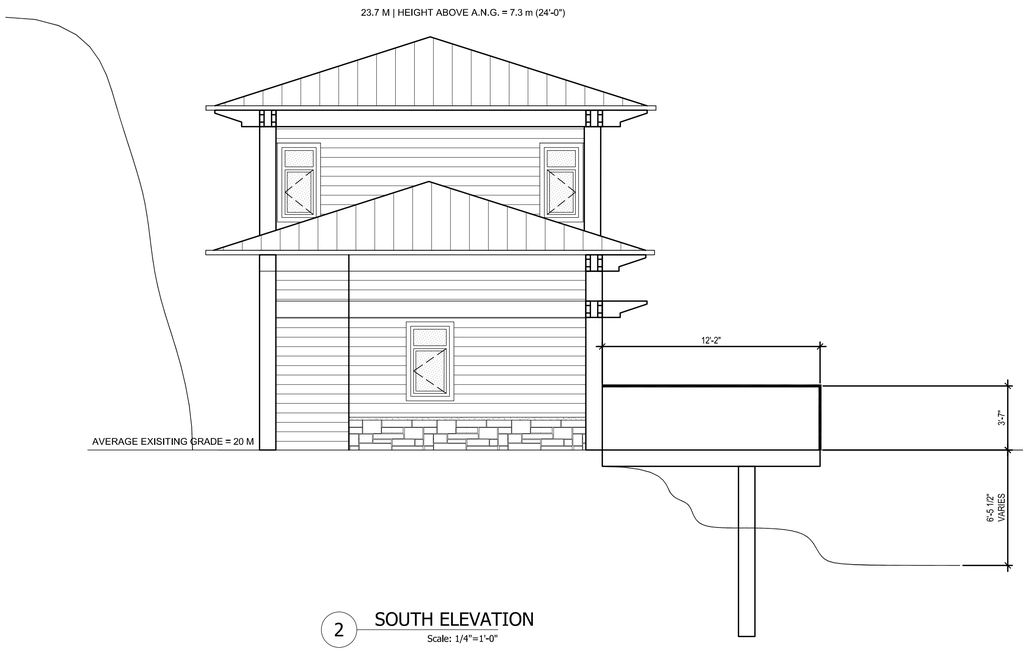
DRAWING NUMBER: A3.0

Rev. No.:

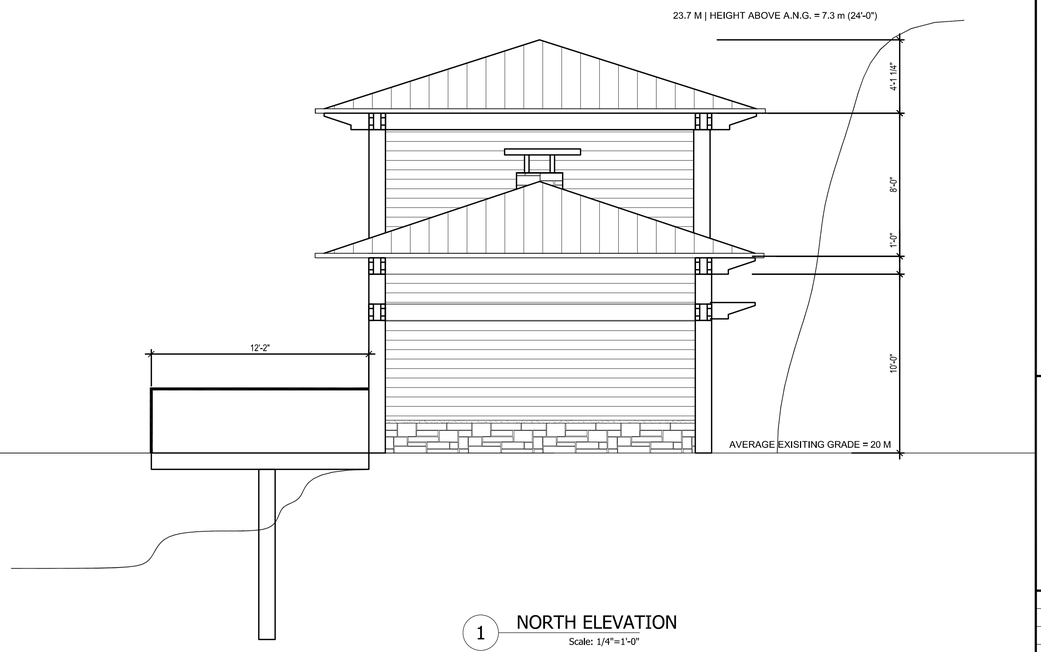
TITLE
ELEVATIONS



3 SECTION- THROUGH VAULTED CEILING L.R.
Scale: 1/4"=1'-0"



2 SOUTH ELEVATION
Scale: 1/4"=1'-0"



1 NORTH ELEVATION
Scale: 1/4"=1'-0"

TYLER SCHMIDT ARCHITECT LTD.

1437 LAWSON AVENUE, WEST VANCOUVER, BC. CANADA. V7T-2E9.

TEL: (778) 279-6268

Seal:

No	Date	Revision/Issue
*	OCT.31.24	ISSUED FOR DP
*	MAY.23.23	ISSUED FOR BP
*	MAR.10.23	ISSUED FOR STRUCT
*	FEB.28.23	ISSUED FOR REVIEW
*	FEB.21.23	ISSUED FOR REVIEW

Key Plan:

SEASONAL USE ONLY

PROJECT NAME

ZIMMERMAN CABIN

SAKINAW LAKE
SUNSHINE COAST, BC

PROJECT No:	22-116	DATE:	NOV.02.22
CLIENT No:			
DRAWN BY:	TWS	CHECKED BY:	TWS
SCALE:	1/4" = 1'-0"		

DRAWING NUMBER: A3.1

Rev. No.:

TITLE: ELEVATIONS

Attachment B

FORM 1

Riparian Areas Protection Regulation: Assessment Report - Lot 15 Sakinaw

Date	**R2 Aug 19, 2024**

I. Primary QEP Information

First Name	Cam	Middle Name S		
Last Name	Forrester			
Designation	R.P.F.	Company: Cam Forrester & Associates		
Registration #	#2118	Email cam_forrester@Telus.net		
Address	6231 Sunshine Coast Highway			
City	Sechelt	Postal V7Z 0M1	Phone # 604.885.7112	
Prov/state	BC	CAN		

II. Secondary QEP Information (N/A)

III. Developer Information

First Name	*Patricia*	Middle Name	
Last Name	*Zimmerman*		
Company	N/A		
Phone #	604.885.9052		
Address	548 6th St E,		
City	North Vancouver,	Postal V7Z 1R1	
Prov/state	BC	Country CAN	

IV. Development Information

Development Type	Rural Residential		
Area of Development (ha)	0.1	Riparian Length (m)	Affected area ~30m
Lot Area (ha)	.2	Nature of Development	Construction-Residence
Proposed Start Date	01Mar24	Proposed End Date	31Jan25

V. Location of Proposed Development

Street Address (or nearest town)	Pender Harbour		
Local Government	Sunshine Coast Regional District	City Madeira Park	
Stream Name	Sakinaw Lake – 00435JERV		
Legal Description (PID)	8552 WEST SAKINAW LAKESHORE WAY Lot 15, DL3248 PID 008-975-337		
Stream/River Type	Stream/Lake	DFO Area 2	
Watershed Code	900-147300		
Latitude	49.68764	Longitude	123.995319

Table of Contents for RAPR Detailed Assessment Report

Notes accompanying Revision 2 – Hardship Rational & Calculations

This revision addresses review comments, dated July 18, 2024. Key RAPR review points are as follows:
"The only mechanisms which permit new development within the SPEA (the septic) under the RAPR would be Under Section 11 in hardship scenarios. As per the previous rejection (*July 2024*), … provide evidence that the parcel meets the requirements of Section 11 of the RAPR to be a hardship
Note: a hardship scenario would apply to the entire development, not just the septic, and the assessment would be required to demonstrate Section 11 is met. This would include providing calculations for the developable area and allowable footprint, describe and provide support documentation (e.g., geotechnical reports, if available) for natural and legal restrictions applicable, etc."

This revision provides the rational for applying the RAPR S.11 hardship scenario to this development.

Constraints relating to viable building structure placement and site service infrastructure reference the civil engineering opinion[1] (Attachment 3.) on overall site constructability and the septic infrastructure siting. Table 1 provides a summary of the parcel calculations that support the hardship case, yields an allowable footprint area and the residual restoration requirements. See also Figure 1. Hardship area site plan, below.

Table 1. S. 11 Hardship Calculations

Category	*Area m2*	*% of total lot area*	*Comments*
Parcel/Lot	*2142*	*100*	
Restricted – SPEA(a)	*437.6*	*20.4*	*15m SPEA*
Restricted - Isolated bedrock – upper slope zone(b)	*1257.4*	*58.7*	
Zoning Bylaw setbacks(c	*180.6*	*8.4*	
Total Site minus a+b+c = Developable Area	*266.3*	*12.4*	
Allowable Footprint (30%) minus Developable Area = Allowable encroachment	*642.6-266.3 = 376.3*	*17.5*	
Human disturbance (Stairs and constructed benches)	*452*	*21.1*	*If S.11 Human disturbance < 70%, allowable footprint = 30%*
Human Disturbance minus Allowable Footprint = Restoration required	*-75.7*	*N/A*	*None required. Voluntary restoration plan (CIA) included below.*

[1] Design Rationale Summary for Field Configuration, Telder Engineering

In this RAPR, following the methodology indicates a setback of 15m for the SPEA with the hardship variance of 376m2 encroachment, of which only 98m2 will be required to accommodate the required septic infrastructure. The constructed 98m2 bench associated with the septic infrastructure will be restored but will not be included in restoration calculations for compliance. Restoration will be surplus to requirements overall.

The cottage and deck surround are designed to be wholly outside of the SPEA.

The owners have prepared the site by blasting and levelling a building area between approximately 13-20m (Photos 3-5). As part of development works on the site, the owners also have already installed the septic system in accordance with local health authority authorization (Attachment 3.) and variance (Attachment 2.)

S. 10(2) of the RAPR will be applied for siting and design. Except for rustic pathways, final development inside the SPEA will be confined to the reduced encroachment allotment area. Pre-existing unattached stairs remain as they are.

Defining 'restricted' areas for this site is straightforward. The first category of restricted accounts for the 15m SPEA, as established in this RAPR report.

The second category characterises the upper steep slope areas in the mid to western portion of the lot. Lack of access, thin soil and steep, fractured terrain preclude development, either of a building site or septic field/infrastructure[2].

Third, zoning bylaw setback requirements were factored into the non-developable area.

Practicability of the upper slopes for septic infrastructure or construction of a residence:

- **The lot is water access only, there are no roads connecting to the back of the lot and electrical power is limited to off-grid temporary sources.**
- **As presented in the Telder memo[3], the only defensible site for the septic field is in its current location.**
- **Upper slopes do not have the required soil to accommodate septic water travel times.**
- **The upper zone is characterised as convex fractured granitic outcroppings a with shallow to non-existent soil mantle. See photos 15 to 20.**
- **Imported septic fill, is generally not supported on technical grounds and would likely require helicopter use.**
- **Similarly, machine access is not possible and septic infrastructure construction would also require helicopter support.**

[2] Telder memo Page 1 bullets # c, d & e.
[3] Telder memo Page 1- Solutions.

- **Any septic infrastructure in the upper zone would require continuous and reliable electrical power (the current design is gravity fed), which does not exist for this lakeshore subdivision**

Practicability of upper slopes for residential construction[4].

- **The bluffy nature of the upper area precludes machine traffic.**
- **Fractured bedrock, requiring pinning and drill work for foundations**
- **Excessive and impractical labour effort would be required for materials and equipment mobilization/demobilization.**
- **Helicopter support or complicated lift solutions would be required.**

Practicability of the pre-existing prepared building site for septic construction. A bench has been constructed outside the SPEA and is designed for competent building foundation & support. To preclude any suggestion that the septic could be located here instead of the planned residence, the following were considered.

- **The soil depth and composition in this location has been investigated and is not suitable for a septic field.**
- **Imported septic fill, is generally not supported on technical grounds and would require barging and machine toting.**

Conditions & Impacts Assessment comments:

(See Revised CIA – Attachment 1.)

The S. 11 hardship calculations (Tables 1 & 2) in this situation indicate that there is no requirement to restore any disturbed area within the SPEA. However, the proponent intends to restore the following areas in the spirit and intent of the RAPR.

Restoration Area 1 – Access disturbance (80m2)

During the bench construction early works, approximately 58m2 disturbance resulted from a heavy equipment access/egress trail from the foreshore in the northeast corner of Lot 15 (Photos 7-8) up to the constructed house bench and the septic infrastructure area. Portions of this linear area will continue to be used for temporary access during construction then converted to rustic access. There are pre-existing unattached stairs from the dock in Lot 15 up to approximately 7m from the HWM, where they intersect the access trail, so that only a few metres of permanent rustic access pathway will be required through the SPEA. Approximately 80m2 in Restoration Area – 1 will be restored in accordance with the CIA, which describes the disturbance and restoration in detail. **The prescription for this zone of restoration has not changed from the previous RAPR report.**

The disturbed trail leads to a dock and will be used to move all the required construction materials from the dock up into the building site with a combination of manual carry and mini hoe. This is the only practicable solution to material delivery to the site and will result in the least impact. On-site

[4] Telder memo Page 1 bullets # c, d & e.

discussions with the builder/contractor have resulted in the following measures to protect this linear feature:

- a commitment to limit the width of the construction access trail use to 2.5m, which will accommodate a skid steer of mini-hoe sized piece of equipment. The trail edges will be clearly flagged.
- Traffic will be limited to only what is necessary for material delivery.
- Construction materials will be stored outside the SPEA.
- All litter and debris will be diligently cleaned up on a regular basis.
- The site will be monitored for erosion & sediment control measures.
- Access will eventually be landscaped rustic steps/steppingstones and permeable elements in keeping with the natural environment.
- Any disturbance in the SPEA outside of the final landscaped rustic steps/will be revegetated in accordance with the accepted CIA; and,
- No trees will be removed or modified in this zone.

Restoration Area 2 – Septic infrastructure bench (98m2)

- **Previous RAPR review comments to this restoration have been to reject it based on the septic infrastructure occupying area of the SPEA.**
- Septic infrastructure, which is the point of the hardship case, will remain in place but will not preclude restoration.
- The area of required disturbed area (approx. 98m2) inside the SPEA resulted from creating the septic infrastructure bench.
- The bench material is made up of sands and angular gravel/cobble.
- Restoration will include applying a thick layer of topsoil across the whole zone, starting at the foreshore edge (east) and sloping up at approximately 3:1 to tie into the rock wall, effectively covering the septic lids and field with high quality growing medium.
- The area will be revegetated with ecologically suited species (dry site tolerant).

Table 2. Conditions & Impacts Summary

Category	*Area m2*	*% of total lot area*	*Comments*
Parcel/Lot	*2142*	*100*	
Allowable encroachment (A)	*376.3*		*RAPR S.11*
Proposed Encroachment (B)	*98*		*Required (reduced) encroachment for septic only, doesn't include unattached stairs or rustic access*
Restoration required	*nil*	*-*	*Minimum required.*
Proposed CIA restoration	*98(not counted towards accomplished restoration) + 80*	*-*	*Surplus restoration = 80m2 Restoration plan (CIA) included below.*

RAPR S.11 Hardship Calculation linework figure.

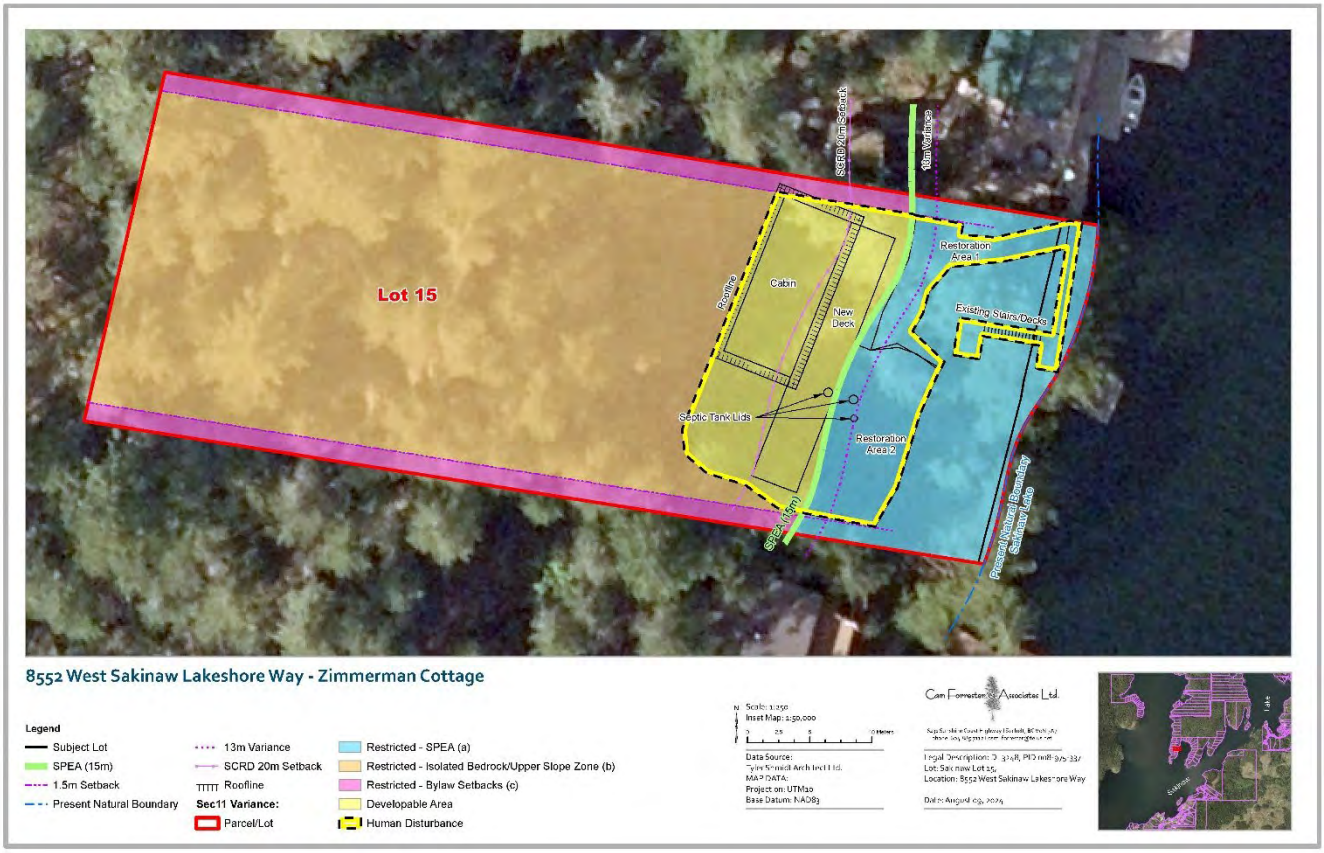


Figure 1. Hardship area site plan

Section 1. Description of Fisheries Resources Values and a Description of the Development proposal

The area of interest is a small portion of the east facing shoreline at the northwestern end of Sakinaw Lake along Lot 15 DL 3248. The Riparian Assessment Area is characterized as a partially treed mix of xeric forest and steep bedrock bluffs that rise above the foreshore and which has been blasted and site prepared upslope in anticipation of cabin construction.

The entire Lot 15 waterline is east facing and is characterized by a shoreline (Photos 1, 3) with 2-6m granitic steep convex slopes in the SPEA and 30-150cm vertical faces at the lake edge, then a narrow 1-3m angular boulder shelf, then a precipitous 80+% drop off. Common angular boulders are visible directly below the natural boundary. Large woody debris in the form of whole submerged trees were observed. No aquatic obligate vegetation was observed growing in the boulder substrate. There are no other noteworthy fish habitat features affected by Lot 15.

The Egmont & Pender Harbour OCP indicates that:

- the Environmentally Sensitive Area Lake Sensitivity ratings are 'Slight'; Sakinaw Lake has a 'Power Craft Safety Area.
- the General Land Use Designation is Rural Residential 'RU-1'; and,
- the Development Permit Area indicates a Riparian Area Assessment is required.

The riparian vegetation occupies a broad convex mossy rock outcrop characteristic of a Douglas-fir/arbutus//salal dry knoll ecosystem. The site mainly has thin to nil soil, is low productivity and currently supports scattered sapling/pole lodgepole pine, Douglas-fir and a step moss/salal understory. Further back from the riparian and the rock outcrop and behind the building site in the western half of the lot, the site is still typical this dry thin-soil site (Photos 15 to 20.).

Development is characterized as residential/cabin construction and the necessary works prescribed in the CIA.

Section 2. Results of Detailed Riparian Assessment

Date:	Aug 19, 2024
Description of Water bodies involved (number, type)	Sakinaw Lake

Stream	-
Wetland	-
Lake	X
Ditch	-
Number of reaches	N/A
Reach #	N/A

Channel width and slope and Channel Type

	Channel Width(m)		Gradient (%)
starting point	-		-
upstream	-		-
	-		-
	-		-
	-		-
downstream	-		-
	-		-
	-		-
	-		-
	-		-
	-		-
Total: minus high /low	-		-
mean	-		-
	R/P	C/P	S/P
Channel Type	-	-	-

I, Cam Forrester, hereby certify that:
a) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*.
b) I am qualified to carry out this part of the assessment of the development proposal made by the developer Patricia Zimmerman
c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.

Site Potential Vegetation Type (SPVT)

	Yes	No	
SPVT Polygons		X	Tick yes only if multiple polygons, if No then fill in one set of SPVT data boxes

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Polygon No:				Method employed if other than TR
	LC	SH	TR	NA
SPVT Type			X	

Zone of Sensitivity (ZOS) and resultant SPEA

Segment No:	N/A	N/A						
LWD, Bank and Channel Stability ZOS (m)	15							
Litter fall and insect drop ZOS (m)	15							
Shade ZOS (m) max	N/A	South bank	Yes		No	X		
Ditch	Justification description for classifying as a ditch (manmade, no significant headwaters or springs, seasonal flow)	NA						
Ditch Fish Bearing	Yes	NA	No	NA	If non-fish bearing, insert no fish bearing status report	NA		
SPEA maximum	**15m with allowable hardship incursion of 376m2, but only 98m2 planned.**							

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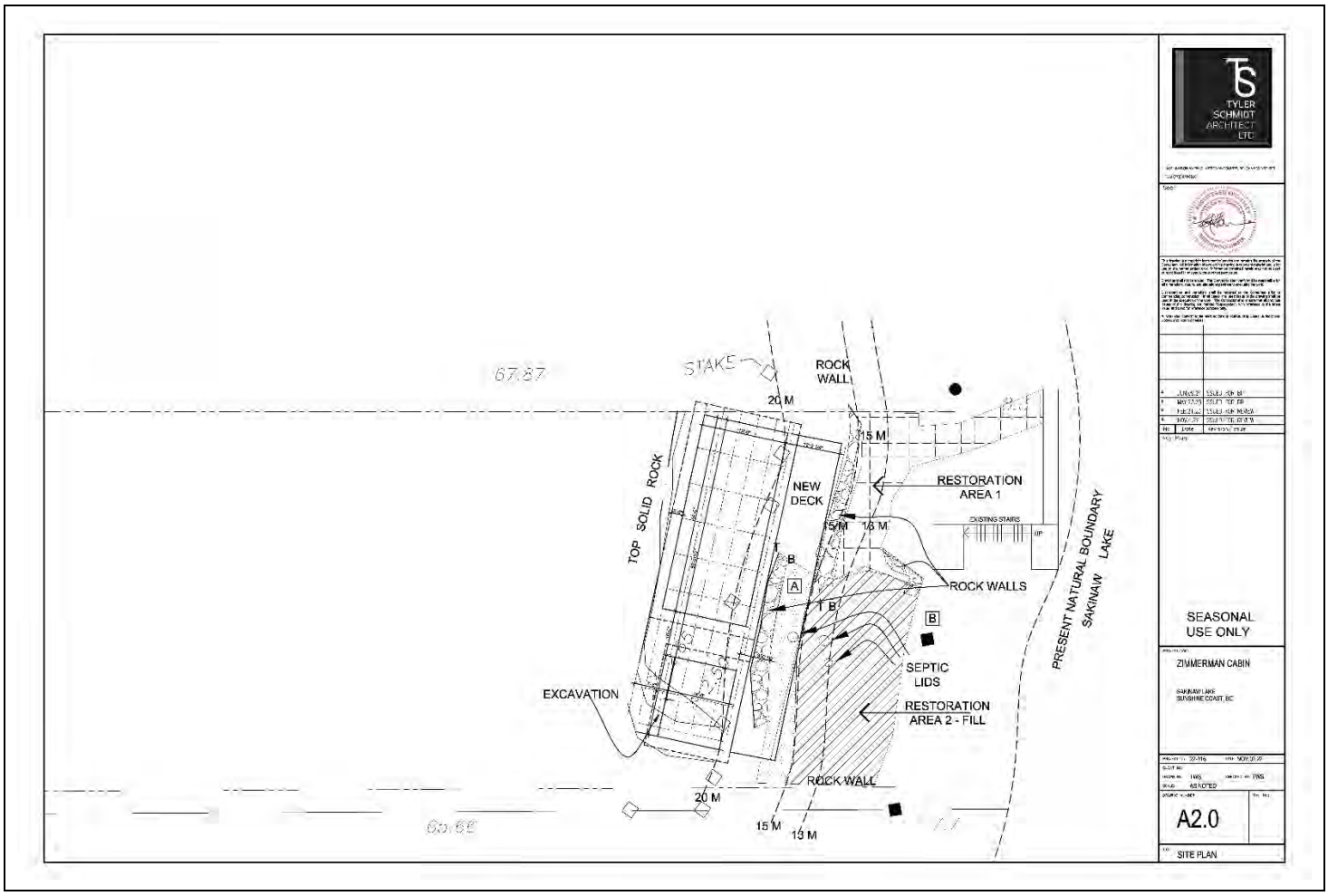
c) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and
d) In carrying out my assessment of the development proposal, I have followed the technical manual to the Riparian Areas Protection Regulation.

Comments

nil

Section 3a. Site Plan- SPEA linework.

Section 3b. Site Plan - Architectural drawing.



Section 4. Measures to Protect and Maintain the SPEA

1. Danger Trees	At the time of the RAPR assessment, no high-risk trees were identified. A specific tree risk assessment is appropriate for any future Danger Tree removal. The property owner may modify trees within the property, and inside the assessment area according to accepted arboriculture methodology for tree risk assessment and treatment. Within a SPEA, the QEP must provide a recommendation stating that trees prescribed for removal or modification represent a hazard to life or property. Danger trees felled within the SPEA shall remain in the SPEA as contribution to LWD habitat elements.

I, Cam Forrester, RPF, hereby certify that:

e) I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*.

f) I am qualified to carry out this part of the assessment of the development proposal made by the developer Patricia Zimmerman

g) I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

2. Windthrow

Hazard Rating				Risk
Topographic Exposure	**Soil Description**	**Stand Description**	**Summary Windthrow Hazard**	**Hazard X Consequence**
MOD-HIGH	MOD-HIGH (Thin soil)	LOW	MOD	MOD-LOW

Description: The riparian trees are mainly second growth conifer. Crown closure is open, live limbs are >50%, have been exposed to storm winds and appear moderately wind firm. At present there is no requirement for a windthrow treatment. In the future, windthrow protection is to be preferentially located outside of the SPEA for the purpose of protecting SPEA trees. And although windthrow treatments within the SPEA (or RAA) are not currently recommended, if conditions and risks change, a QEP must provide a recommendation stating that trees prescribed for removal or modification represent a hazard to life or property. Danger/windthrow hazard trees felled within the SPEA shall remain in the SPEA as contribution to LWD habitat elements.

I, Cam Forrester, RPF, hereby certify that:

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c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

3. Slope Stability	Not applicable.

I, Cam Forrester, RPF, hereby certify that:

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4. Protection of Trees	The trees within the SPEA, including critical rooting zones, defined as the entire remaining SPEA, and not the RAA, which has been developed previously, will be effectively protected from disturbance with a combination of signage, fencing and crew education. No new development or disturbance will occur in the SPEA during construction. See encroachment comments regarding signage.

I, Cam Forrester, RPF, hereby certify that:

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c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

5. Encroachment	To maintain the effectiveness of the riparian protection area, the SPEA should be clearly demarcated with appropriate signs and/or a fence or berm barrier that is in keeping with the natural environment. The fencing has been delivered to the site already and is going to be erected once authorizations are acquired. During construction, storage of materials and machinery traffic will be conducted so as not to disturb the SPEA or critical rooting zones. In this case, based on site steepness and no access to the back of the lot, the critical rooting zone is any undisturbed forest floor. To protect the soil structure adjacent to the build on the undisturbed foreshore SPEA side, in addition to the fencing, the ground will be protected with matting, pallets or similar, to preclude soil compaction from foot traffic. In addition, construction waste & debris will be cleaned up during construction. Concrete wash and wastewater shall not be permitted to impact the SPEA. The property owner shall avoid unauthorized trails; refuse dumping, soil disturbance, vegetation conversion or tree clearing in the SPEA.

I, Cam Forrester, RPF, hereby certify that:

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b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Patricia Zimmerman
c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.

6. Sediment and Erosion Control	This is a low likelihood for generating sediment and erosion from the construction area to the extent that there would be impacts to the SPEA. The QEP who will conduct Construction Environmental Monitoring inspections, will assess the need for ESC measures and will prescribe appropriate treatment/installations. This section is related to 7. Stormwater Management.
I, Cam Forrester, RPF, hereby certify that: a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*. b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Patricia Zimmerman c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.	
7. Stormwater Management	Referencing the RAPR 2019 Guidance, "The RAPR is only able to address development within the Riparian Assessment Area, but stormwater management is an issue for the entire development site and watershed. For all Detailed Assessments, the QEP must include in their Assessment Report a plan to capture the small storm runoff event from the Riparian Assessment Area." Lot 15 is partly developed in the form of the access trail, the blasted building site and the septic infrastructure. Storm water within the RAPR Assessment area is expected to be adequately conveyed in perimeter drainage retention structures. It is the opinion of the writer, CPESC-IT with considerable experience in ESC BMPs, that the stormwater originating from a rainfall event in the RAA does not represent a risk of sediment delivery. This is based on the water input being mainly raindrop or minor surface flow on a small area of permeable very coarse parent material and a mainly vegetated lower slope. No erosion rills were observed in the subject lot, which in the context of the fall 2021 atmospheric river events is an adequate measurement of the low-risk robustness of the slope in terms of erosion.
I, Cam Forrester, RPF, hereby certify that: a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*. b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Patricia Zimmerman c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.	
8. Floodplain Concerns (highly mobile channel)	No encroachment or impact to any active floodplain, channels or stream banks are proposed.
I, Cam Forrester, RPF, hereby certify that: a. I am a qualified environmental professional, as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*. b. I am qualified to carry out this part of the assessment of the development proposal made by the developer Patricia Zimmerman c. I have carried out an assessment of the development proposal and my assessment is set out in this Assessment Report; and in carrying out my assessment of the development proposal, I have followed the assessment methods set out in the Minister's technical manual to the Riparian Areas Protection Regulation.	

Section 5. Environmental Monitoring

An environmental monitoring program is required during any future construction phase to ensure that the objectives for SPEA management is understood and protected. This will consist of:

- Work crew education and standard operating procedures for construction and fuel management when working in and around water.
- pre-work meeting, pre-work plan and crew signoffs.
- on-site monitoring as required to ensure SPEA integrity through following the pre-work plan.
- the ability for the qualified monitor to direct and advise works related to protection of the SPEA, especially on the implementation of erosion and sediment controls.
- the ability to issue stop work orders in the case of practices that are illegal or damaging to the SPEA.
- the ability to report environmental infractions related to stream protection regulations.
- photographs and notes should be taken to document the various phases of construction, any observed environmental events and their resolution.

A Post Development Report is to be completed by a QEP and submitted to RAPR notification system as a requirement of the regulation. The report must document that setbacks and special measures were adhered to during construction.

The restoration areas will be monitored for several growing seasons in accordance with the CIA recommendations.

Section 6. Photos

Photo 1. Lot 15, viewing west.

Photo 2. Snow fencing ready to be installed at the SPEA to manage enroacment and protection of trees.

Photo 3. Upland building site, viewing centre of site.

Photo 4. Upland building site, viewing north portion of site.

Photo 5. Upland building site, viewing south portion of site. (Restoration Area- 2 – Fill).

Photo 6. Upland building site, septic infrastructure near 13m variance line. (Restoration Area- 2 – Fill).

Photo 7: Rock wall constructed at 15m SPEA line. CIA disturbance in foreground. (Restoration Area - 1).

Photo 8: CIA disturbance in foreground, resulting from heavy equipment access for upland site preparation. Viewing northeast. Temporary disturbance will be restored (Restoration Area-1).

Photo 9: CIA disturbance in foreground, resulting from heavy equipment access for upland site preparation. . Viewing northeast. (Restoration Area- 2 – Fill).

Photo 10: Upper RAA with driveway access viewing northward. Lot (northern) line approximated for reference. (Restoration Area - 1).

Photo 11. SPEA viewed from above. Viewing direction is southerly.

Photo 12. SPEA. Viewing direction is south.

Photo 13. Lake HWM marked with flagging pins, viewing south.

Photo 14. Lake HWM marked with flagging pins, viewing north.

Photo 15. Upper area, thin soil mantle.

Photo 16. Upper area, thin soil mantle.

Photo 17. Upper area, thin soil mantle, steep slope.

Photo 18. Upper area, bluff behind building site.

Photo 19. Upper area, thin soil mantle, steep slope.

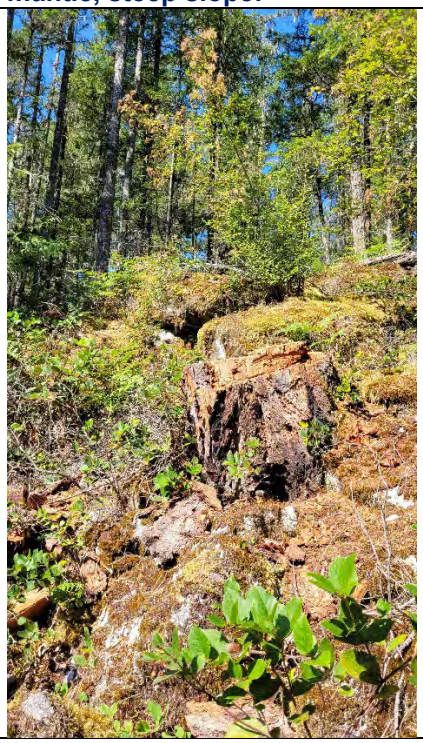


Photo 20. Upper area, thin soil mantle, steep slope.

Section 7. Professional Opinion

Qualified Environmental Professional opinion on the development proposal's riparian assessment.

Date **31MAY24**

1. I, Cam Forrester, RPF

_____

hereby certify that:

a) I am/We are qualified environmental professional(s), as defined in the Riparian Areas Protection Regulation made under the *Riparian Areas Protection Act*.
b) I am/We are qualified to carry out the assessment of the proposal made by the developer Patricia Zimmerman, which proposal is described in section 3 of this Assessment Report (the "development proposal"),
c) I have/We have carried out an assessment of the development proposal and my/our assessment is set out in this Assessment Report; and
d) In carrying out my/our assessment of the development proposal, I have/We have followed the specifications of the Riparian Areas Protection Regulation and assessment methodology set out in the minister's manual; AND

2. As qualified environmental professional(s), I/we hereby provide my/our professional opinion that:

a) N/A the site of the proposed development is subject to undue hardship, (**if applicable, indicate N/A otherwise**) and
b) YES, the proposed development will meet the **riparian protection standard** if the development proceeds as proposed in the report and complies with the measures, if any, recommended in the report.

Attachment – 1: REVISED Conditions & Impacts Assessment

Conditions & Impacts Assessment (CIA) (REV2.)

PREPARED FOR: Patricia Zimmerman
PREPARED BY: Cam Forrester, RPF
LOCATION: 8552 WEST SAKINAW LAKESHORE WAY Lot 15, DL3248 PID 008-975-337
DATE: Aug 19, 2024
CC: Sven Koberwitz, Senior Planner, Planning & Development, SCRD

This CIA is intended to accompany the RAPR report for 8552 WEST SAKINAW LAKESHORE WAY Lot 15, DL3248 PID 008-975-337 on Sakinaw Lake. The RAPR supports a hardship situation and results in a SPEA encroachment of 98m2 for septic infrastructure. The RAPR hardship calculations indicate that there is no requirement for restoration, but the proponent will proceed in the spirit and intent of the RAPR.

Lot A is rectangular 70x30m 0.21 ha rectangle and is oriented east/west. Acting on a legal variance to the 20m flood protection setback that has been acquired to allow development up to 13m from the high-water mark, the owners have prepared the building site by blasting and levelling a building site between approximately 15-20m (Photos 1-3.). A level building site has been cut from a bedrock bluff to accommodate new cabin construction. A second bench, inside the contemporary SPEA, in front of the building site was levelled off to accommodate the septic infrastructure.

Baseline conditions are assumed to have been a mixed conifer and deciduous(minor) second growth cover and with an understory dominated by sword fern and salal. The riparian vegetation occupies a broad convex mossy rock outcrop characteristic of a Douglas-fir/arbutus//salal dry knoll ecosystem. The site mainly has thin to nil soil, is low productivity and currently supports scattered sapling/pole lodgepole pine, Douglas-fir and a step moss/salal understory. Further back from the riparian and the rock outcrop and behind the building site in the western half of the lot, the site is more typical of a mesic Douglas-fir-salal site.

SPEA disturbance can by categorized as follows (See Figure 1.):

Restoration Area 1 – Access disturbance (Photos 1,2)

There is a pre-existing disturbed trail, the area subject to the CIA, in the northeast corner of Lot 15 which leads to a dock and will be used to move all the required construction materials from the dock up into the building site with a combination of manual carry and mini hoe tote. This is the only practicable solution to material delivery to the site and will result in the least impact. On-site discussions with the builder/contractor have resulted in the following measures to protect this linear feature:

- a commitment to limit the width of the construction access trail use to 2.5m, which will accommodate a skid steer of mini-hoe sized piece of equipment. The trail edges will be clearly flagged.
- Traffic will be limited to only what is necessary for material delivery.
- Construction materials will be stored outside the SPEA.
- All litter and debris will be diligently cleaned up on a regular basis.
- The site will be monitored for erosion & sediment control measures.
- Access will eventually be landscaped rustic steps/steppingstones and permeable elements in keeping with the natural environment.
- Any disturbance in the SPEA outside of the final landscaped rustic steps/will be revegetated in accordance with the accepted CIA, estimated at 80m2.
- The final trail through this area will be ~1.5m width composed of permeable materials
- Revegetation will be with accepted native riparian species; and,
- No trees will be removed or modified in this zone.

Restoration Area 2 – Fill (Photos 3-5) Hardship encroachment area.

- **Previous RAPR review comments to this restoration have been to reject it based on the septic infrastructure occupying area of the SPEA.**
- Septic infrastructure will remain in place but will not preclude restoration.
- The area of required A (approx. 98m2) disturbed area inside the SPEA resulted from creating the septic infrastructure bench.
- The bench material is made up of sands and angular gravel/cobble.
- Restoration will include applying a thick layer of topsoil across the whole zone, starting at the foreshore edge (east) and sloping up at approximately 4:1 to tie into the rock wall, effectively covering the septic lids and field with high quality growing medium.
- The area will be revegetated with ecologically suited species (dry site).

No other disturbance has occurred or is planned in any other segment of the SPEA throughout the property.

Riparian Assessment Area (RAA) Impacts

The following table summarizes potential impacts from disturbance on the measures to protect the SPEA. The RAPR assessment and current conditions informed these comments.

Table 1. Lot 15 -- A Summary of the Disturbance & Impacts to the Measures to Protect the SPEA

Measures To Protect	Applies? Y/N	Description
Wildlife/Danger Tree Removal	Y	At the time of the RAPR assessment, no high-risk trees were identified. A specific tree risk assessment is appropriate for any future Danger Tree removal. The property owner may modify trees within the property, and inside the assessment area according to accepted arboriculture methodology for tree risk assessment and treatment. Within a SPEA, the QEP must provide a recommendation stating that trees prescribed for removal or modification represent a hazard to life or property. Danger trees felled within the SPEA shall remain in the SPEA as contribution to LWD habitat elements.
Windthrow	Y	The area adjacent to the CIA disturbance is treed with a variable species mix, including scattered deciduous. Trees are exposed second growth with windfirm characteristics and a history of being windfirm. No windfirming treatment is required to protect the SPEA in the subject area.
Slope Stability	`N	Does not apply. No terrain stability issues.
Tree Protection	Y	The SPEA will be signed and fenced to establish the recommended 'no vegetation removal' covenant. Restoration in the CIA area will be supportive of this measure.
Encroachment	Y	Same as Tree Protection
Sediment and Erosion Control	Y/N	The area is stable and is not generating any sediment in its current condition.
Stormwater	Y/N	Run-off in the RAA appears to be well distributed. Vegetated margins and a very small catchment area result in a very low stormwater risk.
Flood Plain Concerns	N	Does not apply.

Restoration Recommendations

Restoration of the disturbed area to baseline conditions will consist of the following:

- Planting ecologically suited native plant species on a microsite basis.
  - Shade tolerant species should be considered if planting under a tree canopy.
  - Mesic/drought tolerant species upland from the shoreline.
  - Limited maintenance is expected to control invasive blackberry etc.

- establishing a barrier fence and signage at the SPEA boundary.
- Deer browse protection may be required on planted trees/shrubs.
- Irrigation/watering may be required during the first several growing seasons.

This restoration will follow guidelines provided by the MFLNRO (Ministry of Water, Land and Air Protection, 2008[1]). The site is characterized as a Low soil nutrient regime, and Dry- Very Dry soil moisture regime. The existing plant diversity is not complex, and any restoration species are required to be growing season drought tolerant.

The objective is to return the disturbed area to a vegetated state with near full site occupancy with a ground and crown cover of native shrubs, herbs, and trees.

In addition to restoration, the trail disturbance area will incorporate landscaped rustic steps/steppingstones and permeable elements, not to exceed 1.5m width in keeping with the natural environment, which is provided for in the zoning for the site.

[1] Riparian Restoration Guidelines, 2008, Ministry of Environment, Environmental Stewardship Lower Mainland Region

Table 2. Lot 1 A Summary of Recommended Native Species for the Restoration Planting Prescription

Recommended Native Plants

Deciduous Trees

Botanical Name	Common Name	Mature Height (m)	Best Growth Conditions[1]	# Plants
Alnus rubra	*Red alder*	*25*	*W-M*	*5*

Coniferous Trees

Botanical Name	Common Name	Mature Height (m)	Best Growth Conditions[1]	# Plants
Pseudotsuga menziesii	Douglas-fir	to 70	d	5
Pinus contorta	Shore pine	to 18	w-d	5

Shrubs

Botanical Name	Common Name	Mature Height (m)	Best Growth Conditions[1]	# Plants
♦ ¨ *Rosa nutkana*	Nootka rose	to 3	d-m	15
♦ *Rubus parviflorus*	thimbleberry	0.5-3	d-m	10
♦ *Gaultheria shallon*	salal	1-3	d-m-w	40-80
♦ *Alelanchier alnifoila*	Saskatoon berry	2-5	d-m	5
♦ *Holidiscus discolor*	Ocean spray	2-5	d-m	5
♦ *Ribes sanginium*	Red current	1-2	d-m	5

Herbs

Botanical Name	Common Name	Mature Height (m)	Best Growth Conditions[1]	# Plants
Polystichum munitum	swordfern	to .5	d-m	20

Monitoring

The restoration prescription relies on post-construction monitoring to identify potential plant survival or health issues as well as functioning of the riparian habitat. Monitoring also requires a commitment by the proponent to make reasonable changes to mitigate negative outcomes and ensure that the vegetation is successfully established and that it is likely to function over time.

The primary concern of monitoring will be maintenance of vegetation survival and health conditions through verification that artificially and naturally established vegetation is healthy, vigorous, and likely to reach its potential. Specific monitoring criteria at this site will include:

- Conducting inventories of species composition, the prevalence of planted species, the ratio of non-native and invasive species to native species.
- Assessing soil moisture and the development of soil characteristics.
- Conducting general wildlife use observations within the planted area.
- Conducting photo studies to track vegetation establishment.
- Assessments will inform efforts to infill plant from the recommended species list where vegetation is slow to establish.
- Invasive species, mainly anticipated to be Himalayan blackberry, may be manually controlled to allow planted stock to establish.
- Documentation of monitoring observations and corrective measures.
- If any of the restored area is assessed to not be regenerated adequately; and,
- Additional area or corrective measures will be prescribed at the discretion of the QEP.

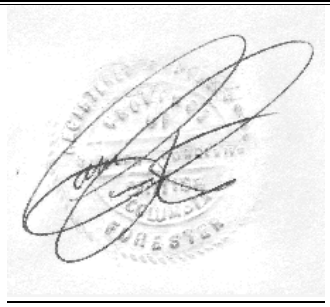
Monitoring is proposed to take place once in the first year after plant establishment and then again in the third year after establishment.

Monitoring notes will be available for validation purposes for each of the monitoring visits.

Figure 1. CIA areas for Lot 15 – restoration areas highlighted area in RAPR site plan.

Qualified Environmental Professional Assurance

It is my opinion that the recommendations and observations in this memo will achieve the revegetation objectives for the minor disturbance into the SPEA on Lot 15 DL 3248.



Cam Forrester, R.P.F.

 # 2118

Date Signed – Aug 19, 2024

Photos

Photo 1. Access trail/CIA area. Viewing northwest from stairs.

Photo 2. CIA area on north boundary, viewing north.

Photo 3. Restoration Area 2 – Encroachment area.

Photo 4. Restoration Area 2 - Encroachment area.

Photo 5. Restoration Area 2 - Encroachment area.

Attachment – 2: Variance.

July 4, 2005 File No.: BOV # 109

Robert and Michelin Tait
Cliffs #1, 35 – 37 Plantation Road
The Peak
Hong Kong

Dear Mr. and Mrs. Tait:

Re: Board of Variance Decision
Legal Description: Lot 15, DL 3248, Plan 11997, PID: 008-975-337
Civic Description: Square Bay, Sakinaw Lake, BC

This letter is to advise you that the Board of Variance, at its meeting held June 30, 2005, issued the following order regarding the above application:

DECISION 02/05 - *BOV Application No. 109 (Tait)*

Tom Barker/Graham Argyle

The Board of Variance rules that due to the topography of the site, there is a hardship and the application to relax Section 516 (1) (c) of Sunshine Coast Regional District Zoning Bylaw 337 is granted, that the front yard setback be 13 metres as requested and that the proposed cottage be limited to a footprint of 92.5 square metres (1,000 square feet) and that no part of the structure or deck space should encroach on the front yard setback, any trees cut in the front yard setback will be replaced with two planted trees and every attempt is to be made to protect fish habitat, and that the SCRD is assured the disposal field is constructed to have no impact on the lake.

CARRIED

If you have any questions with respect to the Board's decision, please contact me at 604-885-2261 (ext. 6125).

Yours truly,

Joan Harvey, Secretary
Board of Variance

cc. Sechelt Indian Band Chief and Council
R. Nerpio, Applicant
SCRD Building Department

Attachment – 3: (A) Septic permit, (B) Engineer's rational.

Vancouver CoastalHealth

HEALTH PROTECTION

LETTER OF CERTIFICATION RECEIVED

This is to confirm that a Letter of Certification was received and accepted by the Health Authority for the following on-site sewerage disposal system:

DATE OF ACCEPTANCE: NOVEMBER 25, 2022

TAX ASSESSMENT ROLL NUMBER: 746.06007.029

CIVIC ADDRESS: LOT 15, DL 3248, SAKINAW LAKE, BC

LEGAL DESCRIPTION: DL 3248, LOT 15, PLAN VAP 11997

AUTHORIZED PERSON: BERT TELDER

Please retain this confirmation for your records and provide a copy to the appropriate parties.

Project 2231

Design Rationale Summary for Field Configuration

Location: Lot 15 District Lot 3248 Sakinaw Lake, BC, PID 008-975-337

Site Review

1. The project is an existing lot of 2084m2 (0.515 acres) with no onsite septic system.
    a. No option exists for public sewer hookup.
    b. The parcel has an existing occupied dwelling originally built prior to 1989 with no conventional septic field. This parcel is part of an approved subdivision and is subject to seasonal occupancy.
    c. There is no road access to the back of the lot, only water access to the front.
2. The lot has a narrow frontage of 28.5m on the foreshore of Sakinaw Lake.
3. The lot is divided into 5 sections starting from the foreshore to the back property line.
    a. The foreshore section cannot be built upon due to proximity to the lake.
    b. A "lower" bench section exists on which the dwelling is built. A gravity system built here could comply using other means to adhere to the principle of the setback requirement.
    c. The central rocky section with very thin soil coverage is steep with a mean slope exceeding 50%. This is not a buildable area.
    d. The upper section has a mean slope of 30% and a relative elevation of 18m. This area cannot be developed as [safe] machine access[1] is not possible.
    e. The last section with a mean slope of 70% is not buildable.
4. The site does not have access to hydro and pumping up to a field area would not be practical.

Solution

1. The practical solution is to incorporate an advanced treatment system in the location of the lower bench to both meet the needs of the owners and to protect the lake.
2. Type 2 treatment chosen for the treatment system is a Passive Combined Treatment and Dispersal System (CTDS) configuration.
    a. The Hydraulic Loading Rate (HLR) is 48 L/m^2/day.
    b. Soil depth in this area is greater than 150cm.
        c. The dispersal bed length is 5.49m and fits the requirements for contour length.
    d. Trickle dosing is the means of controlling effluent dispersal. As this is a site that uses water from the lake and has no hydro it is unlikely that the dosing would be excessive.
3. Calculation of 6 Day Travel Time
    a. The hardship in this location is that we cannot conceivably locate the field any further from the foreshore than what is planned. However the system can meet the intent of the setback requirements in two ways, 1) use of advance treatment to reduce effluent BOD and TSS before it is applied to the local soils and 2) ensure that the time of

[1] Due to the rocky nature of the slope an excavator is essential to clear the area for a field.

propagation through the natural soil is sufficient to render FC and viral contamination safe.

i. In practice the 6-day period assumes that effluent has been sufficiently rendered by the native soils to be safe for the local environment to absorb.
ii. The calculation results in a propagation distance of 11.65m whereas the actual foreshore setback is 13.9m.