



File No. 1790-20

October 26, 2017

TO WHOM IT MAY CONCERN

**Re: DISTRICT OF SOOKE  
MURRAY ROAD STAIRCASE  
INVITATION TO QUOTE FOR CONSTRUCTION**

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The District of Sooke is requesting a quote for construction for the Murray Road Staircase (see attached figure) located at 1906 Murray Road, Sooke. The quote is for the labour and material costs to replace the existing staircase (**Schedule 1 – Previous Stairs**). The District of Sooke will supply all survey and geotechnical information, and hazardous tree removal as necessary. The previous staircase has already been removed.

Any questions are to be directed to Paul Butterfield by email at [pbutterfield@sooke.ca](mailto:pbutterfield@sooke.ca) or by phone at (250) 642-1631 and will be accepted until **Noon Friday, November 3, 2017**. All responses to questions will be posted on the District's website by 4:30pm that day.

It is expected that the Bidder will be satisfied with the extent of work required and that minor modifications will not add additional costs to the District. By delivering a Bid (**Schedule 2 - Quote Form**), the Bidder irrevocably agrees that the Bidder has received, read, examined the site and fully understood the scope of work and all terms of reference in this Request. Once approval is awarded by the District, it is expected that the work will begin within 60 days of award.

The District may, in its sole discretion, disqualify any or all Bids, cancel this Request for Quotes, reject any or all Bids, and to re-bid the same or similar Work at any time. The District reserves the right to reject any or all bids. The lowest bid will not necessarily be accepted. The District reserves the right to waive informalities and accept the bid deemed most favourable to the District of Sooke at their sole discretion.

Proof of insurance in the amount of five million dollars (\$5,000,000) with the District of Sooke as an additional insured will be required in accordance with the District of Sooke's Risk Management – Contract Services Policy. It is also expected that the Bidder be a member in good standing with the Worker's Compensation Board and have a municipal or inter-municipal business licence.

Bidders are to notify property owners prior to entering their property as required. The Bidder will be responsible for any damages or encroachment onto private property and will save the District, and all contractors, harmless from any claims as a result of their work.

Any Bid provided by the Bidder shall remain open for 30 days.



Please provide your quote and estimated schedule for the work, to the undersigned electronically at [pbutterfield@sooke.ca](mailto:pbutterfield@sooke.ca) or to front counter staff in person at 2205 Otter Point Road **by 2:00pm on Thursday, November 9, 2017.**

Regards,

Paul Butterfield  
Engineering Technologist

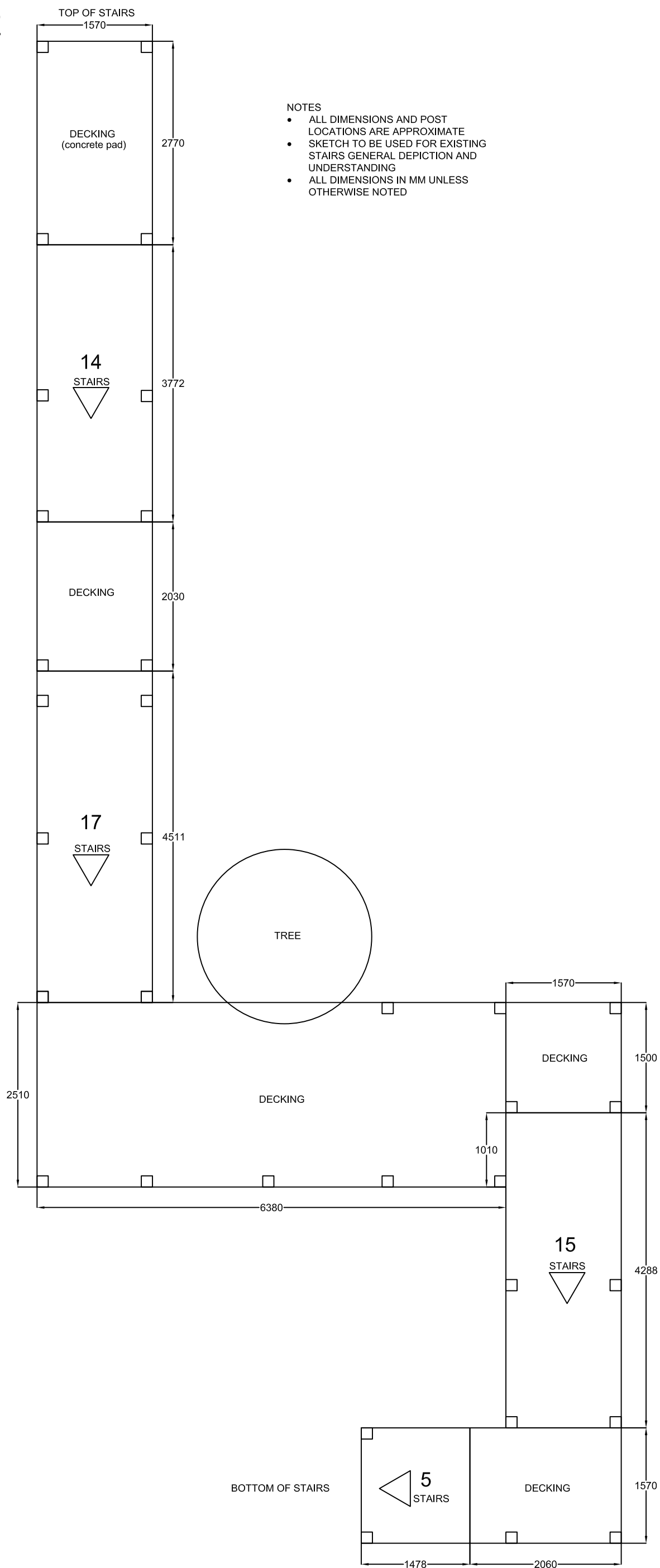
encl.

- (1) Staircase Design Specification,
- (2) Site Survey Plan PDF,
- (3) Geotechnical Report,
- (4) Risk Management - Contract Services Policy

cc.

Rob Howat - Director of Development Services  
Laura Hooper - Head of Parks and Environmental Services

## SCHEDULE ONE



**District of Sooke**  
**Request for Quote – Schedule 2**  
**Murray Road Staircase**

**Quote Form**

**Quote Submission:**

Project: Murray Road Staircase

Project No.: 1790-20

Date:

Submitted by:

(Name of Company)

(Address)

Email:

Telephone: ( )

Name of Bidder:

Signature:

**Contract Price:**

Having examined all matters referred to in the Scope of Work prepared by the District of Sooke for the Scope of Work, we, the undersigned, hereby offer to enter into a Contract to complete the Scope of Work for the price of:

	<b>Price (Excluding GST)</b>
Please provide a LUMP SUM cost	\$ _____ Excluding GST

Extra Work is charged at a rate of: \$ \_\_\_\_\_

**District of Sooke**  
**Request for Quote – Schedule 2**  
**Murray Road Staircase**

The price is in Canadian funds which include the supply of all the products, all labour and materials, supervision, services, construction machinery and equipment, overhead and profit, and represent the entire cost to the Owner for the completion of the Work. All applicable Federal and Provincial taxes and duties, *excluding* Goods and Services Tax (GST), are included in the price.

We agree that if the District orders us in writing to perform extra work which is not reasonably inferable from the specifications as being part of the Work, we will perform the same and shall be paid therefore in accordance with the terms of the General Conditions applicable to Changes and Extra Work in the General Services Agreement with the successful Bidder. We agree that the District may delete from the Contract a portion or portions of the Work provided such deletion is not for the purpose of allowing someone else to perform the deleted portion during the Contract Time.

**Proposed Construction Schedule:**

State your intended start date if awarded this contract: \_\_\_\_\_

Date of substantial completion of project: \_\_\_\_\_

**Contractor Numbers and Status:**

Our District of Sooke (or Intermunicipal) Business License Number: \_\_\_\_\_

Our Worker's Compensation Registration Number: \_\_\_\_\_

State whether you are able to meet the insurance requirements: YES / NO

**Notification:**

If notified in writing by the District of acceptance of this Quote within the specified acceptance period after the Quote closing date, we shall:

- a. Provide, prior to commencing work, certified copies of the Contractor's insurance called for in the Quote Documents;
- b. Provide our Worker's Compensation Registration Number and a current Worker's Compensation Clearance Letter;
- c. Supply our District of Sooke Business License Number or approved equivalent; and
- d. Enter into and execute a General Services Agreement for the Work.

**District of Sooke**  
**Request for Quote – Schedule 2**  
**Murray Road Staircase**

**References:**

Please submit at least three references for projects similar in scope and value. Note that additional pages outlining this portion of the Quote may be included with your submission.

Date of Contract	Business Name	Contact Name	E-mail	Telephone Number

**Guarantees & Warranty:**

State all guarantees and warranties being offered.


**Subcontractors:**

If you will be using sub-contractors for the Work please provide their business name, contact names phone numbers and aspect of the Work they will perform.


**District of Sooke**  
**Request for Quote – Schedule 2**  
**Murray Road Staircase**

**Authorization:**

A person authorized to sign on behalf of the Contractor; to agree to all statements made in response to this Request for Quote should complete and sign this Quote.

The enclosed Offer is submitted in response to the above-referenced Request for Quote, with the acknowledgement and receipt of addenda \_\_\_\_\_ through \_\_\_\_\_. Through submission of this Offer we agree to all the terms and conditions set out in the RFP and have agreed that any inconsistent provisions in our Submission will be as if not written and do not exist. We have carefully read and examined the Request for Quote, and we agree to holding the stated pricing for the period of indicated in the Quote Form.

We agree to hold this offer open for acceptance by the District of Sooke for \_\_\_\_\_ days.

Signature:	Legal Name of Contractor:
Printed (Full) Name:	Address:
Title:	
Date:	
E-mail:	
Contact Phone Number(s):	

GENERAL

- ALL DESIGN HAS BEEN COMPLETED IN ACCORDANCE WITH THE 2012 EDITION OF THE BRITISH COLUMBIA BUILDING CODE, INCLUDING ALL ADDENDA.
- ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH THE BRITISH COLUMBIA BUILDING CODE, INCLUDING ALL ADDENDA, ALL REFERENCED CODES AND ALL FEDERAL AND MUNICIPAL REGULATIONS AND BY-LAWS.
- ALL REFERENCED CODES AND STANDARDS SHALL BE AS REFERENCED IN THE GOVERNING EDITION OF THE BRITISH COLUMBIA BUILDING CODE.

4. DESIGN CRITERIA: M<sub>0</sub> (64)

SNOOE				
SNOW LOADS		SPECTRAL ACCELERATION		
Ss	1.30 kPa (27.146pf)	So (0.2)	So (0.5)	So (1.0)
Sr	0.30 kPa (6.28 pf)	1.1	0.75	0.36
Is	U.S. 1.0/SIS 0.90			0.18
				0.53
WIND LOADS		SEISMIC LOADS		
q10	0.37kPa (7.73pf)	Rd	SIT CLASS	
q50	0.48kPa (10.02pf)	Ro	D	
W	U.S. 1.0/SIS 0.75	Is	1.3	
			U.S. 1.0	
SPECIFIED LOADING		DEFLECTION CRITERIA		
DEAD LOAD	= 0.75kPa (15pf)	LIVE LOAD		
LIVE LOAD	= 4.80kPa (100pf)	TOTAL LOAD		
SNOE LOAD	= 1.58kPa (33pf)			
		= L/360		
		= L/240		

- THESE DRAWINGS INCLUDING DIMENSIONS SHALL BE READ IN CONJUNCTION WITH ALL OTHER PROJECT DOCUMENTS INCLUDING SPECIFICATIONS, NOTES, AND SCHEDULES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION.
- THESE DRAWINGS SHOW THE COMPLETED STRUCTURE ONLY. PROVIDE TEMPORARY BRACING AND SHORING FOR THE CONSTRUCTION LOADING CONDITIONS AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION. CONSTRUCTION LOADS SHALL NOT EXCEED DESIGN LOADS.
- THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA TO REVIEW AND SEAL THE DRAWINGS FOR ANY TEMPORARY SHORING, BRACING OR OTHER DESIGNS REQUIRED TO COMPLETE CONSTRUCTION.
- UNDER NO CIRCUMSTANCES SHALL DRAWINGS BE SEALED.
- CONTRACTOR AND ALL SUB-TRADES SHALL VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING FABRICATION.

SUBMITTALS

- WHERE SHOP DRAWINGS ARE REQUESTED IN THE GENERAL NOTES THE CONTRACTOR SHALL PROVIDE THEM IN EITHER HARD COPY OR DIGITAL FORMAT TO THE FOLLOWING REQUIREMENTS FOR THE ENGINEER'S REVIEW PRIOR TO FABRICATION. THE SHOP DRAWINGS SHALL INDICATE DETAILS, DIMENSIONS, MATERIALS AND DESIGN LOADS.
- DRAWINGS NOT SEALED BY THE SPECIALTY ENGINEER SHALL BE ACCOMPANIED BY A LETTER WITH A DRAWING LIST AND DRAWING LIST ARE TO BE SIGNED AND SEALED BY THE SPECIALTY ENGINEER.
- IF A DIGITAL SUBMISSION IS MADE THE FILES SHALL BE IN PDF FORMAT ON A PDF OR TRANSMITTAL VIA E-MAIL. THE SUBMISSION SHALL CONTAIN A LETTER WITH A DRAWING LIST AS DESCRIBED ABOVE SIGNED AND SEALED BY THE SPECIALTY ENGINEER. THE FINAL SUBMISSION SHALL BE MADE AS A HARD COPY BEARING THE ORIGINAL SEAL AND SIGNATURE OF THE SPECIALTY ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA.
- THE FOLLOWING SUBMISSIONS ARE REQUIRED FOR THIS PROJECT:
  - CONCRETE MIX DESIGNS
  - POST AND BEAM TIMBER FRAMING\*

- INDICATES THE REQUIREMENT THAT SUBMISSION BE SEALED BY A SPECIALTY ENGINEER REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA AND PROVIDE A SCHEDULE 'S' UPON COMPLETION OF THE WORK.
- SHOP DRAWINGS WHICH ARE REQUIRED TO, BUT DO NOT HAVE THE APPROPRIATE ENGINEERS SEAL AND SIGNATURE WILL NOT BE REVIEWED.
- SHOP DRAWINGS WILL BE REQUIRED ONLY FOR GENERAL CONFORMITY WITH THE PROJECT DRAWINGS AND SPECIFICATIONS. QUANTITIES AND DETAILED DIMENSIONS ARE THE CONTRACTORS RESPONSIBILITY. THE REVIEW SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH ALL THE REQUIREMENTS OF THE CONTRACT DOCUMENTS INCLUDING CONFORMANCE WITH OTHER TRADES AND DISCIPLINES. THE CONTRACTOR IS RESPONSIBLE FOR BRACING AND DIMENSIONS ON THE SHOP DRAWINGS.
- SHOP DRAWING SUBMISSIONS FOR THE WORK OF SPECIALTY ENGINEERS SHALL BE AS SET OUT IN THIS SECTION.
- THE QUALITY ASSURANCE FOR MATERIALS, FABRICATION AND INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR AND HIS SPECIALTY ENGINEER.
- THE SPECIALTY ENGINEER OR HIS REPRESENTATIVE SHALL VISIT THE SITE AND REVIEW THE COMPLETED WORK DESIGNED AND PERFORMED ON HIS SHOP DRAWINGS TO SATISFY HIMSELF THAT THE FINISHED WORK CONFORMS WITH THE PROJECT DRAWINGS AND SPECIFICATIONS. THE SPECIALTY ENGINEER SHALL THEN PROVIDE THE PROJECT ENGINEER OF RECORD WITH A COMPLETED SCHEDULE 'S' FOR HIS WORK ALONG WITH ANY SKETCHES SHOWING FIELD MODIFICATIONS. THESE SKETCHES SHALL BEAR THE SEAL AND SIGNATURE OF THE SPECIALTY ENGINEER.

FIELD REVIEWS

- THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A MINIMUM OF 24 HOURS (1 WORKING DAY) ADVANCE NOTICE FOR FIELD REVIEWS.
- THE FOLLOWING FIELD REVIEWS ARE CONSIDERED TO BE THE MINIMUM NUMBER OF STRUCTURAL FIELD REVIEWS REQUIRED FOR THE PROJECT:
  - CONCRETE REINFORCING STEEL SHALL BE REVIEWED PRIOR TO PLACING CONCRETE. REINFORCING IN CONCRETE WALLS SHALL BE REVIEWED PRIOR TO BUTTJOINING UP WALL FORMS.
  - TIMBER FRAMING SHALL BE REVIEWED PRIOR TO CONCRETE ANY FRAMING AND BEFORE ADDITIONAL LOADS SUCH AS CONCRETE TOPPING AND MECHANICAL EQUIPMENT ARE APPLIED.
- IF THE ENGINEER IS NOT PROVIDED WITH THE OPPORTUNITY TO PERFORM THE REQUIRED FIELD REVIEWS, FINAL ACCEPTANCE OF THE PROJECT WILL NOT BE ISSUED.

FOUNDATIONS

- ASSUMED DESIGN VALUES:

PAO FOOTINGS	100 kPa (2100 psf)	75 kPa (1570 psf)
ALLOWABLE BEARING CAPACITY TO BE CONFIRMED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION.		
- CENTRE ALL FOOTINGS UNDER COLUMNS AND WALLS UNLESS NOTED OTHERWISE.
- FOUNDATION BEARING MATERIAL SHALL BE PROTECTED FROM RAIN, FROST, SNOW AND WATER INTRUSION.
- FOOTING ELEVATIONS INDICATED ON THE DRAWINGS REPRESENT MINIMUM VALUES TO BE USED. VARIABLE SITE GRADES AND SOIL CONDITIONS, UNDERGROUND SERVICES AND EXISTING STRUCTURES MAY REQUIRE ADJUSTMENT OF FOOTING ELEVATIONS. THE CONTRACTOR SHALL TAKE ALLOWANCES FOR MINOR VARIATIONS IN CONDITIONS THAT DIFFER FROM WHAT IS SHOWN ON DRAWINGS.

REINFORCING STEEL

- REINFORCING STEEL SHALL BE DEFORMED STEEL AND GRADE AND SHALL CONFORM TO CAN/CSA-C30.18-09.
- ALL REINFORCING BARS SHALL BE TIED SECURELY TO PREVENT DISPLACEMENT.
- UNLESS NOTED OTHERWISE ON PLANS, LAP LENGTHS FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

REINFORCING BAR LAP LENGTHS		
CONCRETE	BAR SIZE	NOTES:
	10M	15M
	20	450 (177)
	25	560 (227)
	30	560 (227)
	35	560 (227)

- NO SPICES OTHER THAN THOSE NOTED ON THE DRAWINGS ARE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE STRUCTURAL ENGINEER.
- WHERE CONCRETE SURFACES ARE TO BE EXPOSED ONLY NON-CORROSE TYPE REINFORCING CHAINS SHALL BE USED TO SUPPORT THE REINFORCING STEEL.
- HOOKS ON ALL TIES SHALL BE BENT AT LEAST 135° AND HAVE A MINIMUM LEG OF 6 TIMES THE TIE BAR DIAMETER.

CAST-IN-PLACE CONCRETE

- ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF CAN/CSA A23.1-09 AND A23.2-09.
- CONCRETE MIXES, AGGREGATES AND CEMENTITIOUS MATERIALS, INCLUDING PORTLAND CEMENT AND PORTLAND CEMENT FILLER, SHALL BE SUPPLIED BY A QUALIFIED SUPPLIER AND SHALL BE TESTED IN ACCORDANCE WITH CAN/CSA A23.1-09 AND A23.2-09. THE MINIMUM NUMBER OF TESTS PERFORMED SHALL BE AS PER CSA A23.2-09. ADDITIONAL TESTING SHALL BE PERFORMED AT THE DIRECTION OF THE STRUCTURAL ENGINEER. CONTRACTOR SHALL PROVIDE TESTING AGENCY WITH ADEQUATE NOTICE TO PROVIDE TESTING AS REQUIRED.
- ALL CONCRETE CURING SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1-09. SPECIAL PRECAUTIONS SHALL BE TAKEN PER CSA A23.1 FOR PLACING AND CURING CONCRETE AT OR ABOVE 27° C AND AT OR BELOW 5° C.
- UNLESS NOTED OTHERWISE, ALL REINFORCING STEEL SHALL HAVE THE FOLLOWING CLEAR COVER DISTANCES:

CLAS	STRENGTH	EXPOSURE	CEMENT TYPE
FOOTINGS	250kPa (5800 psf)	F-2	GU
FOUNDATIONS	25 MPa (3500 psi)	F-2	GU
PIERS			
- PORTLAND LESTONE CEMENT (P-LC) SHALL MEET THE REQUIREMENTS OF CSA A3000 FOR LESTONE CEMENTS.
- CONCRETE TESTING SHALL BE CARRIED OUT BY THE CONTRACTORS AND PAID FOR BY THE OWNER AND SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1-09 AND A23.2-09. THE MINIMUM NUMBER OF TESTS PERFORMED SHALL BE AS PER CSA A23.2-09. ADDITIONAL TESTING SHALL BE PERFORMED AT THE DIRECTION OF THE STRUCTURAL ENGINEER. CONTRACTOR SHALL PROVIDE TESTING AGENCY WITH ADEQUATE NOTICE TO PROVIDE TESTING AS REQUIRED.
- ALL CONCRETE CURING SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1-09. SPECIAL PRECAUTIONS SHALL BE TAKEN PER CSA A23.1 FOR PLACING AND CURING CONCRETE AT OR ABOVE 27° C AND AT OR BELOW 5° C.

MECHANICAL AND ADHESIVE ANCHORS

- ALL ANCHORS ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- ALL ANCHORS ARE TO BE THE ADHESIVE TYPE. MECHANICAL ANCHORS ARE ONLY TO BE USED WHEN SPECIFICALLY CALLED-UP ON THE DRAWINGS. SUBSTITUTIONS MUST BE APPROVED BY THE PROJECT ENGINEER PRIOR TO USE.
- UNLESS NOTED OTHERWISE ADHESIVE ANCHORS SHALL BE HULTI HAS-E' OR HULTI-Z' ROD. REFER TO DRAWINGS FOR ANCHOR LOCATIONS, SIZES, CENTRES AND EMBEDMENT LENGTH.
  - USE HULTI H2000 WHEN:
    - A QUICK CURE IS REQUIRED.
    - HOLDING ARE HANDED DRILLED.
    - HOLES ARE NOT OVER-SIZED.
    - BASE MATERIAL TEMPERATURE IS ABOVE MINUS 10° CELSIUS.
  - EXTENDED WORKING TIME IS REQUIRED AND CURE TIME IS NOT CRITICAL.
  - ADHESIVE IS APPLIED TO BOTH END OF ANCHOR ROD, INCLUDING OR FILLER DRILLS.
  - THE EMBEDMENT IS UNDERWATER, OR
  - HOLES ARE OVER-SIZED.
- REFER TO DRAWINGS FOR MECHANICAL ANCHOR LOCATIONS, SIZES, CENTRES AND EMBEDMENT LENGTH.
- HOLES FOR MECHANICAL ANCHORS SHALL BE CLEARED OUT WITH HIGH PRESSURE AIR OR BRUSH PRIOR TO ANCHOR INSTALLATION.
- INSTALLERS OF HULTI PRODUCTS SHALL HAVE RECEIVED TRAINING BY HULTI (CANADA) CORP. IN THE USE OF THE SPECIFIED PRODUCTS. THE GENERAL CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A LETTER STATING THAT THIS TRAINING HAS BEEN COMPLETED.

WOOD FRAME CONSTRUCTION

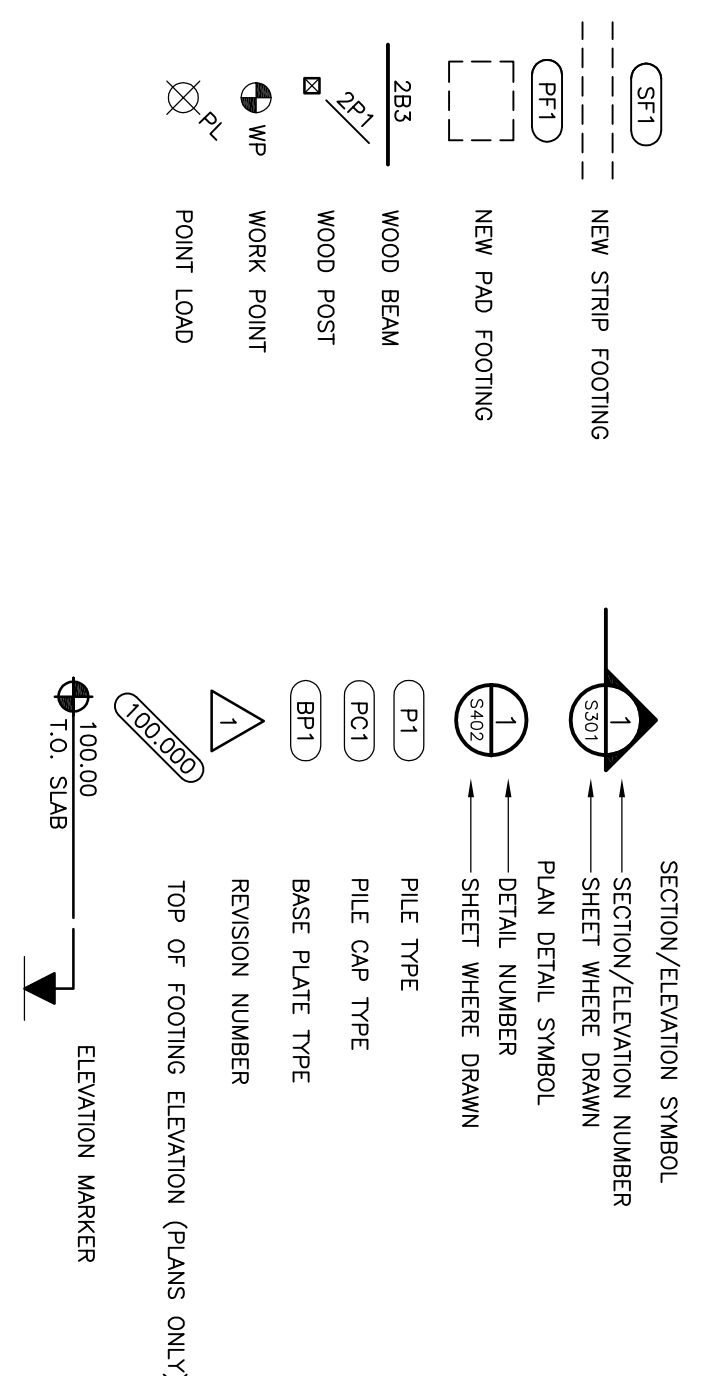
- ALL WOOD FRAMING, INCLUDING BRIDGING, NAILING AND OTHER DETAILS SHALL BE AS INDICATED ON THE BUILDING CODE.
- ALL NAILS SHALL BE COMMON ROUND STEEL WIRE NAILS CONFORMING TO CSA B111-1974 (R2003).
- WOOD SCREWS SHALL MEET THE REQUIREMENTS OF ASME B18.61-1981.
- BOLTS SHALL HAVE PRE-DRILLED HOLES 1-2mm LARGER THAN THE BOLT DIAMETER.
- LAG SCREWS SHALL CONFORM TO CSA B34-1967, PRE-DRILLED HOLES FOR LAG SCREWS MAY BE LUBRICATED WITH SOAP OR OTHER NON-PETROLEUM BASED LUBRICANT.
- THE FOLLOWING MINIMUM SHANK DIAMETERS SHALL APPLY TO NAILS SPECIFIED ON THE STRUCTURAL DRAWINGS:

NAIL SIZE	MINIMUM SHANK DIAMETER
75mm (3")	3.65 mm (0.144")
90mm (3 1/2")	3.25 mm (0.128")
100mm (4")	2.84 mm (0.112")
- NAILS SHALL BE FULL HEADED NAILS.
- NAILS SHALL NOT BE LESS THAN 10mm (3/8") FROM THE EDGE OF THE FRAMING MEMBER.
- ALL STRUCTURAL LUMBER SHALL COMPLY WITH CSA-0141-05 (R2009) AND SHALL BE KILN DRIED TO MAXIMUM 19% MOISTURE CONTENT PRIOR TO INSTALLATION.
- ALL WOOD FRAMING TO BE DRY#1 OR BETTER UNLESS NOTED OTHERWISE. BEARING THE GRADE STAMP OF AN AGENCY CERTIFIED BY THE CANADIAN LUMBER STANDARDS ACCREDITATION BOARD.
- ALL TIMBER TO BE "KOC" (KANE COPPER QUAY) PRESSURE TREATED WOOD. CUT SURFACES OF TREATED LUMBER ARE TO RECEIVE BRASS-PLATED OR COLOURED PRESERVATIVE. WORK SHALL BE DONE IN ACCORDANCE WITH CAN/CSA-0141-05 (R2009) AND SHALL BE KILN DRIED TO BE USED. TREATED WOOD PRODUCTS SHALL BEAR THE STAMP OF THE CANADIAN WOOD PRESERVERS BUREAU (CWPB).
- ALL FASTENERS FOR USE IN AJO TREATED TIMBER SHALL BE HOT DIP GALVANIZED OR STAINLESS STEEL. IN ACCORDANCE WITH ASTM A653, CONNECTORS INCLUDING NAILS, BOLTS, HANGERS, HOLD-DOWNS, STEEL STRAPS, POST BASES, ETC. SHALL BE STAINLESS STEEL TYPES 304 OR 316. REFER ALSO TO THE PRESERVATIVE MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- ALL BOLTS USED IN WOOD FRAME CONSTRUCTION SHALL CONFORM TO ASTM A307 OR SAE A429 GRADE 2. HANGERS AND SHIMS ARE TO BE ASTM A307 OR SAE A429 GRADE 28 (60 ksi YIELD STRENGTH). USE OF OTHER BOLTS MUST BE PRE-APPROVED BY THE ENGINEER OF RECORD.
- ALL FRAMING ANCHORS SPECIFIED ON THE DRAWINGS ARE BY SIMPSON STRONG-TIE. ALTERNATES MUST BE PRE-APPROVED BY THE ENGINEER OF RECORD.

LIST OF ABBREVIATIONS

ALT	ALTERNATE
B/S	BOTH SITES
C/W	CENTRE LINE
CLR	CLEAR
CLC	CLEAR IN PLACE
COL	COLUMN
CONT	CONTINUOUS
DL	DEAD LOAD
ELS	EACH SIDE
EXT	EXTERIOR
EXT	EXTENSION
GLV	GLASS
HORIZ	HORIZONTAL
L	LAMINATED VENEER LUMBER
LVL	LAMINATED VENEER LUMBER
MAX	MAXIMUM
MIN	MINIMUM
NS	NOT TO SCALE
OPP	OPPOSITE
PL	PLATE
PL	PRESSURE TREATED (LUMBER)
R/W	REINFORCE WITH
SSDL	STRIP
THICK	THICK
T.O.	TOP OF
UND	UNLESS NOTED OTHERWISE
VERT	VERTICAL
WP	WORK POINT

SYMBOLS LEGEND



STRUCTURAL DRAWING LIST

- S01 GENERAL NOTES
- S02 SUN RIVER TRAIL AND STAIR DESIGN PLAN AND PROFILE
- S03 TYPICAL DETAILS

STRUCTURAL DRAWING ISSUE RECORD

ISSUE		DRAWING NUMBER											
ISSUE No.	ISSUE DATE	ISSUED FOR	101	201	301								
A	2016.03.11	PRELIMINARY DISCUSSION	●	●	●								

ISSUES

- No. DATE ISSUED FOR
- A 2016.03.11 PRELIMINARY REVIEW
- B 2016.06.13 REVISION

SIT CONSULTANT	

Design development

2205 OTTER POINT ROAD SOOKE BC V9Z 1J2

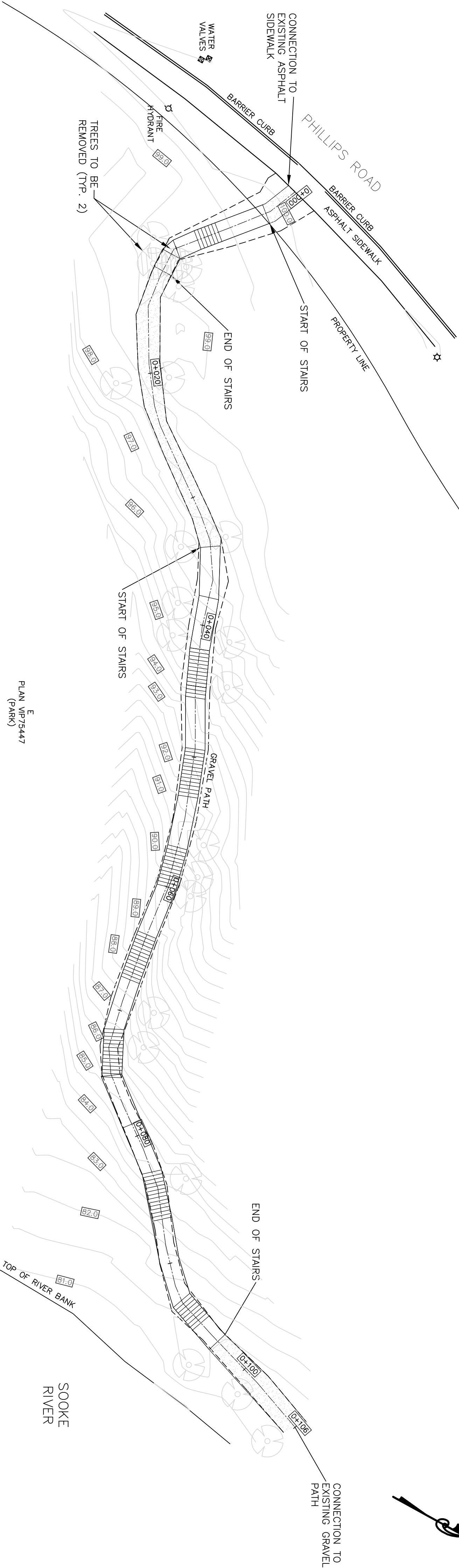
DISTRICT OF SOOKE



1051 Vancouver St. Victoria, BC V8V 4T6  
Tel: 250-580-4875 Fax: 250-580-4392  
Email: mol@heroldengineering.com

DESIGNED	ENGINEER'S SEAL
DRB	
DESIGN REVIEW	
DRAFTED	
QAR	
DRAFTING REVIEW	
PROJECT No.	CLIENT DRAWING No.
3444-003	n/a
SCALE	PERMIT No.
AS SHOWN	n/a
HEL DRAWING No.	REVISION
S01	A



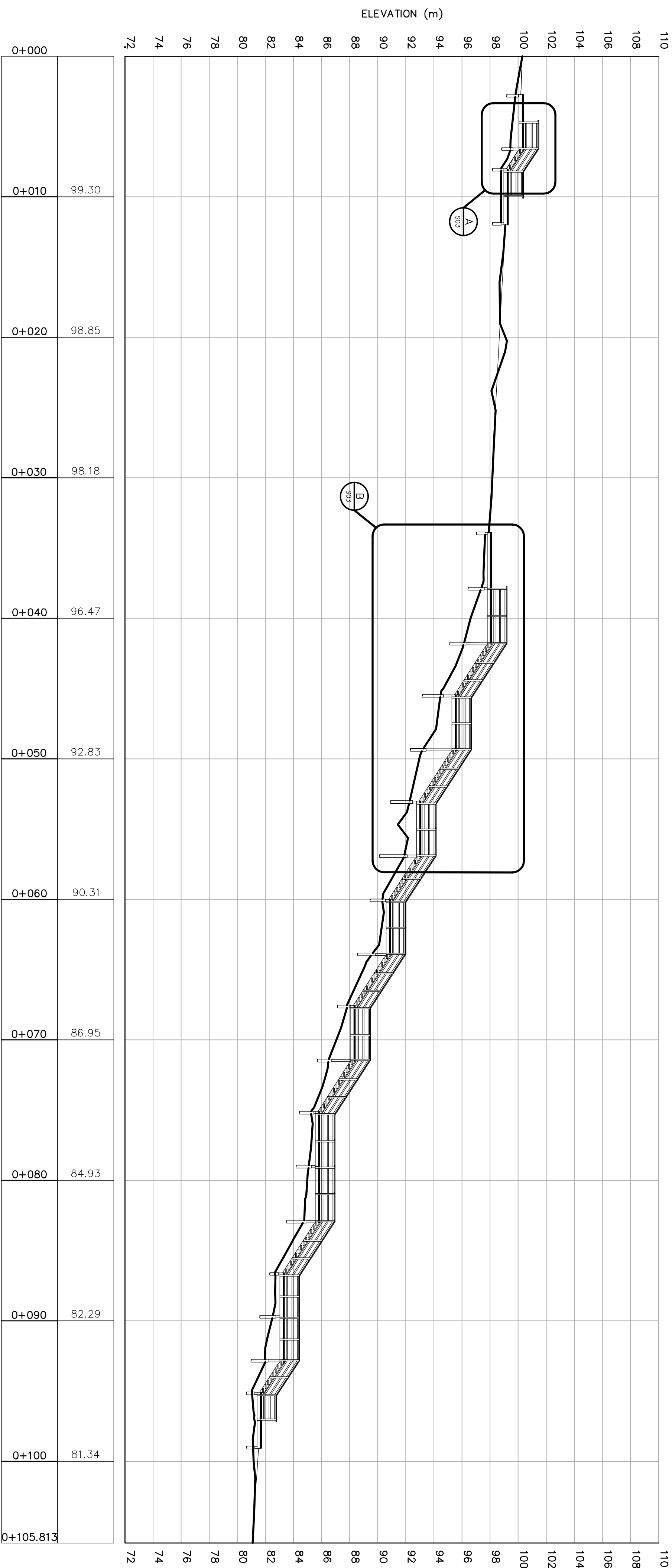


- NOTES:
1. ELEVATIONS ARE ASSUMED AND REFERENCED TO WATER VALVES NOTED ON DRAWINGS AS 100.00m
  2. NATURE TRAIL TO BE CONSTRUCTED AS PER DISTRICT OF SOOKE PARKS AND RECREATION PLAN
  3. SLOPE STABILITY TO BE REVIEWED AND CONFIRMED BY GEOTECHNICAL ENGINEER

ISSUES	
NO.	DATE ISSUED FOR
A	2016.03.11 PRELIMINARY REVIEW
B	2016.06.13 TENDER

CLIENT	
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PRELIMINARY



# DISTRICT OF SOOKE 2015 STAIR ASSESSMENTS SOOKE RIVER

SOOKE BC

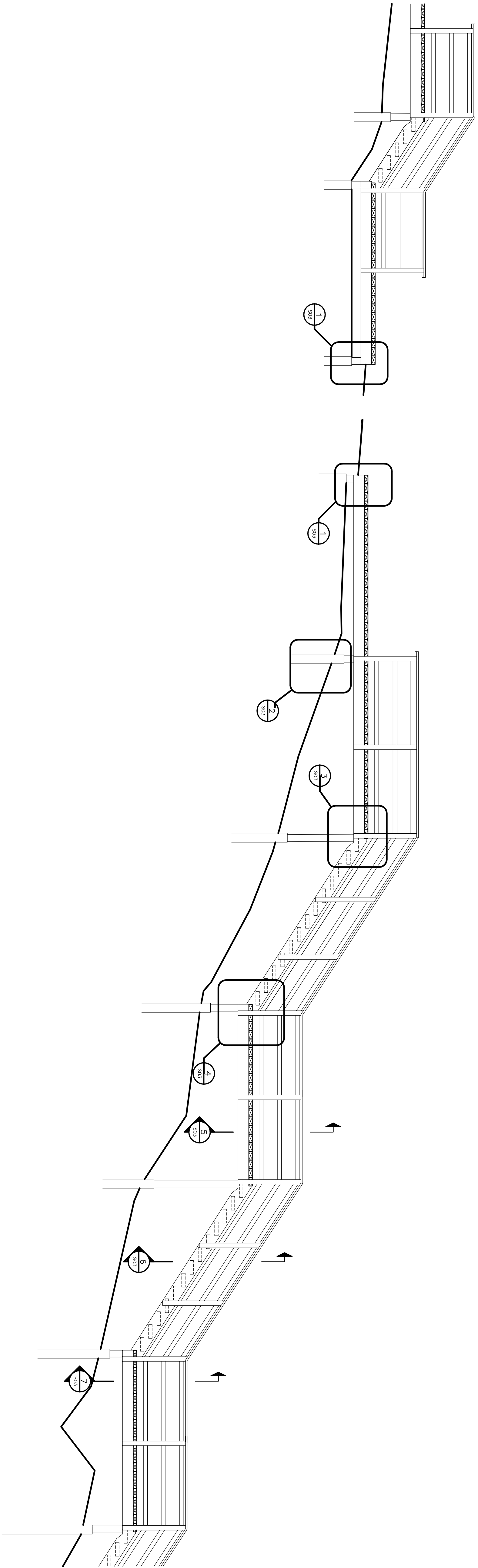
DISTRICT OF SOOKE

**HEROLD**  
ENGINEERING

1051 Vancouver St. Victoria, BC V8V 4T6  
Tel: 250-590-4875 Fax: 250-590-4392  
Email: info@heroldengineering.com

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PHILLIPS ROAD SUN RIVER TRAIL AND STAIR DESIGN PLAN AND PROFILE	
DESIGNED DRB	ENGINEER'S SEAL
DESIGN REVIEW	
DRAFTED GAR	
DRAFTING REVIEW	
PROJECT No. 3444-003	CLIENT DRAWING No.
SCALE H: AS NOTED V: AS NOTED	PERMIT No.
HEL DRAWING No. S02	REVISION 2 OF 3 A



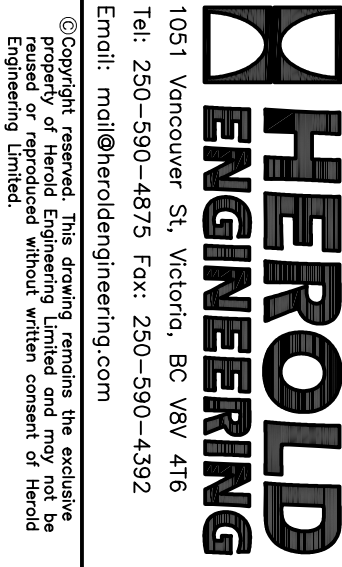
ISSUES		
NO.	DATE	ISSUED FOR
A	2016.03.11	PRELIMINARY REVIEW
B	2016.06.13	TENDER

CLIENT	
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PRELIMINARY

DISTRICT OF SOOKE  
2015 STAIR ASSESSMENTS  
SOOKE RIVER

SOOKE BC  
DISTRICT OF SOOKE



PHILLIPS ROAD SUN RIVER TRAIL AND STAIR DESIGN PLAN AND PROFILE	
DESIGNED DNB	ENGINEER'S SEAL
DESIGN REVIEW	
DRAFTED GAR	
DRAFTING REVIEW	
PROJECT No. 3444-003	CLIENT DRAWING No.
SCALE H: AS NOTED V: AS NOTED	PERMIT No.
HEL DRAWING No. S03	REVISION 2 OF 3 A









DESTROY ALL DRAWINGS SHOWING PREVIOUS REVISION

SITE PLAN OF PART OF MURRAY ROAD,  
SECTION 3, SOOKE DISTRICT.

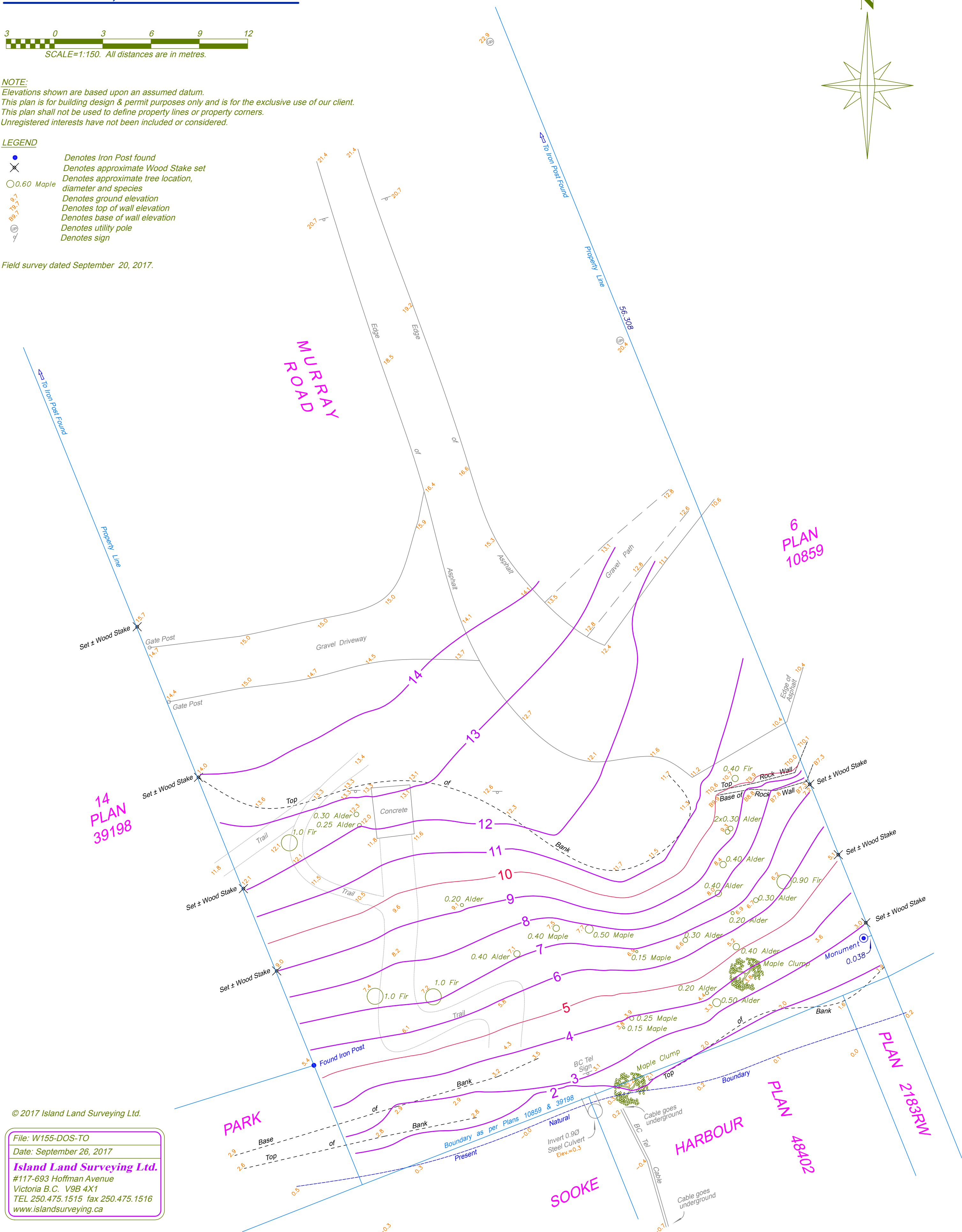


NOTE:  
Elevations shown are based upon an assumed datum.  
This plan is for building design & permit purposes only and is for the exclusive use of our client.  
This plan shall not be used to define property lines or property corners.  
Unregistered interests have not been included or considered.

LEGEND

-  *Denotes Iron Post found*
-  *Denotes approximate Wood Stake set*
-  *Denotes approximate tree location, diameter and species*
-  *Denotes ground elevation*
-  *Denotes top of wall elevation*
-  *Denotes base of wall elevation*
-  *Denotes utility pole*
-  *Denotes sign*

*Field survey dated September 20, 2017.*



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*File: W155-DOS-TO*

*Date: September 26, 2017*

***Island Land Surveying Ltd.***

#117-693 Hoffman Avenue

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## **RYZUK GEOTECHNICAL**

Engineering & Materials Testing

28 Crease Avenue, Victoria, BC, V8Z 1S3 Tel: 250-475-3131 Fax: 250-475-3611 www.ryzuk.com

October 12, 2017

File No: 4472-10

District of Sooke  
2205 Otter Point Road  
Sooke, BC  
V9Z 1J2

Attn: Laura Hooper

(By email: lhooper@sooke.ca)

Re: Proposed Staircase Replacement  
1906 Murray Road – Sooke, BC

As requested, we have intermittently attended the referenced site, most recently on September 25, 2017, to assess the existing geotechnical conditions as such relate to the proposed replacement of the staircase from the end of the road down to the foreshore area and boardwalk. In this regard, our investigation involved a review of survey plans, aerial imagery, as well as visual inspection during the noted site reconnaissance. Our observations and comments pertaining to potential geotechnical challenges at the site are contained herein. Our work has been undertaken in accordance with, and is subject to, the attached Terms of Engagement.

The attached Site Plan (dwg. 8-4472-10-1) indicates the layout of the site. Murray Road slopes moderately south-southeast, leading into the site location at Murray Road Park, along the shoreline of the Sooke Harbour. The site is densely vegetated, and the overall slope increases to a maximum of approximately 40° - 45°. Towards the west side of the site, a concrete landing sits at the crest of the slope. At the time of our attendance in early July, a wooden staircase descended from this landing to a point partway down the slope, crossed the slope to the east, and continued down the slope towards the shoreline. It had been partially removed at that time, and the remaining portions showed distortion due to downslope movement of some of the posts and piers. By September 15 it had been fully removed, and surficial soils were exposed in that area. Tidal action at the toe of the slope has eroded a 1.5 m – 2 m face along the present natural boundary.

Four test/auger holes were hand-excavated along the alignment of the staircase. Organic soil cover was found to be inconsistent, varying from not present to thicknesses of up to 0.5 m. Underlying the organic topsoil material is a native dense brown silty sand/sandy silt. Test hole locations are indicated on the Site Plan.

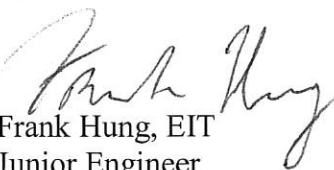
Consistent with previous observations, there were no indications of large scale slope instability. However, we are aware of the apparent past stability on private properties immediately to the west, although no geotechnical reports regarding such have been located. Minor surficial movement or creep is likely, especially within the organic topsoil layer, as evidenced by our observations in July. Provided further clearing of vegetation on the slope is minimized, risks of long term erosion can be minimized.

While specific designs have not yet been provided, we expect that the proposed staircase will likely follow the previous alignment, and will consist of relatively light loads. We consider the native silty sand/sandy silt to be suitable subgrade, and further recommend that any foundation elements are embedded a minimum of 0.5 m to mitigate sliding, subject to a geotechnical review at the time of construction. Narrow rectangular piers aligned down the slope can minimize the impact of surficial creep by allowing the surficial material to slide past while not pushing supports over, provided that the footings are set on/in stable ground.

Given the above, and provided our recommendations are followed, we consider that the proposed development can likely be completed without causing slope instability or being adversely impacted by shallow slope creep. However, there remains a possibility of larger-scale deep-seated natural slope instability unrelated to the proposed works that could impact the system. In this regard, we recommend inspection of the storm drain off the end of Murray Road just to the east, to ensure that it is still functioning as designed and is not contributing to erosion or slope instability. Subject to the above, it is our assessment that the site may be safely used for the use intended as an access trail/staircase.

We trust the preceding is suitable for your purposes at present, however if you have any questions with respect to the above, please contact us.

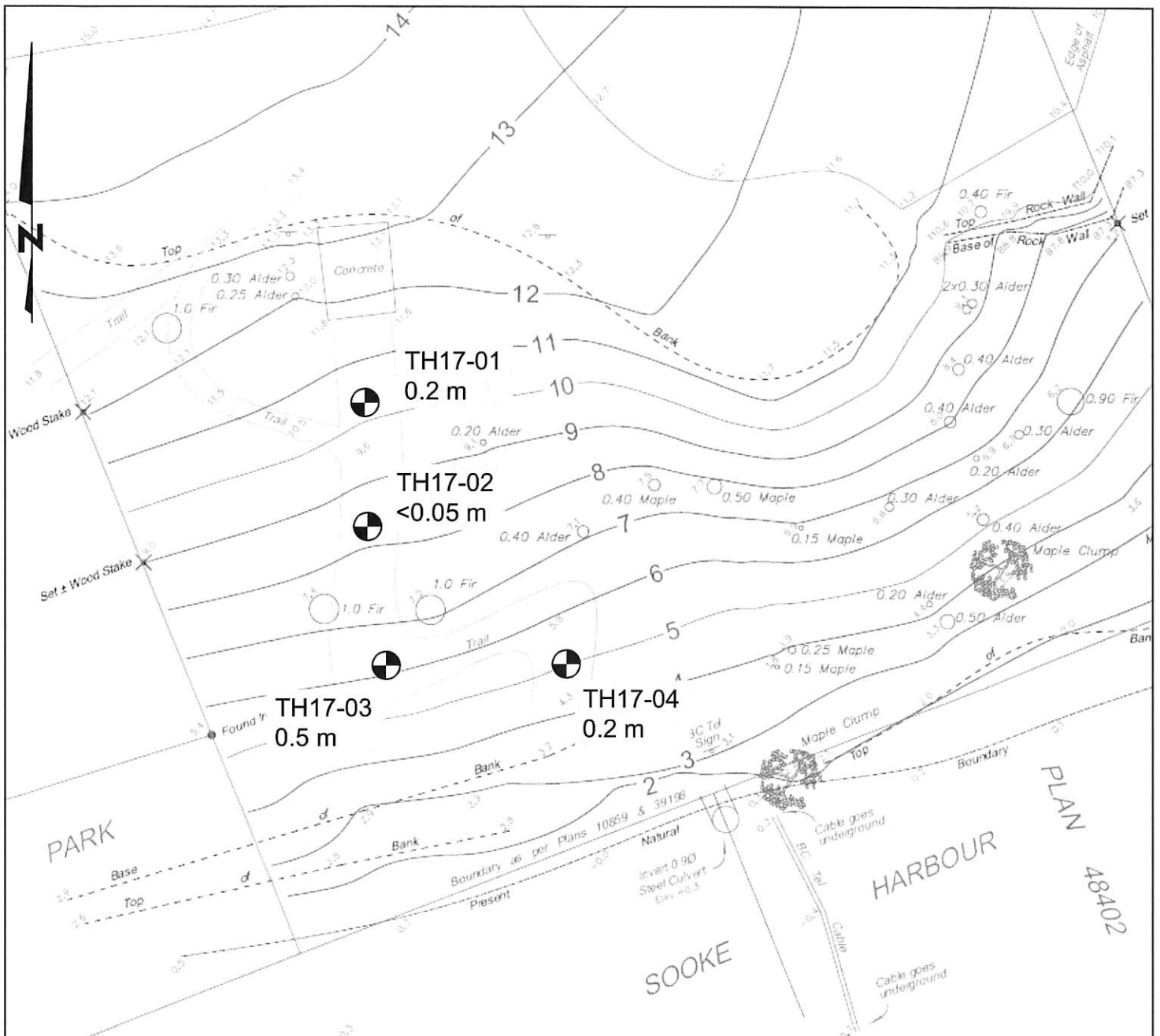
Yours truly,  
Ryzuk Geotechnical

  
Frank Hung, EIT  
Junior Engineer

  
Bruce Dagg, M.Sc., P.Eng.  
Review Engineer



Attachment - Terms of Engagement  
Site Plan – dwg. 8-4472-10-1



#### Notes:

1. Site Location Plan taken from 'Site Plan of Part of Murray Road' by Island Land Surveying Ltd., dated September 27, 2017.
2. Test Hole locations located based on site features, and are accurate to within +/- 2 m.
3. Test holes are labelled with approximate depth to competent subgrade.



The District of Sooke		DRAWN	FKFH
TEST HOLE LOCATION PLAN		DATE	October, 2017
Proposed Staircase Replacement		APPROVED	
Murray Road Park		SCALE	1:200
Sooke, B.C.		DRAWING No.	8-4472-10-1
RYZUK GEOTECHNICAL	Engineering & Materials Testing		

## TERMS OF ENGAGEMENT

### GENERAL

Ryzuk Geotechnical (the Consultant) shall render the Services, as specified in the agreed Scope of Services, to the Client for this Project in accordance with the following terms of engagement. The Services, and any other associated documents, records or data, shall be carried out and/or prepared in accordance with generally accepted engineering practices in the location where the Services were performed. No other warranty, expressed or implied is made. The Consultant may, at its discretion and at any stage, engage sub-consultants to perform all or any part of the Services.

Ryzuk Geotechnical is a wholly owned subsidiary of C. N. Ryzuk & Associates Ltd.

### COMPENSATION

All charges will be payable in Canadian Dollars. Invoices will be due and payable by the Client on receipt of the invoice without hold back. Interest on overdue accounts is 24% per annum.

### REPRESENTATIVES

Each party shall designate a representative who is authorized to act on behalf of that party and receive notices under this Agreement.

### TERMINATION

Either party may terminate this engagement without cause upon thirty (30) days' notice in writing. On termination by either party under this paragraph, the Client shall forthwith pay to the Consultant its Charges for the Services performed, including all expenses and other charges incurred by the Consultant for this Project.

If either party breaches this engagement, the non-defaulting party may terminate this engagement after giving seven (7) days' notice to remedy the breach. On termination by the Consultant under this paragraph, the Client shall forthwith pay to the Consultant its Charges for the Services performed to the date of termination, including all fees and charges for this Project.

### ENVIRONMENTAL

The Consultant's field investigation, laboratory testing and engineering recommendations will not address or evaluate pollution of soil or pollution of groundwater. The Consultant will cooperate with the Client's environmental consultant during the field work phase of the investigation.

### PROFESSIONAL RESPONSIBILITY

In performing the Services, the Consultant will provide and exercise the standard of care, skill and diligence required by customarily accepted professional practices and procedures normally provided in the performance of the Services contemplated in this engagement at the time when and the location in which the Services were performed.

### INSURANCE

Ryzuk Geotechnical is covered by Professional Indemnity Insurance as follows:

1. \$ 2,000,000 each and every claim
2. \$ 4,000,000 aggregate
3. \$ 5,000,000 commercial/general liability coverage

### LIMITATION OF LIABILITY

The Consultant shall not be responsible for:

1. the failure of a contractor, retained by the Client, to perform the work required for the Project in accordance with the applicable contract documents;
2. the design of or defects in equipment supplied or provided by the Client for incorporation into the Project;
3. any cross-contamination resulting from subsurface investigations;
4. any Project decisions made by the Client if the decisions were made without the advice of the Consultant or contrary to or inconsistent with the Consultant's advice;
5. any consequential loss, injury or damages suffered by the Client, including but not limited to loss of use, earnings and business interruption;
6. the unauthorized distribution of any confidential document or report prepared by or on behalf of the consultant for the exclusive use of the Client
7. Subsurface structures and utilities



The Consultant will make all reasonable efforts prior to and during subsurface site investigations to minimize the risk of damaging any subsurface utilities/mains. If, in the unlikely event that damage is incurred where utilities were unmarked and/or undetected, the Consultant will not be held responsible for damages to the site or surrounding areas, utilities/mains or drilling equipment or the cost of any repairs.

The total amount of all claims the Client may have against the Consultant or any present or former partner, executive officer, director, stockholder or employee thereof under this engagement, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited to the amount of any professional liability insurance the Consultant may have available for such claims.

No claim may be brought against the Consultant in contract or tort more than two (2) years after the date of discovery of such defect.

## DOCUMENTS AND REPORTING

All of the documents prepared by the Consultant or on behalf of the Consultant in connection with the Project are instruments of service for the execution of the Project. The Consultant retains the property and copyright in these documents, whether the Project is executed or not. These documents may not be used on any other project without the prior written agreement of the Consultant.

The documents have been prepared specifically for the Project, and are applicable only in the case where there has been no physical alteration to, or deviation from any of the information provided to the Consultant by the Client or agents of the Client. The Client may, in light of such alterations or deviations, request that the Consultant review and revise these documents.

The identification and classification as to the extent, properties or type of soils or other materials at the Project site has been based upon investigation and interpretation consistent with the accepted standard of care in the engineering consulting practice in the location where the Services were performed. Due to the nature of geotechnical engineering, there is an inherent risk that some conditions will not be detected at the Project site, and that actual subsurface conditions may vary considerably from investigation points. The Client must be aware of, and accept this risk, as must any other party making use of any documents prepared by the Consultant regarding the Project.

Any conclusions and recommendations provided within any document prepared by the Consultant for the Client has been based on the investigative information undertaken by the Consultant, and any additional information provided to the Consultant by the Client or agents of the Client. The Consultant accepts no responsibility for any associated deficiency or inaccuracy as the result of a miss-statement or receipt of fraudulent information.

## JOBSITE SAFETY AND CONTROL

The Client acknowledges that control of the jobsite lies solely with the Client, his agents or contractors. The presence of the Consultant's personnel on the site does not relieve the Client, his agents or contractors from their responsibilities for site safety. Accordingly, the Client must endeavor to inform the Consultant of all hazardous or otherwise dangerous conditions at the Project site of which the Client is aware.

The client must acknowledge that during the course of a geotechnical investigation, it is possible that a previously unknown hazard may be discovered. In this event, the Client recognizes that such a hazard may result in the necessity to undertake procedures which ensure the safety and protection of personnel and/or the environment. The Client shall be responsible for payment of any additional expenses incurred as a result of such discoveries, and recognizes that under certain circumstances, discovery of hazardous conditions or elements requires that regulatory agencies must be informed. The Client shall not bring about any action or dispute against the Consultant as a result of such notification.

## FIELD SERVICES

Where applicable, field services recommended for the Project are the minimum necessary, in the sole discretion of the Consultant, to observe whether the work or a contractor retained by the Client is being carried out in general conformity with the intent of the Services. Any reduction from the level of services recommended will result in the Consultant providing qualified certifications for the work.

## DISPUTE RESOLUTION

If requested in writing by either the Client or the Consultant, the Client and the Consultant shall attempt to resolve any dispute between them arising out of or in connection with this Agreement by entering into structured non-binding negotiations with the assistance of a mediator on a without prejudice basis. The mediator shall be appointed by agreement of the parties. If a dispute cannot be settled within a period of thirty (30) calendar days with the mediator, the dispute shall be referred to and finally resolved by arbitration under the rules of the arbitrator appointed by agreement of the parties or by reference to a Judge of the British Columbia Court.





Policy 5.4  
File No. 2510-00  
October 25, 2004  
Amended March 25, 2013

## ***Risk Management-Contract Services Policy***

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1. Any person or organization that contracts with the District of Sooke to provide services to or on behalf of the District must provide proof to the District that the following ***minimum*** requirements have been met:
  - a) proof of liability insurance coverage with a minimum value of \$5,000,000;
  - b) certificate indicating that the individual or organization has an active WCB account that covers any and all persons who will be providing contracted services to or for the District of Sooke; and
  - c) proof of applicable credentials.
2. Copies of the above documentation must be received prior to the commencement of services.
3. The document submitted for insurance coverage must indicate the type of coverage and expiry date.
4. Preference is for the District of Sooke to be named as an additional insured in the liability insurance document.

Note: An individual contracted to provide coverage for the following positions is not covered by the District's errors and omissions policy:

Chief Administrative Officer  
Corporate Officer  
Director of Finance  
Municipal Engineer  
Municipal Planner  
Building Official