GEOPACIFIC
CONSULTANTS

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2nd Floor, 3351 Douglas Street
Victoria, B.C. V8Z 3L4

Corporation of the Township of Esquimalt
1229 Esquimalt Road
Esquimalt, B.C.
V9A 3P1

March 19, 2026
File: 25595
R0

Attention: Edgar Salamanca

Re: Geotechnical Investigation Report – Proposed Trenchless Storm Crossing
855/857 Admirals Road, Esquimalt, B.C.

1.0 INTRODUCTION

We understand that the Corporation of the Township of Esquimalt will be undertaking the installation of a new storm-main as part of a municipal repair of existing infrastructure in Esquimalt, B.C. Based on the preliminary drawings prepared by Kerr Wood Leidal Associates Ltd. (KWL), the new storm main will tie into existing municipal storm water management infrastructure at the southern extent of 855/857 Admirals Road and the northern extent of the Seaspan Yard. The proposed storm main will cross under the existing E&N Rail and the CRD owned pedestrian trail before tying into the existing municipal storm water management system at the southern end of the E&N Rail. The provided drawing of the proposed storm water management infrastructure alignment is provided in Appendix C following the text of this report.

This report presents the results of our geotechnical investigation in the general area of the proposed trenchless installation and provides our recommendations for the design and construction of the proposed stormwater main crossing. This report has been prepared exclusively for our client, for their use, the use of others on their development team, and for use in the development and permitting process.

2.0 SITE DESCRIPTION

The development site is located west of the intersection of Admirals Road, Colville Road and the E&N Rail. The proposed trenchless crossing of the E&N rail is bounded by the residential development at 855/857 Admirals Road to the north, existing rail infrastructure and the CRD owned pedestrian trail to the east and west, and the industrial Seaspan ship repair yard to the south. The alignment of the proposed trenchless crossing is located approximately 220 m west of the secured entrance to the Seaspan yard.

Based on the preliminary drawings prepared by KWL, the proposed trenchless crossing area is generally sloped from north to south with a change in elevation from approximately 16 m to 12.7 m geodetic. The E&N rail and CRD owned pedestrian pathway are positioned above the surrounding grades at geodetic elevations of approximately 19 m and 18 m, respectively. The slope at the south side of the E&N rail down to the Seaspan yard is inclined approximately at a 2H:1V with localized steeper sections and is generally densely vegetated.

The location of the investigation relative to the surrounding developments and proposed improvements is shown on our Drawing No. 25595-01, following the text of this report.

3.0 INVESTIGATION

GeoPacific Consultants Ltd. completed an investigation of the soil and groundwater conditions in the vicinity of the proposed stormwater trenchless crossing on March 02, 2026, using a track mounted sonic drill rig supplied and operated by Blue Max Drilling of Courtenay, B.C. The site investigation was comprised of two sonic boreholes, labelled BH26-01 & BH26-02, both supplemented with Dynamic Cone Penetration Test (DCPT) soundings to assist in determining the in-situ relative density of the surficial soils. The placement of the boreholes was determined based on accessible areas to the drill rig. BH26-01 was positioned at the southern extent of the paved driveway adjacent to the single-family homes at 855/857 Admirals Road. BH26-02 was positioned on the CRD owned pedestrian trail.

The sonic boreholes were advanced up to depths of between 9.1 m and 10.7 m below current local grades. The test holes were located, supervised, and logged by a member of our geotechnical staff. Soil samples were collected for routine laboratory testing.

Two DCPT soundings were advanced up to depths between 13.7 m and 11.3 m below current local grades. As the cone was advanced into the ground, the number of blows necessary to penetrate every 305 mm into the ground was recorded to assist with estimating the relative density of the subsurface soils.

Prior to our investigation, a BC one call was placed at the borehole locations, and a member of our staff confirmed the borehole locations were cleared of existing civil infrastructure. The boreholes were backfilled and sealed in accordance with provincial abandonment requirements following classification, sampling, and logging.

The borehole logs with our Dynamic Cone Penetration Results (DCPT) are presented in Appendix A. The approximate locations of the test holes and the DCPT soundings completed by GeoPacific Consultants Ltd. are shown on our Drawing 25595-01, following the text of this report.

4.0 SUBSURFACE CONDITIONS

4.1 Soil Conditions

Based on the BC Ministry of Energy and Mines Geoscience Map 2000-2, the subject site is divided between two units, C2 and R2. The unit R2 is described as thin soil cover with scattered bedrock outcrop. "This unit generally consists of shallow soils over bedrock. In much of Greater Victoria, this unit includes areas with less than 5 metres of Victoria Clay, mainly the brown clay facies, overlying thin older Pleistocene deposits or bedrock. Scattered outcrops occur throughout the unit, and bedrock is commonly found in the upper few metres." The unit C2 is described as areas where the "grey clay facies is commonly greater than 10 metres and locally exceeds 20 metres. In this unit, the grey facies is overlain by the brown clay facies, which is generally 2 to 4 metres thick. The thickness of older Pleistocene deposits underlying the Victoria clay is generally less and a few metres".

The subsurface conditions at our test hole locations were observed to generally consist of compact to very dense fill, overlying stiff to very stiff silty clay belonging to the Victoria Clay Sequence. Based on the results of our investigation and the borehole logs provided by SLR Consulting, bedrock is anticipated to slope downwards from south to north within the area of review with the investigation area consisting of a low point within the undulating bedrock typical of the region. A general description of the soils encountered is as follows:

FILL

Compact to dense sandy silty gravel fill was encountered to a depth of approximately 0.3 m below existing grade at BH26-01. Dense to very dense crush stone fill was encountered to a depth of up to approximately 2.1 m below existing grade at BH26-02.

The sandy silty gravel was noted to be moist and brown. The crushed stone fill was noted to generally consist of rock particles in the range of 75 mm in diameter with some cobbles up to approximately 150 mm in diameter. The crushed stone fill was noted to be grey and dry.

SILTY CLAY

Very stiff to hard silty clay with trace sand of the brown clay facies was encountered at BH26-01 and BH26-02, extending to depths of approximately 6.1 m to 7.9 m below existing grade, respectively. The stratum was noted to be dry to moist and brown in colour.

A lens of silty clayey gravel was encountered underlying the brown silty clay up to 8.2 m below existing grade.

Atterberg limits testing within this stratum indicated a liquid limit (LL) in the range of 39% of 44%, a plastic limit (PL) in the range of 22% to 23%, plasticity index (PI) in the range 17% to 21%. Moisture contents ranged between of 23.3% to 26.1%.

SILTY CLAY

Stiff to very stiff silty clay with trace sand and gravel of the grey clay facies was encountered at BH26-01 and BH26-02 up to 9.1 m to 10.7 m below existing grade, respectively. The stratum was noted to be moist and blue-grey in colour.

Laboratory testing indicated moisture contents of the stratum ranged from 30.3% to 35.3 %

GLACIAL TILL / BEDROCK

Although not encountered in our drilling investigation, glacial till overlying bedrock is expected to underlay the silty clay of the Vicotria clay Sequence. Based on the borehole logs provided by SLR Consulting, bedrock was encountered at depths ranging from 2.9 to 4.6 m below the current site grades of the Seaspan yard at the southern side of the E&N Rail line.

The bedrock in the mapped area is commonly understood to belong to the Wark Gneiss Complex, generally consisting of metabasalt. Based on our experience in the area, the bedrock may show intrusive dykes to regionally intrusive elements belonging to the Westcoast Crystalline complex consisting of granodiorite to gabbro, intermixed with the more commonly observed metabasalt.

For a more detailed description of the subsurface conditions, refer to the test hole logs in Appendix A, following the text of this report.

4.2 Groundwater Conditions

The static groundwater table was not encountered in our test holes and is expected to be well below the proposed development grades for the site. Perched groundwater should be expected to form within the fills above less permeable soils. The groundwater level may vary seasonally with generally higher levels during the wetter months of the year and following periods of significant precipitation. Perched groundwater should also be expected to form in the topsoil fill following periods of sustained precipitation.

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 Trenchless Utility Installation

Based on the preliminary drawings prepared by Kerr Wood Leidal Associates Ltd. (KWL), the new storm main will tie into existing municipal stormwater management infrastructure at the southern extent of 855/857 Admirals Road and the northern extent of the Seaspan yard. The proposed storm main will cross under the existing E&N Rail and the CRD owned pedestrian trail before tying into the existing municipal storm water management system at the southern end of the E&N Rail.

To accommodate the proposed installation, we anticipate excavations in the range of approximately 3 m below current site grades at the northern side of the rail line for the entry pit and excavations in the range of approximately 4 m below the adjacent grade of the E&N rail fill structure at the exit pit excavation. Our recommendations for temporary excavations are presented in Section 5.2 below.

The new stormwater main invert is proposed to extend from approximately 13.8 m geodetic at DMH 2 on the northern side of the E&N Rail line to approximately 12.5 m geodetic at DMH 3 at the southern side of the rail line. The design depth of the crossing is approximately 2.0 m below the asphalt driveway of the existing residential home, approximately 3.5 – 4 m below the existing grade of the CRD pedestrian pathway, approximately 5.5 m below the existing grade of the E&N rail line and near existing grade at the southern side of the E&N rail. The preliminary alignment provided by KWL is presented in Appendix C following the text of this report.

As discussed in Section 4.0, bedrock was not encountered within our subsurface investigation. At BH26-01 approximately 0.3 m of fills were encountered overlying very stiff to hard silty clay. At BH26-02, completed through the CRD owned pedestrian trail, approximately 2.1 m of dense to very dense crushed rock fill was encountered overlying the very stiff to hard silty clay. Based on the borehole logs provided by SLR Consulting Ltd., bedrock was encountered in the range of 2.9 to 4.6 m below existing grades within the Seaspan yard at the southern side of the proposed trenchless crossing alignment. Based on the depths of fill observed at BH26-02, the crushed rock fills are expected to terminate approximately 1.5 m above the approximate alignment of the new stormwater main in the area of BH26-02. Based on our experience with similar projects, trenchless installation methods such as directional drilling and pipe-jacking are considered geotechnically feasible within the stiff to hard silty clay.

The thickness of the fills in the alignment of the proposed trenchless crossing should be expected to fluctuate from north to south across the E&N rail line, particularly at the southern side where borehole investigations were not feasible due to existing slope geometry. Based on borehole logs provided by SLR Consulting Ltd., up to approximately 1.5 m of sand to silt and sand fill was encountered overlying the silty clay stratum encountered at the approximate geodetic elevation of 11.2 m. The extent of fills encountered in the vicinity of DMH 4 may extend into the fill slope for the E&N rail line. As such we recommend that the trenchless crossing contractor select equipment capable of advancing through the crushed rock fills encountered in BH26-02. Alternatively, the

alignment or grade of the stormwater main may be modified to avoid the fill zone detailed in the provided drill logs presented in Appendix B.

We confirm, from a geotechnical point of view, that the proposed off-site improvements are feasible from a geotechnical perspective, and the site may be used safely for the purpose intended. Should the proposed excavation depth or installation design deviate from the loading and grading assumptions described herein, the recommendations presented below may require revision to reflect the revised conditions.

5.2 Temporary Excavations and Dewatering for Entry/Exit Pits

We expect that the proposed trenchless crossing installation equipment will require temporary excavations in the range of approximately 3 m below existing grade to achieve the alignment of the proposed stormwater main. We expect that temporary excavations would be sloped where possible since it is more economical to do so. Temporary slopes may be cut no steeper than 1:1 (H:V) with any surficial fill or loose soils benched back at a distance equal to the thickness of the layer. Due to the very stiff to hard consistency of the silty clay, temporary slopes within the stratum may be inclined up to 3:4 (H:V).

All temporary excavations in excess of 1.2 m in height should be covered with poly-sheeting and must be reviewed by a geotechnical engineer prior to worker entry, as required by WorkSafe BC. Temporary slope requirements may be subject to change due to the present groundwater conditions during excavation.

Based on the information provided, we understand that the proposed drill pad excavation at the northern end of the E&N rail line will be located in the paved driveway adjacent to the existing single-family home. Excavation adjacent to the existing foundations should be completed outside of a 1H:1V projected slope from the outside edge of the bottom of the footing to the outside bottom edge of the excavation. Should excavation be required within a 1:1 (H:V) projection of the existing building foundations, temporary shoring measures will be required.

We expect that deeper excavations may be required at the entry and exit points of the installation where open cuts may not be feasible or where vertical cuts are required adjacent to the existing slopes. Pre-driven sheet piles or other temporary shoring methods may be considered. Alternatively, shoring cages could be installed in accordance with WorkSafe BC guidelines. The extent of the shored sections of the excavation will depend on the existing topography as well as the final design layout, elevations, and contractor equipment requirements for the proposed stormwater crossing.

We expect perched groundwater may be encountered in the surficial fills overlying the less permeable very stiff to hard silty clay. We expect a conventional sump and sump pump system can be used to remove water from the excavation area.

GeoPacific shall be contacted for, and must review, the temporary excavation and shoring works. GeoPacific will prepare an excavation/shoring design upon request.

5.3 Subgrade Preparation

Based on the anticipated excavation depths, we expect that the proposed horizontal drilling equipment will be erected on a subgrade of very stiff to hard silty clay. The silty clay is considered sensitive to changes in moisture content. We recommend that the subgrade be blinded with a minimum of 150 mm of 19 mm clear crush gravel to preserve the bearing qualities of the subgrade and provide a level base prior to erecting the drilling equipment.

GeoPacific shall be contacted for the review of subgrades prior to blinding.

5.4 Grade Reinstatement/Backfilling Requirements

Grade reinstatement and backfilling should be completed with engineered fill. In the context of this report, "Engineered Fill" is generally defined as clean sand to sand and gravel containing silt and clay less than 5 % by weight, compacted to 95% Modified Proctor (ASTM D1557) Maximum Dry Density, with a moisture content within 2% of optimum for compaction. Density testing should be conducted on each lift to confirm the compaction requirements and ensure performance.

All soils and fill material proposed for use must be reviewed and pre-approved by GeoPacific.

Crushed Rock Fill

Grade reinstatement using the encountered 75 – 150 mm minus crushed stone fill may be considered as engineered fill. The fills may require screening of any organics that may accumulate at the time of excavation.

Silty Clay

The existing native silty clay soils may be considered for reuse; however, considerable additional effort should be expected to control moisture content and meet compaction requirements. Reduced lift thickness in the range of 150 mm loose lifts may be required to achieve the minimum 95% Modified Proctor Dry Density (ASTM D1557) at a moisture content that is within 2% of optimum for compaction. Extra care to maintain the material near the optimum moisture should be anticipated as over-saturated or over-dry soil will reduce effectiveness of compaction. Any stockpiled material should be protected with polysheeting to mitigate changes in moisture content.

5.5 Monitoring

Monitoring of ground movements adjacent to the trenchless crossing location should be implemented. We recommend slope indicator casings adjacent to shoring areas and conventional survey hubs along the alignment of the trenchless installation are implemented. We further recommend a detailed photographic pre-construction survey surrounding and along the alignment of the trenchless installation is complete prior to the commencement of work.

6.0 DESIGN AND CONSTRUCTION REVIEWS

The preceding sections make recommendations for the design and construction of the proposed development. We have recommended that we be retained for the review of certain aspects of the design and construction. These field reviews are not carried out for the benefit of the contractors and, therefore do not in any way affect the contractors' obligations to perform under the terms of their contract.

It is the responsibility of the contractors working on-site to inform GeoPacific Consultants Ltd. a minimum of 48 hours in advance that a field review is required. In summary, reviews are required by a geotechnical engineer for the following portions of work:

1. Excavation - Review of temporary slopes and soil conditions.
2. Shoring - Review of any required shoring installation.
3. Directional Drilling - Review of proposed methodology and installation of directional drilling.
4. Engineered Fill - Review of fill materials and degree of compaction for any grade reinstatement.

It is critical that these reviews are carried out to ensure that our intentions have been adequately communicated. It is also critical that contractors working on the site view this document in advance of any work being carried out, so that they become familiar with the sensitive aspects of the works proposed. It is the responsibility of the developer to notify GeoPacific Consultants Ltd. when conditions or situations not outlined within this document are encountered.

7.0 CLOSURE

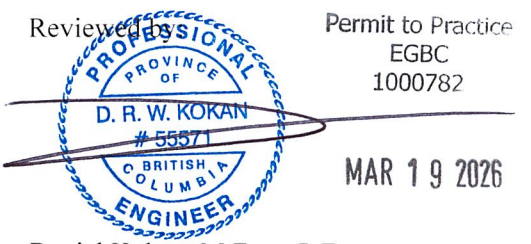
This report has been prepared exclusively for our client for the purpose of providing geotechnical recommendations for the design and construction of the proposed off-site improvements. This report remains the property of GeoPacific Consultants Ltd. and unauthorized use of, or duplication of, this report is prohibited.

We are pleased to assist you with this project, and we trust this information is helpful and sufficient for your purposes at this time. If you would like further details or would like clarification on nay of the above, please do not hesitate to call.

For:
GeoPacific Consultants Ltd.

Raymond Dickof, B.Sc.,
Project Manager

Reviewed by:



Permit to Practice
EGBC
1000782

MAR 1 9 2026

Daniel Kokan, M.Eng., P.E.ng.
Senior Project Engineer

LEGEND:

BH26-XX - BORE HOLE (BH) LOCATION

SITE PLAN

1:500

REFERENCE:
ESQUIAMALT GIS MAP

GEOPACIFIC CONSULTANTS

DATE:	MARCH 10, 2026		
DRAWN BY: J.J.	APPROVED BY: J.C.	REVIEWED BY: R.D.	
SCALE:	AS SHOWN		

PROPOSED RESIDENTIAL DEVELOPMENT

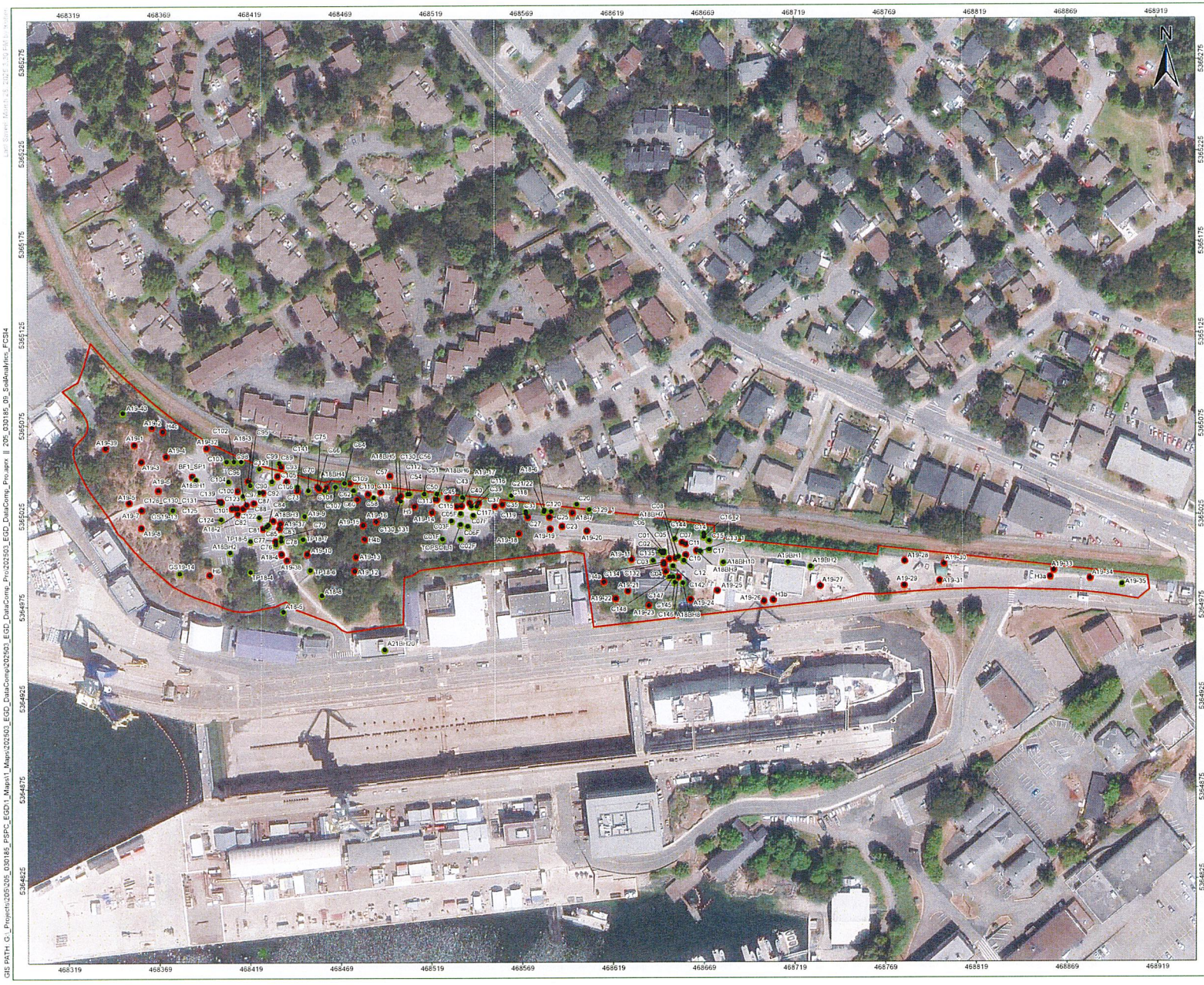
855,857 ESQUIAMALT ROAD, ESQUIMALY, B.C.

SITE PLAN

FILE NO: 25595

DWG NO: 25595-01

REVISIONS:
A.
B.
C.



LEGEND:

- SOIL SAMPLE

EXCEEDANCE

- CONCENTRATIONS LESS THAN OR EQUAL TO CCME / CSR GUIDELINES / STANDARDS BASED ON MAXIMUM CONCENTRATION FROM ANY SAMPLE AND ANY DEPTH
- CONCENTRATIONS GREATER THAN CCME / CSR GUIDELINES / STANDARDS BASED ON MAXIMUM CONCENTRATION FROM ANY SAMPLE AND ANY DEPTH COLLECTED AT THAT LOCATION
- FCSI

DRAFT

NOTES:
SATELLITE IMAGERY: WAYBACK, 2024

SERVICE LAYER CREDITS:

0 20 40 80 120 m

SCALE 1:1,000
PAGE SIZE: 22 x 34
NAD 1983 UTM Zone 10N
THIS MAP IS FOR CONCEPTUAL PURPOSES ONLY AND SHOULD NOT BE USED FOR NAVIGATION

PUBLIC SERVICES AND PROCUREMENT CANADA
ESQUIMALT GRAVING DOCKS
825 ADMIRALS ROAD
ESQUIMALT, BC, CANADA

EGD DATA COMPILATION
REPORT UPDATE (2024/2025)

SOIL ANALYTICAL RESULTS AT FCSI 4

SLR

FIGURE NO:
9

DATE: March 28, 2025

PROJECT NO: 205.030185.00001

GIS PATH: G:_Projects\205\205_030185_PSPC_EGD\1_Maps\1_Maps\202503_EGD_DataComp\202503_EGD_DataComp_Pro\202503_EGD_DataComp_Pro.aprx || 205_030185_05_SoilAnalytic_FCSI4

APPENDIX A – BOREHOLE LOGS

DATED 02-03-2026

Test Hole Log: BH26-01

File: 25595
Project: Proposed Trenchless Crossing
Client: Township of Esquimalt
Site Location: 855 Admirals Rd, Esquimalt, B.C.

GEOPACIFIC CONSULTANTS
1779 West 75th Avenue, Vancouver, BC, V6P 6P2
Tel: 604-439-0922 Fax:604-439-9189

INFERRED PROFILE

Depth (ft / m)	Symbol	SOIL DESCRIPTION	Depth (m)/Elev (m)	Moisture Content (%)	DCPT (blows per foot)	Groundwater / Well	Remarks
0 / 0		Ground Surface	16.0				
0 / 0		**SANDY SILTY GRAVEL** Compact to dense sandy silty GRAVEL. Brown. Moist.	0.0	10.5	>50		
3 / 1		**SILTY CLAY** Hard silty CLAY. Dark grey. Dry to moist.		24.8	26, 16, 24, 23, 29, 28, 23, 19, 21, 21, 20, 20, 17, 18, 17		5' Atterberg Limits: LL 44%, PL 23%, PI 21% (CL)
15 / 4			11.4	26.1			
15 / 4		**SILTY CLAY** Very stiff silty CLAY. Blue-grey to brown. Moist.	4.6		14, 15, 15, 15, 14, 15, 15, 14, 15, 15, 15, 16, 15, 17, 16, 16, 18, 17, 18, 19, 18, 18, 21, 21, 20, 21		
20 / 6			9.9				
20 / 6		**SILTY CLAY** Stiff to very stiff silty CLAY. Blue-grey. Moist. Medium plasticity.	6.1	35.3			
30 / 9			6.9				DCPT Refusal @ 43'
30 / 9			9.1				
46 / 14		End of Borehole					

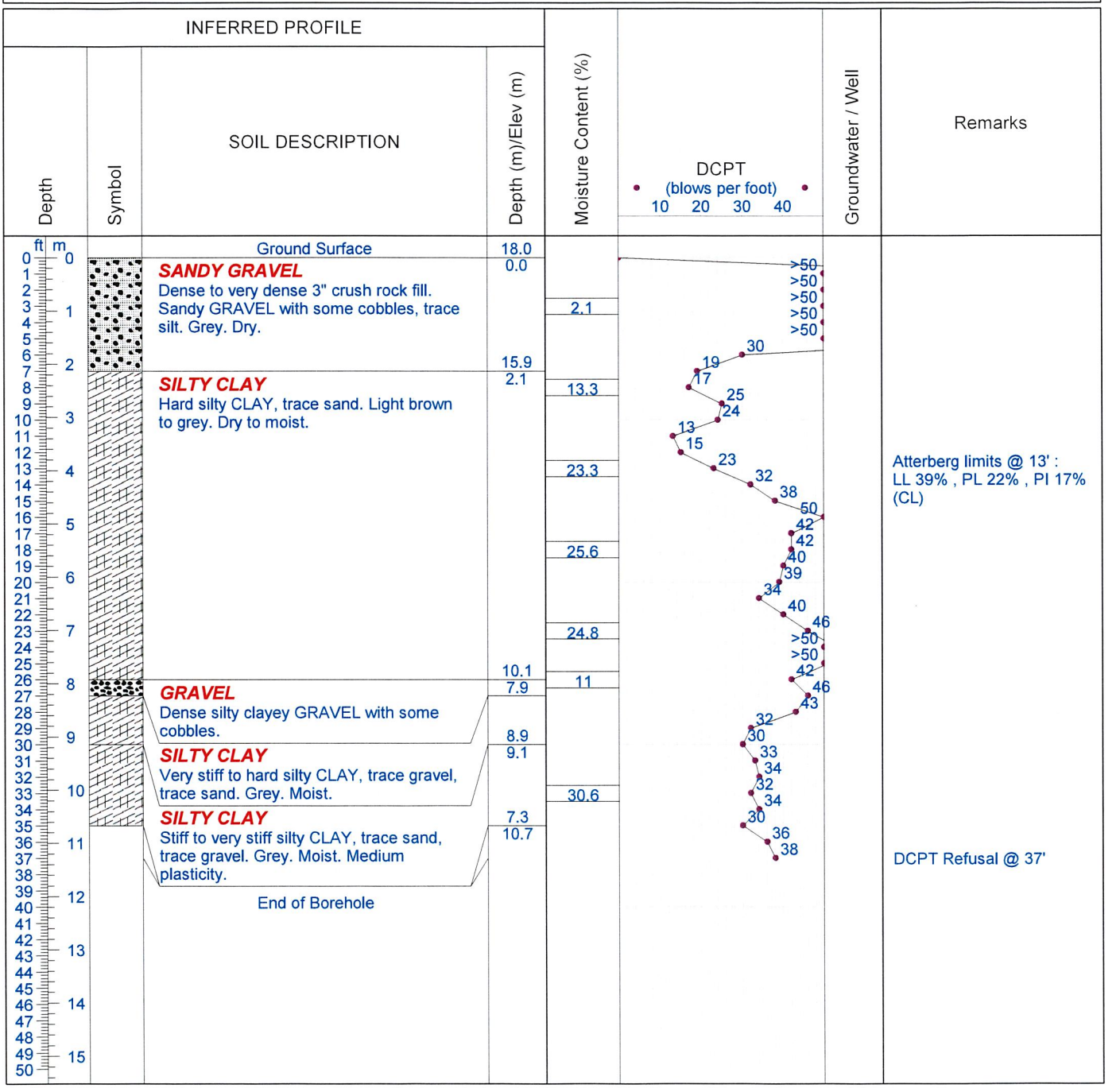
Logged: R.D.
Method: SONIC
Date: March 2, 2026

Datum: Ground Surface
Figure Number: A.01

Test Hole Log: BH26-02

File: 25595
Project: Proposed Trenchless Crossing
Client: Township of Esquimalt
Site Location: 855 Admirals Rd, Esquimalt, B.C.

GEOPACIFIC CONSULTANTS
1779 West 75th Avenue, Vancouver, BC, V6P 6P2
Tel: 604-439-0922 Fax:604-439-9189



Logged: R.D.
Method: SONIC
Date: March 2, 2026

Datum: Ground
Figure Number: A.02
Page: 1 of 1

APPENDIX B – DRILL LOGS PREPARED BY SLR CONSULTING LTD.

SLR
Consulting (Canada) Ltd.

SLR JOB NO: 201.88351.04

CLIENT: **PWGSC**
PROJECT: **Esquimalt Graving Dock Uplands**
825 Admirals Road
Esquimalt, BC

BOREHOLE LOG

BOREHOLE NO: A18BH-10
SURFACE ELEVATION: 11.89 m

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 / 10 / 100 / 1000	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
0					**GRAVEL** (FILL) angular gravel, some fine sand, grey, moist					
		A18BH10-1/2			**SILTY SAND** trace gravel, brown, moist	5				
		A18BH10-3			**SILT AND CLAY** trace orange mottling, grey, moist	0				11
1		A18BH10-4				0			backfilled with drill cuttings	10
2		A18BH10-5				0				9
3					End of borehole at 3.0 m					

DRILLING METHOD: Solid Stem Auger Drilling

DRILL DATE: 28 August 2009 LOGGED BY: DGP

Notes: AUGER SAMPLE

SLR Consulting (Canada) Ltd.

SLR JOB NO: 201.88351.04

CLIENT: **PWGSC**
PROJECT: **Esquimalt Graving Dock Uplands**
825 Admirals Road
Esquimalt, BC

BOREHOLE LOG

BOREHOLE NO: A19BH-1
SURFACE ELEVATION: 12.12 m
UTM COORDINATES 5364994 N 468716 E

DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 10 100 1000	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
0		A19BH1-1/2			**GRASS**	0				12
					SAND trace gravel, trace organics, brown, moist	0				
		A19BH1-3			**SAND AND SILT** trace gravel, trace organics, brown, moist					
1										11
					SILT AND CLAY trace gravel, some orange mottling (native material), brown, moist	10			backfilled with drill cuttings	
2		A19BH1-4								10
		A19BH1-5			**SAND** trace silt, trace gravel, trace cobble, brown, moist	5				
					BEDROCK End of borehole at 2.9 m					

DRILLING METHOD: Solid Stem Auger Drilling

DRILL DATE: 28 August 2009 LOGGED BY: JE

Notes: AUGER SAMPLE

SLR Consulting (Canada) Ltd.

SLR JOB NO: 201.88351.04

CLIENT: **PWGSC**
PROJECT: **Esquimalt Graving Dock Uplands**
825 Admirals Road
Esquimalt, BC

BOREHOLE LOG

BOREHOLE NO: A19BH-2
SURFACE ELEVATION: 12.26 m
UTM COORDINATES 5364993 N 468724 E

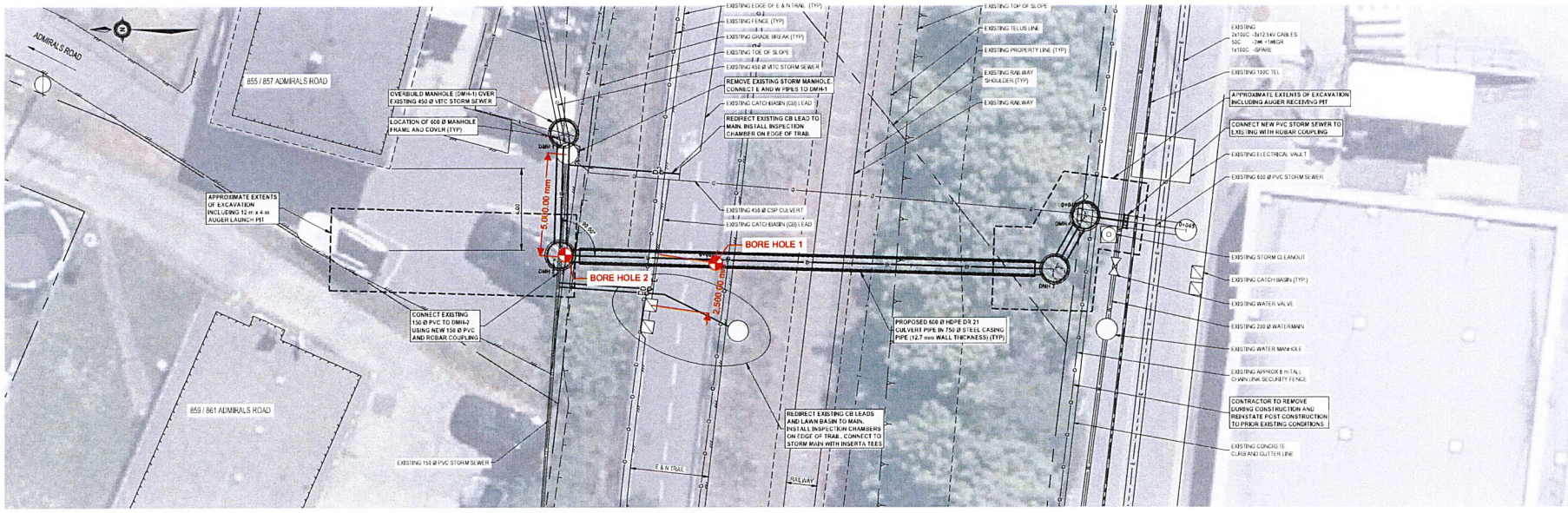
DEPTH (m)	SAMPLE TYPE	SAMPLE ID	SPT COUNT	SOIL TYPE	SOIL DESCRIPTION	FIELD TEST DATA: ORGANIC VAPOUR LEVEL (ppmv) 1 10 100 1000	WELL COMPLETION	WATER LEVEL	WELL COMPLETION NOTES	ELEVATION (m)
0		A19BH2-1			**GRASS**	5				12
					SAND trace gravel, trace organics, brown, moist					
		A19BH2-2				0				
1										11
					SILT AND CLAY trace gravel, some orange mottling (native material), brown, moist					
2									backfilled with drill cuttings	10
		A19BH2-3				0				
3										9
4					**SAND AND GRAVEL** trace cobble, brown, moist					8
		A19BH2-4				0				
					End of borehole at 4.6 m					

DRILLING METHOD: Solid Stem Auger Drilling

DRILL DATE: 28 August 2009 LOGGED BY: JE

Notes: AUGER SAMPLE

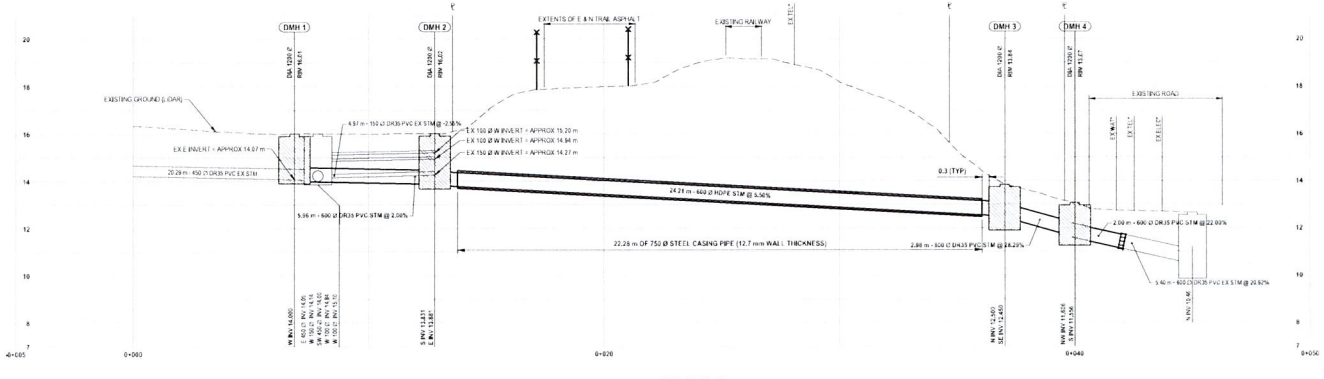
APPENDIX C – PRELIMINARY DESIGN DRAWINGS PREPARED BY KERR WOOD LEIDAL ASSOCIATES LTD. (KWL)



PLAN
Scale 1:100

0 1 (1:100) 5 m

NOTE
CONTRACTOR TO CONFIRM DEPTH AND LOCATION OF ALL UTILITIES AND REPORT ANY CONFLICTS TO THE ENGINEER PRIOR TO CONSTRUCTION.



PROFILE
Scale 1:100

KERR WOOD LEIDAL
consulting engineers
Accountability • Collaboration • Excellence • Innovation

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

Rev.	Date	Des	Dwn	Chk	Description
A	2026-02-26	EN	KTK	RYL	ISSUED FOR DISCUSSION

CORP. OF THE TOWNSHIP OF ESQUIMALT
855 ADMIRALS RD. CULVERT REPLACEMENT

PLAN, PROFILE AND NOTES

Project No. 601.014
Group CIVIL
Drawing No. C-101
Rev. A