

Self-Screening Registration Criteria

T07: Technical Bridge and Major Culvert Condition Inspection

The Ministry of Forests and Range will only contract with technical services consultants to carry out inspections of bridges and major culverts on forest roads. Consultants providing technical services under service category T07 must have the mandatory knowledge and experience as detailed below.

Mandatory Knowledge Requirements

1. have considerable recognized specialization within the discipline of routine bridge and major culvert inspection services as required by the ministry, including:
 - carrying out visual inspections and physical (non-destructive) testing log stringer, steel, concrete, or glulam bridge components, and concrete, log, or steel major culverts and verifying the testing as the inspection progressed
 - in the case of wood components, assessing the significance of any rot to the structure's integrity
 - establishing whether structural deficiencies require evaluation by professional engineers or can be simply rectified by specifying suitable minor repairs
2. have considerable knowledge of:
 - bridge and major culvert materials and methods of bridge and major culvert condition inspection
 - forest road bridge and major culvert configurations and material types including log, timber, steel and concrete elements
3. have a working knowledge of:
 - typical details and arrangements described in the Ministry of Forests publication entitled, *Forest Service Bridge Design and Construction Manual* available at the following web site: http://www.for.gov.bc.ca/hth/engineering/publications_guidebooks.htm.
 - forest road and bridge planning, bridge construction techniques and bridge maintenance activities (with emphasis on routine bridge condition inspection)
4. be familiar with Provincial legislation such as the *Forest Practices Code of British Columbia Act*, *Forest and Range Practices Act*, and *Water Act*, and associated regulations under those acts, including the Water Regulation, Forest Road Regulation, and the Forest Planning and Practices Regulation, among other legislation relevant to maintenance of bridges and major culverts;
5. have knowledge and understanding of the principles and best management practices relevant to maintenance of bridges and major culverts provided in publications such as:

- Forest Practices Code of BC Fish-stream Crossing Guidebook (March 2002)
 - Forest Practices Code of BC Forest Road Engineering Guidebook (June 2002)
 - Forest Practices Code of BC Riparian Management Area Guidebook
 - Forest Practices Code of BC Fish-stream Identification Guidebook
6. in the case of projects that come under the control and administration of BC Timber Sales (BCTS), obtain BCTS Environmental Management System (EMS) Level 3 training prior to commencing work on any BCTS Worksite.

Mandatory Experience Requirements

1. Consultants providing services for inspection of bridges and major culvert require a minimum of 5 years of demonstrated relevant experience in forestry or related resource industries in British Columbia. Consultants must have specific work experience in providing:
 - visual inspection and physical (non-destructive) testing of log stringer and other log and timber bridge components, and provide options for action (restriction, repair, upgrade, repair)
 - general visual examinations of steel, concrete, and glulam bridge components, and major culverts, including working under the direct supervision of a qualified registered professional engineer
 - completion of inspection reports in a format acceptable to the Ministry
 - general visual examinations of bridge substructures to evaluate structural integrity and assess for scour, concrete deterioration, pile rot or corrosion; and provide options for action (restriction, repair, upgrade, replacement)

Rails to Trails

Routine Condition Culvert Inspection Form

Crossing	Structure #	Site #	Length(m)	UTM Zone and E	UTM N
Sutherland Creek	CW-042	CW-042	60.0	11 / 412432	5434957
Trail Name	Km		Dimension(mm)	Culvert Material	Flumes (Y or N)
CWRT	83.5		3000 x 2500	rock tunnel	N
Inspection Co. Name	Inspector's Name /Signature			Inspection Date:	November 12 2011
SNT Engineering Ltd.	R.L.Johnson			Next Inspection:	November 12 2014

GENERAL INFORMATION:						
LEFT/RIGHT APPROACHES (as seen facing downstream)						
E = excellent; G = good; F = fair; P = poor; N/A = not appl.						
Item	Present Condition (circle or fill-in)					Comments (a comment is mandatory if condition "Poor" is selected)
Alignment	E	G	F	P		Road is very narrow
Bridge Ahead Signs Missing	0	1	2		N/A	
Brushing Required		Yes		No		weeds along shoulders
Approach Handrail/Guardrail	E	G	F	P	N/A	
Posted Load Rating (tonnes)					N/A	
Road Surface	E	G	F	P		

GENERAL CULVERT ITEMS						
Baffles	E	G	F	P	N/A	
Bolted Connections	E	G	F	P	N/A	
Coupled Connections	E	G	F	P	N/A	
Coating	E	G	F	P	N/A	
Fill	E	G	F	P	N/A	
Roof	E	G	F	P	N/A	Could not inspect but all are solid rock
Side Walls	E	G	F	P	N/A	Could not inspect but all are solid rock
Floor	E	G	F	P	N/A	Could not inspect but all are solid rock
Head Walls	E	G	F	P	N/A	none; inlet and outlet in solid rock
Wing Walls	E	G	F	P	N/A	Concrete training walls
Inlet	E	G	F	P	N/A	Clear high velocity stream; no u/s debris
Outlet	E	G	F	P	N/A	
Riprap	E	G	F	P	N/A	
Trash Rack	E	G	F	P	N/A	
Aprons or Other Inlet/Outlet Items	E	G	F	P	N/A	
Overall Condition	E	G	F	P	N/A	

FLUMES						
Upstream Flume	E	G	F	P	N/A	
Downstream Flume	E	G	F	P	N/A	

Rails to Trails

Routine Condition Culvert Inspection Form

Crossing	Structure #	Site #	Length(m)	UTM Zone and E	UTM N
Sutherland Creek	CW-042	CW-042	60.0	11 / 412432	5434957
Trail Name	Km		Dimension(mm)	Culvert Material	Flumes (Y or N)
CWRT	83.5		3000 x 2500	rock tunnel	N

CHANNEL

Est. Present Water Level Depth (m)	Est. Present Water Level Width (m)	Est. High Water Level Clearance (m)
0.2	2.0	2.6

HAZARDS (indicate Y or N)

High Water?	Scour?	Ice?	Debris?	Aggradation?
N	N	N	N	N
Hazard Comments				

REPAIRS (H = High, M= Medium, L = Low)

#	Priority	Description	Estimate (\$)
1	none		
2			
3			

ITEMS TO MONITOR

#	Description
1	none
2	
3	

General Comments

There is a well-kept shed upstream; this may be part of Christina Lake water system. Note that a ladder is required to access the stream bed.

P. Eng Inspection Required?	Y	N	Estimated Date of Replacement: 2042
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PROFESSIONAL ENGINEER (PEng) CERTIFICATION

Current Load Rating GVW (tonnes):	n/a	New Load Rating GVW (tonnes)	Replacement Date (yyyy) 2042
Reviewed by - P.Eng.	Les Thiessen	Date:	Jan-12

Culvert Inspection Photos

Structure # : CW-042

Name of Crossing: Sutherland Creek

Name of Trail: CWRT

Km: 83.5

Inspection Date: November 12 2011

(Left and right as seen facing downstream)



Right (east) approach



Left (west) approach



Inlet



Outlet with inlet visible



Upstream and water district shed

Self-Screening Registration Criteria

P06: Professional Condition Inspection and Evaluation of Forest Road Bridges and Major Culverts (PEng)

Mandatory Knowledge Requirements

The Ministry of Forests and Range will only contract with qualified professional engineers (PEngs) to provide professional services for condition inspection and evaluation of Forest Service road bridges and major culverts. Professional engineers providing this service must:

1. be members in good standing with the Engineers and Geoscientists of British Columbia (EGBC);
2. have appropriate education, training and experience within the discipline of engineering that are congruent with the bridge and major culvert inspection and evaluation services required by the ministry;
3. have considerable recognized specialization in bridge and major culvert materials, methods of bridge and major culvert condition inspection and assessment, and establishing “load ratings” for bridges;
4. be thoroughly familiar with typical forest road bridge and major culvert configurations and material types including logs, timbers, glulam, steel and concrete elements;
5. be thoroughly familiar with the typical details and arrangements described in the Ministry of Forests and Range publication entitled, *Forest Service Bridge Design and Construction Manual* available at the following web site:
http://www.for.gov.bc.ca/hth/engineering/publications_guidebooks.htm
6. be familiar with forest road, bridge and major culvert planning, including bridge design and construction techniques, design vehicle configuration assessment, fluvial geomorphology, river engineering, scour and scour protection, design flood hydrology determination, open channel hydraulics, flood routing, methods for stream flow training, and debris potential assessment and estimation;
7. be thoroughly familiar with the *Canadian Highway Bridge Design Code* (CAN/CSA-S6), including Section 14 (“Evaluation”) and other associated bridge standards for welding of engineering materials and bridge component fabrication, or other standards as appropriate;
8. have a working knowledge and understanding of the principles and best management practices provided in the following government publications:
 - Forest Practices Code of BC Forest Road Engineering Guidebook (June 2002)
 - Forest Practices Code of BC Fish-stream Crossing Guidebook (March 2002)
 - Forest Practices Code of BC Riparian Management Area Guidebook
 - Forest Practices Code of BC Fish-stream Identification Guidebook

10. in the case of projects that come under the control and administration of BC Timber Sales (BCTS), obtain BCTS Environmental Management System (EMS) Level 3 training prior to commencing work on any BCTS Worksite.

Mandatory Experience Requirements


All professional engineers providing services for condition inspection and evaluation of Forest Service road bridges and major culverts require a minimum of 5 years of demonstrated relevant professional experience. This experience must include professional bridge condition inspection and evaluation of work in forestry or related resource industries in British Columbia.

Registered professional engineers must have specific work experience in the following condition inspection and evaluation activities:

1. Close proximity condition inspection, assessment and structural evaluation of major culverts and bridge superstructures and/or substructures to make recommendations regarding the load capacity and preparation of technical specifications and special provisions for repair.
2. Close proximity condition inspection of substructures to evaluate structural integrity and assess for scour, concrete deterioration, pile rot or corrosion; and prepare technical specifications and special provisions to replace or repair the substructure as required.
3. Structural review and analysis and provision of “load ratings” where needed.
4. Application of Section 14 (“Evaluation”) of CAN/CSA-S6, *Canadian Highway Bridge Design Code*.

Rails to Trails
Routine Condition Culvert Inspection Form



Crossing Sutherland Creek	Structure # CW-042	Site # 5-3	Km 83.5	UTM Zone 11 N	UTM E 412445	UTM N 5434996
Trail Name C&WT	Height (m) 3	Width (m) 2.5	Length (m) 50.0	Diameter (m)	Material Rock tunnel	Flumes (Y or N) No
Inspection Co. Name Sean Annan	Inspector's Signature 			Inspection Date September 29, 2019	Next Inspection	
GENERAL INFORMATION:						
GENERAL CULVERT ITEMS						
Item	Present Condition	Comments				
Baffles	NA					
Bolted Connections	NA					
Coupled Connections	NA					
Coating	NA					
Fill	NA					
Roof	Good	Rock tunnel. Tunnel not accessed due to flow				
Side Walls	Good	Rock tunnel. Tunnel not accessed due to flow				
Floor	Cannot Inspect	Flowing creek				

**Rails to Trails
Routine Condition Culvert Inspection Form**



Crossing Sutherland Creek	Structure # CW-042	Site # 5-3	Km 83.5	UTM Zone 11 N	UTM E 412445	UTM N 5434996
Trail Name C&WT	Height (m) 3	Width (m) 2.5	Length (m) 50.0	Diameter (m)	Material Rock tunnel	Flumes (Y or N) No

GENERAL INFORMATION:

LEFT/RIGHT APPROACHES (as seen facing downstream)

GENERAL CULVERT ITEMS

Item	Present Condition	Comments
Headwalls	Good	Rock and mortar at inlet. Stable no signs of movement. 2m tall. CIP concrete wall at outlet. 3.0m tall. Minor spalling at terminal end. Cold joints appear stable. No observed movement
Wing Walls	NA	
Inlet	Good	1.4m wall at inlet where access is. Ladder required.
Outlet	Good	
Riprap	NA	
Trash Rack	NA	
Aprons or Other Inlet/Outlet Items	Poor	Concrete apron at outlet completely scoured away
Overall Condition	Good	

Rails to Trails
Routine Condition Culvert Inspection Form



Crossing Sutherland Creek	Structure # CW-042	Site # 5-3	Km 83.5	UTM Zone 11 N	UTM E 412445	UTM N 5434996
Trail Name C&WT	Height (m) 3	Width (m) 2.5	Length (m) 50.0	Diameter (m)	Material Rock tunnel	Flumes (Y or N) No

GENERAL INFORMATION:

LEFT/RIGHT APPROACHES (as seen facing downstream)

Item	Present Condition	Comments
Alignment	NA	
Bridge Ahead Signs Missing	NA	
Brushing Required	No	
Approach Handrail/Guardrail	NA	
Posted Load Rating (tonnes)		
Road Surface	Good	

FLUMES

Upstream Flume	Good	Creek bed
Downstream Flume	Good	Creek bed

Rails to Trails
Routine Condition Culvert Inspection Form



Crossing Sutherland Creek	Structure # CW-042	Site # 5-3	Km 83.5	UTM Zone 11 N	UTM E 412445	UTM N 5434996
Trail Name C&WT	Height (m) 3	Width (m) 2.5	Length (m) 50.0	Diameter (m)	Material Rock tunnel	Flumes (Y or N) No

CHANNEL

Est. Present Water Level Depth (m) 0.2	Est. Present Water Level Width (m) 2.5	Est. High Water Level Clearance (m) 3
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HAZARDS

High Water? No	Scour? No	Ice? No	Debris? No	Aggradation? No
Hazard Comments				

REPAIRS (Priority = High, Medium, Low)

#	Priority	Description	Estimate (\$)
1	Low	Grout patch localized CIP wall spalling at outlet	1000
2			
3			
4			
5			

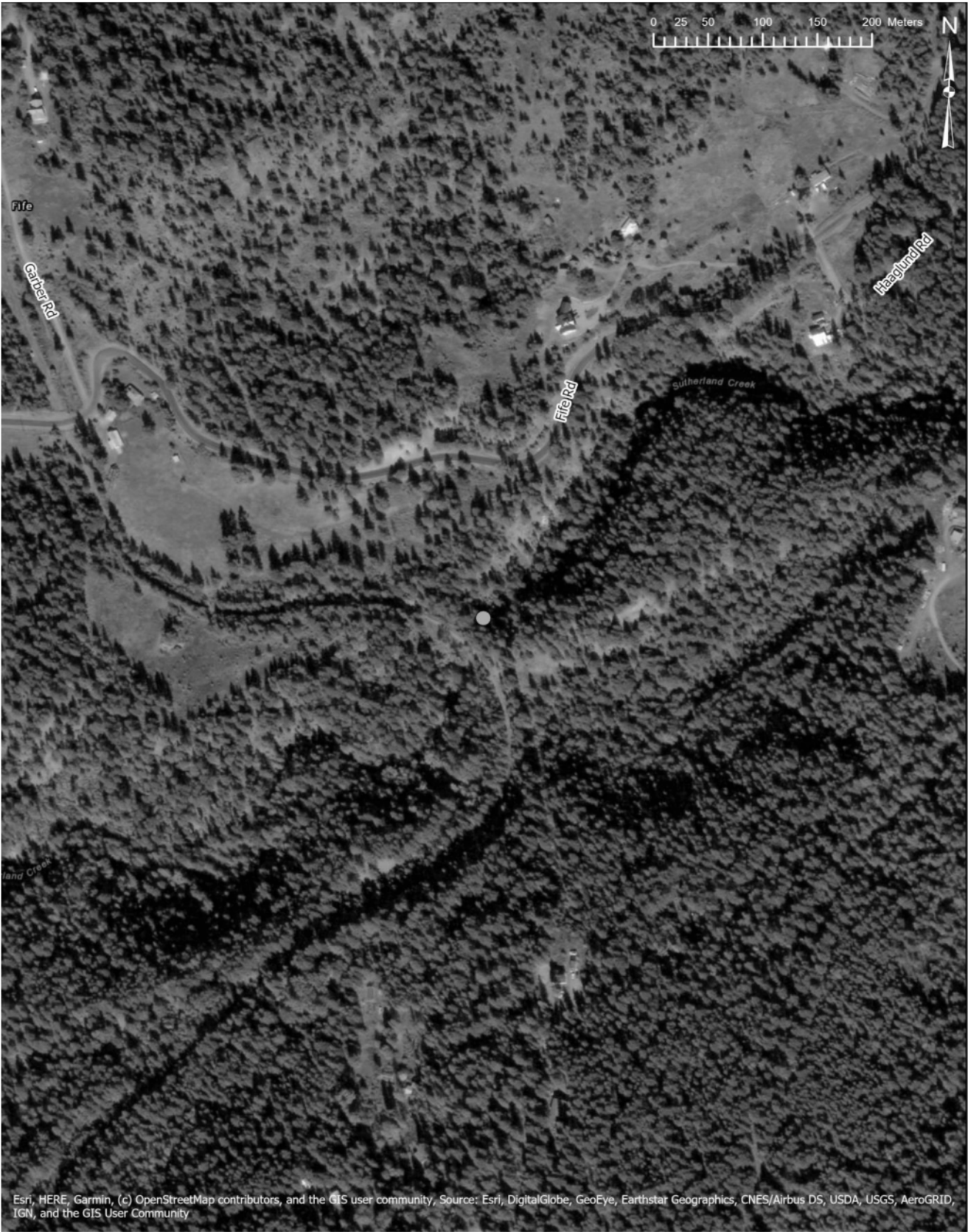
ITEMS TO MONITOR

#	Description
1	
2	
3	
4	
5	

General Comments	Rock tunnel. Ladder needed at inlet. Good condition. Minor localized spalling in CIP headwall at outlet
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P. Eng Inspection Required? No	Estimated Date of Replacement:		
PROFESSIONAL ENGINEER (P.Eng) CERTIFICATION			
Current Load Rating GVW (tonnes):	Reviewed by - P.Eng Sean Annan		Date Reviewed
New Load Rating GVW (Tonnes):			

Location



Rails to Trails
Routine Condition Culvert Inspection Form



Upstream channel



Rails to Trails
Routine Condition Culvert Inspection Form



Inlet



Rails to Trails
Routine Condition Culvert Inspection Form



Inlet



Rails to Trails
Routine Condition Culvert Inspection Form



2.5m rock and mortar headwall at inlet



Rails to Trails
Routine Condition Culvert Inspection Form



Outlet



Rails to Trails
Routine Condition Culvert Inspection Form



Outlet



Rails to Trails
Routine Condition Culvert Inspection Form



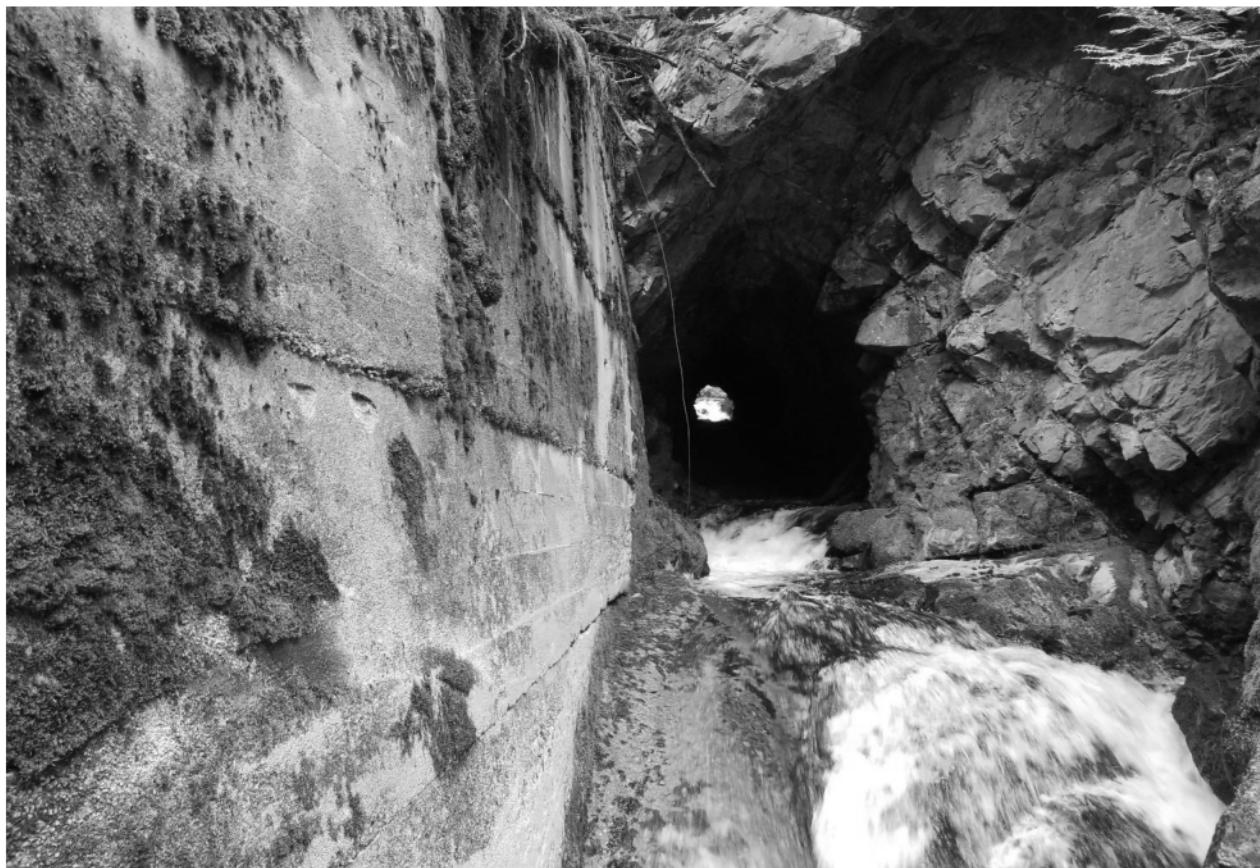
Outlet



Rails to Trails
Routine Condition Culvert Inspection Form



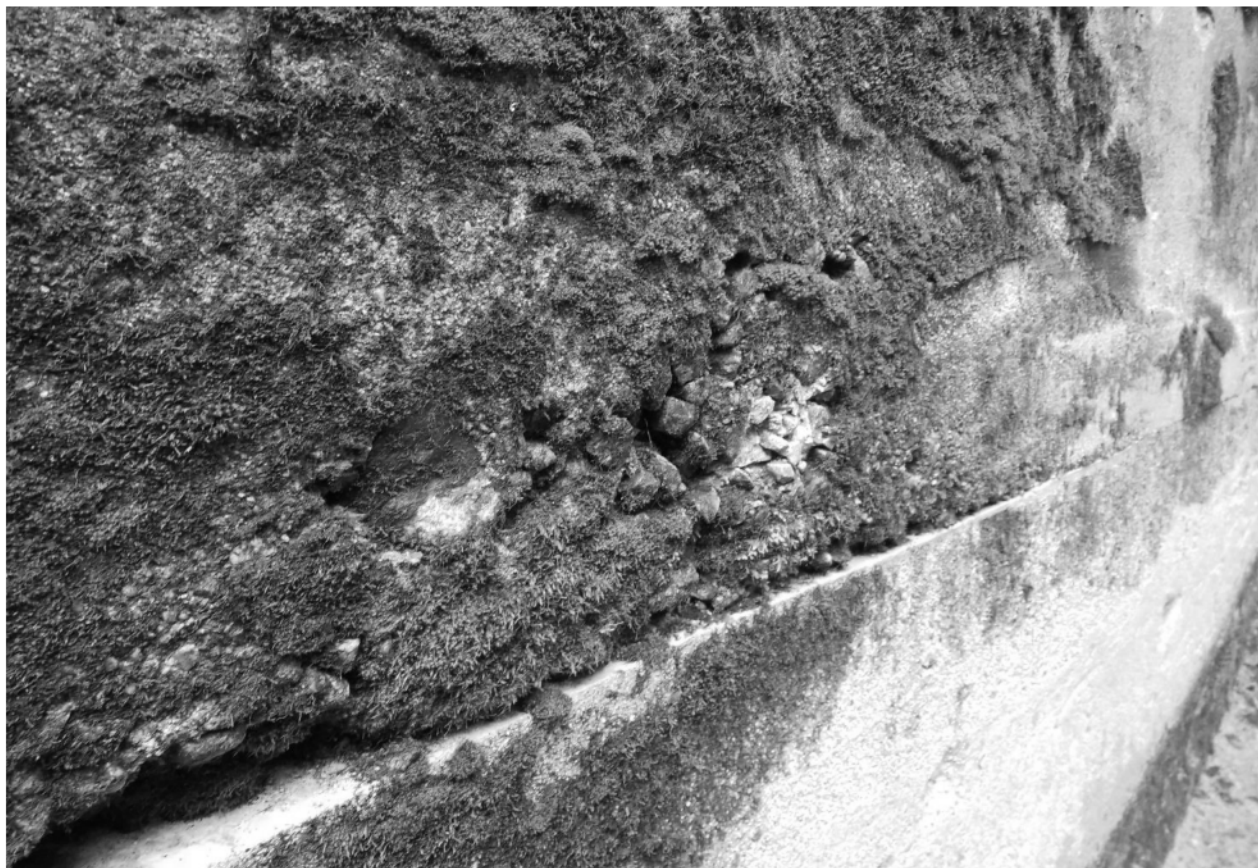
Outlet



Rails to Trails
Routine Condition Culvert Inspection Form



Localized spalling on outlet headwall





Natural Resource Ministries

Operational Services Contract

CONTRACT FILE NO: 10005-40/EN23474030	THIS AGREEMENT DATED FOR REFERENCE THE DAY OF 03 RD DAY OF AUGUST, 2022
PROJECT DESCRIPTION: ROUTINE BRIDGE AND MAJOR CULVERT INSPECTIONS – RAIL TRAILS LOCATED AT: LEGALLY ESTABLISHED RAIL TRAILS FROM SLOCAN CITY TO PRINCETON, BC	

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, as
represented by the MINISTER OF **FORESTS**

Engineering Branch, Southern Engineering Group
441 Columbia Street, Kamloops, British Columbia, V2C 2T3

Phone Number: (250) 250 309 7899FAX Number: (250) 828-4154
Ministry Representative: Alex Soukup
E-mail Address: alex.soukup@gov.bc.ca

(the "Province")

AND:

SNT ENGINEERING LTD.
#3 – 385 Baker Street
Nelson, British Columbia V1L 4H6

Phone Number: (250) 354-7683FAX Number: N/A
E-mail Address: info@snteng.ca

Contractor Representative: Les Thiessen
Business Number: 812341824BC0001
WorkSafe BC and/or Personal Optional Protection Number^{s.21}

(the "Contractor")

referred herein to as "the Parties".

WHEREAS:

- A.** The Province requires the Work described in this Agreement to be carried out for its benefit.
- B.** The Contractor is prepared to do the Work.
- C.** The Province and the Contractor have agreed that the Work shall be carried out in accordance with Contract Documents.

Accordingly, the Parties agree as follows:

ARTICLE 1 DEFINITIONS

1.01 In this document, the following words have the following meanings:

- (a) **"Agreement"** means the agreement between the Parties as set out in the Contract Documents;
- (b) **"Amending Document"** means an NRS600 Contract Modification Agreement form or another standard form of similar nature specified by the Province;
- (c) **"Assessment"** means a pre-estimate of damages incurred by the Province as a result of the Contractor's failure to perform, unsatisfactory performance or other non-compliance with the provisions of this Agreement;
- 1) **"Changed Condition"** means a materially changed physical condition at the Work Area which was not foreseen by the Contractor and which would not have been reasonably foreseen by a reasonable contractor who, before submitting its tender, conducted a thorough investigation of the work to be done to complete the Work, including a thorough inspection of the Work Area and review of all information available from the Province to persons wishing to submit tenders, but does not include any weather conditions or natural events;
- (d) **"Contract Documents"** means those documents described in Section 2.01 and the Work Progress Plan;
- (e) **"Contract Price"** means the total amount payable to the Contractor for satisfactory performance of the Work, as set out in Schedule 'B';
- (f) **"Contractor Representative"** means a person designated pursuant to Section 5.05;
- (g) **"Environmental Damage"** means:
 - i. slumping or sliding of land;
 - ii. inordinate soil disturbance; or
 - iii. other damage to the environment which the Province considers significant.
- (h) **"Equitable Adjustment"** means a fair and reasonable adjustment negotiated by the Parties to:
 - i. the Contract Price; or
 - ii. the time within which the Work is to be performed;
- (i) **"Fiscal Year"** means the period from April 1 to the next March 31 inclusive;
- (j) **"Incorporated Material"** means any material in existence prior to the start of the Term or developed independently of this Agreement, and that is incorporated or embedded in the Produced Material by the Contractor or a Subcontractor;
- (k) **"Material"** means the Produced Material and the Received Material;
- (l) **"Ministry Representative"** means a person appointed pursuant to Section 5.01;
- (m) **"Occupied Area"** means any Work Area, camp or rest area, or any other area occupied by the Contractor for the purposes of this Agreement;
- (n) **"Payment Area"** means a portion of a Work Area as specified in the Work Progress Plan which contains a specified amount of scheduled Work;
- (o) **"Performance Security"** means the security provided by the Contractor in accordance with Article 4;
- (p) **"Produced Material"** means records, software and other material, whether complete or not, that, as a result of this Agreement, are produced or provided by the Contractor or a Subcontractor and includes the Incorporated Material;
- (q) **"Received Material"** means records, software and other material, whether complete or not, that, as a result of this Agreement, are received by the Contractor or a Subcontractor from the Province or any other person;
- (r) **"Subcontractor"** means a person, firm or corporation contracting with the Contractor to perform a part or parts of the Work, or to supply products worked to a special design according to the Agreement, but does not include one who merely supplies products not so worked;
- (s) **"Shortfall"** means the difference between total Contract Price and the amount paid to the Contractor for Work satisfactorily completed;

- (t) **"Term"** means the period of time this Agreement is in force pursuant to Article 3;
 - (u) **"Work"** means all labour, supervision, administration, materials, transportation, supplies, tools, equipment and such other services and materials necessary or desirable to perform the services described in the Contract Documents, and includes any services which are not expressly described, but which are nevertheless necessary for the proper execution of the work;
 - (v) **"Work Area"** means the area shown outlined on the attached maps;
 - (w) **"Work Day"** means every day of the week except Saturday, Sunday and statutory holidays; and
 - (x) **"Work Progress Plan"** means the plan developed on a form approved by the Province and submitted to the Ministry Representative for approval which outlines the scope, timing, location and any other requirements of the Work.
- 1.02 If any of the words in Section 1.01 are used in any other Contract Document, they have the same meaning as in this document unless the context dictates otherwise.
- 1.03 Words or abbreviations which have well known technical or trade meanings are used in the Contract Documents in accordance with those recognized meanings.
- 1.04 The headings of the clauses of this Agreement have been inserted for reference only and do not define, limit, alter or enlarge the meaning of any provision of this Agreement.

ARTICLE 2 CONTRACT DOCUMENTS AND MODIFICATIONS

Contract Documents

- 2.01 The attached schedules are applicable to and form part of this Agreement:

Schedule	Title
Schedule "A"	Services
Schedule "B"	Contract Payment
Schedule "C"	Safety Conditions
Schedule "D"	Insurance Requirements
Schedule "E"	Prime Contractor Agreement – Not Applicable
Schedule "F"	SAFE Certification Requirement
Schedule "G"	Tax Verification and Appendix I – Not Applicable
Project Map(s)	IPAD_SIR KVR_82E_SE Grandforks KVR East Maintenance overview KVR Maintenance Fife - Midway
Attachment(s)	Drawing - Rail Trail Cross Section TYP

Amending Documents

- 2.02 No modification of this Agreement is effective unless it is in writing and signed by, or on behalf of, the Parties.

Interpretation

- 2.03 Any reference in the Contract Documents to a manual or a form means a manual or form published by or for the Province and includes every amendment of such manual or form and any manual or form published from time to time in substitution for them or replacement of such manual or form.
- 2.04 In the event of a conflict between the Contract Documents, the terms of this Document supersede all other Documents. In the event of a conflict between alike Contract Documents of different dates, the Document of later date prevails.

ARTICLE 3 TERM OF CONTRACT AND COMMENCEMENT OF WORK

- 3.01 The Term of this Agreement is from **August 12, 2022**, to **March 31st, 2023** inclusive, and work shall proceed in accordance with the Work Progress Plan.
- 3.02 The Contractor shall not conduct any Work until the Province notifies the Contractor to commence work.

- 3.03 The Contractor shall commence Work within 7 calendar days from the date specified in the Notice to Commence Work and regardless of the date of execution or delivery of this Agreement, the Contractor must provide the Services during the Term.
- 3.04 Time is of the essence in this Agreement and, without limitation, will remain of the essence after any modification or extension of this Agreement, whether or not expressly restated in the document effecting the modification or extension.

ARTICLE 4 CONTRACT PERFORMANCE SECURITIES

- 4.01 Upon request of the Province, the Contractor shall furnish Performance Security in the amount specified by and in a form and manner acceptable to the Province as security for the faithful performance by the Contractor of all Work.
- 4.02 The Province may retain any Performance Security until all Work has been completed in accordance with this Agreement. The Performance Security is subject to forfeiture, at the discretion of the Province, if the Contractor fails to perform or to comply with this Agreement.
- 4.03 If the Contractor fails to perform or comply with this Agreement, the Province may, in addition to terminating the Agreement and claiming the Performance Security, pursue any other remedies available to it under this Agreement or the laws of the Province of British Columbia.

ARTICLE 5 PARTY REPRESENTATIVES

Ministry Representative

- 5.01 The Province shall appoint a Ministry Representative who shall have full authority to act on behalf of the Province in connection with this Agreement.
- 5.02 Upon commencement of this Agreement, the Province shall notify the Contractor of the name of the Ministry Representative.
- 5.03 The Province may substitute a Ministry Representative at any time, and shall immediately notify the Contractor of the change.
- 5.04 The Ministry Representative may require the Contractor to do anything necessary to satisfy the Ministry Representative that the Work is being performed in accordance with the Contract Documents.

Contractor Representative

- 5.05 The Contractor shall appoint a Contractor Representative fluent in English, who shall:
- (a) have full authority to act on behalf of the Contractor in connection with the Work and the Agreement; and
 - (b) be available to the Ministry Representative, when requested, and be present at all times at any site where the Work is carried out.
- 5.06 Upon entering into this Agreement, the Contractor shall notify the Province of the name, address and telephone number of the Contractor Representative appointed pursuant to Section 5.05.
- 5.07 The Contractor shall not substitute a Contractor Representative without the written consent of the Ministry Representative.
- 5.08 If, in the reasonable opinion of the Ministry Representative, the Contractor Representative is not suitably experienced or is unable to properly supervise the Work or communicate with the Ministry Representative, then the Contractor shall, upon receipt of written notice from the Ministry Representative, replace that representative and immediately notify the Province of that change.
- 5.09 All Work carried out by the Contractor or the Subcontractor must be under the direct and continuous supervision of the Contractor or the Contractor Representative.

ARTICLE 6 STANDARDS OF PERFORMANCE AND WORK PROGRESS

Work Progress Plan

- 6.01 The Contractor Representative shall meet with the Ministry Representative before the commencement of Work to:
- (a) inspect the Work Area, and
 - (b) review the Contract Documents and work performance requirements.
- 6.02 The Work Progress Plan may divide the scheduled Work into Payment Areas. Where no Payment Areas are approved the entire Work Area shall be considered to be one Payment Area.
- 6.03 The Work shall proceed in accordance with the Work Progress Plan.

Standards of Performance

- 6.04 The Contractor acknowledges it has satisfied itself to:
- (a) the nature and magnitude of the Work; and
 - (b) the general character, quality and quantity of the equipment and materials required to execute and complete the Work.
- Any failure by the Contractor to discover matters which affect or could affect the Work does not relieve the Contractor from its obligations under this Agreement or otherwise affect the Contract Price.
- 6.05 The Contractor shall at all times exercise the standard of care, skill and diligence normally exercised and observed by persons engaged in the performance of activities similar to the Work.

Continuity and Suspension of Work

- 6.06 The actual date the Work may commence is dependent upon the weather and completion of the Work Progress Plan. Once commenced, Work shall be continuous except as provided for in Section 6.09.
- 6.07 If the Province reasonably decides that weather or other conditions make it unsuitable for Work to proceed, it may suspend operations for a specified or an indefinite period, and it may require the Contractor remain available for up to five (5) consecutive Work Days to resume work as specified by the Province. If the suspension exceeds twenty-four (24) hours the Parties shall negotiate an Equitable Adjustment to the Contract Price to compensate the Contractor for reasonable and substantiated out-of-pocket costs incurred during the suspension.
- 6.08 In the event operations are suspended under Section 6.07, the Term may be extended by a length of time agreed to by the Parties.
- 6.09 If the Province, having suspended Work pursuant to Section 6.07, does not permit Work to resume within five (5) Work Days, either Party may, by giving written notice to the other Party, terminate this Contract without penalty. Neither Party is liable for compensation of any kind arising out of the suspension of operations. Payment shall be made for all Work satisfactorily performed before the suspension of Work.
- 6.10 A suspension pursuant to Section 6.07 to be effective must be in writing and delivered to the Contractor by a method provided for in Section 15.06.

ARTICLE 7 INDEMNIFICATION AND INSURANCE

Indemnity

- 7.01 You must indemnify and save harmless the Province and its employees and agents from any loss, claim (including any claims of infringement of third party intellectual property rights), damage award, action, cause of action, cost or expense that the Province or any of its employees or agents may sustain, incur, suffer or be put to at any time either before or after this Agreement ends, (each a "Loss"), to the extent the Loss is directly or indirectly caused or contributed to by:
- (a) any act or omission by you or your agents, employees, officers, directors or Subcontractors in connection with this Agreement; or
 - (b) any representation or warranty by you being or becoming untrue or incorrect.

- 7.02 Neither the Province nor its Ministry Representative in charge, its agents, authorized representatives, or employees are personally liable for any act performed in the discharge of any duty imposed or in the exercise of any power or authority conferred upon them by, or within the scope of, the Agreement if it can be demonstrated that all reasonable care was exercised in the conduct of the operations; in all such matters these persons act solely as agents and representatives of the Province.
- 7.03 Neither the Province nor any of its employees, authorized representatives, or agents are liable to the Contractor or the Contractor's employees or agents for any injury, loss, or damage however occasioned to any of them or their equipment or livestock while being transported or conveyed in any vessel, boat, aircraft owned or operated by the Province, and the Contractor shall not undertake claims against the Province, its employees, authorized representatives, or agents to recover any such injury, loss or damage either on its own behalf or on behalf of its employees or agents. The Contractor shall indemnify and save harmless the Province, its employees, authorized representatives, or agents from any such claims initiated by the Contractor's employees, subcontractors, servants, or agents.

Insurance

- 7.04 During the Term, the Contractor shall pay and maintain insurance coverage as specified in writing by the Province from time to time.

ARTICLE 8 PROTECTION OF WORK AND PROPERTY

General

- 8.01 The Contractor shall protect the Province's property from damage and is responsible for damage which may arise as the result of the Contractor's operations under the Agreement, except damage which occurs as a result of the acts or omissions of the Province or its other contractors, agents and employees.

Protection of the Environment

- 8.02 If the Contractor encounters circumstances such as weather conditions or site factors where the Contractor knows or should reasonably know that proceeding with the Work may, directly or indirectly, cause Environmental Damage, the Contractor shall:
- (a) immediately suspend such Work;
 - (b) immediately advise the Province of the suspension and circumstances;
 - (c) not proceed with such Work until the Province so instructs; and
 - (d) upon the Province's instruction to proceed with such Work, do so in accordance with the Province's instructions.
- 8.03 The Contractor shall not be deemed to be in breach of this Agreement for suspending Work pursuant to Section 8.02.

Fire Protection

- 8.04 The Contractor shall:
- (a) take every precaution to prevent unintentional fire from occurring on or about the Work Area,
 - (b) ensure that no person burns any debris on or about the Work Area unless authorized under a Burning Reference Number issued by the Ministry of Forests, Lands and Natural Resource Operations, BC Wildfire Services, and
 - (c) ensure that, with respect to smoking,
 - (i) no person smokes except in areas that are free of or fully cleared of all flammable material,
 - (ii) no burning material falls outside cleared areas, and
 - (iii) all burning material is completely extinguished before leaving cleared areas.

ARTICLE 9 COMPLIANCE WITH THE LAW

- 9.01 This Agreement is governed by, and is to be interpreted and construed in accordance with, the laws of the Province of British Columbia, including, but not limited to, the *Employment Standards Act* and its Regulations.

- 9.02 The Contractor shall comply with, and must ensure that any Subcontractors comply with, all applicable occupational health and safety laws in relation to the performance of the Contractor's obligations under this Agreement, including the *Workers Compensation Act* in British Columbia or similar laws in other jurisdictions.
- 9.03 Without limiting Section 9.02, the Contractor:
- (a) may be considered the "Prime Contractor" for the Work, as described in the attached Safety Conditions Schedule, and as such shall enter into a Prime Contractor Agreement and carry out the duties as described therein;
 - (b) shall be solely responsible for safety at the Work Area;
 - (c) shall, at its own expense, provide the necessary WorkSafe BC compensation coverage for itself, all workers and any shareholders, directors, partners or other individuals employed or engaged in the performance of the Work and shall ensure all approved Subcontractors obtain WorkSafe BC coverage;
 - (d) if the Contractor or its Subcontractors do not have the benefit of mandatory workers compensation coverage under the *Workers Compensation Act*, then the Contractor shall ensure that it and its Subcontractors apply for and obtain Personal Optional Protection under the *Workers Compensation Act*;
 - (e) shall be responsible for and pay for all fines, assessments, penalties, and levies made or imposed under the *Workers' Compensation Act* and regulations relating in any way to the Work;
 - (f) upon request, provide the Province with evidence of compliance with Section 9.03 (c) and (d);
 - (g) shall promptly pay all persons employed or engaged in the execution of the Work; and
 - (h) shall obtain all licences and permits required by law to carry out the Work, unless obtained by the Province and provided to the Contractor before commencement of the Work, and provide the Province with proof of having obtained those licences or permits.
- 9.04 Nothing in this Agreement shall relieve the Contractor from its responsibility to comply with all applicable provisions of the *Forest & Range Practices Act* and its regulations.

ARTICLE 10 CHANGED CONDITION

- 10.01 If a Changed Condition occurs during the course of the Work, the following applies:
- (a) The Parties shall immediately advise each other of particulars of the Changed Condition and the Contractor Representative and the Ministry Representative shall meet to attempt to deal with the condition.
 - (b) If the Changed Condition is so substantial that amending the Agreement to deal with the change would change the essential nature of the Work, then either Party may elect not to proceed with the Work any further and the contract shall be brought to an end. If either Party so elects, the following shall apply:
 - (i) The Contractor shall be entitled to receive payment for any Work which the Contractor has satisfactorily completed;
 - (ii) If the payment under (i) is for 90% or greater of the original total volume of Work the Contractor shall be entitled to no additional payments;
 - (iii) If the payment under (i) is for less than 90% of the original total volume of Work the Contractor shall be entitled to an additional payment calculated as 15% of the Shortfall that is less than 90% of the original volume of Work multiplied by the average price per unit as shown in the following equation:

$$0.15 \times (0.90 \times [\text{original volume of Work}] \text{ minus } [\text{volume of Work completed}]) \times (\text{average price per unit}).$$
 - (c) If the Changed Condition can be dealt with by the substitution of an alternate Work Area or by other amendment to the Agreement and if such substitution or other amendment will not change the essential nature of the Work, then the Province may, in its discretion, substitute such an alternate Work Area (and make changes to this Agreement that are appropriate to deal with the substitution) or make other amendments to this Agreement. The Contractor shall be obliged to proceed on that basis. If the parties cannot agree on a price for the Work as amended in the substituted Work Area, then the price shall subsequently be determined pursuant to Article 14.

- (d) The Province is not obliged to make any payment under Section 10.01 (b)(ii) and (iii), or to satisfy any claim by the Contractor for any losses occasioned by such a shortfall if the Shortfall is occasioned by an Act of God, unsuitable weather, natural disaster, withdrawal of labour in disputes, or any other unforeseeable cause over which the Province has no direct control.

ARTICLE 11 INSPECTION AND ACCEPTANCE

Request for Inspection and Acceptance

- 11.01 The Contractor shall, upon completing all Work within a Payment Area, promptly request that the Province inspect and determine the acceptability of the Work. The request must be in writing, may take the form of an invoice, and, must be delivered to the Province by a method provided for in Section 15.06.

Inspection by the Province

- 11.02 The Province shall, following receipt of the Contractor's request for inspection and acceptance, promptly inspect and determine the acceptability of the Work performed in the Payment Area. Work shall be inspected in accordance with the Contract Documents. The Province is not obliged to make any determination of acceptability before receiving the written request.
- 11.03 The Contractor is encouraged, but not required, to observe inspections while they are underway.
- 11.04 The Province shall provide the Contractor with a copy of inspection results.
- 11.05 The Province reserves the right to inspect, at all times during the Term and without notice to the Contractor, any Work performed.
- 11.06 The Contractor shall pay the Province, on demand, all direct and indirect additional inspection costs incurred because Payment Areas were not fully completed by the time specified in the Contractor's request for inspection and acceptance.
- 11.07 Inspections are conducted by the Province in order to determine compliance with the provisions of this Agreement and to provide the basis for calculating the payment due. These inspections are conducted for the sole benefit of the Province, and do not release the Contractor from the responsibility of providing quality control measures to assure that the Work strictly complies with this Agreement.

Re-Inspection

- 11.08 If the results of an inspection are unacceptable to the Contractor, it may, if it does so within three (3) Work Days of receiving the inspection results, request the Province re-inspect the Work.
- 11.09 If the Contractor requests a re-inspection of the Work, the Province shall perform the re-inspection at a time mutually agreed to by the Parties, but in any event no later than ten (10) Work Days after receiving the request.
- 11.10 The results of the re-inspection shall be used to determine payment and shall be final and binding.
- 11.11 The Contractor shall pay the Province's costs of the re-inspection only if the difference in Work quality between the original inspection and the re-inspection is less than ten percent (10%) of the original inspection results.
- 11.12 If the Province bears the costs of the re-inspection, it shall also pay the Contractor, if they are present for the entire re-inspection, the sum of two hundred and fifty dollars (\$250.00) for time spent re-inspecting.

ARTICLE 12 MEASUREMENT AND PAYMENT

Payment

- 12.01 If the Contractor complies with this Agreement, the Province shall pay the Contractor for all Work at the rates [inclusive of taxes paid or payable by the Contractor to a supplier but exclusive of any applicable Provincial Sales Tax (PST) that the Contractor is required to charge the Province as a taxable transaction and the Goods and Services Tax (GST)] and times described in Schedule B and we are not obliged to pay you more than the maximum amount or dollar limit specified in Schedule B.

- 12.02 Expenses, if payable, will be exclusive of GST or other applicable tax paid or payable to the extent the Contractor is entitled to claim credits (including GST input tax credits), rebates, refunds or remissions of the tax from the relevant taxation authorities.
- 12.03 The Province will pay any applicable taxes payable under law or agreement with the relevant taxation authorities. Invoices must show the calculation of any applicable taxes (excluding taxes paid directly by the Contractor to a supplier and which were inclusive in the bid price) to be paid as a separate line item and expenses must be listed chronologically, be in reasonable detail and with dates of all expenses claimed with receipts or copies of receipts, where applicable, attached.
- 12.04 Our obligation to pay money to you is subject to the *Financial Administration Act*, which makes that obligation subject to an appropriation being available in the fiscal year of the Province during which payment becomes due.
- 12.05 Unless otherwise specified in this Agreement, all references to money are to Canadian dollars.

Payment Initiation

- 12.06 The Province shall upon acceptance of the Work within a Payment Area, promptly initiate a payment.

Holdback

- 12.07 The Province is not obliged to advance to the Contractor more than ninety percent (90%) of the calculated amount of any payment. The ten percent (10%) holdback shall be retained for forty (40) calendar days after the completion, or earlier termination, of all Work and interest is not payable on the amount held back by the Province.
- 12.08 The Province is authorized, but not obliged, to apply the holdback funds as follows:
- (a) firstly, to any unpaid government agencies;
 - (b) secondly, to the Contractor's and Subcontractor's unpaid workers, Subcontractors and material suppliers; and
 - (c) thirdly, as security for the correction of any breach of, or for payment of any Assessment provided for in, this Agreement.

Payment for Part Performance

- 12.09 If this Agreement expires or is terminated before completion of the Work, the Province shall only pay for that portion of the Work completed to the satisfaction of the Province before the said expiration or termination.

Method of Measurement

- 12.10 All linear and area measurements under this Agreement are measured on the horizontal plane, unless specified otherwise in an attached Schedule.

Remeasurements

- 12.11 If the calculation of a payment depends upon the area completed, and if the Contractor believes the area used in calculating that payment is incorrect, the Contractor may request the Province remeasure the Payment Area. The request shall be delivered in writing to the Province, within three (3) Work Days of the Contractor receiving a copy of the payment calculation for the Payment Area in question.
- 12.12 If the Province's remeasurement indicates that the originally specified area was correct within five percent (5%), the original measurement will be used and the Contractor will pay for the cost of the remeasurement. If the difference between measurements exceeds five percent (5%), payment will be based on the second measurement without charge for the remeasurement.

Appropriation

- 12.13 Despite any other provision of this Agreement, the Province's obligation to pay the Contractor, pursuant to this Agreement, is subject to:
- (a) the Legislative Assembly of the Province of British Columbia having provided sufficient funds to enable the Province, in any Fiscal Year or part thereof, to make payment pursuant to this Agreement when it is due; and
 - (b) Treasury Board not having controlled or limited expenditure of any funds.

ARTICLE 13 NON-COMPLIANCE AND TERMINATION

Termination by the Province

- 13.01 The Province may, at its sole discretion, terminate this Agreement at any time, and no claim may be made by the Contractor for any losses occasioned by that termination if the termination:
- (a) occurs before the Province notifies the Contractor to commence Work;
 - (b) is caused by an Act of God, unsuitable weather, natural disaster, withdrawal of labour in labour disputes, or any other unforeseeable causes over which the Province has no direct control; or
 - (c) is caused by an Event of Default.

Mutual Termination

- 13.02 This Agreement may be terminated at any time by the mutual consent of the Parties.

Contract Performance Security

- 13.03 If the Province terminates this Agreement, the Contract Performance Security will only be returned to the Contractor if the termination is occasioned by an Act of God, unsuitable weather, natural disaster, withdrawal of labour in labour disputes, or any other unforeseeable cause clearly beyond the control of the Contractor.

Non-Compliance with Agreement Provisions

- 13.04 An "Event of Default" means any of the following:
- (a) failure to perform any of the Contractor's obligations under this Agreement, or
 - (b) any representation or warranty made by the Contractor in this Agreement (including as part of any competitive process resulting in this Agreement being entered into) is untrue or incorrect, or
 - (c) an Insolvency Event, which means any of the following:
 - (i) an order is made, a resolution is passed or a petition is filed, for the Contractor's liquidation or winding up,
 - (ii) the Contractor commits an act of bankruptcy, makes an assignment for the benefit of its creditors or otherwise acknowledges its insolvency,
 - (iii) a bankruptcy petition is filed or presented against the Contractor or a proposal under the *Bankruptcy and Insolvency Act* (Canada) is made by the Contractor,
 - (iv) a compromise or arrangement is proposed in respect of the Contractor under the *Companies' Creditors Arrangement Act* (Canada),
 - (v) a receiver or receiver-manager is appointed for any of the Contractor's property, or
 - (vi) the Contractor ceases, in our reasonable opinion, to carry on business as a going concern.
- 13.05 On the happening of an Event of Default, or at any time thereafter, the Province may, at its option, by written notice to the Contractor do any one or more of the following:
- (a) require that the Event of Default be remedied within a time period specified in the notice;
 - (b) require the Contractor to re-work the area to the Province's satisfaction within a time period specified in the notice;
 - (c) impose other requirements on the Contractor to deal with the alleged failure of compliance within a time period specified in the notice;
 - (d) pursue any remedy or take any other action available to us at law or in equity; or
 - (e) impose an Assessment if such an Assessment is provided for in the Contract Documents;
 - (f) require the Contractor to do no further Work until the alleged failure of compliance is dealt with according to the Province's requirements; and
 - (g) by written notice to you, terminate this Agreement with immediate effect or on a future date specified in the notice, subject to the expiration of any time period specified under Section 13.05(a).

These remedies shall be in addition to and not instead of any other remedy which the Province may have with respect to the Contractor's breach of this Agreement.

- 13.06 No failure or delay on the Province's part to exercise its rights in relation to an Event of Default will constitute a waiver of such rights.
- 13.07 If you become aware that an Event of Default has occurred or anticipates that an Event of Default is likely to occur, you must promptly notify us of the particulars of the Event of Default or anticipated Event of Default. A notice under this section as to the occurrence of an Event of Default must also specify the steps you propose to take to address, or prevent recurrence of, the Event of Default. A notice under this section as to an anticipated Event of Default must specify the steps you propose to take to prevent the occurrence of the anticipated Event of Default.
- 13.08 Where the Contractor has reworked an area the Province shall inspect any re-worked area and the results of the inspection shall supersede any previous inspection results. The Contractor shall pay the Province's costs of the inspection.
- 13.09 For the purposes of imposing an Assessment, the Province need not notify the Contractor before imposing an Assessment.
- 13.10 If the Province imposes an Assessment on the Contractor, the Assessment may be collected by deduction from a payment under this Agreement, any Contract Performance Security or from any holdback.
- 13.11 If the Contractor does not agree with the Province that there has been a failure to comply, the Contractor shall comply with any and all of the requirements imposed by the Province, but the Contractor shall have the right to seek compensation from the Province under Article 14, if there in fact was no failure to comply.

ARTICLE 14 DISPUTE RESOLUTION

- 14.01 If a dispute occurs between the Parties concerning any matter governed by this Agreement, the disputing Party shall promptly advise the other Party and the Parties together shall use all reasonable efforts to resolve the dispute informally.
- 14.02 If the Parties are unable to resolve the dispute informally, within five (5) Work Days, the Contractor shall then give Notice, within ten (10) Work Days, of the complaint to the Ministry Representative, which particulars shall include the following:
 - (a) a detailed description of the nature of the complaint;
 - (b) a list of the relevant provisions of the Contract Documents; and
 - (c) an evaluation by the Contractor of the matters in dispute.
- 14.03 The Province shall, within twenty (20) Work Days of receipt by the Ministry Representative of the written particulars, give the Contractor a decision, in writing, of one of the following:
 - (a) that the Province accepts the position of the Contractor; or
 - (b) that the Province rejects the position of the Contractor.
- 14.04 If the Province accepts the position of the Contractor, the Parties shall enter into an Amending Document to reflect the Agreement.
- 14.05 If the Province rejects the position of the Contractor, the Parties shall proceed to mediation with a mutually agreed upon third party. If the dispute is not resolved within fifteen (15) Work Days of appointment of the mediator, then the Parties may, if they both agree, proceed to arbitration pursuant to the *Commercial Arbitration Act*.
- 14.06 If the matter in dispute is not resolved promptly pursuant to Section 14.01, the Ministry Representative may give to the Contractor instructions that in his or her opinion are necessary to provide for the proper performance of the Work and to prevent delays.
- 14.07 If the Contractor receives instructions pursuant to Section 14.06, the Contractor shall act immediately to carry out the Work pursuant to the instructions, but any Work performed by the Contractor in this respect shall be without prejudice to any claim the Contractor may have concerning the dispute.

- 14.08 Nothing in this Article precludes either Party from having a dispute resolved by a court of competent jurisdiction, although no steps shall be taken by either Party to initiate legal proceedings until after the process described in Sections 14.01 through 14.03 has been completed.

ARTICLE 15 MISCELLANEOUS

Confidentiality

- 15.01 The Contractor will treat as confidential and will not, without the prior written consent of the Province, disclose or permit to be disclosed or used, either before or after the expiration or sooner termination of this Agreement, all information supplied to, accessed or obtained by, or which comes to the knowledge of the Contractor or a Subcontractor (whether verbally, electronically or otherwise) as a result of this Agreement except if the disclosure is necessary to enable the Contractor to fulfill its obligations or to comply with applicable laws or if it is information that is generally known to the public other than as a result of a breach of this Agreement.

Contractor Status

- 15.02 In relation to the performance of your obligations under this Agreement, you are an independent contractor and not our:
- (a) employee or partner; or
 - (b) agent except as may be expressly provided for in this Agreement.

You must not act or purport to act contrary to this section.

- 15.03 The Contractor shall accept instructions from the Province, but the Contractor is not subject to the control of the Province in respect of the manner in which instructions are carried out.
- 15.04 The Contractor shall not purport to commit the Province to the payment of any money to any person.
- 15.05 The Contractor shall ensure all personnel hired by the Contractor to perform the Work are at all times employees of the Contractor and not of the Province. The Contractor is solely responsible for arranging reliefs and substitutions, pay, supervision, discipline, employment insurance, leave and all other matters arising out of the relationship of employer and employee.

Notices

- 15.06 Any notice or document required to be given under this Agreement shall be conclusively deemed to be validly given or delivered to and received by the Parties at the work site or at the address, facsimile, or email address specified on the first page of this Agreement (or at such other address as either Party may from time to time designate by notice in writing to the other):
- (a) if hand delivered to the Party or the specified Party representative, on the date of that personal delivery;
 - (b) if prepaid post and if mailed during any period when normal postal services prevail, on the fifth business day after its mailing;
 - (c) if delivered by courier service, on the fifth business day after collection by the courier service;
 - (d) if sent by facsimile or electronic transmission, on the day of transmittal unless transmitted after the normal business hours of the addressee or on a day that is not a Work Day, in which case it will be deemed to be received on the next following Work Day.

Non-Waiver

- 15.07 A waiver of any term or breach of this Agreement is effective only if it is in writing and signed by, or on behalf of, the waiving Party and is not a waiver of any other term or breach.

Contractor-Furnished Facilities

- 15.08 Except where specified otherwise in the Contract Documents, the Contractor shall undertake all Work and furnish at its cost all labour, equipment, supervision, transportation, supplies and incidentals necessary to perform the Work.

Unsuitable Workers

- 15.09 The Contractor must provide a sufficient number of persons to perform the Work and shall ensure all persons are fully instructed and supervised, legally entitled to work in Canada, competent, English literate, efficient, qualified by education, adequately trained, and experienced to carry out the tasks to which each is assigned.
- 15.10 The Contractor shall, upon request of the Ministry Representative, remove any person it employs for purposes of the Agreement who, in the reasonable opinion of the Province, is incompetent or has conducted himself or herself improperly, and the Contractor shall not permit a person who has been so removed to perform any further Work.

Survival of Terms

- 15.11 All terms of this Agreement in favour of the Province and all rights and remedies of the Province, either at law or in equity, survive the expiry or sooner termination of this Agreement subject to any applicable limitation period prescribed by law.

Material and Intellectual Property

- 15.12 If the Contractor receives a request for access to any of the Material from a person other than the Province, and this Agreement does not require or authorize the Contractor to provide that access, the Contractor must promptly advise the person to make the request to the Province.
- 15.13 The Province exclusively owns all property rights in the Material that are not intellectual property rights. Any equipment property the Province may provide to the Contractor or a Subcontractor is the Province's exclusive property. The Contractor must deliver any Material or equipment property to us immediately following expiration of this Agreement, or sooner upon our request, in the same condition it was supplied to the Contractor, excepting always loss or damage attributable to reasonable wear or tear.
- 15.14 The Province exclusively owns all intellectual property rights, including copyright in:
- (a) Received Material the Contractor receives from the Province, and
 - (b) Produced Material, other than any Incorporated Material.

Upon the Province's request, the Contractor must deliver to the Province documents satisfactory to the Province that irrevocably waives in the Province's favour any moral rights that the Contractor (or its employees) or a Subcontractor (or its employees) may have in the Produced Material and confirm the vesting in the Province of the copyright in the Produced Material, other than any Incorporated Material,

- 15.15 Upon any Incorporated Material being embedded or incorporated in the Produced Material and to the extent that it remains so embedded or incorporated, you grant the Province:
- (a) a non-exclusive, perpetual, irrevocable, royalty-free, worldwide license to exercise, in respect of that Incorporated Material, the rights set out in the *Copyright Act* (Canada), including the right to use, reproduce, modify, publish and distribute that Incorporated Material; and
 - (b) the right to sublicense or assign to third-parties any or all of the rights granted to the Province under section 15.15(a).

Conflict of Interest

- 15.16 The Contractor shall not perform any service to any other person, firm or corporation in circumstances which, in the reasonable opinion of the Province, could give rise to a conflict of interest between the Contractor's obligations to that person and the Contractor's obligation under this Agreement.

Site Clean Up

- 15.17 The Contractor shall maintain the Occupied Areas free from any accumulations of waste products or debris, other than that caused by the Province or other contractors.
- 15.18 Upon the Contractor vacating any Occupied Area, the Ministry Representative shall inspect the area to determine, at his or her sole discretion, whether or not the area was left in an acceptable condition.
- 15.19 If the Ministry Representative determines the Contractor left the Occupied Area in an unacceptable condition, the Province may repair the area and charge the entire cost of the repairs to the Contractor.

Camping and Parking

15.20 Use of Provincial sites by the Contractor or the Contractor's employees or agents for the purposes of lodgings, camping or trailer parking in connection with Work under this Agreement, is permitted only with the prior written approval of:

- (a) on recreational sites, a representative of the Ministry of Forests, Lands and Natural Resource Operations, Recreation Sites and Trails Branch;
- (b) on other Provincial Crown forest land including roads and landings, the Ministry Representative appointed pursuant to Section 5.01 of this Agreement;

Such use, if approved, shall be at the Contractor's own expense, if any. The approval may be revised or revoked at any time by the Province.

Powers Cumulative

15.21 The powers set out in the Contract Documents for the Province to enforce the Contractor's compliance with this Agreement may be exercised separately, concurrently or cumulatively.

Agreement Execution

15.22 This Agreement may be entered into by a separate copy of this Agreement being executed by, or on behalf of, each party and that executed copy being delivered to the other party by a method provided for in Section 15.06 or any other method agreed to by the parties.

Non-transferable


15.23 The Contractor must not assign any of its rights or obligations under this Agreement without the Province's prior written consent. Upon providing written notice to the Contractor, the Province may assign to any person any of the Province's rights under this Agreement and may assign to any "government corporation", as defined in the Financial Administration Act, any of the Province's obligations under this Agreement.

Representations and Warranties

15.24 As at the date this Agreement is executed and delivered by, or on behalf of, the Parties, the Contractor represents and warrants, except to the extent it has previously disclosed otherwise in writing to the Province,:

- (a) all information, statements, documents and reports furnished or submitted by it to the Province in connection with this Agreement (including as part of any competitive process resulting in this Agreement being entered into) are in all material respects true and correct; and
- (b) if the Contractor is not an individual:
 - i) it has the power and capacity to enter into this Agreement and to observe, perform and comply with the terms of this Agreement and all necessary corporate or other proceedings have been taken and done to authorize the execution and delivery of this Agreement by, or on its behalf, and
 - ii) this Agreement has been legally and properly executed by the Contractor, or on its behalf, and is legally binding upon and enforceable against the Contractor in accordance with its terms.

15.25 The Parties hereto have duly executed this Agreement.

SIGNED AND DELIVERED on behalf of the Province by an authorized representative of the Province	SIGNED AND DELIVERED by or on behalf of the Contractor (or by an authorized signatory of the Contractor if a corporation)
	
(Authorized Ministry /Expense Authority) Drew Alway	(Contractor or Authorized Signatory) Les Thiessen
Dated this ____ day of August____, 2022	Dated this 15 day of August____, 2022



Schedule A - Services

File: 10005-40/EN23474030

Attachment to the Agreement with SNT Engineering Ltd. for Routine Bridge & Major Culvert Inspections – Rail Trails (KVR, C&WR, SVR).

1. THE SERVICES

The Contractor shall provide the following Services:

LINK TO FTP SITE FOR MAPS

[https://www.for.gov.bc.ca/ftp/RSI/external!/publish/2022%20Bridge%20Inspection%20Contracts/EN23474030%20\(Railtrail\)/](https://www.for.gov.bc.ca/ftp/RSI/external!/publish/2022%20Bridge%20Inspection%20Contracts/EN23474030%20(Railtrail)/)

1. **Synopsis**

Structure inspection data for the Provincially owned rail trails has been recently added to, and is now housed, managed, collected and distributed in an Oracle database called the Corporate Bridge Register (CBR). CBR recently upgraded its data set to include Rec Sites and Trails BC's (RSTBC) inventory of rail trail structures. These routine inspections will be the first inspections to use the newly added CBR data. As a result, previous inspection data will be found as files uploaded to the 'Structure Documents and Photos' tab. Inspectors are required to deliver all the reporting to the MOF through [CBR Offline Client](#).

The work consists of:

- Performing routine inspections on Bridges and Major Culverts on the Provincially owned rail trails, including the Kettle Valley Rail Trail (KVR), the legally established trail portion of the Columbia & Western Rail Trail (C&WR) and the Slocan Valley Rail Trail (SVR). These segments of rail trail are located within the Cascades Natural Resource District (DCS), the Okanagan-Shuswap Resource District (DOS), and the Selkirk Natural Resource District (DSE).
 - a) Rail Trail Bridges and Major Culverts vary considerably in size, complexity and risk. The **average** length/span of the crossing structures which require inspection is 38m.
 - b) Many bridges are multi-span structures and many of the major culverts are buried under 6m to 50m (vertical) of fill.
 - c) A subset of 5 bridges on the list are all-timber structures.
- Performing other bridge inspection work as directed (as outlined later in this document).
- Providing data entry of the above inspections.
- Providing data management services as directed.
- Provide a list of priority works for structures that pose immediate risk to downstream resources or to public safety recommending further inspection (close proximity), maintenance, interventions or other measures. This list includes structures that are near failure only.

SCHEDULE A
SERVICES (Continued)

2. Timelines

Routine Inspection work shall be completed as follows:

- 25 percent of structures inspected by September 12th, 2022
- 100 percent of structures inspected by October 14th, 2022

Failure to meet this schedule may result in the MOF reducing the number of structures to be inspected and reassigning to others. Alternately the MOF may stop work and terminate the contract. If requested the contractor is to report production on a weekly basis.

Note: uploading of inspection data via CBR Offline Client must be completed by November 1st, 2022.

3. Qualifications

The inspection crew shall consist of at least one Key Person, as listed in "Key Personnel" named in this Contract. Data entry shall be done under the supervision of the Key Person who is familiar with similar database applications as defined below. The Key Person must provide a detailed written work history with references as proof of meeting experience requirements listed below. Please include structure identification, terms of reference, clients and dates. The Ministry will not accept substitutions without prior approval.

Companies carrying out inspections must be registered on the Engineering and Equipment Services (EES) Directory on BCBid under service category for bridge inspection Technicians and/or Engineers (T07 and P06 respectively).

Inspections must be done by the Key Person that meet the knowledge requirements listed in the Engineering Equipment and Services Directory (EES) under service category for bridge inspection Technicians and/or Engineers (T07 and P06 respectively).

The Key Person must also have the following experience.

- have carried out routine and/or close proximity inspection on forestry bridges over 3 or more successive years under direction of a professional engineer.
- has completed routine and/or close proximity inspections on a minimum of 300 forestry type bridges including log stringer, steel, concrete and glulam bridges (in the past 5 years),
- Has greater than 2 years of experience in database work, of which there must be at least 20 days of cumulative data base entry for CBR or an equivalent road and structures database system.

The level of previous inspections must be to a similar or greater level in detail as the MFLNRO Inspection forms. Please submit sample inspections if the above inspections were not for the Ministry of Forests, Lands and Natural Resource Operations or Ministry of Transportation

A Key Person that meets the mandatory requirements for T07 of EES list yet does not meet the above listed bullets will be considered provided that a Professional Engineer meeting the mandates of P06 of EES takes professional responsibility for quality assurance for all of the field work. Meeting the Mandatory Experience Requirements for P06 of EES shall be defined as, in the opinion of Ministry Representative, to have been a significant portion of one's workload and shall have been performed within the last 6 years.

SCHEDULE A

SERVICES (Continued)

The MOF may be tendering a number of contracts concurrently. The MOF reserves the right to limit the number of contracts awarded to any one Key Personnel (see later Section “qualifications”). This will be based on:

- how reasonable, in the judgement of the MOF, are the inspection production projections made by the contractor relative to the timeline above or
- the contractor's past performance

4. Pre-Work Meeting

A start up office meeting shall be convened the week of August 15th – August 19th, 2022, between the Contract Coordinator and the Contractor to accept and negotiate scheduling, discuss deliverable expectations, and to discuss personnel and responsibilities. The pre-work will take place virtually using Microsoft Teams. This is to be paid at the Pre-Work Meeting rate. The following people must attend the office pre-work: Contractor Representative and all Key Personnel as identified in the contract below. Any Key Personnel added to the contract, and approved by the Ministry, must conduct a subsequent pre-work meeting with the ministry at the contractor's cost.

5. Scope of Work

Structures to be inspected are listed in the attached '2022 Rail Trail Master list_StructureInventoryDetailReport (2)' and for reference only are shown on the overview maps provided with the tender documents. Where there is a discrepancy in the scope of work between the lists in '2022 Rail Trail Master list_StructureInventoryDetailReport (2)' and the location maps, the lists shall govern. Previously un-known structures are not expected to be found in this inspection. If a bridge or major culvert is found on the contact area but not listed in 'Rail Trail Master list_StructureInventoryDetailReport (2)', it will be inspected at a negotiated rate based on the standard rates in the contract. A few structures may be dropped or added to the list during field work. Prices will be adjusted using bid unit rates unless otherwise agreed to in advance. The bid quantities are only an estimate and billable units will be based on actual units delivered based on the bid price.

6. Types of Inspections and Payment Method

6.1. Routine Bridge Inspections

To be paid on a unit rate

Routine Bridge Inspections are visual inspections of concrete, timber or steel structures and all components that are “readily accessible” which means all areas that are accessible using an eight foot step ladder. This is completed with a one person crew. It does not include areas that require climbing or extension ladders. Such work would be done under day rates as discussed later. The inspection is to; (a) consider public safety for recreational trail users by detecting and monitoring problems, (b) identify and recommend repairs, (c) identify defects or conditions that warrant a close proximity inspection, (d) recommend further P.Eng inspection and/or load rating.

- Where the site involves an overspan of an old bridge, the inspection shall be considered one structure for costing unless approved by the Ministry Representative.
- Where the site cannot be satisfactorily accessed using the provisions noted below under 'Close Proximity Inspections'; the contractor shall notify the Ministry Representative immediately.
- Unless mutually agreed to by the ministry representative and the contractor, the contractor is not expected to use a scaffold, snooper truck or boat to complete any inspections of the structures listed in this contract.

SCHEDULE A

SERVICES (Continued)

6.2. Routine Major Culvert Inspections

To be paid on a separate unit rate.

Routine Major Culvert Inspections are visual inspections of all culvert components that are “readily accessible” which means all areas that are accessible using an eight foot step ladder. This is completed with a one person crew. It does not include areas that require climbing or extension ladders. Such work would be done under day rates as discussed later. The inspection is to; (a) consider public safety for recreational trail users by detecting and monitoring problems, (b) identify and recommend repairs, (c) identify defects or conditions that warrant a close proximity inspection, (d) recommend further P.Eng inspection and/or load rating.

- The Routine Major Culvert Inspections unit rate includes all time related to accessing inlets and outlets.
- All Routine Major Culvert Inspections will include professional estimates of inlet and outlet cover depth.
- Where accessing a culvert inlet or outlet is unreasonable or unsafe with a one person crew, the ‘Close Proximity Inspections’ provisions and hourly rate will apply.
- Where the site involves twin culverts, the inspection shall be considered one structure for costing unless approved by the Ministry Representative.
 - Twin culverts will be defined as ‘multiple (2 or more) culverts included in a battery or close configuration and used to pass water volumes from a single watercourse.’
- The contractor is not expected to enter the interior of any Major Culverts beyond a reasonable and superficial inspection of the inlet and/or outlet.

6.3. Close proximity Inspections

To be done on a Close Proximity Inspections hourly rate.

To be done on an as and when required basis. No rail corridor structures have been specifically and previously identified for close proximity inspection.

Close Proximity Inspections involve use of special access equipment and/or specialists to assess conditions of components that have been identified during routine inspections for specialist reviews, or are critical components that are otherwise inaccessible using routine inspection techniques. Special access equipment includes an extension ladder and must be carried out using a **2 person crew**. Boat access for inspection of mid channel piers and/or abutments is not a normal requirement of close proximity inspections. Where applicable, mobilization and demobilization cost for such work shall use the following marshalling points:

- SVR – Nelson/Castlegar
- C&WR - Castlegar
- KVR (Carmi and Princeton Subdivisions) - Kelowna

SCHEDULE A

SERVICES (Continued)

6.4. As Built / Inventory Inspections

To be included in the routine inspection unit rate or at an Extra Works All Found Field hourly rate depending on the amount of data to be collected. (as agreed upon between MOF Contract representative and the contractor representative prior to conducting the inspection.) These inspections include detailed measure up of a new structure (or existing structure as required) utilizing all applicable forms described in section 7.9. Extra relevant sketches and notes may be required for a Professional Engineer to load rate these structures. Due to limitations of what can be entered into CBR in the field, inspectors may have to record data on "hard copy" forms (See section 7.9, "As Built, Inventory and Inspection Forms") and enter the data later in "CBR Office Data Clean up". These inspections are as and when required under the following circumstances:

- If noted in the "Planned inspection Comments"
- if when doing the routine inspection, the inspector notes an error in the site /structure information in CBR
- if directed by the MOF Contract Representative

This work would be done with a **one person crew**. It is expected that this work would be done while performing the unit rate inspections above and there would no mobilization or demobilization. In the circumstance where the inspector must mobilize/demobilize to specifically to do such work, the marshalling points will be as above in section 6.3.

6.5. CBR Office Data Clean Up

To be done at CBR Office Data Clean Up hourly rate. The CBR Office Data clean up rate is only applied for inventory updates to CBR, not for uploading routine or unit rate inspections.

7. Deliverables

7.1. **General**

Generally accepted bridge inspection best practices are required for this assignment however there are MOF specific requirements highlighted below.

7.2. **Pre-Field**

7.2.1. Contractor shall orient himself/herself to CBR at no cost to the MOF. Key Personnel must also obtain a BCeID or apply for BCeID registration at: <https://www.bceid.ca/>

7.2.2. All bridge inspection records are stored in the Ministry of Forests' Corporate Bridge Register (CBR). The structures to be inspected will be available online ready for download using the "offline client" from a select geographical area. The offline client must be downloaded to the contractor's laptop prior to bridge data download. The structure description, planned inspection comments and last inspection report (uploaded as a PDF to the 'structure documents and photos' tab) will be available off-line once downloaded. Ensure to only download structures that are on the Rail Trail Master list_StructureInventoryDetailReport (2)' or as directed by the MOF Contract representative. Alternative data collection systems for gathering bridge inspection information shall not be accepted by the Ministry.

SCHEDULE A

SERVICES (Continued)

7.2.3. Routine Inspections include review of the existing Corporate Bridge Register (CBR) site and structure data in order to identify inventory updates that should occur. **This means reviewing existing CBR inventory information** and documenting updates required. This includes identification of access requirements, special equipment required for structure inspections (extension ladders, scaffold), identification of close proximity inspections required and Professional Engineering inspections required.

7.2.4. Ensure the inspector has the latest version/update of CBR Offline Client.

7.2.5. Obtain any new bridge number plates from the Ministry Representative as required.

7.2.6. There are many access control structures which have been installed by local agriculture operations and landowners. The contractor must review the following link and route plan accordingly. In most cases, a bicycle or E-bike can pass through the access control structures.

- Access Control Inventory
<https://cabin.maps.arcgis.com/home/webmap/viewer.html?webmap=43ec5bf77fcd48d99f8a8a682b65d008>

7.2.7. Before commencing work the contractor shall provide an estimated schedule of work in accordance to Section 2.0 Timelines, and shall update this periodically with the Ministry Representative.

7.3. **Field**

See later section "Supplement to Section Deliverables-Field" for clarification of the points below
For each site the following is required:

- Install traffic control signage as required
- Confirm all local site and/or structure information in CBR. This includes but is not limited to GPS coordinates, mile boards, structure details, etc. Where there are errors in the digital data, note the errors for entry later under CBR Office Data clean up
- Review the most recent inspection report
- Review items that required repairs and monitoring (from previous inspections) and note conditions including restating outstanding repair items. Monitor items must be addressed within the inspection comments.
- Review "Planned Inspection Comments" for the structure
- Where directed install any bridge number plates. Identify any structures found that do not have number plates.
- Perform the inspection in accordance with a format consistent with CBR, noting deficiencies and levels of deterioration using the rating values. Unless not applicable all fields on the inspection form to be filled in.
- Monitoring issues related, but not limited to undermining, aggradations, section loss, deflections, settlement, leaning require measurements where previous monitoring has been done. Where the issue is first encountered, the inspector is to take initial measurements. If previously identified measurements must be retaken and stated within the inspection comments.

SCHEDULE A

SERVICES (Continued)

- Components rated as poor require a description statement explaining why the component has been rated poor.
- For all bridges provide at least one photograph showing the bridge (from the upstream and downstream sides) and approaches, and one of each abutment as well as the watercourse upstream and downstream of the culvert. Minimum total of 8 photos per bridge. Photograph defects and items that require monitoring or repair. If the structure has a number plate on it a picture of this must be taken as well. All other bridge identifiers are to be photographed as well. Pictures are to be taken in good light conditions (i.e. not at dusk). **Camera must be set to 4X3 format.**
- For all major culverts provide at least one photograph showing the inlet and outlet, headwalls, aprons and interior as well as the watercourse upstream and downstream of the culvert. Photograph defects and items that require monitoring or repair. If the structure has a number plate on it a picture of this must be taken as well. All other culvert identifiers are to be photographed as well. Pictures are to be taken in good light conditions (i.e. not at dusk). **Camera must be set to 4X3 format.**
- Collect sufficient information including notes, photos and sketches required to perform a calculation for a reduced load rating if warranted; such that the Ministry would be able to do so without delay and without having to return to the structure for further data collection.
- For each recommended repair, provide an estimated quantity of materials required, cost estimate for the repairs, explanatory notes and sketches to describe the work, and rank each defect in terms of priority.
- Identify specific access needs for future inspection (if required)
- Perform a structure as-built inventory (and inspection) for structures not previously inventoried.
- Identify any component(s) or conditions that require inspection by a professional engineer.
- Identify any structure that was not inspected along with reasons why not.
- Complete reasonable minor repairs (i.e. clear culvert inlet with shovel if applicable). Ensure photo is taken to show works completed.
- Where the class of the structure in the field does not match the existing CBR class, then a hard copy inspection is required (Section 7.9 "As Built, Inventory and Inspection Forms"). The Ministry Representative needs to be notified.

7.4. Urgent Notification

If, during the course of an inspection, the inspector finds a defect that requires immediate attention or determines that the structure should be load rated, the inspector shall, within 48 hours of their findings, report to the Rec Sites and Trails BC assigned Engineer, the Rail Corridor Engineering Officer, the Trails Manager, and the Southern Engineering Group Lead of any deficiency that may cause the bridge to be unsafe to users. If practicable, the inspector must contact the RSTBC assigned engineer by satellite phone from the site. This report is to be followed up with an e-mail with attached pictures.

SCHEDULE A

SERVICES (Continued)

7.5. Safety Notification

The inspector shall provide a report of all bridges and major culverts with repairs recommended to be completed for Public Safety but do not require immediate attention at the end of each month. This report shall identify structure site, location and nature of repair required and to be submitted to the Rec Sites and Trails BC assigned Engineer, the Rail Corridor Engineering Officer, the Trails Manager, and the Southern Engineering Group Lead. This report shall have the structures organized by Resource District.

7.6. Professional Inspection and Load rating

Where the inspector discovers significant structural deficiencies or potential deficiencies, the inspector must indicate in CBR a professional inspection is required. The contractor must always collect enough information for a professional engineer to complete a load rating. Load rating of structures shall be carried out by a Ministry of Forests Engineer. Any public safety issues must be reported immediately to the Rec Sites and Trails BC assigned Engineer, the Rail Corridor Engineering Officer, the Trails Manager, and the Southern Engineering Group Lead and the contract coordinator as defined above in Urgent Notification

7.7. Off Line Records

Where, for whatever reason (lost data, weathered out, etc) the contractor downloads a structure "off line" and then does not complete the inspection on a structure, he/she MUST notify the MOF Contract representative as soon as it apparent that the inspection will not be done.

7.8. Post Field

The inspector is to upload all the CBR digital inspection data and associated notes sketches and photos as per the schedule stated in Section 2 "Timelines". All notes and sketches that cannot be entered directly into CBR fields must be scanned into a PDF format and included in the "Documents and Photos" tabs of CBR.

The inspector may invoice only for inspections that have been fully completed and uploaded back onto CBR.

7.9. As Built, Inventory and Inspection Forms

Where the inspector must collect hard copy data, he/she should collect sufficient information to complete Site and Structure Inventory Forms. As part of this inventory, the contractor shall carry out a routine visual inspection using the forms FS 1337A, 1337B, 1337C (for inspection of log stringer bridges, steel/concrete bridges, and culverts).

Inventory shall be in the format of forms FS 1342, 1343, 1344 (for site inventory data, culvert inventory data, bridge inventory data) and shall provide sufficient information and detail for a bridge engineer to complete a load rating where specified. For collecting information for load rating the contractor should discuss data requirements with the local bridge engineer

These forms are available at the Forest Service website:

<https://www2.gov.bc.ca/gov/content/industry/natural-resource-use/resource-roads/engineering-standards-guidelines/bridge-design-construction>

8. Equipment and Materials Supplied by the Ministry

8.1. The bidder must have strong stand alone skills in the use of computers and electronic databases. The MOF cannot provide support to bidders who are having problems.

8.2. Copy of CBR off line client structure and inspection information.

8.3. Any equipment supplied by the Ministry to the Consultant shall be returned prior to final billing

SCHEDULE A

SERVICES (Continued)

- 8.4. The latest version of the CBR User Manual is located at the website below. Be advised that it does not include updates since August 22, 2011.

<https://intranet.gov.bc.ca/assets/intranet/flnrord/irod/engineering/cbr/cbr-user-manual-working-draft.pdf>

9. Required Tools and Equipment

- 9.1. Digital camera with flash suitable for high quality photos (minimum 6 Mega Pixel),
- 9.2. Vehicle does NOT necessarily need to be a pick-up truck but must be in good, reliable and well-maintained condition and capable of carrying out the duties listed above.
 - 9.2.1. Vehicle must be capable of travelling narrow, water barred, cross ditched or brushed in roads or sections of trail. Alternatively, for vehicles not meeting this capability, the Contractor may substitute a suitable Vehicle/ORV/E-bike or equivalent combination.
 - 9.2.2. Some sections of trail have access control structures in place that will not allow the passage of highway vehicles or off-road vehicles (see 7.2.6. access control inventory above). It may be most efficient to complete the works using an electric bicycle (e-bike) or other similar mode of transport.
- 9.3. 2 Traffic Warning signs (MOT signing manual type C-004 750x750mm or equivalent).
- 9.4. GPS unit for recording location within 10 meters as: UTM Coordinates and applicable zone
- 9.5. Hip waders,
- 9.6. 8 foot step ladder (for routine) and/or 26 foot extension ladder (for close proximity)
- 9.7. Increment borer or 6-9 mm diameter drill (450 mm or longer) with treated plugs
- 9.8. Measuring devices (including diameter tape, callipers, 30m tape, 8m pocket tape),
- 9.9. Flathead screwdriver for scraping or probing
- 9.10. Axe
- 9.11. Satellite phone, hand compass, and clinometer
- 9.12. Whisk broom, wire brush, shovel
- 9.13. Binoculars, flashlight, magnifying glass
- 9.14. Rock hammer, 5' chain, plumb bob and carpenters level
- 9.15. Inspection forms and clipboard, field books, lumber crayon
- 9.16. Ropes and safety harness, warning signs, "c" clamps, first aid kit, personal floatation device
- 9.17. Computer equipped with Windows 10 and with Microsoft Edge browser.

SCHEDULE A

SERVICES (Continued)

10. Safety

Contractors shall ensure Occupational Health and Safety Regulations safe practices are followed for carrying out the work. This includes but is not limited to; Working Alone or in Isolation (General), Fall Protection, Ladders Scaffolding and Temporary Work Platforms, Traffic Control and Designated Safe Work Area (Forestry Operations), Confined Spaces, Personal and Protective Clothing and Equipment, Buoyancy Equipment.

Detailed Inspections of components greater than 3m above ground shall be done using an extension ladder scaffolding or temporary work platforms and shall be done only by a 2 or more person crew.

The bridge deck and 15m on either side shall be considered a Designated Safe Work Area for the period of the inspection and Traffic Control measures (Forestry Operations 26.14.3) shall be provided by the contractor. Traffic Control appropriate to the hazard is required, and is dependent on site conditions (level of traffic, site distances, and the nature of the inspection). It may include one or more of the following:

1. radio notification for short duration closures on radio controlled roads
2. providing warning signs on bridge approaches
3. temporary blocking the bridge to traffic using a motor vehicle or barricades

11. Access and Missed Inspections

11.1 The rail trails are NOT like typical forest service roads/resource roads and have a unique set of access logistics that need to be considered. Unit rates for routine bridge and major culvert inspections will apply for addressing typical rail trail access logistics when moving from one site to the next. Extra Works Field hourly rate will not apply to typical access logistics unless otherwise agreed to by the ministry representative. Typical access logistics of the rail trails include but are not limited to:

11.1.1. Sections of rail trails legally restrict motorized access so special measures may need to be taken for access including authorization, signage, slow rates of travel and notification. Non-motorized sections:

- C&WR: CW-049 – CW-052
- KVR: Little Tunnel to Penticton (KV-037 & KV-038)

11.1.2. There are many access control structures (gates, bollards, lock blocks, rocks, etc) which have been installed/placed by local agriculture operations and landowners. The contractor must review the following link and route plan accordingly. In most cases, a bicycle or E-bike can pass through the access control structures.

- Access Control Inventory web app
<https://cabin.maps.arcgis.com/home/webmap/viewer.html?webmap=43ec5bf77fcd48d99f8a8a682b65d008>

SCHEDULE A

SERVICES (Continued)

11.1.3. Other typical rail trail access logistics to consider:

- The rail trails are comprised of a mostly contiguous line measuring approximately 500km with multiple access points from Highways, other MoTI maintained roads, Forest Service Roads (FSRs) and Road Permit (RP) roads.
- Very narrow running surface in places (~2-3m).
- Minimal pull outs and/or turn arounds.
- Infrequent and irregular access points.
- Abundance of non-radio-controlled multi-use recreational users with little knowledge of standard road safety protocols.
- Access control features (gates, bollards, lock blocks, rocks, etc.) installed by adjacent agriculture operations and landowners.
- Incorrect and/or outdated mapping.
- Structures with no/ambiguous load ratings.
- Opinionated, and in some cases hostile, trail users, locals and adjacent residents.

11.2. If a section of rail trail is found to be impassable due to reasons beyond the typical rail trail access logistics listed above (ie. pulled structure, rock fall, prism failure, etc) or to access control structures which have not been identified in the Access Control Inventory web app, the Extra Works Field hourly rate will be applied starting from the completion of the previous bridge inspection and ending at the start of access to the next structure. This must be agreed upon by the Ministry contract representative prior to submission of invoice.

11.3. If the contractor cannot access or find a structure or the structure has been removed, the Extra Works Field hourly rate will be applied starting from the completion of the previous bridge inspection and ending at the start of access to the next structure. This must be agreed upon by the Ministry contract representative prior to submission of invoice.

11.4. For most structures, field collected GPS co-ordinates have been provided on the inspection forms. Unfortunately, for some structures these co-ordinates have been estimated from maps or have not been collected. The contractor is responsible for review, verification and clean up of structure GPS location. Co-ordinates should be used as a guide only, and any errors or omissions should be noted on the forms and the current co-ordinates recorded.

11.5. The contractor shall be responsible for locating the correct structure. Incorrect crossings inspected by the contractor shall not be paid for unless the information we provide is found to be in error. The contractor may be required to return to the site to inspect the correct structure.

11.6. The contractor should schedule work to ensure areas with the risk of early snow are completed before access may become an issue and/or evaluation of bridge components may be impaired.

SCHEDULE A

SERVICES (Continued)

12. Access and Accommodation

The bid prices shall include contractors expenses for; room and board, travel and access to the site(s), and access for inspections, except as described below:

(a) structure inspections requiring helicopter, or boat access (inspections carried out utilizing these forms of transportation will be completed under the Extra Works Field hourly rate). If a helicopter is required to conduct the inspection, MOF contract coordinator must approve and arrange the flight.

13. Schedule and Liaison with Ministry Staff

The contractor shall also contact the designated Ministry Staff and advise them of commencement of work. They should enquire as to the availability of any keys for roads that may be gated. The contractor shall pick up signage from the Forest District office prior to conducting inspections in the field.

Rail Trails Contacts:

Role	Contact Name (Engineering Officer)	Phone and e-mail
Engineering Officer – Rail Corridors	Alex Soukup	250-309-7899 alex.soukup@gov.bc.ca
RSTBC assigned Engineer	TBD	TBD
RSTBC Trails Manager	Tennessee Trent	778-671-9165 Tennessee.trent@gov.bc.ca
Southern Engineering Group Lead	Drew Alway	250-554-7237 Drew.alway@gov.bc.ca

14. Supplement to Section Deliverables-Field

(1) Rating Values

The rating of bridge and culvert elements as listed on the inspection forms shall be completed using the appropriate grading as defined below (Note: for use of CBR Poor condition components will require a description statement.):

Excellent	Elements are new and properly installed
Good	Elements are structurally sound, in good repair and have minimal wear
Fair	Elements are structurally sound but show moderate wear or preliminary indications of rot, rust or corrosion
Poor	Elements may be structurally unsound, major items in need of repair or replacement or the load rating reduced

SCHEDULE A

SERVICES (Continued)

Not Applicable (N/A)	Elements are not present on structure being inspected
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(2) Notes and Sketches

As applicable to a given structure, observations shall include comments on the following components to describe the repair, or to provide information for load rating. They should be clearly identified as to location in bridge (e.g., abutment #1; pier #2 — pile #2; span #2 — stringer #4), complete with a sketch detailing the problem (e.g. length, width and depth of a crack). Notes and sketches shall be presented in Professional Format.

(3) Ranking defects in terms of priority and risk

Priority	Description
H - High	Defects which should be addressed immediately that may endanger users or are compromising the structure (e.g. extensive rot, scour, damage, washouts, etc)
M - Medium	Defects that affect the strength, durability or life span of the structure in the short term (may be required before next inspection and/or is subject to level of use, e.g. scour, culvert separation or loss of shape)
L - Low	Defects that affect long term strength, durability or life span of the structure and could be monitored or replaced subject to level of use.

15. Quality Assurance

The MOF will review periodically some completed inspections for quality assurance during the term of contract (including data entry if electronic forms are required). Each approved inspector must provide 20% of the completed inspections conducted in the first week of commencing inspections. The contractor shall provide all materials including photos, notes and sketches, and completed inspection and inventory forms upon request.

If in the view of the Ministry Representative the inspections are substandard, the contractor may be required to stop work and submit additional inspections for review (including electronic data entry (if specified)). At its sole discretion, the Ministry may then direct the contractor to re-inspect those bridges or culverts or may terminate the contract with no additional payments.

Contractor is to ensure that submitted inspections are correct and complete with all applicable fields filled and all photos uploaded. If inspections are found to have errors and/or omissions invoices may be rejected and payment will not be made until all inspections are corrected. **No updates to the inspections will be accepted after November 1st, 2022 and inspections with incomplete and/or missing data or photos shall be rejected and shall not receive payment.**

17. Quality Management

The Contractor is responsible for providing a Quality Management check system to ensure data from inspections have been entered into CBR accurately. The Contractors' Quality Management process shall be submitted to the Ministry for review and approval. Proof of this Quality Management being conducted shall be submitted with final payment.

SCHEDULE A

SERVICES (Continued)

18. Assessments

Late delivery of the final product shall be assessed \$100/day until all deliverables have been received.

Structure(s) not inspected due to contractor not considering 'typical rail trail access logistics' (Section 11.1) shall have the cost of inspecting that structure(s) by the Ministry or another party deducted from the contract price.

2. KEY PERSONNEL

2.01 The Services shall be performed by the following "Key Personnel":

(a) Les Thiessen – P. Eng

and there shall be no substitution for the person(s) listed above without the prior consent of the Province.

3. OPTION TO RENEW- N/A



Schedule B – Contract Payment

File: 10005-40/EN23474030

Attachment to the Agreement with SNT Engineering Ltd. for Routine Bridge and Major Culvert Inspections – Rail Trails. Located at: Legally established rail trails from Slocan City to Princeton BC.

FEES

Your fees (**exclusive of any applicable taxes described in this Agreement that is a taxable transaction chargeable to the Province**) will be based on the rates in the following price schedule during the Term when you are providing the Services.

Price Schedule					
Item No.	Item or Description of Work	Unit of Measurement	A Estimated Quantity	B Price Per Unit Excluding GST and PST as a taxable transaction charged to the Province	C Extended \$\$.¢¢ Amount Excluding GST and PST as a taxable transaction charged to the Province (Include cents to the two decimal place.) (C = A x B)
1.	Routine Bridge Inspections on the Slocan Valley Rail Corridor	Per Structure	4 Structures	\$220.00	\$880.00
2.	Routine Major Culvert Inspections on the Slocan Valley Rail Corridor	Per Structure	4 Structures	\$220.00	\$880.00
3.	Routine Bridge Inspections on the Columbia & Western Rail Corridor	Per Structure	5 Structures	\$220.00	\$1,100.00
4.	Routine Major Culvert Inspections on the Columbia & Western Rail Corridor	Per Structure	15 Structures	\$220.00	\$3,300.00
5.	Routine Bridge Inspections on the Kettle Valley Rail Corridor (Carmi Subdivision)	Per Structure	11 structures	\$220.00	\$1,100.00
6.	Routine Major Culvert Inspections on the Kettle Valley Rail Corridor (Carmi Subdivision)	Per Structure	21 Structures	\$220.00	\$4,620.00
7.	Routine Bridge Inspections on the Kettle Valley Rail Corridor (Princeton Subdivision)	Per Structure	5 Structures	\$220.00	\$1,100.00
8.	Routine Major Culvert Inspections on the Kettle Valley Rail Corridor (Princeton Subdivision)	Per Structure	9 Structures	\$220.00	\$1,980.00
9.	Close Proximity Inspections (includes 2 person crew)	Hour	10 Hours	\$150.00	\$1,500.00
10.	Extra Works Field during routine inspections	Hour	20 Hours	\$70.00	\$1,400.00

SCHEDULE B

CONTRACT PAYMENT

11.	Pre-Work Meeting	Lump Sum	N/A	\$500.00	\$500.00
12.	CBR Office Data clean up (as, if and when required)	Hour	20 Hours	\$80.00	\$1,600.00
Total Contract Price:					\$21,280.00

- 1.01 The quantities stated under Clause 1.01 are estimations only. The final quantity measurements may vary from the estimations and contract payment will be based on the actual quantities and the price(s) per Unit of Measure stated above.
- 1.02 Notwithstanding Clause 1.02, the contract is not to exceed the total fees payable to you in accordance with this Schedule in the amount of an estimated **\$21,280.00** without the **prior written** approval of the Ministry Representative.

1. Expenses

- 2.01 We will not pay any expenses to you for the completion of the Services.

2. Holdback from Payment

- 3.01 As per the Agreement, the Province does not intend to retain a holdback from contract payments but the Province does retain the right to withhold from any payments due to you under this Agreement an amount sufficient to indemnify us against any third party claims.

3. Submission of Statement of Account

- 4.01 In order to obtain payment for any fees and, where applicable, expenses under the Agreement, you must submit to us a written Statement of Account in a form satisfactory to us on total satisfactory completion of the services.
- 4.02 The Statement of Account(s) must show the following:
- (a) your legal name, address, the date and the period of time which the invoice applies ("Billing Period"), the contract number **EN23474030**, and a statement number for identification;
 - (b) the calculation of all fees claimed under this Agreement for the Billing Period, with hours, dates, rates, and name(s) of persons providing the Services, a description of specific services/works completed during the Billing Period, including a declaration that the Services have been completed;
 - (c) and where expenses are to be paid under this Agreement, a chronological listing, in reasonable detail and with dates, of all expenses claimed by you under this Agreement for the Billing Period with receipts or copies of receipts, where applicable, attached;
 - (d) if you are claiming reimbursement of any GST or other applicable taxes paid or payable by you in relation to those expenses, a description of any credits, rebates, refunds, or remissions you are entitled to from the relevant taxation authorities in relation to those taxes;
 - (e) the calculation of any applicable taxes payable by us in relation to the Services provided under this Agreement and for the Billing Period as a separate line item (excluding taxes paid directly by you to a supplier and which were included in the bid price);
 - (f) any other billing information reasonably requested by us.

SCHEDULE B

CONTRACT PAYMENT

4.03 Within thirty days of our receipt of your invoice, or the date we authorize payment, whichever is the latter, we must pay you fees and, where applicable, expenses for those Services we determined were satisfactorily received during the Billing Period.

4.04 Invoices are to be submitted to:

Alex.Soukup@gov.bc.ca

*Stating the new Ministry of Forests and Contract Number EN23474030 on the invoice



Schedule C Safety Conditions

File: 10005-40/EN23474030

Attachment to the Agreement with SNT Engineering Ltd. Routine Bridge and Major Culvert Inspections – Rail Trails. Located at: Legally established rail trails from Slocan City to Princeton BC.

Terms such as “employer”, “supervisor”, “multiple employer workplace”, “owner”, “prime contractor”, and “worker” have the meanings given those terms under the *Workers’ Compensation Act (WC Act)* and its regulation.

ARTICLE 1 OTHER SAFETY CONSIDERATIONS

Notice of Project

- 1.01 Where a Notice of Project is required as set out in the *WC Act* and its regulations, the Contractor, unless otherwise notified in writing by the Province or the Prime Contractor, must submit the Notice of Project in a format acceptable to WorkSafe BC.
- 1.02 Where the Contractor submits the Notice of Project, a copy must be provided to the Province. Where the Province or Prime Contractor will submit the Notice of Project, the Contractor must provide, upon request, all information necessary to support the Notice of Project and the Contractor will be provided with a copy of the Notice of Project.
- 1.03 The Contractor will commence and conduct all operations consistently with the Notice of Project.

Reporting

- 1.04 The Contractor must immediately submit written notice to the Province on all matters reported to WorkSafe BC by the Contractor or the Contractor’s Subcontractors. The written notice must include all information necessary to allow the Province to adequately collect and address safety or other related incidences, and will be anonymized so as not to include personal information about an identifiable individual including their name, address, telephone number, age, sex, race, religion, sexual orientation, disability, fingerprints, or blood type, health care, educational, financial or employment history and anyone else’s opinion about the individual. This scope does not include business contact information (e.g., name, title, address, telephone or fax numbers or email address used for business contact purposes).
- 1.05 Where a Party brings safety concerns to the attention of the other Party, the Party will give full consideration to the issues raised. Where the Contractor receives safety concerns from the Province, the Contractor will provide the Province with a considered response, including any information necessary to demonstrate that the Contractor is in compliance with *WC Act* and its regulations.
- 1.06 Upon the Province’s request, the Contractor or any of its Subcontractors must provide evidence to the satisfaction of the Province that the Contractor or its Subcontractor(s) has:
 - (a) an effective business process in place to:
 - i) remedy any workplace conditions that are hazardous to the health or safety of the employer’s workers including safe work practices and procedures;
 - ii) ensure that the employer’s workers:
 - A. are made aware of all known or reasonably foreseeable health or safety hazards to which they are likely to be exposed by their work;
 - B. are made aware of their rights and duties under the *WC Act* and its regulations.

- (b) established occupational health and safety policies and programs in accordance with the regulations, which includes:
 - i) first aid assessment and provision services and equipment;
 - ii) an employee monitoring system that will periodically ensure the well being of all workers working alone or in isolation;
 - iii) accident injury reporting and investigation;
 - iv) an emergency response plan and employee understanding of said plan that will ensure adequate and timely response to any emergency that can be reasonably expected to occur in relation to the Works or Services being performed;
 - v) evidence of training and any required certifications required under *WC Act* or its regulations;
 - vi) evidence of a maintenance program for all equipment and vehicles owned or operated by the Contractor or its Subcontractors commensurate with the risks associated with such equipment and vehicles;
 - vii) provision for the regular inspection of premises, work methods and work practices; and
 - viii) provision by the employer for the instruction and supervision of workers including orientation of workers in the safe performance of their work.
- (c) provided and maintained in good condition protective equipment, devices, and clothing as required by the *Occupational Health and Safety Regulation* and ensure that these are used by the employer's workers;
- (d) provided the employer's workers all information, instruction, training, and supervision necessary to ensure the health and safety of those workers in carrying out their work and to ensure the health and safety of other workers at the workplace;
- (e) a copy of the *WC Act* and its regulations readily available for review by the employer's workers and, at each workplace where workers of the employer are regularly employed, post and keep posted a notice advising where the copy is available for review.

ARTICLE 2 PRIME CONTRACTOR PROVISIONS

2.01 The Contractor acknowledges, agrees, and warrants that:

- (a) The Contractor will be considered to be the Prime Contractor and shall enter into a Prime Contractor Agreement with the Province and shall carry out the duties described therein, where any of the following conditions exist:
 - (i) the Province gave notice that the Successful Bidder would be the Prime Contractor;
 - (ii) the Province designates the Contractor to be the Prime Contractor at any time during the performance of the Work or Services;
 - (iii) the Contractor creates a multiple employer workplace through subcontracting any of the Work or Service at any time.

2.02 Where the Contractor is being considered as the Prime Contractor as per clause 2.01, the following is applicable:

- (a) upon request, the Contractor must satisfy the Province that the Contractor has the experience and capacity to address Prime Contractor responsibilities in accordance with the Agreement and the *WC Act* and its regulations; and
- (b) the Province provides written acknowledgement of the Contractor's experience and capacity to function as Prime Contractor; and
- (c) where the Contractor creates a multiple employer workplace, the Contractor will provide or acquire at their own expense all resources necessary to discharge the Prime Contractor responsibilities; or
- (d) the Province may, in its sole discretion, give consideration for compensation related to any

additional costs where, after commencement of the work, the Province creates a multiple employer workplace and designates the Contractor to be the Prime Contractor.

- 2.03 The Province may from time to time give prior written notice that a person other than the Contractor is designated as the Prime Contractor. The Contractor agrees that on receiving such written notice, the Contractor will cooperate with the Prime Contractor and shall coordinate health and safety activities and ensure compliance with the Prime Contractor's safety program.
- 2.04 The Contractor shall, upon becoming aware of any apparent deficiencies in the Prime Contractor's work which would affect the Work or Services, shall report such deficiencies in writing to the Ministry Representative.

ARTICLE 3 HAND FALLING

- 3.01 Where hand falling activity will be taking place under the Agreement and without limiting any other provision of the Agreement or the Contract Documents, the Contractor shall comply with the following safety requirements.
- 3.02 Hand falling means the falling of trees by any means with at least one person at or near the base of the tree during falling and not inside a protected cab, where the trees are greater than 6 inches diameter at 12 inch stump height, or as may be determined by WorkSafe BC.
- 3.03 The Contractor must ensure that:
 - (a) all hand falling is undertaken by fallers certified by BC Forest Safety Council (BCFSC) or ENFORM and are qualified for the slope and timber conditions being addressed;
 - (b) a qualified Falling Supervisor satisfactory to the Province is designated for all forestry related hand falling activities and for all non-forestry related hand falling activities taking place.
- 3.04 A Falling Supervisor will be deemed qualified where:
 - (a) it has satisfactorily completed the BCFSC Falling Supervisor Training course; or
 - (b) it is BCFSC Falling Supervisor Certified; or
 - (c) in the Province's sole opinion, evidence of qualifications/certifications and proficiency for the timber and slope for the Work Area and competency to discharge the expectations of a falling supervisor is satisfactory.
- 3.05 No hand falling operations will commence without the Province's prior satisfaction of acceptable proof of qualification/certification and of the Falling Supervisor's ability and competence.
- 3.06 The Contractor must, at least five Work Days prior to commencement of any hand falling operations, notify the Ministry Representative of the name of the designated Falling Supervisor or substitution thereof.
- 3.07 A Falling Plan must be developed with full engagement by the Falling Supervisor in collaboration with Hand Falling personnel and others responsible to discharge aspects of the falling plan.
- 3.08 The Contractor must ensure:
 - (a) no work will commence prior to all considerations of the Falling Plan being implemented as established by the designated Falling Supervisor;
 - (b) all hand falling operations performed occur and are supported in accordance with the Falling Plan; and
 - (c) upon request of the Ministry representative, provide any documents and evidence to verify adherence to the Falling Plan.
- 3.09 If the Contractor engages a subcontractor as its Falling Supervisor, the Contractor shall not be relieved from the subcontracted obligations or any obligations under this Agreement.



Schedule D – Insurance

File: 10005-40/EN23474030

Attachment to the Agreement with SNT Engineering Ltd. for Routine Bridge and Major Culvert Inspections – Rail Trails. Located at: Legally established rail trails from Slocan City to Princeton BC.

Without restricting the generality of the indemnification provisions contained in the Agreement, the Contractor shall, at its own expense, provide and maintain, during the term of this Agreement, the following insurance coverage as fully specified in Paragraph 12 and any additional insurance which it is required by law to carry or which it considers necessary to cover risks not otherwise covered by insurance specified in this Schedule in its sole discretion.

1. All such insurance described herein must be primary and not require the sharing of any loss by any insurer of the Province.
2. Where a warranty period is required by the Province under this Agreement, the Contractor shall ensure that Products and Completed Operations coverage, as applicable, shall be in force for the duration of the warranty period.
3. Insurance shall be placed with Insurers licensed to underwrite such insurance in Canada and in forms and amounts acceptable to the Province. All such insurance shall be at no expense to the Province. If the Province requires additional Insurance Coverage to be obtained by the Contractor, the additional expense of such additional insurance shall be borne by the Province.
4. Notwithstanding Paragraph 6, the Contractor shall, prior to the commencement of services and before any payments are made under this Agreement, file with the Ministry Representative evidence of insurance coverage in the form of a completed Province of British Columbia Certificate of Insurance (Form FIN 173). When requested by the Province, the Contractor shall provide certified copies of required insurance policies.
5. ICBC's Confirmation of Automobile Insurance Coverage (Form APV 47) or Confirmation of Unlicensed Vehicle Coverage (Form APV 45) may be used when applicable as evidence of Automobile Liability Insurance for vehicles or off-road vehicles used during the performance of the services.
6. The insurance policies, except for ICBC Automobile Liability Insurance, shall provide that the insurance shall not be cancelled or materially changed so as to affect the coverage provided under the Agreement, without the Insurer giving at least thirty (30) days prior written notice to the Province. Material change with respect to Professional Liability Insurance does not require the Insurer to give thirty (30) days prior written notice to the Province.
7. Failure to provide the required insurance documentation shall result in termination of this Agreement.
8. If the insurance policies expire prior to the end of the Agreement Term, the Contractor shall provide the ministry evidence of renewal or new policy meeting the requirements of the expired insurance in the form of a completed Province of British Columbia Certificate of Insurance and ICBC's Form APV 47 or APV45, if applicable, at least ten (10) days prior to the expiry date of the policies listed in this Schedule.
9. The Contractor shall ensure that all its subcontractors performing Services under this Agreement carry insurance in the form and limits specified in Paragraph 12.

10. Unless stated otherwise under any subsection of Paragraph 12, where the Province is to be added as an Additional Insured or otherwise to be identified on the policy, it shall be written as follows: "Her Majesty the Queen in right of the Province of British Columbia as represented by the Minister of Insert Ministry Name and any of its employees, servants or agents".

11. The following forms of insurance and specified minimum limits are required:

a) **Commercial General Liability** (*NOTE: most widely used and common type of liability coverage typically required. CGL is not optional and while it may be waived in certain circumstances, RMB must review in advance and approve.*)

Commercial General Liability insurance in an amount not less than \$2 million inclusive per occurrence against bodily injury, personal injury, and property damage and including liability assumed under the Agreement.

Such policy(s) of insurance shall include, but not be limited to:

- i) Products and Completed Operations Liability;
- ii) Owner's and Contractor's Protective Liability;
- iii) Contingent Employer's Liability;
- iv) Blanket Written Contractual Liability;
- v) Personal Injury Liability;
- vi) Non-Owned Automobile Liability;
- vii) Cross Liability;
- viii) Employees as Additional Insureds;
- ix) Broad Form Property Damage;

and where such further risk exists:

- x) Forest Fire Fighting Expense Coverage in the amount of:
 - ☐ \$1 million (*activity taking place during fire season*)
 - ☐ \$500,000 (*activity taking place outside of fire season*)
 - ☒ Not applicable (*activity not taking place in forested areas or where the activity does not include potential of sparks from welders, chainsaws, or hot exhaust, etc.*)
- xi) Sudden and Accidental Pollution endorsement on the Commercial General liability insurance policy with a limit of liability not less than the amount indicated below per occurrence insuring against bodily injury, property damage and clean-up expenses arising from new pollution conditions arising from the Contractor's performance of the Agreement, or if such endorsement is unavailable on the Commercial General Liability insurance policy, a Sudden and Accidental Pollution insurance policy insuring against same and with same limits of liability indicated below, such policy shall not contain an "insured vs insured" exclusion and this insurance shall include the Province as an additional insured as stated below:

Note to contract manager: *level of coverage is dependent on the potential of an occurrence, frequency of occurrence(s), hazards involved, and the financial damages. It is possible this endorsement is not available and, therefore, a separate policy will be required and this will be determined by the insurance broker and made known on the Certificate of Insurance.*

- ☐ \$250,000
- ☐ \$500,000
- ☐ \$1 million
- ☒ Not applicable

As per Paragraph 11, the Province is to be added as an "Additional Insured" under this policy.

b) **Automobile Liability**

Where any licensed vehicle or off road vehicle is owned, leased, rented, or used in the performance of this Agreement, Third Party Automobile Liability insurance in an amount not less than \$2 million inclusive per occurrence must be provided for any such vehicle.

c) **Professional Errors and Omissions Liability**

Professional Liability in an amount not less than \$2 million per claim, insuring the Contractor's liability resulting from errors and omissions in the performance of professional services under this Agreement.

d) **Watercraft Liability**

Where any watercraft operated or used (including rented watercraft) in the performance of the Agreement, the Contractor will obtain and maintain, or will cause to be obtained and maintained and will provide evidence to the Province of a Subcontractor's compliance with this requirement, Watercraft liability insurance in an amount not less than the limits of liability imposed by the *Marine Liability Act* and in any event not less than the amount listed inclusive per occurrence:

- i) \$2 million for contractor's own operations and float homes; or
- ii) \$5 million for ferry services, water taxi, floating lodges and any towing operation.

Such insurance shall include:

- i) a cross liability clause
- ii) Sudden and Accidental Pollution endorsement on the Watercraft liability insurance policy with a limit of liability not less than the amount indicated below per occurrence insuring against bodily injury, property damage and cleanup expenses arising from new pollution conditions arising from the Contractor's performance of the Agreement, or if such endorsement is unavailable on the Watercraft Liability insurance policy, a Sudden and Accidental Pollution insurance policy insuring against same and with same limits of liability indicated below, such policy shall not contain an "insured vs insured" exclusion and this insurance shall include the Province as an additional insured as stated below:

- ☒ \$250,000
- ☐ \$500,000
- ☐ \$1 million
- ☐ Not Applicable

Where applicable, such policy will also include coverage for marine towing operations.

As per Paragraph 11, the Province is to be added as an "Additional Insured" under this policy.



Natural Resource Ministries

Schedule F SAFE Certification Requirements

File: 10005-40/EN23474030

Attachment to the Agreement with SNT Engineering Ltd. for Routine Bridge and Major Culvert Inspections – Rail Trails. Located at: Legally established rail trails from Slocan City to Princeton, BC.

Prior to commencement of the Work or Services under the Agreement, the Contractor must ensure that all of the Contractor's Subcontractors are:

- (a) Certified in the BC Forest Safety Council SAFE Company Program; or
 - (b) Certified under another safety scheme recognized by BC Forest Safety Council, and that certification or endorsement is maintained in good standing while working or providing direction on the Place of Work or Work Area.
2. The Contractor may apply in writing to the Province for exemption of the requirement for certification in the SAFE Companies Program of its Subcontractors under the following situations:
- (a) where the Work or Services is not normally performed by persons working in the forest industry;
 - (b) where, by requiring SAFE Company certification, the Contractor would put an undue hardship on its Subcontractors performing the work or might prevent required work from being done under the Contract.
3. The Province must provide exemption approval in writing. Where approval or conditional approval is given, the Contractor must ensure its Subcontractors comply with the terms and conditions of the approval.
4. The Contractor's and its Subcontractor's good standing in the SAFE Company Program or other recognized program will be a factor of consideration for contract extensions or renewals under an option-to-renew contract.
5. Should the Contractor or its Subcontractors no longer be in good standing in the SAFE Company Program or other recognized program at any time during the Term of the Agreement, the Contractor shall immediately advise the Province and shall submit to the Province, within five (5) days, evidence satisfactory to the Province that the Contractor or its Subcontractors are actively engaged with the BC Forest Safety Council or other applicable organization in obtaining re-certification.

The Contractor or its Subcontractors must achieve re-certification within a reasonable period of time, and the reasonable period of time will be determined by the Province in its sole opinion.

When re-certification is obtained, the Contractor shall promptly submit proof of re-certification to the Province.



BC Ministry of Forests, Lands, and Natural Resource Operations

Major Culvert Inspection Report

Page: 1 of 2
Date Printed: 2023/01/26
User Id: IDIRs.15
Database: PROD
Report Id: CBR001C

Structure Name: CW-042 Sort By: Project Number, Branch, User KM (Asc)

Site #:	CW-042	Structure Name:	CW-042	Road Name:		Inspection Date:	2022/10/10
KM:	80.20	User km:	80.20	Crossing Name:	unknown	Next Inspection Date:	2024/08/01
Project File ID #:	REC3197	Br.	GF-CHR	Forest District:	Rec Dist - Kootenay-Boundary		
Culvert Type:	Round			Culvert Material:	Other		
Inlet Cover (mm):				Outlet Cover (mm):			
Footing Type:				Gradient (%):			
Culvert Length (metres):	50.0	Opening Height (mm):	3,000	Opening Width (mm):	2,500		
UTM Zone:	11	UTM Easting:	412444	UTM Northing:	5434996		
Inspector Name:	Rudi van der Merwe		Year Superstructure Installed:				
Access:							

APPROACHES

Alignment	Good	
Bridge Ahead Signs Missing	0	
Brushing Required	Yes	
Fender Condition	None	
Road Surface	Good	Adequate width for trail use, narrow for vehicle use

CULVERT ELEMENT

Baffles	Fair	Blasted rock floor form natural baffles, but outlet is not fish friendly
Bolted Connections	Not Applicable	
Coupled Connections	Not Applicable	
Coating	Not Applicable	
Embedment Materials	Not Applicable	
Fill	Good	Approx 10m cover at inlet
Floor	Good	Blasted rock
Footing	Not Applicable	
Head Wall	Good	Blast rock headwall at inlet and outlet
Inlet	Good	
Outlet	Fair	Concrete chute is scoured with short drop into unarmoured spillway, forming plunge pool and undermining concrete chute
Overall	Good	

Corporate Bridge Register (CBR)

Disclaimer:
1) Structure and site information is current at the time of report creation and may have changed since the inspection was submitted and/or accepted.
2) Historic Load Rating data not available, contact FLNRO Regional Office for detailed information.



BC Ministry of Forests, Lands, and Natural Resource Operations

Major Culvert Inspection Report

Page: 2 of 2
Date Printed: 2023/01/26
User Id: IDIR's.15
Database: PROD
Report Id: CBR001C

Structure Name: CW-042 Sort By: Project Number, Branch, User KM (Asc)

Site #:	CW-042	Structure Name:	CW-042	Road Name:		Inspection Date:	2022/10/10			
Riprap	Not Applicable									
Roof	Good		Blasted rock							
Side Walls	Good		Blasted rock							
Trash Rack	Not Applicable									
Wiers/Backwater Structures	Not Applicable									
Wing Wall	Good		Stone wall at inlet, CIP concrete wall at outlet							
CHANNEL	Estimated Present Water Level Depth:		0.2		Estimated Present Water Level Width:		4.5			
	Estimated High Water Level Clearance:		2.0							
HAZARDS	High Water:	No	Scour:	No	Ice:	No	Debris:	No	Aggradation:	No
	Comment:									
REPAIRS	#	Status	Priority	Estimate	Description					
MONITORS	#	Description								
	1	Monitor concrete scour and deterioration at outlet								
GENERAL	Inspector's Comment:	Structure is in good condition. Blasted rock tunnel with stone wingwall on the right at the inlet and CIP concrete wingwall on right at outlet. Headwalls are blasted rock at inlet and outlet and in good condition. Inlet wingwall is in good condition built on bedrock and stable. No concrete floor at inlet or inside tunnel. Outlet is in fair condition with significant scour to concrete chute floor at the outlet of the tunnel. Floor is not yet scoured through and remains functional, however a plunge pool formed at the drop off from the concrete chute. Undermined at the end of chute, could not get a measurement. Monitor concrete deterioration at the outlet. Over time, if the floor scours through, the wingwall at the outlet may become undermined, however this is a very slow moving scour and may not be an issue for several years. Rock tunnel is 58m long with a minimum opening at the inlet of approx 2.5m x 2.5m. Opening varies throughout but is on average larger than the inlet opening.								
GENERAL	PEng's Comment:	MB-Jan 4, 2023: Continue to monitor abrasion to concrete apron at outlet of rock culvert.								
GENERAL	Estimated Load Restriction (year):		2045		Estimated Replacement (year):					
	Current Inspection Load Rating:		See footnote		Design Load GVW (tonnes):		Design Vehicle Config.:		TR	
	Professional Inspection Required?		No		Report Status:		Reviewed By Michael Burnett on 2023/01/04 09:07:21			

Corporate Bridge Register (CBR)

Disclaimer:

- 1) Structure and site information is current at the time of report creation and may have changed since the inspection was submitted and/or accepted.
- 2) Historic Load Rating data not available, contact FLNRO Regional Office for detailed information.