

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	

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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

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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				

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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	

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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

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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		
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						
P. Eng Inspection Required?			No			
Estimated Date of Replacement:						
PROFESSIONAL ENGINEER (P.Eng) CERTIFICATION			Replacement Date:			
Current Load Rating GVW (tonnes):		Reviewed by - P.Eng		Date Reviewed		
New Load Rating GVW (Tonnes):		Sean Annan				

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Location



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Upstream channel



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Inlet



Rails to Trails
Routine Condition Culvert Inspection Form



Inlet



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Routine Condition Culvert Inspection Form



2.5m rock and mortar headwall at inlet



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Outlet



Rails to Trails
Routine Condition Culvert Inspection Form



Outlet



Rails to Trails
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Outlet



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Outlet



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Localized spalling on outlet headwall

