Bridge Culvert Inspection

Bridge File Number	71676 -1 Bridge Culvert	Form Type	CUL1
Year Built	1953	Lot No.	4
Bridge or Town Name	BLUESKY	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO LEITH RIVER, 8.10.73.3, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	2:66 C1 16.180	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Nov-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 3 TWP 82 RGE 2 W6M	Data Entry Date	13-Dec-2011
Longitude, Latitude	-118:13:30, 56:04:21	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	12-Dec-2011
Contract Main. Area	CMA04	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	10.6 /	Dept. Review Date	10-Jan-2012
AADT/Year	1,680 / 2010 (A)	Follow-Up By	
Road Classification	RAU-210-110		
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2489	1753	RPP	23.8	152X51	3.0	PIPE ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North r/w	Gas	
Power	South r/w - 6 wire o/h	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	7	Approaches approx. 50 and 20m SE and SW. Curve 300 m west.
Vertical Alignment		8	8	
Roadway Width (m)	10.600			
Embankment		6	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		6	5	Minor tears on sides of bevel.
Heaving (mm)	50			
Invert Above/Below Stream Bed				@ s/b-06-Oct-2008
Above/Below (mm)	0			
Scour Protection		5	5	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1753, Type: RPP**)				
Barrel Last Accessible Date	08-Feb-2010			Deep water, thin ice~800mm
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	N	Floor covered with ice.
Measured Rise (mm)	1690			
Measured At Ring No.	4			
Sag (mm)	63			
Percent Sag	4			
Sidewall		6	N	Several bolts seem not to be tightened. Heavy rust on walls above ice level.-08-Feb-2010
Measured Span (mm)	2486			
Measured At Ring No.	4			
Deflection (mm)	3			Deflection covered with ice.-08-Feb-2010
Percent Deflection	1			
Floor		N	N	Floor covered with ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	N	
Separation (mm)	0			
Longitudinal Seams		7	N	
Total No. of Cracked Rings	0			1N
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	N	Heavy rusting in floor. (Superficial rust along floor, and side wall, bottom 1/2.-Oct 6, 2008 Alkaling stains through roof bolts. Floor not visible.-08-Feb-2010
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1753, Type: RPP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	N	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**N**	GR was 6 on 08-Feb-2010

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		4	4	Tears in both sidewalls.
Heaving (mm)	150			Top of bevel damaged by equipment.
Invert Above/Below Stream Bed				@SB.-Oct6, 2008
Above/Below (mm)	0			
Scour Protection		5	5	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		**4**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		6	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		**6**	**6**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**66.7/55.6**	**Sufficiency Rating (Last/Now) (%)**	**61.5/65.9**	Est. Repl. Yr	2015	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection		Department Comments	

Maintenance Reviewed By		Date		Estimated Total	0
Proposed Long-Term Strategy					
On 3-Year Program (Y/N)					
Proposed Action					

Previous Inspector's Name	Brian Pientsch	Previous Assistant's Name	Lisbeth Medina
Next Inspection Date	10-Aug-2013	Previous Inspection Date	08-Feb-2010
Inspection Cycle (Default) (months)	21		
Comment			