

Bridge Culvert Inspection			
Bridge File Number	01674 -1 Bridge Culvert	Form Type	CUL1
Year Built	1973	Lot No.	2
Bridge or Town Name	MCLEOD VALLE	Inspector Name	Eric Carcoux
Located Over	TRIBUTARY TO MCLEOD RIVER, 8.11.107.10, WATERCRS-ST	Inspector Class	BR CLS A
Located On	32:10 C1 6.353	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	14-Oct-2012
Legal Land Location	NW SEC 20 TWP 57 RGE 13 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:54:23, 53:56:50	Data Entry Date	06-Jan-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Stew Hagan
Contract Main. Area	CMA12	Review Date	12-Dec-2012
Clear Roadway/Skew	8.3 / 7 deg. (RHF)	Dept. Reviewer Name	Paul Catt
AADT/Year	1,950 / 2011 (A)	Dept. Review Date	18-Jan-2013
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2019	2226	SPE	118.3	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment	Tagged on u/s end.							

Utilities (Located at)

Utility Attachments			
Telephone	Both sides.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	In sag. Horizontal curve North & South.
Vertical Alignment		6	6	
Roadway Width (m)	8.300			
Embankment		N	5	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 10)				
Guardrail (Y/N)	Yes			West side only.
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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		3	3	Bevel end has been bent up and torn. -photo
Heaving (mm)	1300			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		4	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		4	5	
Beavers (Y/N)	No			
Upstream End General Rating		3	3	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Barrel Last Accessible Date	15-Dec-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		3	3	
Measured Rise (mm)	2052			
Measured At Ring No.	15			
Sag (mm)	174			
Percent Sag	8			
Sidewall		3	3	Small isolated perforation South sidewall @ R30.
Measured Span (mm)	2218			
Measured At Ring No.	10			
Deflection (mm)	199			
Percent Deflection	10			
Floor		N	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		5	5	Tear in pipe from edge of structural plate to bolt hole @ R31 (South side upper seam).
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	Superficial rust along floor. Rust stains through bolt holes.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Fish Passage Adequacy		3	3	Hanging outlet.
Baffle (Type :)		X	X	
Waterway Adequacy		4	4	Inlet bent up. Within 500 mm of crown at outlet.
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		4	4	Bevel is cantilevered 1.2m.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)		1500		
Scour Protection		N	5	Class III placed in attempt to prevent further damage.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		N	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		5	5	
HWM (m below Top of Culvert)				Silt has been deposited on banks to height of crown.(photo) Would be partially due to reduced capacity at inlet.
Drift (Y/N)		No		
Channel Bottom Degradation/Aggrading		DEGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	At u/s end.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Cut off u/s bevel.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	30.7/31.2	Est. Repl. Yr	2013	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Culvert is scheduled for replacement in conjunction with hwy 32 likely 2012 or 2013.		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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	14-Jul-2014		Previous Inspection Date	15-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							