

Bridge Culvert Inspection				
Bridge File Number	09401 -1 Bridge Culvert		Form Type	CUL1
Year Built	1928		Lot No.	3
Bridge or Town Name	MORLEY		Inspector Name	Garry Roberts
Located Over	JOSHUA CREEK, 2.13.52, WATERCRS-ST		Inspector Class	BR CLS A
Located On	1A:04 C1 18.702		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	31-Aug-2012
Legal Land Location	SW SEC 35 TWP 25 RGE 7 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:52:46, 51:10:14		Data Entry Date	03-Oct-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Joel Wozney
Contract Main. Area	CMA28		Review Date	14-Sep-2012
Clear Roadway/Skew	7 /		Dept. Reviewer Name	Tim Davies
AADT/Year	1,710 / 2011 (A)		Dept. Review Date	11-Oct-2012
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	15			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	4260	2200	BP	16.2			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	North and South ditch.		Gas
Power			Municipal
Others			Problem (Y/N) Yes
Remarks	Cable exposed @ South headslope.		

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	Built on curve and sag. Limited sight distance. Speed posted @ 55 km/hr.
Vertical Alignment		5	5	
Roadway Width (m)	7.000			
Embankment		4	4	Steep and minor erosion at South side.
Sideslope (_ :1)	2.0			
(Height of Cover(m) : 7)				
Guardrail (Y/N)	Yes			2 broken posts @ South guardrail. 1 split.
Approach Road / Embankment General Rating		4	4	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		6	6	Minor cracks - 0.4 mm wide.
(Shape :)				
Cutoff Wall		N	N	Buried.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4260, Rise (mm): 2200, Type: BP)				
Barrel Last Accessible Date	31-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Cracking in roof and sides. Cracks up to 1.5mm wide @ West. Most cracks are narrow.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		6	6	West wall has one exposed rebar because of poor cover.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		5	5	Floor has footings.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	Minor leakage.
Separation (mm)	28			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 4260, Rise (mm): 2200, Type: BP)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		5	5	Numerous narrow medium width cracks @ SE wing.
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			New rock @ end of structure and in scour hole @ SW wing.
Above/Below (mm)	500			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Meandering stream.
Bank Stability		5	5	
HWM (m below Top of Culvert)	-2.0			
Drift (Y/N)	Yes			Large amounts of fallen trees U/S - channel has been cleaned out since the last high water that caused this drift in June 2005.
Channel Bottom Degrading/Aggrading	DEGRADING			Possible that water was over road and was 2.0m over top of box in 2005
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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	2013	Repair guardrail - 3 posts @ South side.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	53.9/53.9	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	31-May-2014		Previous Inspection Date	07-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							