

Bridge Culvert Inspection				
Bridge File Number	07691 -1 Bridge Culvert		Form Type	CUL1
Year Built	1928		Lot No.	3
Bridge or Town Name	MORLEY		Inspector Name	Garry Roberts
Located Over	JACOB CREEK, 2.13.51, WATERCRS-ST		Inspector Class	BR CLS A
Located On	1A:04 C1 23.276		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	29-Aug-2012
Legal Land Location	SE SEC 6 TWP 26 RGE 6 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:49:24, 51:11:25		Data Entry Date	28-Sep-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	04-Sep-2012
Clear Roadway/Skew	7 /		Dept. Reviewer Name	Tim Davies
AADT/Year	1,710 / 2011 (A)		Dept. Review Date	02-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	3050	2590	BP	18.9			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	South & North fencelines.		Gas
Power	3 wires 100m North.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	Curves on both sides. Sag with limited sight distance - speed posted @ 80 km/hr. - okay for posted speed.
Vertical Alignment		4	4	
Roadway Width (m)	7.000			
Embankment		5	5	Steep both sides
Sideslope ( _ :1)	2.0			
(Height of Cover(m) : 2.3)				
Guardrail (Y/N)	Yes			1 post missing & section of flexbeam damaged @ NE. 2 broken posts at SW. 1 post split @ midpoint of North rail.
<b>Approach Road / Embankment General Rating</b>		<b>4</b>	<b>4</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		7	7	
(Shape : )				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3050, Rise (mm): 2590, Type: BP)				
Barrel Last Accessible Date	29-Aug-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	6	Staining & medium scaling @ construction joint @ 1/3 L. Some cracking at downstream end roof to wall-minor spalls starting to form. 1 mm wide horizontal crack - typical East & West.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		6	6	Minor vertical cracks - hairline, 0.1 mm wide. Minor Honeycomb in West wall @ 1 m x 2 m area @ North.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	Floor silt covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	
Separation (mm)	30			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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): 3050, Rise (mm): 2590, Type: BP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>6</b>	<b>6</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				South.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		5	5	0.4 mm wide horizontal crack @ SW end 1 m spalled @ SE - spall is above fill, rebar exposed.
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	5	90 degree turn D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.1			(April 11, 2007) No visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>5</b>	

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	Replace 1 flexbeam & 4 - 150 x 200 x 1500 TT posts @ NE guardrail.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>66.7/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>54.9/54.9</b>	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	29-May-2014		Previous Inspection Date	07-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							