

Bridge Culvert Inspection				
Bridge File Number	73948 -1 Bridge Culvert		Form Type	CUL1
Year Built	1992		Lot No.	4
Bridge or Town Name	RAYMOND		Inspector Name	Jon Davies
Located Over	RID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	52:02 C1 21.091		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	28-Sep-2011
Legal Land Location	SE SEC 16 TWP 6 RGE 19 W4M		Data Entry By	Erin Roberts
Longitude, Latitude	-112:29:41, 49:27:57		Data Entry Date	01-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	UNDEFINED CMA		Review Date	03-Oct-2011
Clear Roadway/Skew	10 /		Dept. Reviewer Name	Tim Davies
AADT/Year	400 / 2010 (A)		Dept. Review Date	17-Nov-2011
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	7			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	MP	25	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South ditch.	Gas	
Power	3 wires 20m North & 3 wires 7m West.	Municipal	
Others	Fibre optic cable North ditch.	Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Canal access at 4 corners
Vertical Alignment	9	9	
Roadway Width (m)	7.200		
Embankment	8	8	
Sideslope ( _ :1)	6.0		
(Height of Cover(m) : <b>0.7</b> )			
Guardrail (Y/N)	Yes		
<b>Approach Road / Embankment General Rating</b>	<b>8</b>	<b>8</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction			South end.
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		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>200</b> )				
Scour/Erosion		N	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 # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>1800</b> , Type: <b>MP</b> )				
Barrel Last Accessible Date	15-Jan-2009			Not accessible- due to high water depth
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	Viewed from ends- general shape is good
Measured Rise (mm)	1794			
Measured At Ring No.	2			
Sag (mm)	6			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)	1800			
Measured At Ring No.	2			
Deflection (mm)	6			
Percent Deflection				
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.	2			
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	15			
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		N	N	(Superficial corrosion on the floor) 15- Jan-2009
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			No sight line possible
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	5	(Ice to barrel roof) 19-Jan-2010
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North end.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Curves U/S & D/S of the pipe. A pump inlet and turnout structure U/S
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.6			No visibl w HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>60.4/59.4</b>	Est. Repl. Yr	2040	Maint. Req. (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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	28-Jun-2013		Previous Inspection Date	19-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							