

Bridge Culvert Inspection			
Bridge File Number	01531 -1 Bridge Culvert	Form Type	CUL1
Year Built	1979	Lot No.	4
Bridge or Town Name	GLEICHEN	Inspector Name	Jon Davies
Located Over	WID - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS B
Located On	1:14 R1 36.029;1:14 L1 36.023	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Feb-2012
Legal Land Location	SW SEC 15 TWP 22 RGE 22 W4M	Data Entry By	Lauren Korte
Longitude, Latitude	-112:58:53, 50:51:49	Data Entry Date	18-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA30	Review Date	27-Feb-2012
Clear Roadway/Skew	25.7 / -2 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	6,650 / 2010 (A)	Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120	Follow-Up By	
Detour Length (km)	1		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2620	1770	RPP	68.9	152X51	4.0	PIPE ARCH
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South R/W.	Gas	
Power	1 wire North, South & West, APPROX 30m.	Municipal	
Others	FROM C.L., CROSSING 100m West.	Problem (Y/N)	No
Remarks	Fibre optics @ North R/W.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 150m West.
Vertical Alignment		7	7	
Roadway Width (m)	25.700			
Embankment		7	7	
Sideslope ( _ :1)	4.0			
(Height of Cover(m) : 2)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	Ingrown.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>200</b> )				
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): 2620, Rise (mm): 1770, Type: RPP)				
Barrel Last Accessible Date	11-Feb-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		5	5	Grout nipples at D/S end.
Measured Rise (mm)	1650			
Measured At Ring No.	13			Estimate.
Sag (mm)	120			
Percent Sag	7			
Sidewall		5	5	
Measured Span (mm)	2780			
Measured At Ring No.	13			
Deflection (mm)	160			
Percent Deflection	6			
Floor		N	N	Floor is ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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)	No			
Longitudinal Stagger (Y/N)	No			
Coating		N	6	Minor staining @ boltholes at sidewall and roof.
Corrosion By Soil (Y/N)	Yes			Superficial corrosion at waterline and below.
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2620, Rise (mm): 1770, Type: RPP)				
Fish Passage Adequacy		X	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>5</b>	<b>5</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		4	4	Heavy scaling.
Collar		6	6	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	6	Heavily ingrown.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	5	
Bank Stability		7	7	
HWM (m below Top of Culvert)				None Visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
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							
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>58.5/58.5</b>	Est. Repl. Yr	2020	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	11-Nov-2013		Previous Inspection Date	08-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							