

Bridge Culvert Inspection			
Bridge File Number	78647 -1 Bridge Culvert	Form Type	CULE
Year Built	1976	Lot No.	2
Bridge or Town Name	RIV QUI BARR	Inspector Name	Todd Warshawski
Located Over	2ND ORDER TRIBUTARY TO STURGEON RIVER, 6.65.13.2, WATERCRS-ST	Inspector Class	BR CLS B
Located On	44:00 C1 17.345	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Apr-2013
Legal Land Location	SW SEC 4 TWP 55 RGE 26 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:49:07, 53:43:16	Data Entry Date	30-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA09	Review Date	29-Apr-2013
Clear Roadway/Skew	18 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	4,580 / 2012 (A)	Dept. Review Date	01-May-2013
Road Classification	RAU-211.8-110	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	U/S	-	1810	SP	10.9	152X51	3.0	ROUND
1	MAIN	1724	1901	SPE	18.3	152X51	2.8	ELLIPSE
1	D/S	-	1810	SP	7.3	152X51	3.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West r/w.	Gas	To North approx 100m.
Power	2 wires to East r/w, street lights.	Municipal	
Others		Problem (Y/N)	No
Remarks	Tagged on u/s crown		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Hwy 37 intersection 20m South of crossing.
Vertical Alignment		9	9	
Roadway Width (m)	17.800			30mm wide crack and ravelling ACP over CSP-photo
Embankment		4	6	
Sideslope (__:1)	5.0			
(Height of Cover(m) : <b>0.8</b> )				
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		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1810, Type: SP)				
Barrel Last Accessible Date	16-Apr-2013			Ratings for u/s & d/s extensions
Special Features				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	
Measured Rise (mm)	1819			
Measured At Ring No.	3			
Sag (mm)	0			
Percent Sag	0			
Sidewall		8	8	
Measured Span (mm)	1817			
Measured At Ring No.	10			
Deflection (mm)	10			
Percent Deflection	0			
Floor		7	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	8	
Separation (mm)	15			
Longitudinal Seams		7	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1810, Type: SP)				
Ponding (Y/N)	No			
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 Extension General Rating</b>		<b>7</b>	<b>8</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	16-Apr-2013			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	7	
Measured Rise (mm)				Risde not measured due to ice.
Measured At Ring No.				
Sag (mm)				Sag est less than 3%
Percent Sag	0			
Sidewall		8	7	
Measured Span (mm)	1762			
Measured At Ring No.	6			
Deflection (mm)	38			
Percent Deflection	2			
Floor		7	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	Lower 1/3 not viewed/rated
Separation (mm)	0			
Longitudinal Seams		7	7	
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		N	6	Floor of center section.-30-Sep-2009
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Ponding (Y/N)	No			
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>7</b>	<b>7</b>	
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		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	45 degree turn SE downstream.
Bank Stability		8	6	Landowner is rasing banks with fill
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>7</b>	<b>6</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	Patch crack in CSP over culvert.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>77.6/75.8</b>	Est. Repl. Yr	2030	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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	16-Jan-2015		Previous Inspection Date	06-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							