

Bridge Culvert Inspection			
Bridge File Number	70904 -1 Bridge Culvert	Form Type	CUL1
Year Built	1972	Lot No.	2
Bridge or Town Name	ROBB	Inspector Name	Todd Warshawski
Located Over	BRYAN CREEK, 8.11.107.33.16, WATERCRS-ST	Inspector Class	BR CLS B
Located On	47:06 C1 6.656	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	31-Oct-2012
Legal Land Location	NE SEC 15 TWP 49 RGE 21 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:59:07, 53:13:45	Data Entry Date	19-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13	Review Date	13-Nov-2012
Clear Roadway/Skew	10.2 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,020 / 2011 (A)	Dept. Review Date	20-Nov-2012
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	73		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2905	3203	SPE	63.4	152X51	3.5	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	East r/w.	Gas	
Power	5 wires West r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	File tag present, exterior U/S end roof.		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Access to Robb to North. Gentle curve. No passing N/B. Acceleration & deceleration lanes. Long sag.
Vertical Alignment	6	6	
Roadway Width (m)	10.200		
Embankment	5	5	
Sideslope ( __:1)	2.5		
(Height of Cover(m) : 7)			
Guardrail (Y/N)	Yes		Several loose connections. Strike damage on E & W rail with several broken posts.-photo
<b>Approach Road / Embankment General Rating</b>	<b>6</b>	<b>6</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		5	5	Bevel projects from fill 1000mm. Upper bevl pushed inward.-photo
Heaving (mm)	600			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	150			
Scour Protection		4	4	Settlement of ground around bevel.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		4	4	Loss of fill along bevel.-photo
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2905, Rise (mm): 3203, Type: SPE)				
Barrel Last Accessible Date	31-Oct-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		5	6	
Measured Rise (mm)	3026			
Measured At Ring No.	14			
Sag (mm)	177			
Percent Sag	5			
Sidewall		5	5	
Measured Span (mm)	3120			
Measured At Ring No.	14			
Deflection (mm)	215			
Percent Deflection	7			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
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				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	6	Stains at upper seams/bolts.
Corrosion By Soil (Y/N)	Yes			
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: MAIN, Span (mm): 2905, Rise (mm): 3203, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	Hanging outlet.
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	5	
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		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	400			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	600			
Scour Protection		4	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		4	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	6	
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>5</b>	<b>6</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2013	25m3 CL2 at inlet.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Repair damaged guardrail/posts.					
OTHER ACTION	2013	Tighten loose guardrail connections.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>42.9/44.6</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	Bryan Wai		Previous Assistant's Name	Junaid Iqbal			
Next Inspection Date	31-Jul-2014		Previous Inspection Date	04-Oct-2012			
Inspection Cycle (Default) (months)	21						
Comment							