

Bridge Culvert Inspection			
Bridge File Number	78748 -1 Bridge Culvert	Form Type	CUL1
Year Built	1977	Lot No.	2
Bridge or Town Name	ROBB	Inspector Name	Todd Warshawski
Located Over	CENTRE CREEK, 8.11.84.73, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:24 C1 10.502	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	31-Oct-2012
Legal Land Location	NW SEC 5 TWP 47 RGE 19 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:45:09, 53:01:35	Data Entry Date	21-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13	Review Date	13-Nov-2012
Clear Roadway/Skew	13 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	300 / 2011 (A)	Dept. Review Date	22-Nov-2012
Road Classification	RAU-213.4-110	Follow-Up By	
Detour Length (km)	31		

**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	57.9	75X25	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	File tag installed @ U/S roof.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Limited sight distance to East due to crest curve.
Vertical Alignment		6	6	
Roadway Width (m)	13.000			
Embankment		4	6	
Sideslope ( __:1)	3.0			
(Height of Cover(m) : 5)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

**Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	S. side bent in 300mm(under water but visible.)
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	350			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</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	09-Dec-1996			Culvert viewed from ends. (water 900mm deep) General shape and condition appear adequate.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	(Mid 1880 x 1740. 2002/04/06) (06/Oct/2005)
Measured Rise (mm)				
Measured At Ring No.	1			
Sag (mm)	60			
Percent Sag	3			
Sidewall		N	N	(First section from inlet. 2002/04/06)
Measured Span (mm)				
Measured At Ring No.	1			(06/Oct/2005)
Deflection (mm)	80			
Percent Deflection	4			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		N	N	(300mm gap @ last D/S barrel. Coupler intact. 17/Apr/2007)
Separation (mm)	300			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	Pitting rust lower 1/2.-04-Feb-2009
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			900mm ponding due to rock dam @ D/S end.-photo

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		4	4	Hanging outlet & rock dam. -photo
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	.8m ice to crown. -Nov 2010 (400mm deep silt @ U/S barrel. 17/Apr/2007) Iced over.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	G.R. from 17/Apr/2007. Was "6"
Downstream 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 : )				
Cutoff Wall		X	X	
Bevel End		7	6	Bevel protrudes 500mm from fill.
Heaving (mm)	100			
Invert Above/Below Stream Bed		ABOVE		(17/Apr/2007)
Above/Below (mm)	300			
Scour Protection		4	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : )				
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
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading		DEGRADING		Deg d/s only
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2013	Remove rock dam @ D/S end.					
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>51.3/52.8</b>	Est. Repl. Yr	2028	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	Eric Carcoux		Previous Assistant's Name				
Next Inspection Date	31-Jul-2014		Previous Inspection Date	08-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							