

Bridge Culvert Inspection			
Bridge File Number	81842 -1 Bridge Culvert	Form Type	CUL1
Year Built	1979	Lot No.	2
Bridge or Town Name	GRAND CENTRE	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO MARIE CREEK, 7.7.2, WATERCRS-ST	Inspector Class	BR CLS B
Located On	897:14 C1 4.683	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	15-Dec-2011
Legal Land Location	SW SEC 24 TWP 63 RGE 3 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-110:20:00, 54:27:50	Data Entry Date	10-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA08	Review Date	30-Dec-2011
Clear Roadway/Skew	9.2 / -5 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	490 / 2010 (A)	Dept. Review Date	18-Jan-2012
Road Classification	RCU-210-110	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	MAIN	-	1829	MP	24.4	68X13	2.8	ROUND
Special Features	VERT STEEL STRUTS							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	Along West ditch.	Gas	
Power	3 wires OH 23m East of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag installed @ West end, top of roof.-Damaged		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Access to residence North & South. Crest curve to South. No passing. Limited sight distance.
Vertical Alignment	6	6	
Roadway Width (m)	9.200		
Embankment	7	7	
Sideslope ( __:1)	3.0		
(Height of Cover(m) : 1.7)			
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	W		
End Treatment (Concrete, Steel, Others, None)	NONE		
Headwall	X	X	
Collar	X	X	
Wingwalls (Shape : )	X	X	
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	End torn off.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		4	4	Small quantity of rock.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		4	4	Fill erosion around end due to no bevel.
Beavers (Y/N)				
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</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>1829</b> , Type: <b>MP</b> )				
Barrel Last Accessible Date	15-Dec-2011			
<b>Special Features</b>				
Special Feature			7	75mm x 100mm HSS tube struts at 1500 OC. 75mm x 100mm whalers top and bottom.
(Type : <b>VERT STEEL STRUTS</b> )				
Special Feature				
(Type : )				
Roof		3	3	West end roof torn, probably when removing dam/installing cage.
Measured Rise (mm)	1645			Rise/sag not measured due to ice.
Measured At Ring No.				
Sag (mm)	184			
Percent Sag	10			
Sidewall		4	4	@ centerline
Measured Span (mm)	1978			
Measured At Ring No.				
Deflection (mm)	149			
Percent Deflection	8			
Floor		6	N	Under ice/water
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	80			
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		4	N	Rust flaking, pitting on floor.-Aug,2008
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
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): 1829, Type: MP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	5	Debris caught on struts.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>3</b>	<b>3</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(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							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2012	Remove debris inside U/S barrel.					
OTHER ACTION	2012	Repair inlet section.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>52.4/46.0</b>	Est. Repl. Yr	2025	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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	15-Mar-2015		Previous Inspection Date	14-Aug-2008			
Inspection Cycle (Default) (months)	39						
Comment							