

Bridge Culvert Inspection			
Bridge File Number	73283 -1 Bridge Culvert	Form Type	CUL1
Year Built	1958	Lot No.	1
Bridge or Town Name	EDSON	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO EMBARRAS RIVER, 8.11.107.33.8, WATERCRS-ST	Inspector Class	BR CLS B
Located On	47:06 C1 28.252	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	31-Oct-2012
Legal Land Location	NE SEC 1 TWP 51 RGE 20 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:48:21, 53:22:37	Data Entry Date	30-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13	Review Date	28-Nov-2012
Clear Roadway/Skew	9.1 / 25 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,020 / 2011 (A)	Dept. Review Date	06-Dec-2012
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	20		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1524	MP	15	68X13	2.8	ROUND
1	D/S	-	1524	MP	25	68X13	3.5	ROUND
Special Features	BARREL ELBOW							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West r/w.	Gas	
Power	5 wires West r/w, 3 wires East r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	File tag in place - top @ West/Inlet end.		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	On wide horizontal curve, no passing on NB. Shallow sag.
Vertical Alignment	7	7	
Roadway Width (m)	9.100		
Embankment	6	6	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 4)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>5</b>	<b>5</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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	N	Covered by beaver dam
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	4	Scour/loss of fill along sides of inlet.
Beavers (Y/N)	Yes			2m high dam U/S.
<b>Upstream End General Rating</b>		<b>6</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Barrel Last Accessible Date	31-Oct-2012			
<b>Special Features</b>				
Special Feature		6	6	
(Type : <b>BARREL ELBOW</b> )				
Special Feature				
(Type : )				
Roof		3	3	Measured 8.5 M from D/S end.
Measured Rise (mm)	1315			
Measured At Ring No.				
Sag (mm)	209			13.7%
Percent Sag	14			
Sidewall		3	3	Measured 8.5 M from D/S end.
Measured Span (mm)	1710			
Measured At Ring No.				
Deflection (mm)	186			12.2%
Percent Deflection	12			
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	First section from D/S end.
Separation (mm)	200			
Longitudinal Seams		X	X	Riveted pipe - D/S end.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Scaling rust @ 5-7 o'clock.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	200mm hanging outlet, D/S end.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	5	
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)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		5	4	Loss of fill and under bevel.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		4	4	Scour hole.
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)				HWM not visible.
Drift (Y/N)	Yes			Beaver dam @ Inlet, U/S end.
Channel Bottom Degrading/Aggrading	DEGRADING			2m high dam immediately u/s.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<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	2013	Placement of additional Class I Rock @ U/S & D/S ends of culvert.					
REMOVE DRIFT ACCUMULATION	2013	Removal of beaver dam @ Inlet, U/S end.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Repair scour hole @ D/S end & over hang of outlet bevel end.					
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>39.0/34.0</b>	Est. Repl. Yr	2015	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor annually until replacement. Currently at prelim. stage of replacement. Consider delaying repairs until replacement.		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	Brent Herrick		Previous Assistant's Name	Bryan Wai			
Next Inspection Date	31-Jul-2014		Previous Inspection Date	04-Oct-2012			
Inspection Cycle (Default) (months)	21						
Comment							