

Bridge Culvert Inspection				
Bridge File Number	08394 -1 Bridge Culvert		Form Type	CUL1
Year Built	1983		Lot No.	2
Bridge or Town Name	ATHABASCA		Inspector Name	Todd Warshawski
Located Over	MUSKEG CREEK, 8.11.69, WATERCRS-ST		Inspector Class	BR CLS B
Located On	2:42 C1 0.680		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	29-Mar-2013
Legal Land Location	SW SEC 20 TWP 66 RGE 22 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:17:47, 54:43:17		Data Entry Date	17-Apr-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA10		Review Date	03-Apr-2013
Clear Roadway/Skew	15.4 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	4,110 / 2012 (A)		Dept. Review Date	23-Apr-2013
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	30			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	8600	5200	RPE	30	152X51		ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)				
Utility Attachments				
Telephone	North r/w.		Gas	
Power	5 wires South r/w.		Municipal	North side - street lights.
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	50 km speed zone within town limits. Entrances, 4 lanes over structure plus sidewalk on South.
Vertical Alignment		7	7	
Roadway Width (m)	13.600			
Embankment		5	5	Minor erosion at SW toe of ditch, grassed and stable.-Jul, 2011
Sideslope (___:1)	4.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	Yes			Concrete. Jersey barrier.
Approach Road / Embankment General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Hairline vertical crack.
Collar		7	7	
Wingwalls		4	5	SE wing has a wide shrinkage crack & SW wing has wide shrinkage crack. Form holes not filled in.
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		6	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Upstream End General Rating		4	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 8600, Rise (mm): 5200, Type: RPE)				
Barrel Last Accessible Date	29-Mar-2013			Ice 2.4m from crown.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	6	
Measured Rise (mm)				
Measured At Ring No.				Sag est.
Sag (mm)	50			
Percent Sag	1			
Sidewall		N	N	
Measured Span (mm)				(Bulging inwards on plate 4, 5 & 7 West wall, #5 being worst at est 75mm. East wall same but only 25mm bulge. Bulging appears to be from support wires during installation. 2002/10/09)
Measured At Ring No.				
Deflection (mm)	75			Ice to high to rate sidewall
Percent Deflection				
Floor		N	N	Ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	
Separation (mm)	0			Circumferential seams are staggered. Lower seams not viewed/rated.
Longitudinal Seams		N	6	
Total No. of Cracked Rings	0			(Plates on roof poorly nested. East sidewall longitudinal seams improperly lapped. Lower seams not viewed/rated.
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		7	7	
Corrosion By Soil (Y/N)	Yes			Minor superficial rust up to 0.5m above water level.-Jul, 2011
Corrosion By Water (Y/N)	Yes			Upper 1/2 rated. Corrosion on upper seams/bolts.
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): 8600, Rise (mm): 5200, Type: RPE)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	(G.R. was "5" from 09/Oct/2002)
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		Safety fence damaged at NE.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Headwall lightly scaled.
Collar		7	7	
Wingwalls		4	5	Light scaling. Wide vertical shrinkage crack NE & NW. Water seepage through vertical cracks.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Downstream End General Rating		4	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	
Bank Stability		7	7	
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)				
Channel General Rating		7	9	

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	Repair safety fence on NE wingwall.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	60.3/63.7	Est. Repl. Yr	2034	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor bulging on East & West wall at plate 5, 3:00 position.-09-Oct-2002		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	29-Dec-2014		Previous Inspection Date	07-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							