

Bridge Culvert Inspection			
Bridge File Number	00796 -1 Bridge Culvert	Form Type	CUL1
Year Built	1980	Lot No.	2
Bridge or Town Name	CALMAR	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO WEED CREEK, 6.110.2, WATERCRS-ST	Inspector Class	BR CLS B
Located On	39:10 C1 3.021	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	07-Jan-2013
Legal Land Location	NE SEC 25 TWP 49 RGE 28 W4M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-113:57:24, 53:15:54	Data Entry Date	22-Jan-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11	Review Date	16-Jan-2013
Clear Roadway/Skew	12.8 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	4,570 / 2011 (A)	Dept. Review Date	23-Jan-2013
Road Classification	RAU-211.8-110	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	3495	3854	SPE	48.8	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	N & S RW	Gas	
Power	2 wire N row	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Residential entrance to East, field entrance to west.
Vertical Alignment	8	8	
Roadway Width (m)	12.500		
Embankment	8	8	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 3.3)			
Guardrail (Y/N)	Yes		
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	X	X	
Collar	N	N	(Separation 15mm gap between constr joint @ SE concrete slope.- Jun/09) Snow covered
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	Floor not rated
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	N	Covered in snow/drift
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			Drift across inlet - photo.
Upstream End General Rating		6	6	GR carried fwd.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3495, Rise (mm): 3854, Type: SPE)				
Barrel Last Accessible Date	07-Jan-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	4	Accident damage U/S end, localized area, bent in 300 to 400mm at roof with tear. Tear in roof Ring 6 100mm long.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		4	4	Deflected inward. Rings 1-4, 12
Measured Span (mm)	3460			
Measured At Ring No.	6			
Deflection (mm)	35			
Percent Deflection	1			
Floor		N	N	Ice/water
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	Upper 2/3 rated
Separation (mm)	0			
Longitudinal Seams		4	4	Cusping 1 plates ring 12 East side. Likely cracked on outside. Span is 3150 @ this location.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				Cusping at lower seam ring 1-4.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	
Corrosion By Soil (Y/N)	Yes			
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): 3495, Rise (mm): 3854, Type: SPE)				
Fish Passage Adequacy		5	5	
Baffle		N	N	
(Type :)				
Waterway Adequacy		4	4	Logs & debris across inlet - photo.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		4	4	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
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	(Bevel bending inward 300mm both sides. (Bevel projects from fill 700 mm NE.-June 2009)
Heaving (mm)	200			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		5	5	
HWM (m below Top of Culvert)	0.8			Drift (logs) on bevel (photo).
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	Remove U/S drift.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	44.9/44.7	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor cusping on 1st plate, E side form outlet. 3150mm span between X's. (Monitor outlet scour protection 26Jan06)		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	Todd Warshawski		Previous Assistant's Name				
Next Inspection Date	07-Oct-2014		Previous Inspection Date	24-Mar-2011			
Inspection Cycle (Default) (months)	21						
Comment							