

Bridge Culvert Inspection			
Bridge File Number	13939 -1 Bridge Culvert	Form Type	CUL1
Year Built	1994	Lot No.	4
Bridge or Town Name	MORRIN	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO WEST MICHICHI CREEK, 3.35.2.4, WATERCRS-ST	Inspector Class	BR CLS A
Located On	9:06 C1 18.995	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	02-Nov-2011
Legal Land Location	SE SEC 2 TWP 31 RGE 20 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-112:43:21, 51:37:14	Data Entry Date	28-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA21	Review Date	13-Nov-2011
Clear Roadway/Skew	14.1 / -20 deg. (LHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year		Dept. Review Date	28-Nov-2011
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	8		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4610	SP	76.2	152X51	4.0,4.0,4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ditch, strung through pipe.	Gas	
Power	2 line OH 25m East of centerline.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Farm access 50m NE. Land access 75m SW. Gentle curves located North & South. Slight sag curve.
Vertical Alignment	7	7	
Roadway Width (m)	14.100		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 5.8)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	7	Narrow perpendicular cracks every 0.6m on headwall.
Collar	7	7	
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	N	N	Submerged.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4610, Type: SP)				
Barrel Last Accessible Date	02-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Could not measure rise due to ice.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				Estimate 3%.
Percent Sag				
Sidewall		7	7	(4610 at mid span. 01/11/26) Difficult to measure for one person. Approx measurement: R5 = 4582mm, 28mm. There is a deflection in the North sidewall of ring 12.
Measured Span (mm)	4743			
Measured At Ring No.	12			
Deflection (mm)	133			
Percent Deflection	3			2.9%
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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		6	6	Minor.
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): 4610, Type: SP)				
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		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	Narrow cracking every 0.4m.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Submerged.
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	S curve U/S.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Unknown.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	77.5/79.6	Est. Repl. Yr	2063	Maint. Req. (Y/N)	No
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	Jason Saly		Previous Assistant's Name				
Next Inspection Date	02-Aug-2013		Previous Inspection Date	11-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							