

Bridge Culvert Inspection			
Bridge File Number	83012 -1 Bridge Culvert	Form Type	CUL1
Year Built	2003	Lot No.	4
Bridge or Town Name	TWO HILLS	Inspector Name	Jason Saly
Located Over	TRIBUTARY TO VERMILION RIVER, 6.5.27, WATERCRS-ST	Inspector Class	BR CLS A
Located On	36:20 C1 29.825	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Jan-2013
Legal Land Location	SE SEC 30 TWP 54 RGE 12 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:45:18, 53:41:25	Data Entry Date	22-Jan-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA14	Review Date	19-Jan-2013
Clear Roadway/Skew	11.8 / 18 deg. (RHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	1,290 / 2011 (A)	Dept. Review Date	24-Jan-2013
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	14		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2740	SP	93.27	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	
Power	2 wires OH @ East ditch.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Gradual horizontal curve starts @ 50m North. Blind crest curve 200m South. No passing SB.
Vertical Alignment	6	6	
Roadway Width (m)	11.800		
Embankment	N	N	Well vegetated. Snow covered but no evidence of problem.
Sideslope (__:1)	4.0		
(Height of Cover(m) : 6.8)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	6	6	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	(A bolt bent @ North side of bottom plate - photo. 23May2006). Bevel end plates were out through the holes leaving top holes not connected. Under water, can't confirm. Otherwise bevel in good shape.
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	450			
Scour Protection		9	N	Snow covered but no sign of problem.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		9	N	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2740, Type: SP)				
Barrel Last Accessible Date	10-Jan-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Could not measure rise due to ice. (08Dec2010)
Measured Rise (mm)	2792			
Measured At Ring No.	10			
Sag (mm)	52			
Percent Sag	1			
Sidewall		8	8	Span at R2=2711=29mm=1% Span at R10=2730=10mm Span at R13=2729=11mm Span at R18=2735=5mm Inwards
Measured Span (mm)	2711			
Measured At Ring No.	2			
Deflection (mm)	29			
Percent Deflection	1			
Floor		N	N	(Water 0.9m.). Iced over.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		5	5	Roof seams missing 2 bolts at East end and 1 bolt at West end - ok, no problem.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	2nd circumferential seam has a rust spot at roof, minor. Minor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2740, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	Bevel end plates were cut through the holes leaving top holes not connected.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	N	(Gullies developing around end pipe and on D/S berms. 23/May/2006). Snow covered but no sign of problem.
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	Wide flood plain.
Bank Stability		9	9	
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		9	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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	69.6/66.2	Est. Repl. Yr	2055	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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	10-Oct-2014		Previous Inspection Date	08-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							