

Bridge Culvert Inspection				
Bridge File Number	76245 -1 Bridge Culvert		Form Type	CUL1
Year Built	1965		Lot No.	1
Bridge or Town Name	TWO HILLS		Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	45:08 C1 8.072		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-Jan-2013
Legal Land Location	SE SEC 36 TWP 54 RGE 12 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:37:46, 53:42:17		Data Entry Date	01-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA14		Review Date	13-Feb-2013
Clear Roadway/Skew	9.3 /		Dept. Reviewer Name	Chris Black
AADT/Year	660 / 2011 (A)		Dept. Review Date	28-Mar-2013
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	2			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	1724	1901	MPE	20.7	68X13	3.5	ELLIPSE
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)	No											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not required; cattle crossing.											

Utilities (Located at)

Utility Attachments												
Telephone	Plowed in South ditch.					Gas						
Power	5 wire OH across road 400m East.					Municipal						
Others						Problem (Y/N)		No				
Remarks												

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 250m West. No passing EB. Blind crest curve 100m to East.
Vertical Alignment		5	5	
Roadway Width (m)	9.300			
Embankment		7	N	Snow covered, but no signs of problems.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1.4)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		5	5	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	Squared end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		6	N	Snow covered.
Scour/Erosion		6	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		6	N	GR was 6 from 06Jun2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: MPE)				
Barrel Last Accessible Date	06-Jun-2011			Fencing & snow at ends of pipe prevents entry.
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		2	2	Not measured due to dirt on floor. Large hole in roof @ S end, exposed, from mower damage. Damage outside of roadway.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		7	N	(1655 @ R1. 06Jun2011).
Measured Span (mm)	1720			
Measured At Ring No.				(At mid span. 06Jun2011).
Deflection (mm)				(-4mm. 06Jun2011).
Percent Deflection	0			
Floor		N	N	Partially covered with dirt over concrete floor.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		2	2	Circumferential seam torn @ S end roof where torn by mower. Damage outside of roadway.
Separation (mm)	40			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		7	7	
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): 1724, Rise (mm): 1901, Type: MPE)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	G.R. rating increased by 2 pts as damage to roof not in structural zone.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	Squared end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		6	N	GR was 6 from 06Jun2011.
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Roadway Surface		7	7	
(Type :)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		6	6	
Structure In Use (Y/N)	No			Fenced off at both ends.
Grade Separation 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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	65.6/63.7	Est. Repl. Yr	2029	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Plate has been pushed into pipe as directed by AT; no further action is required. Pipe has been removed from service. LRA sent to Donald Saunders 27Feb2013.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)	Y						
Proposed Action	2008.02.28 Have signed cattle pass removal form, may remove when appropriate. Brownlee & Associates						
Previous Inspector's Name	Jason Saly		Previous Assistant's Name				
Next Inspection Date	22-Oct-2014		Previous Inspection Date	06-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							