

Bridge Culvert Inspection				
Bridge File Number	77012 -1 Bridge Culvert		Form Type	CUL1
Year Built	1969		Lot No.	4
Bridge or Town Name	DERWENT		Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	45:08 C1 55.395		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	21-Jan-2013
Legal Land Location	SE SEC 15 TWP 54 RGE 7 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-110:56:44, 53:39:32		Data Entry Date	01-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA15		Review Date	13-Feb-2013
Clear Roadway/Skew	9.2 /		Dept. Reviewer Name	Chris Black
AADT/Year	580 / 2011 (A)		Dept. Review Date	14-Mar-2013
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1829	MP	22.6	68X13	3.5	ROUND
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	Crosses Hwy 400m East.		Municipal	
Others	Fibre optics North r/w.		Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 200m East. Field approach 20m NW. Near top of a crest curve. On grade to the East. No passing EB. Poor sight distance to East.
Vertical Alignment		5	5	
Roadway Width (m)	9.200			
Embankment		7	N	Transverse crack in ACP previously sealed. Snow covered, but no signs of problems.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 0.9)				
Guardrail (Y/N)	Yes			Minor creasing.
Approach Road / Embankment General Rating		5	5	

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	4	Damage at roof; no action required since no longer in use.
Heaving (mm)	200			
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			
Upstream End General Rating		6	4	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: MP)				
Barrel Last Accessible Date	21-Jan-2013			Minor mower damage to both bevel ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	Mower damage to crowns @ each end of barrel. (S end 1746, 4.5%. 07Jun2011).
Measured Rise (mm)				
Measured At Ring No.				(Estimate 100mm sag. 03/03/25)
Sag (mm)	100			
Percent Sag				Estimate.
Sidewall		5	5	Span at midpipe=1902=73mm=4%Span at N end=1888=59mm Span at S end=1838=9mm
Measured Span (mm)	1902			
Measured At Ring No.				
Deflection (mm)	73			
Percent Deflection	4			
Floor		N	N	Covered with dirt.
Bulge (mm)	0			(03/03/25)
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	85 mm gap within coupler.
Separation (mm)	85			
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: MP)				
Coating		5	5	Some superficial corrosion top of bevel ends and floor, minor soil side corrosion.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	4	Mower damage at roof; no action required since pipe not in use.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
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		5	4	
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				

Structure Usage				
		Last	Now	Explanation of Condition
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		7	7	
Structure In Use (Y/N)	No			Fencing gone.
Grade Separation General Rating		7	7	

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) (%)	70.1/67.2	Est. Repl. Yr	2022	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	(Pipe takes no flow. 07Sep2006).		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)	Y						
Proposed Action	2008.01.17 Have executed Cattlepass removal form. replace livestock underpass with small drainage culvert with Landowner's waterline. Brownlee & Associates						
Previous Inspector's Name	Jason Saly		Previous Assistant's Name				
Next Inspection Date	21-Oct-2014		Previous Inspection Date	07-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							