

Bridge Culvert Inspection				
Bridge File Number	79130 -1 Bridge Culvert		Form Type	CUL1
Year Built	1979		Lot No.	4
Bridge or Town Name	CALGARY		Inspector Name	Garry Roberts
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	8:06 C1 0.525		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	30-May-2012
Legal Land Location	SW SEC 11 TWP 24 RGE 4 W5M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-114:27:34, 51:01:25		Data Entry Date	27-Jun-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA27		Review Date	18-Jun-2012
Clear Roadway/Skew	13 /		Dept. Reviewer Name	Tim Davies
AADT/Year	7,900 / 2011 (A)		Dept. Review Date	29-Jun-2012
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	15			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	29.9	75X25	2.8	ROUND
Special Features		CONC FLOOR						
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										

Utilities (Located at)			
Utility Attachments			
Telephone	IN SOUTH DITCH		Gas
Power	23 m NORTH OF C/L 4 WIRE and South row		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Int Hwy 22 300m W
Vertical Alignment		8	8	
Roadway Width (m)	13.000			
Embankment		4	4	Insufficient cover over pipe. Only 0.3m of cover up to 5m from crown end
Sideslope (___:1)	5.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH
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	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		6	6	
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
Barrel Last Accessible Date	30-May-2012			
<b>Special Features</b>				
Special Feature (Type : <b>CONC FLOOR</b> )		5	5	
Special Feature (Type : )				
Roof		5	5	200 mm DEEP x 1 m LONG DENT @ 1.4 m in U/S end- Estimate. Overall roof shape looks adequate. 200mm deep dent at D/S end.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		6	6	FROM NORTH END @ TOP & WEST SIDE OF BARREL - SEAM OPENED 10 mm
Measured Span (mm)	2210			
Measured At Ring No.	3			
Deflection (mm)	10			
Percent Deflection	1			
Floor		N	N	200 mm GRAVEL ON TOP of concrete floor
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	60mm verticle misalignment in ring 3
Separation (mm)	50			
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		5	5	SUPERFICIAL CORROSION ON TOP OF ROOF @ ENDS and in barrel in ring 4 upper sidewall and roof and in upper sidewall of R1. Barrel has been painted over still corrosion around edges.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	Pipe handles drainage
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>5</b>	<b>5</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		SOUTH
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	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		6	6	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		X	X	
Roadway Surface		7	5	Minor ruts forming.
(Type : <b>ACP</b> )				
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		7	7	
Structure In Use (Y/N)	Yes			
<b>Grade Separation General Rating</b>		<b>7</b>	<b>5</b>	

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>66.1/58.8</b>	Est. Repl. Yr	2032	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	28-Feb-2014		Previous Inspection Date	23-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							