

Bridge Culvert Inspection				
Bridge File Number	78506 -1 Bridge Culvert		Form Type	CUL1
Year Built	1979		Lot No.	4
Bridge or Town Name	MORLEY		Inspector Name	Jon Davies
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS B
Located On	68:04 C1 27.467		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	18-Sep-2012
Legal Land Location	NW SEC 18 TWP 24 RGE 5 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:41:57, 51:02:44		Data Entry Date	10-Oct-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA28		Review Date	21-Sep-2012
Clear Roadway/Skew	12.3 / 0 deg.		Dept. Reviewer Name	Tim Davies
AADT/Year	310 / 2011 (A)		Dept. Review Date	11-Oct-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	16			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4928	3150	RPE	28	152X51	5.0	ELLIPSE
Special Features								
Special Features Comment								

Posting Information									
Required Vert. Clearance Posting (m)									
Posted Vertical Clearance (Y/N)									
Posted:	Lane	NB	On Bridge (m)	In Advance (Y/N)	Lane	SB	On Bridge (m)	In Advance (Y/N)	
Remarks	Not required.								

Utilities (Located at)			
Utility Attachments			
Telephone	West r/w.		Gas
Power			Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Curve to South.
Vertical Alignment		7	7	
Roadway Width (m)	12.300			
Embankment		7	6	4:1 @ West side.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 0.9)				
Guardrail (Y/N)	Yes			West side approx 100 mm below standard height, poor job of radius section on SW corners - heat bent.
Approach Road / Embankment General Rating		5	5	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		West.
End Treatment (Concrete, Steel, Others, None)	STEEL			
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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) : 300)		7	7	
Scour/Erosion		7	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): 4928, Rise (mm): 3150, Type: RPE)				
Barrel Last Accessible Date	18-Sep-2012			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		7	7	Est. roof.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	22			
Percent Sag	1			
Sidewall		4	4	R6 N. Upper longitudinal seam with 3 cracked bolt holes.
Measured Span (mm)	4950			
Measured At Ring No.	5			
Deflection (mm)	22			
Percent Deflection	1			
Floor		N	N	Clay & gravel to 300 mm.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		4	4	R6N upper sidewall Longitudinal Seams with 3 cracked bolt holes - no change Sept/12. Only roof is staggered.
Total No. of Cracked Rings	1			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	137			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Rust stains through bolt holes.
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): 4928, Rise (mm): 3150, Type: RPE)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
Roadway Surface		5	5	
(Type : SOIL)				
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		5	5	
Structure In Use (Y/N)	Yes			
Grade Separation General Rating		5	5	

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) (%)	60.5/60.4	Est. Repl. Yr	2025	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	18-Jun-2014		Previous Inspection Date	07-Jan-2011			
Inspection Cycle (Default) (months)	21						
Comment							