

Bridge Culvert Inspection			
Bridge File Number	00990 -1 Bridge Culvert	Form Type	CULE
Year Built/Lined	1952/2007	Lot No.	4
Bridge or Town Name	RAYMOND	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO ETZIKOM COULEE, 11.9.5, WATERCRS-ST	Inspector Class	BR CLS B
Located On	52:02 C1 10.581	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Sep-2011
Legal Land Location	SE SEC 16 TWP 6 RGE 20 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-112:38:23, 49:27:54	Data Entry Date	01-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	03-Oct-2011
Clear Roadway/Skew	7.3 /	Dept. Reviewer Name	Tim Davies
AADT/Year	1,260 / 2010 (A)	Dept. Review Date	17-Nov-2011
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
2	U/S FULL LINER	-	2200	MP	10			ROUND
2	MAIN FULL LINER	-	1524	SSP	24.4			ROUND
2	D/S FULL LINER	-	2200	MP	10			ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North & South ditch.	Gas	
Power	North row	Municipal	
Others	Fibre optic cable North ditch.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Gradual curve to West. No passing. In sag curve, limited sight distance both sides. Road widens to West.
Vertical Alignment	5	5	
Roadway Width (m)	7.300		
Embankment	8	8	1.0m of backfill over the extensions then up to the road at 1.5:1
Sideslope (___:1)	1.5		
(Height of Cover(m) : 3.2)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	5	5	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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 # : 2, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2200, Type: MP)				
Barrel Last Accessible Date	19-Jan-2010			6.1m long CSP extensions both ends. Not accessible due to high water depth.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	PR 8 Viewed from South end- general shape is good
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	10			
Percent Sag				
Sidewall		8	N	PR 8
Measured Span (mm)	2215			
Measured At Ring No.	1			
Deflection (mm)	15			
Percent Deflection				
Floor		N	N	800mm water
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)				
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)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2200, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		8	N	PR 8

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: SSP)				
Barrel Last Accessible Date	19-Jan-2010			Not accessible due to high water depth
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	Old pipe has been lined with a 1524mm steel pipe and grouted in PR 8 - viewed from South end general shape is good
Measured Rise (mm)	1524			
Measured At Ring No.	1			
Sag (mm)				
Percent Sag				
Sidewall		8	N	PR 8
Measured Span (mm)	1524			
Measured At Ring No.	1			
Deflection (mm)				
Percent Deflection				
Floor		8	N	PR 8
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No			
Circumferential Seams		8	N	(Welded) 19-Jan-2010 PR 8
Separation (mm)				
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: SSP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	PR 8

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
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)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(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
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.0			HWM Not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel 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) (%)	88.9/55.6	Sufficiency Rating (Last/Now) (%)	81.6/65.9	Est. Repl. Yr	2040	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-Jun-2013		Previous Inspection Date	19-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							