

Bridge Culvert Inspection				
Bridge File Number	79528 -1 Bridge Culvert		Form Type	CUL1
Year Built	1981		Lot No.	2
Bridge or Town Name	EAST COULEE		Inspector Name	Owen Salava
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	10:08 C1 16.402		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	01-Nov-2011
Legal Land Location	NE SEC 6 TWP 28 RGE 18 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-112:31:12, 51:22:07		Data Entry Date	30-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA21		Review Date	14-Nov-2011
Clear Roadway/Skew	9.2 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	590 / 2010 (A)		Dept. Review Date	02-Dec-2011
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	20			

Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	2200	MP	21	75X25	3.0	ROUND
Special Features	CONC FLOOR							
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	North ditch.	Gas	South ditch (West).
Power	South side.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Curve to the East.
Vertical Alignment		8	6	
Roadway Width (m)	9.200			
Embankment		6	6	East measured. Small dia. CSP 12m West.
Sideslope ( __:1)	3.5			
(Height of Cover(m) : 1.6)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

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	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		5	5	Minimal grass.
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</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	01-Nov-2011			
<b>Special Features</b>				
Special Feature (Type : <b>CONC FLOOR</b> )		N	N	Silted over.
Special Feature (Type : )				
Roof		4	4	Est 2% deflection. Extended at North with 3m long 2.0m dia CSP. Localized dent in roof R3. 6 small perforations in R4, rated 4 as not under load.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	50			
Percent Sag	2			
Sidewall		6	6	Isolated minor dents at ring ends.
Measured Span (mm)	2160			
Measured At Ring No.	3			
Deflection (mm)	40			
Percent Deflection	2			
Floor		N	N	Concrete floor silted over.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	4	Up to 60mm vertical @ splice. R2 lapped correctly in flow direction. Infiltration (photos).
Separation (mm)	60			
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): 2200, Type: MP)				
Coating		4	4	Some pitting floor & outside roof @ both ends. Moderate sidewall corrosion. S extension roof has perforations.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG				
Ponding (Y/N)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	Handles drainage.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		Concrete poured around culvert at exit from sideslope, not a standard end treatment.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	20mm crack.
Collar		5	5	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	0			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		5	5	
Scour/Erosion		5	5	
Beavers (Y/N)				No
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		X	X	
Roadway Surface (Type : <b>SOIL</b> )		7	7	
Icing (Y/N)				No
Traffic Safety Features Type		X	X	None

Structure Usage				
		Last	Now	Explanation of Condition
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		6	6	
Structure In Use (Y/N)	No			No fences to N.
<b>Grade Separation General Rating</b>		<b>6</b>	<b>6</b>	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
OVERLAY DECK										
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING										
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUTOFF										
REPAIR SEAMS										
OTHER ACTION	2012	Seal circumferential seam gaps with expanding foam to stop infiltration.								
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>55.6/55.8</b>	<b>Est. Repl. Yr</b>	<b>2025</b>	<b>Maint. Req. (Y/N)</b>	<b>Yes</b>			
Special Comments for Next Inspection	Culvert also handles drainage as per 24Nov1994 comment at water adequacy.		Department Comments							
Maintenance Reviewed By			Date			Estimated Total	0			
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)	N									
Proposed Action	2006.10.24 Bridges to review lack of guardrails for safety. This is a crown quarter but should contact lessee in two years to determine continued usage.									
Previous Inspector's Name	Owen Salava	Previous Assistant's Name								
Next Inspection Date	01-Aug-2013	Previous Inspection Date	11-Mar-2010							
Inspection Cycle (Default) (months)	21									
Comment										

**Maintenance Recommendations**

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
OVERLAY DECK						
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION	2012	Seal circumferential seam gaps with expanding foam to stop infiltration.	Programmed	2013		
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>55.6/55.8</b>	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
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Special Comments for Next Inspection	Culvert also handles drainage as per 24Nov1994 comment at water adequacy.	Department Comments	Currently programmed to be replaced in 2021
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Maintenance Reviewed By	Andrew Smikles	Date	30-Oct-2012	Estimated Total	0
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Proposed Long-Term Strategy	
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On 3-Year Program (Y/N)	N
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Proposed Action	2006.10.24 Bridges to review lack of guardrails for safety. This is a crown quarter but should contact lessee in two years to determine continued usage.
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Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
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Next Inspection Date	01-Aug-2013	Previous Inspection Date	11-Mar-2010
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Inspection Cycle (Default) (months)	21
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Comment	
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