

Bridge Culvert Inspection			
Bridge File Number	73822 -1 Bridge Culvert	Form Type	CULE
Year Built	1951	Lot No.	4
Bridge or Town Name	COLEMAN	Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO NEZ PERCE CK, 2.12.37.15.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	3:02 C1 14.905	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Nov-2011
Legal Land Location	NE SEC 8 TWP 8 RGE 4 W5M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:29:59, 49:38:11	Data Entry Date	09-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA26	Review Date	21-Dec-2011
Clear Roadway/Skew	13.4 / 62 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	6,470 / 2010 (A)	Dept. Review Date	10-Jan-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	4		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	-	1800	MP	3.6	68X13		ROUND
1	MAIN	1680	1680	BP	42.7			RECTANGLE
1	D/S	-	1800	SP	51.8	152X51	3.0	ROUND
Special Features	BARREL ELBOW							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power	1 wire at u/s end & light strd	Municipal	
Others		Problem (Y/N)	No
Remarks	1-300 mm ROAD CSP AT NE APRON		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	NEXT TO BF 73819
Vertical Alignment		7	7	
Roadway Width (m)	13.400			
Embankment		6	6	Erosion channel @ SE rock lined drainage from Hwy 3
Sideslope (__:1)	1.0			Walkway over north end with timber rail. 2.5 berm at north.
(Height of Cover(m) : 0)				Embankment sloughing but well veg @ S 1:1 S - 1:1 @ top of S
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		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Some minor spalling
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : )		X	X	
Cutoff Wall		N	N	Buried.
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 400)		7	7	
Scour/Erosion		7	7	
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: U/S, Span (mm): , Rise (mm): 1800, Type: MP)				
Barrel Last Accessible Date	28-Nov-2011			U/S barrel of 1800 x 3.6 long.
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof			6	
Measured Rise (mm)	1830			
Measured At Ring No.	2			Upward.
Sag (mm)	30			
Percent Sag	1			
Sidewall			6	
Measured Span (mm)	1870			
Measured At Ring No.	2			
Deflection (mm)	70			
Percent Deflection	4			
Floor			6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams			4	Open gap at butt joint with BP allowing rock infiltration but no problems.
Separation (mm)	200			
Longitudinal Seams			5	Rivettted seams.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)				
Coating			4	
Corrosion By Soil (Y/N)	No			Moderate corrosion with pitting on floor to mid sidewall.
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1800, Type: MP)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			
Fish Passage Adequacy			5	
Baffle			X	
(Type : )				
Waterway Adequacy			6	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel Extension General Rating</b>			<b>6</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1680, Rise (mm): 1680, Type: BP)				
Barrel Last Accessible Date	28-Nov-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	6	Concrete box cell. Narrow cracks.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	6	Narrow to medium width cracks.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	Rock covered. Also several sections of rail track in barrel of BP.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	6	
Separation (mm)	15			
Longitudinal Seams		N	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		N	X	
Corrosion By Soil (Y/N)	No			
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): 1680, Rise (mm): 1680, Type: BP)					
Camber POS/ZERO/NEG	ZERO				
Ponding (Y/N)	No				
Fish Passage Adequacy		5	5		
Baffle		X	X		
(Type : )					
Waterway Adequacy		5	6		
Icing (Y/N)	No			Minor drift and rail track sections.	
Silting (Y/N)	No				
Drift (Y/N)	Yes				
<b>Barrel General Rating</b>		<b>N</b>	<b>6</b>		
Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 1800, Type: SP)					
Barrel Last Accessible Date	28-Nov-2011				
<b>Special Features</b>					
Special Feature			7	Elbow at D/S end of SPCSP	
(Type : <b>BARREL ELBOW</b> )					
Special Feature					
(Type : )					
Roof		N	7	(South SPCSP Floor clear @ 90% of S pipe) 2004/07/21	
Measured Rise (mm)	1810				
Measured At Ring No.	12				
Sag (mm)	10				
Percent Sag	0				
Sidewall		N	6	Minor construction tears at isolated areas.	
Measured Span (mm)	1805				
Measured At Ring No.	12				
Deflection (mm)	5				
Percent Deflection	0				
Floor		N	6	Minor abrasion.	
Bulge (mm)	0				
Measured At Ring No.					
Abrasion (Y/N)	Yes				
Circumferential Seams		N	7		
Separation (mm)	0				
Longitudinal Seams		N	7	2N at roof.	
Total No. of Cracked Rings	0				
Total No. of Rings with Two Cracked Seams	0				
Min. Remaining Steel Between Cracks (mm)					
Proper Lap (Y/N)	No				
Longitudinal Stagger (Y/N)	Yes				
Coating		5	5	Superficial corrosion on the floor	
Corrosion By Soil (Y/N)	No				
Corrosion By Water (Y/N)	Yes				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 1800, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel Extension General Rating</b>		<b>N</b>	<b>6</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		South end.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	5	
Bank Stability		6	6	Rock Stacked @ NE
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</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>55.6/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>51.6/62.1</b>	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	28-Aug-2013		Previous Inspection Date	17-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							