

Bridge Culvert Inspection			
Bridge File Number	75125 -1 Bridge Culvert	Form Type	CUL1
Year Built	1959	Lot No.	2
Bridge or Town Name	CARBON	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO KNEEHILLS CREEK, 3.46.6, WATERCRS-ST	Inspector Class	BR CLS A
Located On	575:04 C1 7.614	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	25-Jan-2011
Legal Land Location	SE SEC 26 TWP 29 RGE 23 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:07:60, 51:30:12	Data Entry Date	04-Mar-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA21	Review Date	03-Feb-2011
Clear Roadway/Skew	8.4 / 30 deg. (RHF)	Dept. Reviewer Name	Chris Black
AADT/Year	1,060 / 2009 (A)	Dept. Review Date	06-Mar-2011
Road Classification	RCU-208-110	Follow-Up By	
Detour Length (km)	5		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	1429	1575	SPE	19.8	152X51	3.0	ELLIPSE
1	MAIN	1429	1575	SPE	43.8	152X51	3.0	ELLIPSE
1	D/S	1429	1575	SPE	19.8	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment	5% vertical ellipse.							

**Utilities (Located at)**

Utility Attachments			
Telephone	Along South fence.	Gas	
Power	3 OH lines @ N fenceline.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Minor sag curve.
Vertical Alignment		7	7	
Roadway Width (m)	8.400			
Embankment		6	6	4:1 @ top, closer to 3:1 further out.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 10)				
Guardrail (Y/N)	Yes			Turn down end at NE too high. Many post holes not filled. 1 post split on N. rail post.
<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)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		N	7	(Minor rust at valley of invert. 04Oct2004).
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	N	Snow covered.
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</b>	G.R. carried forward from unknown date.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 1429, Rise (mm): 1575, Type: SPE)				
Barrel Last Accessible Date	25-Jan-2011			Shape is 5,5,5,5N plates.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	6	
Measured Rise (mm)	1530			
Measured At Ring No.	17			
Sag (mm)	45			2.9%
Percent Sag	3			
Sidewall		4	4	Sidewall has wavy appearance in some areas. Most bolts on upper East sidewall are not fully engaged, some bolts loose / missing - photo.
Measured Span (mm)	1466			
Measured At Ring No.	16			
Deflection (mm)	37			2.5%
Percent Deflection	3			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	
Separation (mm)	0			
Longitudinal Seams		4	4	Some nuts loose or they have partial bite.
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	Minor pitting at floor of 2 rings at North end.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 1429, Rise (mm): 1575, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	Grass on barrel bolts to crown.
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel Extension General Rating</b>		<b>4</b>	<b>4</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	N	(Edges banged up but still operational. 04Oct2004). Snow covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		N	N	Snow covered.
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	G.R. carried forward from unknown date.
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	
Bank Stability		7	7	
HWM (m below Top of Culvert)				Grass on bolts to crown through entire barrel.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>6</b>	<b>6</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	2012	Retighten all loose / missing bolts and nuts.					
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>56.5/56.4</b>	Est. Repl. Yr	2035	Maint. Req. (Y/N)	Yes
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	Bryan Wai		Previous Assistant's Name				
Next Inspection Date	25-Apr-2014		Previous Inspection Date	22-Feb-2008			
Inspection Cycle (Default) (months)	39						
Comment							