

Bridge Culvert Inspection			
Bridge File Number	71333 -1 Bridge Culvert	Form Type	CUL1
Year Built	1955	Lot No.	1
Bridge or Town Name	HINTON	Inspector Name	Shane Hall
Located Over	TRIBUTARY TO MASKUTA CK, 8.11.141.4, WATERCRS-ST	Inspector Class	BR CLS A
Located On	16:02 C1 9.354	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	06-Jul-2012
Legal Land Location	SE SEC 4 TWP 50 RGE 26 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:44:05, 53:16:52	Data Entry Date	18-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13	Review Date	20-Aug-2012
Clear Roadway/Skew	13 / 10 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	4,240 / 2011 (A)	Dept. Review Date	09-Oct-2012
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	999		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1430	1575	SPE	70.1	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	North r/w.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	No file tag seen. May be buried under dirt.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	On a curve. On grade rising to east, limited sight distance. No passing EB.
Vertical Alignment		6	6	
Roadway Width (m)	13.000			
Embankment		7	7	
Sideslope ( __:1)	3.0			
(Height of Cover(m) : 8)				
Guardrail (Y/N)	Yes			South side only.
<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)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		4	4	Perforations in floor. 1 log across inlet. Gravel layer on bevel end.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	5	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>250</b> )				
Scour/Erosion		7	5	400mmx200mm erosion along NW corner of bevel.-photo
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1430, Rise (mm): 1575, Type: SPE)				
Barrel Last Accessible Date	06-Jul-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	1560			
Measured At Ring No.	6			
Sag (mm)	15			
Percent Sag	1			
Sidewall		7	2	Ring12-50mmx50mm hole @ 9:00 construction damage.-photo Longitudinal seam separated in ring 3.
Measured Span (mm)	1440			
Measured At Ring No.	6			
Deflection (mm)	10			
Percent Deflection	1			
Floor		3	3	Perforation up to 230 x 50 in rings 1-3. Gravel on floor over rings 1-5. Perforations visible above gravel.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		6	2	Ring 3-Longitudinal seam separated 80mm @ 7:00 position over 400mm length.-photo 4 bolts missing
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	3	Floor covered with perforations in floor near u/s in rings 1-3. Bottom 0.5m width of floor has pitting/scaling rust.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1430, Rise (mm): 1575, Type: SPE)				
Fish Passage Adequacy		4	4	Outlet invert perched above streambed, est 500mm.
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	(Iced to within 500 of crown, 00/04/21)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>3</b>	<b>2</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		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		4	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		4	4	Bevel undermined. 1m long, 500mm deep.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	
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)				HWM not visible.
Drift (Y/N)	Yes			Small sized drift.
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<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	2012	Remove log across inlet.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Program for replacement.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/22.2</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>38.3/33.0</b>	Est. Repl. Yr	2015	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	Monitor corrosion and separated longitudinal seam.		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	Eric Carcoux		Previous Assistant's Name				
Next Inspection Date	06-Apr-2014		Previous Inspection Date	15-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							