

Bridge Culvert Inspection			
Bridge File Number	81272 -1 Bridge Culvert	Form Type	CUL1
Year Built	1991	Lot No.	4
Bridge or Town Name	HAYNES	Inspector Name	Jason Saly
Located Over	HAYNES CREEK, 3.66, WATERCRS-ST	Inspector Class	BR CLS A
Located On	11:16 C1 20.131	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	13-Feb-2012
Legal Land Location	NW SEC 4 TWP 39 RGE 23 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:15:34, 52:19:37	Data Entry Date	08-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA20	Review Date	29-Feb-2012
Clear Roadway/Skew	12.1 / -18 deg. (LHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,420 / 2010 (A)	Dept. Review Date	09-Mar-2012
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	11		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	5230	SP	67.7	152X51	5.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power	3 wires North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Farm access 350m East. Curve 0.5 km to East.
Vertical Alignment	8	7	
Roadway Width (m)	12.100		
Embankment	8	8	Minor dents to W-beam.
Sideslope ( _ :1)	2.0		
(Height of Cover(m) : 6.9)			
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	7	7	(Minor cracks. 29Mar2010) - Snow covered,
Collar	7	N	
Wingwalls	X	X	
(Shape : )			
Cutoff Wall	N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1300			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>5230</b> , Type: <b>SP</b> )				
Barrel Last Accessible Date	13-Feb-2012			
Special Features				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	7	Could not measure rise due to ice.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			Estimated 1.0% sag.
Percent Sag	1			
Sidewall		N	7	Could not accurately measure span due to dia. of pipe.
Measured Span (mm)	5285			
Measured At Ring No.				Est.
Deflection (mm)	55			
Percent Deflection	1			
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	5	Leaking at bolt and efflorescence, typical.
Separation (mm)	0			
Longitudinal Seams		N	5	(Water leaking in along bowed seam on West side ring 5 from U/S end. 03/11/30) Evidence (staining) along odd # rings.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
				1N.
Coating		N	5	
Corrosion By Soil (Y/N)	Yes			
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: MAIN, Span (mm): , Rise (mm): 5230, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		N	N	Unknown.
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	Yes			(Heavy silt evident at outlet. 30Mar2010).
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>5</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		7	7	Minor cracks.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1400			
Scour Protection		5	5	Minor erosion beside bevel. Steep embankment is eroded silt.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
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>Channel (U/S and D/S)</b>				
Alignment		4	4	90 degree bend in South channel. Well armoured bank on D/S end.
Bank Stability		5	5	Vertical bank 60m U/S.
HWM (m below Top of Culvert)				HWM not visible. Deadfall D/S.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				Unknown.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>4</b>	<b>4</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>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>62.2/62.2</b>	Est. Repl. Yr	2039	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	13-Nov-2013		Previous Inspection Date	29-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							