

Bridge Culvert Inspection			
Bridge File Number	80896 -1 Bridge Culvert	Form Type	CUL1
Year Built	1985	Lot No.	4
Bridge or Town Name	CONKLIN	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO CHRISTINA RIVER, 8.11.39.4.9, WATERCRS-ST	Inspector Class	BR CLS B
Located On	881:22 C1 18.804	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Sep-2010
Legal Land Location	SW SEC 7 TWP 78 RGE 6 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-110:56:02, 55:44:29	Data Entry Date	21-Sep-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA07	Review Date	16-Sep-2010
Clear Roadway/Skew	10 / 30 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	790 / 2009 (A)	Dept. Review Date	05-Oct-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	250		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	64.6	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others	Fibre optic West r/w.	Problem (Y/N)	No
Remarks	File tag installed on top of East end roof.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Near km 197.
Vertical Alignment		6	6	In sag curve.
Roadway Width (m)	10.000			
Embankment		8	8	
Sideslope ( __:1)	3.0			
(Height of Cover(m) : 6.7)				
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		E		
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		5	5	First 2 sections heaved 400mm.
Heaving (mm)	400			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		6	4	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>250</b> )				
Scour/Erosion		6	4	Scour along bevel.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): <b>1724</b> , Rise (mm): <b>1901</b> , Type: <b>SPE</b> )				
Barrel Last Accessible Date	09-Sep-2010			Water 300mm deep
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	1860			
Measured At Ring No.	9			
Sag (mm)	41			
Percent Sag	1			
Sidewall		7	6	
Measured Span (mm)	1800			
Measured At Ring No.	9			
Deflection (mm)	76			
Percent Deflection	4			
Floor		N	N	Minor abrasion from gravel/rocks traveling through barrel.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	Neg. camber est 500 mm.
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)	No			
Coating		5	5	Superficial corrosion lower 1/2.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Fish Passage Adequacy		3	3	Need high water to exit U/S heaved sections.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	Scour hole suggests pipe may be undersized.
Icing (Y/N)	Yes			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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)	200			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			200mm rock on embankment.
Scour Protection		4	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		4	4	Small scour hole 5m x 2m x 1m.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	HWM not visible. Deadfall in D/S channel.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible. Deadfall in D/S channel.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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>77.8/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>58.8/52.2</b>	Est. Repl. Yr	2029	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	Monitor D/S scour and inlet heaving. If heaving continues consider installing collar.		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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	09-Dec-2013		Previous Inspection Date	13-Jun-2007			
Inspection Cycle (Default) (months)	39						
Comment							