

Bridge Culvert Inspection			
Bridge File Number	80693 -1 Bridge Culvert	Form Type	CUL1
Year Built	1984	Lot No.	4
Bridge or Town Name	GRANDE PRAIR	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO CUTBANK RIVER, 8.10.58.20.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	40:40 C1 2.155	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	21-Aug-2012
Legal Land Location	SE SEC 28 TWP 65 RGE 5 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:41:13, 54:39:12	Data Entry Date	25-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05	Review Date	24-Sep-2012
Clear Roadway/Skew	11.8 / -36 deg. (LHF)	Dept. Reviewer Name	Steve Pasquan
AADT/Year	2,120 / 2011 (A)	Dept. Review Date	07-Jan-2013
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	75		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2610	2877	SPE	137.8	152X51	3.0,3.0,4.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	On a crest curve with limited sight to the S. On long gradual horizontal curve. Superelevated. No passing SB.
Vertical Alignment		6	6	
Roadway Width (m)	11.800			
Embankment		N	4	SW ditch erosion 2 x 1.5 x 40m. EMBANKMENT SLUMPING OVER CULVERT ON D/S SIDE 3m bench both sides. BACKSLOPE SLOUGHING @ SW COR. VEGETATED.
Sideslope ( :1)	3.0			
(Height of Cover(m) : 12.3)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	2 Medium vertical cracks on face.
Collar		N	6	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		N	5	Concrete collar projects from fill 0.7m on S. side.
Heaving (mm)	300			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	6	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)</b>				
Barrel Last Accessible Date	21-Aug-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	2846			
Measured At Ring No.	20			
Sag (mm)	31			
Percent Sag	22			
Sidewall		7	7	
Measured Span (mm)	2649			
Measured At Ring No.	20			
Deflection (mm)	39			
Percent Deflection	2			
Floor		N	7	
Bulge (mm)	0			
Measured At Ring No.	20			
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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		6	6	Minor superficial rust. 500mm strip on floor.
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): 2610, Rise (mm): 2877, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	200mm drop at outlet.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream 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	
Bevel End		5	4	BOTH SIDES PUSHING IN 300mm. Undermined 1.8M
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		N	4	Bevel undermined 1.8m
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		N	4	Bevel undermined 1.8m
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		N	4	South bank at west side sliding into the channel.
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Incised channel.
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>	

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</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>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>64.7/63.4</b>	Est. Repl. Yr	2029	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor SW bank.		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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	21-May-2014		Previous Inspection Date	24-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							