

Bridge Culvert Inspection				
Bridge File Number	82253 E-1 Bridge Culvert		Form Type	CULM
Year Built	2000		Lot No.	4
Bridge or Town Name	WATERCOURSE CULVERT ON PROVINCIAL HIGHWAY 43 NEAR GRANDE PRA		Inspector Name	Russel Vanderschaaf
			Inspector Class	BR CLS B
Located Over	TRIBUTARY TO BEAR RIVER, 8.10.58.18.2.1, WATERCRS-ST		Assistant Name	
			Assistant Class	
Located On	43:04 R1 13.990		Inspection Date	29-Nov-2012
Water Body Cl./Year			Data Entry By	Theresa Lacusta
Navigabil. Cl./Year			Data Entry Date	17-Dec-2012
Legal Land Location	SE SEC 17 TWP 72 RGE 4 W6M		Reviewer Name	Eric Carcoux
Longitude, Latitude	-118:34:31, 55:13:44		Review Date	17-Dec-2012
Road Authority	Alberta Transportation (AIT)		Dept. Reviewer Name	Steve Pasquan
Contract Main. Area	CMA05		Dept. Review Date	03-Jan-2013
Clear Roadway/Skew	12.9 /		Follow-Up By	
AADT/Year	5,880 / 2011 (A)			
Road Classification	RAD-412.4-120			
Detour Length (km)	1			

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1200	SSP	32		9.5	ROUND
2	MAIN	-	1200	SSP	32		9.2	ROUND
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		9	9	In gentle sag
Vertical Alignment		7	7	
Roadway Width (m)	12.900			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1)				
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
(Pipe # : 1, Span Type: )				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: )				
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	N	Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	N	Snow covered
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>8</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: SSP)				
Barrel Last Accessible Date	29-Nov-2012			West pipe
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	6	near cl estimsated due to ice.
Measured Rise (mm)	1147			
Measured At Ring No.				
Sag (mm)	53			
Percent Sag	4			
Sidewall		7	7	near cl Inward
Measured Span (mm)	1197			
Measured At Ring No.				
Deflection (mm)	39			
Percent Deflection	18			
Floor		7	7	near cl
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)				
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: SSP)</b>				
Coating		6	6	Minor surface rust.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>6</b>	<b>6</b>	

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: SSP)</b>					
Barrel Last Accessible Date	29-Nov-2012			East pipe	
<b>Special Features</b>					
Special Feature					
(Type : )					
Special Feature					
(Type : )					
Roof		7	7	near cl estimated due to ice.	
Measured Rise (mm)	1189				
Measured At Ring No.					
Sag (mm)	11				
Percent Sag					
Sidewall		7	7	near lc ineard	
Measured Span (mm)	1195				
Measured At Ring No.					
Deflection (mm)	5				
Percent Deflection					
Floor		7	7	near cl	
Bulge (mm)					
Measured At Ring No.					
Abrasion (Y/N)	No				
Circumferential Seams		7	7		
Separation (mm)					
Longitudinal Seams		X	X		
Total No. of Cracked Rings					
Total No. of Rings with Two Cracked Seams					
Min. Remaining Steel Between Cracks (mm)					
Proper Lap (Y/N)					
Longitudinal Stagger (Y/N)					

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: SSP)				
Coating		6	6	Minor surface rust
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
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	
(Pipe # : 2, Span Type: )					
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		8	8		
Heaving (mm)					
Invert Above/Below Stream Bed	BELOW				
Above/Below (mm)	200				
Scour Protection		8	N	Snow covered	
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 300)					
Scour/Erosion		8	N	Snow covered	
Beavers (Y/N)	No				
<b>Downstream End General Rating</b>		<b>8</b>	<b>8</b>		

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)				No HWM visible
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading				stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>8</b>	<b>8</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>66.7/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>73.0/72.9</b>	Est. Repl. Yr	2060	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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	29-Aug-2014		Previous Inspection Date	21-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							