

Bridge Culvert Inspection				
Bridge File Number	73436 -1 Bridge Culvert		Form Type	CUL1
Year Built	1987		Lot No.	4
Bridge or Town Name	PADDLE PRAIR		Inspector Name	Russel Vanderschaaf
Located Over	BOYER RIVER, 8.10.23, WATERCRS-ST		Inspector Class	BR CLS B
Located On	35:12 C1 18.483		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	15-Nov-2011
Legal Land Location	SW SEC 5 TWP 103 RGE 22 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:36:51, 57:54:29		Data Entry Date	13-Dec-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA01		Review Date	12-Dec-2011
Clear Roadway/Skew	11 / -15 deg. (LHF)		Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,130 / 2010 (A)		Dept. Review Date	10-Jan-2012
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	7100	4000	RPB	15.9	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone			Gas
Power	4 wires o/h along West ditch.		Municipal
Others			Problem (Y/N) No
Remarks	Gauge station 3m from d/s end.		

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Built on a curve, slight limited site distance. No passing NB.
Vertical Alignment		7	8	
Roadway Width (m)	11.000			
Embankment		7	4	Erosion on NW corner behind wingwall. (1.3mx1.9m)
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	Yes			Approach rail not attached to bridge. 15mmx55mm spall on East curb. Curbs 30% scaling. 4 missing bolts on bridge rail. 6 missing bolts on guardrail. Hazard markers attached to 2nd guardrail post from structure.
<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	5	30% scaling Wide vertical cracks on top of culvert.
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : )		5	4	(South West wingwall leaning at top-May 16, 2008).
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			Under snow.
Above/Below (mm)	500			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		6	5	No evident problems through snow.
Scour/Erosion		6	5	No evident problems.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 7100, Rise (mm): 4000, Type: RPB)				
Barrel Last Accessible Date	18-Feb-2010			~2m of water, viewed from ends.
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		6	6	Floor covered with ice.
Measured Rise (mm)				Est
Measured At Ring No.				
Sag (mm)	10			
Percent Sag				
Sidewall		6	6	
Measured Span (mm)	7033			approx.cl - 18-Feb-2010
Measured At Ring No.	5			
Deflection (mm)	67			deflection inward.
Percent Deflection	1			
Floor		N	N	Under ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		6	6	3N stagger on roof, none on sides.
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)	No			
Coating		4	4	Pitting rust above ice level. Akaling deposit through roof bolts.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 7100, Rise (mm): 4000, Type: RPB)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type : )				
Waterway Adequacy		7	8	
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>6</b>	<b>6</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Scalling on E and W side of headwall.-30%
Collar		X	X	
Wingwalls		5	6	SE wingwall pile pushing North.
(Shape : )				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		5	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	6	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM NOT VISIBLE
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			Not visible-covered with snow.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
<b>Channel General Rating</b>		<b>7</b>	<b>7</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>67.7/70.8</b>	Est. Repl. Yr	2035	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	Brian Pientsch		Previous Assistant's Name	Lisbeth Medina			
Next Inspection Date	15-Aug-2013		Previous Inspection Date	18-Feb-2010			
Inspection Cycle (Default) (months)	21						
Comment							