

Bridge Culvert Inspection			
Bridge File Number	07015 -1 Bridge Culvert	Form Type	CUL1
Year Built	1999	Lot No.	2
Bridge or Town Name	HOBHEMA	Inspector Name	Jason Saly
Located Over	TRIBUTARY TO BATTLE RIVER, 5.52, WATERCRS-ST	Inspector Class	BR CLS A
Located On	2A:24 C1 14.314	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	23-Nov-2011
Legal Land Location	NE SEC 12 TWP 44 RGE 25 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:29:46, 52:47:04	Data Entry Date	21-Dec-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA17	Review Date	15-Dec-2011
Clear Roadway/Skew	12.8 / -29 deg. (LHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,980 / 2010 (A)	Dept. Review Date	09-Jan-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	15		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3000	2400	PCB	30			RECTANGLE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments							
Telephone	West r/w & East r/w.			Gas	Crossing 150m North.		
Power	1 wire crossing 80m North.			Municipal			
Others	6 wire East approx 15m from c/l, telecommunication.			Problem (Y/N)	No		
Remarks							

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 100m North. Accel/decel lanes end/start over pipe.
Vertical Alignment		8	8	
Roadway Width (m)	12.800			
Embankment		7	N	Snow covered.
Sideslope ( :1)	2.5			
(Height of Cover(m) : 0.7)				
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		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
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		7	7	Concrete end, bevel cut. Not visible.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Not visible.
Above/Below (mm)	500			
Scour Protection		N	N	Snow covered.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>250</b> )				
Scour/Erosion		N	N	
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
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3000, Rise (mm): 2400, Type: PCB)</b>				
Barrel Last Accessible Date	23-Nov-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	4 anchor assembly plates bolted through roof for guardrail posts.
Measured Rise (mm)	2400			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		8	8	
Measured Span (mm)	3000			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		8	N	Ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Rubber seal broken @ E end of R1 @ bottom @ N. Actively losing fines. 100mm gap outside. Not a problem as it is the end barrel seam with no dirt cover over top. Also @ R8.
Separation (mm)	90			
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)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3000, Rise (mm): 2400, Type: PCB)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>8</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		5	5	Concrete. Slight settlement @ bevel end, circumferential seam 35m gap @ bottom with 95mm gap @ top.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : <b>RIP RAP</b> ) (Avg. Rock Size(mm) : <b>250</b> )		N	N	Snow covered.
Scour/Erosion		N	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.0			Flow line on wall.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</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	2012	Seal circumferential seams.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/88.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>82.0/82.0</b>	Est. Repl. Yr	2055	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Check E bevel for settlement. Measure circ. seam at marks on N side, near roof.		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	23-Aug-2013		Previous Inspection Date	02-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							