

Bridge Culvert Inspection			
Bridge File Number	73865 -1 Bridge Culvert	Form Type	CULM
Year Built	1952	Lot No.	4
Bridge or Town Name	MYRNAM	Inspector Name	Jason Saly
Located Over	2ND ORDER TRIBUTARY TO SLAWA CREEK, 6.19.1.3, WATERCRS-ST	Inspector Class	BR CLS A
Located On	45:08 C1 37.697	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Jan-2013
Legal Land Location	SW SEC 13 TWP 54 RGE 9 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:12:18, 53:39:28	Data Entry Date	28-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA15	Review Date	13-Feb-2013
Clear Roadway/Skew	8 / 0 deg.	Dept. Reviewer Name	Chris Black
AADT/Year	580 / 2011 (A)	Dept. Review Date	14-Mar-2013
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	6		

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	SP	28.7	152X51	2.8	ROUND
2	MAIN	-	914	MP	24.4	68X13	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South ditch.	Gas	Crosses Hwy 16m West of sec span.
Power	3 wire OH 25m North of c/l.	Municipal	
Others	1 line OH N/S 90m West.	Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	R/W superelevated over culverts in long curve. Slight blind crest curve to East. No passing EB. Intersection 75m West.
Vertical Alignment	6	6	
Roadway Width (m)	8.000		
Embankment	6	N	Cover on MP 1.95 m. Snow covered, but no signs of problems.
Sideslope (__:1)	3.0		
(Height of Cover(m) : 3.1)			
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
<b>(Pipe # : 1, Span Type: Primary Span)</b>			
Direction	S		East pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape : )			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Cutoff Wall		X	X	
Bevel End		6	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			(03/03/25)
Above/Below (mm)	200			
Scour Protection		7	N	(Well vegetated. 07Jun2011) - Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>N</b>	GR was 6 from 07Jun2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SP)</b>				
Barrel Last Accessible Date	17-Aug-2009			Ice within 500mm of roof at N end & 1.0m at S end; shape appears adequate.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	(Rise U/S1490, < 1%. Mid 1540, 1480. 21Oct99).
Measured Rise (mm)				
Measured At Ring No.				Estimate (03/03/25)
Sag (mm)	80			
Percent Sag				
Sidewall		N	N	W sidewall punctured 1.4 from U/S end of barrel, 300mm dia - minor. (At mid span. 17Aug2009).
Measured Span (mm)	1565			
Measured At Ring No.				
Deflection (mm)	65			(4.3%. 17Aug2009).
Percent Deflection	4			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	(0.8m deep water. It appears this structure was extended with a 5% VE to the S. The transition from a round pipe to 5% VE resulted in some loose bolts & a flat seam at ring 4 at 2 o'clock. 17Aug2009).
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			1N
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	(Superficial rust along strip of floor. 1999/10/21). (Spot corrosion on roof/sidewall. 17Aug2009).
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): , Rise (mm): 1500, Type: SP)				
Camber POS/ZERO/NEG	ZERO			(03/03/25)
Ponding (Y/N)	Yes			(~1m water at midpipe. 07Jun2011).
Fish Passage Adequacy		6	6	
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>4</b>	<b>4</b>	GR carried forward from 17Aug2009 based on sidewall rating.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		Bevel end immersed in water.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	N	(East side of bevel toe is bent. 03/03/25). (Bevel end immersed in water & covered by vegetation. 07Jun2011) - Snow covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			(03/03/25)
Above/Below (mm)	400			
Scour Protection		5	N	(Minimal riprap visible, well vegetated. 07Jun2011) - Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>N</b>	GR was 5 from 07Jun2011.
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		6.5m West of primary span.
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
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Bevel End		6	N	(Bevel overgrown with weeds/grass. 07Jun2011).
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			(03/03/25)
Above/Below (mm)	1000			
Scour Protection		6	N	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>N</b>	GR was 6 from 07Jun2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 914, Type: MP)</b>				
Barrel Last Accessible Date	05-Sep-2006			6.5m West of SP. Viewed from ends; shape appears adequate.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	Roof appears in good condition.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	Sidewalls appear in good condition.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	(Floor appears in good condition. 05Sep2006.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	(05/Sept/2006)
Separation (mm)	30			
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		6	5	Viewed from ends.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 914, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	5	Structure serves only as an overflow culvert to supplement primary span.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>5</b>	<b>N</b>	GR was 5 from 05Sep2006.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1450			
Scour Protection		6	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>N</b>	GR was 6 from 07Jun2011.
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				Unknown.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<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>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>52.6/51.5</b>	Est. Repl. Yr	2020	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	Jason Saly		Previous Assistant's Name				
Next Inspection Date	22-Oct-2014		Previous Inspection Date	07-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							