

Bridge Culvert Inspection			
Bridge File Number	70937 -1 Bridge Culvert	Form Type	CULM
Year Built	1969	Lot No.	2
Bridge or Town Name	MYRNAM	Inspector Name	Jason Saly
Located Over	TRIBUTARY TO SLAWA CREEK, 6.19.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	45:08 C1 44.179	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Jan-2013
Legal Land Location	SW SEC 15 TWP 54 RGE 8 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:06:25, 53:39:27	Data Entry Date	25-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA15	Review Date	13-Feb-2013
Clear Roadway/Skew	9 /	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	2019	2226	SPE	50	152X51	2.8	ELLIPSE
2	MAIN	-	914	MP	50	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Plowed in South ditch.	Gas	
Power	3 wire OH 25m North of c/l along fenceline.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Intersection 100m West.
Vertical Alignment	6	6	Long grade up to West over 2 crest curves. No passing WB.
Roadway Width (m)	9.300		
Embankment	6	N	(Riprap in drainage ditch @ SE corner. 07Jun2011) - Snow covered, but no signs of problems.
Sideslope (__:1)	2.5		
(Height of Cover(m) : 4.7)			
Guardrail (Y/N)	Yes		Damaged down turned terminal end at SE. Broken post along S rail.
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	S		
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
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		5	N	Snow covered.
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			(Piles in floor of bevel only - photo. 06Sept2006).
Above/Below (mm)	250			
Scour Protection		5	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		5	N	Snow covered.
Beavers (Y/N)	Yes			1.2m dam at end of bevel.
Upstream End General Rating		5	N	GR was 5 from 07Jun2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Barrel Last Accessible Date	22-Jan-2013			Inspected 8 Of 20 rings before ice height too great.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	4	Rise at R5=2213=13mm (Rise at R10=2208=18mm Rise at R12=2193=33=1.5% Rise at R15=2236=10mm. 07Jun2011). R8 2:00 seam has inward cusping; no action required. (07Jun2011)
Measured Rise (mm)	2196			
Measured At Ring No.	12			
Sag (mm)	33			
Percent Sag	2			
Sidewall		5	5	Span at R5=2047=28mm (Span at R10=2011=8mm Span at R12=2068=49mm=2.4% Span at R15=2011=8mm. 07Jun2011). Corrugation crimped at R5/6 5:00. (07Jun2011)
Measured Span (mm)	2068			
Measured At Ring No.	12			
Deflection (mm)	49			
Percent Deflection	2			
Floor		6	N	Patially covered by ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		4	4	R1,8-9 have poorly nested seams and loose bolts and R8-9 are covered by beaver debris. (R11 loose bolts & building inward @ 2:00. 07Jun2011). Rating carried forward; no action required.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				1N stagger.
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	N	(Pitting on floor 07Jun2011), staining through bolt holes. Ice on floor.
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): 2019, Rise (mm): 2226, Type: SPE)					
Camber POS/ZERO/NEG	ZERO				
Ponding (Y/N)	Yes			1.2m at S end.	
Fish Passage Adequacy		4	4	Cannot get through beaver dams.	
Baffle		X	X		
(Type :)					
Waterway Adequacy		4	4	(Ices almost completely full. 96/02/20). (Up to 100mm from D/S crown. 96/02/20). Beaver dam drift @ S bevel/opening. Rating based on previous comments.	
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	Yes				
Barrel General Rating		4	4		
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Span Type: Primary 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		N	N	Snow covered.	
Heaving (mm)					
Invert Above/Below Stream Bed	ABOVE			(03Mar25)	
Above/Below (mm)	300				
Scour Protection		N	N	(Riprap washed into stream. Degradation of s/b at D/S end occurring due to steep nature of channel to North. 03/03/25).	
(Type :)					
(Avg. Rock Size(mm) :)					
Scour/Erosion		N	N		
Beavers (Y/N)	Yes				
Downstream End General Rating		5	N	GR was 5 since 07Sep2006.	
Upstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Span Type: Secondary Span)					
Direction		S		South end located 6.8m East of SPCSP. Unable to find. Buried by beaver dam.	
End Treatment (Concrete, Steel, Others, None)	NONE				
Headwall		X	X		
Collar		X	X		
Wingwalls		X	X		
(Shape :)					
Cutoff Wall		X	X		

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		N	N	(80% overgrown, very difficult to find.) Covered by beaver dam.
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			(03/03/25)
Above/Below (mm)	300			
Scour Protection		N	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		N	N	(Small scour hole @ U/S end.)
Beavers (Y/N)	Yes			
Upstream End General Rating		N	N	GR was 7 from 15Dec1997.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 914, Type: MP)				
Barrel Last Accessible Date	15-Dec-1997			Barrel completely inaccessible.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(03/03/25)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	25			
Percent Sag				
Sidewall		N	N	(03/03/25)
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	25			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	
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		N	N	(03/03/25)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

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		4	4	(Pipe submerged at N end. 07Jun2011). (Ices full at D/S end. 20Feb1996). (03Mar25). Covered by beaver dam at S end.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	General rating carried over from 20Feb1996.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		Not visible. Submerged.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	(Submerged. 07Jun2011).
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	Yes			
Downstream End General Rating		5	N	GR was 5 from 07Sep2006.
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)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				(100 x 50m ponds @ other end. Aggradation of s/b to S with manure & straw while D/S is degrading due to steep grade in s/b. 03/03/25). U/S & D/S dams.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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	2013	Remove beaver dam & debris in barrel & in U/S opening. Remove dam 30m D/S before next inspection.					
OTHER ACTION	2013	Locate & inspect secondary span culvert.					
OTHER ACTION	2013	Replace guardrail post.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	42.3/42.2	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
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							