

Bridge Culvert Inspection				
Bridge File Number	01510 -1 Bridge Culvert		Form Type	CUL1
Year Built/Lined	1965/1990		Lot No.	2
Bridge or Town Name	MARWAYNE		Inspector Name	Jason Saly
Located Over	STRETTON CREEK, 6.5.6, WATERCRS-ST		Inspector Class	BR CLS A
Located On	897:04 C1 12.210		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	29-Nov-2012
Legal Land Location	SW SEC 36 TWP 51 RGE 3 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-110:19:31, 53:26:33		Data Entry Date	01-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA15		Review Date	25-Feb-2013
Clear Roadway/Skew	10.3 / -45 deg. (LHF)		Dept. Reviewer Name	Chris Black
AADT/Year	2,570 / 2011 (A)		Dept. Review Date	14-Mar-2013
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
2	MAIN FULL LINER	-	2700	MP	49.4	125X26	2.8,2.8,2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)				
Utility Attachments				
Telephone	Along West ditch.		Gas	
Power	3 wires OH 25.0m East of c/l. 2 wire crosses c/l of road and pipe.		Municipal	
Others	WSC gauge 12.0m West of West end.		Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	In long shallow sag curve with no passing Northbound. Poor sight distance to North.
Vertical Alignment		6	6	
Roadway Width (m)	10.300			
Embankment		7	N	Snow covered, but no signs of problems.
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 2.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)		CONCRETE		
Headwall			3	Concrete on top of pipe is broken & slid off pipe.
Collar			3	Concrete not attached to bevel.
Wingwalls			X	
(Shape :)				
Cutoff Wall			N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End			4	Accident damage to S side of bevel; ~300mm deflection inwards. Dislodged concrete from bevel.
Heaving (mm)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection (Type :) (Avg. Rock Size(mm) :)			N	Snow covered.
Scour/Erosion			N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating			3	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP)				
Barrel Last Accessible Date	29-Nov-2012			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof			8	Could not measure rise due to ice. Grout btwn original pipe & liner; grout ports in roof. Est.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag	1			
Sidewall			8	Span at E end=2714=14mm Span at Midpipe=2715=15mm=0.5% Span at W end=2686=14mm 0.5%
Measured Span (mm)	2715			
Measured At Ring No.				
Deflection (mm)	15			
Percent Deflection	1			
Floor			7	(Excess concrete level out over floor, R3. 26Jan2010) - Partially covered by ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams			8	Seams welded.
Separation (mm)				
Longitudinal Seams			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			5	Numerous welds left uncoated.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP)				
Fish Passage Adequacy			4	(D/S en perched; no flow. 26Jan2010). Rating maintained due to previous comments.
Baffle			X	
(Type :)				
Waterway Adequacy			4	(Due to d/s scour. 26Jan2010).
Icing (Y/N)				
Silting (Y/N)				
Drift (Y/N)				
Barrel General Rating			8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			5	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection			N	(Some large rock, 1.0m. 07Sep2006).
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion			3	Material around bevel has eroded away.
Beavers (Y/N)				
Downstream End General Rating			3	
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)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(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	2013	10m3 Class II @ D/S.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Jack out the dent on the inlet. Restore concrete around bevel.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	56.9/56.6	Est. Repl. Yr	2040	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	(Monitor d/s erosion. 26Jan2010).		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	29-Feb-2016		Previous Inspection Date	26-Jan-2010			
Inspection Cycle (Default) (months)	39						
Comment							