

Bridge Culvert Inspection				
Bridge File Number	08358 -1 Bridge Culvert		Form Type	CUL1
Year Built	1970		Lot No.	3
Bridge or Town Name	NEW BRIGDEN		Inspector Name	Owen Salava
Located Over	TRIBUTARY TO SOUNDING CREEK, 4.4.7, WATERCRS-ST		Inspector Class	BR CLS A
Located On	41:12 C1 27.331		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	18-Jul-2012
Legal Land Location	NW SEC 3 TWP 31 RGE 4 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-110:30:05, 51:37:46		Data Entry Date	02-Aug-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA22		Review Date	31-Jul-2012
Clear Roadway/Skew	10.6 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	570 / 2011 (A)		Dept. Review Date	07-Aug-2012
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2590	2870	SPE	51.8	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone			Gas	
Power	4 lines East fenceline.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	No passing SB & NB, in sag curve.
Vertical Alignment		6	6	
Roadway Width (m)	10.600			
Embankment		N	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 5)				
Guardrail (Y/N)	Yes			NE 135 post broken.
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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
Bevel End		N	5	Pitting rust along floor.
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	5	Slight undermining of bevel but well rocked.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2590, Rise (mm): 2870, Type: SPE)				
Barrel Last Accessible Date	18-Jul-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2795			
Measured At Ring No.	9			
Sag (mm)	75			2.6%
Percent Sag	3			
Sidewall		7	7	Minor damage caused during construction, repaired at R8.
Measured Span (mm)	2686			
Measured At Ring No.	9			
Deflection (mm)	96			3.7%
Percent Deflection	4			
Floor		N	N	Water 0.5m deep.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	Only top seams visible.
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			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	(Superficial rust along floor. 18Aug2009). Starting to show corrosion @ bolts. Corrosion perforations S sidewall at R11.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2590, Rise (mm): 2870, Type: SPE)				
Fish Passage Adequacy		5	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	6	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	6	Well vegetated.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Downstream End General Rating		5	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	8	
Bank Stability		N	7	
HWM (m below Top of Culvert)	2.0			Flow line.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	8	

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	Repair broken guardrail post.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	72.9/71.5	Est. Repl. Yr	2030	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	18-Apr-2014		Previous Inspection Date	29-Mar-2011			
Inspection Cycle (Default) (months)	21						
Comment							