

Bridge Culvert Inspection				
Bridge File Number	80587 -1 Bridge Culvert		Form Type	CUL1
Year Built	1986		Lot No.	1
Bridge or Town Name	SUNDRE		Inspector Name	Owen Salava
Located Over	TRIBUTARY TO JACKSON CREEK, 3.96.1, WATERCRS-ST		Inspector Class	BR CLS A
Located On	22:20 C1 9.562		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	19-Oct-2012
Legal Land Location	NW SEC 33 TWP 33 RGE 5 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-114:39:47, 51:52:51		Data Entry Date	09-Nov-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA29		Review Date	30-Oct-2012
Clear Roadway/Skew	14.5 / -15 deg. (LHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,270 / 2011 (A)		Dept. Review Date	19-Nov-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	-	2134	SP	61	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	West r/w.	Gas	
Power	3 wires located at West end.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Climbing lane Northbound. No passing. Intersection 150m North. Located North of BF 80586.
Vertical Alignment		6	6	
Roadway Width (m)	14.500			
Embankment		6	6	4:1 then to 2.5:1. Wide transverse crack S of pipe, previously sealed.
Sideslope (__:1)	2.5			
(Height of Cover(m) : 5.5)				
Guardrail (Y/N)	Yes			
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	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Upstream End General Rating		4	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2134, Type: SP)				
Barrel Last Accessible Date	19-Oct-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	3	Slight roof seam flattening.
Measured Rise (mm)	1900			
Measured At Ring No.	2			
Sag (mm)	234			
Percent Sag	11			
Sidewall		N	4	7.8%
Measured Span (mm)	2300			
Measured At Ring No.	2			
Deflection (mm)	166			
Percent Deflection	8			
Floor		N	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	6	Water coming through bevel seam @ North haunch.
Separation (mm)	0			
Longitudinal Seams		N	6	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	6	Minor superficial corrosion along floor and at seams.
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): , Rise (mm): 2134, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(Ice within 700mm of crown. 03Feb2011).
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	
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		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		N	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	
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						
REMOVE DRIFT ACCUMULATION						
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION	2012	Assess if strut needed; consider Lvl 2 to measure plate curvature, i.e. chord offsets.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	44.0/44.9	Est. Repl. Yr	2018	Maint. Req'd. (Y/N)	No
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Special Comments for Next Inspection	Department Comments

Maintenance Reviewed By	Date	Estimated Total
Proposed Long-Term Strategy		0

On 3-Year Program (Y/N)

Proposed Action

Previous Inspector's Name: Owen Salava

Next Inspection Date: 19-Jul-2014

Inspection Cycle (Default) (months): 21

Comment

Previous Assistant's Name

Previous Inspection Date: 03-Feb-2011

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	Assess if strut needed; consider Lvl 2 to measure plate curvature, i.e. chord offsets.	Continue to monitor on regular BIM cycles			
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	44.0/44.9	Est. Repl. Yr	2018	Maint. Req. (Y/N) No
Special Comments for Next Inspection			Department Comments	Current regional need year is 2018		
Maintenance Reviewed By	Andrew Smikles		Date	07-Jan-2013	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	19-Jul-2014		Previous Inspection Date	03-Feb-2011		
Inspection Cycle (Default) (months)	21					
Comment						