

Bridge Culvert Inspection				
Bridge File Number	73566 -1 Bridge Culvert		Form Type	CUL1
Year Built	1963		Lot No.	4
Bridge or Town Name	MORNINGSIDE		Inspector Name	Jason Saly
Located Over	TRIBUTARY TO WOLF CREEK, 5.56.3, WATERCRS-ST		Inspector Class	BR CLS A
Located On	2:26 L1 31.528;2:26 R1 31.528		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	20-Mar-2013
Legal Land Location	SE SEC 27 TWP 41 RGE 26 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:39:47, 52:33:16		Data Entry Date	01-Apr-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA19		Review Date	26-Mar-2013
Clear Roadway/Skew	35.2 /		Dept. Reviewer Name	Chris Black
AADT/Year	27,540 / 2011 (A)		Dept. Review Date	09-Apr-2013
Road Classification	RFD-412.4-130		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2692	1727	CPE	59.7			ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone			Gas	
Power			Municipal	
Others	Old telegraph lines East r/w. Railroad tracks East of Hwy 2.		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Located in curve. Turnoff to overpass 80m north.
Vertical Alignment		8	8	
Roadway Width (m)	35.200			
Embankment		7	7	Embankment reinforced with asphalt over pipe ends. East side 4:1.
Sideslope (:1)	3.0			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
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		7	7	Concrete bevel 760mm long.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2692, Rise (mm): 1727, Type: CPE)				
Barrel Last Accessible Date	20-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	(Rise @ R33 = 1708, 19mm. 15Sep2011) - Could not measure rise due to ice.
Measured Rise (mm)	1707			
Measured At Ring No.	23			
Sag (mm)	20			(1.2%. 15Sep2011).
Percent Sag	1			
Sidewall		7	7	Span @ R3 = 2680, 12mm. R13 = 2679, 13mm. R33 = 2676, 16mm.
Measured Span (mm)	2675			
Measured At Ring No.	23			
Deflection (mm)	17			0.6% inward.
Percent Deflection	1			
Floor		N	N	Under ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	5	Grouted between sections with some grout missing, minor. Some vertical cracking.
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		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2692, Rise (mm): 1727, Type: CPE)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
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		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	Concrete bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Upstream comes in at slight angle & gradient is steep from railroad structure. "S" curve in stream upstream.
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)				
Channel General Rating		5	5	

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							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	73.8/73.7	Est. Repl. Yr	2043	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	20-Dec-2014		Previous Inspection Date	15-Sep-2011			
Inspection Cycle (Default) (months)	21						
Comment							