

Bridge Culvert Inspection				
Bridge File Number	76003 S-1 Bridge Culvert		Form Type	CUL1
Year Built	1982		Lot No.	4
Bridge or Town Name	FT MCMURRAY		Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO HALFWAY CK, 8.11.39.1.3.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	63:10 L1 37.802		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Nov-2011
Legal Land Location	NE SEC 26 TWP 87 RGE 9 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-111:19:05, 56:34:32		Data Entry Date	12-Dec-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA07		Review Date	23-Nov-2011
Clear Roadway/Skew	13.4 / -45 deg. (LHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	6,900 / 2010 (A)		Dept. Review Date	15-Dec-2011
Road Classification	RAD-412.4-120		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	2905	3203	SPE	55.5	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	E row		Gas	
Power	3 wires E row		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Horizontal curve about 400m North. Crest vertical curve 400m South.
Vertical Alignment	7	7	
Roadway Width (m)	13.400		
Embankment	8	8	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 1.9)			
Guardrail (Y/N)	No		
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	5	5	Outside collar settled 200mm. NE & SE corners stable conditions.
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
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): 2905, Rise (mm): 3203, Type: SPE)				
Barrel Last Accessible Date	10-Mar-2010			Barrel 1/3 full with ice.--too thin to enter, viewed from ends, looks ok.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				Est 5%.
Percent Sag	5			
Sidewall		4	N	Not much could be viewed from ends to assign a rating.
Measured Span (mm)	3130			
Measured At Ring No.	10			
Deflection (mm)	225			(8% -10-Mar-2010)
Percent Deflection	8			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	N	
Separation (mm)	0			
Longitudinal Seams		7	N	
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		6	6	Minor superficial rust at waterline.
Corrosion By Soil (Y/N)	No			
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): 2905, Rise (mm): 3203, Type: SPE)				
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	Gr carried fwd.
Downstream 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	
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	5	Curves 90 degree from South to West U/S.
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		6	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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	58.5/58.0	Est. Repl. Yr	2030	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor deflections.		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	Wade Nanninga		Previous Assistant's Name				
Next Inspection Date	16-Aug-2013		Previous Inspection Date	10-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							