

Bridge Culvert Inspection				
Bridge File Number	78995 -1 Bridge Culvert		Form Type	CUL1
Year Built	1981		Lot No.	2
Bridge or Town Name	FT MCMURRAY		Inspector Name	Wade Nanninga
Located Over	CONN CREEK, 8.11.38, WATERCRS-ST		Inspector Class	BR CLS B
Located On	63:11 R1 15.722;63:11 L1 15.767		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	09-Mar-2010
Legal Land Location	NW SEC 29 TWP 89 RGE 9 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-111:24:16, 56:44:56		Data Entry Date	29-Mar-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA07		Review Date	29-Mar-2010
Clear Roadway/Skew	25 / 10 deg. (RHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	32,860 / 2008 (A)		Dept. Review Date	31-Mar-2010
Road Classification	RFD-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	PI./Slab Thickness	Shape
1	MAIN	3800	4190	SPE	81.7	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	BF tag installed @ top of West end. Horizontal curves in both directions.
Vertical Alignment		7	7	
Roadway Width (m)	25.000			
Embankment		7	7	
Sideslope (:1)	3.0			
(Height of Cover (m) : 3.2)				
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)	CONCRETE			
Headwall		X	X	
Collar		4	5	Minor crack SW collar.
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Approx.
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 450)				
Scour/Erosion		7	7	
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): 3800, Rise (mm): 4190, Type: SPE)				
Barrel Last Accessible Date	09-Mar-2010			1/2 full with ice-lower sidewall/floor. Not visible.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	6	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	150			Estimated.
Percent Sag				
Sidewall		N	N	(4 cracked rings in North side @ 7 o'clock longitudinal seam. 17/Aug/2006)
Measured Span (mm)	4025			
Measured At Ring No.	12			
Deflection (mm)	225			
Percent Deflection	6			
Floor		N	N	(Rock covered floor throughout. 17/Aug/2006)
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		N	4	Missing bolt at R6/R7-photo.
Separation (mm)	0			
Longitudinal Seams		N	N	(Rings 8-11 @ 7 o'clock, North side. 17/Aug/2006) Previously rated "2". (40mm steel remaining in R10 - photo. 50mm steel remaining in R11 - photo. 17/Aug/2006)
Total No. of Cracked Rings	4			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	40			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	5	Superficial rust visible at water line.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 4190, Type: SPE)					
Camber POS/ZERO/NEG	ZERO				
Ponding (Y/N)	No				
Fish Passage Adequacy		4	5	Barrel 1/3 rise full of ice.	
Baffle		N	N		
(Type :)					
Waterway Adequacy		4	5	(Rock & gravel washed into and settled on barrel floor approx 0.3 - 0.4 thick. 17/Aug/2006)2	
Icing (Y/N)	Yes				
Silting (Y/N)	No				
Drift (Y/N)	No				
Barrel General Rating		2	2	General rating carried over from 17/Aug/2006.	
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	North side pushed in, 200mm probably during construction. Ice about 1300mm from crown.	
Heaving (mm)	0				
Invert Above/Below Stream Bed	BELOW			Below ice level.	
Above/Below (mm)	300				
Scour Protection		6	6		
(Type : RIP RAP)					
(Avg. Rock Size (mm) : 450)					
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		7	7		
Bank Stability		7	7		
HWM (m below Top of Culvert)				HWM not visible.	
Drift (Y/N)	No				
Channel Bottom Degrading/Aggrading	NONE				
Beavers (Y/N)	No				

Structure Usage				
		Last	Now	Explanation of Condition
(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	2011	Strut rings 8 - 11.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	22.2/22.2	Sufficiency Rating (Last/Now) (%)	28.4/38.4	Est. Repl. Yr	2012	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	Jacob Oresile		Previous Assistant's Name				
Next Inspection Date	09-Dec-2011		Previous Inspection Date	30-Apr-2008			
Inspection Cycle (Default) (months)	21						
Comment							