

Bridge Culvert Inspection			
Bridge File Number	81051 -1 Bridge Culvert	Form Type	CUL1
Year Built	1988	Lot No.	4
Bridge or Town Name	DUHAMEL	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO BATTLE RIVER, 5.45, WATERCRS-ST	Inspector Class	BR CLS A
Located On	21:22 C1 32.207	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	20-Sep-2012
Legal Land Location	SE SEC 34 TWP 45 RGE 21 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-112:58:01, 52:55:19	Data Entry Date	03-Oct-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA16	Review Date	27-Sep-2012
Clear Roadway/Skew	13.2 / 55 deg. (RHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,570 / 2011 (A)	Dept. Review Date	16-Oct-2012
Road Classification	RAU-213.4-120	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	3080	2465	RPE	66.5	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Along West r/w boundary.	Gas	50m South.
Power		Municipal	
Others	Fibre optic E r/w.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Long vert. curve to the N, horiz. curve to the S. No passing NBL due to hill. Approach 30m SW.
Vertical Alignment	5	5	
Roadway Width (m)	13.200		
Embankment	7	7	
Sideslope (__:1)	4.0		
(Height of Cover(m) : 1.7)			
Guardrail (Y/N)	Yes		Too low, ~400mm high at W & ~380mm high at E (photo).
Approach Road / Embankment General Rating	5	5	

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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	Well vegetated.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
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): 3080, Rise (mm): 2465, Type: RPE)				
Barrel Last Accessible Date	20-Sep-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	4	Not able to measure rise due to water/silt. (All measurements from 08Feb2008).
Measured Rise (mm)	2260			
Measured At Ring No.	10			
Sag (mm)	205			
Percent Sag	8			
Sidewall		7	7	
Measured Span (mm)	3140			
Measured At Ring No.	10			
Deflection (mm)	60			
Percent Deflection	2			
Floor		N	N	Water/silt.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			(Abrasion=N from 08Feb2008).
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	Lower longitudinal seams not visible, under water/silt.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			0.5m water/silt.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3080, Rise (mm): 2465, Type: RPE)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	
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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	Well vegetated.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	63.5/63.4	Est. Repl. Yr	2035	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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	20-Jun-2014		Previous Inspection Date	08-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							