

Bridge Culvert Inspection				
Bridge File Number	00493 E-2 Bridge Culvert		Form Type	CUL1
Year Built	1986		Lot No.	2
Bridge or Town Name	MEDICINE HAT		Inspector Name	Tom Carey
Located Over	BULLSHEAD CREEK, 2.7.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	1:21 R1 13.233		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	09-Feb-2012
Legal Land Location	SE SEC 16 TWP 12 RGE 5 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-110:37:43, 49:59:26		Data Entry Date	25-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	26-Feb-2012
Clear Roadway/Skew	12.5 /		Dept. Reviewer Name	Tim Davies
AADT/Year	11,630 / 2011 (A)		Dept. Review Date	29-Mar-2012
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	9380	5170	RPA	30.6	152X51	5.0,4.0	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone			Gas	
Power	8 line-100m South.		Municipal	
Others	Fibre optics South ROW.		Problem (Y/N)	No
Remarks	4 line power x's hwy. 80m East.			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Road Rises to East and West. Long grade East. Within city limits. Int - 100m East.
Vertical Alignment		7	7	
Roadway Width (m)	12.500			
Embankment		7	7	Wrong lap at NE and SE.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				South end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	Conduit running through.
Collar		8	8	
Wingwalls		8	8	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	Erosion behind top of SE wingwall - minor.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
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): 9380, Rise (mm): 5170, Type: RPA)				
Barrel Last Accessible Date	09-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Est.
Measured Rise (mm)	5120			
Measured At Ring No.	4			
Sag (mm)	50			
Percent Sag	1			
Sidewall		8	8	Inward.
Measured Span (mm)	9335			
Measured At Ring No.	4			
Deflection (mm)	45			
Percent Deflection	1			
Floor		N	N	Ice and silt covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	3N stagger at roof and lower sidewall.
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)	Yes			
Coating		6	6	((Superficial corrosion below normal water line) 15-june-2008).
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 9380, Rise (mm): 5170, Type: RPA)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(800mm of silt on the floor).
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	Conduit running through.
Collar		8	8	
Wingwalls		8	8	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
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		6	6	Gradual bend SE, small rock dam 30m U/S channel. Fence crossing creek is holding some debris-minor.
Bank Stability		6	6	
HWM (m below Top of Culvert)	3.6			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	79.8/79.8	Est. Repl. Yr	2037	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	09-Nov-2013		Previous Inspection Date	13-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							