

Bridge Culvert Inspection				
Bridge File Number	74897 -1 Bridge Culvert		Form Type	CUL1
Year Built	1980		Lot No.	3
Bridge or Town Name			Inspector Name	Dave Lam
Located Over	TRIBUTARY TO THREEHILLS CREEK, 3.50.2.6, WATERCRS-ST		Inspector Class	BR CLS A
Located On	582:04 C1 55.071		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	15-Jul-2011
Legal Land Location	SW SEC 18 TWP 31 RGE 23 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:15:11, 51:38:56		Data Entry Date	29-Aug-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA20		Review Date	28-Jul-2011
Clear Roadway/Skew	10.6 / -55 deg. (LHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	450 / 2010 (A)		Dept. Review Date	30-Aug-2011
Road Classification	RCU-209-110		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	-	1200	MP	53.7	125X26		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	Crossing over/under N end of culver.
Power		Municipal	
Others		Problem (Y/N)	Yes
Remarks	Gas signs have fallen down.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	9	
Vertical Alignment	8	8	
Roadway Width (m)	10.600		
Embankment	8	8	
Sideslope (__:1)	2.5		N end.
(Height of Cover(m) : 3.1)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	8	8	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		
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	Step bevel. U/S some damage during installation.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(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): , Rise (mm): 1200 , Type: MP)				
Barrel Last Accessible Date	15-Jul-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	5	Some dents from installation & 1 large dent from fence post 9m from d/s end. Damage during installation at u/s end (photo). 1.7%
Measured Rise (mm)	1180			
Measured At Ring No.				
Sag (mm)	20			
Percent Sag	2			
Sidewall		6	6	
Measured Span (mm)	1200			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Ends of culvert jnts bent as installed. 2nd seam from S infiltration, minor.
Separation (mm)	50			
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		5	5	Minor rust starting on floor.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
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): , Rise (mm): 1200, Type: MP)				
Fish Passage Adequacy		8	8	
Baffle			X	
(Type :)				
Waterway Adequacy		8	4	Pipe may be undersized due to scour hole at outlet.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed				At streambed.
Above/Below (mm)	0			
Scour Protection		4	4	Needs more rock.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		4	4	Scour hole 4m x 3m.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		4	5	Curves sharply into culvert at u/s end. No erosion evident.
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		4	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2011	20m3 Class I rock.					
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) (%)	55.0/55.6	Sufficiency Rating (Last/Now) (%)	65.1/53.6	Est. Repl. Yr	2029	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	Aime Theroux		Previous Assistant's Name				
Next Inspection Date	15-Oct-2014		Previous Inspection Date	18-Dec-2001			
Inspection Cycle (Default) (months)	39						
Comment							