Bridge Culvert Inspection

Bridge File Number	76869 -1 Bridge Culvert	Form Type	CUL1
Year Built	1968	Lot No.	1
Bridge or Town Name	ROLLING HILL	Inspector Name	Tom Carey
Located Over	TRIBUTARY TO TWELVE MILE COULEE, 2.13.3.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	530:02 C1 18.829	Assistant Class	
Water Body Cl./Year		Inspection Date	23-Jun-2010
Navigabil. Cl./Year		Data Entry By	Kelsey Roberts
Legal Land Location	SW SEC 18 TWP 15 RGE 13 W4M	Data Entry Date	21-Jul-2010
Longitude, Latitude	-111:47:28, 50:15:07	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	19-Jul-2010
Contract Main. Area	CMA23	Dept. Reviewer Name	Lorenz Bohnert
Clear Roadway/Skew	9.1 /	Dept. Review Date	23-Jul-2010
AADT/Year	170 / 2009 (A)	Follow-Up By	
Road Classification	RLU-209G-90		
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	-	1524	MP	33.7	68X13		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South R/W	Gas	
Power	3 wire N., 3 wire W.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Rural road intersection 10m west
Vertical Alignment		8	8	
Roadway Width (m)	9.200			
Embankment		N	5	
Sideslope (__:1)	2.0			
(Height of Cover(m) : **4.2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		South end.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	Drainage culverts E. & W. sides.
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	5	
(Type : **RIP RAP, NATURAL**)				
(Avg. Rock Size(mm) : **150**)				
Scour/Erosion		N	5	snow covered
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): , Rise (mm): 1524, Type: MP**)				
Barrel Last Accessible Date				
Special Features				
Special Feature				(ROOF SHAPE IS ADEQUATE. ESTIMATE 100 mm SAG.) 13/06/03
(Type :)				
Special Feature				Water 200mm from crown. Unable to enter - viewed from ends. Could not site roof line.
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	100			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
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		N	N	(CORROSION WITH PITTING @ SIDEWALL viwed from ends) 13/06/03 Fitting corrosion at all areas seen at ends.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			1.3m DP

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP**)				
Fish Passage Adequacy		4	4	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	4	(500mm deep) 13/06/03 Debris at U/S end 500mm above crown
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**4**	**4**	general rating carried forward

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		North end.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	5	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) : **150**)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		9	9	
Bank Stability		N	4	Sloughing at SE @ 15m
HWM (m below Top of Culvert)	-0.5			Long area
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		**9**	**4**	

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) (%)**	**47.7/41.4**	Est. Repl. Yr	2015	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	-Pipe hasn't been entered in past cycles - consider dewater and inspection. -Or assess for replacement on five year cycle.	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	Tim Davies	Previous Assistant's Name			
Next Inspection Date	23-Sep-2013	Previous Inspection Date	22-Feb-2007		
Inspection Cycle (Default) (months)	39				
Comment					