Bridge Culvert Inspection

Bridge File Number	78859 -1 Bridge Culvert	Form Type	CUL1
Year Built	1978	Lot No.	4
Bridge or Town Name	STAND OFF	Inspector Name	Jason Rusu
Located Over	2ND ORDER TRIBUTARY TO PRAIRIE BLOOD COULEE, 2.12.20.1.1.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	509:02 C1 10.302	Assistant Class	
Water Body Cl./Year		Inspection Date	17-Nov-2012
Navigabil. Cl./Year		Data Entry By	Kelsey Roberts
Legal Land Location	SE SEC 21 TWP 6 RGE 24 W4M	Data Entry Date	14-Dec-2012
Longitude, Latitude	-113:10:25, 49:28:56	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	01-Dec-2012
Contract Main. Area	CMA25	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	10 / 39 deg. (RHF)	Dept. Review Date	27-Dec-2012
AADT/Year	1,400 / 2011 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	10		

Bridge Culvert Information

Number of Culverts	1

Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	MP	53.6	75X25	3.5,3.5,3.5	ROUND

Special Features	
Special Features Comment	

Utilities (Located at)

Utility Attachments			
Telephone	EAST SIDE	Gas	30 m OFF TO EAST
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	CURVE 120 m SOUTH. NO PASSING SOUTH BOUND.
Vertical Alignment		7	7	
Roadway Width (m)	10.000			
Embankment		6	6	Some minor erosion in the SW ditch
Sideslope (__:1)	3.0			
(Height of Cover(m) : **4.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		WEST END.
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		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	6	Grass growing through the rocks
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP**)				
Barrel Last Accessible Date	06-Sep-2009			700mm of water in the pipe with thin ice and silt too hazardous to enter.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	N	(Sag noticeable 2nd section from each end) 5-Sept-2009. Viewed from ends- est 10% deflection and 6% SAG. P.R. 5
Measured Rise (mm)	1690			
Measured At Ring No.	8			
Sag (mm)	110			
Percent Sag	6			
Sidewall		4	N	P.R. 4
Measured Span (mm)	1973			
Measured At Ring No.	8			
Deflection (mm)	173			
Percent Deflection	10			
Floor		N	N	(200mm of silt)
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	N	(NO NOTICABLE DIRT INFILTRATION 60mm vertical seperation R1)
Separation (mm)	80			
Longitudinal Seams		X	X	((GROUTED 910408)) 20030218
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		5	N	(ALKALINE STAINS JUST ABOVE WATERLINE - MINOR minor corrosion) P.R. 5
Corrosion By Soil (Y/N)	Yes			
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): , Rise (mm): 1800, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	200mm Silt
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**4**	**4**	G.R. carried forward

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		EAST END.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	N	Snow covered
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		6	N	(Grass growing through the rocks) 5-Sept-2009
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**N**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	FARMER HAS EARTHEN DAM 25 m U/S AS A DUGOUT FOR CATTLE.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**44.4/44.4**	**Sufficiency Rating (Last/Now) (%)**	**55.4/53.2**	Est. Repl. Yr	2020	Maint. Reqd. (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	17-Feb-2016	Previous Inspection Date	06-Sep-2009
Inspection Cycle (Default) (months)	39		
Comment			