Bridge Culvert Inspection

Bridge File Number	73421 -1 Bridge Culvert	Form Type	CUL1
Year Built	1985	Lot No.	4
Bridge or Town Name	STAND OFF	Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO BELLY RIVER, 2.12.22.9, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	2:06 C1 1.423	Assistant Class	
Water Body Cl./Year		Inspection Date	16-Oct-2011
Navigabil. Cl./Year		Data Entry By	Erin Roberts
Legal Land Location	NW SEC 21 TWP 6 RGE 25 W4M	Data Entry Date	19-Nov-2011
Longitude, Latitude	-113:18:45, 49:29:21	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	09-Nov-2011
Contract Main. Area	CMA26	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	11 /	Dept. Review Date	21-Nov-2011
AADT/Year	1,520 / 2010 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
Detour Length (km)	15		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2130	1410	FP	26	68X13	3.5	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ditch	Gas	
Power		Municipal	
Others	Fiber Optics line West ditch	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Farm access North side
Vertical Alignment		9	9	
Roadway Width (m)	11.000			
Embankment		8	8	
Sideslope (__:1)	4.5			
(Height of Cover(m) : **0.9**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**9**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West
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		N	4	Damaged at top and South side from mower.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	7	Ingrown
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**4**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2130, Rise (mm): 1410, Type: FP**)				
Barrel Last Accessible Date	19-Oct-2000			Unable to enter due to 700mm of water and silt
Special Features				
Special Feature				Viewed from both ends Shape appears the same as @ the last insp. (2180 span @ mid)
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(Isolated sag in roof at d/s circ seam - done when constructed. Est sag.) 200/10/19)
Measured Rise (mm)	1310			
Measured At Ring No.	2			
Sag (mm)	100			Est
Percent Sag	7			
Sidewall		N	N	
Measured Span (mm)	2180			
Measured At Ring No.	2			
Deflection (mm)	50			est
Percent Deflection	2			
Floor		N	N	400 TO 600 mm SILT ON FLOOR with 300mm water.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(ALL SEAMS GROUTED) 200/10/19
Separation (mm)	80			
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	(MINOR SUPERF'L CORROSION @ SIDEWALL) 19-Oct-2000
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): 2130, Rise (mm): 1410, Type: FP**)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(GRAVEL & DIRT - SHOULD FLUSH)
Icing (Y/N)	No			
Silting (Y/N)	Yes			Silt is half of rise
Drift (Y/N)	No			
Barrel General Rating		**4**	**4**	GR carried forward

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		East
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **150**)				
Scour/Erosion		N	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		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)				
Channel Bottom Degrading/Aggrading	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) (%)**	**51.7/48.6**	Est. Repl. Yr	2025	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	16-Jul-2013	Previous Inspection Date	21-Jan-2010
Inspection Cycle (Default) (months)	21		
Comment			