Bridge Culvert Inspection

Bridge File Number	86166 -1 Bridge Culvert	Form Type	CUL1
Year Built	2010	Lot No.	4
Bridge or Town Name		Inspector Name	Brian Pientsch
Located Over	WATERCOURSE, WATERCRS-NI	Inspector Class	BR CLS A
Located On	43:02 R1 15.191;43:02 L1 15.167	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	04-Jul-2011
Legal Land Location	NW SEC 19 TWP 71 RGE 8 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-119:13:47, 55:10:13	Data Entry Date	15-Aug-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05	Review Date	13-Jul-2011
Clear Roadway/Skew		Dept. Reviewer Name	Steve Pasquan
AADT/Year	7,010 / 2010 (A)	Dept. Review Date	16-Nov-2011
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	-	2200	MP	124.69	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	1 W crosses serviced 40 West.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 100m West.
Vertical Alignment		7	7	
Roadway Width (m)				
Embankment		9	9	WB 12.40, EB14.16, service road 8.00
Sideslope (__:1)	6.0			
(Height of Cover(m) : **3.2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

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		9	9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		5	7	Drawings call for class 2 riprap.-26-Nov-2010
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		9	9	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	04-Jul-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	6	
Measured Rise (mm)				14m from d/s end.
Measured At Ring No.	9			estimated upward deflection, due to 400mm silt.
Sag (mm)	100			
Percent Sag	5			
Sidewall		7	6	
Measured Span (mm)	2103			
Measured At Ring No.	9			inward deflection
Deflection (mm)	97			
Percent Deflection	5			
Floor		9	N	
Bulge (mm)				19m from d/s end.
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	Seam 8 at 7:00 20mm gap filled with foam.
Separation (mm)	50			Seam 4 at 4:00 45m gap filled with foam. Seam 1 50m gap at 5:00 filled with foam.
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		9	9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 2200, Type: MP**)				
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**7**	**6**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		9	9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		9	9	
Beavers (Y/N)	No			
Downstream End General Rating		**9**	**9**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		9	9	
HWM (m below Top of Culvert)				No HWM 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		**8**	**8**	

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) (%)	**77.8/66.7**	**Sufficiency Rating (Last/Now) (%)**	**83.1/79.6**	Est. Repl. Yr	2070	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	Russel Vanderschaaf	Previous Assistant's Name			
Next Inspection Date	04-Apr-2013	Previous Inspection Date	26-Nov-2010		
Inspection Cycle (Default) (months)	21				
Comment					