Bridge Culvert Inspection

Bridge File Number	73769 -1 Bridge Culvert	Form Type	CUL1
Year Built	1985	Lot No.	4
Bridge or Town Name	LAC STE ANNE	Inspector Name	Kris Bosters
Located Over	TRIBUTARY TO STURGEON RIVER, 6.65.23, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Brian Cote
Located On	633:02 C1 30.457	Assistant Class	
Water Body Cl./Year		Inspection Date	20-Jul-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NE SEC 24 TWP 54 RGE 4 W5M	Data Entry Date	13-Aug-2012
Longitude, Latitude	-114:27:13, 53:40:49	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	31-Jul-2012
Contract Main. Area	CMA12	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	10.4 / 5 deg. (RHF)	Dept. Review Date	16-Aug-2012
AADT/Year	870 / 2011 (A)	Follow-Up By	
Road Classification	RCU-209-110		
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	-	2400	SP	48.2	152X51	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South r/w.	Gas	Crossing 100m West
Power	2 lines 19m north c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks	File tag at u/s.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Culvert is located on a curve. No passing EB.
Vertical Alignment		7	7	
Roadway Width (m)	10.400			
Embankment		N	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **5.8**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		N	N	Water to deep to see ~ 400mm from roof.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		N	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	
Beavers (Y/N)	Yes			Dam 15m u/s.
Upstream End General Rating		**7**	**7**	GR carried forward from 30-Jan-2009.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: SP**)				
Barrel Last Accessible Date	30-Jan-2009			Not accessible, water too deep, viewed from ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(2352 x 2572 measured mid length. 02/10/02) Dirt on floor. - 30-Jan-2009 Shape appears good.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	20			
Percent Sag				
Sidewall		5	N	R7-2345, U/S-2333.-30-Jan-2009
Measured Span (mm)	2243			
Measured At Ring No.				At D/S.
Deflection (mm)	157			Inwards.
Percent Deflection	7			6.54%
Floor		N	N	Under dirt.- 30-Jan-2009
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			Presence of dirt on floor.
Circumferential Seams		5	N	
Separation (mm)	0			
Longitudinal Seams		5	N	Bolts covered with rust.-30-Jan-2009
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	N	Minor superficial rust lower 1/2.-30-Jan-2009
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: SP**)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**5**	**N**	Last rated 5 on 30-Jan-2009

Downstream 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	
Bevel End		N	N	Portion viewed looks good. Water 400mm from roof.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		N	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	
Beavers (Y/N)	Yes			Dam 20m d/s.
Downstream End General Rating		**7**	**7**	GR carried forward from 30-Jan-2009.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		N	7	
HWM (m below Top of Culvert)				HWM not visible. Drift not seen.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**67.1/67.0**	Est. Repl. Yr	2032	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	Jacob Oresile	Previous Assistant's Name			
Next Inspection Date	20-Oct-2015	Previous Inspection Date	30-Jan-2009		
Inspection Cycle (Default) (months)	39				
Comment					