Bridge Culvert Inspection

Bridge File Number	75395 -1 Bridge Culvert	Form Type	CUL1
Year Built	1990	Lot No.	4
Bridge or Town Name	EVANSBURG	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO LOBSTICK RIVER, 8.11.84.51.7, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	16:10 L1 20.218;16:10 R1 20.165	Assistant Class	
Water Body Cl./Year		Inspection Date	27-Aug-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 28 TWP 53 RGE 8 W5M	Data Entry Date	09-Sep-2012
Longitude, Latitude	-115:07:44, 53:36:03	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	29-Aug-2012
Contract Main. Area	CMA12	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	24.6 / 15 deg. (RHF)	Dept. Review Date	18-Sep-2012
AADT/Year	8,050 / 2011 (A)	Follow-Up By	
Road Classification	RAD-412.4-120		
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	-	3990	SP	95.1	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North r/w.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	File tag U/S (South).		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Range road 100m southwest.
Vertical Alignment		8	8	
Roadway Width (m)	24.600			EBL 12.4m, WBL 12.2m.
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **4.8**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		(Water to crown 3.2m. 06/June/2005)
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Minor surface scaling.
Collar		7	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3990, Type: SP**)				
Barrel Last Accessible Date	09-Mar-2007			Water /silt 0.9m deep. Viewed from ends, shape and condition appear ok.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	1m of outlet barrel bent in 750mm.
Measured Rise (mm)				(Sag estimate. 06/June/2005)
Measured At Ring No.				
Sag (mm)	140			
Percent Sag				
Sidewall		N	N	(100mm construction tear @ R14 (overlap 14 & 15). 09/Mar/2007)
Measured Span (mm)	4046			Last ring pushed in at NE (D/S) - photo.
Measured At Ring No.	12			(1.4%. 09/Mar/2007)
Deflection (mm)	56			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				2N stagger. Viewed from ends.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3990, Type: SP**)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	G.R. was "5" from 09/Mar/2007.

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	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	7	Curve at inlet.
Bank Stability		7	5	Banks sliding u/s.
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**8**	**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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**66.2/64.5**	Est. Repl. Yr	2038	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	As this structure has not been accessed for 2 or more cycles, a Level 2 inspection is required as per Bim Manual Section 13.9.1.5. Based on observed site evaluations we are recommending that this be deferred to a later date.	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	Kris Bosters	Previous Assistant's Name			
Next Inspection Date	27-May-2014	Previous Inspection Date	05-Oct-2010		
Inspection Cycle (Default) (months)	21				
Comment					