Bridge Culvert Inspection

Bridge File Number	76926 -1 Bridge Culvert	Form Type	CUL1
Year Built	1997	Lot No.	4
Bridge or Town Name	BARNEGAT	Inspector Name	Wade Nanninga
Located Over	SQUARE CREEK, 8.11.55.9.6.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	881:20 C1 2.785	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Sep-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NE SEC 35 TWP 68 RGE 13 W4M	Data Entry Date	06-Oct-2010
Longitude, Latitude	-111:52:19, 54:55:58	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	20-Sep-2010
Contract Main. Area	CMA08	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	9.8 / -29 deg. (LHF)	Dept. Review Date	14-Oct-2010
AADT/Year	1,290 / 2009 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	250		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2700	MP	40	125X26	2.8	ROUND
Special Features								
Special Features Comment		Double zinc coated.						

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	
Power	1 wire OH 15 m East of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks	File tag installed top of East roof.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	
Vertical Alignment		6	6	
Roadway Width (m)	9.800			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		Water 1.1m from crown.
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)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		7	7	
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): 2700, Type: MP**)				
Barrel Last Accessible Date	14-Sep-1994			Viewed pipe from both ends. Shape appears good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	50			Est 2% def.
Percent Sag				
Sidewall		7	7	
Measured Span (mm)				
Measured At Ring No.				Est 2% def.
Deflection (mm)	50			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	118			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Appears to be constantly full with standing water..

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP**)				
Fish Passage Adequacy		7	7	
Baffle		X	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	G.R. was "7" from 14/Sept/1994.

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		Water 1.2m from crown.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				25m u/s dam
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		**6**	**6**	

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) (%)**	**61.0/60.7**	Est. Repl. Yr	2044	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	Dave Lam	Previous Assistant's Name	
Next Inspection Date	10-Dec-2013	Previous Inspection Date	12-Jun-2007
Inspection Cycle (Default) (months)	39		
Comment			