Bridge Culvert Inspection

Bridge File Number	07294 -1 Bridge Culvert	Form Type	CUL1
Year Built	2000	Lot No.	4
Bridge or Town Name	ROCHESTER	Inspector Name	Todd Warshawski
Located Over	TAWATINAW RIVER, 8.11.68, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	661:10 C1 3.497	Assistant Class	
Water Body Cl./Year		Inspection Date	23-Jul-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 24 TWP 62 RGE 24 W4M	Data Entry Date	16-Aug-2010
Longitude, Latitude	-113:27:29, 54:22:16	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	26-Jul-2010
Contract Main. Area	CMA10	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	10.2 / -20 deg. (LHF)	Dept. Review Date	26-Aug-2010
AADT/Year	210 / 2009 (A)	Follow-Up By	
Road Classification	RAU-209-110		
Detour Length (km)	16		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	7087	4900	RPA	30.5	152X51	5.0,4.0,4.0	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	SOUTH -R.O.W	Gas	
Power	3 lines 50m South of inlet.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	In residential area reduced speed to 80 km/hr hill to the west.
Vertical Alignment		6	6	Curves and intersection in both directions.
Roadway Width (m)	10.000			
Embankment		7	6	
Sideslope (__:1)	2.0			
(Height of Cover(m) : **1.5**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		N	7	
Collar		N	7	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		N	7	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		N	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): 7087, Rise (mm): 4900, Type: RPA**)				
Barrel Last Accessible Date	27-Feb-2007			Viewed from ends, shape and condition appear good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		9	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		9	N	
Separation (mm)	0			
Longitudinal Seams		9	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				3N
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		9	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 7087, Rise (mm): 4900, Type: RPA**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		N	N	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**9**	**N**	GR 9 - 27-Feb-2007

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		N	7	
Collar		N	7	
Wingwalls		N	7	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		9	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
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		7	7	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/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) (%)	**100.0/55.6**	**Sufficiency Rating (Last/Now) (%)**	**90.5/70.2**	Est. Repl. Yr	2054	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	23-Oct-2013	Previous Inspection Date	27-Feb-2007		
Inspection Cycle (Default) (months)	39				
Comment					