Bridge Culvert Inspection

Bridge File Number	85148 -1 Bridge Culvert	Form Type	CUL1
Year Built	2009	Lot No.	2
Bridge or Town Name		Inspector Name	Todd Warshawski
Located Over	WATERCOURSE, WATERCRS-NI	Inspector Class	BR CLS B
Located On	39:06 C1 9.369	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Jan-2013
Legal Land Location	NE SEC 6 TWP 49 RGE 5 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:43:05, 53:12:24	Data Entry Date	05-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11	Review Date	17-Jan-2013
Clear Roadway/Skew	12 / 0 deg.	Dept. Reviewer Name	Brent Herrick
AADT/Year	3,650 / 2011 (A)	Dept. Review Date	14-Feb-2013
Road Classification	RAU-212-110	Follow-Up By	
Detour Length (km)	4		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1810	SSP	68			ROUND
Special Features								
Special Features Comment		No BF tag.						

Utilities (Located at)

Utility Attachments			
Telephone	North & South r/w.	Gas	
Power	3 wires OH North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Slight sag
Vertical Alignment		7	6	
Roadway Width (m)	12.000			
Embankment		4	N	Erosion gully @ SW 0.3m wide, 0.45m deep, 15m long.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **7.2**)				
Guardrail (Y/N)	Yes			Several missing, split, loose spacer blocks.
Approach Road / Embankment General Rating		**7**	**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		7	7	Lower 1/2 rot noted.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	N	Snow
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		N	N	
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): 1810, Type: SSP**)				
Barrel Last Accessible Date	10-Jan-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	20			
Percent Sag	1			
Sidewall		7	7	Near 2/3 point.-Jan/2011 Ice above spring line.
Measured Span (mm)	1835			
Measured At Ring No.				
Deflection (mm)	25			
Percent Deflection	2			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	Welded seams.
Separation (mm)	0			
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		5	5	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
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): 1810, Type: SSP**)				
Fish Passage Adequacy		7	7	
Baffle		7	N	
(Type : **WEIR**)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

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		7	N	Under fire
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		N	N	Under snow
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **500**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	GR carried forward.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	6	Crack turns at inlet and outlet.
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.8			Ice level -Jan,2013
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**	**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	2013	Guardrail repairs.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**74.6/73.8**	Est. Repl. Yr	2059	Maint. Reqd. (Y/N)	Yes

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	Wade Nanninga	Previous Assistant's Name	
Next Inspection Date	10-Oct-2014	Previous Inspection Date	25-Jan-2011
Inspection Cycle (Default) (months)	21		
Comment			