Bridge Culvert Inspection

Bridge File Number	71417 -2 Bridge Culvert	Form Type	CULM
Year Built	2011	Lot No.	4
Bridge or Town Name	BAWLF	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO DRIEDMEAT CREEK, 5.40.3, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	13:12 C1 18.137	Assistant Class	
Water Body Cl./Year		Inspection Date	27-Jun-2012
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	NW SEC 35 TWP 45 RGE 18 W4M	Data Entry Date	15-Jul-2012
Longitude, Latitude	-112:31:06, 52:55:49	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	05-Jul-2012
Contract Main. Area	CMA16	Dept. Reviewer Name	Andrew Smikles
Clear Roadway/Skew	/ 30 deg. (RHF)	Dept. Review Date	19-Jul-2012
AADT/Year	3,150 / 2011 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2740	SP	45.72	152X51	3.0	ROUND
2	MAIN	-	2740	SP	45.72	152X51	3.0	ROUND
Special Features								
Special Features Comment		BF tag installed on N side.						

Utilities (Located at)

Utility Attachments			
Telephone	N ROW.	Gas	
Power	1 wire 40m N.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Approach 100m W. Middle of shallow sag.
Vertical Alignment		7	7	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type:**)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type:**)				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	Not keyed in.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
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): 2740, Type: SP**)				
Barrel Last Accessible Date	27-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	9	
Measured Rise (mm)	2735			
Measured At Ring No.	7			
Sag (mm)	5			
Percent Sag	0			
Sidewall		9	9	
Measured Span (mm)	2770			
Measured At Ring No.	7			
Deflection (mm)	30			
Percent Deflection	1			
Floor		9	9	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	9	
Separation (mm)	0			
Longitudinal Seams		9	9	
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			2N
Coating		9	9	
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): , Rise (mm): 2740, Type: SP**)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	Yes			0.6m deep.
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**9**	**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2740, Type: SP**)				
Barrel Last Accessible Date	27-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	9	
Measured Rise (mm)	2750			
Measured At Ring No.	8			
Sag (mm)	0			
Percent Sag	0			
Sidewall		9	9	
Measured Span (mm)	2760			
Measured At Ring No.	8			
Deflection (mm)	20			
Percent Deflection	1			
Floor		9	9	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	9	
Separation (mm)	0			
Longitudinal Seams		9	9	
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			2N
Coating		9	9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2740, Type: SP**)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	Yes			0.6m
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**9**	**9**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type:**)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		7	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		8	8	Rail bridge 30m u/s.
Bank Stability		8	8	
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 : **Fish Pool**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
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) (%)	**100.0/100.0**	**Sufficiency Rating (Last/Now) (%)**	**91.0/91.0**	Est. Repl. Yr	2060	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	Wade Nanninga	Previous Assistant's Name			
Next Inspection Date	27-Mar-2014	Previous Inspection Date	16-Mar-2012		
Inspection Cycle (Default) (months)	21				
Comment					