Bridge Culvert Inspection

Bridge File Number	81962 -1 Bridge Culvert	Form Type	CUL1
Year Built	1994	Lot No.	4
Bridge or Town Name	EAST COULEE	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO RED DEER RIVER, 3.25, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	570:01 C1 8.405	Assistant Class	
Water Body Cl./Year		Inspection Date	27-Jan-2011
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	SE SEC 18 TWP 27 RGE 17 W4M	Data Entry Date	04-Mar-2011
Longitude, Latitude	-112:22:25, 51:18:02	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	03-Feb-2011
Contract Main. Area	CMA21	Dept. Reviewer Name	Chris Black
Clear Roadway/Skew	11 / 12 deg. (RHF)	Dept. Review Date	06-Mar-2011
AADT/Year	450 / 2009 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
Detour Length (km)	21		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3670	SP	44.5	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	11.000			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.4**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		9	N	Snow covered.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		8	N	(Visible at ends and top. 19Feb2009).

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		8	8	Gate panel across bevel
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	N	Snow covered.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3670, Type: SP**)				
Barrel Last Accessible Date	27-Jan-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Sag estimated 1% Same as sidewall - not measured due to silt.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	25			
Percent Sag	1			
Sidewall		8	8	
Measured Span (mm)	3690			
Measured At Ring No.	6			
Deflection (mm)	20			0.5%
Percent Deflection	1			
Floor		N	N	(Silted in & concrete strip along floor. 19Feb2009). 1m silt
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				1N stagger
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	Mild
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): 3670, Type: SP**)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			Silt will easily flush in a flood. 1.0m silt.
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream 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	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	N	Snow covered.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)				No HWM 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		**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) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**83.5/83.5**	Est. Repl. Yr	2049	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	The pipe may double as a cattlepass.	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	Garry Roberts	Previous Assistant's Name			
Next Inspection Date	27-Apr-2014	Previous Inspection Date	19-Feb-2009		
Inspection Cycle (Default) (months)	39				
Comment					