Bridge Culvert Inspection

Bridge File Number	80927 -1 Bridge Culvert	Form Type	CUL1
Year Built	1988	Lot No.	2
Bridge or Town Name	JEAN D PRAIR	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO LAWRENCE RIVER, 8.10.12.1.2, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Clem Guenette
Located On	58:12 C1 7.452	Assistant Class	
Water Body Cl./Year		Inspection Date	13-Jun-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 36 TWP 110 RGE 7 W5M	Data Entry Date	06-Nov-2012
Longitude, Latitude	-115:01:46, 58:35:32	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	04-Nov-2012
Contract Main. Area	CMA01	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	11 /	Dept. Review Date	15-Jan-2013
AADT/Year	230 / 2011 (A)	Follow-Up By	
Road Classification	RAU-210-110		
Detour Length (km)	999		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	29	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	3 wire o/h along South ditch.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		8	8	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.5**)				
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)	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	5	
Heaving (mm)	450			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		5	5	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	13-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	5	
Measured Rise (mm)	2073			cl
Measured At Ring No.				
Sag (mm)	127			
Percent Sag	6			
Sidewall		6	6	
Measured Span (mm)	2316			
Measured At Ring No.				@ c/l
Deflection (mm)	116			
Percent Deflection	5			
Floor		N	N	Covered withwater.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	70			
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		4	4	Pitting & scaling lower 1/4. Perforations in d/s bevel.
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): 2200, Type: MP**)				
Fish Passage Adequacy		3	3	DROP OFF @ OUTLET 300mm.
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	4	(Barrel completely iced up -1996/04/25)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**5**	

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		3	3	Perforation @ end on East side.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		3	4	DROP OFF AT OUTLET APPROX. 300mm, and is starting to undermine this bevel. photo
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		3	4	Undermining bevel.-photo
Beavers (Y/N)	No			
Downstream End General Rating		**3**	**3**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	Slumping banks (u/s & d/s).
Bank Stability		5	5	Banks sloughing
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
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	2012	Backfill D/S bevel.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**66.7/55.6**	**Sufficiency Rating (Last/Now) (%)**	**46.1/40.5**	Est. Repl. Yr	2033	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Monitor u/s bevel heaving. Monitor erosion.	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	Brian Pientsch	Previous Assistant's Name	Lisbeth Medina
Next Inspection Date	13-Mar-2014	Previous Inspection Date	06-Aug-2010
Inspection Cycle (Default) (months)	21		
Comment			