Bridge Culvert Inspection

Bridge File Number	81930 -1 Bridge Culvert	Form Type	CUL1
Year Built	1993	Lot No.	4
Bridge or Town Name	KEG RIVER	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO KEMP RIVER, 8.10.31.1.2, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	35:10 C1 33.908	Assistant Class	
Water Body Cl./Year		Inspection Date	15-Nov-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NE SEC 6 TWP 100 RGE 22 W5M	Data Entry Date	14-Dec-2011
Longitude, Latitude	-117:35:31, 57:39:18	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	12-Dec-2011
Contract Main. Area	CMA04	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	10.2 /	Dept. Review Date	09-Jan-2012
AADT/Year	1,050 / 2010 (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	-	2400	MP	45	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	7 wire o/h on West side.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	
Vertical Alignment		9	8	
Roadway Width (m)	10.200			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **2.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**9**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		Ice to crown 35mm.
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		N	N	Rated above water-May 16, 2008
Heaving (mm)	0			.
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		N	N	Covered with snow.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	Covered with snow.
Beavers (Y/N)	No			
Upstream End General Rating		**N**	**N**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Barrel Last Accessible Date	27-Nov-2004			Viewed from ends. Water 2.4m deep Culvert not found, submerged in snow.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	Shape appears good.-May 16,2008
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	50			Sag est.May 16,2008
Percent Sag				
Sidewall		N	N	(SPAN 2430 @ C/L (1999-11-24)
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	30			
Percent Deflection				
Floor		N	N	Completely covered with snow.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	X	
Separation (mm)				
Longitudinal Seams		X	N	
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		N	N	(MINOR SUPERFICIAL RUST on sides. - 2004/11/27) Rated above water-May 16, 2008
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		X	X	
Baffle		N	N	
(Type :)				
Waterway Adequacy		N	4	Culvert nearly fully submerged.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**7**	**N**	GR was 7 from 27-Nov-2004

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		Ice to crown 65mm
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	Rated above water-May 16, 2008
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Est.-May 16,2008
Above/Below (mm)	300			
Scour Protection		N	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	GR was 6 from 27-Nov-2004

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	8	
HWM (m below Top of Culvert)				HWM NOT VISIBLE
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	NONE			
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) (%)	**77.8/55.6**	**Sufficiency Rating (Last/Now) (%)**	**78.6/50.2**	Est. Repl. Yr	2034	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	Brian Pientsch	Previous Assistant's Name	Lisbeth Medina		
Next Inspection Date	15-Aug-2013	Previous Inspection Date	16-Feb-2010		
Inspection Cycle (Default) (months)	21				
Comment					