

Bridge Culvert Inspection								
Bridge File Number	00975 -1 Bridge Culvert				Form Type	CUL1		
Year Built	1990				Lot No.	2		
Bridge or Town Name	RAYMOND				Inspector Name	Jon Davies		
Located Over	KIPP COULEE, 11.9.6, WATERCRS-ST				Inspector Class	BR CLS B		
Located On	52:02 C1 18.774				Assistant Name			
Water Body Cl./Year					Assistant Class			
Navigabil. Cl./Year					Inspection Date	28-Sep-2011		
Legal Land Location	SE SEC 17 TWP 6 RGE 19 W4M				Data Entry By	Alyssa Boynton		
Longitude, Latitude	-112:31:36, 49:27:54				Data Entry Date	13-Oct-2011		
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Garry Roberts		
Contract Main. Area	CMA25				Review Date	03-Oct-2011		
Clear Roadway/Skew	7.5 / 20 deg. (RHF)				Dept. Reviewer Name	Tim Davies		
AADT/Year	1,260 / 2010 (A)				Dept. Review Date	28-Oct-2011		
Road Classification	RAU-209-110				Follow-Up By			
Detour Length (km)	8							
Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	3650	SP	53	152X51	3.0	ROUND
Special Features								
Special Features Comment								
Utilities (Located at)								
Utility Attachments								
Telephone	South ditch.				Gas			
Power	3 wires West 100m.				Municipal			
Others	Fibre optic cable North ditch.				Problem (Y/N)	No		
Remarks								
Approach Road / Embankment								
			Last	Now	Explanation of Condition			
Horizontal Alignment			7	7	Farm access at SW In sag curve, no passing EB. Highway 846 500m East.			
Vertical Alignment			6	6				
Roadway Width (m)	7.500							
Embankment			7	7	Both sides start @ 5:1 then 3:1.			
Sideslope (_ :1)	3.0							
(Height of Cover(m) : 4.2)								
Guardrail (Y/N)	No							
Approach Road / Embankment General Rating			6	6				
Upstream End								
Culvert Component			Last	Now	Explanation of Condition			
Direction					South end.			
End Treatment (Concrete, Steel, Others, None)	CONCRETE							
Headwall			7	7				
Collar			7	7	Hairline cracks.			
Wingwalls			X	X				
(Shape :)								
Cutoff Wall			N	N	Buried			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	Top of bevel was allowed to creep inwards 50mm both sides prior to casting collar. Inward 200mm @ East side.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		6	3	Rip Rap displaced U/S west.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		6	3	5m long x 4m wide up to 3m deep sour extends up to 500mm behind west bevel.
Beavers (Y/N)	No			
Upstream End General Rating		6	3	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3650, Type: SP)				
Barrel Last Accessible Date	19-Jan-2010			Not accessible due to high water level and flow.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	(Roof estimated.) Jan 10 2010. P.R. 7 View from ends - general shape is good.
Measured Rise (mm)	3620			
Measured At Ring No.	9			
Sag (mm)	30			
Percent Sag				
Sidewall		7	N	(3460 R1) 19 jan 2010. P.R. 7
Measured Span (mm)	3673			
Measured At Ring No.	6			
Deflection (mm)	23			
Percent Deflection	1			
Floor		N	N	(400m water on 300mm deep silt) Jan 19 2010.
Bulge (mm)	0			
Measured At Ring No.	9			
Abrasion (Y/N)				
Circumferential Seams		8	N	P.R. 8
Separation (mm)	0			
Longitudinal Seams		6	N	(All plates appear to be curved too far causing seams to try to cusp inwards. Worst case 3:00 & 9:00. Gaps up to 10mm @ some. No Change.) Jan 19 2010. (2N stagger) Jan 19 2010. P.R.6
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	N	(Couple small indentations, some minor rust & some galvanizing peeling) Jan 19 2010. P.R 6
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3650, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	N	P.R 7
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	N	P.R. 6
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North end.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	4	Creek makes a 80 degree corner to enter U/S.
Bank Stability		6	3	Bank sloughing up to 20m U/S of inlet.
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	3	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	Place 20m3 of class 1 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) (%)	66.7/55.6	Sufficiency Rating (Last/Now) (%)	67.9/64.0	Est. Repl. Yr	2043	Maint. Req. (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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	28-Jun-2013		Previous Inspection Date	19-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							