

Bridge Culvert Inspection			
Bridge File Number	73650 -2 Bridge Culvert	Form Type	CUL1
Year Built	2007	Lot No.	4
Bridge or Town Name	LANGDON	Inspector Name	Jon Davies
Located Over	WID - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS B
Located On	9:02 R1 0.463;9:02 L1 0.464;RAMP 159-2 A	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Nov-2011
Legal Land Location	SW SEC 14 TWP 24 RGE 27 W4M	Data Entry By	Anne Roberts
Longitude, Latitude	-113:40:46, 51:02:31	Data Entry Date	21-Dec-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA30	Review Date	05-Dec-2011
Clear Roadway/Skew	12 / 0 deg.	Dept. Reviewer Name	Tim Davies
AADT/Year	2,400 / 2010 (A)	Dept. Review Date	10-Jan-2012
Road Classification	RAU-212.0-110	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1600	MP	72	125X26		ROUND
Special Features		BARREL ELBOW						
Special Features Comment		Estimate culvert length 124 m						

Utilities (Located at)			
Utility Attachments			
Telephone	West ROW	Gas	Crossing 25m West of inlet
Power	West and East ROW	Municipal	
Others	Fibre optic cable West and East ROW	Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	
Vertical Alignment		7	7	
Roadway Width (m)	14.000			
Embankment		7	7	4.1 E + W side slopes and at D/S end. U/S has service road.
Sideslope (_ :1)	4.0			
(Height of Cover(m) : 3)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
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): 1600 , Type: MP)				
Barrel Last Accessible Date	22-Nov-2011			
Special Features				
Special Feature			7	Elbow at D/S end of Ring 3.
(Type : BARREL ELBOW)				
Special Feature				
(Type :)				
Roof		N	7	
Measured Rise (mm)	1565			
Measured At Ring No.	2			
Sag (mm)	35			
Percent Sag	2			
Sidewall		N	7	
Measured Span (mm)	1640			
Measured At Ring No.	2			
Deflection (mm)	40			
Percent Deflection	2			
Floor		N	N	500 mm of water
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	6	
Separation (mm)	15			
Longitudinal Seams		X	X	
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)				
Longitudinal Stagger (Y/N)				
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 1600, Type: MP)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
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)	300			
Scour Protection		6	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	7	
Beavers (Y/N)	No			
Downstream End General Rating		6	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	7	1600 mm CSP 8 m from D/S invert for service road.
Bank Stability		6	7	
HWM (m below Top of Culvert)				No visible HWM
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		6	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) (%)	55.6/77.8	Sufficiency Rating (Last/Now) (%)	61.0/76.2	Est. Repl. Yr	2050	Maint. Req. (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	Rex Davidson		Previous Assistant's Name				
Next Inspection Date	22-Aug-2013		Previous Inspection Date	25-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							