

Bridge Culvert Inspection				
Bridge File Number	73827 -1 Bridge Culvert		Form Type	CUL1
Year Built	1988		Lot No.	4
Bridge or Town Name	TILLEY		Inspector Name	Tom Carey
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	1:18 R1 29.165;1:18 L1 29.180		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	15-Feb-2012
Legal Land Location	SE SEC 1 TWP 18 RGE 13 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-111:39:17, 50:29:17		Data Entry Date	26-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	26-Feb-2012
Clear Roadway/Skew	30 / 29 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	6,650 / 2011 (A)		Dept. Review Date	29-Mar-2012
Road Classification	RFD-412.4-130		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	3870	2100	RPE	76.8	152X51	4.0	ELLIPSE
Special Features	CONC FLOOR							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South R/W (North R/W fibre optic).	Gas	
Power	3-wire, X's at pipe, N. side	Municipal	
Others	Light standards both sides.	Problem (Y/N)	No
Remarks	5 line H.V. power 60 m North.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	60m W. of Jct. S.H. 876.
Vertical Alignment		9	9	Slab visible @ median.
Roadway Width (m)	26.500			
Embankment		7	7	
Sideslope (___:1)	4.0			
(Height of Cover(m) : 0.6)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		North.
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		7	7	
Heaving (mm)	60			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	Canal banks are well armored with rock size of 100mm.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 100)				
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): 3870, Rise (mm): 2100, Type: RPE)				
Barrel Last Accessible Date	15-Feb-2012			
Special Features				
Special Feature		N	N	Iced over.
(Type : CONC FLOOR)				
Special Feature				
(Type :)				
Roof		N	7	Est.
Measured Rise (mm)	2193			
Measured At Ring No.				
Sag (mm)	93			
Percent Sag	4			
Sidewall		N	7	3953 span @ mid Ring 8.
Measured Span (mm)	3950			
Measured At Ring No.	2			
Deflection (mm)	80			
Percent Deflection	2			
Floor		N	N	1000mm Deep Ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		N	4	Corrosion with some pitting @ side walls.
Corrosion By Soil (Y/N)				
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): 3870, Rise (mm): 2100, Type: RPE)				
Fish Passage Adequacy		7	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	8	
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		S		South.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	Ingrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	7	Canal slopes are well vegetated.
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.4			No visible HWM. (991007)
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		9	9	

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) (%)	67.0/81.1	Est. Repl. Yr	2025	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	15-Nov-2013		Previous Inspection Date	15-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							