

Bridge Culvert Inspection				
Bridge File Number	76167 -1 Bridge Culvert		Form Type	CUL1
Year Built	1986		Lot No.	3
Bridge or Town Name	TILLEY		Inspector Name	Tom Carey
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	535:02 C1 10.556		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Feb-2010
Legal Land Location	SW SEC 4 TWP 17 RGE 13 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-111:44:24, 50:23:51		Data Entry Date	03-Mar-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	23-Feb-2010
Clear Roadway/Skew	9 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	230 / 2008 (A)		Dept. Review Date	08-Mar-2010
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	3100	1980	RPE	23.8	152X51		ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	North side.		Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks				

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	Hazard markers
Vertical Alignment		9	9	
Roadway Width (m)	9.000			50mm wide cracks in A.C.P 3m E&W of pipe.
Embankment		7	N	Snow
Sideslope (__:1)	2.0			
(Height of Cover (m) : 1.3)				
Guardrail (Y/N)	Yes			One broken post @ S.E.
<b>Approach Road / Embankment General Rating</b>		<b>9</b>	<b>9</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		N		North end.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		7	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		6	N	Snow
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size (mm) : <b>250</b> )				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>N</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3100, Rise (mm): 1980, Type: RPE)</b>				
Barrel Last Accessible Date	16-Feb-2010			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	Estimate
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	30			
Percent Sag	1			
Sidewall		8	8	
Measured Span (mm)	3200			
Measured At Ring No.	4			
Deflection (mm)	100			
Percent Deflection	3			
Floor		N	N	ice covered- Avg. 1.0m dp
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)				
Longitudinal Seams		8	8	Roof is staggered
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)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	corrosion with some pitting in the lower half @ side wall
Corrosion By Soil (Y/N)				
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): 3100, Rise (mm): 1980, Type: RPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	N	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>8</b>	
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		7	N	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		6	N	Snow
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 250)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>N</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		9	9	Drop structure 20 m d/s (2 turnout structures 5m North) 1 turnout structure 10m south
Bank Stability		7	N	Snow
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>9</b>	<b>9</b>	G.R. carried forward

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	2010	Patch cracks in A.C.P 3m E&W of pipe					
OTHER ACTION	2010	Replace one guardrail post at SE					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/88.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>79.7/86.3</b>	Est. Repl. Yr	2033	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	16-May-2013		Previous Inspection Date	28-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							