

Bridge Culvert Inspection				
Bridge File Number	72761 -1 Bridge Culvert		Form Type	CUL1
Year Built	1973		Lot No.	1
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 6.264		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Feb-2010
Legal Land Location	SE SEC 1 TWP 17 RGE 14 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-111:48:01, 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	9.5 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	100 / 2008 (A)		Dept. Review Date	08-Mar-2010
Road Classification	RCU-210-110		Follow-Up By	
Detour Length (km)	20			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1525	MP	32.4	68X13		ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone			Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks	800mm CSP 5m NE CORNER, (CONCRETE STRUCTOR 5m SE CORNER) -Snow			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	25mm wide crack in A.C.P 3m East of pipe.
Vertical Alignment		9	9	
Roadway Width (m)	9.000			
Embankment		7	N	Snow
Sideslope ( _ :1)	4.0			
(Height of Cover (m) : 2.8)				
Guardrail (Y/N)	No			
<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 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		4	N	(CORROSION WITH PITTING) Snow
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	450			
Scour Protection		N	N	snow covered
(Type : )				
(Avg. Rock Size (mm) : )				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	General Rating carried forward
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 1525, Type: MP)				
Barrel Last Accessible Date	22-Jan-1999			
<b>Special Features</b>				
Special Feature				Ice to 400mm of roof @ U/S end- close to 300mm of roof @ midspan
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	(ROOF FLATTENING UNDER ROAD SECTION IS APPROXIMATELY 10 m LONG)
Measured Rise (mm)	1325			
Measured At Ring No.				
Sag (mm)	200			
Percent Sag				
Sidewall		N	N	(ROOF HAS 13.1% EST. SAG. SIDEWALLS HAVE 23.9% DEFLECTION.) 22/01/99 Roof appears flattened viewing from U/S end
Measured Span (mm)	1890			
Measured At Ring No.				
Deflection (mm)	365			
Percent Deflection	23			
Floor		N	N	(Both ends extended by 4m with 1600mm CSP's) 990122
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(H, AT U/S COUPLER, NO DIRT
Separation (mm)	230			
Longitudinal Seams		N	N	INFILTRATION COULD BE DETECTED (95)).
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	(HEAVY RUST, NO PERFORATIONS). 22/03/99
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): -, Rise (mm): 1525, Type: MP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>2</b>	<b>2</b>	GR carried forward
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		4	N	(CORROSION WITH PITTING)
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			ice and snow covered
Above/Below (mm)	450			
Scour Protection		N	N	snow covered
(Type : )				
(Avg. Rock Size (mm) : )				
Scour/Erosion		N	N	snow covered
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	general rating carried forward
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		9	9	800mm CSP DRAINS INTO CANAL FROM EAST. Secondary channel enters channel from the East 10m from d/s end
Bank Stability		5	N	Snow
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<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	Replace pipe					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>22.2/22.2</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>41.8/42.1</b>	Est. Repl. Yr	2010	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Informed by A.T. Feb.16/10- pipe is scheduled for replacement in 2010.		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							