

Bridge Culvert Inspection				
Bridge File Number	72073 -1 Bridge Culvert		Form Type	CUL1
Year Built	1963		Lot No.	2
Bridge or Town Name	CASSILS		Inspector Name	Tom Carey
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	539:04 C1 6.037		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Feb-2010
Legal Land Location	SW SEC 29 TWP 17 RGE 16 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-112:10:45, 50:27:20		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	8.5 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	650 / 2008 (A)		Dept. Review Date	08-Mar-2010
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	50			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1742	1920	SPE	25.5	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment	2200 MP ext. @ ends- approx. 10m @ each end.							

Utilities (Located at)

Utility Attachments			
Telephone	South side.	Gas	
Power	3-wire, N. side.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		7	7	
Roadway Width (m)	8.500			
Embankment		6	6	
Sideslope (_ :1)	3.0			
(Height of Cover (m) : 2.8)				
Guardrail (Y/N)	No			
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			Extended with a 10.5m bevel section
Headwall		X	X	2200mm CSP corr. Profile 152x57, 2.8mm thick
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	N	snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	70			
Scour Protection		N	N	
(Type :)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		N	N	snow covered
Beavers (Y/N)	No			
Upstream End General Rating		8	N	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1742, Rise (mm): 1920, Type: SPE)				
Barrel Last Accessible Date	10-Feb-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	(Water leaching through roof seam)
Measured Rise (mm)	1852			
Measured At Ring No.	7			
Sag (mm)	68			
Percent Sag	3			
Sidewall		5	5	
Measured Span (mm)	1810			
Measured At Ring No.	7			
Deflection (mm)	68			
Percent Deflection	3			
Floor		N	N	(Extesive corrosion scaling, pitting & perforations @ haunches)2003/06/12
Bulge (mm)	0			
Measured At Ring No.				Floor & corrosion rate "3" based on past comment.
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)				
Longitudinal Seams		6	6	(Water coming through roof seam @ 2/3 length)
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		N	N	Corrosion staining @ ring #5 to #7
Corrosion By Soil (Y/N)	Yes			(Perforations @ haunches)- iced over
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1742, Rise (mm): 1920, Type: SPE)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	General rating carried forward- floor rated 3 due to corrosion perms.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		Extended with a 10.5m bevel section
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	2200mm CSP corrogation profile
Collar		X	X	152 x 151 mm thick
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	8	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	N	snow covered
(Type :)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		N	N	snow covered
Beavers (Y/N)	No			
Downstream End General Rating		8	N	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	(Some cattle action)
Bank Stability		7	7	
HWM (m below Top of Culvert)				
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		8	8	

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	2012	(Place concrete floor) if it has not been done					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	55.6/49.5	Est. Repl. Yr	2020	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	10-May-2013		Previous Inspection Date	22-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							