

Bridge Culvert Inspection				
Bridge File Number	76166 -1 Bridge Culvert		Form Type	CULM
Year Built	1992		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	535:02 C1 16.603		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 13 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-111:39:18, 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	10 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	230 / 2008 (A)		Dept. Review Date	08-Mar-2010
Road Classification	RCU-208-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	MP	23	75X25	2.8	ROUND
2	MAIN	-	1800	MP	23	75X25	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	S.side		Gas	
Power	3 wire North ditch		Municipal	
Others			Problem (Y/N)	No
Remarks	HAZARDS @ all corners			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	INTERSECTION WITH SH 876 30 m EAST
Vertical Alignment	9	9	
Roadway Width (m)	8.500		
Embankment	8	N	Snow
Sideslope (__:1)	3.0		
(Height of Cover (m) : 1.4)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	N		Irrigation turnout 20m north NORTH END east PIPE
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls (Shape :)	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		8	N	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	N	
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 150)				
Scour/Erosion		8	N	Snow
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): -, Rise (mm): 1800, Type: MP)				
Barrel Last Accessible Date	28-Feb-2007			East PIPE
Special Features				
Special Feature				Snow and ice 800mm from roof Shape good.
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	(Estimate)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	N	(Inward)
Measured Span (mm)	1795			
Measured At Ring No.	1			
Deflection (mm)	5			
Percent Deflection				
Floor		N	N	ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	N	
Separation (mm)	60			
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		4	N	(Corrosion with some pittin in the lower half)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 1800, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(WATER HAS BEEN OVER TOP OF PIPES)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		SOUTH END east PIPE
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	N	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	N	Snow
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 150)				
Scour/Erosion		8	N	
Beavers (Y/N)	No			
Downstream End General Rating		8	N	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		NORTH END West PIPE
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
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		8	N	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	N	Snow
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 150)				
Scour/Erosion		8	N	
Beavers (Y/N)	No			
Upstream End General Rating		8	N	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): - , Rise (mm): 1800, Type: MP)				
Barrel Last Accessible Date	28-Feb-2007			West Pipe
Special Features				
Special Feature				Snow and ice 800mm from roof Shape is good.
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	(Estimate)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	N	
Measured Span (mm)	1800			
Measured At Ring No.	2			
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	N	
Separation (mm)	100			
Longitudinal Seams		X	X	
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		4	N	(corrosion with some pitting in the lower half)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 1800, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(WATER HAS BEEN OVER TOP OF PIPES)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		SOUTH END west PIPE
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	N	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	N	Snow
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 150)				
Scour/Erosion		8	N	
Beavers (Y/N)	No			
Downstream End General Rating		8	N	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	Irrigation turnout 2m S Control structure 20m S (Water runs over the pipes)
Bank Stability		7	N	Snow
HWM (m below Top of Culvert)	0.2			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		9	9	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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	88.9/55.6	Sufficiency Rating (Last/Now) (%)	79.3/58.8	Est. Repl. Yr	2043	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	16-May-2013		Previous Inspection Date	28-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							