

Bridge Culvert Inspection				
Bridge File Number	76892 -1 Bridge Culvert		Form Type	CUL1
Year Built	1968		Lot No.	1
Bridge or Town Name	COALDALE		Inspector Name	Garry Roberts
Located Over	SMR - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	845:02 C1 26.045		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	20-Mar-2012
Legal Land Location	NW SEC 26 TWP 8 RGE 20 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-112:37:22, 49:41:02		Data Entry Date	12-Apr-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	23-Mar-2012
Clear Roadway/Skew	9.1 /		Dept. Reviewer Name	Tim Davies
AADT/Year	800 / 2011 (A)		Dept. Review Date	17-Apr-2012
Road Classification	RCU-208-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2490	1750	RPP	18.9	152X51	2.8,2.8,2.8	PIPE ARCH
Special Features								
Special Features Comment								

Utilities (Located at)				
Utility Attachments				
Telephone	U/S 5m conduit over canal.		Gas	20m upstream.
Power	East and North side.		Municipal	Gate 6m from East end.
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	Church and residential access.
Vertical Alignment		8	8	
Roadway Width (m)	8.200			
Embankment		8	8	
Sideslope ( _ :1)	3.0			
(Height of Cover(m) : 0.5)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>8</b>	<b>8</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		West.
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		6	7	Large rock in the bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		8	8	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2490, Rise (mm): 1750, Type: RPP)</b>				
Barrel Last Accessible Date	20-Mar-2012			2490 x 1750 design.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		3	3	Construction holes in R1. Beginning of reverse curvature entire roof length.
Measured Rise (mm)	1550			
Measured At Ring No.	5			
Sag (mm)	200			
Percent Sag	11			
Sidewall		7	7	
Measured Span (mm)	2530			
Measured At Ring No.	5			
Deflection (mm)	40			
Percent Deflection	2			
Floor		5	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	6	
Separation (mm)				
Longitudinal Seams		3	3	Roof not well nested. 20mm vertical gap at seam. Beginning of reverse curvature @ 12:00.
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)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	Corrosion with some pitting on the lower half of the pipe.
Corrosion By Soil (Y/N)				
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): 2490, Rise (mm): 1750, Type: RPP)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>3</b>	<b>3</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	7	
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		9	9	15m U/S drop structure. Turnout 2m D/S to North.
Bank Stability		8	8	
HWM (m below Top of Culvert)	1.1			No visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
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>	

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	2012						
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>55.8/57.7</b>	Est. Repl. Yr	2020	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	ER4 can be increased with strutting. Combination of low cover (0.5m) and beginning reverse curvature in roof makes strutting urgent.		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	Glen Mikesh		Previous Assistant's Name	Bernie Roseke			
Next Inspection Date	20-Jun-2015		Previous Inspection Date	22-Apr-2009			
Inspection Cycle (Default) (months)	39						
Comment							