

Bridge Culvert Inspection				
Bridge File Number	74521 -1 Bridge Culvert		Form Type	CUL1
Year Built	1955		Lot No.	4
Bridge or Town Name	RAYMOND		Inspector Name	Jon Davies
Located Over	2ND ORDER TRIBUTARY TO MILK RESERVOIR, 11.9.6.3.1.1, WATERCRS-ST		Inspector Class	BR CLS B
Located On	506:02 C1 21.330		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	04-Jun-2012
Legal Land Location	SE SEC 2 TWP 5 RGE 20 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-112:35:06, 49:20:55		Data Entry Date	23-Jun-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	15-Jun-2012
Clear Roadway/Skew	12.2 /		Dept. Reviewer Name	Tim Davies
AADT/Year	290 / 2011 (A)		Dept. Review Date	29-Jun-2012
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	Pl./Slab Thickness	Shape
1	MAIN	-	2430	SP	49.4	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	SOUTH DITCH		Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	7	Bottom of a sag
Vertical Alignment		6	6	
Roadway Width (m)	9.600			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				SOUTH
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	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2430 , Type: SP)				
Barrel Last Accessible Date	04-Jun-2012			extended both ends
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	4	Rated 4 due to sag.
Measured Rise (mm)	2185			
Measured At Ring No.	9			
Sag (mm)	245			
Percent Sag	10			
Sidewall		4	4	No change- Rated 4 due to deflection INSTALLATION DAMAGE-holes @ rings 12 & 15 from construction
Measured Span (mm)	2650			
Measured At Ring No.	9			
Deflection (mm)	220			
Percent Deflection	9			
Floor		6	N	P.R. 6 Not visible due to water and silt.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	N	P.R. 7. Lower sidewall seam not visible.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				Older rings improper lap & no stagger New ext rings proper lap & stagger
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Alkali corrosion at isolated roof and sidewall seams. Superficial rust below waterline.
Corrosion By Soil (Y/N)	Yes			
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): , Rise (mm): 2430, Type: SP)					
Fish Passage Adequacy		5	5		
Baffle		X	X		
(Type :)					
Waterway Adequacy		5	5	BASED ON HWM COMMENT ON PAGE 3	
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	No				
Barrel General Rating		4	4		
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
Direction				North	
End Treatment (Concrete, Steel, Others, None)		STEEL			
Headwall		X	X		
Collar		X	X		
Wingwalls		X	X		
(Shape :)					
Cutoff Wall		X	X		
Bevel End		7	7		
Heaving (mm)	100				
Invert Above/Below Stream Bed		BELOW			
Above/Below (mm)	300				
Scour Protection		7	4	Riprap displaced at invert.	
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 300)					
Scour/Erosion		7	4	6m long x 5m wide scour hole extending from invert.	
Beavers (Y/N)		No			
Downstream End General Rating		7	4		
Structure Usage					
		Last	Now	Explanation of Condition	
Channel (U/S and D/S)					
Alignment		7	7	(THIS SPRING HAD 100-150 YEAR FLOOD COULD ONLY SEE WHIRL POOL. 960103) 02/06/18	
Bank Stability		7	7	D/S banks have slumped.	
HWM (m below Top of Culvert)		4.0		No HWM visible	
Drift (Y/N)		No		(THIS SPRING HAD 100-150 YEAR FLOOD COULD ONLY SEE WHIRL POOL. 960103) 02/06/18	
Channel Bottom Degrading/Aggrading		DEGRADING			
Beavers (Y/N)		No			
(Fish Compensation Measure 1 : NONE)					
(Fish Compensation Measure 2 : NONE)					
Channel General Rating		7	4		

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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	55.4/50.5	Est. Repl. Yr	2020	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	04-Sep-2015		Previous Inspection Date	20-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							