

Bridge Culvert Inspection			
Bridge File Number	75530 -1 Bridge Culvert	Form Type	CULE
Year Built/Lined	1965/1993	Lot No.	4
Bridge or Town Name	COWLEY	Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO CASTLE RIVER, 2.12.35.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	3:04 C1 21.891	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Nov-2011
Legal Land Location	NW SEC 11 TWP 7 RGE 1 W5M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:02:23, 49:33:03	Data Entry Date	09-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA26	Review Date	08-Dec-2011
Clear Roadway/Skew	14.9 / 0 deg.	Dept. Reviewer Name	Tim Davies
AADT/Year	3,950 / 2010 (A)	Dept. Review Date	10-Jan-2012
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
2	MAIN FULL LINER	-	3360	MP	98.8		98.8	ROUND
2	D/S FULL LINER	-	4220	SP	13.632	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	North ditch	Gas		
Power	3 wire 50 m north of c.l.	Municipal		
Others	Fibre optic S ditch	Problem (Y/N)	No	
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Sag curve through valley with good sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	21.000			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 10.2)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		South
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		7	7	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		7	7	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3360, Type: MP)				
Barrel Last Accessible Date	27-Nov-2011			
Special Features				
Special Feature (Type :)				1/2 liner.
Special Feature (Type :)				
Roof		7	7	est Measured from liner floor to original roof.
Measured Rise (mm)	3522			
Measured At Ring No.	23			
Sag (mm)	0			
Percent Sag	0			
Sidewall		7	7	Grouted 1/2 liner to midpoint of sidewalls. Measured at top of liner - R23
Measured Span (mm)	3563			
Measured At Ring No.	23			
Deflection (mm)	203			
Percent Deflection	6			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)				
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			1N stagger in original
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Alkali and corrosion at East S/W of original pipe
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3360, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
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		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 4220, Type: SP)				
Barrel Last Accessible Date	27-Nov-2011			SPCSP extension - North D/S end
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Extended at North and with 3 rings of SPCSP
Measured Rise (mm)	4220			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		8	8	
Measured Span (mm)	4220			
Measured At Ring No.	1			
Deflection (mm)				
Percent Deflection				
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	2N stagger
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)	Yes			
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 4220, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			At North end - 500mm
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 Extension General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North End
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	8	
Collar		9	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Buried.
Bevel End		9	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1100			
Scour Protection		9	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		9	8	
Beavers (Y/N)	No			
Downstream End General Rating		9	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		6	6	

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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	76.0/74.9	Est. Repl. Yr	2035	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	27-Aug-2013		Previous Inspection Date	19-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							