

Bridge Culvert Inspection			
Bridge File Number	74146 -1 Bridge Culvert	Form Type	CUL1
Year Built	1953	Lot No.	4
Bridge or Town Name	CARSELAND	Inspector Name	Tom Carey
Located Over	TRIBUTARY TO BOW RIVER, 2.13.22, WATERCRS-ST	Inspector Class	BR CLS A
Located On	24:04 C1 1.861	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	20-Feb-2013
Legal Land Location	NE SEC 5 TWP 22 RGE 25 W4M	Data Entry By	Anne Roberts
Longitude, Latitude	-113:25:40, 50:50:41	Data Entry Date	19-Mar-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA30	Review Date	03-Mar-2013
Clear Roadway/Skew	8.5 /	Dept. Reviewer Name	Tim Davies
AADT/Year	2,420 / 2011 (A)	Dept. Review Date	25-Mar-2013
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	-	1524	MP	24.7	68X13		ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	None		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Curve 400 m north 75 km/hr. On grade 2%.
Vertical Alignment	6	6	
Roadway Width (m)	8.500		
Embankment	7	7	
Sideslope ( __:1)	2.0		
(Height of Cover(m) : 2.2)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>6</b>	<b>6</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Snow covered.
Above/Below (mm)	200			
Scour Protection		7	7	Some rock under grass. Well grassed.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>100</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP)				
Barrel Last Accessible Date	20-Feb-2013			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		4	4	Isolated 100mm bulge @ roof 2m from d/s end MINOR CUSPING @ ROOF SEAMS
Measured Rise (mm)	1380			
Measured At Ring No.	2			
Sag (mm)	144			
Percent Sag	9			
Sidewall		5	5	
Measured Span (mm)	1620			
Measured At Ring No.	2			
Deflection (mm)	96			
Percent Deflection	6			
Floor		5	5	Moderate corrosion on entire length of floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	Rivetted.
Separation (mm)	50			
Longitudinal Seams		X	8	
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		5	5	Some alkali at seams & corrosion on entire length of floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			SLIGHTLY
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): 1524, Type: MP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		4	N	(WELL GRASSED IN. Bevel undermined 500mm at end.) PR 4 Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		4	N	(2500 mm WIDE x 700 mm DEEP x 8 m LONG scour hole). PR 4
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	(Waded in to most of it. Feels like it is rock lined.) GR carried forward.
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	Low shallow banks.
Bank Stability		8	8	
HWM (m below Top of Culvert)				No visible hwm.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			@ D/S
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</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							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>63.2/63.2</b>	Est. Repl. Yr	2021	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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	20-Nov-2014		Previous Inspection Date	20-May-2011			
Inspection Cycle (Default) (months)	21						
Comment							