

Bridge Culvert Inspection			
Bridge File Number	71870 -1 Bridge Culvert	Form Type	CUL1
Year Built	1959	Lot No.	2
Bridge or Town Name	FAWCETT	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO PEMBINA RIVER, 8.11.84.5, WATERCRS-ST	Inspector Class	BR CLS B
Located On	44:02 C1 45.252	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Apr-2013
Legal Land Location	SE SEC 11 TWP 64 RGE 1 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:01:54, 54:31:17	Data Entry Date	22-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA10	Review Date	21-Apr-2013
Clear Roadway/Skew	10.9 / -20 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	2,250 / 2012 (A)	Dept. Review Date	23-Apr-2013
Road Classification	RAU-210-110	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
1	MAIN	1724	1901	SPE	45.1	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	4 wires East r/w.	Municipal	
Others	Telegraph, west r/w. Fibre optics East, Alberta supernet.	Problem (Y/N)	No
Remarks	BF tag on u/s end.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	In slight sag curve.
Vertical Alignment	7	7	
Roadway Width (m)	10.900		
Embankment	6	5	Embankment has settled over pipe creating slight dip but appears to have stabilized.
Sideslope (__:1)	3.0		
(Height of Cover(m) : 3)			
Guardrail (Y/N)	Yes		West side only. Strike damage @ NW, 8 sections + TDE.
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
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
Cutoff Wall		X	X	
Bevel End		5	X	Bevel unsupported for 1m & shifted 0.5m South. Bevel bent and lifted from previous debris removals.
Heaving (mm)	250			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		5	N	Gap between bevel & fill is due to heaving. Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		5	N	Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		5	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	16-Apr-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Rise not measured due to ice. Sag est at less than 3%
Measured Rise (mm)	1881			
Measured At Ring No.	6			
Sag (mm)	20			
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	1721			
Measured At Ring No.	11			
Deflection (mm)	3			
Percent Deflection	1			
Floor		7	N	Ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	Lower 1/3 not viewed
Separation (mm)	0			
Longitudinal Seams		7	7	Lower seams not viewed. 1N. Stagger
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Bottom 1/3 superficial rust. Stains at upper seams/bolts.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	5	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		1200 dia ditch CSP flows onto outlet. 300mm drop to channel. Fillcrete washed off. Bevel cantelevered. Lost fill both sides, 1m long.
End Treatment (Concrete, Steel, Others, None)	STEEL			2-1200MM csp under railway bed 3m d/s of inlet.
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	Floor not viewed/rated.
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		5	N	Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	N	Snow covered
Beavers (Y/N)	No			
Downstream End General Rating		5	5	Gr carried fwd from July, 2011
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	5	Sharp bend at outlet due to railway.
Bank Stability		6	6	
HWM (m below Top of Culvert)	0.2			Grass in u/s fence.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	5	

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	2013	Repair guardrail - 8 sections, 8 posts, TDE					
OTHER ACTION	2013	Fill in sideslope settlement.					
OTHER ACTION	2013	Remove debris from clearing work.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	70.0/62.0	Est. Repl. Yr	2021	Maint. Req. (Y/N)	Yes
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	Eric Carcoux		Previous Assistant's Name				
Next Inspection Date	16-Jan-2015		Previous Inspection Date	13-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							