

Bridge Culvert Inspection			
Bridge File Number	72134 -1 Bridge Culvert	Form Type	CUL1
Year Built	1961	Lot No.	2
Bridge or Town Name	FLATBUSH	Inspector Name	Todd Warshawski
Located Over	CHISHOLM CREEK, 8.11.83, WATERCRS-ST	Inspector Class	BR CLS B
Located On	44:04 C1 25.131	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Apr-2013
Legal Land Location	SW SEC 22 TWP 67 RGE 1 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:04:42, 54:48:34	Data Entry Date	24-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA10	Review Date	21-Apr-2013
Clear Roadway/Skew	11 / -30 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,900 / 2012 (A)	Dept. Review Date	01-May-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	20		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2120	SP	36.6	152X51	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	West r/w	Gas		
Power	3 wire o/h East r/w	Municipal		
Others	depth guage d/s	Problem (Y/N)	No	
Remarks	BF tag on u/s end.			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Access road to SW.
Vertical Alignment		8	8	
Roadway Width (m)	10.600			Wide crack in ACP over pipe.-photo
Embankment		8	8	
Sideslope ( _ :1)	4.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**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		X	X	
(Shape : )				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	5	Crown bent from equipment.
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	5	Few rocks, well grassed.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>200</b> )				
Scour/Erosion		6	5	
Beavers (Y/N)	Yes			1.2m high dam on inlet.-photo
<b>Upstream End General Rating</b>		<b>6</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>2120</b> , Type: <b>SP</b> )				
Barrel Last Accessible Date	16-Apr-2013			Pipe may be VE. Confirm at next inspection.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	Rise not measured due to ice. Sag est at less than 3%.
Measured Rise (mm)	2032			
Measured At Ring No.				
Sag (mm)	29			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	2032			
Measured At Ring No.	7			
Deflection (mm)	13			
Percent Deflection				
Floor		N	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	6	
Separation (mm)	0			
Longitudinal Seams		N	4	Several upper seams with insufficient bolt length.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				1N Stagger
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	5	Pitting on lower 1/3. Stains on upper seams/bolts
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			1.0m deep at u/s end.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2120, Type: SP)				
Fish Passage Adequacy		6	6	
Baffle		N	X	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>N</b>	<b>4</b>	
Downstream 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	
Bevel End		6	6	Floor not viewed/rated.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		6	N	Snow covered
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	N	Snow covered
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.6			Water stains.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>8</b>	<b>8</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	Remove debris at inlet.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Seal crack in ACP.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>58.4/51.8</b>	Est. Repl. Yr	2027	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Pipe may be "VE", confirm at next inspection if no ice is on pipe.		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 Caroux		Previous Assistant's Name				
Next Inspection Date	16-Jan-2015		Previous Inspection Date	13-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							