

Bridge Culvert Inspection				
Bridge File Number	74561 -1 Bridge Culvert		Form Type	CUL1
Year Built	1956		Lot No.	4
Bridge or Town Name	BOYLE		Inspector Name	Eric Carcoux
Located Over	TRIBUTARY TO FLAT CREEK, 8.11.55.5.8.1, WATERCRS-ST		Inspector Class	BR CLS A
Located On	63:01 C1 32.280		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	13-Jan-2012
Legal Land Location	SW SEC 34 TWP 65 RGE 19 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-112:48:12, 54:40:02		Data Entry Date	22-Jan-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA07		Review Date	16-Jan-2012
Clear Roadway/Skew	11 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	4,090 / 2010 (A)		Dept. Review Date	02-Feb-2012
Road Classification	RAU-211.8-110		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	2489	1753	RPP	20.7	152X51	3.0	PIPE ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	West r/w.		Gas	
Power	1 wire East r/w.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Pipe is between a road allowance and an approach East side.
Vertical Alignment	9	9	No file tag installed.
Roadway Width (m)	11.000		
Embankment	6	6	
Sideslope (__:1)	1.0		
(Height of Cover(m) : 0.5)			
Guardrail (Y/N)	No		Pipe does not meet clear zone requirements. Top of inlet is 2m from edge of road .
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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		4	5	
Scour/Erosion		4	5	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1753, Type: RPP)				
Barrel Last Accessible Date	12-Jan-2011			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		6	6	
Measured Rise (mm)	1705			
Measured At Ring No.	6			
Sag (mm)	48			
Percent Sag	3			
Sidewall		5	4	Cracked seam
Measured Span (mm)	2568			
Measured At Ring No.	6			
Deflection (mm)	79			
Percent Deflection	3			
Floor		5	5	
Bulge (mm)	50			
Measured At Ring No.	6			
Abrasion (Y/N)	No			
Circumferential Seams		4	4	13 bolts missing on longitudinal and circumferential seams.
Separation (mm)	0			
Longitudinal Seams		4	4	Some bolts have insufficient thread & others appear to be backing out of bolt.
Total No. of Cracked Rings	1			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	110			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	Floor has 25% pitting & heavy scaling on lower.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1753, Type: RPP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
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		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		4	4	Bevel sections not lapped properly & missing 22 bolts - photo.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		4	4	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		7	8	

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) (%)	49.6/49.9	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	Todd Warshawski		Previous Assistant's Name				
Next Inspection Date	13-Oct-2013		Previous Inspection Date	02-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							