

Bridge Culvert Inspection				
Bridge File Number	13905 -1 Bridge Culvert		Form Type	CUL1
Year Built	1961		Lot No.	1
Bridge or Town Name	CARVEL CORNE		Inspector Name	Eric Carcoux
Located Over	KILINI CREEK, 6.65.19, WATERCRS-ST		Inspector Class	BR CLS A
Located On	43:22 R1 23.495;43:22 L1 23.541		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	26-Aug-2011
Legal Land Location	SE SEC 16 TWP 53 RGE 2 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:13:24, 53:34:22		Data Entry Date	27-Sep-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA11		Review Date	26-Sep-2011
Clear Roadway/Skew	15 / 30 deg. (RHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	11,870 / 2010 (A)		Dept. Review Date	28-Sep-2011
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2490	1750	RPP	79.2	152X51	2.8	PIPE ARCH
Special Features		VERT STEEL STRUTS						
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	East r/w.		Gas
Power	3 lines East r/w.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	100 m north of Hwy 16 and 43 interchange. SBL 15m NBL 15m.
Vertical Alignment		7	7	
Roadway Width (m)	30.000			
Embankment		4	4	Scoured 1.5m back and 0.8m above crown at U/S end.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 3)				
Guardrail (Y/N)	Yes			West side only.
<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		4	4	Lawn mower damage top of West bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		4	4	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		4	4	Scoured 1.5m back and 0.8 above crown.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2490, Rise (mm): 1750, Type: RPP)				
Barrel Last Accessible Date	02-Oct-2002			Water to within 200mm of top of pipe. Condition appears to be the same as last comments from when it was last accessible.
<b>Special Features</b>				
Special Feature		N	N	
(Type : <b>VERT STEEL STRUTS</b> )				
Special Feature				
(Type : )				
Roof		N	N	(Assume previous "3" rating due to comments from Oct. 02/02. 15/June/2006)
Measured Rise (mm)	1575			
Measured At Ring No.				
Sag (mm)	193			
Percent Sag	11			(10.9% sag. 2002/10/02)
Sidewall		N	N	(5% deflection, 25 mm of steel between cracks. 2002/10/02) (Assume current "2" rating due to comments from Oct. 02/02. 15/June/2006) (Measured 2627 x 1575 at ring 7.3. 2002/10/02)
Measured Span (mm)	2627			
Measured At Ring No.				
Deflection (mm)	124			
Percent Deflection	5			
Floor		N	N	
Bulge (mm)	25			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	(Rings 1 to 10, 21 & 22 cracked at 8:00 with ring 4 only have 25 mm of steel left. 2002/10/02) (Assume current "2" rating with less than 25mm steel? 15/June/2006)
Total No. of Cracked Rings	10			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		N	N	(Some scaling and pitting. 2002/10/02)
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2490, Rise (mm): 1750, Type: RPP)</b>				
Ponding (Y/N)	Yes			1.4m ponding
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type : )				
Waterway Adequacy		4	4	(Usually little or no freeboard. 2002/10/02) (Icing. 97/06/10) (Small clump at base of timber struts. 2002/10/02)
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>2</b>	<b>2</b>	G.R. carried forward since 02/Oct/2002)
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		Water to 400mm below crown.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		5	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		5	N	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>200</b> )				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	GR carried forward from 11-Nov-2009
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	5	
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.1			HWM 15-June-2006 Evidence indicates pipe has flowed full.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>5</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	2013	Replace					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>22.2/22.2</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>33.8/33.8</b>	Est. Repl. Yr	2013	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Replacement design currently underway.		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	Melanie Johnson		Previous Assistant's Name				
Next Inspection Date	26-May-2013		Previous Inspection Date	11-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							