

Bridge Culvert Inspection			
Bridge File Number	74085 -1 Bridge Culvert	Form Type	CUL1
Year Built	1975	Lot No.	4
Bridge or Town Name	CARVEL CORNE	Inspector Name	Kris Bosters
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.119, WATERCRS-ST	Inspector Class	BR CLS A
Located On	627:02 C1 32.715	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	25-Oct-2012
Legal Land Location	SE SEC 5 TWP 52 RGE 2 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:15:02, 53:27:15	Data Entry Date	13-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11	Review Date	04-Nov-2012
Clear Roadway/Skew	9.2 / 45 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,430 / 2011 (A)	Dept. Review Date	20-Nov-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	25		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1429	1575	SPE	108.5	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment	1429 x 1575mm vertical ellipse							

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	2 wire North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Site is West of BF 02324. res. access each way. 80 km/h design vert. align. Crest curve W, limited sight distance. No passing.
Vertical Alignment		5	5	
Roadway Width (m)	8.800			
Embankment		4	4	Ditch erosion channel - SW not affecting culvert. Grassed & stable.
Sideslope (:1)	3.5			
(Height of Cover(m) : 9)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		5	5	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		5	5	Bevek assembled incorrectly and seam lapped more by 1 bolt hole & 11 bolts missing.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		5	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): 1429, Rise (mm): 1575, Type: SPE)				
Barrel Last Accessible Date	25-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1550			
Measured At Ring No.	8			
Sag (mm)	25			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	1470			
Measured At Ring No.	8			
Deflection (mm)	41			
Percent Deflection	3			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.	8			
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	1N
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	4	Rusting/scaling & pitting by water seeping in from bolts at lower 1/3.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	POS			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1429, Rise (mm): 1575, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	long pipe and steep
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		5	5	Sloes down to slough area - channel rock covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		5	5	
Beavers (Y/N)	Yes			Cuttings everywhere.
Downstream End General Rating		5	5	
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			Deadfall in channel.
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	64.0/64.0	Est. Repl. Yr	2030	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	Arnold Assenheimer		Previous Assistant's Name				
Next Inspection Date	25-Jan-2016		Previous Inspection Date	10-Jul-2009			
Inspection Cycle (Default) (months)	39						
Comment							