

Bridge Culvert Inspection				
Bridge File Number	76959 -1 Bridge Culvert		Form Type	CUL1
Year Built	1969		Lot No.	4
Bridge or Town Name	WOKING		Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO KAKUT CREEK, 8.10.58.11.3.6, WATERCRS-ST		Inspector Class	BR CLS B
Located On	677:04 C1 17.255		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	08-Nov-2011
Legal Land Location	SE SEC 29 TWP 76 RGE 3 W6M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:25:29, 55:36:25		Data Entry Date	22-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05		Review Date	20-Nov-2011
Clear Roadway/Skew	11 / 0 deg.		Dept. Reviewer Name	Steve Pasquan
AADT/Year	110 / 2010 (A)		Dept. Review Date	10-Jan-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	32.9	152X51	3.0	PIPE ARCH
Special Features	VERT STEEL STRUTS							
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power	17M N. OF C/L 1 LINE		Municipal
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	7	Approaches 100m East
Vertical Alignment		8	8	
Roadway Width (m)	9.500			
Embankment		8	7	
Sideslope (:1)	3.0			
(Height of Cover(m) : 2)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	7	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	6	
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
Upstream End General Rating		7	6	
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	17-Sep-2010			Viewed from end, waer with thin ice.
Special Features				
Special Feature		7	N	
(Type : VERT STEEL STRUTS)				
Special Feature				
(Type :)				
Roof		5	N	Est. sag due to steel struts. Missing bolts in last two sections from d/s end @ 12:00.-17-Sep-2010
Measured Rise (mm)	1607			
Measured At Ring No.	4			
Sag (mm)	95			
Percent Sag	5			
Sidewall		2	N	Seam cracked at the 9:00 position, 45mm sleet between crack in ring 3.photo-17-Sep-2010
Measured Span (mm)	2511			
Measured At Ring No.	4			Missing bolts in last two sections from d/s end @ 3:00 and 9:00.-17-Sep-2010
Deflection (mm)	22			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		4	N	TWO PIPES WERE SPLICED TOGETHER AT C/L.50 MM GAP AT ROOF @ SPLICE between ring 3 & 4.
Separation (mm)	50			
Longitudinal Seams		2	N	Seam cracked at the 9:00 position, 45mm steel between crack in ring 3.(photo)17-Sep-2010
Total No. of Cracked Rings	2			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)	45			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			600mm in downstream end.-17-Sep-2010

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)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	2 point increase due to struts. GR carried over-17-Sep-2010
Downstream 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 :)				
Cutoff Wall		X	X	
Bevel End		4	4	Bevel section separating from barrel
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	7	
HWM (m below Top of Culvert)				No HWM visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				stable
Beavers (Y/N)	No			
(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) (%)	Year	Inspector Comments	Sufficiency Rating (Last/Now) (%)	Est. Repl. Yr	Maint. Req. (Y/N)	No
	44.4/44.4		60.0/59.1	2013		

Special Comments for Next Inspection	Monitor seam at 9:00 on ring 3. Reduce inspection cycle to 21 months.	Department Comments
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Maintenance Reviewed By	Date	Estimated Total	0
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Proposed Long-Term Strategy	
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On 3-Year Program (Y/N)	
Proposed Action	

Previous Inspector's Name	Russel Vanderschaaf	Previous Assistant's Name	
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Next Inspection Date	08-Aug-2013	Previous Inspection Date	17-Sep-2010
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Inspection Cycle (Modified) (months)	21
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Comment	
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Maintenance Recommendations

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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) (%)	60.0/59.1	Est. Repl. Yr	2013	Maint. Req. (Y/N) No
Special Comments for Next Inspection	Monitor seam at 9:00 on ring 3. Reduce inspection cycle to 21 months.		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	Russel Vanderschaaf		Previous Assistant's Name			
Next Inspection Date	08-Aug-2013		Previous Inspection Date	17-Sep-2010		
Inspection Cycle (Modified) (months)	21					
Comment						