

Bridge Culvert Inspection				
Bridge File Number	76242 -1 Bridge Culvert		Form Type	CUL1
Year Built	1992		Lot No.	4
Bridge or Town Name	TOMAHAWK		Inspector Name	Kris Bosters
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.134, WATERCRS-ST		Inspector Class	BR CLS A
Located On	624:02 C1 9.693		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	25-Oct-2012
Legal Land Location	SW SEC 4 TWP 51 RGE 6 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:49:55, 53:22:01		Data Entry Date	06-Nov-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11		Review Date	04-Nov-2012
Clear Roadway/Skew	9.8 / 4 deg. (RHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	1,180 / 2011 (A)		Dept. Review Date	13-Nov-2012
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	38			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1600	MP	51	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	south r/w		Gas
Power	1 wire N. r/w 2 wire S. r/w		Municipal Problem (Y/N) No
Others			
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Typical entrance/access S.W. "T" intersection 60m S.E. Crest curves each way.
Vertical Alignment		7	7	
Roadway Width (m)	9.800			
Embankment		7	7	
Sideslope (__:1)	3.5			
(Height of Cover(m) : 5.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

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	Bevel too long 3.5m. - side deflecting inward 200mm.
Heaving (mm)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
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): , Rise (mm): 1600, Type: MP)				
Barrel Last Accessible Date	25-Oct-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1551			@ last seam
Measured At Ring No.				
Sag (mm)	50			
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	1650			@ last seam
Measured At Ring No.				
Deflection (mm)	50			
Percent Deflection	3			
Floor		N	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	End section downstream - tight at top & 120 mm separation at the bottom.20jan03. (End section (upstream) has uplifted & water is piping & entering at first seam. Mar 30, 2006.)
Separation (mm)	75			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Coating		4	4	Pitting rust lower 1/3.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
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		5	5	Long barrel. Small dents caused by heavy equipment.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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) (%)	71.1/69.0	Est. Repl. Yr	2040	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	08-Jul-2009			
Inspection Cycle (Default) (months)	39						
Comment							