

Bridge Culvert Inspection			
Bridge File Number	70134 -2 Bridge Culvert	Form Type	CULE
Year Built/Lined	1959/2001	Lot No.	4
Bridge or Town Name	BRANT	Inspector Name	Tom Carey
Located Over	TRIBUTARY TO WEST ARROWWOOD CREEK, 2.13.18.6, WATERCRS-ST	Inspector Class	BR CLS A
Located On	23:08 C1 2.579	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	18-Feb-2013
Legal Land Location	SE SEC 5 TWP 19 RGE 24 W4M	Data Entry By	Anne Roberts
Longitude, Latitude	-113:17:38, 50:34:20	Data Entry Date	17-Mar-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA27	Review Date	03-Mar-2013
Clear Roadway/Skew	12.9 /	Dept. Reviewer Name	Tim Davies
AADT/Year	1,040 / 2011 (A)	Dept. Review Date	25-Mar-2013
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN Partially Lined	2315	2560	RPE	47.5	152X51		ELLIPSE
2	MAIN PARTIAL LINER	-	1900	MP	42	125X26	3.5,3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ditch.	Gas	
Power	1 line North ditch 20 m from c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	9	
Vertical Alignment	7	7	
Roadway Width (m)	12.900		
Embankment	7	7	
Sideslope (__:1)	4.0		
(Height of Cover(m) : 2.5)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	N		
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		9	N	
Bevel End		9	9	3m of original SP with concrete floor.
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		9	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
Scour/Erosion		9	N	
Beavers (Y/N)	No			
Upstream End General Rating		9	9	GR carried forward.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2315, Rise (mm): 2560, Type: RPE)				
Barrel Last Accessible Date	18-Feb-2013			CSP liner 1900mm diameter
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	50 mm ice on floor.
Measured Rise (mm)	1910			
Measured At Ring No.	1			
Sag (mm)	10			
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	1930			
Measured At Ring No.	1			
Deflection (mm)	30			
Percent Deflection	1			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	20			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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): 2315, Rise (mm): 2560, Type: RPE)				
Coating		8	6	Superficial corrosion on length of floor - only haunches seen.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
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
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)				
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed Above/Below (mm)				
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 350)		X	X	
Scour/Erosion		X	X	
Beavers (Y/N)				
Downstream End General Rating		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)				
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		X	X	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Upstream End General Rating		N	N	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1900, Type: MP)				
Barrel Last Accessible Date				
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		X	X	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		X	X	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		X	X	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		X	X	
Separation (mm)				
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 # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1900, Type: MP)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)				
Siltting (Y/N)				
Drift (Y/N)				
Barrel General Rating		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		9	9	
Bevel End		9	9	3m of original SP with concrete floor.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	200			
Scour Protection		9	9	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		9	9	
Beavers (Y/N)	No			
Downstream End General Rating		9	9	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Drop structure 60 m North. Dugout 30 m North.
Bank Stability		7	7	
HWM (m below Top of Culvert)				None 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		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) (%)	79.7/79.7	Est. Repl. Yr	2048	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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	18-Nov-2014		Previous Inspection Date	18-May-2011			
Inspection Cycle (Default) (months)	21						
Comment							