

Bridge Culvert Inspection				
Bridge File Number	84526 -1 Bridge Culvert		Form Type	CUL1
Year Built	1993		Lot No.	2
Bridge or Town Name	GLENWOOD		Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO BELLY RIVER, 2.12.22.11, WATERCRS-ST		Inspector Class	BR CLS A
Located On	505:02 C1 42.092		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Jun-2012
Legal Land Location	SW SEC 6 TWP 5 RGE 25 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-113:21:46, 49:20:56		Data Entry Date	23-Jul-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	10-Jul-2012
Clear Roadway/Skew	10.2 / -40 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	1,220 / 2011 (A)		Dept. Review Date	30-Jul-2012
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	6			

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	36	125X26		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	South Side		Gas	
Power	2 Wire North Side		Municipal	
Others	Supernet South ROW		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	10.000			
Embankment		3	3	2m x 2m x 10m long erosion gully at NE- also eroding d/s bevel. NE O.TLM conveys large flow from east incline of 2 km.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1.8)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		8	8	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				South End
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	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	7	
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	10-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	1610			
Measured At Ring No.	3			
Sag (mm)	10			
Percent Sag	0			
Sidewall		8	8	Inward
Measured Span (mm)	1580			
Measured At Ring No.	3			
Deflection (mm)	20			
Percent Deflection	1			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	sealed with spray foam
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)				
Coating		5	5	moderate corrosion at floor
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Fish Passage Adequacy		3	3	Hanging bevel at d/s
Baffle (Type :)		X	X	
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)	200			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 200)		3	3	1m deep x 5 x 5 scour hole. also erosion at side of bevel from ditch drainage
Scour/Erosion		3	3	
Beavers (Y/N)		No		
Downstream End General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Turns 90deg upstream
Bank Stability		4	4	d/s banks eroded
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading		DEGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	Approx 20m ³ cl.2 at d/s					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2012	Repair ditch erosion NE- 15m ³ Cl.1					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	68.4/67.2	Est. Repl. Yr	2036	Maint. Req. (Y/N)	Yes
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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	10-Sep-2015		Previous Inspection Date	19-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							