

Bridge Culvert Inspection				
Bridge File Number	71505 -1 Bridge Culvert		Form Type	CULM
Year Built	1955		Lot No.	2
Bridge or Town Name	BRETON		Inspector Name	Wade Nanninga
Located Over	2ND ORDER TRIBUTARY TO POPLAR CREEK, 6.132.8.3, WATERCRS-ST		Inspector Class	BR CLS B
Located On	616:02 C1 17.890		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	14-Feb-2011
Legal Land Location	SE SEC 3 TWP 48 RGE 5 W5M		Data Entry By	Janie Assenheimer
Longitude, Latitude	-114:38:13, 53:06:18		Data Entry Date	25-Feb-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA11		Review Date	22-Feb-2011
Clear Roadway/Skew	9 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	860 / 2009 (A)		Dept. Review Date	02-Mar-2011
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	20			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3600	1800	BP	47.5			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Range road intersection to East. Crest curve to east with limited sight distance.
Vertical Alignment		7	7	
Roadway Width (m)	9.000			
Embankment		7	N	(Erosion channels all 4 corners, grassed and appear stable. 21-Nov-07)
Sideslope (__:1)	3.0			
(Height of Cover(m) : 4.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		East barrel.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		4	4	Severe scaling.
Collar		X	X	
Wingwalls (Shape :)		4	4	Severe scaling top, wide vertical cracks. Center wall is heavily scaled top edge.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	

Bridge Culvert Barrel

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	14-Feb-2011			Wide vertical crack with spalling on center wall @ inlet where joins center bevel wall. 0.5m ice along floor.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	5	5 - 10mm cracks through circum. seams.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	5	Horiz. longitudinal cracks with efflorescence.
Measured Span (mm)	1800			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	5 - 10 mm cracks at each seam.
Separation (mm)	10			
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)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 1)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			About 0.3.
Fish Passage Adequacy		N	6	
Baffle		N	X	
(Type :)				
Waterway Adequacy		N	6	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	5	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date	14-Feb-2011			0.5m ice along floor.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	5	5 - 10mm cracks at circ. seams.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	5	Wide vertical crack with spalling. Centre wall at inlet horizontal cracks with efflorescence.
Measured Span (mm)	1800			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	5 - 10mm cracks at each seam.
Separation (mm)	10			
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)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 2)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			0.3m
Fish Passage Adequacy		7	6	
Baffle		N	X	
(Type :)				
Waterway Adequacy		N	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		East barrel.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		N	7	
Collar		N	X	
Wingwalls		N	4	Cracking and small spalls @ joint wingwall to barrel. Wide vertical cracks in wingwall.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	Banks are getting undermined D/S, minor. Banks "belled" out with no problems. 01/Sept/2004
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	(G.R. carried forward from 01/Sept/2004)
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Ben ds U/S, enters at a bad angle.
Bank Stability		5	5	Minor undermining and slumping.
HWM (m below Top of Culvert)				HWM not visible Caught at inlet.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
(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	2011	At inlet.					
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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	64.3/54.9	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor scaling of inlet concrete surfaces and ditch erosion. Monitor barrel cracking.		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	Jacob Oresile		Previous Assistant's Name				
Next Inspection Date	14-May-2014		Previous Inspection Date	21-Nov-2007			
Inspection Cycle (Default) (months)	39						
Comment							