

Bridge Culvert Inspection			
Bridge File Number	81354 -1 Bridge Culvert	Form Type	CULM
Year Built	1989	Lot No.	4
Bridge or Town Name	NEWBROOK	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO NAMEPI CREEK, 6.57.4, WATERCRS-ST	Inspector Class	BR CLS B
Located On	827:04 C1 1.621	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	08-Mar-2010
Legal Land Location	SW SEC 12 TWP 62 RGE 22 W4M	Data Entry By	Janie Assenheimer
Longitude, Latitude	-113:10:32, 54:20:29	Data Entry Date	22-Mar-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA10	Review Date	11-Mar-2010
Clear Roadway/Skew	10 / -25 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	90 / 2008 (A)	Dept. Review Date	24-Mar-2010
Road Classification	RLU-209G-90	Follow-Up By	
Detour Length (km)	3		

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	MP	28	125X26	2.8	ROUND
2	MAIN	-	2200	MP	28	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	
Vertical Alignment	8	8	
Roadway Width (m)	10.000		
Embankment	N	7	
Sideslope (__:1)	4.0		
(Height of Cover (m) : 0.7)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>			
Direction	W		North pipe.
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
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Cutoff Wall		X	X	
Bevel End		N	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	6	Sandstone mixed in.
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 300)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 1800, Type: MP)</b>				
Barrel Last Accessible Date	08-Mar-2010			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	7	(Near c/l rise 1825 upward. 20/Sept/2003)
Measured Rise (mm)	1825			Not measured due to ice. Shape and condition appear good.
Measured At Ring No.				
Sag (mm)	25			
Percent Sag	1			
Sidewall		5	6	Minor localized bulging @ several locations.
Measured Span (mm)	1775			Inward deflection 1.4%
Measured At Ring No.	2			
Deflection (mm)	25			
Percent Deflection	1			
Floor		N	N	(Silted over. Installation damage, small hole in D/S 1/3, installation damage. 20/Sept/2003)
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	65			
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		6	6	(Minor supreficial rust - lower third. Dec 4/06)
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 1800, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>5</b>	<b>6</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		E		North pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		N	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : RIP RAP) (Avg. Rock Size (mm) : 300)		N	6	Some sandstone.
Scour/Erosion		N	6	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>6</b>	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Bevel End		N	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	6	Some sandstone.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size (mm) : <b>300</b> )				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): - , Rise (mm): 2200, Type: MP)</b>				
Barrel Last Accessible Date	04-Dec-2006			Not accessible due to water/ice.
<b>Special Features</b>				
Special Feature				Viewed from ends, shape and condition appear good.
(Type : )				
Special Feature				
(Type : )				
Roof		6	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		3	N	(At West end 2105, @ mid pipe 2109, @ East end 2109. Dec 4/06)
Measured Span (mm)	2109			
Measured At Ring No.				
Deflection (mm)	9			Pipe is 2200 @ centreline not 1800
Percent Deflection				
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	N	
Separation (mm)	70			
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		6	6	(Minor superficial rust, lower third. - Dec 4/06)
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 2200, Type: MP)</b>				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>3</b>	<b>N</b>	Previous measurements & ratings were based on wrong barrel diameter.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Direction		E		South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	Some sandstone.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size (mm) : <b>300</b> )				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		8	8	Snow covered.
Bank Stability		N	8	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
<b>Channel General Rating</b>		<b>8</b>	<b>8</b>	

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>58.6/71.8</b>	Est. Repl. Yr	2038	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	Jason Saly		Previous Assistant's Name				
Next Inspection Date	08-Jun-2013		Previous Inspection Date	04-Dec-2006			
Inspection Cycle (Default) (months)	39						
Comment							