

Bridge Culvert Inspection			
Bridge File Number	06982 -1 Bridge Culvert	Form Type	CULE
Year Built	1954	Lot No.	4
Bridge or Town Name	THORSBY	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO STRAWBERRY CREEK, 6.112.4, WATERCRS-ST	Inspector Class	BR CLS B
Located On	622:02 C1 14.731	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Mar-2012
Legal Land Location	SE SEC 31 TWP 49 RGE 1 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:07:48, 53:15:54	Data Entry Date	10-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11	Review Date	09-Apr-2012
Clear Roadway/Skew	9.8 / -10 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	650 / 2011 (A)	Dept. Review Date	11-Apr-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	5		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	4000	2000	PCB	13.8			RECTANGLE
1	MAIN	4000	2000	BP	44			RECTANGLE
1	D/S	4000	2000	PCB	17.8			RECTANGLE
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South & North r/w.	Gas	
Power	2 lines 13m North of c/l crosses road 30 West.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag on South headwall.		

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	6	Intersecting road east, curve west.
Vertical Alignment		7	7	
Roadway Width (m)	9.800			
Embankment		7	6	
Sideslope (__:1)	2.5			
(Height of Cover(m) : 15)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>6</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		N	7	
(Shape : )				

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	BELOW			
Above/Below (mm)	100			
Scour Protection		N	6	Some sandstone.
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 2000, Rise (mm): 2000, Type: PCB, Cell Sequence: 1)</b>				
Barrel Last Accessible Date	16-Mar-2012			East cell.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	8	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	8	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	8	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	8	Standard precast joint.
Separation (mm)	20			
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)				
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 2000, Rise (mm): 2000, Type: PCB, Cell Sequence: 1)				
Ponding (Y/N)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel Extension General Rating</b>		<b>N</b>	<b>8</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 2000, Rise (mm): 2000, Type: PCB, Cell Sequence: 2)				
Barrel Last Accessible Date	16-Mar-2012			East cell.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	5	Wide flexural cracks.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	5	Isolated surface spalls due to shallow rebar. Heavy surface scaling. Wide flexural cracks.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	5	Heavy surface scaling. Wide flexural cracks.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	5	Steel capped and grouted on roof and sidewalls.
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)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 2000, Rise (mm): 2000, Type: PCB, Cell Sequence: 2)</b>				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel Extension General Rating</b>		<b>N</b>	<b>5</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2000, Rise (mm): 2000, Type: BP, Cell Sequence: 1)</b>				
Barrel Last Accessible Date	16-Mar-2012			West cell
<b>Special Features</b>				
Special Feature			X	
(Type : <b>VERT TIMBER STRUTS</b> )				
Special Feature				
(Type : )				
Roof		N	8	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	8	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	8	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	8	Standard precast joint.
Separation (mm)	20			
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)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2000, Rise (mm): 2000, Type: BP, Cell Sequence: 1)</b>				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
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>N</b>	<b>8</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2000, Rise (mm): 2000, Type: BP, Cell Sequence: 2)</b>				
Barrel Last Accessible Date	16-Mar-2012			West cell
<b>Special Features</b>				
Special Feature			X	
(Type : <b>VERT TIMBER STRUTS</b> )				
Special Feature				
(Type : )				
Roof		N	5	Wide flex cracks.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	5	Wide flex cracks. Heavy scaling. Surface spalls on shallow rebar.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	5	Wide flex cracks Heavy scaling
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	5	Capped and grouted. Seam at South extension is poorly grouted.-phot0
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)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2000, Rise (mm): 2000, Type: BP, Cell Sequence: 2)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
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>N</b>	<b>5</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		N	8	
Collar		N	8	
Wingwalls		N	8	
(Shape : )				
Cutoff Wall		N	N	
Bevel End		N	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		N	7	
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	6	30 deg. turn at inlet.
Bank Stability		N	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>6</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>22.2/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>48.8/64.9</b>	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	Jacob Oresile		Previous Assistant's Name				
Next Inspection Date	16-Jun-2015		Previous Inspection Date	03-Feb-2009			
Inspection Cycle (Default) (months)	39						
Comment							