

Bridge Culvert Inspection			
Bridge File Number	84118 -1 Bridge Culvert	Form Type	CULM
Year Built	1935	Lot No.	4
Bridge or Town Name	WATERCOURSE CULVERT ON LOCAL ROAD NEAR EXSHAW	Inspector Name	Garry Roberts
Located Over	WATERCOURSE, WATERCRS-NI	Inspector Class	BR CLS A
Located On	LOCAL ROAD	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	08-Apr-2013
Legal Land Location	NW SEC 21 TWP 24 RGE 9 W5M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-115:12:10, 51:03:51	Data Entry Date	13-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Ash Morjaria
Contract Main. Area	CMA28	Review Date	12-Apr-2013
Clear Roadway/Skew	9.3 /	Dept. Reviewer Name	Tim Davies
AADT/Year	144 / 2013 (E)	Dept. Review Date	22-Apr-2013
Road Classification		Follow-Up By	
Detour Length (km)	999		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	6000	1250	BP	11.6			RECTANGLE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	South ROW	Gas		
Power	Over top of culvert and crosses SW	Municipal		
Others	Fiber optics south ROW	Problem (Y/N)	No	
Remarks				

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment		5	In Grotto Pond parking lot 20 m north of Hwy 1A
Vertical Alignment		8	
Roadway Width (m)	8.000		
Embankment		7	At east
Sideslope ( __:1)	3.1		
(Height of Cover(m) : 1)			
Guardrail (Y/N)	Yes		Wrong lap at NW and NE
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall		9	Recast recently
Collar		X	
Wingwalls		8	Recast recently
(Shape : <b>FLARE</b> )			
Cutoff Wall		X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End			X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection			8	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion			8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>			<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3000, Rise (mm): 1250, Type: BP, Cell Sequence: 1)</b>				
Barrel Last Accessible Date	08-Apr-2013			South cell
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof			8	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall			8	Isolated narrow vertical cracks
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor			8	Recently cleaned
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams			X	
Separation (mm)				
Longitudinal Seams			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	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG				
Ponding (Y/N)				

Bridge Culvert Barrel					
Culvert Component			Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3000, Rise (mm): 1250, Type: BP, Cell Sequence: 1)</b>					
Fish Passage Adequacy				5	Dry
Baffle				X	
(Type : )					
Waterway Adequacy				5	Prone to gravel silting
Icing (Y/N)	No				
Siltng (Y/N)	No				
Drift (Y/N)	No				
<b>Barrel General Rating</b>				<b>8</b>	

Bridge Culvert Barrel					
Culvert Component			Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3000, Rise (mm): 1250, Type: BP, Cell Sequence: 2)</b>					
Barrel Last Accessible Date	08-Apr-2013				
<b>Special Features</b>					
Special Feature					
(Type : )					
Special Feature					
(Type : )					
Roof				8	
Measured Rise (mm)					
Measured At Ring No.					
Sag (mm)					
Percent Sag					
Sidewall				8	Isolated narrow vertical cracks
Measured Span (mm)					
Measured At Ring No.					
Deflection (mm)					
Percent Deflection					
Floor				8	Recently cleaned
Bulge (mm)	0				
Measured At Ring No.					
Abrasion (Y/N)	No				
Circumferential Seams				X	
Separation (mm)					
Longitudinal Seams				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	
Corrosion By Soil (Y/N)					
Corrosion By Water (Y/N)					
Camber POS/ZERO/NEG					
Ponding (Y/N)					

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3000, Rise (mm): 1250, Type: BP, Cell Sequence: 2)				
Fish Passage Adequacy			5	Dry
Baffle			X	
(Type : )				
Waterway Adequacy			5	Prone to gravel silting
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>			<b>8</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall			6	Chipped from rock removal equipment
Collar			X	
Wingwalls			7	
(Shape : <b>FLARE</b> )				
Cutoff Wall			X	
Bevel End			X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection			7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion			7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>			<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment			7	
Bank Stability			7	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			Channel is prone to aggrading. Recently cleaned and currently stable.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>			<b>7</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>/88.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>/74.4</b>	Est. Repl. Yr	2050	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	Cells have history of silting from gravel in channel. Clean cells and channel on a regular basis.		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			Previous Assistant's Name				
Next Inspection Date	08-Jan-2018		Previous Inspection Date				
Inspection Cycle (Default) (months)	57						
Comment							