

Bridge Culvert Inspection				
Bridge File Number	75580 -1 Bridge Culvert		Form Type	CUL1
Year Built	1962		Lot No.	4
Bridge or Town Name	WILLINGDON		Inspector Name	Jason Saly
Located Over	2ND ORDER TRIBUTARY TO VERMILION RIVER, 6.5.30.3, WATERCRS-ST		Inspector Class	BR CLS A
Located On	45:06 C1 22.752		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	23-Jan-2013
Legal Land Location	SE SEC 32 TWP 55 RGE 14 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-112:02:33, 53:47:32		Data Entry Date	28-Feb-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA14		Review Date	13-Feb-2013
Clear Roadway/Skew	9 / 30 deg. (RHF)		Dept. Reviewer Name	Chris Black
AADT/Year	400 / 2011 (A)		Dept. Review Date	14-Mar-2013
Road Classification	RAU-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	1930	1219	CPE	19.8			ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	Plowed in South ditch.		Gas	
Power	Crossing 50m East.		Municipal	
Others	CN Railway 35m South of c/l. Fibre optics North r/w.		Problem (Y/N)	No
Remarks				

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Local road intersection 15m East, RR144. Old railway line 25m South, removed - now a pedestrian trail.
Vertical Alignment		8	8	
Roadway Width (m)	9.000			
Embankment		8	N	Snow covered, but no signs of problems.
Sideslope ( __:1)	4.0			
(Height of Cover(m) : 1.8)				
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
Direction		N		
End Treatment (Concrete, Steel, Others, None)	NONE			
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		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	N	Snow covered.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>N</b>	GR was 7 from 06Jun2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1930, Rise (mm): 1219, Type: CPE)				
Barrel Last Accessible Date	06-Jun-2011			Viewed from ends, shape and condition appear good; pipe snowed in.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		7	N	Some dirt on floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Gaps filled with expanding foam.
Separation (mm)	50			
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	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1930, Rise (mm): 1219, Type: CPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	No fish expected, dry.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			Dirt on floor.
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>N</b>	Previous rating was 8 from 06Jun2011.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	N	(Concrete bags on top of pipe have deteriorated. Mostly natural now. 06Jun2011).
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	N	(1 exposed wire rusting top of pipe tongue, 200mm. 06Jun2011).
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>N</b>	GR was 7 from 06Jun2011.
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	Channel meanders through meadow at upstream (North).
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.3			(Water marks on culvert. 14/Apr/2007)
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	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>6</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>88.9/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>78.2/59.4</b>	Est. Repl. Yr	2024	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	23-Oct-2014		Previous Inspection Date	06-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							