

Bridge Culvert Inspection				
Bridge File Number	77300 -1 Bridge Culvert		Form Type	CUL1
Year Built	1971		Lot No.	3
Bridge or Town Name	WRENTHAM		Inspector Name	Jon Davies
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS B
Located On	36:02 C1 21.649		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	06-Dec-2011
Legal Land Location	NE SEC 15 TWP 6 RGE 17 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-112:12:24, 49:28:27		Data Entry Date	15-Jan-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA24		Review Date	18-Dec-2011
Clear Roadway/Skew	11.4 /		Dept. Reviewer Name	Tim Davies
AADT/Year	540 / 2010 (A)		Dept. Review Date	18-Jan-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1778	1981	RPP	24.4	152X51	2.8	PIPE ARCH
Special Features		CONC FLOOR						
Special Features Comment								

Posting Information										
Required Vert. Clearance Posting (m)										
Posted Vertical Clearance (Y/N)			No							
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)	In Advance (Y/N)
Remarks	Not required									

Utilities (Located at)				
Utility Attachments				
Telephone	West R/W		Gas	Crosses under road 20 m south
Power			Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	On gradual curve.
Vertical Alignment		5	5	Grade rises to the north
Roadway Width (m)	11.400			
Embankment		7	5	Ditch erosion 8 m West of West invert - minor.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	Yes			Guardrail damage at SE turnout.
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		X	7	
Scour/Erosion		X	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1778, Rise (mm): 1981, Type: RPP)				
Barrel Last Accessible Date	06-Dec-2011			
<b>Special Features</b>				
Special Feature (Type : <b>CONC FLOOR</b> )			7	
Special Feature (Type : )				
Roof		5	5	Hole torn in roof 2nd ring from d/s done when installed - another piece csp places atop hole prior to backfill, 3.5m from D/S 3- holes at 500mmx100mm, in roof 2.2m from u/s end-outside of fill damage from mowers-patched w/ old steel sign over top and the patched steel sign is damaged from the mowers Average 1860 measured from roof to concrete throughout. Estimate
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	20			
Percent Sag	1			
Sidewall		6	6	
Measured Span (mm)	1820			
Measured At Ring No.	2			
Deflection (mm)	42			
Percent Deflection	2			
Floor		N	N	Concrete floor
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	6	
Separation (mm)	0			
Longitudinal Seams		5	5	5% of seams poorly nested - up to 20 mm gap. NORTH SIDE AT FLOOR.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1778, Rise (mm): 1981, Type: RPP)</b>				
Coating		7	7	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
<b>(Type : )</b>				
Waterway Adequacy		X	7	
Icing (Y/N)	No			
Siltting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>5</b>	<b>5</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
<b>(Shape : )</b>				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	150			
Scour Protection		X	7	
<b>(Type : NATURAL)</b>				
<b>(Avg. Rock Size(mm) : )</b>				
Scour/Erosion		X	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>Grade Separation</b>				
Road Alignment		X	X	Grade at east end.
Roadway Surface		7	7	
<b>(Type : )</b>				
Concrete- no dirt				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
<b>Type</b>				

Structure Usage				
		Last	Now	Explanation of Condition
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		7	7	
Structure In Use (Y/N)	Yes			Guide fencing in place
<b>Grade Separation General Rating</b>		<b>7</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	2012	Replace 1 section of flex beam and 1 post at SE					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>73.2/66.9</b>	Est. Repl. Yr	2028	Maint. Req. (Y/N)	Yes
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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	06-Sep-2013		Previous Inspection Date	24-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							