

Bridge Culvert Inspection				
Bridge File Number	77529 -2 Bridge Culvert		Form Type	CUL1
Year Built	2002		Lot No.	4
Bridge or Town Name	LINDEN		Inspector Name	Dave Lam
Located Over	TRAIL-PED, OVER 50000 PS		Inspector Class	BR CLS A
Located On	806:04 C1 7.329		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Jul-2011
Legal Land Location	SW SEC 17 TWP 30 RGE 25 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:29:51, 51:34:06		Data Entry Date	21-Aug-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA20		Review Date	28-Jul-2011
Clear Roadway/Skew	10.2 / -40 deg. (LHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	1,580 / 2010 (A)		Dept. Review Date	22-Aug-2011
Road Classification	RCU-210-110		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	-	3000	MP	43	125X26	2.8	ROUND
Special Features								
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	60m West.					Gas	50m East.				
Power						Municipal					
Others						Problem (Y/N)	No				
Remarks											

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Horizontal curve to North on grade - uphill to North.
Vertical Alignment		6	6	
Roadway Width (m)	10.200			
Embankment		7	7	Transverse crack in ACP, width of pavement - photo, previously sealed.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1.6)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
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		9	7	Slightly distorted at SW near roof, minor.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			Buried in fill.
Above/Below (mm)	2000			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		4	X	
Scour/Erosion		4	X	
Beavers (Y/N)	No			
Upstream End General Rating		4	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)				
Barrel Last Accessible Date	16-Jul-2011			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		9	9	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	30			Est.
Percent Sag	0			
Sidewall		9	9	2970 span measured near c/l.
Measured Span (mm)	2970			
Measured At Ring No.				
Deflection (mm)	30			
Percent Deflection	0			
Floor		N	9	Compacted gravel on floor. Rated under grade separation. Steel portion of floor is good.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		9	9	
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		9	9	Lots of graffiti on sidewalls - photo.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)				
Siltng (Y/N)				
Drift (Y/N)				
Barrel General Rating		9	9	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			Buried in fill.
Above/Below (mm)	2000			
Scour Protection		9	X	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		9	X	
Beavers (Y/N)	No			
Downstream End General Rating		9	9	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	Old CPR line and ditch.
Roadway Surface		7	7	
(Type : GRAVEL)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		8	8	
Structure In Use (Y/N)	No			
Grade Separation General Rating		7	7	

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							
Structural Condition Rating (Last/Now) (%)	100.0/100.0	Sufficiency Rating (Last/Now) (%)	92.9/96.3	Est. Repl. Yr	2051	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	Monitor embankment erosion at NW corner. 2003.08.14 Trailnet Canada is responsible for all maintenance & rehab costs as well as any future extensions. AT will assume responsibility for routine BIM inspections...PC.		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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	16-Oct-2014		Previous Inspection Date	17-Mar-2005			
Inspection Cycle (Default) (months)	39						
Comment							