

Bridge Inspection							
Bridge File Number	76431 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1968/1968			Lot No.	2		
Bridge or Town Name	MAGNOLIA			Inspector Name	Kris Bosters		
Located Over	CNR			Inspector Class	BR CLS A		
Located On	757:02 C1 0.405;TRAIL-PED, ON TR			Assistant Name	Brian Cote		
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	08-Aug-2012		
Legal Land Location	NW SEC 20 TWP 53 RGE 6 W5M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-114:51:35, 53:35:33			Data Entry Date	04-Sep-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA12			Review Date	27-Aug-2012		
Clear Roadway/Skew	9.1 /			Dept. Reviewer Name	Brent Herrick		
AADT/Year	610 / 2011 (A)			Dept. Review Date	18-Sep-2012		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	3						
Allowable Load (t):	Single	CS1 30 GIRDER	Semi	CS2 52 GIRDER	Train	CS3 75 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20				----> Primary Span		

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)				No								
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks		Not required										
Required Load Posting (t)				Single			Semi			Truck Train		
Posted Loading (t)				Single			Semi			Truck Train		
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Remarks		Not required.										
Hazard Marker At Bridge (Y/N)		Yes										
Remarks		Not standard location or height.										
Other Sign Types		80km/hr, divided hwy ahead.										

Utilities (Located at)			
Utility Attachments			
Telephone	20 m west.		Gas
Power			Municipal
Others	CNR utility line		Problem (Y/N) No
Remarks		CNR utility lines buried in both ditch r/w.	

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Beginning of S curve to Hwy 16. Looking North - photo #1.
Vertical Alignment		7	7	
Roadway Width (m)	10.000			Insufficient length.
Approach Bump		8	8	
Guardrail (Y/N)	Yes			
Guardrail		7	7	
Length (m)	11.000			
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		N	4	Erosion running from backwalls down headslope at NW.
Approach Road General Rating		6	6	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : HC, 3 Spans, Lengths(m): 8.5-8.5-8.5, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now					
Wearing Surface			4	4	Pothole over span 1.-photo Cracking of pavement over longitudinal - photo. Girder lines opened up again, suspect lateral connection problems.
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	Yes				
Deck Top			N	N	Paved over.
Deck Rideability			7	7	
Deck Joints			N	N	Covered with ACP. Bumps repaired.
Bump (Y/N)		No			
Deck Drainage			4	6	Girder leg and channel stained below drains.
Drains Clogged (Y/N)		No			
Curbs/Median			N	3	Chipped at NW corner, hole in curb face at SW with exposed void.
(Curb Type : Standard)					
Scaling (Percent Area)		10			
Bridge Rail			4	4	Double layer. Missing 112 splice bolts - photo Missing rail to post bolt West on the South end of span 2 - photo
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			4	4	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			N	6	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	S1 (G8, G9), S2 (G10) have spall in anchor zone in one leg each. Spall extends above top half of reinforcing bars.
Last				3	
Now				3	
Girders			3	3	
Last Complete Inspection Date		07-Aug-2012		Short medium longitudinal cracks in the legs of several girders in AZ - photo. S1G2 spall, 1 leg i/s AZ. G6 medium crack AZ, 1 leg. Medium crack 2 legs o/s AZ. G7 2 legs, cracks o/s AZ. S1G8, S1G9, S2G10 spall in 1 leg each AZ with exposed rebar above top half of reinforcing bars.	
Cracking (Y/N)		Yes			
Spalling (Percent Area)		5			
Lift or Connector Pocket Grouted (Y/N)		Yes			
(Number Of Girders : 33)					
Span Alignment Problems					
Vertical (Y/N)		No			
Horizontal (Y/N)		No			
Superstructure General Rating			3	3	

Substructure						
Bridge Component		Last	Now	Explanation of Condition		
Abutments						
(Extended Backwall Piles (Y/N) : Y)						
(Extended Backwall Piles Spacing(mm) : 1700)						
(Total Number of Caps/Corbels : 5:5)				Bridge has been raised by adding an extra cap.		
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Bearing Seats/Caps/Corbels				8	8	
(Type : TREATED TIMBER)						
(Depth(mm) : 300)						
(Width(mm) : 300)						
Backwalls/Breastwalls				7	7	
Greatest Height (m)		1.80				
Wingwalls				7	7	
(Total Number of Bearing Piles : 7:7)				Most only exp[osed 20cm, some at NW completely covered.		
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	100					
Now	18					
Piles				N	N	
Paint/Coating				X	X	
Abutment Stability				6	7	
Scour/Erosion				4	4	
Erosion on both headslopes.						
Piers/Bents						
(Type : PIER-COLUMN)						
(Total Number of Caps/Corbels : 5:5)				Covered with petrotac, North cap is a bit too long.		
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Bearing Seats/Caps/Corbels				7	7	
(Type : TREATED TIMBER)						
(Depth(mm) : 300)						
(Width(mm) : 300)						
(Total Number of Bearing Piles : 9:9)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Pier Shaft/Piles				7	7	
Greatest Height (m)		3.00				
Bracing/Struts/Sheathing				3	7	
				No additional struts can be added as all abutment piles are strutted.		
Nose Plate				X	X	
Paint/Coating				X	X	
(Colour Description :)						
(Colour Code :)						
Pier Stability				7	7	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		4	5	Scour between piles of pier 1.
Debris (Y/N)	No			
Substructure General Rating		6	7	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	Bridge required to avoid roadway fill from spilling onto CN trestle pier.
Traffic Safety Features		8	X	
Type				
Slope Protection		4	4	Erosion gullies on headslope.
(Type : NONE; NONE)				
Bank Stability		N	6	
Drainage		N	4	Drainage onto headslope causing erosion.
Grade Separation General Rating		8	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Install missing splice bolts and rail to post bolts.					
SEAL CURBS							
PATCH DECK	2012	Patch potholes.					
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION	2012	Replace hazard makers.					
OTHER ACTION	2012	Repair curb face.					
OTHER ACTION	2012	Replace girders.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/55.6	Sufficiency Rating (Last/Now) (%)	62.2/59.1	Est. Repl. Yr	2022	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor headslopes.		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	08-Nov-2015		Previous Inspection Date	29-Jan-2009			
Inspection Cycle (Default) (months)	39						
Comment							