

Bridge Inspection											
Bridge File Number	81588 E-1 Bridge				Form Type	SG					
Year Built/Year Supstr	1993/1993				Lot No.	2					
Bridge or Town Name	FORT MACLEOD				Inspector Name	Jason Rusu					
Located Over	2:08 R1 0.000;2:08 L1 0.002				Inspector Class	BR CLS A					
Located On	3:06 R1 43.829				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	09-Oct-2011					
Legal Land Location	NE SEC 3 TWP 9 RGE 26 W4M				Data Entry By	Alyssa Boynton					
Longitude, Latitude	-113:26:36, 49:42:42				Data Entry Date	17-Nov-2011					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Garry Roberts					
Contract Main. Area	CMA26				Review Date	09-Nov-2011					
Clear Roadway/Skew	16.1 /				Dept. Reviewer Name	Tim Davies					
AADT/Year	4,420 / 2010 (A)				Dept. Review Date	21-Nov-2011					
Road Classification	RFD-412.4-130				Follow-Up By						
Detour Length (km)	1										
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	CS750									----> Primary Span	

Posting Information										
Required Vert. Clearance Posting (m)	UNDER: 2 L1 5.6m, 2 R1 6.1m									
Posted Vertical Clearance (Y/N)	Yes									
Posted:	Lane	NB	On Bridge (m)	6.2	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	In Advance (Y/N)
Remarks	Not req.									
Required Load Posting (t)	Single				Semi				Truck Train	
Posted Loading (t)	Single				Semi				Truck Train	
Posted:	Lane	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No		
Posted:	Lane	WB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)			
Remarks	Not required.									
Hazard Marker At Bridge (Y/N)	No									
Remarks										
Other Sign Types	INFORMATION, 60 KM/HR UNDER BRIDGE,									

Utilities (Located at)										
Utility Attachments										
Telephone					Gas					
Power	Intersct lighting above&below				Municipal					
Others	LIGHT STANDARDS @ SOUTH				Problem (Y/N)	No				
Remarks										

Approach Road										
			<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>					
Horizontal Alignment			7	7	Exit ramp SE					
Vertical Alignment			8	8						
Roadway Width (m)	12.400									
Approach Bump			7	7						
Guardrail (Y/N)	Yes				One nut missing @ guardrail to bridge rail connection @ NW - Bolt in place					
Guardrail			4	4						
Length (m)	61.000				12m Long guardrail with flair end @ east. Wrong lap at NE and SE. Missing 2 splice bolts at NW. SE is damaged due to wrong lap.					
Current Standard (Y/N)	No									
Termination Type	TURNDOWN									
Drainage			3	3	Erosion along NE wing and slope protection.					
<b>Approach Road General Rating</b>			<b>7</b>	<b>7</b>						

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : <b>WG, 2 Spans, Lengths(m): 34-34, A-Ident Number: A1222-02</b> )						
<b>Special Features</b>						
Special Feature			X			
(Type : )						
Special Feature			X			
(Type : )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>	0	0	0	0		
<b>Now</b>	0.0	0.0	0.0	0.0		
Wearing Surface			7	7	Some long crks-sealed	
(Material Type : <b>ACP</b> )						
(Thickness(mm) : <b>50</b> )						
Deck Top			N	N		
Deck Rideability			8	8		
Deck Joints			3	3	Both East and West Abut Joint gland torn @ the steel extrusion @ several areas Torn completely through 1 sheared bolt at NE curb cover plate.	
Temperature (deg. C)		10				
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
100		E. abut				
90		W. abut				
Deck Drainage			4	4	Leaks @ abut joints. DECK DRAINS @ ABUT CORNERS. 50 mm DIA DRAINS.	
Drains Clogged (Y/N)		No				
Curbs/Median			8	8	Vertical cracks.	
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		0				
Bridge Rail			8	8		
(Type : <b>BRIDGE TUBE;STEEL BRIDGE TUBE</b> )						
Bridge Rail Posts			8	8		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating			7	7		
(Type : )						
Sidewalk			X	X		
<b>Girder/Beam</b>						
Cover Plate			X	X		
Flange			8	8		
Web			8	8		
Stiffeners			8	8		
Splice			8	8		
Weld			8	8		
Diaphragms/Cross Frame			8	8		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
<b>(Primary Span : WG, 2 Spans, Lengths(m): 34-34, A-Ident Number: A1222-02)</b>				
Paint Condition		X	X	Weathering steel
(Colour Description : )				
(Colour Code : )				
Touchup Required (Y/N)	No			
Bearings		8	8	Expansion at abuts.
Temperature (deg. C)	10			
<b>(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)</b>				
(Fixed Type : )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	LEACHING @ MINOR TRANSVERSE CRACKS More at deck exterior.
Stains (Percent Area)	3			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>7</b>	<b>7</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		8	8	
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		8	8	
Wingwalls		8	8	Pigmented at wings. Stained at both backwalls from joint leakage.
Piles		N	N	
Paint/Coating		7	7	
Abutment Stability		8	8	
Scour/Erosion		3	3	0.5x0.5x15m erosion along north side of slope protection.
<b>Piers/Bents</b>				
(Type : <b>PIER-COLUMN</b> )				
Bearing Seats/Caps		8	8	
(Type : <b>CONCRETE</b> )				
<b>(Total Number of Bearing Piles : 6)</b>				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		7	7	Galvanized
(Colour Description : )				
(Colour Code : )				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Substructure General Rating</b>		<b>8</b>	<b>8</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		5	5	Yellow curve signs. Chevrons at posted speed of 60km/hr only, alignment is adequate.  Some minor undermining @ concrete@ concrete slope protection
Traffic Safety Features		8	8	
Type	NJ BARRIERS			
Slope Protection		3	3	Concrete cast @ slope portection @ top. Pulled away 160mm fromm additional cast concrete @ west 30mm@ east Slope protextion eroded and undermined at north east.
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		5	5	
Drainage		5	5	
<b>Grade Separation General Rating</b>		<b>5</b>	<b>5</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK	2012	Fill voids at West paving lip.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Replace east and west abut joint gland.					
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2012	Repair erosion at East slope- 0.5x0.5x15. Fill gaps at top both slopes.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Clean backwall staining after seal replacement.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>83.3/83.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>71.6/67.2</b>	Est. Repl. Yr	2064	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	09-Jul-2013		Previous Inspection Date	22-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							