

Bridge Inspection									
Bridge File Number	76339 W-2 Bridge				Form Type	PSR			
Year Built/Year Supstr	1969/1969				Lot No.	2			
Bridge or Town Name	CLOVERBAR 08				Inspector Name	Wade Nanninga			
Located Over	RAMP 88-1 A;CPR				Inspector Class	BR CLS A			
Located On	16:18 L1 1.564				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	21-Aug-2012			
Legal Land Location	SW SEC 16 TWP 53 RGE 23 W4M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-113:20:01, 53:34:13				Data Entry Date	28-Aug-2012			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA09				Review Date	22-Aug-2012			
Clear Roadway/Skew	12.2 / -52 deg. (LHF)				Dept. Reviewer Name	Brent Herrick			
AADT/Year	47,380 / 2011 (A)				Dept. Review Date	30-Aug-2012			
Road Classification	RAD-412.4-120				Follow-Up By				
Detour Length (km)	1								
Allowable Load (t):	Single	CS1 38 GIRDER	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	HS20						----> Primary Span		

Posting Information													
Required Vert. Clearance Posting (m)		UNDER: 88-1-A 6.5m											
Posted Vertical Clearance (Y/N)													
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)	6.5	In Advance (Y/N)	Yes	
Remarks													
Required Load Posting (t)		Single				Semi				Truck Train			
Posted Loading (t)		Single				Semi				Truck Train			
Posted:	Lane	EB	At Junction (Y/N)				In Advance (Y/N)				At Bridge (Y/N)		
Posted:	Lane	WB	At Junction (Y/N)		No	In Advance (Y/N)		No	At Bridge (Y/N)		No		
Remarks		Not required.											
Hazard Marker At Bridge (Y/N)		No											
Remarks		Not req'd											
Other Sign Types		Information											

Utilities (Located at)				
Utility Attachments				
Telephone	Buried in ditch between P2 & P3.		Gas	North side along r/w, under bridge between P2 & P3.
Power			Municipal	
Others	Light standards.		Problem (Y/N)	No
Remarks		Light standards at NE and NW corners are rusty in splash zone.		

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Top of crest curve.
Vertical Alignment		7	7	
Roadway Width (m)	12.200			Could not confirm width.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			No rail at SW corner.
Guardrail		4	4	Minor creasing.
Length (m)	84.000			GR connection to parapets - bolts missing @ NE, NW and SE corner.-photo
Current Standard (Y/N)	No			
Termination Type	Turned Down			

Approach Road							
			Last	Now	Explanation of Condition		
Drainage			5	5			
Approach Road General Rating			7	7			
Superstructure							
Bridge Component			Last	Now	Explanation of Condition		
(Primary Span : FC, 5 Spans, Lengths(m): 21.3-25.9-15.2-25.9-21.3, A-Ident Number:)							
Special Features							
Special Feature			8	8			
(Type : UNDERSLUNG DIAPHR)							
Special Feature				X			
(Type :)							
Wearing Surface/Deck Top Detail Ratings							
			N (%)	1 (%)	2 (%)	3 (%)	Viewed from corners.
Last							
Now			50.0	0.0	0.0	0.0	
Wearing Surface			5	5	Few small spalls. Up to 15mm deep, 150 diameter along joints.		
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)							
(Thickness(mm) : 50)							
Lateral Connection Problem (Y/N)		No					
Deck Top			N	N			
Deck Rideability			7	7			
Deck Joints			4	4	Viewed from corners, could not confirm measurements. Missing 3 plow deflectors. Missing 2 plow deflectors. Missing 3 plow deflectors. Missing 5 plow deflectors. Missing 3 plow deflectors. Missing 3 plow deflectors.		
Temperature (deg. C)		30					
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))							
(Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))							
Gap Size (mm)		Gap Location					
98		Abut 1					
107		Pier 1					
105		Pier 2					
110		Pier 3					
115		Pier 4					
88		Abut 2					
Deck Drainage			7	7	No deck drains. Staining at centre of pier cap.		
Drains Clogged (Y/N)							
Curbs/Median			4	N	Spalling at North parapet.-photo - 24-Sep-2010		
(Curb Type : NEW JERSEY)							
Scaling (Percent Area)		0					
Bridge Rail			7	7	On parapet.		
(Type : GALVANIZED STEEL PARAPET RAIL)							
Bridge Rail Posts			7	7	Paint peeling - 90% failed. Red paint over galvanize 90% gone. Galvanizing intact under paint.		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)							
Bridge Rail/Posts Coating			7	7			
(Type : GALVANIZED)							
Sidewalk			X	X			

Superstructure						
Bridge Component		Last		Now		Explanation of Condition
(Primary Span : FC, 5 Spans, Lengths(m): 21.3-25.9-15.2-25.9-21.3, A-Ident Number:)						
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	4		
Now				3		
Girders				3	3	SP4-G1, longitudinal stained crack. S4 G6 longitudinal crack on S. leg no stain. Vertical crack in end of S4-G8-no stain. Numerous rust spots do no tappear to be from strand, low cover. Numerouls girders have rust stains on underside of legs du to low cover-not strands. S5G1& G8 has med vert. ck in E. end with rust stain.-photo Spalled over P1@S2G1. Typical chamfer cracks, some extend into underside.
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
(Number Of Girders : 40)						
Diaphragms/Cross Frame				4	4	Spalled over P1@S2G1. Numerous diaphragms have horizontal delam cracks.
Bearings				3	4	Pads distorting and twistin on both abutments. Pads moving - not centered. Need snooper to inspect pier bearings. 6 of 6 AB's have sheared at West abut.-photo 9 of 16 bearing pads sliding off of grout oads at W. abut.-photo 6 of 6 A's have sheared off at East abut.-photo
Temperature (deg. C)		20				
(Expansion Type : REINFORCED PAD BEARING)						
(Fixed Type : REINFORCED PAD BEARING)						
Coating Adequate (Y/N)		Yes				
Functioning (Y/N)		Yes				
Deck Underside				5	5	Old corrosion stains @ weep drains. Underside of S2 stained from train exhaust.
Stains (Percent Area)		1				
Span Alignment Problems						
Vertical (Y/N)		No				Skew pressures - twisting bridge.
Horizontal (Y/N)		Yes				
Superstructure General Rating				3	3	
Substructure						
Bridge Component		Last		Now		Explanation of Condition
Abutments						
Bearing Seats/Caps				4	4	Delam crack NE corner abut 2. Wide horizontal crack W abutment uner G5-0.6m.
(Type : CONCRETE)						
Backwalls/Breastwalls				6	6	
Wingwalls				4	4	Spall @ SE wingwall.-photo
Piles				N	N	
Paint/Coating				5	5	
Abutment Stability				4	4	
Scour/Erosion				X	X	
Piers/Bents						
(Type : PIER-COLUMN)						P1 cap crack has delam under S1-G5. Delam cracks P4, SP1. Patches. Low cover spall @ N end of P1. P4 has wide delam @ S & N end.-photo
Bearing Seats/Caps				4	4	
(Type : CONCRETE)						
(Total Number of Bearing Piles : 4:4:4:4)						Minor spalling on north pile of P3& P1; lack of cover on tie wires.
Pier Shaft/Piles				4	4	
Bracing/Struts/Sheathing				X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Nose Plate		X	X	
Paint/Coating		5	5	
(Colour Description :)				
(Colour Code :)				
Pier Stability		6	6	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		4	4	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		6	6	Sharp curve to north of structure.
Traffic Safety Features		6	6	West end of North and South guardrail have crash attenuator ends.
Type	Guardrail / Lighting			
Slope Protection		5	5	
(Type : CONCRETE; CONCRETE)				
Bank Stability		5	5	
Drainage		5	5	
Grade Separation General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Repair spalls in parapet walls, if not done.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Repair plow deflectors.					
RESET/ PAINT BEARINGS	2012	Reset bearings, install shear blocks to prevent lateral movement.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Repair spall @ SE wingwall.					
OTHER ACTION	2012	Reconnect approach GR to parapets.					
OTHER ACTION	2012	Repair abutment and pier cap delaminations.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	43.9/43.9	Est. Repl. Yr	2035	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder cracking		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	21-May-2014		Previous Inspection Date	24-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							