

Bridge Inspection										
Bridge File Number	08435 E-1 Bridge				Form Type	CON				
Year Built/Year Supstr	1956/1956				Lot No.	2				
Bridge or Town Name	HINTON				Inspector Name	Shane Hall				
Located Over	MASKUTA CREEK, 8.11.141, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	16:02 R1 19.979				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	06-Jul-2012				
Legal Land Location	NW SEC 31 TWP 50 RGE 25 W5M				Data Entry By	Theresa Lacusta				
Longitude, Latitude	-117:39:00, 53:21:38				Data Entry Date	21-Aug-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux				
Contract Main. Area	CMA13				Review Date	20-Aug-2012				
Clear Roadway/Skew	13.4 /				Dept. Reviewer Name	Brent Herrick				
AADT/Year	5,880 / 2011 (A)				Dept. Review Date	22-Aug-2012				
Road Classification	RAD-412.4-120				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:	HS20								----> Primary Span	

Posting Information									
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)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Remarks	Not required.								
Hazard Marker At Bridge (Y/N)	Yes								
Remarks	Only at NW & SW corners.								
Other Sign Types	Information.								

Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	North r/w & South exterior curb.				Gas	West end			
Power	3 lines South r/w, 2 wires O/H West end.				Municipal				
Others					Problem (Y/N)	No			
Remarks									

Approach Road									
			<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>				
Horizontal Alignment			6	6	Private accesses at each end of bridge. In bottom of sag, limited sight distance to West, crest curve both ends.				
Vertical Alignment			6	6					
Roadway Width (m)		13.200							
Approach Bump			5	5					
Guardrail (Y/N)		Yes			Insufficient length, no additional posts, missing 8 connection bolts to bridge @ SE - photo. 5 split posts @ SW - photo.				
Guardrail			3	3	At NW & SW only, terminal end @ NE & SE. Not thrie beam.				
Length (m)		12.000							
Current Standard (Y/N)		No							
Termination Type		Turned Down							
Drainage			4	4	Windrow under guard-rail @ SW. Rebar protruding between ACP & drain trough @ NE corner.-photo				
<b>Approach Road General Rating</b>			<b>6</b>	<b>6</b>					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : CT, 3 Spans, Lengths(m): 12.8-18.3-12.8, A-Ident Number: )					
<b>Special Features</b>					
Special Feature		6	6	Galvanized HSS with 2 - 20 dia plate tie rods SP @ 300 o/c. Tie rod galvanizing deteriorating 75% on exterior locations; superficial rust.	
(SType : <b>EXT SHEAR STIRRUP</b> )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>	0	0	0	0	
<b>Now</b>					
Wearing Surface		6	6	Chipseal over 50mm asphalt.	
(Material Type : <b>ACP - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Deck Top		N	N		
Deck Rideability		7	7		
Deck Joints		6	6	Temperature (deg. C) 17 (Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> ) (Fixed Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> ) Gap Size (mm) Gap Location 63 East - expansion 68 West - expansion	
Temperature (deg. C)		17			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
Gap Size (mm)		Gap Location			
63		East - expansion			
68		West - expansion			
Deck Drainage		5	5		
Drains Clogged (Y/N)		No			
Curbs/Median		3	3	several delams/spalls in North curb on inside and outside face. (photos). Spalls under S curb Sp2 & SP3.	
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		3			
Bridge Rail		6	6	Double layer. Rusty anchor bolts, 2 sheared A/Bs on South railing, welded to base (photo). Weld broken at 2 caps on South posts (photos).	
(Type : <b>GALVANIZED STEEL FLEX BEAM</b> )					
Bridge Rail Posts		3	3		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating		6	6		
(Type : <b>GALVANIZED</b> )					
Sidewalk		X	X		
Girders		4	3	G3 SP1 - Narrow crack with spalling adjacent to bearing @ A1.-photo Narrow flexural cracks @ all girders. Narrow, medium cracks @ G1,G4 & G6 East near bearing. Water damage, scaling and severe efflorescence at G6 A2.-photo	
Diaphragms/Cross Frame		4	4	Diaphragms have medium scaling with vertical cracks over piers. Exposed rebar & spall @ pier 2 between G2/G3. 4/5 have cracking and/or 2 spalling wuth exposed rebar @ A1.-photo @ G2/3, 5/5 @ AZ.	
Bearings		4	3	60 mm overhang @ A1. 60mm @ A2. Outer abutment bearings have rust coating and are pitted. Severe corrosion @ G1E.-photo Bearing at G3A1 may be ceased causing cracking in girder.	
Temperature (deg. C)		17			
(Expansion Type : <b>SLIDING PLATE;ROCKER BEARING</b> )					
(Fixed Type : <b>PINNED BEARING</b> )					
Coating Adequate (Y/N)		No			
Functioning (Y/N)		No			

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CT, 3 Spans, Lengths(m): 12.8-18.3-12.8, A-Ident Number: )				
Deck Underside		4	4	Random transverse cracks and efflorescence throughout. Two localized wide longitudinal cracks in Span 2; with efflorescence stain, rust stains staining between G5/6 at AZ.- photo Exposed rebar, rust and water stains staining between G5/6 at AZ.-photo Popout in SP2 between G4/G5.-photo
Stains (Percent Area)	2			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>4</b>	<b>3</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats		6	6	
Backwalls/Breastwalls		6	6	
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		4	4	Scaling.
Abutment Stability		7	7	
Scour/Erosion		5	5	
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				
Bearing Seats/Caps		7	7	
(Type : <b>CONCRETE</b> )				
Pier Shaft/Piles		6	5	Wide vertical cracks P1 under G2 and at CL P2.
Nose Plate		X	X	
Paint/Coating		5	5	Concrete grey.
(Colour Description : )				
(Colour Code : )				
Pier Stability		8	8	
Scour		5	5	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>6</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>S</b> )				
(D/S Direction : <b>N</b> )				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Slope Protection		5	5	Concrete bags. Existing timber piling @ E & W headslopes. Class 2 rock riprap along West bank & West pier.
(Type : <b>RIP RAP; CONCRETE</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel 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	2013	Install missing SE transition connection bolts; field weld 2 loose metal caps @ South posts.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Install missing guardrail splice bolts @ SE.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION	2013	Replace 5 split guardrail posts @ SW.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>61.2/56.5</b>	Est. Repl. Yr	2045	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	Monitor tie-rod plating deterioration on exterior faces. Monitor bearings, girder cracks and deck underside (@SP3 between G5/6.)		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	Eric Carcoux		Previous Assistant's Name				

Next Inspection Date	06-Apr-2014	Previous Inspection Date	15-Sep-2010
Inspection Cycle (Default) (months)	21		
Comment			