

Bridge Inspection									
Bridge File Number	76034 -1 Bridge				Form Type	DT SG			
Year Built/Year Supstr	1966/1964				Lot No.	2			
Bridge or Town Name	HONDO				Inspector Name	Wade Nanninga			
Located Over	ATHABASCA RIVER, 8.11, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	2:46 C1 6.352				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	28-Mar-2013			
Legal Land Location	SW SEC 21 TWP 70 RGE 1 W5M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-114:05:34, 55:04:26				Data Entry Date	23-Apr-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA10				Review Date	17-Apr-2013			
Clear Roadway/Skew	8.5 /				Dept. Reviewer Name	Brent Herrick			
AADT/Year	2,370 / 2012 (A)				Dept. Review Date	01-May-2013			
Road Classification	RAU-211.8-110				Follow-Up By				
Detour Length (km)	10								
Allowable Load (t):	Single	H 31 STRINGER		Semi	HS 52 GIRDER		Train	CS3 69 U3U4	
Design Loading:	HS20							----> On Critical Spans ---->Critical Member	
----> Primary Span									
Posting Information									
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									
Other Sign Types									
Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone					Gas				
Power	1 wire North				Municipal				
Others					Problem (Y/N)	No			
Remarks									
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			8	8	In gradual sag curve with limited sight distance. Steep grade to South.				
Vertical Alignment			5	5					
Roadway Width (m)		9.900		(Gap between approach slab and curb @ NW corner allows water under slab.)					
Approach Bump			5	5	Slight bump @ South abutment.				
Guardrail (Y/N)		Yes							
Guardrail			4	6	Minor dents with modified connections @ SE & NW corners. Standard connection @ NE & SW corners. (Retrofit transition not bolted to anchor - photo. Typical @ SE & NW.- Sep-2011)				
Length (m)		45.600							
Current Standard (Y/N)		No							
Termination Type		Turn Down							
Drainage			4	5	Culverts @ NE and NW corners.				
<b>Approach Road General Rating</b>			<b>5</b>	<b>5</b>					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : DT, 7 Spans, Lengths(m): 16.8-61-61-61-61-61-16.8, A-Ident Number: A0494-02;A0494-03;A0494-04;A0494-05;A0494-06;A0494-01;A0494-07)					
<b>Special Features</b>					
Special Feature			X	Ice guage. At pier 2, access hatch open.	
(Type : )					
Catwalk Access		4	4	Gates @ both ends not locked.	
(Type : <b>UNLOCKED</b> )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>					
<b>Now</b>					
Wearing Surface		5	4	Epoxy overlay failed along edges of wide tranverse cracks, missing patches in center, potholes developing - photos. Chipseal over expoxy on concrete.	
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Deck Top		N	N		
Deck Rideability		7	6		
Deck Joints		5	4	Collector trough leaking under P3 & P4 joint, dripping onto catwalk below. photo-10-Sep-2009	
Temperature (deg. C)		0			
(Expansion Type : <b>FINGER PLATES</b> )				Curb coverplates removed pier 6.	
(Fixed Type : <b>COMPRESSION SEAL (ACME SEALS)</b> )					
Gap Size (mm)		Gap Location			
20		Pier 6 - FP			
65		Pier 5 - SS			
30		Pier 4 - FP			
25		Pier 3 - FP			
70		Pier 2 - SS			
15		Pier 1 - FP			
Deck Drainage		3	3	(Water splashing past collectors on finger plates. 2004/07/10.) Water weeping through snow slots.-Jul-2011 Broken drain tube @ NE.	
Drains Clogged (Y/N)		No			
Curbs/Median		4	3	Wide crack under curb at several locations. Deterioration on backside of numerous bolts. Spalling at base of posts near pier 2.-photo	
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		2			
Bridge Rail		4	4	Bent & broken verts @ West railing. Missing nut near pier 3. 2 - 3 Insufficient threads on 30% of bolts.	
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )				Accident damage at Pier 5.-photo 1 post twisted.	
Bridge Rail Posts		4	3		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating		6	5		
(Type : <b>GALVANIZED</b> )					
Sidewalk		X	X		
Top Chord		7	7	See UT 2011 for details. (Cracking under joint brackets. 18/Mar/2006)	
Diagonals		4	4	Other connections with corrosion blister - photo.	
Verticals		7	7	Missing bracing hanger bolts @ some connections.-11-Dec-2007)Could not confirm	
Connections		5	5	Section loss on floor beam ends due to rust.	
Floor Beams		4	4	Connections squeaking.	
Bottom Chord		7	7	Several stringers cracked. Several diagonals have rough holes.	
Stringers		3	3	Stringers under snow slots corroding.-Jul, 2011	
Diaphragms/Cross Frame		4	4	Corrosion & section loss in some members over piers.	

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Primary Span : DT, 7 Spans, Lengths(m): 16.8-61-61-61-61-61-16.8, A-Ident Number: A0494-02;A0494-03;A0494-04;A0494-05;A0494-06;A0494-01;A0494-07)						
Paint Condition				3	3	20% superficial rust especially in splash areas and under joints. Bird excrement on bottom chord. Pitting & scaling rust @ joints & floor beam ends, some section loss.
(Colour Description : GREEN)						
(Colour Code : 14090;14193)						
Touchup Required (Y/N)	Yes					
Bearings				4	4	A/B missing nut @ P3E & P4E. Bent A/B @ P1E.
Temperature (deg. C)	0					Loose AB nuts P1 P3 & P4. Plates are corroded.
(Expansion Type : SLIDING PLATE)						
(Fixed Type : PINNED BEARING)						
Coating Adequate (Y/N)	No					
Functioning (Y/N)	Yes					
Deck Underside				3	3	Typical wide transverse cracks at 10m o-c (approx), some leaching with delam exposing corroding rebars - photo. Snow slots removed.
Stains (Percent Area)	1					
(Snow Slots Filled : )						
<b>Span Alignment Problems</b>						
Vertical (Y/N)	No					
Horizontal (Y/N)	No					
<b>Superstructure General Rating</b>				<b>3</b>	<b>3</b>	

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Secondary Span : RB)						
<b>Special Features</b>						
Special Feature					X	
(Type : )						
Special Feature					X	
(Type : )						
<b>Wearing Surface/Deck Top Detail Ratings</b>						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>						
<b>Now</b>	5.0					
Wearing Surface				5	5	Epoxy wearing surface underneath failing along shoulders. Chip seal coat surface over epoxy & concrete. A few 200mm holes in chipseal.
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Deck Top				N	N	
Deck Rideability				7	6	
Deck Joints				5	4	North approach joint is leaking out corners causing corrosion on bearings and abutments. photo-10-Sep-2009  Broken cover plate @ SE.
Temperature (deg. C)	0					
(Expansion Type : FINGER PLATES)						
(Fixed Type : COMPRESSION SEAL (ACME SEALS))						
Gap Size (mm)	Gap Location					
75	N. abut					
71	S. abut					
Deck Drainage				5	5	Leaking at North approach joint.-10-Sep-2009
Drains Clogged (Y/N)	No					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
<b>(Secondary Span : RB)</b>					
Curbs/Median		5	5	Concrete on parapets is chipped at numerous locations. A few grader scrape marks.	
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)	2				
Bridge Rail		7	7	About 30% of bolts hav3 2-3 insufficient threads.	
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )					
Bridge Rail Posts		4	4		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating		5	5		
(Type : <b>GALVANIZED</b> )					
Sidewalk		X	X		
<b>Girder/Beam</b>					
Cover Plate		X	X	Some corrosion evident in bottom flanges. - splash zone	
Flange		6	6		
Web		7	7		
Stiffeners		X	X		
Splice		X	X		
Weld		X	6		
Diaphragms/Cross Frame		7	7		
Paint Condition		4	4	20% corrosion especially bottom flanges and under joints.	
(Colour Description : <b>GREEN</b> )					
(Colour Code : <b>14090;14193</b> )					
Touchup Required (Y/N)	Yes				
Bearings		4	4	A2 A/B bent 30mm. (Shear S7G2 bearing A/B .-Sep 2011) Neoprene, split & collapsed. Bearings pitting/rusting. Bearings @ base of P1 & P5 suspect not functioning due to corrosion. Other bearings appear functioning.	
Temperature (deg. C)	0				
(Expansion Type : <b>SLIDING PLATE</b> )					
(Fixed Type : <b>PINNED BEARING</b> )					
Coating Adequate (Y/N)	No				
Functioning (Y/N)	No				
Deck Underside		4	4	Longitudinal medium cracks following end of snow slot anchor under both gutters.	
Stains (Percent Area)	0				
<b>Span Alignment Problems</b>					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
<b>Superstructure General Rating</b>		<b>4</b>	<b>4</b>		
<b>Substructure</b>					
Bridge Component		Last	Now	Explanation of Condition	
<b>Abutments</b>					
Bearing Seats/Caps		5	5		
(Type : <b>CONCRETE</b> )					
Backwalls/Breastwalls		6	6		
Wingwalls		6	4	Spalling parapet walls	
Piles		N	N		
Paint/Coating		X	X		
Abutment Stability		7	6		

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour/Erosion		5	5	300mm gullies along all 4 corners.-stabilized
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				Massive concrete & steel piers. P2N surface delam; P2E cracking under bearing. Wide vertical cracks under bearing on P3 & P4.
Bearing Seats/Caps		5	5	
(Type : <b>CONCRETE</b> )				P1N bearings @ base of steel piers, P1 & P6 are corroded and suspect not functioning - photo.
(Total Number of Bearing Piles : <b>0:0:0:0:0</b> )				P2N 300mm x 300mm deteminations on side of pier.
Pier Shaft/Piles		5	5	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	Nose plates are rusted.
(Colour Description : )				
(Colour Code : )				
Pier Stability		7	7	
Scour		N	N	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )				
(D/S Direction : <b>E</b> )				
Alignment		9	9	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	Yes			
Slope Protection		5	5	
(Type : <b>NATURAL; NATURAL</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>	



Special Comments for Next Inspection	Monitor erosion on West headslope.		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	Randy Bredo	Previous Assistant's Name			
Next Inspection Date	28-Dec-2014	Previous Inspection Date	21-Sep-2011		
Inspection Cycle (Default) (months)	21				
Comment					