

Bridge Inspection									
Bridge File Number	73922 -1 Bridge				Form Type	DT SG			
Year Built/Year Supstr	1962/1961				Lot No.	2			
Bridge or Town Name	SHANDRO				Inspector Name	Wade Nanninga			
Located Over	NORTH SASKATCHEWAN RIVER, 6, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	857:06 C1 16.201				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	17-Dec-2012			
Legal Land Location	NW SEC 34 TWP 57 RGE 15 W4M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-112:09:04, 53:58:30				Data Entry Date	16-Jan-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA07				Review Date	09-Jan-2013			
Clear Roadway/Skew	8.5 /				Dept. Reviewer Name	Paul Catt			
AADT/Year	890 / 2011 (A)				Dept. Review Date	18-Jan-2013			
Road Classification	RCU-209-110				Follow-Up By				
Detour Length (km)	65								
Allowable Load (t):	Single	CS1 30 STRINGER		Semi	CS2 53 STRINGER		Train	CS3 63 STRINGER	
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	Missing SW								
Other Sign Types									
Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	In conduit on West side (bottom).				Gas				
Power	2 wires 100m N				Municipal				
Others					Problem (Y/N)		Yes		
Remarks	Conduit disjointed West side span 7.								
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			5	5	Long gradual hills winding down into larger river valley. SH652 intersection 250m north.				
Vertical Alignment			6	6					
Roadway Width (m)	9.600				NE T.D. end improper lap installed on wrong side of post and too high - typ. of SE also. Missing 4 splice bolts at NE and wrong lap at SW. Not thriebeam.				
Approach Bump			6	6					
Guardrail (Y/N)	Yes								
Guardrail			4	4					
Length (m)	26.000								
Current Standard (Y/N)	No								
Termination Type	Turned Down								
Drainage			5	5					
Approach Road General Rating			5	5					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : DT, 7 Spans, Lengths(m): 30.5-48.8-61-61-61-48.8-30.5, A-Ident Number: A0432-02;A0432-03;A0432-04;A0432-05;A0432-06;A0432-01;A0432-07)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	30.0	0.0	0.0	0.0	
Wearing Surface			5	5	FRSF o/l.Covered with chipcoat. 3% peeled off along curb and at joints.
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Deck Top			N	N	
Deck Rideability			6	6	Bumps at all deck joints due to camber in all spans.
Deck Joints			5	5	Armoured gland with steel sliding plates above silicone seal at pier 4.
Temperature (deg. C)		-17		1 curb cover plate bolt slightly high at pier 3 west curb.-11-Jun-2010	
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC);ARMOURED GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
(Fixed Type :)					
Gap Size (mm)		Gap Location		Abut. 1 South - 80 Abut. 2 North - 80	
90		Pier 1			
90		Pier #2			
100		Pier #3			
100		Pier #4 Coverplate			
85		Pier #5			
90		Pier #6			
Deck Drainage			6	6	
Drains Clogged (Y/N)		No			
Curbs/Median			6	N	
(Curb Type : Standard)					
Scaling (Percent Area)		5			
Bridge Rail			3	6	Missing 1 bottom rail to post bolt Sp. 4 west side.-11-Jun-2010
(Type : GALVANIZED STEEL VERTICAL BAR)					
Bridge Rail Posts			4	6	1 A/B nut not tight at Sp. 2 near P1 west side and 1 at east side Sp 3. Approx. 8 A/B with insufficient thread.-11-Jun-2010
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			5	5	
(Type : GALVANIZED)					
Sidewalk			X	X	See 2010 UT report for details.
Top Chord			7	7	No catwalk. Several end floorbeams are stressed with paint stretch marks at web to flange interface above top chords. (Inside angle of F.B. brace is cracked right through and remaining angle has paint stretch marks Sp. 3 UOE. Missing bolt at floorbeam connection U8E - Sp. 2 angle brace. 23 end floorbeam stiffeners behind stringers are cracked but have little significance at this time. 2 cracked clip angles each 45 mm long at Sp. 4 at U0 - stringer 2.)11-Jun-2010
Diagonals			7	7	
Verticals			7	7	
Connections			4	4	
Floor Beams			4	4	
Bottom Chord			7	7	
Stringers			4	4	
Viewed from banks could not confirm cracks or missing bolt - ratings carried forward.					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : DT, 7 Spans, Lengths(m): 30.5-48.8-61-61-61-48.8-30.5, A-Ident Number: A0432-02;A0432-03;A0432-04;A0432-05;A0432-06;A0432-01;A0432-07)					
Diaphragms/Cross Frame		7	7		
Paint Condition		5	4	Isolated areas of moderate corrosion @ joints. 97% of paint is good.	
(Colour Description : GREEN)					
(Colour Code : 14090)					
Touchup Required (Y/N)	Yes				
Bearings		7	7	Exp bearing & truss to exp bearing pins have been replaced by what appears to be stainless steel & teflon between steel. 4/10 bearings have not been painted.	
Temperature (deg. C)	11				
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)					
(Fixed Type : PINNED BEARING)					
Coating Adequate (Y/N)	Yes				
Functioning (Y/N)	Yes				
Deck Underside		6	6	Sp. 2 has isolated corrosion.	
Stains (Percent Area)	2				
(Snow Slots Filled : Y)					
Span Alignment Problems					
Vertical (Y/N)	No			(The South tilt wall is once again touching the deck truss bowing the wall. July 07/05)	
Horizontal (Y/N)	No				
Superstructure General Rating		4	4	GR carried fwd from 11-Jun-2010	
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Secondary Span : WG)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	30.0	0.0	0.0	0.0	
Wearing Surface		6	5	FRSF o/l. covered by chipcoat. 3% peeled off along CL & @ joints.	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Deck Top		N	N		
Deck Rideability		6	6		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Secondary Span : WG)					
Deck Joints		7	7		
Temperature (deg. C)	-17				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC);ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
(Fixed Type :)					
Gap Size (mm)	Gap Location				
80	S. abut				
90	Pier #1				
90	Pier #6				
80	N. abut				
Deck Drainage		6	6		
Drains Clogged (Y/N)	No				
Curbs/Median		5	N	The approach curb and parapets are 30% medium scaled.	
(Curb Type : Standard)					
Scaling (Percent Area)	10				
Bridge Rail		7	7	(6 A/B nuts with insufficient thread.-11-Jun-2010) Minor damage to 2 posts East side south span 1.	
(Type : GALVANIZED STEEL VERTICAL BAR)					
Bridge Rail Posts		4	4		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		5	5		
(Type : GALVANIZED)					
Sidewalk		X	X		
Girder/Beam					
Cover Plate		X	X		
Flange		7	7		
Web		7	7		
Stiffeners		7	7		
Splice		X	X		
Weld		7	7		
Diaphragms/Cross Frame		7	5		Dented diaphragm @ SW.-ok
Paint Condition		3	3	Light green. Isolated heavy corrosion at fascia girders top and bottom flanges from deck leakage @ South end.	
(Colour Description : GREEN)					
(Colour Code : 14090)					
Touchup Required (Y/N)	Yes				
Bearings		7	7	South abutment bearings have been painted.	
Temperature (deg. C)	-17				
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)					
(Fixed Type : PINNED BEARING)					
Coating Adequate (Y/N)	Yes				
Functioning (Y/N)	Yes				
Deck Underside		7	7		
Stains (Percent Area)	2				
Span Alignment Problems					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Secondary Span : WG)				
Superstructure General Rating		7	7	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		6	4	Spall @ NW corner.
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		5	5	Minor erosion gullies at south covered with erosion mat.
Piers/Bents				
(Type : PIER-SOLID)				
Piers 2 and 3 have vertical cracks initiated at anchor bolts.				
Bearing Seats/Caps		5	5	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0:0:0:0)				
6 piers.				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	Light corrosion on nose plate.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		N	N	Water too deep.
Debris (Y/N)	No			
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		7	7	North headslope fenced to allow complete grazing of headslope - ok.
(Type : NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	

Structure Usage				
		Last	Now	Explanation of Condition
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Repair T.D. ends					
GALVANIZE/PAINT BRIDGE RAIL	2013	Replace 1 missing bolt 18 x 50 mm H.T., if not done.					
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS	2013	Repair cracked clip angles, if not done.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Replace missing F.B. bolt if not done.					
OTHER ACTION	2013	Replace SW hazard marker.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/50.0	Sufficiency Rating (Last/Now) (%)	52.9/52.9	Est. Repl. Yr	2040	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	Randy Bredo			
Next Inspection Date	17-Mar-2016		Previous Inspection Date	11-Jun-2010			
Inspection Cycle (Default) (months)	39						
Comment							