

Bridge Inspection							
Bridge File Number	75315 -1 Bridge			Form Type	SG		
Year Built/Year Supstr	1961/1961			Lot No.	2		
Bridge or Town Name	HEINSBURG			Inspector Name	Wade Nanninga		
Located Over	NORTH SASKATCHEWAN RIVER, 6, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	893:06 C1 19.501			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	14-Dec-2012		
Legal Land Location	NE SEC 21 TWP 55 RGE 4 W4M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-110:32:02, 53:46:15			Data Entry Date	15-Jan-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA15			Review Date	09-Jan-2013		
Clear Roadway/Skew	8.5 /			Dept. Reviewer Name	Paul Catt		
AADT/Year	600 / 2011 (A)			Dept. Review Date	18-Jan-2013		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	50						
Allowable Load (t):	Single	CS1 71 GIRDER	Semi	CS2 76 GIRDER	Train	CS3 79 GIRDER	----> 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	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							
Hazard Marker At Bridge (Y/N)	Yes						
Remarks	Not to std height/location.						
Other Sign Types							

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	West/East r/w	Gas	
Power	1 wire NE	Municipal	
Others	F.O @ NE	Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Horizontal curves each end. Access road into Heinsburg 45m to NE. Steep grades both sides.
Vertical Alignment		5	5	
Roadway Width (m)	9.600			(Pot hole developing @ north approach slab. May 25, 2006)
Approach Bump		5	5	
Guardrail (Y/N)	Yes			2 broken posts @ SW corner.(photo)
Guardrail		4	4	2 broken posts @ NE.
Length (m)	38.000			
Current Standard (Y/N)	Yes			
Termination Type	Turned Down			
Drainage		6	6	
<b>Approach Road General Rating</b>		<b>5</b>	<b>5</b>	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : <b>WG, 5 Spans, Lengths(m): 72.2-79.2-85.3-79.2-72.2, A-Ident Number: A0380-01</b> )						
<b>Special Features</b>						
Special Feature			6	(Bottom flange alignment guide bars have broken welds. Bronze wear bars are cracked. May 25, 2006) Cannot confirm previous "3" rating.		
(Type : )						
Hinge		N	N			
(Hinge Type : <b>STEEL;PIN HANGER</b> )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)	Snowcovered.	
<b>Last</b>	100	0	0	0		
<b>Now</b>	90.0	0.0	0.0	0.0		
Wearing Surface		N	4	200mm potholes at hinge 2.		
(Material Type : <b>ACP</b> )						
(Thickness(mm) : <b>50</b> )						
Deck Top		N	N			
Deck Rideability		7	7			
Deck Joints		3	N	(Have plugs installed to bear onto finger, are worn or mushroomed. Curb plates at hinge deck joints are loose. There are no deck joints over the piers. May 25, 2006)		
Temperature (deg. C)		-13				
(Expansion Type : <b>FINGER PLATES;SLIDING PLATES</b> )						
(Fixed Type : <b>SLIDING PLATES</b> )						
Gap Size (mm)		Gap Location		Membrane at hinge 3 has partially failed.(photo)-07-Oct-2009		
125		S. Abut (1)				
50		Hinge 1, Support 1		Finger plates at pier 3 uneven.-photo South side 10mm higher than North.		
50		Hinge 2, Support 2				
95		Pin 1, Support 3				
48		Hinge 3, Support 4				
100		N. Abut (2)				
Deck Drainage		7	7			
Drains Clogged (Y/N)		No				
Curbs/Median		6	N	1 chip on outside of post near SE corner. Medium scaling on curb face.-07-Oct-2009		
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		3		Snow covered.		
Bridge Rail		7	7	Vertical lattice handrail panels.		
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )						
Bridge Rail Posts		6	6	Post base not visible		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating		7	7			
(Type : <b>GALVANIZED</b> )						
Sidewalk		X	X			
<b>Girder/Beam</b>						
Cover Plate		X	X	(Stiffeners, weld and diaphragms / cross brace rated "3" in October, 2005.-May 25, 2006)		
Flange		4	4	Arc strikes.		
Web		6	6	(Longitudinal stiffeners have cracks.		
Stiffeners		6	6	Diaphragm stiffener welds, bottom lateral gusset welds, long. stiffener welds have cracks. Oct. 17/05)		
Splice		7	7	Cannot confirm.		
Weld		7	7	Top flanges near hinge supports are rusting with loss of section. Worst near hinge 3.(photo)		
Diaphragms/Cross Frame		5	5	(Rating reflected from stiffener weld cracks.) Oct. 17/05 Cannot see.		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : <b>WG, 5 Spans, Lengths(m): 72.2-79.2-85.3-79.2-72.2, A-Ident Number: A0380-01</b> )				
Paint Condition		5	5	Dark brown.
(Colour Description : )				
(Colour Code : )				
Touchup Required (Y/N)	No			
Bearings		5	5	Missing anchor bolt nuts at all abutment bearings.
Temperature (deg. C)	-13			
(Expansion Type : <b>ROCKER BEARING</b> )				
(Fixed Type : )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		4	4	South end has greater frequency of cracks are stained exposing rebar. Isolated staining at hangers.  Concrete spalls @ H2,H3,H4.(photo)-2 300mm chunks of concrete fallen from deck neat AZ @ NE corner.
Stains (Percent Area)	1			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>4</b>	<b>4</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		6	6	
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		5	5	Med vertical ck full height @ A2.
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		8	8	
Scour/Erosion		8	8	
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				Piers 1 & 4 West side have one vertical crack.
Bearing Seats/Caps		7	7	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>0:0:0:0</b> )				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		8	8	
Scour		8	8	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>6</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )				Sloughing embankment @ NW, not affecting structure.
(D/S Direction : <b>E</b> )				
Alignment		8	8	
Bank Stability		8	4	
HWM (m below Top of Curb)	30.0			(HWM survey stake at South headslope - 2003). Not apparent.
Drift (Y/N)	No			
Slope Protection		7	7	
(Type : <b>NATURAL; NATURAL</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>4</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	2013	Fill pothole @ hinge 2.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Repair deck joint membrane at hinge 3, if not done.					
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Reset Hazard Markers.					
OTHER ACTION	2013	Repair broken GR posts.(4)					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>61.9/58.6</b>	Est. Repl. Yr	2056	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor for irregularities in bottom flange bracing due to crack in welds. Monitor longitudinal stiffener splices, look for indication of cracks in web. Monitor deck spalling at hinge locations. Monitor loss of section due to corrosion in top flange.		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	Arnold Assenheimer		Previous Assistant's Name	Shane Hall			
Next Inspection Date	14-Mar-2016		Previous Inspection Date	07-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							