Bridge Inspection

Bridge File Number	00436 -1 Bridge	Form Type	PSR
Year Built/Year Supstr	2000/2000	Lot No.	2
		Inspector Name	Kris Bosters
Bridge or Town Name	VILLENEUVE	Inspector Class	BR CLS A
Located Over	STURGEON RIVER, 6.65, WATERCRS-ST	Assistant Name	
Located On	44:00 C1 16.261	Assistant Class	
Water Body Cl./Year		Inspection Date	06-Jul-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NE SEC 31 TWP 54 RGE 26 W4M	Data Entry Date	13-Jul-2011
Longitude, Latitude	-113:49:07, 53:42:41	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	11-Jul-2011
Contract Main. Area	CMA11	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	11 /	Dept. Review Date	18-Jul-2011
AADT/Year	5,450 / 2010 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
Detour Length (km)	10		

Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	---> On Critical Spans --->Critical Member
Design Loading:		CS750					---> 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)	No
Remarks	Not required.
Other Sign Types	Curve Ahead. HWY 39

Utilities (Located at)

Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	W r/w	Gas	
Power	1 wire W r/w	Municipal	
Others		Problem (Y/N)	
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Driveway NW, curve to South. Crest curve, good sight distance. Hwy 35 intersection 300m N.
Vertical Alignment		7	7	
Roadway Width (m)	11.800			Wide cracks in ACP at end of approach slab and abutments.-photo
Approach Bump		5	4	ACP patch and settlement of approach has created a 3m long wheel trap along SE approach.-photo
Guardrail (Y/N)	Yes			1 post broken and 1 rail section damage SW corner. photo
Guardrail		3	3	1 post and 2 rails damaged SE.-photo 1 damaged rail NW.
Length (m)	49.000			
Current Standard (Y/N)	Yes			
Termination Type	Turn Down			
Drainage		7	7	
Approach Road General Rating		**7**	**7**	

Superstructure

Bridge Component		Last	Now	Explanation of Condition
(Primary Span : **DBC, 1 Spans, Lengths(m): 40, A-Ident Number: A0382-01**)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%) / 1 (%) / 2 (%) / 3 (%)			1.0 x 0.5m sections of chipseal missing, about 5% of deck.
Last	0 / 0 / 0 / 0			
Now				
Wearing Surface		5	5	
(Material Type : **CONVENTIONAL CHIP SEAL COAT**)				
(Thickness(mm) :)				
Lateral Connection Problem (Y/N)	No			
Deck Top		N	N	
Deck Rideability		8	8	
Deck Joints		X	X	Buffer angle. No joint, integral abutments.
Temperature (deg. C)	22			
(Expansion Type :)				
(Fixed Type : **BUFFER ANGLES**)				
Gap Size (mm)	Gap Location			
Deck Drainage		7	4	0.5m wide birdbaths along E curb.-photo
Drains Clogged (Y/N)	No			
Curbs/Median		6	6	Narrow vertical cracks on facia 500mm o/c.
(Curb Type : **Standard**)				
Scaling (Percent Area)	0			
Bridge Rail		8	8	
(Type : **GALVANIZED STEEL BRIDGE TUBE**)				
Bridge Rail Posts		8	8	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)				
Bridge Rail/Posts Coating		8	8	
(Type : **GALVANIZED**)				
Sidewalk		X	X	
Girder Detail Ratings				
	N (count) / 1 (count) / 2 (count) / 3 (count)			
Last				
Now				
Girders		8	8	
Cracking (Y/N)	No			
Spalling (Percent Area)	0			
(Number Of Girders : **9**)				

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **DBC, 1 Spans, Lengths(m): 40, A-Ident Number: A0382-01**)				
Diaphragms/Cross Frame		8	8	Concrete diaphragms.
Bearings		N	N	Integral abutments.
Temperature (deg. C)	20			
(Expansion Type :)				
(Fixed Type :)				(28/Feb/2006) Unknown.
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		8	8	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		**8**	**8**	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Abutments				
Bearing Seats/Caps		N	N	
(Type : **CONCRETE**)				
Backwalls/Breastwalls		8	5	S backwall under G2 &3 has 1.0m long. Wide vertical cracks with salt stains.-photo
Wingwalls		7	7	Narrow random map cracking all 4 wingwalls.
Piles		N	N	
Paint/Coating		6	6	Paint is cracked on all 4 wingwalls.
Abutment Stability		8	8	
Scour/Erosion		8	8	
Piers/Bents				
(Type :)				
Bearing Seats/Caps		X	X	
(Type :)				
(Total Number of Bearing Piles :)				
Pier Shaft/Piles		X	X	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		X	X	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **W**)				Curves to the East & West.
(D/S Direction : **E**)				
Alignment		7	7	
Bank Stability		8	8	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		8	8	
(Type : **NATURAL; NATURAL**)				
Guidebank/Spurs		X	X	
Adequacy of Opening		9	9	
(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						
GALVANIZE/PAINT 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	2011	Repair approach rail at SE and NW corners.				
OTHER ACTION	2011	Extend ACP at SW to eliminate wheel trap				
OTHER ACTION	2011	Seal cracks in ACP at abutments.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**72.5/72.5**	Est. Repl. Yr	2064	Maint. Reqd. (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	Stew Hagan	Previous Assistant's Name	Kris Bosters		
Next Inspection Date	06-Apr-2013	Previous Inspection Date	30-Sep-2009		
Inspection Cycle (Default) (months)	21				
Comment					