

Bridge Inspection									
Bridge File Number	07871 -1 Bridge				Form Type	PSR			
Year Built/Year Supstr	1958/1958				Lot No.	2			
Bridge or Town Name	MANNVILLE				Inspector Name	Owen Salava			
Located Over	VERMILION RIVER, 6.5, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	881:08 C1 4.791				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	08-Aug-2011			
Legal Land Location	SW SEC 6 TWP 51 RGE 8 W4M				Data Entry By	Marcia Chavez			
Longitude, Latitude	-111:10:28, 53:22:21				Data Entry Date	13-Sep-2011			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien			
Contract Main. Area	CMA15				Review Date	15-Aug-2011			
Clear Roadway/Skew	7.9 /				Dept. Reviewer Name	Andrew Smikles			
AADT/Year	300 / 2010 (A)				Dept. Review Date	15-Sep-2011			
Road Classification	RCU-209-110				Follow-Up By				
Detour Length (km)	20								
Allowable Load (t):	Single	CS1 39 GIRDER	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	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					Gas				
Power	2 wire OH 15m E of c.l.				Municipal				
Others	WSC flow guage on W. rail.				Problem (Y/N)	No			
Remarks	Power crossed road 150m N of bridge.								

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Crest curve 200m to S with horizontal curve also part of alignment. Limited sight distance, no passing SBL.				
Vertical Alignment			6	6					
Roadway Width (m)		9.000			Minor pothole SBL at A1 (photo).				
Approach Bump			7	7					
Guardrail (Y/N)		Yes							
Guardrail			7	7					
Length (m)		53.800							
Current Standard (Y/N)		Yes							
Termination Type		TURNED DOWN							
Drainage			4	4	Minor erosion at NE wingwall; some ACP at corner undermined (photo).				
Approach Road General Rating			6	6					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 1 Spans, Lengths(m): 25.9, A-Ident Number:)					
Special Features					
Special Feature		9	9		
(SType : EXT SHEAR STIRRUP)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface		X	X		
(Material Type : CONCRETE)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)					
Deck Top		5	5	Transverse cracks. Light scaling - 30% - of area.	
Deck Rideability		6	6		
Deck Joints		7	7		
Temperature (deg. C)		25		A1 A2	
(Expansion Type : GLAND (SILICON SEAL))					
(Fixed Type : BUFFER ANGLES)					
Gap Size (mm)		Gap Location			
55	S. abut				
63	N. abut				
Deck Drainage		5	5	No deck drains. Drains to N.	
Drains Clogged (Y/N)					
Curbs/Median		5	5	Light scaling at isolated areas on curb tops.	
(Curb Type : Standard)					
Scaling (Percent Area)		1			
Bridge Rail		4	5	Single layer flexbeam - not to std.	
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts		3	3	Posts have oversized holes relative to anchor bolts. Insufficient thread on all bolts. EP2 has one sheared A/B - roof span post (photo). Some posts on roof span not plumb.	
(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	0	0	0	0	
Now	0	0	0	0	
Girders		6	6	girder end NE + NW have minor cracking near shoes.	
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : 7)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 1 Spans, Lengths(m): 25.9, A-Ident Number:)				
Diaphragms/Cross Frame		7	7	
Bearings		5	N	(At S end slider not centered on bridge plate.)010123. Too high to thoroughly inspect. 75% corrosion with pitting.
Temperature (deg. C)	25			
(Expansion Type : STEEL SLIDING PLATES WITH BRONZE PLATE IN BETWEEN)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		8	8	Ends of deck jammed into backwalls.
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		5	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		5	4	Scaling at NW corner with exposed rebar.
(Type : CONCRETE)				
Backwalls/Breastwalls		4	4	Scaling at NW corner; some corroded rebar visible (photo).
Wingwalls		5	5	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		6	6	
Scour/Erosion		7	7	
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		4	4	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Curb)				No visible HWM.
Drift (Y/N)	No			
Slope Protection		6	6	Some CL1 rock on S hslp.
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Install 1 post AB at EP2.					
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	2012	Patch small pothole at A1 - 0.05m3 ACP patch.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/38.9	Sufficiency Rating (Last/Now) (%)	62.4/55.8	Est. Repl. Yr	2030	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	No action on abuts & wingwall.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	CSE low, continue to seal deck. Rehab or replace in about 2035. RS						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Randy Bredo		Previous Assistant's Name				
Next Inspection Date	08-Nov-2014		Previous Inspection Date	27-Jul-2007			
Inspection Cycle (Default) (months)	39						
Comment							