

Bridge Inspection							
Bridge File Number	00229 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1973/1973			Lot No.	2		
Bridge or Town Name	VEGREVILLE			Inspector Name	Owen Salava		
Located Over	VERMILION RIVER, 6.5, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	16A:24 R1 7.070;16A:24 L1 7.071			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	13-Dec-2012		
Legal Land Location	SW SEC 17 TWP 52 RGE 14 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-112:02:15, 53:29:25			Data Entry Date	07-Jan-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA14			Review Date	20-Dec-2012		
Clear Roadway/Skew	21 / 15 deg. (RHF)			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	4,730 / 2011 (A)			Dept. Review Date	08-Jan-2013		
Road Classification	RAD-412.4-120			Follow-Up By			
Detour Length (km)	3						
Allowable Load (t):	Single	CS1 30 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 70 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	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Remarks	Posting not required.							
Hazard Marker At Bridge (Y/N)	No							
Remarks	Not required.							
Other Sign Types	Information, Max Speed Limit 50km/hr.							

Utilities (Located at)			
Utility Attachments			
Telephone	Conduit at North curb.		Gas
Power	4 wires OH 15 m South of c/l.		Municipal
Others	Conduit @ SE ditch.		Street lighting both sides.
			Problem (Y/N)
Remarks	No		
Remarks	Cable exposed and conduit failed on East headslope.		

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Superelevated to accommodate curve. Town intersections both sides. Width varies due to turning lane on bridge.
Vertical Alignment		8	8	
Roadway Width (m)	21.000			
Approach Bump		6	6	Lacking strong posts @ all corners. (Insufficient length) - unable to verify length due to snow. Not thrie beam.
Guardrail (Y/N)	Yes			
Guardrail		5	5	
Length (m)	19.000			
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN			
Drainage		5	5	(Water @ SW corners of both lanes ponding & leaking down onto abutment seats. 02.08.28).
Approach Road General Rating		6	6	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : HCO, 3 Spans, Lengths(m): 10.1-10.1-10.1, A-Ident Number:)						
Special Features						
Special Feature			X	All three spans have girder legs, shotcreted to rebuild spalled areas.		
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)	Snow/ice covered.	
Last	100	0	0	0		
Now	50.0	0.0	0.0	0.0		
Wearing Surface				N	5	(4 longitudinal cracks / lane on span 1 & 3 between girders. 5 longitudinal cracks / lane on span 2. 05Feb2008) - Chipsealed over cracks.
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Lateral Connection Problem (Y/N)		Yes				
Deck Top				N	N	
Deck Rideability				7	7	
Deck Joints				N	N	(Abut joints leaking at NW and SE abut joints buffer angles. No pier joints. 05Feb2008). Paved over.
Bump (Y/N)		No				
Deck Drainage				N	4	Water leaking down @ W abut at the low end of each lane and btwn girders @ both abuts; causing gully erosion scars; stained by leakage.
Drains Clogged (Y/N)		No				
Curbs/Median				N	N	(200 x 400 x 75mm chip out of NE corner. 75% of lift pockets in curbs need grouting. 04/05/17). Snow covered.
(Curb Type : Standard)						
Scaling (Percent Area)		2				
Bridge Rail				N	N	Double layer - snow covered.
(Type : GALVANIZED STEEL FLEX BEAM)						
Bridge Rail Posts				7	N	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating				6	N	
(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				4	4	(3 int - hairline shear cracks. 02/08/28). 50% of legs repaired with shotcrete. Still some leakage between units from cracks in deck above. 2 girder legs have air drill spalls. 4 interior girders rated 4. 4 curbs and 2 interiors rated 5 due to longitudinal cracks. S2G1 & S3G1 spalled midspan. Previous report says curb lift pocket not grouted - not seen this time.
Last Complete Inspection Date		13-Dec-2012				
Cracking (Y/N)		Yes				
Spalling (Percent Area)		1				
Lift or Connector Pocket Grouted (Y/N)		Yes				
(Number Of Girders : 72)						
Span Alignment Problems						
Vertical (Y/N)		No				
Horizontal (Y/N)		No				
Superstructure General Rating				4	4	

Substructure							
Bridge Component			Last	Now	Explanation of Condition		
Abutments							
(Extended Backwall Piles (Y/N) : N)							
(Extended Backwall Piles Spacing(mm) :)							
(Total Number of Caps/Corbels : 1:1)							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now	0	0	0	0			
Bearing Seats/Caps/Corbels				4	4	Water leaking onto W abut, seat is stained. Concrete deteriorated @ E abut seat. Shotcrete on W breastwall delaminated - minor.	
(Type : CONCRETE)							
(Depth(mm) :)							
(Width(mm) :)							
Backwalls/Breastwalls				N	N		
Greatest Height (m)		1.00					
Wingwalls				6	N	Snow covered.	
(Total Number of Bearing Piles : 0:0)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	100	0	0	0			
Now	100	0	0	0			
Piles				N	N	Buried	
Paint/Coating				X	X		
Abutment Stability				7	7		
Scour/Erosion				4	4	Water draining under NW abut cap forming a gully which is further exacerbated by deck drain above. Both hslp have scour @ toe. W hslp has a gully (photo).	
Piers/Bents							
(Type : PIER-COLUMN)							
(Total Number of Caps/Corbels : 1:1)							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now	0	0	0	0			
Bearing Seats/Caps/Corbels				4	4	S end of P2 spall exposing stirrup.	
(Type : CONCRETE)							
(Depth(mm) :)							
(Width(mm) :)							
(Total Number of Bearing Piles : 12:12)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now	0	0	0	0			
Pier Shaft/Piles				7	7		
Greatest Height (m)		4.00					
Bracing/Struts/Sheathing				X	X		
Nose Plate				X	X		
Paint/Coating				4	4	Active corrosion 0.3 m to 0.6 m above ground, peeling to 1.5 m above ground. Colour=Green.	
(Colour Description : BLUE)							
(Colour Code : 15182)							

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		7	7	
Scour		5	5	
Debris (Y/N)	Yes			Minor beaver dam under bridge & old piles.
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				Bend in river immediately U/S of bridge.
(D/S Direction : N)				
Alignment		5	5	
Bank Stability		5	5	Bend at D/S & NE bank is near vertical, 50m away from bridge.
HWM (m below Top of Curb)				HWM not visible. Small beaver dam under bridge. Old piles in channel.
Drift (Y/N)	Yes			
Slope Protection		5	5	
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
REPAIR/REPLACE BRIDGE RAIL										
SEAL CURBS	2013	Carried forward.(if not done already)								
PATCH DECK										
OVERLAY DECK										
STRAIGHTEN/REPLACE MEMBERS										
WASHING										
SHOTCRETE REPAIRS										
CORE TIMBER CAPS/CORBELS										
REPAIR/REPLACE TIMBER CAPS										
REPAIR ABUTMENT SCOUR/EROSION	2013	10m3 pitrun at W hslp.								
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL STRUTS										
OTHER ACTION	2013	Grout 9 lift pockets (curbs). (Carried forward)								
OTHER ACTION	2013	Advise utilities of exposed cable.								
OTHER ACTION	2013	Remove old piles, sheet piling & beaver dam.								
OTHER ACTION	2013	Patch with concrete on south end P2.								
OTHER ACTION	2013	Seal seats & caps.								
OTHER ACTION	2013	Touch-up pile paint.								
OTHER ACTION	2013	Add TT posts at 4 corners & upgrade guardrail length to meet std, if not yet done.								
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	59.8/59.5	Est. Repl. Yr	2019	Maint. Req. (Y/N)	Yes			
Special Comments for Next Inspection	Monitor longit. cracks on interior girders.		Department Comments							
Maintenance Reviewed By		Date			Estimated Total	0				
Proposed Long-Term Strategy	2005.01.10 Bridge should be good until 2015. Consider gravity floc epoxy for cracks, repair deck delaminations as required and chip coat.									
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Owen Salava	Previous Assistant's Name								
Next Inspection Date	13-Sep-2014	Previous Inspection Date	16-Dec-2010							
Inspection Cycle (Default) (months)	21									
Comment										

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
SEAL CURBS	2013	Carried forward.(if not done already)	On 4 year bridge sealing program			
PATCH DECK						
OVERLAY DECK						
STRAIGHTEN/REPLACE MEMBERS						
WASHING						
SHOTCRETE REPAIRS						
CORE TIMBER CAPS/CORBELS						
REPAIR/REPLACE TIMBER CAPS						
REPAIR ABUTMENT SCOUR/EROSION	2013	10m3 pitrun at W hslp.	Defer			
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
INSTALL STRUTS						
OTHER ACTION	2013	Grout 9 lift pockets (curbs). (Carried forward)	Completed 2012			
OTHER ACTION	2013	Advise utilities of exposed cable.	Defer			
OTHER ACTION	2013	Remove old piles, sheet piling & beaver dam.	Defer			
OTHER ACTION	2013	Patch with concrete on south end P2.	Completed 2012			
OTHER ACTION	2013	Seal seats & caps.	Next time on site			
OTHER ACTION	2013	Touch-up pile paint.	Defer			
OTHER ACTION	2013	Add TT posts at 4 corners & upgrade guardrail length to meet std, if not yet done.	Completed 2012			
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	59.8/59.5	Est. Repl. Yr	2019	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection	Monitor longit. cracks on interior girders.		Department Comments	Currently programmed to be replaced in 2022.		
Maintenance Reviewed By	Andrew Smikles	Date	21-Jan-2013	Estimated Total	0	
Proposed Long-Term Strategy	2005.01.10 Bridge should be good until 2015. Consider gravity floe epoxy for cracks, repair deck delaminations as required and chip coat.					
On 3-Year Program (Y/N)						
Proposed Action						

Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	13-Sep-2014	Previous Inspection Date	16-Dec-2010
Inspection Cycle (Default) (months)	21		
Comment			