

Bridge Inspection							
Bridge File Number	75220 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1971/1971			Lot No.	1		
Bridge or Town Name	CHIPMAN			Inspector Name	Owen Salava		
Located Over	WHITFORD CREEK, 6.48.4, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	29:02 C1 22.526			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	08-Nov-2012		
Legal Land Location	SE SEC 29 TWP 55 RGE 17 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-112:29:18, 53:46:26			Data Entry Date	21-Nov-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA14			Review Date	15-Nov-2012		
Clear Roadway/Skew	11 /			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	1,000 / 2011 (A)			Dept. Review Date	26-Nov-2012		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	5						
Allowable Load (t):	Single	CS1 28 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 65 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	Not required.							

Hazard Marker At Bridge (Y/N)	Yes
Remarks	Off line & not to standard height, varies.
Other Sign Types	Narrow Bridge.

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone		Gas	
Power	2 wires 20m North.		Municipal
Others		Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	In sag, hills E & W, limited sight distance.
Vertical Alignment		7	7	
Roadway Width (m)	10.000			Wide ACP crack at each abut.
Approach Bump		7	7	Some TT blocks rotated. SE 1 broken post.
Guardrail (Y/N)	Yes			
Guardrail		6	3	
Length (m)	15.600			Too short, not enough posts. Not thrie beam.
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		7	7	
<b>Approach Road General Rating</b>		<b>7</b>	<b>7</b>	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : <b>HC, 1 Spans, Lengths(m): 6.1, A-Ident Number: )</b>					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Snow
<b>Last</b>	0	0	0	0	
<b>Now</b>	30.0	0.0	0.0	0.0	
Wearing Surface			7	7	
(Material Type : <b>MIX TYPE 1 ACP</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	Paved over.
Deck Rideability			7	7	
Deck Joints			N	N	(1 buffer angle missing at centerline on east end.) Not visible, paved over. Wide ACP crack at abutments.
Bump (Y/N)		No			
Deck Drainage			7	7	
Drains Clogged (Y/N)		No			
Curbs/Median			7	7	Partially snow/ice covered.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		0			
Bridge Rail			3	3	Single layer with insufficient splice bolt @ leading edge - photo. Typical both sides (16).
(Type : <b>GALVANIZED STEEL FLEX BEAM</b> )					
Bridge Rail Posts			6	6	Posts with superficial corrosion.
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			5	5	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0	0	0	0	
Girders			4	4	4 of 13 with wide longit. cracking in AZ both legs, cracking in other leg; confirmed sound concrete. Isolated connector pocket stains.
Last Complete Inspection Date		08-Nov-2012			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
Lift or Connector Pocket Grouted (Y/N)		Yes			
(Number Of Girders : <b>13</b> )					
<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>									
(Extended Backwall Piles (Y/N) : Y)				Bearing piles are tied to backwals with backwall clamps & scabs.					
(Extended Backwall Piles Spacing(mm) : 1200)									
(Total Number of Caps/Corbels : 1:1)				Cap is H-pile with capitals. Stiffeners not centered over pile.					
Bearing Seats/Caps/Corbels Detail Ratings									
	N (count)	1 (count)	2 (count)				3 (count)		
<b>Last</b>	0	0	0				0		
<b>Now</b>	0	0	0				0		
Bearing Seats/Caps/Corbels			5				5		
(Type : STEEL)									
(Depth(mm) : 360)									
(Width(mm) : 375)									
Backwalls/Breastwalls			7				7		
Greatest Height (m)		2.60							
Wingwalls			3	3		SW wingwall damaged - photo. 1 pile fallen down, another pile leaning. 3 planks broken (photo). Trees growing btwn planks at NE.			
(Total Number of Bearing Piles : 12:12)									
Piles Detail Ratings									
	N (count)	1 (count)	2 (count)	3 (count)					
<b>Last</b>	0	0	0	1					
<b>Now</b>	0	0	0	1					
Piles			3	3		A1P3,4 & A2P4 split - photo; worst @ A1P4 - photos. A1P4 - R=3 > Reduced section & load bearing capacity. A2P3,4 - R=4. Old piles remaining beside new piles at EP1 & WP1.			
Paint/Coating			X	4					
Abutment Stability			6	6					
Scour/Erosion			7	7					
<b>Piers/Bents</b>									
(Type : )									
(Total Number of Caps/Corbels : )									
Bearing Seats/Caps/Corbels Detail Ratings									
	N (count)	1 (count)	2 (count)	3 (count)					
<b>Last</b>									
<b>Now</b>									
Bearing Seats/Caps/Corbels			X	X					
(Type : )									
(Depth(mm) : )									
(Width(mm) : )									
(Total Number of Bearing Piles : )									
Piles Detail Ratings									
	N (count)	1 (count)	2 (count)	3 (count)					
<b>Last</b>									
<b>Now</b>									
Pier Shaft/Piles			X	X		(Max deck to S/B 3.2m)			
Greatest Height (m)		3.20							
Bracing/Struts/Sheathing			X	X					
Nose Plate			X	X					

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		X	X	
Scour		X	X	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>3</b>	<b>3</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>N</b> )				North side stream hits bridge at an angle.
(D/S Direction : <b>S</b> )				
Alignment		5	5	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		6	6	
(Type : <b>NATURAL; NATURAL</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>5</b>	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
REPAIR/REPLACE BRIDGE RAIL	2013	Install 16 splice bolts & upgrade to meet standard.								
SEAL CURBS										
PATCH DECK										
OVERLAY DECK										
STRAIGHTEN/REPLACE MEMBERS										
WASHING										
SHOTCRETE REPAIRS										
CORE TIMBER CAPS/CORBELS										
REPAIR/REPLACE TIMBER CAPS										
REPAIR ABUTMENT SCOUR/EROSION										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL STRUTS										
OTHER ACTION	2013	Reinstall hazard markers to meet std.								
OTHER ACTION	2013	Band 3 split piles.								
OTHER ACTION	2013	Replace wing piles & planks at SW corner.								
OTHER ACTION	2013	Replace A1P4 or splice repair pile.								
OTHER ACTION	2013	Upgrade approach guardrail to meet standard.								
OTHER ACTION	2013	Replace 1 post at SE.								
OTHER ACTION	2013	Cut down trees at NE wingwall.								
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>57.4/57.4</b>	<b>Est. Repl. Yr</b>	<b>2020</b>	<b>Maint. Req. (Y/N)</b>	<b>Yes</b>			
Special Comments for Next Inspection	(Inspect piles at 12mth cycle until repaired/replaced. 14Aug2009). (Piles cored in 2009, OK. 20Oct2009). Monitor cracked girder legs.									
Maintenance Reviewed By			Date			Estimated Total		0		
Proposed Long-Term Strategy										
Bridge should be adequate until 2023. Chip seal if working in the area. CB										
On 3-Year Program (Y/N)										
Y										
Proposed Action										
Core substructure in 2009. Pile splice repairs may be required. CB										

Previous Inspector's Name	Dave Lam	Previous Assistant's Name	
Next Inspection Date	08-Aug-2014	Previous Inspection Date	07-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	2013	Install 16 splice bolts & upgrade to meet standard.	Programmed	2012			
SEAL CURBS							
PATCH DECK							
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION	2013	Reinstall hazard markers to meet std.	To operations				
OTHER ACTION	2013	Band 3 split piles.	Programmed	2012			
OTHER ACTION	2013	Replace wing piles & planks at SW corner.	Programmed	2012			
OTHER ACTION	2013	Replace A1P4 or splice repair pile.	Programmed	2012			
OTHER ACTION	2013	Upgrade approach guardrail to meet standard.	To operations				
OTHER ACTION	2013	Replace 1 post at SE.	Programmed	2012			
OTHER ACTION	2013	Cut down trees at NE wingwall.	To operations				
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>57.4/57.4</b>	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	(Inspect piles at 12mth cycle until repaired/replaced. 14Aug2009). (Piles cored in 2009, OK. 20Oct2009). Monitor cracked girder legs.		Department Comments	Replacement programmed for 2018			

Maintenance Reviewed By	Andrew Smikles	Date	17-Dec-2012	Estimated Total	0
Proposed Long-Term Strategy	Bridge should be adequate until 2023. Chip seal if working in the area. CB				
On 3-Year Program (Y/N)	Y				
Proposed Action	Core substructure in 2009. Pile splice repairs may be required. CB				
Previous Inspector's Name	Dave Lam	Previous Assistant's Name			
Next Inspection Date	08-Aug-2014	Previous Inspection Date	07-Dec-2010		
Inspection Cycle (Default) (months)	21				
Comment					