

Bridge Inspection							
Bridge File Number	01409 -1 Bridge			Form Type	PSR		
Year Built/Year Supstr	1957/1957			Lot No.	1		
Bridge or Town Name	THREE HILLS			Inspector Name	Owen Salava		
Located Over	THREEHILLS CREEK, 3.50.2, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	21:14 C1 26.446			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	18-Sep-2012		
Legal Land Location	SE SEC 6 TWP 31 RGE 23 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-113:14:32, 51:37:11			Data Entry Date	02-Oct-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA20			Review Date	27-Sep-2012		
Clear Roadway/Skew	10.4 /			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	2,490 / 2011 (A)			Dept. Review Date	18-Oct-2012		
Road Classification	RAU-211.8-110			Follow-Up By			
Detour Length (km)	3						
Allowable Load (t):	Single	CS1 40 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 63 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	Not required.						
Hazard Marker At Bridge (Y/N)	Yes						
Remarks	All too low, spring type; NE HM leaning; SW knocked over.						
Other Sign Types	Curve signs.						

Utilities (Located at)			
Utility Attachments			
Telephone	At North, East & West sides.		Gas
Power	3 wires over South end of bridge & 1 wire 25m West.		Municipal
Others	Fibreoptic E r/w.		Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Intersections at NE and SW. Curves both ends; limited sight distance; no passing both directions.
Vertical Alignment		6	5	
Roadway Width (m)	10.800			36.0m at NE, SE & NW +99m. Insufficient posts; not thrie beam. Typical V1 (radius) at NE & SW corners to accomodate intersections.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		6	6	
Length (m)	36.000			
Current Standard (Y/N)	No			
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 : PO, 2 Spans, Lengths(m): 25.9-25.9, A-Ident Number: )					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0.0	0.0	0.0	0.0	
Wearing Surface			5	5	Chip seal 5% worn over epoxy w/s from plows.
(Material Type : <b>CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : )					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			6	6	
Deck Joints			7	7	
Temperature (deg. C)		18			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
68		S.abut			
61		Pier			
58		N. abut			
Deck Drainage			7	7	Retrofit drains added along both sides.
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	Localized cracking, spot corrosion mainly in E curb.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		0			
Bridge Rail			7	7	Double layer, blocked out (photo).  20 A/B with insufficient thread. 6 A/B nuts east curb are loose (photo).
(Type : <b>GALVANIZED STEEL FLEX BEAM</b> )					
Bridge Rail Posts		4	4		
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating		6	6		
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
<b>Girder Detail Ratings</b>					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0	0	0	1	
Girders			5	3	in S2 vertical 100mm crack above bearing S2-G9 over pier.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : <b>20</b> )					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 2 Spans, Lengths(m): 25.9-25.9, A-Ident Number: )				
Diaphragms/Cross Frame		7	7	
Bearings		6	6	Expansion @ abutments. Fixed @ pier. Pier bearings are tied.  Superficial rust on bearings.
Temperature (deg. C)	18			
(Expansion Type : <b>SLIDING PLATE</b> )				
(Fixed Type : <b>PINNED BEARING</b> )				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Underside @ NW between S2G1/G2/G3. Efflorescence on North end & South. Small void in deck S2 btw. G3-4.
Stains (Percent Area)	2			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>5</b>	<b>3</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		5	5	Delam. crack at NW abut seat. Rebar visible from shallow cover at SE.
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		5	5	
Wingwalls		4	4	Delam cracking at top of SE wingwall (photo).
Piles		N	N	Buried.
Paint/Coating		5	5	Tar at abut face only.
Abutment Stability		8	8	
Scour/Erosion		6	6	
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				
Bearing Seats/Caps		4	6	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>0</b> )				
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	20% superficial corrosion at nose plate & heavy scaling @ West end. Scaling at u/s side (photo).
(Colour Description : )				
(Colour Code : )				
Pier Stability		8	8	
Scour		7	7	
Debris (Y/N)	Yes			Old piles in channel.
<b>Substructure General Rating</b>		<b>4</b>	<b>5</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )				
(D/S Direction : <b>E</b> )				
Alignment		7	7	
Bank Stability		5	5	Steep cut at u/s & d/s.
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		6	6	Natural at toe. Bagged concrete @ top half.
(Type : <b>CONCRETE; CONCRETE</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>6</b>	<b>6</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Tighten loose nuts, rehab post anchor bolts at next rehab.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2012	Patch cracks/delams & at next rehab.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS	2012	Rehab at next major rehab.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Reset HMs at NE & SW.					
OTHER ACTION	2012	Patch SE wingwall delam & seal all wingwalls.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>58.3/55.3</b>	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	No action for girder r=3 at this time.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	Rehab including deck, approach slabs and joint. Bridge should be good until 2017. RS						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	18-Jun-2014		Previous Inspection Date	10-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							