

Bridge Inspection							
Bridge File Number	77177 -1 Bridge			Form Type	PSR		
Year Built/Year Supstr	1971/1971			Lot No.	2		
Bridge or Town Name	ROCKY MT HOU			Inspector Name	Owen Salava		
Located Over	NORTH SASKATCHEWAN RIVER, 6, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	11:10 C1 3.881			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	02-Feb-2012		
Legal Land Location	SW SEC 4 TWP 40 RGE 7 W5M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-114:57:15, 52:24:36			Data Entry Date	02-Mar-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA18			Review Date	23-Feb-2012		
Clear Roadway/Skew	12.2 / 0 deg.			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	3,140 / 2010 (A)			Dept. Review Date	09-Mar-2012		
Road Classification	RAU-213.4-120			Follow-Up By			
Detour Length (km)	10						
Allowable Load (t):	Single	CS1 55 GIRDER	Semi	CS2 64 GIRDER	Train	CS3 75 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)	No							
Remarks	Required.							
Other Sign Types	Information signing.							

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	In south curb.		Gas
Power			Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Curve to east, slightly limited sight distance. Crest to the West, intersection 150m West. West end has slight bump.
Vertical Alignment		6	6	
Roadway Width (m)	14.300			Pothole forming at A2 & A1 paving lips in EBL.
Approach Bump		6	6	SW corner 36.6m guardrail length. Insufficient length & posts.
Guardrail (Y/N)	Yes			
Guardrail		6	6	
Length (m)	29.000			
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		7	7	
Approach Road General Rating		5	5	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : FC, 5 Spans, Lengths(m): 33.5-33.5-33.5-33.5-33.5, A-Ident Number:)					
Special Features					
Special Feature		7	7	Viewed from banks, appears o.k.	
(Type : EXT LATER POST TENS)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now	10.0	0.0	0.0	0.0	
Wearing Surface		6	6	Localized delam around pier joints and in travel lanes - photo.	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		6	6	Slight bump over pier joints.	
Deck Joints		3	3	Minor gouges in joints from plow, no problem. Girder ends spalling @ deck joint drains, typical at all piers - photo. (P3 gland failed over 3m length - photo. 01Apr2010). N cover plate is not flush @ P4. S cover plate at P2 not flush. A2 jnt jammed with gravel. Pier glands jammed with gravel.	
Temperature (deg. C)		-3			
(Expansion Type : FINGER PLATES;GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
108		West abutment - A1			
60		Pier 1			
65		Pier 2			
72		Pier 3			
55		Pier 4			
108		East abutment - A2			
Deck Drainage		4	5	Drains leaking at all piers onto cap ends - photo. S5G8 has spall at scupper at top of girder leg. Icing at SW & NW corner of abut seat.	
Drains Clogged (Y/N)		No			
Curbs/Median		3	4	Delam cracking in various locations in N curb. Corrosion stains along interior face. P4N cover plate not flush - photo.	
(Curb Type : Standard)					
Scaling (Percent Area)		5			
Bridge Rail		7	7		
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		3	7		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		5	5		
(Type : GALVANIZED)					
Sidewalk		X	X		
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	16				
Now	24	0	0	0	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : FC, 5 Spans, Lengths(m): 33.5-33.5-33.5-33.5-33.5, A-Ident Number:)				
Girders		5	5	S1G1 has vertical cracks in E end of girder. C/L E abut, near vertical at 2/3 L. Typical chamfer line cracking on all girders. Longit. cracking in mid-point of girder legs. Non typical crack on girder leg near S1G2 W abut, S5G8 E abut, measured & dated. No change. S1G1 U/S cracking extends 390mm into deck.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
(Number Of Girders : 40)				
Diaphragms/Cross Frame		4	4	Vertical narrow cracks in 85% of diaphragms. (S4G1 diaphragm 3 has delam cracking with corrosion. 01Apr2010).
Bearings		5	5	Bearing bolts at pier curb units are all leaning inwards perhaps due to stressing laterally. Some rusting of bearing plate, typical on all.
Temperature (deg. C)	-3			
(Expansion Type : SLIDING PLATE)				
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	Non typical crack on girder leg near S1G2 W abut, S5G8 E abut, measured & dated. No change. S1G1 U/S cracking extends 390mm into deck.
Stains (Percent Area)	0			
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				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		5	5	
Abutment Stability		8	8	
Scour/Erosion		5	5	
Piers/Bents				
(Type : PIER-SOLID)				(P4 N end small spall at underside near bearing. Vertical crack under some girder bearings - photo. Minor spall with exposed rebar at underside of P5 cap. 01Apr2010). Viewed from banks.
Bearing Seats/Caps		4	4	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	Surface corrosion.
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		6	N	Ice covered.

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	Yes			
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				River currently against W bank causing recent erosion, however toe of slope is bedrock (shale) erosion rate is slow. (Main flow through S2 - Feb 2012).
(D/S Direction : N)				
Alignment		6	6	
Bank Stability		6	6	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		5	5	No slope protection on West bank near vertical bank. Abutment 2 concrete slope protection part of guide bank armouring.
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		8	8	
Adequacy of Opening		8	8	
(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						
GALVANIZE/PAINT BRIDGE RAIL						
SEAL CURBS	2012	Patch delams in N curb.				
PATCH DECK	2012	Patch delam chipseal.				
SEAL DECK						
OVERLAY DECK						
REPAIR/REPLACE DECK JOINTS	2012	Replace P3 gland, if not yet done.				
RESET/ PAINT BEARINGS	2020	Straighten/reset bent pier bearing A/B at next major rehab.				
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION	2012	Remount P4 North cover plate flush; P2 S plate.				
OTHER ACTION	2012	Patch potholes along paving lips.				
OTHER ACTION	2012	Patch P4 spall @ S end.				
OTHER ACTION	2012	Patch exposed rebar in dia S4G1, if not yet done.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
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OTHER ACTION						
OTHER ACTION						
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OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now)	44.4/44.4	Sufficiency Rating (Last/Now)	49.3/49.2	Est. Repl. Yr	2040	Maint. Reqd. (Y/N)
						Yes
Special Comments for Next Inspection	Measure girder cracks & pier cracking.					
Department Comments						
Maintenance Reviewed By		Date				Estimated Total 0
Proposed Long-Term Strategy	2006.05.09 rehab 2030, replacement 2060.					
On 3-Year Program (Y/N)						

Proposed Action			
Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	02-Nov-2013	Previous Inspection Date	01-Apr-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							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2012	Patch delams in N curb.	Programmed	2012			
PATCH DECK	2012	Patch delam chipseal.	Programmed	2012			
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Replace P3 gland, if not yet done.	Programmed	2012			
RESET/ PAINT BEARINGS	2020	Straighten/reset bent pier bearing A/B at next major rehab.	Defer to next rehab.				
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Remount P4 North cover plate flush; P2 S plate.	Programmed	2012			
OTHER ACTION	2012	Patch potholes along paving lips.	Operations	2012			
OTHER ACTION	2012	Patch P4 spall @ S end.	Programmed	2012			
OTHER ACTION	2012	Patch exposed rebar in dia S4G1, if not yet done.	Programmed	2012			
OTHER ACTION							
OTHER ACTION							
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OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	49.3/49.2	Est. Repl. Yr	2040	Maint. Req. (Y/N)	Yes

Special Comments for Next Inspection	Measure girder cracks & pier cracking.	Department Comments	DA		
Maintenance Reviewed By	Darron Ahlstedt	Date	05-Nov-2012	Estimated Total	0
Proposed Long-Term Strategy	2006.05.09 rehab 2030, replacement 2060.				
On 3-Year Program (Y/N)					
Proposed Action					
Previous Inspector's Name	Owen Salava	Previous Assistant's Name			
Next Inspection Date	02-Nov-2013	Previous Inspection Date	01-Apr-2010		
Inspection Cycle (Default) (months)	21				
Comment					