

Bridge Inspection							
Bridge File Number	07721 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1957/1957			Lot No.	1		
Bridge or Town Name	HARDISTY			Inspector Name	Jason Saly		
Located Over	IRON CREEK, 5.16, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	870:02 C1 6.625			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	13-Dec-2012		
Legal Land Location	SW SEC 22 TWP 44 RGE 11 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-111:31:40, 52:47:60			Data Entry Date	14-Jan-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA16			Review Date	20-Dec-2012		
Clear Roadway/Skew	10.1 /			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	570 / 2011 (A)			Dept. Review Date	17-Jan-2013		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	6						
Allowable Load (t):	Single	CS1 28 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 66 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	Installed too low.							
Other Sign Types	Bump							

Utilities (Located at)			
Utility Attachments			
Telephone	West r/w, strung across creek.		Gas
Power			Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Land access to SE. Long sag curve. Crest curves with no passing each direction; passing allowed at bridge.
Vertical Alignment		6	6	
Roadway Width (m)	8.500			Insufficient posts next to bridge. Type VI, SE corner.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		6	6	
Length (m)	23.000			
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		5	N	Snow covered.
Approach Road General Rating		6	6	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PGO, 3 Spans, Lengths(m): 6.1-6.1-6.1, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Snow at curbs.
Last	15				
Now	15.0	0.0	0.0	0.0	
Wearing Surface			5	5	ACP on concrete overlay.
(Material Type : CONCRETE)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			6	6	
Deck Joints			N	N	Asphalt covered.
Bump (Y/N)		No			
Deck Drainage			7	N	
Drains Clogged (Y/N)		No			
Curbs/Median			N	N	(Rusted rebar showing on NW vertical face - photo. 27/Oct/2006) - Snow covered.
(Curb Type : Standard)					
Scaling (Percent Area)		5			
Bridge Rail			7	7	Single layer.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			5	5	13 ogees have been replaced with washers or with no washer.
(Type : TREATED TIMBER;TREATED TIMBER)					
Bridge Rail/Posts Coating			7	7	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	1	
Girders			5	3	PG int with type A curbs S1G2,12; S2G2,12; S3G2,12. S1G2,12; S2G2,12 & S3G2,12 all have wide longit. cracks in AZ, 1 leg only. Type A curbs all spalled at leg bottom exposing longit. rebar.
Last Complete Inspection Date		13-Dec-2012			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		5			
Lift or Connector Pocket Grouted (Y/N)		No			
(Number Of Girders : 39)					
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						
(Extended Backwall Piles (Y/N) : N)						
(Extended Backwall Piles Spacing(mm) :)						
(Total Number of Caps/Corbels : 7:7)					4 top caps, 3 subcaps.	
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				6	6	
(Type : TREATED TIMBER)						
(Depth(mm) : 305)						
(Width(mm) : 355)						
Backwalls/Breastwalls				5	5	
Greatest Height (m)		3.30				
Wingwalls				5	5	
NE wingwall top plank broken. SW wingwall reinforced with drill stems - photo. Timber pile broken, redundant.						
(Total Number of Bearing Piles : 10:10)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last				3		
Now	0	0	1	2		
Piles				3	2	
A1P1 cracked at base - photo. A1P7 large splits at grade - photo. A2P5 split near cap. Steel stub repairs @ A2P4,7. P5 split at cap & hollow sounding with hammer.						
Paint/Coating				X	X	
Abutment Stability				4	4	
Struts to caps not preventing pile movement.						
Scour/Erosion				N	N	
Snow/ice covered.						
Piers/Bents						
(Type : PIER-COLUMN)						
(Total Number of Caps/Corbels : 7:7)					4 top caps, 3 subcaps.	
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				5	5	
(Type : TREATED TIMBER)						
(Depth(mm) : 305)						
(Width(mm) : 355)						
(Total Number of Bearing Piles : 10:10)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last				2		
Now	0	0	2	0		
Pier Shaft/Piles				3	2	
Greatest Height (m)		3.20				
P1p1 heavily abraded on U/S side. P1p5 split at top. P1p5 split at ice. Steel stub repair P1p2.						
Bracing/Struts/Sheathing				6	6	
Struts mostly bearing on caps.						
Nose Plate				X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		5	5	
Scour		N	N	
Debris (Y/N)	Yes			Drift catching on pier 2 near fence at East side.
Substructure General Rating		3	2	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				Creek swings against S abut. NW bank projects out into channel and likely creates eddies & swirls in high water.
(D/S Direction : E)				
Alignment		5	5	
Bank Stability		4	4	Vertical banks U/S & D/S. Cattle eroding low banks - No action.
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	Yes			
Slope Protection		N	N	
(Type : RIP RAP; RIP RAP)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	S3 used as cattlepass.
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
REPAIR/REPLACE BRIDGE RAIL										
SEAL CURBS										
PATCH DECK										
OVERLAY DECK										
STRAIGHTEN/REPLACE MEMBERS										
WASHING										
SHOTCRETE REPAIRS										
CORE TIMBER CAPS/CORBELS	2013	Core piles, assess repair options, if not yet done.								
REPAIR/REPLACE TIMBER CAPS										
REPAIR ABUTMENT SCOUR/EROSION										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION	2013									
INSTALL STRUTS	2013	Move struts to tops of piles.								
OTHER ACTION	2013	Steel stub pile repairs, A1P1,5; A2P5; P1p1,5.								
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	44.4/27.8	Sufficiency Rating (Last/Now) (%)	61.1/54.1	Est. Repl. Yr	2020	Maint. Req'd. (Y/N)	Yes			
Special Comments for Next Inspection	No action for "3" rated girder at this time; bridge work planned for next couple of years.		Department Comments							
Maintenance Reviewed By		Date			Estimated Total	0				
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Owen Salava	Previous Assistant's Name								
Next Inspection Date	13-Mar-2016	Previous Inspection Date	27-Jan-2010							
Inspection Cycle (Default) (months)	39									
Comment										

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
SEAL CURBS						
PATCH DECK						
OVERLAY DECK						
STRAIGHTEN/REPLACE MEMBERS						
WASHING						
SHOTCRETE REPAIRS						
CORE TIMBER CAPS/CORBELS	2013	Core piles, assess repair options, if not yet done.	defer placement on coring list			
REPAIR/REPLACE TIMBER CAPS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION	2013					
INSTALL STRUTS	2013	Move struts to tops of piles.	Defer lowering struts to top of piles (using proper scabs)			
OTHER ACTION	2013	Steel stub pile repairs, A1P1,5; A2P5; P1p1,5.	Defer steel pile sleeves or stub pile repairs (Total 5 piles)			
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	44.4/27.8	Sufficiency Rating (Last/Now) (%)	61.1/54.1	Est. Repl. Yr	2020	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection	No action for "3" rated girder at this time; bridge work planned for next couple of years.		Department Comments	scheduled in PMA for 2014 replacement. placed on 6 month reduced cycle safety inspection.		
Maintenance Reviewed By	John Umlah		Date	30-Apr-2013	Estimated Total	0
Proposed Long-Term Strategy						
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Owen Salava		Previous Assistant's Name			

Next Inspection Date	13-Mar-2016	Previous Inspection Date	27-Jan-2010
Inspection Cycle (Default) (months)	39		
Comment			