

Bridge Inspection									
Bridge File Number	08781 -1 Bridge				Form Type	PSR PCS			
Year Built/Year Supstr	1964/1964				Lot No.	1			
Bridge or Town Name	HYTHE				Inspector Name	Brian Pientsch			
Located Over	BEAVERLODGE RIVER, 8.10.58.18.8.1, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	672:02 C1 12.423				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	24-Jun-2010			
Legal Land Location	SE SEC 14 TWP 73 RGE 11 W6M				Data Entry By	Jill Potts			
Longitude, Latitude	-119:34:25, 55:18:58				Data Entry Date	14-Oct-2010			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Arnold Assenheimer			
Contract Main. Area	CMA05				Review Date	17-Sep-2010			
Clear Roadway/Skew	8.2 /				Dept. Reviewer Name	Steve Pasquan			
AADT/Year	480 / 2009 (A)				Dept. Review Date	19-Nov-2010			
Road Classification	RCU-209-110				Follow-Up By				
Detour Length (km)	13								
Allowable Load (t):	Single		Semi		Train				----> 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	Markers installed too low, on first guardrail post leaning and are loose - photo.								
Other Sign Types	Protected water shed.								
Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	Buried South r/w. Empty conduit South curb.				Gas				
Power	Single wire OH 15m North centerline.				Municipal				
Others					Problem (Y/N)	No			
Remarks									
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			9	9					
Vertical Alignment			8	8					
Roadway Width (m)	9.000				ACP is cracked and ravelling at abutments - photo.				
Approach Bump			4	4	Angle bracket connection to parapet does not meet standard & could be dangerous during a collision - photo. Posts leaning all 4 corners. NE turn down end set too high.				
Guardrail (Y/N)	Yes								
Guardrail			4	4					
Length (m)	11.800								
Current Standard (Y/N)	No								
Termination Type	Turn Down								
Drainage			5	5					
Approach Road General Rating			8	8					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PM, 3 Spans, Lengths(m): 12.2-16.8-12.2, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now					
Wearing Surface			X	X	Staining on underside of girders under grout keys indicates leakage. All grout keys are cracked and spalling - photo.
(Material Type :)					
(Thickness(mm) :)					
Lateral Connection Problem (Y/N)		Yes			
Deck Top			5	5	Tops of girders have light scaling.
Deck Rideability			6	6	
Deck Joints			4	3	Blockouts over piers and at approaches are spalling & cracked. Waterstops exposed and not functioning as designed, leaking. Spalls partially patched with ACP. Joints spalled.
Temperature (deg. C)		21			
(Expansion Type : WATER STOP)					
(Fixed Type : WATER STOP)					
Gap Size (mm)		Gap Location			
		Abutment 1			
		Pier 1			
		Pier 2			
		Abutment 2			
Deck Drainage			5	5	(Water ponding on deck between curb and first interior girder - photo. 07/Oct/2009)
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	Deep grader scrapes on face of curb.
(Curb Type : Standard)					
Scaling (Percent Area)		10			
Bridge Rail			5	5	1 post on North rail has insufficient threads on anchor bolts (2 threads). Posts are rusting.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			4	4	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			4	4	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Girders			5	5	Span 2 G8 deep spall patched with ACP. Some intermitant hairline cracks on deck top running over top voids, S2/G1,2,4,9,10. Rust spots on underside of girders due to wires -photo.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		1			
(Number Of Girders : 10)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PM, 3 Spans, Lengths(m): 12.2-16.8-12.2, A-Ident Number:)				
Diaphragms/Cross Frame		X	X	
Bearings		N	N	Piers to high to view.
Temperature (deg. C)	21			
(Expansion Type : NEOPRENE STRIP BEARING)				
(Fixed Type : NEOPRENE STRIP BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		5	5	Stains from leakage through grout keys.
Stains (Percent Area)	5			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		5	5	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Secondary Span : PE)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%)	1 (%)	2 (%)	3 (%)
Last	0	0	0	5
Now				5.0
Wearing Surface		X	X	Leaking between girder legs, staining.
(Material Type :)				
(Thickness(mm) :)				
Lateral Connection Problem (Y/N)	Yes			
Deck Top		3	3	Deck top has severe scaling. Numerous spalled and debonded areas. Some areas patched with ACP - photo.
Deck Rideability		5	5	
Deck Joints		N	3	Cast connections cracking over pier and abutments. Concrete blockouts for waterstops completely broken up. Partially patched with ACP.
Bump (Y/N)	No			
Deck Drainage		4	4	Drainage is eroding headslopes 5 x 0.4 x 0.2m (lwd) gullies on West headslope. Water ponding on deck between curb girder and first interior girder.
Drains Clogged (Y/N)	No			
Curbs/Median		4	4	2m long longitudinal crack with delaminated areas NW curb. Lots of grader scrapes. 0.5 x 0.6m spalls on all 4 corners of curbs - photo.
(Curb Type : Standard)				
Scaling (Percent Area)	0			
Bridge Rail		4	4	Retrofit angle bracket connection to parapet do not meet any standard and could be dangerous during a collision.
(Type : GALVANIZED STEEL FLEX BEAM)				
Bridge Rail Posts		5	5	Posts are rusting.
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)				
Bridge Rail/Posts Coating		4	4	
(Type : GALVANIZED)				

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Secondary Span : PE)						
Sidewalk				X	X	
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	4		
Now				12		
Girders				3	3	Span 1, G1 & 8,10, S3 two medium cracks within AZ one leg. S1G2-4,5, S3G1,3-5, 8-10 have wide crack in leg with AZ with medium cracks in the other leg. Wide longitudinal crack on deck top and underside SP1 G3 & SP1G8 - photo. SP1/G2,3,4,5,6,7 & 8 and SP3G7 undersides have moisture/salt discolouration. SP1 G3, 9 SP3 G6,7 wide crack in AZ 2 legs concrete soundness not confirmed - photo. SP1 G2,3,4,5,6,7 & 8 and SP3 G3,4,5,6 & 7 all have deep (50mm+) surface spalls partially patched with ACP.
Last Complete Inspection Date		24-Jun-2010				
Cracking (Y/N)		Yes				
Spalling (Percent Area)		1				
Lift or Connector Pocket Grouted (Y/N)		Yes				
(Number Of Girders : 20)						
Span Alignment Problems						
Vertical (Y/N)		No				
Horizontal (Y/N)		No				
Superstructure General Rating				3	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 : 1:1)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Bearing Seats/Caps/Corbels				7	7	
(Type : CONCRETE)						
(Depth(mm) :)						
(Width(mm) :)						
Backwalls/Breastwalls				X	X	
Greatest Height (m)						
Wingwalls				5	5	Wide cracks at cap to wingwall transitions. Medium cracks on outside face of wingwall NW corner.
(Total Number of Bearing Piles : 7:7)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	14	0	0	0		
Now	14					
Piles				N	N	
Paint/Coating				X	X	
Abutment Stability				7	7	
Scour/Erosion				7	7	

Substructure						
Bridge Component				Last	Now	Explanation of Condition
Piers/Bents						
(Type : PIER-SOLID)						
(Total Number of Caps/Corbels : 1:1)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Bearing Seats/Caps/Corbels				7	7	
(Type : CONCRETE)						
(Total Number of Bearing Piles : 0:0)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Pier Shaft/Piles				5	5	
Greatest Height (m)		6.00				
Bracing/Struts/Sheathing				X	X	
Nose Plate				6	6	
Paint/Coating				4	4	50% of paint peeled on nose plate.
(Colour Description :)						
(Colour Code :)						
Pier Stability				7	7	
Scour				5	5	
Debris (Y/N)		No				
Substructure General Rating				5	5	
Structure Usage						
				Last	Now	Explanation of Condition
Channel						
(U/S Direction : N)						
(D/S Direction : S)						
Alignment				7	7	
Bank Stability				5	5	
HWM (m below Top of Curb)						No HWM visible. Beaver dam 50m D/S.
Drift (Y/N)		No				
Slope Protection				5	5	Class 2 along piers.
(Type :)						
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							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2010	Schedule for major rehab: pave approaches, upgrade bridgerail & approach rail. Replace 3 rated girders, install deck o/l, repair curbs & seal, repair headslope erosion, seal piers & repair joints.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	57.3/57.3	Est. Repl. Yr	2023	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girders.		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	Stew Hagan		Previous Assistant's Name	Kris Bosters			
Next Inspection Date	24-Sep-2013		Previous Inspection Date	07-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							