Bridge Inspection

Bridge File Number	72029 -1 Bridge	Form Type	PCS
Year Built/Year Supstr	1964/1964	Lot No.	3
		Inspector Name	Jason Rusu
Bridge or Town Name	ROLLING HILL	Inspector Class	BR CLS A
Located Over	TWELVE MILE COULEE, 2.13.3, WATERCRS-ST	Assistant Name	
		Assistant Class	
Located On	875:04 C1 24.977	Inspection Date	18-Mar-2012
Water Body Cl./Year		Data Entry By	Erin Roberts
Navigabil. Cl./Year		Data Entry Date	11-Apr-2012
Legal Land Location	NW SEC 32 TWP 15 RGE 13 W4M	Reviewer Name	Garry Roberts
Longitude, Latitude	-111:46:07, 50:18:21	Review Date	23-Mar-2012
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	Tim Davies
Contract Main. Area	CMA23	Dept. Review Date	17-Apr-2012
Clear Roadway/Skew	8.2 / -30 deg. (LHF)	Follow-Up By	
AADT/Year	610 / 2011 (A)		
Road Classification	RCU-209-110		
Detour Length (km)	50		

Allowable Load (t):	Single	CS1 30 GIRDER	Semi	CS2 52 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	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	
Other Sign Types	Bridge narrows

Utilities (Located at)

Utility Attachments			
Telephone	West side on curb unit & West r/w.	Gas	Crosses canal 40m East.
Power	3 wires East crosses road 50m South	Municipal	
Others		Problem (Y/N)	No
Remarks	Conduit disconnected.		

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		9	9	
Roadway Width (m)	8.800			
Approach Bump		4	5	
Guardrail (Y/N)	Yes			Not thriebeam.
Guardrail		5	6	
Length (m)	7.800			
Current Standard (Y/N)	No			
Termination Type	TURN DOWN			
Drainage		7	7	
Approach Road General Rating		**4**	**9**	

Superstructure

Bridge Component		Last	Now	Explanation of Condition
(Primary Span : **HC, 3 Spans, Lengths(m): 8.5-8.5-8.5, A-Ident Number:**)				
Special Features				
Special Feature				Bridge is built over a CSP culvert encased in concrete.
(Type :)				
Special Feature				
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%)	1 (%)	2 (%)	3 (%)
Last				
Now	0.0	0.0	0.0	0.0
Wearing Surface		5	5	(5 key cracks @ North span, 3 @ center span & 5 @ South span.)02/05/15
(Material Type : **ACP**)				
(Thickness(mm) : **50**)				
Lateral Connection Problem (Y/N)	Yes			
Deck Top		N	N	
Deck Rideability		7	7	
Deck Joints		N	N	
Bump (Y/N)	No			
Deck Drainage		6	7	
Drains Clogged (Y/N)	No			
Curbs/Median		4	5	4 spall locations with exposed rebar at SW.
(Curb Type : **Standard**)				
Scaling (Percent Area)	0			
Bridge Rail		4	6	Repaired bridgerail. 2 Loose nuts @ West curb @ 1st post from North @ Span 3. Both nuts on Traffic side
(Type : **GALVANIZED STEEL FLEX BEAM**)				
Bridge Rail Posts		4	4	
(Type : **POST STEEL;POST STEEL**)				
Bridge Rail/Posts Coating		4	5	
(Type : **PAINT**)				
Sidewalk		X	X	
Girder Detail Ratings				
	N (count)	1 (count)	2 (count)	3 (count)
Last				
Now	0	0	0	0
Girders		4	4	9 girders have narrow to wide longitudinal cracks in 1 leg only. 4 have narrow shear cracks @ North span only.3 have narrow shear cracks in South span. S3 has 1 girder with wide and narrow crack in legs in AZ S1 has 1 girder with wide & Narrow crack in legs in AZ - curb
Last Complete Inspection Date	18-Mar-2012			
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
Lift or Connector Pocket Grouted (Y/N)				
(Number Of Girders : **30**)				
Span Alignment Problems				
Vertical (Y/N)	No			25mm misalignment of center span
Horizontal (Y/N)	Yes			
Superstructure General Rating		**4**	**4**	

Substructure						
Bridge Component					**Last**	**Now**	**Explanation of Condition**
Abutments							
(Extended Backwall Piles (Y/N) : **Y**)							Abutment piles and caps have fire damage. North abutment. Repaired by County. 6 mm deep charring @ South.
(Extended Backwall Piles Spacing(mm) : **1500**)							
(Total Number of Caps/Corbels : **3:3**)							
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) : **305**)							
Backwalls/Breastwalls					5	5	
Greatest Height (m)	1.50						
Wingwalls					5	5	
(Total Number of Bearing Piles : **8:8**)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now	0	0	0	0			
Piles					5	5	
Paint/Coating					X	X	
Abutment Stability					6	6	
Scour/Erosion					4	4	Erosion @ A1 @ SE Starting to undermine backwall.
Piers/Bents							
(Type : **PIER-COLUMN**)							Piers, piles & bracing have fire damage - 6mm deep charring @ all
(Total Number of Caps/Corbels : **3:3**)							
Bearing Seats/Caps/Corbels Detail Ratings							Steel bearing plates w/rings plate & ring @ tops of all piles. 1 pile @ pier 1 has double bearing plate
	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) : **356**)							
(Total Number of Bearing Piles : **8:8**)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now	0	0	0	0			
Pier Shaft/Piles					5	5	
Greatest Height (m)	3.00						
Bracing/Struts/Sheathing					4	4	One broken @ North and East end.
Nose Plate					X	X	
Paint/Coating					X	X	
(Colour Description :)							
(Colour Code :)							
Pier Stability					6	6	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Scour		5	5	Scoured to top of concrete of culvert, avg 1200mm deep. Culvert covered with concrete under bridge to prevent scour.
Debris (Y/N)	Yes			Old piles & Planks from wingwalls @ abuts
Substructure General Rating		**5**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **W**)				(Crack fill over culvert under bridge.) 02/05/15
(D/S Direction : **E**)				
Alignment		7	7	
Bank Stability		5	3	Ditch drain failure @ NE.
HWM (m below Top of Curb)				None visible.
Drift (Y/N)	No			
Slope Protection		5	5	
(Type : **NONE; NONE**)				
Guidebank/Spurs		X	X	
Adequacy of Opening		9	9	
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**3**	

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						
REPAIR/REPLACE TIMBER CAPS						
REPAIR ABUTMENT SCOUR/EROSION	2012	Ditch erosion at NE reconnect CSP drain and re slope existing.				
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
INSTALL STRUTS						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**50.0/50.0**	**Sufficiency Rating (Last/Now) (%)**	**51.0/55.2**	Est. Repl. Yr	2020	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection		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	Tim Davies	Previous Assistant's Name	
Next Inspection Date	18-Jun-2015	Previous Inspection Date	17-Apr-2009
Inspection Cycle (Default) (months)	39		
Comment			