Bridge Inspection

Bridge File Number	77591 -1 Bridge	Form Type	PCS
Year Built/Year Supstr	1967/1967	Lot No.	2
		Inspector Name	Owen Salava
Bridge or Town Name	NORDEGG	Inspector Class	BR CLS A
Located Over	CRIPPLE CREEK, 6.161.2.3, WATERCRS-ST	Assistant Name	
		Assistant Class	
Located On	734:16 C1 50.585	Inspection Date	02-Dec-2010
Water Body Cl./Year		Data Entry By	Marcia Chavez
Navigabil. Cl./Year		Data Entry Date	03-Jan-2011
Legal Land Location	NW SEC 20 TWP 37 RGE 14 W5M	Reviewer Name	John O'Brien
Longitude, Latitude	-115:58:38, 52:11:57	Review Date	16-Dec-2010
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	Chris Black
Contract Main. Area	CMA18	Dept. Review Date	05-Jan-2011
Clear Roadway/Skew	6.4 / 0 deg.	Follow-Up By	
AADT/Year	60 / 2009 (A)		
Road Classification	RLU-208G-90		
Detour Length (km)	150		

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. Posted 40t / 54t sign @ North jct (SB) not for this bridge.							

Hazard Marker At Bridge (Y/N)	Yes
Remarks	Offline, not to standard.
Other Sign Types	

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	"S" bend immediately North.
Vertical Alignment		4	4	In sag curve, limited sight distance.
Roadway Width (m)	7.000			
Approach Bump		7	7	
Guardrail (Y/N)	No			
Guardrail		X	X	
Length (m)				
Current Standard (Y/N)	No			
Termination Type	NONE			
Drainage		7	7	
Approach Road General Rating		**4**	**4**	

Superstructure						
Bridge Component					**Last**	**Now**	**Explanation of Condition**
(Primary Span : **HC, 1 Spans, Lengths(m): 8.5, A-Ident Number:**)							
Special Features							
Special Feature						X	
(Type :)							
Special Feature						X	
(Type :)							
Wearing Surface/Deck Top Detail Ratings							
	N (%)	1 (%)	2 (%)	3 (%)			Snow covered.
Last							
Now	100.0	0.0	0.0	0.0			
Wearing Surface					X	X	
(Material Type :)							
(Thickness(mm) :)							
Lateral Connection Problem (Y/N)		No					
Deck Top					N	N	Covered with snow.
Deck Rideability					6	6	
Deck Joints					X	X	Protection angle.
Bump (Y/N)		No					
Deck Drainage					7	7	
Drains Clogged (Y/N)		No					
Curbs/Median					5	N	(Minor plow scrapes. 22Nov2005).
(Curb Type : **Standard**)							
Scaling (Percent Area)		10					
Bridge Rail					5	5	Single layer with short splice, improper lap. Insufficient splice bolts.
(Type : **FLEX BEAM**)							
Bridge Rail Posts					6	6	Superficial rusting, paint 30% peeling. Blue paint.
(Type : **POST STEEL;POST STEEL**)							
Bridge Rail/Posts Coating					4	4	
(Type : **PAINT**)							
Sidewalk					X	X	
Girder Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now	0	0	0	0			
Girders					N	7	
Last Complete Inspection Date		02-Dec-2010					
Cracking (Y/N)		No					
Spalling (Percent Area)		0					
Lift or Connector Pocket Grouted (Y/N)							Unknown.
(Number Of Girders : **8**)							
Span Alignment Problems							
Vertical (Y/N)		No					
Horizontal (Y/N)		No					
Superstructure General Rating					**7**	**7**	

Substructure						
Bridge Component				**Last**	**Now**	**Explanation of Condition**
Abutments						
(Extended Backwall Piles (Y/N) : **Y**)						Plus extended backwall.
(Extended Backwall Piles Spacing(mm) : **700**)						
(Total Number of Caps/Corbels : **1:1**)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				7	7	
(Type : **TREATED TIMBER**)						
(Depth(mm) : **305**)						
(Width(mm) : **305**)						
Backwalls/Breastwalls				7	7	
Greatest Height (m)	4.20					
Wingwalls				7	7	
(Total Number of Bearing Piles : **5:5**)						Wood piles set in concrete footing.
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Piles				7	6	
Paint/Coating				X	X	
Abutment Stability				7	7	
Scour/Erosion				7	7	
Piers/Bents						
(Type :)						
(Total Number of Caps/Corbels :)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Bearing Seats/Caps/Corbels				X	X	
(Type :)						
(Depth(mm) :)						
(Width(mm) :)						
(Total Number of Bearing Piles :)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Pier Shaft/Piles				X	X	
Greatest Height (m)						
Bracing/Struts/Sheathing				X	X	
Nose Plate				X	X	
Paint/Coating				X	X	
(Colour Description :)						
(Colour Code :)						
Pier Stability				X	X	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		**7**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **E**)				Channel is skewed to bridge opening.
(D/S Direction : **W**)				
Alignment		4	4	
Bank Stability		4	6	Banks are solid rock 90 degree bends. Almost vertical banks @ NE & SW.
HWM (m below Top of Curb)				HWM is 0.3m below girder legs.
Drift (Y/N)	No			
Slope Protection		7	7	
(Type : **NATURAL; NATURAL**)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(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	2011	Replace / upgrade to double layer to meet standard, galvanized posts.				
SEAL CURBS						
PATCH DECK						
OVERLAY DECK						
STRAIGHTEN/REPLACE MEMBERS						
WASHING	2011	Remove gravel from deck top, if not done.				
SHOTCRETE REPAIRS						
CORE TIMBER CAPS/CORBELS						
REPAIR/REPLACE TIMBER CAPS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
INSTALL STRUTS						
OTHER ACTION	2011	Reset hazard markers to meet standard. (H)				
OTHER ACTION	2011	Install approach rail.				
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/72.2**	**Sufficiency Rating (Last/Now) (%)**	**63.4/61.5**	Est. Repl. Yr	2025	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection		Department Comments	

Maintenance Reviewed By		Date		Estimated Total	0
Proposed Long-Term Strategy	2003.07.30 Core Caps in 2010 and replace caps in 2013. Replce Bridge in 2020.				
On 3-Year Program (Y/N)	Y				
Proposed Action	2003.07.30 Core caps in 2010.				
Previous Inspector's Name	Dave Lam	Previous Assistant's Name			
Next Inspection Date	02-Mar-2014	Previous Inspection Date	22-Nov-2005		
Inspection Cycle (Default) (months)	39				
Comment					