Bridge Inspection

Bridge File Number	74352 W-1 Bridge	Form Type	CON
Year Built/Year Supstr	1956/1956	Lot No.	1
		Inspector Name	Garry Roberts
Bridge or Town Name	CANMORE	Inspector Class	BR CLS A
Located Over	1A:02 C1 0.313;CPR	Assistant Name	
Located On	1:02 L1 8.435	Assistant Class	
Water Body Cl./Year		Inspection Date	06-Feb-2012
Navigabil. Cl./Year		Data Entry By	Anne Roberts
Legal Land Location	NE SEC 28 TWP 24 RGE 10 W5M	Data Entry Date	12-Mar-2012
Longitude, Latitude	-115:19:54, 51:04:30	Reviewer Name	Tom Carey
Road Authority	Alberta Transportation (AIT)	Review Date	21-Feb-2012
Contract Main. Area	CMA28	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	15.2 / -20 deg. (LHF)	Dept. Review Date	22-Mar-2012
AADT/Year	12,750 / 2010 (A)	Follow-Up By	
Road Classification	RAD-412.4-120		
Detour Length (km)	1		

Allowable Load (t):	Single	CS1 43 DECK	Semi	CS2 62 DECK	Train	CS3 111 DECK	---> On Critical Spans ---->Critical Member
Design Loading:		HS20					---> Primary Span

Posting Information

Required Vert. Clearance Posting (m)				UNDER: 1A C1 6.1m								
Posted Vertical Clearance (Y/N)				Yes								
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	6.1	In Advance (Y/N)	Yes
Remarks	NB posting on 74352E. Confirmed accurate Sept. 24, 2010											

Required Load Posting (t)			Single		Semi		Truck Train	
Posted Loading (t)			Single		Semi		Truck Train	
Posted:	Lane	EB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)	
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Remarks	Not req'd							

Hazard Marker At Bridge (Y/N)	No
Remarks	
Other Sign Types	

Utilities (Located at)

Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	S curb & @ NE&SE to N	Gas	Under bridge.
Power	Conduit @ N column pier 3	Municipal	
Others	Telegraph line under bridge.	Problem (Y/N)	No
Remarks	Fiber-optics North row		

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Limited site distance East.
Vertical Alignment		6	6	
Roadway Width (m)	15.200			
Approach Bump		7	7	
Guardrail (Y/N)	Yes			Not thriebeam
Guardrail		7	7	
Length (m)	30.500			
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN ENDS			
Drainage		7	7	
Approach Road General Rating		**6**	**6**	

Superstructure

Bridge Component		Last	Now	Explanation of Condition
(Primary Span : **CS, 9 Spans, Lengths(m): 10.1-13.1-10.1-13.1-10.1-13.1-13.1-13.1-10.1, A-Ident Number:**)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%) / 1 (%) / 2 (%) / 3 (%)			
Last	0 / 0 / 0 / 0			
Now	0.0 / 0.0 / 0.0 / 0.0			
Wearing Surface		4	4	10% OF epoxy OVERLAY FAILED- @ inside lane. Chipcoat covered epoxy on concrete with isolated delams.
(Material Type : **CONCRETE - CONVENTIONAL CHIP SEAL COAT**)				
(Thickness(mm) : **50**)				Wide crack @ centerline @ east span
Deck Top		N	N	
Deck Rideability		6	6	
Deck Joints		4	4	Pier joint at 90 mm. Plow guards @ outside lanes only. Missing 3 at A1 and A2 and 2 at pier joint.
Temperature (deg. C)	-12			
(Expansion Type : **GLAND (WABO-MAUER, TRANSFLEX, ETC)**)				
(Fixed Type :)				
Gap Size (mm)	Gap Location			
75	E. abut.			
70	W. abut.			
Deck Drainage		6	6	
Drains Clogged (Y/N)	No			
Curbs/Median		3	3	Spall at South fascia over Pier 3 and P8 and North fascia of Sp. 4 and 5. Isolated spalls at inside curb face.
(Curb Type : **Standard**)				
Scaling (Percent Area)	5			
Bridge Rail		7	7	
(Type : **STEEL BRIDGE TUBE**)				
Bridge Rail Posts		7	7	SOME SURFACE CORROSION @ 5%
(Type : **POST STEEL;POST STEEL**)				
Bridge Rail/Posts Coating		4	4	
(Type : **PAINT**)				
Sidewalk		X	X	
Girders		X	X	
Diaphragms/Cross Frame		X	X	
Bearings		5	5	CORRODED @ ABUTS -Grout pads cracked and spalled @ steel bearings @ Abuts Additional concrete pads also
Temperature (deg. C)	-12			
(Expansion Type : **STEEL SLIDING PLATES WITH BRONZE PLATE IN BETWEEN;NEOPRENE STRIP BEARING**)				
(Fixed Type :)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		3	3	Crack in underside of deck runs entire length of bridge @ East span - crack is delaminated approx. 3 m^2. Transverse cracks in Sp. 2 with staining.
Stains (Percent Area)	10			

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **CS, 9 Spans, Lengths(m): 10.1-13.1-10.1-13.1-10.1-13.1-13.1-13.1-10.1, A-Ident Number:**)				
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				
Bearing Seats		6	6	
Backwalls/Breastwalls		6	6	
Wingwalls		5	5	
Piles		N	N	Buried.
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		X	7	
Piers/Bents				
(Type : **PIER-COLUMN**)				Cracks at ends of P 4, 5, 7 and 8
Bearing Seats/Caps		5	5	
(Type : **CONCRETE**)				
Pier Shaft/Piles		6	3	P2 - pile 5 spall crack 3 m2 and P3 - pile 1 spall crack 1 m2.
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		**6**	**3**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		6	6	
Traffic Safety Features		6	6	
Type	GUARDRAIL			
Slope Protection		7	7	Gabion baskets at West median.
(Type : **NATURAL; NATURAL**)				
Bank Stability		7	7	
Drainage		7	7	
Grade Separation General Rating		**6**	**6**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
GALVANIZE/PAINT BRIDGE RAIL						
RETROFIT BRIDGE RAIL						
SEAL CURBS	2012	Patch @ span 3 and 4 south and sp. 4 and 5 North- approx. 5m ²				
PATCH DECK	2012	Partial depth to deck underside, East span approx. 3 m². Patch chip coat 10 m2				
SEAL DECK	2012	GFE crack at surface East span.				
OVERLAY DECK						
REPAIR/REPLACE DECK JOINTS	2012	replace 8 missing plow guards.				
RESET/ PAINT BEARINGS						
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION	2012	Chip and patch pier pile delams approx. 4 m2				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**50.0/33.3**	**Sufficiency Rating (Last/Now) (%)**	**67.8/61.6**	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	Garry Roberts	Previous Assistant's Name	
Next Inspection Date	06-Nov-2013	Previous Inspection Date	24-Sep-2010

Inspection Cycle (Default) (months)	21
Comment	