

Bridge Inspection													
Bridge File Number	77803 W-1 Bridge					Form Type	PSR						
Year Built/Year Supstr	1979/1979					Lot No.	1						
Bridge or Town Name	CALGARY - MEMORIAL DRIVE (ALSO OVER NOSE CREEK)					Inspector Name	Garry Roberts						
						Inspector Class	BR CLS A						
Located Over	CPR					Assistant Name							
Located On	LOCAL ROAD					Assistant Class							
Water Body Cl./Year						Inspection Date	15-Jan-2013						
Navigabil. Cl./Year						Data Entry By	Kelsey Roberts						
Legal Land Location	NW SEC 13 TWP 24 RGE 1 W5M					Data Entry Date	02-Feb-2013						
Longitude, Latitude	-114:01:14, 51:02:55					Reviewer Name	Tom Carey						
Road Authority	Alberta Transportation (AIT)					Review Date	22-Jan-2013						
Contract Main. Area	UNDEFINED CMA					Dept. Reviewer Name	Tim Davies						
Clear Roadway/Skew	15.2 /					Dept. Review Date	04-Feb-2013						
AADT/Year	51,705 / 2001 (E)					Follow-Up By							
Road Classification	RLU-208-100												
Detour Length (km)	6												
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62			----> On Critical Spans ---->Critical Member
Design Loading:	HS25											----> Primary Span	
Posting Information													
Required Vert. Clearance Posting (m)													
Posted Vertical Clearance (Y/N)		No											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)		
Remarks	Not required.												
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	At Bridge (Y/N)	No			
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	At Bridge (Y/N)	No			
Remarks	Not required.												
Hazard Marker At Bridge (Y/N)		No											
Remarks													
Other Sign Types		80KM/HR, MERGE, ROUTE, RAMP 50KM/HR											
Utilities (Located at)													
Utility Attachments		POWER UTILITIES-POWER LINE											
Telephone	In area					Gas							
Power	5 Wire at NE and 10 wire under span 3					Municipal		Manhole at East approach					
Others	Light standards					Problem (Y/N)		No					
Remarks	Conduit at West Abut												
Approach Road													
				Last	Now	Explanation of Condition							
Horizontal Alignment				5	5	Curve at ramp and controlled intersection @ West. B4304							
Vertical Alignment				6	6								
Roadway Width (m)		15.000											
Approach Bump				4	6								
Guardrail (Y/N)		Yes			Parapets. 1m2 spall at NE. SE is offset 80mm against traffic.								
Guardrail				3	3								
Length (m)		70.000											
Current Standard (Y/N)		No											
Termination Type		TURNDOWN											
Drainage				6	6								
Approach Road General Rating				5	5								

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : PB, 4 Spans, Lengths(m): 22.9-22.9-22.9-29, 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	0	0	0	0		
Now	30.0	0.0	0.0	0.0		
Wearing Surface				7	7	
(Material Type : POLYMER MODIFIED ACP)						
(Thickness(mm) : 90)						
Lateral Connection Problem (Y/N)		No				
Deck Top				N	N	
Paved						
Deck Rideability				7	7	
Deck Joints				3	3	
Temperature (deg. C)		3			2m long section of seal out of extrusion at South end of East abut deck joint. Appears to have been reinstalled but still leaks.	
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
65		E abut				
65		W abut				
Deck Drainage				3	3	
Drains Clogged (Y/N)		No			Actively Leaking onto Abut @ SE and causing scaling/ spalling.	
Curbs/Median				3	3	
(Curb Type :)						
Scaling (Percent Area)		10			Isolated spall cracks. Spalled at backside of approximately 12 post locations and along tops. Parapet curbs. Plastic rail and posts removed but open post holes. 40% snow covered.	
Bridge Rail				3	X	
(Type :)						
Bridge Rail Posts				3	X	
(Type :)						
Bridge Rail/Posts Coating				5	X	
(Type :)						
Sidewalk				X	X	
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)	Sp.1-G1 has wide crack at underside at P1.	
Last	0	0	0	0		
Now	0	0	0	1		
Girders				4	3	
Cracking (Y/N)		Yes			Corrosion spalling and corrosion not at crack at Span 2 south ext girder. Spall with visible rebar at U/S of Sp 1 -G1 and Sp3 -G1. Sp.1-G1 has minor high load scrape and chip.	
Spalling (Percent Area)		0				
(Number Of Girders : 5)						

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PB, 4 Spans, Lengths(m): 22.9-22.9-22.9-29, A-Ident Number:)				
Diaphragms/Cross Frame		7	7	
Bearings		6	6	Integral @ pier
Temperature (deg. C)	3			
(Expansion Type : STEEL SLIDING PLATES WITH BRONZE PLATE IN BETWEEN)				
(Fixed Type :)				Corrosion at exterior bearings.
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		6	5	Minor corrosion and some scaling at deck ext at South at span 3. at subdeck drains. Deck underside rates "7" other than this
Stains (Percent Area)	2			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		6	5	Isolated spall cracks at SE and NW
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	
Wingwalls		5	5	Cracked and stained at NE
Piles		N	N	Buried.
Paint/Coating		5	5	
Abutment Stability		7	7	
Scour/Erosion		6	6	
Piers/Bents				
(Type : PIER-SOLID)				Integral @ piers
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		6	5	Pigmented sealer.
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		7	7	
Debris (Y/N)	No			
Substructure General Rating		6	5	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	Road & ped way under span 1. Path under Sp 2, Nose creek under sp 2-3, CPR under sp 4
Traffic Safety Features		5	5	
Type	parapets			
Slope Protection		4	5	Gabions @ West abut 170mm wide crack @ East - sealed cracked & heaved 100mm @SE
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	5	
Drainage		7	7	
Grade Separation General Rating		7	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Patch parapet spalls approx 20m2. Reset SE approach parapet.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Replace or re-install East abut joint gland or new deck joint.					
RESET/ PAINT BEARINGS	2013	Blast and recoast exterior.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Coat abutment wings & deck ext underside @ SE also repair girder spalls @ SE and NW.					
OTHER ACTION	2013	Patch Sp.1-G1, Sp.2-G1 and Sp.3-G1.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/44.4	Sufficiency Rating (Last/Now) (%)	51.7/41.5	Est. Repl. Yr	2040	Maint. Req'd. (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	15-Apr-2016		Previous Inspection Date	17-Apr-2011			
Inspection Cycle (Default) (months)	39						
Comment							