

Bridge Inspection							
Bridge File Number	75661 N-1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1963/1963			Lot No.	2		
Bridge or Town Name	MORNINGSIDE			Inspector Name	Jason Saly		
Located Over	604:02 C1 17.109			Inspector Class	BR CLS A		
Located On	2:26 R1 34.302			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	19-Mar-2013		
Legal Land Location	NE SEC 34 TWP 41 RGE 26 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-113:39:46, 52:34:46			Data Entry Date	01-Apr-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA19			Review Date	26-Mar-2013		
Clear Roadway/Skew	12.8 /			Dept. Reviewer Name	Chris Black		
AADT/Year	23,260 / 2011 (A)			Dept. Review Date	09-Apr-2013		
Road Classification	RFD-412.4-130			Follow-Up By			
Detour Length (km)	1						
Allowable Load (t):	Single	CS1 38 GIRDER	Semi	CS2 61 GIRDER	Train	CS3 88 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20				----> Primary Span		

Posting Information												
Required Vert. Clearance Posting (m)		UNDER: 604 C1 5.4m										
Posted Vertical Clearance (Y/N)		Yes										
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.4	In Advance (Y/N)	Yes
Remarks												
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)		No										
Remarks		Not required.										
Other Sign Types		Information, Route										

Utilities (Located at)				
Utility Attachments				
Telephone			Gas	
Power	Underground N span.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	On vertical crest curve, upgrade to North.
Vertical Alignment		7	7	
Roadway Width (m)	11.600			S end only with thrie beam transition.
Approach Bump		7	7	
Guardrail (Y/N)	Yes			
Guardrail		7	7	
Length (m)	80.000			
Current Standard (Y/N)	Yes			
Termination Type	Turn Down			
Drainage		7	7	
<b>Approach Road General Rating</b>		<b>7</b>	<b>7</b>	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PE, 3 Spans, Lengths(m): 12.8-10.7-12.8, A-Ident Number: )					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Snow/dirt covered.
<b>Last</b>	0	0	0	0	
<b>Now</b>	5.0	0.0	0.0	0.0	
Wearing Surface			4	4	Chipseal on epoxy overlay on fibre reinforced concrete O/L. 5% chipseal worn off. SF concrete o/l placed in 1992, epoxy placed 1998.
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			7	N	Steel strip welded to top of joints to match O/L. A2-76mm, P2-75mm, A1-68mm, P1-80mm. Gaps filled with dirt, glands not visible.
Bump (Y/N)	No				
Deck Drainage			7	7	Center span deck drain grouted in.
Drains Clogged (Y/N)	No				
Curbs/Median			6	N	Snow covered.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)	0				
Bridge Rail			6	6	4th post from NW missing bolt. 75mm bend to bottom rail 4th panel from NW. 3rd post from North, only 1/2 bolt projects into nut. 4th panel from South @ East missing bolt @ bottom panel connection 1st panel from South on West rail, bent vertical. Panel 7 East damaged, missing bars. EP6,7 accident damage. Retrofit rail installed. Bridgerail post base plates snow covered.
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )					
Bridge Rail Posts			6	N	
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			7	7	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
<b>Girder Detail Ratings</b>					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0	0	0	0	
Girders			4	4	S3G4,14, S2G7, S1G3-5,7-9,14-15 longit. cracks in AZ, 1 leg. Vertical end of girder cracks over piers at S1G15, S2G1, S2G15 both ends and S3G15. S2G1 has high load spall. Patches on numerous girders.
Last Complete Inspection Date	19-Mar-2013				
Cracking (Y/N)	Yes				
Spalling (Percent Area)	1				
Lift or Connector Pocket Grouted (Y/N)	Yes				
(Number Of Girders : <b>45</b> )					
<b>Span Alignment Problems</b>					
Vertical (Y/N)		No			
Horizontal (Y/N)		No			
<b>Superstructure General Rating</b>			<b>4</b>	<b>4</b>	

Substructure							
Bridge Component		Last	Now	Explanation of Condition			
<b>Abutments</b>							
(Extended Backwall Piles (Y/N) : <b>N</b> )							
(Extended Backwall Piles Spacing(mm) : )							
(Total Number of Caps/Corbels : <b>1:1</b> )							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
<b>Last</b>	0	0	0	0			
<b>Now</b>	0	0	0	0			
Bearing Seats/Caps/Corbels				5	4	Stained with vertical narrow cracks. A2 has a spall near centreline from girders touching teh abut seat.	
(Type : <b>CONCRETE</b> )							
(Depth(mm) : )							
(Width(mm) : )							
Backwalls/Breastwalls				4	N		
Greatest Height (m)		1.50					
Wingwalls				5	5		
(Total Number of Bearing Piles : <b>0:0</b> )							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
<b>Last</b>	100	0	0	0			
<b>Now</b>	100	0	0	0			
Piles				N	N	Buried.	
Paint/Coating				X	X		
Abutment Stability				7	7		
Scour/Erosion				7	7		
<b>Piers/Bents</b>							
(Type : <b>PIER-COLUMN</b> )							
(Total Number of Caps/Corbels : <b>1:1</b> )							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
<b>Last</b>	0	0	0	0	Delaminations on sides of cap caused by pile leverage or pile corrosion.		
<b>Now</b>	0	0	0	0			
Bearing Seats/Caps/Corbels				4	4		
(Type : <b>CONCRETE</b> )							
(Depth(mm) : )							
(Width(mm) : )							
(Total Number of Bearing Piles : <b>10:10</b> )							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
<b>Last</b>	0	0	0	0			
<b>Now</b>	0	0	0	0			
Pier Shaft/Piles				7	7		
Greatest Height (m)		5.00					
Bracing/Struts/Sheathing				X	X		
Nose Plate				X	X		
Paint/Coating				3	4	Superficial corrosion on column splash zone with 20% point failure. Blue.	
(Colour Description : )							
(Colour Code : )							

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		6	6	
Scour		X	X	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>4</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	S604
Traffic Safety Features		6	6	Guardrail and concrete barrier continuous through the structure. Hazard boards both sides, both ends.
Type	Guardrail			
Slope Protection		7	7	
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		7	7	
Drainage		7	7	
<b>Grade Separation General Rating</b>		<b>6</b>	<b>6</b>	

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	2013	Clean joints.					
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	2013	Spray patch chip seal coat.					
OTHER ACTION	2018	Crack repairs and patch at next rehab.					
OTHER ACTION	2018	Patch N abut.					
OTHER ACTION	2013	Seal pier caps; patch delamination.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>62.0/63.3</b>	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor cracks in girder webs & legs on AZ. No action on pile paint at this time. Bridge deck testing never complete at this site.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	Schedule Replacement in 2018. \$2M/structure. DH Guardrail warrants for existing piers need to be checked and the protection work is required.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	19-Dec-2014		Previous Inspection Date	15-Sep-2011			
Inspection Cycle (Default) (months)	21						
Comment							