

Bridge Inspection							
Bridge File Number	75661 S-2 Bridge			Form Type	PCS		
Year Built/Year Supstr	1963/1963			Lot No.	1		
Bridge or Town Name	MORNINGSIDE			Inspector Name	Jason Saly		
Located Over	604:02 C1 17.085			Inspector Class	BR CLS A		
Located On	2:26 L1 34.297			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	-113:39:47, 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)	5.4	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)		In Advance (Y/N)	Yes
Remarks	WB posted of 75661N.											
Required Load Posting (t)	Single				Semi				Truck Train			
Posted Loading (t)	Single				Semi				Truck Train			
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	At Bridge (Y/N)	No	At Bridge (Y/N)	No
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	At Bridge (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 North span.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	Typical G/S. On vertical crest curve, on down grade to South.
Vertical Alignment		7	7	
Roadway Width (m)	11.500			North end only with thrie beam transition.
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		9	7	
Length (m)	100.000			
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 covered.
<b>Last</b>	0	0	0	0	
<b>Now</b>	10.0	0.0	0.0	0.0	
Wearing Surface			6	4	Chip seal coat on polymer overlay on top of 100mm fibre reinforced concrete O/L. Random areas of lost seal coat & debonded/lost epoxy. SF concrete o/l placed in 1992, epoxy placed in 1998.
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT;CONCRETE</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)		No			
Deck Top			X	X	
Deck Rideability			7	7	
Deck Joints			5	N	A1-73mm, P1-84mm, P2-75mm, A2-73mm. Gaps filled with dirt; glands not visible.
Bump (Y/N)		No			
Deck Drainage			7	7	Center span deck drains grouted.
Drains Clogged (Y/N)		No			
Curbs/Median			5	N	(Curb height 150mm. 15Sep2011) - Snow covered.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		0			
Bridge Rail			6	6	1 broken slats in 3rd panel from SW. Retrofit rail installed.
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )					
Bridge Rail Posts			6	N	(3 posts damaged. Slight damage to post. 2 A/B assemblies @ East & 3 @ West have less than full bolt into nut, 3rd post from North has less than 1/2 bolt threaded into nut. Grout pad deterioration. 15Sep2011) - Bridgerail post base plates snow covered.
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			7	7	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	3	
<b>Now</b>	0	0	0	3	
Girders			3	3	0.1 to 0.3mm narrow flexural cracks @ 200 to 300mm spacing. S1G15, S2G1 & S2G15 have vertical end of girder cracks. Some cracked girder legs have been patched. S2G14, 2 legs longit. cracks in AZ. S3G8 spall in AZ @ abut. S3G10 small spall in AZ @ pier. 1 leg S2G1-2,8-12, S3G9,14; S1G1,15.
Last Complete Inspection Date		19-Mar-2013			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		1			
Lift or Connector Pocket Grouted (Y/N)					
(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>3</b>	<b>3</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				6	6	
(Type : <b>CONCRETE</b> )						
(Depth(mm) : )						
(Width(mm) : )						
Backwalls/Breastwalls				6	6	Hairline vertical cracks in South abutment. Greatest height 0.5m.
Greatest Height (m)		1.50				
Wingwalls				5	5	Parging broken 200 x 300 @ NE wingwall.
(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		
<b>Now</b>	0	0	0	0		
Bearing Seats/Caps/Corbels				4	4	Cap is cracked at pile locations. Surface delam cause may be pier migration at base or corrosion of pipe piles.
(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				4	4	Superficial corrosion @ bottom of columns, splash zone - no action at this time.
(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	
Traffic Safety Features		6	6	Not Guardrail with concrete barrier continuous through structure, stop at pier. Hazard boards on East & West end of both sides.
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 Jnts.				
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	At next rehab inject epoxy into girder cracks and patch as required.				
OTHER ACTION	2013	Spray patch chip seal coat.				
OTHER ACTION	2013	Crack repairs to pier caps at next rehab.				
OTHER ACTION						
OTHER ACTION						

<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>60.0/60.0</b>	<b>Est. Repl. Yr</b>	<b>2025</b>	<b>Maint. Req. (Y/N)</b>	<b>Yes</b>
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Special Comments for Next Inspection	Monitor girders for further cracking/spalling in AZ. Bridge deck testing never completed on this structure.	Department Comments
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Maintenance Reviewed By	Date	Estimated Total	0
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Proposed Long-Term Strategy

On 3-Year Program (Y/N)

Proposed Action

Previous Inspector's Name	Owen Salava	Previous Assistant's Name
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Next Inspection Date	19-Dec-2014	Previous Inspection Date	15-Sep-2011
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Inspection Cycle (Default) (months)	21
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Comment

**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 jnts.	Operations wil do with annual washing program	2013		
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	At next rehab inject epoxy into girder cracks and patch as required.	Defer to replacement 2023	2023		
OTHER ACTION	2013	Spray patch chip seal coat.	Sent to Operations			
OTHER ACTION	2013	Crack repairs to pier caps at next rehab.	Defer to replacement	2023		
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>60.0/60.0</b>	Est. Repl. Yr	2025	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection	Monitor girders for further cracking/spalling in AZ. Bridge deck testing never completed on this structure.		Department Comments	Tentatively programmed in PMA to be replaced in 2023. CB		
Maintenance Reviewed By	Chris Black	Date	30-Apr-2013	Estimated Total	0	
Proposed Long-Term Strategy						
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			