

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B03012023-1	
Date: 9/28/2022		Inspected By: M Button		Category: Office - Bridge Office	
BRIDGE INFORMATION					
Site:		2-059 - LAWN BRIDGE WEST (MAIN HWY.) - R220			
SUBSTRUCTURE					
Condition:	F1 - Fair	Bearings:	F1 - Fair	Bearing Seat:	P1 - Poor
Comments:	- East abutment has horizontal cracks throughout with suspected wide spread delaminations. Exterior corners have moderate spalling and disintegration. - Bearings have bulge's and deformation lines, F1. - West abutment has a single wide horizontal crack along the abutment face. The south exterior corner has wide spread disintegration. - Bearings have bulge's and deformation lines, F1. - Bearing seat has a large delaminated chunk of concrete under the girder which may be at risk to cause girder undermining if it spalls, P1. - All wingwalls have light to moderate map cracking with light efflorescence.				
SUPERSTRUCTURE					
Condition:	F1 - Fair	Expansion Joints:	P1 - Poor		
Comments:	- Downstream exterior girder has light longitudinal cracks on the top flange at mid span with light efflorescence. There is no deck cantilever in this area to protect the girder. - Both exterior girders have hairline map crack patterns developing. - Several interior girders have efflorescence leachate at the top flange and deck connection. Girders overall in fair condition, F2 to F1. - West abutment diaphragms have light to severe spalling. - Deck soffit has isolated locations of efflorescent leachate and areas of honeycombs from initial construction. Deck overall in fair condition, F1. - South deck fascia have light to moderate cracking with efflorescence. North deck fascia in fair condition. - Expansion joints are paved over and suspected to be leaking, P3.				
DECK					
Condition:	F1 - Fair	Curbs:	P3 - Poor		
Hand Rail:	F1 - Fair	Roadway Condition:	G - Good		
Approach Rail:	F1 - Fair				
Comments:	- Asphalt in good condition. - Curbs have isolated cracks but otherwise are in fair condition. - Original concrete rails have scaling throughout. Joints in rails over posts have missing mortar, F1. - Guiderail in fair to good condition, are not connected to end blocks, does not have regulation post spacing and does not have regulation sized hazard markers.				
HYDROLOGY					
Water Velocity:	m/s	Ice Problem:	N - No Problem		
Water Depth:	m	Scour Problem:	N - No Problem		
Waterway:	01 - Adequate	Debris Problem:	N - No Problem		
Comments:	- Ditching discharge on the northwest corner of the bridge which runs along the wingwall. Bridge abutments perched high above river bed.				
REPLACEMENT/REHABILITATION					
Next Rehab. Date:	2026	Replacement Year:	2050		
Antic. Rehab. Cost:	\$200,000	Replacement Cost:	\$3,000,000		

Recommendations: - Replace structure rails and end blocks. Increase post spacing and attach to new end blocks. Install regulation sized hazard markers. - Repair abutments and encase wingwalls. - Install culvert on northwest corner of structure to prevent abutment deterioration. - Replace expansion joints. - Replace curbs.

OBSERVATIONS

Overall Condition:	F1 - Fair	Requires Further Inspection:	No
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Additional Observations: - Bridge overall in fair condition with P3 and P1 areas. - Steep slopes. - Scheduled Salmon River.

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2024.