

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B11182024-5	
Date: 11/11/2024		Inspected By: M Button / T Upshall		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-149 - NORTH ARM BRIDGE - R60			
SUBSTRUCTURE					
Condition:	F1 - Fair	Bearings:	I - Inapplicable		
		Bearing Seat:	I - Inapplicable		
Comments:	Light cracking and efflorescence on all four wingwalls. Both abutments have light cracking with efflorescence at their corners. Light erosion to partially submerged abutment footings. Bearing and bearing seat inspection too high for inspection.				
SUPERSTRUCTURE					
Condition:	P3 - Poor	Expansion Joints:	P1 - Poor		
Comments:	Rectangular concrete beams in good condition. Some wide cracks in concrete encasing beam ends. Efflorescence in beam end encasing blocks at structure corners. First meter of deck soffit, out from both abutments, have narrow cracks with efflorescence. Deck soffit cantilever has isolated cracking with efflorescence throughout. Issue more dominant on southeast corner where cracks with efflorescence are grouped tightly. Free end of structure joint causing distress to elements below.				
DECK					
Condition:	F1 - Fair	Curbs:	F1 - Fair		
Hand Rail:	P3 - Poor	Roadway Condition:	F1 - Fair		
Approach Rail:	F1 - Fair				
Comments:	Top rail on northwest corner of structure missing. Vegetation and debris continuing to accumulate along the curbs. Light map cracking throughout all four end blocks. Approach rail joiner embedded in end blocks. No hazard markers on end blocks. Approach rail in good condition but is not "guide rail structures". Guiderail on route 60, northwest of structure, in poor condition. East approach lower than elevation of paved bridged deck. Exposed concrete deck at both ends of structure with wide cracks. Cracks exhibit a form of progressive edge cracking. Suspect these cracks are through slab and are causing the efflorescence seen below on the deck soffit. Some areas around the cracks are delaminated. Reinforcement exposed in some locations.				
HYDROLOGY					
Water Velocity:	Fast m/s	Ice Problem:	P - Possible Problem		
Water Depth:	Unknown m	Scour Problem:	P - Possible Problem		
Waterway:	01 - Adequate	Debris Problem:	N - No Problem		
Comments:	Fast flowing salmon river.				
REPLACEMENT/REHABILITATION					
Next Rehab. Date:	2026	Replacement Year:	2040		
Antic. Rehab. Cost:	\$\$400,000	Replacement Cost:	\$\$3,500,000		
Recommendations:	Hazard markers should be installed on guiderail at all four corners of structure. Replace joiner in structure rail. Replace sections of deck cantilever and first meter of deck on approaches. Regrade east approach to match the elevation of the bridge deck. Waterproof and repave the structure. Modify structure rail to accommodate				

expansion on fixed end. Install proper expansion joints or convert to semi-integral. Years based on rehabilitation being

OBSERVATIONS

Overall Condition:	F1 - Fair	Requires Further Inspection:	No
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Additional Observations:	Structure in fair condition overall. P3 on deck soffits over abutments and sections of deck cantilever. P1 expansion joint. A rehabilitation in short order will extend the life of this structure considerably.
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Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2026.