

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B02172025-8	
Date: 2/12/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-243 - HEART'S DELIGHT BROOK BRIDGE NORTH - R80			
SUBSTRUCTURE					
Condition:	P3 - Poor	Bearings:	I - Inapplicable		
		Bearing Seat:	P3 - Poor		
Comments:	- On the northwest corner, the construction joint between curb and top of wingwall open and has caused the disintegration of the wingwall below. Northwest wingwall disintegrated with considerable section loss, P. - Both abutments west exterior corners have local disintegration and spalls, P3. - Both abutment faces have severe scaling or surface failure throughout, F1 to P3. Abutment faces covered with iron leachate indicating oxidation of reinforcing steel from the expansion joint & bearing seat areas. - No bearings under double tees. - Bearing seat perimeter has local spalls to the exterior corners under the expansion joints. Remainder has no significant defects.				
SUPERSTRUCTURE					
Condition:	P - Poor	Expansion Joints:	P - Poor		
Comments:	- Efflorescence and rust leachate visible between double tee pre-cast sections indicating the cast in place deck is cracked and no longer watertight, P3. - Numerous double tees have wide cracks near the south abutments support, P. No access to north abutment. - West/exterior double tee has wide cracks over half the length of the bottom flange, P. - Expansion joints leaking and causing distress to elements below, P - Pre-cast deck soffit (between double tees) has countless shallow spalls from low cover.				
DECK					
Condition:	P3 - Poor	Curbs:	P - Poor		
Hand Rail:	P - Poor	Roadway Condition:	F1 - Fair		
Approach Rail:	P - Poor				
Comments:	*Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. - Approach rail has numerous dents and cracked off posts from impacts, P. - Structure rail is three rail aluminum system. Rails have numerous dents throughout. End caps missing. F1 to P3. Structure rail on the southwest corner attached to large curb spall, P. - Curb tops covered in snow and not inspectable. Southwest curb spalled/cracked off, P. - Bottom half of the exterior curbs/deck fascias have severe disintegration along the full length of the bridge. Upper half has severe delaminations/spalls throughout, P. - Asphalt surface has various transverse cracks around the south expansion joint but is otherwise in fair condition, F1. - Deck waterproofing assumed to be failed given the efflorescence visible below.				
HYDROLOGY					
Water Velocity:	> 1 m/s	Ice Problem:	K - Known Problem		
Water Depth:	> 1 m	Scour Problem:	P - Possible Problem		
Waterway:	01 - Adequate	Debris Problem:	N - No Problem		
Comments:	- Gabions on the southeast corner of the structure protecting a residences property leaning towards the river. - Deep tidal area under bridge and scour susceptible. - Ice & water levels changing over 1 meter twice a day.				
REPLACEMENT/REHABILITATION					
Next Rehab. Date:		Replacement Year:		2030	

Antic. Rehab. Cost:	\$N/A	Replacement Cost:	\$3,500,000
Recommendations:	- Replace structure within estimated time frame.		
OBSERVATIONS			
Overall Condition:	P - Poor	Requires Further Inspection:	No
Additional Observations:	- P local double tees, curbs, structure rails, approach rails, northwest wingwall.		

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2026.