

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B03062025-3	
Date: 3/5/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-028 - BRANCH CAUSEWAY BRIDGE - R100			
SUBSTRUCTURE					
Condition:	P3 - Poor	Bearings:	U - Uninspectable		
		Bearing Seat:	P3 - Poor		
Comments:	Very severe erosion and spalling to SE/SW abutment corners with significant loss of material. Extensive medium to wide vertical, horizontal, and pattern cracking with heavy efflorescence throughout all wingwalls. The west abutment has moderate spalling with exposed reinforcement on both corners with medium cracking throughout the face. Moderate concrete erosion throughout the tidal elevation zone across the face. Abutment back wall and bearing seat exterior has mild spalling to corner reinforcement. The SW back wall has a very wide crack propagating from the expansion joint area to the bearing seat. Very severe spall exposing vertical reinforcement at corner of SW wingwall and ballast wall. The east abutment has moderate spalling to reinforcement on both corners with light cracking throughout the face. Very severe spalling and disintegration to NE exterior creep block with large section cracked off and resting on bearing seat. SE creep block has numerous wide cracking with efflorescence and severe spalling, delamination, and disintegration. Creep block deterioration likely from leaking expansion joints.				
SUPERSTRUCTURE					
Condition:	P3 - Poor	Expansion Joints:	P1 - Poor		
Comments:	Very wide delaminated vertical crack in SW exterior girder end. Reinforcing bars visible in some girder webs, likely due to low cover. Very wide longitudinal crack in bottom flange and medium spalling exposing reinforcement in top flange of SW exterior girder. Girders have hairline to medium longitudinal cracks throughout all faces of the bottom flange and is leaching efflorescence in several locations. Transverse/hoop reinforcing bars visible on the bottom flange of all girders with moderate to severe corrosion within 2m of the bearing seats. Both expansion joints leaking, P1.				
DECK					
Condition:	P1 - Poor	Curbs:	P1 - Poor		
Hand Rail:	F2 - Fair	Roadway Condition:	P3 - Poor		
Approach Rail:	F2 - Fair				
Comments:	*Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. Municipality water line is secure to upstream deck. Due to severe spalling and disintegration to the NE deck, the anchors and brackets supporting the waterline failed causing the pipe to hang. The waterline is currently supported by a ratchet strap secured to the handrail. Asphalt has numerous severe potholes, ruts and cracks on the approaches and across the structure, P3. Roadway curbs in fair condition and recently patched, F2. South exterior curb/fascia/soffit in poor condition with heavy cracking and is heavily leaching efflorescent materials forming stalactites across the structure. North fascia/soffit/exterior curb has moderate cracking with some efflorescence across the structure. The NE fascia/soffit/exterior curb corner has advanced to extreme disintegration, exposing reinforcement. Likely caused by a leaking expansion joint/deteriorated caulking. Exterior curbs, P1. Concrete deck has extreme leaching of efflorescent materials around most girders and from moderate to heavy cracks between girders, indicating multiple cracks through the deck permitting chloride penetration/migration, P1. Approach/exit rail, end blocks, handrail, and hazard markers in fair condition from recent rehab F2.				
HYDROLOGY					
Water Velocity:	Tidal m/s	Ice Problem:	N - No Problem		

Water Depth:	Tidal m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:			
REPLACEMENT/REHABILITATION			
Next Rehab. Date:		Replacement Year:	2030
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$0
Recommendations:	Would recommend replacement of structure within 5 years.		
OBSERVATIONS			
Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:			

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