

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B10102023-11	
Date: 10/5/2023		Inspected By: Darrell Avery		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		TCH-016 - DARK HOLE BROOK BRIDGE - R1			
SUBSTRUCTURE					
Condition:		F1 - Fair		Bearings:	
				U - Uninspectable	
				Bearing Seat:	
				U - Uninspectable	
Comments:		Previous inspection - South abutment footing construction joint starting to open. Face has medium staining throughout, F1. Southwest abutment corner has a vertical crack propagating from the bearing seat to the footing construction joint. Monitor corner for future spalls that could undermine the exterior double tee. East extension face in fair condition. Southeast corner has medium efflorescence around exterior creep block construction joint. - North abutment footing construction joint starting to open. Face has medium staining throughout. Area of mild scour around the mid-transverse point. East extension face in fair condition. Northeast corner has medium efflorescence around exterior creep block construction joint. - West wingwalls have medium-heavy cracking with efflorescence throughout. Corners to abutment faces rehabbed in the past and poured back. Patched construction joints have medium cracking with efflorescence. - East wingwalls in fair condition.			
SUPERSTRUCTURE					
Condition:		P3 - Poor		Expansion Joints:	
				P3 - Poor	
Comments:		Previous inspection - West fascia/curb has mild alligator cracking throughout. Chaulking cracked at south expansion joint. At approximately mid-span, wide oval shaped crack under handrail post, likely about to spall. Curb at north expansion joint has a large wide crack with mild efflorescence possibly no expansion joint here. - East fascia/curb has mild alligator cracking throughout. Chaulking cracked at south expansion joint. Curb at north expansion joint has a large wide crack with mild efflorescence, possibly no expansion joint here. - Bottom of deck has heavy efflorescence and rust staining between all double tee pre-cast panel sections. Rebar grid can be seen due to low cover or is exposed across most of the sections. One double tee is severely vertically split up through the web over 50% of its length, P1, superstructure P3. New inspection - split in double tee(above) is 70-80% along its length & wide (No noticeable change). Adjacent double tee(further right) has small sections of deterioration.			
DECK					
Condition:		P3 - Poor		Curbs:	
				F1 - Fair	
Hand Rail:		P3 - Poor		Roadway Condition:	
				F2 - Fair	
Approach Rail:		F1 - Fair			
Comments:		Previous inspection - Asphalt in fair condition, wide transverse cracks in center lane & shoulder area. - Structural handrail in fair condition. - Curbs have mild-medium cracking throughout on the roadway side. - Approach/exit rail damaged on the northwest corner of structure, P3. Remainder of guiderail in fair condition, connected to end blocks complete with hazard markers. - Deck likely heavily cracked due to leakage between pre-cast sections, P3. New inspection - Shoulder washout at abut #1 right & settlement at left side. Damage to left side bridge rail including previously noted large concrete spall. Damaged or deteriorated approach guiderail & missing hazard marker at abut. #2 right.			
HYDROLOGY					
Water Velocity:		.4 m/s		Ice Problem:	
				N - No Problem	
Water Depth:		.3 m		Scour Problem:	
				P - Possible Problem	
Waterway:		01 - Adequate		Debris Problem:	
				K - Known Problem	

Comments:	Previous inspection - New beaver dam built upstream and has at least 1.5m of head built up behind it.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2025	Replacement Year:	2030
Antic. Rehab. Cost:	\$\$100,000	Replacement Cost:	\$\$1,500,000
Recommendations:	Previous inspection - Complete superficial rehab of concrete defects, replace expansion joints and some sections of guiderail within 3-5 years. Replace structure within the next 10 years. New inspection - Repair bridge rail.		
OBSERVATIONS			
Overall Condition:	P3 - Poor	Requires Further Inspection:	No
Additional Observations:	Previous inspection - F1 = substructure. P3 = superstructure & deck. Hazards, high speed traffic. Use rubber boots for inspection.		

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