

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B05062022-5	
Date: 4/20/2022		Inspected By: Trevor Upshall		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-027 - PETTY HARBOUR BRIDGE - R			
SUBSTRUCTURE					
Condition:	P3 - Poor	Bearings:	F2 - Fair		
		Bearing Seat:	F2 - Fair		
Comments:	Assumed condition of buried reinforced concrete abutment footings. Numerous medium vertical cracks to west abutment face. Severe erosion to east abutment face with medium corrosion to exposed rebar. Light scaling to northwest bearing seat. P3 - Face of east abutment F2 - Remainder				
SUPERSTRUCTURE					
Condition:	F2 - Fair	Expansion Joints:	F1 - Fair		
Comments:	Medium to wide horizontal cracks in top and bottom flanges of numerous interior/exterior girders. Wide transverse cracks, medium abrasion, and partially paved over concrete expansion joint dams. Compression seal blocked with sand and debris. No caulking in expansion joint gaps in curb fascia. Light spalling to bottom flange of west interior girder over bearing seat. Medium spalling to ends of south exterior girder.				
DECK					
Condition:	F1 - Fair	Curbs:	F1 - Fair		
Hand Rail:	P1 - Poor	Roadway Condition:	P3 - Poor		
Approach Rail:	P1 - Poor				
Comments:	Light spall with wide horizontal/vertical cracks and light efflorescence in deck/curb fascia near NW expansion joint. Remainder of deck/curb fascia medium horizontal/vertical cracks with light efflorescence. Medium spall with exposed rebar on NW/SW cantilever soffit near expansion joint. Medium longitudinal/transverse cracks with light delamination and efflorescence in deck soffit. Damage to aluminum handrail and posts. NE corner top rail missing. Remaining rail light abrasion and missing end caps. Wide longitudinal cracks with light spalling and severe abrasion to top of curbs/sidewalk. Severe slope erosion to NE corner. SW/SE guiderail not properly connected to end blocks. Numerous post are showing signs of decay and damage. Structure has no hazard markers. Asphalt deck approach has severe potholes, raveling, and transverse/longitudinal cracks. Wide horizontal/vertical cracks in SW corner deck/curb end beneath end block.				
HYDROLOGY					
Water Velocity:	0.3 m/s	Ice Problem:	N - No Problem		
Water Depth:	0.6 m	Scour Problem:	P - Possible Problem		
Waterway:	01 - Adequate	Debris Problem:	P - Possible Problem		
Comments:	Stream continues to flow along east abutment only. Hydraulic rip rap required along east abutment to reduce further erosion and possible scour.				
REPLACEMENT/REHABILITATION					
Next Rehab. Date:	2022	Replacement Year:	2030		
Antic. Rehab. Cost:	\$80,000.00	Replacement Cost:	\$2,000,000.00		
Recommendations:	Install approach rail with hazard markers, resurface asphalt deck, clean and caulk expansion joint gaps, repair				

aluminum handrail/posts, repair concrete defects, install hydraulic rip rap along east footing, repair embankment erosion, and clean out deck drains.

OBSERVATIONS

Overall Condition:	P3 - Poor	Requires Further Inspection:	No
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Additional Observations: P1 - Aluminum handrail, approach/exit rail. P3 - Asphalt deck, east abutment. F2 - Remainder

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