

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B08052024-3	
Date: 7/26/2024	Inspected By: D. Burns/J. Rowe	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	2-057 - MIDDLE BROOK BRIDGE		
Route:	233-13	Overall Length:	35 m
Year Built:	1972	Est: No	Overall Width: 12 m
Year Last Rehab.:	1998	Est: No	Roadway Width: 9.7 m
Region:	CENTRAL EAST	Sidewalk Width:	1.2 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	4 m
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	1 m
Purpose of Structure:	04 - Over Non-Navigable Waters		
Type of Handrail:	01 - Aluminum Rail	Spans:	
Roadway Surface:	02 - Asphalt	Span No.:	Length
Alignment Vertical:	01 - Good	Span No.:	Length
Alignment Horizontal:	01 - Good	Span No.:	Length
Restrictions:	No	Span No.:	Length
		1	24
		2	0
		3	0
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	F1 - Fair
		Bearing Seat:	F2 - Fair
Comments:	Light cracking throughout concrete abutments and wingwalls. Abutment 2 has significant vertical crack, also has efflorescence staining near footing. Wingwall 1 left has efflorescence staining under large hole on outside curb. Bearing pads appear to be squat in some areas, but too high for thorough inspection.		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	P1 - Poor
Comments:	Six AASHTO girders with some locations of minor rust staining. Some girder ends have minor spalling. Expansion joints are plugged with asphalt and have gouges in some areas, likely from the snow plow. Curb section of expansions joints are severely disintegrated, and dimeric seal is in poor condition.		
DECK			

Condition:	P3 - Poor	Curbs:	P3 - Poor
Hand Rail:	F2 - Fair	Roadway Condition:	P3 - Poor
Approach Rail:	P3 - Poor		
Comments:	Large section of pothole in asphalt surface on left side of deck. Some patchwork has been done, but more potholes are appearing. Large gouges taken from asphalt in some areas, likely from snow plow. Curbs have light cracking throughout and are in poor condition around expansion joints. Underside of deck has areas of severe spalling/delamination with the worst area being between girders 2 and 3 near abutment 1 before the diaphragm. Underside of deck appears to have exposed rebar with rust staining in some areas. Hazard markers are either missing or damaged. Sidewalk has no ramps. End blocks have minor to moderate cracking throughout. Structural posts are showing signs of rot. Approach 1 left has guard rail detached from post.		
HYDROLOGY			
Water Velocity:	0.5 m/s	Ice Problem:	N - No Problem
Water Depth:	0.5 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	Repair asphalt surface. Repair hazard markers as well as implement new structural post with correct spacing. Repair/monitor large areas of spalling on underside of deck. Repair expansion joints areas, specifically concrete curb sections and dimeric seals.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:		Replacement Year:	
Antic. Rehab. Cost:	\$TBD	Replacement Cost:	\$TBD
Recommendations:	Repair asphalt surface. Repair hazard markers as well as implement new structural post with correct spacing. Repair/monitor large areas of spalling on underside of deck. Repair expansion joints areas, specifically concrete curb sections and dimeric seals.		
OBSERVATIONS			
Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:			

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