

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B09102021-9	
Date: 8/26/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	1-055 - BISCAY BAY CAUSEWAY BRIDGE		
Route:		Overall Length:	38.2 m
Year Built:	1975	Est: No	Overall Width: 0 m
Year Last Rehab.:		Est: No	Roadway Width: 0 m
Region:	AVALON PENINSULA	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	0 m
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	0 m
Purpose of Structure:	03 - Over Navigable Waters	Spans:	
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	1	29.8
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	02 - Adequate	3	0
Restrictions:	No	6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	P1 - Poor	Bearings:	F1 - Fair
		Bearing Seat:	F1 - Fair
Comments:	- West abutment footing has extreme scour, ~75% of the foundation soils have been removed. However, foundation supported on timber piles which is taking the load, P1. Northwest bearing area has a medium spill approaching the girder, P3. Medium AAR around this spill. Bearing pads cannot be seen in most locations due to diaphragm construction to face of abutment. Bearing pads that can be seen have evidence of deformation. - East abutment footing has mild scour on the northeast corner. - Face of both abutments in fair condition. Footings also in fair condition. F1 remainder.		
SUPERSTRUCTURE			
Condition:	P3 - Poor	Expansion Joints:	F1 - Fair
Comments:	- Most girders have medium sized areas with exposed stirrups with some spalling and medium-severe corrosion. Some girders also have exposed reinforcement with severe corrosion to reinforcement under the bottom flange at the bearing area, P3. - Underside of deck in fair condition. - Some diaphragms have minor areas with exposed		

reinforcement with severe corrosion. . - No evidence of leaking in expansion joints.

DECK

Condition:	F1 - Fair	Curbs:	F1 - Fair
Hand Rail:	F1 - Fair	Roadway Condition:	F1 - Fair
Approach Rail:	F1 - Fair		
Comments:	- Both fascias in fair condition, just weathering evident. Efflorescence evident running down the face behind handrail posts. - Asphalt has a wide transverse crack with potholes over each expansion joint, P1. Rest of asphalt F1. - No end blocks and ~2m gap between approach/exit rail and structures handrail. Approach/exit rail in fair condition.		

HYDROLOGY

Water Velocity:	Tidal m/s	Ice Problem:	N - No Problem
Water Depth:	Deep m	Scour Problem:	K - Known Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Rip-rap seems too large for the area. Tides pulling finer material out between the large boulders.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2022	Replacement Year:	2035
Antic. Rehab. Cost:	\$250000	Replacement Cost:	\$2000000
Recommendations:	- Repair all concrete defects. - Using trimming concrete to re-establish bearing under the west footing.		

OBSERVATIONS

Overall Condition:	P3 - Poor	Requires Further Inspection:	No
Additional Observations:	- P1 scour, P3 girders, F1 remainder. - Conduit attached to downstream side of the structure. Hazards, traffic, steep slopes, climbing/descending rip-rap bounders with holes.		

LEGEND:

Condition Definitions:			Problem Definitions:	Category Definitions:
1 - *Good - [discontinued code].	F2 - Fair.	C - Unsafe (Closed to Public).	N - No Problem.	Maint. - Maintenance.
2 - *Fair - [discontinued code].	F1 - Fair.	U - Uninspectable.	P - Possible Problem.	Eng. - Engineering.
3 - *Poor - [discontinued code].	P3 - Poor.	I - Inapplicable.	K - Known Problem.	Office - Bridge Office.
4 - *Unsafe - [discontinued code].	P1 - Poor.		NA - Not Applicable.	
G - Good.	P - Poor.			

PHOTO GUIDELINES:

Inspection Photos:

- Please provide photos using guidelines below:
- Any item which inspector feels should be documented by photograph
 - All items noted above as being P3, P1, P2, or C
 - Any evidence of known ice, scour, debris, waterway problems

INSPECTION PHOTOS