

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B11252021-4	
Date: 10/27/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-072 - ST. MARY'S RIVER BRIDGE		
Route:	510	Overall Length:	0 m
Year Built:	2001	Est: No	Overall Width: 0 m
Year Last Rehab.:		Est: No	Roadway Width: 0 m
Region:	LABRADOR	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	5 m
Type of Structure:	08 - Steel Bridge	Max Depth of N.W.L.:	2 m
Purpose of Structure:	04 - Over Non-Navigable Waters		
Type of Handrail:	01 - Aluminum Rail	Spans:	
Roadway Surface:	01 - Concrete	<u>Span No.:</u>	<u>Length</u>
Alignment Vertical:	01 - Good	1	0
Alignment Horizontal:	01 - Good	2	0
Restrictions:	No	3	0
		<u>Span No.:</u>	<u>Length</u>
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	G - Good	Bearings:	G - Good
		Bearing Seat:	G - Good
Comments:	- Abutment, wingwall and bearing seat concrete in good condition. Corner exterior bearings inspectable and in good condition.		
SUPERSTRUCTURE			
Condition:	G - Good	Expansion Joints:	P1 - Poor
Comments:	- Both expansion joint seals have been torn and pushed through the gap. Water free flowing onto the bearing seats, P1. Placed as P1 to avoid deterioration to other elements. - Exterior curb/soffit in good condition. - Bottom of deck concrete in excellent condition. - Girders have moderate surface corrosion, F2. All girder braces painted with moderate corrosion to bolts.		
DECK			

Condition:	P3 - Poor	Curbs:	G - Good
Hand Rail:	P3 - Poor	Roadway Condition:	G - Good
Approach Rail:	F1 - Fair		
Comments:	- Asphalt in good condition overall, moderate cracking at the expansion joint termination. No asphalt over structure. Deck concrete has exposed rebar with light to moderate corrosion over an area approximately 7x2m in the south bound lane with other areas beginning to delaminate. Suspect low cover over the finished slab. Suggest repairing before corrosion paths are established through the deck, P3. - Pooling water on structure, especially in the north bound lane, no deck drains. - Approach/exit guiderails in fair condition overall, one new post needed on the southeast corner. Approaches have several small shoulder washouts on approaches and at the wingwalls, guiderails connected to end blocks, no collision dampening posts prior to end blocks. All hazard markers in place. - Curbs in good condition. - Structure handrail missing the top rail on northwest corner with twisted posts. Northeast corner has several dented rails.		

HYDROLOGY

Water Velocity:	0.5 m/s	Ice Problem:	N - No Problem
Water Depth:	Deep m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Little to know rip-rap on structure corners, no scour under footings.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2024	Replacement Year:	2060
Antic. Rehab. Cost:	\$40,000	Replacement Cost:	\$1,200,000
Recommendations:	- Repair deck area of exposed rebar. Replace expansion joint seals and re-chaulk curbs. Recommend paving structure to protect concrete and the installation of deck drains. Install new guiderail post on the southeast corner. Replace rip-rap as required.		

OBSERVATIONS

Overall Condition:	F2 - Fair	Requires Further Inspection:	No
Additional Observations:	- Bat feces observed on the bearing seats. Hazards, fast moving traffic, steep slopes and working around water.		

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, P, or C
- Any evidence of known ice, scour, debris, waterway problems

INSPECTION PHOTOS