

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B04282021-5	
Date: 4/20/2021	Inspected By: Butler	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	TCH-111 - TCH-RT.320 UNDERPASS GAMBO INTERCH.		
Route:	1	Overall Length:	61 m
Year Built:	1989	Est: No	Overall Width: 12 m
Year Last Rehab.:		Est: No	Roadway Width: 10 m
Region:	CENTRAL EAST	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	5.9 m
Type of Structure:	05 - Pre-stressed Concrete Slab	Max Depth of N.W.L.:	0 m
Purpose of Structure:	01 - Highway Grade Separation	Spans:	
Type of Handrail:	01 - Aluminum Rail	Span No.:	Length
Roadway Surface:	02 - Asphalt	1	26
Alignment Vertical:	01 - Good	2	26
Alignment Horizontal:	01 - Good	3	0
Restrictions:	Yes	6	0
Describe Restrictions:	posted clearance 5.9m		
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	U - Uninspectable
		Bearing Seat:	U - Uninspectable
Comments:	Concrete abutments, wing walls and 3 column centre pier. Sixteen pot bearings at abutments and three on centre piers not inspected. Light cracking and scaling on wing walls. Pier columns have light cracking. Centre pier column has delamination and exposed rebar due to lack of cover. Abutment 1 and 2 has cracking throughout. Erosion evident under sloped concrete fill protection and has become separated by approx. 100mm from abutment 2. Girder 1 on west side, abutment 2 has excessive cracking of bearing seat. Center piers 1 and 2 from east have cracking and wear from road sand and salt; west side only. Center Pier is worse and has exposed rebar. The guiderail protecting the piers is in poor condition and does not extend far enough west.		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	P3 - Poor
Comments:	Expansion joints leaking, some damage to dams and armour. Dymeric sealer at curb locations poor condition.		

Pavement and concrete at expansion joints is deteriorating. Abutment 2: • evidence of roadway settlement between curb and pavement. • rail attachment to end block requires repair.

DECK

Condition:	F2 - Fair	Curbs:	F2 - Fair
Hand Rail:	P1 - Poor	Roadway Condition:	F2 - Fair
Approach Rail:	P1 - Poor		

Comments: Asphalt wearing surface. Aluminum 4 rail system with concrete end blocks. Aluminum rail has impact damage from snow plows with 2 broken posts and others damaged. End blocks have light scaling and cracking. Curbs have light scaling and cracking. No end shoes at end blocks, guide rail not structural. Guiderail attached to Abutment 1 right has a broken post. The deck gutter has approximately 20mm of sand in it. Abutment 2 approach slab has pavement potholing and cracking. Left side hand rail and several posts damaged. The curb at all expansion joints are severely cracked.

HYDROLOGY

Water Velocity:	n/a m/s	Ice Problem:	NA - Not Applicable
Water Depth:	n/a m	Scour Problem:	NA - Not Applicable
Waterway:	03 - Not Applicable	Debris Problem:	NA - Not Applicable

Comments:

REPLACEMENT/REHABILITATION

Next Rehab. Date:		Replacement Year:	
Antic. Rehab. Cost:	\$15000	Replacement Cost:	\$0
Recommendations:	Replace expansion joints. Replace guide rail with structural guide rail and attach end shoes. Clean the gutters. Replace damaged hand rail and posts. Replace and lengthen guiderail protection piers.		

OBSERVATIONS

Overall Condition:	F2 - Fair	Requires Further Inspection:	No
---------------------------	-----------	-------------------------------------	----

Additional Observations:

LEGEND:

Condition Definitions:

- 1 - *Good - [discontinued code].
- 2 - *Fair - [discontinued code].
- 3 - *Poor - [discontinued code].
- 4 - *Unsafe - [discontinued code].
- G - Good.

- F2 - Fair.
- F1 - Fair.
- P3 - Poor.
- P1 - Poor.
- P - Poor.

- C - Unsafe (Closed to Public).
- U - Uninspectable.
- I - Inapplicable.

Problem Definitions:

- N - No Problem.
- P - Possible Problem.
- K - Known Problem.
- NA - Not Applicable.

Category Definitions:

- Maint. - Maintenance.
- Eng. - Engineering.
- Office - Bridge Office.

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