

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B05232018-25	
Date: 2/6/2018	Inspected By: Chris Lyver	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	1-280 - MUTTON BAY BRIDGE		
Route:		Overall Length:	16.9 m
Year Built:	1967	Est: No	Overall Width: 8.9 m
Year Last Rehab.:		Est: No	Roadway Width: 7.4 m
Region:	AVALON PENINSULA	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	2.1 m
Type of Structure:	02 - Double Tee	Max Depth of N.W.L.:	0.5 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	02 - Concrete Rail	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	<u>Span No.:</u>	<u>Length</u>
Alignment Vertical:	01 - Good	1	11.8
Alignment Horizontal:	01 - Good	2	0
Restrictions:	No	3	0
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	P1 - Poor	Bearings:	U - Uninspectable
		Bearing Seat:	P1 - Poor
Comments:	Wide transverse cracks in tops and faces of abutment footings. Severe erosion/spalling/disintegration to corners of abutment footings. Severe delamination/spalling/disintegration to abutment corners. Numerous medium horizontal/vertical cracks with heavy efflorescence deposits with areas of severe delamination/spalling/disintegration to four wingwalls. No visible signs of bearings (AIB?). Severe spalling/disintegration to d/s exterior bearing seats. Spalling migration towards double tee(AAR). P1 - Dis. Seats F1 - Remainder		
SUPERSTRUCTURE			
Condition:	F1 - Fair	Expansion Joints:	P3 - Poor
Comments:	Very severe delamination/spalling/disintegration to exterior creep blocks. Wide vertical cracks with heavy efflorescence deposits to majority of end diaphragms. Narrow longitudinal/vertical cracks with light/heavy stalactites/efflor. deposits between double tees. Tees in fair condition. Expansion joints paved over on deck.		

Water leakage/staining with heavy efflor. deposits on abutment faces (leaking joints?).

DECK

Condition:	F1 - Fair	Curbs:	P - Poor
Hand Rail:	P - Poor	Roadway Condition:	P - Poor
Approach Rail:	P1 - Poor		
Comments:	Numerous areas of severe delamination/spalling/disintegration with medium horizontal/vertical cracks in curb surfaces and fascia. Severe disintegration to majority of concrete handrails. Top d/s rail missing. U/S top center rail cracked in two. Asphalt on deck & approaches remains in very poor condition with numerous patched areas. Large pothole with deck exposed at south end of structure. Approach/exit guiderail damaged in places; tipping with decaying posts.		

HYDROLOGY

Water Velocity:	0.4 m/s	Ice Problem:	P - Possible Problem
Water Depth:	0.5 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	P - Possible Problem
Comments:	Medium shoulder/slope erosion at 4 corners of structure. Medium road settlement at structure ends.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2018	Replacement Year:	2025
Antic. Rehab. Cost:	\$200000	Replacement Cost:	\$500000
Recommendations:	Structure should be re-inspected by Bridge Office and rehabbed or replaced. In the interim install new guiderail c/w hazard markers (maintenance) and possibly resurface deck/approaches and fix handrails.		

OBSERVATIONS

Overall Condition:	P1 - Poor	Requires Further Inspection:	Yes
Additional Observations:	Unchanged from previous inspection, except new pole-line running along east (d/s) side of the structure.		

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