

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B02172025-5			
Date: 2/12/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:	1-244 - HEART'S DELIGHT BRIDGE SOUTH				
Route:	80	Overall Length:	7 m		
Year Built:	1960	Est: No	Overall Width:	10.4 m	
Year Last Rehab.:	1975	Est: Yes	Roadway Width:	9.2 m	
Region:	AVALON PENINSULA		Sidewalk Width:	0 m	
Jurisdiction:	Provincial		Clearance to R.D. or N.W.L.:	1.6 m	
Type of Structure:	02 - Double Tee		Max Depth of N.W.L.:	0.3 m	
Purpose of Structure:	04 - Over Non-Navigable Waters		Spans:		
Type of Handrail:	01 - Aluminum Rail		<u>Span No.:</u>	<u>Length</u>	<u>Span No.:</u>
Roadway Surface:	02 - Asphalt		1	3.4	4
Alignment Vertical:	01 - Good		2	0	5
Alignment Horizontal:	01 - Good		3	0	6
Restrictions:	No		0		
SUBSTRUCTURE					
Condition:	P3 - Poor		Bearings:	U - Uninspectable	
			Bearing Seat:	P3 - Poor	
Comments:	Medium to severe disintegration to all abutment corners. The northeast exterior bearing seat also has medium severe disintegration, and has undermined the exterior double tee, P3. All wingwalls except the southwest have medium spalling/disintegration along their faces in several locations, P3. Deep water beneath the structure restricted an adequate inspection of the abutments. Abutment faces contain light horizontal/vertical cracks and mild weathering throughout. Medium deposits of efflorescence on abutments and bearing seat leaking from expansion joints. Unable to inspect for scour or erosion.				
SUPERSTRUCTURE					
Condition:	F1 - Fair		Expansion Joints:	P3 - Poor	
Comments:	Medium to severe disintegration to both exterior double tee end blocks. The east expansion joint is leaking and depositing efflorescent material on the face of the east abutment, P3. Leaking of the west joint is evident however less severe. No access beneath structure at midspan due to deep water to properly inspect the double tees and joints. Light delamination's and exposed rebar mat in soffit, and light efflorescence leaking through joints were observed in exterior beams.				
DECK					
Condition:	F1 - Fair		Curbs:	F1 - Fair	
Hand Rail:	F1 - Fair		Roadway Condition:	F1 - Fair	
Approach Rail:	F1 - Fair				
Comments:	*Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. Asphalt in fair condition, mild settlement over each approach with a wide transverse crack, F1. No end blocks. Standard guiderail installed on approach/exit. Approach/exit rails in fair condition. Handrails in fair condition. The southwest				

corner contains a severe deformation and is no longer attached to support post. The north fascia/curb has mild horizontal and vertical cracking throughout with mild efflorescence. The north side deck/double tee construction joint is starting to leach efflorescent materials. Water/chlorides have found a path through this area, P3. The south fascia/curb has mild horizontal cracks with efflorescence on the southwest side, mild spalling/disintegration to exposed reinforcement at the fascia/soffit transition and light spalls beneath the handrail posts.

HYDROLOGY

Water Velocity:	0 m/s	Ice Problem:	N - No Problem
Water Depth:	0 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	Gabions bulging on the downstream side but still in good condition.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2027	Replacement Year:	2035
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$0
Recommendations:	Seal the asphalt/curb joint on the north side to stop leakage through the north deck/double tee construction joint. Replace the east expansion joint. Repair all concrete defects on the exterior 4 corners of the structure and wingwalls. Replace damaged aluminum handrail.		

OBSERVATIONS

Overall Condition:	P3 - Poor	Requires Further Inspection:	No
Additional Observations:	A new timber bridge has been built downstream as part of the towns walking trail. The timber structure is bearing on the gabion baskets causing them to bulge.		

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

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2025.