



GOVERNMENT OF  
NEWFOUNDLAND  
AND LABRADOR  
Department of Transportation and Infrastructure

**BRIDGE INSPECTION REPORT**  
**B08022021-6**

Date: 5/6/2021

Inspected By: Butler

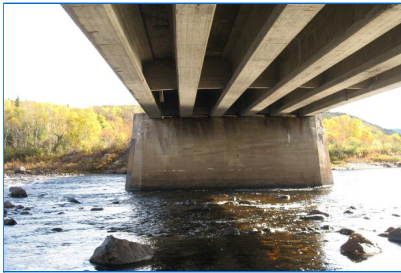
Category: Eng. - Engineering

**BRIDGE INFORMATION**

Site:	2-035 - PIPER'S HOLE RIVER BRIDGE				
Route:	210	Overall Length:	86.5 m		
Year Built:	1968	Est: No	Overall Width:	10.4 m	
Year Last Rehab.:	1995	Est: No	Roadway Width:	9.5 m	
Region:	CENTRAL EAST	Sidewalk Width:	0 m		
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	4 m		
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	2 m		
Purpose of Structure:	03 - Over Navigable Waters	Spans:			
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	1	38	4	0
Alignment Vertical:	01 - Good	2	38	5	0
Alignment Horizontal:	01 - Good	3	0	6	0
Restrictions:	No				

**BRIDGE PHOTOS**





**SUBSTRUCTURE**

**Condition:** F2 - Fair

**Bearings:** U - Uninspectable

**Bearing Seat:** U - Uninspectable

**Comments:**

Concrete abutments, pier and wingwalls. Some cracking with efflorescence throughout. Disintegration of exterior edges of centre pier and upper corners of abutments. Bearing seat has large section of concrete missing under girder 5,6 and between them span one side; some cracking and efflorescence under girder 6 centre pier span one

side. Some cracking and squat in bearing pads. Spalling on Girders appears to be worsening. Center pier has vertical cracks under girder 4 and appear to be worsening at top.

**SUPERSTRUCTURE**

<b>Condition:</b>	F2 - Fair	<b>Expansion Joints:</b>	P3 - Poor
<b>Comments:</b>	2 spans with 6 AASHTO girders per span. Girders 1,2,4,5,6 span one have cracking with efflorescence and exposed rebar; girder 1,2,5,6 span two has cracking with efflorescence, exposed rebar and some disintegration and honeycombing. Leakage through the deck and expansion joints is evident. Expansion joints all have surface impact damage, deterioration around curb sections and seal is not fully seated in joint one - suspected leakage. Spalling on Girders appears to be worsening.		

**DECK**

<b>Condition:</b>	F1 - Fair	<b>Curbs:</b>	F2 - Fair
<b>Hand Rail:</b>	F2 - Fair	<b>Roadway Condition:</b>	F2 - Fair
<b>Approach Rail:</b>	F1 - Fair		
<b>Comments:</b>	Concrete deck with asphalt wearing surface, potholes and cracking on deck - suspected concrete issues. 4 rail aluminum hand rail with concrete end blocks, some light cracking of the end blocks with approach 2 left side being worse. Approach rail has some post rot and the structural sections at the bridge are too short. Curbs faces and surface good, minor deterioration of the backs. Roadway has settlement approach one and two, Approach one is rough due too pothole formation. Approach 2 hazard markers are missing.		

**HYDROLOGY**

<b>Water Velocity:</b>	0.5 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	2 m	<b>Scour Problem:</b>	P - Possible Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	Tidal zone. Unable to check centre pier for scour due to depth, possible issues. Ice jams occur at this structure.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2021	<b>Replacement Year:</b>	
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$0
<b>Recommendations:</b>	Contract awarded to Trident for Re-habing structure in 2021/22		

**OBSERVATIONS**

<b>Overall Condition:</b>	F2 - Fair	<b>Requires Further Inspection:</b>	No
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**Additional Observations:**

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