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|  | GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure | BRIDGE INSPECTION REPORT B09082021-3 | |
| Date: 3/13/2020 | Inspected By: Chris Lyver | Category: Eng. - Engineering | |
| BRIDGE INFORMATION | | | |
| Site: | 1-092 - O'BRIEN'S BRIDGE, PLACENTIA | | |
| Route: | 91 | Overall Length: | 16.6 m |
| Year Built: | 1964 | Est: No | Overall Width: 8.9 m |
| Year Last Rehab.: | | Est: No | Roadway Width: 7.4 m |
| Region: | AVALON PENINSULA | Sidewalk Width: | 0.75 m |
| Jurisdiction: | Provincial | Clearance to R.D. or N.W.L.: | 7.4 m |
| Type of Structure: | 03 - Reinforced Concrete Beam/Slab | 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 | 1 | 8.7 |
| Alignment Vertical: | 01 - Good | 2 | 0 |
| Alignment Horizontal: | 02 - Adequate | 3 | 0 |
| Restrictions: | No | 6 | 0 |
| BRIDGE PHOTOS | | | |
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| SUBSTRUCTURE | | | |
| Condition: | P3 - Poor | Bearings: | F1 - Fair |
| | | Bearing Seat: | F1 - Fair |
| Comments: | - Medium/severe erosion with medium/wide vert. cracks in abutment footings. - Light/medium scour under some areas of footings. Medium/Wide vert./horiz. cracks with medium efflor. deposits in faces of abutments. - Medium/wide cracks with medium efflor. deposits in faces of abutments - Medium wide cracks with light/medium efflor. deposits in all 4 wingwalls. | | |
| SUPERSTRUCTURE | | | |
| Condition: | F1 - Fair | Expansion Joints: | F1 - Fair |
| Comments: | - Numerous medium cracks with heavy efflor. deposits in both exterior beams; there are only 2 beams on structure. - No visible signs of expansion joints in deck. No signs of leakage. - Expansion gaps in curbs have no chaulking. | | |
| DECK | | | |

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|-----------------------|---|---------------------------|-----------|
| Condition: | F1 - Fair | Curbs: | F1 - Fair |
| Hand Rail: | P - Poor | Roadway Condition: | F1 - Fair |
| Approach Rail: | P3 - Poor | | |
| Comments: | - some narrow cracks in deck soffit with light efflor. deposits - severe damage/disintegration to Northeast and Northwest endblocks. Some damage to Southwest endblock with some concrete missing. SE endblock has cracks with efflor. deposits - existing approach and exit rail has some damage with posts tipping out - no hazard markers at structure corners. Concrete handrails are damaged with sections missing. Numerous horizontal cracks in concrete handrail. Some small-medium potholes in asphalt surface on deck approaches, curb surfaces and fascias have medium transverse vertical cracks with some light spilling | | |

HYDROLOGY

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|------------------------|---|------------------------|----------------------|
| Water Velocity: | 0.4 m/s | Ice Problem: | N - No Problem |
| Water Depth: | 0.4 m | Scour Problem: | P - Possible Problem |
| Waterway: | 01 - Adequate | Debris Problem: | N - No Problem |
| Comments: | - some slope erosion on all 4 corners (esp. NW corner) - some hydraulic rip rap has shifted | | |

REPLACEMENT/REHABILITATION

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|----------------------------|--|--------------------------|--------|
| Next Rehab. Date: | 2020 | Replacement Year: | 2025 |
| Antic. Rehab. Cost: | \$180 | Replacement Cost: | \$1400 |
| Recommendations: | - replace conc.handrails and endblocks. Install new approach and exit rail c/w hazard markers - fix remaining concrete defects and scour under footings - resurface over deck and approaches | | |

OBSERVATIONS

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|---------------------------------|---|-------------------------------------|-----|
| Overall Condition: | P - Poor | Requires Further Inspection: | Yes |
| Additional Observations: | P - downstream endblocks and concrete handrail P1 - upstream endblocks and concrete handrails, approach and exit rail and scour under footings F1 - remaining | | |

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