

|   |  |  |               |
|---|--|--|---------------|
|    | GOVERNMENT OF<br>NEWFOUNDLAND<br>AND LABRADOR<br>Department of Transportation and Infrastructure   | <b>BRIDGE INSPECTION REPORT</b><br><b>B05192016-6</b>                                |               |
| <b>Date:</b> 1/18/2016  | <b>Inspected By:</b> Chris Lyver   | <b>Category:</b> Eng. - Engineering  |               |
| <b>BRIDGE INFORMATION</b>   |  |  |               |
| <b>Site:</b>  | 1-045 - SOUTH DILDO BRIDGE   |  |               |
| <b>Route:</b>   | 80   | <b>Overall Length:</b>   | 11.5 m        |
| <b>Year Built:</b>  | 1965   | <b>Overall Width:</b>  | 10.6 m        |
| <b>Year Last Rehab.:</b>  |  | <b>Roadway Width:</b>  | 9.5 m         |
| <b>Region:</b>  | AVALON PENINSULA   | <b>Sidewalk Width:</b>   | 0.6 m         |
| <b>Jurisdiction:</b>  | Provincial   | <b>Clearance to R.D. or N.W.L.:</b>  | 1.7 m         |
| <b>Type of Structure:</b>   | 02 - Double Tee  | <b>Max Depth of N.W.L.:</b>  | 0.4 m         |
| <b>Purpose of Structure:</b>  | 04 - Over Non-Navigable Waters   | <b>Spans:</b>  |               |
| <b>Type of Handrail:</b>  | 02 - Concrete Rail   | <b>Span No.:</b>   | <b>Length</b> |
| <b>Roadway Surface:</b>   | 02 - Asphalt   | 1  | 6.6           |
| <b>Alignment Vertical:</b>  | 01 - Good  | 2  | 0             |
| <b>Alignment Horizontal:</b>  | 01 - Good  | 3  | 0             |
| <b>Restrictions:</b>  | No   | <b>Span No.:</b>   | <b>Length</b> |
|   |  | 4  | 0             |
|   |  | 5  | 0             |
|   |  | 6  | 0             |
| <b>BRIDGE PHOTOS</b>  |  |  |               |
|  |  |  |               |
| <b>SUBSTRUCTURE</b>   |  |  |               |
| <b>Condition:</b>   | F1 - Fair  | <b>Bearings:</b>   | F1 - Fair     |
|   |  | <b>Bearing Seat:</b>   | F1 - Fair     |
| <b>Comments:</b>  | -Sections of abutments poured directly on bedrock. -No visible signs of bearings, medium horizontal/vertical cracks in abutments faces and wing walls. -Medium sized spall in bottom face of south abutment(SE end). -Medium scour under NE corner of North abutment footing. -Severe concrete delamin./spalling continues to corners of north abutment & SE corner of south abutment.   |  |               |
| <b>SUPERSTRUCTURE</b>   |  |  |               |
| <b>Condition:</b>   | P - Poor   | <b>Expansion Joints:</b>   | F1 - Fair     |
| <b>Comments:</b>  | -Very severe concrete disintegration continues to both exterior double tee girders with severe corrosion to exposed reinforcement & stressing cables. -Some cables broken and dangling in river. -Bottom of exterior tees no longer exists with only reinforcement and cables remaining. -Remaining tees have medium deiamin/spalling with medium corrosion to exposed reinforcement(Insufficient cover) -No visible signs of expansion joints. -Very wide cracks , severe spalling & medium corrosion to exposed reinforcement on SE exterior diaphragms/creep block. - |  |               |

Medium cracks & spalling to remaining exterior creep blocks/diaphragms.

**DECK**

|                       |   |                           |                  |
|-----------------------|---|---------------------------|------------------|
| <b>Condition:</b>     | F1 - Fair   | <b>Curbs:</b>             | I - Inapplicable |
| <b>Hand Rail:</b>     | F1 - Fair   | <b>Roadway Condition:</b> | I - Inapplicable |
| <b>Approach Rail:</b> | F1 - Fair   |                           |                  |
| <b>Comments:</b>      | -Medium spalling and medium horizontal/vertical cracking to some areas on short concrete handrails & posts. - Top concrete handrail is missing (in river). -Severe deamin/spalling with medium corrosion to exposed reinforcement to handrail post at SE end (post struck and tipped out). -Medium damage to approach guiderail, approach guiderail remains offset too far leaving bridge ends exposed. |                           |                  |

**HYDROLOGY**

|                        |                             |                        |                   |
|------------------------|-----------------------------|------------------------|-------------------|
| <b>Water Velocity:</b> | 0.6 m/s                     | <b>Ice Problem:</b>    | N - No Problem    |
| <b>Water Depth:</b>    | 0.5 m                       | <b>Scour Problem:</b>  | K - Known Problem |
| <b>Waterway:</b>       | 01 - Adequate               | <b>Debris Problem:</b> | N - No Problem    |
| <b>Comments:</b>       | Narrow opening at waterway. |                        |                   |

**REPLACEMENT/REHABILITATION**

|                            |  |                          |       |
|----------------------------|--|--------------------------|-------|
| <b>Next Rehab. Date:</b>   | 2016   | <b>Replacement Year:</b> | 2020  |
| <b>Antic. Rehab. Cost:</b> | \$100  | <b>Replacement Cost:</b> | \$400 |
| <b>Recommendations:</b>    | -Bridge office should re-inspect exterior double tees & diaphragms/creep blocks. -Repair exterior tees & diaphragms/creep blocks & abutments corners. -Repair scour, install new end blocks handrails. -Repair approach guiderail, move out & replace terminal ends with buried end (if possible). |                          |       |

**OBSERVATIONS**

|                                 |  |                                     |     |
|---------------------------------|--|-------------------------------------|-----|
| <b>Overall Condition:</b>       | P - Poor   | <b>Requires Further Inspection:</b> | Yes |
| <b>Additional Observations:</b> | -unchanged from 2011-2014 inspections. -P for exterior tees and creep blocks. -F1 for remainder. |                                     |     |

**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**