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|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------|--|
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | GOVERNMENT OF<br>NEWFOUNDLAND<br>AND LABRADOR<br>Department of Transportation and Infrastructure |                   | <b>BRIDGE INSPECTION REPORT</b><br><b>B01282025-7</b> |  |
| <b>Date:</b> 1/24/2025                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Inspected By:</b> T Upshall / M Button                                                        |                   | <b>Category:</b> Eng. - Engineering                   |  |
| <b>BRIDGE INFORMATION</b>                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                  |                   |                                                       |  |
| <b>Site:</b>                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1-059 - QUARRY BROOK BRIDGE - R10                                                                |                   |                                                       |  |
| <b>SUBSTRUCTURE</b>                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                  |                   |                                                       |  |
| <b>Condition:</b>                                                                 | P1 - Poor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Bearings:</b>                                                                                 | I - Inapplicable  |                                                       |  |
|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Bearing Seat:</b>                                                                             | I - Inapplicable  |                                                       |  |
| <b>Comments:</b>                                                                  | - Western face of the southwest wingwall (location of holes under approach/exit curb) has very severe disintegration, P1. - Wingwalls have map cracking throughout, F1 to P3. - Both abutment faces have very wide cracking through (beyond the criteria for wide cracks) throughout with efflorescence, P1 to P. - Efflorescent material has covered the east abutment. West abutment has less efflorescent material.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                  |                   |                                                       |  |
| <b>SUPERSTRUCTURE</b>                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                  |                   |                                                       |  |
| <b>Condition:</b>                                                                 | P1 - Poor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Expansion Joints:</b>                                                                         | I - Inapplicable  |                                                       |  |
| <b>Comments:</b>                                                                  | - Deck drains are disintegrated holes through the deck, P. - Severe efflorescent deposits visible between double tee pre-cast sections on the underside of the deck indicating severe cracking and leaching throughout the cast in place concrete deck, P1. - Double tees generally in fair condition, F1. Double tee bearing on the northwest corner has complete disintegration exposing pre-stress cables, P.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                  |                   |                                                       |  |
| <b>DECK</b>                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                  |                   |                                                       |  |
| <b>Condition:</b>                                                                 | P1 - Poor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Curbs:</b>                                                                                    | P - Poor          |                                                       |  |
| <b>Hand Rail:</b>                                                                 | F1 - Fair                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Roadway Condition:</b>                                                                        | P3 - Poor         |                                                       |  |
| <b>Approach Rail:</b>                                                             | P - Poor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                  |                   |                                                       |  |
| <b>Comments:</b>                                                                  | *Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. - Asphalt has medium to wide cracks throughout with potholes forming. Evidence of recent pothole patching, P3. - Structure rail is 4 rail aluminum system. Minor dents and scrapes throughout, F1. - Approach/exit rail generally in fair condition and attached to end blocks, F1. Guiderail attachment to northwest end block not secure due to impact, P. - Hazard markers in place but appear too low. - Northwest end block has been impacted and has cracked off from the curb below, P. - Southern end blocks in fair condition with light scaling throughout, F1. - Northeast end block has wide map cracking throughout with delaminations, P3. - Curbs tops not inspectable due to snow cover. Northwest curb has cracked off above the wingwall due to an impact, P. Exterior face of curbs have light scaling throughout, F1. |                                                                                                  |                   |                                                       |  |
| <b>HYDROLOGY</b>                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                  |                   |                                                       |  |
| <b>Water Velocity:</b>                                                            | Slow m/s                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Ice Problem:</b>                                                                              | N - No Problem    |                                                       |  |
| <b>Water Depth:</b>                                                               | Shallow m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Scour Problem:</b>                                                                            | N - No Problem    |                                                       |  |
| <b>Waterway:</b>                                                                  | 01 - Adequate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Debris Problem:</b>                                                                           | K - Known Problem |                                                       |  |
| <b>Comments:</b>                                                                  | - Slow moving and shallow river below. - Locals placing tree trimmings on the northwest corner of the structure. - There are two erosion holes under the southwest curb. End block and surrounding area above are still supported by large boulders but all fines are washed away below, P.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                  |                   |                                                       |  |
| <b>REPLACEMENT/REHABILITATION</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                  |                   |                                                       |  |
| <b>Next Rehab. Date:</b>                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Replacement Year:</b>                                                                         | 2027              |                                                       |  |
| <b>Antic. Rehab. Cost:</b>                                                        | \$N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Replacement Cost:</b>                                                                         | \$1,500,000       |                                                       |  |

|                                                                         |           |                                     |    |
|-------------------------------------------------------------------------|-----------|-------------------------------------|----|
| <b>Recommendations:</b> - Replace structure with culvert(s).            |           |                                     |    |
| <b>OBSERVATIONS</b>                                                     |           |                                     |    |
| <b>Overall Condition:</b>                                               | P1 - Poor | <b>Requires Further Inspection:</b> | No |
| <b>Additional Observations:</b> - Structure in poor condition, replace. |           |                                     |    |

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2026.