|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FORM RC-TH** **Revised July 2016** | | | | | | | | | **MnDOT BRIDGE RATING AND LOAD POSTING REPORT** **FOR TRUNK HIGHWAYS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge Location and Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hwy. No. | | | | |  | | | | | | | | | | | | | | | Over  Under | | | | | |  | | | | | | | | | | | | | | | | | | **Bridge No.** | | | | | | | | |  | | | | | | | | | | | | |
|  | | | | |  | | | | | | | | | | | | | | |  | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Year Built | | | | |  | | | | | | | | | | | | | | | Year Remodeled | | | | | | | | |  | | | | | | | | | | | | | | | Replaces Br. | | | | | | | | | |  | | | | | | | | | | | |
| Type |  | | | | | | | | | | | | | | | | | | | County | | | |  | | | | | | | | | | | | | | | | | | | | Ref. Pt. | | | | | |  | | | | | | | | | | | | | | | |
| Description | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Location | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Data for Basis of Report** (Check all that apply) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **NBI Condition Ratings** | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Deck  Superstructure | | | | | | | | | | | | | |  | | |  |
| Bridge Inventory File | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | |  | | |  |
| Previous Bridge Rating and Load Posting Report | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Substructure | | | | | | | | | | | | | |  | | |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | |  | | |  |
| Bridge Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ADTT | | | | | | | | | | | | |  | | | |  |
| New  Overlay | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Repair/Reconstruction | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Other Dead Load Modifications | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Bridge Inspected by | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | ,date | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  |
| Damaged Component | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Deteriorated Component | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Types of Analysis: | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manual | | | | | | | | | | | | AASHTOWare BrR, V. | | | | | | | | | | | | | | | | | | | | Computer\* | | | | | | | | | | | | | | | | | | | | | | | | Other\* | | | | | | | | | |
| **\*** | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Method of Rating** (Check appropriate box) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Load Factor (LF)  Assigned LF Rating  Allowable Stress (AS)  Assigned LRFR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Design Load | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Load & Resistance Factor (LRFR) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  |
| Load Testing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Design Method | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Field Eval./Doc. Engineering Judgment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  |
| **Summary of Rating and Load Posting Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Load Posting** | | | | | | | | | | | | | | | | Required | | | | | | | | |  | | | | | **Bridge Rating** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | Not Required | | | | | | | | |  | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sign | | | | | | | | | | | | | | | | TONS | | | | | | | | | | | | | | Inventory | | | | | | | | | | | | | | | | | | | Operating | | | | | | | | | | | | | | | | |
| R12-1A | | | | | |  | | | | | | | | | |  | | | |  | | | | |  | | | | | HS  RF | | | | | |  | | | | | | | | |  | | | | HS  RF | | | | | | | | | |  | | | | |  | |
| R12-5a | | | | | |  | | | | | | | | | |  | | | |  | | | | |  | | | | |  | | | | | |  | | | | | | | | |  | | | |  | | | | | | | | | |  | | | | |  | |
| R12-5 | | | | | |  | | | | | | | | | | M3 | | | | M3S2 | | | | | M3-3 | | | | |  | | | | | |  | | | | | | | | |  | | | |  | | | | | | | | | |  | | | | |  | |
|  | | | | | |  | | | | | | | | | |  | | | |  | | | | |  | | | | | **Overweight Permit Codes** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R12-x11 | | | | | |  | | | | | | | | | |  | | | | 45 | | | | |  | | | | | A | | | |  | | | | | | | | | | B | | | | |  | | | | | | | | C | | | | | |  | |  |
|  | | | | | |  | | | | | | | | | |  | | | |  | | | | |  | | | | |  | | | |  | | | | | | | | | |  | | | | |  | | | | | | | |  | | | | | |  | |  |
| I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Signature: | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Date: | | | | | | | |  | | | | | | | | | |  |
| (Typed or Printed) Name: | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | License No. | | | | | | | | | | |  | | | | | | |  |
| (Typed or Printed) Employed by (Agency/Firm): | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **FORM RD-TH** **Revised Oct. 2011** | | | | | | | | **BRIDGE RATING DETAILS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | Bridge Type | | | | | | | | |  | | | | | | | | | | | | | | | |  | | | | Bridge No. | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  | | | | | |
|  | | Rating Method | | | | | | | | | | | |  | | | | | | | | | | | | |  | | | | Design Load: | | | | | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | | | |
|  | | Roadway Width | | | | | | | | | | | |  | | | | | | | | | | | | |  | | | | Inventory Rating: | | | | | | | | | | | |  | | | | | | | | | | | | | | | | |  | | | | | |
| Curved  Tapered | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Operating Rating: | | | | | | | | | | | |  | | | | | | | | | | | | | | | | |  | | | | | |
|  | | Beam Spacing | | | | | | | | | | |  | | | | | | | | | | | | | |  | | | | Rated | |  | | | | | | | | | | Checked | | | | | | | |  | | | | | | | | |  | | | | | |
| Live Load Distribution Factor | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Date: | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | |
| Single | | | | | | | | | |  | | | | | | | Multiple | | | | |  | | | | |  | | | | Sheet | |  | | | | | | | | of | | | | |  | | | | | |  | | | | | | | | | | | | | |
| Finite/Grid Element Analysis | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **BEAM ELEVATION 2**  Show span lengths, structure/beam depths. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Truck | | | | | | | Rating  Factor | | | | | | | Span/  Pier | | | | | Location | | | | | | Limit State **1** | | | | | | | | | | | | | | | | | | | | | Notes/Comments | | | | | | | | | | | | | | | | | | | |
| Inventory | | | | | | |  | | | | | | |  | | | | |  | | | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
| Operating | | | | | | |  | | | | | | |  | | | | |  | | | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
| Standard A **3** | | | | | | |  | | | | | | |  | | | | |  | | | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
| Standard B **3** | | | | | | |  | | | | | | |  | | | | |  | | | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
| Standard C **3** | | | | | | |  | | | | | | |  | | | | |  | | | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
| Standard P411 **3** | | | | | | |  | | | | | | |  | | | | |  | | | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
| Standard P413 **3** | | | | | | |  | | | | | | |  | | | | |  | | | | | |  | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |

**1** Choose from: service or ultimate; shear or moment

**2** Elevation may be on back or another sheet if it won’t fit here

**3** If the bridge needs posting, change these trucks to the posting trucks.