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| **FORM RC-CL** **Revised Aug. 2018** | | | | | | | | | | | **MnDOT BRIDGE RATING AND LOAD POSTING REPORT** **FOR COUNTY AND LOCAL AGENCIES** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bridge Location and Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hwy. No. | | | | | |  | | | | | | | | | | | | | | | | | | | | Over  Under | | | | | | | |  | | | | | | | | | | | | | | | | | | | **Bridge No.** | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | |
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| Year Built | | | | | |  | | | | | | | | | | | | | | | | | | | | Year Remodeled | | | | | | | | | | | |  | | | | | | | | | | | | | | | Replaces Br. | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | |
| Type |  | | | | | | | | | | | | | | | | | | | | | | | | | County | | | | |  | | | | | | | | | | | | | | | | | | | | | | Ref. Pt. | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | |
| Description | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Location | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **Data for Basis of Report** (Check all that apply) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | **NBI Condition Ratings** | | | | | | | | | | | | | | | | | | | | | |
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| Bridge Inventory File | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | |  | | | | | |  |
| Previous Bridge Rating and Load Posting Report | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Substructure | | | | | | | | | | | | | | |  | | | | | |  |
| Bridge Plans | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Culvert | | | | | | | | | | | | | | |  | | | | | |  |
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| New  Overlay | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | HCAADT | | | | | | | | | | | | | | |  | | | | |  | |
| Repair/Reconstruction | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Other Dead Load Modifications | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Bridge Inspected by | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Date | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Damaged Component | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Deteriorated Component | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Types of Analysis: | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manual | | | | | | | | | | | | | | AASHTOWare BrR, V. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Computer\* | | | | | | | | | | | | | | | | | | | | | | | Other\* | | | | | | | | | | | | | | | | |
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| **Method of Rating** (Check appropriate box) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Load Factor (LFR) | | | | | | | | | | | | | | | | | | | | | | | | | Assigned LFR | | | | | | | | | | | | | | Design Load | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Allowable Stress (ASR) | | | | | | | | | | | | | | | | | | | | | | | | | Assigned LRFR | | | | | | | | | | | | | |  | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| 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 | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R12-1a | | | | | | | |  | | | | | | | | | |  | | | | | | | |  | | | | | |  | | | | | | | Inventory | | | | | | | | | | | | | | | | | | | | | | | | Operating | | | | | | | | | | | | | | | | | | | |
| R12-5a | | | | | | | |  | | | | | | | | | |  | | | | | | | |  | | | | | |  | | | | | | | HS  RF | | | | | | |  | | | | | | | | |  | | | | | | | | HS  RF | | | | | | | | | |  | | | | |  | | | | |
| R12-5 | | | | | | | |  | | | | | | | | | | M3 | | | | | | | | M3S2-40 | | | | | | M3S3 | | | | | | |  | | | | | | |  | | | | | | | | |  | | | | | | | |  | | | | | | | | | |  | | | | |  | | | | |
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| R12-X11 | | | | | | | |  | | | | | | | | | |  | | | | | | | | 45 | | | | | |  | | | | | | | **Overweight Permit Codes** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R11-2a | | | | | | | |  | | | | | | | | | | **BRIDGE CLOSED** | | | | | | | | | | | | | | | | | | | | | A | | |  | | | | | | | | B | | | | | | | | |  | | | | | | | | | | | C | | | | |  | | | | |  | | |
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| 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): | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
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| My signature below indicates that I have read and fully agreed with the load rating report. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Program Administrator’s Signature: | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Date: | | | | | | | | |  | | | | | | | | | | |  |
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| **FORM RD-CL** **Revised Apr. 2018** | | | | | | | | | | | **BRIDGE RATING DETAILS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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|  | | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **BEAM ELEVATION 1**  Show span lengths, structure/beam depths. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Truck | | | | | | | | | Rating  Factor | | | | | | | Span/Pier | | | | | | | Location | | | | | | | | | | Limit State 2 | | | | | | | | | | | | | | | | | | | | | | | | Notes/Comments | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inventory | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| Operating | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| M3 | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| M3S2-40 | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| M3S3-40 | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| SU4 | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| SU5 | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| SU6 | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| SU7 | | | | | | | | |  | | | | | | |  | | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Emergency3 Vehicles | | | | | | | | | Rating  Factor | | | | | | | | Span/Pier | | | | | | | Location | | | | | | | | | Limit State 2 | | | | | | | | | | | | | | | | | | | | | | | | | Notes/Comments | | | | | | | | | | | | | | | | | | | | | | | | |
| EV2 | | | | | | | | |  | | | | | | | |  | | | | | | |  | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | |
| EV3 | | | | | | | | |  | | | | | | | |  | | | | | | |  | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Elevation may be on back or another sheet if it won’t fit here. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Choose from: service or ultimate; shear or moment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. For information only | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| **FORM RD-CL Revised Mar. 2017** | | | **BRIDGE RATING DETAILS** | | | | | | | | | | |
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| **Annual/Routine**  **Permit** | | No Restriction | | | Straddle Two Lanes | | | 5% Impact | Notes/Comments | | | | |
| Rating Factor | | | Rating Factor | | | Rating Factor |
| STD. A | |  | | |  | | |  |  | | | | |
| STD. B | |  | | |  | | |  |  | | | | |
| STD. C | |  | | |  | | |  |  | | | | |
| 6-axle, 90k-99k | |  | | |  | | |  |  | | | | |
| 7-axle, 97k-99k | |  | | |  | | |  |  | | | | |
|  | | | | | | | | | | | | | |
| **Special/Single**  **Permit** | | No Restriction | | | Straddle Two Lanes | | | 5% Impact | | Notes/Comments | | | |
| Rating Factor | | | Rating Factor | | | Rating Factor | |
| P411 | |  | | | \*\* | | |  | |  | | | |
| P413 | |  | | | \*\* | | |  | |  | | | |
| C152b | |  | | | \*\* | | |  | |  | | | |
| C174b | |  | | | \*\* | | |  | |  | | | |
| C214b | |  | | | \*\* | | |  | |  | | | |
| C237b | |  | | | \*\* | | |  | |  | | | |
| C256b | |  | | | \*\* | | |  | |  | | | |
| C200j | |  | | | \*\* | | |  | |  | | | |
| **OVERWEIGHT PERMIT RESTRICTIONS FOR LOCAL BRIDGES** | | | | | | | | | | | | | |
|
| Restriction Code | Restriction Description | | | Special/Single Permit | | Annual/Routine Permit | Detailed Restriction Description | | | | Bridge Check Operation | | |
| 1 | None | | | YES | | YES | No Restriction to cross bridge | | | | Normal | | |
| 2 | Straddle Two Lanes | | | YES | | YES | Drive on the centerline between two lanes, in a manner that prevents any other vehicle from occupying a part of either lane on either side of the permit vehicle. Drive in the center of a single lane bridge. | | | | The AASHTO "Single Lane" live load distribution is used. *This operation applies to all permit vehicles when performing LFR method or only to annual permit vehicles when performing LRFR method.* | | |
| 3 | Maximum speed of 10 mph | | | YES  ① | | YES  ① | Drive at a speed of 10 mph or less | | | | The impact factor is reduced from the AASHTO impact to 5% | | |
| X | DENIED | | | YES | | YES | The overweight permit vehicle is **NOT ALLOWED** on this bridge | | | | Used when requirements for restriction 1 thru 3 are not met | | |
|  | | | | | | | | | | | | | |
| ① | Not allowed where there is a posted minimum speed. | | | | | | | | | | |  | |
| \*\* | “N/A”, Does not apply when performing LRFR method, ref. AASHTO MBE Table 6A.4.5.4.2a-1 | | | | | | | | | | | |  |
|  |  | | | | | | | | | | |  | |