

**2015 ROUTINE
BRIDGE INSPECTION REPORT**



**BRIDGE # 62084
PEDESTRIAN over CSAH 36(WARNER RD)**

DISTRICT: Metro

COUNTY: Ramsey

CITY/TOWNSHIP: St Paul

Date(s) of Inspection: 10/03/2015

Equipment Used:

Owner: County Highway Agency

Inspected By: Engel, Michael; Lee, Joseph; Schaaf, Jerry

Report Written By: Jerry Schaaf

Report Reviewed By: Glenn Pagel

Final Report Date: 12/29/2015

**MnDOT Bridge Office
3485 Hadley Avenue North
Oakdale, MN 55128**



MnDOT Structure Inventory Report

Bridge ID: 62084

PEDESTRIAN

over CSAH 36(WARNER RD)

Date: 12/29/2015

| GENERAL | |
|-------------------------|----------------------------|
| Agency Br. No. | |
| District | Metro |
| Maint. Area | Crew |
| County | 062 - Ramsey |
| City | St Paul |
| Township | |
| Desc. Loc. | 0.1 MI W OF JCT TH 61 |
| Sect., Twp., Range | 3 - 028N - 22W |
| Latitude | Deg 44 Min 56 Sec 48.26 |
| Longitude | Deg 93 Min 2 Sec 33.51 |
| Custodian | 02 - County Highway Agency |
| Owner | 02 - County Highway Agency |
| BMU Agreement | |
| Year Built | 1986 |
| MN Year Reconstructed | |
| FHWA Year Reconstructed | |
| MN Temporary Status | |
| Bridge Plan Location | 1 - CENTRAL |
| Date Opened to Traffic | |
| On-Off System | 0 - OFF |
| Legislative District | 67B |

| STRUCTURE | |
|-------------------|---|
| Service On | 3 - Pedestrian-bicycle |
| Service Under | 1 - Highway, w/ or w/out ped. |
| Main Span Type | 5 - Prestress or Precast 01 - Beam Span |
| Main Span Detail | |
| Appr. Span Type | |
| Appr. Span Detail | |
| Skew | 6 R |
| Culvert Type | |
| Barrel Length | ft. |
| Cantilever ID | |

| NUMBER OF SPANS | | |
|-----------------------------|---------------------------------|------------------|
| MAIN: | 3 | APPR: 0 TOTAL: 3 |
| Main Span Length | 108.8 | ft. |
| Structure Length | 239.3 | ft. |
| Deck Width (Out-to-Out) | 9.5 | ft. |
| Deck Material | 1 - Concrete Cast-in-Place | |
| Wear Surf Type | N - Not Applicable (applies onl | |
| Wear Surf Install Year | | |
| Wear Course/Fill Depth | 0.00 | ft. |
| Deck Membrane | 0 - None | |
| Deck Rebars | 0 - None | |
| Deck Rebars Install Year | | |
| Structure Area (Out-to-Out) | 2273 | sq. ft. |
| Roadway Area (Curb-to-Curb) | 1916 | sq. ft. |
| Sidewalk Width | Lt 0.00 | Rt 0.00 |
| Curb Height | Lt 0.00 | Rt 0.00 |
| Rail Type | Lt NN | Rt NN |

| ROADWAY | | |
|-----------------------------|--------|----------|
| Bridge Match ID (TIS) | | |
| Roadway O/U Key | | |
| Route Sys | Number | |
| Roadway Name or Description | | |
| Level of Service | | |
| Roadway Type | | |
| Control Section (TH Only) | | |
| Reference Point | | |
| Detour Length | mi | |
| Lanes | On | Under 5 |
| | ADT | Year |
| HCACT | 0 | ADTT 0 % |
| Functional Class | | |

| RDWY DIMENSIONS | | |
|------------------------|-------|-------|
| If Divided | NB-EB | SB-WB |
| Roadway Width | ft. | ft. |
| Vertical Clearance | ft. | ft. |
| Max. Vert. Clear. | ft. | ft. |
| Horizontal Clear. | ft. | ft. |
| Lateral Clearance | ft. | ft. |
| Appr. Surface Width | ft. | |
| Bridge Roadway Width | ft. | |
| Median Width On Bridge | ft. | |

| MISC. BRIDGE DATA | |
|---------------------|---------------------------|
| Structure Flared | 0 - No flare |
| Parallel Structure | N - No parallel structure |
| Field Conn. ID | |
| Abutment Foundation | 1 - CONC |
| (Material/Type) | 3 - FTG PILE |
| Pier Foundation | 1 - CONC |
| (Material/Type) | 3 - FTG PILE |
| Historic Status | 5 - Not eligible |

| PAINT | |
|-----------------|---------|
| Year Painted | |
| Unsound Paint % | |
| Painted Area | sq. ft. |
| Primer Type | |
| Finish Type | |

| BRIDGE SIGNS | |
|--------------|------------------|
| Posted Load | 0 - Not Required |
| Traffic | 0 - Not Required |
| Horizontal | 0 - Not Required |
| Vertical | 0 - Not Required |

| INSPECTION | |
|-----------------------------------|------------------|
| Userkey | 199 |
| Unofficial Structurally Deficient | N |
| Unofficial Functionally Obsolete | N |
| Unofficial Sufficiency Rating | -2 |
| Routine Inspection Date | 10/03/2015 |
| Routine Inspection Frequency | 24 |
| Inspector Name | City of St. Paul |
| Status | A - Open |

| NBI CONDITION RATINGS | |
|-----------------------|-------------------------|
| Deck | 7 - Good Condition |
| Unsound Deck % | |
| Superstructure | 8 - Very Good Condition |
| Substructure | 8 - Very Good Condition |
| Channel | N - Not Applicable |
| Culvert | N - Not Applicable |

| NBI APPRAISAL RATINGS | |
|-----------------------|-------------------------------|
| Structure Evaluation | N |
| Deck Geometry | N |
| Underclearances | 9 |
| Water Adequacy | N - Not Applicable |
| Approach Alignment | 9 - Superior to present desir |

| SAFETY FEATURES | |
|-----------------|------------------|
| Bridge Railing | N - NOT REQUIRED |
| GR Transition | N - NOT REQUIRED |
| Appr. Guardrail | N - NOT REQUIRED |
| GR Termini | N - NOT REQUIRED |

| IN DEPTH INSP. | | | |
|----------------|-----|------|------|
| | Y/N | Freq | Date |
| Frac. Critical | | | |
| Underwater | | | |
| Pinned Asbly. | | | |
| Spec. Feat. | | | |

| WATERWAY | |
|-------------------------------------|-------------------------------|
| Drainage Area (sq. mi.) | |
| Waterway Opening | sq. ft. |
| Navigation Control | N - Not applicable, no waterw |
| Pier Protection | |
| Nav. Clr. (ft.) | Vert. ft. Horiz. ft. |
| Nav. Vert. Lift Bridge Clear. (ft.) | |
| MN Scour Code | A - NON WATER' Year |

| CAPACITY RATINGS | | |
|------------------|----------------|------|
| Design Load | 7 - PEDESTRIAN | |
| Operating Rating | 5 - NRAP | 0.0 |
| Inventory Rating | 5 - NRAP | 0.0 |
| Posting VEH: | SEMI: | DBL: |
| Rating Date | | |

| MnDOT Permit Codes | |
|--------------------|---------|
| A: | N - N/A |
| B: | N - N/A |
| C: | N - N/A |

MnDOT BRIDGE INSPECTION REPORT

12/29/2015

Inspector: City of St. Paul

BRIDGE 62084 PEDESTRIAN OVER CSAH 36(WARNER RD)

ROUTINE INSP. DATE: 10/03/2015

| | | |
|--|---------------------------------|--|
| County: Ramsey | Location: 0.1 MI W OF JCT TH 61 | Length: 239.3 ft. |
| City: St Paul | Route: Ref. Pt.: | Deck Width: 9.5 ft. |
| Township: | Control Section: | Rdwy. Area/ Pct. Unsnd: 1916 sq. ft. / % |
| Section: 3 Township: 028N Range: 22W Maint. Area: | | Paint Area/ Pct. Unsnd: sq. ft. / % |
| Span Type: 5 - Prestressed Concrete 02 - Stringer/Multi-beam or Girder | Local Agency Bridge Nbr.: | Culvert: N/A |
| List: | | Postings: |
| NBI Deck: 7 Super: 8 Sub: 8 Chan: N Culv: N | | |
| | Open, Posted, Closed: A - Open | |
| | MN Scour Code: A - NON WATERWAY | |

| | | |
|--|----------------------------|-------------------------------------|
| Appraisal Ratings - Approach: 9 Waterway: N | | Unofficial Structurally Deficient N |
| Required Bridge Signs - Load Posting: 0 - Not Required | Traffic: 0 - Not Required | Unofficial Functionally Obsolete N |
| Horizontal: 0 - Not Required | Vertical: 0 - Not Required | Unofficial Sufficiency Rating N |

Structure Unit:

| ELEM NBR | ELEMENT NAME | ENV | REPORT TYPE | INSP. DATE | QUANTITY | QTY CS 1 | QTY CS 2 | QTY CS 3 | QTY CS 4 | QTY CS 5 |
|---|--|-----|--|------------|----------|------------------------------------|----------|----------|----------|----------|
| 012 | Top of Concrete Deck (No Overlay - Uncoated Rebar) | 1 | Routine | 10/03/2015 | 2270 SF | 2270 | 0 | 0 | 0 | 0 |
| | | | Routine | 10/03/2013 | 2270 SF | 2270 | 0 | 0 | 0 | 0 |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: No spalls, delams or patches. 2013-15 Minor cracking present. 2013-15 | | | | | | | | | | |

| | | | | | | | | | | |
|---|-------------------------------------|---|--|------------|--------|------------------------------------|---|---|---|-----|
| 109 | Prestressed Concrete Girder or Beam | 2 | Routine | 10/03/2015 | 459 LF | 459 | 0 | 0 | 0 | N/A |
| | | | Routine | 10/03/2013 | 459 LF | 459 | 0 | 0 | 0 | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: 3/4" shift of approach beams to the south. 09-15 | | | | | | | | | | |

| | | | | | | | | | | |
|--|------------------------------|---|--|------------|-------|------------------------------------|---|---|---|-----|
| 215 | Reinforced Concrete Abutment | 2 | Routine | 10/03/2015 | 20 LF | 20 | 0 | 0 | 0 | N/A |
| | | | Routine | 10/03/2013 | 20 LF | 20 | 0 | 0 | 0 | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: There is a 0.020 inch vertical crack for the height of the north abutment at the center. 08-11. | | | | | | | | | | |

| | | | | | | | | | | |
|---|------------------------------|---|--|------------|-------|------------------------------------|---|---|---|-----|
| 234 | Reinforced Concrete Pier Cap | 2 | Routine | 10/03/2015 | 18 LF | 18 | 0 | 0 | 0 | N/A |
| | | | Routine | 10/03/2013 | 18 LF | 18 | 0 | 0 | 0 | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: Minor cracking at curtain wall cold joint, on the pier support S.side. 2011-15 | | | | | | | | | | |

Structure Unit:

| ELEM NBR | ELEMENT NAME | ENV | REPORT TYPE | INSP. DATE | QUANTITY | QTY CS 1 | QTY CS 2 | QTY CS 3 | QTY CS 4 | QTY CS 5 |
|--|---|-----|--|------------|----------|------------------------------------|-------------|-------------|-------------|-------------|
| 300 | Strip Seal Deck Joint | 2 | Routine | 10/03/2015 | 20 LF | 20 | 0 | 0 | N/A | N/A |
| | | | Routine | 10/03/2013 | 20 LF | 20 | 0 | 0 | N/A | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: Previous comments > < none > | | | | | | | | | | |
| 302 | Compression Seal Deck Joint | 2 | Routine | 10/03/2015 | 10 LF | 10 | 0 | 0 | N/A | N/A |
| | | | Routine | 10/03/2013 | 10 LF | 10 | 0 | 0 | N/A | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: Date 2002-10-09 - | | | | | | | | | | |
| 311 | Expansion Bearing | 2 | Routine | 10/03/2015 | 4 EA | 4 | 0 | 0 | N/A | N/A |
| | | | Routine | 10/03/2013 | 4 EA | 4 | 0 | 0 | N/A | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: Previous comments > < none > | | | | | | | | | | |
| 313 | Fixed Bearing | 2 | Routine | 10/03/2015 | 8 EA | 8 | 0 | 0 | N/A | N/A |
| | | | Routine | 10/03/2013 | 8 EA | 8 | 0 | 0 | N/A | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: Previous comments > < none > | | | | | | | | | | |
| 320 | Concrete Approach Slab-Bituminous Wearing Surface | 2 | Routine | 10/03/2015 | 1 EA | 0 | 0 | 1 | 0 | N/A |
| | | | Routine | 10/03/2013 | 1 EA | 0 | 0 | 1 | 0 | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: (Bituminous approaches) Thirteen transverse cracks in south approach. 94-11. | | | | | | | | | | |
| 321 | Concrete Approach Slab-Concrete Wearing Surface | 2 | Routine | 10/03/2015 | 1 EA | 1 | 0 | 0 | 0 | N/A |
| | | | Routine | 10/03/2013 | 1 EA | 1 | 0 | 0 | 0 | N/A |
| | | | <input type="checkbox"/> Requires Monitoring | | | <input type="checkbox"/> Monitored | | | | |
| Notes: Numerous transverse cracks in the east approach walk. 06-11. Cracks are unsealed. 2015 | | | | | | | | | | |

Structure Unit:

| ELEM NBR | ELEMENT NAME | ENV | REPORT TYPE | INSP. DATE | QUANTITY | QTY CS 1 | QTY CS 2 | QTY CS 3 | QTY CS 4 | QTY CS 5 |
|----------|--|-----|-------------|------------|----------|----------|----------|----------|----------|----------|
| 334 | Metal Bridge Railing (Coated or Painted) | 2 | Routine | 10/03/2015 | 449 LF | 444 | 5 | 0 | 0 | 0 |
| | | | Routine | 10/03/2013 | 449 LF | 449 | 0 | 0 | 0 | 0 |

 Requires Monitoring Monitored

Notes: The south end of the east bridge handrail needs the sharp edge feathered. 06-07. Partially corrected. 08-11.
The north end of the west rail needs a cap. 07.
The bottom pipe (6') at the south ramp is bent out 3 inches on the north side. 08-15
5' of pipe rail is missing - S.side. 2015

| | | | | | | | | | | |
|-----|---------------------------------------|---|---------|------------|------|---|---|---|---|---|
| 359 | Underside of Concrete Deck Smart Flag | 2 | Routine | 10/03/2015 | 1 EA | 1 | 0 | 0 | 0 | 0 |
| | | | Routine | 10/03/2013 | 1 EA | 1 | 0 | 0 | 0 | 0 |

 Requires Monitoring Monitored

Notes: Previous comments > < none >

| | | | | | | | | | | |
|-----|-------------------------------|---|---------|------------|-------|----|---|---|---|-----|
| 380 | Secondary Structural Elements | 2 | Routine | 10/03/2015 | 10 EA | 10 | 0 | 0 | 0 | N/A |
| | | | Routine | 10/03/2013 | 10 EA | 10 | 0 | 0 | 0 | N/A |

 Requires Monitoring MonitoredNotes:
Previous comments > < none >

| | | | | | | | | | | |
|-----|------------------------------|---|---------|------------|------|---|---|---|---|-----|
| 387 | Reinforced Concrete Wingwall | 2 | Routine | 10/03/2015 | 4 EA | 4 | 0 | 0 | 0 | N/A |
| | | | Routine | 10/03/2013 | 4 EA | 4 | 0 | 0 | 0 | N/A |

 Requires Monitoring Monitored

Notes: Northwest and Northeast wing walls have four cubic feet of fill missing. 98-02.
The wing walls are keystone.
Several capstones of the northwest wall are off and only one is laying at the bottom of the wall. 08-11.
Dry block retaining wall at N. approach.
So. approach walls have fine vertical cracks about 6' O. C. 90-08.
Everything else is okay. - 10

| | | | | | | | | | | |
|-----|------------------|---|---------|------------|------|---|---|---|---|---|
| 409 | Chain Link Fence | 2 | Routine | 10/03/2015 | 1 LF | 1 | 0 | 0 | 0 | 0 |
| | | | Routine | 10/03/2013 | | | | | | |

 Requires Monitoring Monitored

Notes: Added element in 2015.
Quantity needed next inspection.
5' of pipe rail is missing - S.side. 2015

| | | | | | | | | | | |
|-----|-----------------------------|---|---------|------------|------|---|---|-----|-----|-----|
| 964 | Critical Finding Smart Flag | 2 | Routine | 10/03/2015 | 1 EA | 1 | 0 | N/A | N/A | N/A |
| | | | Routine | 10/03/2013 | 1 EA | 1 | 0 | N/A | N/A | N/A |

 Requires Monitoring Monitored

Notes: DO NOT DELETE THIS CRITICAL FINDING SMART FLAG.

Structure Unit:

| ELEM NBR | ELEMENT NAME | ENV | REPORT TYPE | INSP. DATE | QUANTITY | QTY CS 1 | QTY CS 2 | QTY CS 3 | QTY CS 4 | QTY CS 5 |
|----------|--------------|-----|-------------|------------|----------|----------|----------|----------|----------|----------|
| 981 | Signing | 1 | Routine | 10/03/2015 | 1 EA | 1 | 0 | 0 | 0 | 0 |
| | | | Routine | 10/03/2013 | 1 EA | 1 | 0 | 0 | 0 | 0 |

Requires Monitoring Monitored

Notes: The Mn/Dot sign on the south bank of Warner Rd. at the east end of the bridge ramp is down on the ground. 98-08. It's by the utility boxes. 08-10.

| | | | | | | | | | | |
|-----|--------------------------|---|---------|------------|------|---|---|---|-----|-----|
| 984 | Deck & Approach Drainage | 2 | Routine | 10/03/2015 | 1 EA | 1 | 0 | 0 | N/A | N/A |
| | | | Routine | 10/03/2013 | 1 EA | 0 | 1 | 0 | N/A | N/A |

Requires Monitoring Monitored

Notes:

| | | | | | | | | | | |
|-----|---------------------|---|---------|------------|------|---|---|---|-----|-----|
| 988 | Miscellaneous Items | 1 | Routine | 10/03/2015 | 1 EA | 1 | 0 | 0 | N/A | N/A |
| | | | Routine | 10/03/2013 | 1 EA | 1 | 0 | 0 | N/A | N/A |

Requires Monitoring Monitored

Notes: none

General Notes: < none >

58. Deck NBI: Minor cracking and wear. 2011

36A. Brdg Railings NBI:

36B. Transitions NBI:

36C. Appr Guardrail NBI:

36D. Appr Guardrail Terminal NBI:

59. Superstructure NBI:

60. Substructure NBI:

61. Channel NBI:

62. Culvert NBI:

71. Waterway Adeq NBI:

72. Appr Roadway Alignment NBI:

Inventory Notes:

Jerry Schaaf
Inspector's Signature

Glenn Pagel
Reviewer's Signature



1. 2010 deck view - ramp_to_trail.jpg



2. 2011 deckview_1.jpg



3. 2011 deckview_2.jpg



4. 2011 elevation view.jpg



5. bearing.jpg



6. CB repair area_1.jpg



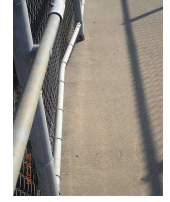
7. curtain_wall_crack_1.jpg



8. curtain_wall_crack_2.jpg



9. fence damage_1.jpg



10. fence damage_2.jpg



11. joint_ramp_1.jpg



12. joint_ramp_2.jpg



13. joint_ramp_3.jpg



14. joint_ramp_4.jpg



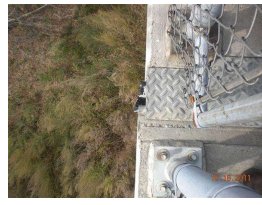
15. joint_ramp_5.jpg



16. joint_ramp_lack_of.jpg



17. joint_S.side_north.jpg



18. joint_S.side_south_1.jpg



19. joint_wall_1.jpg



20. joint_wall_2.jpg



21. pier_support S.side_N.bearing.jpg



22. pier_support S.side_S.bearing.jpg



23. pier_support_S.side.jpg



24. ramp cracks_1.jpg



25. ramp cracks_2.jpg



26. 10-3-13 236.jpg



27. 10-3-13 237.jpg



28. 2013 deckview.jpg



29. 2013 deckview.jpg