# **BRIDGE INSPECTION REPORT**

1805371 1969 **BRIDGE NUMBER** YEAR BUILT

2

2

2

1

2

2

Structure File Number

12

**DECK** 

<u> 1. FLOOR</u>

5. RAILING

7. EXPANSION JOINTS

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15. VERTICALS

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SUBSTRUCTURE

33. ABUTMENTS

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<u>45. SHAPE</u>

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**GENERAL** 

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67. INSPECTED BY

SIGNED

**CHANNEL** 

9. ALIGNMENT

DIST

Bridge Type 322 TYPE SERVICE 6 1

1 REINFORCED CONCRETE PARAPET

**8 ELASTOMERIC STRIP SEAL** 

Max Spans 121

out/out 64 Deck Area 115,907 sqft

Left N NONE / Right N NONE

3. CURBS, SIDEWALKS AND WALKWAYS

11. DIAPHRAGMS or CROSSFRAMES

1 REINF CONCRT (PRESTRSD, PRECAST

CUY 00071 1791 R

SR 176(1328)JENNINGS FWY

4 DENSE CONCRETE (IOWA SYSTEM) OVERLAY

28 ROLLED STEEL

6. DRAINAGE 3 SCUPPERS & DWNSPTS

10. BEAMS/GIRDERS/SLAB

14. FIOOR BEAM CONNECTIONS

24. BEARING DEVICES 2 ROCKERS

26. ARCH COLUMNS or HANGERS

12. JOISTS/STRINGERS

2. WEARING SURFACE

4. MEDIAN

8. SUMMARY

16. DIAGONALS

18. UPPER CHORD

20. GUSSET PLATES

22. SWAY BRACING

2

2

6

1

2

DECK

FLOOR: THE FLOOR IS IN FAIR CONDITION. THERE ARE HAIRLINE TO NARROW TRANSVERSE CRACKS WITH EFFLORESCENCE. A FEW AREAS SHOW HONEYCOMBING AND SPALLING WITH EXPOSED REBAR. THERE ALSO ARE AREAS OF DELAMINATED CONCRETE. FORMWORK WAS LEFT IN PLACE IN SPAN 20AW.

WEARING SURFACE: THE WEARING SURFACE IS IN FAIR CONDITION. THERE ARE AREAS OF FULL-DEPTH PATCHES THAT ARE IN GOOD QUALITY. THERE ARE TRANSVERSE CRACKS SPACED ROUGHLY AT 10 FT INTERVALS IN THE POSITIVE MOMENT REGIONS AND AT 6 FT INTERVALS IN THE NEGATIVE MOMENT REGIONS. THERE ARE ISOLATED AREAS OF MAP CRACKING, SPALLING, AND DETERIORATED PATCHES. SEVERAL RPMS ARE MISSING LEAVING SHALLOW HOLES.

RAILING: THE RAILING IS IN FAIR CONDITION. THERE ARE SEVERAL SPALLS ALONG THE TOE OF THE BARRIER. VERTICAL CRACKS EXIST THROUGHOUT. ONE LARGE SPALL IS IN THE RAIL BETWEEN PIER 22AE AND THE NORTH ABUTMENT AE. MULTIPLE SPALLS WITH EXPOSED REBAR ARE ON THE EXTERIOR FACE. THERE ARE LONGITUDINAL CRACKS WITH EFFLORESCENCE ON THE EXTERIOR FACE.

DRAINAGE: THE DRAINS ARE IN FAIR CONDITION. SEVERAL DRAINS ARE CLOGGED. THERE ARE PORTIONS OF THE DRAIN THAT HAVE BROKEN OFF IN SPANS 12, 17, 18AE, AND 18AW.

EXPANSION JOINTS: THE EXPANSION JOINTS ARE IN FAIR CONDITION. THE GLANDS SHOW SIGNS OF MINOR LEAKAGE. DEBRIS EXISTS IN MOST OF THE JOINTS.

#### SUPERSTRUCTURE

BEAMS/GIRDERS: The beams and girders are in good condition. There is surface corrosion at various locations, especially on the bottom flange, splice bolts, and near the seated hinges. The area near the seated hinges has up to 1/16" section loss. A couple of loose bolts exist at the splice at Beam A, Span 17.

DIAPHRAGMS OR CROSSFRAMES: The crossframes are in fair condition. There are locations of missing bolts and corrosion holes. In Spans 7, 12, and 18AE, the crossbracing has tears where it's attached to the beams.

LATERAL BRACING: The lateral bracing is in fair condition. There's pack rust bowing the gusset plate in Span 18AE. There is a bent gusset plate in Span 19AE and a loose bolt

in Spans 21AE and 23AE. This item was not previously rated, but they exist in Ramp AE.

> BEARING DEVICES: The bearings are in fair condition. There are six bearings that are rocked =10°. One bearing is rocked beyond recall; North Abut AW, Bearing G. The bearings at 21AW have pack rust between the shims causing the masonry plate to be rotated.

> PAINT: The paint is in satisfactory condition. There is greater than 5% and less than 10% of the total coating system has failed. Surface or freckled rust is prevalent throughout. There are random locations of peeling paint and surface corrosion.

PINS/HANGERS/HINGES: The seated hinges are in fair condition. The hinges have surface corrosion with the corrosion heavier at the groove. There is a loose bolt in Span 18AW on Beam E.

FATIGUE PRONE CONNECTIONS: The fatigue prone connections are in good condition. There is surface corrosion on the welds.

LIVE LOAD RESPONSE: The live load response is in satisfactory condition.

## SUBSTRUCTURE

ABUTMENTS: The abutments are in good condition. There is light cracking.

ABUTMENT SEATS: The abutment seats are in good condition. The North Abut AW has debris around Bearings A & F.

PIERS: The piers are in fair condition. There are hairline to medium cracks, spalling with exposed rebar, and delaminations. Pier 17 is a steel box cap and has peeling paint and surface corrosion at various locations. Inside the box cap are steel inclusions and a gouge. Piers 18AW through Pier 22AW have cracks with drilled holes to arrest the cracks.

PIER SEATS: The pier seats are in good condition. There are multiple areas along the pier seat edge that are cracking.

BACKWALLS: The backwalls are in fair condition. The

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backwall is failing at the northwest corner of North Abut

AW. There are holes in the backwall at both the northwest and northeast corners.

WINGWALLS: The wingwalls are in good condition. At the North Abut AW, the east wingwall has missing joint material. The west wingwall has an area of 1  $\frac{1}{2}$ ' x 1  $\frac{1}{2}$ ' spall with exposed rebar and the joint material is falling out.

### APPROACHES

PAVEMENT: THE PAVEMENT IS IN GOOD CONDITION. THERE ARE SPALLS AND PATCHES IN THE ASPHALT ADJACENT TO THE EXPANSION JOINTS.

APPROACH SLABS: THE APPROACH SLABS ARE IN GOOD CONDITION. THERE IS A 6" DIAMETER EROSION HOLE DEVELOPING AT THE WEST END OF THE ABUTMENT JOINT AT THE NORTH ABUT AW.

GUARDRAIL: THE GUARDRAIL IS IN GOOD CONDITION. THE IMPACT ATTENUATOR NEAR PIER 17 HAS BEEN HIT BY A VEHICLE.

#### GENERAL

WARNING SIGNS: THERE ARE NO BRIDGE END MARKERS.

SIGN SUPPORTS: THE SIGN ATTACHED TO PIER 15 HAS TWO LOOSE BOLTS. THIS LOWERED THE RATING FROM A 1 TO A 2.