



Latitude:35.82106, Longitude:-89.96636

Route:55 Section:12 Log:58

Arnold Road ID:47x55x12xA, Arnold Log mile:58.038

District 10, Mississippi County

Owner: 1-State Highway Agency



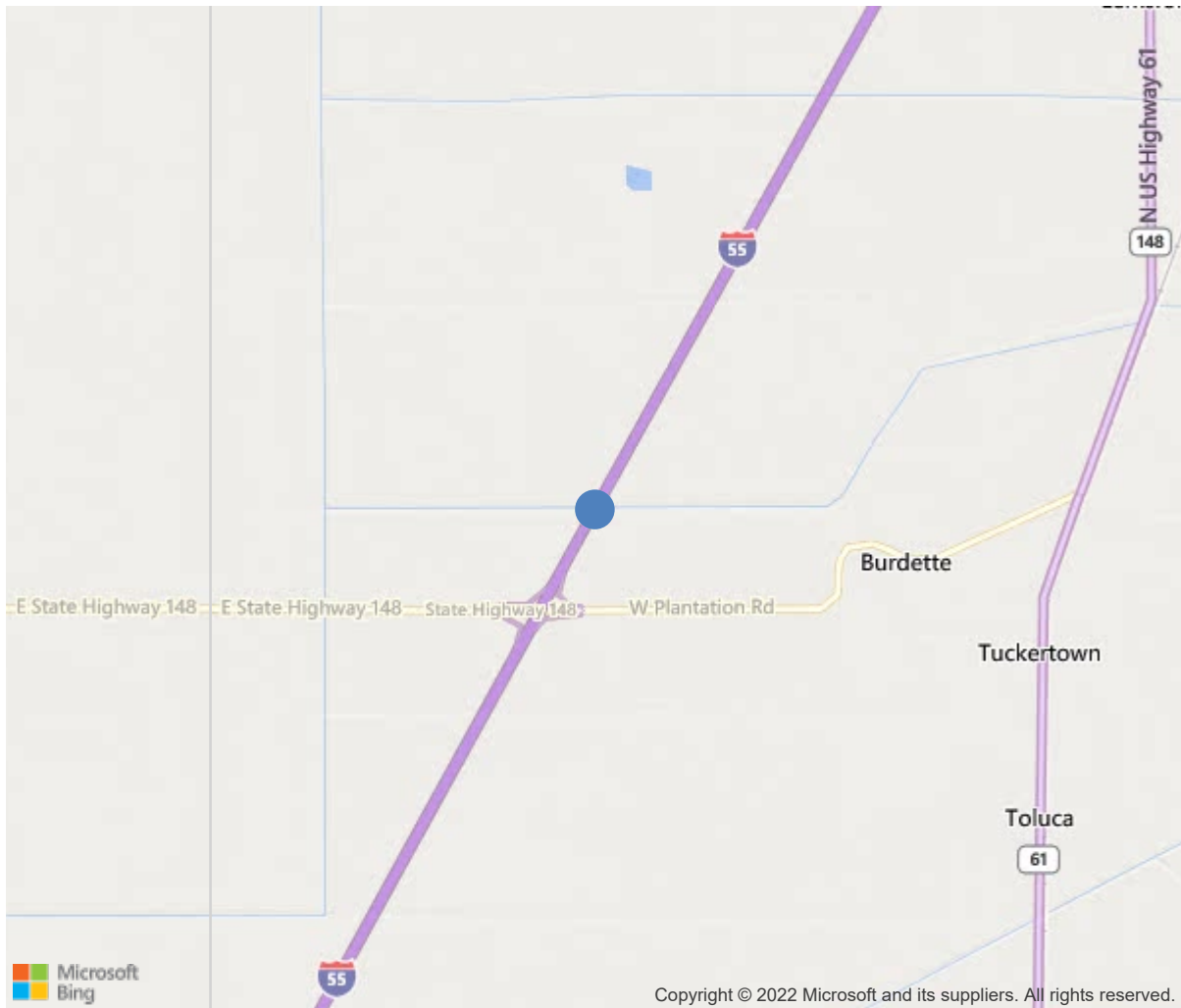
Bridge #B3284(Routine, Underwater type 2)

I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter **Inspection Date:** June 17, 2020

0.56 MI N OF SH 148



35.82106, -89.96636



Bridge #B3284(Routine, Underwater type 2)

I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter Inspection Date: June 17, 2020

| IDENTIFICATION | |
|---|--|
| (1) State Names | Arkansas |
| (8) Structure Number | B3284 |
| (5) Inventory Route | 55 |
| (2) Highway Agency District | 10 |
| (3) County Code | 93-Mississippi County, Arkansa |
| (4) Place Code | 0 |
| (6) Features Intersected | DITCH NO 6 |
| (7) Facility Carried | I-55NB-12-LM 58.00 |
| (9) Location | 0.56 MI N OF SH 148 |
| (11) Mile Point | 58 mi |
| (12) Base Highway Network | Yes |
| (13) LRS Inventory Rte & Subrte | 0000055120 |
| (16) Latitude | 35.82106 |
| (17) Longitude | -89.96636 |
| (98) Border Bridge State Code | |
| (99) Border Bridge Structure No. | |
| STRUCTURE TYPE AND MATERIAL | |
| (43) Main Structure Type | 11 |
| Material | 1-Concrete |
| Type | 1-Slab |
| (44) Approach Structure Type | 00 |
| Material | 0-Other |
| Type | 0-Other |
| (45) No. of Spans in Main Unit | 4 |
| (46) No. of Approach Spans | 0 |
| (107) Deck Structure Type | 1-Concrete Cast-in-Place |
| (108) Wearing Surface/Protective System | |
| Type of Wearing Surface | 1-Monolithic Concrete (concurrently placed |
| Type of Membrane | 0-None |
| Type of Deck Protection | 0-None |
| AGE AND SERVICE | |
| (27) Year Built | 1960 |
| (106) Year Reconstructed | 0 |
| (42) Type of Service | 15 |
| On | 1-Highway |
| Under | 5-Waterway |
| (28) Lane | |
| On | 2 |
| Under | 0 |
| (29) Average Daily Traffic | 20000 |
| (30) Year of ADT | 2014 |
| (109) Truck ADT | 1 % |
| (19) Bypass, Detour Length | 1 mi |
| GEOMETRIC DATA | |
| (48) Length of Maximum Span | 30 ft |
| (49) Structure Length | 120 ft |
| (50) Curb or Sidewalk Width | |
| Left | 0 ft |
| Right | 0 ft |
| (51) Bridge Roadway Width Curb to Curb | 40 ft |
| (52) Deck Width Out to Out | 43.5 ft |
| (32) Approach Roadway Width (W/Shoulders) | 44 ft |
| (33) Bridge Median | 0-No median |
| (34) Skew | 30 Deg |
| (35) Structure Flared | No flare |
| (10) Inventory Route Min Vert Clear | 99.99 ft |
| (47) Inventory Route Total Horiz Clear | 41 ft |
| (53) Min Vert Clear Over Bridge Rdwy | 99.99 ft |
| (54) Min Vert Underclear | 0 ft |
| Ref: | |
| (55) Min Lat Underclear RT | 99.9 ft |
| Ref: | |
| (56) Min Lat Underclear LT | 0 ft |
| NAVIGATION DATA | |
| (38) Navigation Control | 0-No navigation control on water |
| (111) Pier Protection | 5-None present but re-evaluation |
| (39) Navigation Vertical Clearance | 0 ft |
| (116) Vert-Lift Bridge Nav Min Vert Clear | 0 ft |
| (40) Navigation Horizontal Clearance | 0 ft |

| CLASSIFICATION | |
|--|--|
| (112) NBIS Bridge Length | Y |
| (104) Highway System | 1 |
| (26) Functional Class | 1-Rural Principal Arterial - Int |
| (100) Defense Highway | 1-The inventory route is on a In |
| (101) Parallel Structure | R-The right structure of paralle |
| (102) Direction of Traffic | 1 - way traffic |
| (103) Temporary Structure | |
| (105) Federal Lands Highways | 0-N/A |
| (110) Designated National Network | 1-The inventory route is part of the |
| (20) Toll | 3-On free road. The structure is toll- |
| (21) Maintain | 1-State Highway Agency |
| (22) Owner | 1-State Highway Agency |
| (37) Historical Significance | 5-Bridge is not eligible for the NRHP |
| CONDITION | |
| (58) Deck | 6 |
| (59) Superstructure | 6 |
| (60) Substructure | 7 |
| (61) Channel & Channel Protection | 7 |
| (62) Culverts | N |
| LOAD RATING AND POSTING | |
| (31) Design Load | 6-MS 18+Mod / HS 20+Mod |
| (63) Operating Rating Method | 1 |
| (64) Operating Rating | |
| Type | 1-Load Factor(LF) |
| Rating | 43 |
| (65) Inventory Rating Method | 1-Load Factor(LF) |
| (66) Inventory Rating | |
| Type | 4 |
| Rating | 26 |
| (70) Bridge Posting | 5-Equal to or above legal loads |
| (41) Structure Open/Posted/Closed | A-Open, no restriction |
| APPRAISAL | |
| (67) Structural Evaluation | 5 |
| (68) Deck Geometry | 7 |
| (69) Clearances, Vertical/Horizontal | N |
| (71) Waterway Adequacy | 9 |
| (72) Approach Roadway Alignment | 9 |
| (36A) Bridge Railings | 1-Inspected feature meets currently a |
| (36B) Transitions | 1-Inspected feature meets currently a |
| (36C) Approach Guardrail | 1-Inspected feature meets currently a |
| (36D) Approach Guardrail Ends | 1-Inspected feature meets currently a |
| (113) Scour Critical Bridges | 5-Bridge foundations determined to be |
| PROPOSED IMPROVEMENTS | |
| (75) Type of Work | |
| (76) Length of Structure Improvement | 0 ft |
| (94) Bridge Improvement Cost | \$ 0 |
| (95) Roadway Improvement Cost | \$ 0 |
| (96) Total Project Cost | \$ 0 |
| (97) Year of Improvement Cost Estimate | |
| (114) Future ADT | 11592 |
| (115) Year of Future ADT | 2028 |

| INSPECTIONS * | | | |
|--|-----------|-------------|------|
| (90) Inspection Date | 06/2020 | | |
| (91) Frequency | 24 Months | | |
| (92) Critical Feature Inspection | Done | Freq. (Mon) | Date |
| A: Fracture Critical Detail | No | | |
| B: Underwater Inspection | No | | |
| C: Other Special Inspection | No | | |
| * The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted. | | | |



Bridge #B3284(Routine, Underwater type 2)

I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter, Inspection Date: June 17, 2020

| ELEM | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|-------|------------------------------------|-------|-------|------|------|------|-----|
| 38 | RC Slab | SF | 5240 | 425 | 4198 | 617 | 0 |
| 1080 | Delamination/Spall/Patched Area | SF | 76 | 0 | 74 | 2 | 0 |
| 1130 | Cracking (RC and Other) | SF | 825 | 0 | 210 | 615 | 0 |
| 1190 | Abrasion/Wear (PSC/RC) | SF | 3914 | 0 | 3914 | 0 | 0 |
| 215 | Reinforced Concrete Abutment | LF | 124 | 123 | 1 | 0 | 0 |
| 1120 | Efflorescence/Rust Staining | LF | 1 | 0 | 1 | 0 | 0 |
| 227 | Reinforced Concrete Pile | EA | 24 | 23 | 1 | 0 | 0 |
| 1080 | Delamination/Spall/Patched Area | EA | 1 | 0 | 1 | 0 | 0 |
| (227) | | | | | | | |
| 234 | Reinforced Concrete Pier Cap | LF | 149 | 135 | 0 | 14 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 6 | 0 | 0 | 6 | 0 |
| 1090 | Exposed Rebar | LF | 1 | 0 | 0 | 1 | 0 |
| 1120 | Efflorescence/Rust Staining | LF | 3 | 0 | 0 | 3 | 0 |
| 1130 | Cracking (RC and Other) | LF | 4 | 0 | 0 | 4 | 0 |
| (234) | | | | | | | |
| Le | | | | | | | |
| 301 | Pourable Joint Seal | LF | 155 | 135 | 0 | 20 | 0 |
| 2320 | Seal Adhesion | LF | 20 | 0 | 0 | 20 | 0 |
| 321 | Reinforced Concrete Approach Slab | SF | 2920 | 1588 | 0 | 1332 | 0 |
| 1130 | Cracking (RC and Other) | SF | 1332 | 0 | 0 | 1332 | 0 |
| (321) | | | | | | | |
| 331 | Reinforced Concrete Bridge Railing | LF | 240 | 202 | 38 | 0 | 0 |
| 1130 | Cracking (RC and Other) | LF | 38 | 0 | 38 | 0 | 0 |







Typical

Maintenance Needs

Date Reported: 09/06/2012
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Deck

Deficiency Description

Top of concrete slab has several open unsealed cracks and medium scale.
Left side of slab spans 1 & 2 at Bent 2 has some minor scrapes from impact damage.
Top of slab span 1 has a 6" x 12" spall in the right lane.
Span 2 right lane bent 3 has a 1' diam. spall filled with asphalt.
Top of slab span 3 has a 12" x 12" spall and a 6" diameter spall with no exposed rebar.

Remarks





Bridge #B3284(Routine, Underwater type 2)

I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter **Inspection Date:** June 17, 2020

Date Reported: 06/15/2016
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Approach

Deficiency Description

Concrete Approach Slabs has map cracking, especially in the right lanes and the North Concrete Approach Gutters have some small spalls, 1ft. x 1ft. typical.

Remarks



Bridge #B3284(Routine, Underwater type 2)

I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter **Inspection Date:** June 17, 2020

Date Reported: 06/15/2016

Priority: D- Routine

Type of Work: Repair

Status: Monitor

Component: Deck

Deficiency Description

Poured Joint Material is losing adhesion and some arears are falling out.

Remarks



Bridge #B3284(Routine, Underwater type 2)

I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter **Inspection Date:** June 17, 2020

Date Reported: 06/15/2016
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Concrete Cap Bent 3, Span 3 side, at center keyway has a 3ft. x 1ft. area cracked with impending spall.
Concrete Cap Bent 4, Span 4 side, at right keyway has a 1ft. x 1ft. x 4in. deep spall with no rebar exposed.
Left end of Concrete Cap Bent 4 is deteriorated with section loss and rebar exposed.

Remarks



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I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter **Inspection Date:** June 17, 2020

Date Reported: 06/15/2016
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Bent 2 Pile 1 has a minor spall from impact damage.

Remarks



Bridge #B3284(Routine, Underwater type 2)

I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter **Inspection Date:** June 17, 2020

Date Reported: 06/05/2018

Priority: D- Routine

Type of Work: Repair

Status: Monitor

Component: Deck

Deficiency Description

Span 2 slab over bent 2, right side has a 2.5' x 14" x 12" deep spall with exposed rebar.

Remarks





Bridge #B3284(Routine, Underwater type 2)

I-55NB-12-LM 58.00 over DITCH NO 6

Location: 0.56 MI N OF SH 148

Team Lead: Alan Walter Inspection Date: June 17, 2020

Deck Notes

Approach roadway asphalt on south bridge end has (2) 1' diameter X 3" deep spalls.
Concrete rails have moderate width cracks.
Concrete approach slabs has map cracking, especially in the right lanes.
The north concrete approach gutters have some small spalls, (3) 1' x 1'
Deck portion of concrete slab has several open unsealed cracks and minor abrasion.
Left side of slab spans 1 & 2 at bent 2 has some minor scrapes from impact damage.
Span 1 has a 6" x 12" spall & a 6" diameter spall in the right lane.
Span 2 slab over bent 2, right side has a 1.5' x 1.5' x 4" deep spall with exposed rebar.
Span 2 has 3 minor spalls with no exposed rebar.
Span 3 has a 12" x 12" spall and a 6" diameter spall with no exposed rebar.
Span 2 right lane at bent 3 has a 1' diameter spall with no exposed rebar.
Poured joint material is losing adhesion and some areas are falling out.

Superstructure Notes

Soffit portion of slabs have some hairline cracks.
Span 2 bent 2 right side has a 2 1/2' x 14" spall with rebar exposed.

Substructure Notes

Left end of concrete cap bent 2 has some minor scrapes from impact damage.
Concrete cap bent 2 has some honeycomb areas with a few cracks to face of cap.
Concrete cap bent 3, span 3 side, at center key way has a 3' x 1' area cracked with impending spall, and left side of cap has crack with efflorescence on span 2 side of repair. Also has crack at cold joint of repair with impending spall. Cap also has a small spall and vertical cracks over pile 7.
Concrete cap bent 4, span 4 side, at right key way has a 1' x 1' x 4" deep spall with no rebar exposed.
Left end of concrete cap bent 4 is deteriorated with section loss and rebar exposed.
Bent 2 pile 1 has a minor spall from impact damage.
Bent 3 pile 1 was destroyed by impact damage and was repaired with a concrete pile splice with steel encasement along with 8' of end of cap.
Some minor Embankment erosion under Span 1 & 4.