



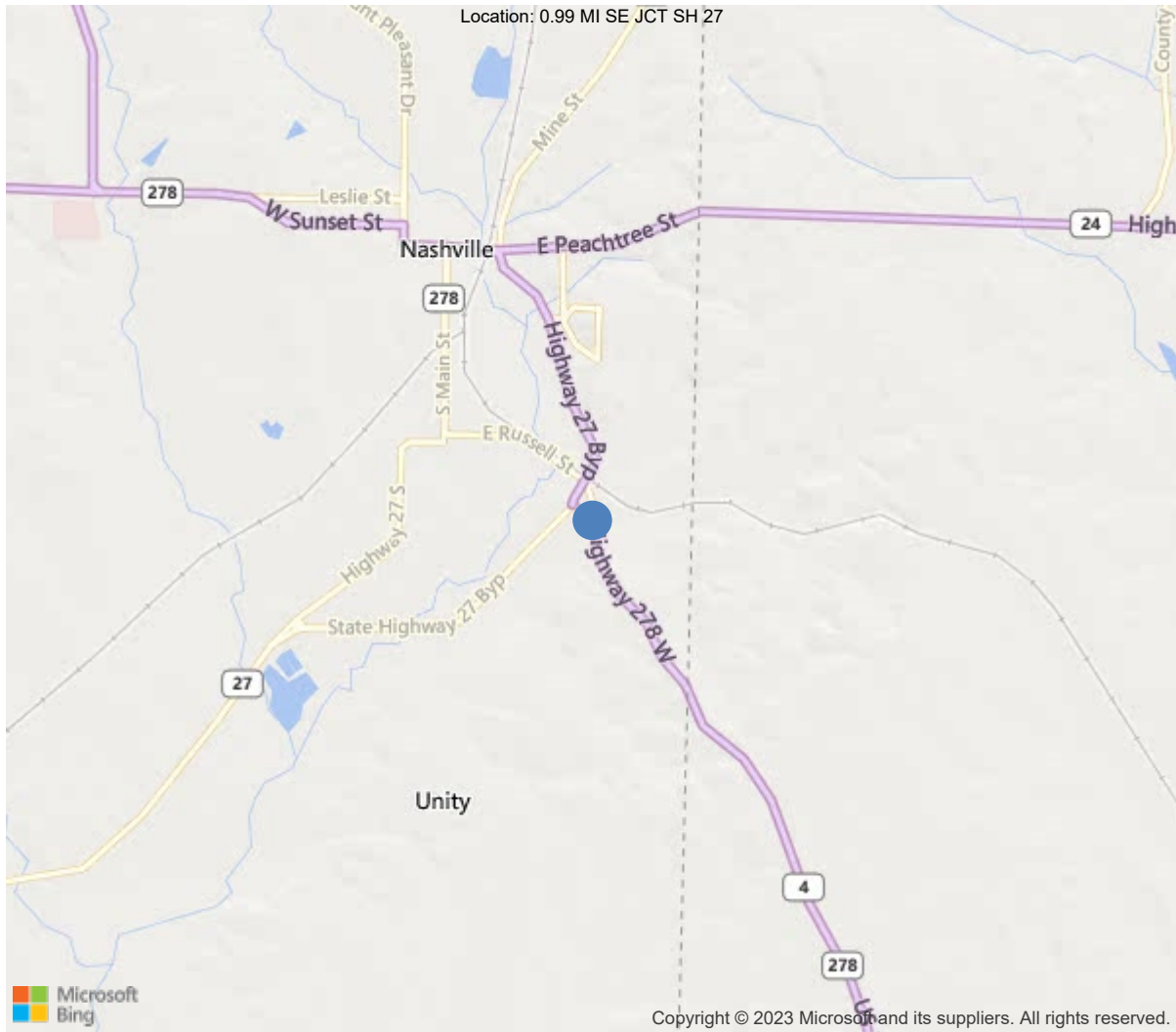
Latitude:33.92819, Longitude:-93.83411

Route:278 Section:04 Log:1.63

Arnold Road ID:31x278x4xA, Arnold Log mile:1.639

District 03, 61 - Howard County

Owner: 1 - State Highway Agency



33.92819, -93.83411



Asset #05527 (Routine, Underwater type 2)

US 278- 04- 1.63 over SANDY BRANCH

Location: 0.99 MI SE JCT SH 27

Team Lead: John King, Inspection Date: 04/11/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05527
(5) Inventory Route	1
(2) Highway Agency District	03 - District 03
(3) County Code	61 - Howard County
(4) Place Code	48560
(6) Features Intersected	SANDY BRANCH
(7) Facility Carried	US 278- 04- 1.63
(9) Location	0.99 MI SE JCT SH 27
(11) Mile Point	1.63 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000
(16) Latitude	33.92819
(17) Longitude	-93.83411
(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	3
(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 pl
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1974
(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	2900
(30) Year of ADT	2018
(109) Truck ADT	16 %
(19) Bypass, Detour Length	15 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	25 ft
(49) Structure Length	75 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	34.1 ft
(52) Deck Width Out to Out	36.7 ft
(32) Approach Roadway Width (W/Shoulders)	32.2 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	35.1 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 w
(111) Pier Protection	1 - Navigation protection not
(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	0
(26) Functional Class	6 - Rural Minor Arterial
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	36
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	7
(68) Deck Geometry	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	5 - Bridge foundations determined t
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	0
(114) Future ADT	3859
(115) Year of Future ADT	2027

INSPECTIONS *			
(90) Inspection Date	04/11/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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.			



Asset #05527 (Routine, Underwater type 2)

District: 03, County: 61 - Howard County

Team Lead: John King, Inspection Date: 04/11/2022

General Observation

4/14/2020...AL, Elevation, Deck, Def. photos taken...04/11/2022. Alignment and Elevation photos taken. Soundings taken per this inspection

58 - Deck (7 - GOOD CONDITION - some minor problems.)

04/11/2018. AL,SS,OTHER PHOTO TAKEN. APPROACH SLAB BEGINNING AND END OF BRIDGE HAVE CRACKS IN THEM.

04/2022... little to no change per this inspection

59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Girders/Beams: slabs

04/2022.. little to no change per this inspection

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Other: pile at abutments see plans job 03771...Footing: see plans drawing # 3771...04/11/2018 BENT 2 RT. AND LT. SIDE OF CAP ARE SPALLED WITH REBAR EXPOSED..

04/2022. Bent 2 Rt and Lt side of cap are spalled with rebar exposed. Little to no change per this inspection.

61 - Channel/Channel Protection (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

04/11/2022... Soundings taken this inspection

A-46 - Asset Files

-



Asset #05527 (Routine, Underwater type 2)

US 278- 04- 1.63 over SANDY BRANCH

Location: 0.99 MI SE JCT SH 27

Team Lead: John King, **Inspection Date:** 04/11/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	2752	2752	0	0	0
205	Reinforced Concrete Column	EA	4	4	0	0	0
215	Reinforced Concrete Abutment	LF	86	86	0	0	0
234	Reinforced Concrete Pier Cap	LF	148	144	2	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1090	Exposed Rebar	LF	2	0	0	2	0
(234) Small spall bent 2 right side, left side spall with rebar exposed							
301	Pourable Joint Seal	LF	136.4	0	136.4	0	0
2310	Leakage	LF	136.4	0	136.4	0	0
321	Reinforced Concrete Approach Slab	SF	1020	1002	18	0	0
1130	Cracking (RC and Other)	SF	18	0	18	0	0
331	Reinforced Concrete Bridge Railing	LF	150	150	0	0	0



Asset #05527(Routine, Underwater type 2)

US 278- 04- 1.63 over SANDY BRANCH

Location: 0.99 MI SE JCT SH 27

Team Lead: John King, Inspection Date: 04/11/2022

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
38	RC Slab	SF	2752	2752	0	0	0

58 - Deck (7 - GOOD CONDITION - some minor problems.)

Comment: 04/11/2018. AL,SS,OTHER PHOTO TAKEN. APPROACH SLAB BEGINNING AND END OF BRIDGE HAVE CRACKS IN THEM.

04/2022... little to no change per this inspection



Asset #05527(Routine, Underwater type 2)

US 278- 04- 1.63 over SANDY BRANCH

Location: 0.99 MI SE JCT SH 27

Team Lead: John King, Inspection Date: 04/11/2022

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Comment: Girders/Beams: slabs

04/2022.. little to no change per this inspection



Asset #05527(Routine, Underwater type 2)

US 278- 04- 1.63 over SANDY BRANCH

Location: 0.99 MI SE JCT SH 27

Team Lead: John King, Inspection Date: 04/11/2022

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	4	4	0	0	0
215	Reinforced Concrete Abutment	LF	86	86	0	0	0
234	Reinforced Concrete Pier Cap	LF	148	144	2	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1090	Exposed Rebar	LF	2	0	0	2	0
(234) Small spall bent 2 right side, left side spall with rebar exposed							

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Comment: Other: pile at abutments see plans job 03771...Footings: see plans drawing # 3771...04/11/2018 BENT 2 RT. AND LT. SIDE OF CAP ARE SPALLED WITH REBAR EXPOSED..

04/2022. Bent 2 Rt and Lt side of cap are spalled with rebar exposed. Little to no change per this inspection.

61 - Channel/Channel Protection (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

Comment: 04/11/2022... Soundings taken this inspection



Asset #05527(Routine, Underwater type 2)

US 278- 04- 1.63 over SANDY BRANCH

Location: 0.99 MI SE JCT SH 27

Team Lead: John King, Inspection Date: 04/11/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



04/2022... Elevation



04/2022... Elevation



04/2022... Alignment



04/2022... Alignment



Deck



Underside of deck typical all spans



Alignment



AL



SS



Elevation



04/2022.. concrete approach slab has cracks both sides of bridge



04/2022.. typical deck photo all spans



04/2022... underside of deck typical all spans



Bent 2 spall



Bent 2 spall





Rt side cap at bent 2 spall



Rt side bent 2 spall



LT side spall with rebar exposed



Concrete approach slab cracking both sides of bridge



04/2022.. typical joint photo all spans

Maintenance Needs

Date Reported: 04/11/2022
Priority: D- Routine
Type of Work: (Inactive) (Inactive) 1 - Clean
Status: Open
Component: Element

Deficiency Description

04/2022.. joints need cleaned and resealed

Remarks





Asset #05527(Routine, Underwater type 2)

US 278- 04- 1.63 over SANDY BRANCH

Location: 0.99 MI SE JCT SH 27

Team Lead: John King, **Inspection Date:** 04/11/2022

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydro and LMC Advised	



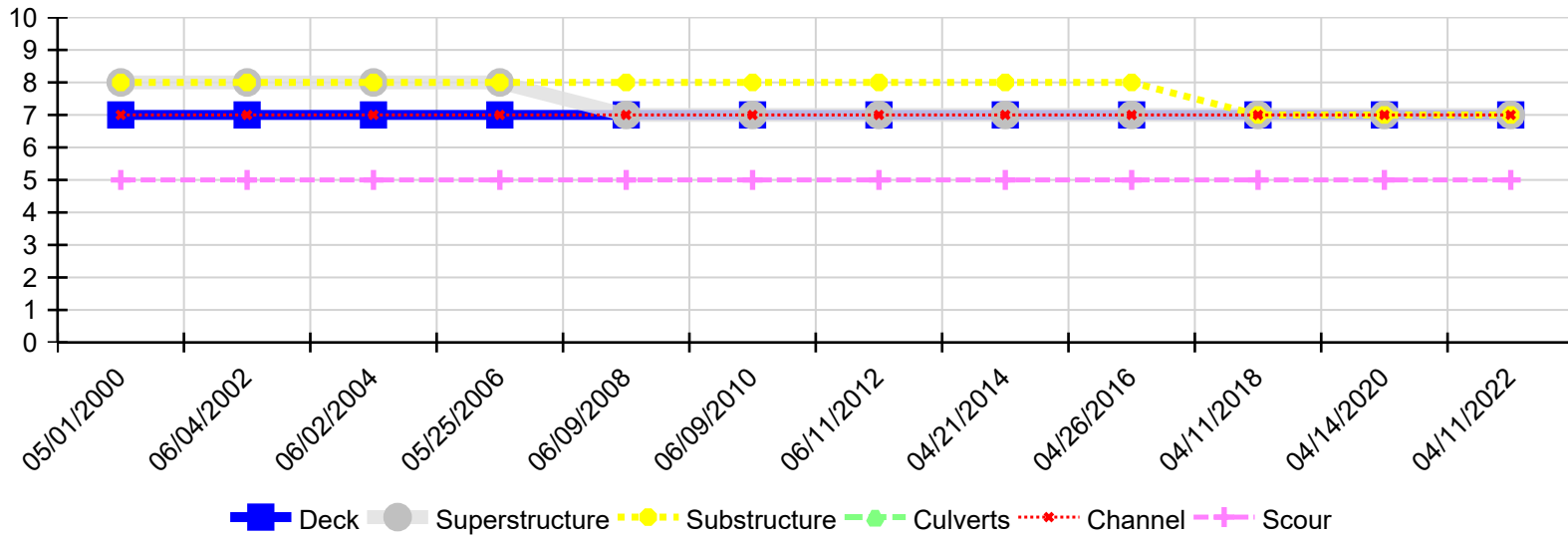
Asset #05527 (Routine, Underwater type 2)

US 278- 04- 1.63 over SANDY BRANCH

Location: 0.99 MI SE JCT SH 27

Team Lead: John King, Inspection Date: 04/11/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/11/2022	7	7	7	N	7	5
04/14/2020	7	7	7	N	7	5
04/11/2018	7	7	7	N	7	5
04/26/2016	7	7	8	N	7	5
04/21/2014	7	7	8	N	7	5
06/11/2012	7	7	8	N	7	5
06/09/2010	7	7	8	N	7	5
06/09/2008	7	7	8	N	7	5
05/25/2006	7	8	8	N	7	5
06/02/2004	7	8	8	N	7	5
06/04/2002	7	8	8	N	7	5
05/01/2000	7	8	8	N	7	5