



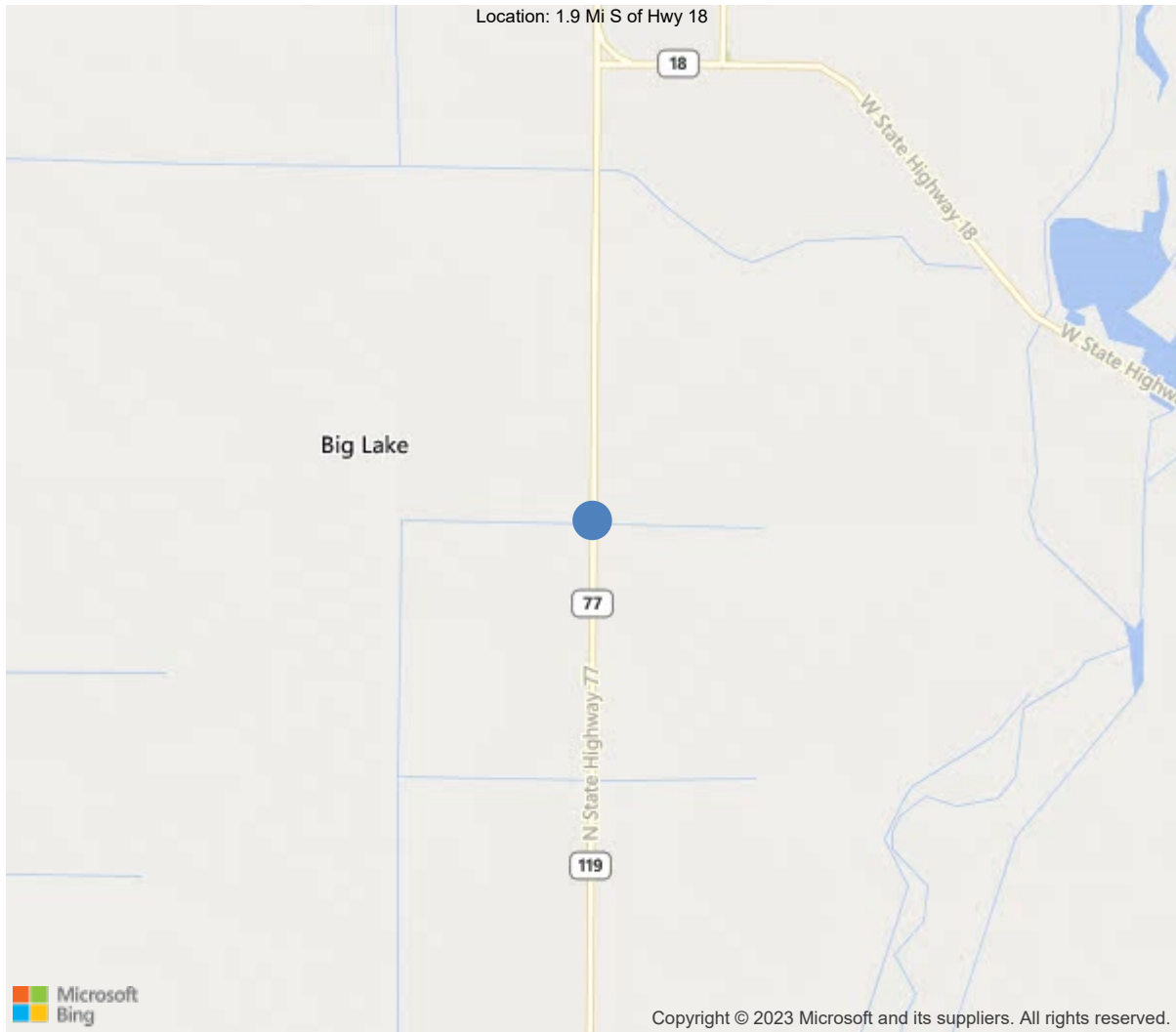
Latitude:35.84029, Longitude:-90.17783

Route:77 Section:02 Log:1.9

Arnold Road ID:47x77x2xA, Arnold Log mile:1.905

District 10, 93 - Mississippi County

Owner: 1 - State Highway Agency



35.84029, -90.17783



Asset #02139(Other Special Recurring)

SH 77-02-LM 1.9 over DITCH NO 20

Location: 1.9 Mi S of Hwy 18

Team Lead: James Adams, Inspection Date: 08/02/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	02139
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	93 - Mississippi County
(4) Place Code	0
(6) Features Intersected	DITCH NO 20
(7) Facility Carried	SH 77-02-LM 1.9
(9) Location	1.9 Mi S of Hwy 18
(11) Mile Point	1.9 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.84029
(17) Longitude	-90.17783
(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	2
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1952
(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	1700
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	6 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	18 ft
(49) Structure Length	36 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	26.5 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 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	24 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	5 - None present but re-evalua
(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	7 - Rural Major Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(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 structu
(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	4
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	36
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	22
(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	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	59 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 117
(96) Total Project Cost	\$ 239
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	1586
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	08/15/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
<p>* 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.</p>			



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

08-02-2023 Special reoccurring inspection for substructure.

Approach roadway has settlement at each end of bridge. Approach roadway embankment at bent 3 Rt has some erosion. Rt bridge rail has areas of minor surface rust. Lt endpost at bent 1 was repaired sometime in the past. Asphalt wearing surface has several longitudinal cracks. Asphalt is cracked over bent 2 joint. Lt and Rt corners of slabs have cracks/spalls over bent 2.

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

Soffit portion of slab has minor sized longitudinal cracks near center line.

Soffit has a few small delaminated areas or spalls with exposed rebar near bent 2.

60 - Substructure (4 - POOR CONDITION - advanced section loss, deterioration, spalling or scour.)

Timber back walls have a few checks and areas of decay.

Timber piles have a few minor checks. Piles have decay at ground line with up to 1" deep section loss typ.

Bent 1 piles 1 and 2 were spliced sometime in the past.

Bent 1 piles 3 and 5 have up to 1" of outside decay and section loss at ground line.

Bent 1 pile 4 is decayed and hollow. Partial outer shell and core remain.

Bent 2 pile 1 is decayed and hollow. Soft core and partial outer shell remain.

Bent 2 piles 2 and 5 were spliced sometime in the past.

Bent 2 pile 4 is decayed and hollow.

Bent 3 piles 1 and 2 are decayed and partially hollow. Piles have outside decay with some section loss at ground line.

Bent 3 pile 3 was spliced sometime in the past.

Bent 3 piles 4 & 5 have 1" outside decay near ground line.

Heavy vegetation and minor drift against Bent 2.

61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

Heavy vegetation and minor drift against Bent 2.

A-46 - Asset Files

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A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (5 - Moderate scour; strength and stability of the bridge are not affected.)

Heavy vegetation and minor drift against Bent 2.



Asset #02139(Other Special Recurring)

SH 77-02-LM 1.9 over DITCH NO 20

Location: 1.9 Mi S of Hwy 18

Team Lead: James Adams, Inspection Date: 08/02/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	954	917	34	3	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1090	Exposed Rebar	SF	3	0	0	3	0
1130	Cracking (RC and Other)	SF	32	0	32	0	0
510	Wearing Surfaces	SF	864	636	18	210	0
3210	Delam/Spall/Patched Area/Pothole	SF	18	0	18	0	0
3220	Crack (Wearing Surface)	SF	210	0	0	210	0
<p>(38) Asphalt wearing surface has several longitudinal cracks. Asphalt is cracked over bent 2 joint. Lt and Rt corners of slabs have cracks/spalls over bent 2.</p> <p>Soffit portion of slab has minor sized longitudinal cracks near center line. Soffit has a few small delaminated areas or spalls with exposed rebar near bent 2.</p> <p>(510-38) Asphalt wearing surface has several longitudinal cracks. Asphalt is cracked over bent 2 joint.</p>							
215	Reinforced Concrete Abutment	LF	77	75	0	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
(215) Concrete abutments minor spalls.							
216	Timber Abutment	LF	77	67	10	0	0
1140	Decay/Section Loss	LF	10	0	10	0	0
(216) Timber back walls have a few checks and areas of decay.							
228	Timber Pile	EA	15	0	10	3	2
1140	Decay/Section Loss	EA	15	0	10	3	2
<p>(228) Timber piles have a few minor checks. Piles have decay at ground line with up to 1" deep section loss typ. Bent 1 piles 1 and 2 were spliced sometime in the past. Bent 1 piles 3 and 5 have up to 1" of outside decay and section loss at ground line. Bent 1 pile 4 is decayed and hollow. Partial outer shell and core remain.</p> <p>Bent 2 pile 1 is decayed and hollow. Soft core and partial outer shell remain. Bent 2 piles 2 and 5 were spliced sometime in the past. Bent 2 pile 4 is decayed and hollow.</p> <p>Bent 3 piles 1 and 2 are decayed and partially hollow. Piles have outside decay with some section loss at ground line. Bent 3 pile 3 was spliced sometime in the past. Bent 3 piles 4 & 5 have 1" outside decay near ground line.</p>							
234	Reinforced Concrete Pier Cap	LF	27	27	0	0	0
(234) Concrete caps minor deterioration.							
301	Pourable Joint Seal	LF	27	0	0	27	0
2350	Debris Impaction	LF	27	0	0	27	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(301) Not visible for inspection.							
330	Metal Bridge Railing	LF	72	36	36	0	0
1000	Corrosion	LF	36	0	36	0	0
515	Steel Protective Coating	SF	231	116	92	23	0
3440	Effectiveness (Steel Protective Coatings)	LF	115	0	92	23	0
(330) Rt bridge rail has areas of minor surface rust. Lt endpost at bent 1 was repaired sometime in the past.							
(515-330) Rt bridge rail has areas of minor surface rust. Lt endpost at bent 1 was repaired sometime in the past.							



Asset #02139(Other Special Recurring)

SH 77-02-LM 1.9 over DITCH NO 20

Location: 1.9 Mi S of Hwy 18

Team Lead: James Adams, Inspection Date: 08/02/2023

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	954	917	34	3	0
1080	Delamination/Spall/Patched Area	SF	2	0	2	0	0
1090	Exposed Rebar	SF	3	0	0	3	0
1130	Cracking (RC and Other)	SF	32	0	32	0	0
510	Wearing Surfaces	SF	864	636	18	210	0
3210	Delam/Spall/Patched Area/Pothole	SF	18	0	18	0	0
3220	Crack (Wearing Surface)	SF	210	0	0	210	0
(38) Asphalt wearing surface has several longitudinal cracks. Asphalt is cracked over bent 2 joint. Lt and Rt corners of slabs have cracks/spalls over bent 2. Soffit portion of slab has minor sized longitudinal cracks near center line. Soffit has a few small delaminated areas or spalls with exposed rebar near bent 2. (510-38) Asphalt wearing surface has several longitudinal cracks. Asphalt is cracked over bent 2 joint.							

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

Comment: 08-02-2023 Special reoccurring inspection for substructure.

Approach roadway has settlement at each end of bridge. Approach roadway embankment at bent 3 Rt has some erosion. Rt bridge rail has areas of minor surface rust. Lt endpost at bent 1 was repaired sometime in the past. Asphalt wearing surface has several longitudinal cracks. Asphalt is cracked over bent 2 joint. Lt and Rt corners of slabs have cracks/spalls over bent 2.



Asset #02139(Other Special Recurring)

SH 77-02-LM 1.9 over DITCH NO 20

Location: 1.9 Mi S of Hwy 18

Team Lead: James Adams, Inspection Date: 08/02/2023

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

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

Comment: Soffit portion of slab has minor sized longitudinal cracks near center line.

Soffit has a few small delaminated areas or spalls with exposed rebar near bent 2.

**Substructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	77	75	0	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
(215) Concrete abutments minor spalls.							
216	Timber Abutment	LF	77	67	10	0	0
1140	Decay/Section Loss	LF	10	0	10	0	0
(216) Timber back walls have a few checks and areas of decay.							
228	Timber Pile	EA	15	0	10	3	2
1140	Decay/Section Loss	EA	15	0	10	3	2
(228) Timber piles have a few minor checks. Piles have decay at ground line with up to 1" deep section loss typ. Bent 1 piles 1 and 2 were spliced sometime in the past. Bent 1 piles 3 and 5 have up to 1" of outside decay and section loss at ground line. Bent 1 pile 4 is decayed and hollow. Partial outer shell and core remain. Bent 2 pile 1 is decayed and hollow. Soft core and partial outer shell remain. Bent 2 piles 2 and 5 were spliced sometime in the past. Bent 2 pile 4 is decayed and hollow. Bent 3 piles 1 and 2 are decayed and partially hollow. Piles have outside decay with some section loss at ground line. Bent 3 pile 3 was spliced sometime in the past. Bent 3 piles 4 & 5 have 1" outside decay near ground line.							
234	Reinforced Concrete Pier Cap	LF	27	27	0	0	0
(234) Concrete caps minor deterioration.							

60 - Substructure (4 - POOR CONDITION - advanced section loss, deterioration, spalling or scour.)

Comment: Timber back walls have a few checks and areas of decay.

Timber piles have a few minor checks. Piles have decay at ground line with up to 1" deep section loss typ.

Bent 1 piles 1 and 2 were spliced sometime in the past.

Bent 1 piles 3 and 5 have up to 1" of outside decay and section loss at ground line.

Bent 1 pile 4 is decayed and hollow. Partial outer shell and core remain.

Bent 2 pile 1 is decayed and hollow. Soft core and partial outer shell remain.

Bent 2 piles 2 and 5 were spliced sometime in the past.

Bent 2 pile 4 is decayed and hollow.

Bent 3 piles 1 and 2 are decayed and partially hollow. Piles have outside decay with some section loss at ground line.

Bent 3 pile 3 was spliced sometime in the past.

Bent 3 piles 4 & 5 have 1" outside decay near ground line.

Heavy vegetation and minor drift against Bent 2.

61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

Comment: Heavy vegetation and minor drift against Bent 2.



Asset #02139(Other Special Recurring)

SH 77-02-LM 1.9 over DITCH NO 20

Location: 1.9 Mi S of Hwy 18

Team Lead: James Adams, Inspection Date: 08/02/2023

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Deck



Span 2



Elevation



Log Mile 2.46 sign,
Item 11 reads LM 1.9



Maintenance Needs

Date Reported: 09/18/2020

Priority: B - Pressing

Type of Work: Repair (General)

Status: Assigned

Component: Element

Deficiency Description

Bent 1 pile 4 is decayed and hollow. Partial outer shell and core remain.

Bent 2 pile 1 is decayed and hollow. Soft core and partial outer shell remain.

Bent 2 pile 4 is decayed and hollow.

Remarks

this bridge scheduled for replacement on job 100955 WRONG
to Dist Bridge Crew for repair as schedule allows KAW 9/23/20

****Bridge 02139 is currently planned to be a HBM box replacement in the 2024 fiscal year. Email attached.



Bent 2 pile 4



Bent 2 pile 1



Bent 1 pile 4



b2 p4



Bent 1 pile 4



Bent 2 pile 1

Maintenance Needs

Date Reported: 08/09/2018

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Bent 1 piles 3 and 5 have up to 1" of outside decay and section loss at ground line.

Bent 3 piles 1 and 2 are decayed and partially hollow. Piles have outside decay with some section loss at ground line.

Bent 3 piles 4 & 5 have 1" outside decay near ground line.

Remarks



Bent 1 pile 3



Asset #02139(Other Special Recurring)

SH 77-02-LM 1.9 over DITCH NO 20

Location: 1.9 Mi S of Hwy 18

Team Lead: James Adams, **Inspection Date:** 08/02/2023

Maintenance Needs

Date Reported: 08/09/2018

Priority: C - Important

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Assigned

Component: Channel

Deficiency Description

Dense vegetation growing along channel banks.

Remarks

to Miss Two crew for removal KAW 2/15/19



Asset #02139(Other Special Recurring)

SH 77-02-LM 1.9 over DITCH NO 20

Location: 1.9 Mi S of Hwy 18

Team Lead: James Adams, **Inspection Date:** 08/02/2023

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	
A-63 Missing/Incorrect Log Mile Signage	Yes
A-64 - Vegetation Removal Requested	



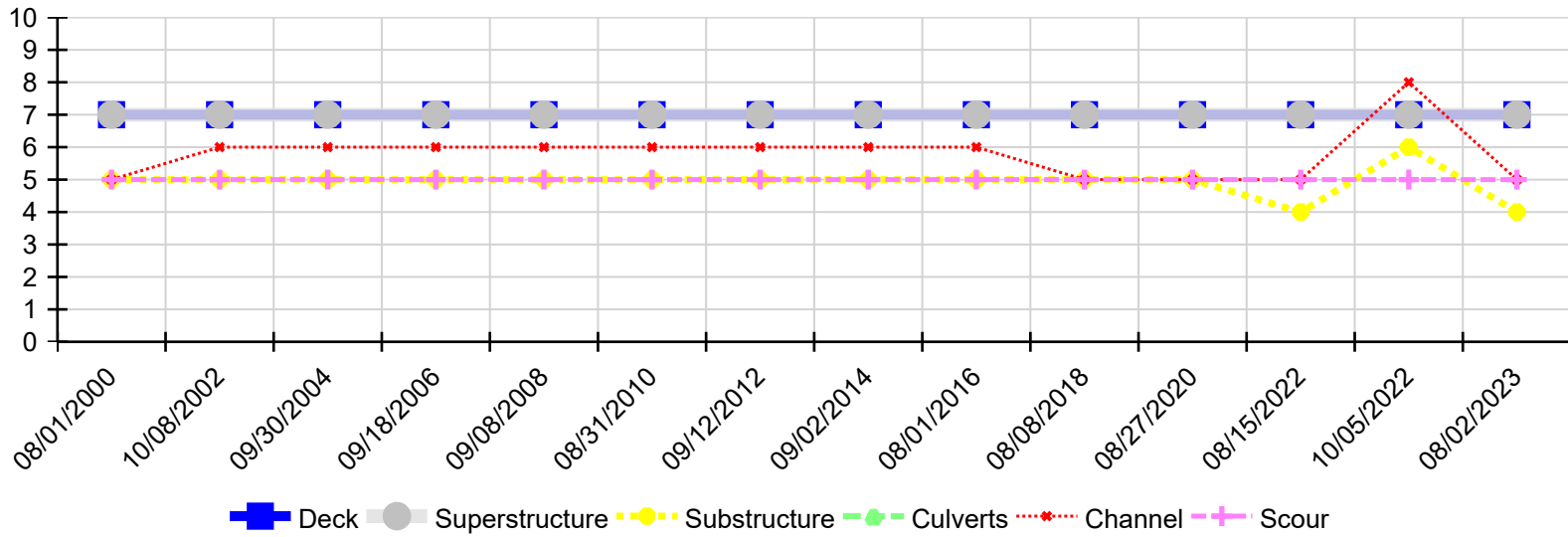
Asset #02139(Other Special Recurring)

SH 77-02-LM 1.9 over DITCH NO 20

Location: 1.9 Mi S of Hwy 18

Team Lead: James Adams, Inspection Date: 08/02/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/02/2023	7	7	4	N	5	5
10/05/2022	7	7	6	N	8	5
08/15/2022	7	7	4	N	5	5
08/27/2020	7	7	5	N	5	5
08/08/2018	7	7	5	N	5	5
08/01/2016	7	7	5	N	6	5
09/02/2014	7	7	5	N	6	5
09/12/2012	7	7	5	N	6	5
08/31/2010	7	7	5	N	6	5
09/08/2008	7	7	5	N	6	5
09/18/2006	7	7	5	N	6	5
09/30/2004	7	7	5	N	6	5
10/08/2002	7	7	5	N	6	5
08/01/2000	7	7	5	N	5	5

From: [Shaw, Cory W.](#)
To: [Luke, Shannon S.](#)
Subject: RE: 101161 Project
Date: Wednesday, August 2, 2023 12:57:00 PM

Ok, thank you!

Cory Shaw
D10

From: Luke, Shannon S. <Shannon.Luke@ardot.gov>
Sent: Wednesday, August 2, 2023 11:59 AM
To: Shaw, Cory W. <Cory.Shaw@ardot.gov>
Subject: RE: 101161 Project

Job 101161 has been canceled and the work on Hwy. 77 has been combined into job 101094 which is a 2024 pavement preservation project.

The Osceola RE office is designing this project and hasn't completed the additional design work.

Bridge 02139 is currently planned to be a HBM box replacement in the 2024 fiscal year.

From: Shaw, Cory W. <Cory.Shaw@ardot.gov>
Sent: Wednesday, August 2, 2023 11:53 AM
To: Luke, Shannon S. <Shannon.Luke@ardot.gov>
Subject: 101161 Project

Hello Shannon,

I'm looking for 101161 Project (shown on Hwy. 77 South of Manila) and am unable to find the plans. Do you have a link to the construction plans?

I'm specifically looking if Bridge 02139 LM 2.426 is under this project.

Thanks.

Cory Shaw
D10