



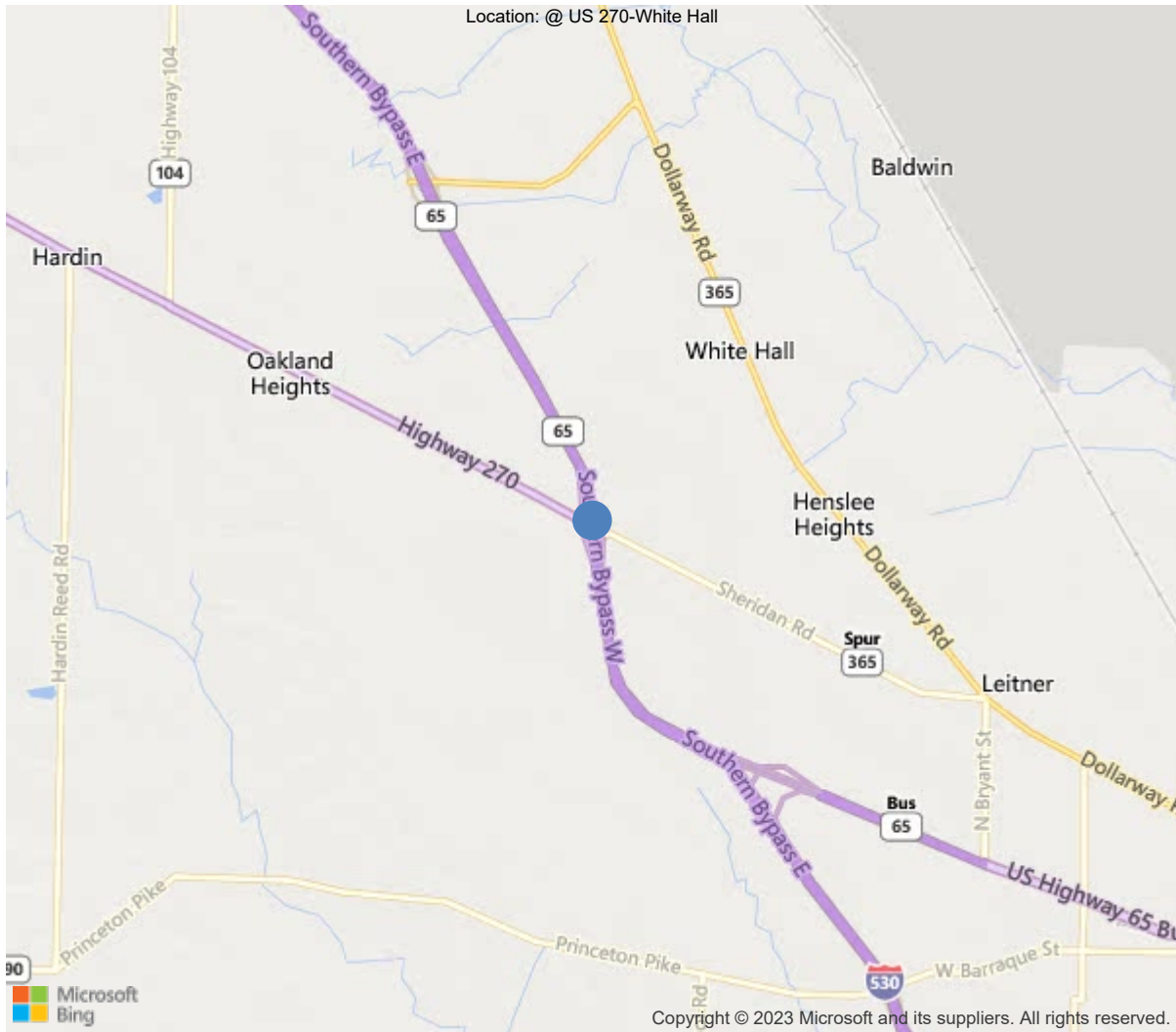
Latitude:34.26168, Longitude:-92.10416

Route:530 Section:05 Log:33.77

Arnold Road ID:35x530x5xB, Arnold Log mile:12.816

District 02, 69 - Jefferson County

Owner: 1 - State Highway Agency



34.26168, -92.10416



Asset #B5500(Routine)

I-530 NB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	B5500
(5) Inventory Route	1
(2) Highway Agency District	02 - District 02
(3) County Code	69 - Jefferson County
(4) Place Code	75170
(6) Features Intersected	US 270
(7) Facility Carried	I-530 NB LM 33.77
(9) Location	@ US 270-White Hall
(11) Mile Point	33.77 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000530050
(16) Latitude	34.26168
(17) Longitude	-92.10416
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4 - Steel continuous
Type	2 - Stringer/Multi-beam or girder
(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	1975
(106) Year Reconstructed	0
(42) Type of Service	11
On	1 - Highway
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	2
Under	2
(29) Average Daily Traffic	14500
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	8 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	106 ft
(49) Structure Length	228.6 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	39 ft
(52) Deck Width Out to Out	42 ft
(32) Approach Roadway Width (W/Shoulders)	40 ft
(33) Bridge Median	0 - No median
(34) Skew	35 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	40 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	15.58 ft
Ref:	
(55) Min Lat Underclear RT	24.1 ft
Ref:	
(56) Min Lat Underclear LT	23.9 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(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	1
(26) Functional Class	11 - Urban Principal Arterial
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	L - The left structure of para
(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 par
(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	7
(61) Channel & Channel Protection	N
(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	6
(69) Clearances, Vertical/Horizontal	7
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(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	N - Bridge not over waterway.
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	18367
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	10/10/2022		
(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 #B5500(Routine)

District: 02, County: 69 - Jefferson County

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

General Observation

Bridge (I-530) is logged from north to south and is the left bridge of two parallel structures.
US 270 (under-route) is logged from west to east.

06-30-2022 GGL-PRD: Accident inspection this date.

Oversize (height) load made contact with Span 2 Girder 1 just past mid-span (over eastbound/center turn lane - traveling opposite normal traffic).

Some superficial scratches were made to bottom and edge of bottom flange - approximately 6-8 sqft of transverse scratches. Most scratches go through finish coat but not primer coat.

No bending or distortion was noted to flange or web in this area.

A-46 - Asset Files

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Asset #B5500(Routine)

I-530 NB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(205) Columns: 3 per bent / Bents 2 & 3. Bent 2 column 2 at ground has cracking.							
215	Reinforced Concrete Abutment	LF	116	76	23	17	0
1080	Delamination/Spall/Patched Area	LF	30	0	13	17	0
1130	Cracking (RC and Other)	LF	10	0	10	0	0
(215) Abutments: 44'-6" = 45" each (skewed - with approximately 13' wings each bent) / Bents 1 & 4. Bent 1 left: Some deterioration, spalling, and patching (some of approach-side road-iron has been removed) on top of backwall of left (outer) lane - 7' CS2 spall, 9' CS3 spall. Bent 1 abutment has cracking. Bent 4 left: Some deterioration, spalling, and patching (some of back-side road-iron has been removed) on top of backwall of left (outer) lane - 6' CS2 spall, 8' CS3 spall.							
234	Reinforced Concrete Pier Cap	LF	90	84	6	0	0
1130	Cracking (RC and Other)	LF	6	0	6	0	0
(234) Caps: 44'-6" = 45' each (skewed) / Bents 2 & 3. Bent 3 back: Some hairline diagonal and vertical cracks.							
302	Compression Joint Seal	LF	96	40	52	4	0
2320	Seal Adhesion	LF	4	0	0	4	0
2330	Seal Damage	LF	32	0	32	0	0
2360	Adjacent Deck or Header	LF	20	0	20	0	0
(302) Joints: 48' each (skewed) / Bents 1 & 4. Bent 1: Joint material has deteriorated and is tattered in right (inside) lane and right shoulder (12'). Bent 4: Small area of minor sagging of joint material in left (outside) lane, just inside of white line. (4') Remaining joint material is wearing and tattering - joint appears to be closed tighter than planned and material seems "pinched". NOTE: Bent 1 left : Some deterioration, spalling, and patching (some of approach-side road-iron has been removed) on top of backwall of left (outer) lane. Bent 4 left : Some deterioration, spalling, and patching (some of back-side road-iron has been removed) on top of backwall of left (outer) lane.							
311	Movable Bearing	EA	15	10	0	5	0
1000	Corrosion	EA	1	0	0	1	0
1020	Connection	EA	2	0	0	2	0
2220	Alignment	EA	2	0	0	2	0
515	Steel Protective Coating	SF	30	10	0	18	2
3440	Effectiveness (Steel Protective Coatings)	EA	20	0	0	18	2

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(311) Movable bearings: 5 per bent / Bents 1, 2, & 4. Coating: 2.0 square feet each. Bent 1 Bearing 2: Left side hinge plate (ear) weld is cracking and plate is bending out. Bent 1 Bearing 4: Left side hinge plate (ear) has broken off - plate no longer attached to girder. Bent 1: Bearing are leaned back almost to limits. Bent 1 Bearing 3: has heavy flaking and pack rust to bearing and masonry plate.							
313	Fixed Bearing	EA	5	5	0	0	0
515	Steel Protective Coating	SF	10	10	0	0	0
(313) Fixed bearings: 5 per bent / Bent 3. Coating: 2.0 square feet each.							
321	Reinforced Concrete Approach Slab	SF	1680	1650	30	0	0
1130	Cracking (RC and Other)	SF	30	0	30	0	0
(321) Approach slabs: (24' wide x 35' long) 840 square feet each / Bents 1 & 4. Bent 1 left: Transverse crack. Bent 4 right: Transverse/diagonal crack. NOTE: Some portions of cracks have been sealed in the past.							
330	Metal Bridge Railing	LF	458	458	0	0	0
515	Steel Protective Coating	SF	1099	1099	0	0	0
(330) Railing: 229' each side. Coating: 2.4 square feet per linear feet of railing. Concrete curb topped with metal railing.							
331	Reinforced Concrete Bridge Railing	LF	458	458	0	0	0
(331) Railing: 229' each side. Concrete curb topped with metal railing.							

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	9492	7692	1728	72	0
1080	Delamination/Spall/Patched Area	SF	3	0	3	0	0
1120	Efflorescence/Rust Staining	SF	80	0	80	0	0
1130	Cracking (RC and Other)	SF	361	0	289	72	0
1190	Abrasion/Wear (PSC/RC)	SF	1356	0	1356	0	0
<p>(12) Deck: 42' wide x 226' long = 9492 sqft.</p> <p>Few unsealed minor- to moderate-sized transverse cracks in various locations - a couple with reflective efflorescence on soffit.</p> <p>Unsealed minor- to moderate-sized longitudinal cracks, mainly over girder in left (outside) lane.</p> <p>A couple scattered, very small/shallow spalls, mainly in left (outer) lanes.</p> <p>Some scattered areas of very light abrasive wear (loss of mortar) in travel lanes (25% travel lanes).</p> <p>Soffit – all spans: Some scattered cracking with efflorescence on overhangs (80 sqft CS2).</p>							

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	1130	1109	20	1	0
1000	Corrosion	LF	1	0	0	1	0
7000	Damage	LF	20	0	20	0	0
515	Steel Protective Coating	SF	12055	0	12045	0	10
3410	Chalking (Steel Protective Coatings)	LF	12037	0	12037	0	0
3440	Effectiveness (Steel Protective Coatings)	LF	10	0	0	0	10
7000	Damage	LF	8	0	8	0	0
<p>(107) Girders: 5 (continuous) per span / Spans 1-3 (60' - 106' - 60' = 226' total span). Coating: 10.0 square feet per linear feet of girder x 45'-6" = 455 sqft, 10.6 square feet per linear feet of girder x 32'-6" = 344.5 sqft, 11.6 square feet per linear feet of girder x 70' = 812 sqft, 10.6 square feet per linear feet of girder x 32'-6" = 344.5 sqft, 10.0 square feet per linear feet of girder x 45'-6" = 455 sqft, = 2411 sqft x 5 girders = 12,055 sqft total.</p> <p>A couple spots of rust, mainly around splices or at haunches near abutments. Span 1 Girder 3 @ Bent 1: Some corrosion and minor section loss to web, flanges and stiffener at end of girder on both sides. (1') All paint is beginning to look chalky, especially on outsides of outer girders.</p> <p>Span 2 Girders 1-3: Traffic impact damage over westbound lane of US 270. Left (outside) edge of flange of Girder 1 bent up slightly. Very slight bow in bottom of girder.</p> <p>06-30-2022 GGL-PRD: Accident inspection this date. Oversize (height) load made contact with Span 2 Girder 1 just past mid-span (over eastbound/center turn lane - traveling opposite normal traffic). Some superficial scratches were made to bottom and edge of bottom flange - approximately 6-8 sqft of transverse scratches. Most scratches go through finish coat but not primer coat. No bending or distortion was noted to flange or web in this area.</p>							



Asset #B5500(Routine)

I-530 NB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation.



Desk Overview



Approach



Span 2 girder 1 near mid span has previous traffic impact.



Span 2 girder 1 traffic impact.



Span 2 girder impact damage.



Span 2 girder 2 impact damage.



Span 2 girder 3 has traffic impact.



Bent 1 abutment has cracking.



Bent 1 bearing 3 has heavy flaking corrosion..



Under view of span 1.



Bent 2 column 2 at ground level has cracking.



Bent 3 cap back has small diagonal cracks.



Span 2 girder 1 has scratches and scrapes.

Maintenance Needs

Date Reported: 12/08/2011

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Assigned

Type of Work: Repair (General)

Component: Element

Deficiency Description

Joints –

Bent 1: Joint material has deteriorated and is tattered in right (inside) lane and right shoulder (12').

Bent 4: Small area of minor sagging of joint material in left (outside) lane, just inside of white line. (4')

Remaining joint material is wearing and tattering - joint appears to be closed tighter than planned and material seems "pinched".

Remarks



Maintenance Needs

Date Reported: 12/08/2011

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Monitor

Type of Work: Repair (General)

Component: Element

Deficiency Description

Bent 1 Bearing 3: has heavy flaking and pack rust to bearing and sole plate..

Remarks



Maintenance Needs

Date Reported: 10/24/2013

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Monitor

Type of Work: Repair (General)

Component: Element

Deficiency Description

Span 1 Girder 3 @ Bent 1: Some corrosion and minor section loss to web, flanges and stiffener at end of girder on both sides.

A couple spots of rust, mainly around splices or at haunches near abutments.

Remarks



Span 1 Girder 3 @ Bent 1 (corrosion)

Maintenance Needs

Date Reported: 09/25/2014

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Monitor

Type of Work: Repair (General)

Component: Element

Deficiency Description

Deck - all spans:

Few unsealed minor- to moderate-sized transverse cracks in various locations - a couple with reflective efflorescence on soffit.

Unsealed minor- to moderate-sized longitudinal cracks, mainly over girder in left (outside) lane.

A couple scattered, very small/shallow spalls, mainly in left (outer) lanes.

Remarks



Deck span 2 has cracks and small spalls.



Deck - Span 1 left @ Bent 2: Cracking/minor spalling



Deck - Span 2 @ midspan: Cracking/abrasive wear



Deck - Span 2 right @ 3/4 span: Cracking/spalling

Maintenance Needs

Date Reported: 09/23/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Assigned

Component: Element

Deficiency Description

Abutments -

Bent 1 left : Some deterioration, spalling, and patching (some of approach-side road-iron has been removed) on top of backwall of left (outer) lane.

Bent 4 left : Some deterioration, spalling, and patching (some of approach-side road-iron has been removed) on top of backwall of left (outer) lane.

Spalling and missing patches are making area between approach slab and bridge end very rough to the traveling public - these defects are in the outer (high-traffic) lane.

Remarks



Bent 1 road iron has section missing. Common bent 4.



Abutment - Bent 1 left: Spalling on top of backwall



Abutment - Bent 4 left: Spalling on top of backwall

Maintenance Needs

Date Reported: 09/23/2020

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Bent 1 Bearing 2: Left side hinge plate (ear) weld is cracking and plate is bending out.

Bent 1 Bearing 4: Left side hinge plate (ear) has broken off - plate no longer attached to girder.

Remarks



Bent 1 Bearing 2: Cracking of weld/bending out of hinge plate (ear)



Bent 1 Bearing 4: Hinge plate (ear) broken loose

Maintenance Needs

Date Reported: 09/23/2020

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

Roadway/end-slope - Bent 4:

Roadway (side) slope on left outside of concrete slope paving has slumped down.

Concrete slope paving across end-slope has moved/slumped down - leaving a 2-3" gap between paving and abutment.

Remarks



Erosion to South East side slope.



Erosion to South East side slope.



Roadway slope - Bent 4 left: Erosion/slope slumping



Slope paving - Bent 4 right: Moving/slumping



Roadway slope - Bent 4 left: Erosion/slope slumping



Asset #B5500(Routine)

I-530 NB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

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	



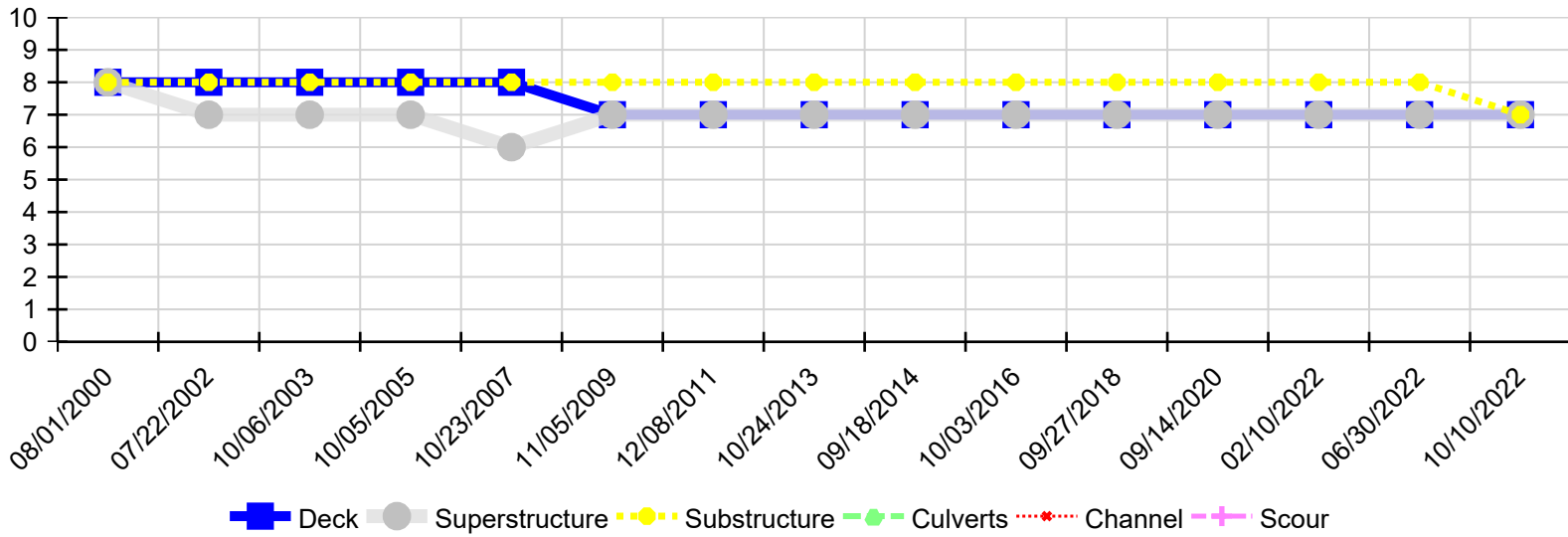
Asset #B5500(Routine)

I-530 NB LM 33.77 over US 270

Location: @ US 270-White Hall

Team Lead: Sharon Hooks, Inspection Date: 10/10/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/10/2022	7	7	7	N	N	N
06/30/2022	7	7	8	N	N	N
02/10/2022	7	7	8	N	N	N
09/14/2020	7	7	8	N	N	N
09/27/2018	7	7	8	N	N	N
10/03/2016	7	7	8	N	N	N
09/18/2014	7	7	8	N	N	N
10/24/2013	7	7	8	N	N	N
12/08/2011	7	7	8	N	N	N
11/05/2009	7	7	8	N	N	N
10/23/2007	8	6	8	N	N	N
10/05/2005	8	7	8	N	N	N
10/06/2003	8	7	8	N	N	N
07/22/2002	8	7	8	N	N	N
08/01/2000	8	8	8	N	N	N