Asset **#16I00240030**(Routine)

Region: 02, **County:** 16 - Coffee

Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

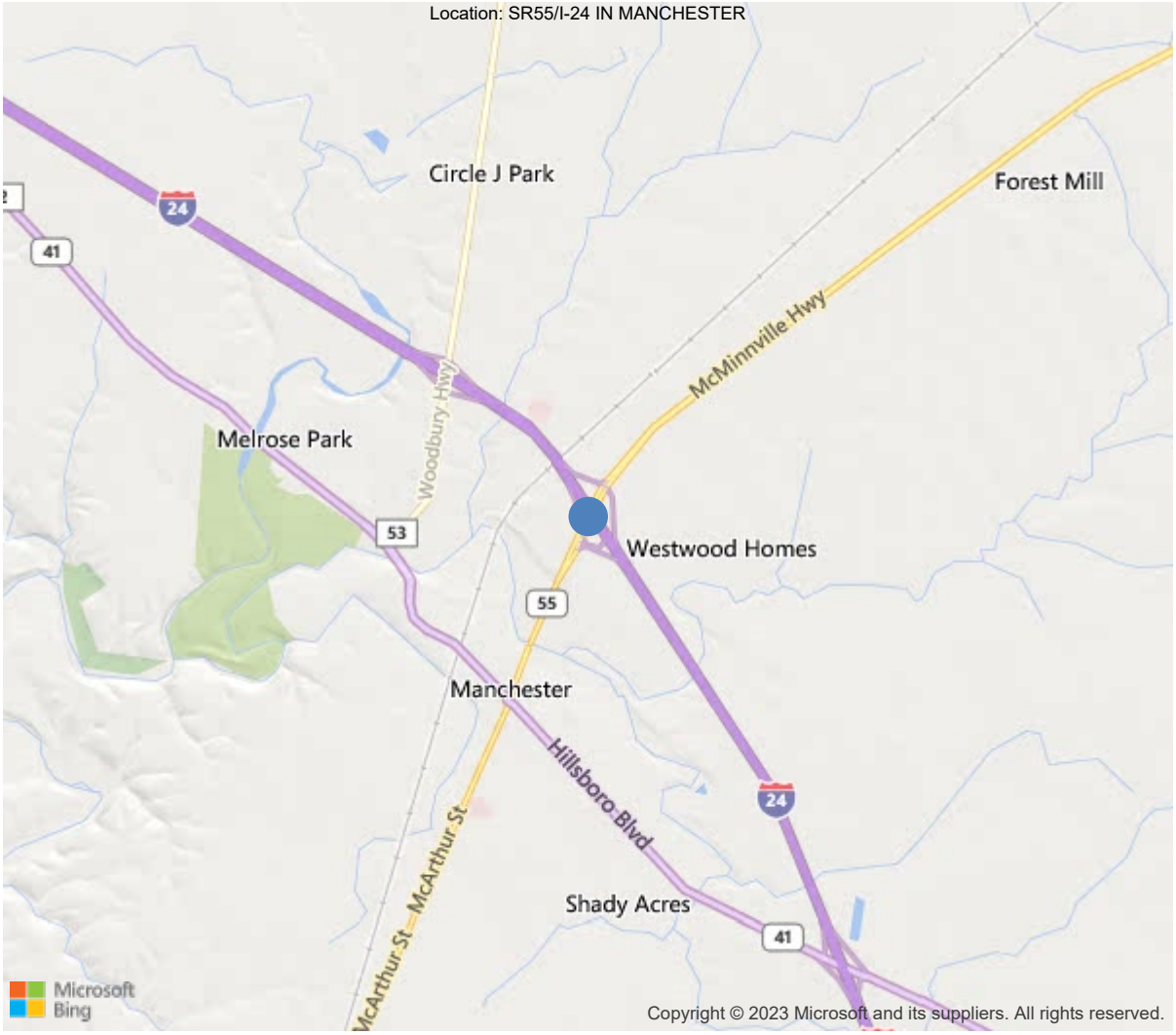
Latitude:35.48967, Longitude:-86.07423

Region 02, 16 - Coffee County

Team Leader: Elizabeth Roadinger

Inspectors: Bradley Dagenais, Anthony Pack

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023



MCMINNVILLE HWY. Crossing I24

35.48967, -86.07423

Routine Bridge Inspection Report

City of Manchester in Coffee County	
Federal ID	16I00240030
Location	16-SR055-14.77-L
Description	McMinnville Highway over I-24, I-24 Milepost 111.20
GPS Coordinates	35.489667, -86.074233
Date	10/25/2023
Overall Condition	Poor

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

Maintenance Recommendations

525 - Repair List # 2 523 - Repair List Add Date 2/13/2002 524 - Repair List Revise Date 10/12/2021

Date Added	Recommendation	Priority
10/21/2021	CLEAN AND PAINT BEARINGS	
01/19/2010	BRIDGERAILS ARE SUBSTANDARD	
05/19/2004	PROTECT BRIDGESEATS FROM WATER DAMAGE AT BOTH ABUTMENTS	
11/04/2021	REMOVE LOOSE DELAMINATED CONCRETE OVER UNDERPASS ROADWAY	
01/29/2014	APPROACH GUARDRAILS ARE SUBSTANDARD	
10/16/2019	REPAIR ROADWAY EXPANSION DEVICES	
10/25/2023	REPAIR CONCRETE CRACKS, SPALLS, AND DELAMINATED AREAS THROUGHOUT THE STRUCTURE	

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

90 - LAST INSPECTION DATE	10/25/2023
10 - MIN. V.C. OVER DECK (ROADWAY + SHOULDERS)	19.20 FT.
520 - MIN. V.C. OVER DECK (EXCLUDES SHOULDERS)	18.10 FT.

36 - TRAFFIC SAFETY FEATURES

Br. Rail	Trans.	Appr. Rail	Terminal	SPEED LIM.
0	0	0	0	40

41 - STRC OPEN/CLOSED/POSTED	A
58 - DECK	4
59 - SUPERSTRUCTURE	5
60 - SUBSTRUCTURE	5
61 - CHANL/CHANL PROTECTION	N
62 - CULVERT AND RETAIN WALL	N
71 - WATERWAY ADEQUACY	N
72 - APPROACH RDWY ALIGNMENT	8
521 - OVERALL CONDITION	3 - Poor

16 - LATITUDE	17 - LONGITUDE
35.489667	-86.074233

Elizabeth Roadinger
TEAM LEADER SIGNATURE

N NOT APPLICABLE

9 EXCELLENT CONDITION

8 VERY GOOD CONDITION - NO PROBLEMS NOTED.

7 GOOD CONDITION - SOME MINOR PROBLEMS.

6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.

5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.

4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.

3 SERIOUS CONDITION - LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOUSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.

2 CRITICAL CONDITION - ADVANCED DETERIORATION OF PRIMARY STRUCTURAL ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED SUBSTRUCTURE SUPPORT. UNLESS CLOSELY MONITORED IT MAY BE NECESSARY TO CLOSE THE BRIDGE UNTIL CORRECTIVE ACTION IS TAKEN.

1 "IMMINENT" FAILURE CONDITION - MAJOR DETERIORATION OR SECTION LOSS PRESENT IN CRITICAL STRUCTURAL COMPONENTS OR OBVIOUS VERTICAL OR HORIZONTAL MOVEMENT AFFECTING STRUCTURAL STABILITY. BRIDGE IS CLOSED TO TRAFFIC BUT CORRECTIVE ACTION MAY PUT IT BACK IN LIGHT SERVICE.

0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORREC

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)

Region: 02, **County:** 16 - Coffee

Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

IDENTIFICATION	
(1) State Names	47 - Tennessee
(8) Structure Number	16I00240030
(5) Inventory Route	1
(2) Highway Agency District	Region 2
(3) County Code	16 - Coffee
(4) Place Code	45500
(6) Features Intersected	I24
(7) Facility Carried	FAP 55 SBL
(9) Location	SR55/I-24 IN MANCHESTER
(11) Mile Point	14.770 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	16SR055001
(16) Latitude	35.489667
(17) Longitude	-86.074233
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	24
Material	2 - Concrete continuous
Type	4 - Tee beam
(44) Approach Structure Type	00
Material	0 - Other / None
Type	0 - Other / None
(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	6 - Bituminous
Type of Membrane	8 - Unknown
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1966
(106) Year Reconstructed	1973
(42) Type of Service	51
On	5 - Highway-pedestrian
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	2
Under	4
(29) Average Daily Traffic	16822
(30) Year of ADT	2021
(109) Truck ADT	7 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	79.3 ft
(49) Structure Length	281.3 ft
(50) Curb or Sidewalk Width	
Left	5.0 ft
Right	ft
(51) Bridge Roadway Width Curb to Curb	30.4 ft
(52) Deck Width Out to Out	42.4 ft
(32) Approach Roadway Width (W/Shoulders)	24.0 ft
(33) Bridge Median	0 - No median
(34) Skew	58 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	19.20 ft
(47) Inventory Route Total Horiz Clear	43.1 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	18.10 ft
Ref:	
(55) Min Lat Underclear RT	11.7 ft
Ref:	
(56) Min Lat Underclear LT	26.5 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(111) Pier Protection	
(39) Navigation Vertical Clearance	0.0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	ft
(40) Navigation Horizontal Clearance	0.0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	1
(26) Functional Class	14 - Urban Other Principal Art
(100) Defense Highway	0 - The inventory route is not
(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	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	4 - Historical significance is
CONDITION	
(58) Deck	4
(59) Superstructure	5
(60) Substructure	5
(61) Channel & Channel Protection	N
(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	40.50
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	24.30
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	6
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	5
(71) Waterway Adequacy	N
(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	N - Bridge not over waterway.
PROPOSED IMPROVEMENTS	
(75) Type of Work	33 - Widening of existing brid
(76) Length of Structure Improvement	281.2 ft
(94) Bridge Improvement Cost	$ 150
(95) Roadway Improvement Cost	$ 16
(96) Total Project Cost	$ 226
(97) Year of Improvement Cost Estimate	2020
(114) Future ADT	23632
(115) Year of Future ADT	2040

INSPECTIONS *			
(90) Inspection Date			10/12/2021
(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.

Looking ahead on route

Across top of deck

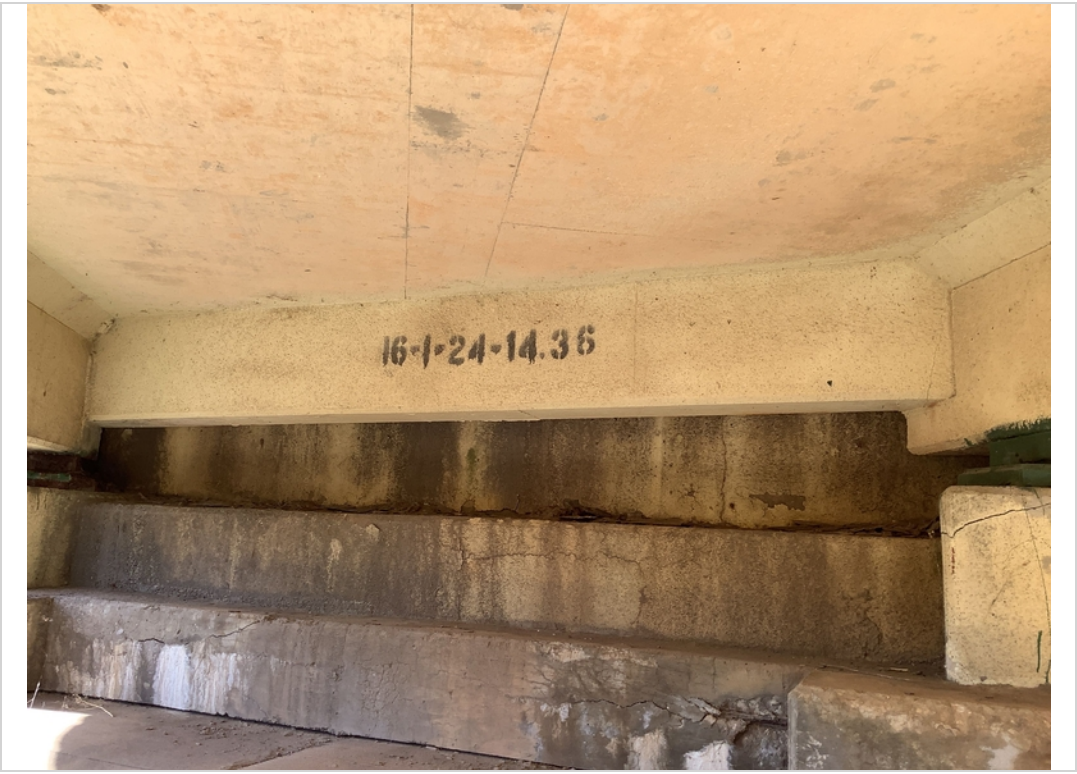
Looking back on route

Side view of structure

Underclearance looking east

Underclearance looking west

Bottom of deck



Bridge number

Typical abutment

Typical bent

Typical moderate efflorescence in bottom of deck

Typical moderate spalls with exposed rebar in bottom of deck bay "A"

Typical spalls with rebar in right overhangs

Typical moderate spall in bottom of deck

Typical crack in bottom of deck

Typical rust staining in bottom of deck

Typical bearing

Bearing “C” at abutment #1

Span #3 beam “A”

Moderate vertical crack in beam "A" in span #3

Moderate spall on beam "A" in span #3 with exposed strands

Hairline longitudinal crack along length of beam "A" in span #3

Typical cracks on beams

Beam "D" at abutment #1

Typical cracks with efflorescence at abutments

Void between deck and abutment #1 at left side

Void between deck and abutment #2 at left side

Bearing surface for bearing "B" (under beam "C") at abutment #1

#2 left abutment

Typical spalls on bent columns from collision damage

Typical rebar pop-outs on bent columns

Vegetation growing on bent columns

Sidewalk deterioration

Typical rough and uneven wearing surface

Typical pothole in wearing surface

#1 approach joint

#2 approach joint

Attached sign

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

PERFORMANCE EVALUATION

Time of Day Inspected: 10:00 AM
Weather Conditions: Sunny, 67°F
Vehicles Observed: All types

LIVE LOAD BEHAVIOR

Sub Horiz./ Vert. Defl	(No)	
Sub Vibration	(No)	
Super Horiz./ Vert. Defl	(No)	
Super Vibration	(Yes)	

APPROACH

Alignment	(Good)	
Slab	(NA)	
Joints	(Poor)	Asphalt overlaid; cracking and rough patches over joints
Pavement	(Poor)	Rough and uneven with up to 2" of settlement over joints
Embankment	(Good)	
Approach Drains	(Good)	

TRAFFIC SAFETY FEATURES

Bridge Railing Rating	(Fair)	Weathering stains and rebar pop-outs
Transitions Rating	(Good)	
Guardrail Rating	(Good)	
Guardrail Terminal Rating	(Good)	

SIGNS POSTED ON ROUTE

Paddleboards	No	Weight Limit Posted	Not Needed
Vertical Clearance (<14'-6")	No	Gross	Tons
Posted Height		Single-unit Vehicle	Tons
Narrow Bridge Signs	No	Multi-unit Vehicle	Tons
One Lane Bridge Signs	No		
Other Signs or Plaques	Route 55 signage; I-24 signage	564 Assigned Bridge Name	

ATTACHED SIGNS

Sign No	Location	Text on Sign	Noted Defects
	Left side of bridge over I-24 Eastbound lanes	Exit 111B HWY 55 McMinnville	None

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

DECK

Wearing Surface Type	Asphalt	**Wearing Surface Depth**	3

Wearing Surface	(Poor)	Moderate cracking throughout; potholes and repaired areas
Deck - Structural Condition	(Poor)	Moderate leakage at bay "A" at construction joint; widespread moderate spalls with exposed rebar in overhangs and bay "A"; hairline cracks with efflorescence; delaminated areas
Curbs	(Good)	
Median	(NA)	
Sidewalks	(Poor)	Minor settlement at the bridge ends; areas of broken concrete
Parapet	(NA)	
Railing	(Fair)	Weathering stains and rebar pop-outs
Rail Paint	(NA)	
Deck Drains	(NA)	
Lighting Standards	(NA)	
Utilities	(NA)	
Expansion Joints	(Poor)	Asphalt overlaid; moderate cracking and rough patches over joints; moderate joint leakage at abutments

SUPERSTRUCTURE

Bearing Devices	(Fair)	Corroded at abutment #1 on "A" and "C" due to lack of paint
Girders	(Fair)	Beam "D" has up to 0.125" diagonal cracking over the bearing at abutment #1; beam "A" in span #3 has two moderate spalls exposing prestressing strands; moderate crack and hairline longitudinal crack along length of "A"; cracks on beams "B" and "C" in span #2
Beams	(NA)	
Floor Beams	(NA)	
Stringers	(NA)	
Diaphragms	(Good)	
Superstructure Bracing	(NA)	
Trusses - General	(NA)	
Trusses - Portals	(NA)	
Trusses - Bracing	(NA)	
Superstructure Paint	(Poor)	On bearings. Paint has failed and bearings are corroded at abutment #1 "A" and "C"
Alignment of Members	(Good)	

TEXTURE COAT

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

ABUTMENTS

Abutment Caps	(Fair)	Moderate spalls with exposed rebar and delaminated areas
Abutment Breastwall	(NA)	
Abutment Wings	(Good)	
Abutment Backwall	(Fair)	Delaminated areas; cracks with efflorescence; gap between deck and abutment on left side of both abutments
Abutment Plumb	(Good)	
Abutment Footing	(NA)	
Abutment Piles	(Not Visible)	
Abutment Embankment	(Good)	
Abutment Bearing Surface	(Fair)	Delaminated area under bearing "B" at abutment #1
Abutment Slope Paving	(Fair)	Broken behind bent #1
Abutment Rip Rap	(NA)	

PIERS

Pier Caps	(NA)	
Pier Columns I Walls	(NA)	
Pier Plumb	(NA)	
Pier Footing	(NA)	
Pier Piles	(NA)	
Pier Bearing Surface	(NA)	

BENTS

Bent Caps	(NA)	
Bent Columns	(Fair)	Spalls at bent #1 from collision damage; rebar pop-outs on columns at bent #3
Bent Plumb	(Good)	
Bent Footing	(Not Visible)	
Bent Piles	(Not Visible)	
Bent Bearing Surface	(NA)	
Piles Need Replacement	(No)	

Inspection Team's Summary

This bridge consists of four concrete deck girder spans with an asphalt wearing surface. It has a total length of 281.3 feet with a maximum span length of 79.3 feet. It is situated on a 58° left skew. It was constructed in 1966, and it was widened in 1973. This bridge was inspected on October 25, 2023 by a Region 2 bridge inspection team from Tullahoma and was found to be in overall poor condition.

The approach alignment, embankments, and drains are rated good. The joints are rated poor due to being overlaid with asphalt. The pavement is rated poor due to being rough and uneven with up to 2 inches of settlement over the joints. The bridge railing is in fair condition due to weathering stains and rebar pop-outs. The traffic safety features do not meet the current safety standards.

The deck is rated poor. There is moderate leakage at bay “A” at the construction joints, widespread moderate spalls with exposed rebar in the overhangs and bay “A”, delaminated areas, and some cracking with efflorescence. The sidewalks are rated poor due to minor settlement at the bridge ends and having areas of broken concrete. The wearing surface is in poor condition due to having moderate cracking throughout, potholes, and repaired areas.

The superstructure is rated fair. The bearing devices are rated fair due to corrosion at abutment #1 on bearings “A” and “C” due to lack of paint. The beams are rated fair. Beam “D” has up to 0.125 inch diagonal cracking over the bearing at abutment #1. Beam “A” in span #3 has two moderate spalls exposing prestressing stands. Beam "A" in span #3 also has a moderate vertical crack and a hairline longitudinal crack along the beam length. Beams "B" and "C" in span #2 have isolated cracks.

The substructure is rated fair. The abutment caps are rated fair due to moderate spalls with exposed rebar and delaminated areas. The backwalls are rated fair due to delaminated areas and cracks with efflorescence. The slope paving is rated fair due to being broken behind bent #1. The bent columns are rated fair due to spalls at bent #1 from collision damage and rebar pop-outs on columns at bent #3.

General Inspection Comment

Asset **#16I00240030**(Routine)

Region: 02, **County:** 16 - Coffee

Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

Deck Elevation

Benchmark height 1095.54 Benchmark location Top of curb on right side of abutment #1 Southbound lanes Edge location

Comment All distances and elevations are in feet

Location	Top Lt. Curb	Left Gutter	Center Line	Right Gutter	Top Rt. Curb
Abutment #1	1091.31	1090.75	1090.85	1090.62	1090.42
Bent #1	1091.67	1091.01	1091.14	1090.95	1092.26
Bent #2	1091.73	1091.11	1091.27	1091.18	1091.77
Bent #3	1091.34	1090.75	1090.95	1090.95	1091.57
Abutment #2	1090.81	1090.22	1090.49	1090.49	1091.04

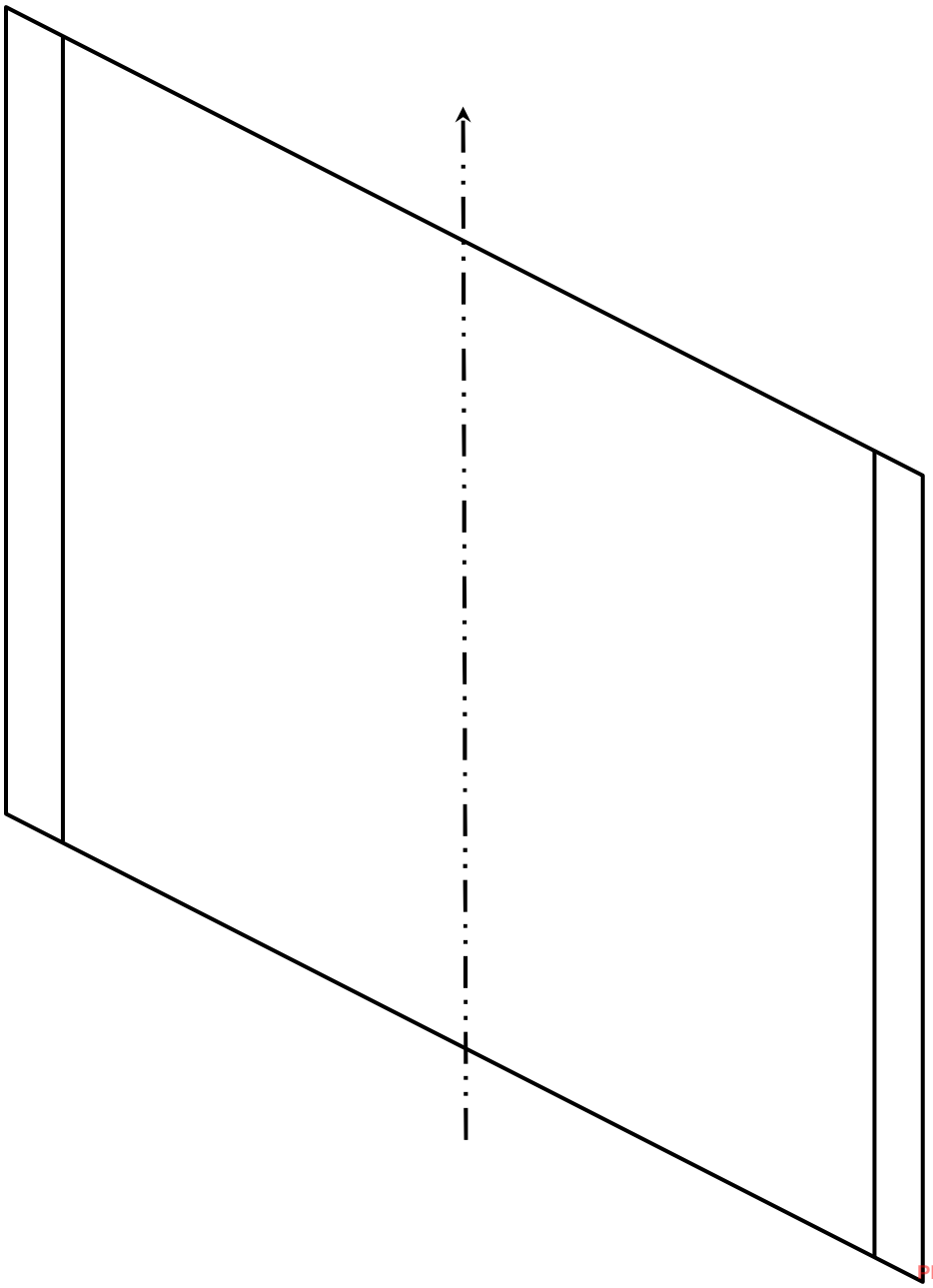
Top of Deck Span No. 1

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth

Asphalt is rough and uneven with moderate cracking throughout

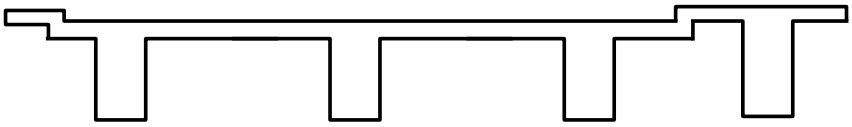


Bottom of Deck Span No. 1

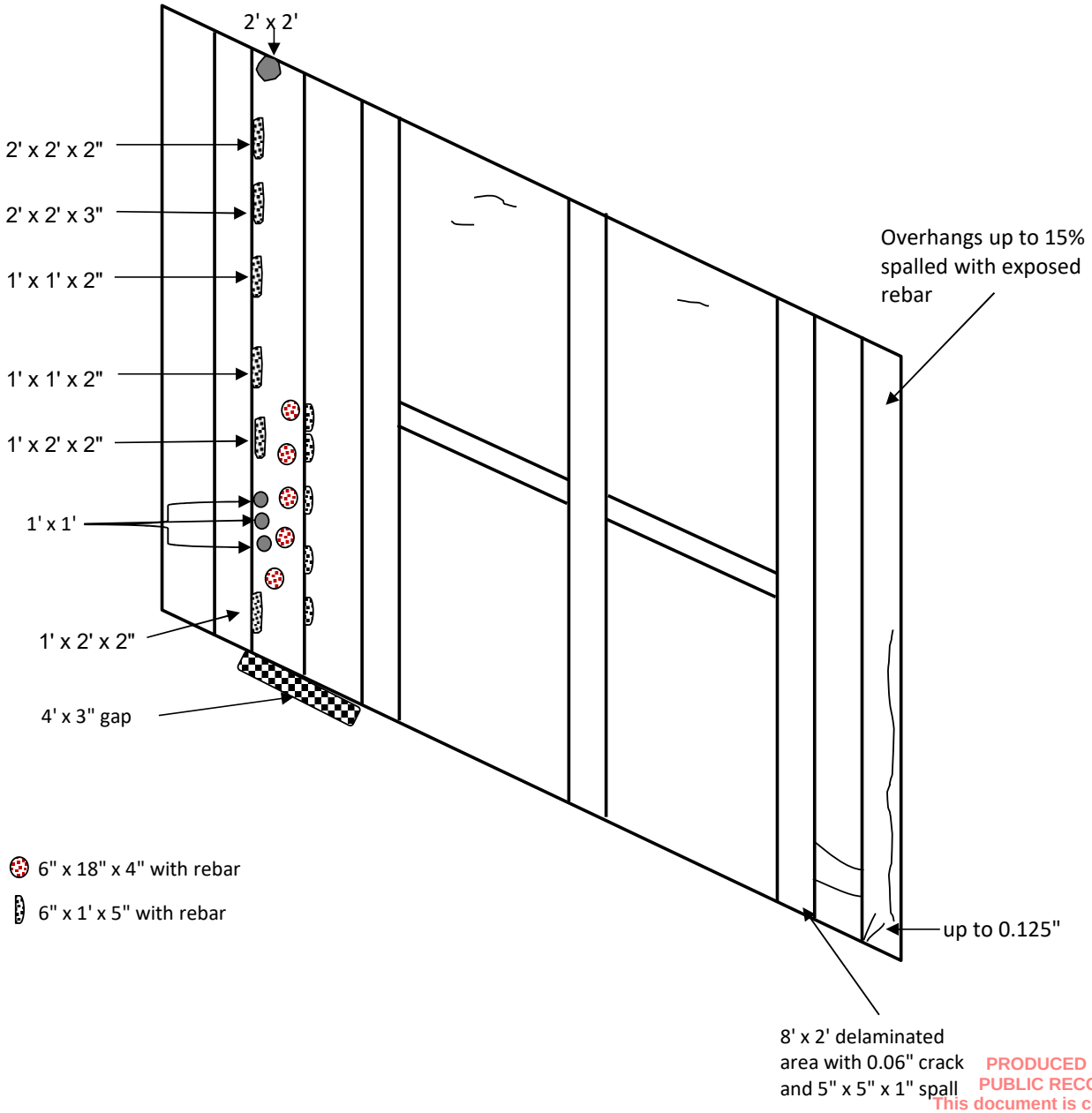
Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth



Cracks are hairline with minor efflorescence
Spalls have exposed rebar



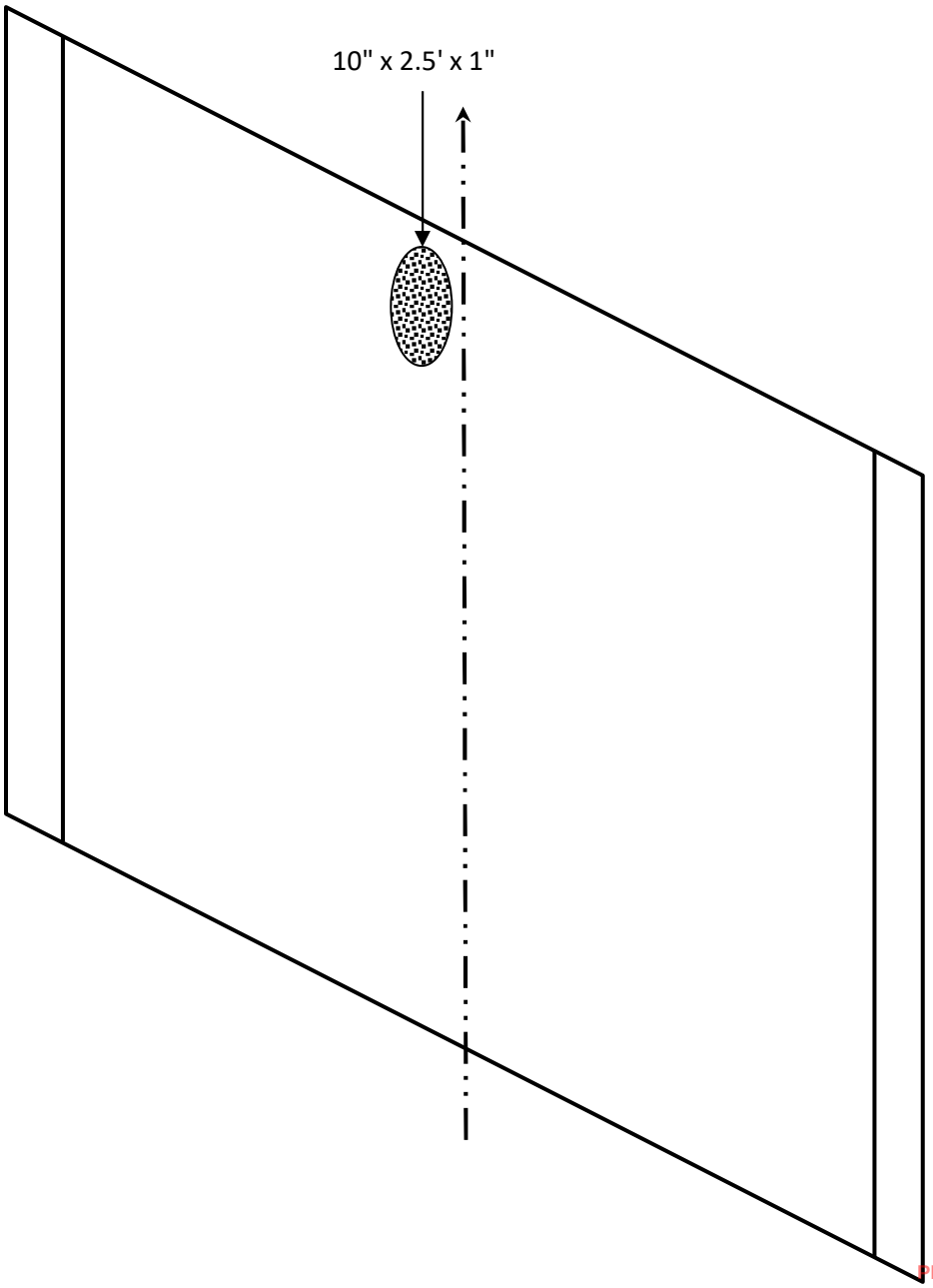
Top of Deck Span No. 2

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth

Asphalt is rough and uneven with moderate cracking throughout



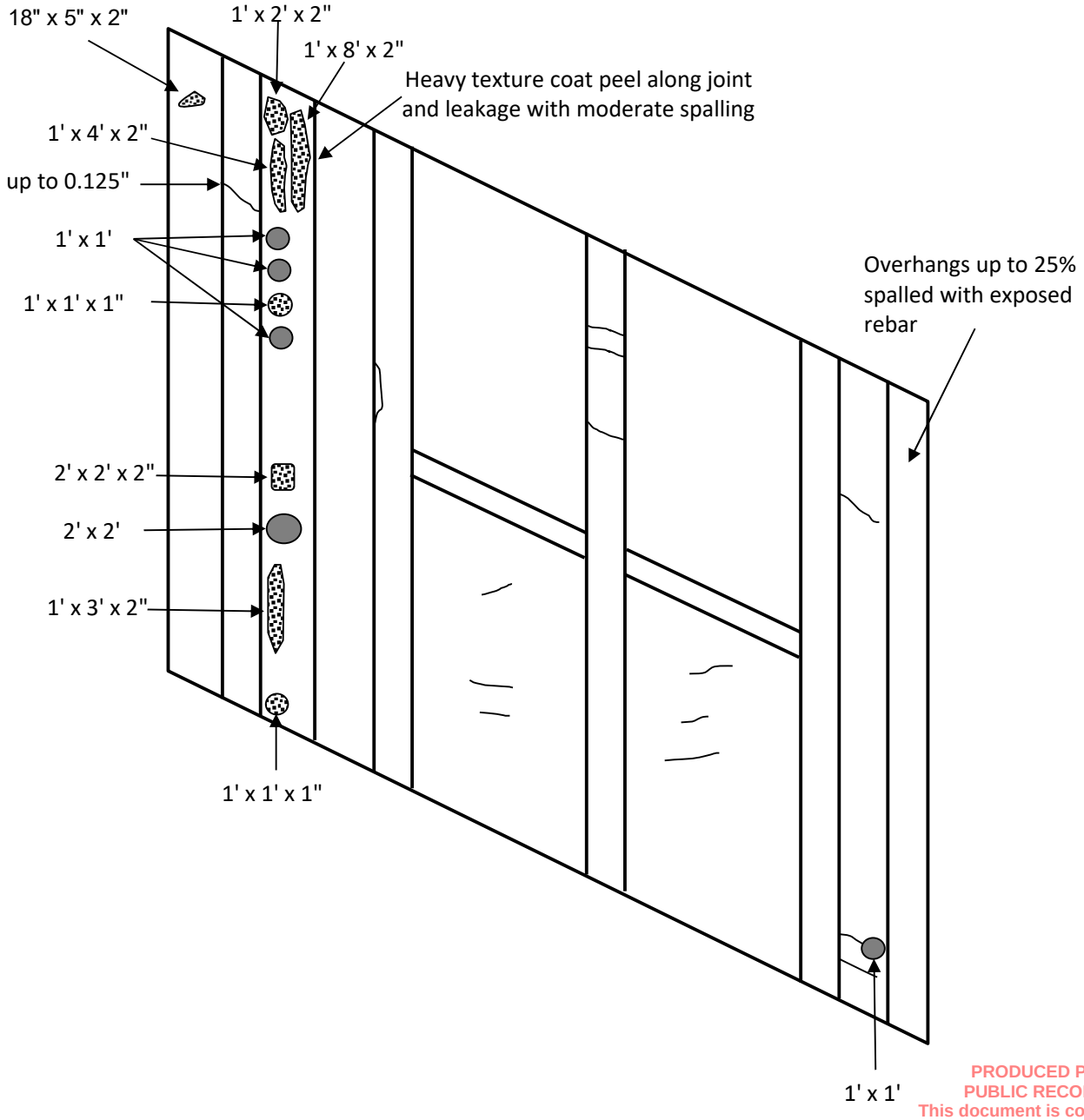
Bottom of Deck Span No. 2

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth

Cracks are hairline with minor efflorescence
Spalls have exposed rebar



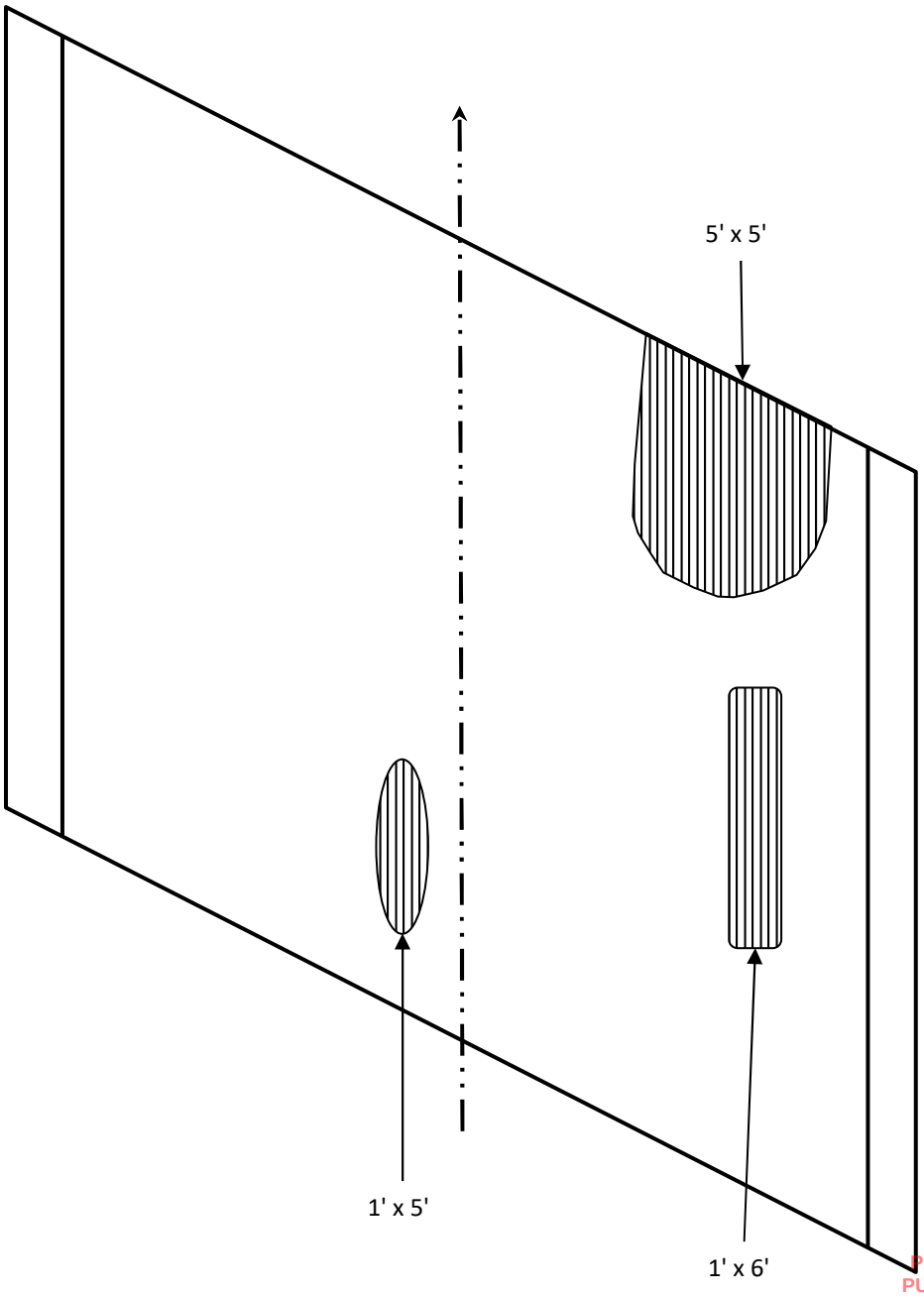
Top of Deck Span No. 3

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:					
	Cracking			Repairs	(light vertical)
				Voids	(large checker board)
	Spalling		(confetti)	Dimensions are noted as	
	Scaling		(10% dots)	↔ X ↕ X depth	
	Delamination		(40% gray)		

Asphalt is rough and uneven with moderate cracking throughout

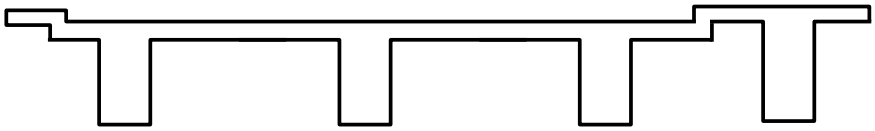


Bottom of Deck Span No. 3

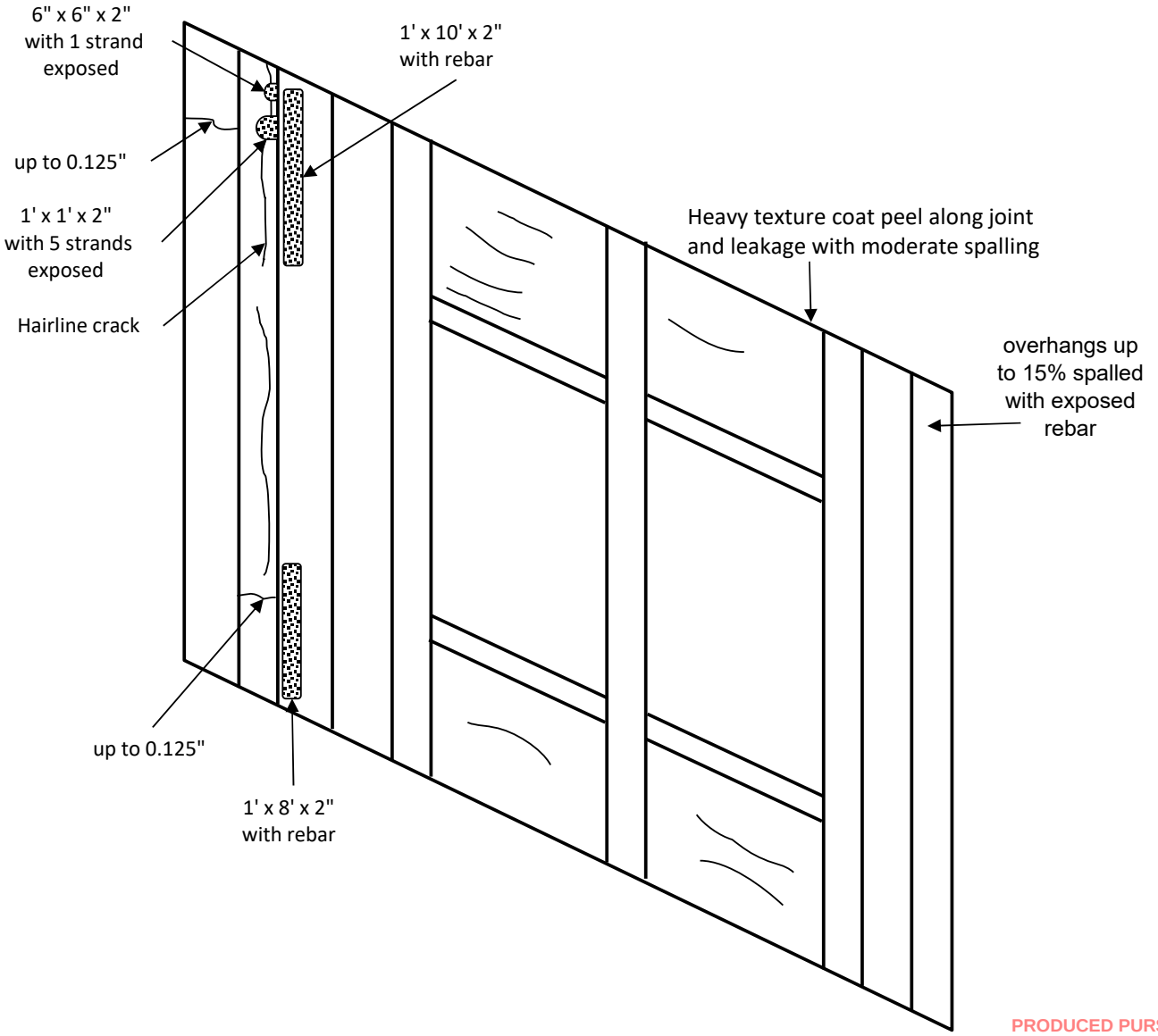
Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth



Cracks are hairline with slight efflorescence



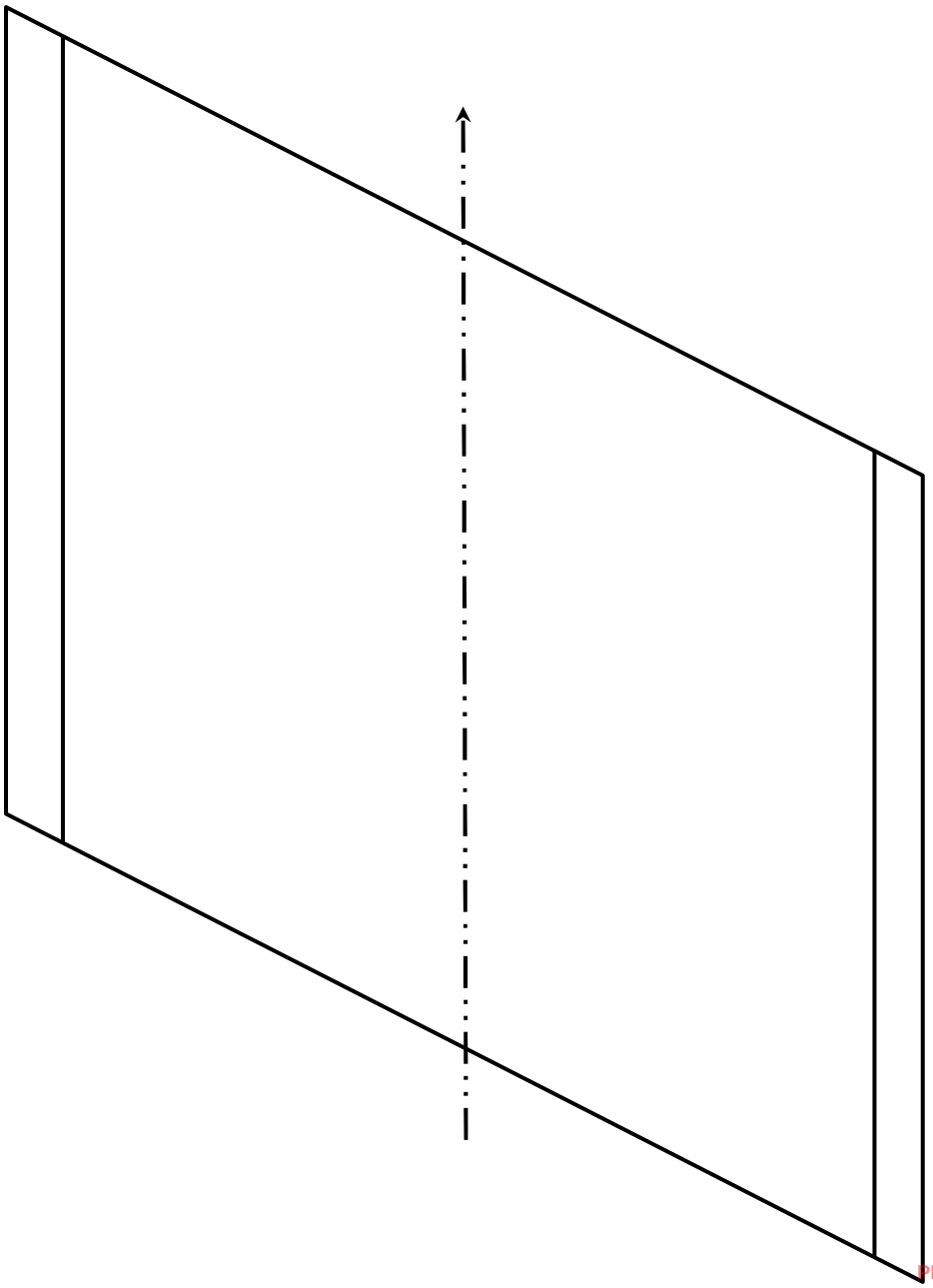
Top of Deck Span No. 4

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth

Asphalt is rough and uneven with moderate cracking throughout

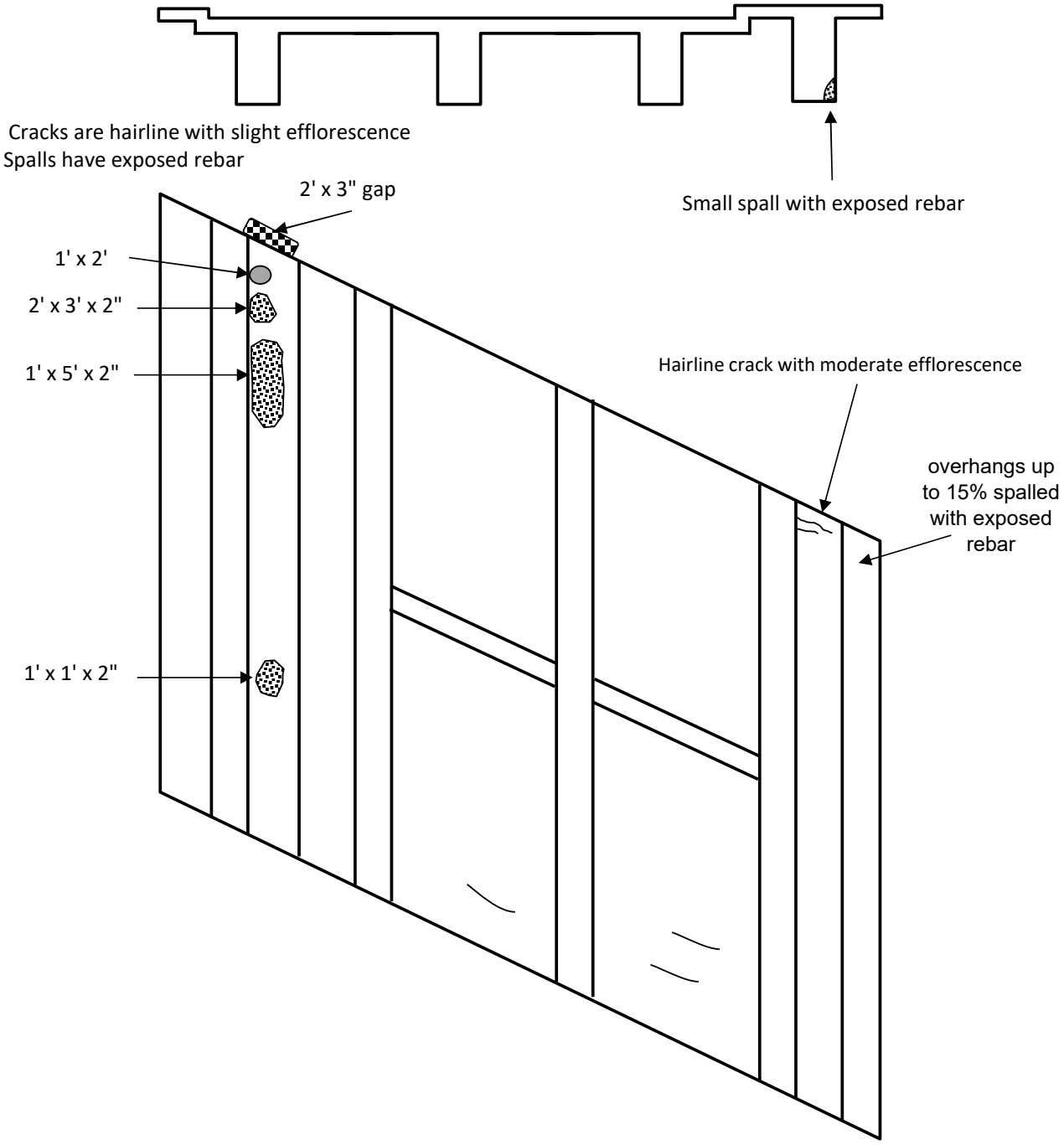


Bottom of Deck Span No. 4

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth



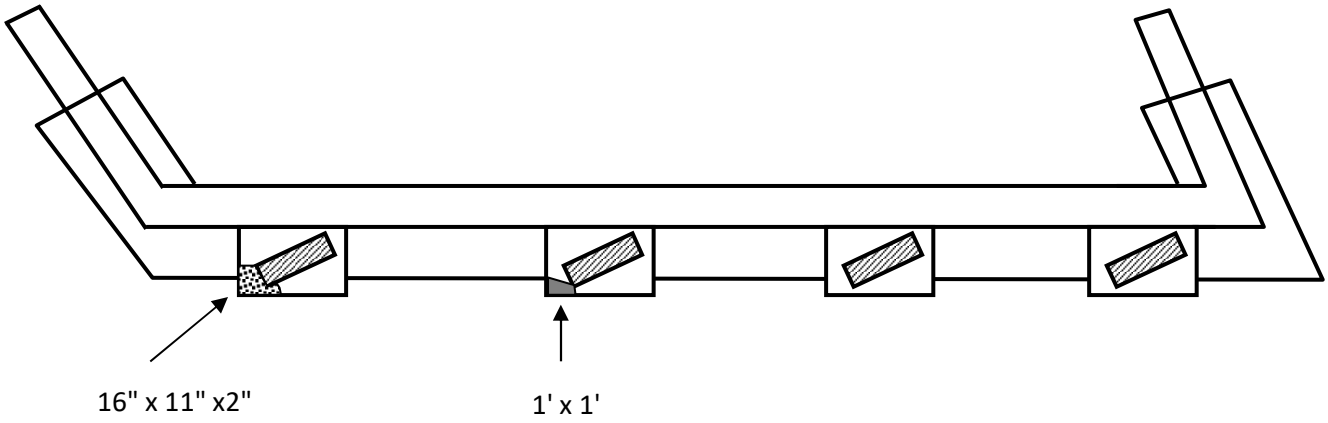
Abutment No. 1

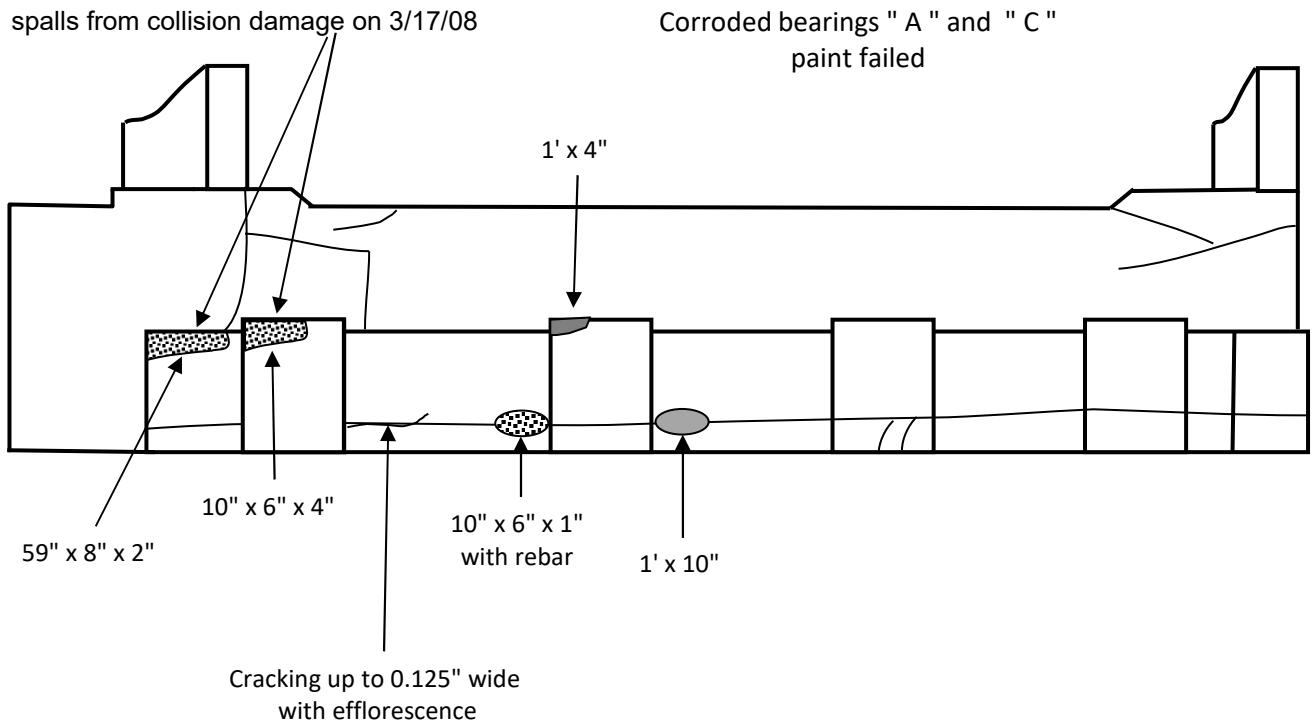
Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Bearings (light upward diagonal)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth

cracks are hairline



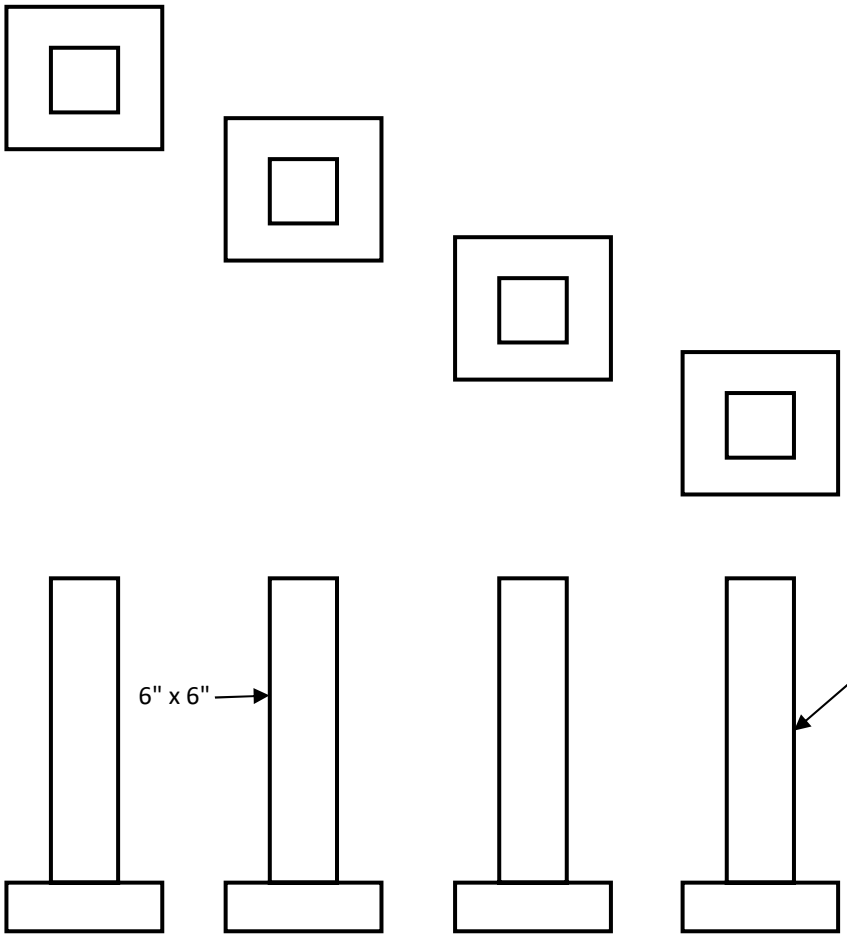


Bent No. 1

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Bearings (light upward diagonal)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth

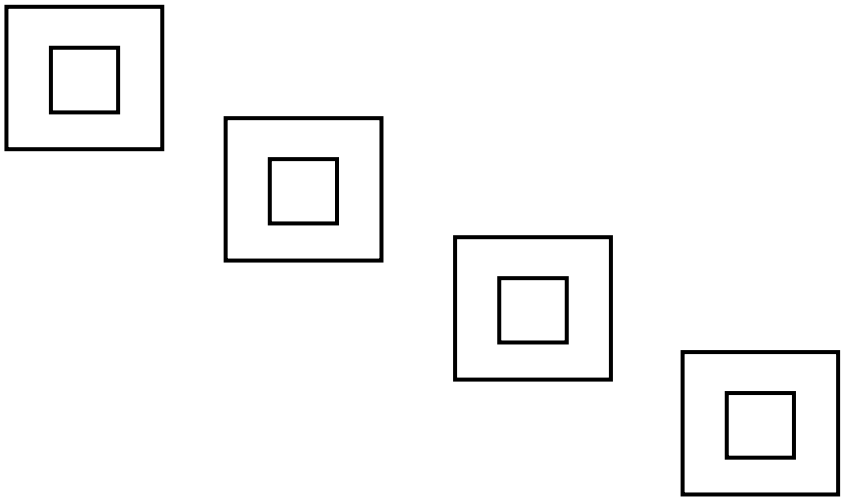


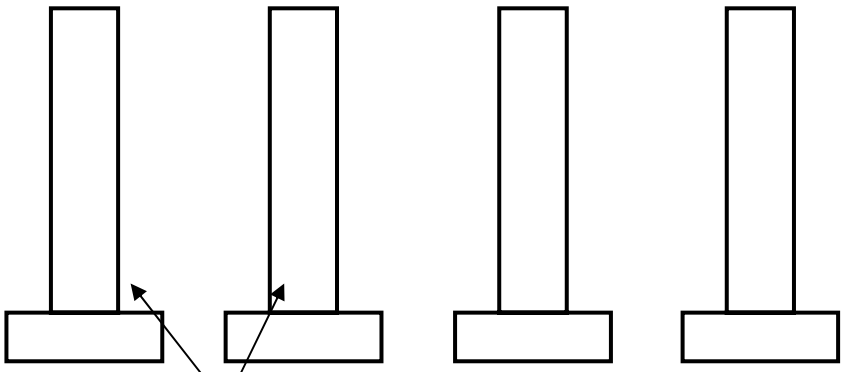
Bent No. 2

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

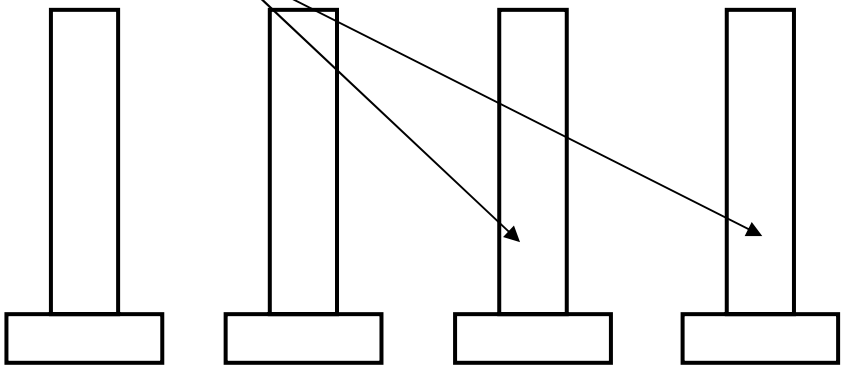
Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Bearings (light upward diagonal)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth





Front Side

Vegetation growth



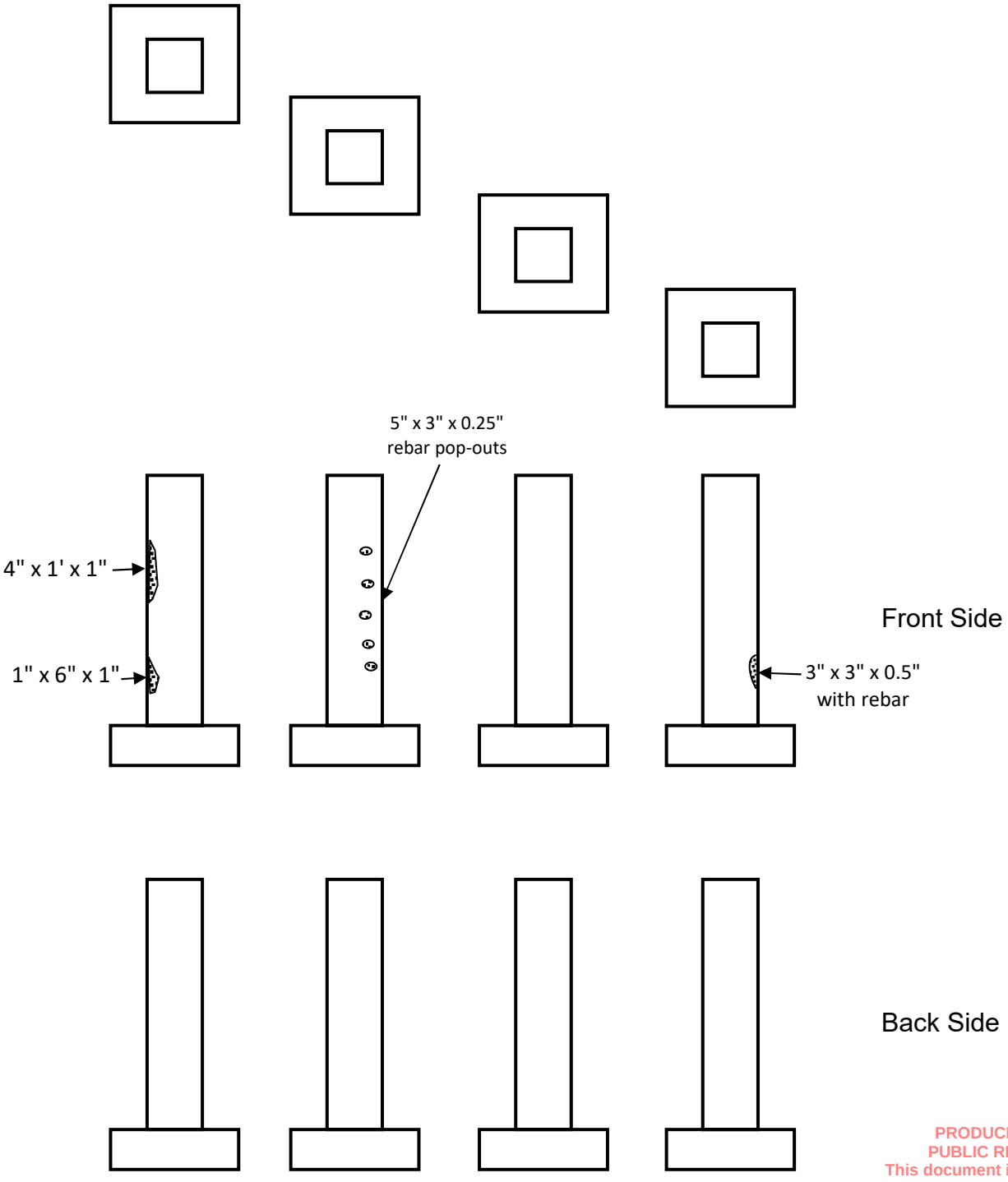
Back Side

Bent No. 3

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Bearings (light upward diagonal)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth



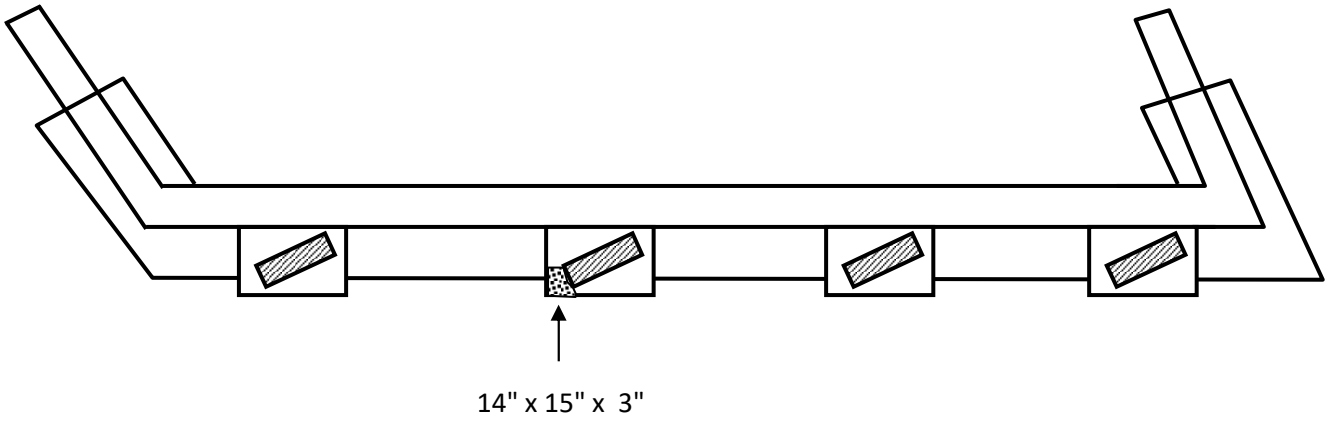
Abutment No. 2

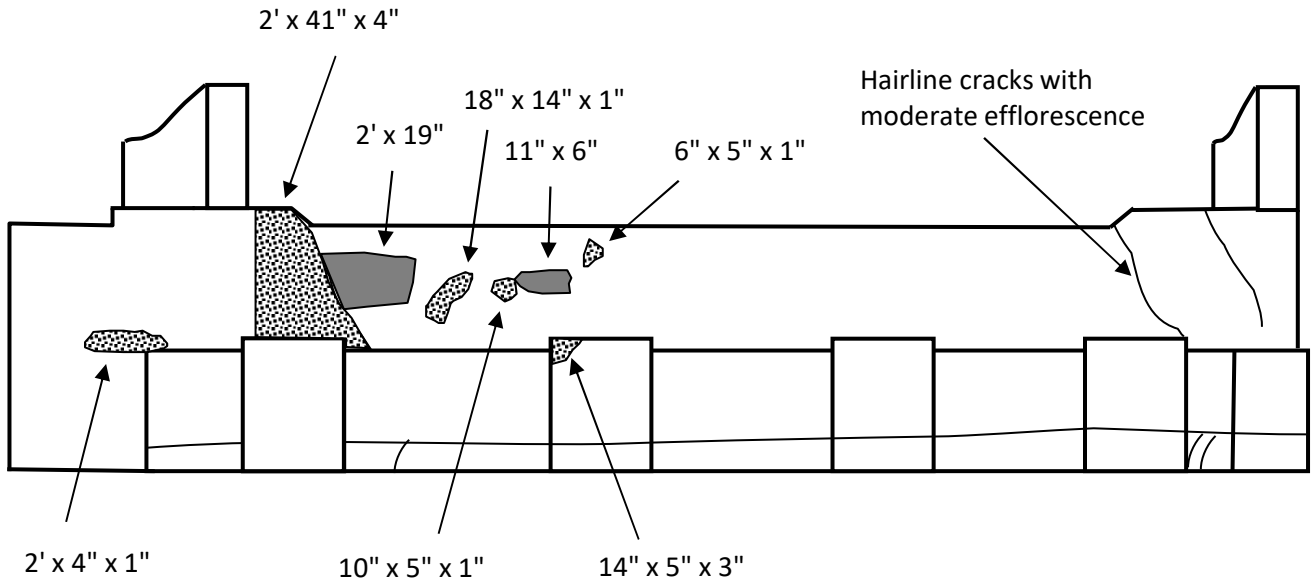
Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

Legend:
- Cracking
- Spalling (confetti)
- Scaling (10% dots)
- Delamination (40% gray)
- Repairs (light vertical)
- Bearings (light upward diagonal)
- Voids (large checker board)
- Dimensions are noted as ↔ X ↕ X depth

cracks are small





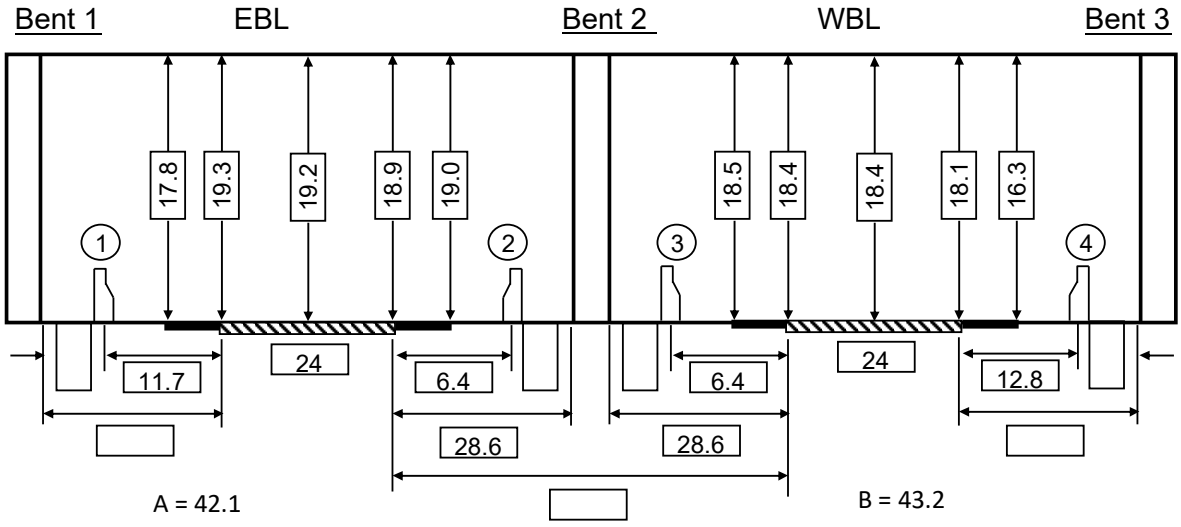
Form BIR 3.10
REVISED 6-9-92

Date October 25, 2023

Bridge Location No. 16 (County) SR55 (Route) 14.77L (Log Mile)

NOTE: ALL DISTANCES AND ELEVATIONS ARE IN FEET.

Lateral and Vertical Clearances for Divided Highway / Interstate



1. Rail / Barrier Type:	W-Shape		Conc. Barrier	X	None	
2. Rail / Barrier Type:	W-Shape	X	Conc. Barrier		None	
3. Rail / Barrier Type:	W-Shape	X	Conc. Barrier		None	
4. Rail / Barrier Type:	W-Shape		Conc. Barrier	X	None	

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

Equipment List

General Inspection

Yes	Pocket knife
Yes	Sounding/chipping hammer
	Chain drag
Yes	Range pole
	25' rod - depth and clearance

Visual Aid

	Binoculars
Yes	Flashlight
	Magnifying glass
	Hand mirror

Cleaning

	Wisk broom
	Wire brush
	Flat bladed screwdriver
	Hand shovel
	Penetrating oil (WD-40, etc.)

Tools For Access

	Ladders
	Rope
	Waders
	Machete or bush axe

Comment

Tools For Measuring

	Masonry/Wood Ruler
Yes	6’ Pocket Tape
	25’ and 100’ Tape
Yes	Calipers
	Thermometer
	Carpenter’s Level
	String and Weighted line (plumb bob)

Special Purpose Equipment

	Reach All
	Bucket Truck
	Traffic control
	Boat
	Sonar depth finder
	Increment borer
	Survey equipment
	Safety Harness
	Climbing equipment
	Dye penetrant
	Drone

Special Purpose Equipment

Laser measurer

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Re Conc Top Flange	SF	11815	11457	155	203	0
1080	Delamination/Spall/Patched Area	SF	210	0	15	195	0
1120	Efflorescence/Rust Staining	SF	146	0	140	6	0
1130	Cracking (RC and Other)	SF	152	150	0	2	0
510	Wearing Surfaces	SF	8439	6739	200	1500	0
3210	Delamination/Spall/Patched Area/Pothole (Wearing Surfaces)	SF	200	0	200	0	0
3220	Crack (Wearing Surface)	SF	1500	0	0	1500	0
(16) Element record added 2016-02-24.							
(1080-16) Element record added 2016-02-24.							
(1120-16) Element record added 11/9/2021							
(1130-16) Element record added 2016-02-24.							
(510-16) Element record added 2016-02-24.							
(3210-510-16) Element record added 2016-02-24.							
(3220-510-16) Element record added 2016-02-24.							
109	Pre Opn Conc Girder/Beam	LF	101	90	5	6	0
1100	Exposed Prestressing	LF	2	0	0	2	0
1110	Cracking (PSC)	LF	69	60	5	4	0
(109) Element record added 2016-02-24.							
(1100-109) Element record added 11/9/2021							
110	Re Conc Opn Girder/Beam	LF	1025	1019	0	6	0
1080	Delamination/Spall/Patched Area	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	3	0	0	3	0
(110) Element record added 2016-02-24.							
(1080-110) Element record added 2016-02-24.							
(1130-110) Element record added 2016-02-24.							
205	Re Conc Column	EA	12	6	5	1	0
1080	Delamination/Spall/Patched Area	EA	2	0	1	1	0
1090	Exposed Rebar	EA	1	0	1	0	0
7000	Damage	EA	3	0	3	0	0
(205) Element record added 2016-02-24.							
(1080-205) Element record added 2016-02-24.							
(1090-205) Element record added 11/9/2021							

TN TDOT Department of Transportation

Asset **#16I00240030**(Routine)
Region: 02, **County:** 16 - Coffee
Team Lead: Elizabeth Roadinger, **Inspection Date:** 10/25/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(7000-205) Element record added 2016-02-24.							
215	Re Conc Abutment	LF	118	85	6	27	0
1080	Delamination/Spall/Patched Area	LF	21	0	6	15	0
1120	Efflorescence/Rust Staining	LF	4	0	0	4	0
1130	Cracking (RC and Other)	LF	88	85	0	3	0
7000	Damage	LF	5	0	0	5	0
(215) Element record added 2016-02-24.							
(1080-215) Element record added 2016-02-24.							
(1120-215) Element record added 11/9/2021							
(1130-215) Element record added 2016-02-24.							
(7000-215) Element record added 2016-02-24.							
302	Compressn Joint Seal	LF	100	0	0	100	0
2310	Leakage	LF	100	0	0	100	0
(302) Element record added 2016-02-24.							
310	Elastomeric Bearing	EA	26	24	2	0	0
1000	Corrosion	EA	2	0	2	0	0
(310) Element record added 2016-02-24.							
(1000-310) Element record added 11/9/2021							
331	Re Conc Bridge Railing	LF	557	539	18	0	0
1090	Exposed Rebar	LF	18	0	18	0	0
1130	Cracking (RC and Other)	LF	30	30	0	0	0
(331) Element record added 2016-02-24.							