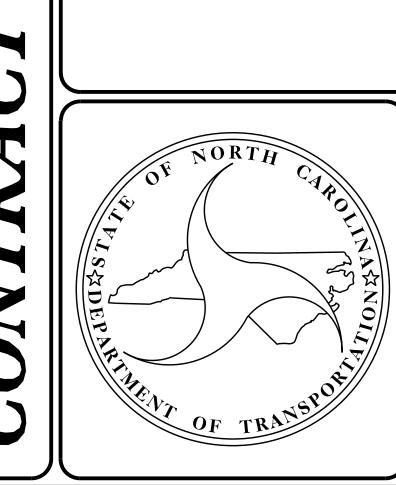
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## WILSON COUNTY

STATE PROJECT REPERENCE NO. HI-0006 F. A. PROJ. NO. STATE PROJ. NO. 0264076 49982.1.1 P.E. R.O.W. 49982.2.1 0264076 49982.2.2 0264076 UTILITIES 49982.3.1 0264076 CONST.

LOCATION: BRIDGE #970246 & #970247 ON US 264 BYP OVER US 301.

BRIDGE #970248 & #970249 ON US 264 OVER CSX.

BRIDGE #970250 & #970251 ON US 264 BYP OVER SR 1612 & CSX.

BRIDGE #970252 & #970253 ON US 264 BYP OVER CONTENTNEA CREEK.

BRIDGE #970254 ON SR 1606 OVER US 264. BRIDGE #970255 ON SR 1602 OVER US 264.

BRIDGE #970256 & #970257 ON US 264 BYP OVER NSRR.

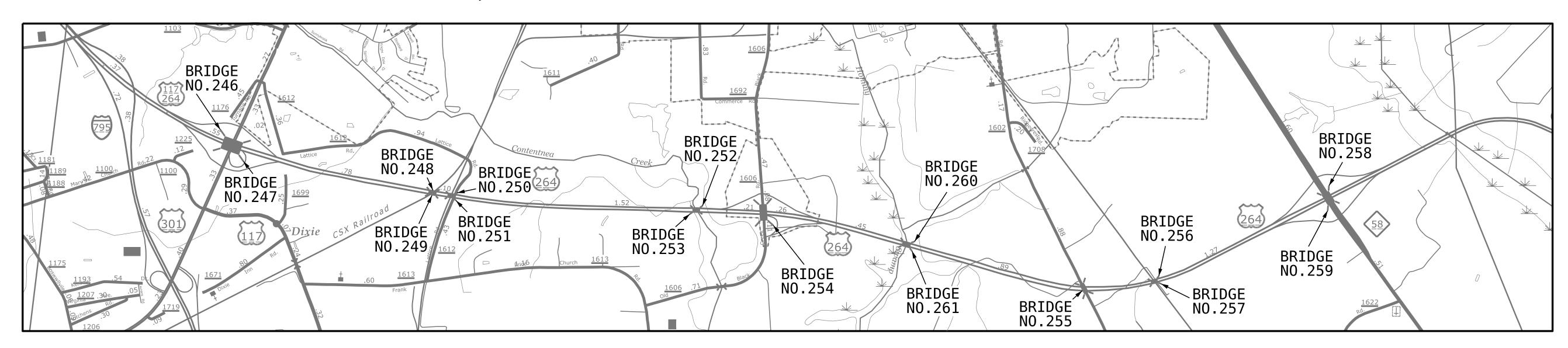
BRIDGE #970258 & #970259 ON NC 58 OVER US 264.

BRIDGE #970260 & #970261 ON US 264 BYP OVER HOMINY SWAMP.

TYPE OF WORK: BRIDGE PRESERVATION – SHOTBLASTING & SILANE DECK

TREATMENT, RECONSTRUCTION OF BRIDGE DECK JOINTS AND

SEALS, AND PRESTRESSED CONCRETE GIRDER REPAIRS.



## VICINITY MAP

#### DESIGN DATA

BRIDGE #246 & #247 ADT (2019) = 11,750 BRIDGE #248, #249, #250, #251, #252, #260, & #261 ADT (2019) = 11,250

BRIDGE #253 ADT (2018) = 10,500 BRIDGE #254 ADT (2018) = 2,300

BRIDGE #254 ADT (2018) = 2,300 BRIDGE #256 ADT (2018) = 9,750

BRIDGE #257 ADT (2019) = 9,750 BRIDGE #258 ADT (2017) = 3,750

BRIDGE #259 ADT (2018) = 3,600

E #259 ADT (2018) = 3,600

#### PROJECT LENGTH

BRIDGE # 970254 = 0.039 MILES BRIDGE # 970246 = 0.040 MILES BRIDGE # 970247 = 0.040 MILES BRIDGE # 970255 = 0.045 MILES BRIDGE # 970248 = 0.042 MILES BRIDGE # 970256 = 0.034 MILES BRIDGE # 970249 = 0.042 MILES BRIDGE # 970257 = 0.035 MILES BRIDGE # 970250 = 0.046 MILES BRIDGE # 970258 = 0.041 MILES BRIDGE # 970251 = 0.046 MILES BRIDGE # 970259 = 0.040 MILES BRIDGE # 970252 = 0.082 MILES BRIDGE # 970260 = 0.042 MILES BRIDGE # 970253 = 0.082 MILES BRIDGE # 970261 = 0.043 MILES

TOTAL LENGTH TIP PROJECT HI-0006 = 6.97 MILES

#### Prepared in the Office of:

#### **DIVISION OF HIGHWAYS**

STRUCTURES MANAGEMENT UNIT
1000 BIRCH RIDGE DR.
RALEIGH, N.C. 27610

2018 STANDARD SPECIFICATIONS

LETTING DATE:

SEPTEMBER 20, 2022

Kristy W. Alford, P.E., CPM
PROJECT ENGINEER

Aster G. Abraha, P.E.

PROJECT DESIGN ENGINEER

## STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

## WILSON COUNTY

LOCATION: BRIDGE #970246 & #970247 ON US 264 BYP OVER US 301.

BRIDGE #970248 & #970249 ON US 264 OVER CSX.

BRIDGE #970250 & #970251 ON US 264 BYP OVER SR 1612 & CSX.

BRIDGE #970252 & #970253 ON US 264 BYP OVER CONTENTNEA CREEK.

BRIDGE #970254 ON SR 1606 OVER US 264. BRIDGE #970255 ON SR 1602 OVER US 264.

BRIDGE #970256 & #970257 ON US 264 BYP OVER NSRR.

BRIDGE #970258 & #970259 ON NC 58 OVER US 264.

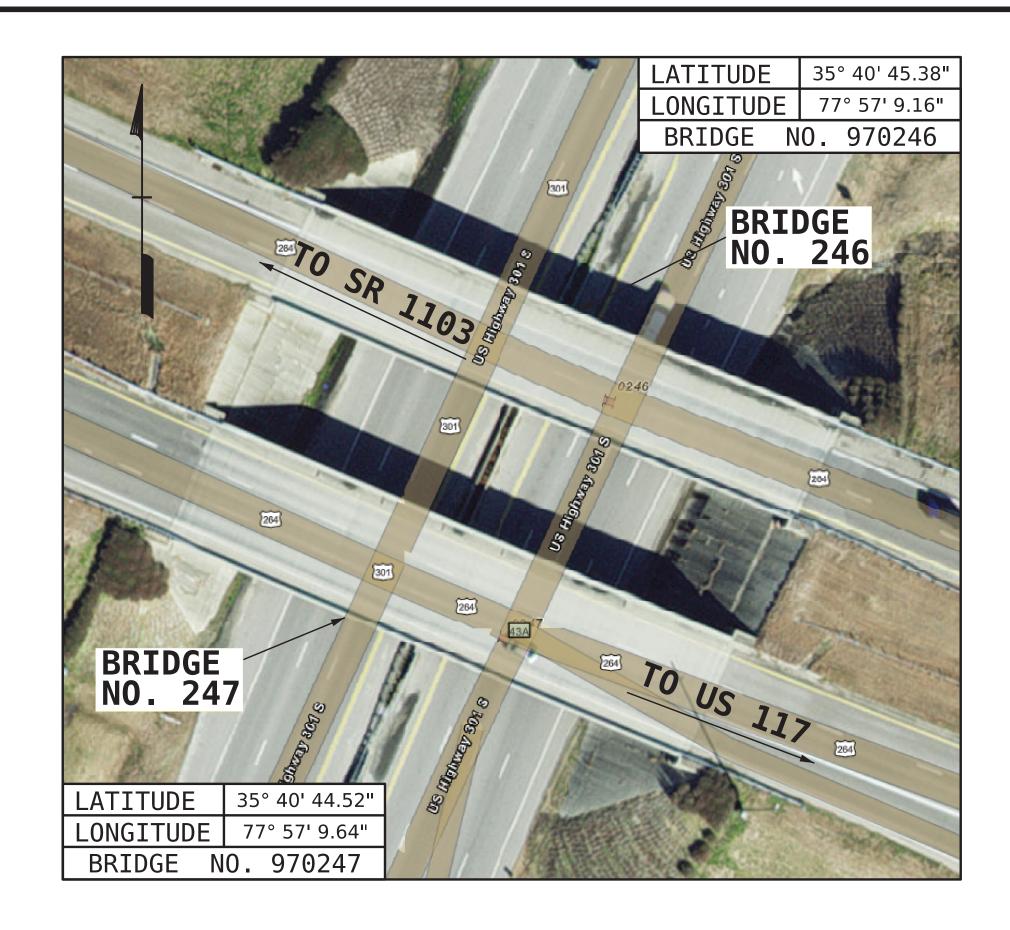
BRIDGE #970260 & #970261 ON US 264 BYP OVER HOMINY SWAMP.

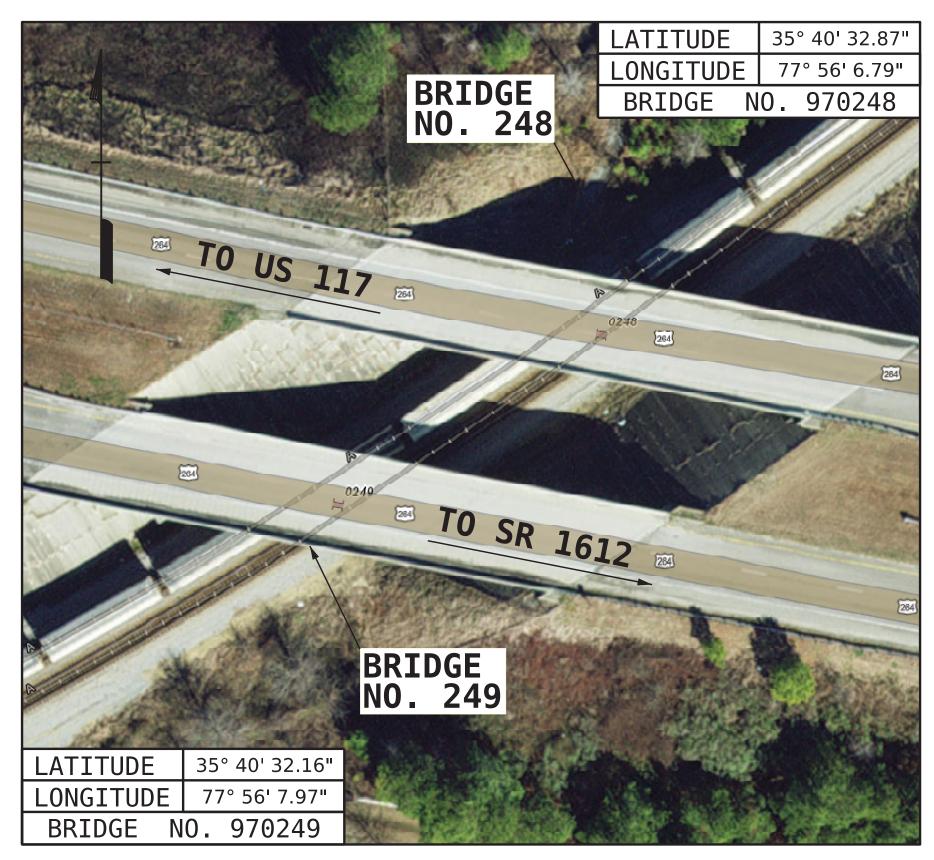
TYPE OF WORK: BRIDGE PRESERVATION – SHOTBLASTING & SILANE DECK TREATMENT, RECONSTRUCTION

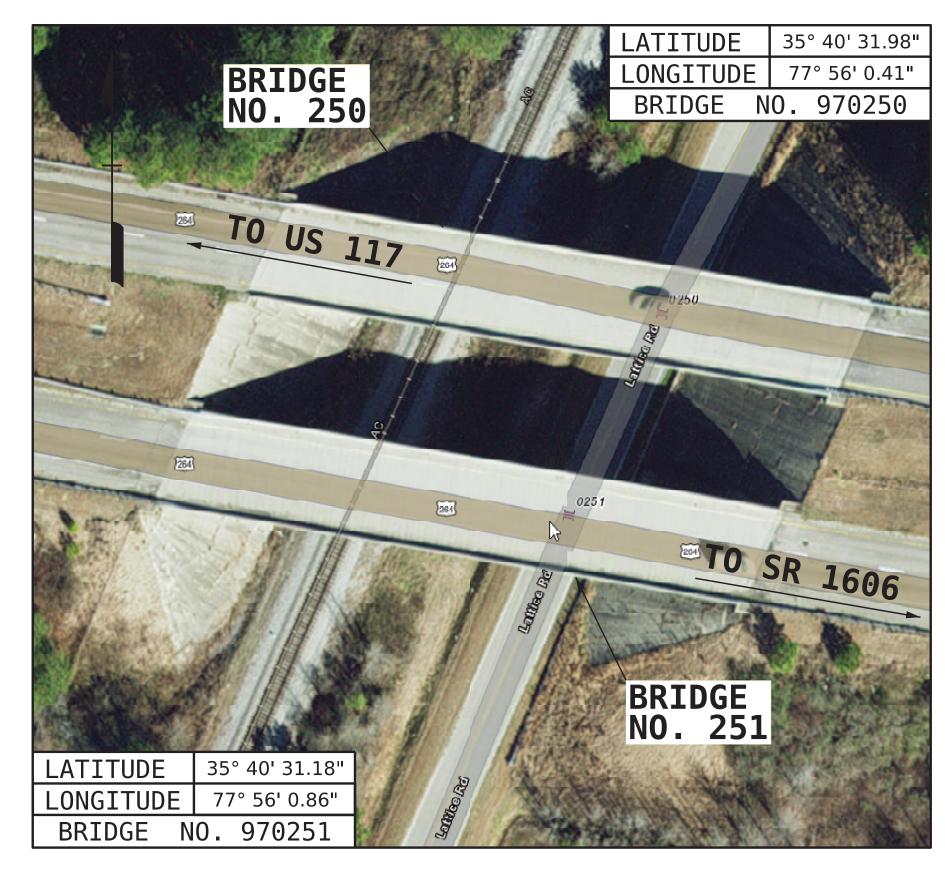
OF BRIDGE DECK JOINTS AND SEALS, AND PRESTRESSED CONCRETE GIRDER REPAIRS.

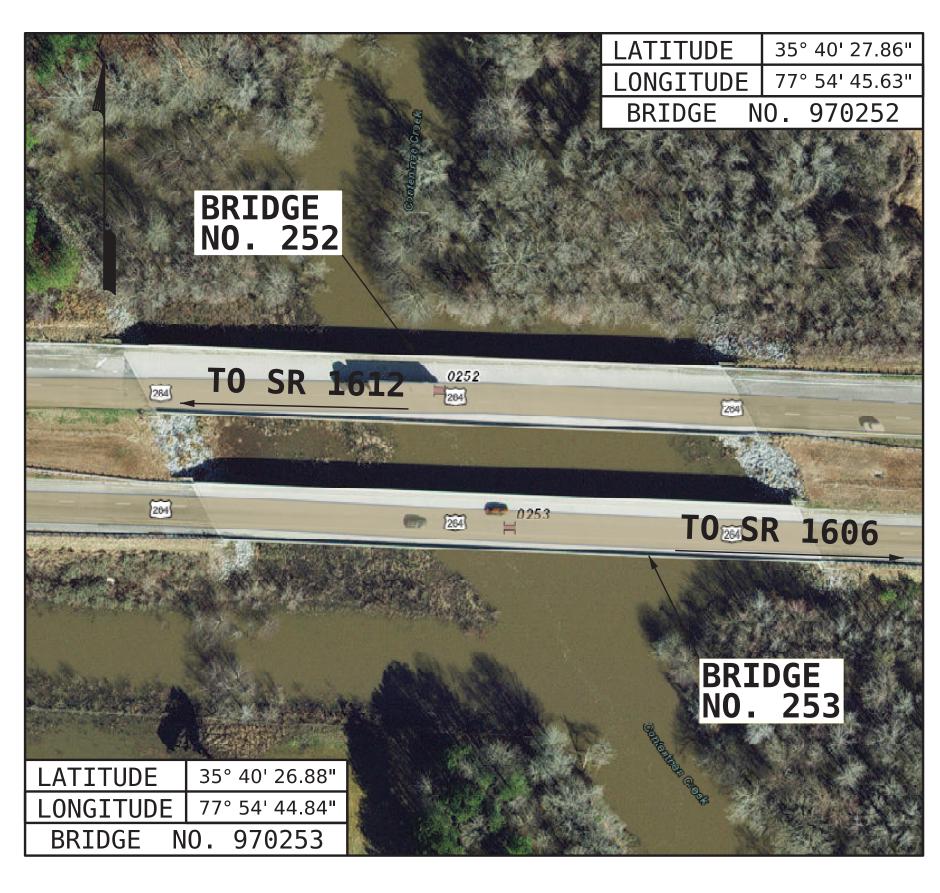
## INDEX OF STRUCTURES SHEETS

SHEET No.	<b>DESCRIPTION</b>	SHEET No.	<b>DESCRIPTION</b>	SHEET No.	<b>DESCRIPTION</b>
1	TITLE SHEET	STRUCTURE No.	<i>970251</i>	<i>S11–4</i>	JOINT REPAIR
<i>1A</i>	INDEX OF SHEETS	S6-1	GENERAL DRAWING	STRUCTURE No.	970257
S-1 & S-2	LOCATION SKETCHES	S6-2	TYPICAL SECTION	S12-1	GENERAL DRAWING
<b>S</b> –3	TOTAL BILL OF MATERIAL	<b>S6–3</b>	SURFACE PREPARATION	<i>S12–2</i>	TYPICAL SECTION
	& GENERAL NOTES	<i>S6–4</i>	JOINT REPAIR	<i>S12–3</i>	SURFACE PREPARATION
STRUCTURE No.	970246	STRUCTURE No.	970252	<i>S12–4</i>	JOINT REPAIR
<i>S1–1</i>	GENERAL DRAWING	S7-1 & S7-2	GENERAL DRAWING	STRUCTURE No.	970258
<i>S1</i> –2	TYPICAL SECTION	<b>S7–</b> 3	TYPICAL SECTION	S13-1	GENERAL DRAWING
<i>S1–3</i>	SURFACE PREPARATION	<i>S7–4</i>	SURFACE PREPARATION	<i>S13–2</i>	TYPICAL SECTION
<i>S1–4</i>	JOINT REPAIR	<b>S</b> 7–5	JOINT REPAIR	<i>S13–3</i>	SURFACE PREPARATION
STRUCTURE No.	970247	STRUCTURE No.	970253	<i>S13–4</i>	SUPERSTRUCTURE REPAIR
S2-1	GENERAL DRAWING	S8-1 & S8-2	GENERAL DRAWING	<b>S13–5</b>	PCG REPAIR DETAILS
S2-2	TYPICAL SECTION	<b>S</b> 8–3	TYPICAL SECTION	<i>S13–6</i>	JOINT REPAIR
S2-3	SURFACE PREPARATION	<i>S8–4</i>	SURFACE PREPARATION	STRUCTURE No.	970259
<i>S2–4</i>	JOINT REPAIR	<b>S</b> 8–5	JOINT REPAIR	<i>S14–1</i>	GENERAL DRAWING
STRUCTURE No.	970248	STRUCTURE No.	970254	<i>S14–2</i>	TYPICAL SECTION
S3-1	GENERAL DRAWING	S9–1	GENERAL DRAWING	<i>S14–3</i>	SURFACE PREPARATION
<b>S</b> 3–2	TYPICAL SECTION	<b>S9–2</b>	TYPICAL SECTION	<i>S14–4</i>	JOINT REPAIR
<b>S</b> 3–3	SURFACE PREPARATION	<b>S</b> 9–3	SURFACE PREPARATION	STRUCTURE No.	970260
<i>S3–4</i>	JOINT REPAIR	S9-4	SUPERSTRUCTURE REPAIR	<i>S15–1</i>	GENERAL DRAWING
STRUCTURE No.	970249	<b>S</b> 9–5	PCG REPAIR DETAILS	<i>S15–2</i>	TYPICAL SECTION
S4-1	GENERAL DRAWING	S9-6	JOINT REPAIR	<i>S15–3</i>	SURFACE PREPARATION
<b>S4</b> –2	TYPICAL SECTION	STRUCTURE No.		<i>S15–4</i>	JOINT REPAIR
S4-3	SURFACE PREPARATION	S10-1	GENERAL DRAWING	STRUCTURE No.	
S4-4	JOINT REPAIR	<i>S10–2</i>	TYPICAL SECTION	<i>S16–1</i>	GENERAL DRAWING
STRUCTURE No.		S10-3	SURFACE PREPARATION	<i>S16–2</i>	TYPICAL SECTION
S5-1	GENERAL DRAWING	<i>S10–4</i>	JOINT REPAIR	<b>S16–3</b>	SURFACE PREPARATION
S5-2	TYPICAL SECTION	STRUCTURE No.		<i>S16–4</i>	JOINT REPAIR
S5-3	SURFACE PREPARATION	S11–1	GENERAL DRAWING	STANDARD SHE	
S5-4	JOINT REPAIR	<i>S11–2</i>	TYPICAL SECTION	SN	STANDARD NOTES
		<b>S11–</b> 3	SURFACE PREPARATION		











PROJECT NO. HI-0006

WILSON COUNTY

BRIDGE NO.970246, 970247,

970248, 970249, 970250,

970251, 970252, 970253,

& 970254

\_\_\_\_

SHEET 1 OF 2

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

#### LOCATION SKETCHES

Aster Abraha  DDA094AED5104FD  07/12/2022				
			REVI	SIO
	NO.	BY:	DATE:	NO.

#### **LOCATION SKETCH**

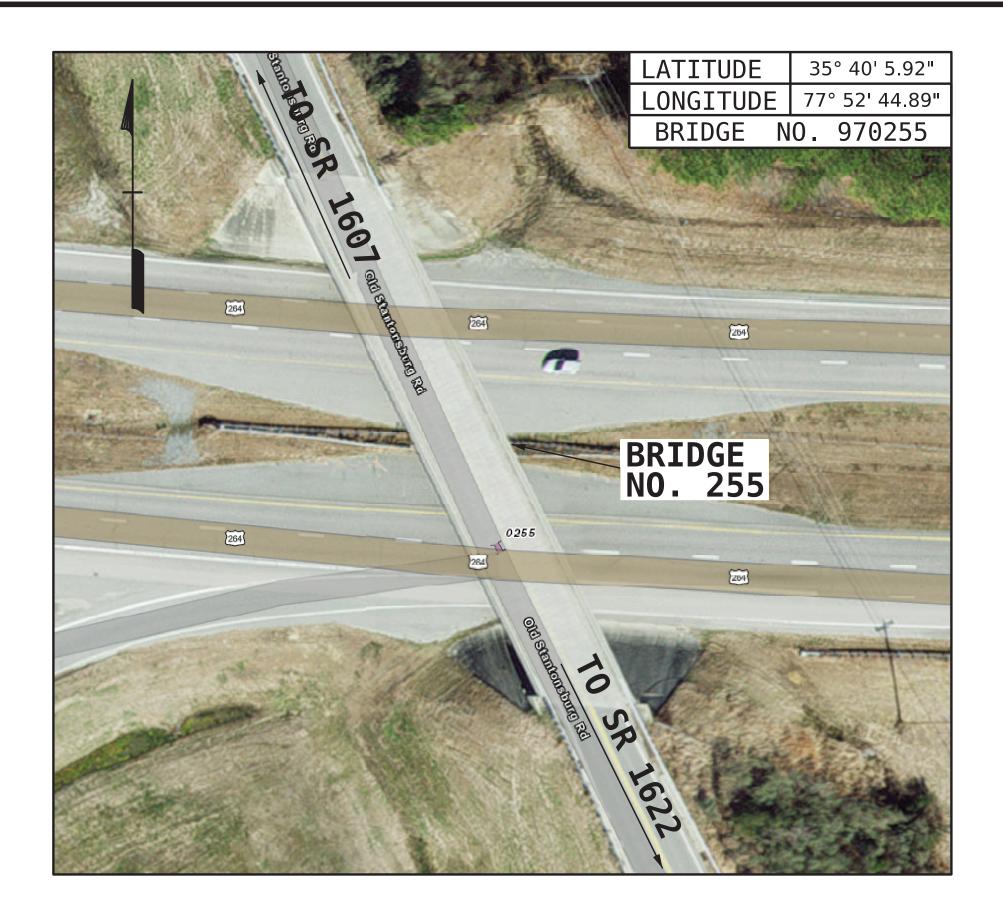
INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY. CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING THE BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

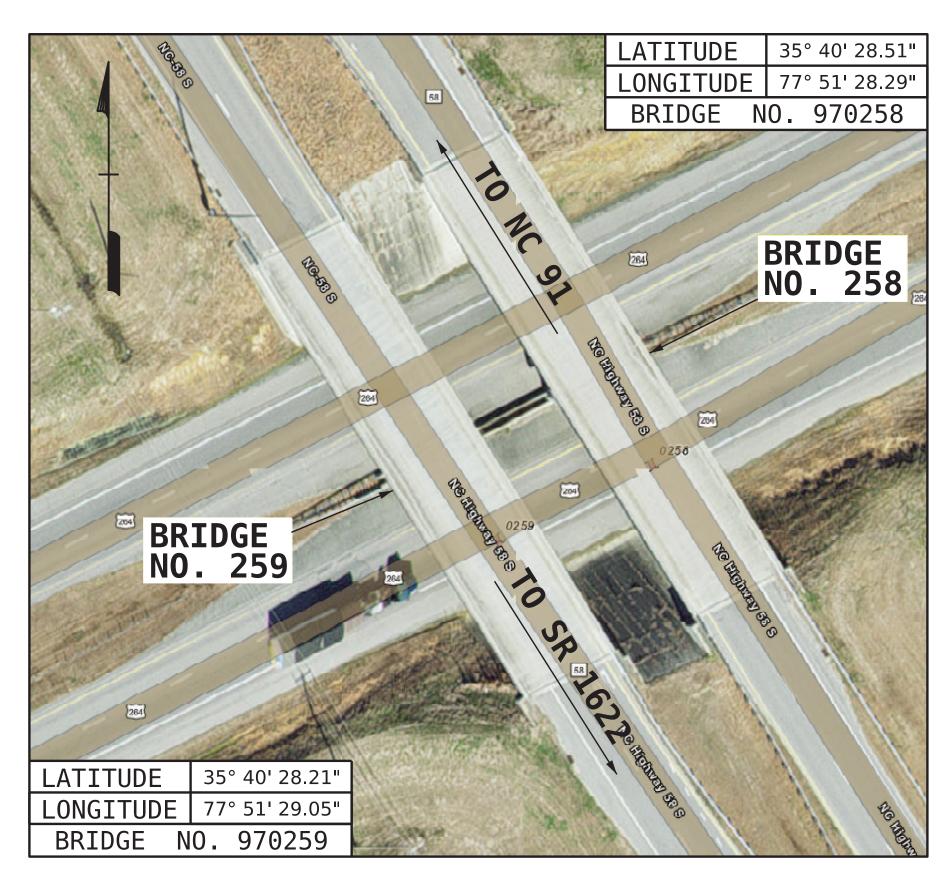
DRAWN BY :	G. AY	ES	DATE: 6	72022
CHECKED BY :	A. G. AE	BRAHA	DATE : 6	/2022
DESTON ENGINEER	OF RECORD.		DATE •	

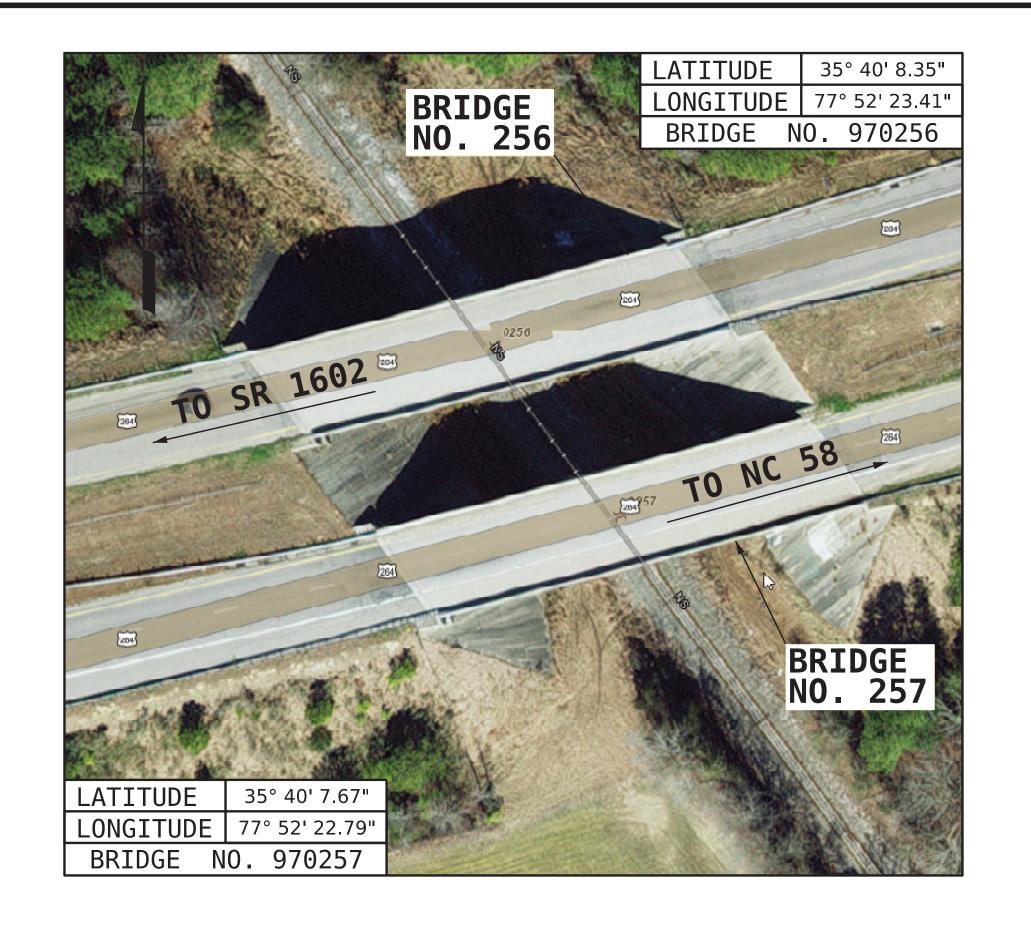
DOCUMENT NOT CONSIDERED 1 No. FINAL UNLESS ALL SIGNATURES COMPLETED 2

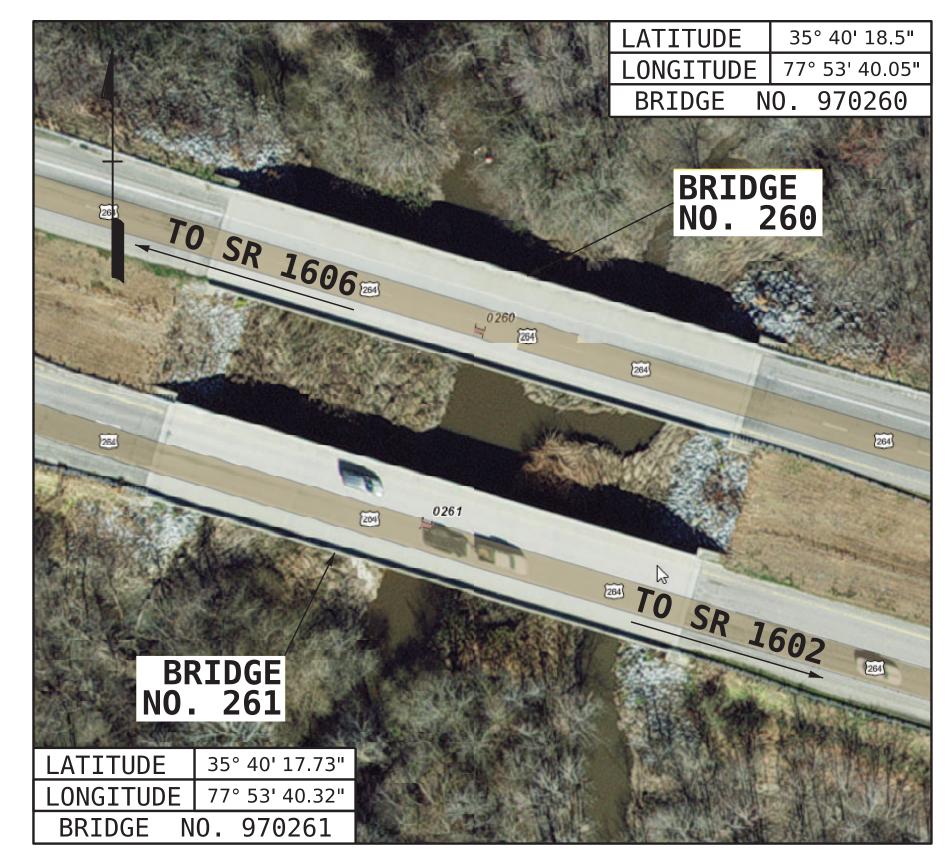
SEAL 030024

| NO. BY: DATE: NO. BY: DATE: S-1 | TOTAL SHEETS | SHEETS | Sheet | Sh









#### LOCATION SKETCH

INFORMATION INDICATED ON THE LOCATION SKETCH SHALL BE CONSIDERED GENERAL INFORMATION ONLY.

G. AYES A. G. ABRAHA 6/2022 6/2022 DRAWN BY CHECKED BY : \_\_ DATE: DESIGN ENGINEER OF RECORD: \_

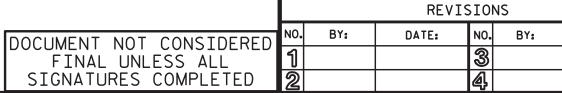
CONTRACTOR SHALL CONFIRM, THROUGH OTHER SOURCES, SPECIFIC INFORMATION REGARDING THE BRIDGES, ROADWAYS, UTILITIES, THE SURROUNDING AREA, AND ANY OTHER ASPECTS THAT MAY BE NECESSARY TO PERFORM AND COMPLETE THE PROJECT.

PROJECT NO. HI-0006 WILSON COUNTY BRIDGE NO. 970255, 970256 970257, 970258, 970259, 970260, & 970261

SHEET 2 OF 2

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION





SEAL 030024

DATE:

S-2

TOTAL SHEETS

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT DUE TO THE NATURE OF PRESERVATION PROJECTS, THE EXTENT OF WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. REPAIR LOCATIONS AND ESTIMATES OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS.

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER.

THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT FOR ANY DELAYS OF ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN WHAT IS SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW ALL STATE AND FEDERAL SAFETY REQUIREMENTS.

WORK ON THE BRIDGE(S) SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL BELOW, EXCEPT WHERE THE CONTRACTOR PLANS TO USE PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES TO CATCH THE MATERIAL. THE CONTRACTOR SHALL SUBMIT PLANS FOR CONSTRUCTION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS AND THE PROIECT SPECIAL PROVISIONS.

THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT THE EXISTING STRUCTURE WHICH IS TO REMAIN IN PLACE WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY PART OF THE EXISTING STRUCTURE WHICH IS TO REMAIN IN PLACE, THE DAMAGED AREA SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT NO ADDITIONAL COST TO THE DEPARTMENT.

ANY DAMAGE TO EXISTING REINFORCING STEEL, DURING CONTRACTOR'S OPERATIONS, SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AND PERFORMED AT NO ADDITIONAL COST TO THE DEPARTMENT.

FOR CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL A COMPLETE SEQUENCE OF TASKS FOR EACH OPERATION AFFECTING THE BRIDGE SURFACE AND/OR TRAFFIC.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

ALL PAVEMENT MARKINGS WILL BE IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING SURFACE PREPARATIONS OF THE BRIDGE DECK. THE CONTRACTOR SHALL TAKE CARE THAT ANY CONSTRUCTION DEBRIS THAT COLLECTS IN THE DRAINS IS CONTAINED. DRAINS IN SHOULDERS OF ADJACENT TRAVEL LANE(S) SHALL BE KEPT FREE AND CLEAR OF DEBRIS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR VOLUMETRIC MIXER, SEE SPECIAL PROVISIONS.

FOR SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT. SEE SPECIAL PROVISIONS.

FOR CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

AT THE TIME OF PREPARATION OF THESE PLANS, IT WAS NOT ANTICIPATED THAT THE FOLLOWING ITEM(S) LISTED WOULD BE REQUIRED. HOWEVER, IT MAY BE DETERMINED IN THE FIELD THAT THE FOLLOWING ITEM(S) LISTED, OR OTHER WORK WILL BE NECESSARY TO PROPERLY COMPLETE THE INTENDED BRIDGE PRESERVATION/REHABILITATION WORK. THE CONTRACTOR SHALL BE PREPARED TO PERFORM SUCH WORK IN A TIMELY MANNER, AS DETERMINED IN THE FIELD. SUCH WORK SHALL BE CONSIDERED EXTRA WORK AND SHALL BE ADDRESSED AS PER ARTICLE 104-7 OF THE STANDARD SPECIFICATIONS. PROJECT SPECIAL PROVISIONS THAT OUTLINE REQUIREMENTS FOR THESE POTENTIAL ADDITIONAL WORK ITEMS HAVE BEEN PROVIDED IN THE PROJECT DOCUMENTS, BUT NO QUANTITIES HAVE BEEN LISTED. ACTUAL PAY ITEMS, QUANTITIES, AND COSTS WILL BE ESTABLISHED, AS REQUIRED, IF EXTRA WORK IS ENCOUNTERED. UNANTICIPATED ITEMS:

ITEM	DESCRIPTION	UNIT
1	CONCRETE REPAIRS	CU. FT.
2	SPLICING OF PRESTRESSING STRAND	EA.

TOTAL BILL OF MATERIAL											
BRIDGE NO.	SHOTCRETE REPAIRS	VOLUMETRIC MIXER	POURABLE SILICONE JOINT SEALANT	ELASTOMERIC CONCRETE FOR PRESERVATION	REPAIRS TO PRESTRESSED CONCRETE GIRDER	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT		
	CU. FT.	LUMP SUM	LN. FT.	CU. FT.	CU. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.		
970246		LUMP SUM	74.9	12.9		68.6	0.0	869.6	869.6		
970247		LUMP SUM	90.6	15.6		83.1	0.0	1052.7	1052.7		
970248		LUMP SUM	104.9	18.0		96.2	1.0	899.8	899.8		
970249		LUMP SUM	108.1	18.6		99.1	0.0	913.3	913.3		
970250		LUMP SUM	77.2	13.3		70.8	0.0	993.6	993.6		
970251		LUMP SUM	77.2	13.3		70.8	0.0	995.9	995.9		
970252		LUMP SUM	104.5	18.0		95.8	0.0	2166.4	2166.4		
970253		LUMP SUM	86.4	14.9		79.2	0.0	1790.6	1790.6		
970254	4.6	LUMP SUM	95.6	16.4	0.3	87.6	0.0	1075.5	1075.5		
970255		LUMP SUM	69.8	12.0		64.0	0.0	791.0	791.0		
970256		LUMP SUM	80.9	13.9		74.1	0.0	741.4	741.4		
970257		LUMP SUM	80.6	13.9		73.9	0.0	753.7	753.7		
970258	14.7	LUMP SUM	75.2	18.8	0.3	75.1	0.0	879.8	879.8		
970259		LUMP SUM	75.2	12.9		68.9	0.0	872.2	872.2		
970260		LUMP SUM	74.8	12.9		68.6	0.0	923.6	923.6		
970261		LUMP SUM	74.8	12.9		68.6	0.0	923.6	923.6		
TOTAL	19.3	LUMP SUM	1,350.7	238.3	0.6	1,244.4	1.0	16,642.7	16,642.7		

MILSON COUNTIES
BRIDGE NO.: 970246, 970247,
970248, 970249, 970250,
970251, 970252, 970253,
970254, 970255, 970256,
970257, 970258, 970259,
970260, & 970261



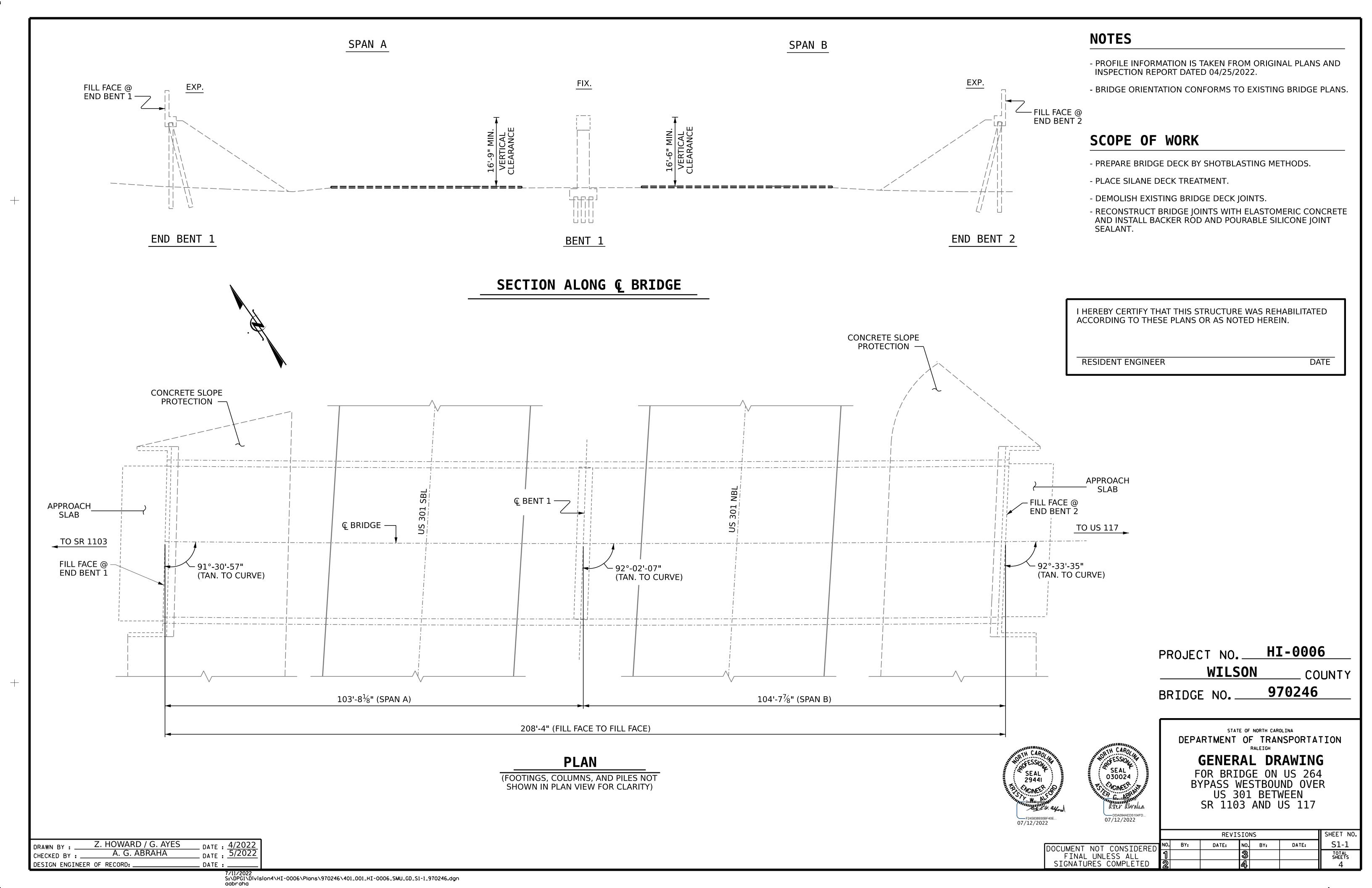
STATE OF NORTH CAROLINA

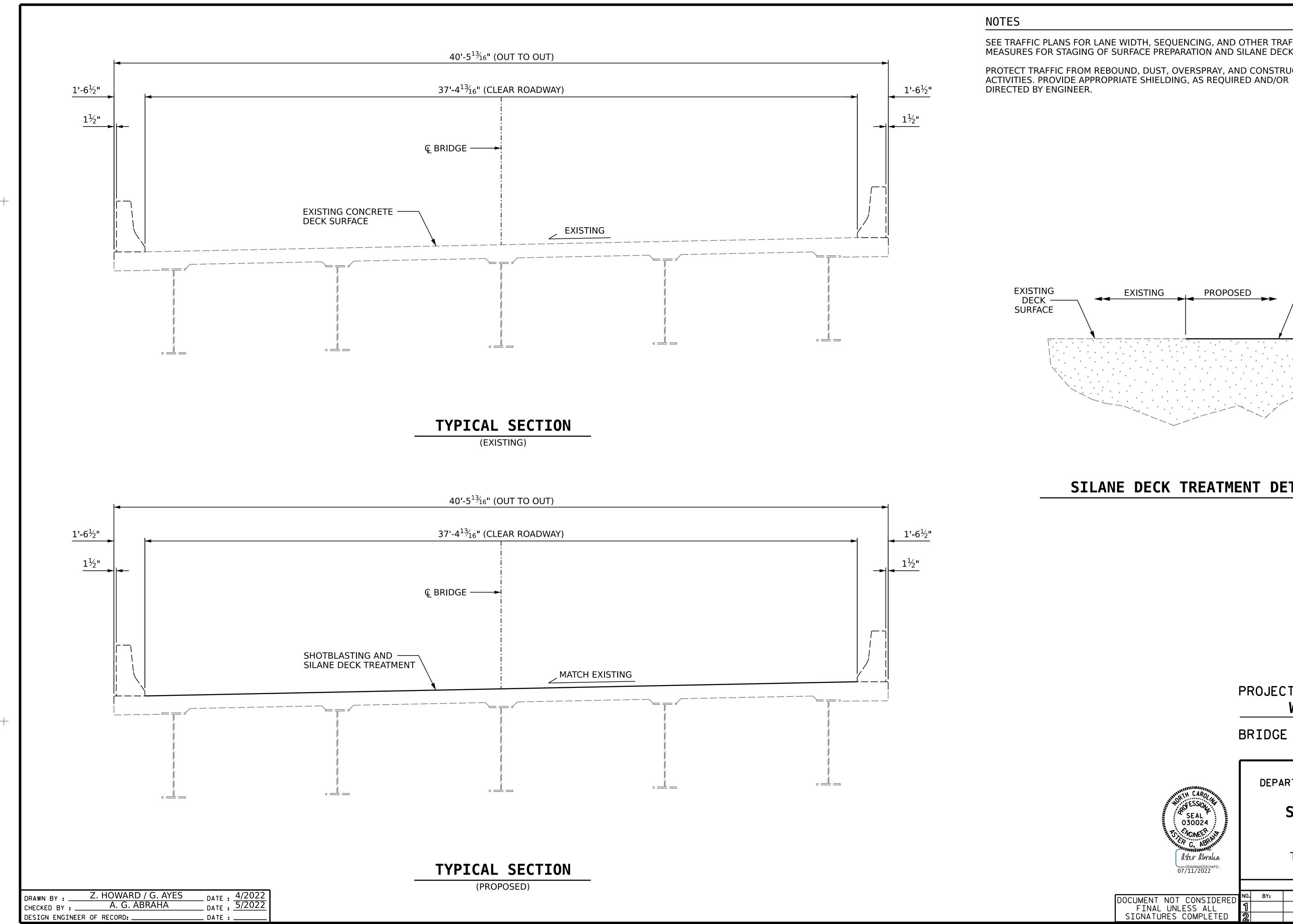
DEPARTMENT OF TRANSPORTATION
RALEIGH

BILL OF MATERIAL AND GENERAL NOTES

			SHEET NO.				
DOCUMENT NOT CONSIDERED	NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
FINAL UNLESS ALL	1			3			TOTAL SHEETS
SIGNATURES COMPLETED	2			4			

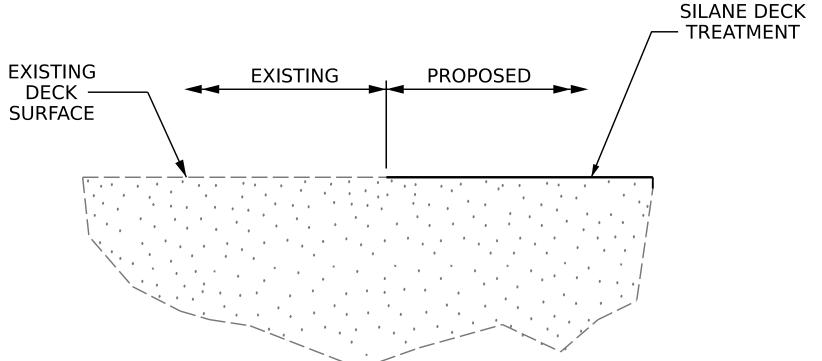
DRAWN BY :	G. AYES	DATE: 06/2022
CHECKED BY •	A. G. ABRAHA	DATE : 06/2022





SEE TRAFFIC PLANS FOR LANE WIDTH, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION



#### SILANE DECK TREATMENT DETAIL

**HI-0006** PROJECT NO.\_\_\_ WILSON COUNTY 970246 BRIDGE NO. \_\_\_\_

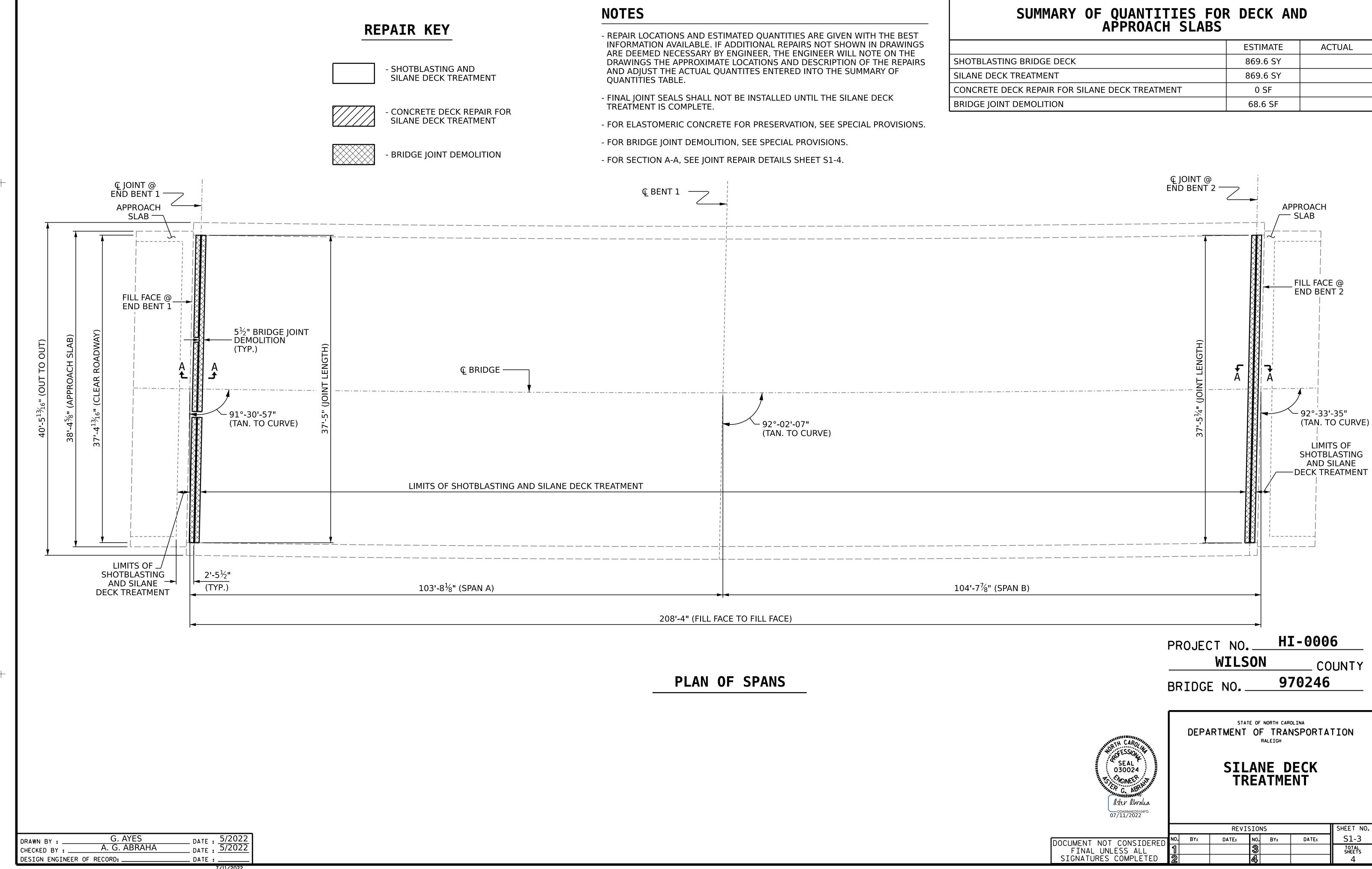
> STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

#### **SUPERSTRUCTURE**

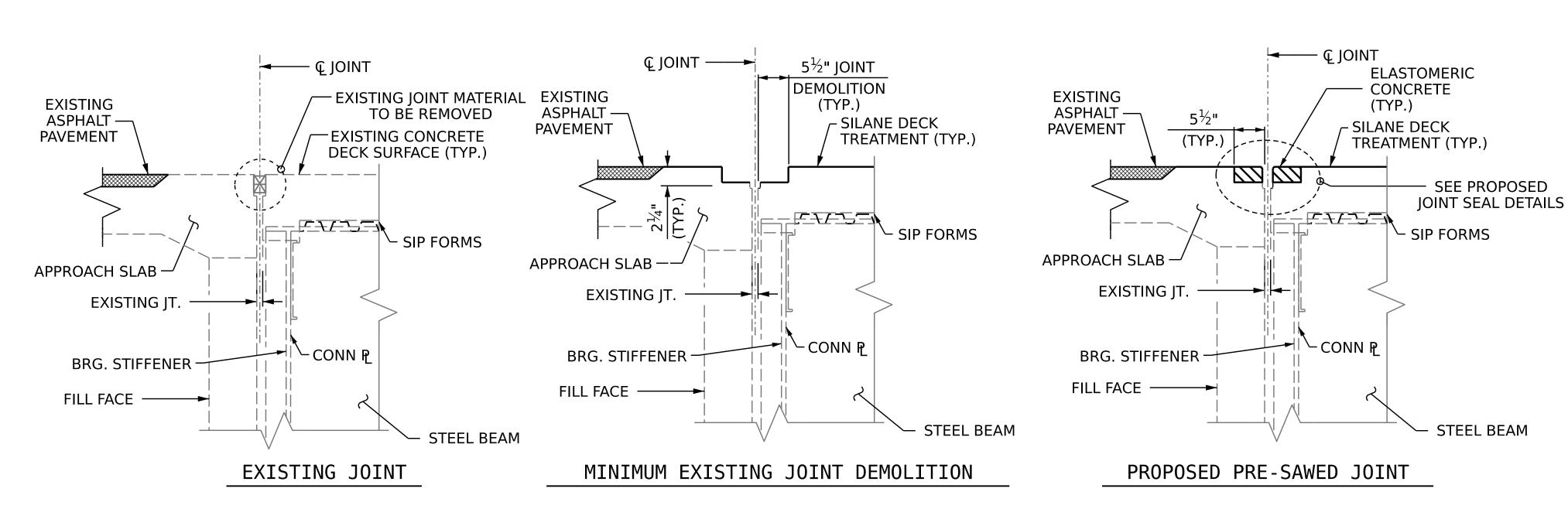
TYPICAL SECTION AND SILANE DECK TREATMENT DETAILS

SHEET NO. REVISIONS DATE: NO. BY: DATE: TOTAL SHEETS

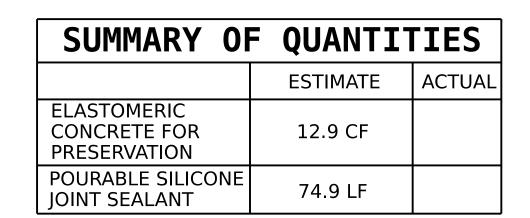
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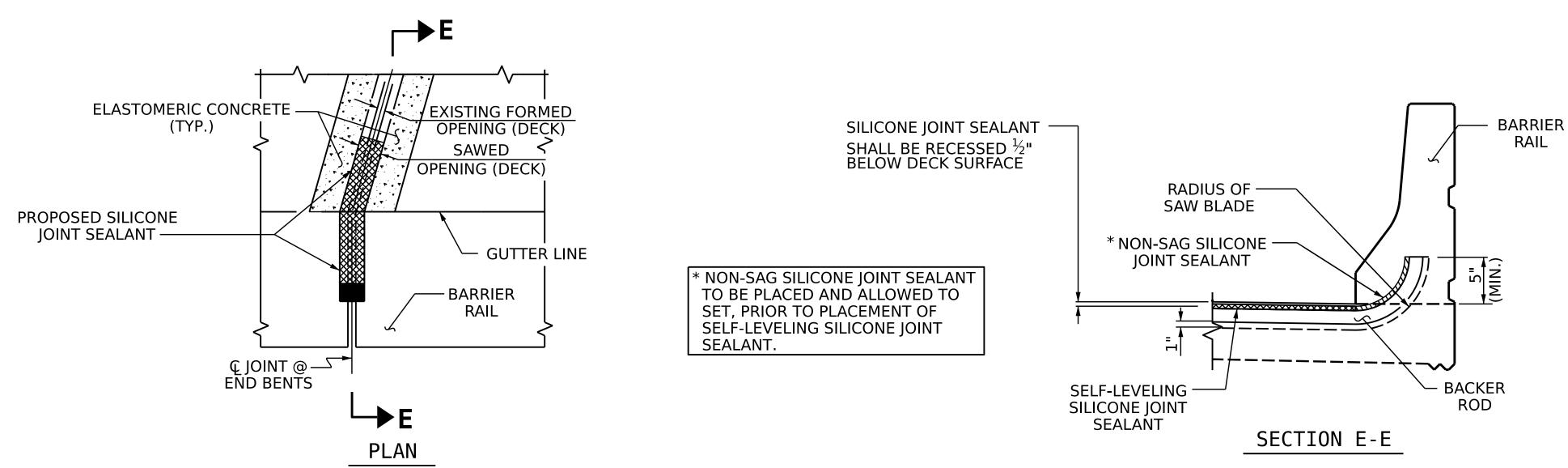


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#### JOINT INSTALLATION SEQUENCE AT END BENTS **SECTION A-A**





#### **NOTES**

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.

CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER, REVISION TO THE IOINT SEAL SIZE MAY BE NECESSARY.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE BACKER ROD FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.

ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.

POURABLE SILICONE IOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

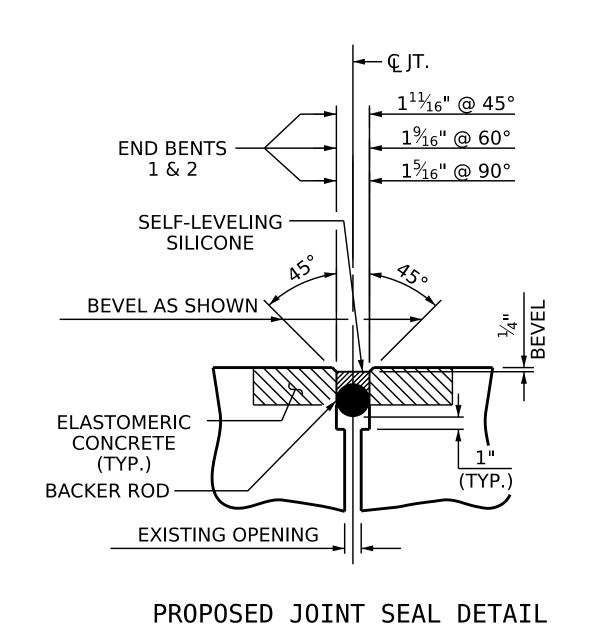
QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



(WITH SAWED DIMENSIONS)

**HI-0006** PROJECT NO. \_\_\_ WILSON COUNTY

970246 BRIDGE NO. \_\_\_\_

SEAL 030024 DDA094AED5104FD.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

JOINT REPAIR

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

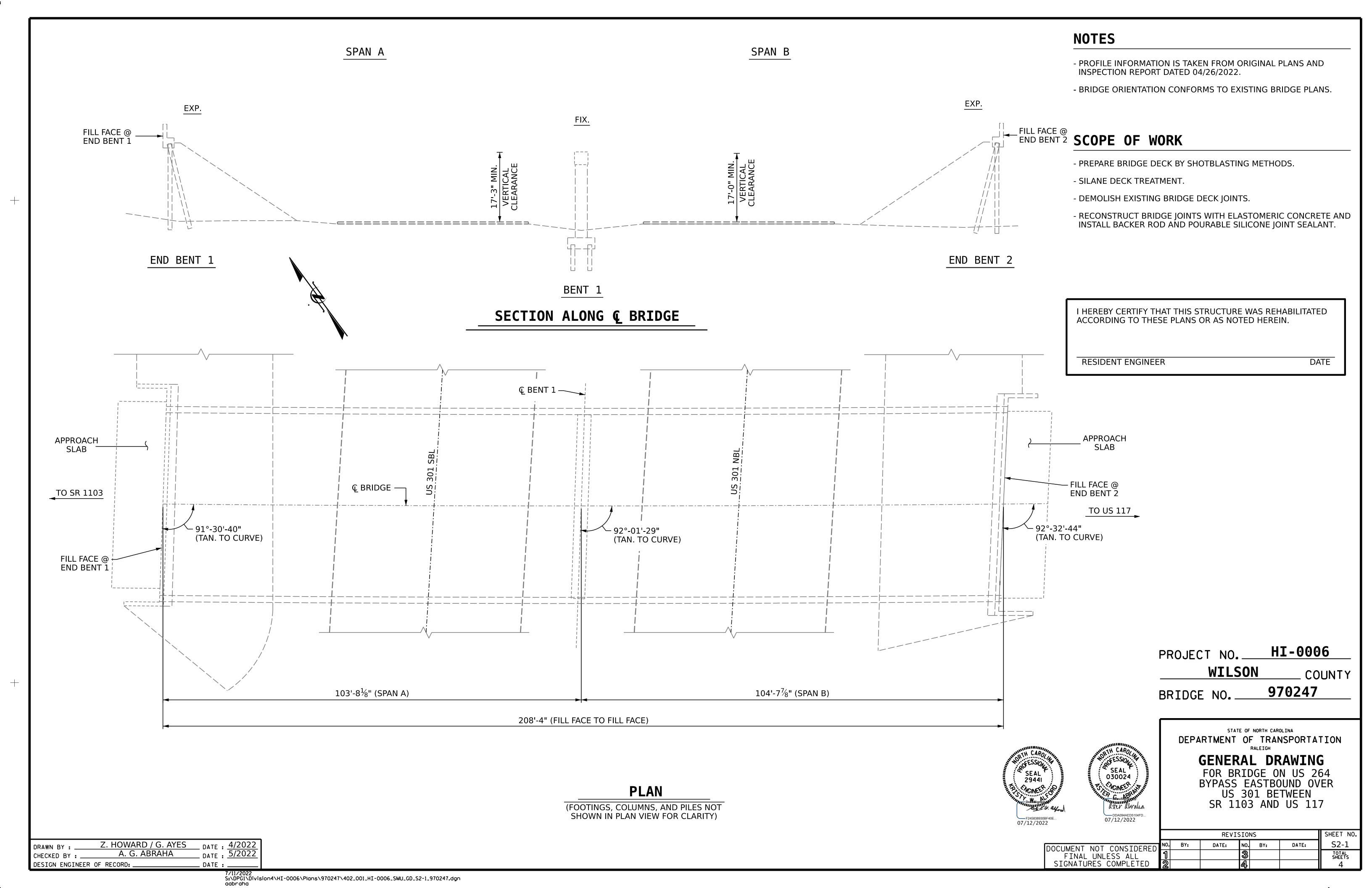
**DETAILS** 

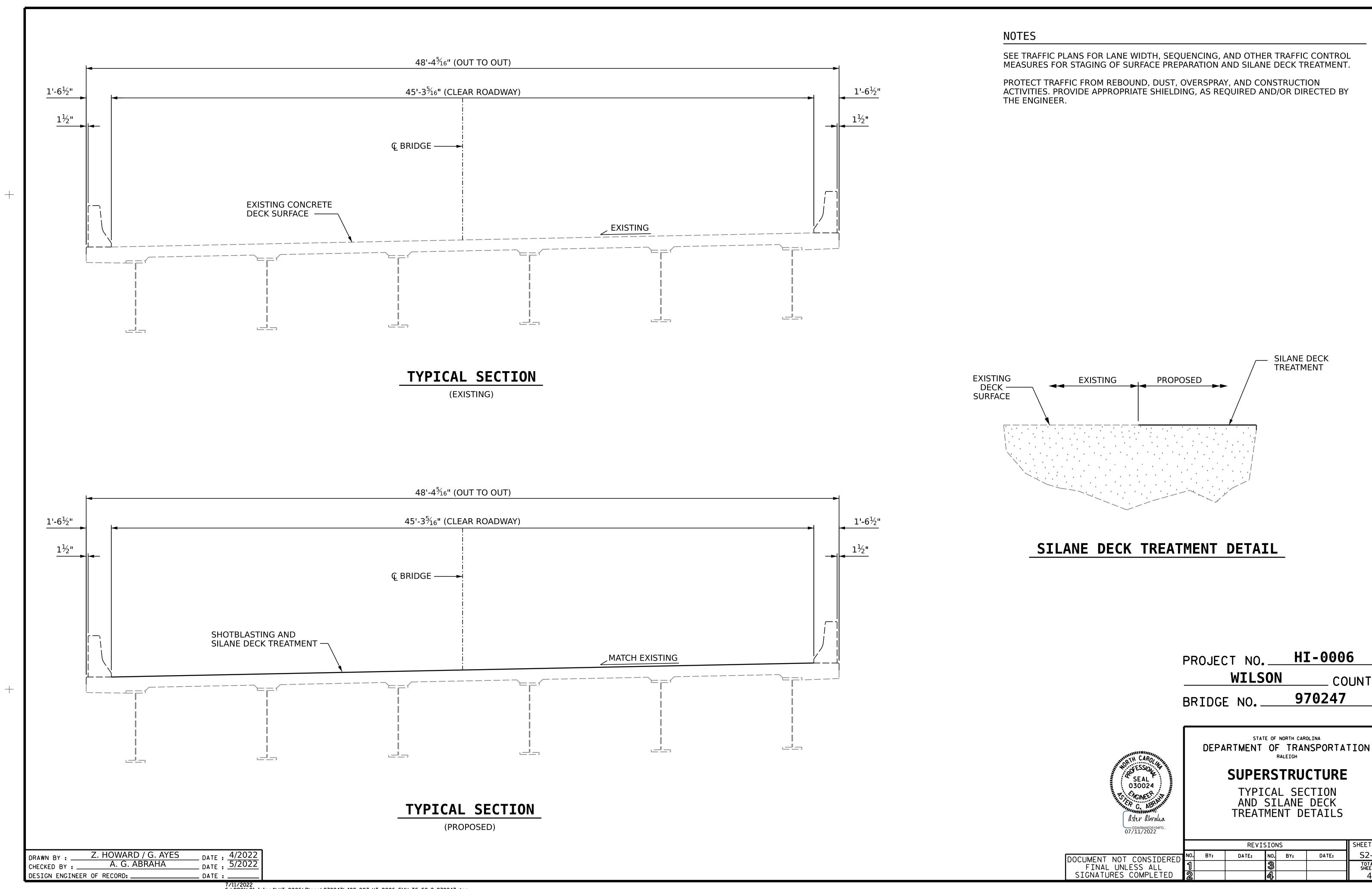
SHEET NO REVISIONS S1-4 NO. BY: DATE: DATE: TOTAL SHEETS

JOINT DETAIL AT BARRIER RAIL

DATE: 5/2022 G. AYES DRAWN BY : DATE: 5/2022 A. G. ABRAHA CHECKED BY : . DATE : \_\_\_\_\_\_ DESIGN ENGINEER OF RECORD: \_

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**SUPERSTRUCTURE** 

WILSON

TYPICAL SECTION AND SILANE DECK TREATMENT DETAILS

STATE OF NORTH CAROLINA

COUNTY

SILANE DECK TREATMENT

SHEET NO. REVISIONS S2-2 NO. BY: DATE: TOTAL SHEETS

## REPAIR KEY - SHOTBLASTING AND SILANE DECK TREATMENT - CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

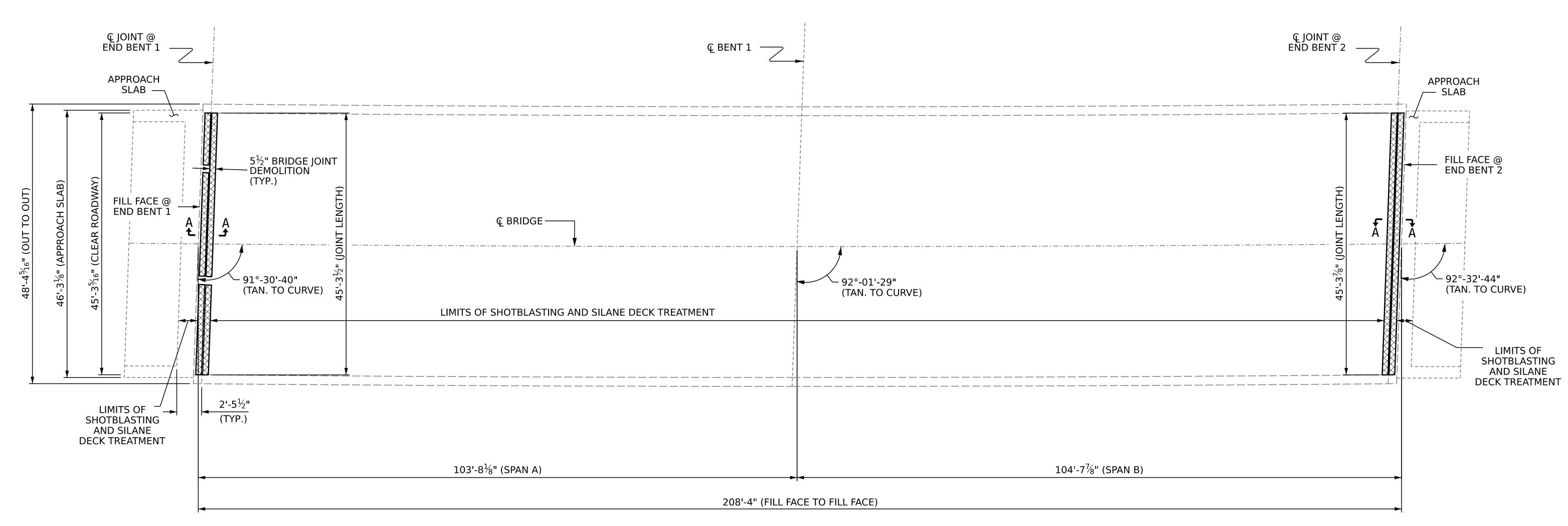
- BRIDGE JOINT DEMOLITION

#### **NOTES**

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S2-4.

## SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,052.7 SY	
SILANE DECK TREATMENT	1,052.7 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	83.1 SF	



PLAN OF SPANS

PROJECT NO. HI-0006 WILSON \_ COUNTY 970247

BRIDGE NO. \_\_\_\_



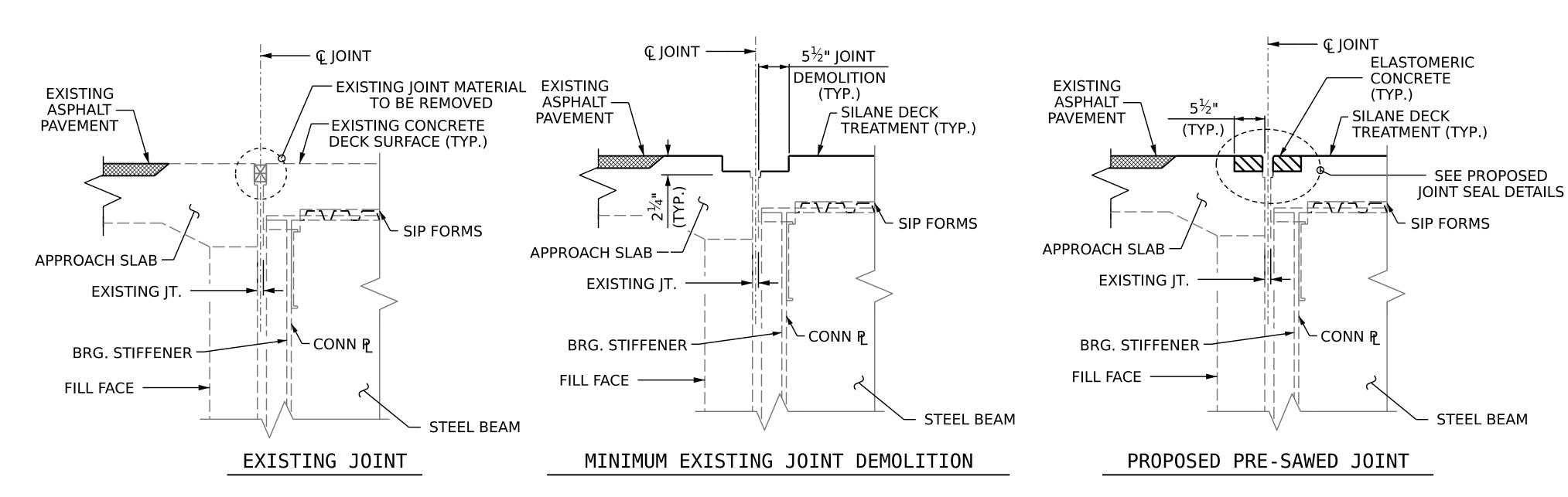
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SILANE DECK TREATMENT

SHEET NO. REVISIONS S2-3 NO. BY: DATE: DATE: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

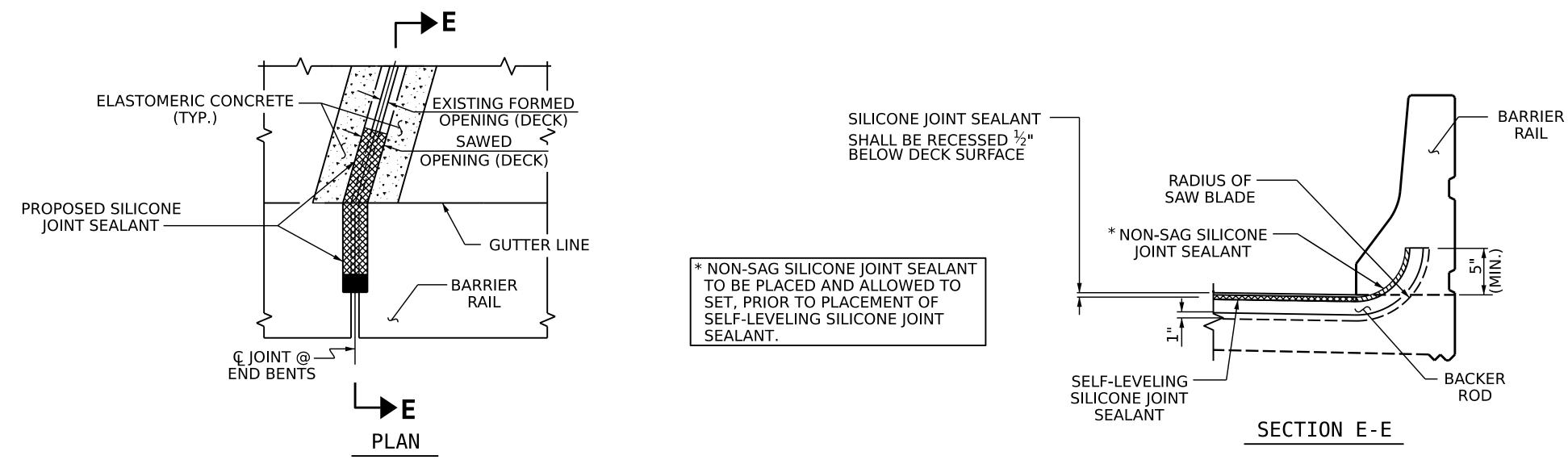
G. AYES A. G. ABRAHA DATE: 5/2022 DATE: 5/2022 DRAWN BY : CHECKED BY : . DESIGN ENGINEER OF RECORD:

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#### JOINT INSTALLATION SEQUENCE AT END BENTS **SECTION A-A**

SUMMARY OF	QUANTI	ΓIES
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	15.6 CF	
POURABLE SILICONE JOINT SEALANT	90.6 LF	



**NOTES** 

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.

POURABLE SILICONE IOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

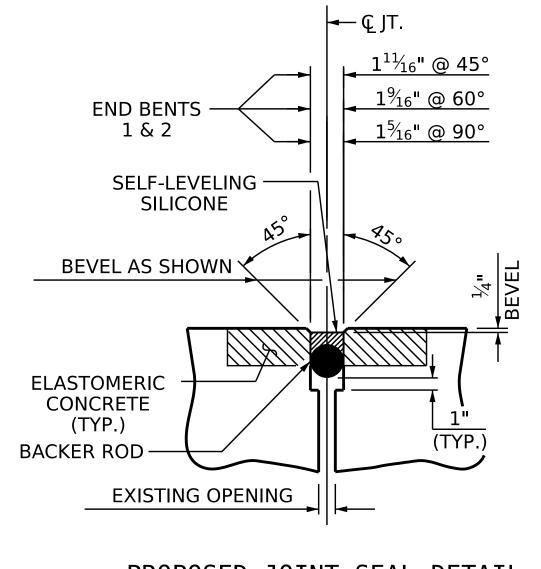
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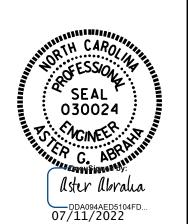
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROPOSED JOINT SEAL DETAIL (WITH SAWED DIMENSIONS)

**HI-0006** PROJECT NO. \_\_\_ WILSON

970247 BRIDGE NO. \_\_\_\_



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

> JOINT REPAIR **DETAILS**

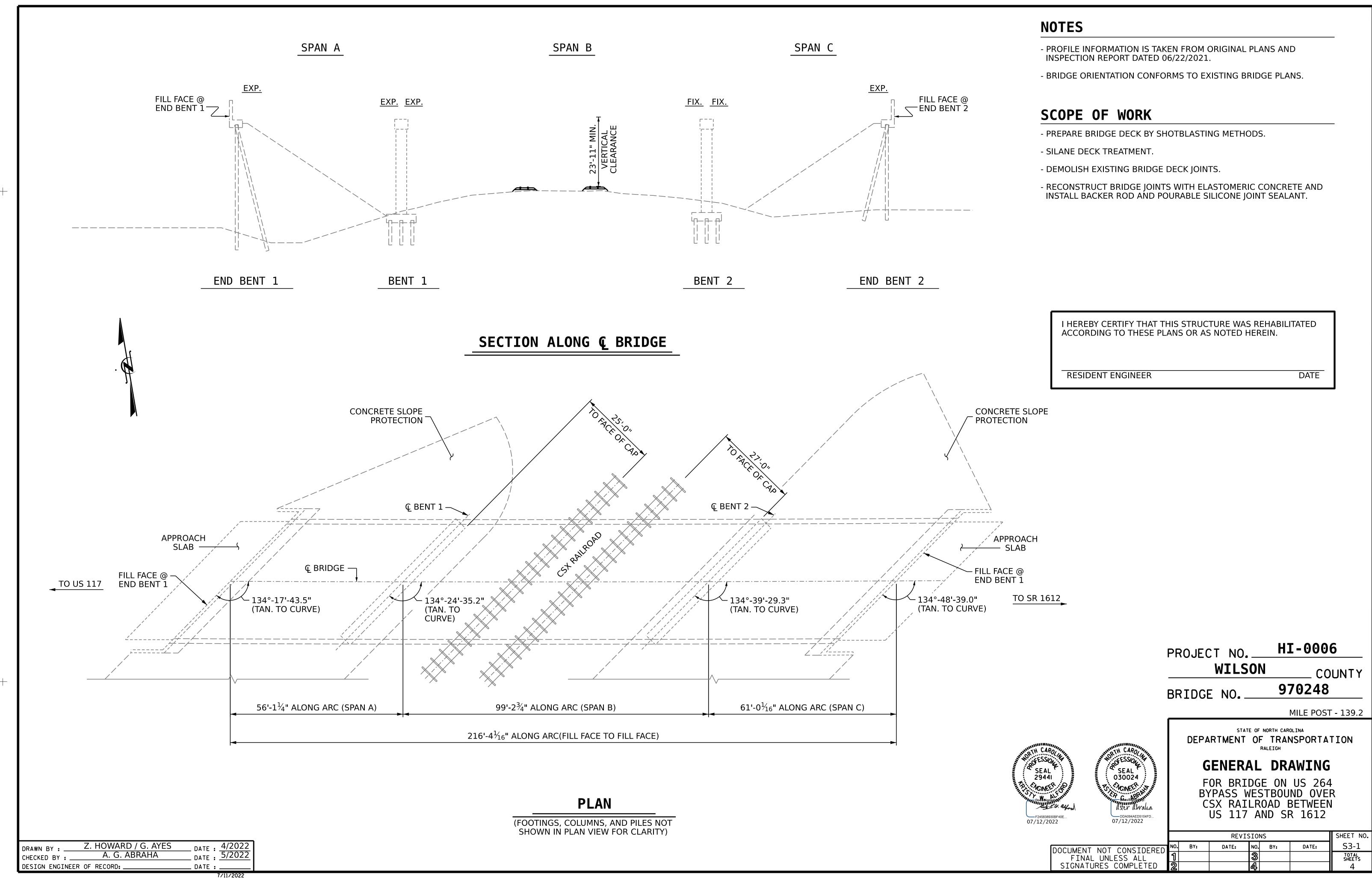
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JOINT DETAIL AT BARRIER RAIL

DATE : 5/2022 G. AYES DRAWN BY : DATE: 5/2022 A. G. ABRAHA CHECKED BY : . DATE : \_\_\_\_\_\_ DESIGN ENGINEER OF RECORD: .

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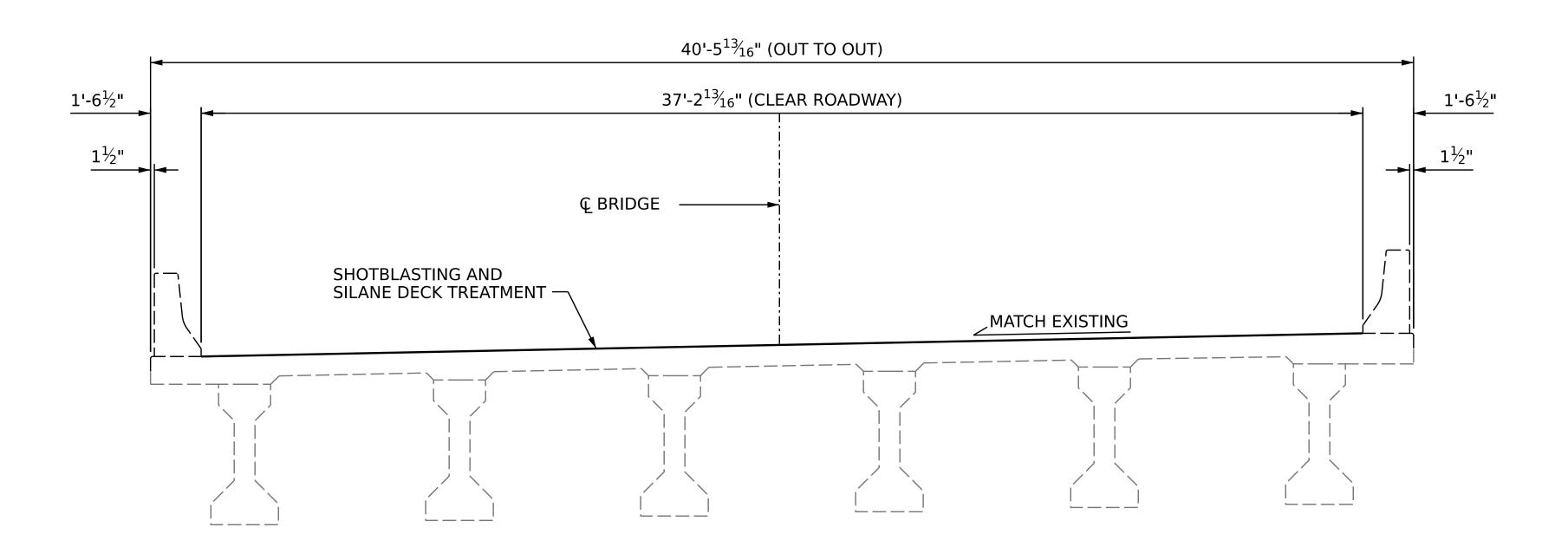
COUNTY



40'-5<sup>13</sup>/<sub>16</sub>" (OUT TO OUT) 37'-2<sup>13</sup>/<sub>16</sub>" (CLEAR ROADWAY) 1'-6½" 1'-6½" 1½" € BRIDGE **EXISTING CONCRETE** DECK SURFACE — **EXISTING** 

TYPICAL SECTION

(EXISTING)



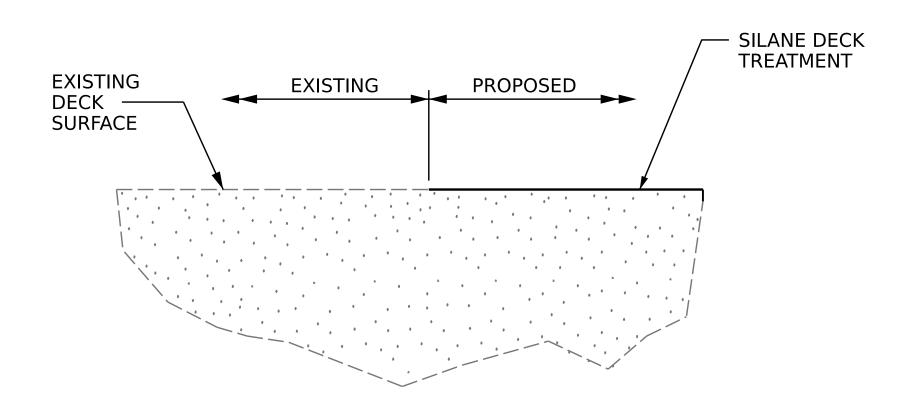
#### TYPICAL SECTION

(PROPOSED)

NOTES

SEE TRAFFIC PLANS FOR LANE WIDTH, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



#### SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006 WILSON COUNTY

970248 BRIDGE NO.\_\_\_\_

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
RALEIGH

#### **SUPERSTRUCTURE**

TYPICAL SECTION AND SILANE DECK TREATMENT DETAILS

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Z. HOWARD / G. AYES A. G. ABRAHA \_ DATE : 4/2022 \_ DATE : 5/2022 DESIGN ENGINEER OF RECORD:

CHECKED BY : \_\_\_

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## REPAIR KEY - SHOTBLASTING AND SILANE DECK TREATMENT - CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

- BRIDGE JOINT DEMOLITION

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITES ENTERED INTO THE SUMMARY OF

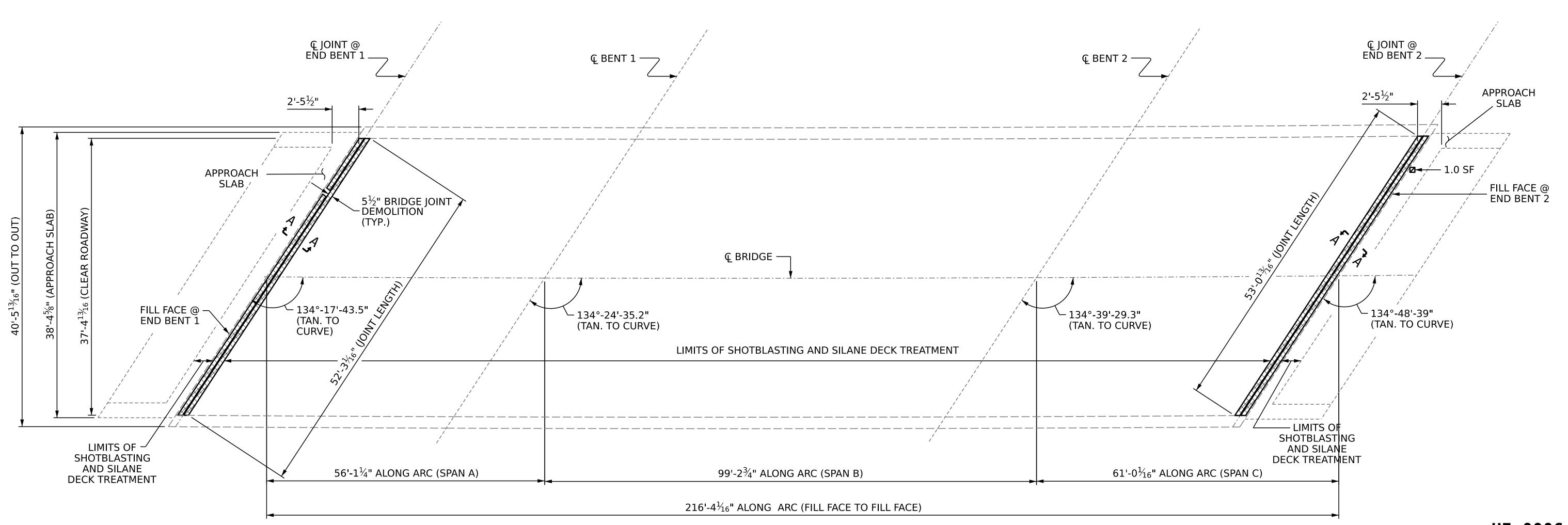
QUANTITIES TABLE.

- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.

- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S3-4.

## SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	899.8 SY	
SILANE DECK TREATMENT	899.8 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	1.0 SF	
BRIDGE JOINT DEMOLITION	96.2 SF	



**PLAN OF SPANS** 

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970248



STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

SILANE DECK TREATMENT

REVISIONS SHEET NO.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED 2 4 4

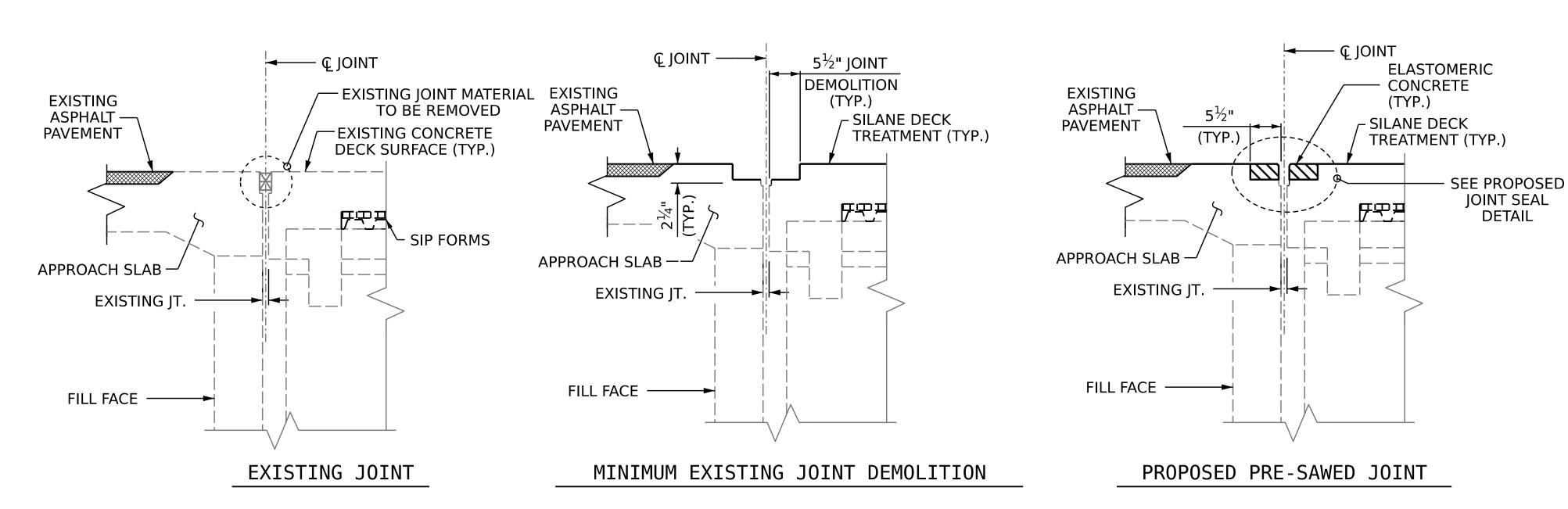
DRAWN BY: G. AYES

CHECKED BY: A. G. ABRAHA

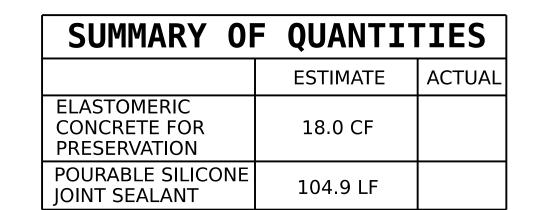
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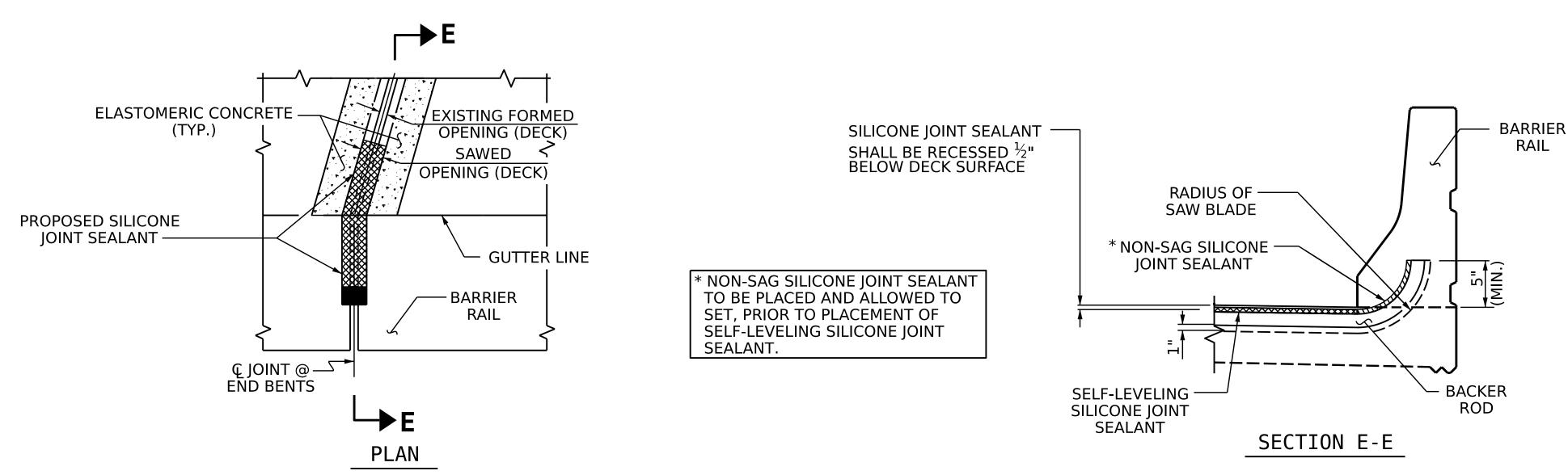
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#### JOINT INSTALLATION SEQUENCE AT END BENTS **SECTION A-A**





#### **NOTES**

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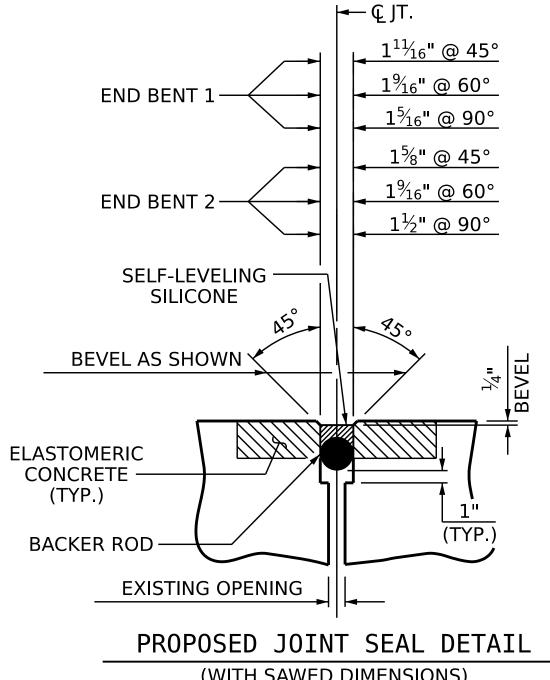
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FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



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DOCUMENT NOT CONSIDERED

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(WITH SAWED DIMENSIONS)

WILSON COUNTY 970248 BRIDGE NO. \_\_\_\_

PROJECT NO. \_\_\_

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

**HI-0006** 

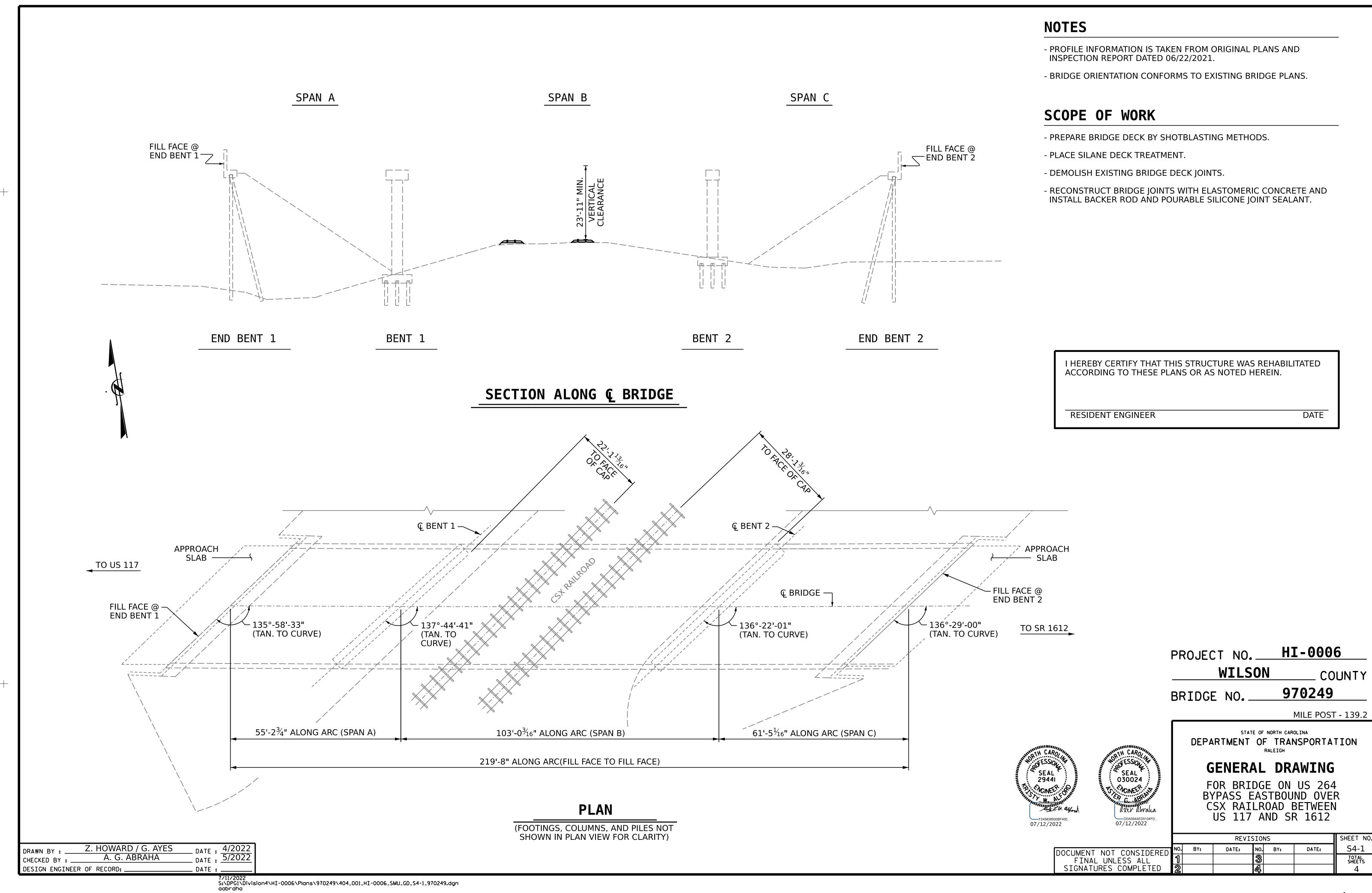
JOINT REPAIR **DETAILS** 

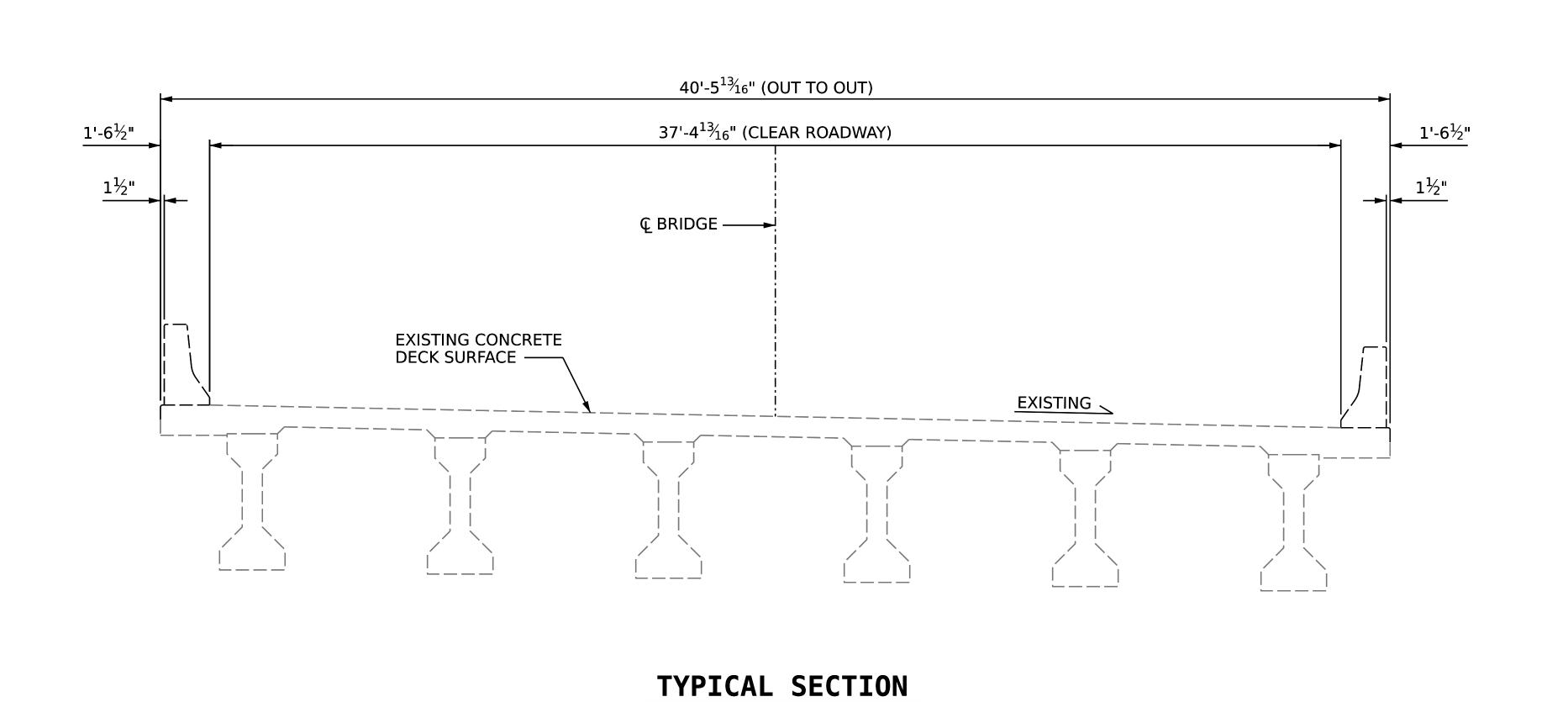
SHEET NO **REVISIONS** S3-4 DATE: BY: DATE: TOTAL SHEETS

JOINT DETAIL AT BARRIER RAIL

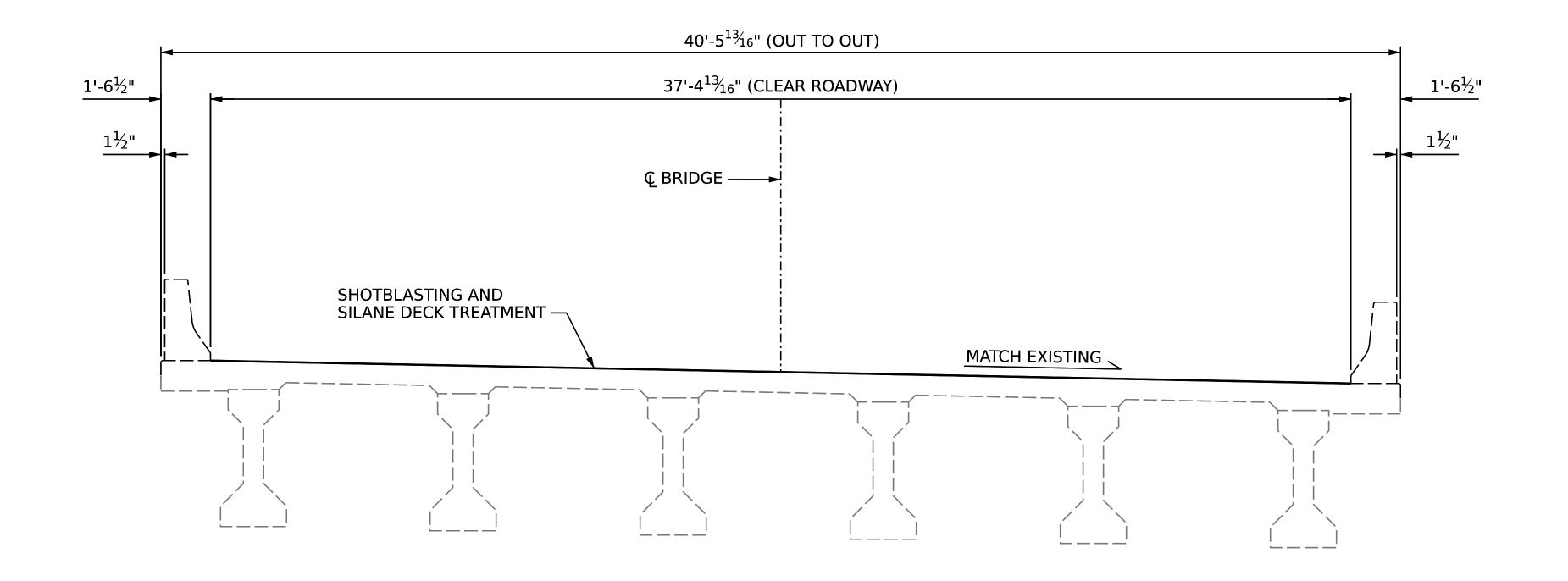
DATE : 5/2022 G. AYES DRAWN BY : DATE: 5/2022 A. G. ABRAHA CHECKED BY : . DATE : \_\_\_\_\_\_ DESIGN ENGINEER OF RECORD: .

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(EXISTING)



#### TYPICAL SECTION

(PROPOSED)

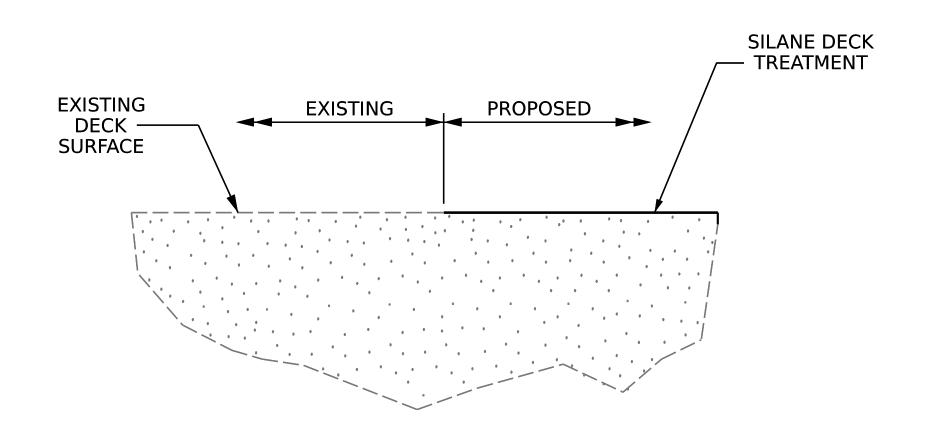
DRAWN BY: Z. HOWARD / G. AYES
CHECKED BY: A. G. ABRAHA
DESIGN ENGINEER OF RECORD: DATE:

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#### NOTES

SEE TRAFFIC PLANS FOR LANE WIDTH, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



#### SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006
WILSON COUNTY

BRIDGE NO. 970249



STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

#### **SUPERSTRUCTURE**

TYPICAL SECTION AND SILANE DECK TREATMENT DETAILS

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#### REPAIR KEY

- SHOTBLASTING AND SILANE DECK TREATMENT

- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT

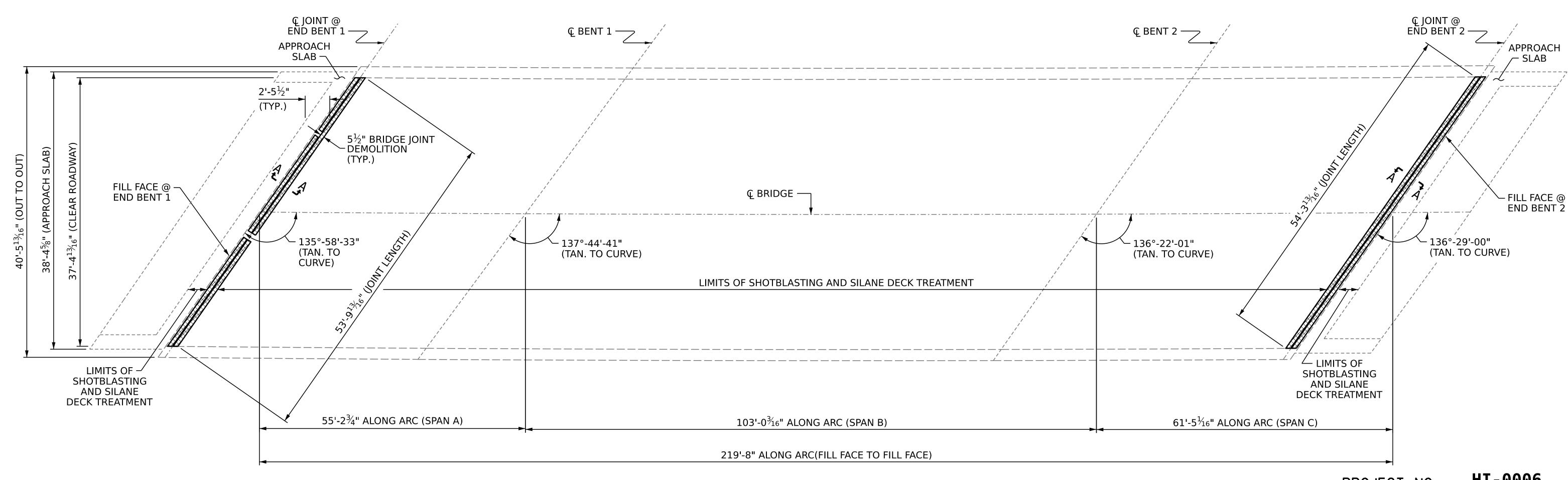
- BRIDGE JOINT DEMOLITION

#### **NOTES**

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- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S4-4.

## SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

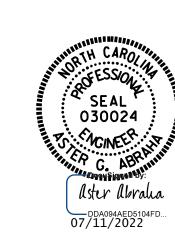
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	913.3 SY	
SILANE DECK TREATMENT	913.3 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	99.1 SF	



PROJECT NO. HI-0006 WILSON \_ COUNTY

BRIDGE NO. 970249

PLAN OF SPANS



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

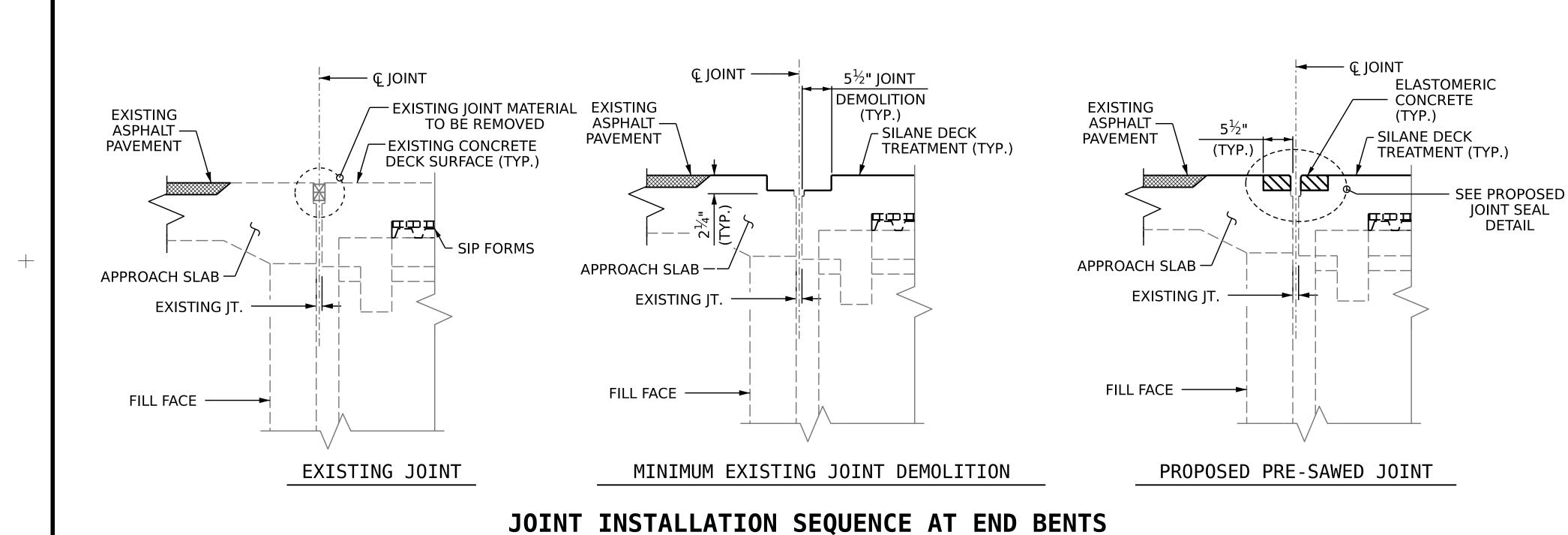
SILANE DECK TREATMENT

S4-3

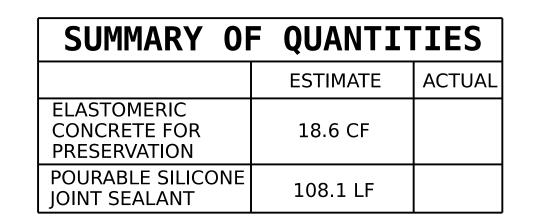
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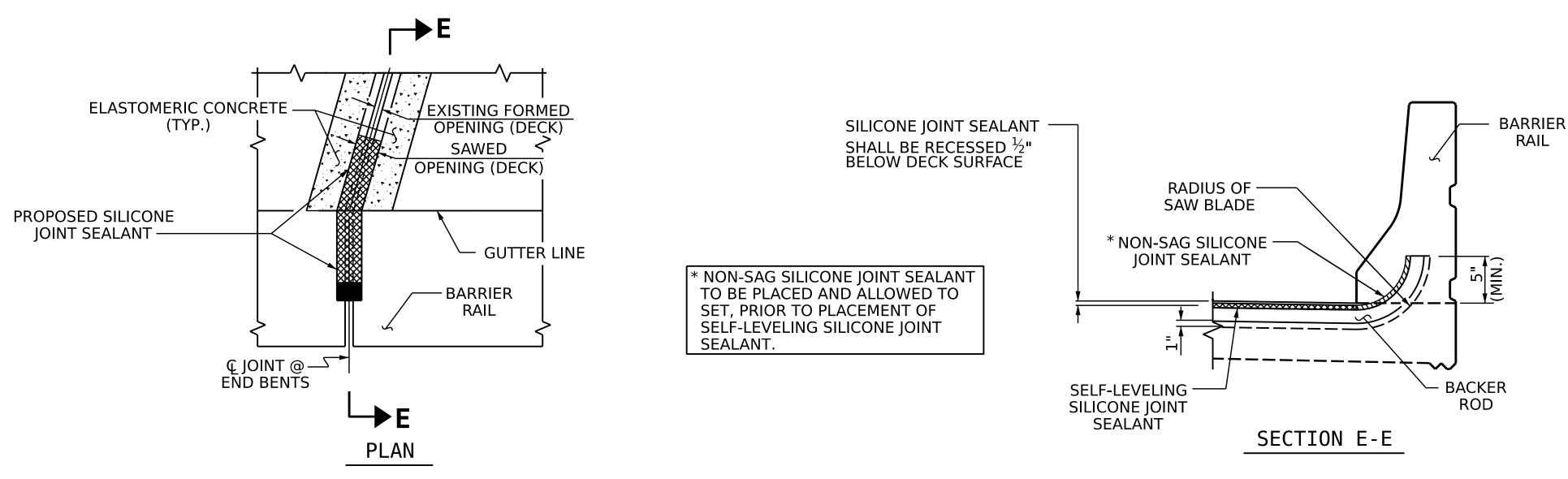
G. AYES A. G. ABRAHA DATE: 5/2022 DATE: 5/2022 DRAWN BY : CHECKED BY : \_ DESIGN ENGINEER OF RECORD:

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**SECTION A-A** 





#### NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.

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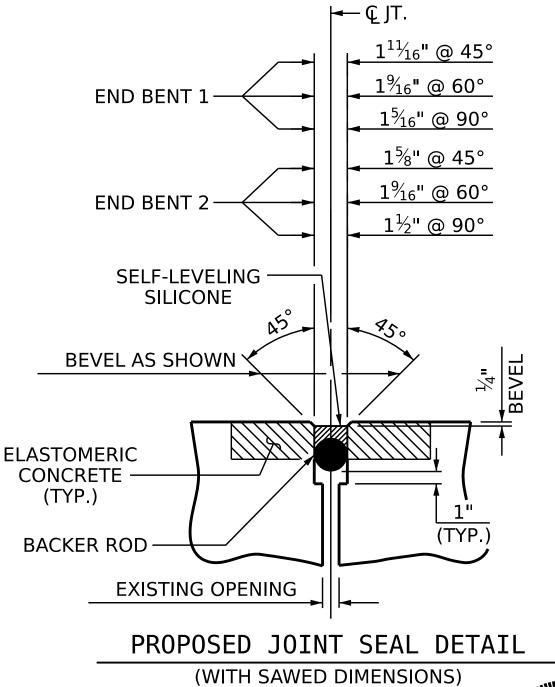
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FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



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PROJECT NO. HI-0006
WILSON COU

BRIDGE NO. 970249

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

JOINT REPAIR DETAILS

TOTAL
SIGNATURES COMPLETED

REVISIONS

REVISIONS

REVISIONS

SHEET NO
BY: DATE: NO. BY: DATE: S4-4

SIGNATURES COMPLETED

A

O7/11/2022

JOINT DETAIL AT BARRIER RAIL

DRAWN BY: G. AYES

CHECKED BY: A. G. ABRAHA

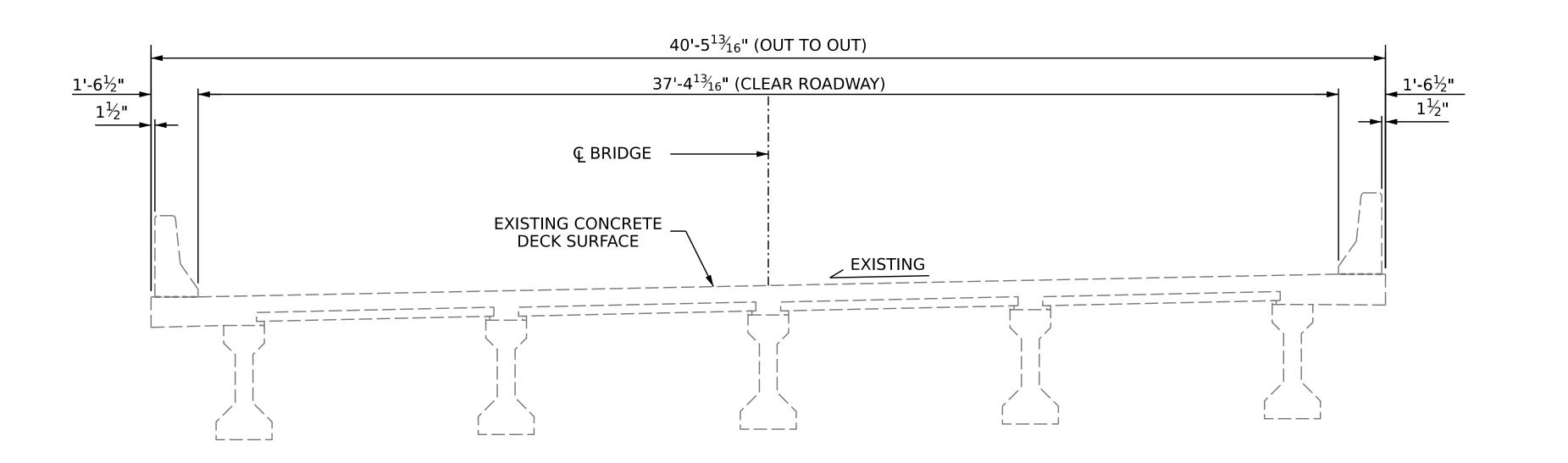
DATE: 5/2022

DESIGN ENGINEER OF RECORD: DATE: --

7/11/2022 S:\DPG1\Division4\HI-0006\Plans\970249\404\_007\_HI-0006\_SMU\_JT\_S4-4\_970249.dgn aabraha

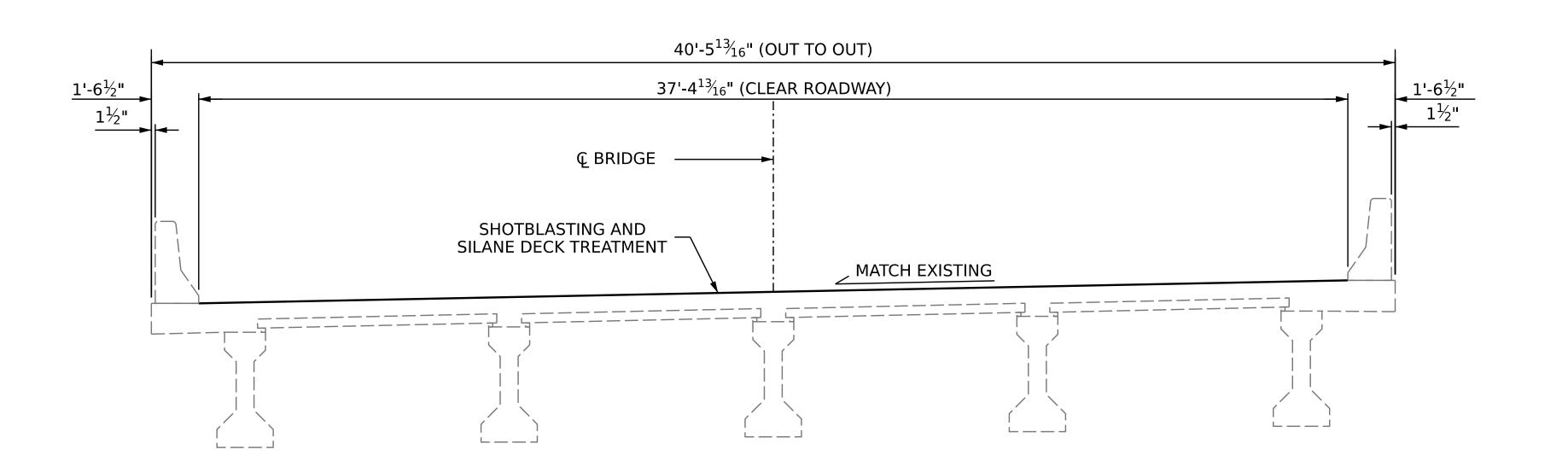
COUNTY

**NOTES** - PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/21/2021. - BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS. SPAN A SPAN D SPAN B SPAN C FILL FACE @ END BENT 1 FILL FACE @ END BENT 2 EXP. END BENT 1 BENT 1 BENT 3 BENT 2 END BENT 2 SECTION ALONG & BRIDGE TO FACE OF CAP APPROACH APPROACH — SLAB SLAB -/ ← Ç BENT 3 © BENT 1 ── © BENT 2 TO US 117 TO SR 1606 FILL FACE @ € BRIDGE — END BENT 2 104°-25'-18" (TAN. TO CURVE) 104°-27'-37" — 104°-18'-5" ─ 104°-35'-1" -- 104°-18'-53" (TAN. TO CURVE) (TAN. TO CURVE) (TAN. TO CURVE) (TAN. TO CURVE) FILL FACE @ END BENT 1 **HI-0006** PROJECT NO.\_\_\_ WILSON COUNTY  $48'-1\frac{1}{2}$ " ALONG ARC (SPAN A)  $64'-7\frac{7}{8}$ " ALONG ARC (SPAN B) 67'-3<sup>13</sup>/<sub>16</sub>" ALONG ARC (SPAN C) 58'-3" ALONG ARC (SPAN D) 970250 BRIDGE NO. \_\_\_ 238'- $4\frac{3}{16}$ " ALONG ARC (FILL FACE TO FILL FACE) MILE POST - 139.2 SCOPE OF WORK STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION **PLAN** RALEIGH - PREPARE BRIDGE DECK BY SHOTBLASTING METHODS. I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED SEAL 030024 GENERAL DRAWING ACCORDING TO THESE PLANS OR AS NOTED HEREIN. (FOOTINGS, COLUMNS & PILES NOT SEAL 29441 - PLACE SILANE DECK TREATMENT. SHOWN IN PLAN VIEW FOR CLARITY) FOR BRIDGE ON US 264 BYPASS WESTBOUND OVER CSX RAILROAD AND SR 1612 BETWEEN US 117 AND SR 1606 NOINEER AND BOOKS OF THE PROPERTY OF THE PROPE - DEMOLISH EXISTING BRIDGE DECK JOINTS. Aster Abraha - RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT. RESIDENT ENGINEER DATE 07/12/2022 07/12/2022 SHEET NO. REVISIONS DATE: 2/2022 DATE: 5/2022 G. AYES S5-1 NO. BY: DATE: DATE: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED DRAWN BY : A. G. ABRAHA TOTAL SHEETS CHECKED BY : \_ DESIGN ENGINEER OF RECORD: \_\_\_ \_ DATE : \_\_\_\_\_ 7/11/2022 S:\DPG1\Division4\HI-0006\Plans\970250\405\_001\_HI-0006\_SMU\_GD\_S5-1\_970250.dgn aabraha



#### TYPICAL SECTION

(EXISTING)



#### TYPICAL SECTION

(PROPOSED)

DRAWN BY: G. AYES

CHECKED BY: A. G. ABRAHA

DATE: 2/2022

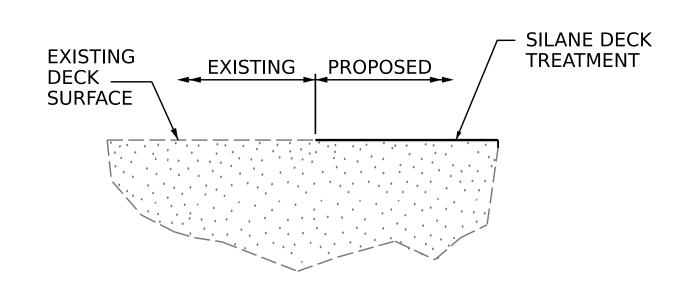
DESIGN ENGINEER OF RECORD: DATE: --

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#### NOTES

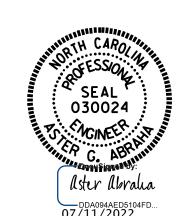
SEE TRAFFIC PLANS FOR LANE WIDTH, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



#### SILANE DECK TREATMENT DETAIL

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970250



STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

#### **SUPERSTRUCTURE**

TYPICAL SECTION AND SILANE DECK TREATMENT DETAILS

S5-2

	REVISIONS					
DOCUMENT NOT CONSIDERED	NO.	BY:	DATE:	NO.	BY:	DATE
FINAL UNLESS ALL	1			8		
SIGNATURES COMPLETED	2			4		