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**CONTRACT NO: C204734 PROJECT: HI-0007**



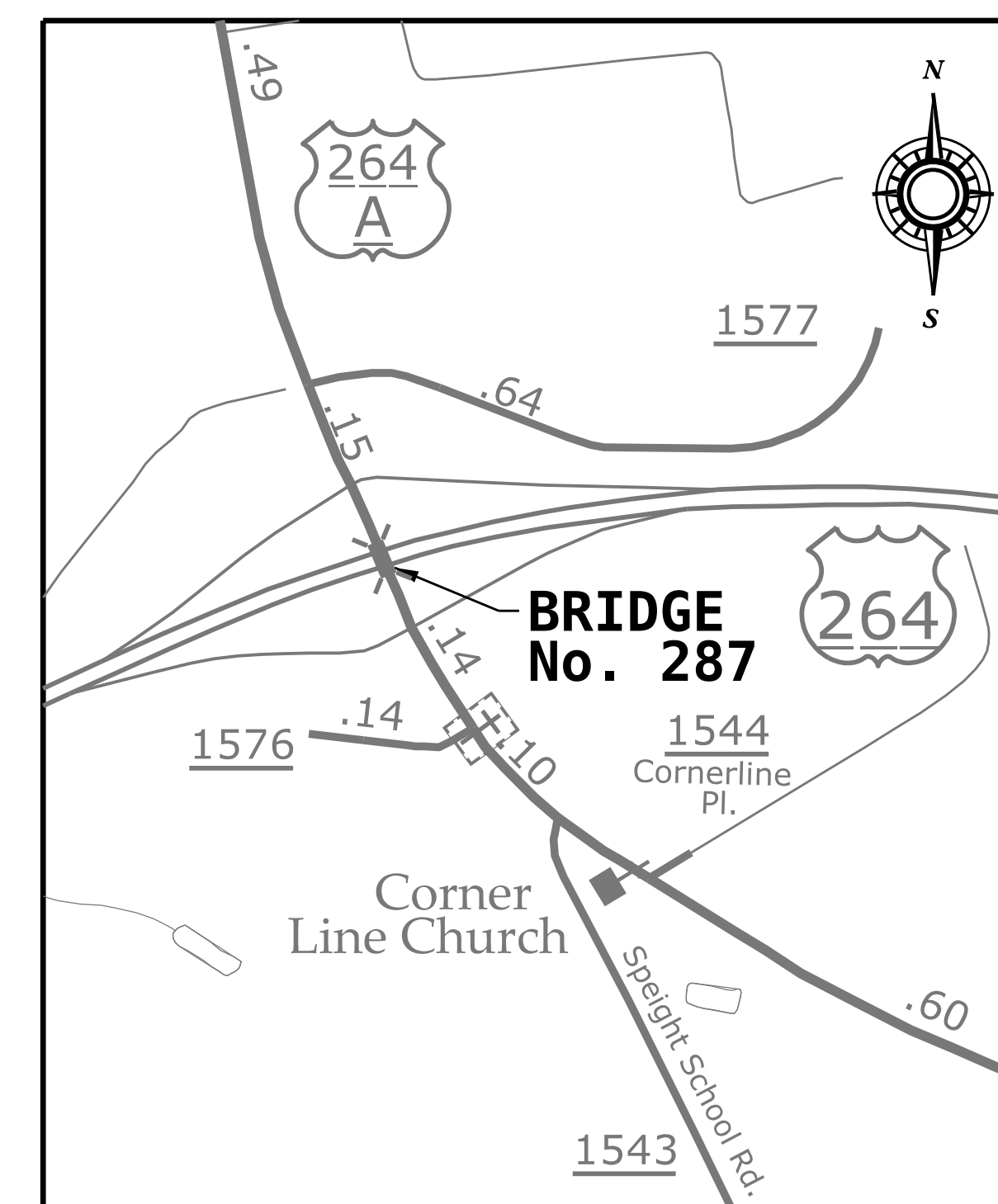
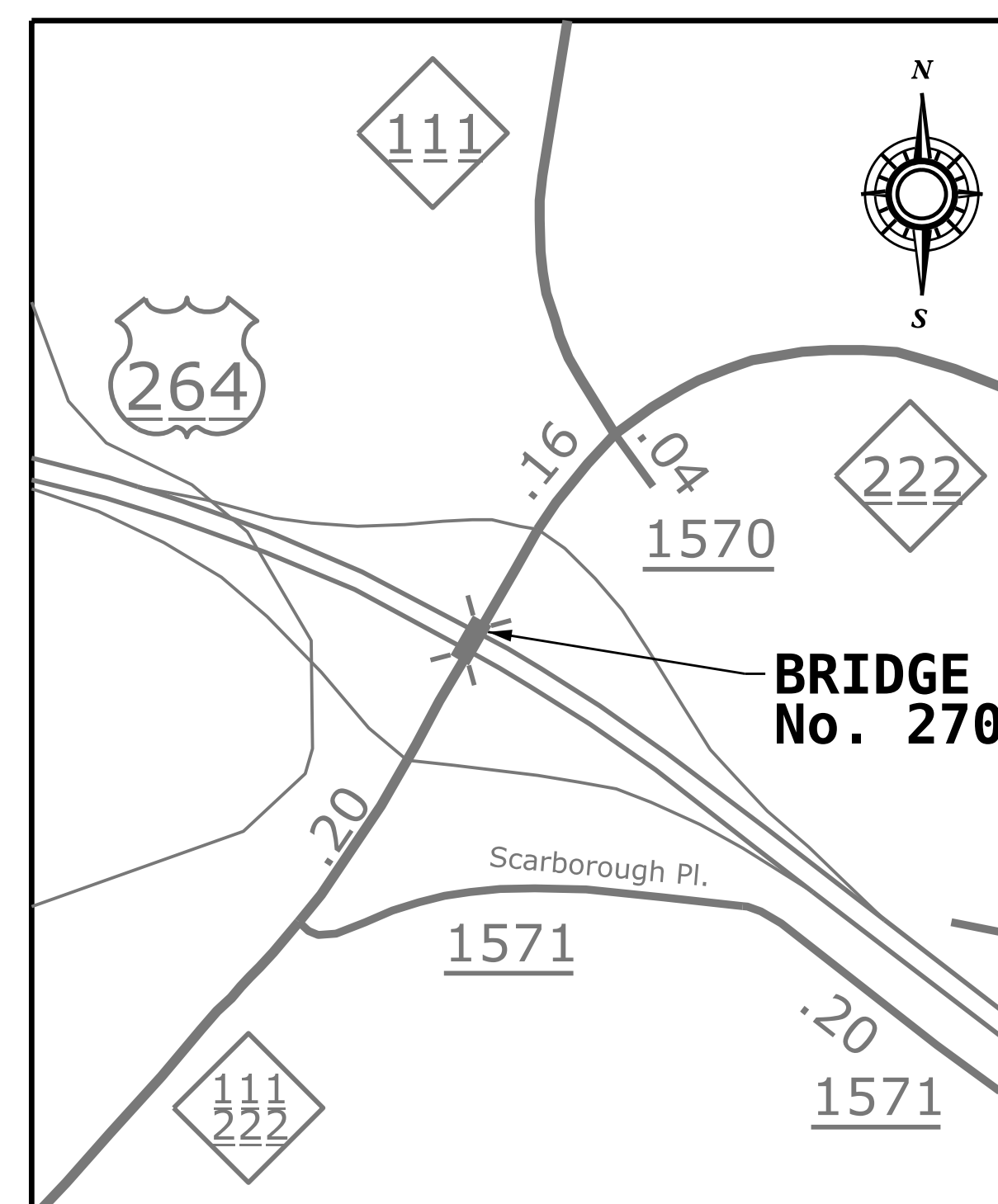
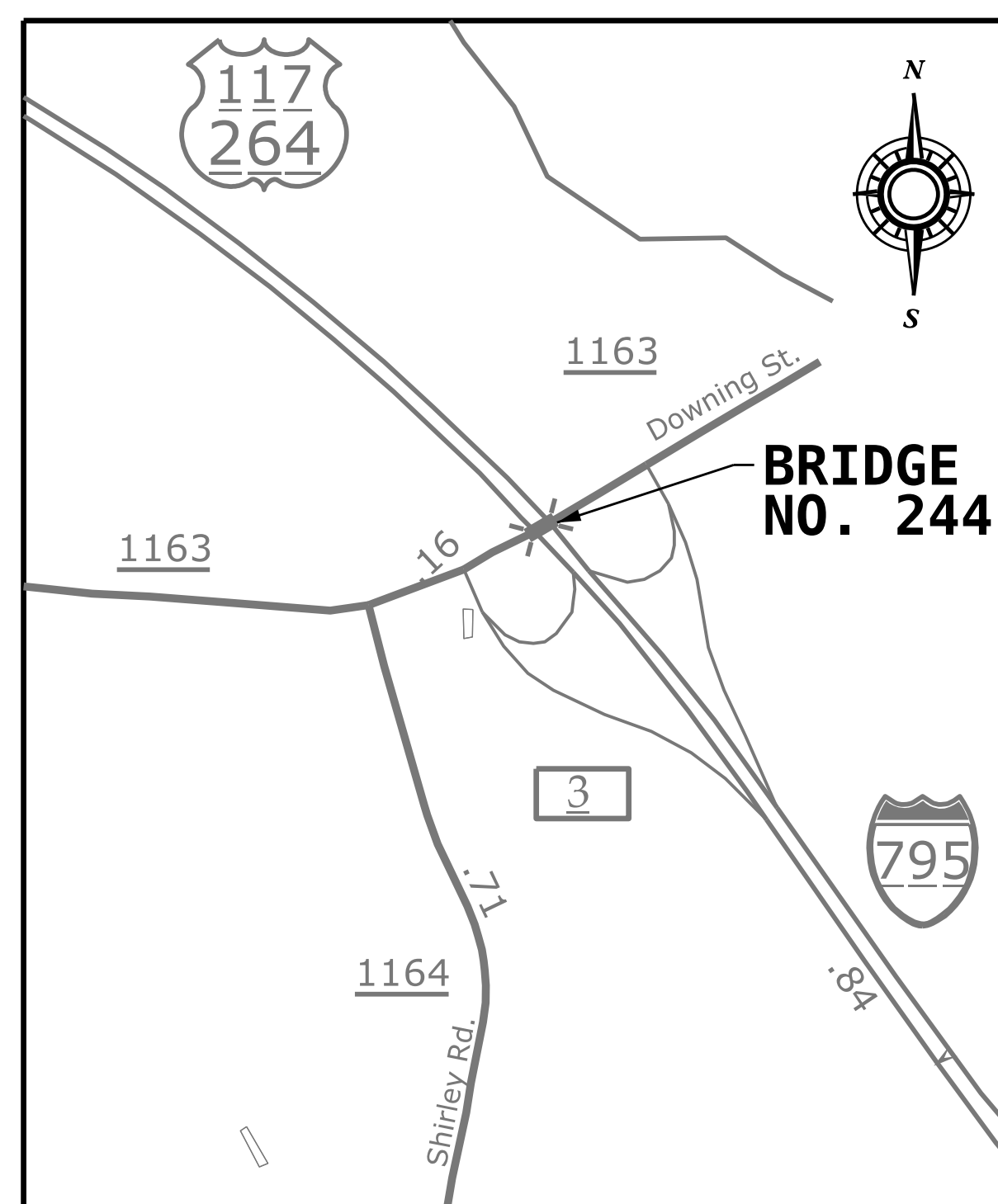
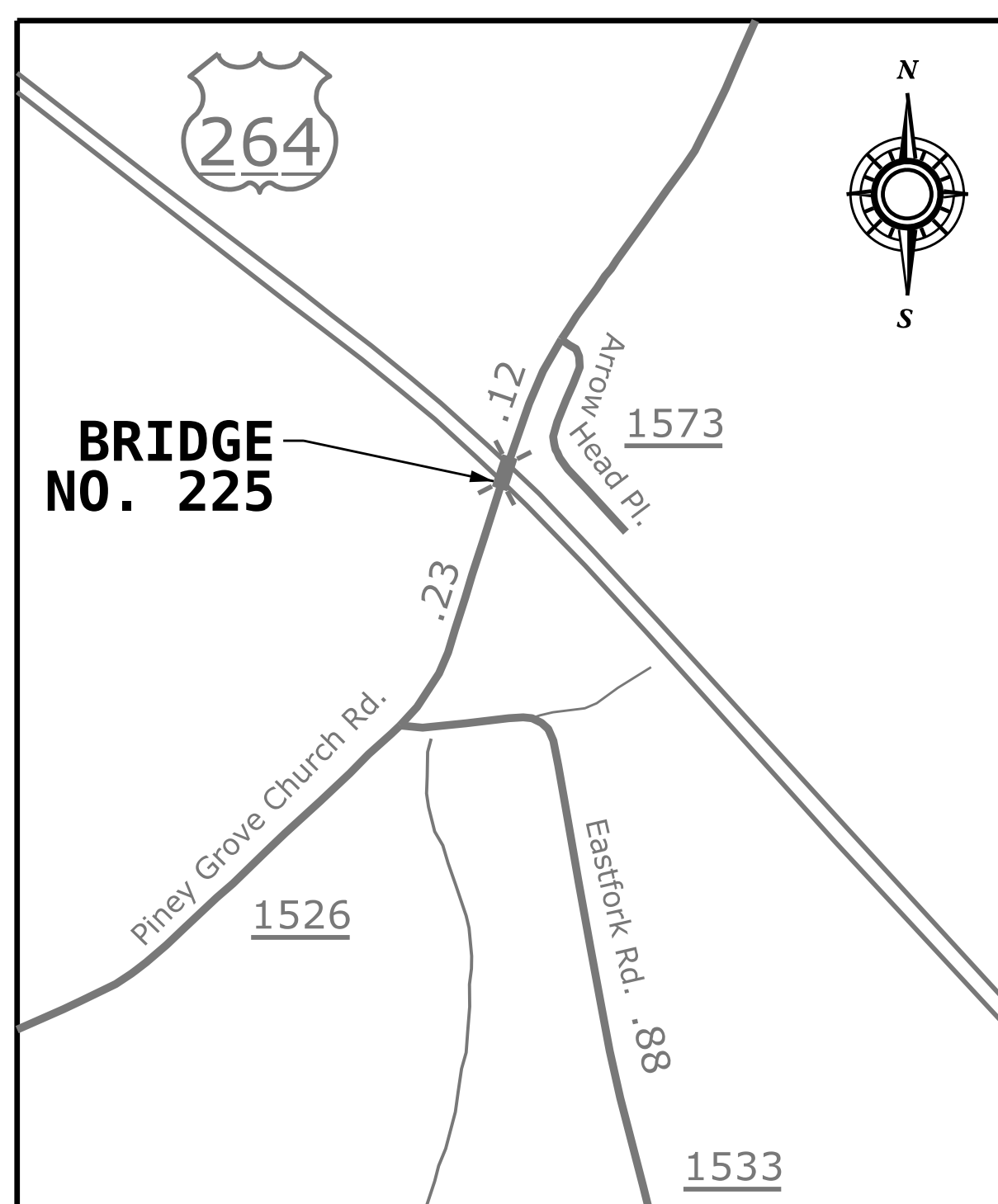
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**WILSON COUNTY**

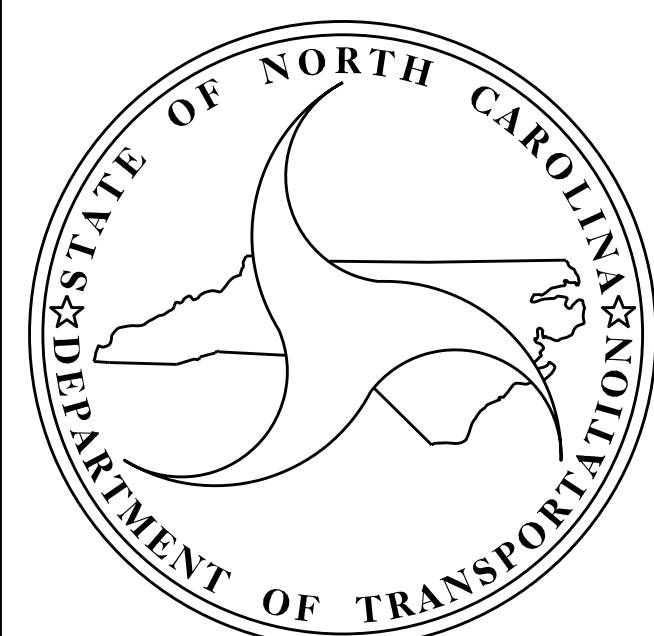
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HI-0007	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
49983.1.1	0264075	P.E.	
49983.2.1	0264075	R.O.W.	
49983.2.2	0264075	UTILITIES	
49983.3.1	0264075	CONST.	

**LOCATION:** BRIDGE #970225 ON SR 1526 OVER US 264.  
BRIDGE #970244 ON SR 1163 OVER US 264 BYP.  
BRIDGE #970270 ON NC 111/NC 222 OVER US 264.  
BRIDGE #970287 ON US 264 ALT E OVER US 264.

**TYPE OF WORK:** BRIDGE PRESERVATION - SHOTBLASTING & SILANE DECK TREATMENT, RECONSTRUCTION OF BRIDGE DECK JOINTS AND SEALS, PRESTRESSED CONCRETE GIRDER REPAIRS, SUBSTRUCTURE REPAIRS WITH SHOTCRETE, AND CONCRETE SLOPE PROTECTION CRACK SEALING.



**VICINITY MAP**



**DESIGN DATA**

BRIDGE #970225 ADT (2019) = 60  
BRIDGE #970244 ADT (2015) = 2,200  
BRIDGE #970270 ADT (2018) = 2,400  
BRIDGE #970287 ADT (2019) = 2,200

**PROJECT LENGTH**

BRIDGE # 970225 = 0.038 MILES  
BRIDGE # 970244 = 0.044 MILES  
BRIDGE # 970270 = 0.037 MILES  
BRIDGE # 970287 = 0.041 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:

OCTOBER 18, 2022

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

Aster G. Abraha, P.E.  
PROJECT DESIGN ENGINEER

5/26/20

PROJECT: HI-0007

CONTRACT NO: C204734

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

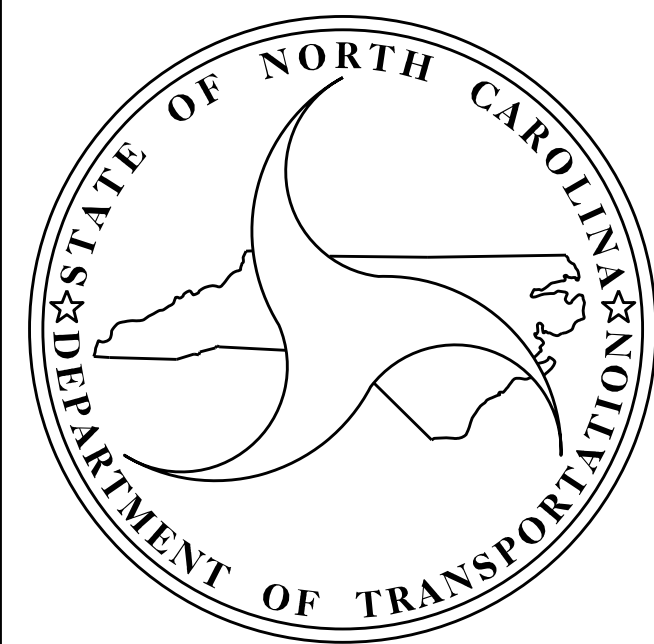
**WILSON COUNTY**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HI-0007	1A	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
49983.1.1	0264075	P.E.	
49983.2.1	0264075	R.O.W.	
49983.2.2	0264075	UTILITIES	
49983.3.1	0264075	CONST.	

LOCATION: BRIDGE #970225 ON SR 1526 OVER US 264.  
BRIDGE #970244 ON SR 1163 OVER US 264 BYP.  
BRIDGE #970270 ON NC 111/NC 222 OVER US 264.  
BRIDGE #970287 ON US 264 ALT E OVER US 264.

**INDEX OF STRUCTURES SHEETS**

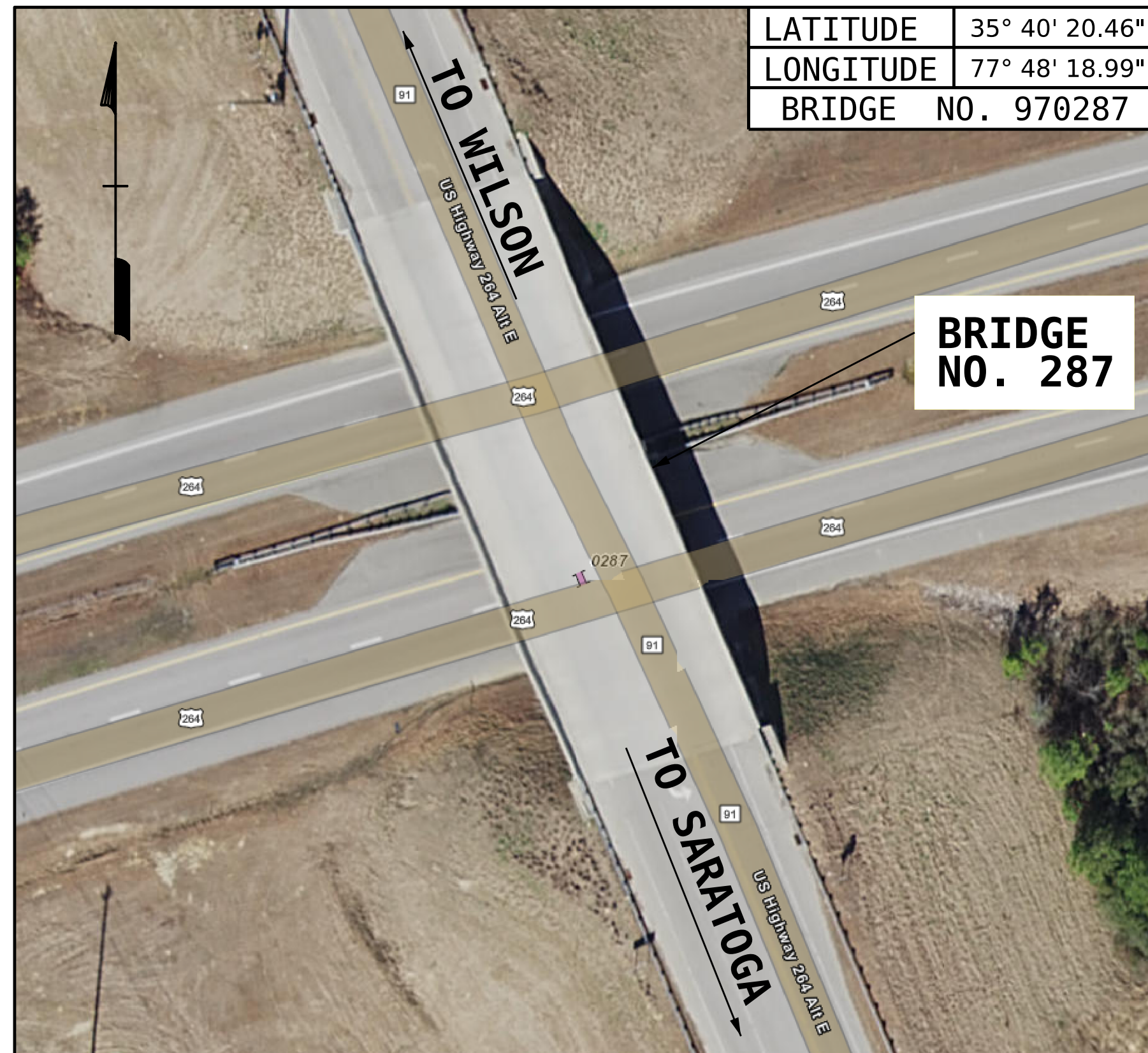
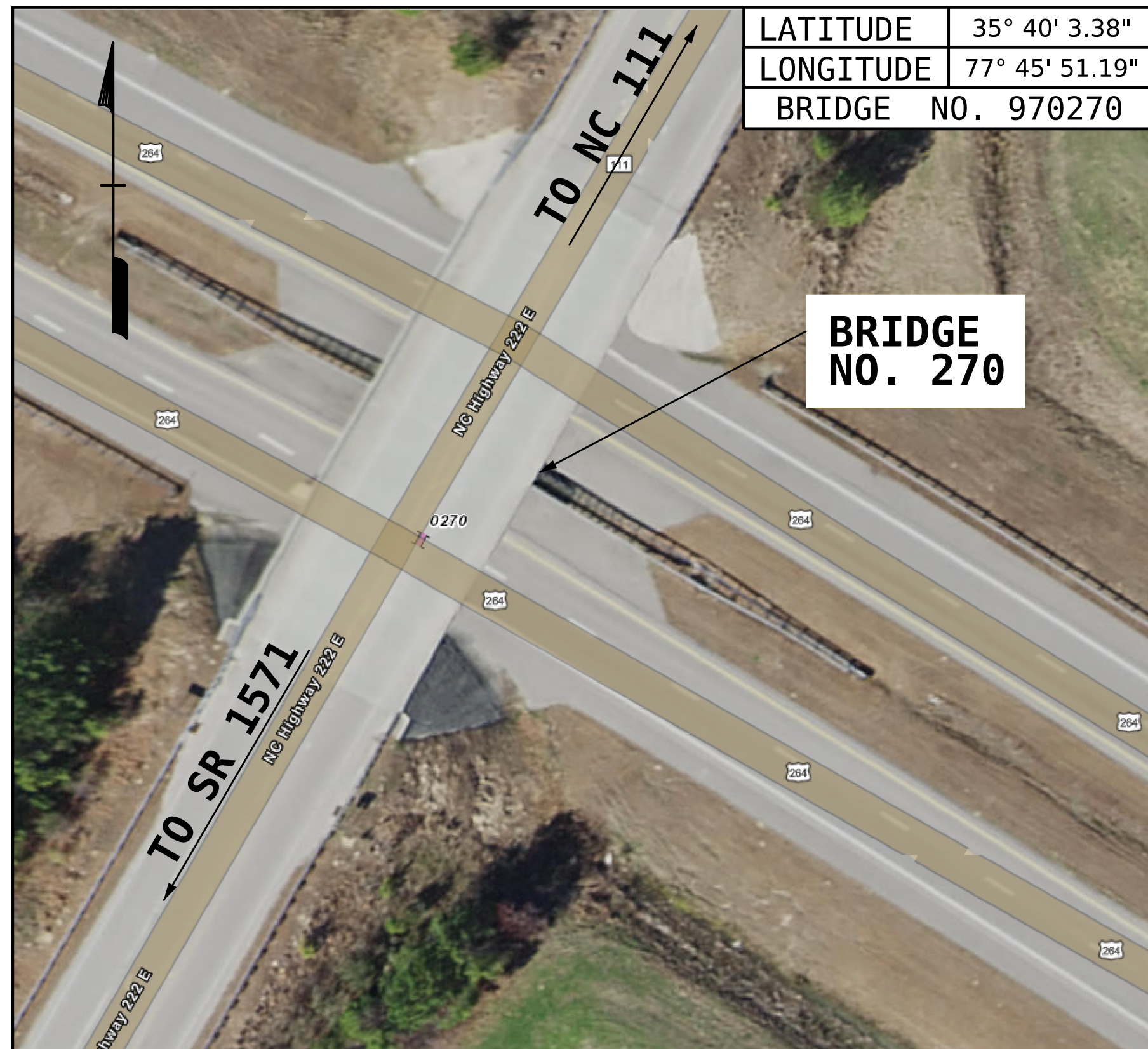
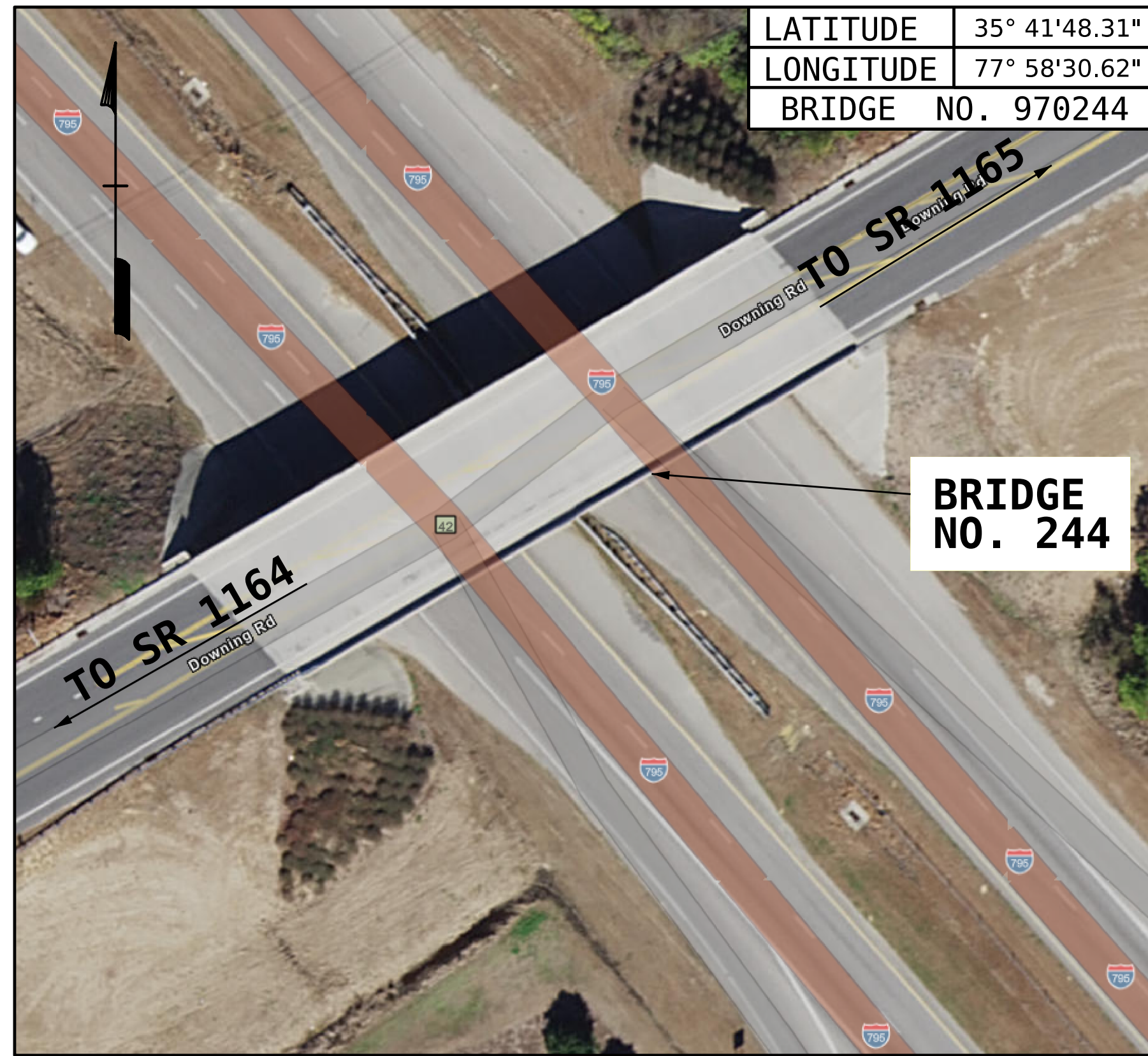
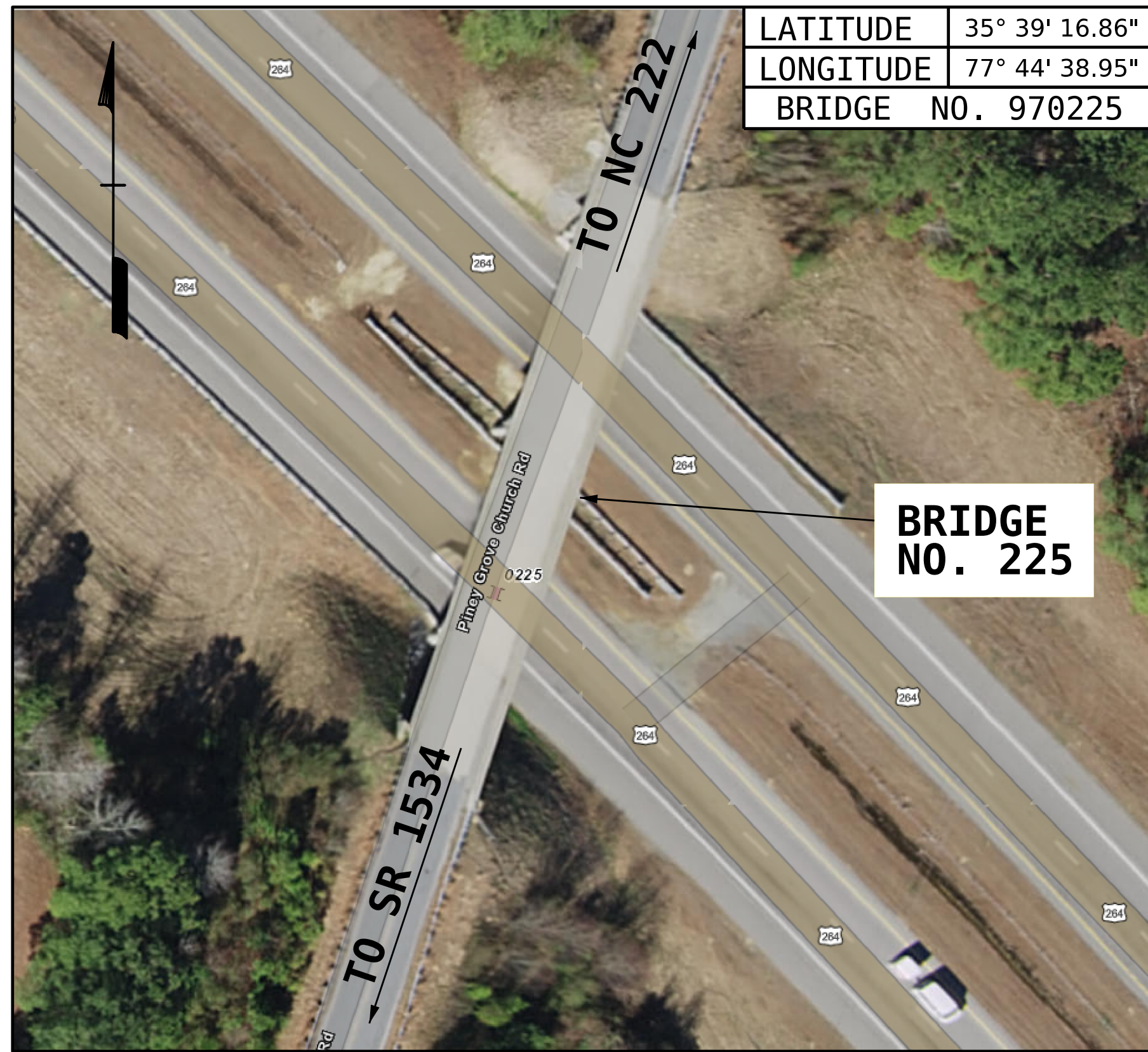
<u>SHEET No.</u>	<u>DESCRIPTION</u>	<u>SHEET No.</u>	<u>DESCRIPTION</u>	<u>SHEET No.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET	STRUCTURE No. 970244		STRUCTURE No. 970287	
1A	INDEX OF SHEETS	S2-1	GENERAL DRAWING	S4-1	GENERAL DRAWING
S-1	LOCATION SKETCHES	S2-2	TYPICAL SECTION	S4-2	TYPICAL SECTION
S-2	TOTAL BILL OF MATERIAL & GENERAL NOTES	S2-3	SURFACE PREPARATION	S4-3	SURFACE PREPARATION
		S2-4	SUPERSTRUCTURE REPAIR	S4-4	JOINT REPAIR
STRUCTURE No. 970225		S2-5	PCG REPAIR DETAILS	S4-5	END BENTS
SI-1	GENERAL DRAWING	S2-6	JOINT REPAIR	S4-6	BENTS
SI-2	TYPICAL SECTION	S2-7	SLOPE PROTECTION REPAIR DETAILS	S4-7	CAP/COLUMN REPAIR DETAILS
SI-3	SURFACE PREPARATION			S4-8	SLOPE PROTECTION REPAIR DETAILS
SI-4	SUPERSTRUCTURE REPAIR	STRUCTURE No. 970270			
SI-5	PCG REPAIR DETAILS	S3-1	GENERAL DRAWING	STANDARD SHEETS	
SI-6	JOINT REPAIR	S3-2	TYPICAL SECTION	SN	STANDARD NOTES
SI-7	END BENTS	S3-3	SURFACE PREPARATION		
SI-8 THRU SI-10	BENTS	S3-4	JOINT REPAIR		
SI-11	CAP/COLUMN REPAIR DETAILS				



**TYPE OF WORK:**

**BRIDGE PRESERVATION - SHOTBLASTING & SILANE DECK TREATMENT, RECONSTRUCTION OF BRIDGE DECK JOINTS AND SEALS, PRESTRESSED CONCRETE GIRDER REPAIRS, SUBSTRUCTURE REPAIRS WITH SHOTCRETE, AND CONCRETE SLOPE PROTECTION CRACK SEALING.**

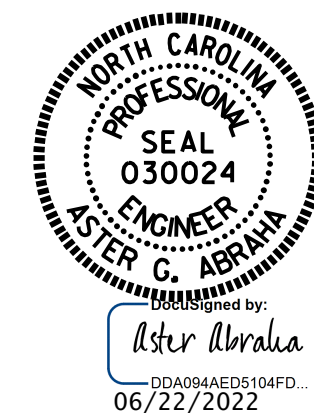
Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
STRUCTURES MANAGEMENT UNIT  
1000 BIRCH RIDGE DR.  
RALEIGH, N.C. 27610



**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.

PROJECT NO. HI-0007  
WILSON COUNTY  
 BRIDGE NO. 970225, 970244  
970270, & 970287



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**LOCATION SKETCHES**

DRAWN BY : G. AYES DATE : 4/2022  
 CHECKED BY : A. G. ABRAHA DATE : 5/2022  
 DESIGN ENGINEER OF RECORD: -- DATE : --

DOCUMENT NOT CONSIDERED  
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 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-1
1			3			TOTAL SHEETS
2			4			

**GENERAL NOTES:**

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 PROJECT 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.

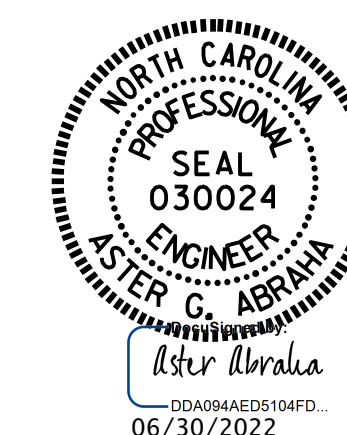
AT THE TIME OF PREPARATION OF THESE PLANS, IT WAS NOT ANTICIPATED THAT THE FOLLOWING ITEM(S) LISTED WOULD BE REQUIRED. HOWEVER, IT MAY BE DETERMINED IN THE FIELD THAT THE FOLLOWING ITEM(S) LISTED, OR OTHER WORK WILL BE NECESSARY TO PROPERLY COMPLETE THE INTENDED BRIDGE PRESERVATION/REHABILITATION WORK. 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.
970225	13.8	LUMP SUM	133.6	13.8	1.8	73.5	79.1	521.6	521.6
970244	13.0	LUMP SUM	316.6	16.6	0.5	88.6	0.0	1,091.4	1,091.4
970270	--	LUMP SUM	110.2	18.9	--	101.1	0.0	1,069.2	1,069.2
970287	7.2	LUMP SUM	170.0	28.8	--	115.0	0.0	1,211.6	1,211.6
TOTAL	34.0	LUMP SUM	730.4	78.1	2.3	378.2	79.1	3,893.8	3,893.8

PROJECT NO. HI-0007  
**WILSON** COUNTIES  
 BRIDGE NO. : 970225, 970244  
970270, 970287



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**BILL OF MATERIAL AND GENERAL NOTES**

DRAWN BY : G. AYES DATE : 05/2022  
 CHECKED BY : A. ABRAHA DATE : 05/2022

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED

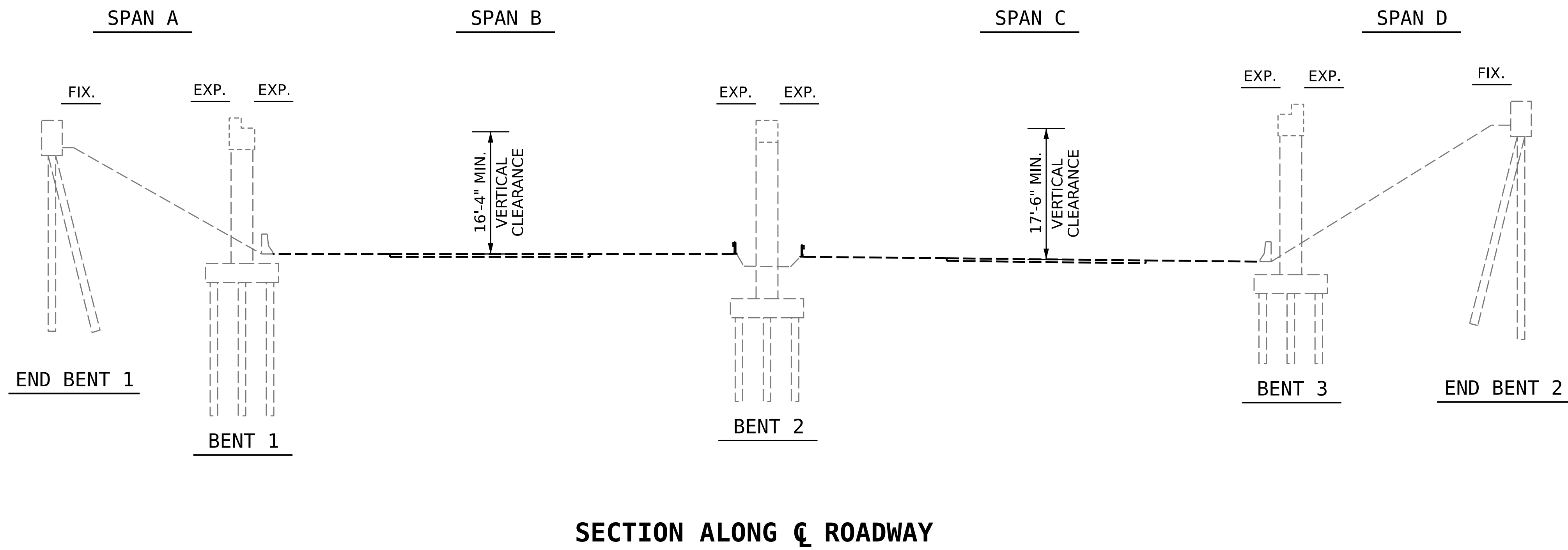
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-2
2			4			TOTAL SHEETS 3

**NOTES**

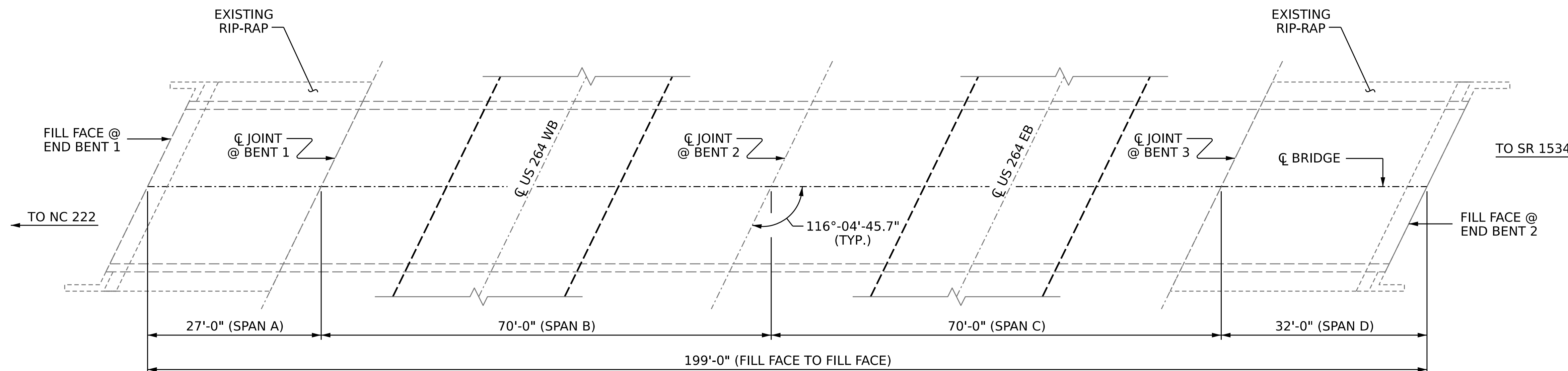
- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/07/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

**SCOPE OF WORK**

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.
- REPAIR PRESTRESSED CONCRETE GIRDERS.
- REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE AREAS FOR SHOTCRETE REPAIRS.
- PERFORM SHOTCRETE REPAIRS.



**SECTION ALONG CL ROADWAY**



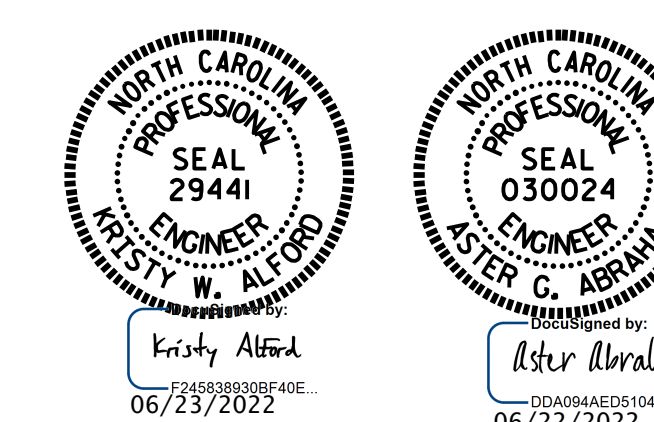
**PLAN**

(FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
 BRIDGE NO. **970225**



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GENERAL DRAWING**

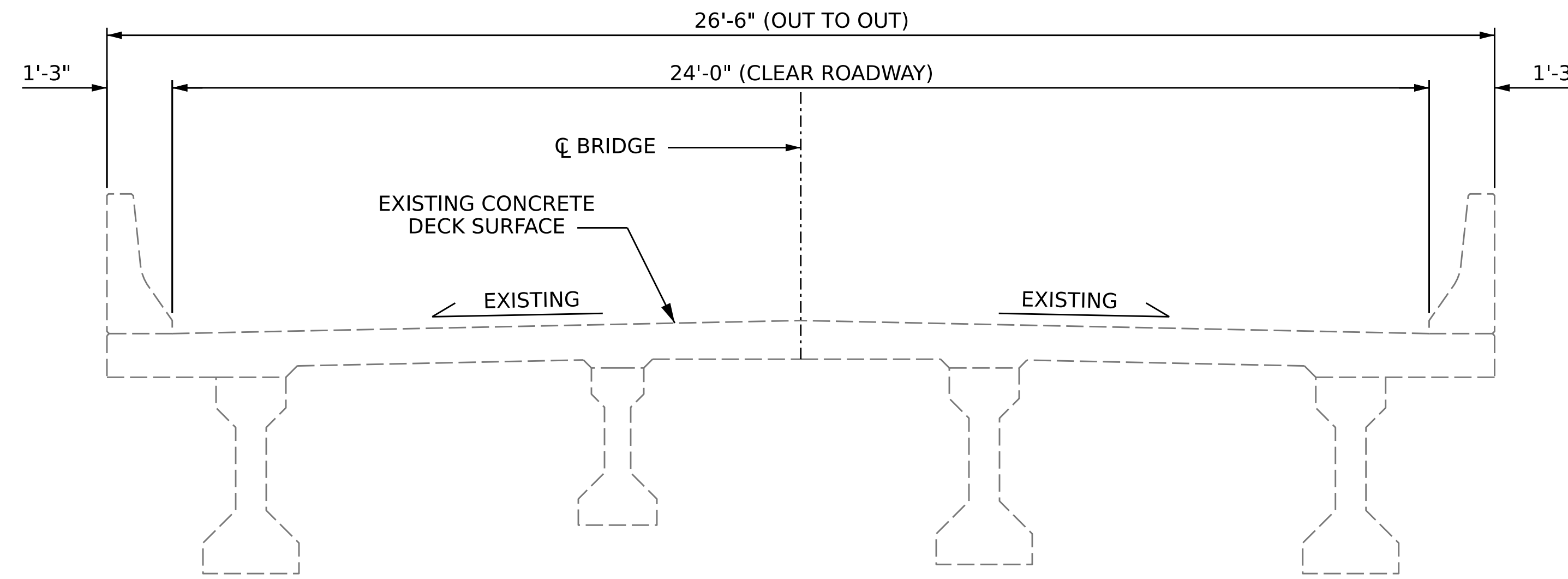
FOR BRIDGE 225 OVER  
 US 264 BETWEEN  
 NC 222 AND SR 1534

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-1
1			3			TOTAL SHEETS
2			4			11

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DRAWN BY : **G. AYES** DATE : **3/2022**  
 CHECKED BY : **A. G. ABRAHA** DATE : **5/2022**

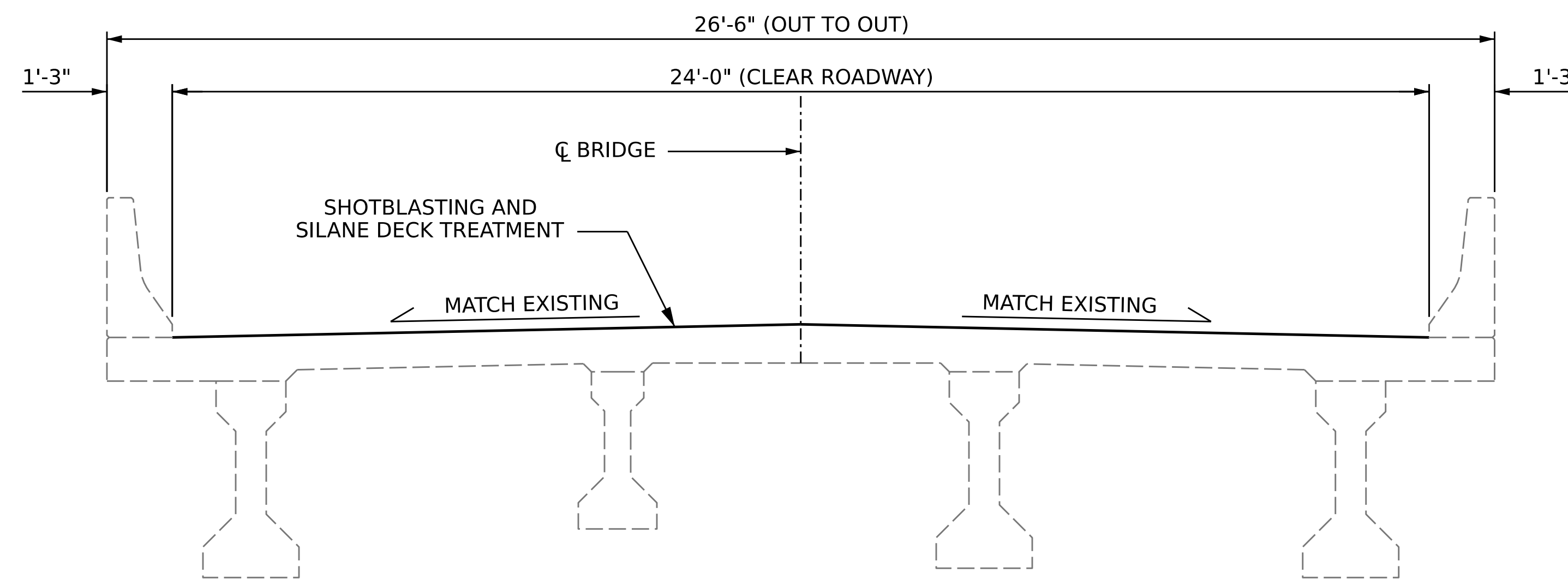
6/22/2022  
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 aabr\_ahg



HALF SECTION  
(SPAN A & D)

HALF SECTION  
(SPAN B & C)

**TYPICAL SECTION**  
(EXISTING)



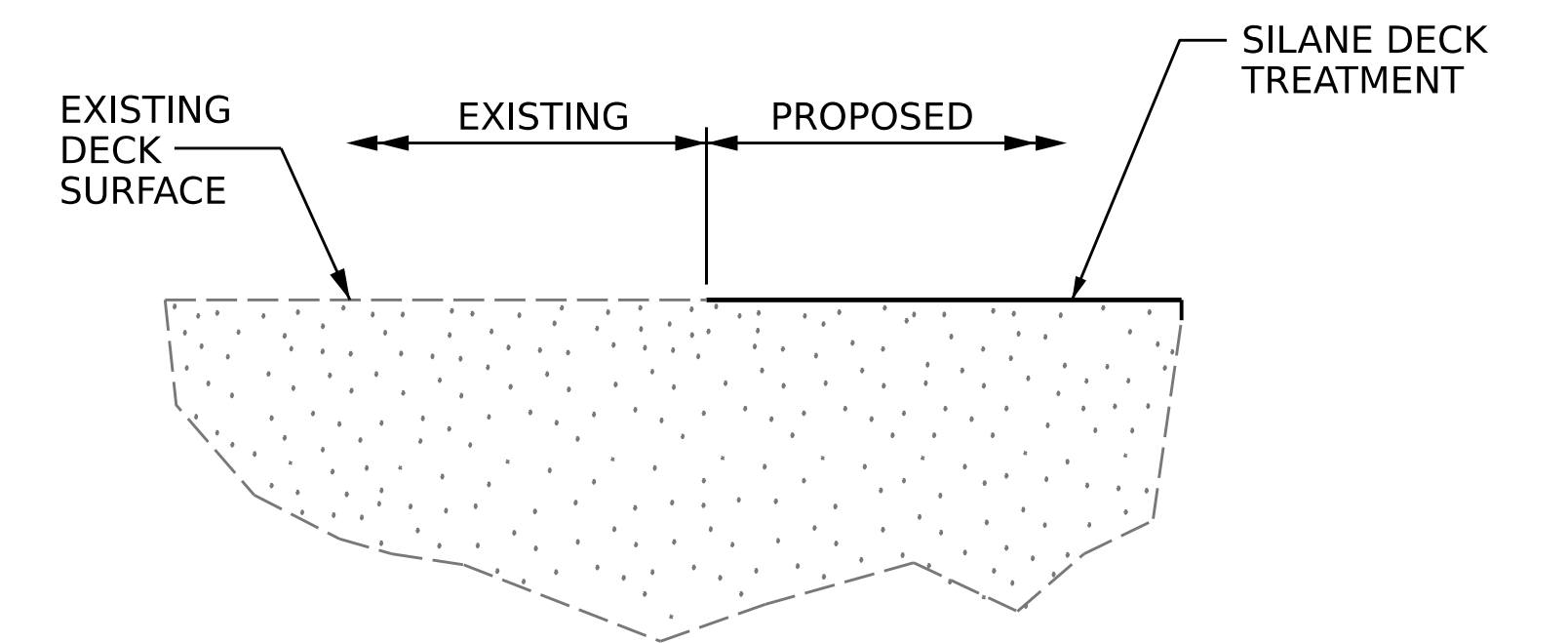
HALF SECTION  
(SPAN A & D)

HALF SECTION  
(SPAN B & C)

**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.



**SILANE DECK TREATMENT DETAIL**

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
 BRIDGE NO. **970225**



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUPERSTRUCTURE**  
 TYPICAL SECTION  
 AND SILANE DECK  
 TREATMENT DETAILS


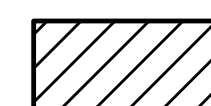
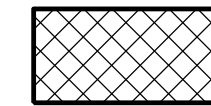
REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S1-2
2			4			TOTAL SHEETS 11

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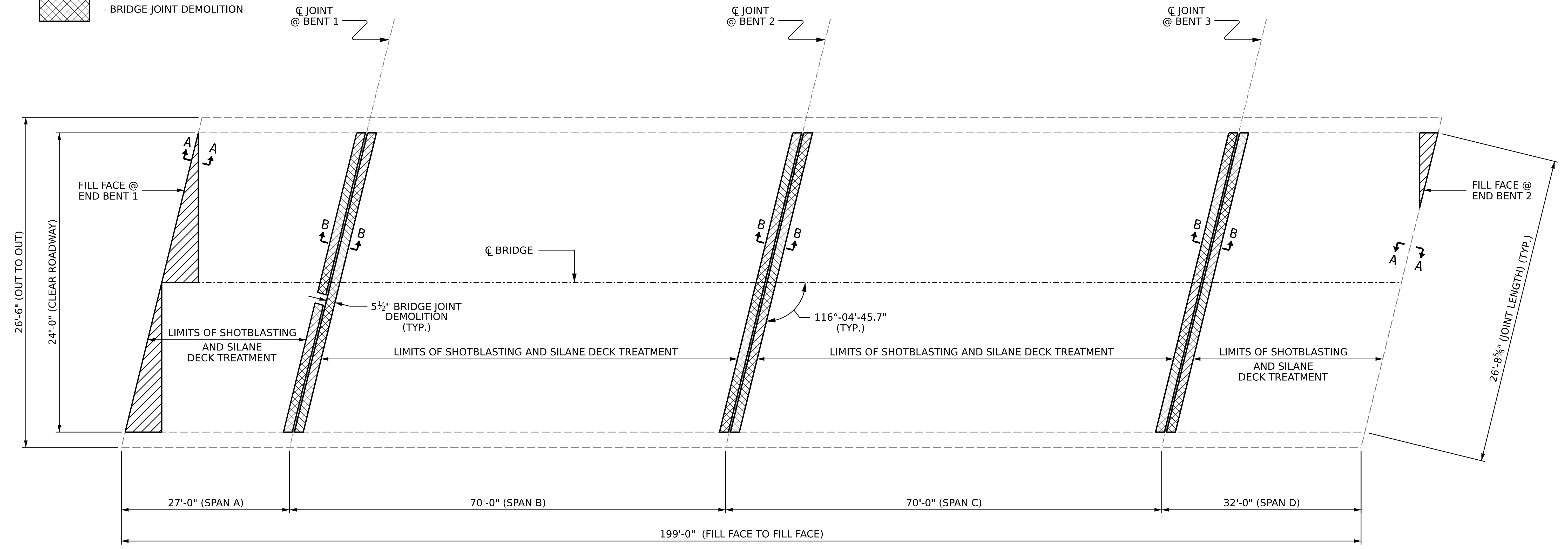
DRAWN BY : G. AYES DATE : 3/2022  
 CHECKED BY : A. G. ABRAHA DATE : 5/2022

**REPAIR KEY**

-  - SHOTBLASTING AND SILANE DECK TREATMENT
-  - CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
-  - BRIDGE JOINT DEMOLITION

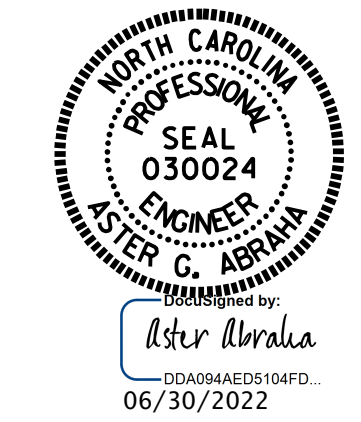
**SUMMARY OF QUANTITIES FOR DECK**

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	521.6 SY	
SILANE DECK TREATMENT	521.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	79.1 SF	
BRIDGE JOINT DEMOLITION	73.5 SF	



**PLAN OF SPANS**

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
 BRIDGE NO. **970225**



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**SILANE DECK TREATMENT**

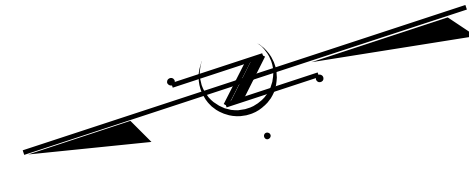
DRAWN BY : **G. AYES** DATE : **3/2022**  
 CHECKED BY : **A. G. ABRAHA** DATE : **5/2022**

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-3
2			4			TOTAL SHEETS 11

6/30/2022  
 S:\DPG1\Division4\HI-0007\Plans\970225\401.005.HI-0007.SMU.S\*.S1-3.970225.dgn  
 aabraha





**NOTES**

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON 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 AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

CONTRACTOR SHALL SAWCUT TO A NOMINAL DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED. CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT WILL NOT DAMAGE EXISTING REINFORCING STEEL.

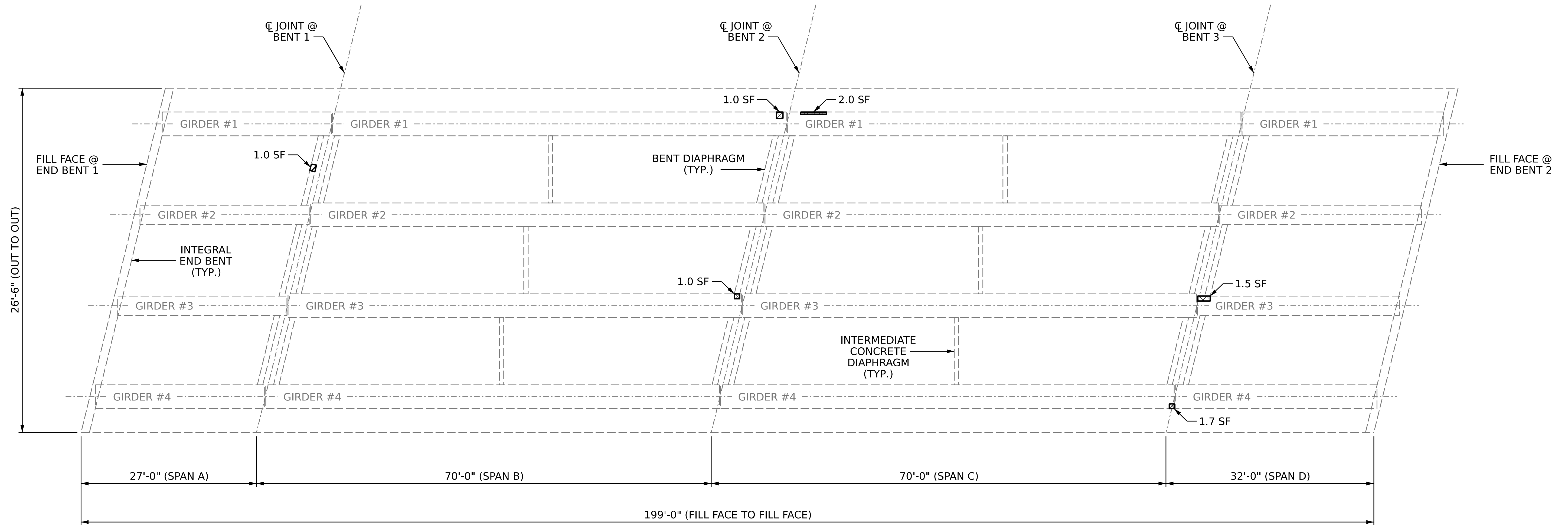
FOR CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS, SEE PRESTRESSED CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS SHEET S1-5.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

**REPAIR QUANTITY TABLE**

UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK & OVERHANG	0	0		
BENT DIAPHRAGMS	1.0	0.3		
<b>GIRDER REPAIRS</b>	<b>AREA SF</b>	<b>VOLUME CF</b>	<b>AREA SF</b>	<b>VOLUME CF</b>
PC GIRDERS	7.2	1.8		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, 1" BEHIND REBAR AND MIN. 2" CLEARANCE TO SAWCUT.



**PLAN OF SPANS - UNDERSIDE REPAIRS**

**REPAIR KEY**

- DIAPHRAGM REPAIR
- PRESTRESSED CONCRETE GIRDER REPAIR

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
 BRIDGE NO. **970225**



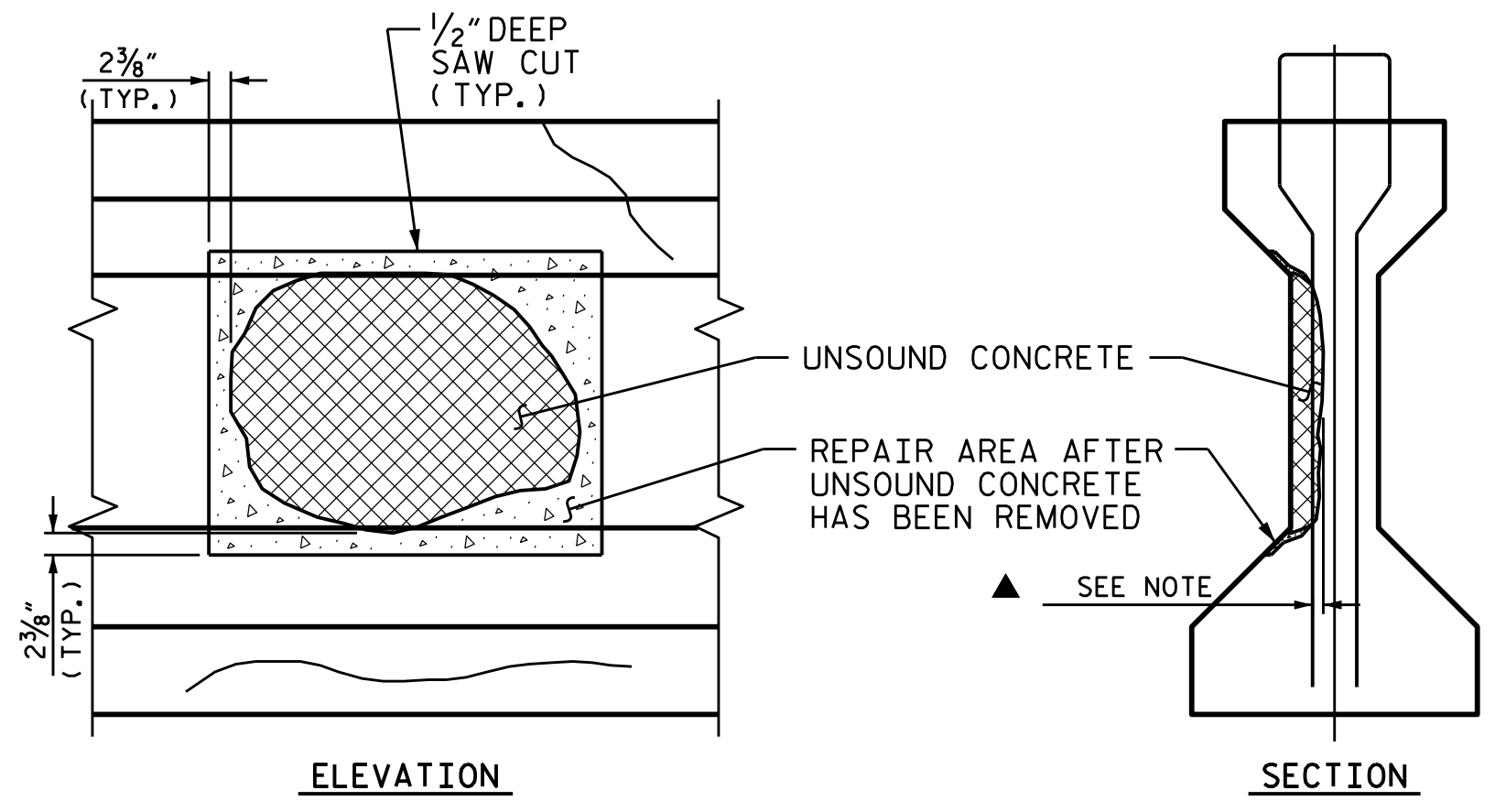
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUPERSTRUCTURE  
 CONCRETE REPAIRS**

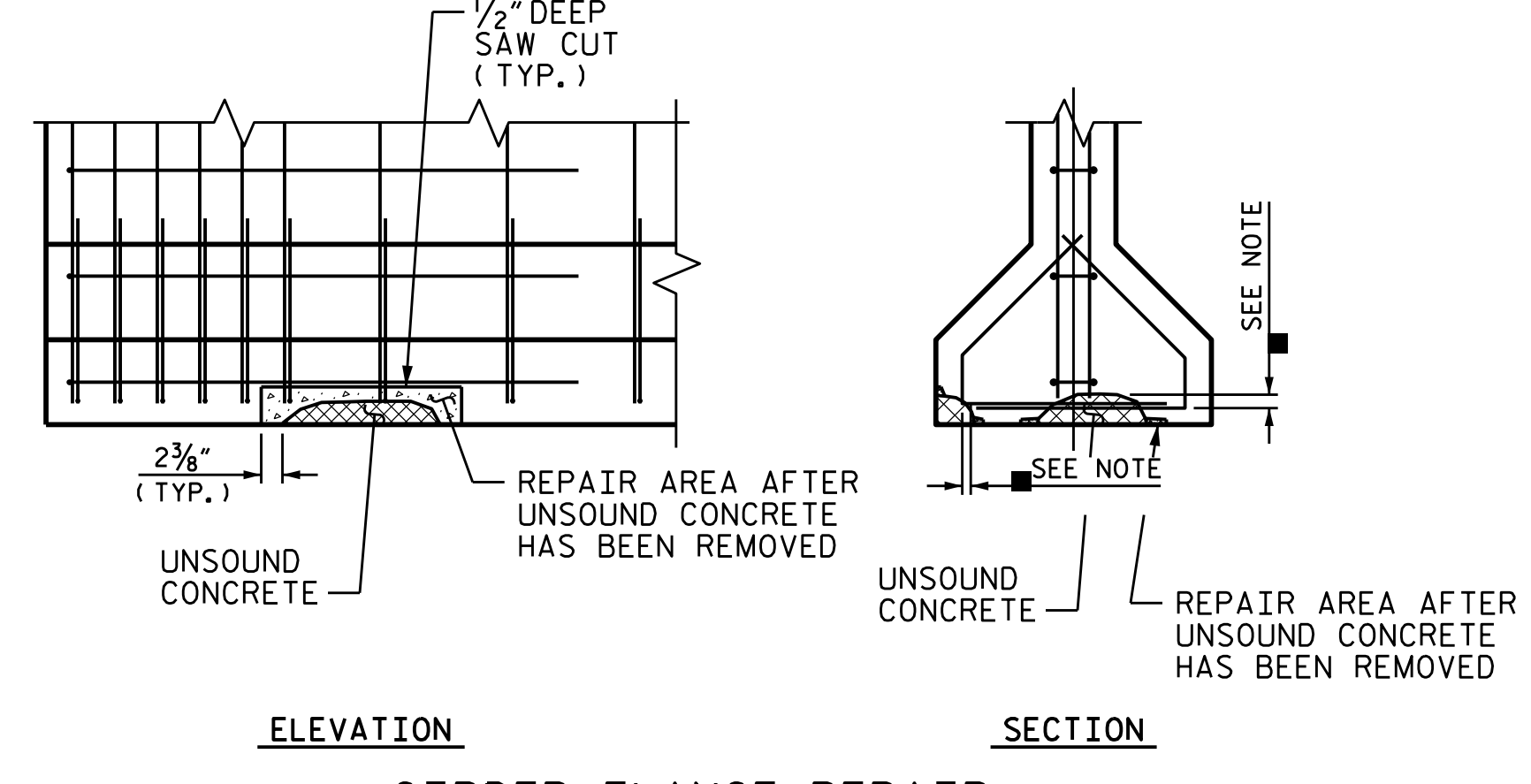
DRAWN BY : **G. AYES** DATE : **4/2022**  
 CHECKED BY : **A. G. ABRAHA/A. Y. GODFREY** DATE : **5/2022**

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NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-4
2			4			TOTAL SHEETS 11

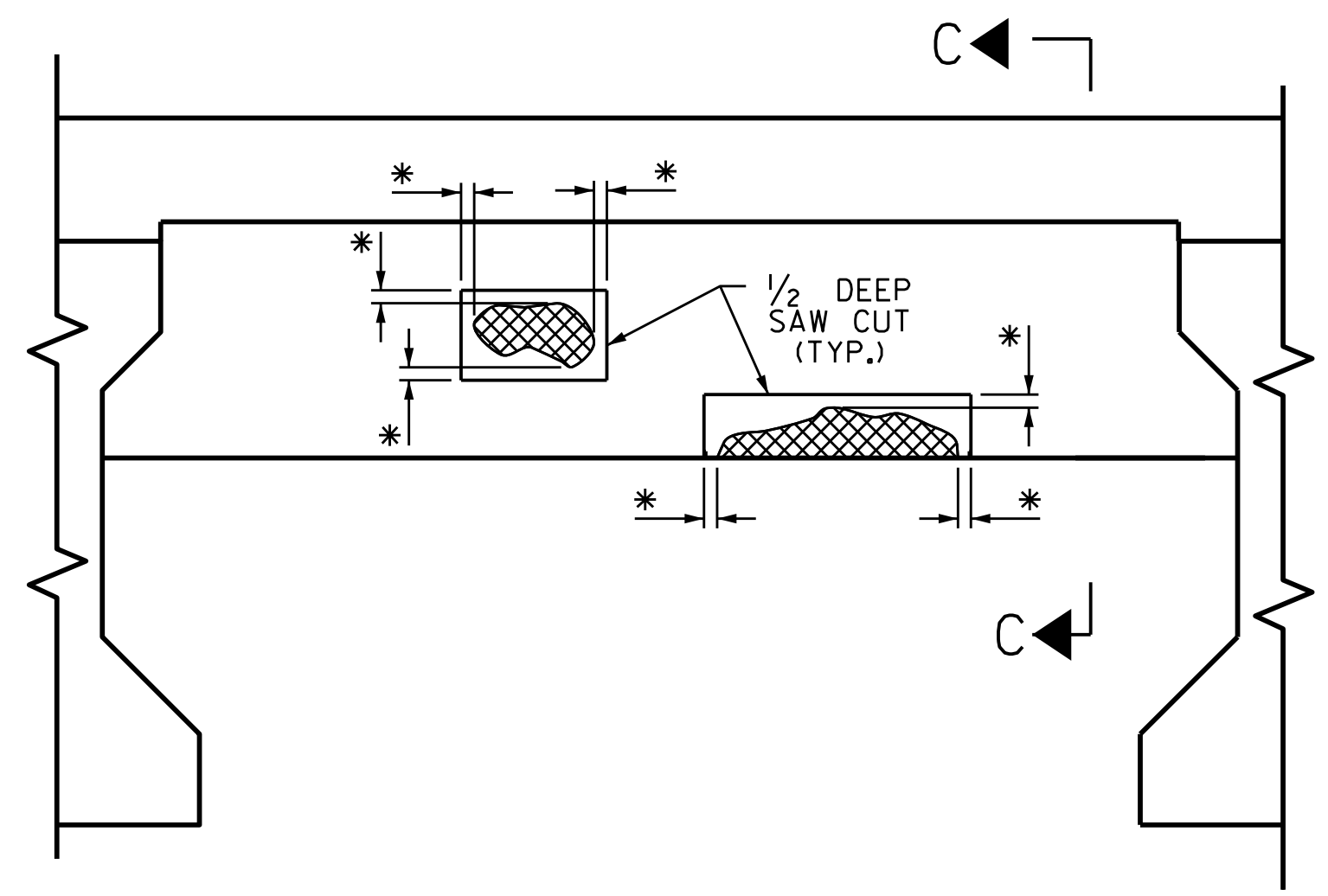


GIRDER WEB REPAIR



GIRDER FLANGE REPAIR

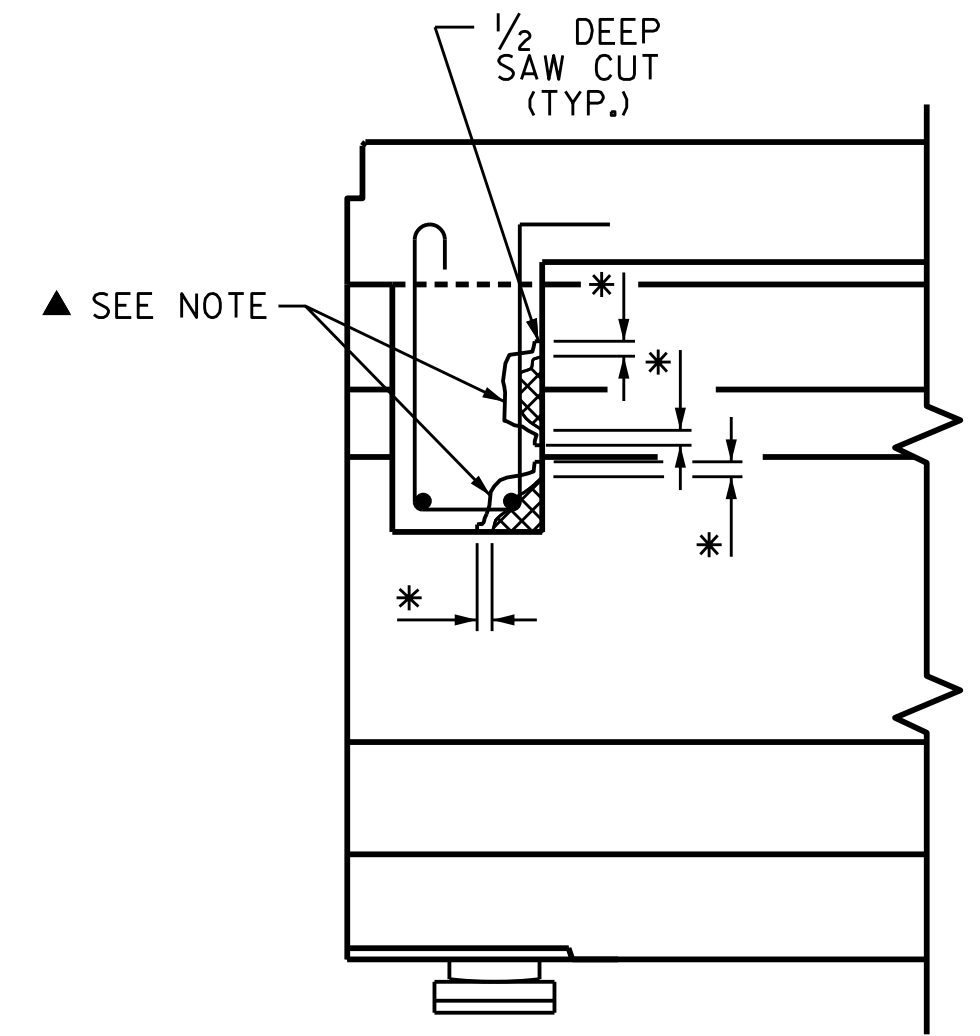
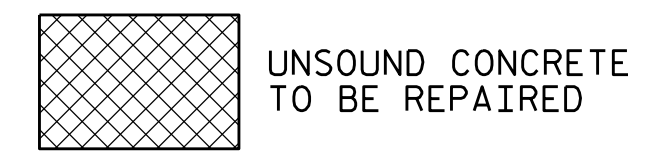
PRESTRESSED GIRDER REPAIR



TYPICAL SECTION

\* 1/2" DEEP SAW CUT SHALL BE PLACED 2" INTO SOUND CONCRETE.

REPAIR KEY:



SECTION C-C

NOTES:

- PREPACKAGED MATERIAL IS REQUIRED.
- CONSULT WITH THE ENGINEER TO DETERMINE PRELOADING REQUIREMENTS WHEN REPAIR IS WITHIN THE CENTER REGION OF THE BEAM (0.25L TO 0.75L).
- FOR REPAIRS OVER TRAFFIC AND SHALLOW REPAIRS THAT DO NOT ENGAGE REINFORCEMENT, ANCHOR PATCH MATERIAL USING 1/4" GALVANIZED BOLTS, EPOXY ANCHORED WITH 2" EMBEDMENT. PLACE BOLTS IN A 6" GRID. USE A LATEX OR EPOXY PATCH MATERIAL FOR IMPROVED BOND. USE EXTREME CARE TO NOT DAMAGE STRANDS.
- FOR PRESTRESSED CONCRETE GIRDER REPAIRS, SEE SPECIAL PROVISIONS.

PRESTRESSED GIRDER REPAIR SEQUENCE:

- SOUND CONCRETE TO DETERMINE EXTENTS OF REPAIR LOCATION.
- REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL. SAW CUT AROUND REPAIR AREA TO A MINIMUM DEPTH OF 1/2".
- REMOVE CONCRETE WITHIN SAW CUT AREA TO MINIMUM 1/2" DEPTH. IF CONCRETE IS DAMAGED BEYOND THE ORIGINAL SAW CUT, A NEW SAW CUT IS REQUIRED.
- IF MORE THAN HALF THE CIRCUMFERENCE OF A REINFORCING BAR IS EXPOSED DURING THIS PROCESS, REMOVE ADDITIONAL CONCRETE TO 1" BEHIND THE BAR. THIS DOES NOT APPLY TO PRESTRESSED STRANDS.
- ALL UNSOUND CONCRETE MUST BE REMOVED, HOWEVER, PRESTRESSED STRANDS SHOULD NOT BE DISTURBED UNLESS ABSOLUTELY NECESSARY. USE EXTREME CARE TO NOT DAMAGE STRANDS.
- CLEAN ALL EXPOSED REINFORCING BARS AND PRESTRESSED STRANDS IN ACCORDANCE WITH THE REPAIRS TO PRESTRESSED CONCRETE GIRDERS SPECIAL PROVISION. FOR BARS WITH MORE THAN 10% SECTION LOSS, SPLICE AND SECURELY TIE SUPPLEMENTAL REINFORCING BARS AS NEEDED. NOTE AND PROVIDE DETAILED DOCUMENTATION, INCLUDING LOCATION AND SEVERITY, OF ALL DAMAGE TO PRESTRESSED STRANDS THAT EXCEEDS 10% SECTION LOSS. IF FIVE OR MORE STRANDS ARE DAMAGED, NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF REPAIR MATERIAL.
- REMOVE ALL LOOSE OR WEAKENED MATERIAL THEN CLEAN THE REPAIR AREA OF DIRT, GREASE, OIL, AND FOREIGN MATTER.
- PREPARE SURFACE AND PLACE APPROVED REPAIR MATERIAL ACCORDING TO PRESTRESSED CONCRETE GIRDER REPAIRS SPECIAL PROVISION. MAXIMUM AGGREGATE SIZE FOR REPAIR MATERIAL SHALL NOT EXCEED 2/3 THE MINIMUM REPAIR DEPTH.

PROJECT NO. HI-0007  
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 BRIDGE NO. 970225

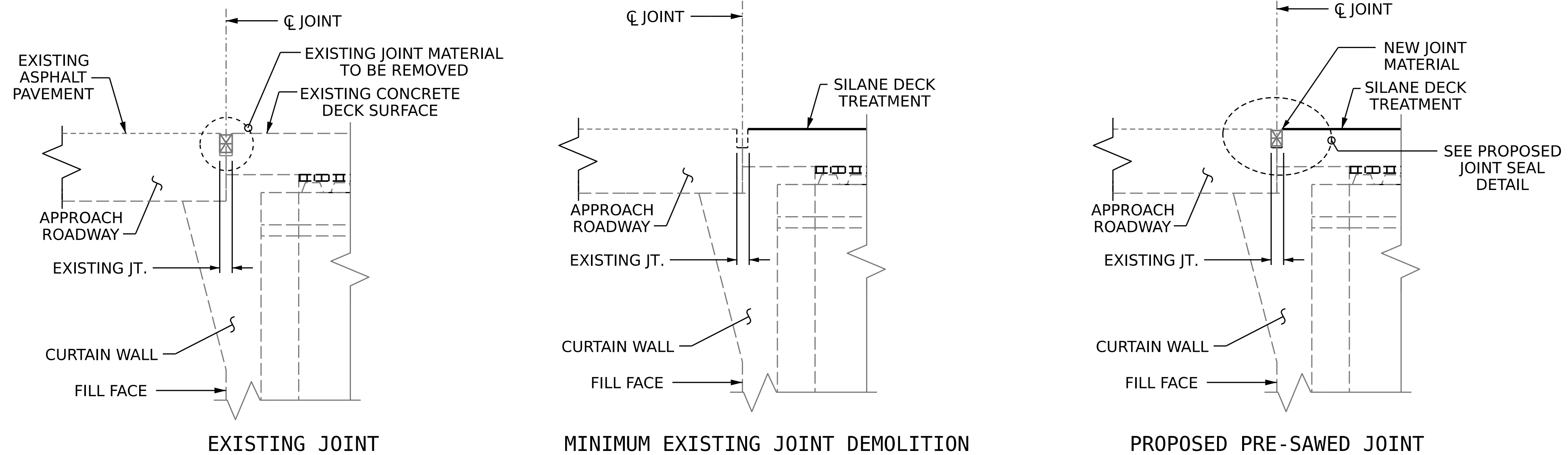


STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 PRESTRESSED CONCRETE  
 GIRDER AND DIAPHRAGM  
 REPAIR DETAILS

ASSEMBLED BY : G. AYES	DATE : 5/2022
CHECKED BY : A. G. ABRAHA	DATE : 5/2022
DRAWN BY : NAP 08/18	
CHECKED BY :	

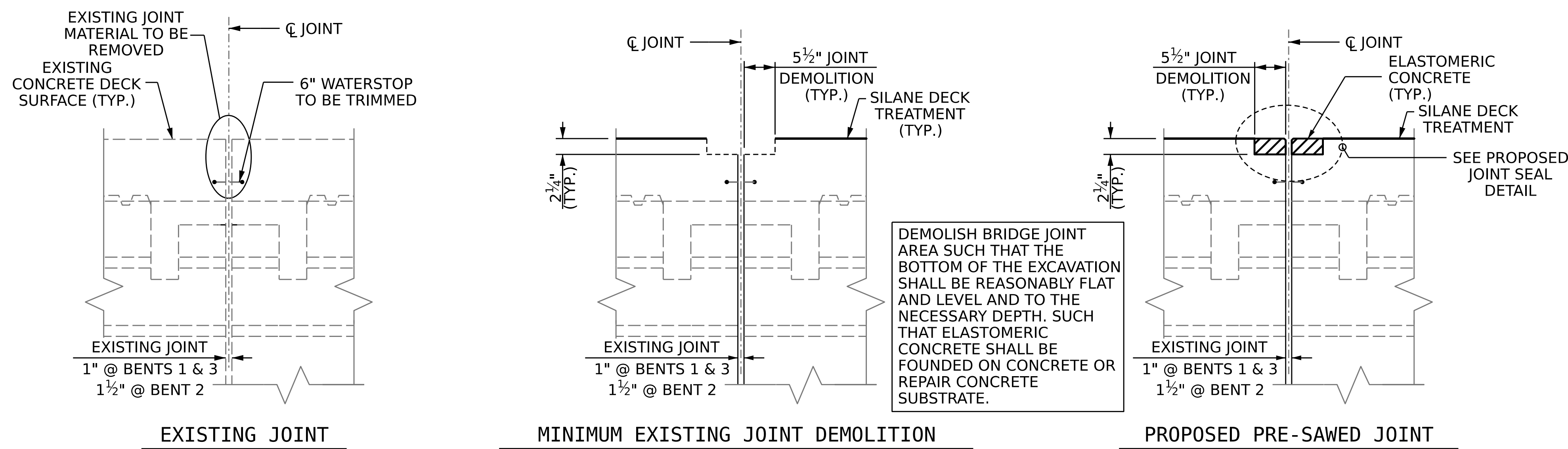
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-5
1			3			TOTAL SHEETS
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**JOINT INSTALLATION SEQUENCE AT END BENTS**

**SECTION A-A**

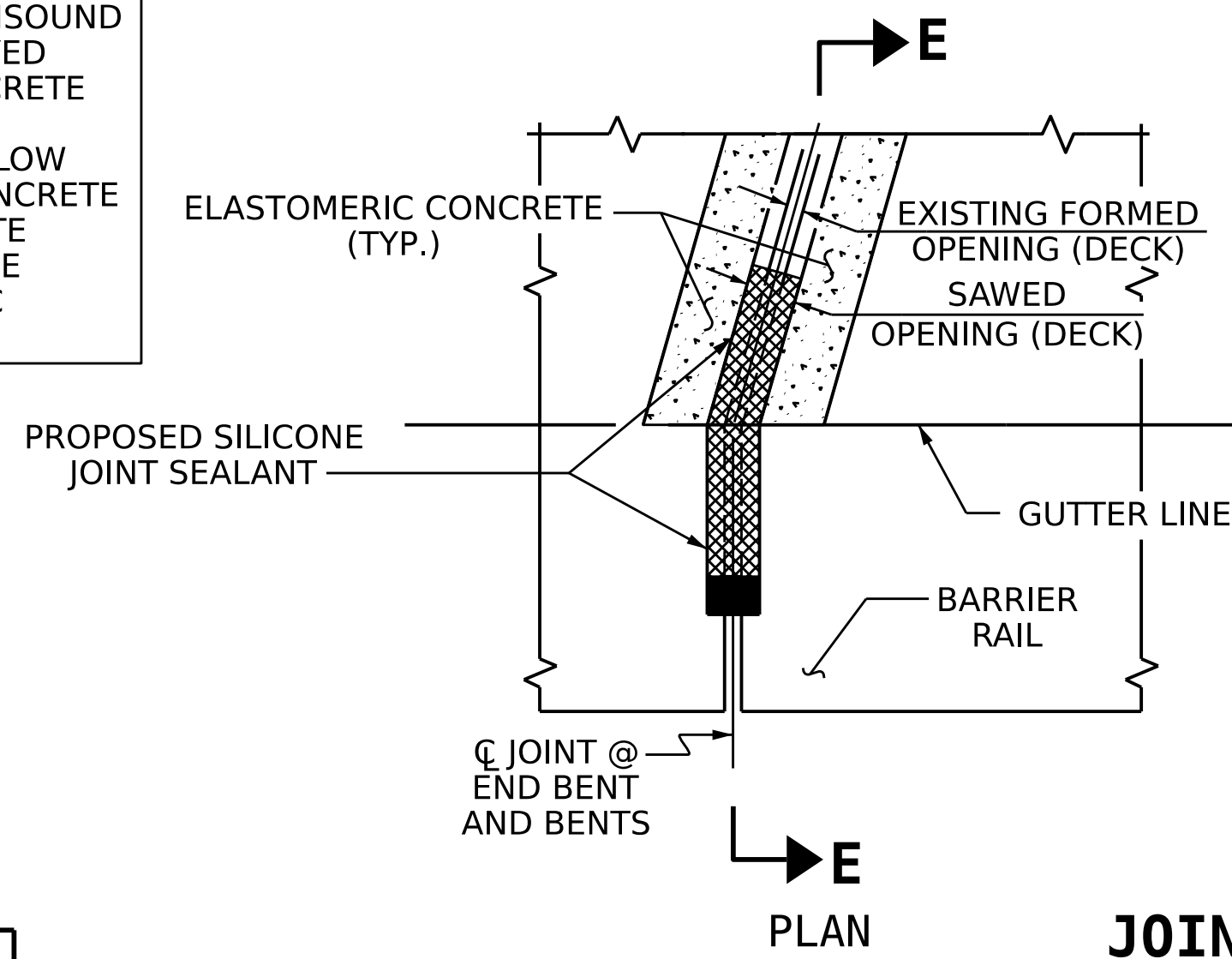


DEMOLISH BRIDGE JOINT AREA SUCH THAT THE BOTTOM OF THE EXCAVATION SHALL BE REASONABLY FLAT AND LEVEL AND TO THE NECESSARY DEPTH, SUCH THAT ELASTOMERIC CONCRETE SHALL BE FOUNDED ON CONCRETE OR REPAIR CONCRETE SUBSTRATE.

**JOINT INSTALLATION SEQUENCE AT BENTS**

**SECTION B-B**

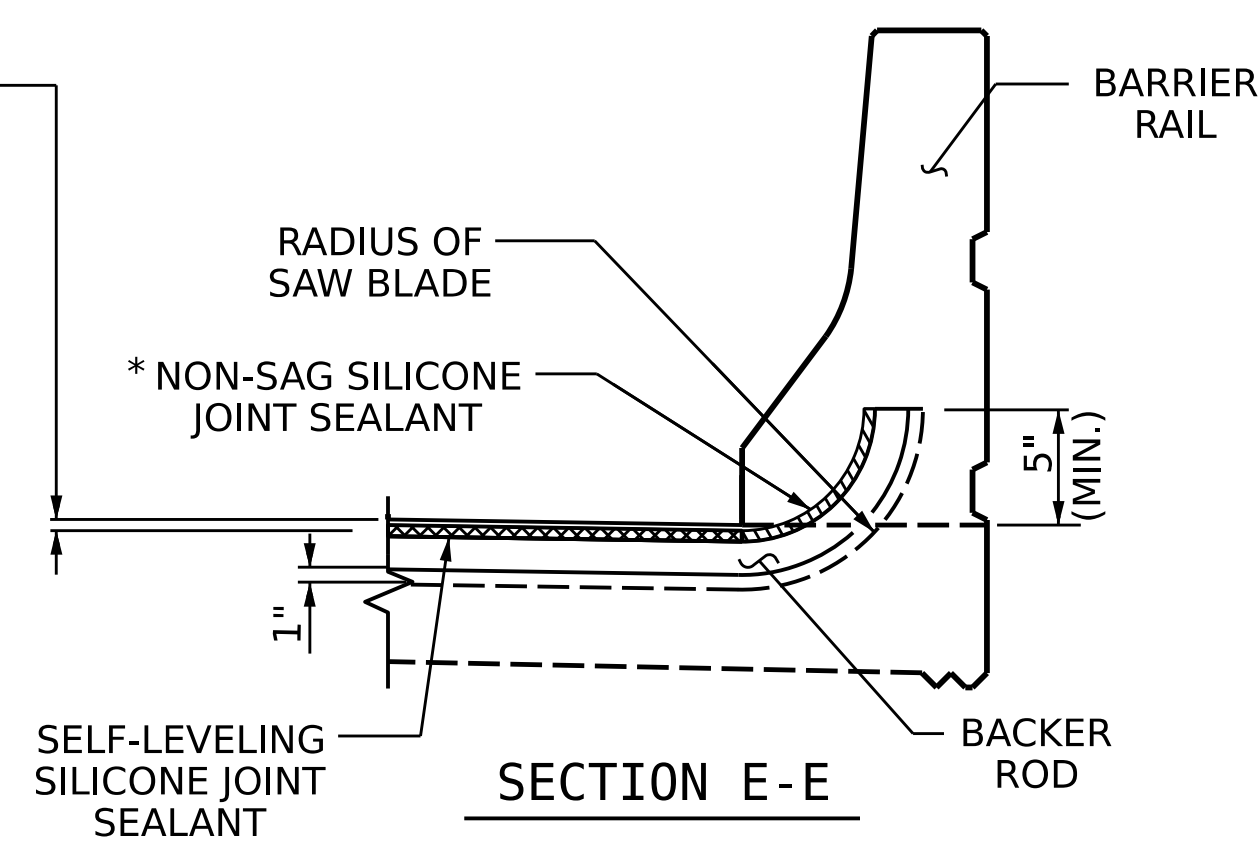
IF THE EMBEDDED PORTION OF THE EXISTING PLASTIC WATERSTOP IS EXPOSED DURING REMOVAL OF UNSOUND CONCRETE, OR IF UNSOUND CONCRETE IS REMOVED WITHIN 2" OF THE WATERSTOP, THE ENTIRE CONCRETE DEPTH TO THE WATERSTOP SHALL BE REMOVED. IF SUCH EXCAVATION EXTENDS MORE THAN 2" BELOW THE BOTTOM OF THE PLANNED ELASTOMERIC CONCRETE HEADER, AS SHOWN, APPROVED REPAIR CONCRETE SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE ELASTOMERIC CONCRETE.



**JOINT DETAIL AT BARRIER RAIL**

\* NON-SAG SILICONE JOINT SEALANT TO BE PLACED AND ALLOWED TO SET, PRIOR TO PLACEMENT OF SELF-LEVELING SILICONE JOINT SEALANT.

SILICONE JOINT SEALANT SHALL BE RECESSED 1/2" BELOW DECK SURFACE



**NOTES**

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.

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.

FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS.

SILICONE JOINT 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 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.

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.8 CF	
POURABLE SILICONE JOINT SEALANT	133.6 LF	

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
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STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

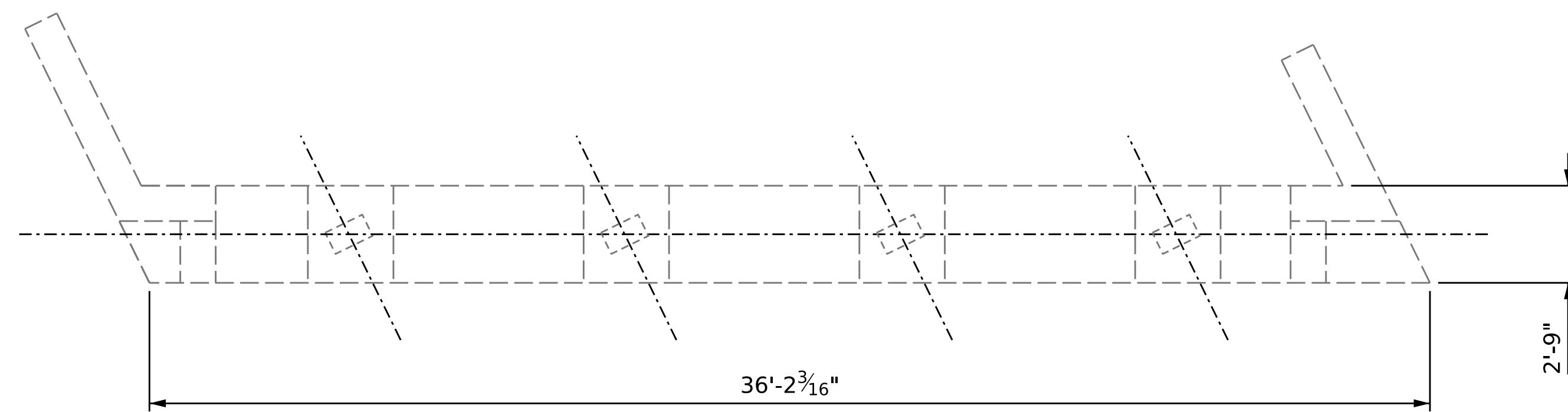
**JOINT REPAIR DETAILS**



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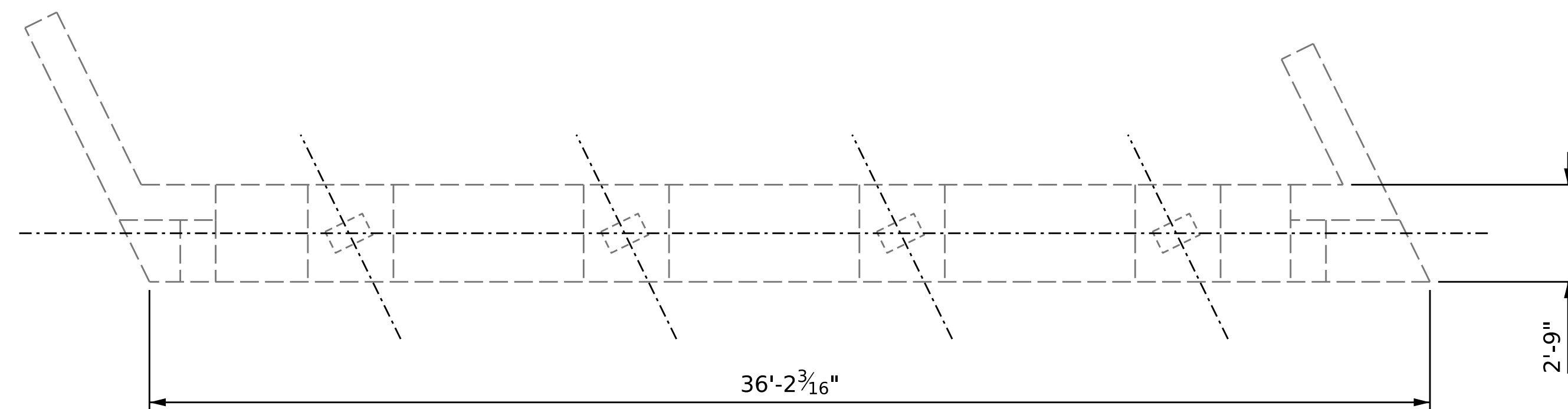


PLAN  
(TOP OF CAP)

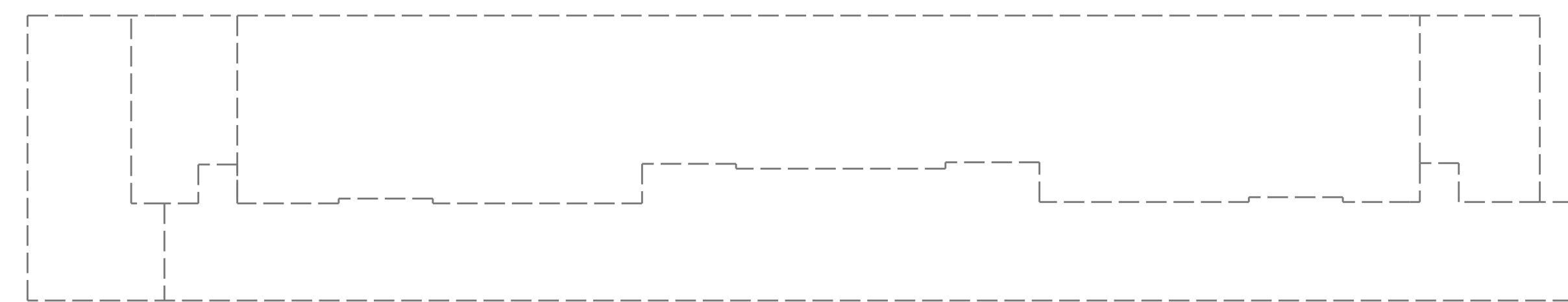


ELEVATION  
(LOOKING NORTH)

**END BENT 1**



PLAN  
(TOP OF CAP)



ELEVATION  
(LOOKING SOUTH)

**END BENT 2**

**REPAIR QUANTITY TABLE**

REPAIRS - END BENTS	QUANTITIES			
	ESTIMATE		ACTUAL	
	AREA SF	VOLUME CF	AREA SF	VOLUME CF
<b>SHOTCRETE REPAIRS</b>				
CAP	0	0		
CURTAIN WALL	0	0		
WINGWALL				
<b>CONCRETE REPAIRS</b>				
CAP	0	0		
CURTAIN WALL	0	0		
WINGWALL				

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, 1" BEHIND REBAR AND MIN. 2" CLEARANCE TO SAWCUT.

**NOTES**

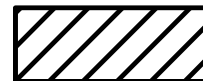

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

CONCRETE REPAIRS MAYBE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

**REPAIR KEY**

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
 BRIDGE NO. **970225**

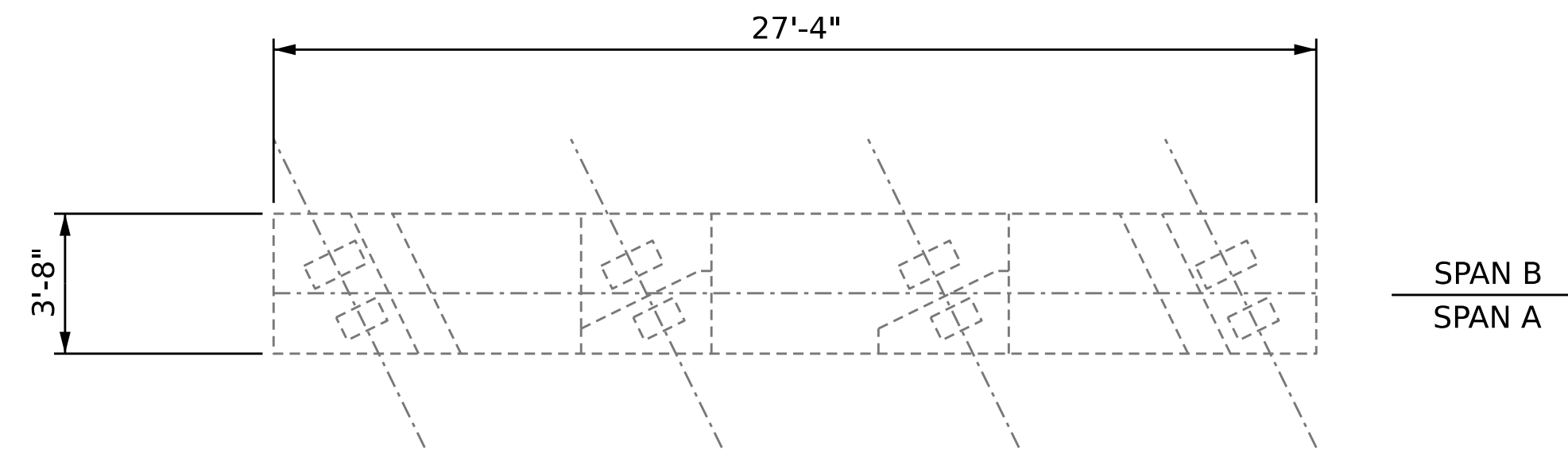


STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**SUBSTRUCTURE REPAIR  
 END BENT 1 &  
 END BENT 2**

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DRAWN BY : **G. AYES** DATE : **3/2022**  
 CHECKED BY : **A. G. ABRAHA** DATE : **5/2022**



**PLAN**  
TOP OF CAP

**NOTES**

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON 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 AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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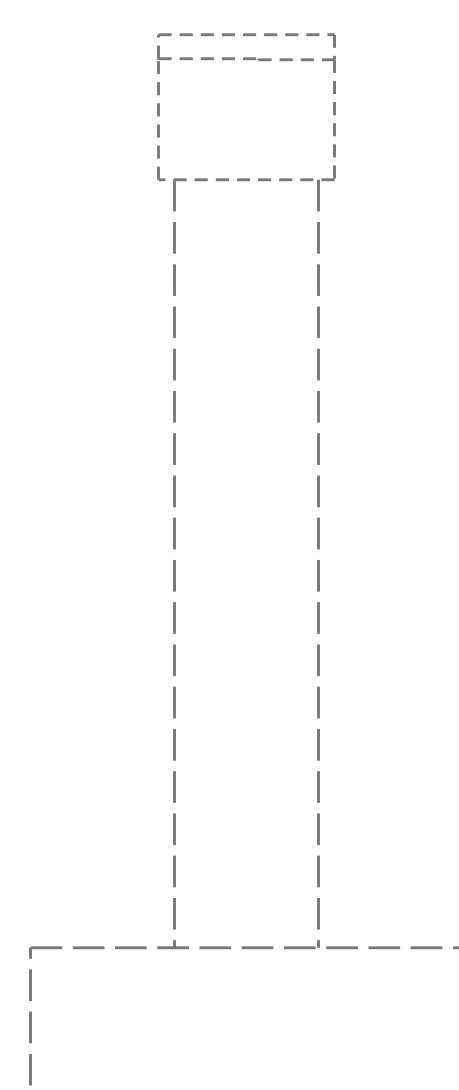
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CAP & COLUMN REPAIRS DETAILS, SEE TYPICAL CAP & COLUMN REPAIR DETAIL SHEET.

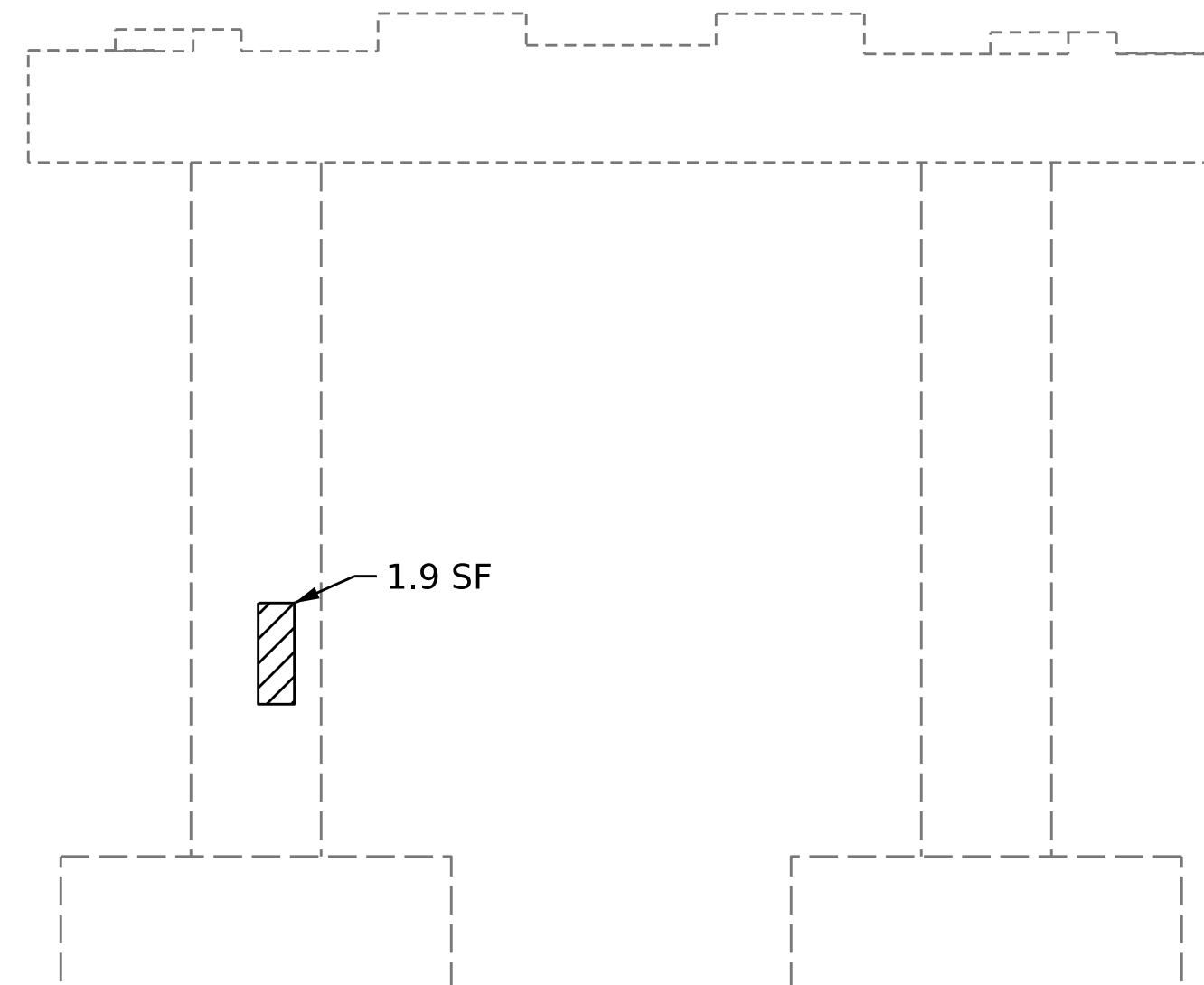
**REPAIR QUANTITY TABLE**

REPAIRS - BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	4.3	2.2		
COLUMN	2.9	1.5		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
COLUMN	0	0		

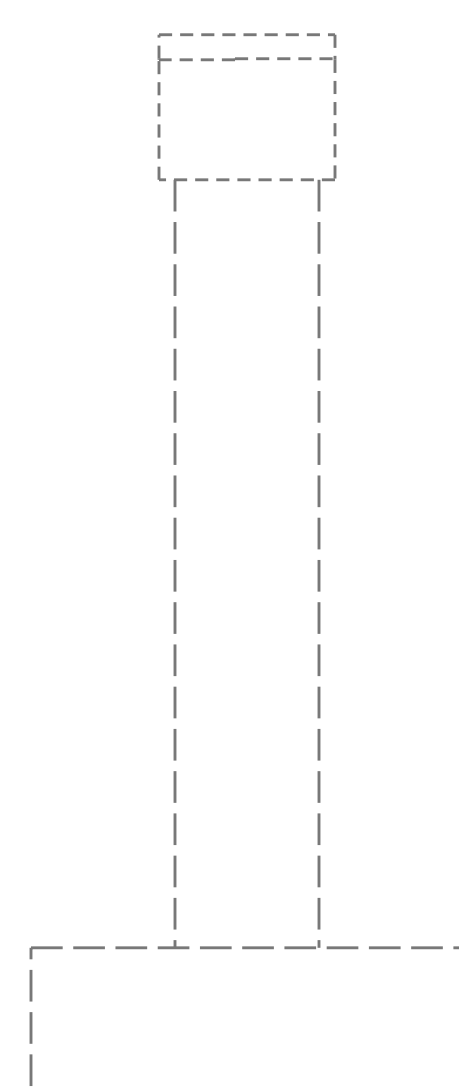
VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, 1" BEHIND REBAR AND MIN. 2" CLEARANCE TO SAWCUT.



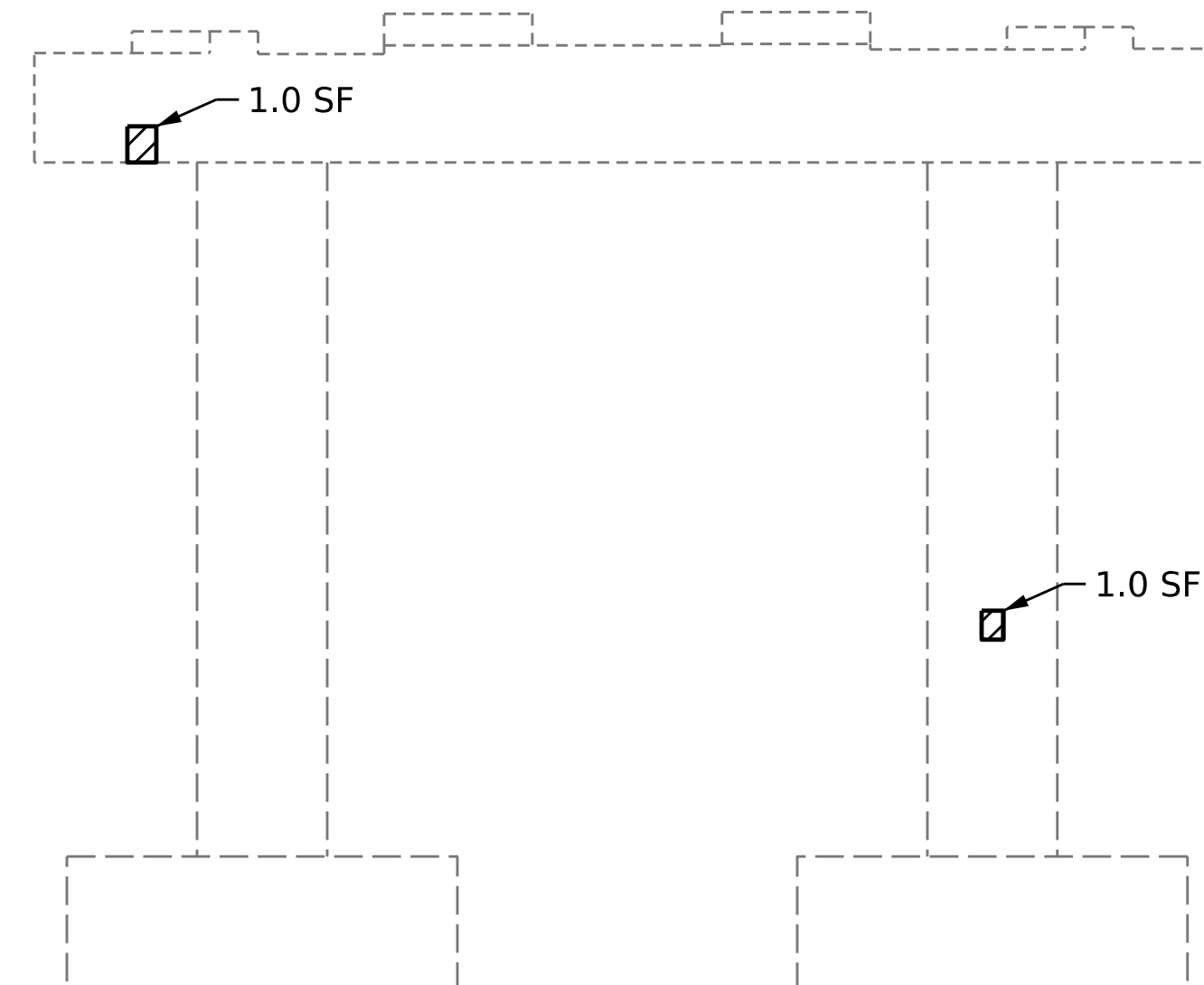
**END VIEW**  
EAST END



**ELEVATION**  
NORTH SIDE  
(LOOKING SOUTH)

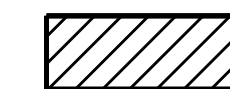


**END VIEW**  
WEST END



**ELEVATION**  
SOUTH SIDE  
(LOOKING NORTH)

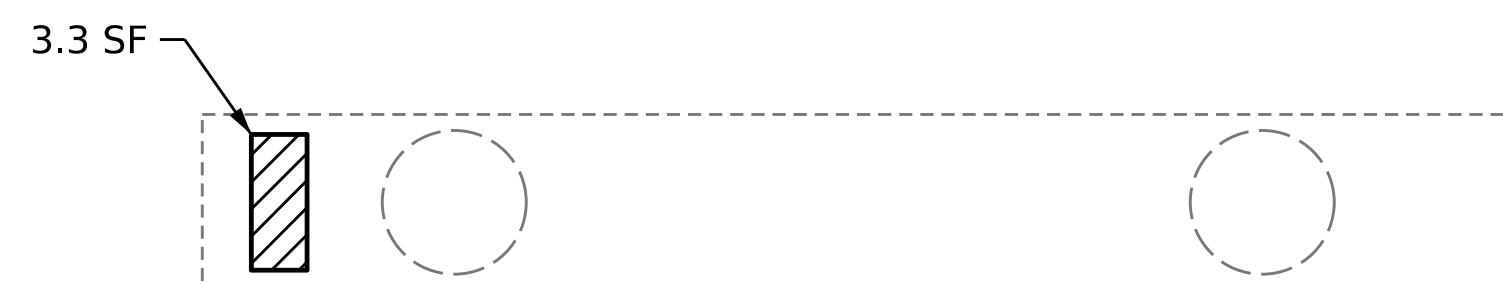
**REPAIR KEY**



SHOTCRETE REPAIR AREA



CONCRETE REPAIR AREA



**PLAN**  
BOTTOM OF CAP

PROJECT NO. **HI-0007**

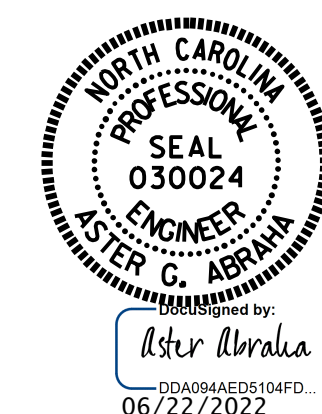
**WILSON** COUNTY

BRIDGE NO. **970225**

SHEET 1 OF 3

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**SUBSTRUCTURE  
REPAIR  
BENT 1**

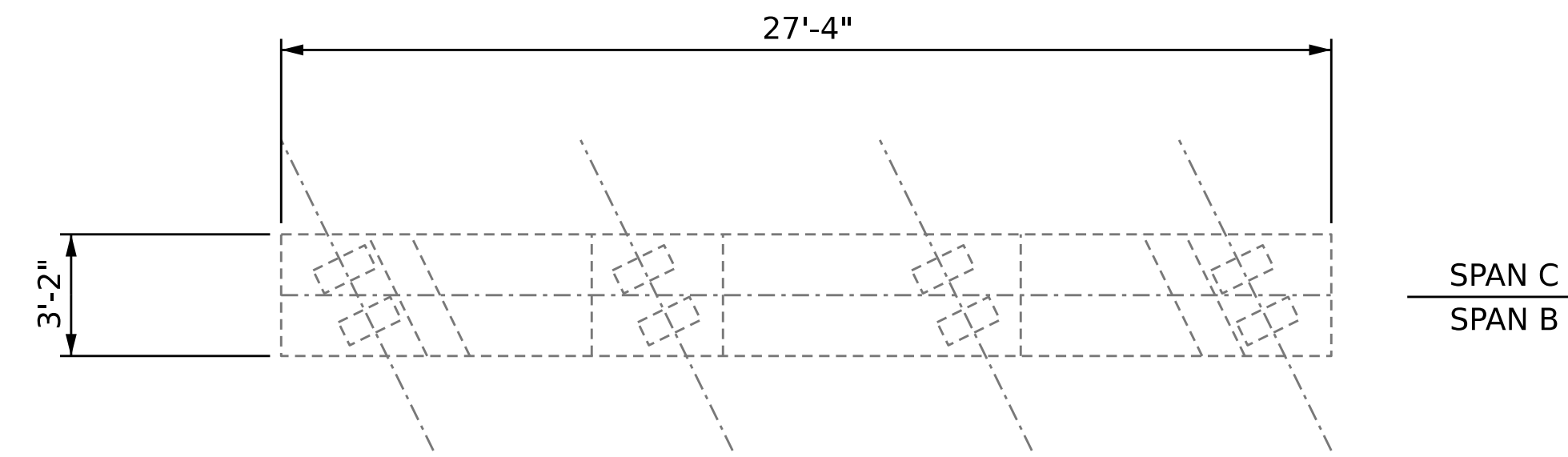


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DRAWN BY : **G. AYES** DATE : **4/2022**  
CHECKED BY : **A. Y. GODFREY** DATE : **5/2022**



**PLAN**  
TOP OF CAP

**NOTES**

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN BASED ON 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 AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

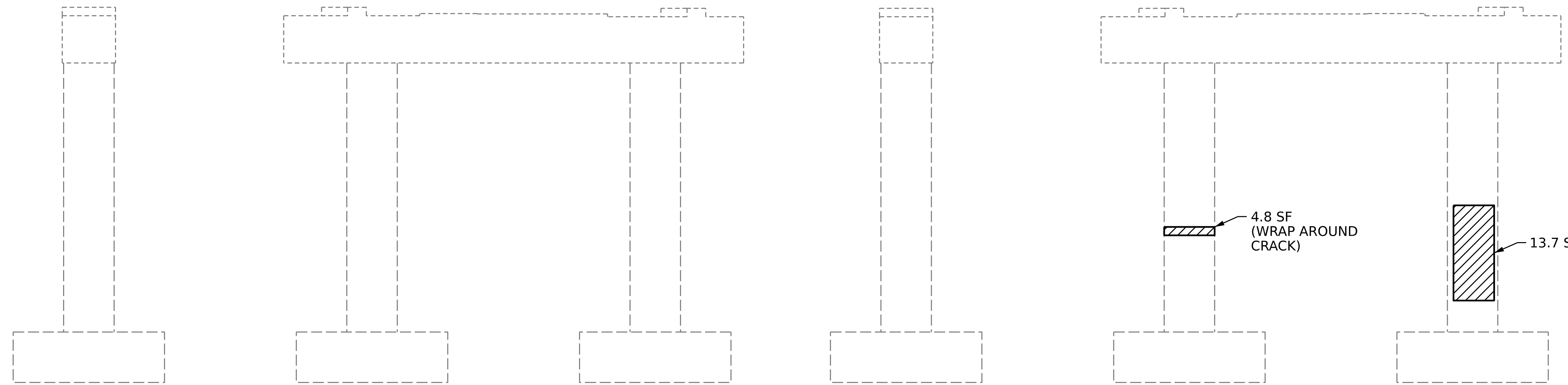
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CAP & COLUMN REPAIRS DETAILS, SEE TYPICAL CAP & COLUMN REPAIR DETAIL SHEET.

**REPAIR QUANTITY TABLE**

REPAIRS - BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
COLUMN	18.5	9.3		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
COLUMN	0	0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, 1" BEHIND REBAR AND MIN. 2" CLEARANCE TO SAWCUT.



**REPAIR KEY**

- SHOTCRETE REPAIR AREA
- CONCRETE REPAIR AREA

**END VIEW**  
EAST END

**ELEVATION**  
NORTH SIDE  
(LOOKING SOUTH)

**END VIEW**  
WEST END

**ELEVATION**  
SOUTH SIDE  
(LOOKING NORTH)



**PLAN**  
BOTTOM OF CAP

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
BRIDGE NO. **970225**

SHEET 2 OF 3



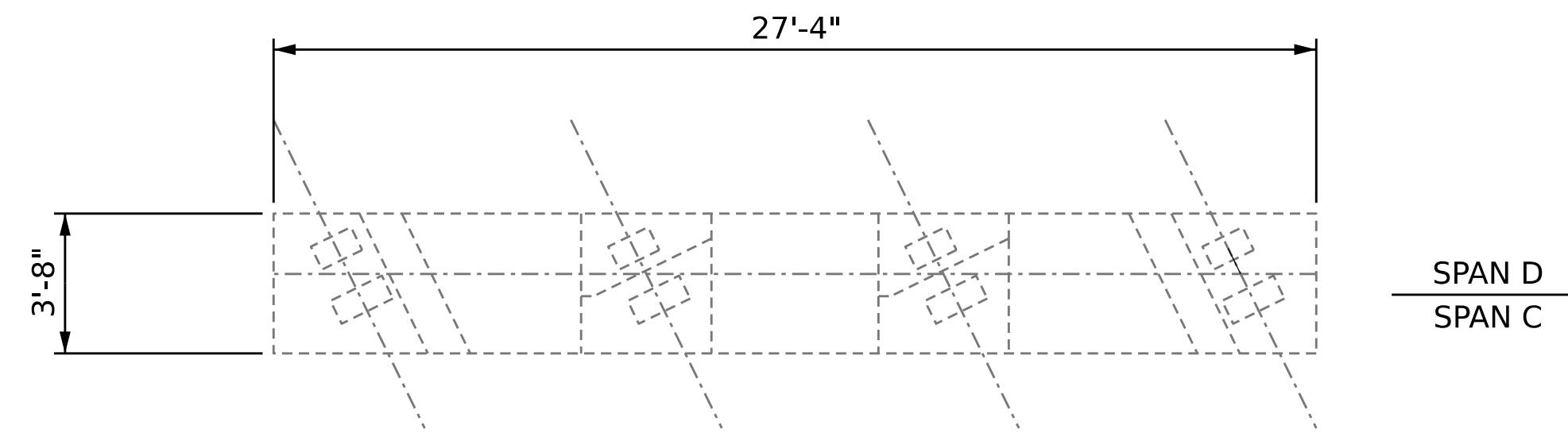
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DEPARTMENT OF TRANSPORTATION  
RALEIGH

**SUBSTRUCTURE  
REPAIR  
BENT 2**

REVISIONS					SHEET NO.
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1			3		S1-9
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DRAWN BY : G. AYES DATE : 4/2022  
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**PLAN**  
TOP OF CAP

**NOTES**

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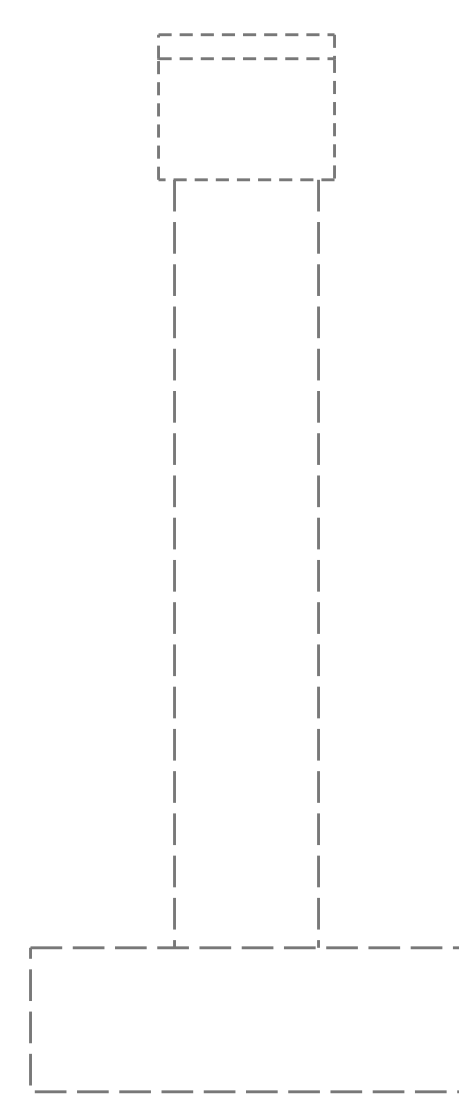
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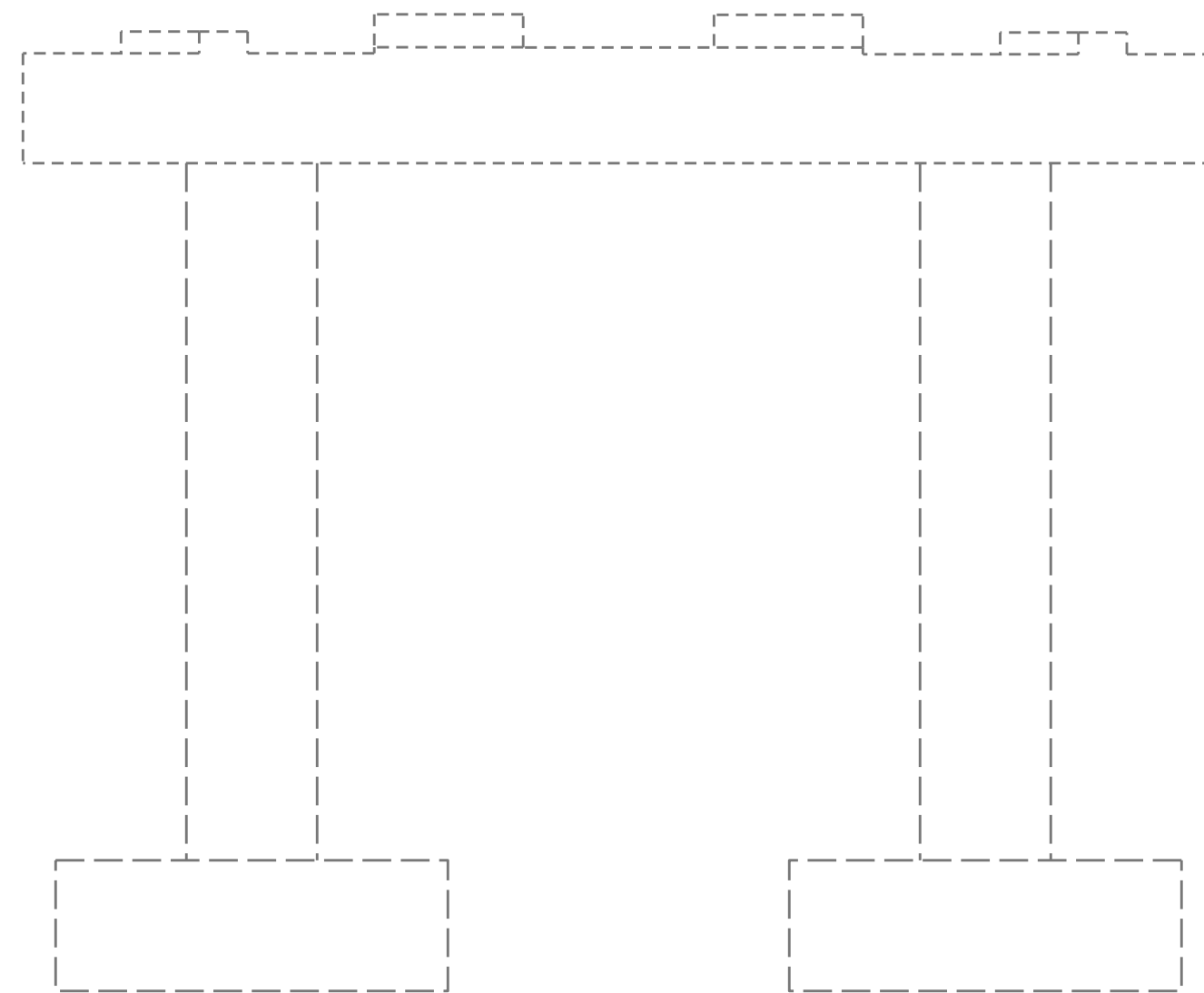
**REPAIR QUANTITY TABLE**

REPAIRS - BENT 3	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	1.0	0.5		
COLUMN	0	0		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
COLUMN	0	0		

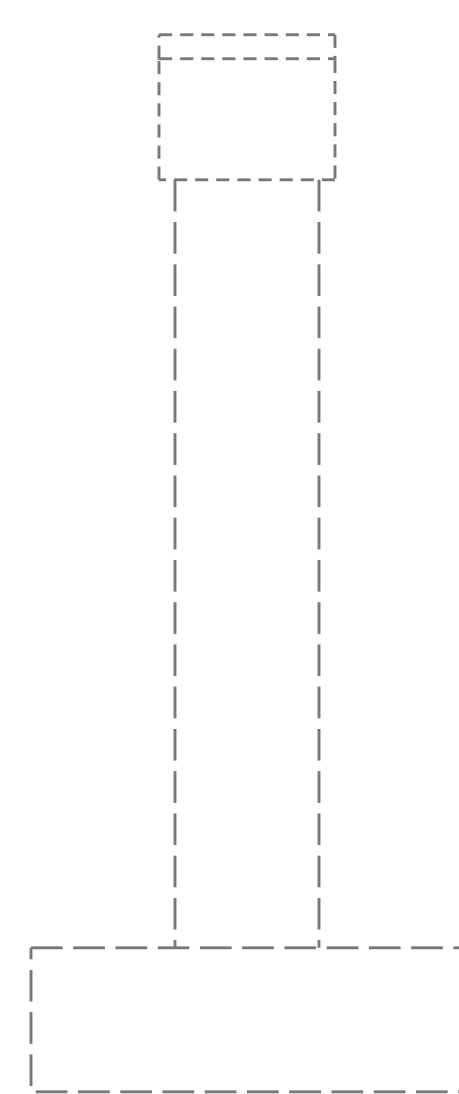
VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, 1" BEHIND REBAR AND MIN. 2" CLEARANCE TO SAWCUT.



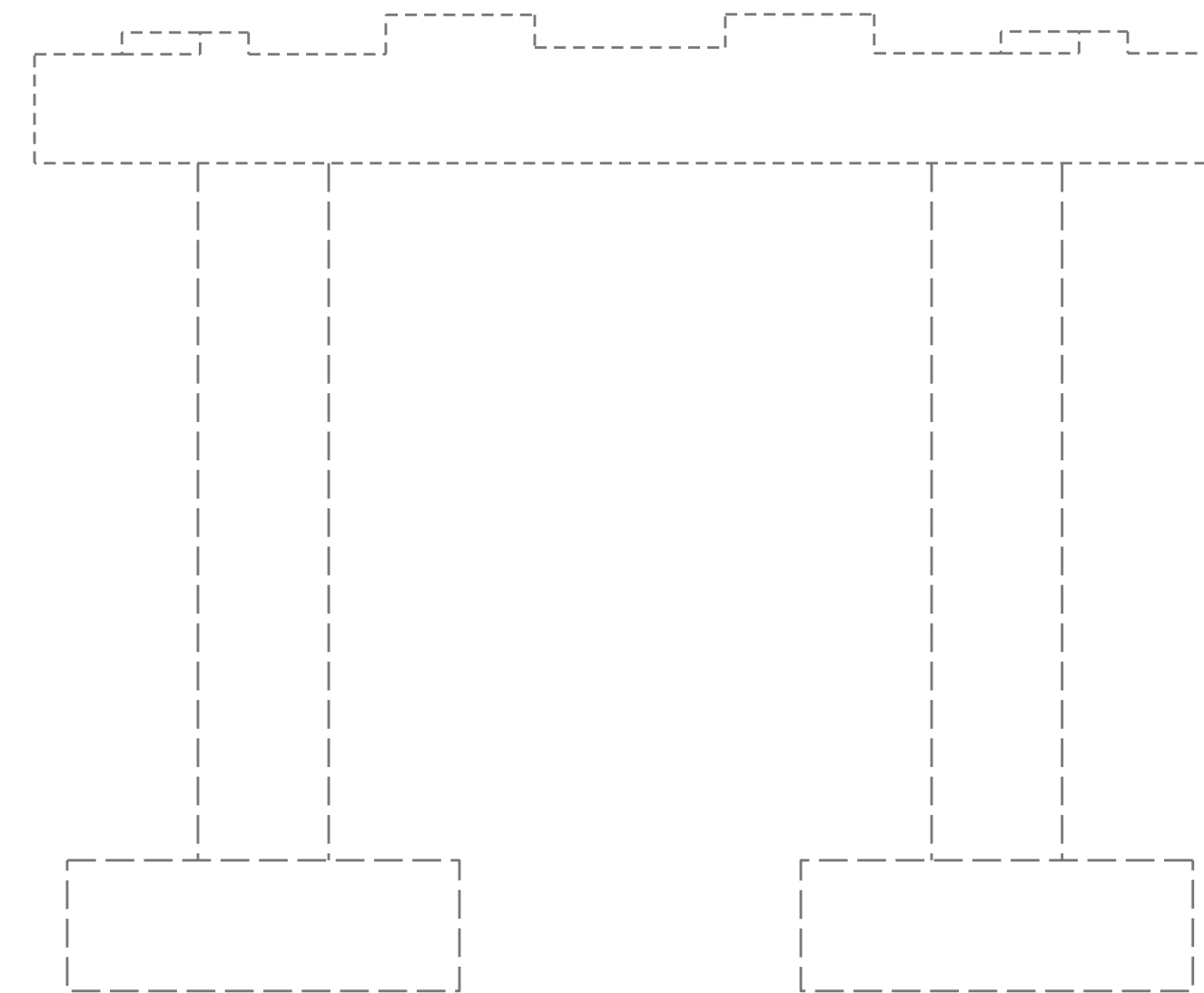
**END VIEW**  
EAST END



**ELEVATION**  
NORTH SIDE  
(LOOKING SOUTH)

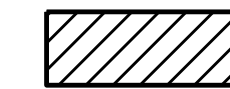


**END VIEW**  
WEST END

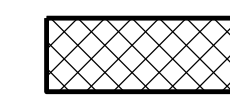


**ELEVATION**  
SOUTH SIDE  
(LOOKING NORTH)

**REPAIR KEY**



SHOTCRETE REPAIR AREA



CONCRETE REPAIR AREA



**PLAN**  
BOTTOM OF CAP

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
BRIDGE NO. **970225**

SHEET 3 OF 3



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**SUBSTRUCTURE  
REPAIR  
BENT 3**

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1			3			TOTAL SHEETS
2			4			11

DRAWN BY : **G. AYES** DATE : **4/2022**  
CHECKED BY : **A. Y. GODFREY/A. G. ABRAHA** DATE : **5/2022**

**NOTES**

TYPICAL BENT CAP REPAIRS ARE SHOWN. REPAIR DETAILS SIMILAR FOR END BENT CAPS AND STRUTS.

THE METHOD USED TO DELINEATE THE AREAS OF UNSOUND CONCRETE TO BE REPAIRED SHALL NOT PERMANENTLY MARK THE CONCRETE, LEAVE ANY RESIDUE AFTER REMOVAL OR REQUIRE HARSH CHEMICALS TO REMOVE.

THE CONTRACTOR SHALL REMOVE THE DETERIORATED CONCRETE IN ACCORDANCE WITH THE GUIDELINES SET IN THESE NOTES, IN THE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS.

REMOVE UNSOUND CONCRETE TO THE EXTENT NECESSARY, MINIMUM OF 1" BEHIND REBAR AND MINIMUM OF 2" CLEARANCE TO SAWCUT.

NO MORE THAN ONE-THIRD OF THE CAP OR COLUMN CROSS SECTIONAL AREA SHALL BE REMOVED AT ONE TIME. SHOULD IT BECOME NECESSARY TO REMOVE MORE THAN 30% OF A CAP OR COLUMN CROSS SECTIONAL AREA, NOTIFY THE ENGINEER PRIOR TO PROCEEDING.

SIMULTANEOUS REMOVAL OF UNSOUND CONCRETE MAY BE PERMITTED ON MORE THAN ONE FACE OF A CAP AND/OR COLUMN, IF THE AREAS OF REMOVAL ARE NOT ADJACENT TO OR DIRECTLY OPPOSITE ONE ANOTHER. IF REMOVAL EXTENDS MORE THAN 1 1/2" BEHIND THE MAIN REINFORCING BARS, NOTIFY THE ENGINEER PRIOR TO PROCEEDING.

REINFORCING STEEL WHICH IS DETERMINED BY THE ENGINEER TO BE REPLACED, SHALL BE REMOVED TO A POINT WHERE IT IS SOUND. THE PATCH SHALL EXTEND A SUFFICIENT DISTANCE BEYOND THIS POINT TO DEVELOP A SPLICE LENGTH SPECIFIED IN THE TABLE ON THIS SHEET.

THE #4 "U" DOWELS ARE REQUIRED ONLY AROUND THE ANCHOR BOLTS. THE EXISTING REINFORCING STEEL IN THE PEDESTAL WALL SHALL BE CLEANED, STRAIGHTENED AND REMAIN IN PLACE.

FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS, SEE STANDARD SPECIFICATIONS.

COAT ALL REPAIR SURFACE AREAS ON THE TOP OF CAPS, INCLUDING CHAMFERS, WITH EPOXY PROTECTIVE COATING, OVERLAPPING THE REPAIR AREA BY A MINIMUM OF 3" ON ALL POSSIBLE SIDES.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

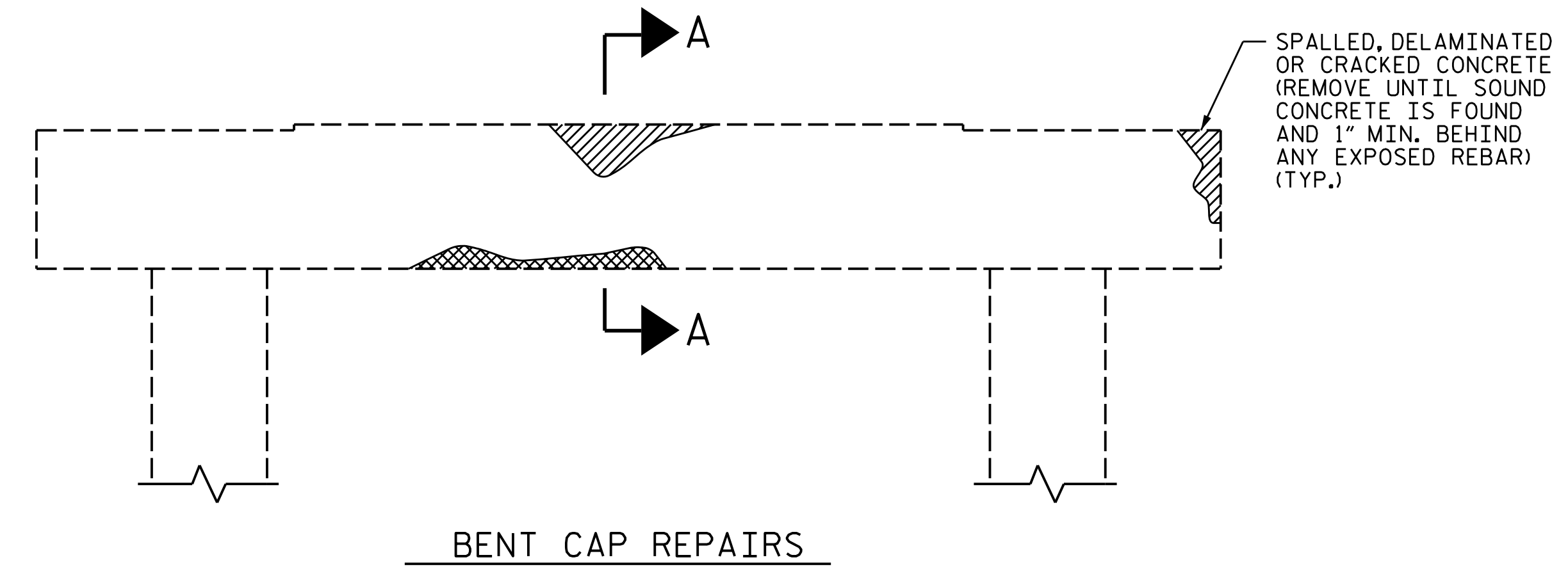
PROJ. NO. HI-0007  
WILSON COUNTY  
 BRIDGE NO. 970225

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 STANDARD  
 TYPICAL CAP  
 AND COLUMN  
 REPAIR DETAILS

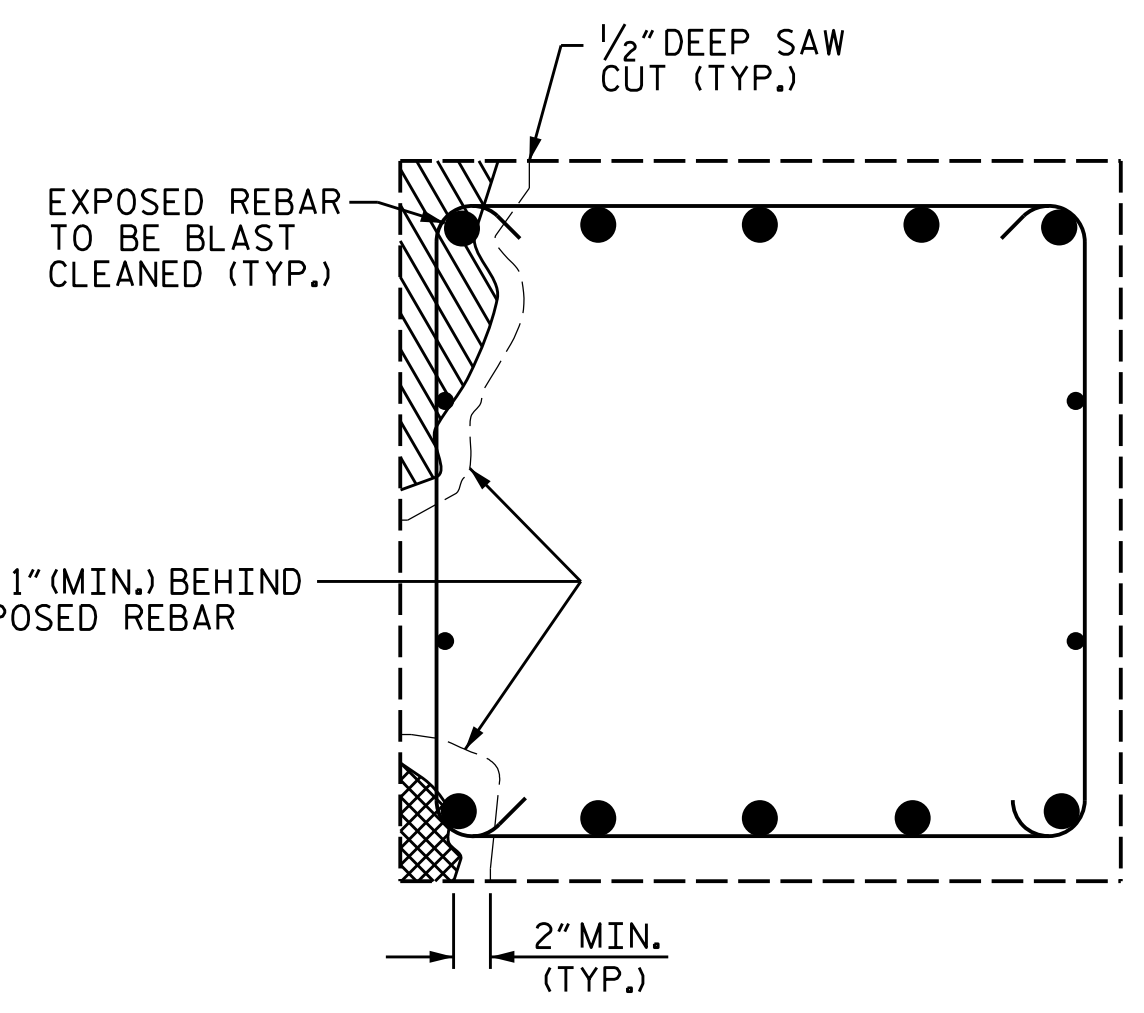


REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-11
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2			4			11

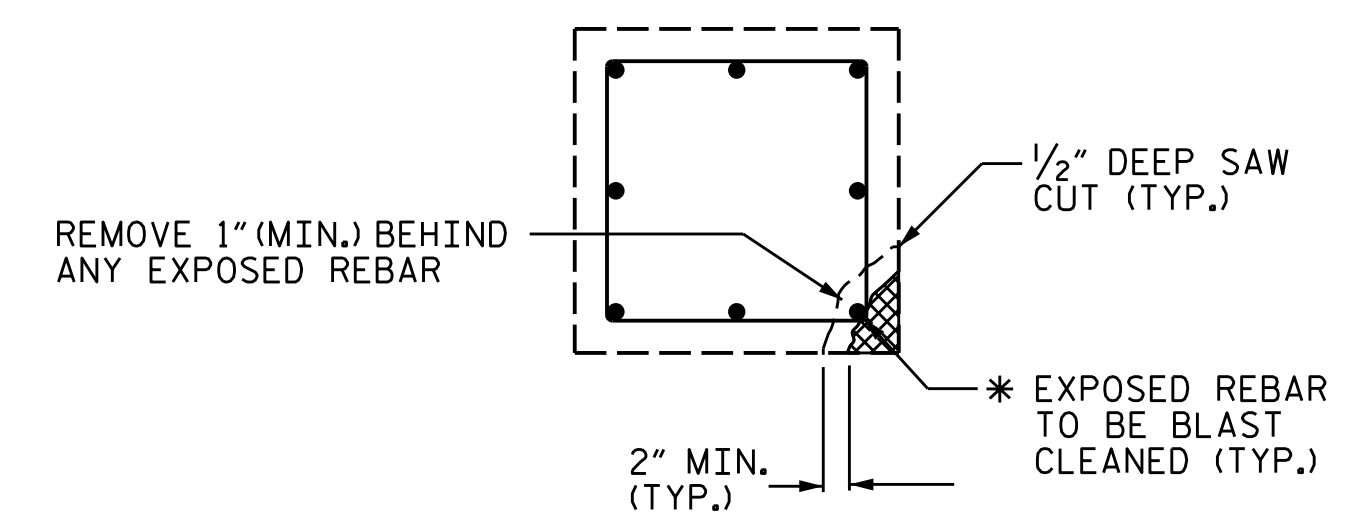
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**BENT CAP REPAIRS**



**SECTION A-A**

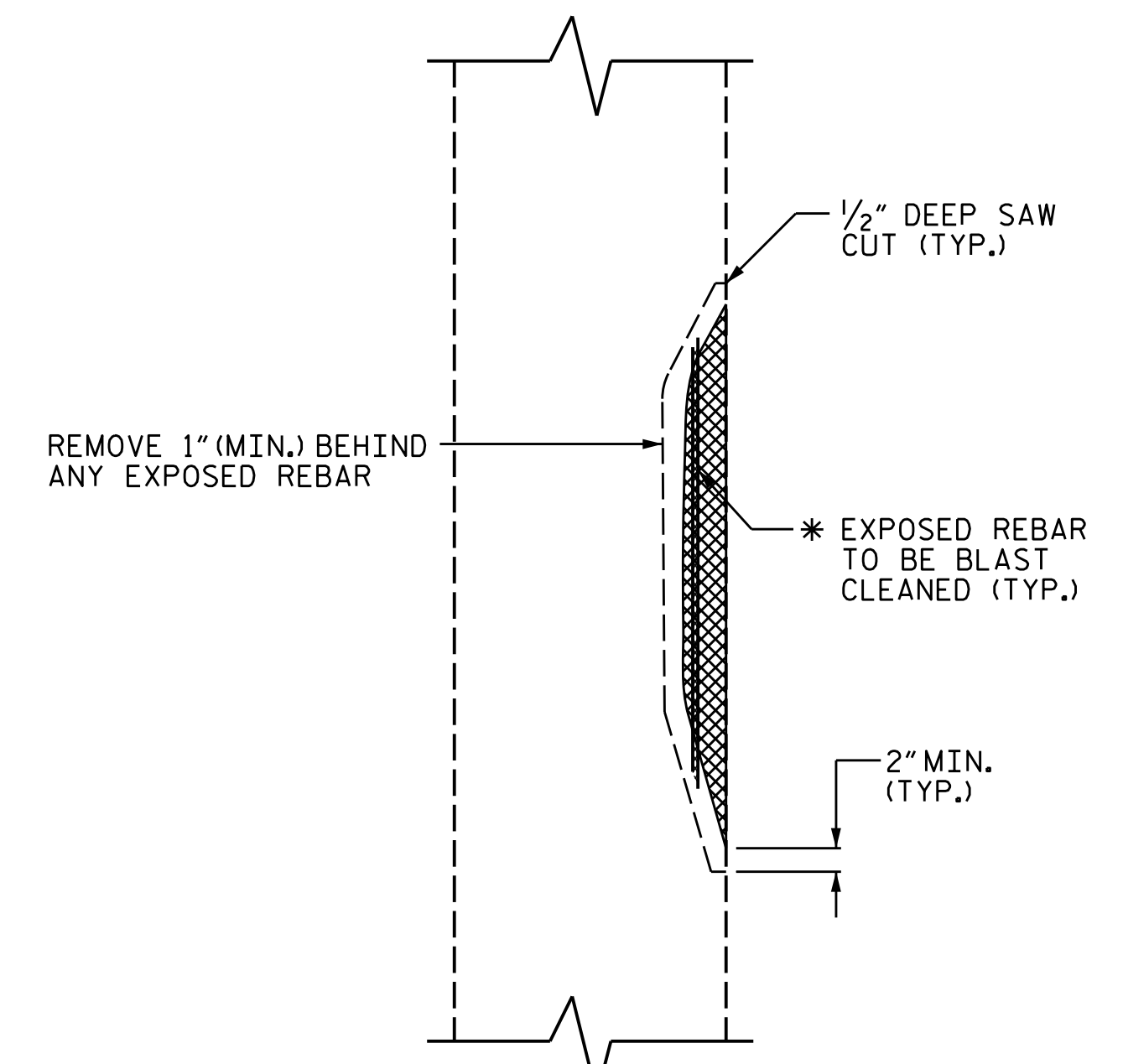


**PLAN OF COLUMN**



**REPAIR KEY**

**CAP REPAIR**

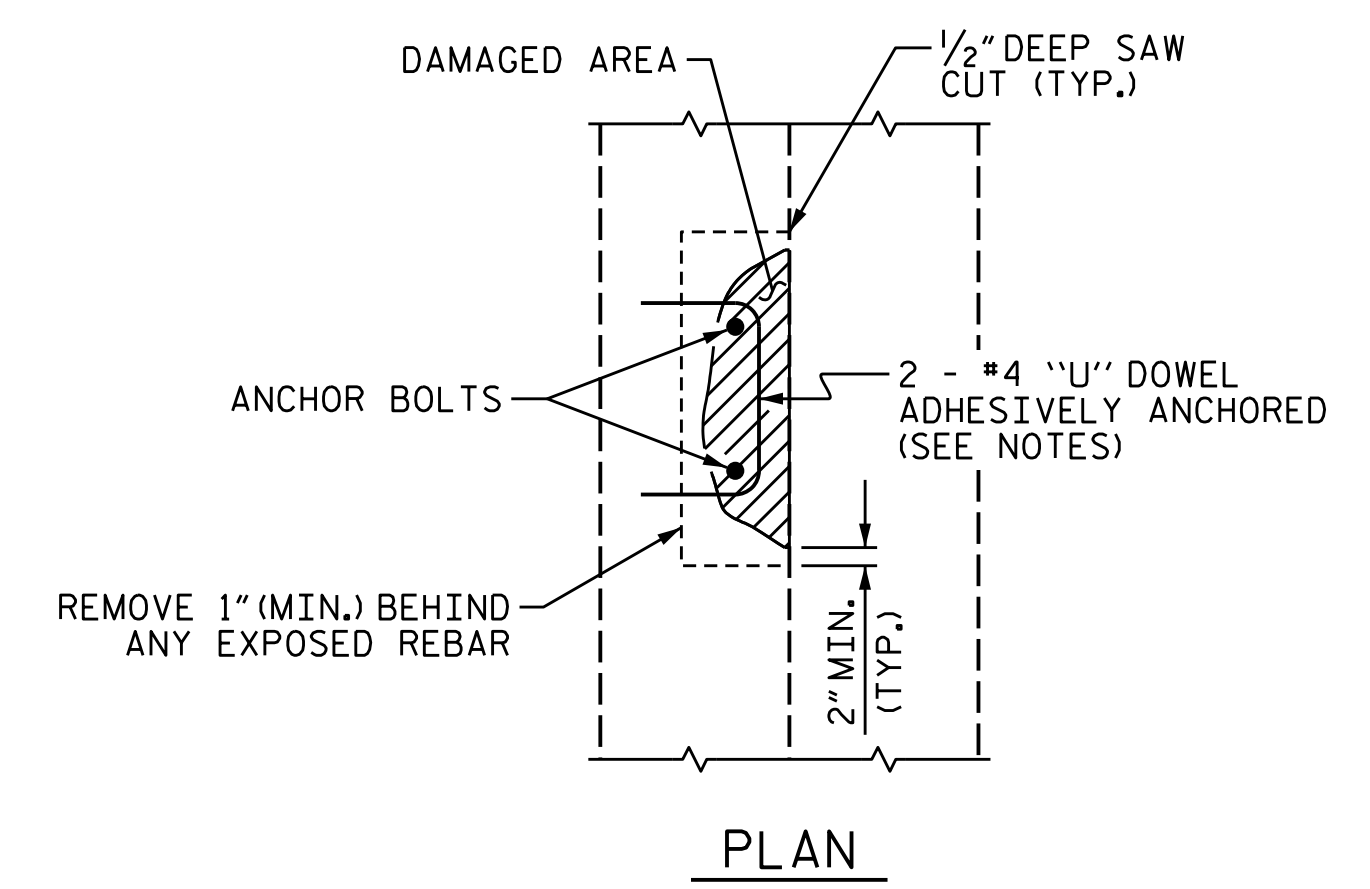


**ELEVATION OF COLUMN**

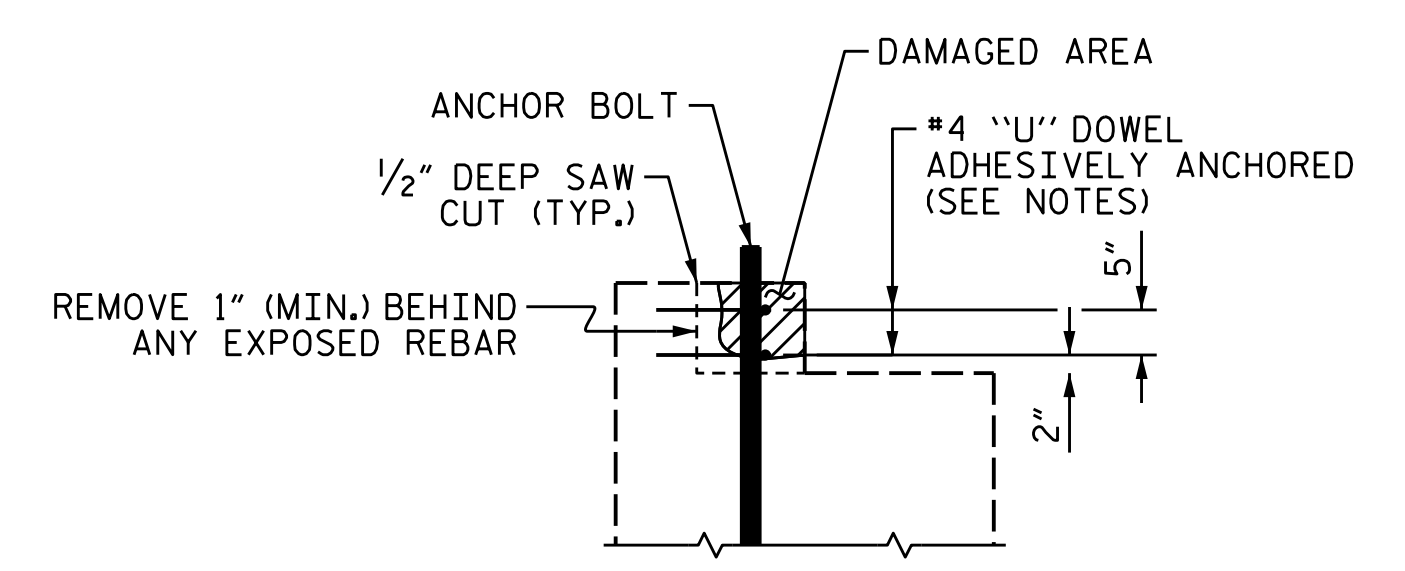
**COLUMN REPAIR**

\* REPAIR LENGTH SHALL NOT EXCEED 10 FEET.

BAR SIZE	MIN. SPLICE LENGTH
#4	2'-4"
#5	2'-9"
#6	4'-0"
#7	5'-3"
#8	6'-9"
#9	8'-6"
#10	10'-11"
#11	13'-4"



**PLAN**



**ELEVATION**

**PEDESTAL WALL REPAIR**

ASSEMBLED BY : G. A. DATE : 5/2022  
 CHECKED BY : A. G. A. DATE : 5/2022  
 DRAWN BY : NAP 8/18  
 CHECKED BY :

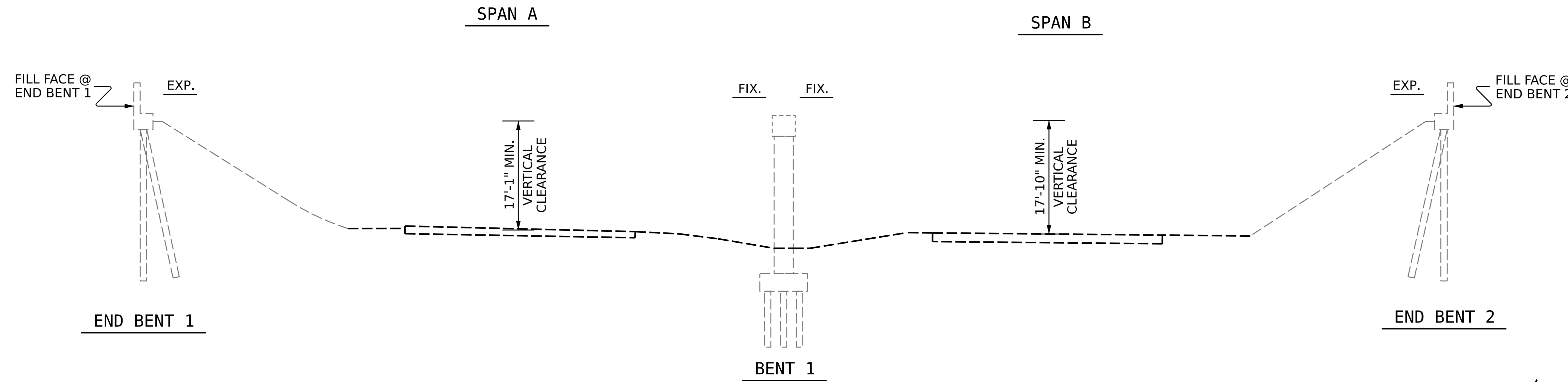


**NOTES**

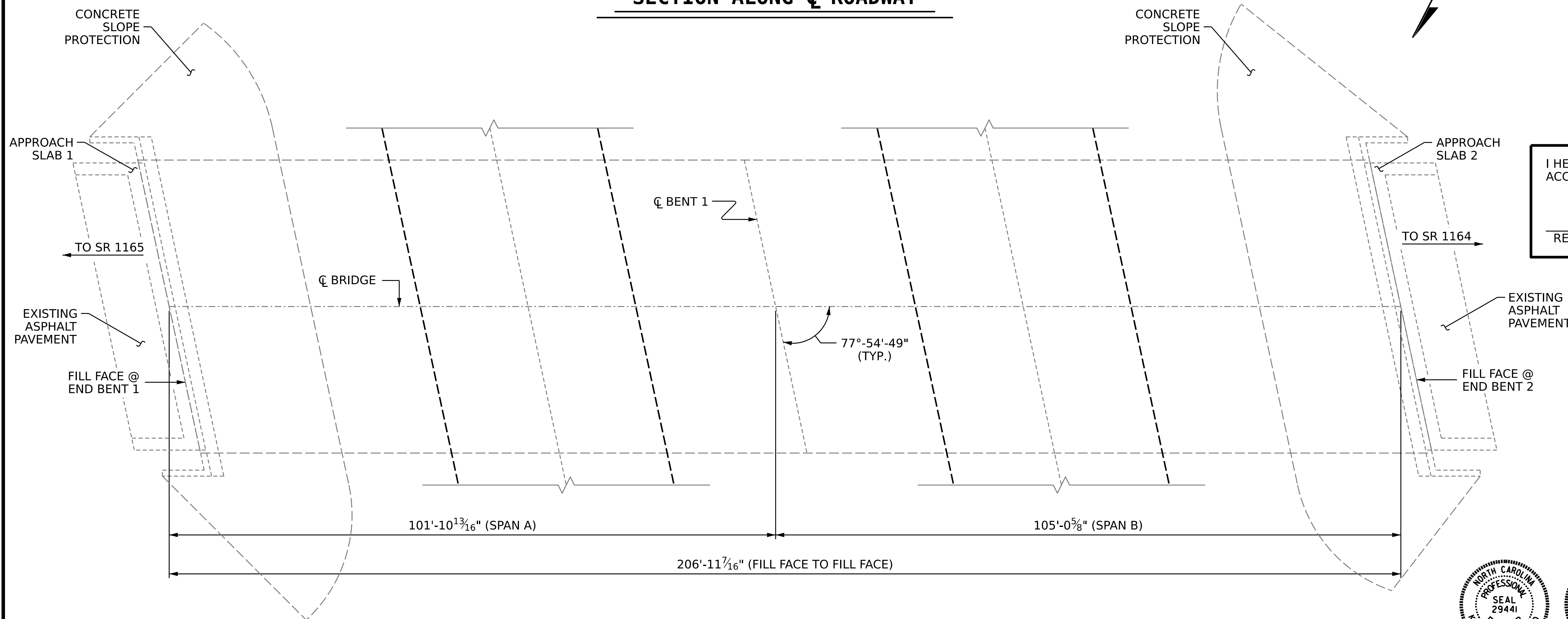
- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 05/20/2020.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

**SCOPE OF WORK**

- BRIDGE DECK SURFACE PREPARATION.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE, INSTALL BACKER ROD, AND POURABLE SILICONE JOINT SEALANT.
- REPAIR PRESTRESSED CONCRETE GIRDERS.
- REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE AREAS FOR SHOTCRETE REPAIRS.
- PERFORM SHOTCRETE REPAIRS.
- PROPERLY PREPARE AND SEAL CRACKING IN SLOPE PROTECTION WITH SILICONE JOINT SEALANT.



**SECTION ALONG  $\bar{C}$  ROADWAY**



I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
 BRIDGE NO. **970244**

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GENERAL DRAWING**

FOR BRIDGE 244 ON SR 1163  
 OVER US 264 WILSON BYPASS  
 BETWEEN SR 1165 AND SR 1164



**PLAN**  
 (FOOTINGS, COLUMNS & PILES NOT SHOWN IN PLAN VIEW FOR CLARITY)

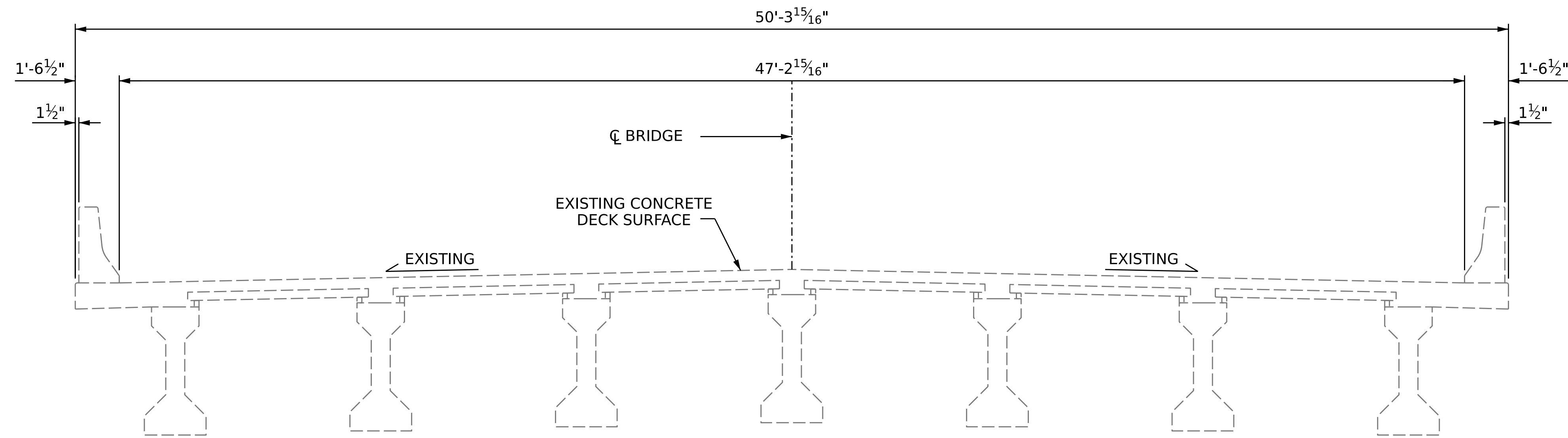
DRAWN BY : G. AYES DATE : 4/2022  
 CHECKED BY : A. G. ABRAHA DATE : 5/2022  
 DESIGN ENGINEER OF RECORD: -- DATE : --

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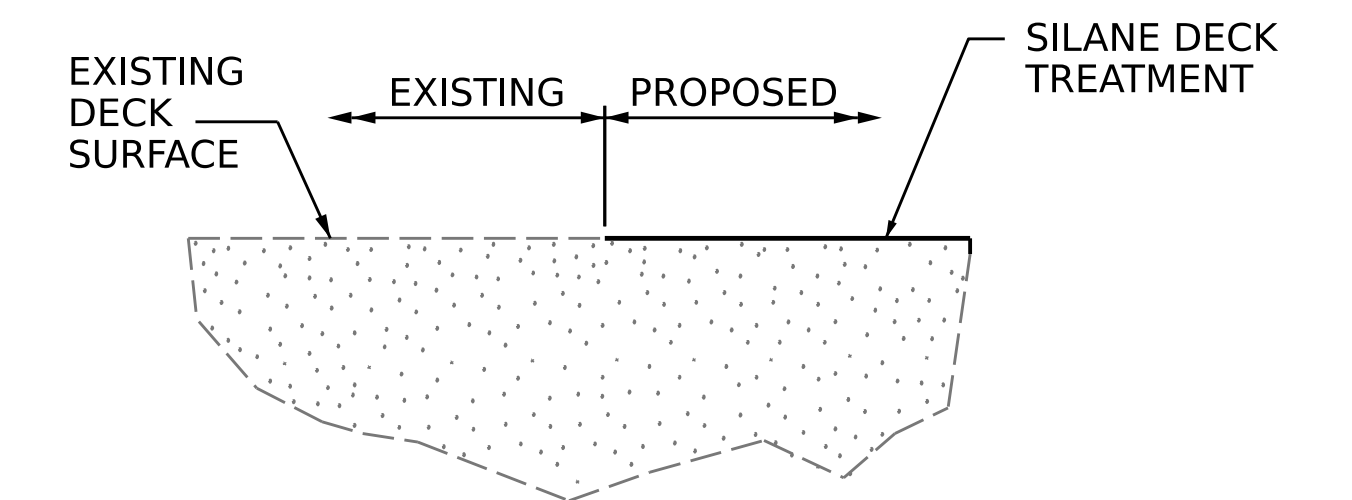
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**NOTES**

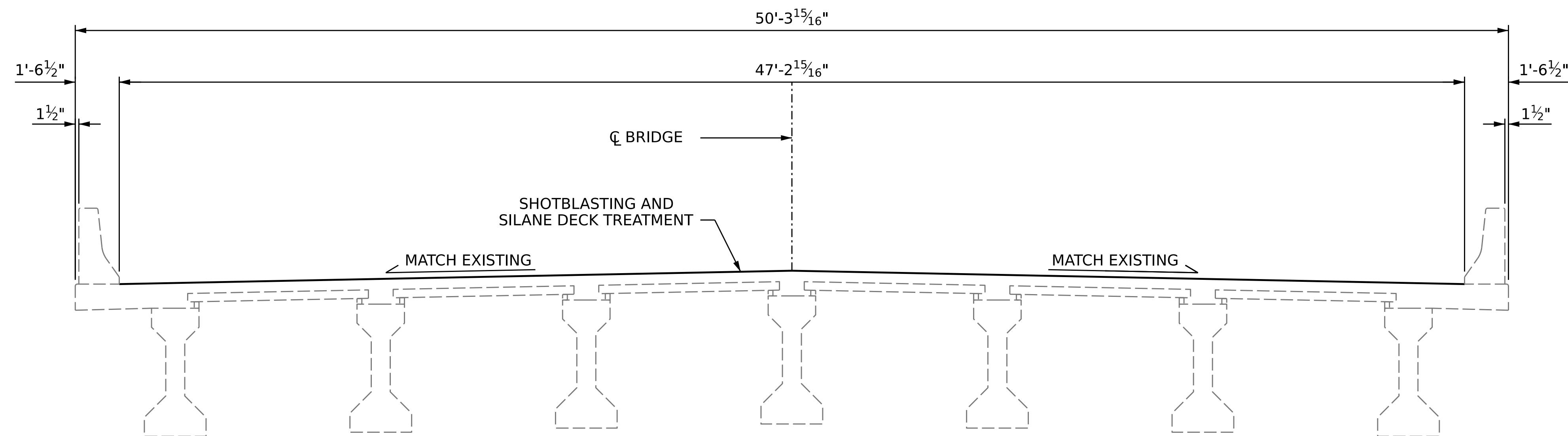
SEE TRAFFIC PLANS FOR LANE WIDTH, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.



**TYPICAL SECTION**  
(EXISTING)



**SILANE DECK TREATMENT DETAIL**



**TYPICAL SECTION**  
(PROPOSED)

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
 BRIDGE NO. **970244**



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**SUPERSTRUCTURE**  
 TYPICAL SECTION  
 AND SILANE DECK  
 TREATMENT DETAILS

DRAWN BY : G. AYES DATE : 4/2022  
 CHECKED BY : A. G. ABRAHA DATE : 5/2022  
 DESIGN ENGINEER OF RECORD: -- DATE : --

6/22/2022  
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 aabr\_aha


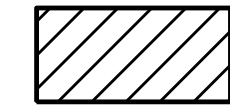
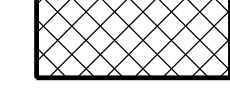
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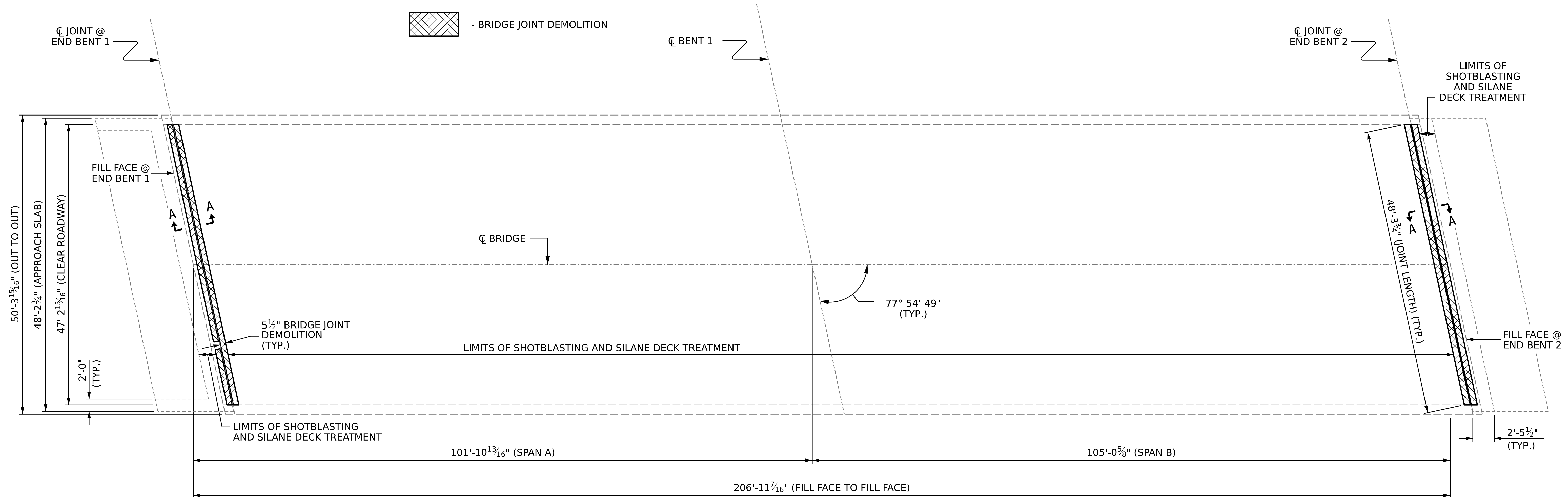
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NO.	BY:	DATE:	NO.	BY:	DATE:	S2-2
1			3			TOTAL SHEETS
2			4			7

**SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS**

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,091.4 SY	
SILANE DECK TREATMENT	1,091.4 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	88.6 SF	

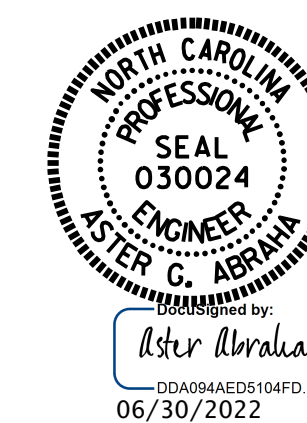
**REPAIR KEY**

-  - SHOTBLASTING AND SILANE DECK TREATMENT
-  - CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
-  - BRIDGE JOINT DEMOLITION



**PLAN OF SPANS**

PROJECT NO. **HI-0007**  
**WILSON** COUNTY  
 BRIDGE NO. **970244**



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SILANE DECK TREATMENT**

DRAWN BY : G. AYES DATE : 4/2022  
 CHECKED BY : A. G. ABRAHA DATE : 5/2022  
 DESIGN ENGINEER OF RECORD : -- DATE : --

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1			3			TOTAL SHEETS
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