

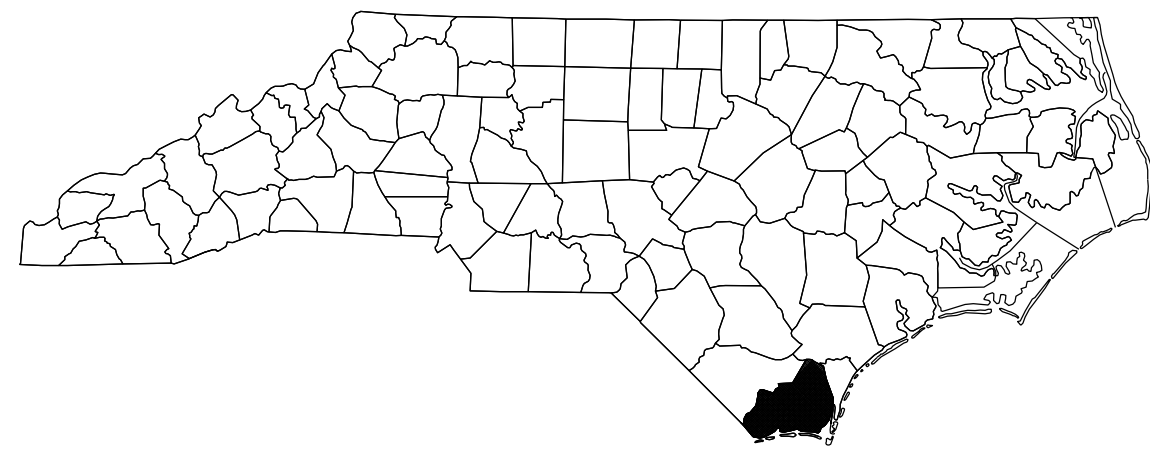
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BRUNSWICK COUNTY

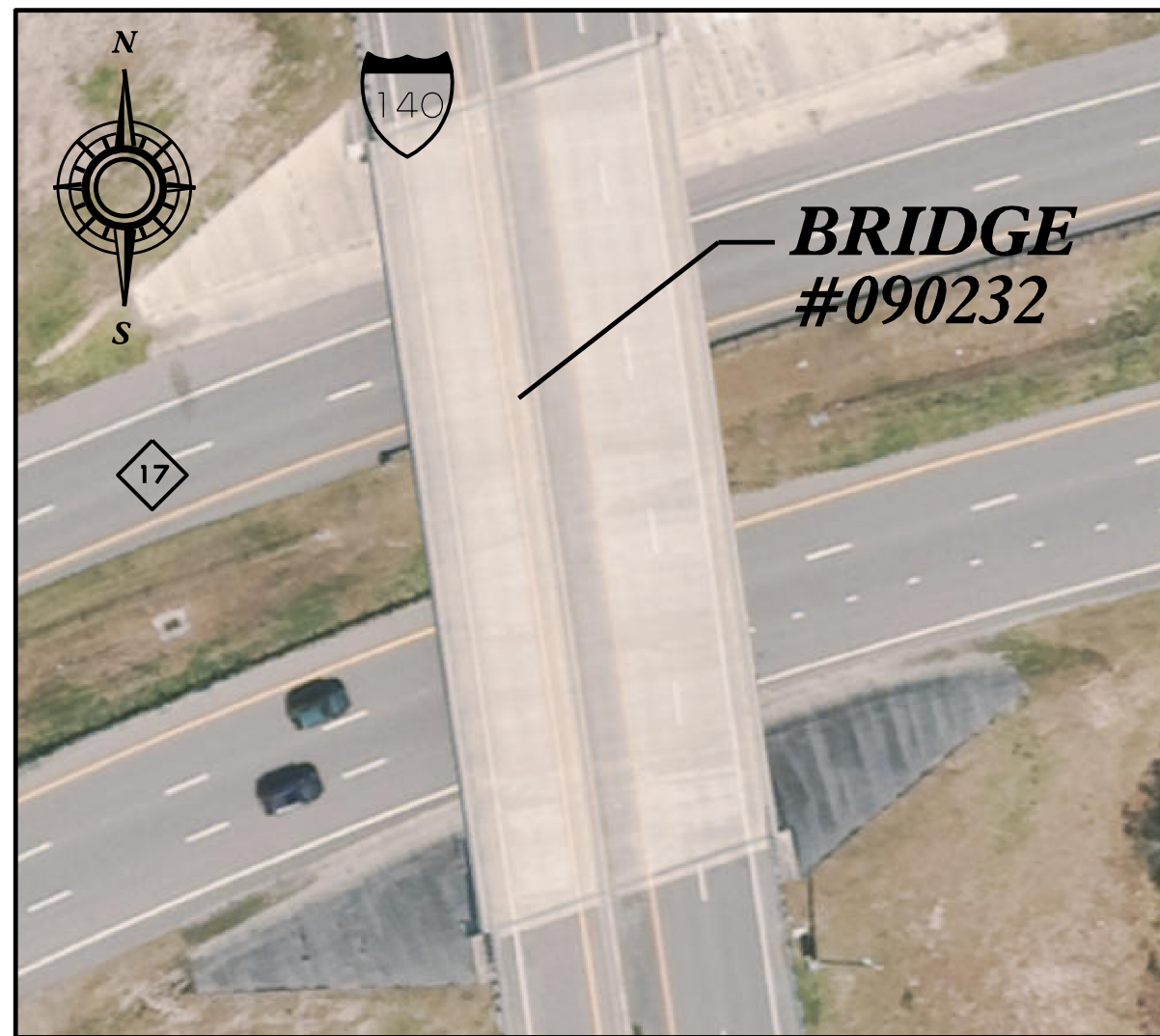
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-6036		
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
47985.1.1		P.E.	
47985.3.1	0140003	CONST.	

PROJECT: I-6036

CONTRACT NO: C204866

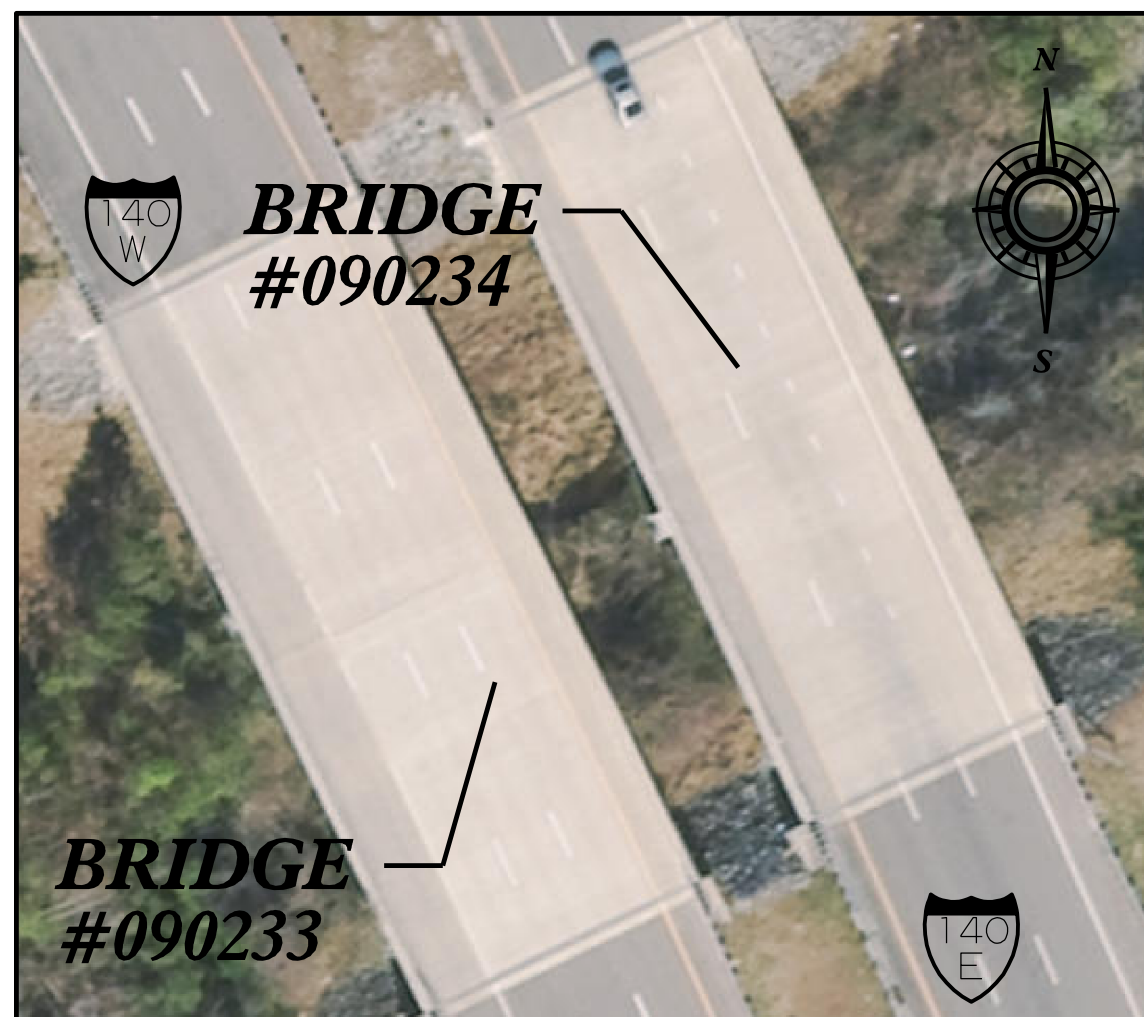


LOCATION: BRIDGE #090232 ON I-140 WBL & EBL OVER US 17
 BRIDGE #090233 ON I-140 WBL OVER MORGAN CREEK TRIBUTARY
 BRIDGE #090234 ON I-140 EBL OVER MORGAN CREEK TRIBUTARY
 BRIDGE #090235 ON I-140 WBL OVER MORGAN CREEK TRIBUTARY
 BRIDGE #090236 ON I-140 EBL OVER MORGAN CREEK TRIBUTARY
 BRIDGE #090237 ON I-140 WBL OVER MORGAN CREEK TRIBUTARY
 BRIDGE #090238 ON I-140 EBL OVER MORGAN CREEK TRIBUTARY
 BRIDGE #090239 ON I-140 WBL OVER WILDLIFE CROSSING
 BRIDGE #090240 ON I-140 EBL OVER WILDLIFE CROSSING
 BRIDGE #090241 ON I-140 WBL OVER WILDLIFE CROSSING
 BRIDGE #090242 ON I-140 EBL OVER WILDLIFE CROSSING

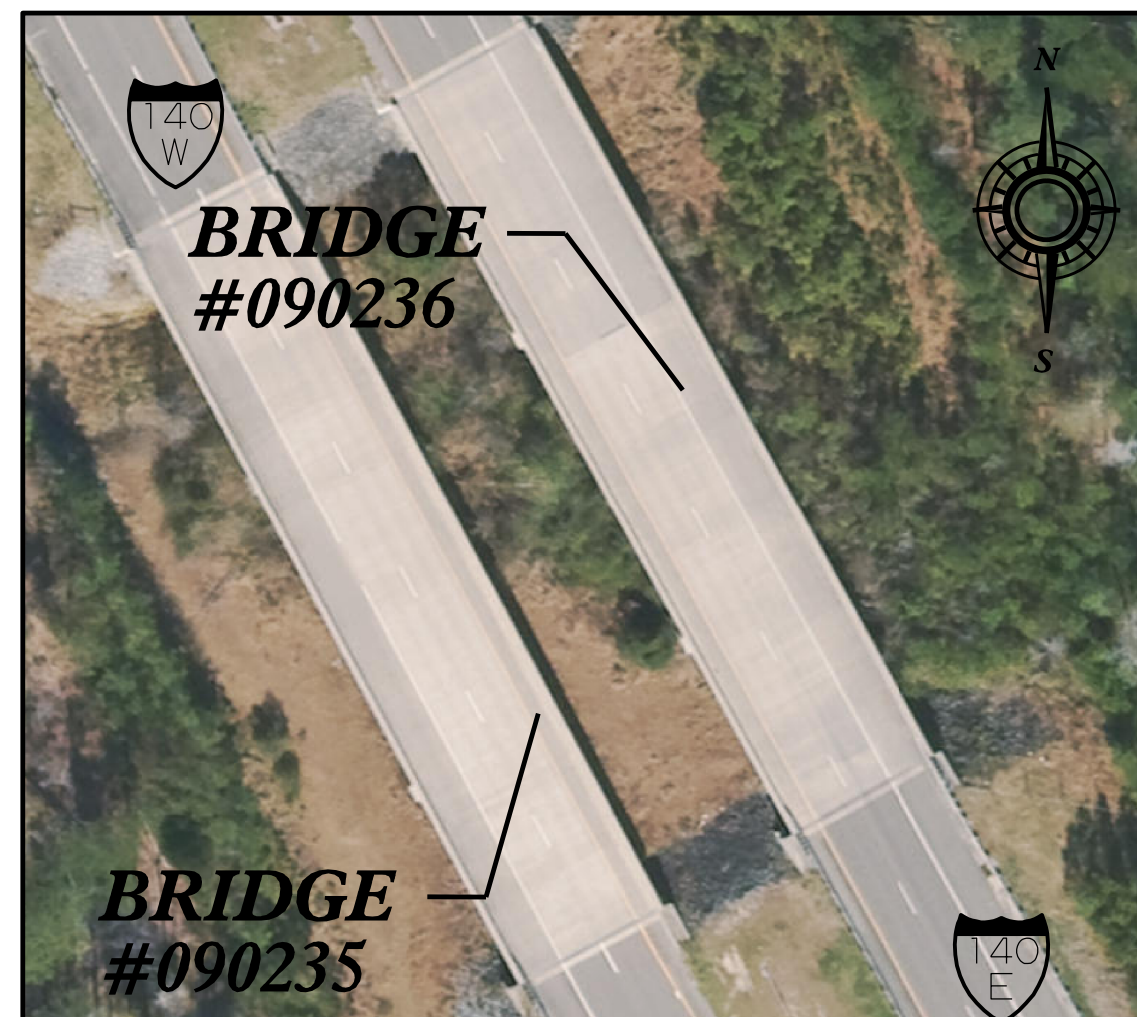


VICINITY MAP

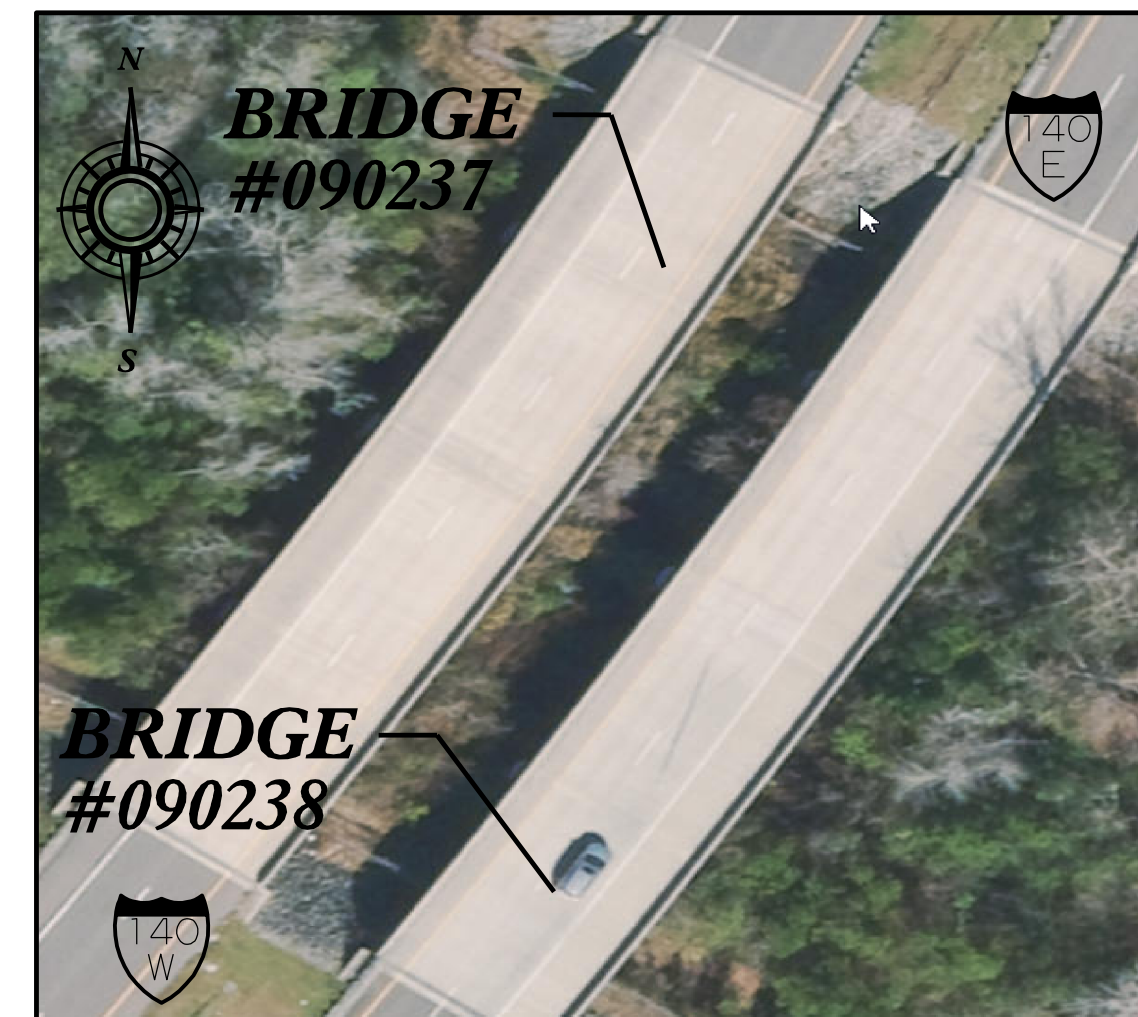
TYPE OF WORK: BRIDGE PRESERVATION - JOINT REPLACEMENT, DECK SURFACE REPAIRS, AND SILANE DECK TREATMENT.



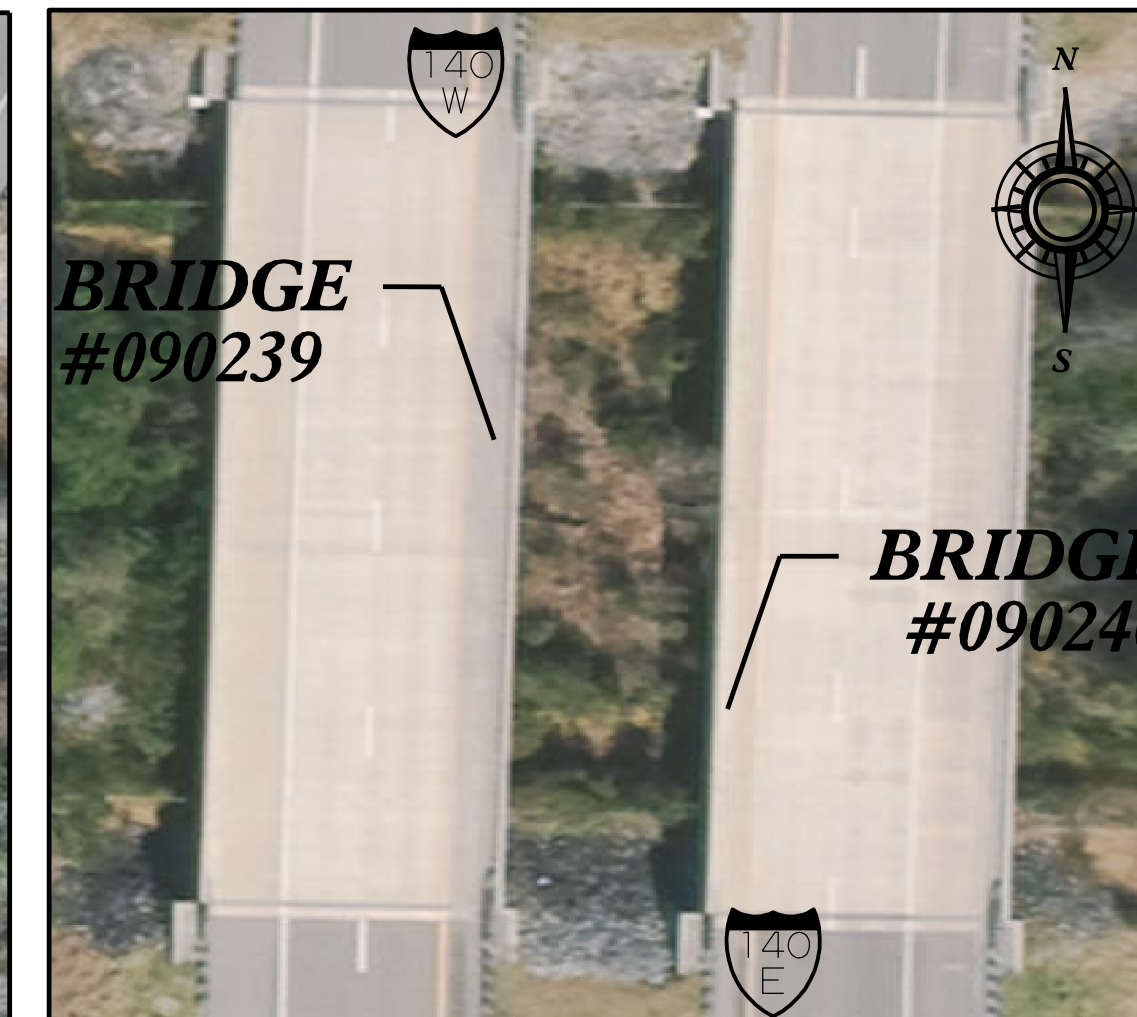
VICINITY MAP



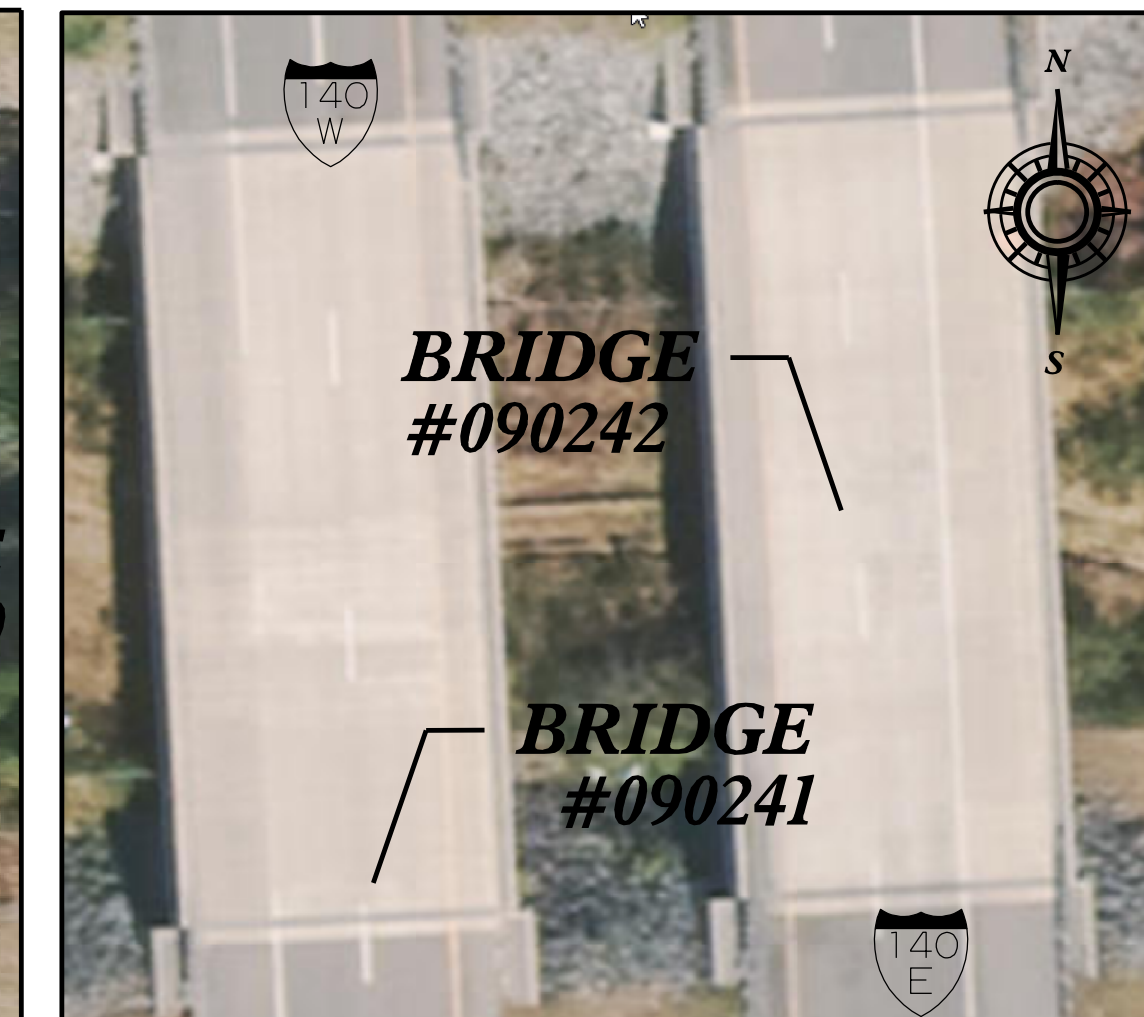
VICINITY MAP



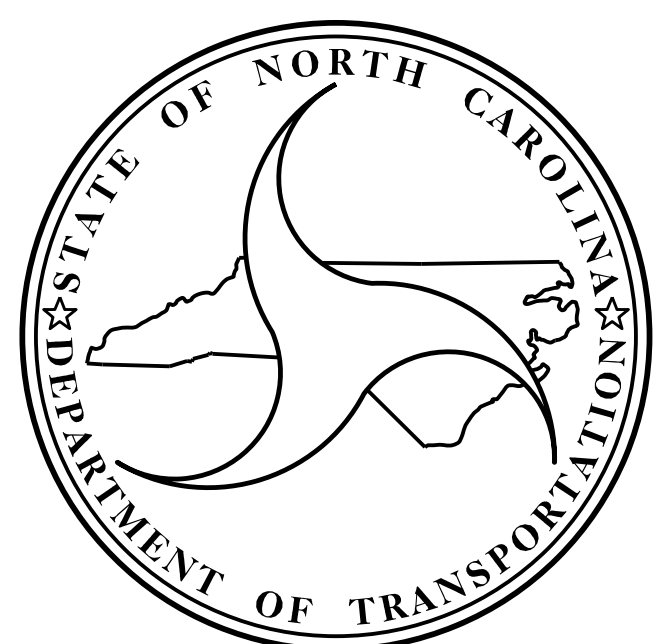
VICINITY MAP



VICINITY MAP



VICINITY MAP



DESIGN DATA

BRIDGE #090232	- ADT 2015	- 1,100
BRIDGE #090233	- ADT 2018	- 5,750
BRIDGE #090234	- ADT 2018	- 5,750
BRIDGE #090235	- ADT 2018	- 5,750
BRIDGE #090236	- ADT 2018	- 5,750
BRIDGE #090237	- ADT 2018	- 5,750
BRIDGE #090238	- ADT 2018	- 5,750
BRIDGE #090239	- ADT 2018	- 5,750
BRIDGE #090240	- ADT 2018	- 5,750
BRIDGE #090241	- ADT 2018	- 5,750
BRIDGE #090242	- ADT 2018	- 5,750

PROJECT LENGTH

BRIDGE #090232	- .035 MILE
BRIDGE #090233	- .028 MILE
BRIDGE #090234	- .028 MILE
BRIDGE #090235	- .045 MILE
BRIDGE #090236	- .045 MILE
BRIDGE #090237	- .045 MILE
BRIDGE #090238	- .046 MILE
BRIDGE #090239	- .030 MILE
BRIDGE #090240	- .030 MILE
BRIDGE #090241	- .020 MILE
BRIDGE #090242	- .020 MILE

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

2018 STANDARD SPECIFICATIONS

LETTING DATE :

November 21, 2023

KRISTY ALFORD, PE
PROJECT ENGINEER

P. KOREY NEWTON, PE
PROJECT DESIGN ENGINEER

INDEX

STRUCTURE	DESCRIPTION	SHEETS
	TOTAL BILL OF MATERIAL	S-1
S1	BRIDGE #090232 ON I-140 WBL & EBL OVER US 17	S1-1 THRU S1-4
S2	BRIDGE #090233 ON I-140 WBL OVER MORGAN CREEK TRIBUTARY	S2-1 THRU S2-4
S3	BRIDGE #090234 ON I-140 EBL OVER MORGAN CREEK TRIBUTARY	S3-1 THRU S3-4
S4	BRIDGE #090235 ON I-140 WBL OVER MORGAN CREEK TRIBUTARY	S4-1 THRU S4-4
S5	BRIDGE #090236 ON I-140 EBL OVER MORGAN CREEK TRIBUTARY	S5-1 THRU S5-4
S6	BRIDGE #090237 ON I-140 WBL OVER MORGAN CREEK TRIBUTARY	S6-1 THRU S6-4
S7	BRIDGE #090238 ON I-140 EBL OVER MORGAN CREEK TRIBUTARY	S7-1 THRU S7-4
S8	BRIDGE #090239 ON I-140 WBL OVER WILDLIFE CROSSING	S8-1 THRU S8-4
S9	BRIDGE #090240 ON I-140 EBL OVER WILDLIFE CROSSING	S9-1 THRU S9-4
S10	BRIDGE #090241 ON I-140 WBL OVER WILDLIFE CROSSING	S10-1 THRU S10-4
S11	BRIDGE #090242 ON I-140 EBL OVER WILDLIFE CROSSING	S11-1 THRU S11-4

PROJECT NO. **I-6036**
BRUNSWICK COUNTY

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
INDEX SHEET					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
TOTAL SHEETS					

DRAWN BY : S.T. SANDOR DATE : 6/9/23
 CHECKED BY : W. C. SMITH DATE : 6/13/23
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

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 OR 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 BRIDGES SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL BELOW, EXCEPT WHERE THE CONTRACTOR'S PLAN 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.

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.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE SAMPLE BARS SHOULD COME FROM STEEL ACTUALLY USED IN THE PROJECT AND THE SAMPLE BARS SHOULD BE REPLACED BY SPLICED BARS AS SPECIFIED IN THE SAMPLE BAR REPLACEMENT CHART. PAYMENT FOR THE SAMPLE BARS AND REPLACEMENT REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

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.

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

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

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

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

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SQ. FT.

SAMPLE BAR REPLACEMENT	
SIZE	LENGTH
#3	6'-2"
#4	7'-4"
#5	8'-6"
#6	9'-8"
#7	10'-10"
#8	12'-0"
#9	13'-2"
#10	14'-6"
#11	15'-10"

NOTE:

SAMPLE BAR REPLACEMENT LENGTHS BASED ON 30" (SAMPLE LENGTH) PLUS TWO SPLICE LENGTHS AND f =60 ksi.

COORDINATES FOR BRIDGES		
BRIDGE NUMBER	LATITUDE	LONGITUDE
090232	34° 11' 25.58"	78° 04' 44.06"
090233	34° 11' 39.53"	78° 04' 48.97"
090234	34° 11' 39.93"	78° 04' 47.97"
090235	34° 11' 49.06"	78° 04' 55.33"
090236	34° 11' 49.39"	78° 04' 54.41"
090237	34° 12' 28.68"	78° 04' 39.22"
090238	34° 12' 28.29"	78° 04' 38.53"
090239	34° 13' 06.73"	78° 04' 37.46"
090240	34° 13' 06.80"	78° 04' 36.59"
090241	34° 14' 27.26"	78° 04' 33.31"
090242	34° 14' 27.31"	78° 04' 32.47"

TOTAL BILL OF MATERIAL					
BRIDGE NUMBER	FOAM JOINT SEALS FOR PRESERVATION	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	LIN. FT.	CU. FT.	SQ. FT.	SQ. YD.	SQ. YD.
090232	130.4	38.0	130.4	1,320.3	1,320.3
090233	110.0	32.2	110.0	921.4	921.4
090234	98.0	28.6	98.0	820.8	820.8
090235	84.0	24.6	84.0	1,104.9	1,104.9
090236	84.0	24.6	84.0	1,104.9	1,104.9
090237	84.0	24.6	84.0	1,105.0	1,105.0
090238	84.0	24.6	84.0	1,142.0	1,142.0
090239	84.8	24.8	84.8	746.7	746.7
090240	84.8	24.8	84.8	746.7	746.7
090241	84.4	24.6	84.4	504.8	504.8
090242	84.4	24.6	84.4	504.8	504.8
TOTAL	1,012.8	296.0	1012.8	10,022.3	10,022.3

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. _____



DocuSigned by:
 P. Corey Newton
 AFFE3D0451B407...
 08/10/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

TOTAL BILL OF MATERIAL

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

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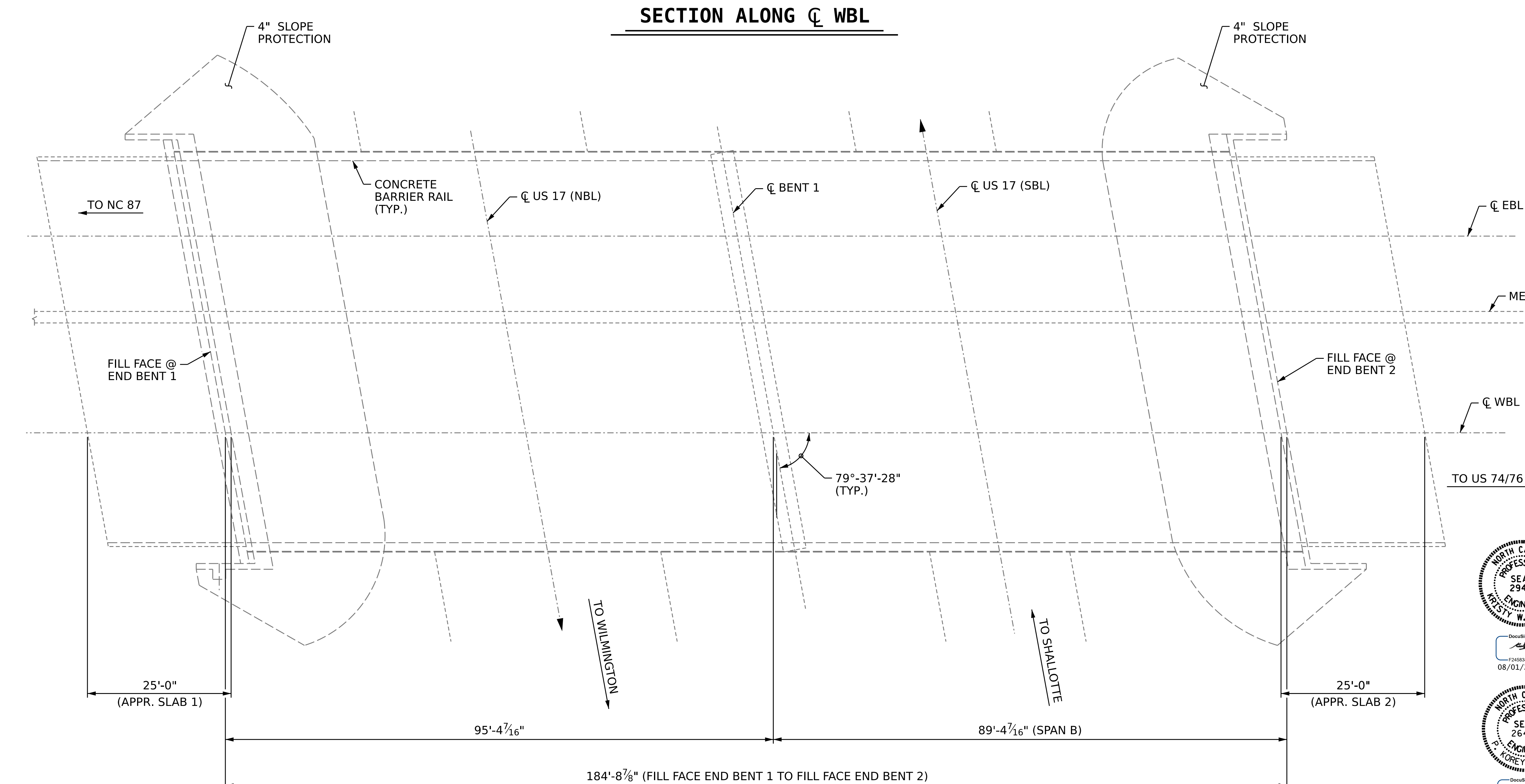
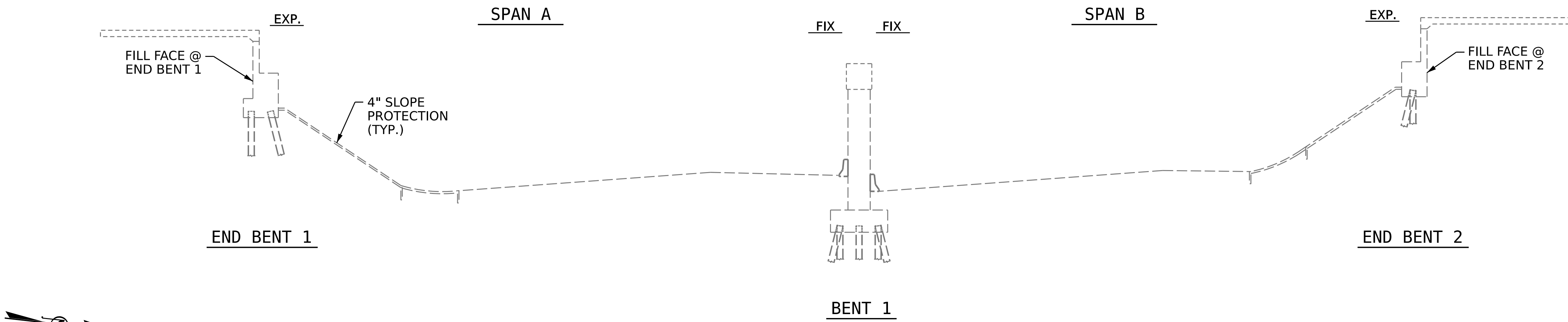
DRAWN BY : S. T. SANDOR DATE : 6/9/23
 CHECKED BY : W. C. SMITH DATE : 6/13/23
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/02/2021.
BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS/ROUTINE INSPECTION.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS



PLAN

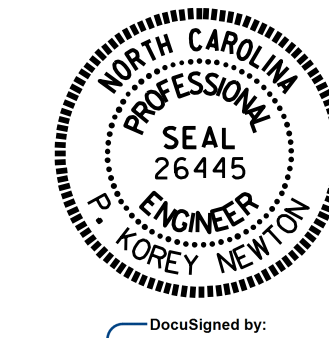
DRAWN BY : S. T. SANDOR DATE : 1/9/23
 CHECKED BY : W. C. SMITH DATE : 1/10/23
 DESIGN ENGINEER OF RECORD: DATE :

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

RESIDENT ENGINEER _____ DATE _____



DocuSigned by:
F34583B30BFA4E
08/01/2023



DocuSigned by:
P. Corey Newton
4FF35014319407...
07/26/2023

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090232**

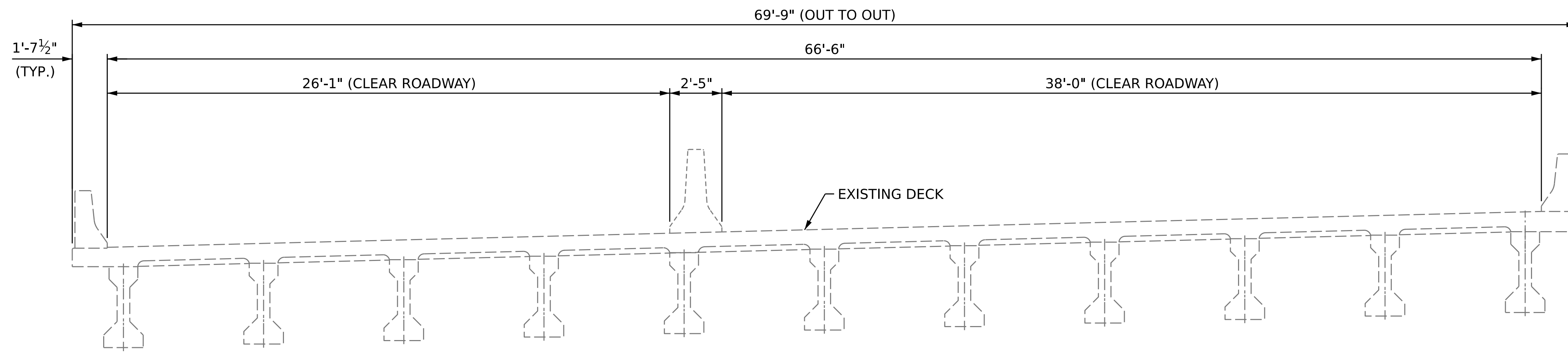
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING

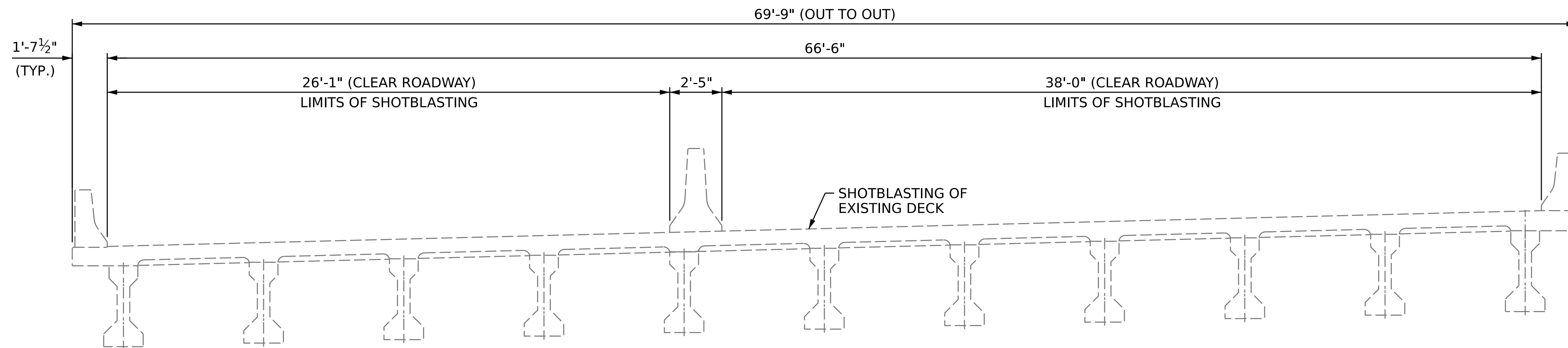
FOR BRIDGE ON
 I-140 WBL & EBL
 OVER US 17

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

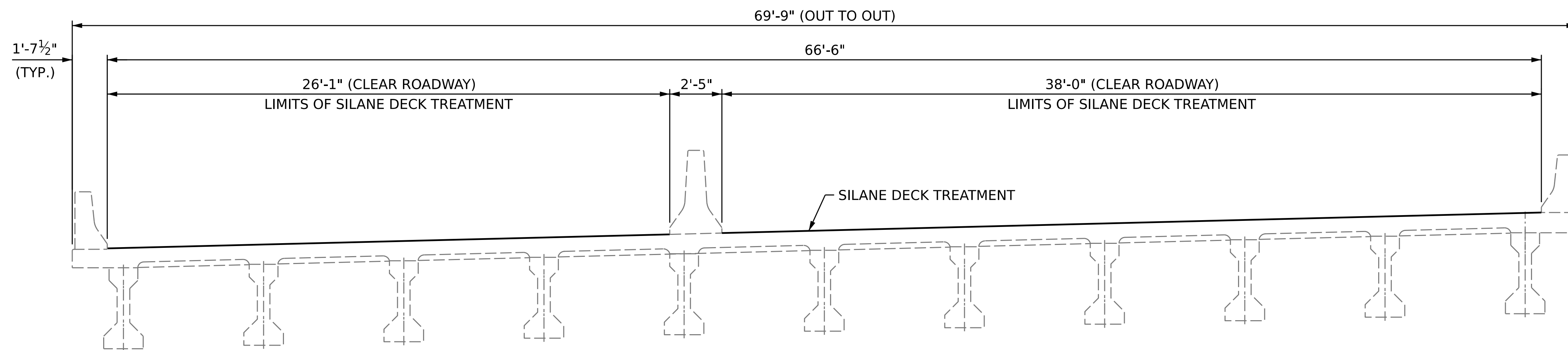
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TYPICAL SECTION
(EXISTING)



TYPICAL SECTION
(SHOTBLASTING)

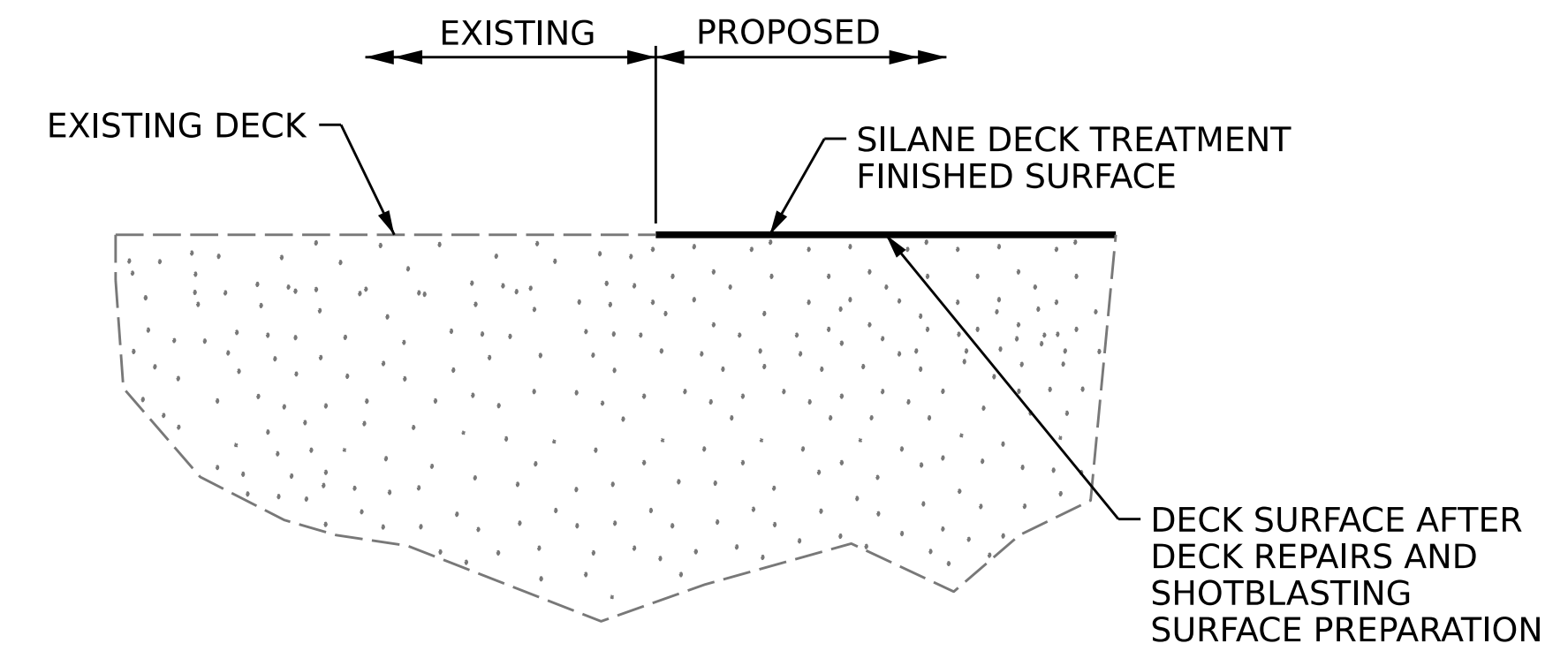


TYPICAL SECTION
(PROPOSED)

NOTES

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

GIRDERS ARE AASHTO TYPE III PRESTRESSED CONCRETE GIRDERS.



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090232**



Designed by:
P. Corey Newton
 07/26/2023

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

DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 1/9/23
 DESIGN ENGINEER OF RECORD: DATE :

1/25/2023
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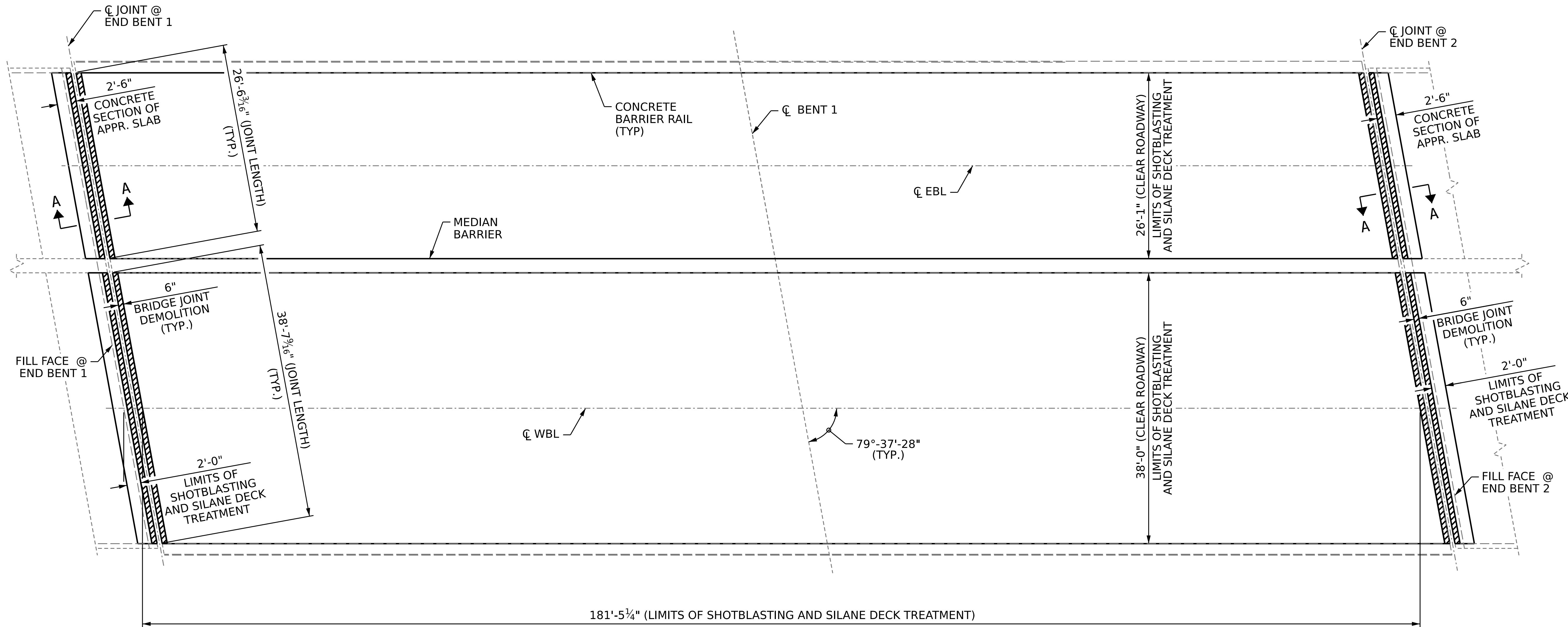
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S1-2
2			4			4

NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,291.9 SQ. YDS.	
SILANE DECK TREATMENT	1,291.9 SQ. YDS.	
BRIDGE JOINT DEMOLITION	65.2 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	28.4 SQ. YDS.	
SILANE DECK TREATMENT	28.4 SQ. YDS.	
BRIDGE JOINT DEMOLITION	65.2 SQ. FT.	



- SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
- BRIDGE JOINT DEMOLITION

APPROACH SLAB 1
PART PLAN VIEW

SPAN A

SPAN B

APPROACH SLAB 2
PART PLAN VIEW

PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090232**



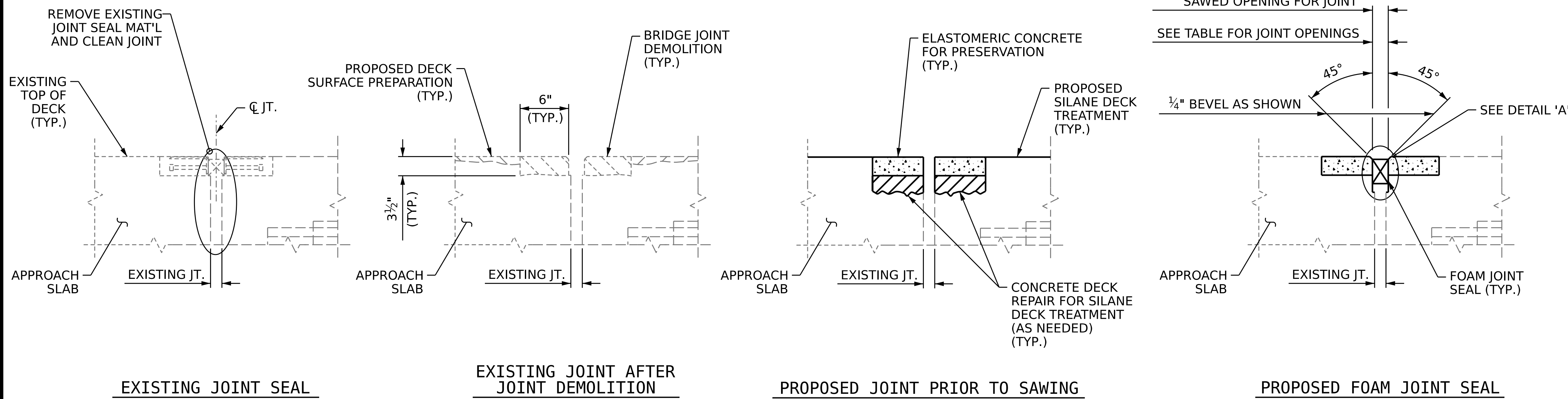
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P. Corey Newton
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 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**SUPERSTRUCTURE
 PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 1/9/23
 DESIGN ENGINEER OF RECORD: DATE :

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 FINAL UNLESS ALL
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			S1-3
2			4			4



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN ¼", NOTIFY THE ENGINEER.

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

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL SAW CUT TO A NOMINAL DEPTH OF ½" BUT REINFORCING STEEL SHALL NOT BE DAMAGED. CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

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

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

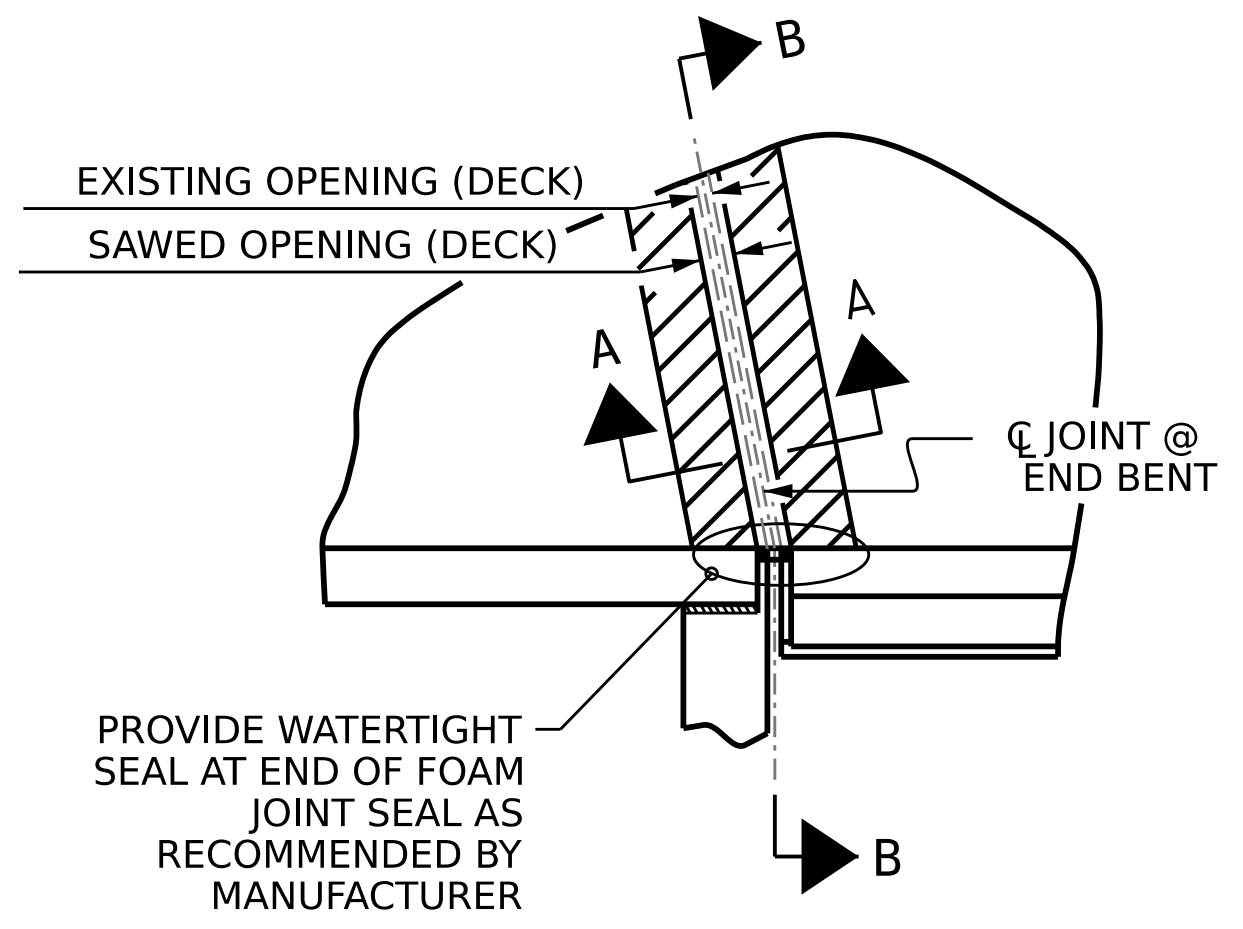
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

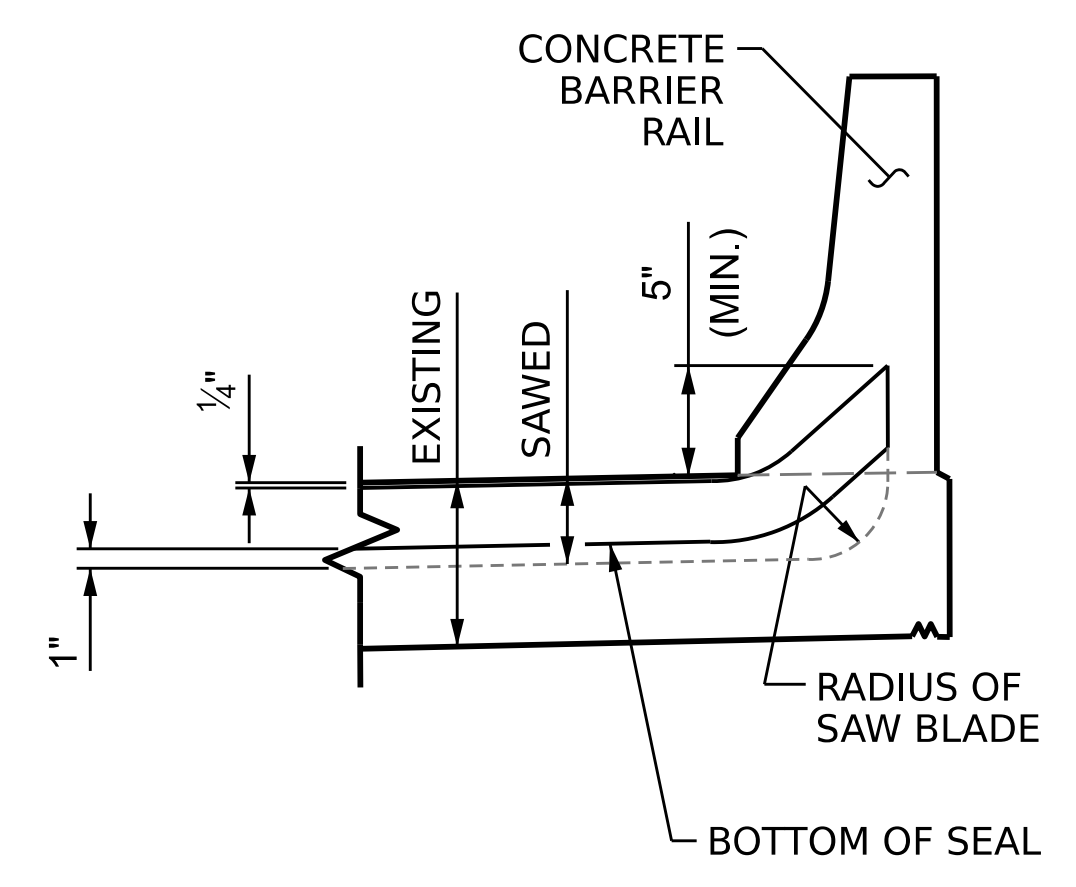
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

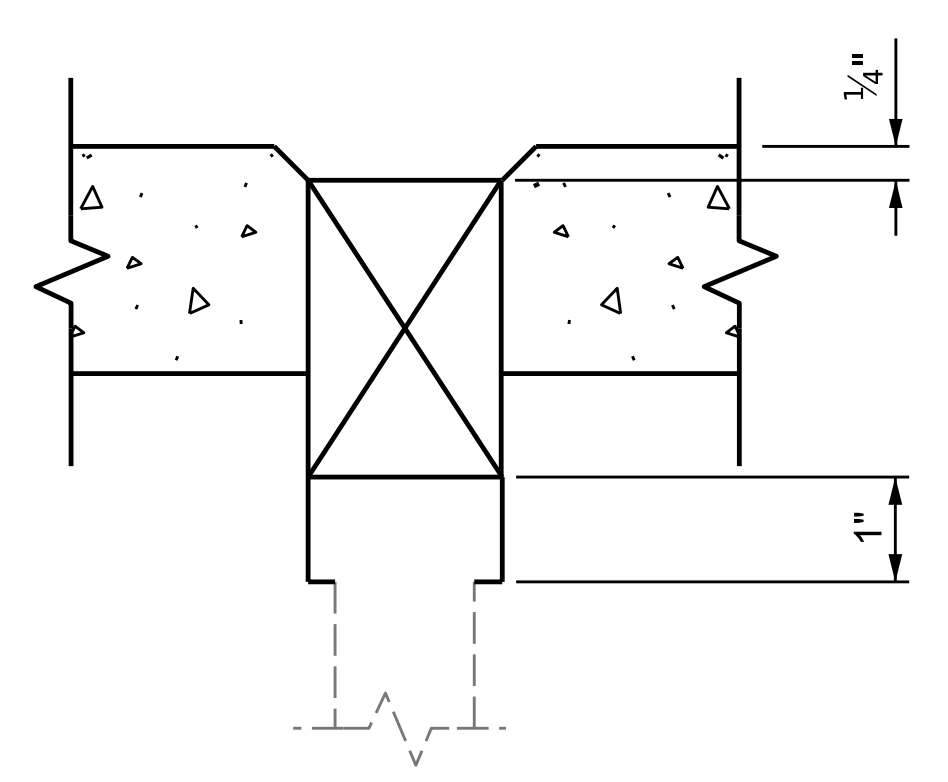
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE

	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	130.4	

ELASTOMERIC CONCRETE FOR PRESERVATION

LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	19.0	
END BENT 2	19.0	
TOTAL	38.0	

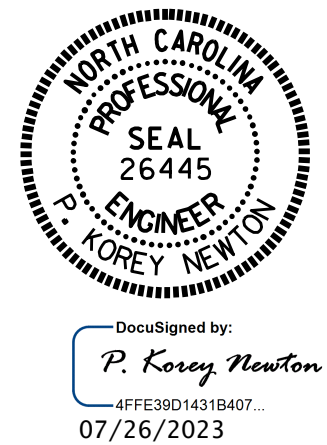
SAWED JOINT OPENING TABLE

LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2 1/8"	2"	1 3/4"
END BENT 2	2 1/8"	2"	1 3/4"

DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 1/9/23
 DESIGN ENGINEER OF RECORD : DATE :

1/25/2023 S:\DPG\Division3\I-6036\BRG.L.090232\Plans\401.007.I-6036.SMU.JT.S1-4.090232.dgn pknewton

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090232**

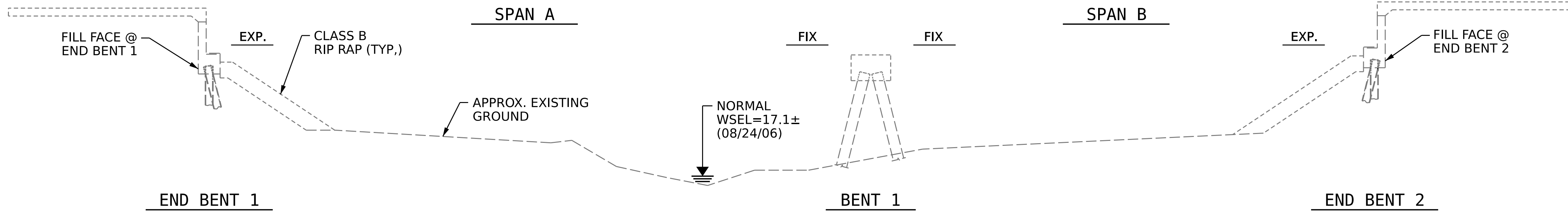


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

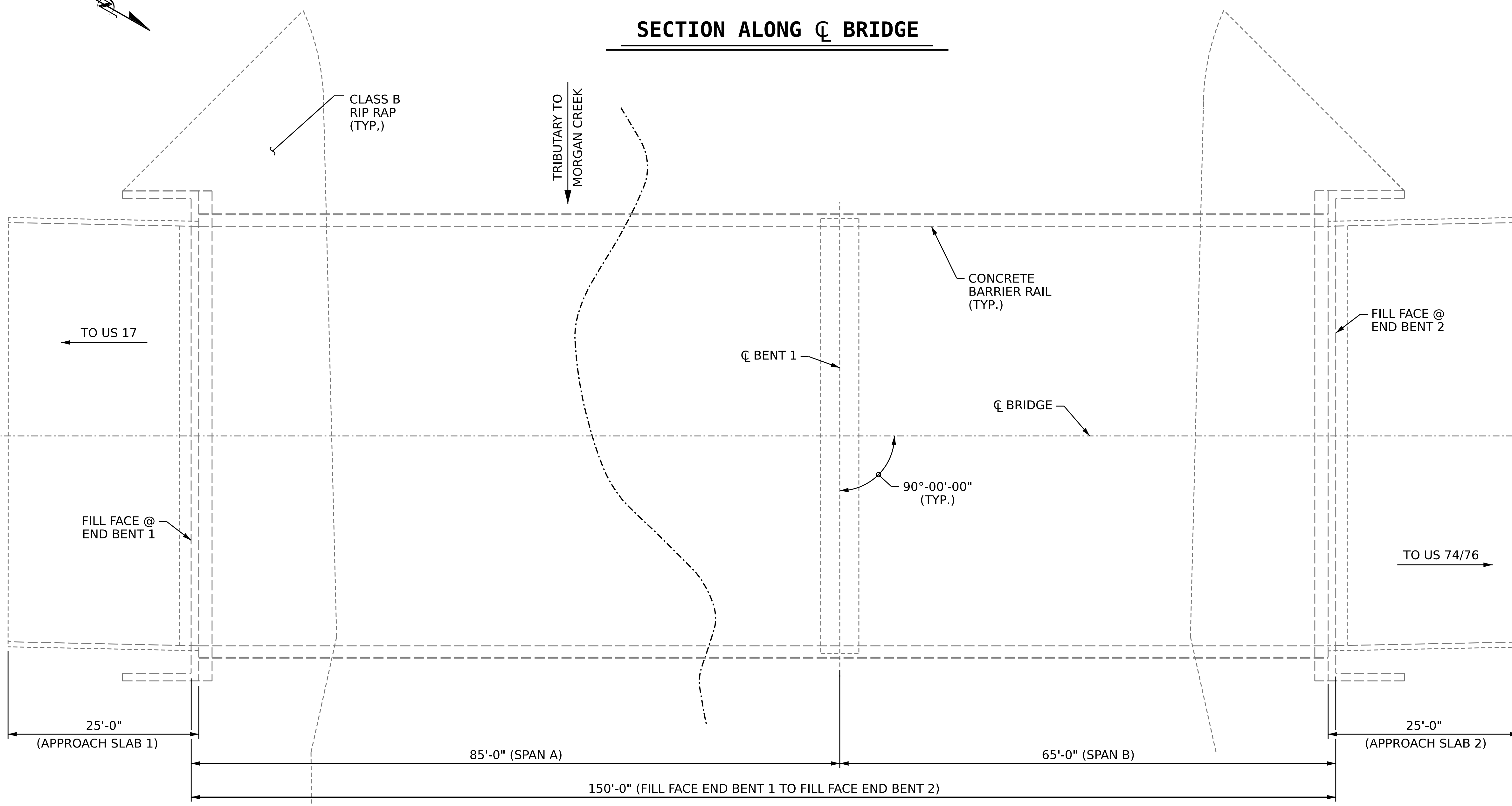
JOINT REPAIR DETAILS

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SECTION ALONG CL BRIDGE



PLAN

NOTES

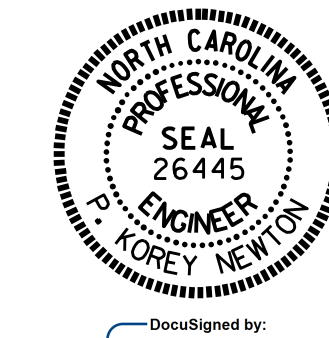
GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/07/2021.
BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS



DocuSigned by:
F245838930F40E
08/01/2023



DocuSigned by:
P. Corey Newton
47FE30014319407...
07/26/2023

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
BRIDGE NO. **090233**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOR BRIDGE ON
I-140 WBL OVER
MORGAN CREEK TRIBUTARY

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

DRAWN BY : S. T. SANDOR DATE : 1/10/23
CHECKED BY : W. C. SMITH DATE : 1/17/23
DESIGN ENGINEER OF RECORD: _____ DATE : _____

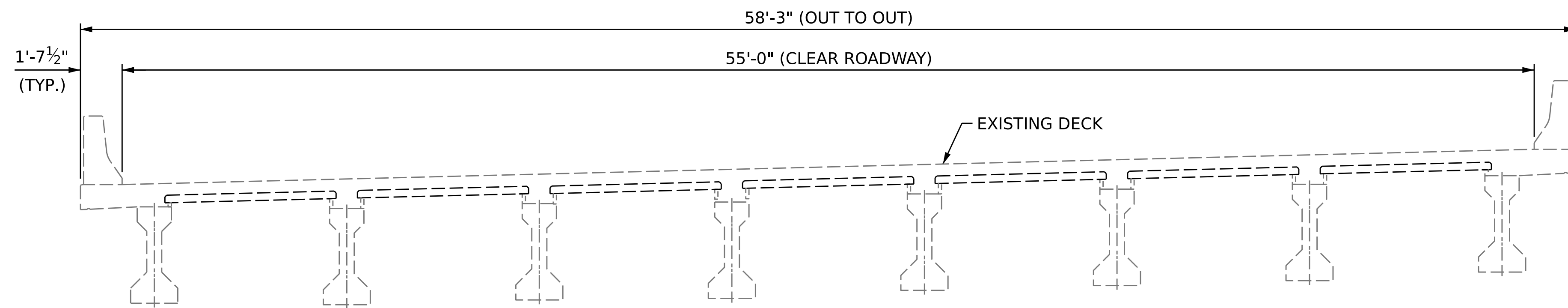
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

NOTES

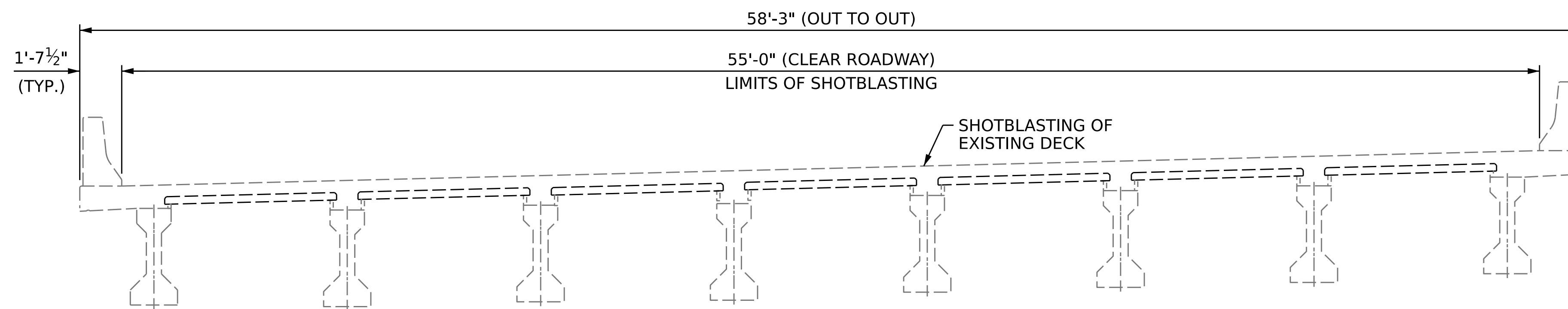
SEE TRANSPORTATION MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

GIRDERS ARE AASHTO TYPE III PRESTRESSED CONCRETE GIRDERS.



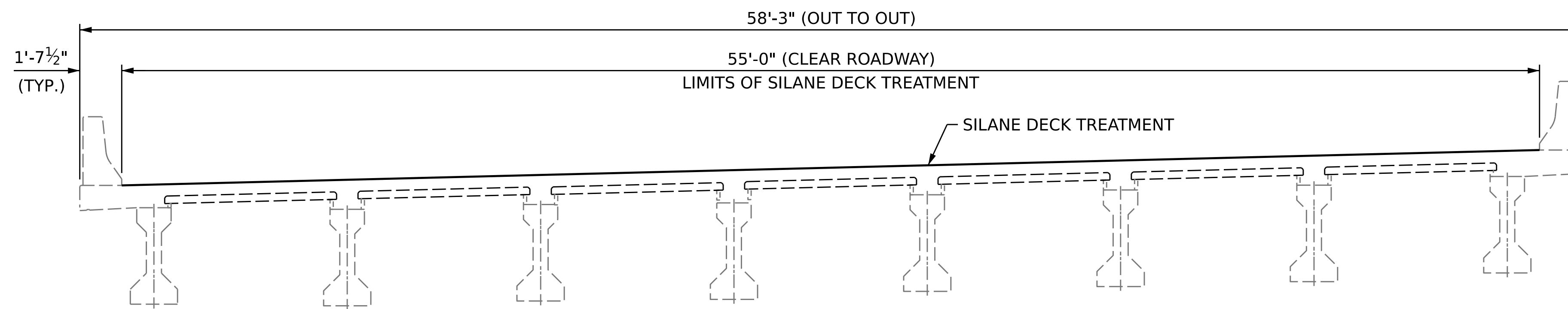
TYPICAL SECTION

(EXISTING)



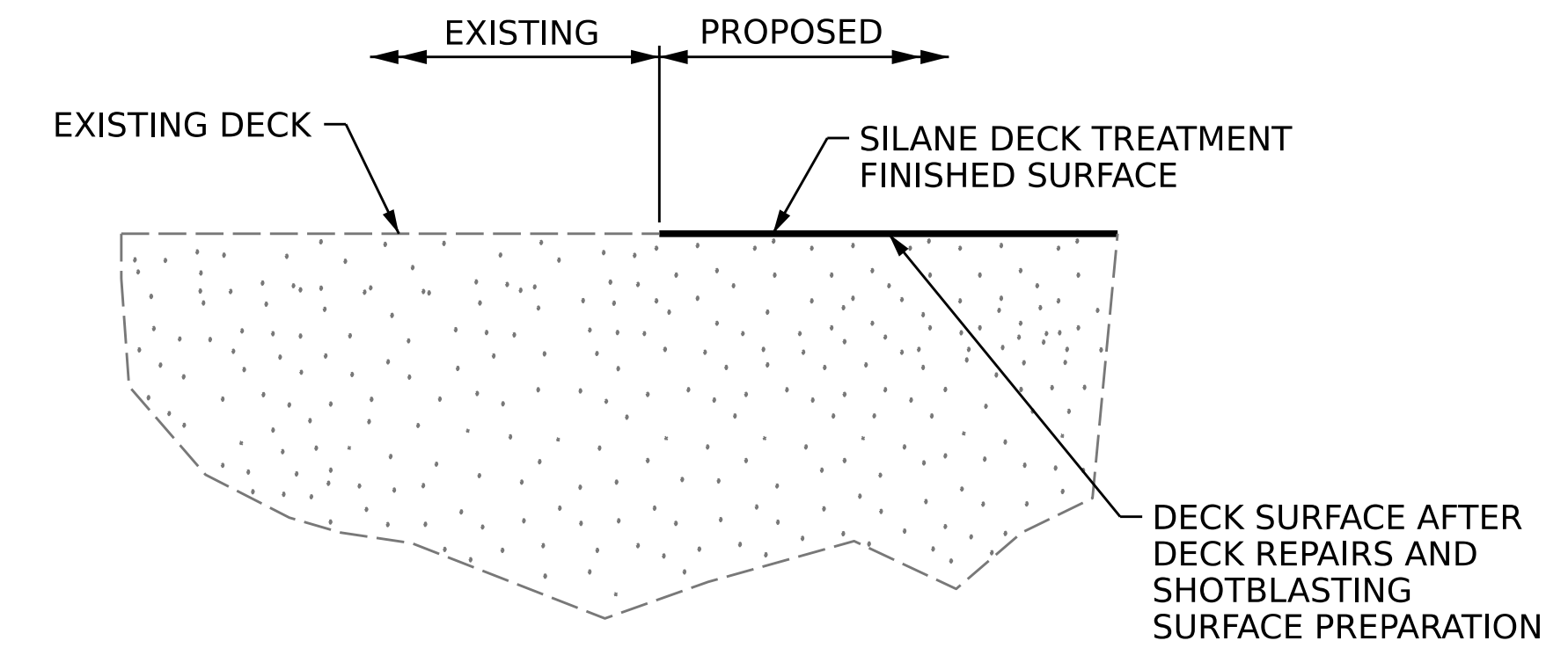
TYPICAL SECTION

(SHOTBLASTING)



TYPICAL SECTION

(PROPOSED)



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090233**



Designed by:
P. Corey Newton
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUPERSTRUCTURE
 TYPICAL SECTION
 FOR SILANE
 DECK TREATMENT**

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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

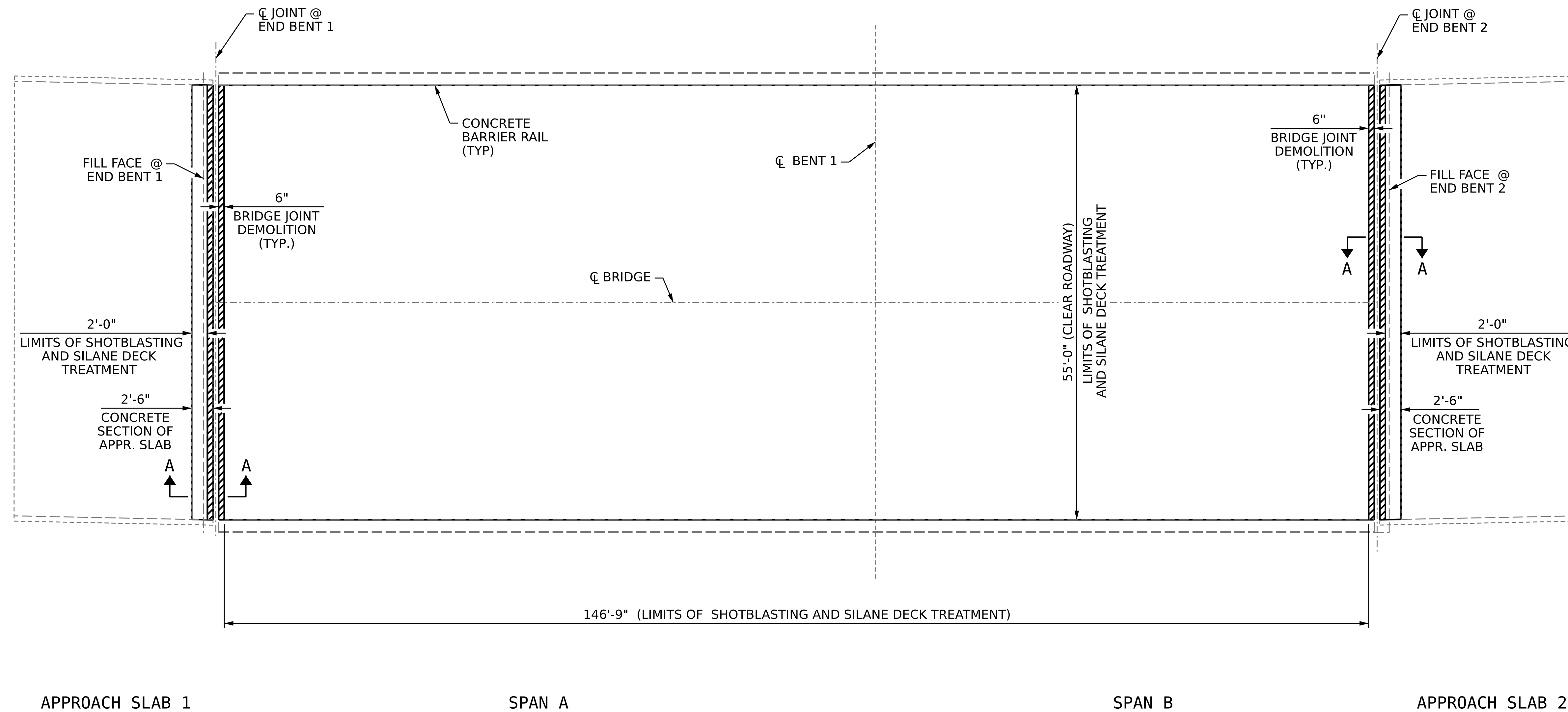
DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 1/17/23
 DESIGN ENGINEER OF RECORD: DATE :

NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

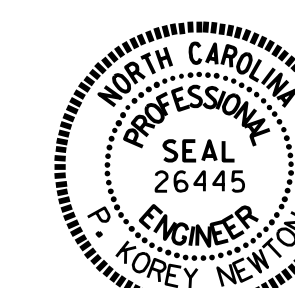
DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	897.0 SQ. YDS.	
SILANE DECK TREATMENT	897.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	55.0 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	24.4 SQ. YDS.	
SILANE DECK TREATMENT	24.4 SQ. YDS.	
BRIDGE JOINT DEMOLITION	55.0 SQ. FT.	



- SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
- BRIDGE JOINT DEMOLITION

PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090233**



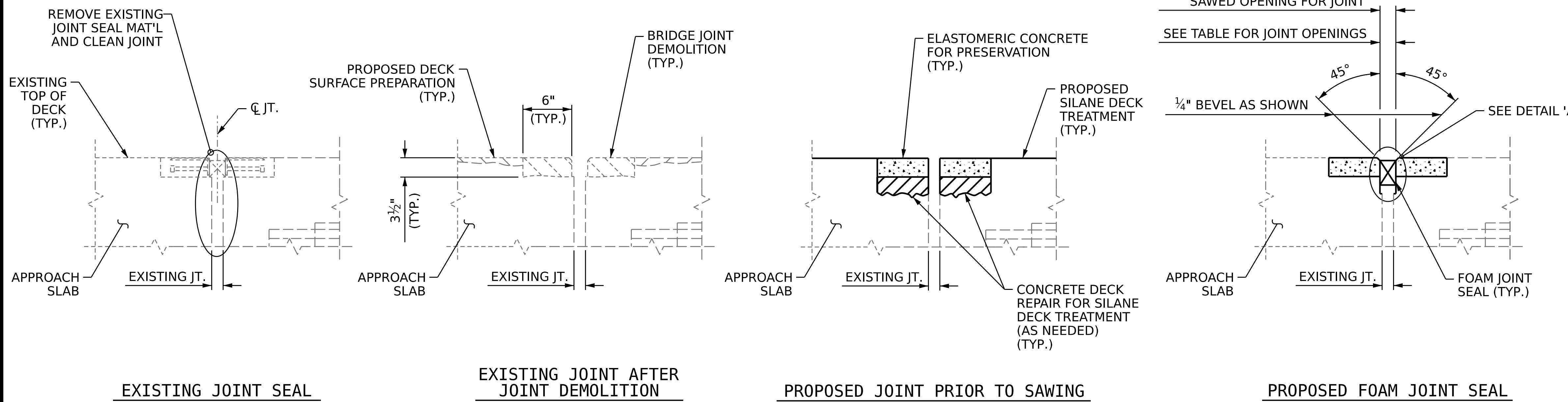
Designed by:
P. Corey Newton
 47FES9014319407
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**SUPERSTRUCTURE
 PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 1/17/23
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4", NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE FOAM JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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

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

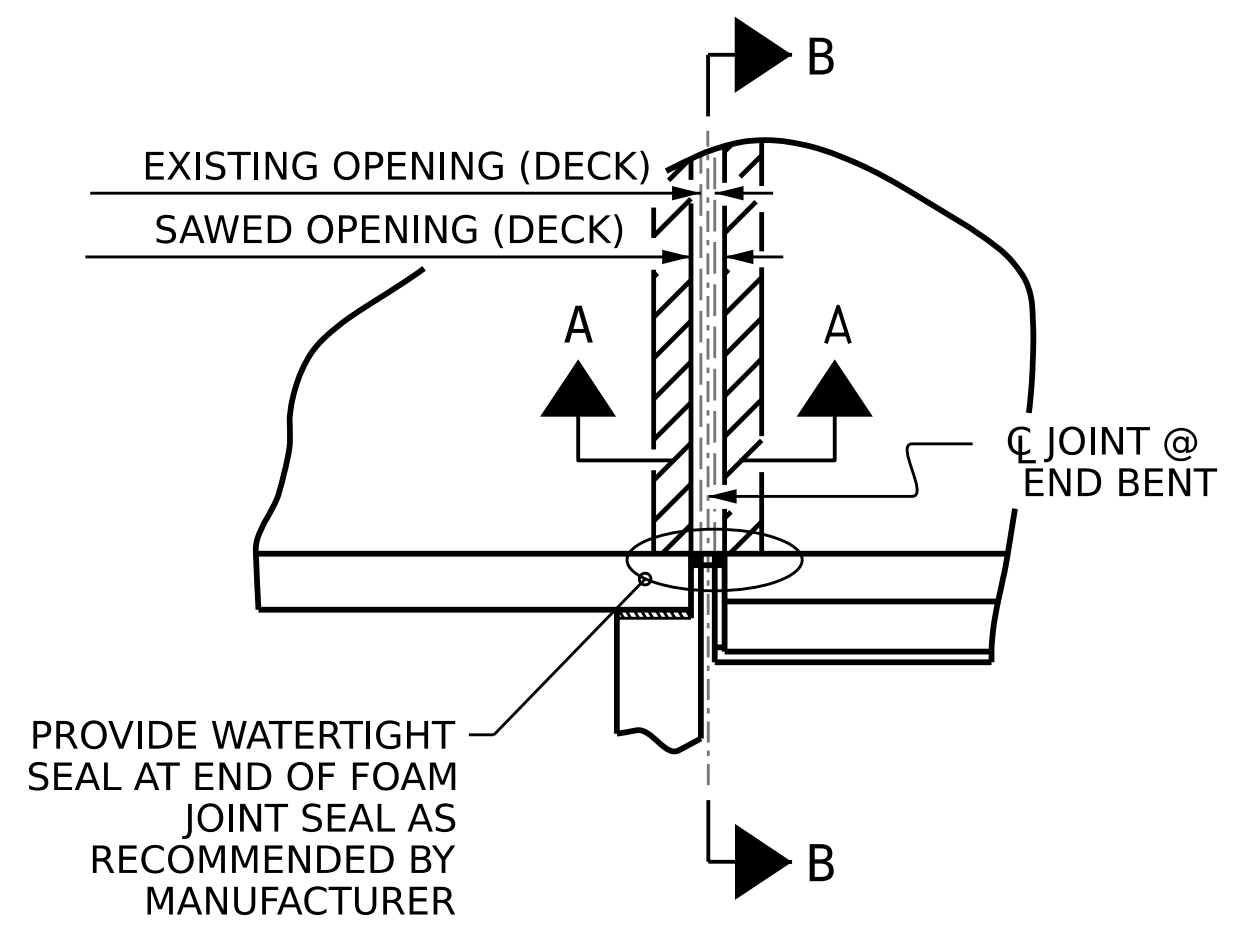
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

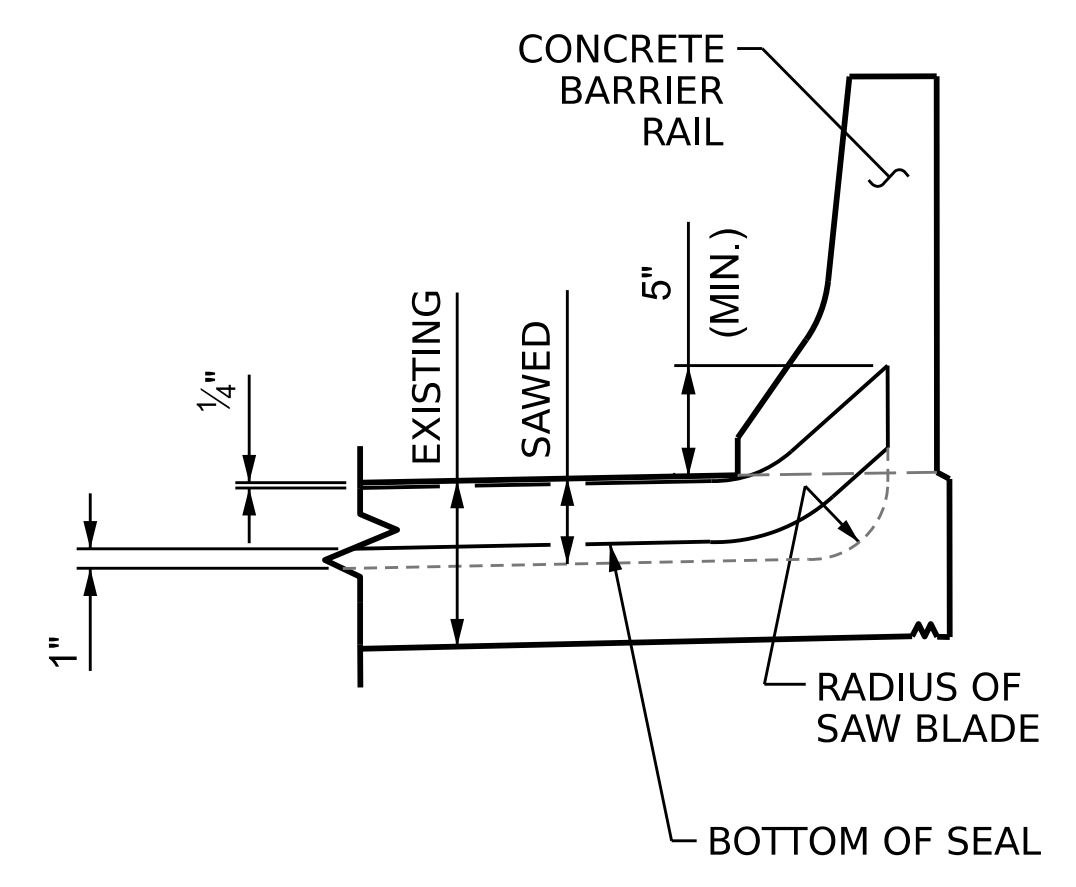
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

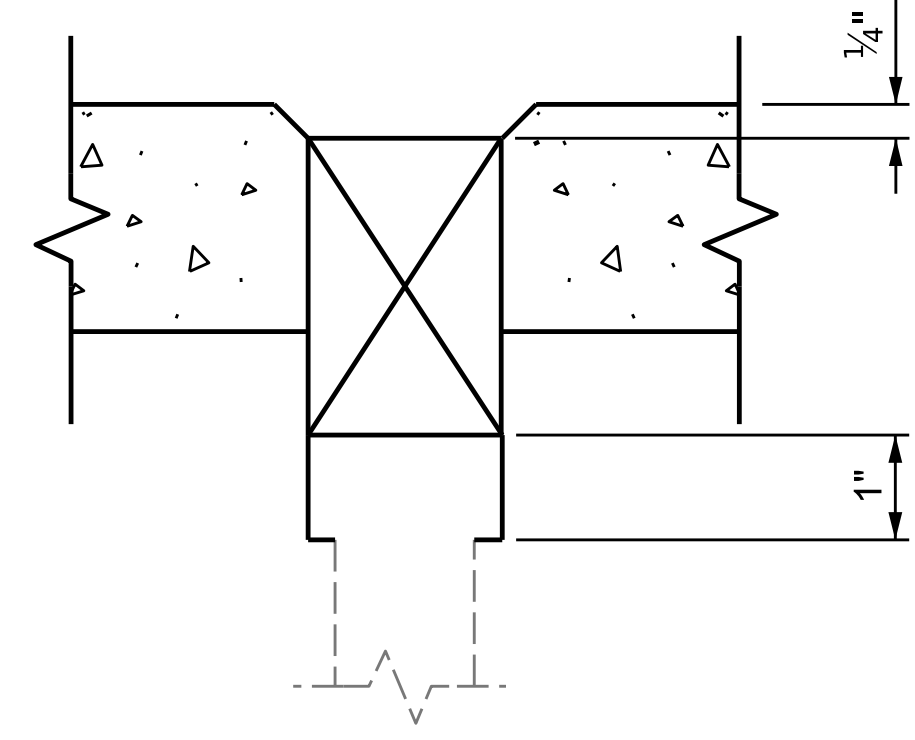
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE

	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	110.0	

ELASTOMERIC CONCRETE FOR PRESERVATION

LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	16.1	
END BENT 2	16.1	
TOTAL	32.2	

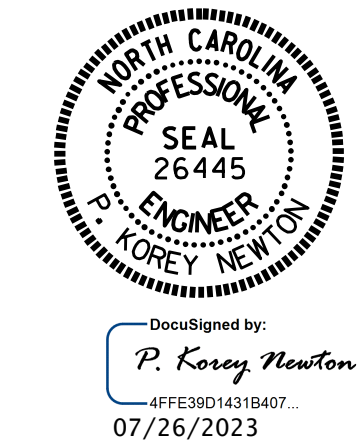
SAWED JOINT OPENING TABLE

LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2 1/8"	2"	1 3/4"
END BENT 2	2 1/16"	2"	1 13/16"

DRAWN BY : S. T. SANDOR DATE : 1/9/23
 CHECKED BY : W. C. SMITH DATE : 1/17/23
 DESIGN ENGINEER OF RECORD: DATE :

1/25/2023
 S:\DPG\Division3\I-6036\BRG.2.090233\Plans\402.007.I-6036.SMU.JT.S2-4.090233.dgn
 pknewton

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090233**

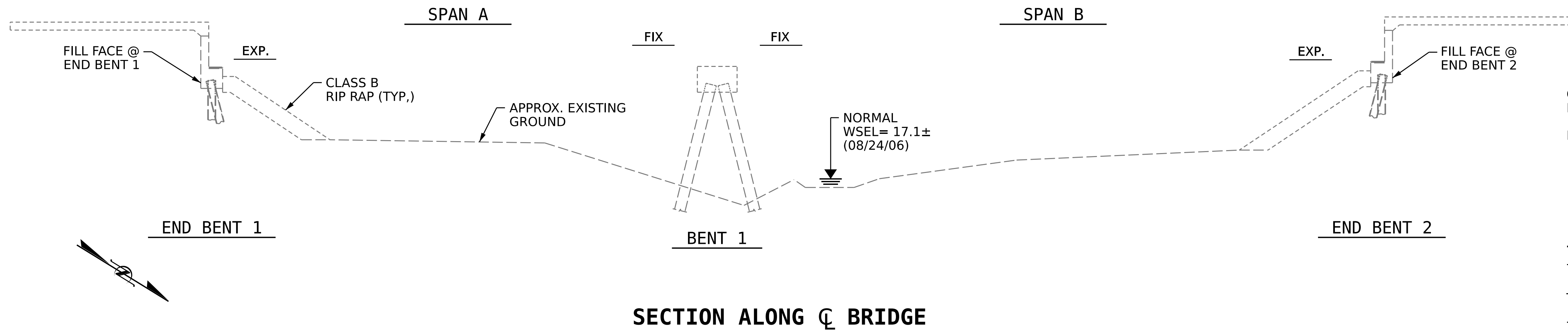


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

JOINT REPAIR DETAILS

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



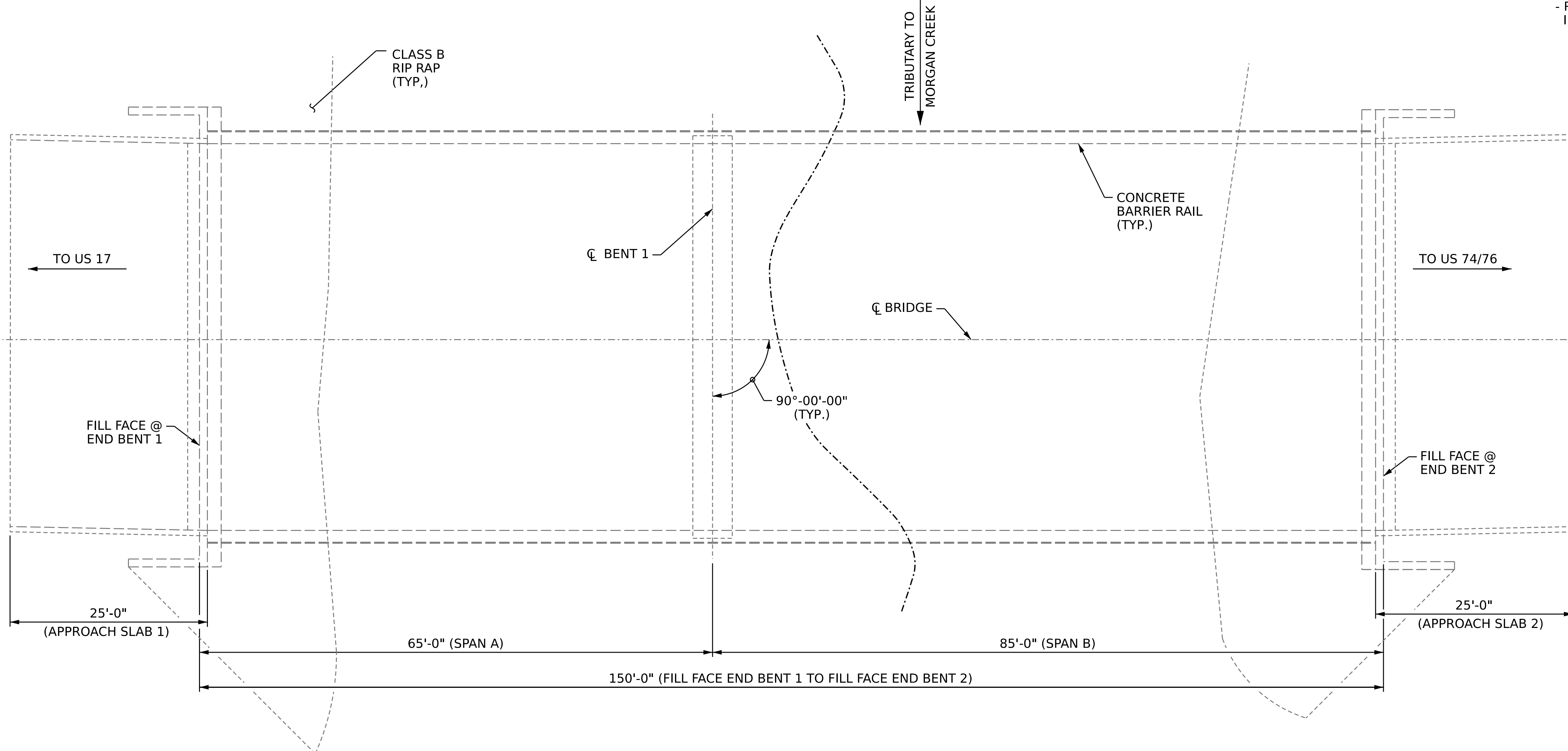
SECTION ALONG CL BRIDGE

NOTES

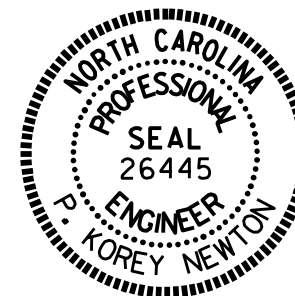
GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 05/05/2021.
BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS



PLAN



PROJECT NO. **I-6036**
BRUNSWICK COUNTY
BRIDGE NO. **090234**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOR BRIDGE ON
I-140 EBL OVER
MORGAN CREEK TRIBUTARY

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

RESIDENT ENGINEER DATE

DRAWN BY : S. T. SANDOR DATE : 1/9/23
CHECKED BY : W. C. SMITH DATE : 5/23/23
DESIGN ENGINEER OF RECORD: DATE :

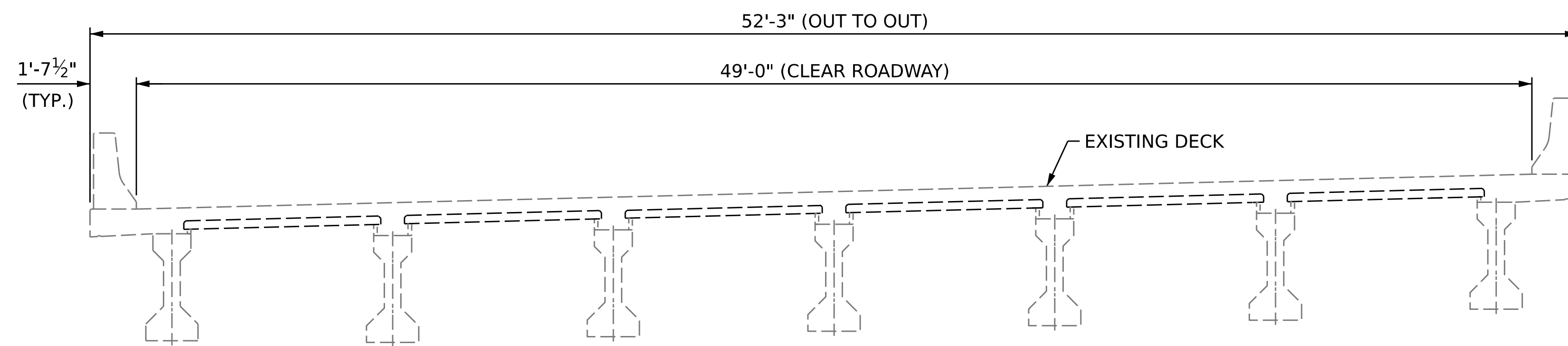
REVISIONS						SHEET NO. S3-1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

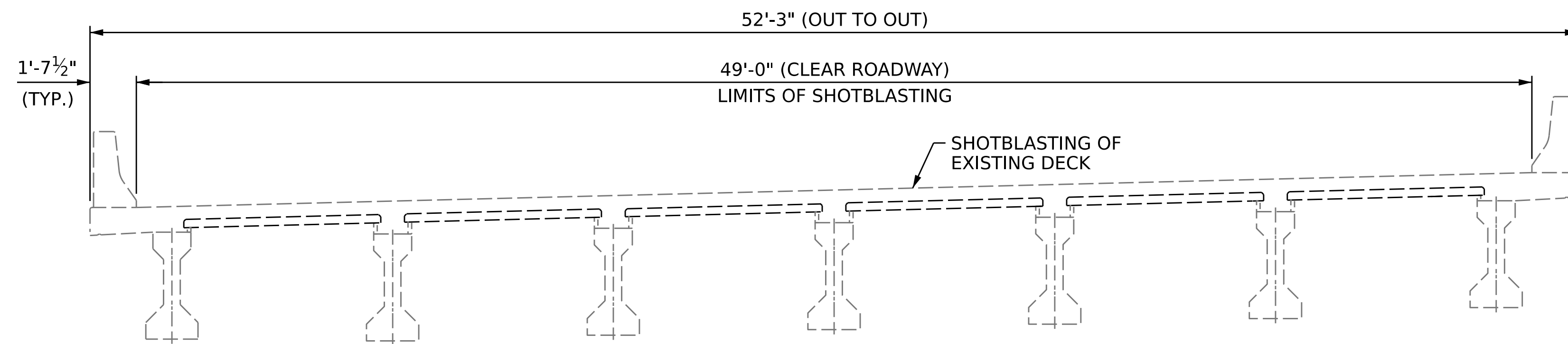
NOTES

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

GIRDERS ARE AASHTO TYPE III PRESTRESSED CONCRETE GIRDERS.

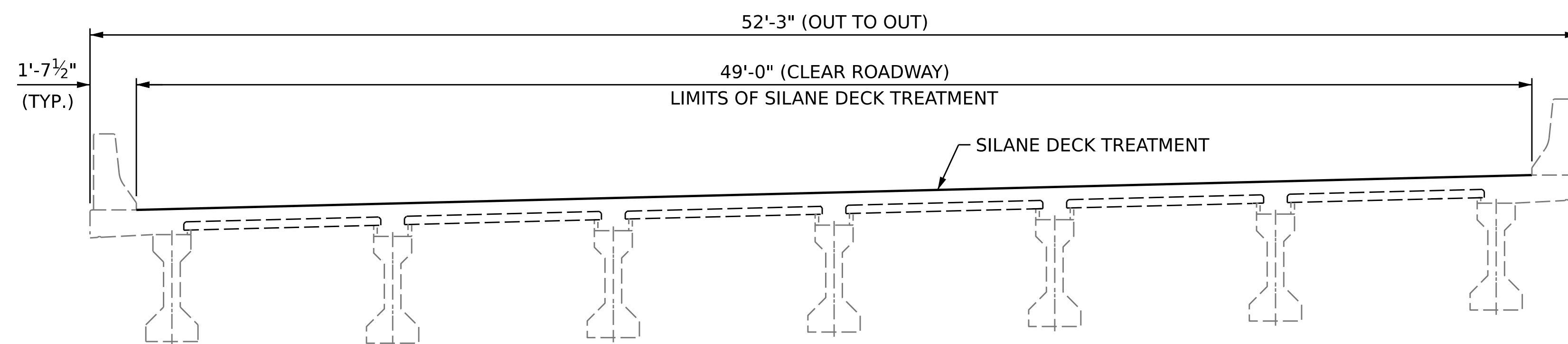


TYPICAL SECTION



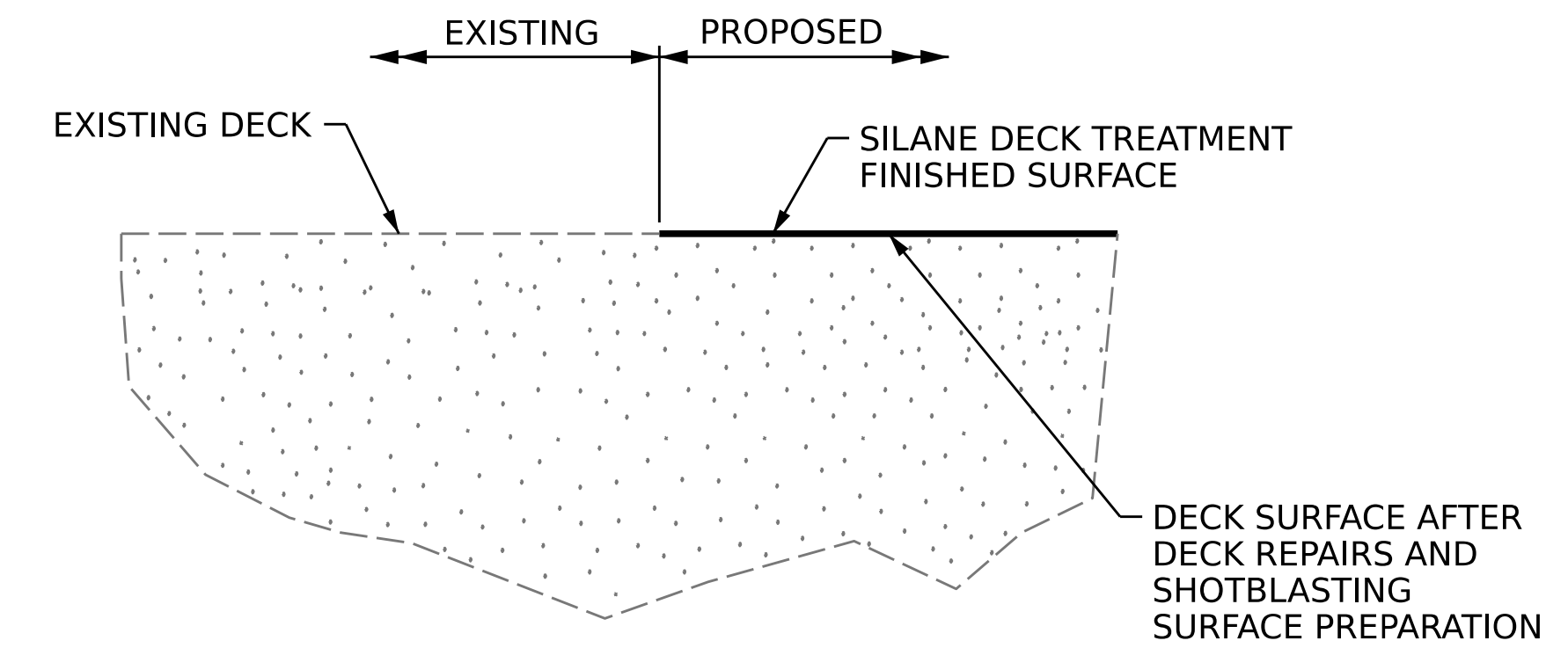
TYPICAL SECTION

(SHOTBLASTING)



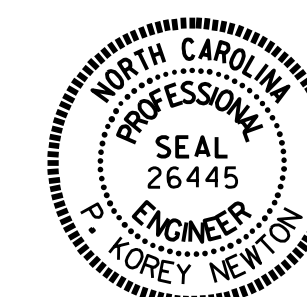
TYPICAL SECTION

(PROPOSED)



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090234**



Designed by:
P. Corey Newton
 47FES0014319407
 07/26/2023

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

DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

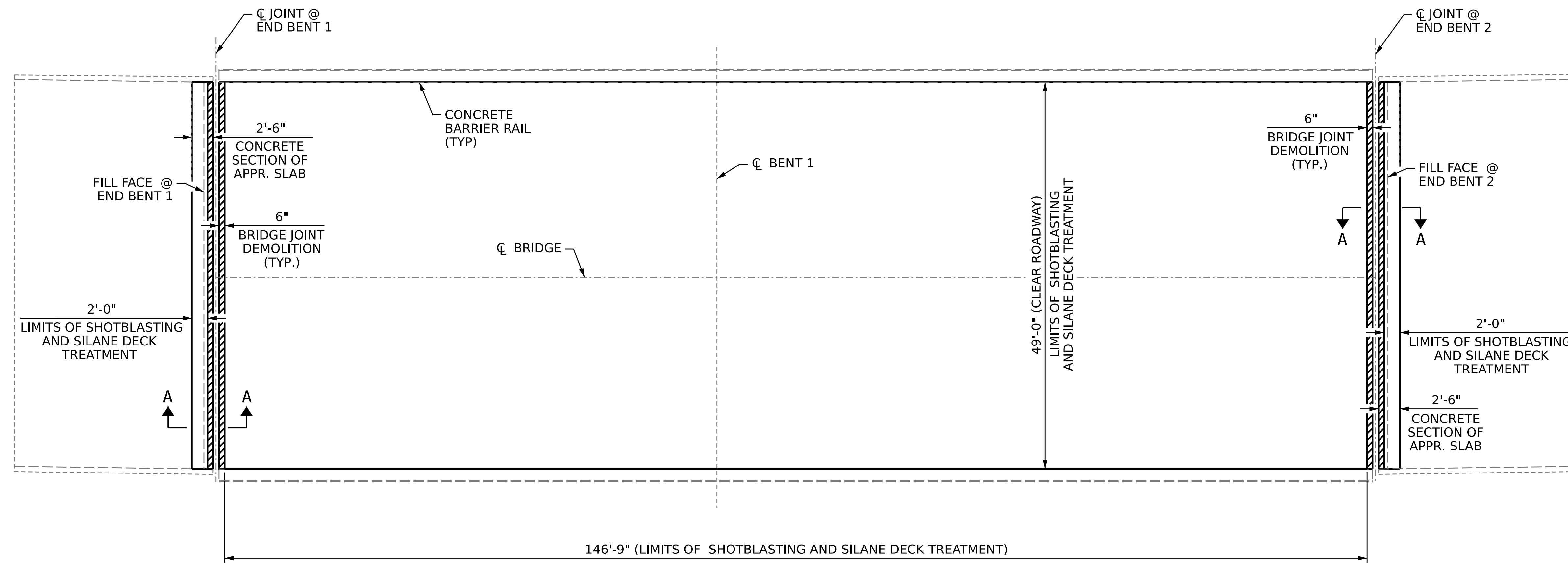
REVISIONS						SHEET NO. S3-2
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 4
2			4			

NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	799.0 SQ. YDS.	
SILANE DECK TREATMENT	799.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	49.0 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	21.8 SQ. YDS.	
SILANE DECK TREATMENT	21.8 SQ. YDS.	
BRIDGE JOINT DEMOLITION	49.0 SQ. FT.	



- SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
- BRIDGE JOINT DEMOLITION

APPROACH SLAB 1

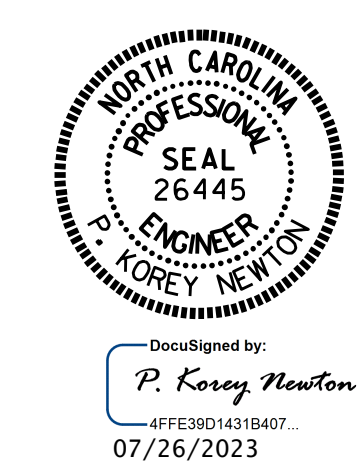
SPAN A

SPAN B

APPROACH SLAB 2

PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090234**

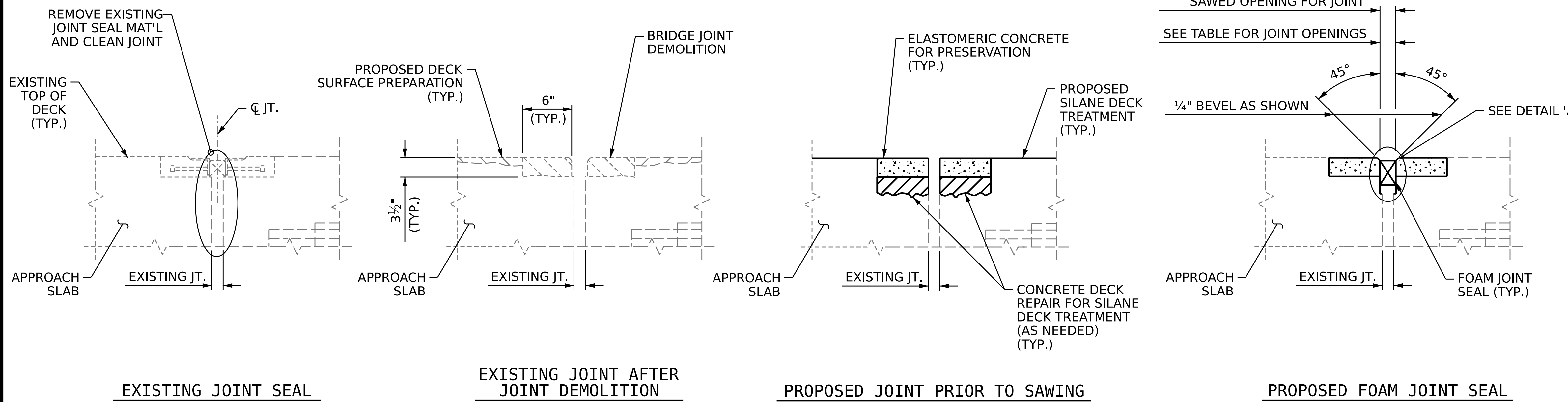


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**SUPERSTRUCTURE
 PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO. S3-3 TOTAL SHEETS 4
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4", NOTIFY THE ENGINEER.

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

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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

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

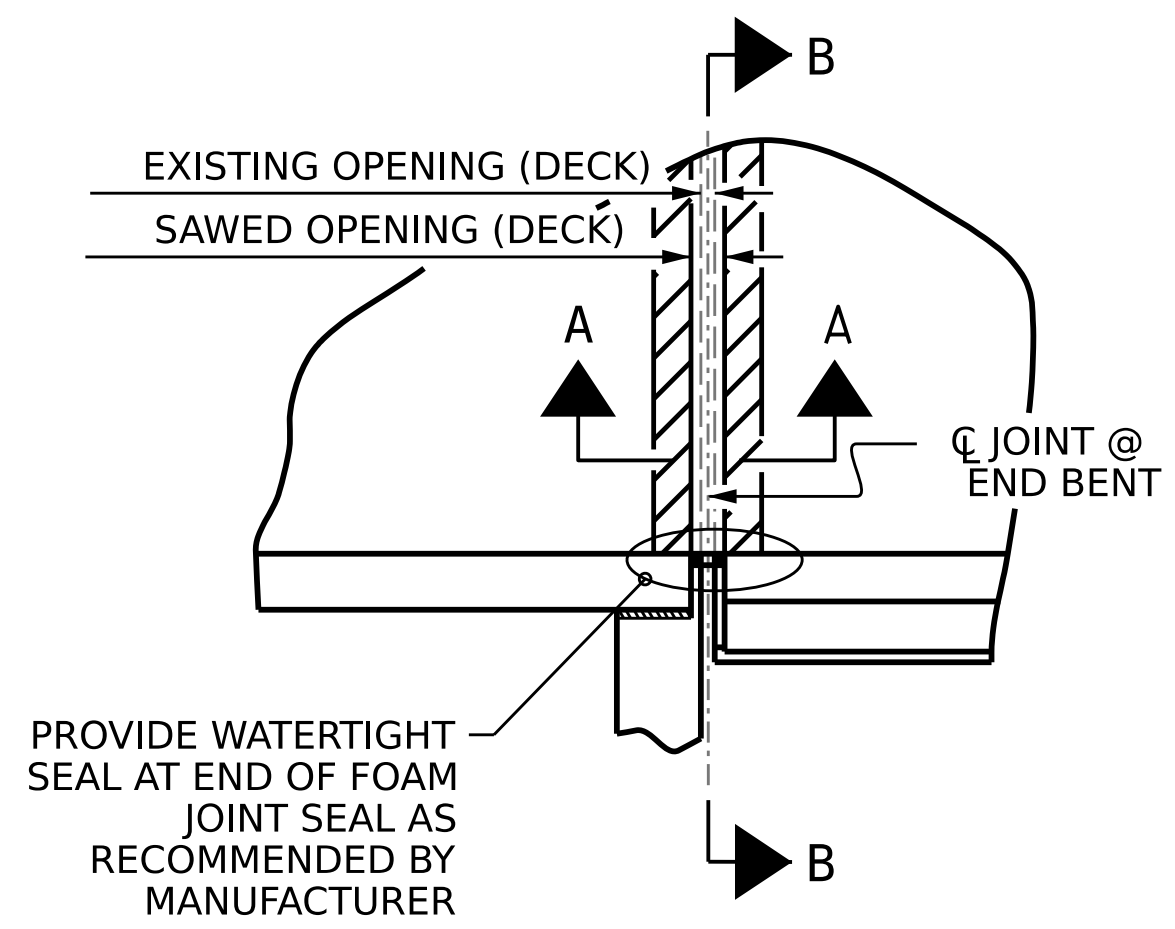
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

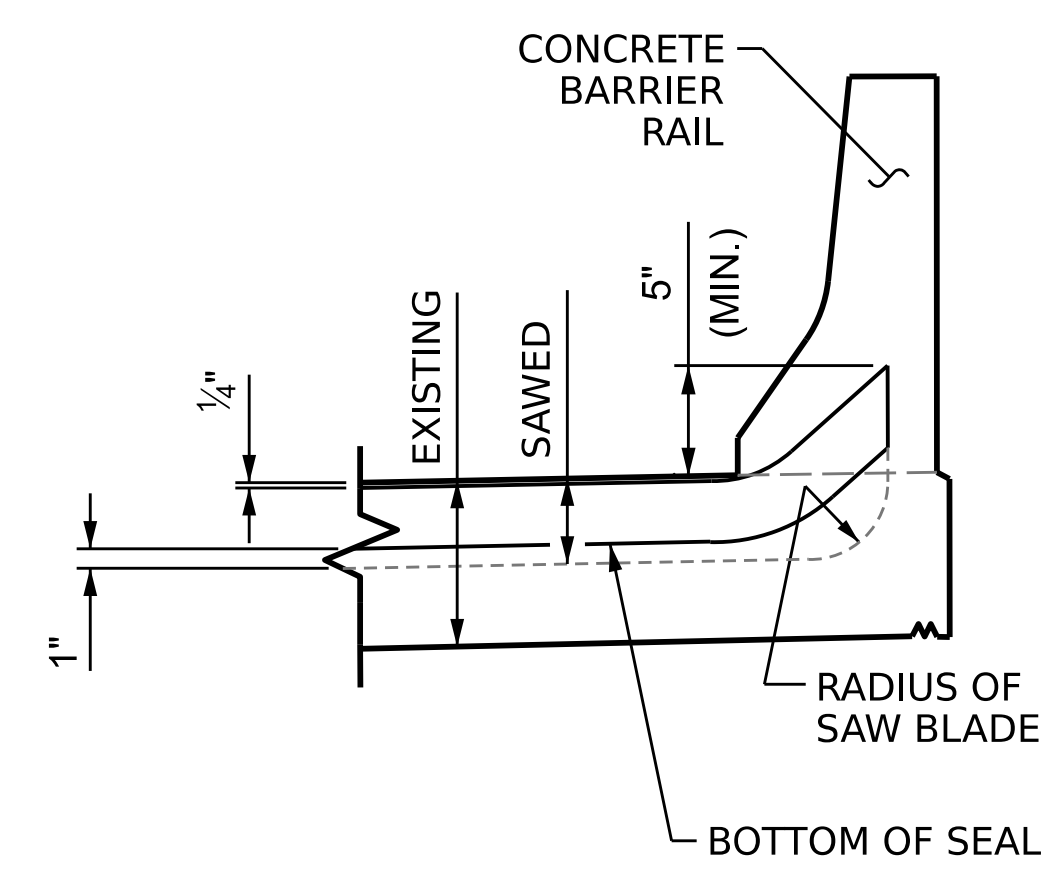
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

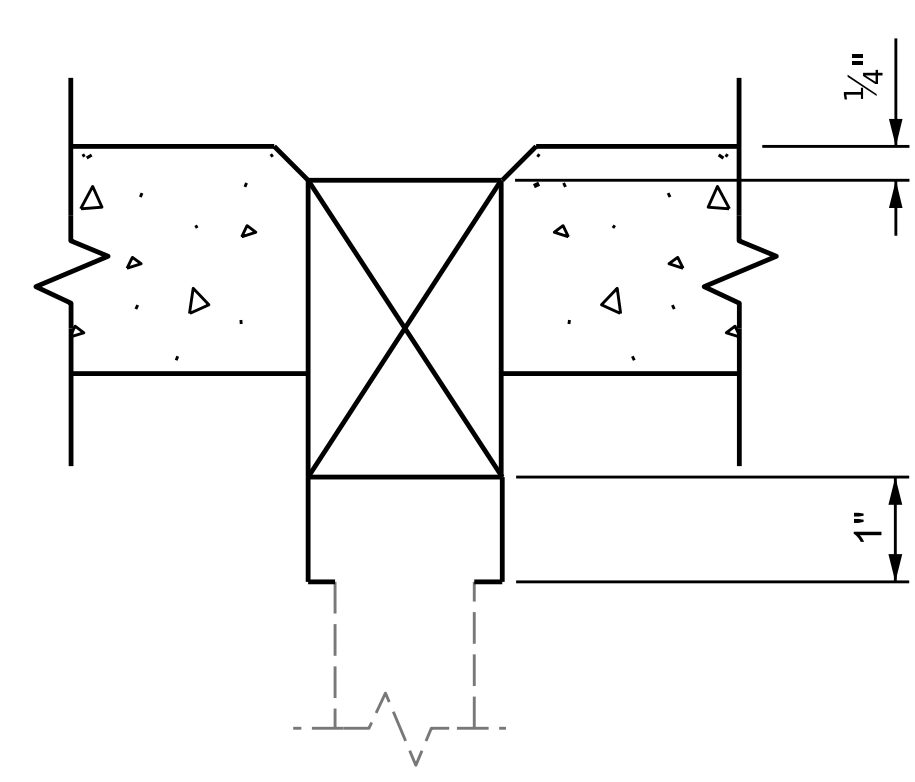
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE

	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	98.0	

ELASTOMERIC CONCRETE FOR PRESERVATION

LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	14.3	
END BENT 2	14.3	
TOTAL	28.6	

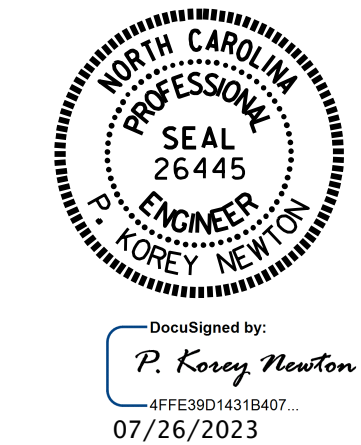
SAWED JOINT OPENING TABLE

LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2 1/16"	2"	1 3/16"
END BENT 2	2 1/8"	2"	1 3/4"

DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD : DATE :

1/25/2023
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 pknewton

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090234**

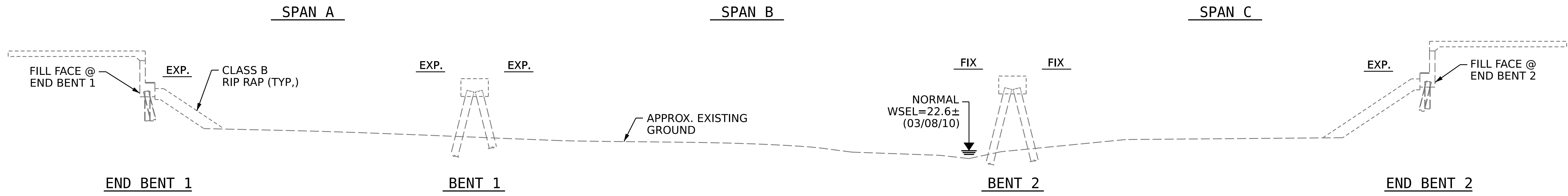


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

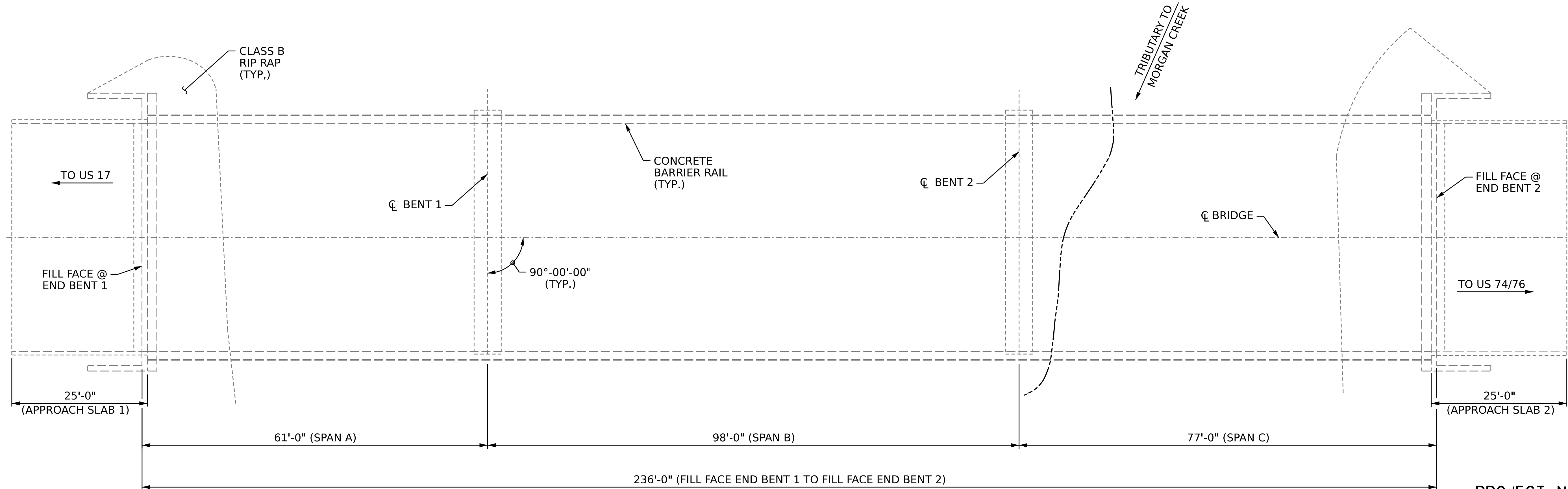
JOINT REPAIR DETAILS

NO.	BY:	DATE:	REVISIONS			SHEET NO.
			NO.	BY:	DATE:	
1			3			S3-4
2			4			TOTAL SHEETS 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SECTION ALONG CL BRIDGE



PLAN



DocuSigned by:
Kristy W. Alf
08/01/2023

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090235**

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/08/2021.
 BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS

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

 RESIDENT ENGINEER DATE



DocuSigned by:
P. Corey Newton
07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 FOR BRIDGE ON
 I-140 WBL OVER
 MORGAN CREEK TRIBUTARY

DRAWN BY :	S. T. SANDOR	DATE :	1/12/23
CHECKED BY :	W. C. SMITH	DATE :	5/23/23
DESIGN ENGINEER OF RECORD :		DATE :	

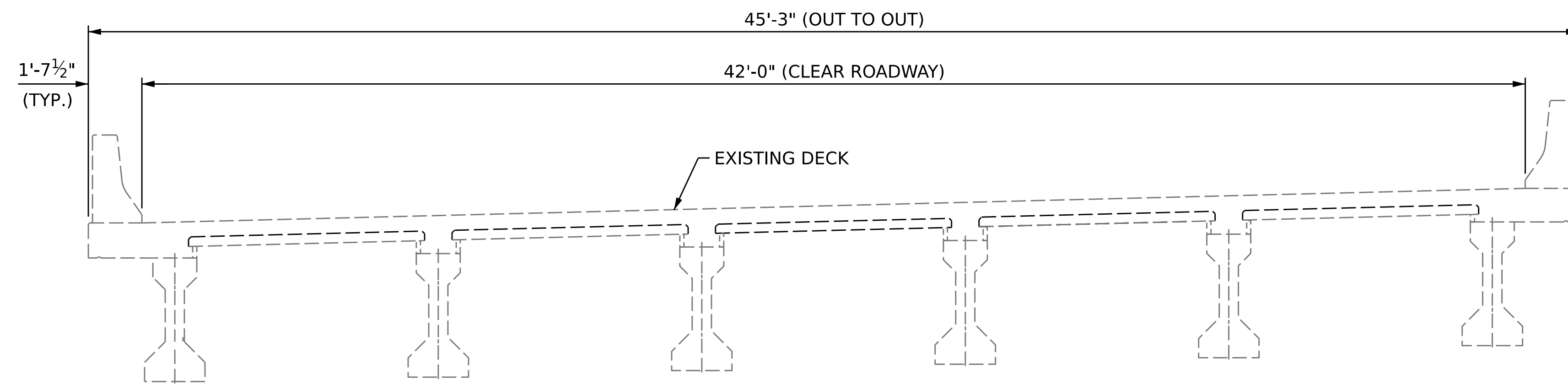
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S4-1
1			3			TOTAL SHEETS
2			4			4

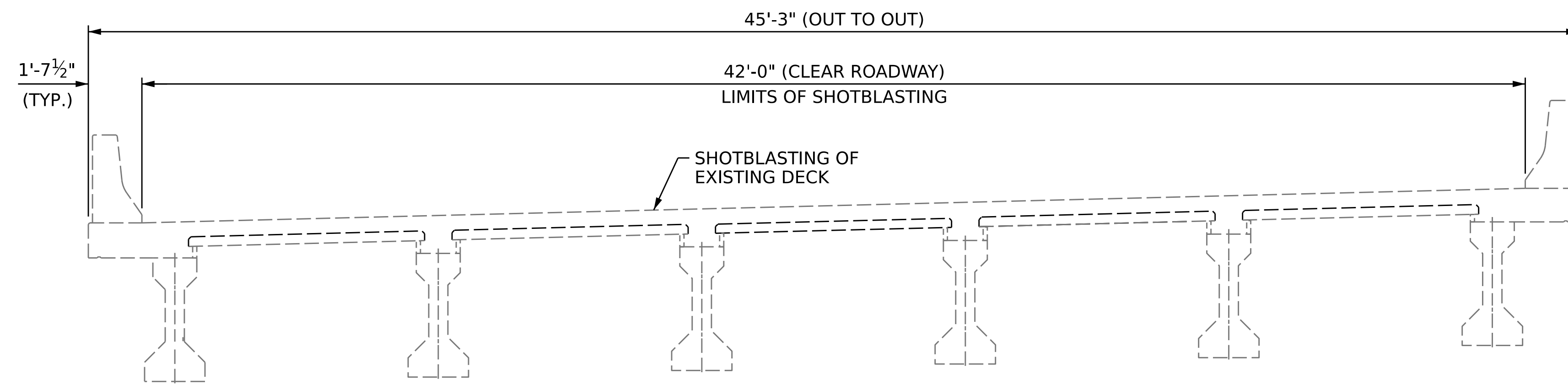
NOTES

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

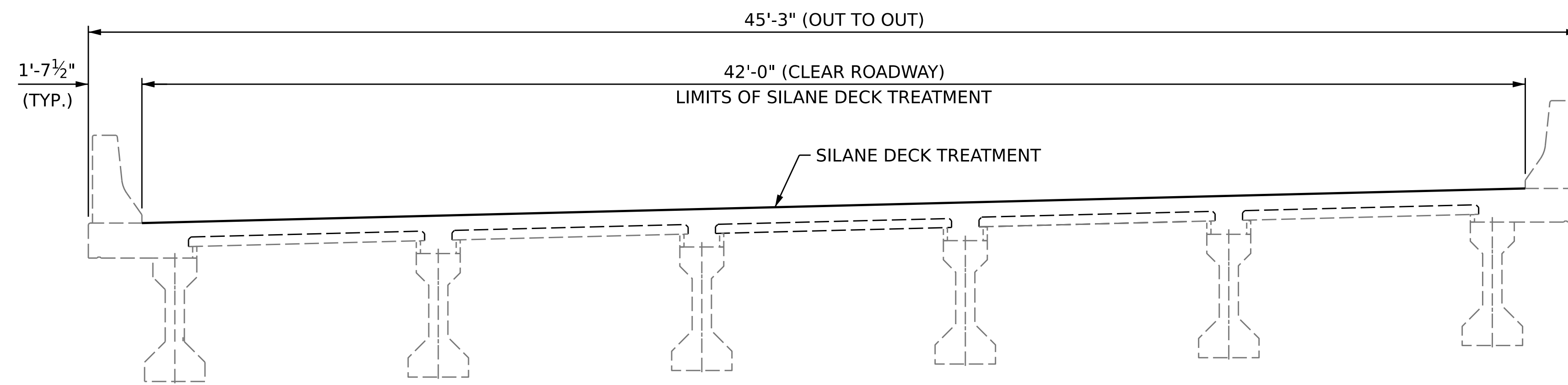
GIRDERS ARE AASHTO TYPE IV PRESTRESSED CONCRETE GIRDERS.



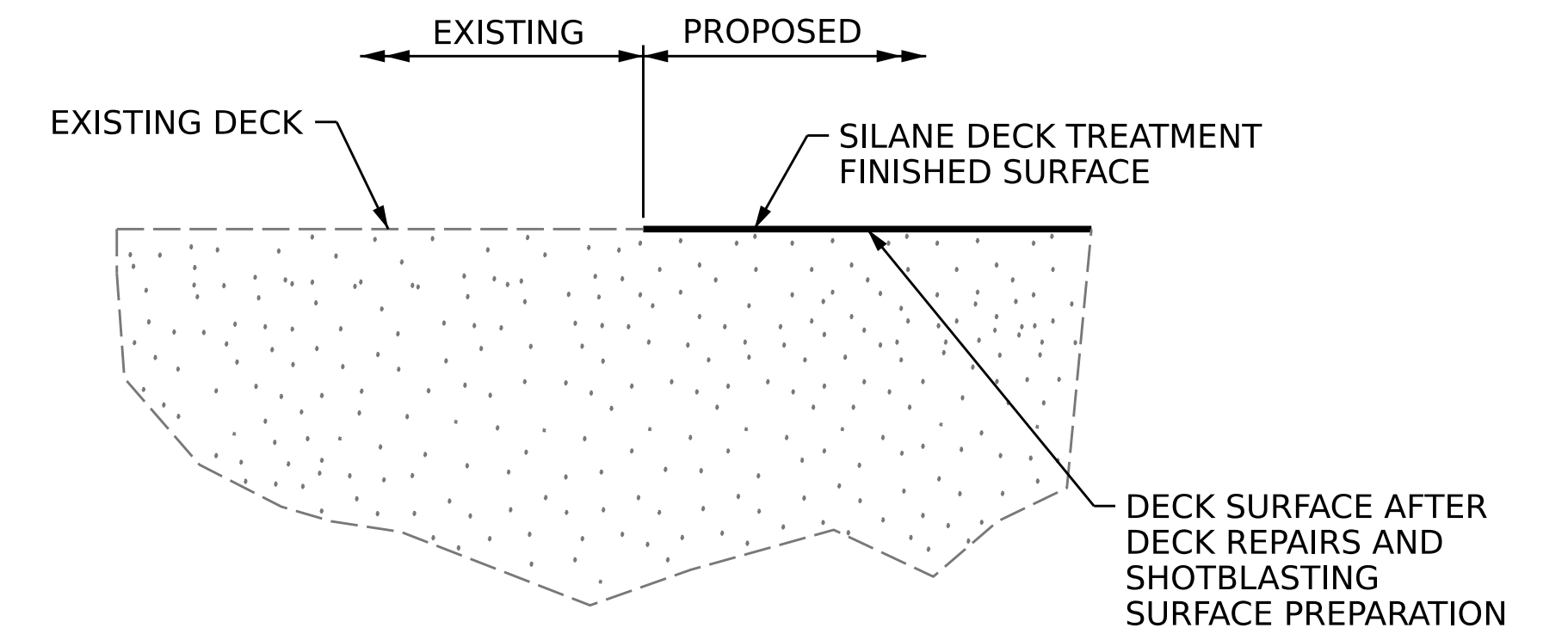
TYPICAL SECTION
(EXISTING)



TYPICAL SECTION
(SHOTBLASTING)



TYPICAL SECTION
(PROPOSED)



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090235**



DocuSigned by:
P. Corey Newton
 47FE39014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION FOR SILANE DECK TREATMENT

REVISIONS						SHEET NO. S4-2
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

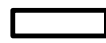

DRAWN BY : S. T. SANDOR DATE : 1/6/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

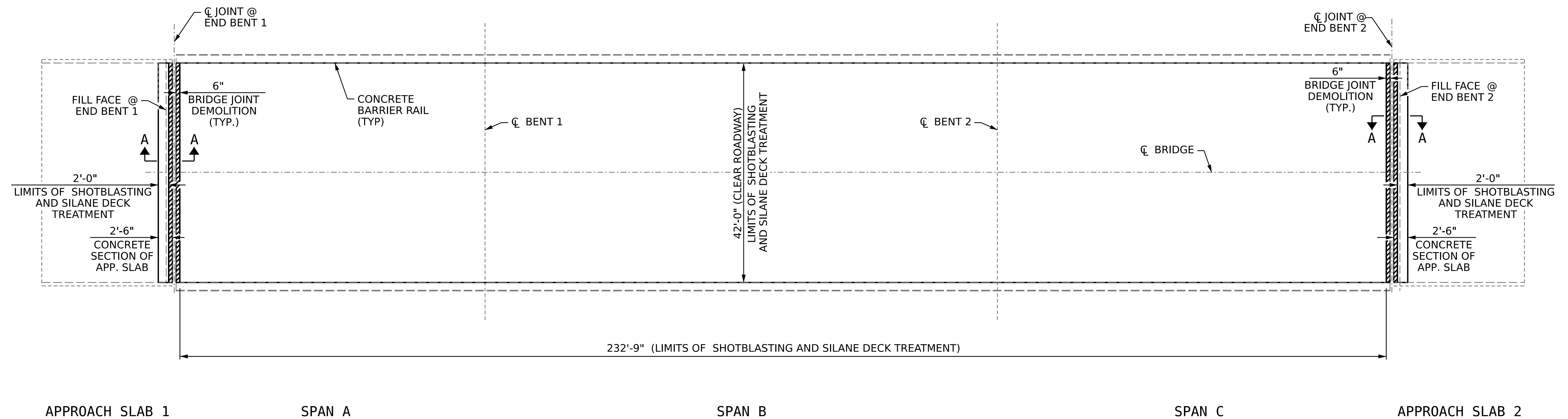
NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,086.2 SQ. YDS.	
SILANE DECK TREATMENT	1,086.2 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.0 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	18.7 SQ. YDS.	
SILANE DECK TREATMENT	18.7 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.0 SQ. FT.	

 SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
 BRIDGE JOINT DEMOLITION



PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090235**



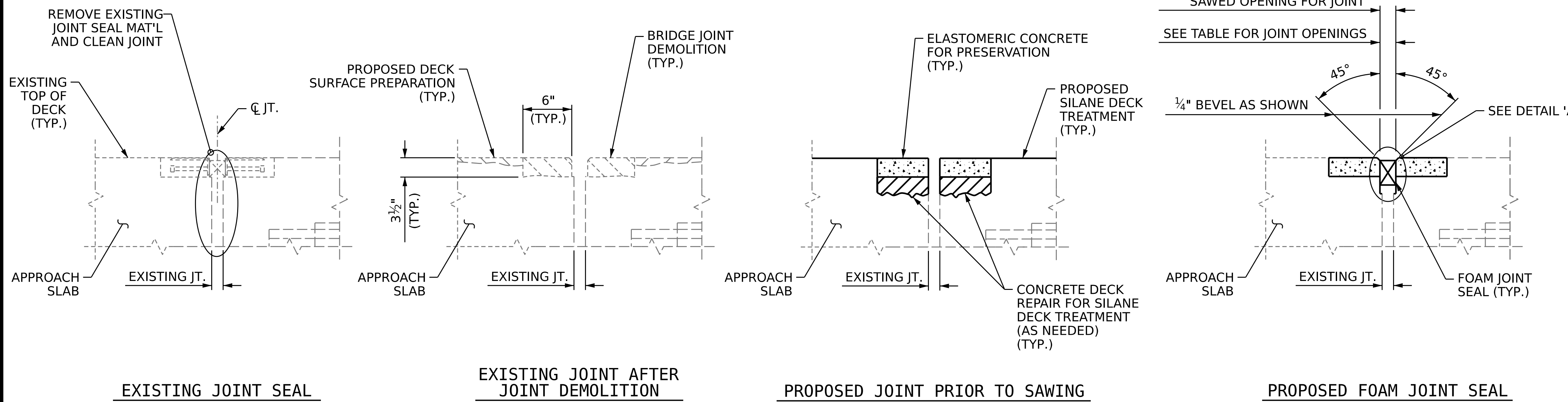
Designed by:
P. Corey Newton
 47FES9014319407
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
**PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/12/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S4-3
2			4			TOTAL SHEETS 4



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4", NOTIFY THE ENGINEER.

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

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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

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

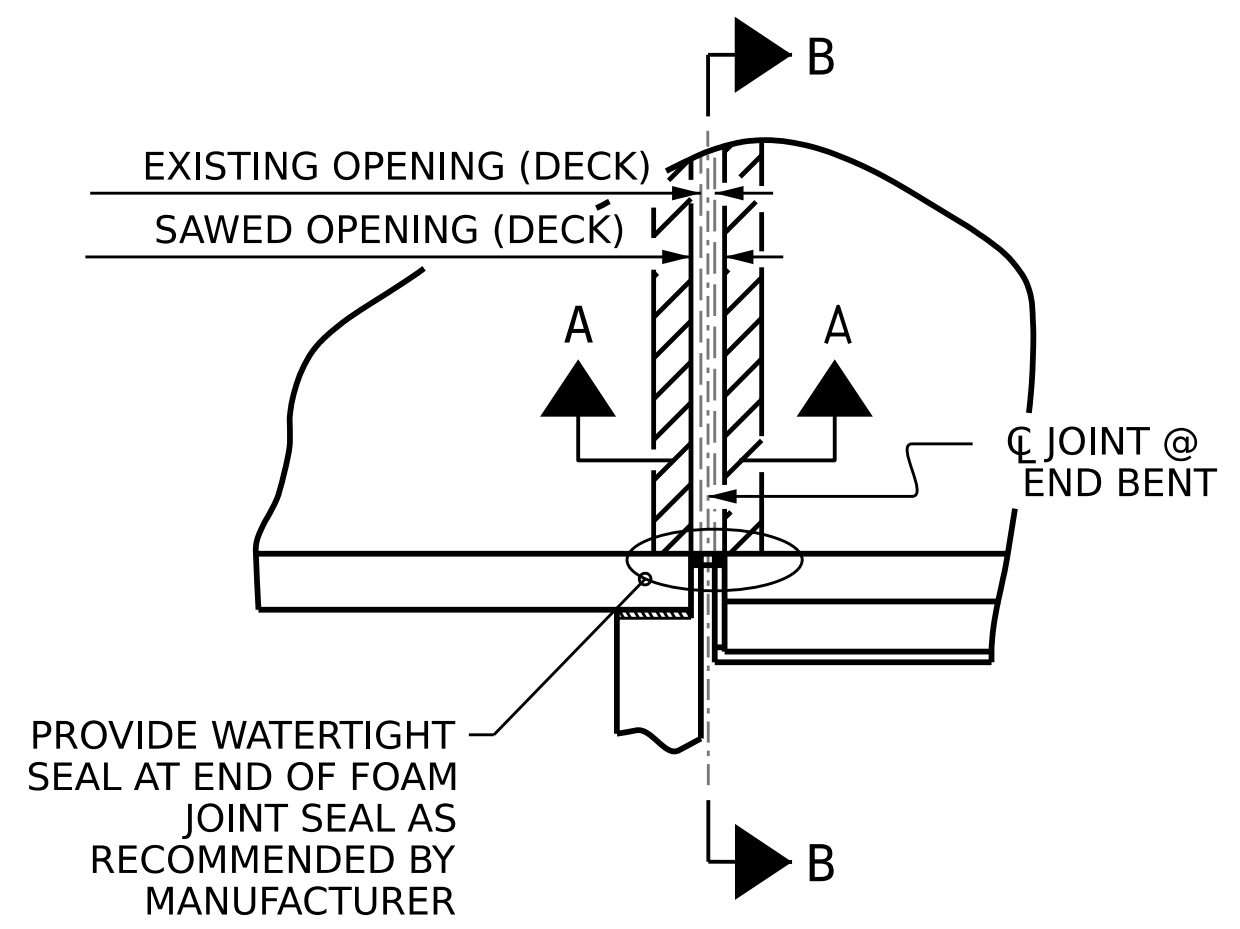
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

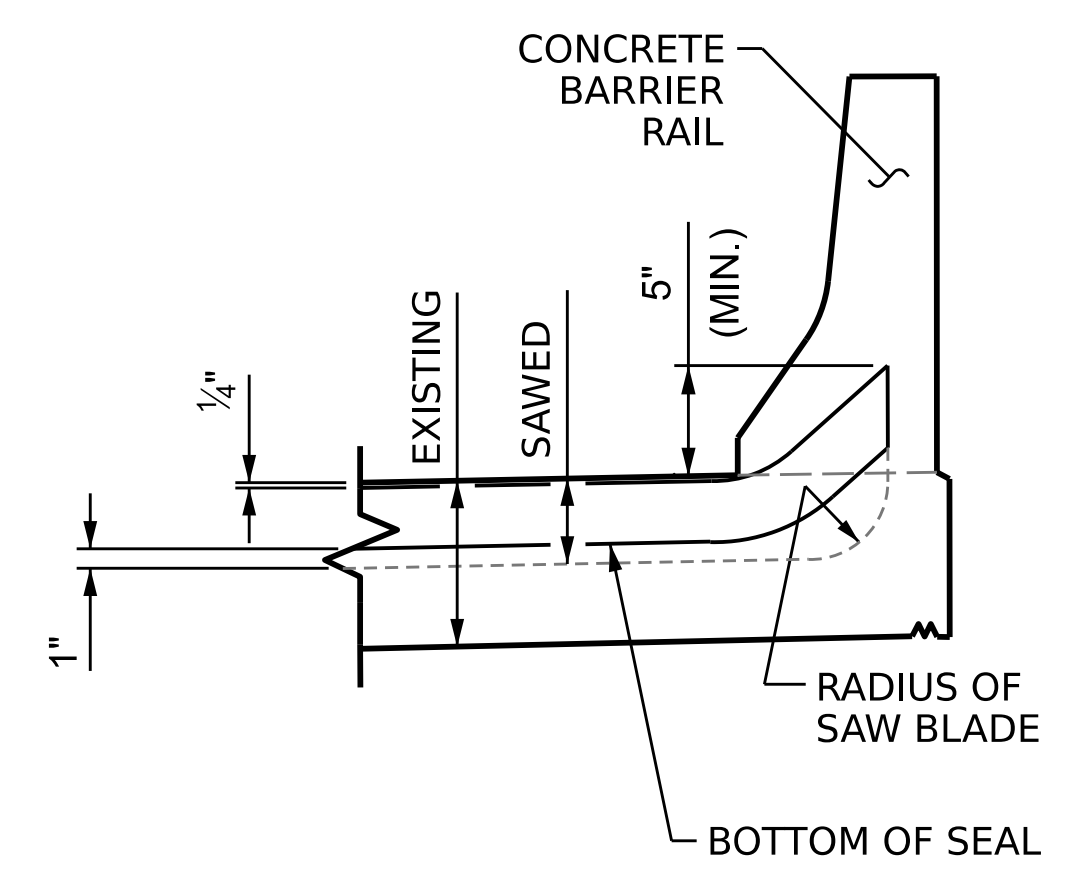
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

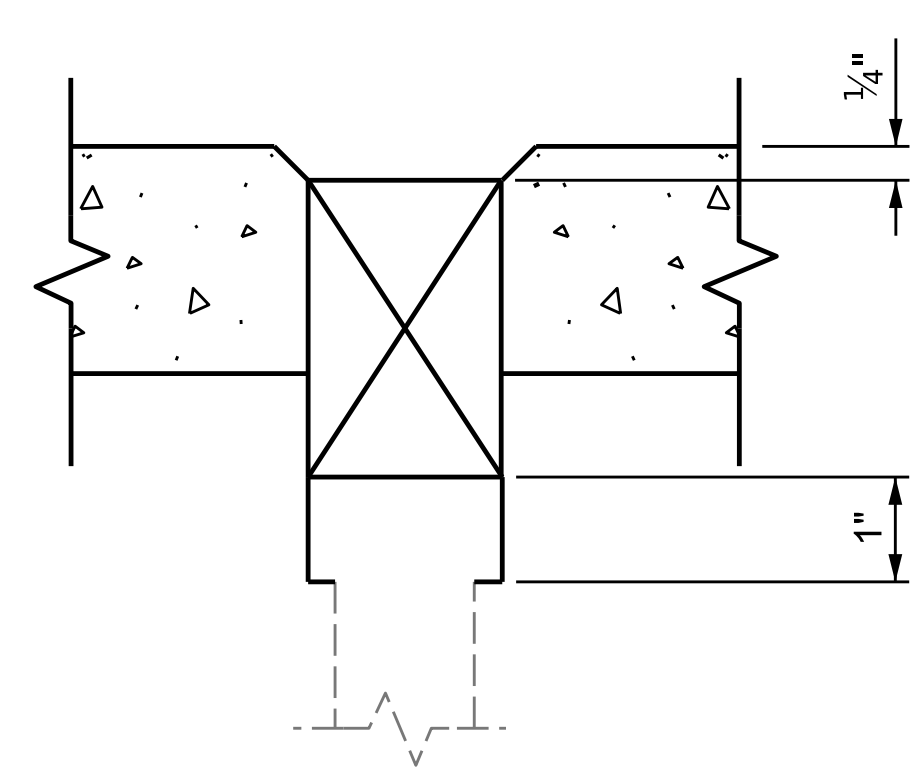
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE

	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	84.0	

ELASTOMERIC CONCRETE FOR PRESERVATION

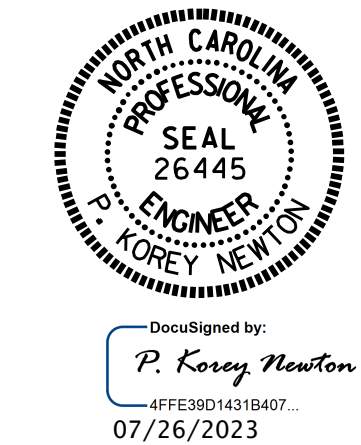
LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	12.3	
END BENT 2	12.3	
TOTAL	24.6	

SAWED JOINT OPENING TABLE

LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2 1/2"	2 1/4"	1 3/4"
END BENT 2	2 1/8"	2"	1 3/4"

DRAWN BY : S. T. SANDOR DATE : 1/12/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090235**

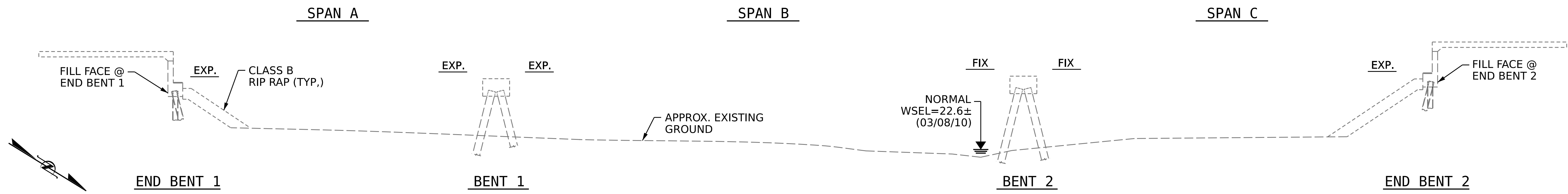


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

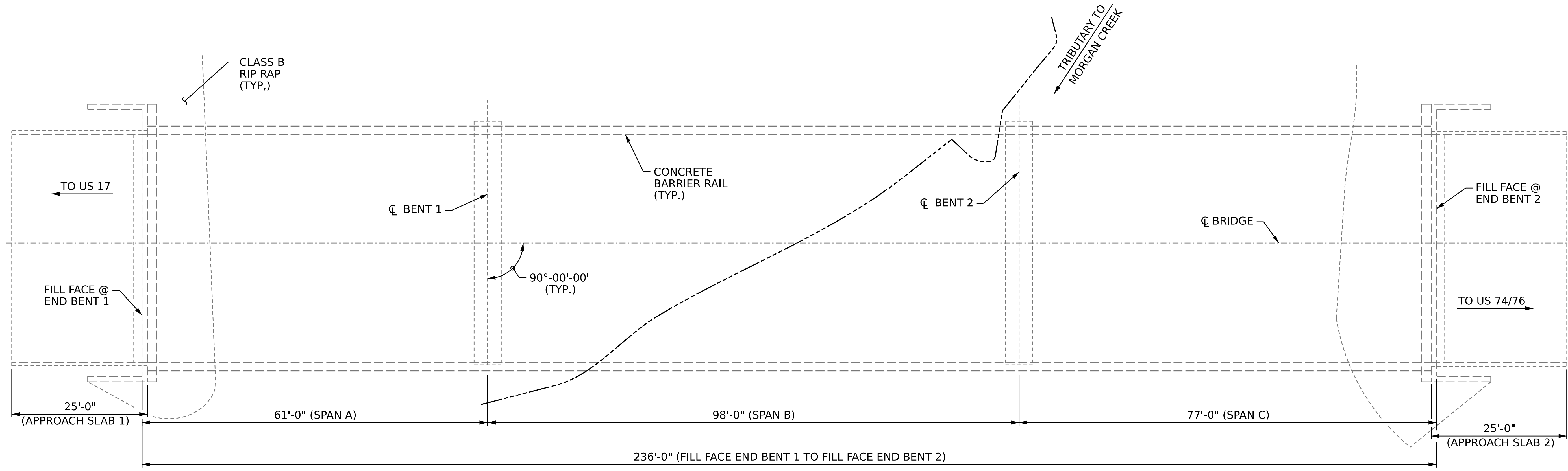
JOINT REPAIR DETAILS

NO.	BY:	DATE:	REVISIONS			SHEET NO.
			NO.	BY:	DATE:	
1			3			S4-4
2			4			TOTAL SHEETS 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SECTION ALONG CL BRIDGE



PLAN



DocuSigned by:
Kristy W. Alford
08/01/2023

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090236**

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/09/2021.
 BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS

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

 RESIDENT ENGINEER DATE



DocuSigned by:
P. Corey Newton
07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON
 I-140 EBL OVER
 MORGAN CREEK TRIBUTARY

DRAWN BY : S. T. SANDOR DATE : 1/12/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

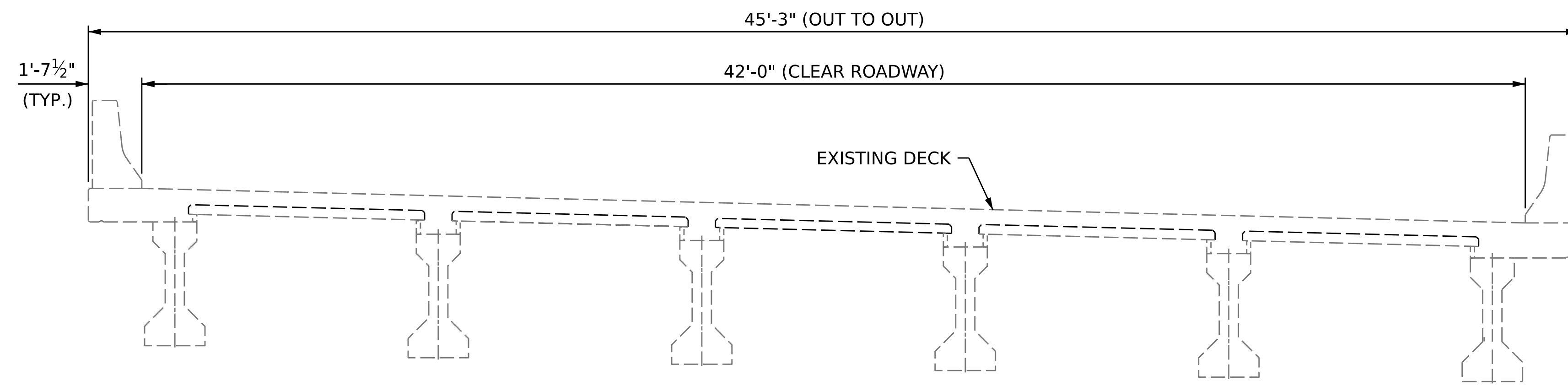
DOCUMENT NOT CONSIDERED
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 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			TOTAL SHEETS 4

NOTES

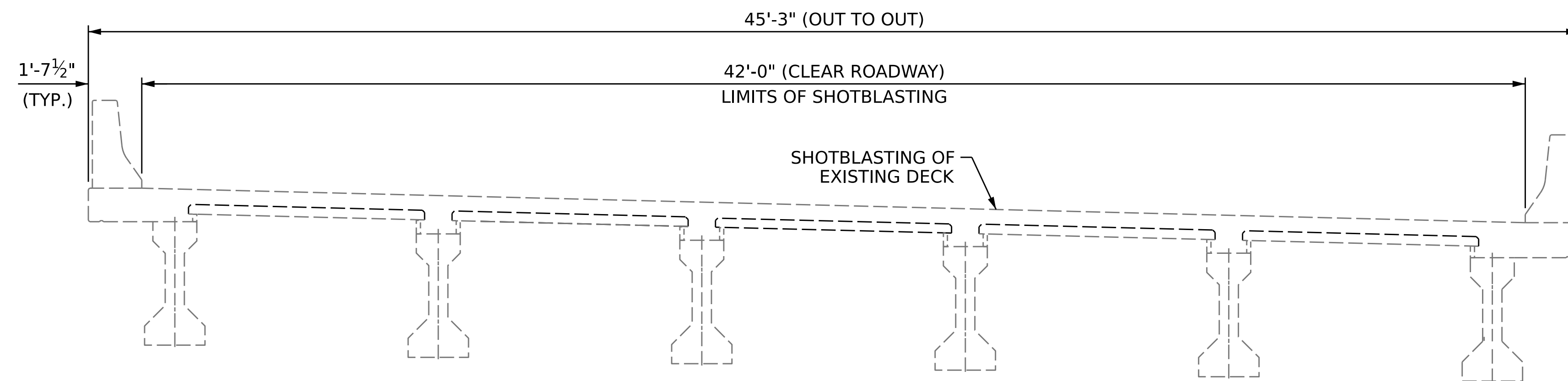
SEE TRANSPORTATION MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

GIRDERS ARE AASHTO TYPE IV PRESTRESSED CONCRETE GIRDERS.



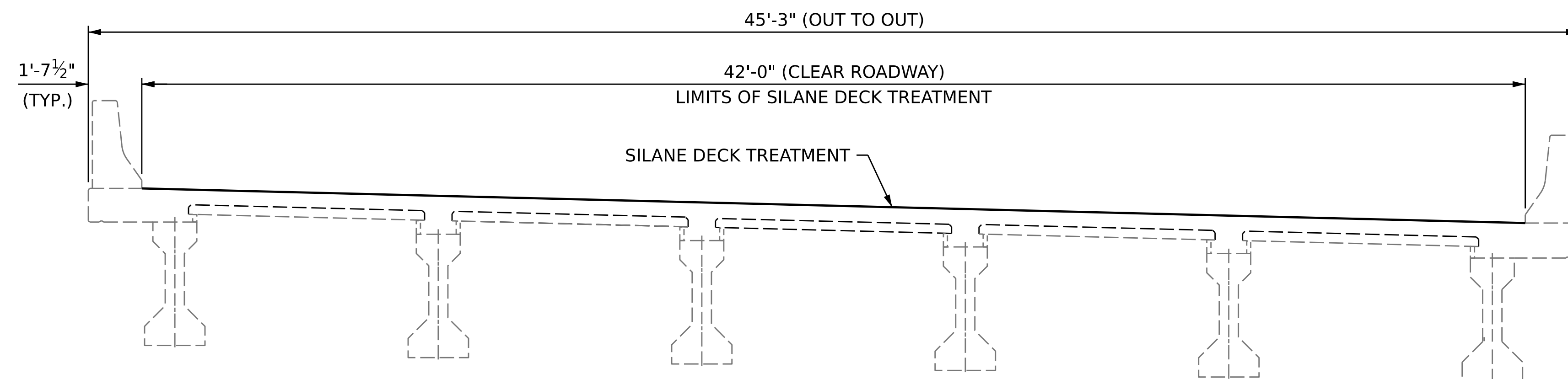
TYPICAL SECTION

(EXISTING)



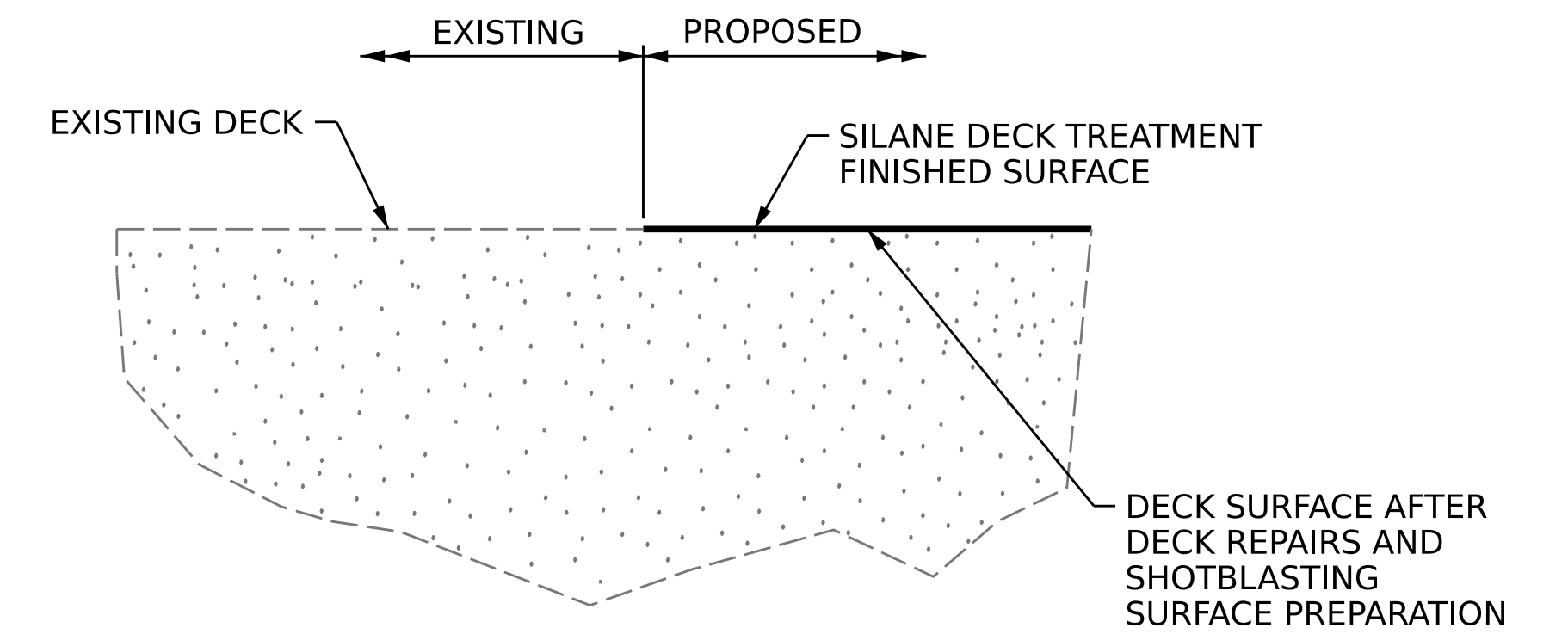
TYPICAL SECTION

(SHOTBLASTING)



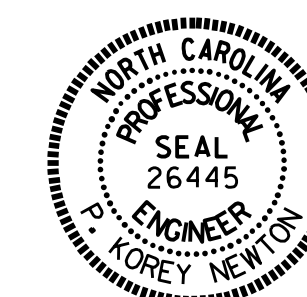
TYPICAL SECTION

(PROPOSED)



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090236**



DocuSigned by:
P. Corey Newton
 47FE39014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
**TYPICAL SECTION
 FOR SILANE
 DECK TREATMENT**

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S5-2
1			3			TOTAL SHEETS
2			4			4

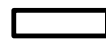

DRAWN BY : S. T. SANDOR DATE : 1/17/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

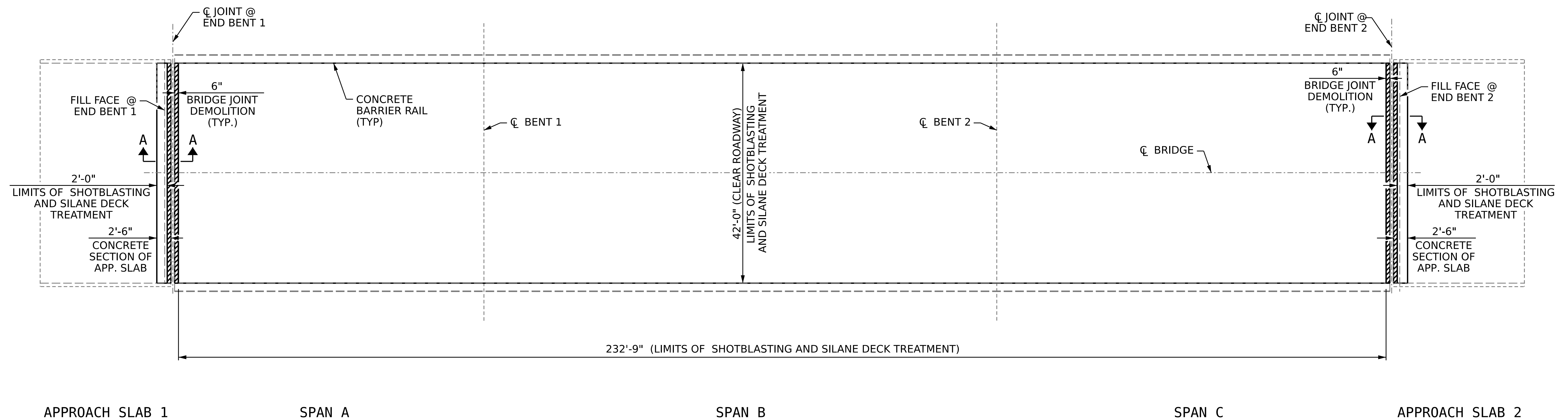
NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,086.2 SQ. YDS.	
SILANE DECK TREATMENT	1,086.2 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.0 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	18.7 SQ. YDS.	
SILANE DECK TREATMENT	18.7 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.0 SQ. FT.	

 SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
 BRIDGE JOINT DEMOLITION



PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090236**



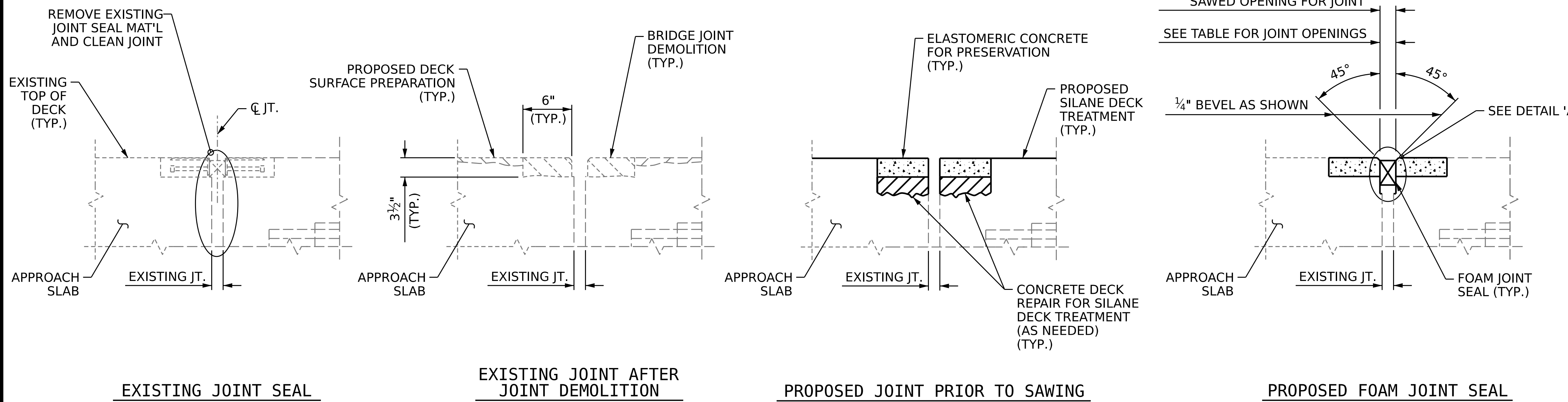
Documented by:
P. Corey Newton
 47FE30014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
**PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/17/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S5-3
1			3			TOTAL SHEETS
2			4			4



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN ¼", NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE FOAM JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL SAW CUT TO A NOMINAL DEPTH OF ½" BUT REINFORCING STEEL SHALL NOT BE DAMAGED. CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.

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

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

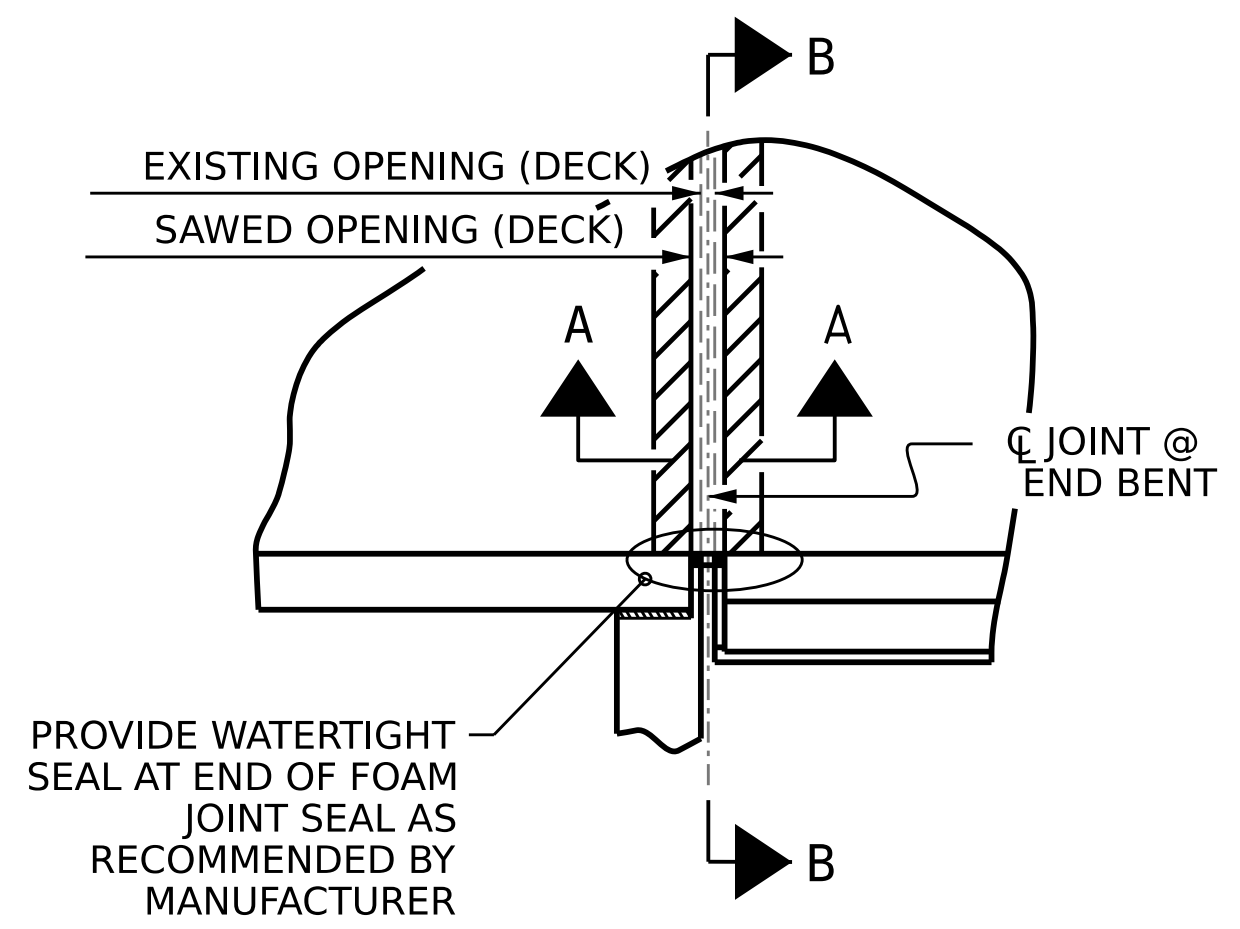
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

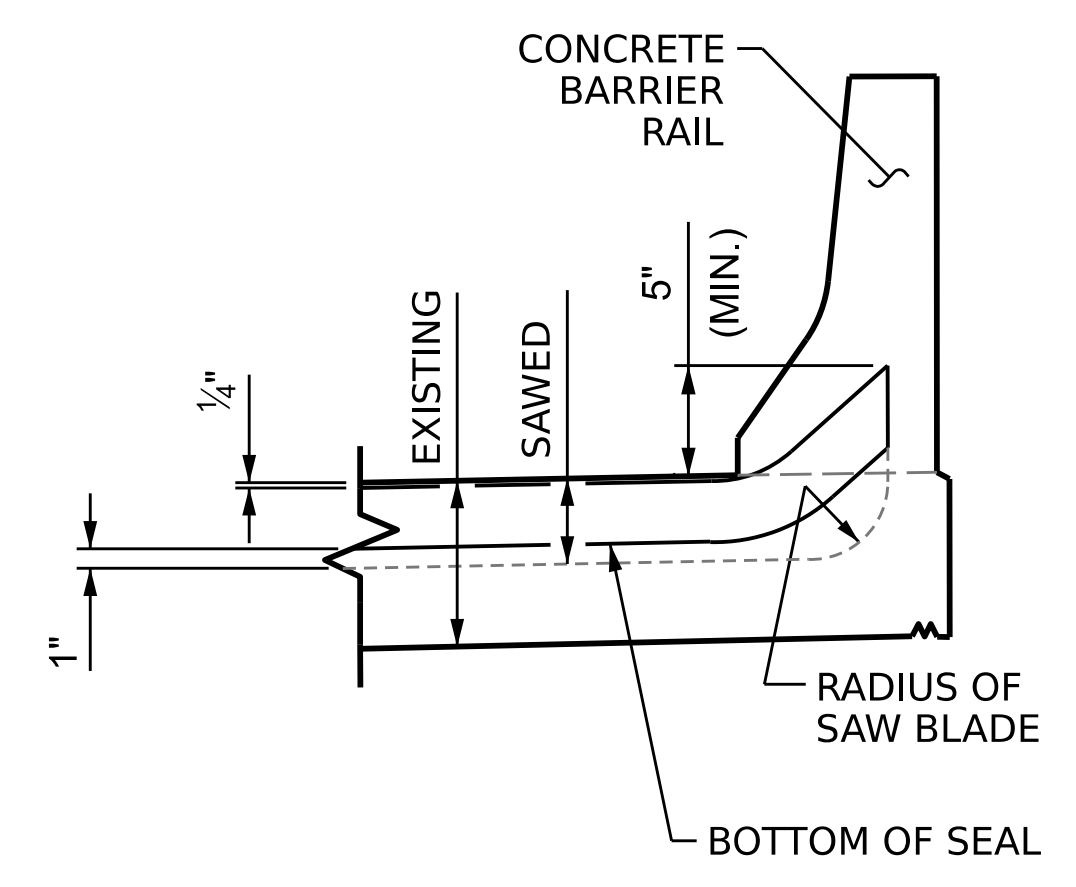
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

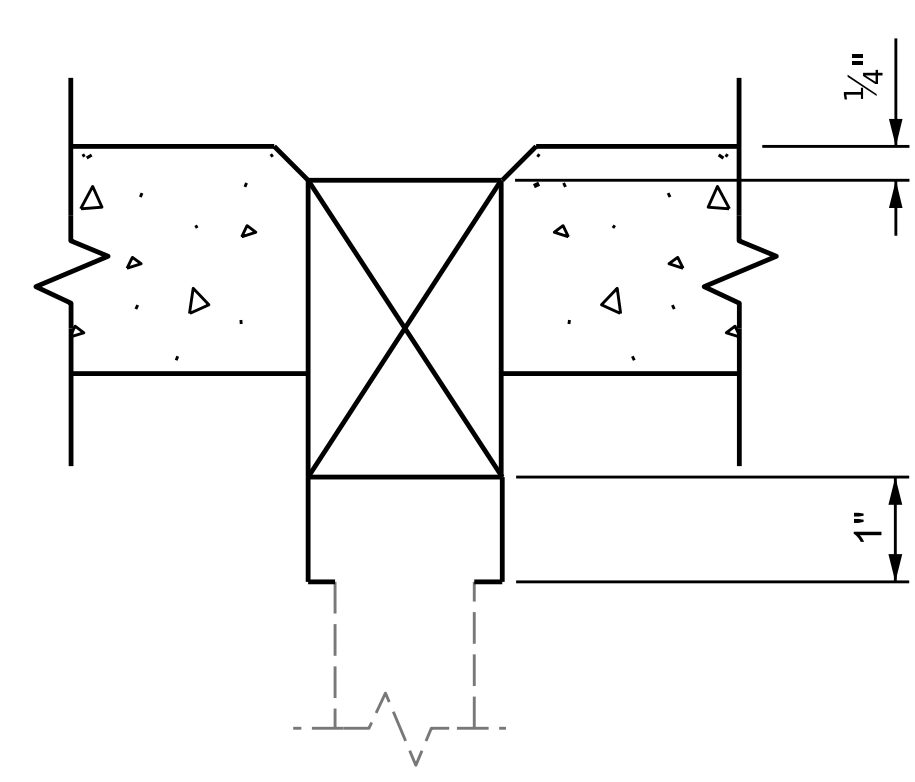
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE		
	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	84.0	

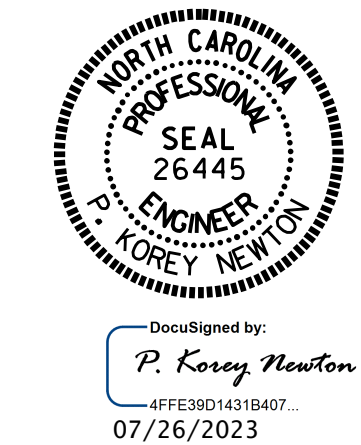
ELASTOMERIC CONCRETE FOR PRESERVATION		
LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	12.3	
END BENT 2	12.3	
TOTAL	24.6	

SAWED JOINT OPENING TABLE			
LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2½"	2¼"	1¾"
END BENT 2	2½"	2"	1¾"

DRAWN BY : S. T. SANDOR DATE : 1/17/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

1/25/2023
 S:\DPG\Division3\I-6036\BRC_5_090236\Plans\405_007.I-6036.SMU.JT_S5-4_090236.dgn
 pknewton

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090236**

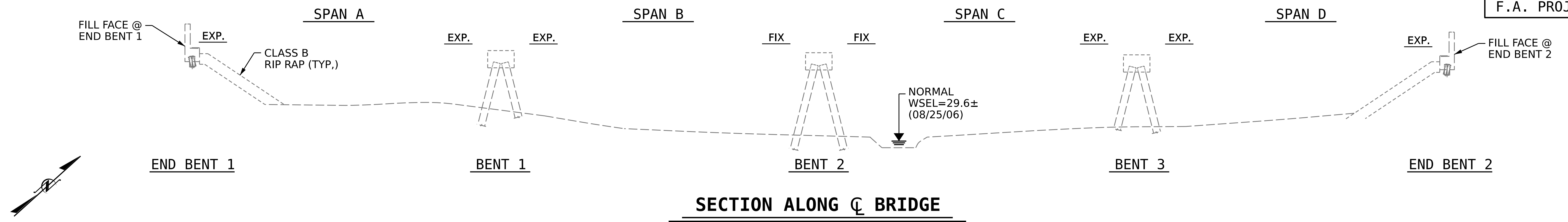


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

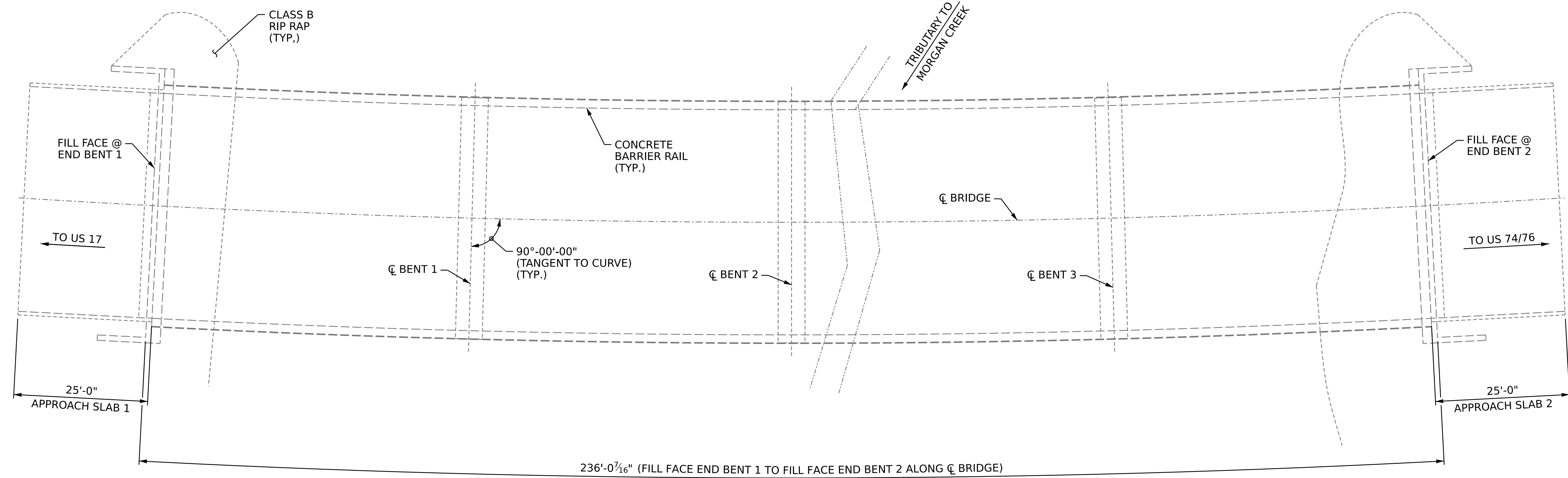
JOINT REPAIR DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S5-4
1			3			TOTAL SHEETS
2			4			4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SECTION ALONG CL BRIDGE



PLAN

NOTES

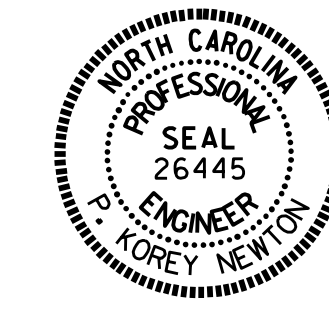
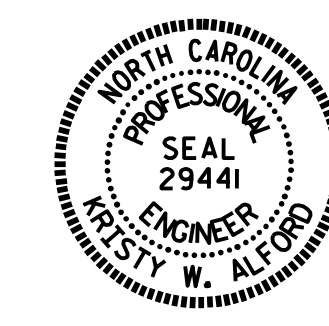
GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/02/2021.
 BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS

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

 RESIDENT ENGINEER DATE



PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090237**

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON
 I-140 WBL OVER
 MORGAN CREEK TRIBUTARY

DRAWN BY : S. T. SANDOR DATE : 1/12/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

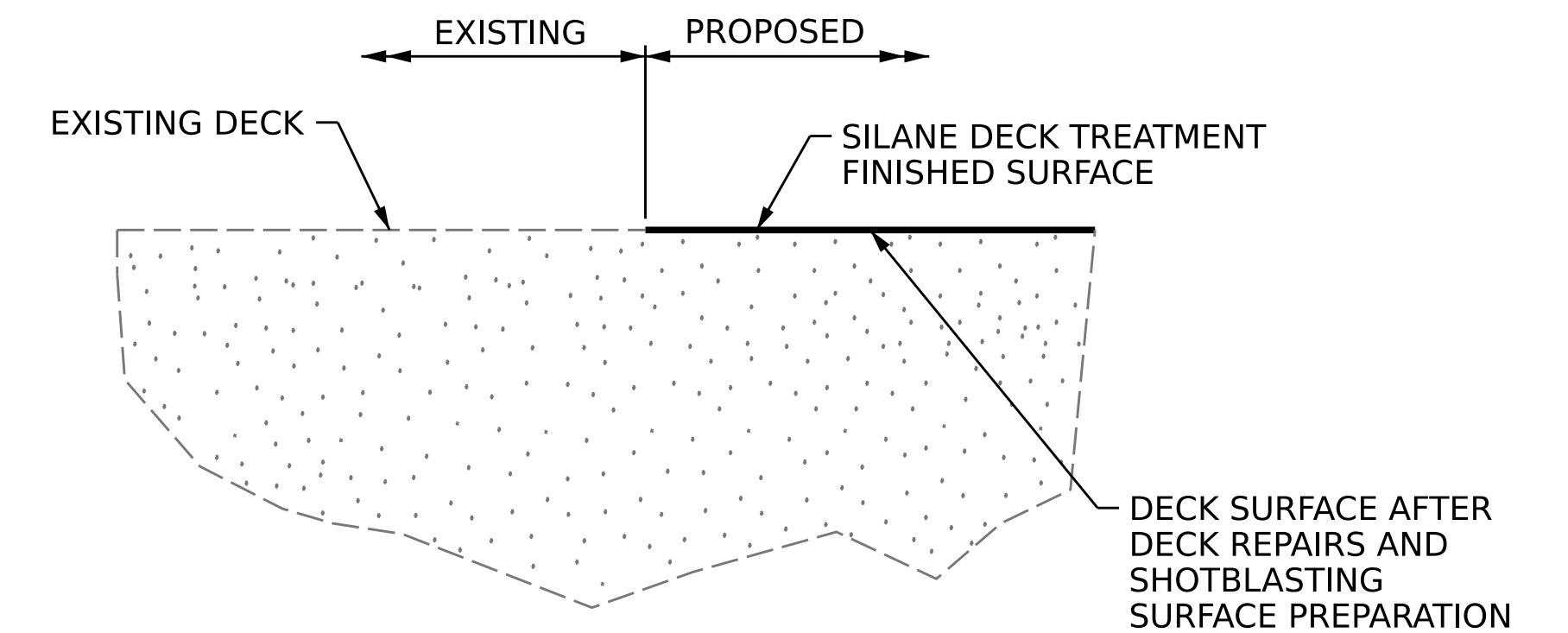
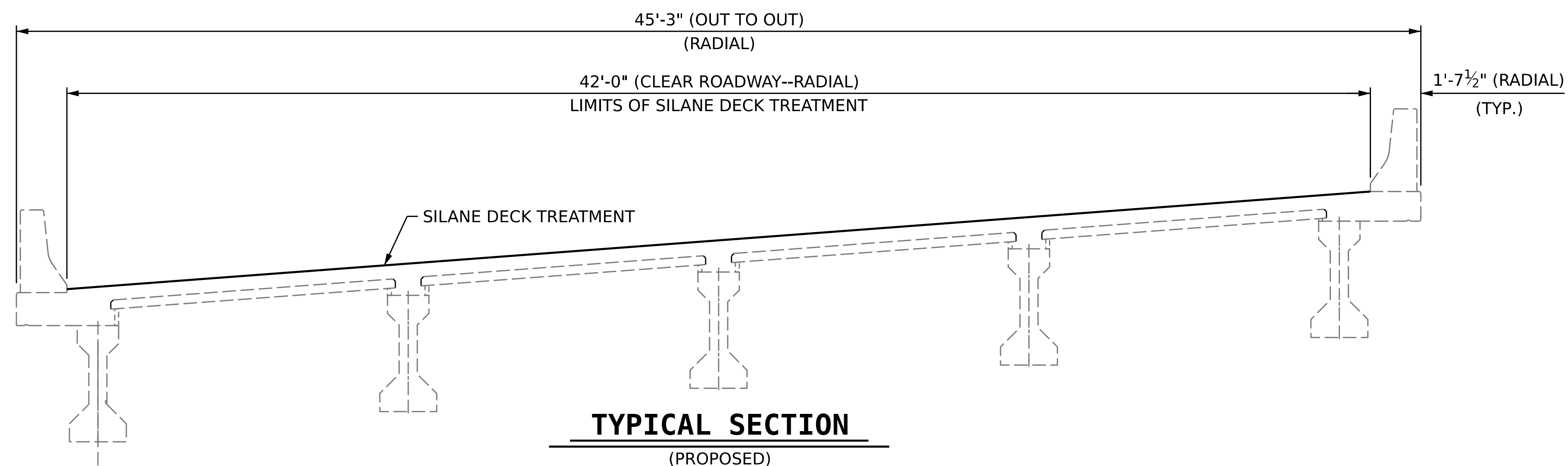
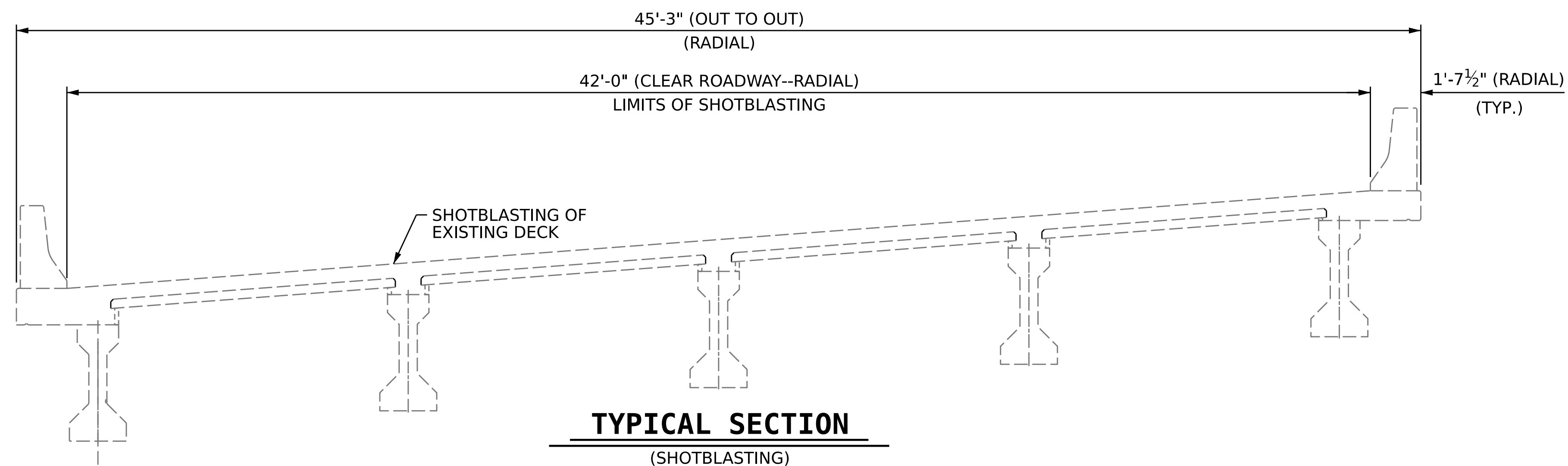
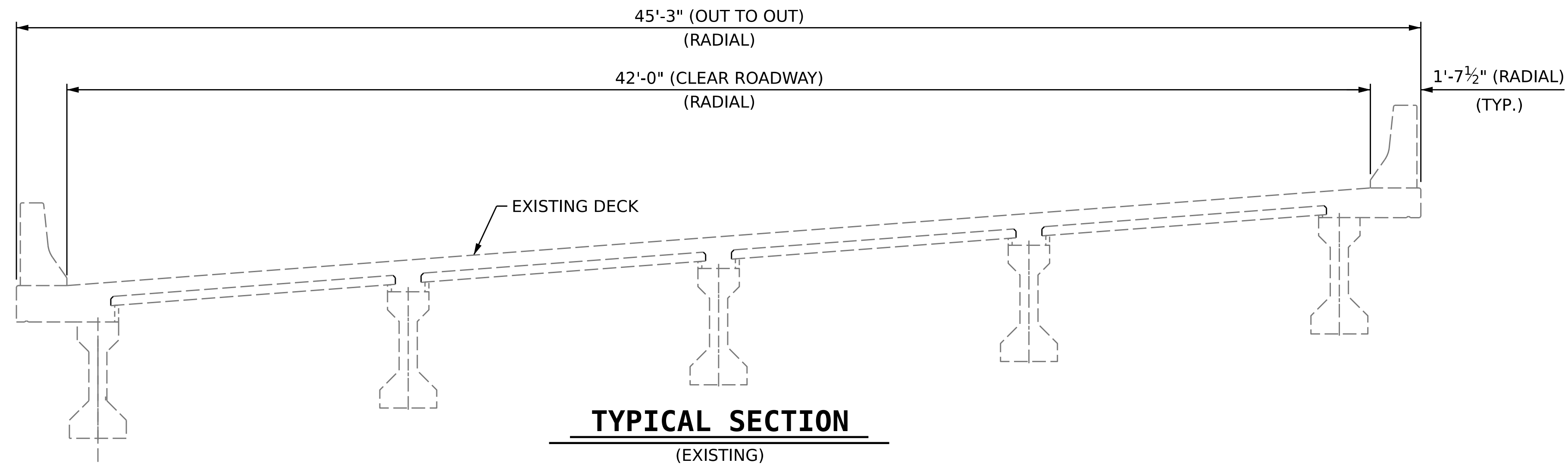
REVISIONS						SHEET NO. S6-1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 4
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES

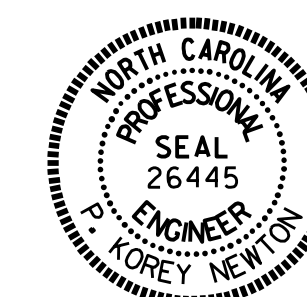
SEE TRANSPORTATION MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

GIRDERS ARE AASHTO TYPE III PRESTRESSED CONCRETE GIRDERS.



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090237**



DocuSigned by:
P. Corey Newton
 #FFE39014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION FOR SILANE DECK TREATMENT

REVISIONS						SHEET NO. S6-2
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

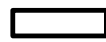

DRAWN BY : S. T. SANDOR DATE : 1/18/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

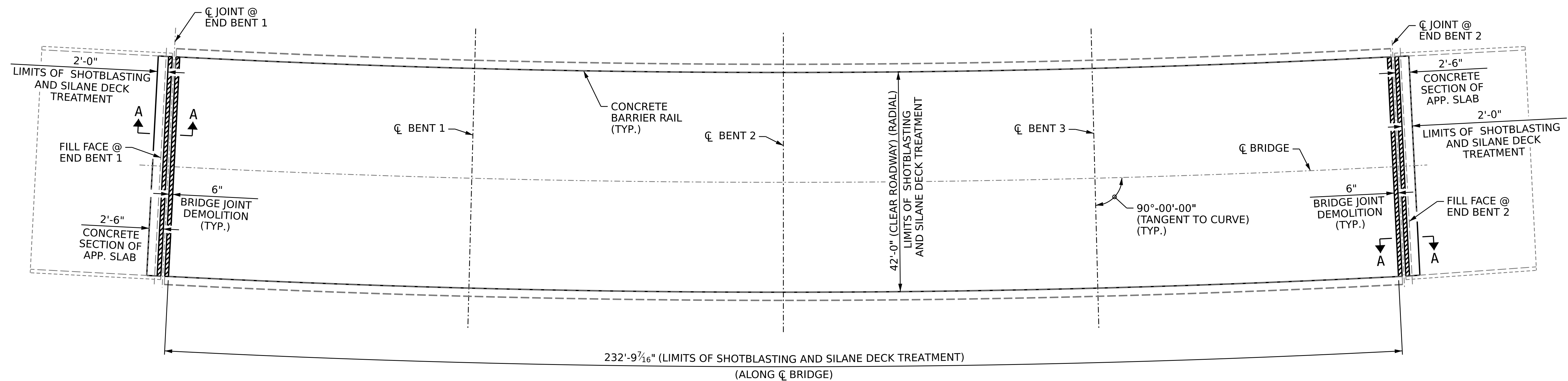
NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,086.3 SQ. YDS.	
SILANE DECK TREATMENT	1,086.3 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.0 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	18.7 SQ. YDS.	
SILANE DECK TREATMENT	18.7 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.0 SQ. FT.	

-  SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
-  BRIDGE JOINT DEMOLITION



PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090237**



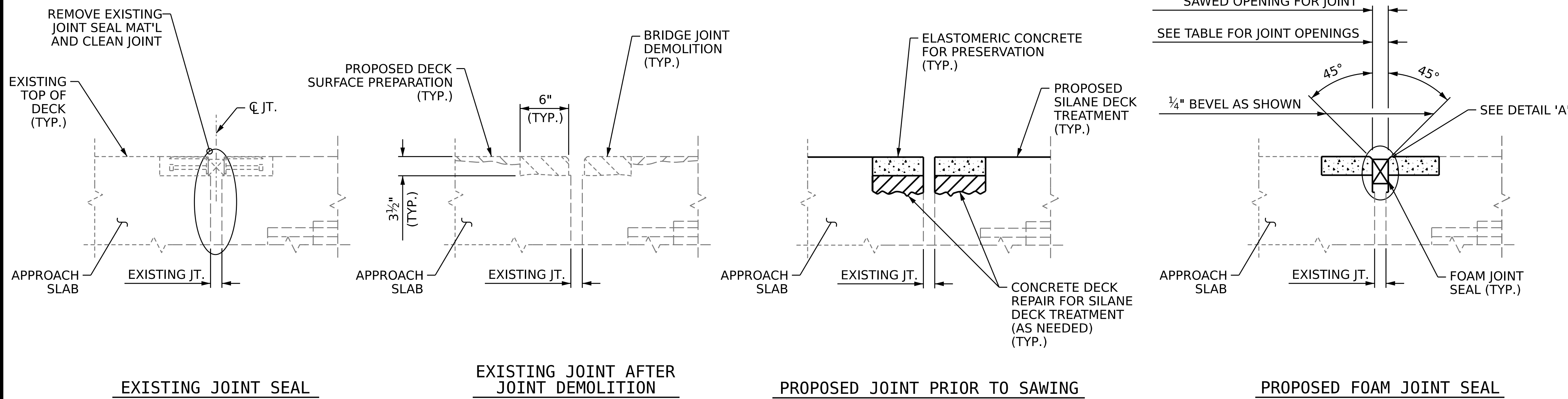
DocuSigned by:
P. Corey Newton
 47FE30014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
**PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/18/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO. S6-3 TOTAL SHEETS 4
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4", NOTIFY THE ENGINEER.

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

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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

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

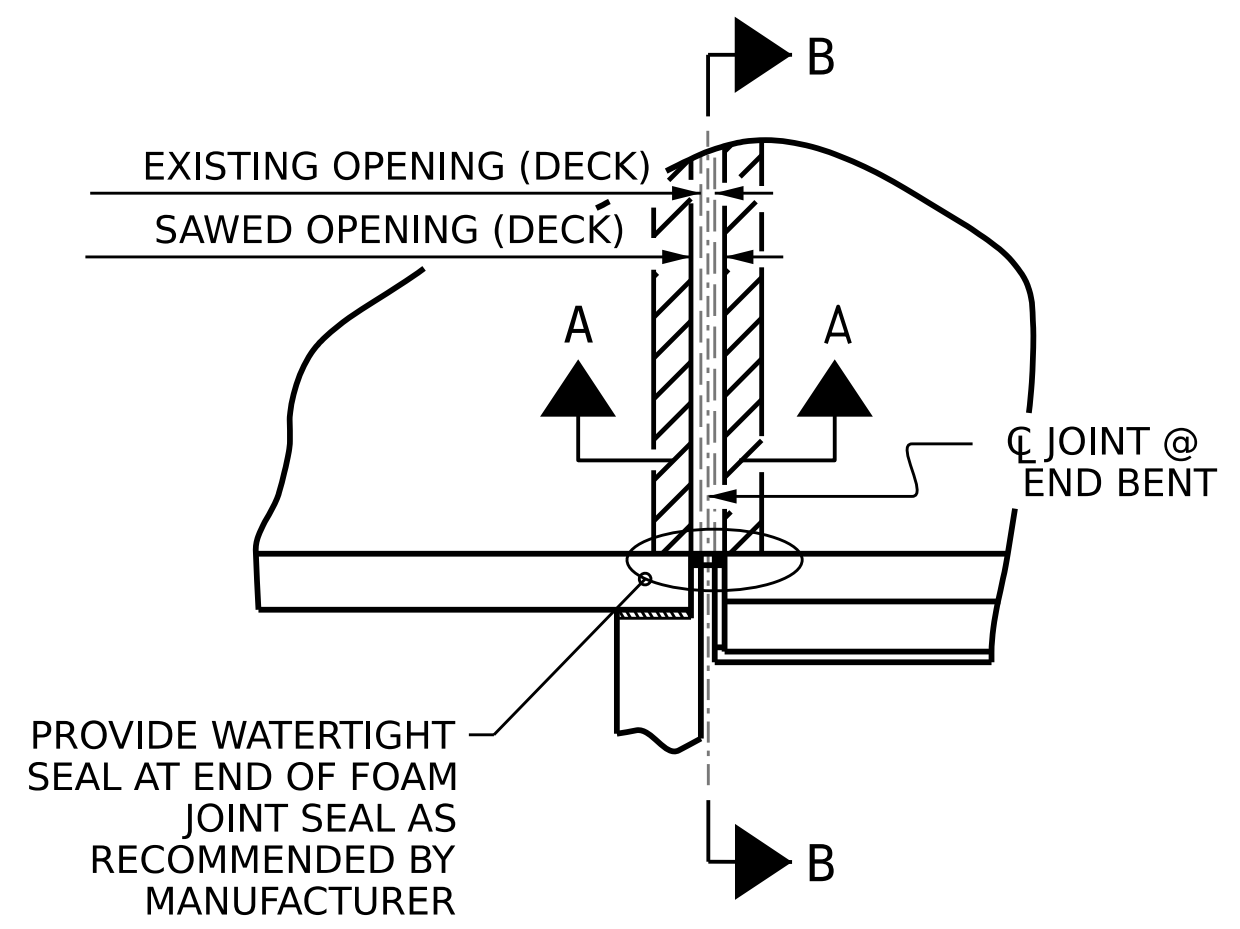
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

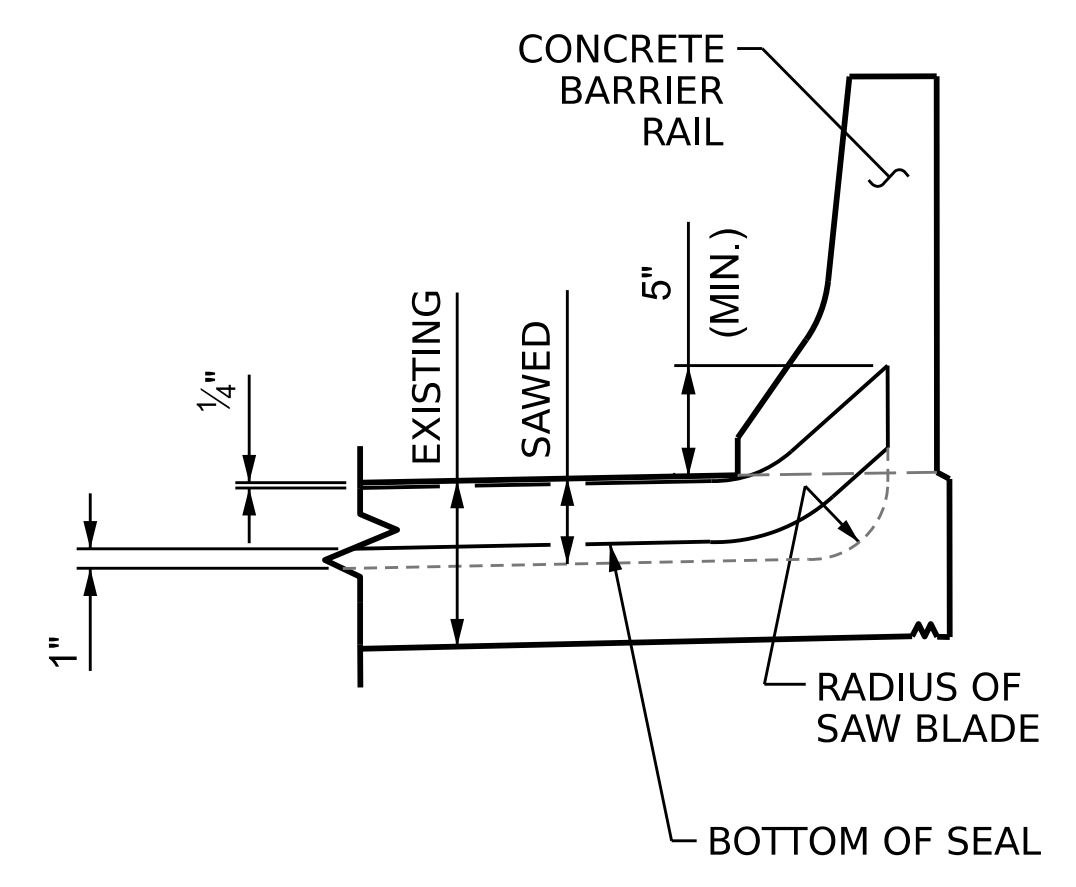
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

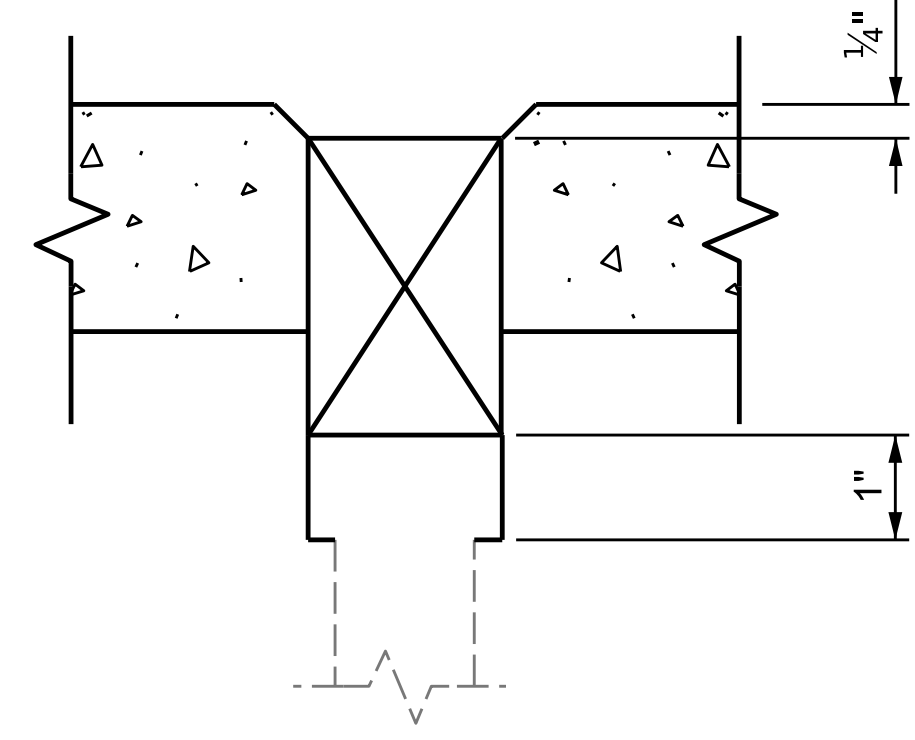
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE

	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	84.0	

ELASTOMERIC CONCRETE FOR PRESERVATION

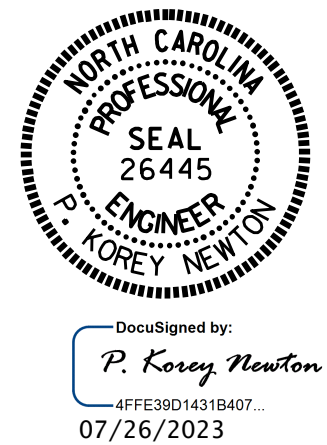
LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	12.3	
END BENT 2	12.3	
TOTAL	24.6	

SAWED JOINT OPENING TABLE

LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2 3/16"	2"	1 5/8"
END BENT 2	2 3/16"	2"	1 5/8"

DRAWN BY : S. T. SANDOR DATE : 1/17/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090237**

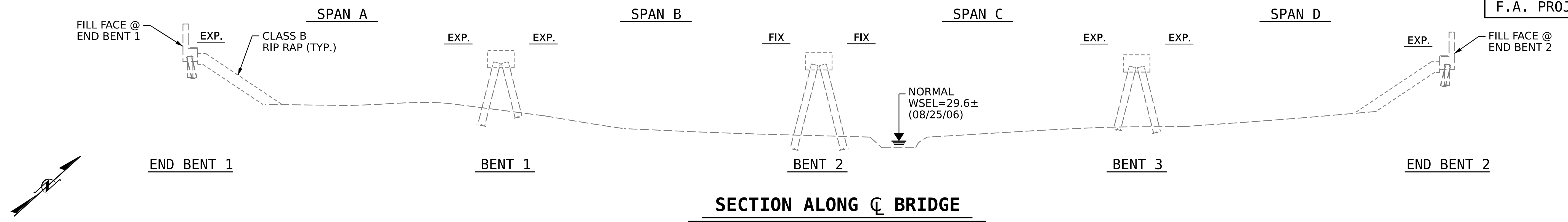


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

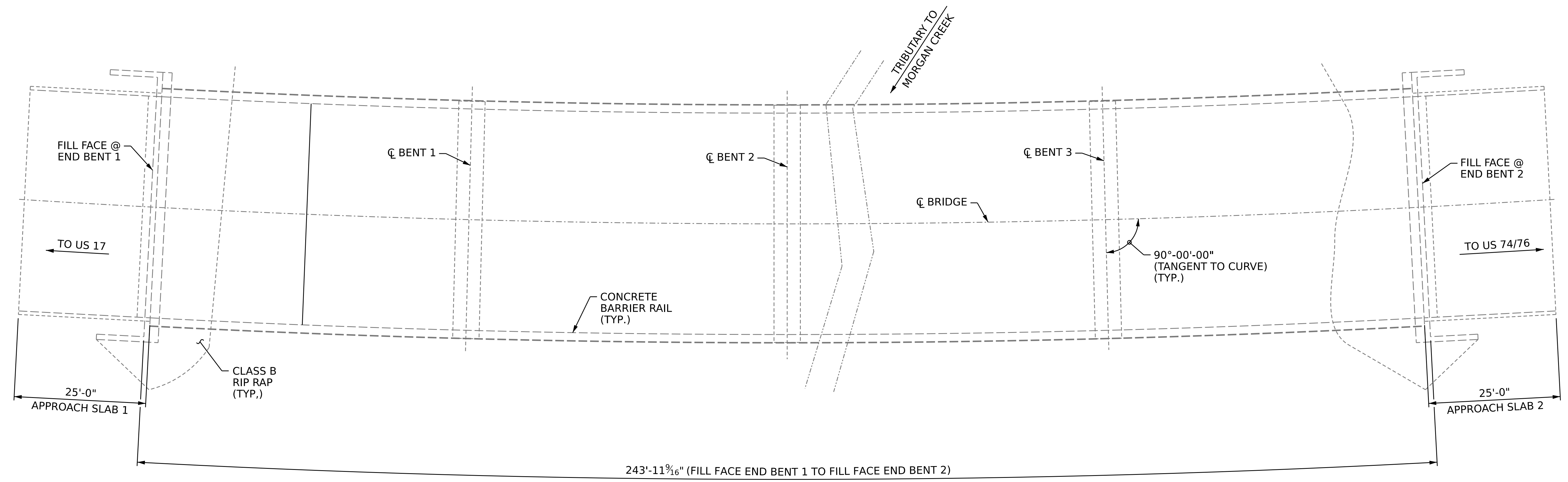
JOINT REPAIR DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S6-4
2			4			TOTAL SHEETS 4

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SECTION ALONG CL BRIDGE



PLAN

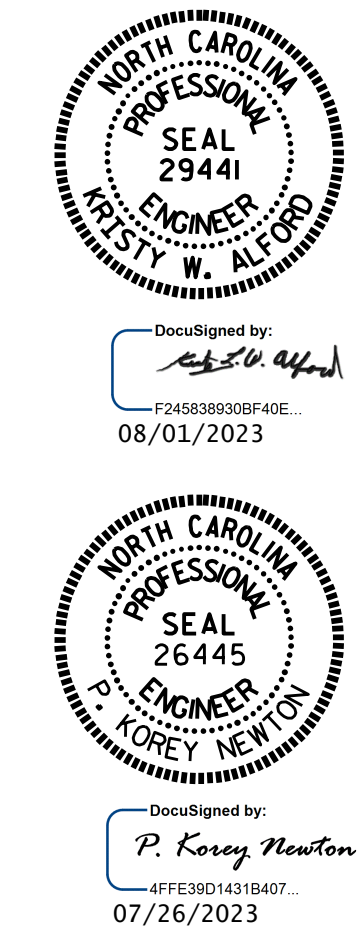
NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/02/2021.
BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS

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



PROJECT NO. **I-6036**
BRUNSWICK COUNTY
BRIDGE NO. **090238**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOR BRIDGE ON
I-140 EBL OVER
MORGAN CREEK TRIBUTARY

DRAWN BY :	S. T. SANDOR	DATE :	1/18/23
CHECKED BY :	W. C. SMITH	DATE :	5/23/23
DESIGN ENGINEER OF RECORD:		DATE :	

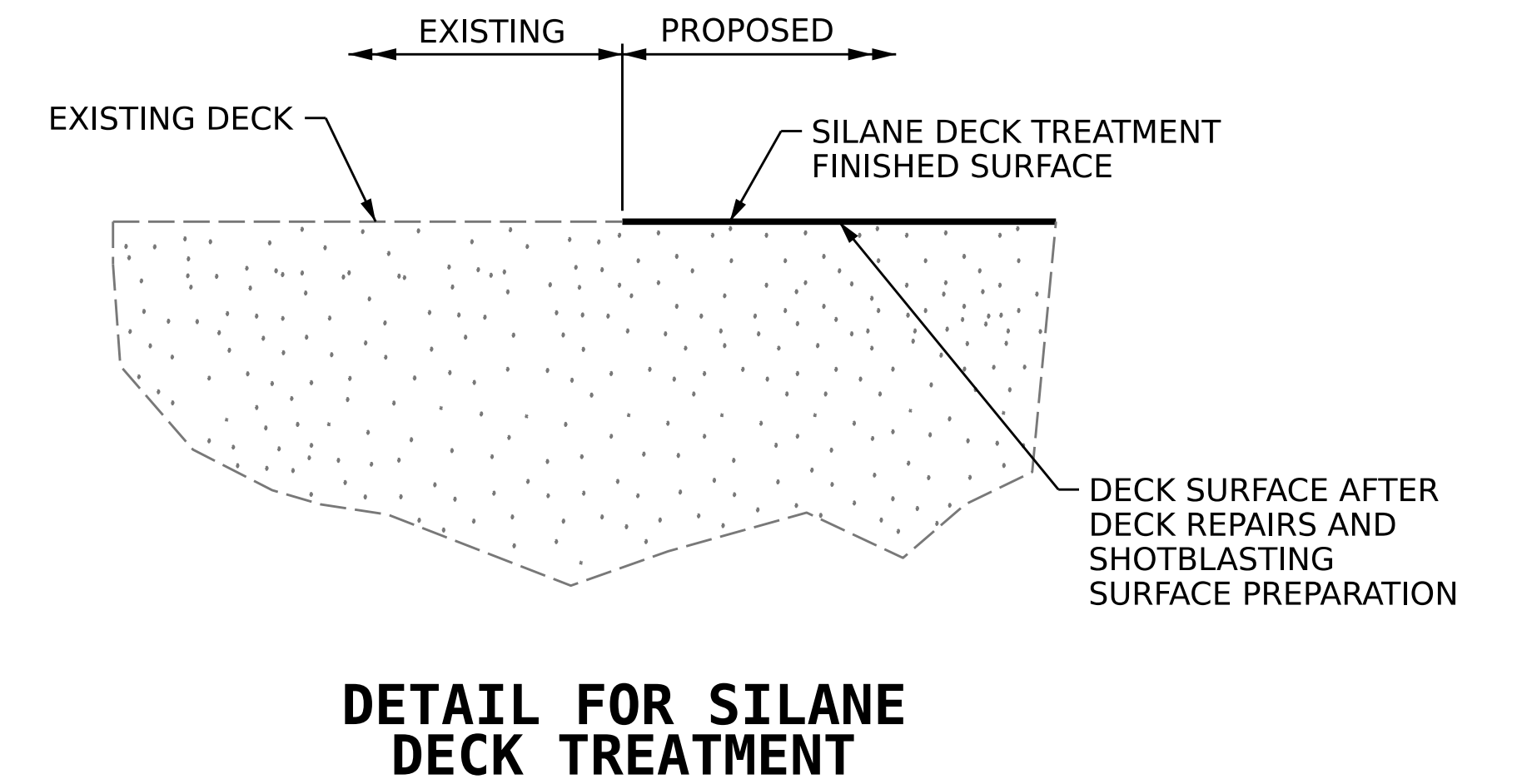
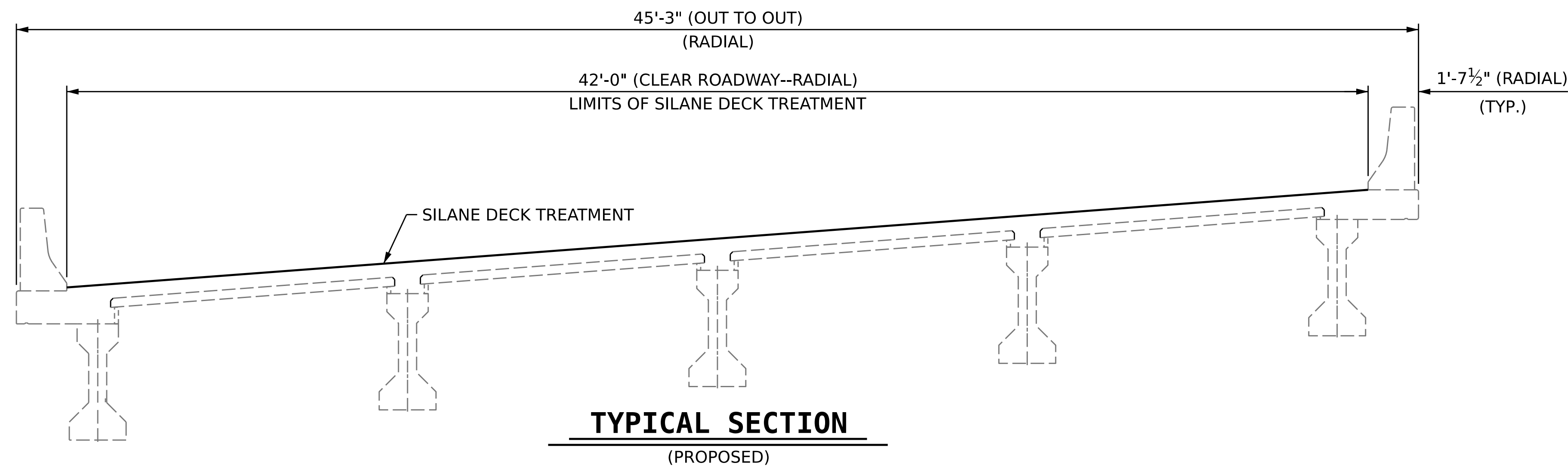
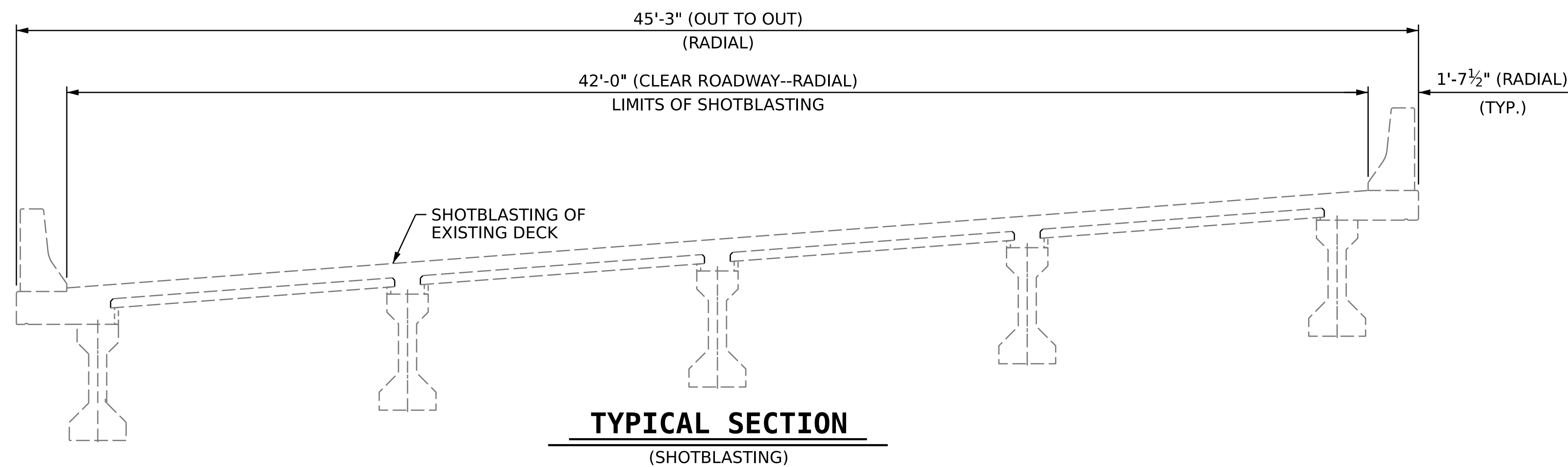
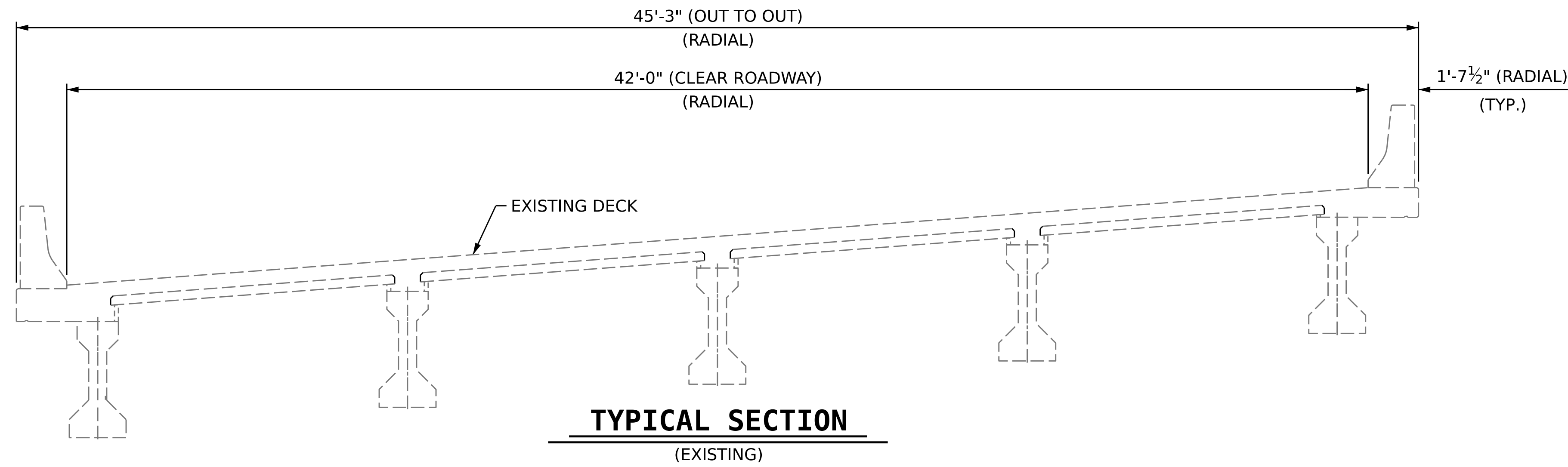
REVISIONS						SHEET NO. S7-1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 4
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

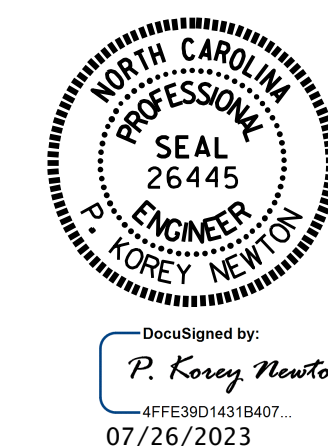
NOTES

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

GIRDERS ARE AASHTO TYPE III PRESTRESSED CONCRETE GIRDERS.



PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090238**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE

**TYPICAL SECTION
 FOR SILANE
 DECK TREATMENT**

DRAWN BY : S. T. SANDOR DATE : 1/18/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

7/25/2023
 S:\DPG\Division3\I-6036\BRC_7_090238\Plans\407.003.I-6036.SMU.TS.S7-2.090238.dgn
 pknewton

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

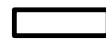

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NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			4

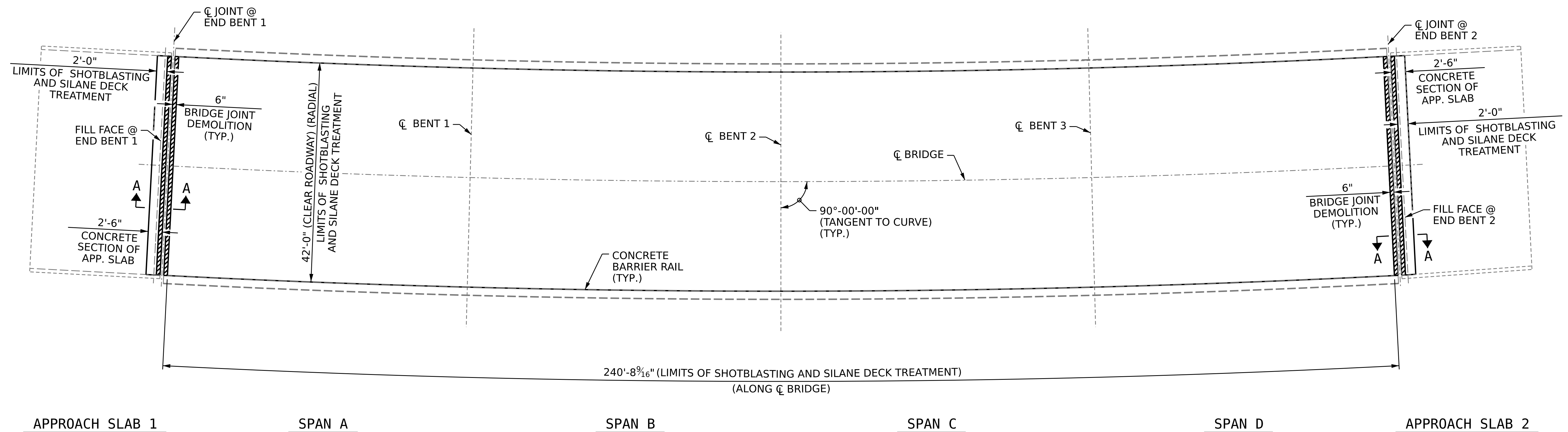
NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,123.3 SQ. YDS.	
SILANE DECK TREATMENT	1,123.3 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.0 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	18.7 SQ. YDS.	
SILANE DECK TREATMENT	18.7 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.0 SQ. FT.	

-  SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
-  BRIDGE JOINT DEMOLITION



PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090238**



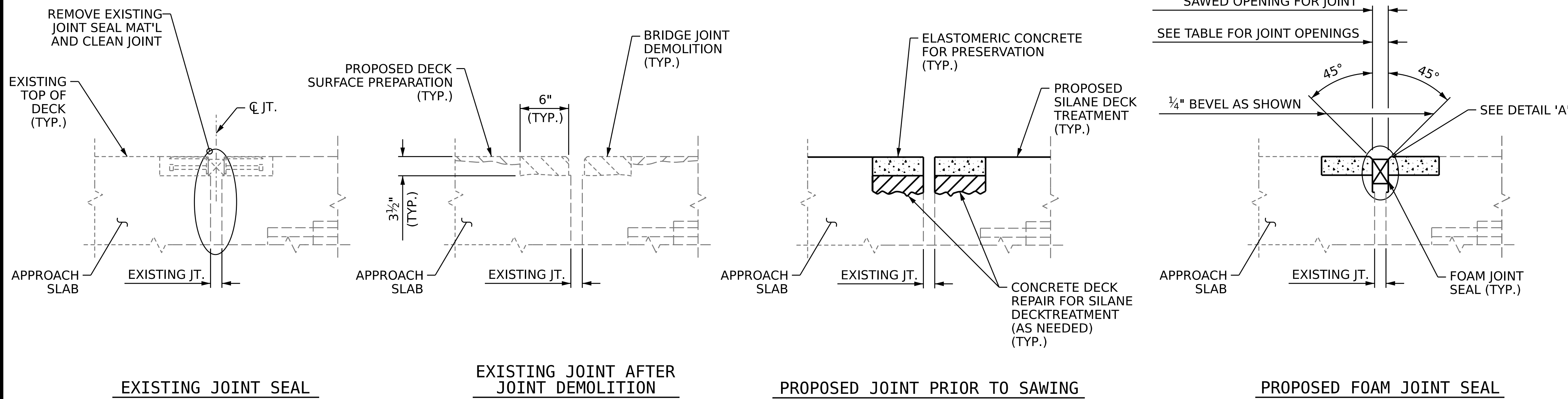
DocuSigned by:
 P. Corey Newton
 #FFE39014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
**PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/18/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO. S7-3 TOTAL SHEETS 4
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4", NOTIFY THE ENGINEER.

THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE FOAM JOINT SEAL FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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

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

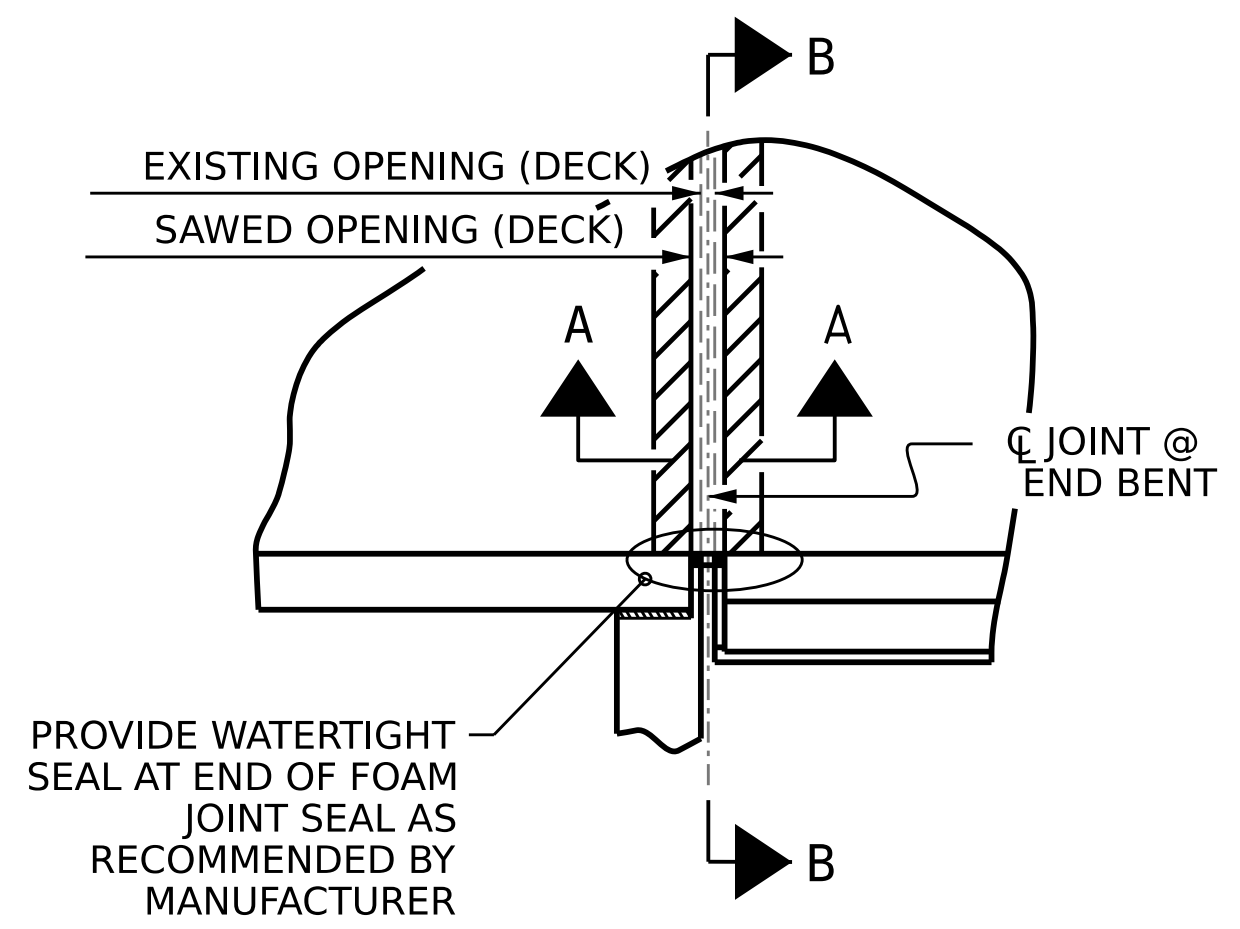
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

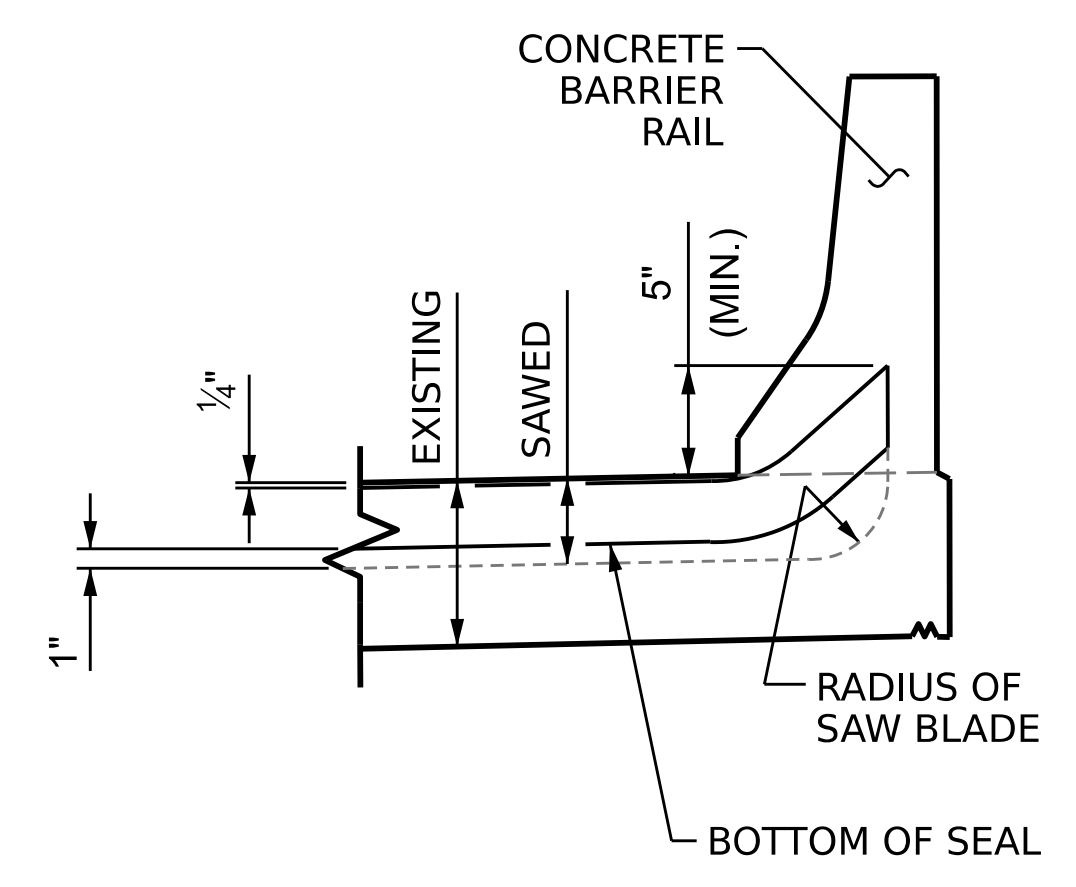
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

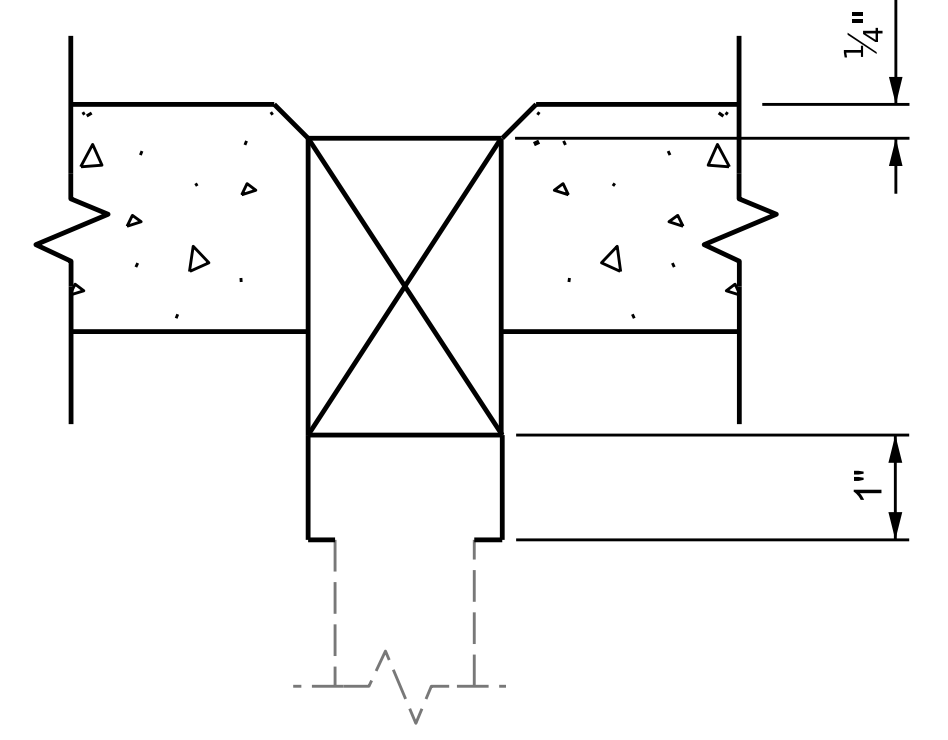
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE

	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	84.0	

ELASTOMERIC CONCRETE FOR PRESERVATION

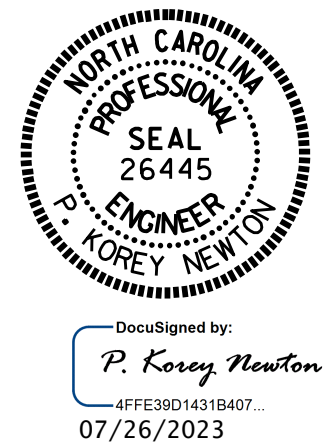
LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	12.3	
END BENT 2	12.3	
TOTAL	24.6	

SAWED JOINT OPENING TABLE

LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2 3/16"	2"	1 5/8"
END BENT 2	2 3/16"	2"	1 5/8"

DRAWN BY : S. T. SANDOR DATE : 1/17/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090238**

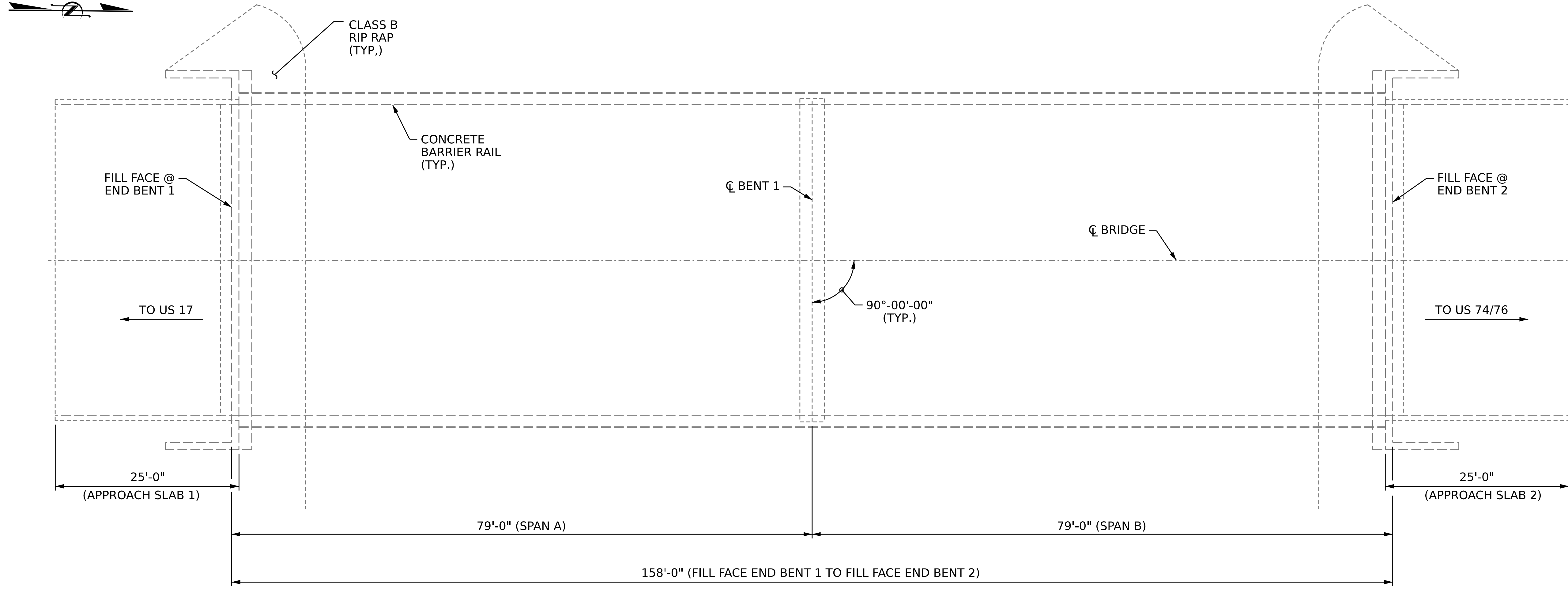
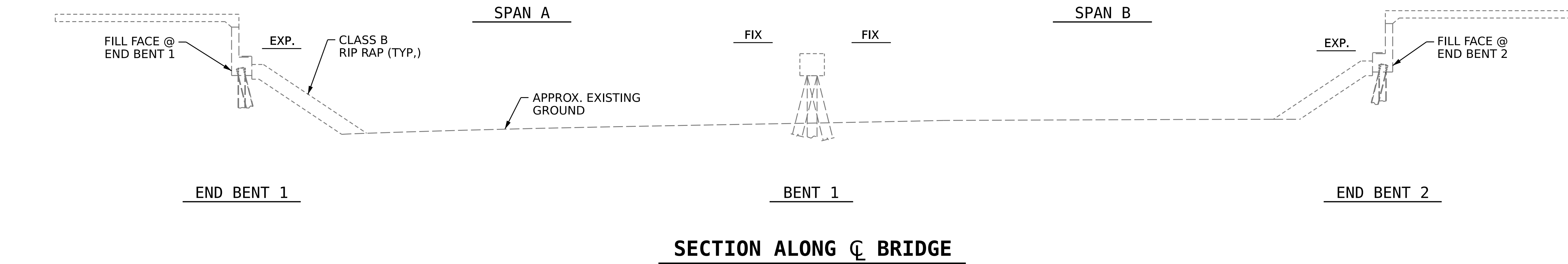


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

JOINT REPAIR DETAILS

NO.	REVISIONS			SHEET NO.
	BY:	DATE:	NO.	
1			3	S7-4
2			4	TOTAL SHEETS 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PLAN

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/10/2021.
BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS

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

RESIDENT ENGINEER _____ DATE _____



DocuSigned by:
P. Corey Newton
#245838308F40E
08/01/2023



DocuSigned by:
P. Corey Newton
#F5E81451B407...
07/26/2023

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
BRIDGE NO. **090239**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOR BRIDGE ON
I-140 WBL OVER
WILDLIFE CROSSING

DRAWN BY : S. T. SANDOR DATE : 1/19/23
CHECKED BY : W. C. SMITH DATE : 5/23/23
DESIGN ENGINEER OF RECORD: _____ DATE : _____

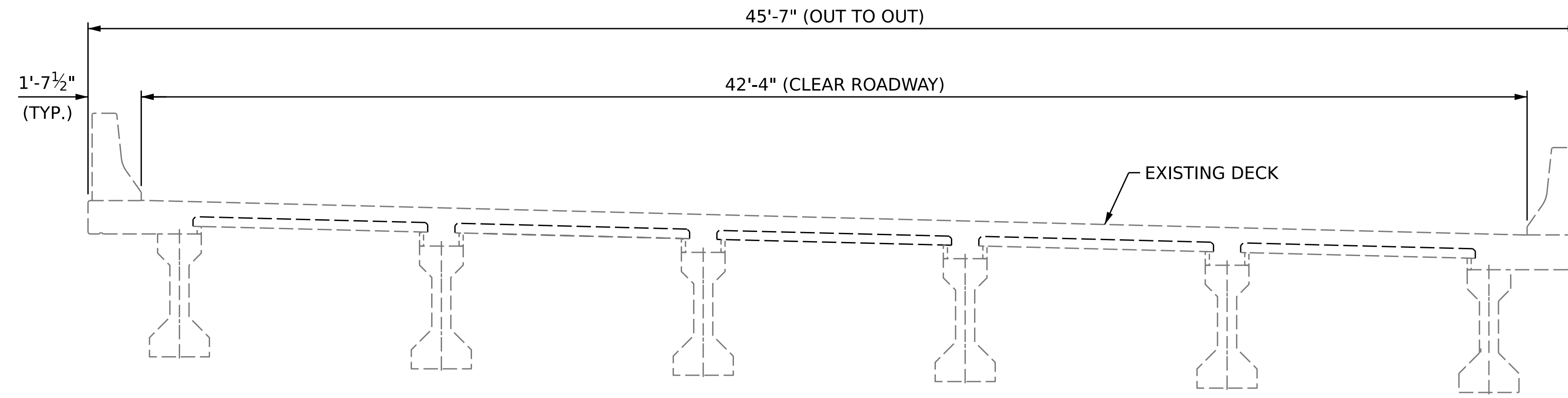
DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

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NO.	BY:	DATE:	NO.	BY:	DATE:	S8-1
1			3			TOTAL SHEETS
2			4			4

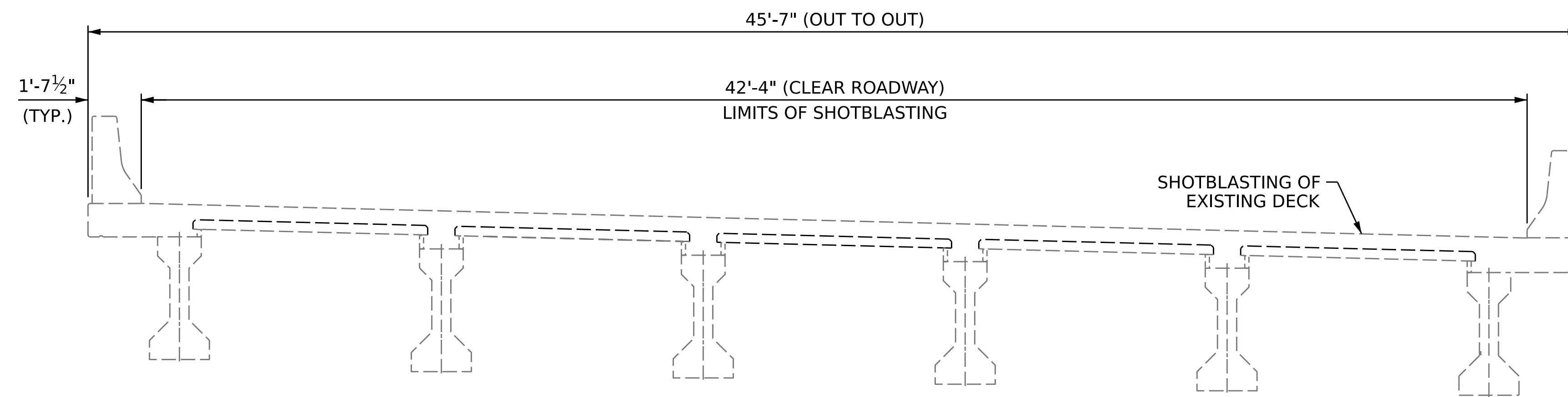
NOTES

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

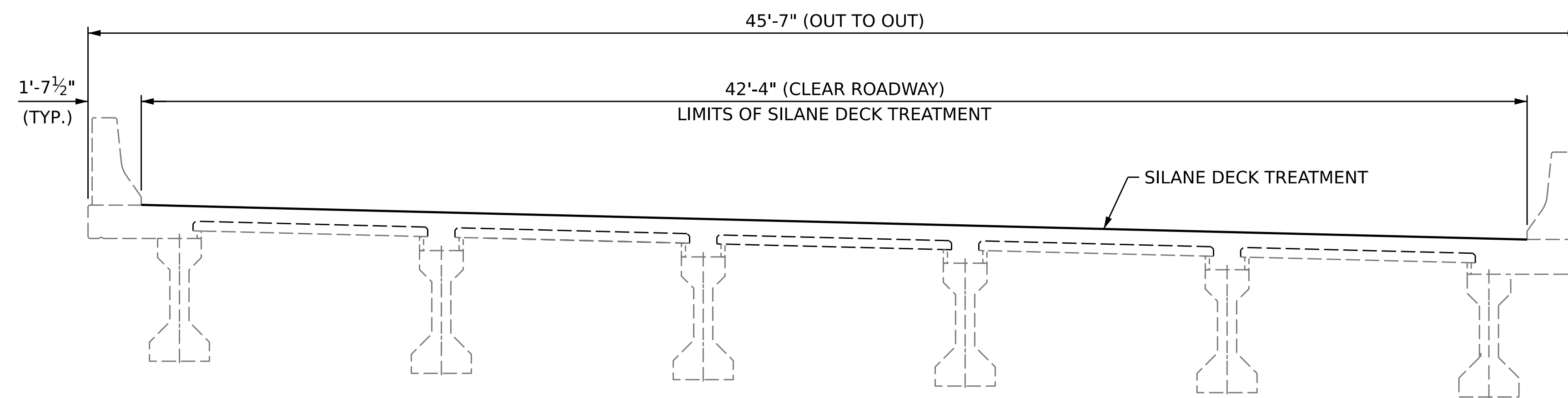
GIRDERS ARE AASHTO TYPE III PRESTRESSED CONCRETE GIRDERS.



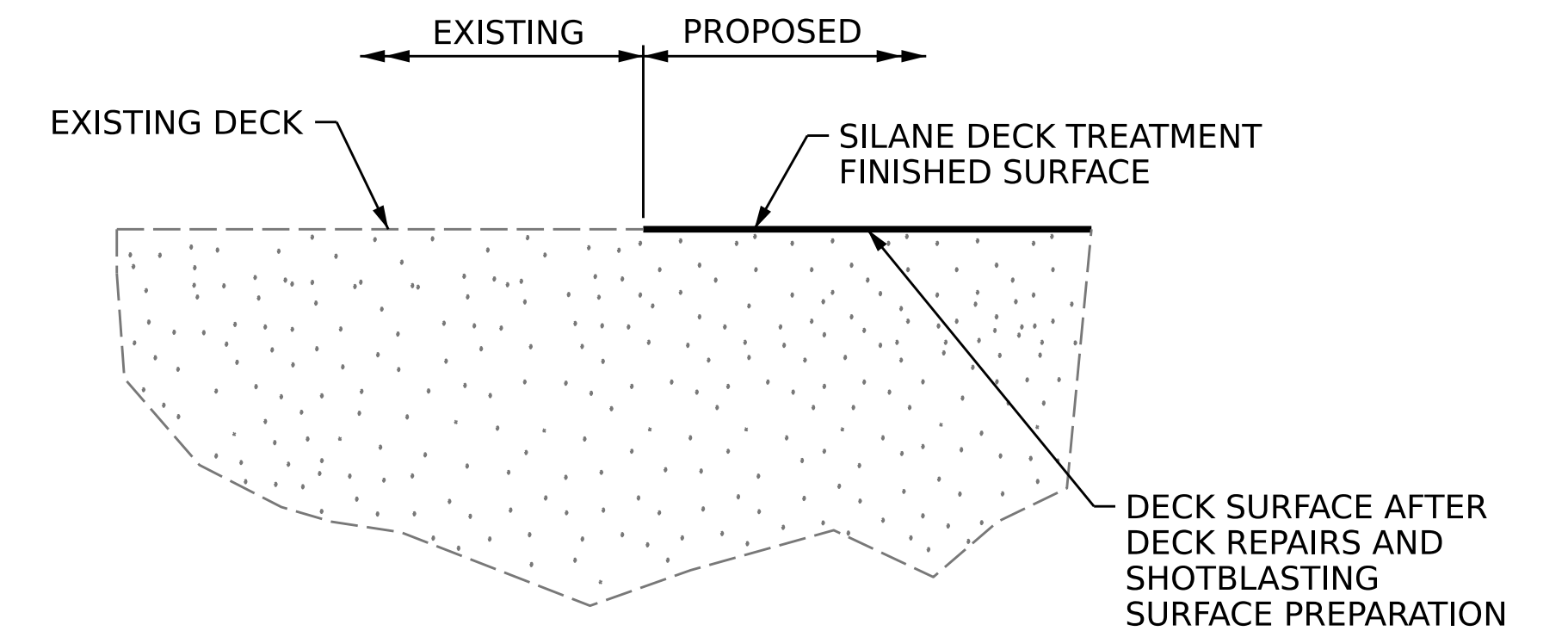
TYPICAL SECTION
(EXISTING)



TYPICAL SECTION
(SHOTBLASTING)



TYPICAL SECTION
(PROPOSED)



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090239**



DocuSigned by:
P. Corey Newton
 #FFE3D014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION FOR SILANE DECK TREATMENT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

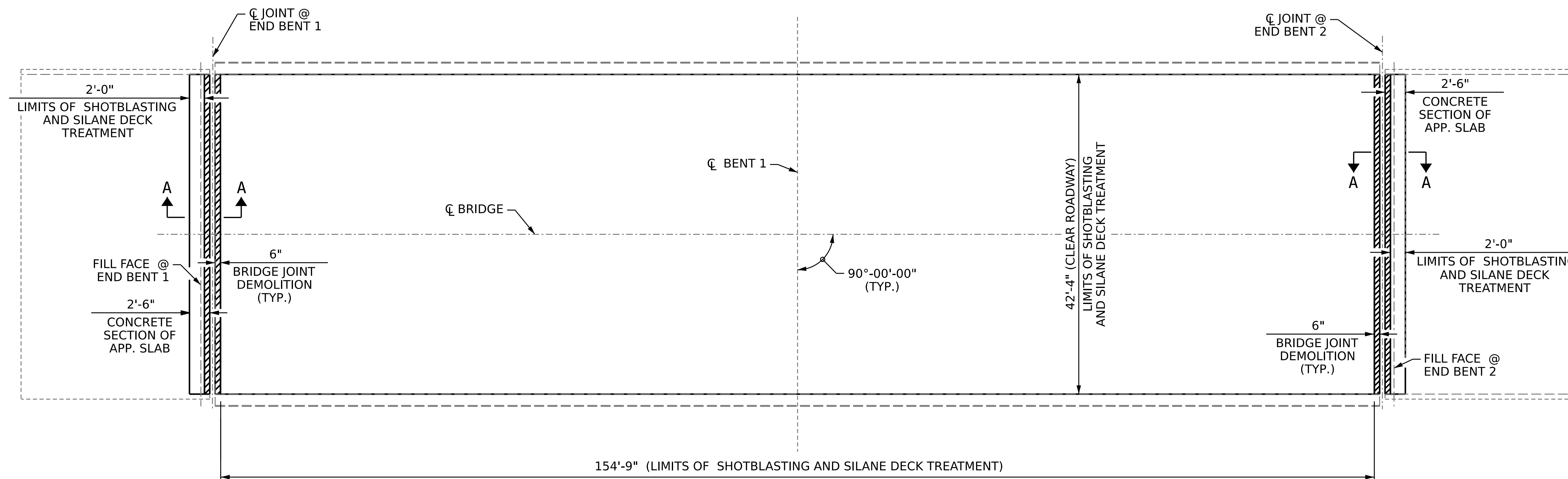
DRAWN BY : S. T. SANDOR DATE : 1/18/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	727.9 SQ. YDS.	
SILANE DECK TREATMENT	727.9 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.4 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	18.8 SQ. YDS.	
SILANE DECK TREATMENT	18.8 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.4 SQ. FT.	



- SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
- BRIDGE JOINT DEMOLITION

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090239**

PLAN OF SPANS



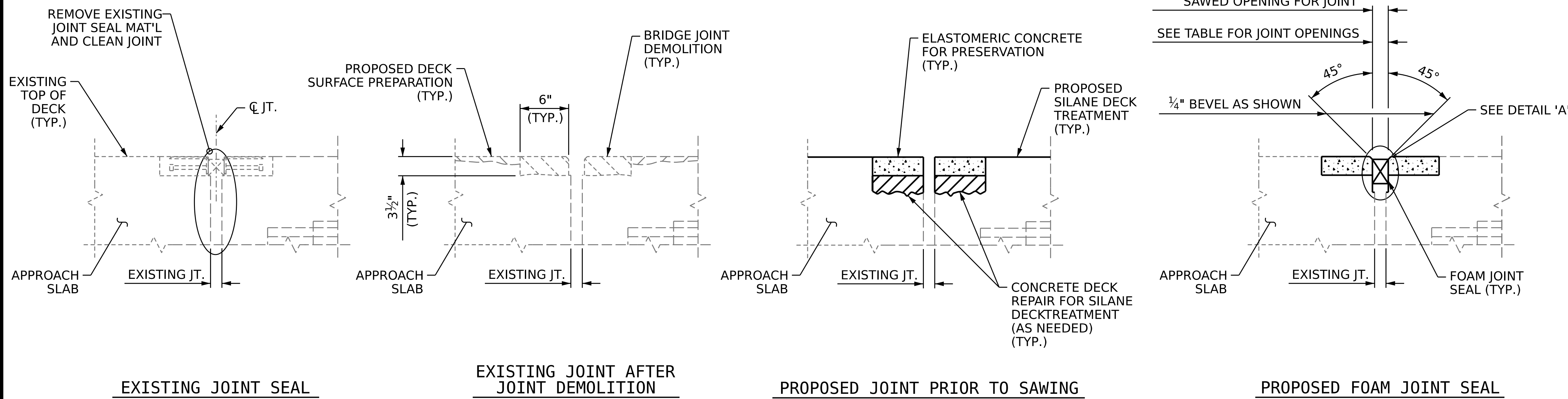
DocuSigned by:
P. Corey Newton
 47FE39014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**SUPERSTRUCTURE
 PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/19/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S8-3
2			4			TOTAL SHEETS 4



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4", NOTIFY THE ENGINEER.

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

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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

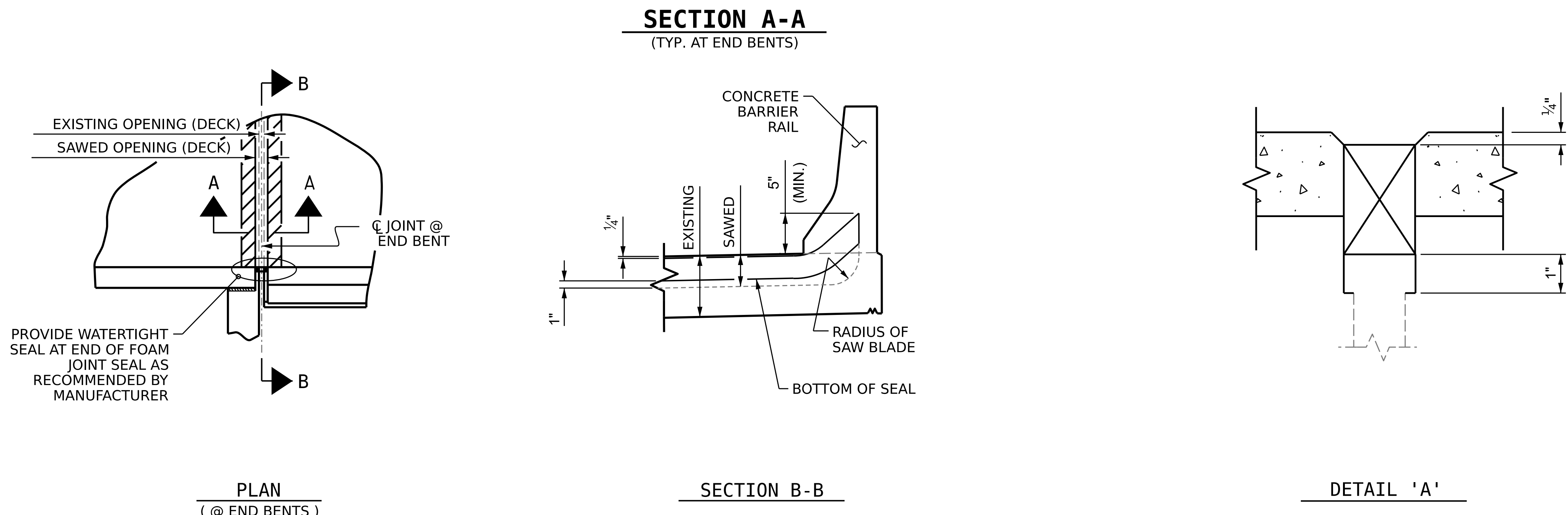
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHALL BE REASONABLY FLAT AND LEVEL. THE ENGINEER SHALL DETERMINE ACCEPTABILITY OF THE SURFACE.

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

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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



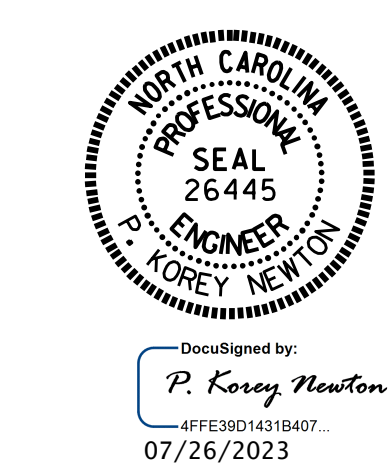
JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE		
	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	84.8	

ELASTOMERIC CONCRETE FOR PRESERVATION		
LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	12.4	
END BENT 2	12.4	
TOTAL	24.8	

SAWED JOINT OPENING TABLE			
LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2 1/8"	2"	1 3/4"
END BENT 2	2 1/8"	2"	1 3/4"

DRAWN BY : S. T. SANDOR DATE : 1/19/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :



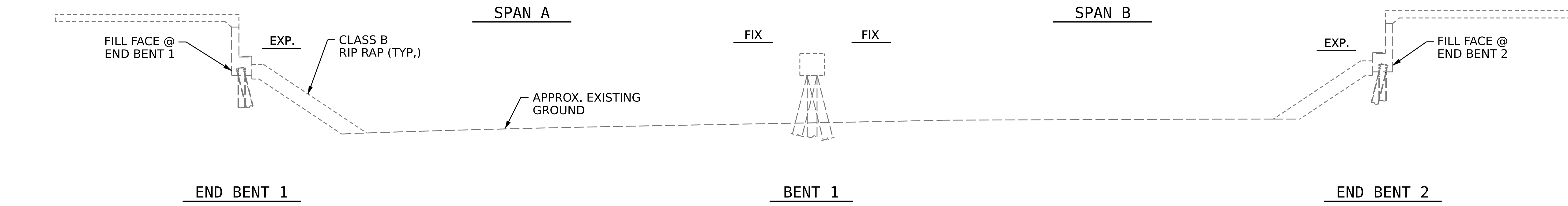
PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090239**

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

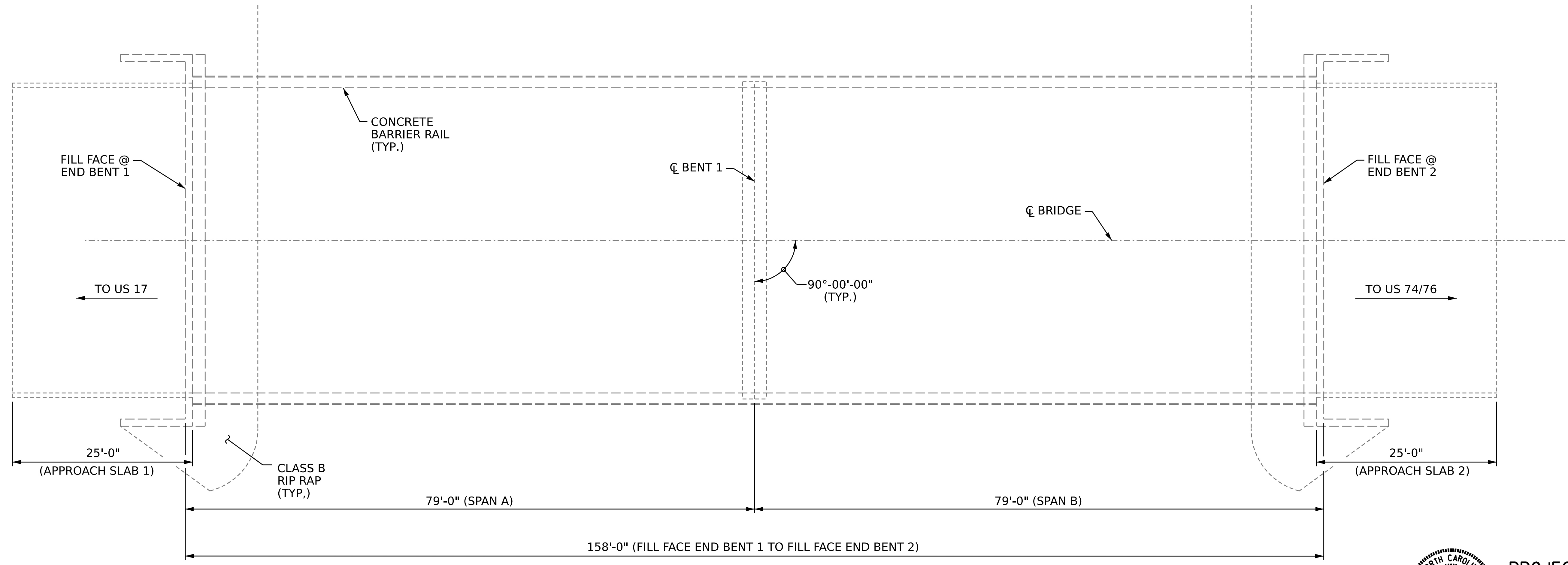
JOINT REPAIR DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S8-4
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SECTION ALONG CL BRIDGE



PLAN

NOTES

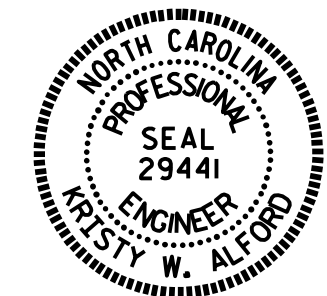
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BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

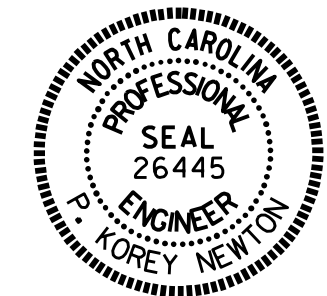
- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS

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

RESIDENT ENGINEER _____ DATE _____



DocuSigned by:
P2458383808F40E
08/01/2023



DocuSigned by:
P. Corey Newton
1F3E8014519407...
07/26/2023

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
BRIDGE NO. **090240**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON
I-140 EBL OVER
WILDLIFE CROSSING

DRAWN BY : S. T. SANDOR DATE : 1/20/23
CHECKED BY : W. C. SMITH DATE : 5/23/23
DESIGN ENGINEER OF RECORD: _____ DATE : _____

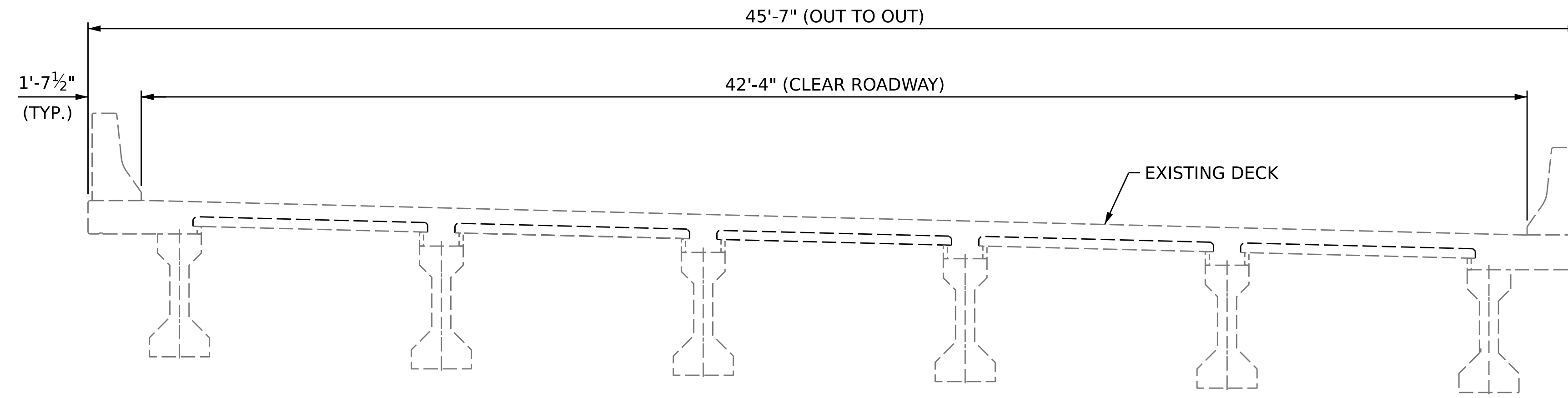
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FINAL UNLESS ALL
SIGNATURES COMPLETED

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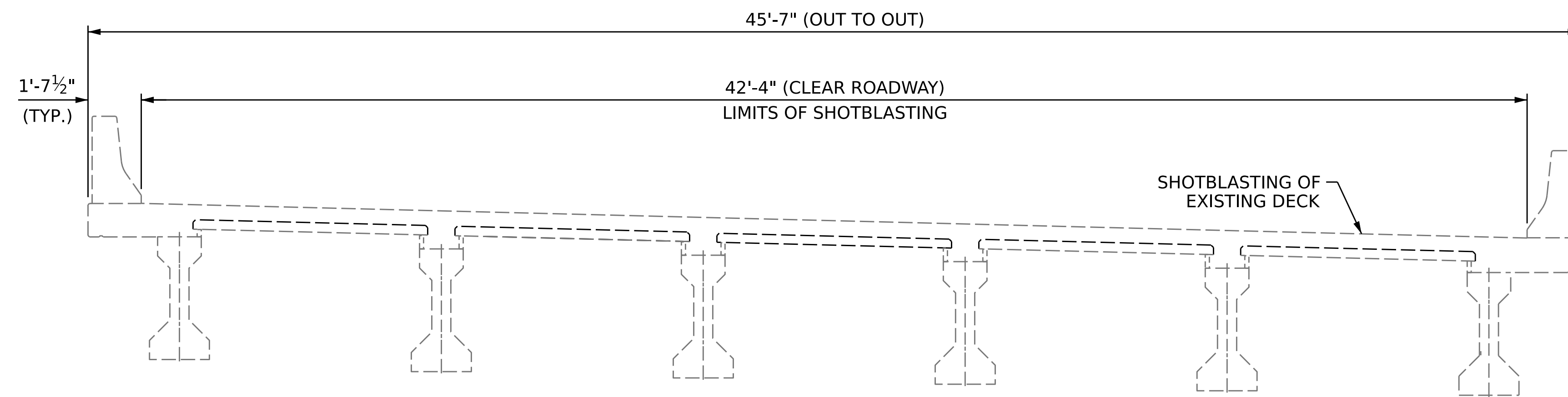
NOTES

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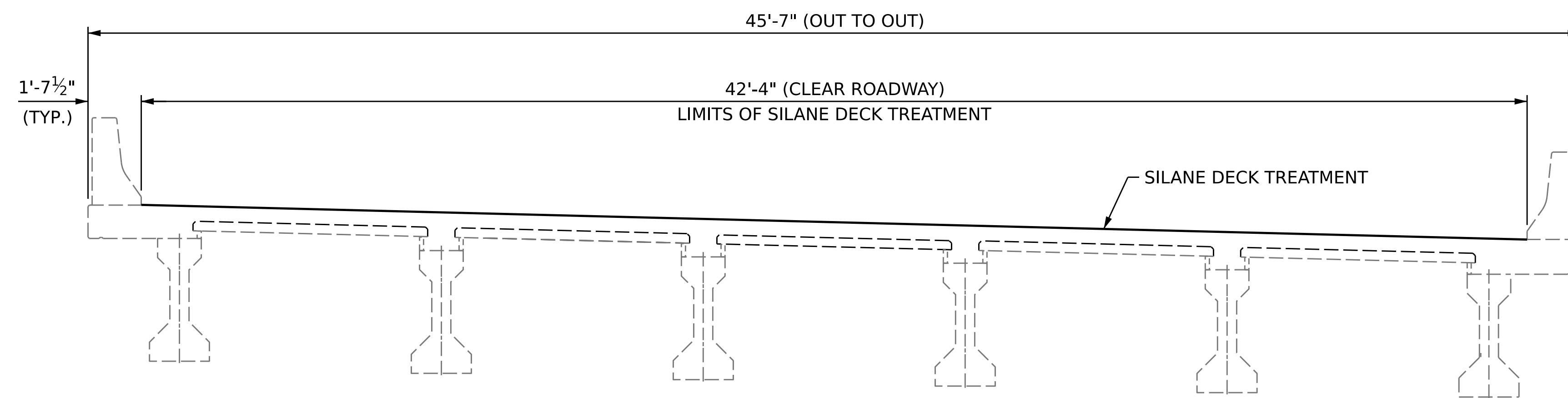
GIRDERS ARE AASHTO TYPE III PRESTRESSED CONCRETE GIRDERS.



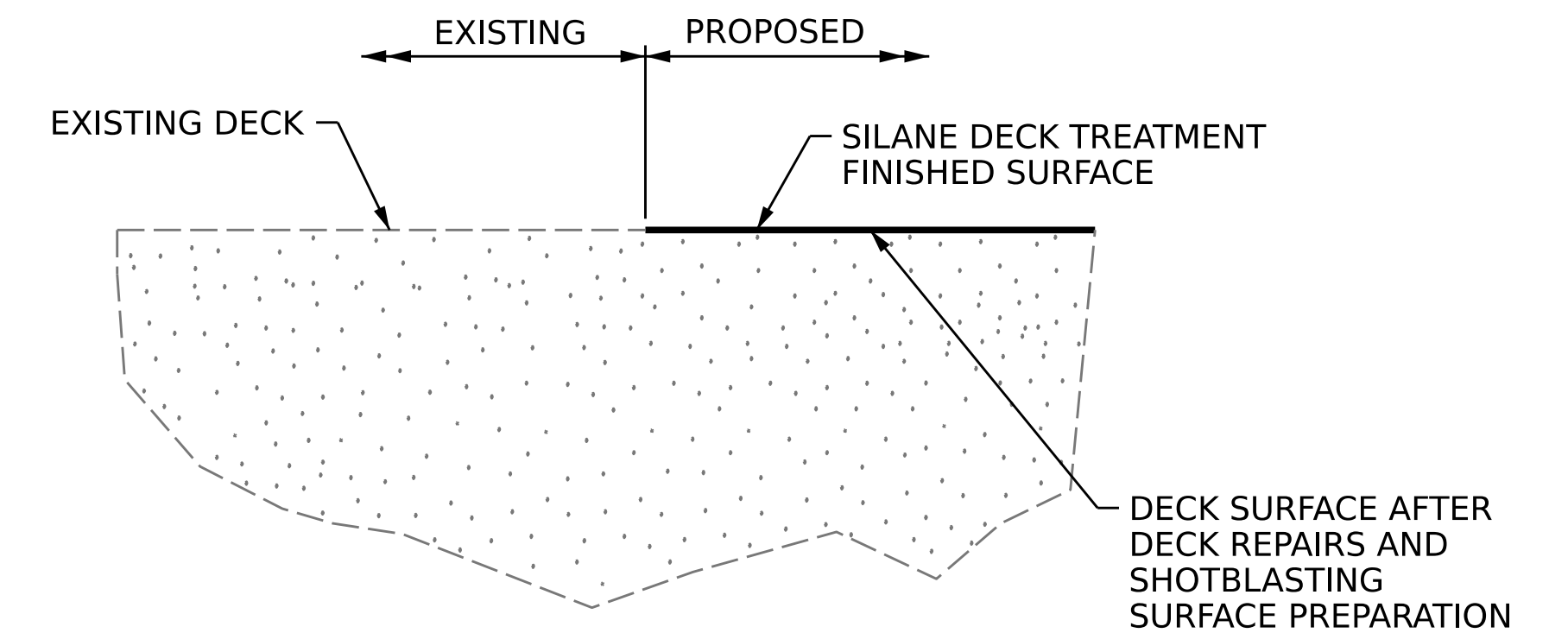
TYPICAL SECTION
(EXISTING)



TYPICAL SECTION
(SHOTBLASTING)



TYPICAL SECTION
(PROPOSED)



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090240**



DocuSigned by:
P. Corey Newton
 #FFE3D014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION FOR SILANE DECK TREATMENT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
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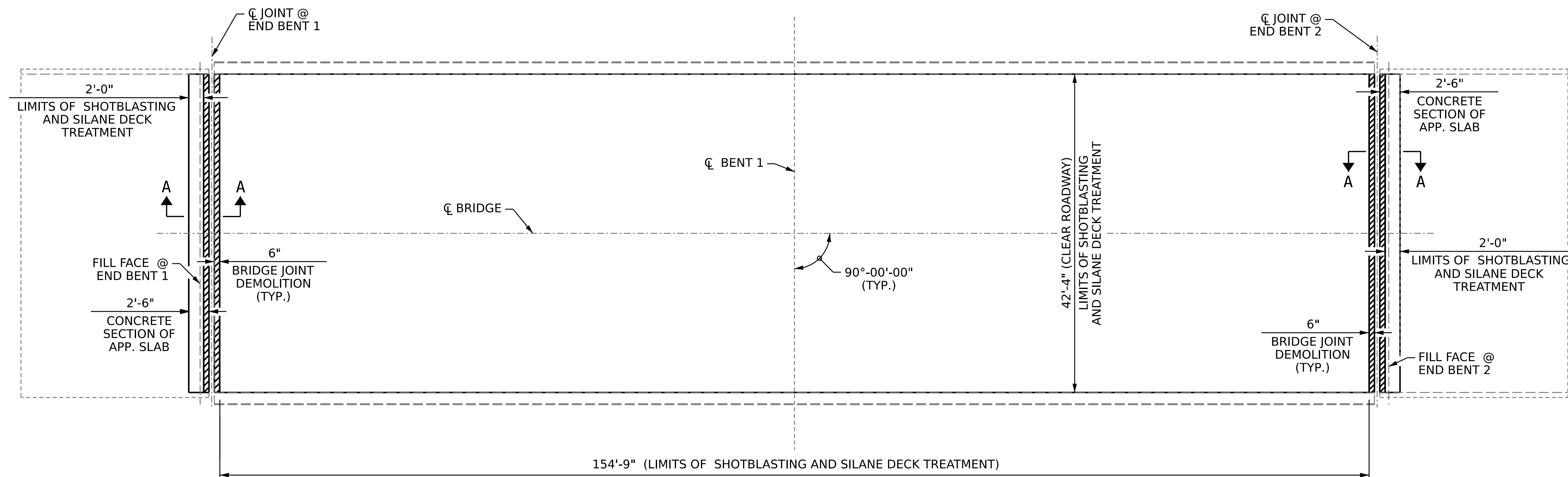
DRAWN BY : S. T. SANDOR DATE : 1/18/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

NOTES

FOR SECTION A-A, SEE " JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	727.9 SQ. YDS.	
SILANE DECK TREATMENT	727.9 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.4 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	18.8 SQ. YDS.	
SILANE DECK TREATMENT	18.8 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.4 SQ. FT.	



- SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
- BRIDGE JOINT DEMOLITION

APPROACH SLAB 1

SPAN A

SPAN B

APPROACH SLAB 2

PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090240**



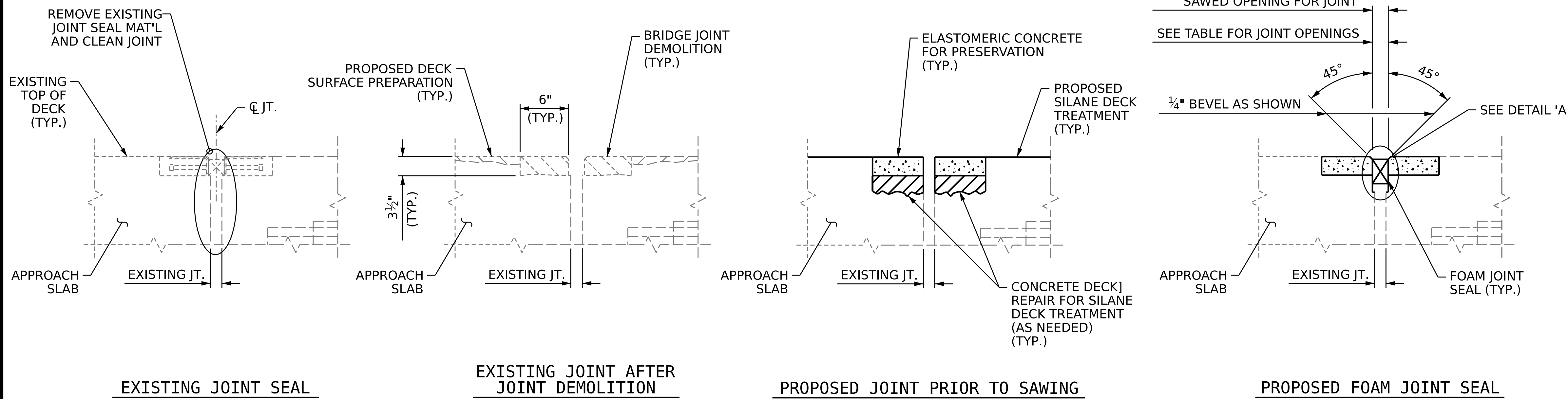
DocuSigned by:
P. Corey Newton
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 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**SUPERSTRUCTURE
 PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/19/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

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REVISIONS						SHEET NO. S9-3 TOTAL SHEETS 4
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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

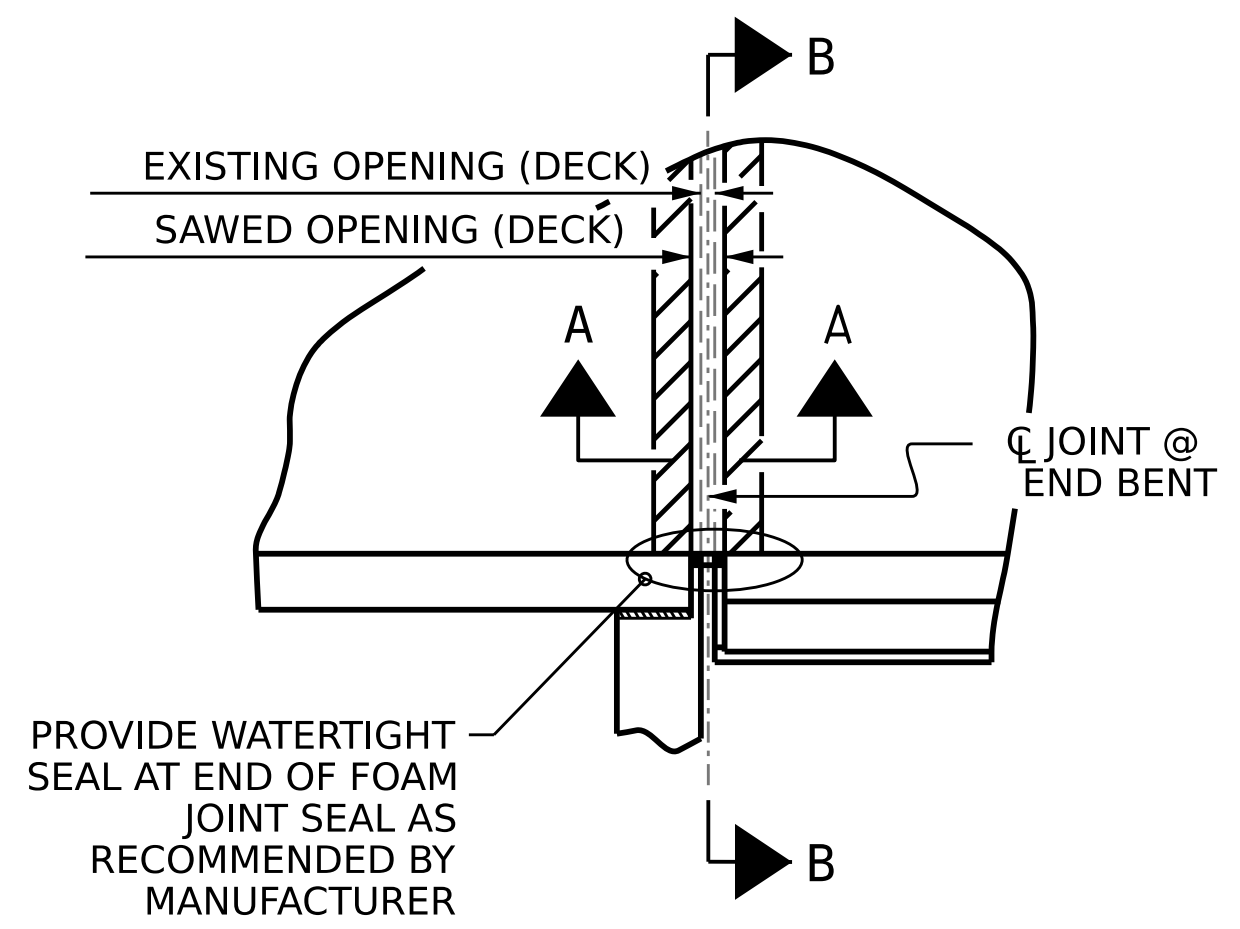
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

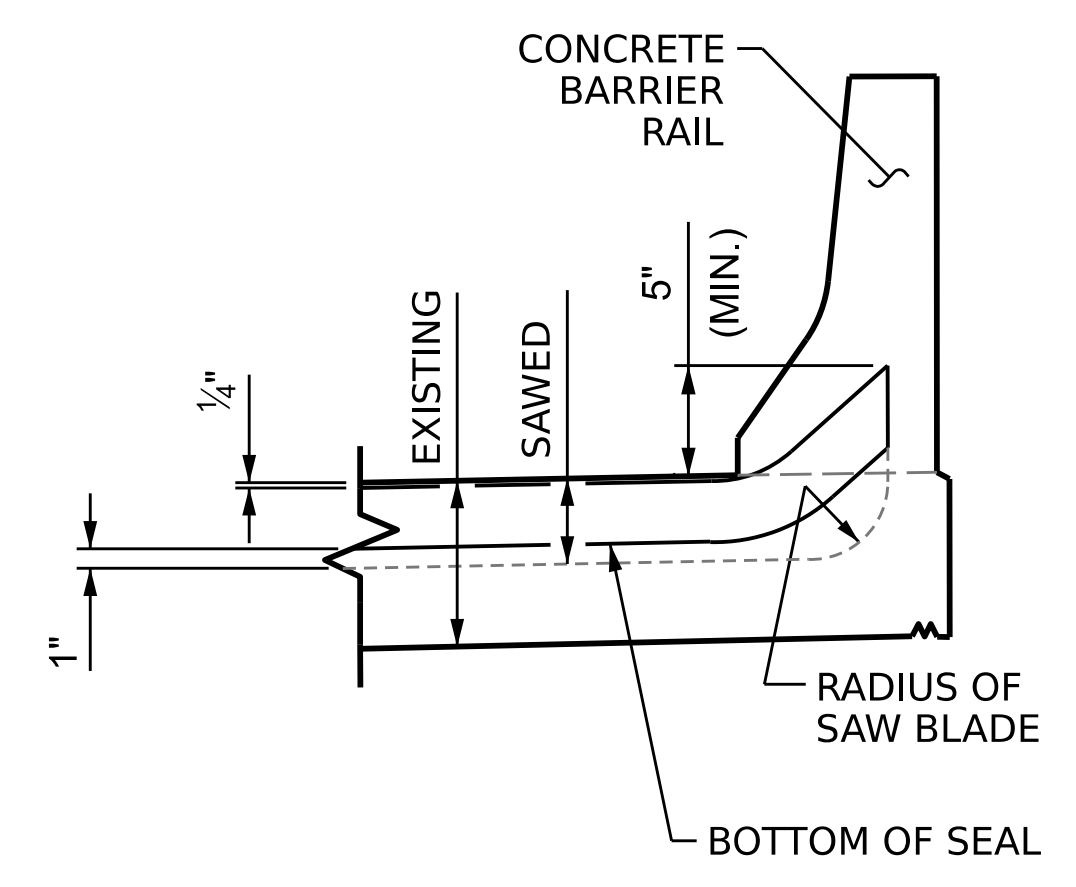
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

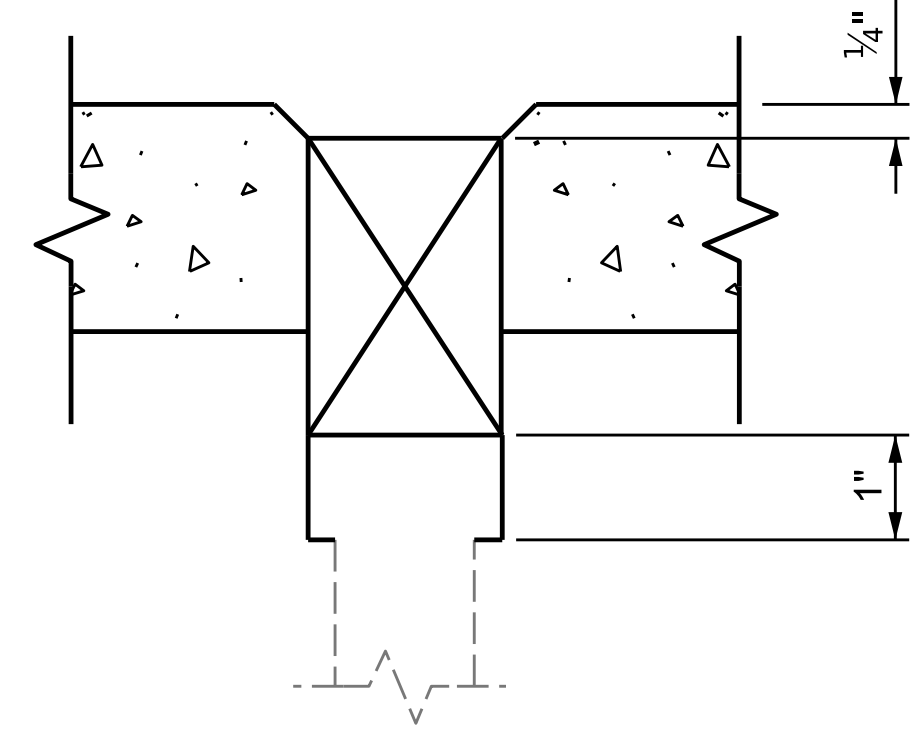
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE

	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	84.8	

ELASTOMERIC CONCRETE FOR PRESERVATION

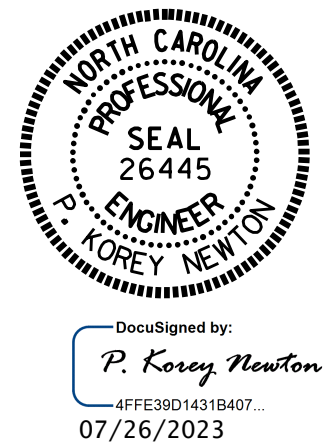
LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	12.4	
END BENT 2	12.4	
TOTAL	24.8	

SAWED JOINT OPENING TABLE

LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2 1/8"	2"	1 3/4"
END BENT 2	2 1/8"	2"	1 3/4"

DRAWN BY : S. T. SANDOR DATE : 1/19/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD : DATE :

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090240**

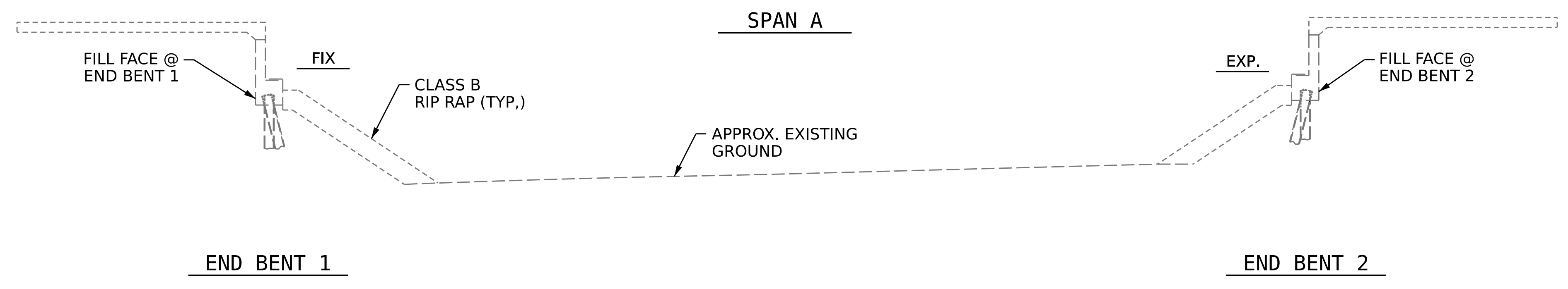


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

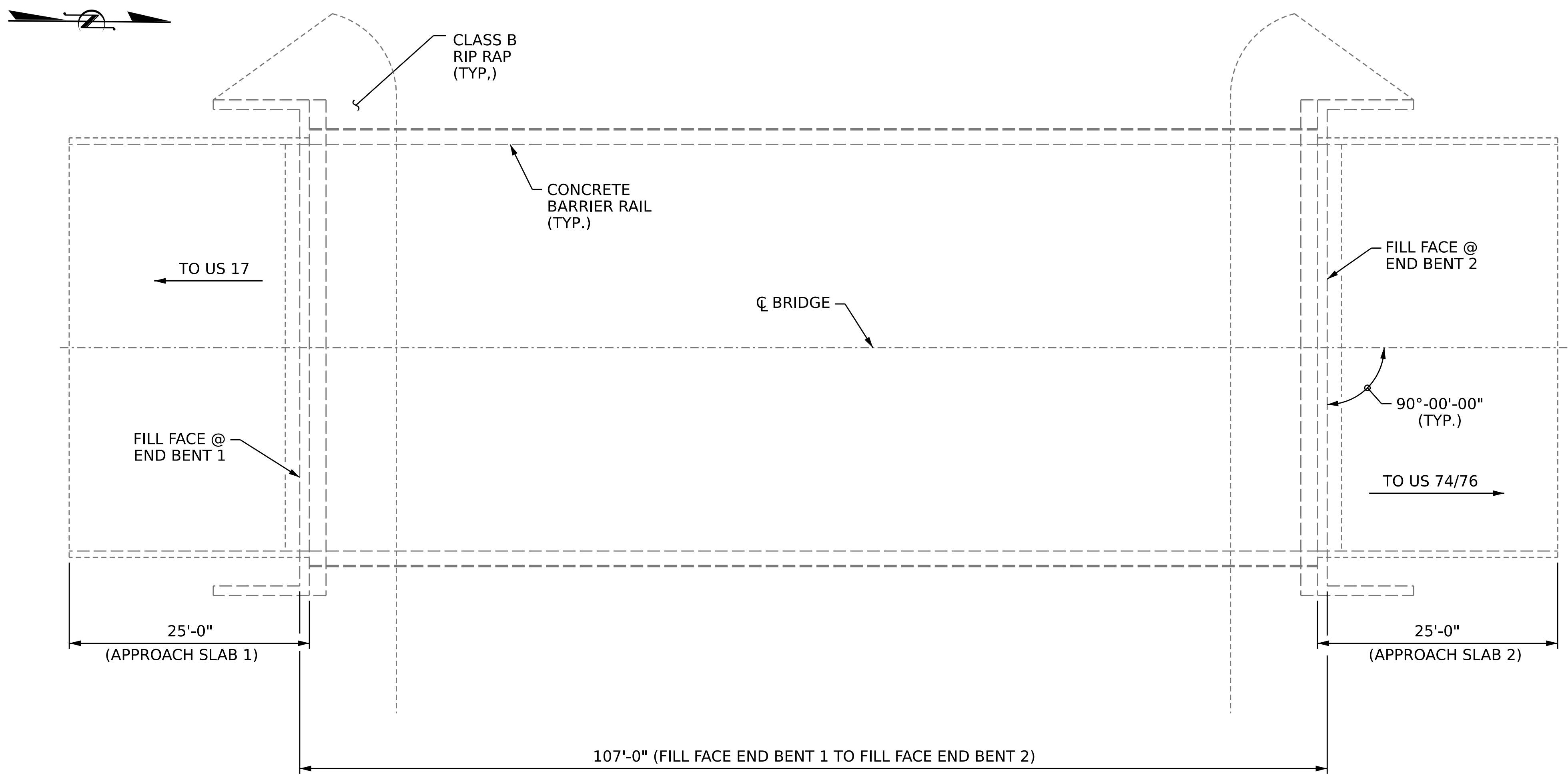
JOINT REPAIR DETAILS

NO.	BY:	DATE:	REVISIONS			SHEET NO.
			NO.	BY:	DATE:	
1			3			S9-4
2			4			TOTAL SHEETS 4

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



SECTION ALONG Q BRIDGE



PLAN

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/11/2021.
BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

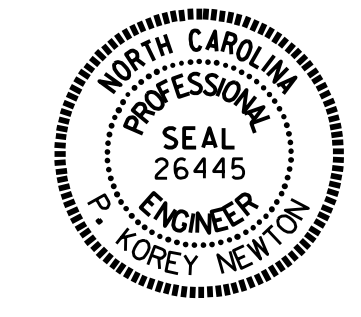
- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS

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

RESIDENT ENGINEER _____ DATE _____



DocuSigned by:
F2458388308F40E
08/01/2023



DocuSigned by:
P. Corey Newton
47FE39014318407...
07/26/2023

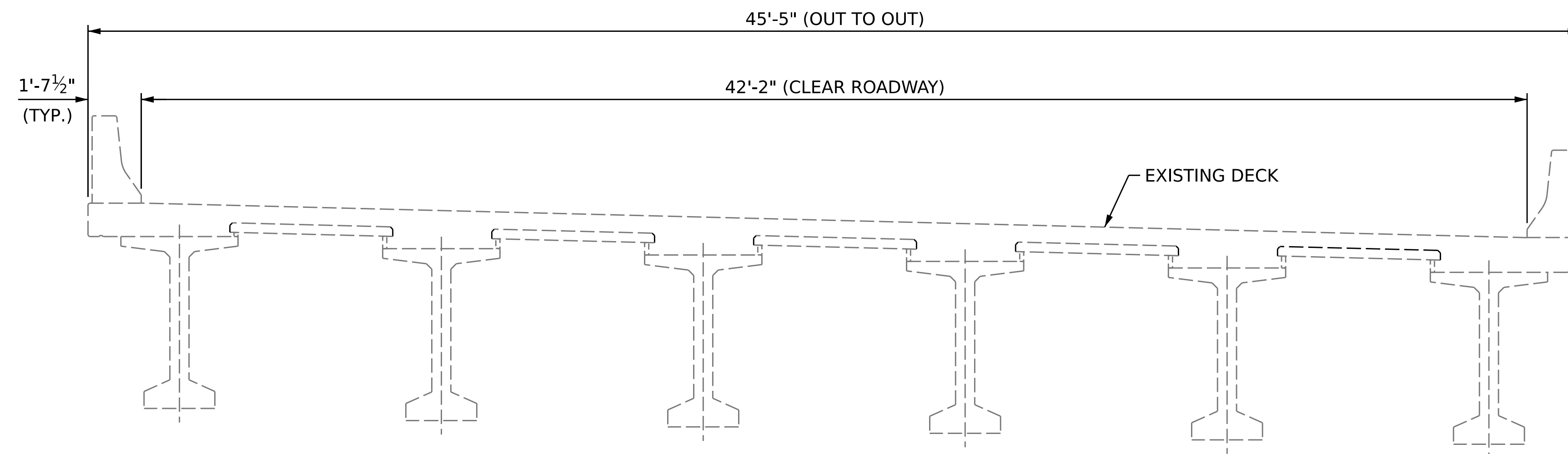
PROJECT NO. **I-6036**
BRUNSWICK COUNTY
BRIDGE NO. **090241**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOR BRIDGE ON
I-140 WBL OVER
WILDLIFE CROSSING

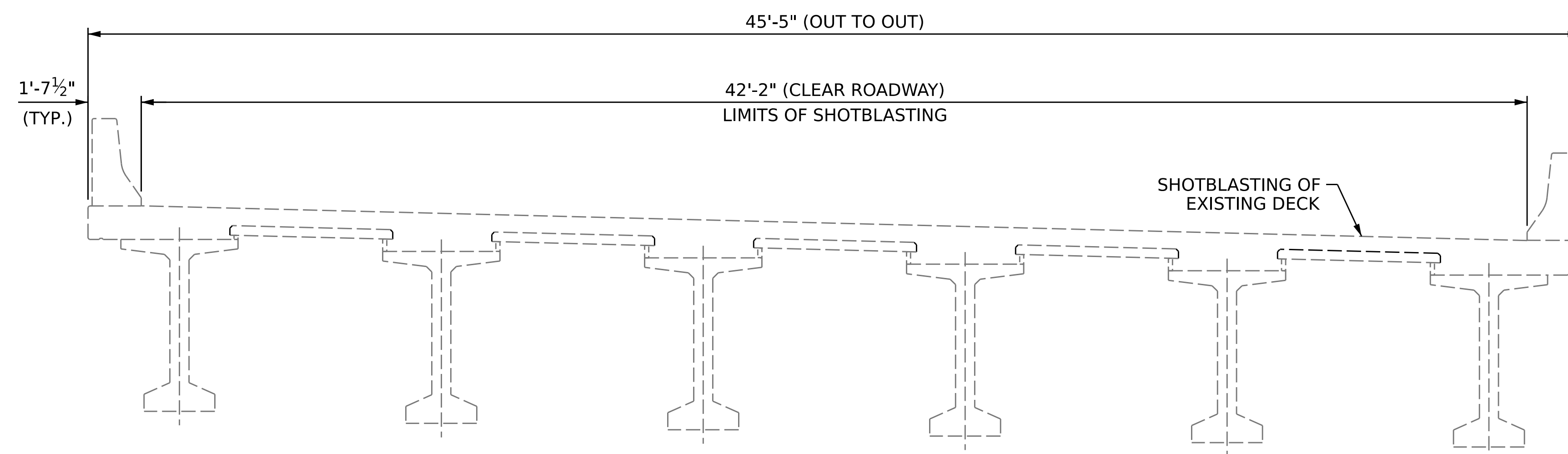
DRAWN BY : S. T. SANDOR DATE : 1/20/23
CHECKED BY : W. C. SMITH DATE : 5/23/23
DESIGN ENGINEER OF RECORD: _____ DATE : _____

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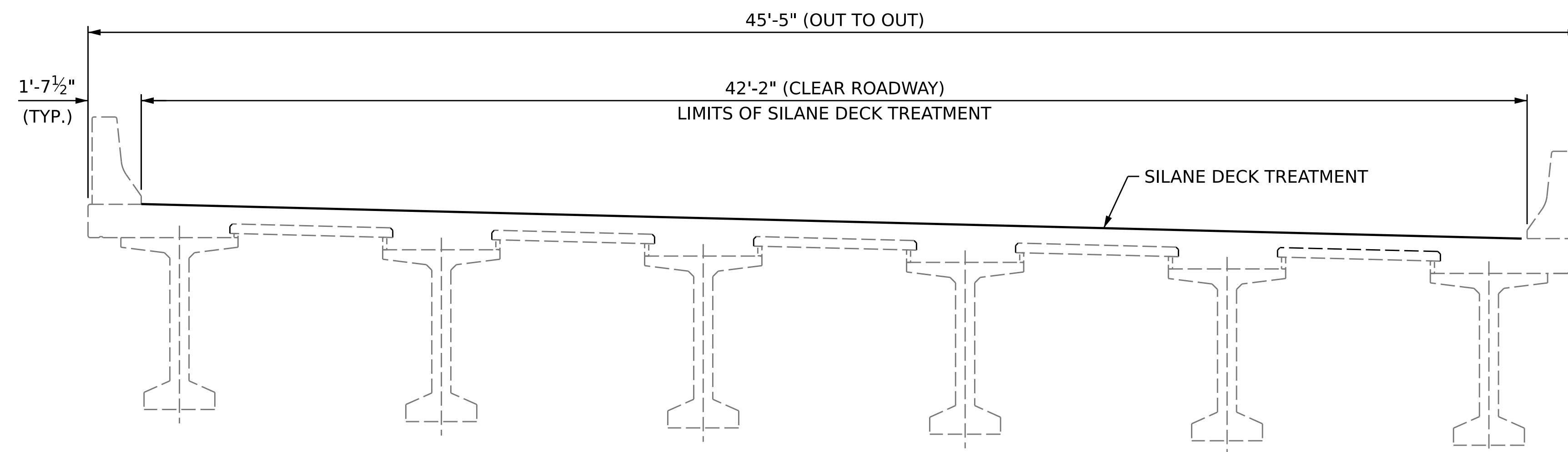
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION
(EXISTING)



TYPICAL SECTION
(SHOTBLASTING)

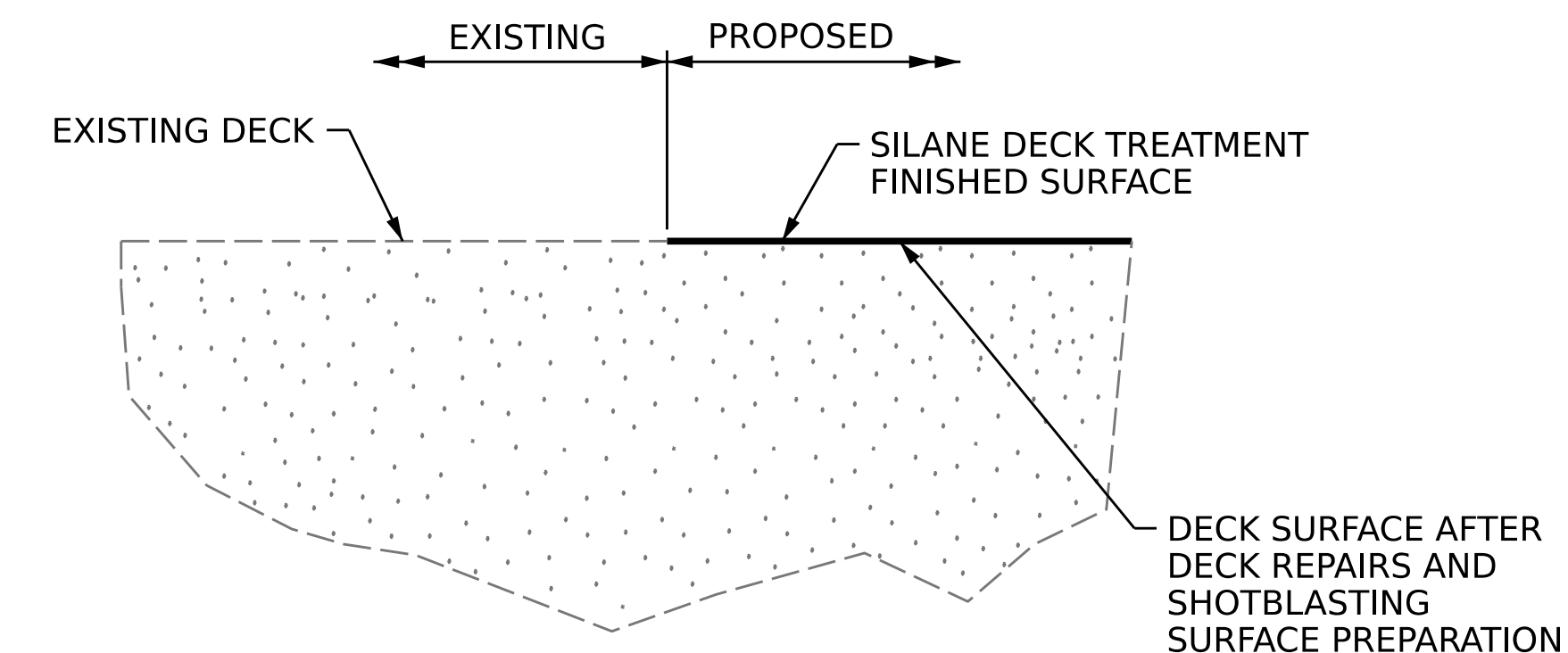


TYPICAL SECTION
(PROPOSED)

NOTES

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

GIRDERS ARE 63" PRESTRESSED CONCRETE MODIFIED BULB TEE.



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090241**



Designed by:
P. Corey Newton
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION FOR SILANE DECK TREATMENT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO. S10-2
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			4

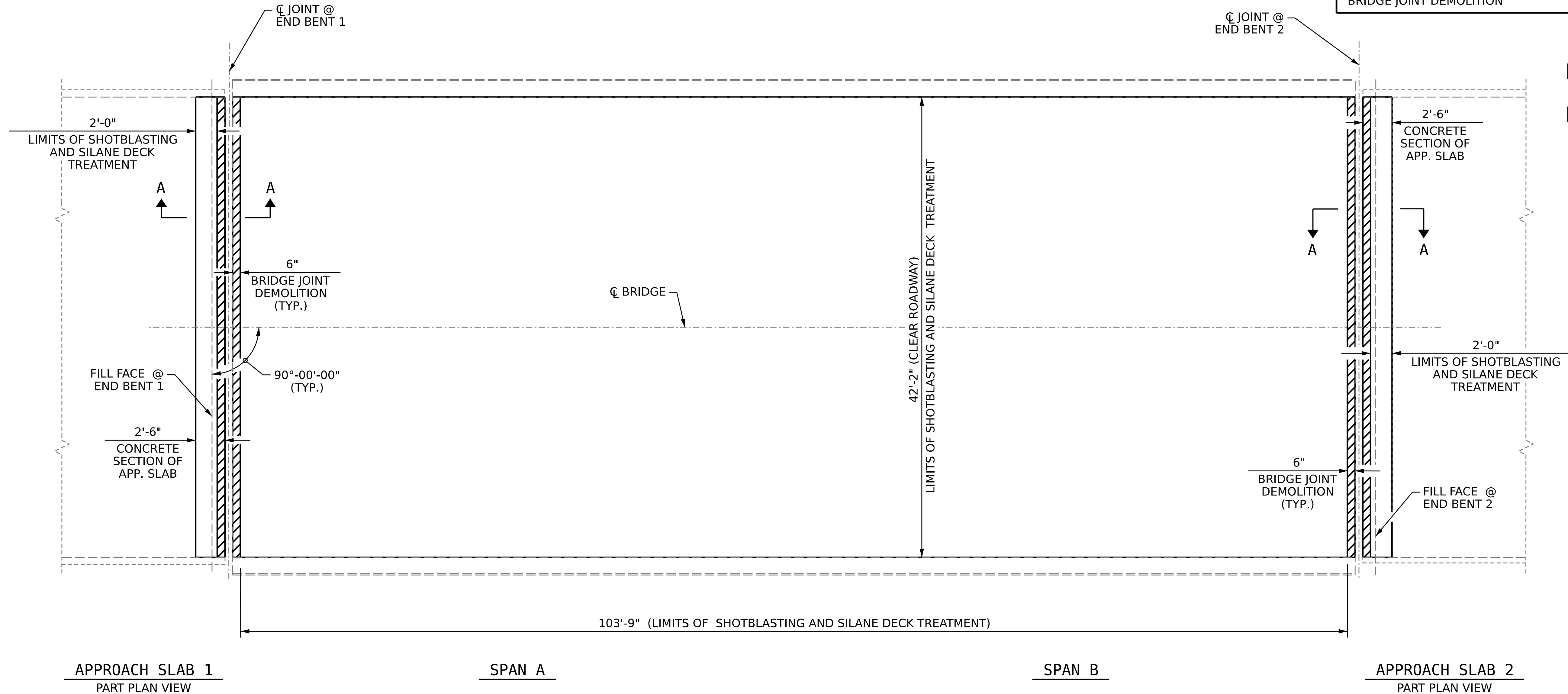
DRAWN BY : S. T. SANDOR DATE : 1/20/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	486.1 SQ. YDS.	
SILANE DECK TREATMENT	486.1 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.2 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	18.7 SQ. YDS.	
SILANE DECK TREATMENT	18.7 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.2 SQ. FT.	



- SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
- BRIDGE JOINT DEMOLITION

PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090241**



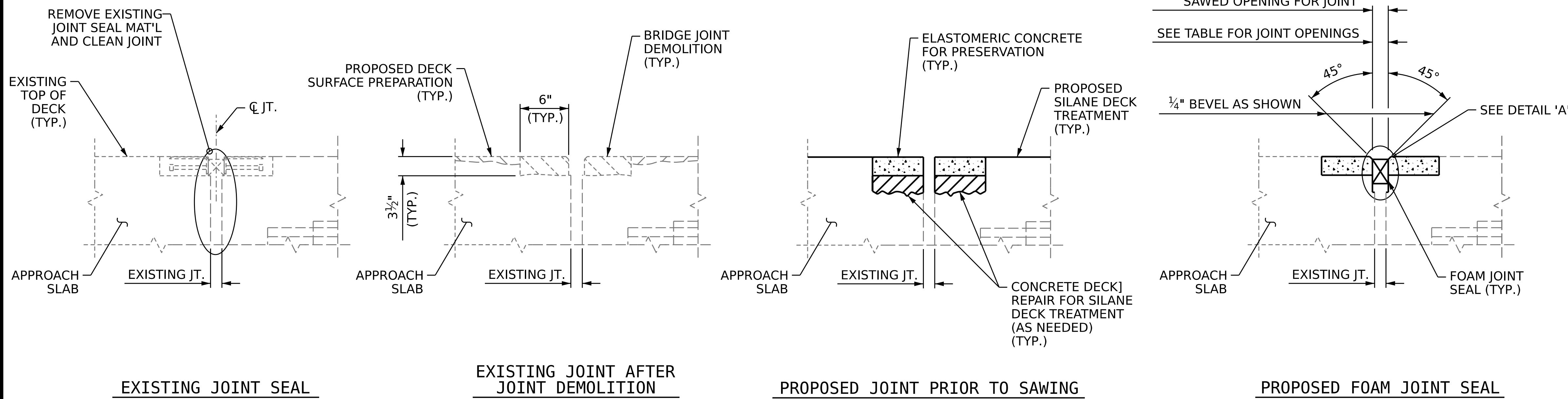
DocuSigned by:
 P. Corey Newton
 #FF53014319407...
 07/26/2023

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
**PLAN OF SPANS
 AND
 APPROACH SLABS**

DRAWN BY : S. T. SANDOR DATE : 1/20/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD : DATE :

DOCUMENT NOT CONSIDERED
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 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S10-3
1			3			TOTAL SHEETS
2			4			4



NOTES

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY OR SEALANT WORK IS COMPLETE.

THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING JOINT OPENING PRIOR TO ORDERING JOINT SEAL MATERIAL. IF THE ACTUAL JOINT OPENING VARIES FROM THE OPENING INDICATED IN THE DETAILS BY MORE THAN 1/4", NOTIFY THE ENGINEER.

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

FOAM JOINTS SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

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.

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

THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

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

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

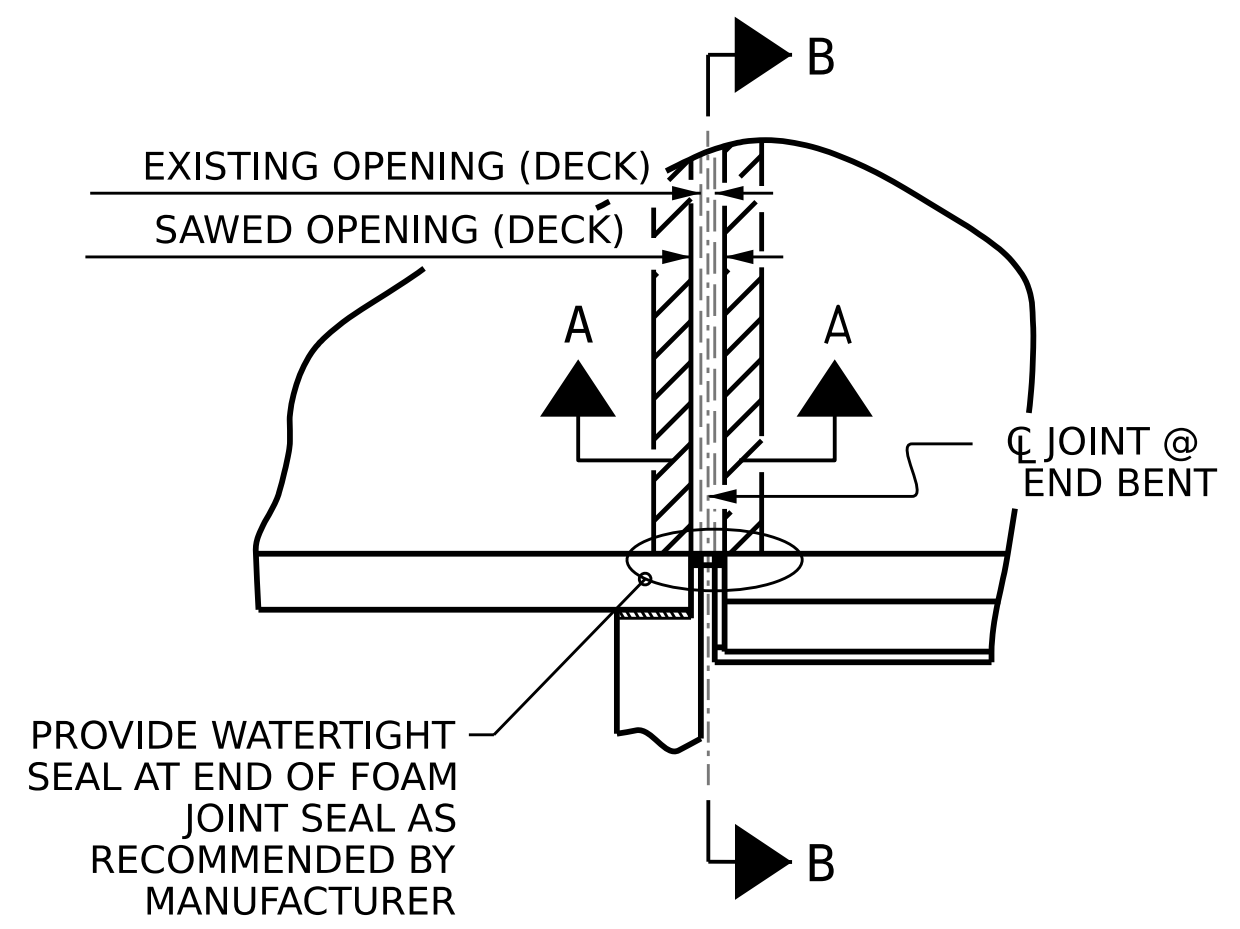
FOR EXCAVATION BELOW THE BOTTOM OF PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT THE BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

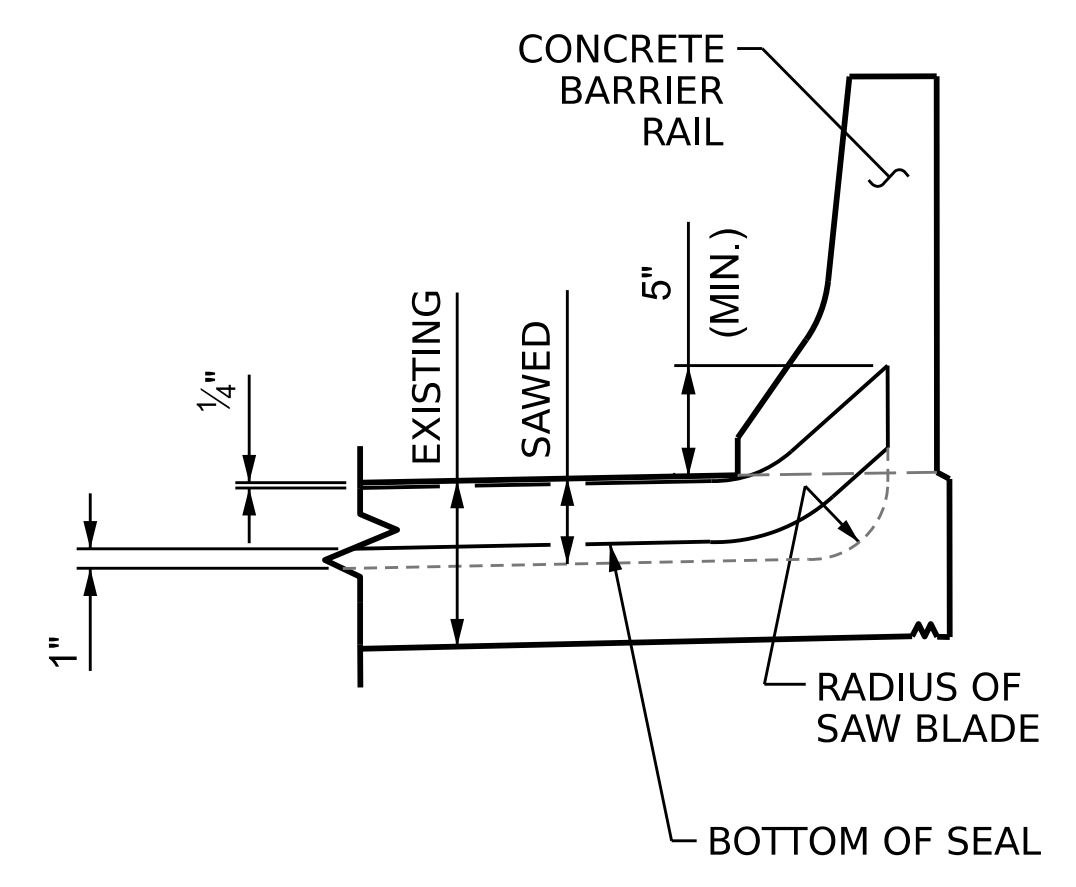
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

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

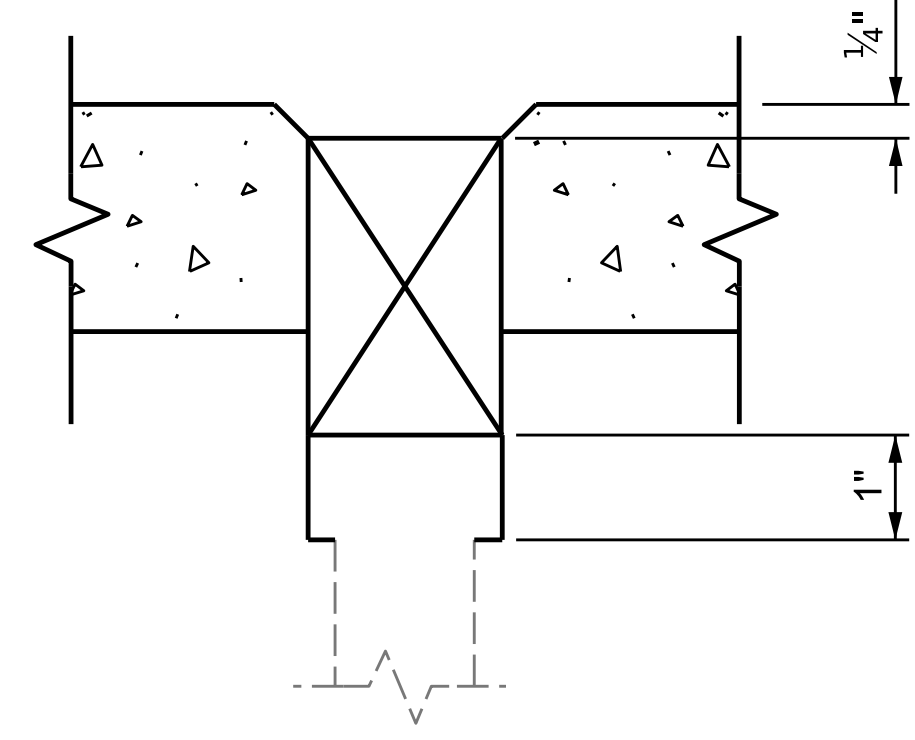
SECTION A-A
(TYP. AT END BENTS)



PLAN
(@ END BENTS)



SECTION B-B



DETAIL 'A'

JOINT SEAL DETAILS

JOINT REPAIR QUANTITY TABLE

	ESTIMATED (LIN. FT.)	ACTUAL (LIN. FT.)
FOAM JOINT SEALS FOR PRESERVATION	84.4	

ELASTOMERIC CONCRETE FOR PRESERVATION

LOCATION	ESTIMATED (CU. FT.)	ACTUAL (CU. FT.)
END BENT 1	12.3	
END BENT 2	12.3	
TOTAL	24.6	

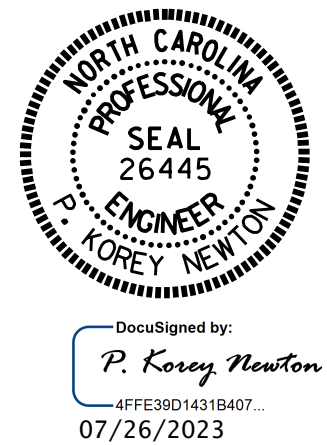
SAWED JOINT OPENING TABLE

LOCATION	SAWED JOINT OPENING (PERPENDICULAR TO JOINT)		
	AT 45°	AT 60°	AT 90°
END BENT 1	2"	2"	2"
END BENT 2	2 3/16"	2"	1 11/16"

DRAWN BY : S. T. SANDOR DATE : 1/19/23
 CHECKED BY : W. C. SMITH DATE : 5/23/23
 DESIGN ENGINEER OF RECORD: DATE :

7/25/2023
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 pknewton

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090241**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

JOINT REPAIR DETAILS

REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
2			4			4

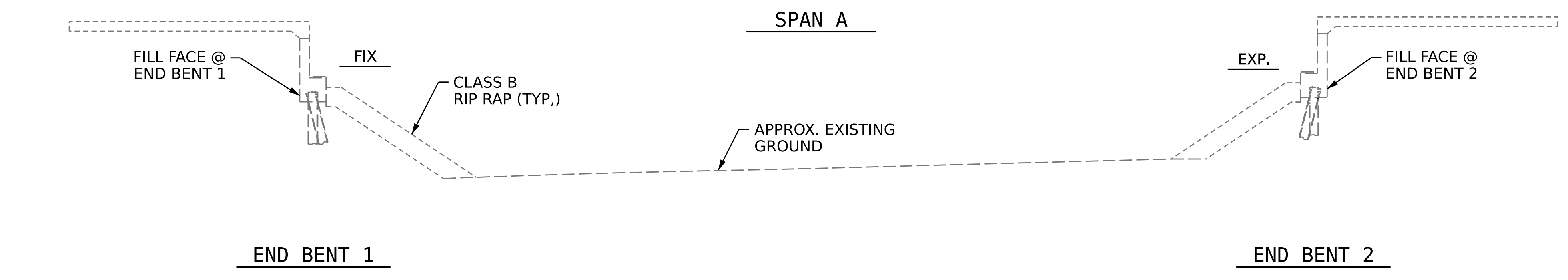
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NOTES

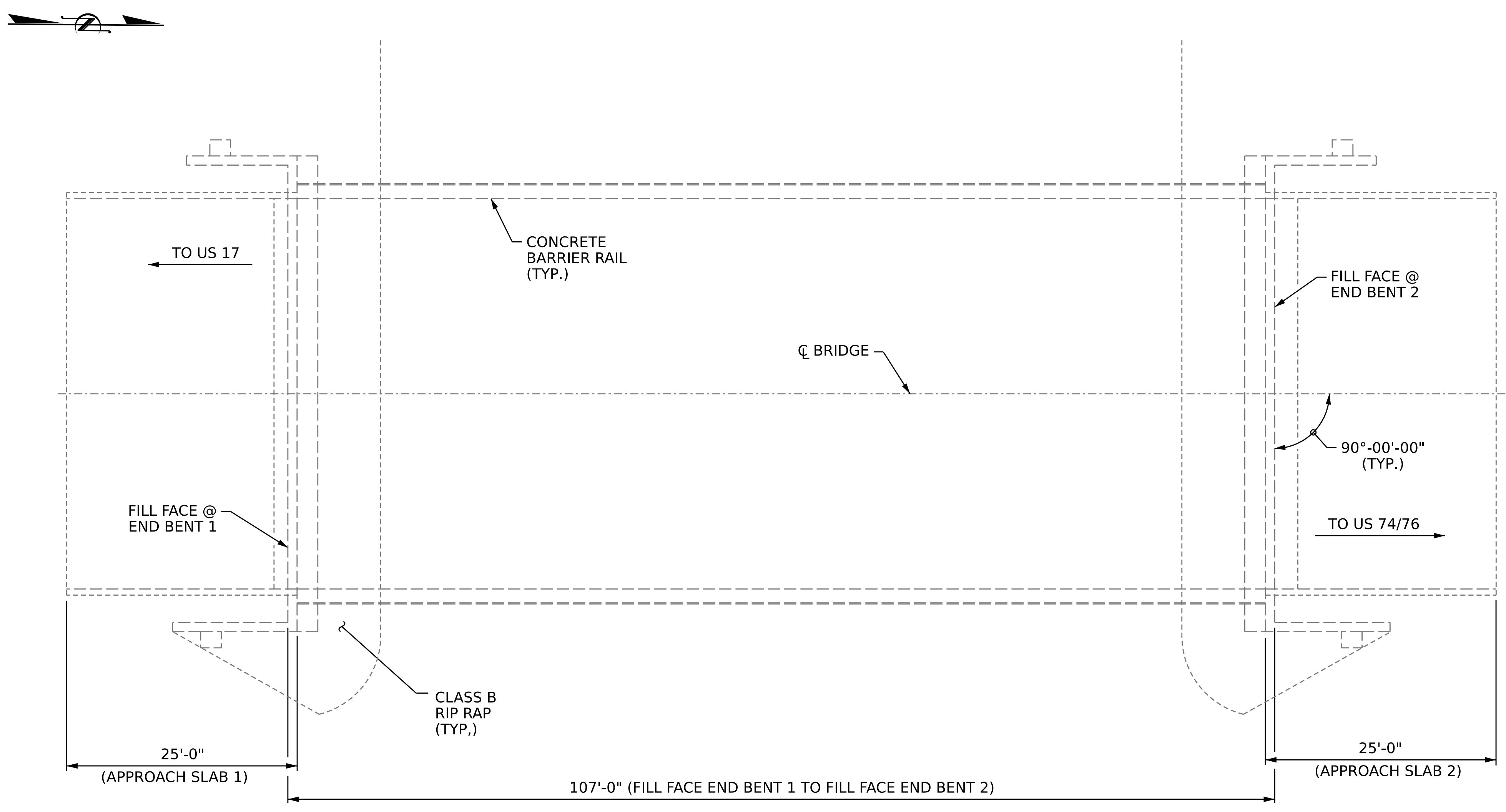
GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 06/11/2021.
BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT.
- APPLY SILANE DECK TREATMENT.
- REMOVE EXISTING ELASTOMERIC CONCRETE, ARMOR, AND JOINT MATERIAL.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL FOAM JOINT SEALS



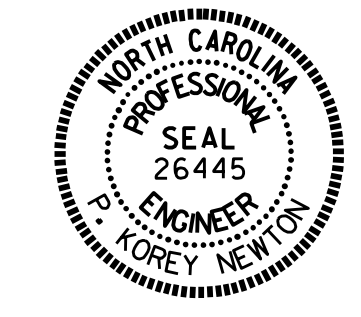
SECTION ALONG CL BRIDGE



PLAN

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

RESIDENT ENGINEER _____ DATE _____



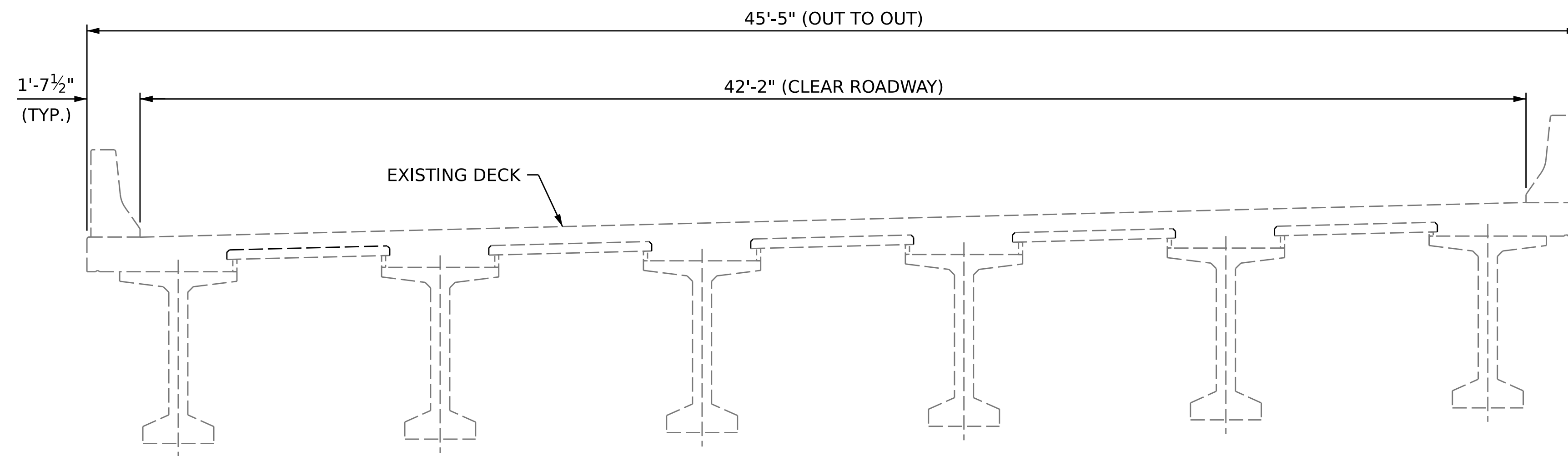
PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090242**

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON
 I-140 EBL OVER
 WILDLIFE CROSSING

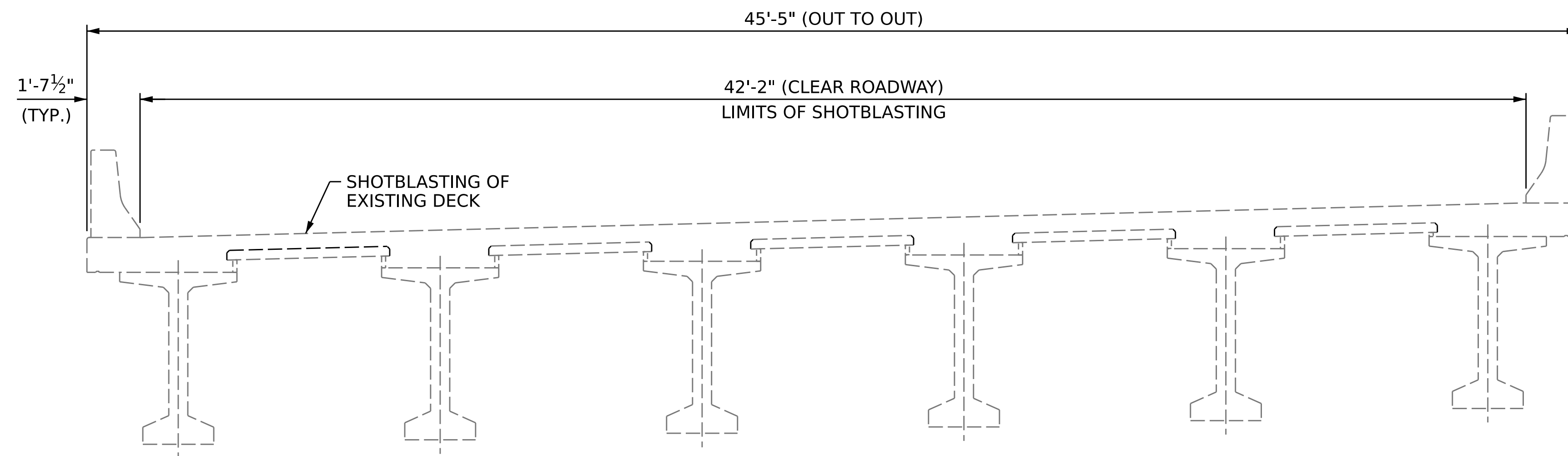
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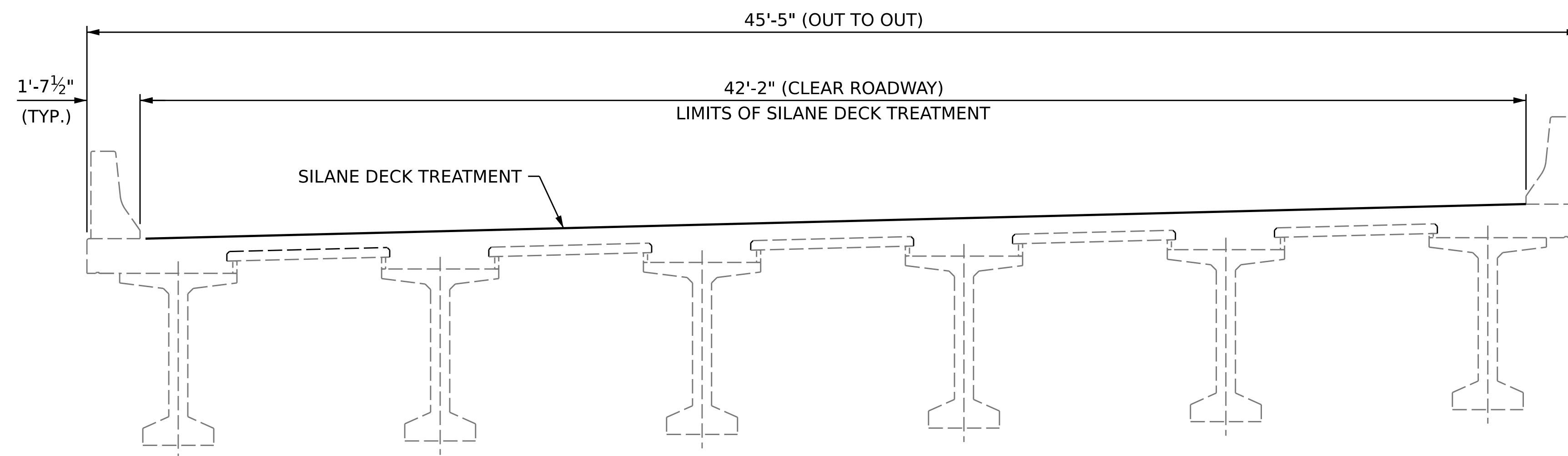
DRAWN BY : S. T. SANDOR DATE : 5/23/23
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TYPICAL SECTION
(EXISTING)



TYPICAL SECTION
(SHOTBLASTING)

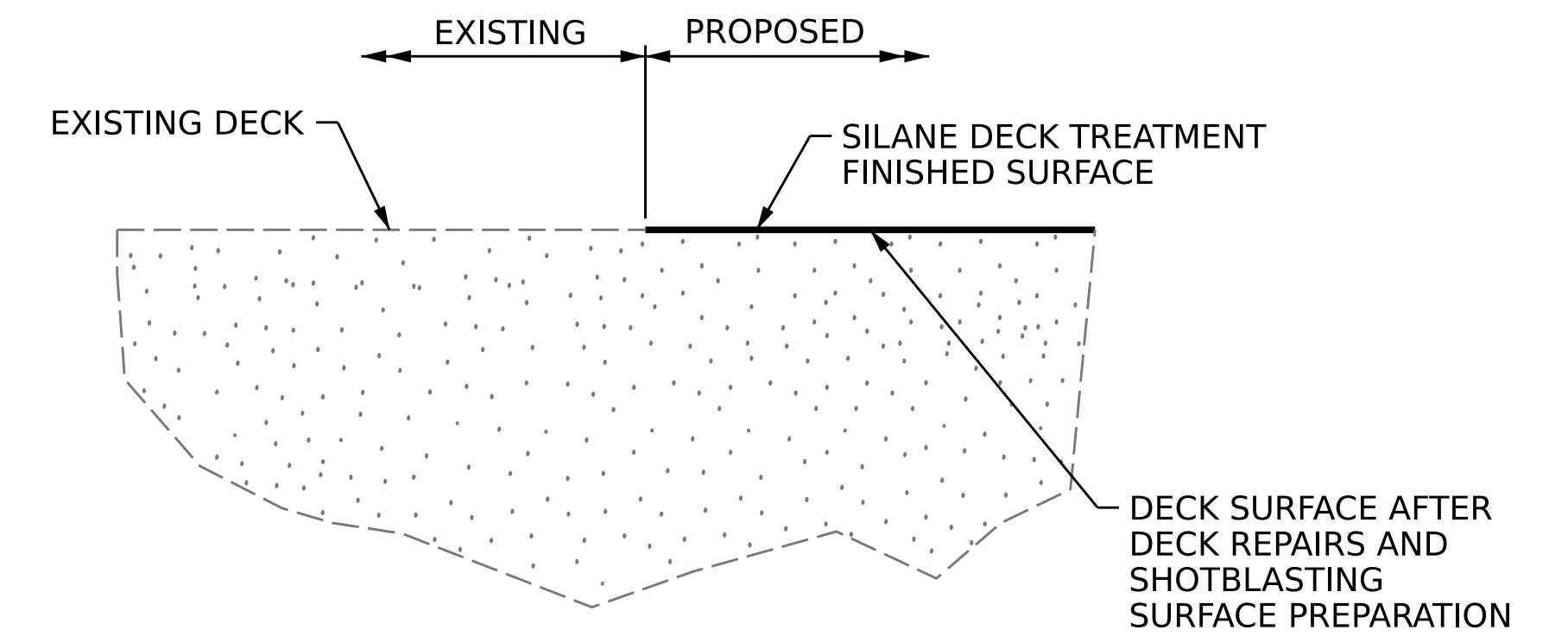


TYPICAL SECTION
(PROPOSED)

NOTES

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

GIRDERS ARE 63" PRESTRESSED CONCRETE MODIFIED BULB TEE.



DETAIL FOR SILANE DECK TREATMENT

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090242**



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 477E39014319407...
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STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
TYPICAL SECTION FOR SILANE DECK TREATMENT

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REVISIONS						SHEET NO. S11-2
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			4

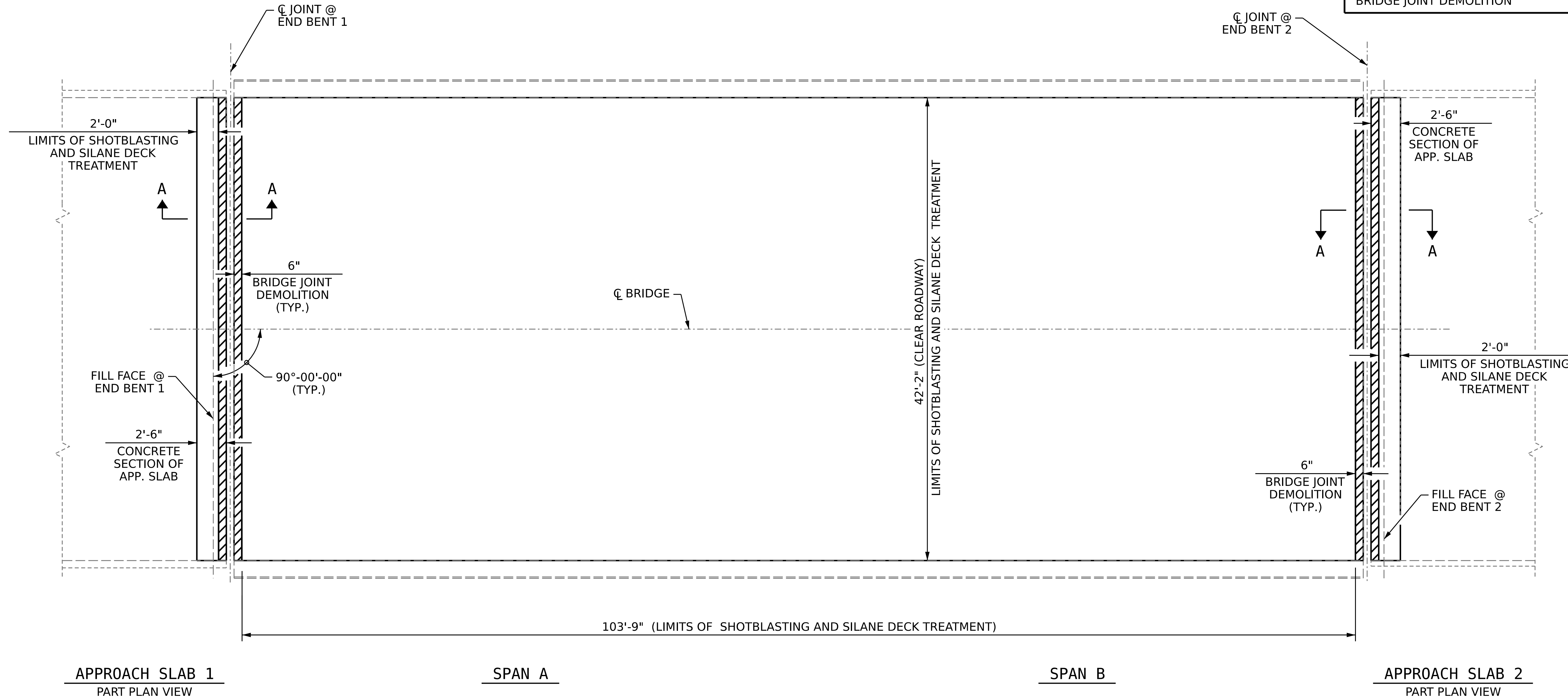
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NOTES

FOR SECTION A-A, SEE "JOINT REPAIR DETAILS" SHEET.

DECK SURFACE REPAIR QUANTITY TABLE

DECK SURFACE REPAIR		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	486.1 SQ. YDS.	
SILANE DECK TREATMENT	486.1 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.2 SQ. FT.	
APPROACH SLABS		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	18.7 SQ. YDS.	
SILANE DECK TREATMENT	18.7 SQ. YDS.	
BRIDGE JOINT DEMOLITION	42.2 SQ. FT.	



- SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT AREA
- BRIDGE JOINT DEMOLITION

PLAN OF SPANS

PROJECT NO. **I-6036**
BRUNSWICK COUNTY
 BRIDGE NO. **090242**



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STATE OF NORTH CAROLINA
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**SUPERSTRUCTURE
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1			3			TOTAL SHEETS
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