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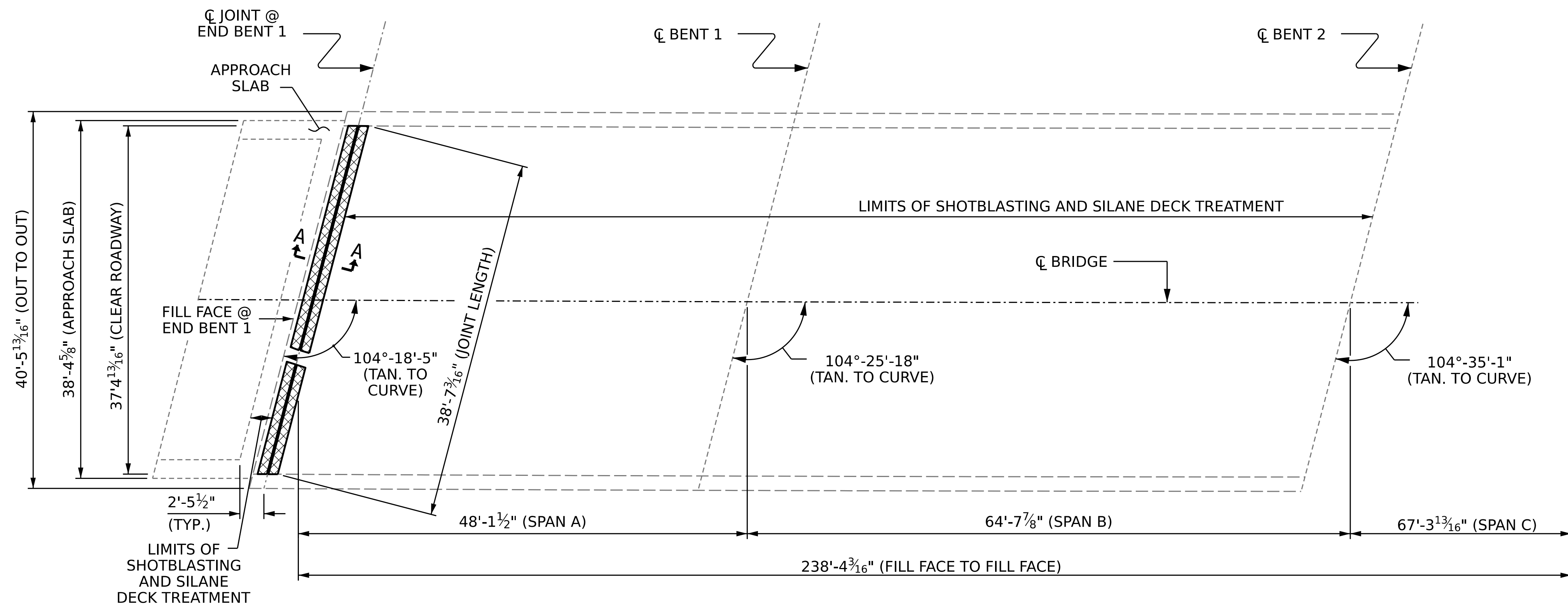
**This file or an individual page
shall not be considered a certified document.**

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLAB

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	993.6 SY	
SILANE DECK TREATMENT	993.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	70.8 SF	

NOTES

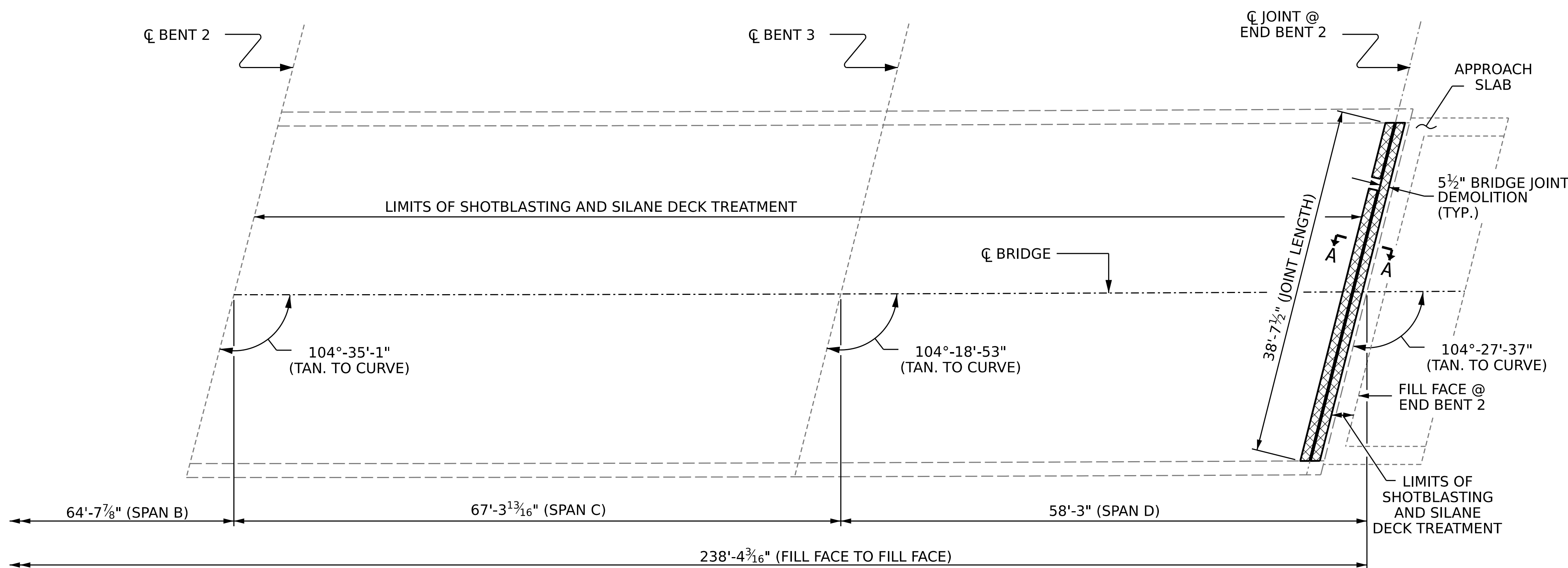
- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S5-4.



PLAN OF SPANS

REPAIR KEY

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



PLAN OF SPANS

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



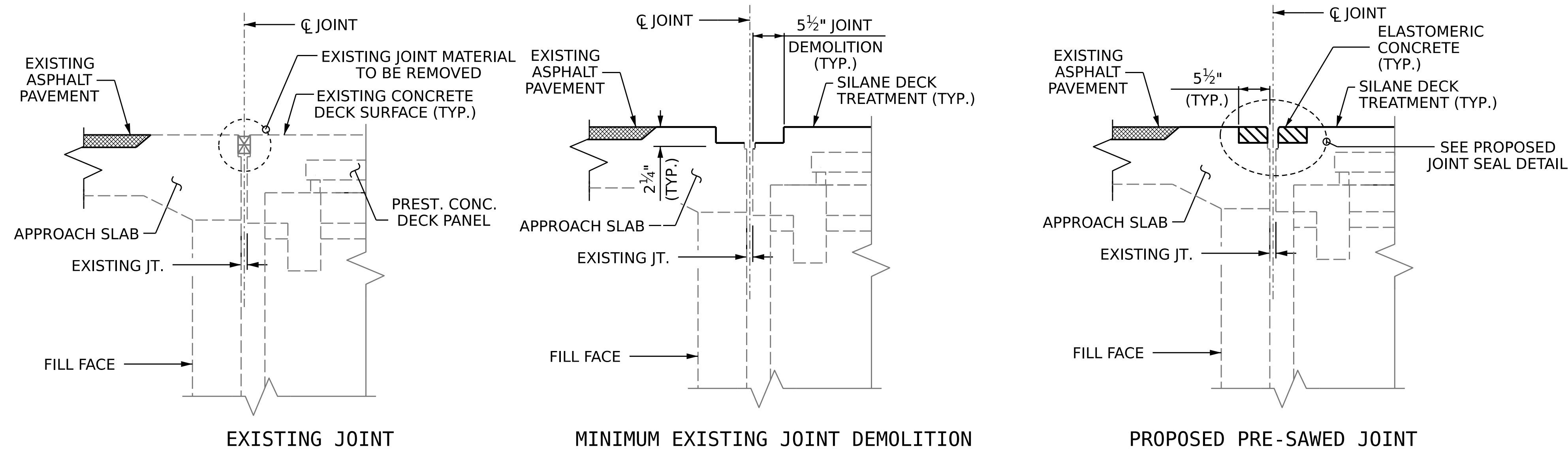
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

DRAWN BY : G. AYES DATE : 2/2022
 CHECKED BY : A. G. ABRAHA DATE : 5/2022
 DESIGN ENGINEER OF RECORD: --- DATE : ---

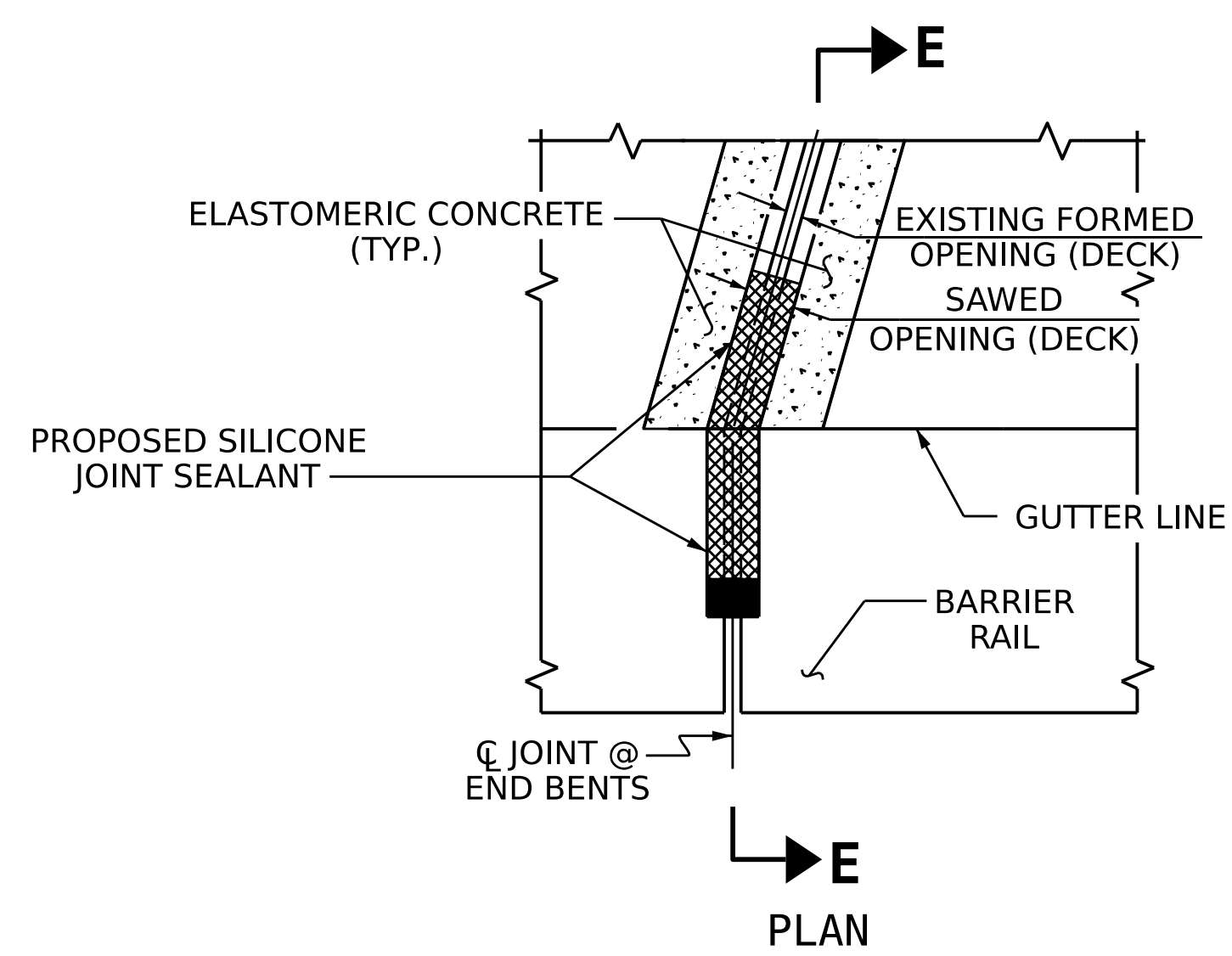
DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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

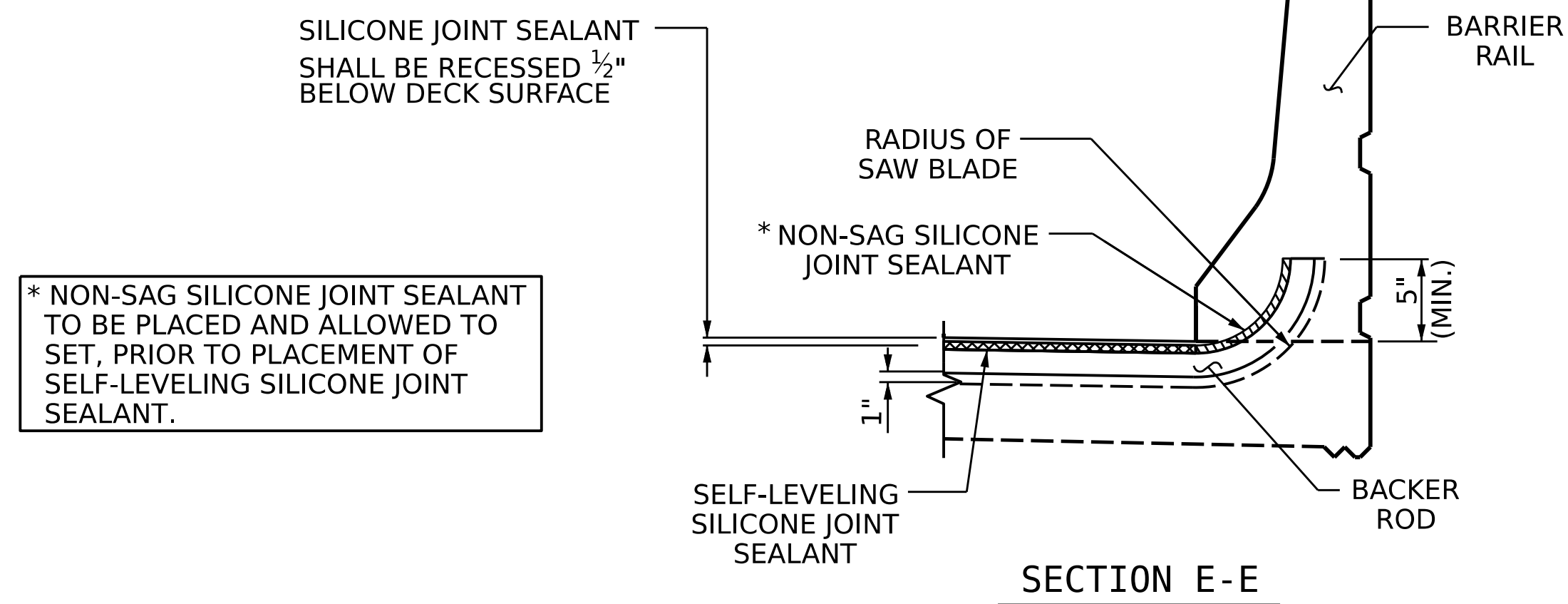


JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.3 CF	
POURABLE SILICONE JOINT SEALANT	77.2 LF	



JOINT DETAIL AT BARRIER RAIL



NOTES

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

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

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

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

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

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

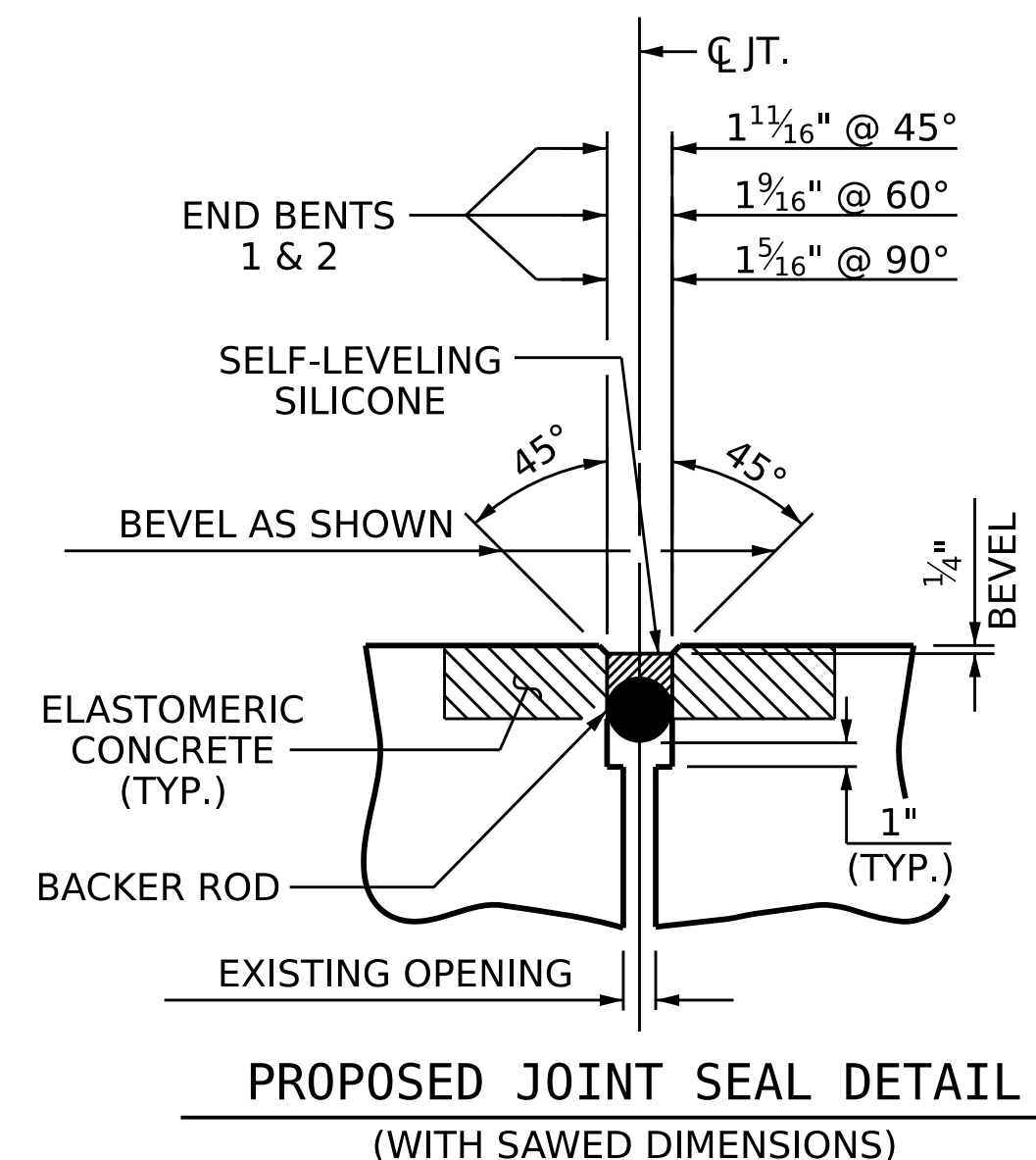
QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

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

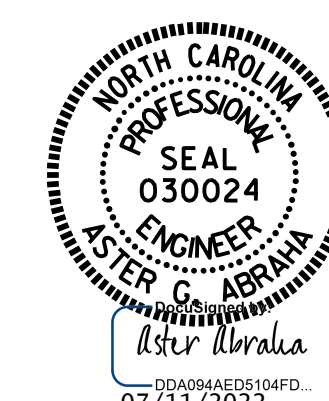
FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



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



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

**JOINT REPAIR
DETAILS**

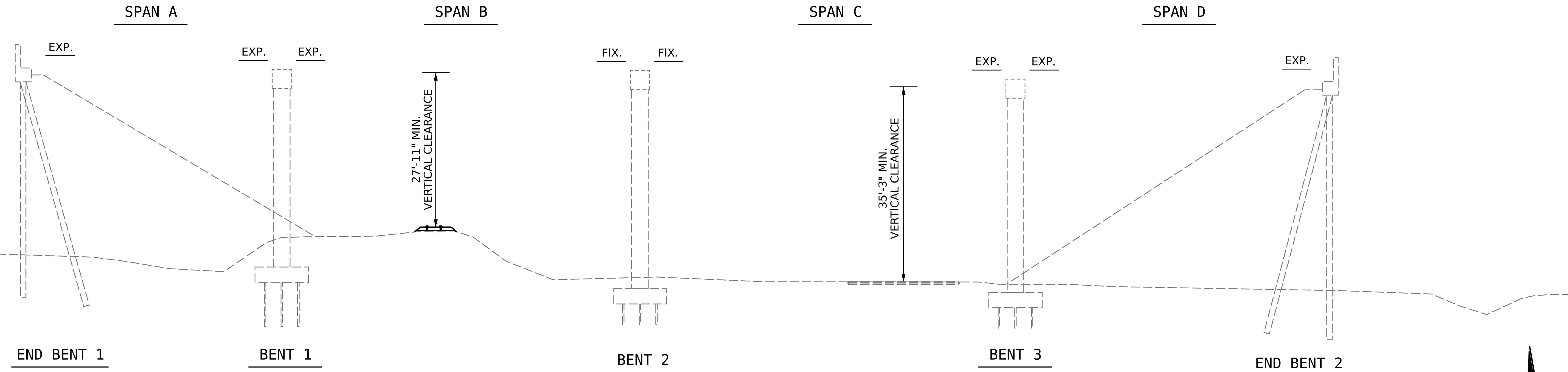
DRAWN BY : G. AYES DATE : 6/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

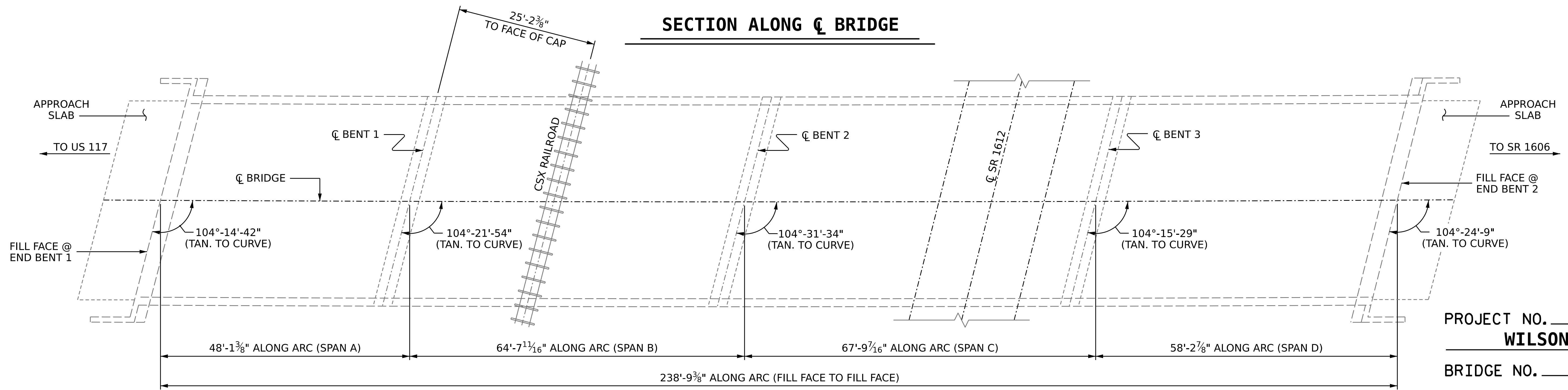
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S5-4
1			3			TOTAL SHEETS
2			4			4

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/21/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.



SECTION ALONG ϕ BRIDGE



SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

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

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

RESIDENT ENGINEER _____ DATE _____



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970251**
 MILE POST - 139.2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264 BYPASS EASTBOUND OVER CSX RAILROAD AND SR 1612 BETWEEN US 117 AND SR 1606

REVISIONS

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

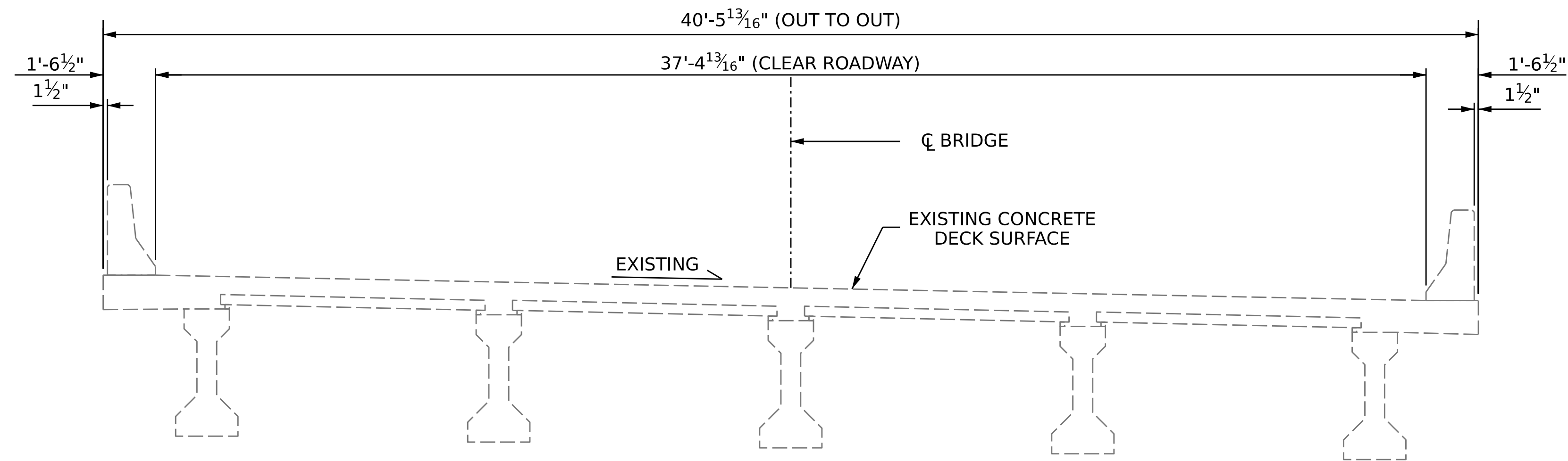
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : G. AYES DATE : 2/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: -- DATE : --

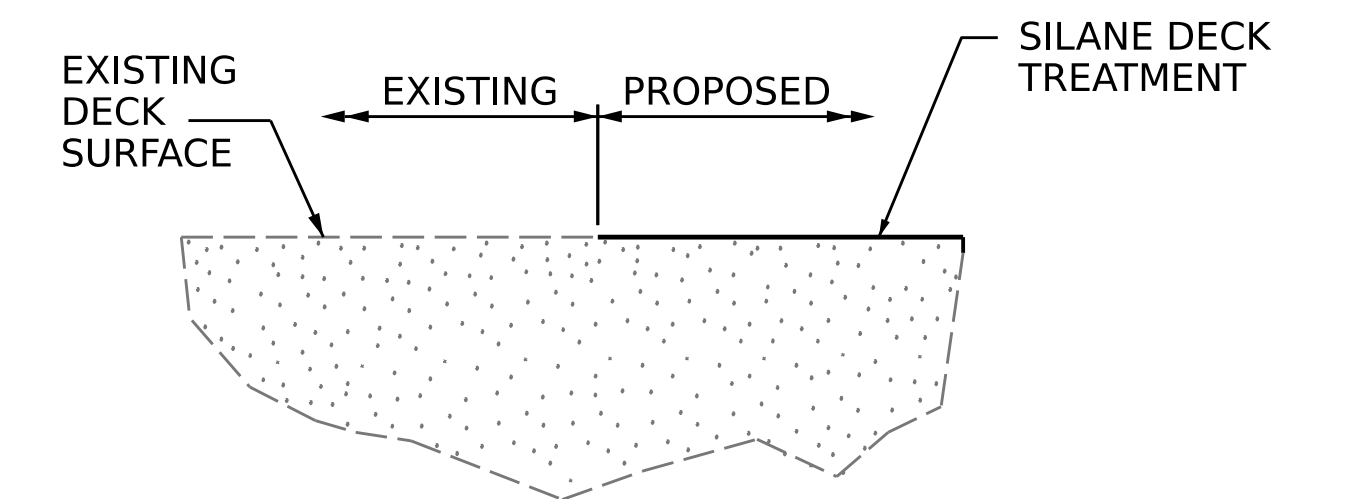
NOTES

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

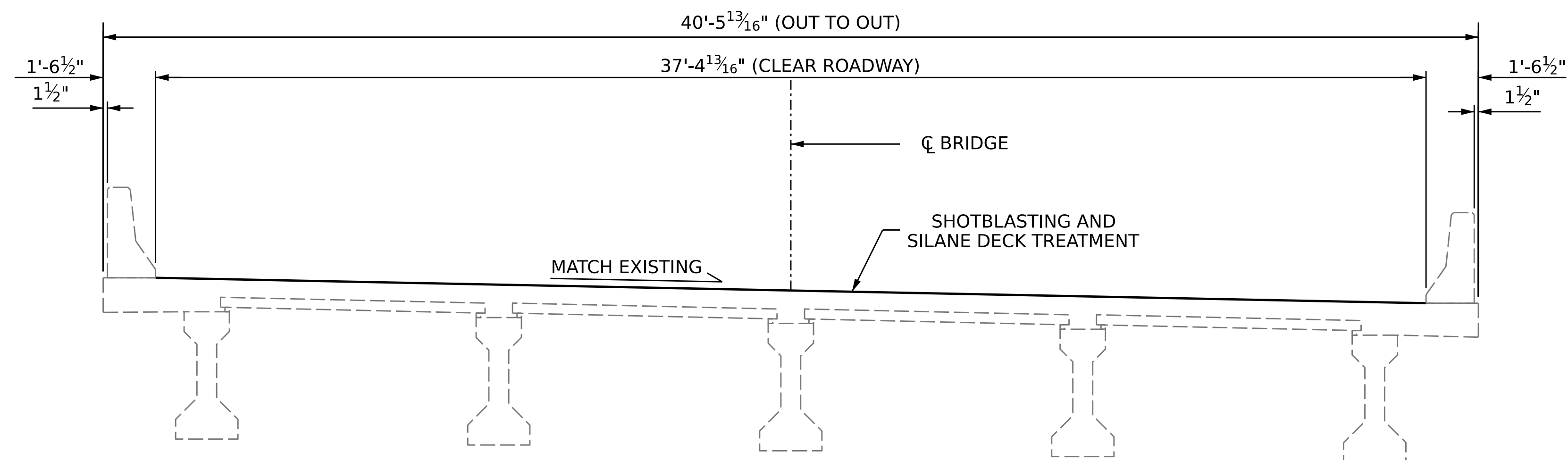
PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



TYPICAL SECTION
(EXISTING)

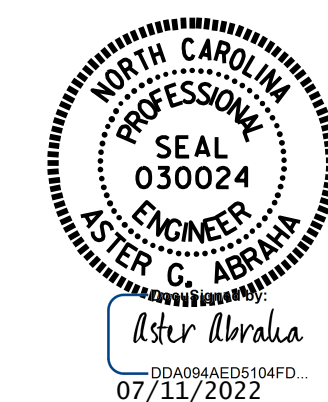


SILANE DECK TREATMENT DETAIL



TYPICAL SECTION
(PROPOSED)

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970251**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 TYPICAL SECTION
 AND SILANE DECK
 TREATMENT DETAILS

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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

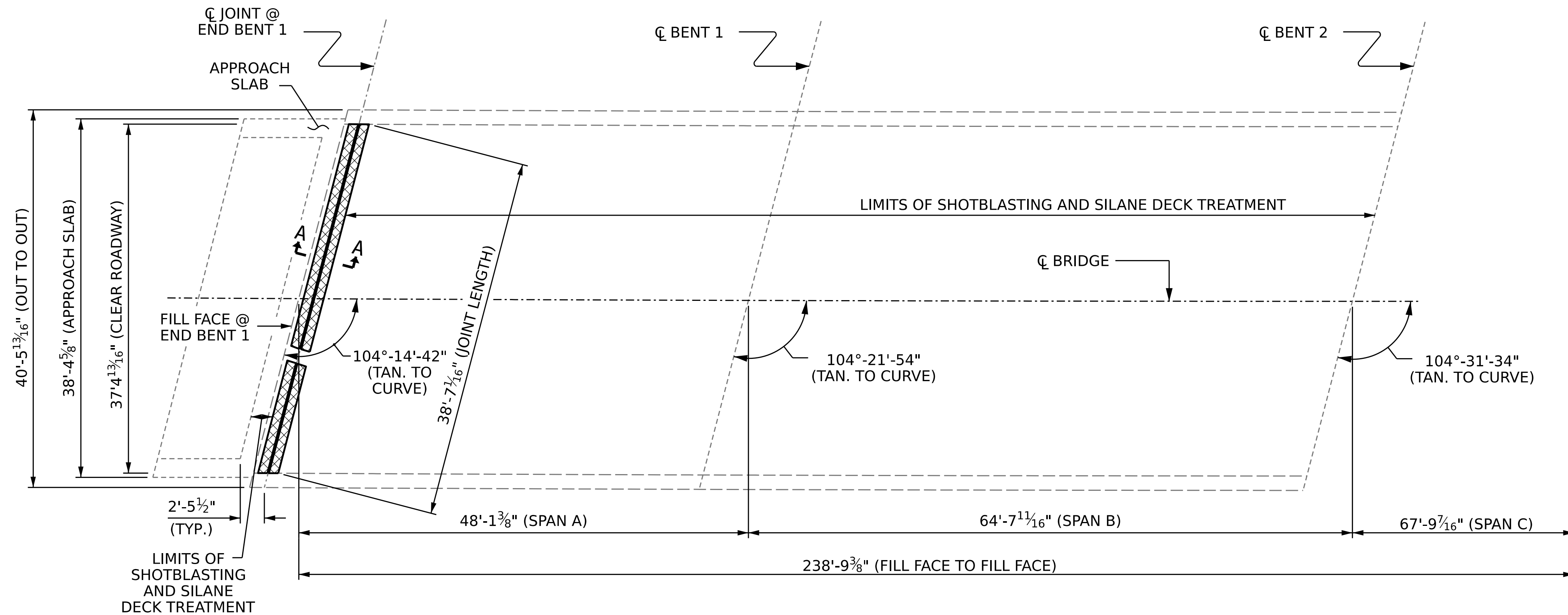
DRAWN BY : G. AYES DATE : 2/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: -- DATE : --

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLAB

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	995.9 SY	
SILANE DECK TREATMENT	995.9 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	70.8 SY	

NOTES

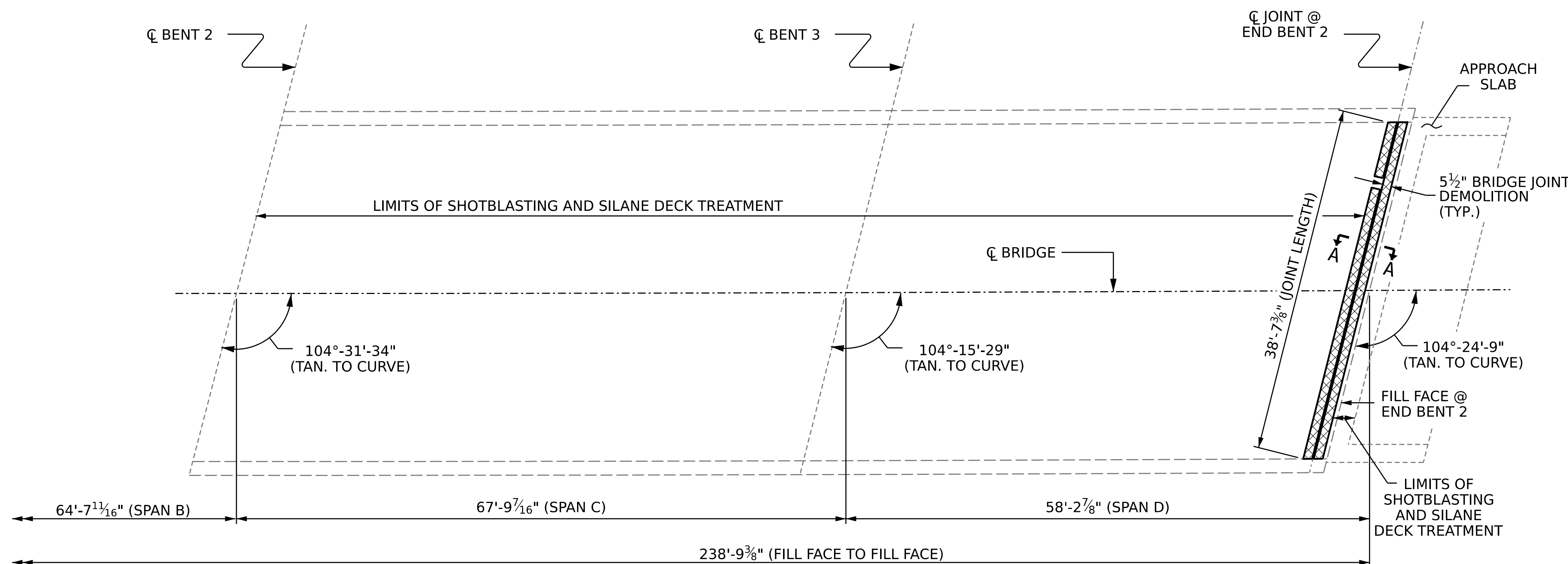
- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S6-4.



PLAN OF SPANS

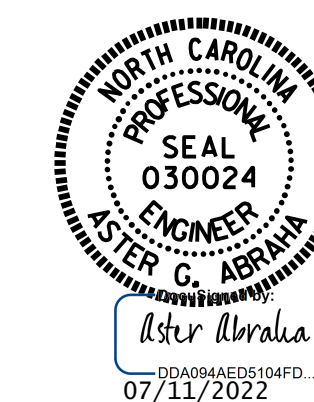
REPAIR KEY

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



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970251**



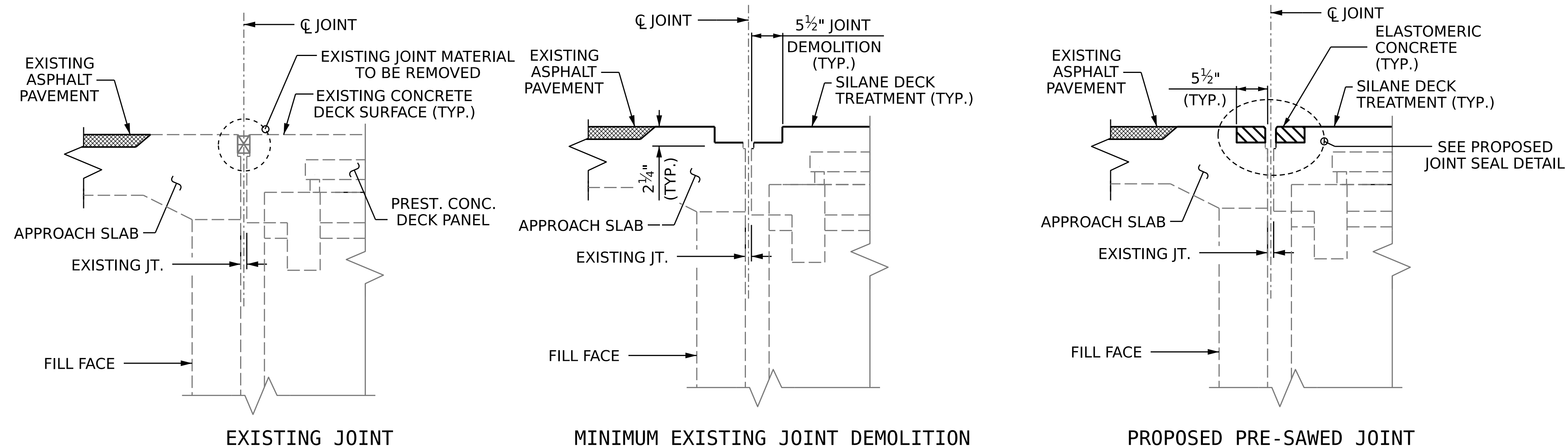
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

DRAWN BY : G. AYES DATE : 2/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: --- DATE : ---

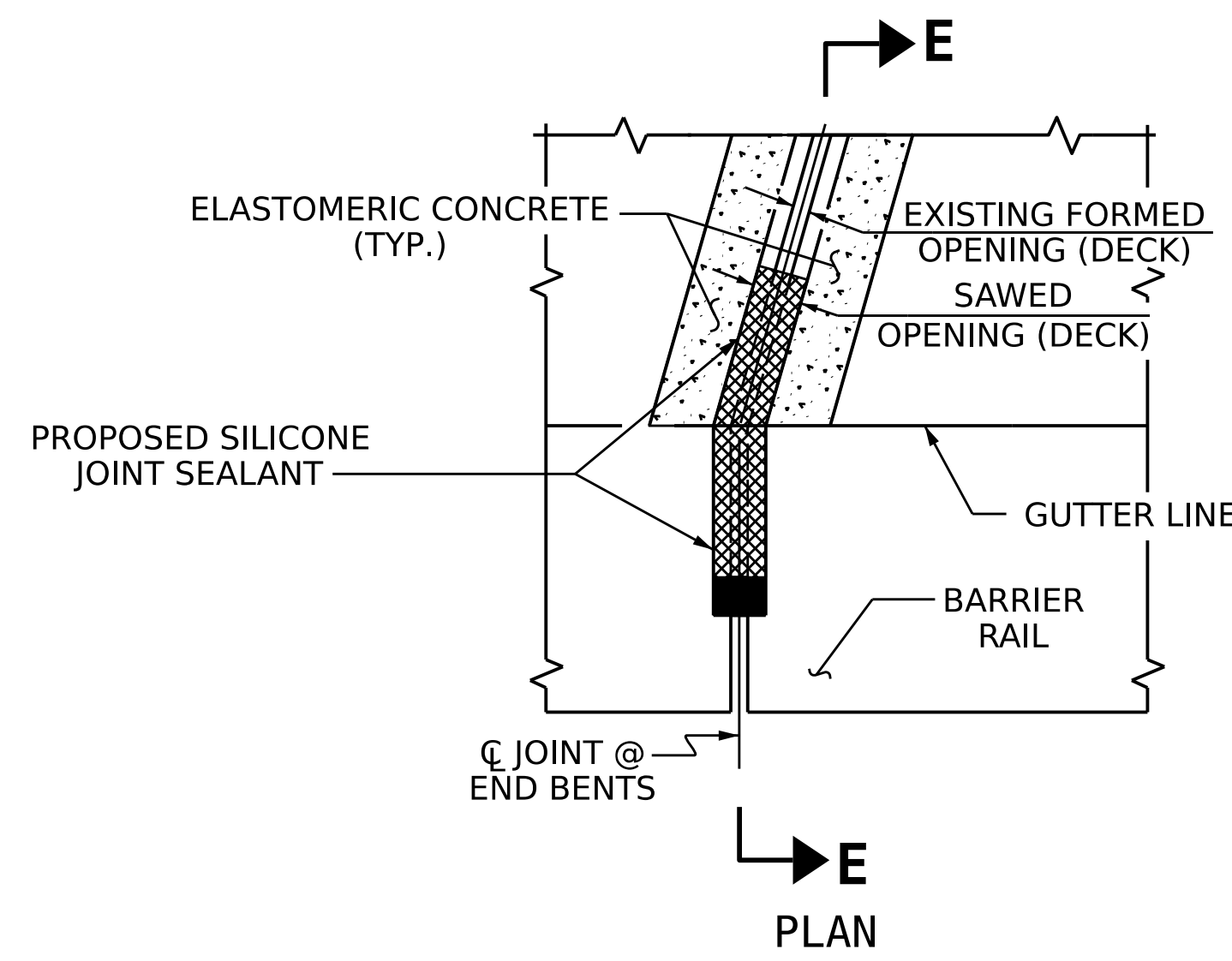
DOCUMENT NOT CONSIDERED
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S6-3
1			3			TOTAL SHEETS
2			4			4



JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

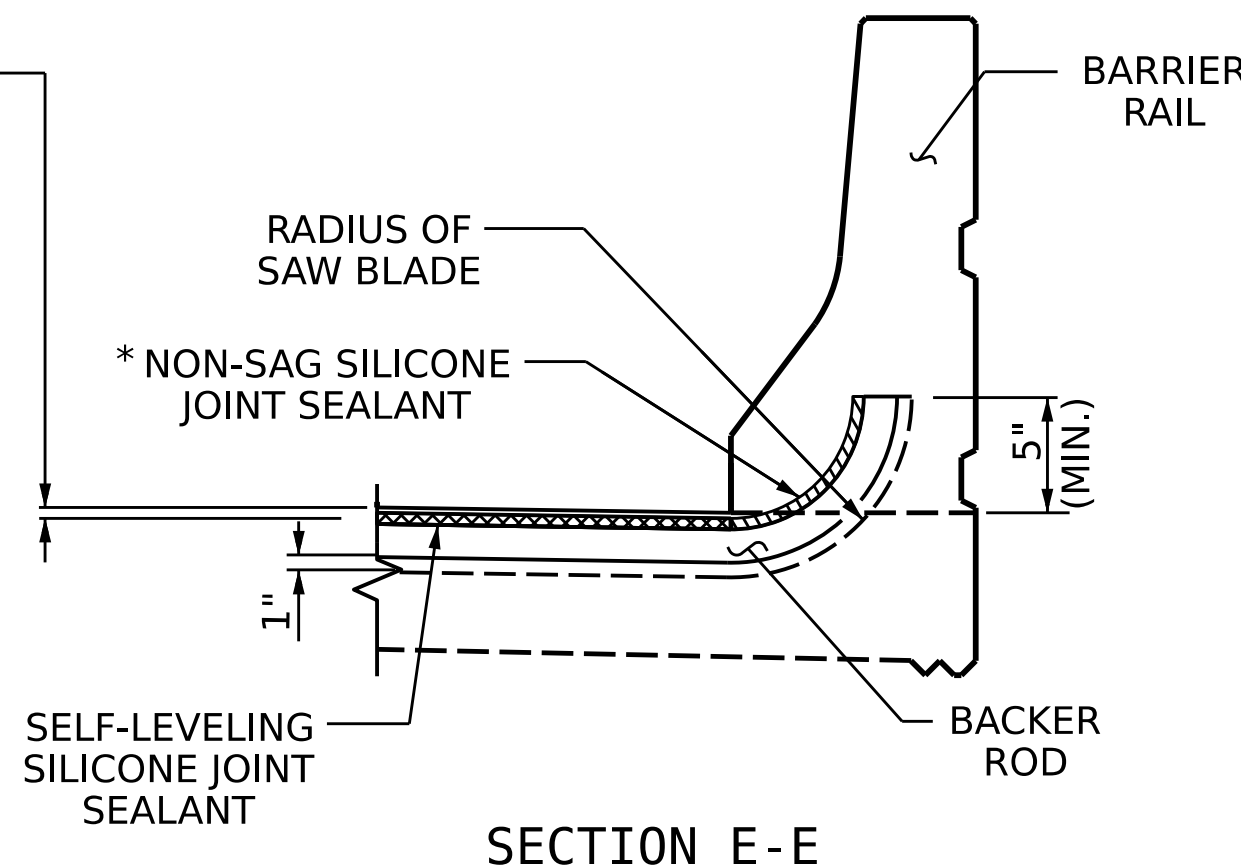
SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.3 CF	
POURABLE SILICONE JOINT SEALANT	77.2 LF	



JOINT DETAIL AT BARRIER RAIL

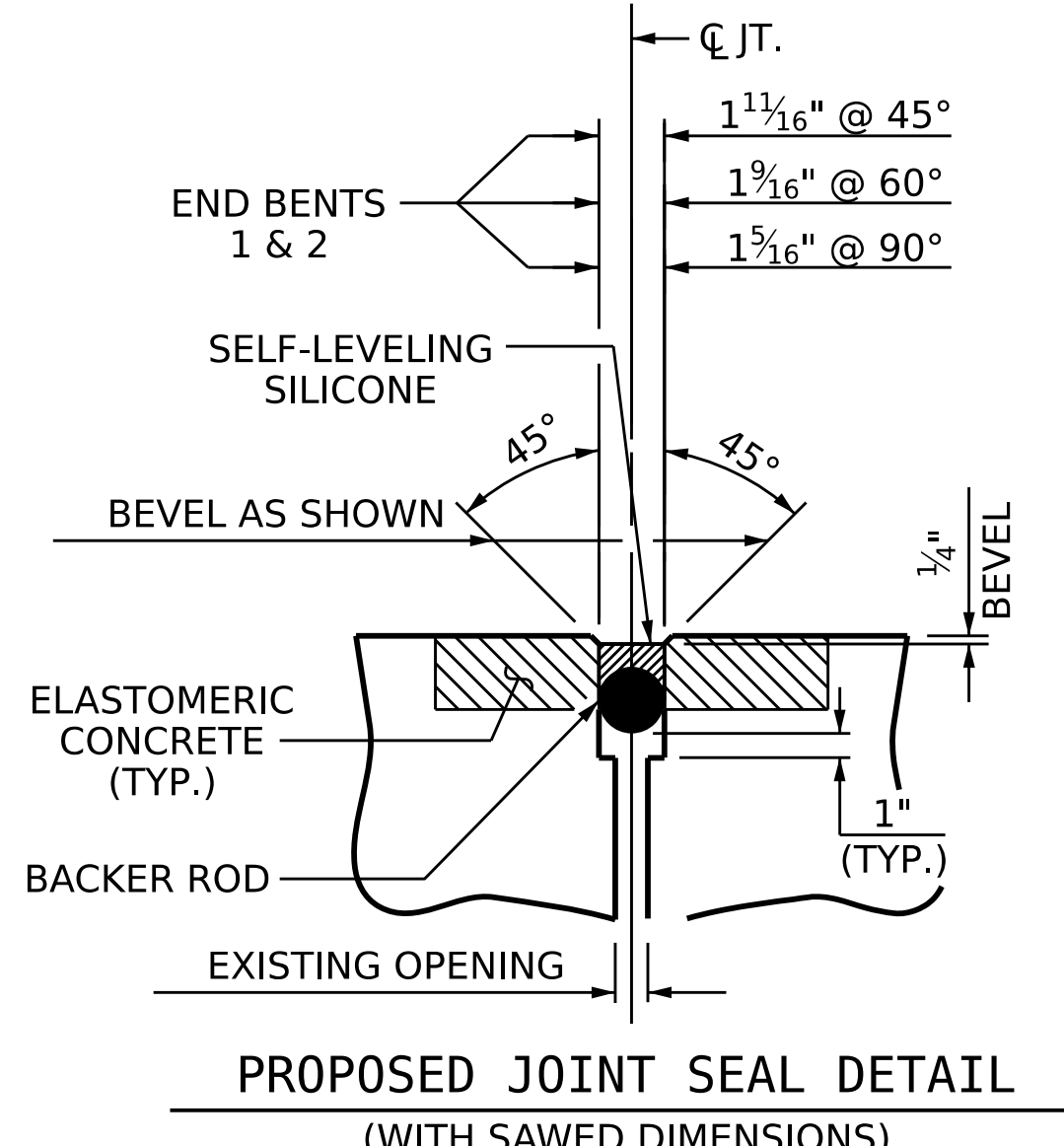
SILICONE JOINT SEALANT SHALL BE RECESSED 1/2" BELOW DECK SURFACE

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

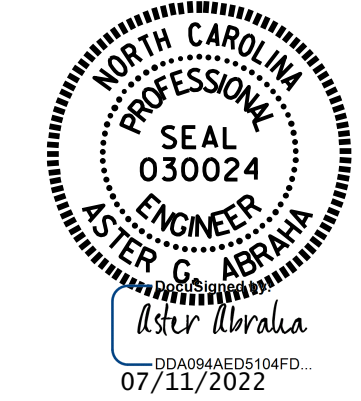


NOTES

- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.
- THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE BACKER ROD FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.
- ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.
- THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.
- POURABLE SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.
- DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.
- QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.
- FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.
- FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970251**



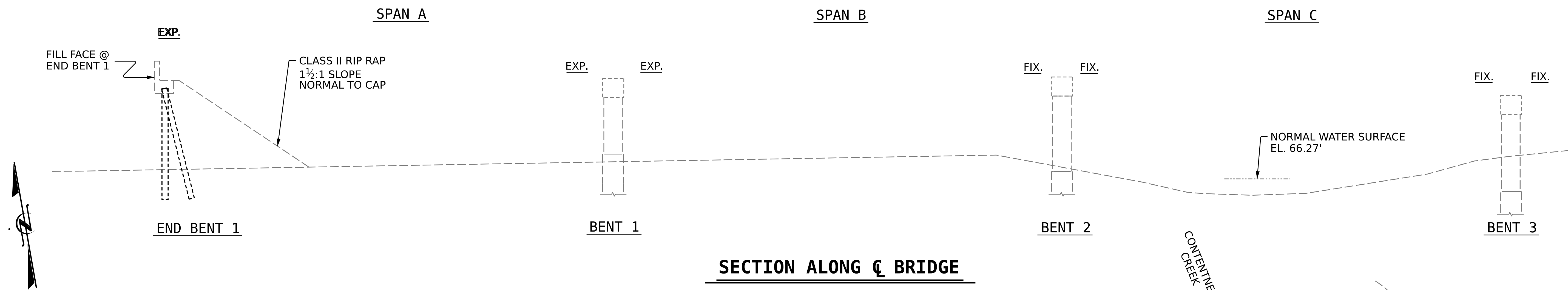
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

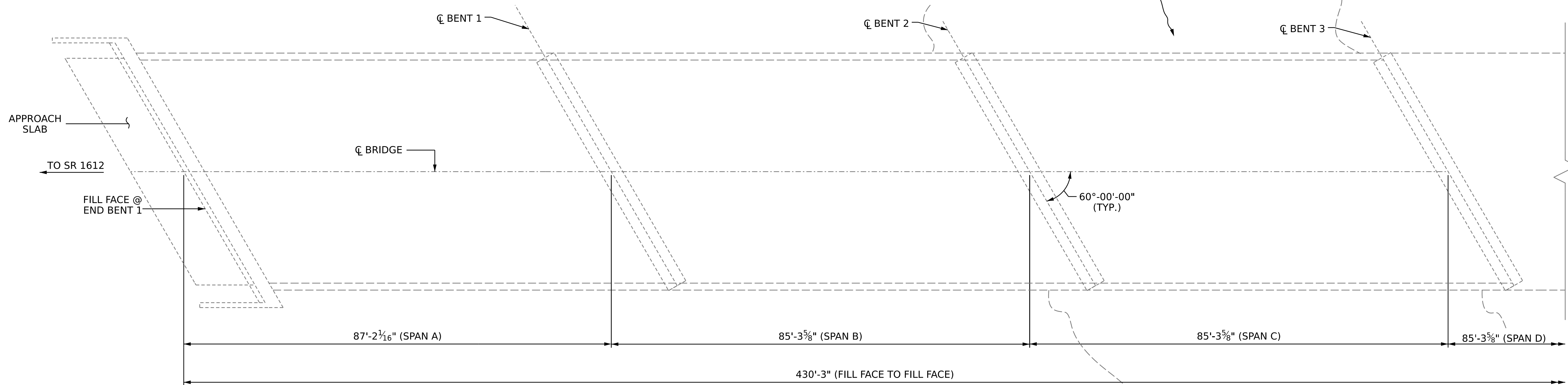
DRAWN BY : G. AYES DATE : 6/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD : -- DATE : --

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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



SECTION ALONG CL BRIDGE



NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/12/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

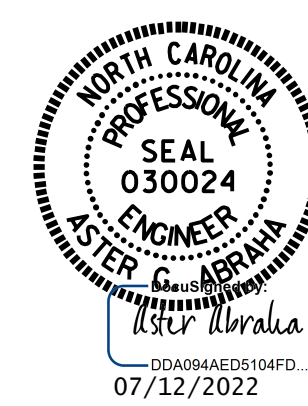
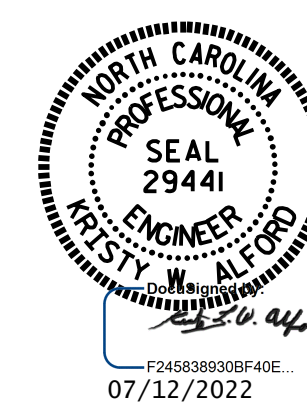
- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

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

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

RESIDENT ENGINEER _____ DATE _____



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970252**

SHEET 1 OF 2

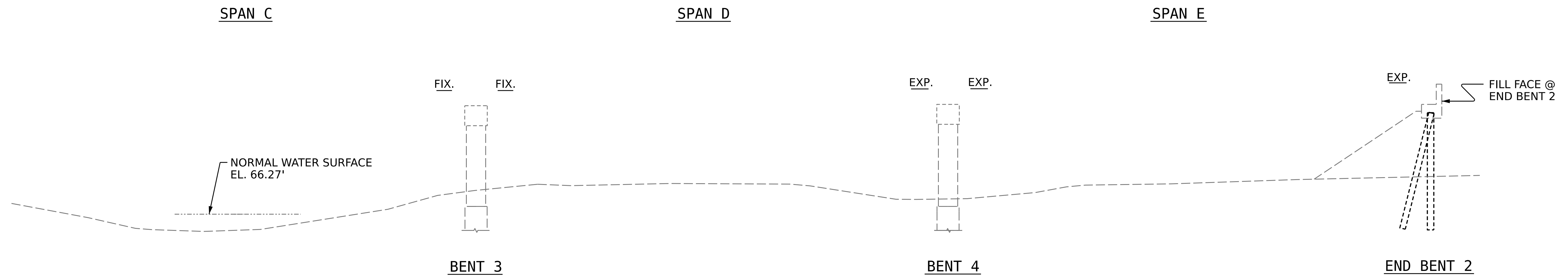
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 BRIDGE ON US 264
 BYPASS WESTBOUND OVER
 CONTENTNEA CREEK BETWEEN
 SR 1606 AND SR 1612

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

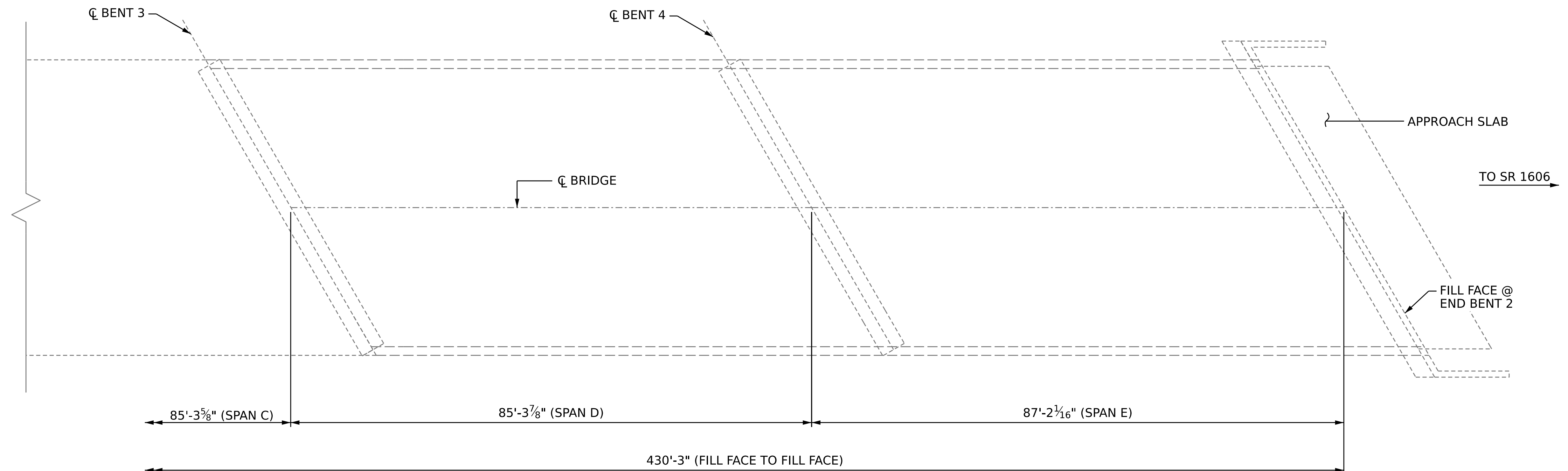
TOTAL SHEETS: 5

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: _____ DATE : _____



SECTION ALONG CL BRIDGE



NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/12/2022.

- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

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

PROJECT NO. **HI-0006**

WILSON COUNTY

BRIDGE NO. **970252**

SHEET 2 OF 2



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON US 264
BYPASS WESTBOUND OVER
CONTENTEA CREEK BETWEEN
SR 1606 AND SR 1612

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
CHECKED BY : A. G. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: _____ DATE : _____

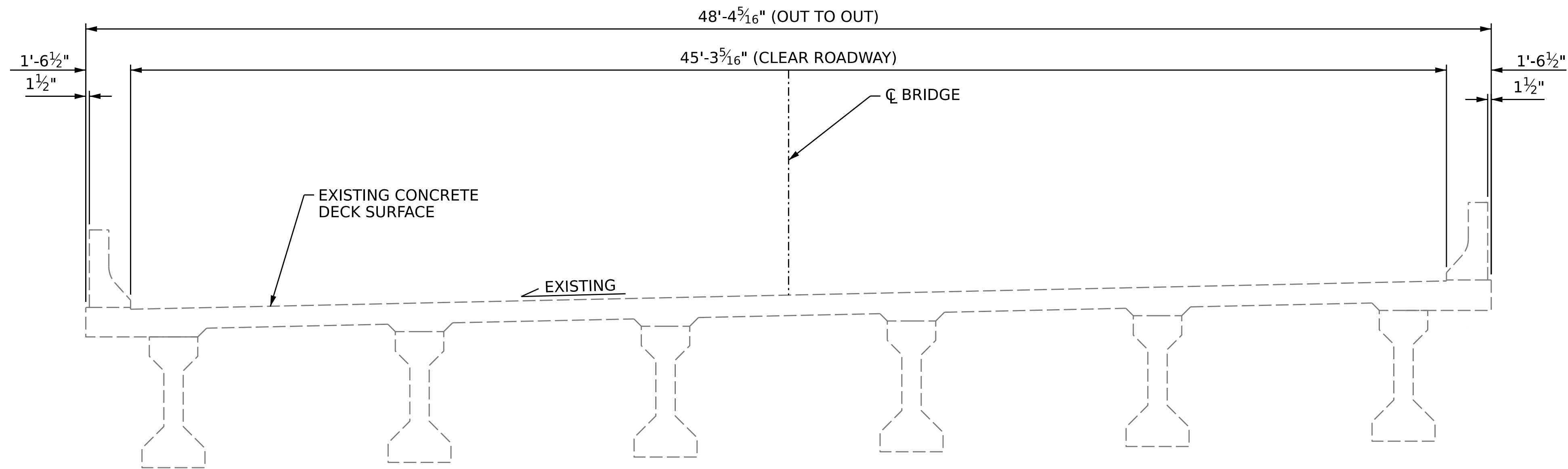
DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

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NO.	BY:	DATE:	NO.	BY:	DATE:	S7-2
1			3			TOTAL SHEETS
2			4			5

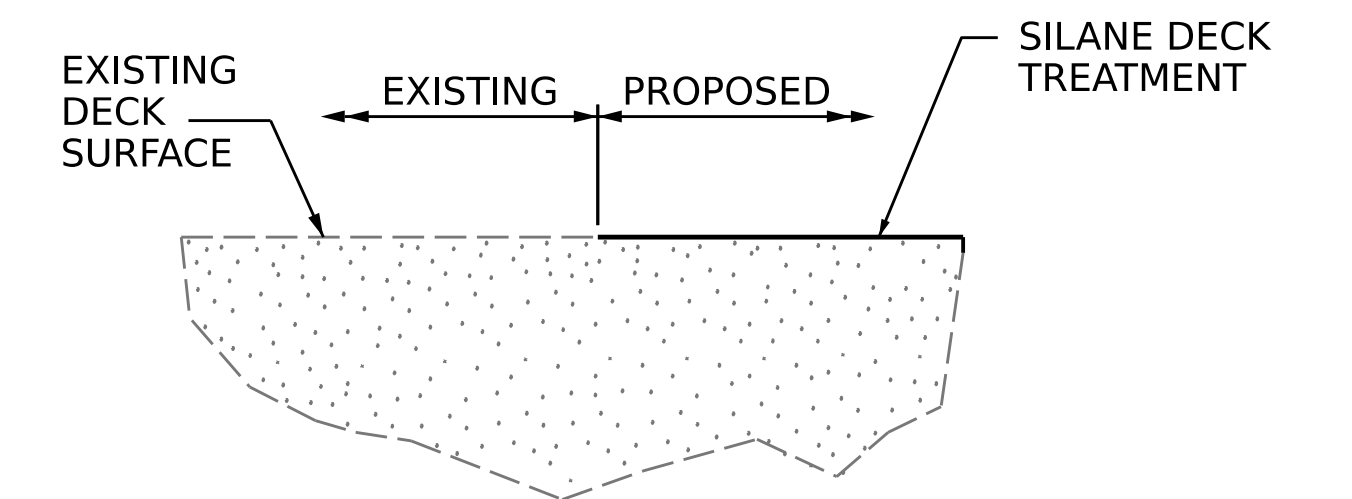
NOTES

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

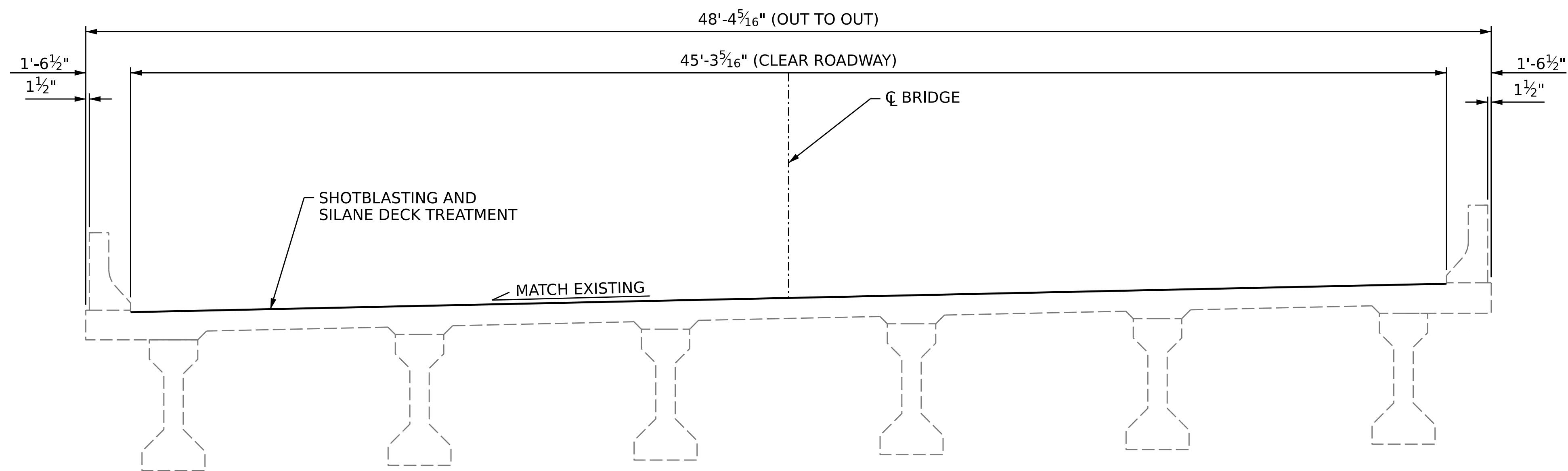
PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



**TYPICAL SECTION
(EXISTING)**



SILANE DECK TREATMENT DETAIL



**TYPICAL SECTION
(PROPOSED)**

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970252**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 TYPICAL SECTION
 AND SILANE DECK
 TREATMENT DETAILS

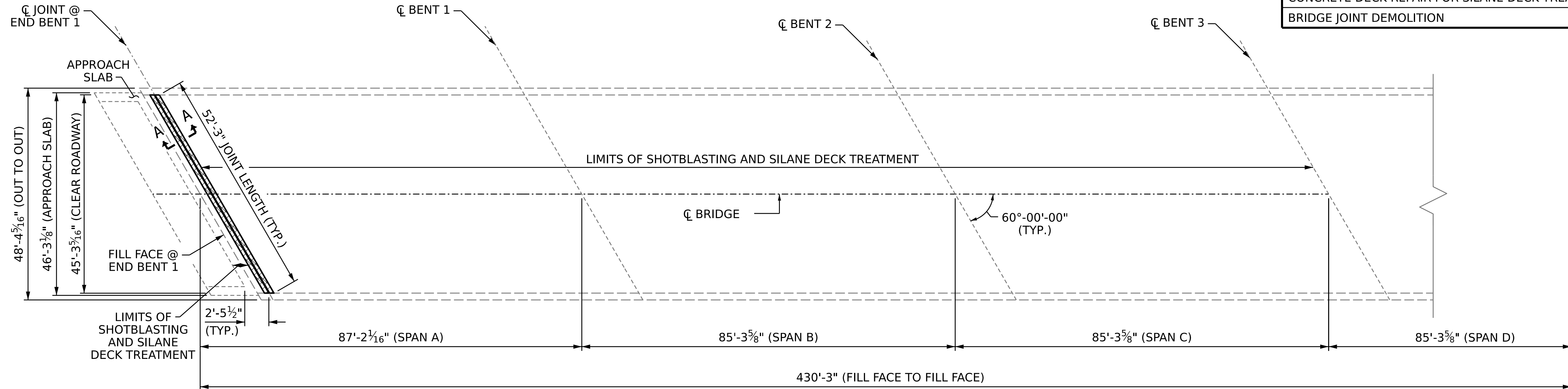
DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD : DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

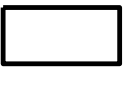
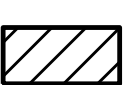

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S7-3
1			3			TOTAL SHEETS
2			4			5

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLAB

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	2,166.4 SY	
SILANE DECK TREATMENT	2,166.4 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	95.8 SY	



REPAIR KEY

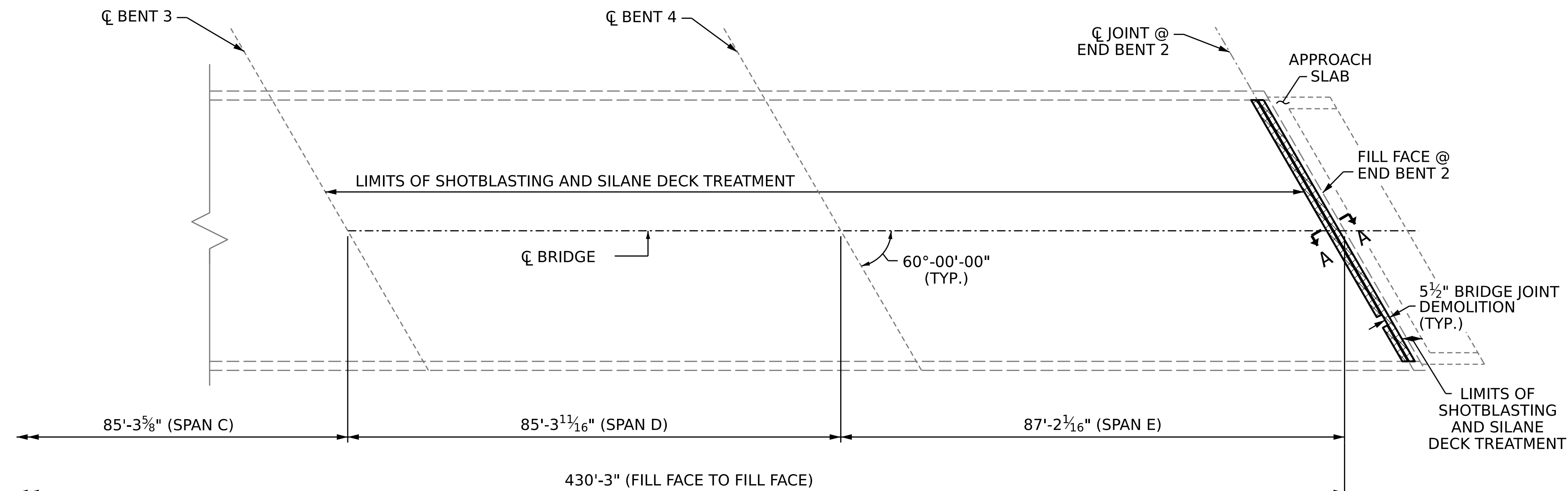
-  - SHOTBLASTING AND SILANE DECK TREATMENT
-  - CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
-  - BRIDGE JOINT DEMOLITION

PLAN OF SPANS

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S7-5.

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970252**



PLAN OF SPANS



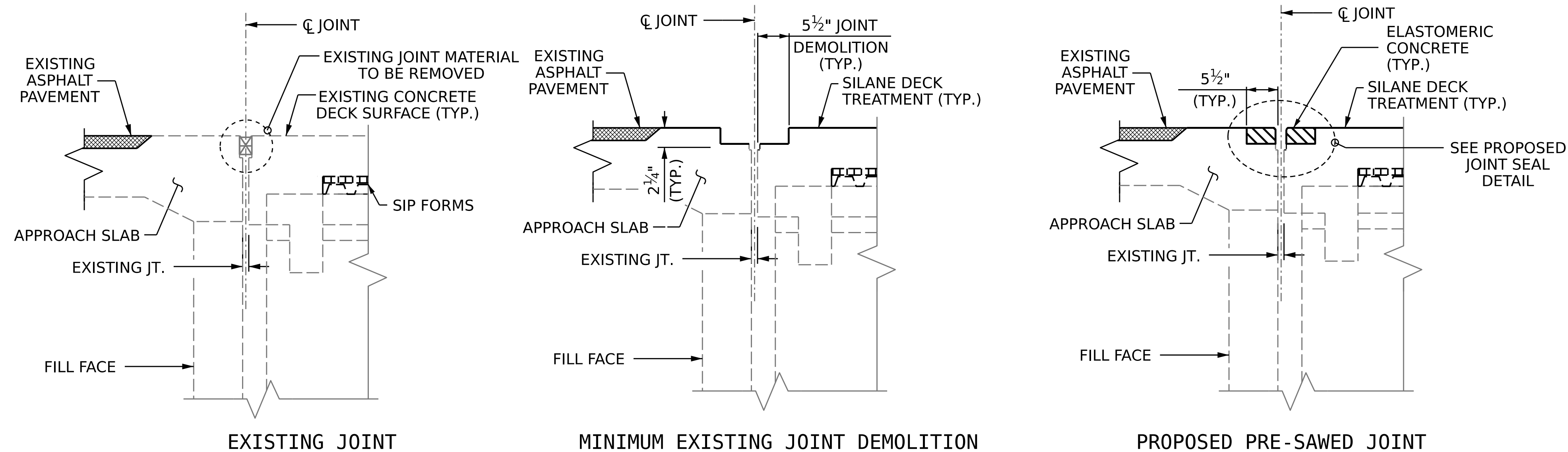
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD : DATE :

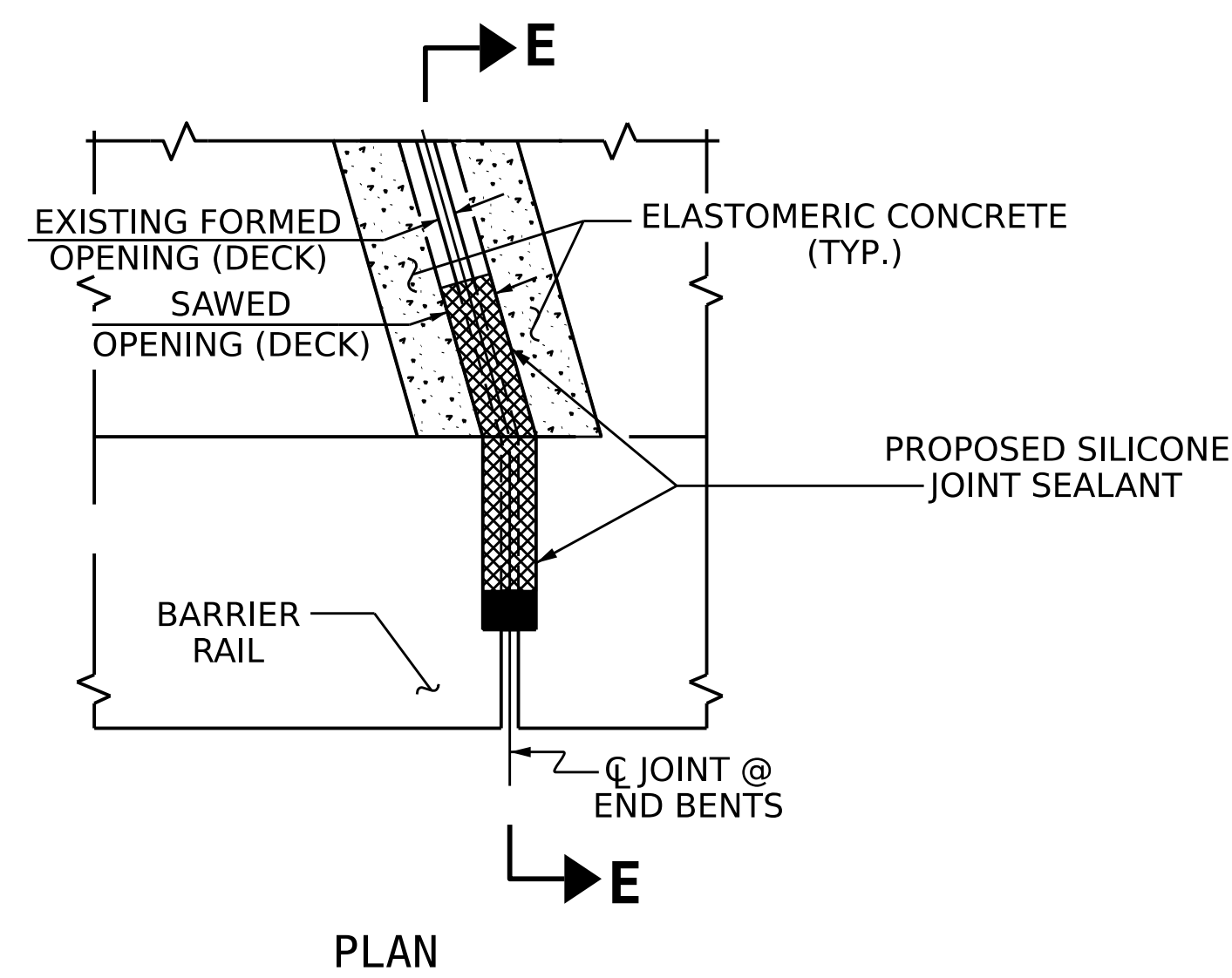
DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S7-4
1			3			TOTAL SHEETS
2			4			5

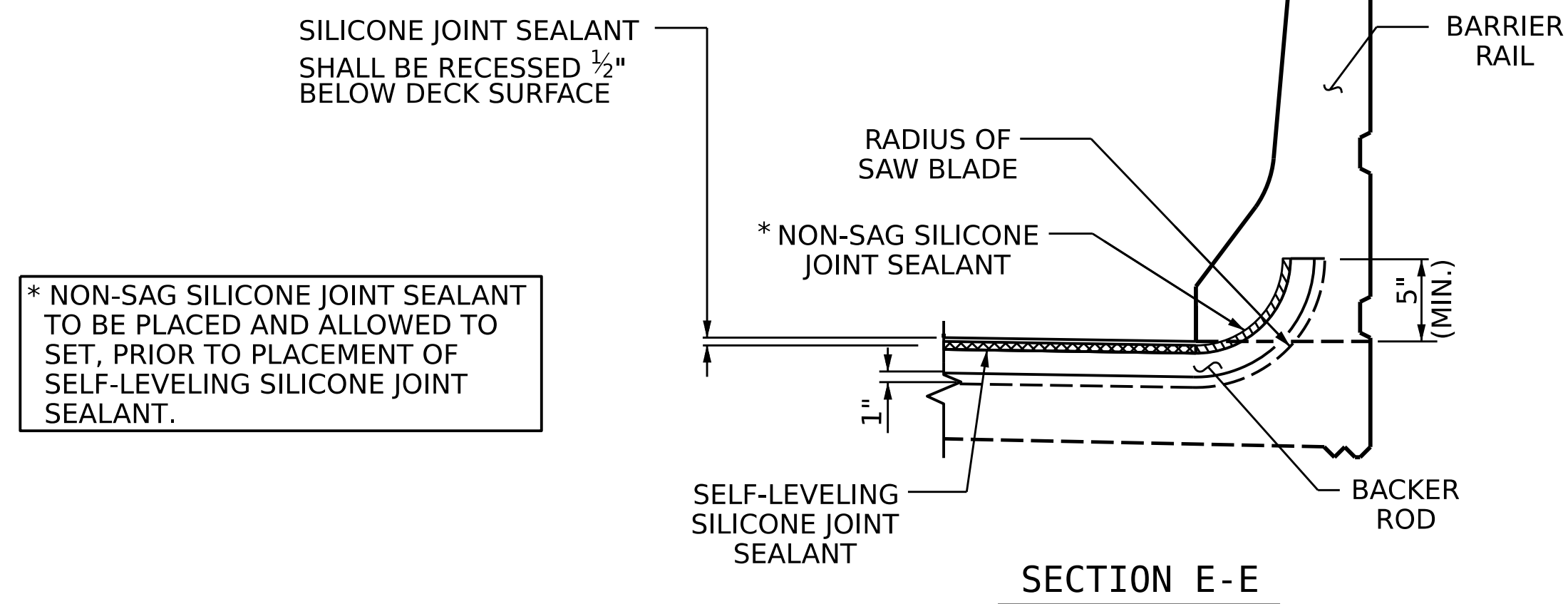


JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	18.0 CF	
POURABLE SILICONE JOINT SEALANT	104.5 LF	

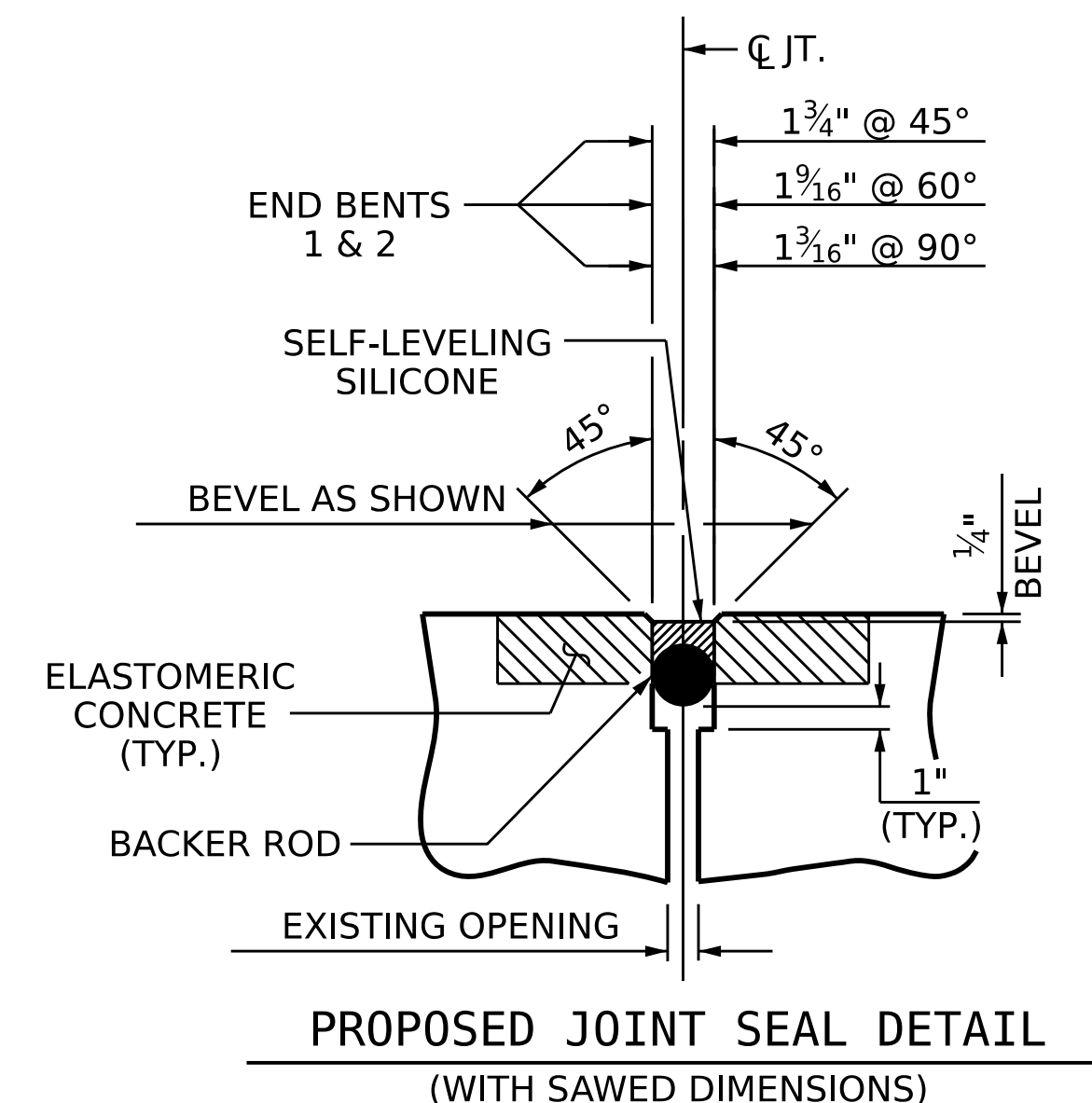


JOINT DETAIL AT BARRIER RAIL

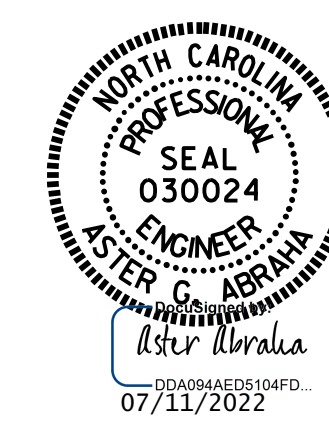


NOTES

- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.
- THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE BACKER ROD FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.
- ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.
- THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.
- POURABLE SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.
- DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.
- QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.
- FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.
- FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970252**



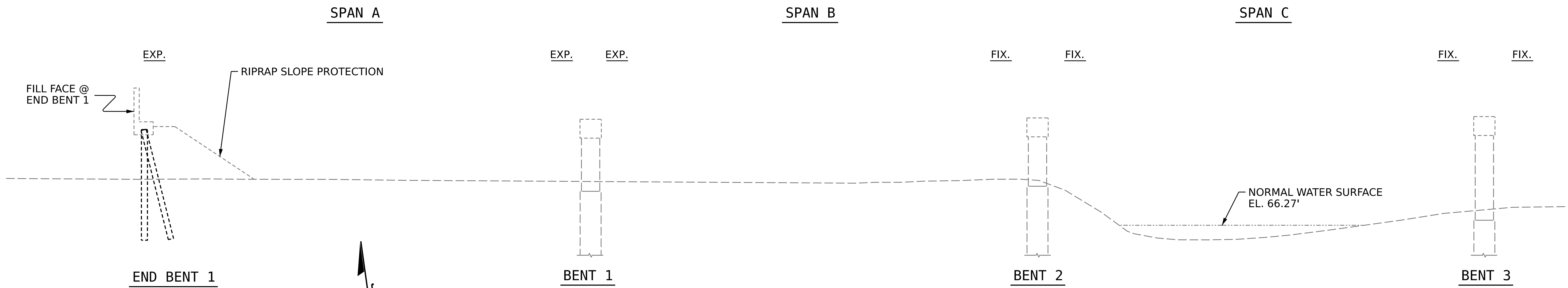
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

JOINT REPAIR DETAILS

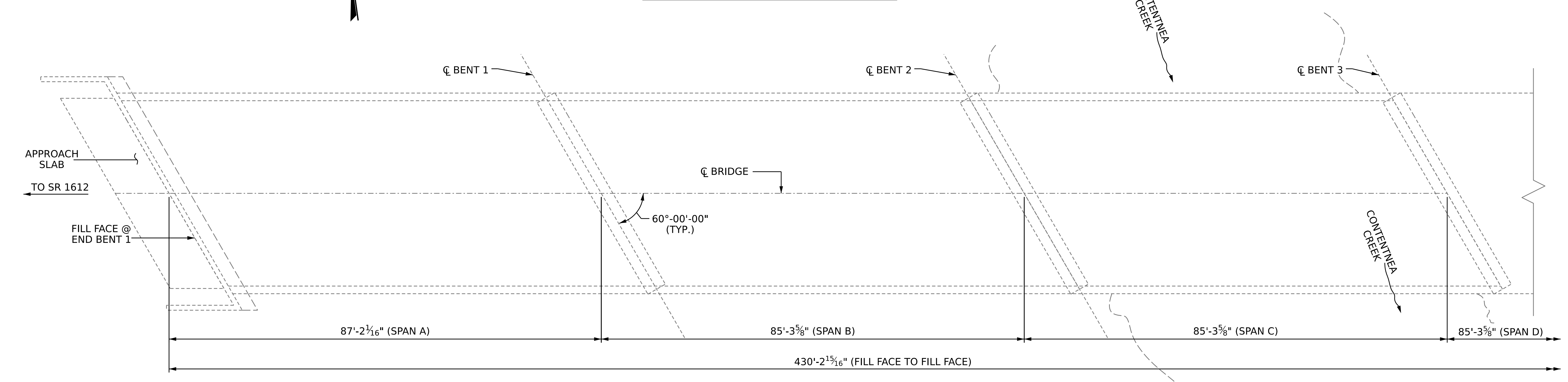
DRAWN BY : G. AYES DATE : 6/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: -- DATE : --

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S7-5
1			3			TOTAL SHEETS
2			4			5



SECTION ALONG CL BRIDGE



NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/12/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

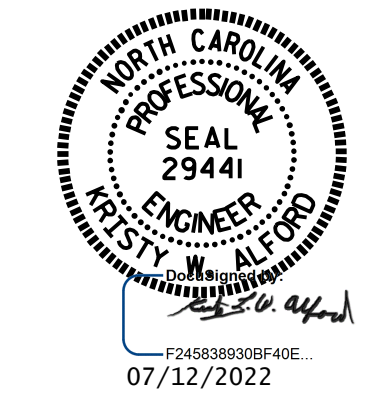
- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

PLAN

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

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

RESIDENT ENGINEER _____ DATE _____



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970253**

SHEET 1 OF 2

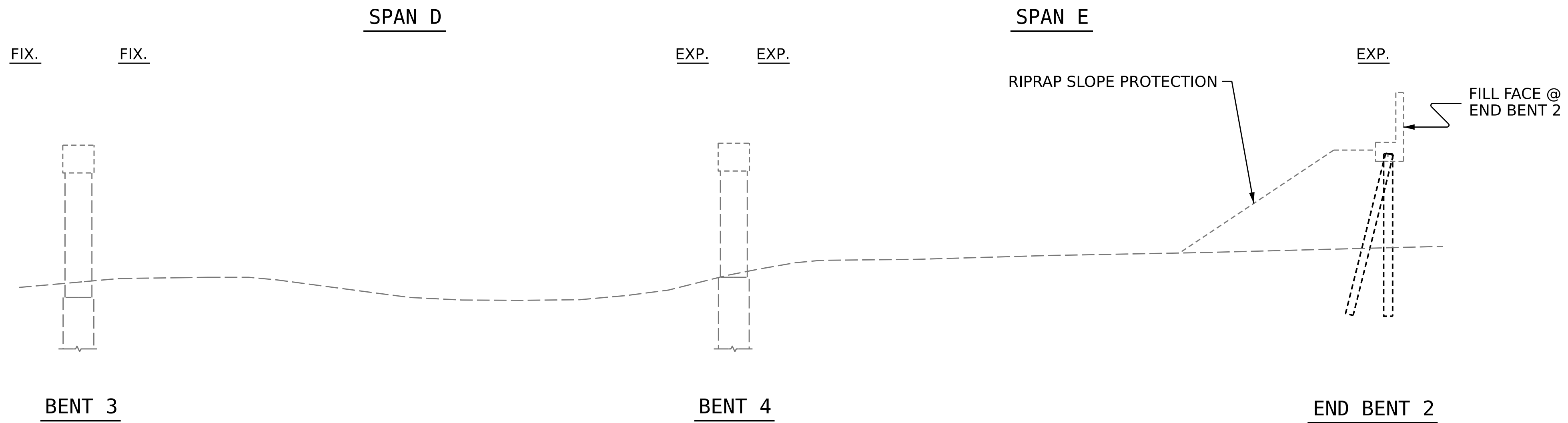
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 BRIDGE ON US 264
 BYPASS EASTBOUND OVER
 CONTENTEA CREEK BETWEEN
 SR 1606 AND SR 1612

REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 5

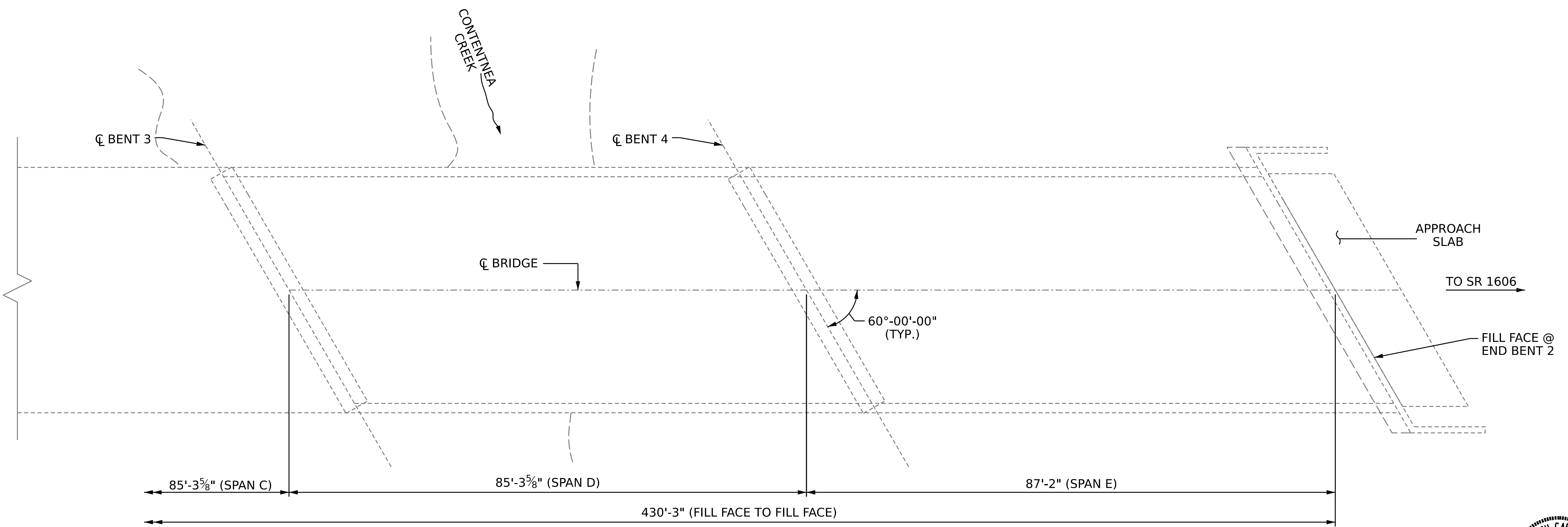
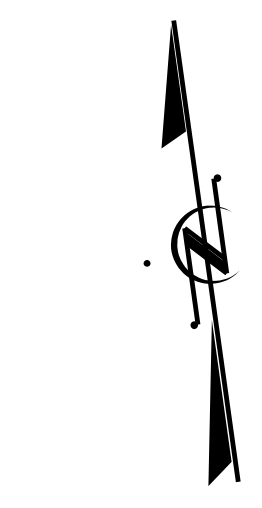
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: _____ DATE : _____



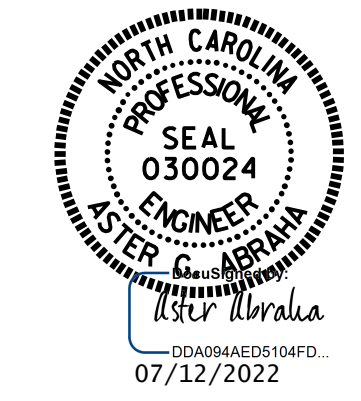
SECTION ALONG CL BRIDGE

- NOTES**
- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/12/2022.
 - BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.
- SCOPE OF WORK**
- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.
 - PLACE SILANE DECK TREATMENT.
 - DEMOLISH EXISTING BRIDGE DECK JOINTS.
 - RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.



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

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970253**
 SHEET 2 OF 2

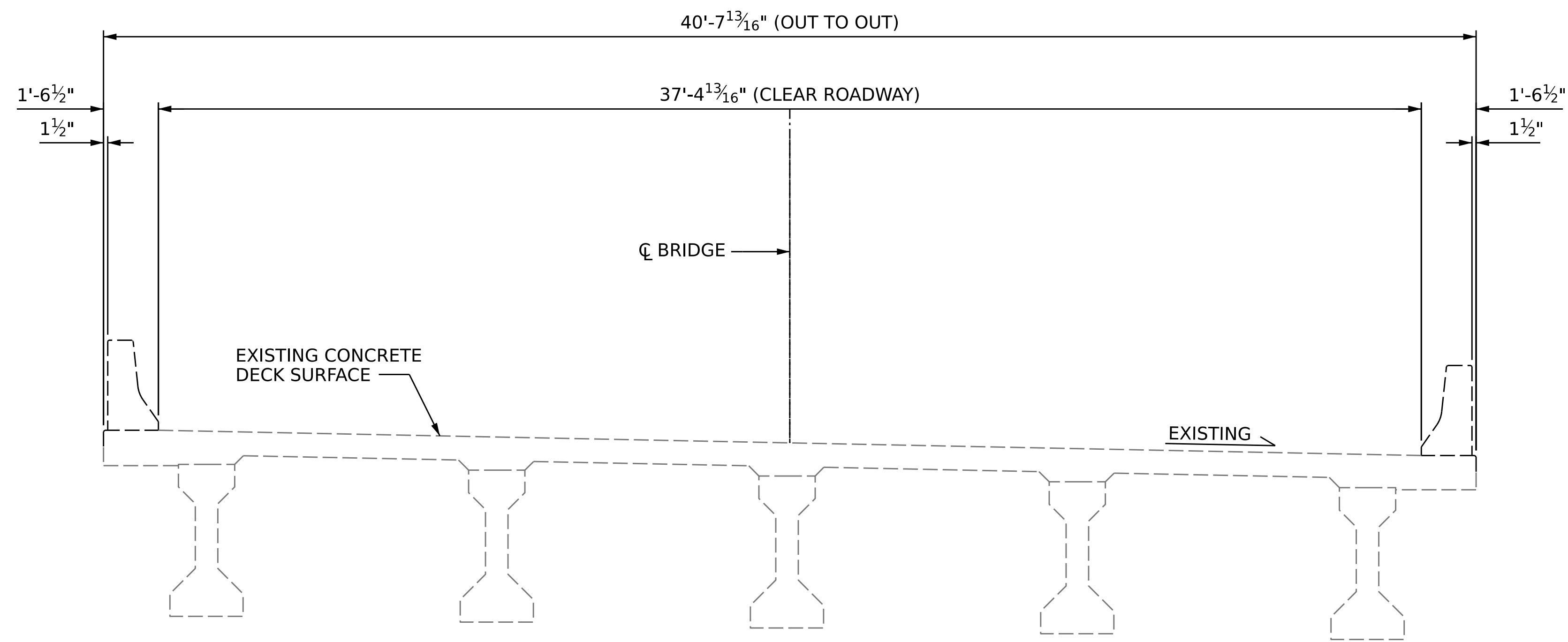


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 BRIDGE ON US 264
 BYPASS EASTBOUND OVER
 CONTENTEA CREEK BETWEEN
 SR 1606 AND SR 1612

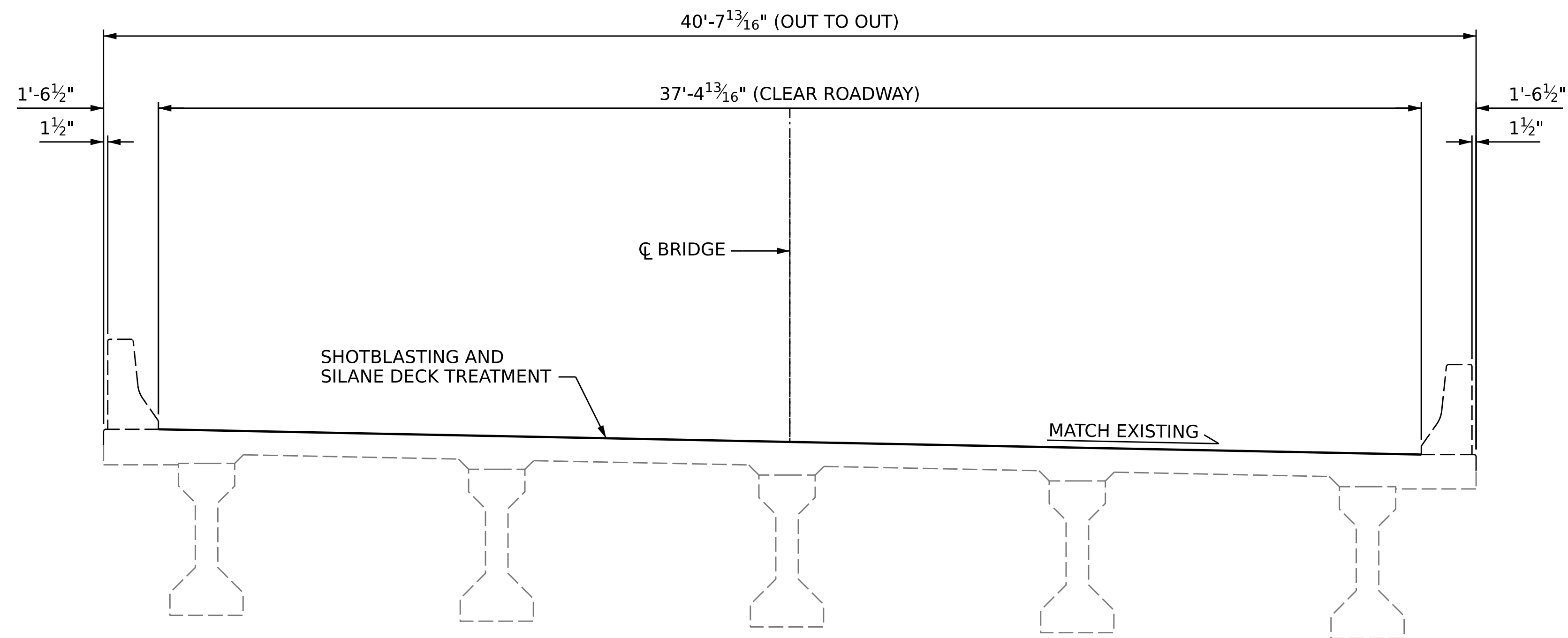
DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD : _____ DATE : _____

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S8-2
1			3			TOTAL SHEETS
2			4			5



TYPICAL SECTION
(EXISTING)

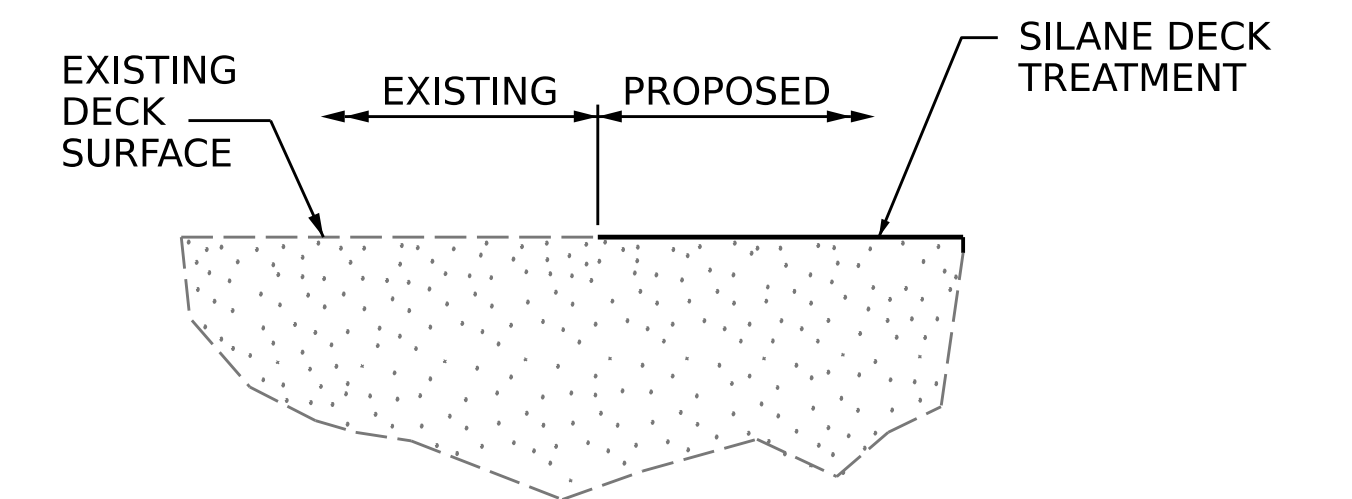


TYPICAL SECTION
(PROPOSED)

NOTES

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

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



SILANE DECK TREATMENT DETAIL

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970253**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 TYPICAL SECTION
 AND SILANE DECK
 TREATMENT DETAILS

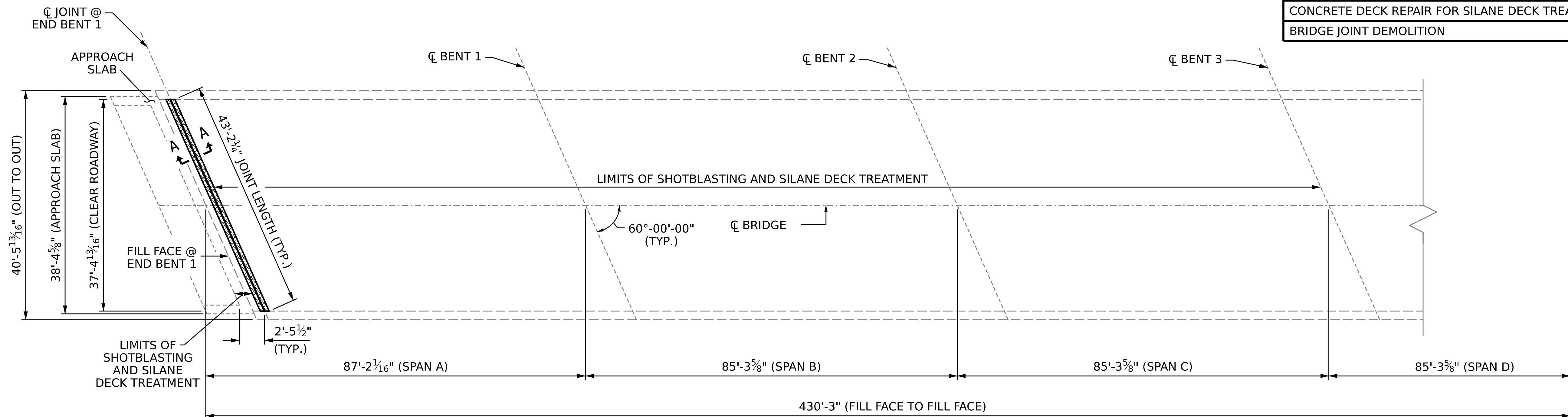
DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD : DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

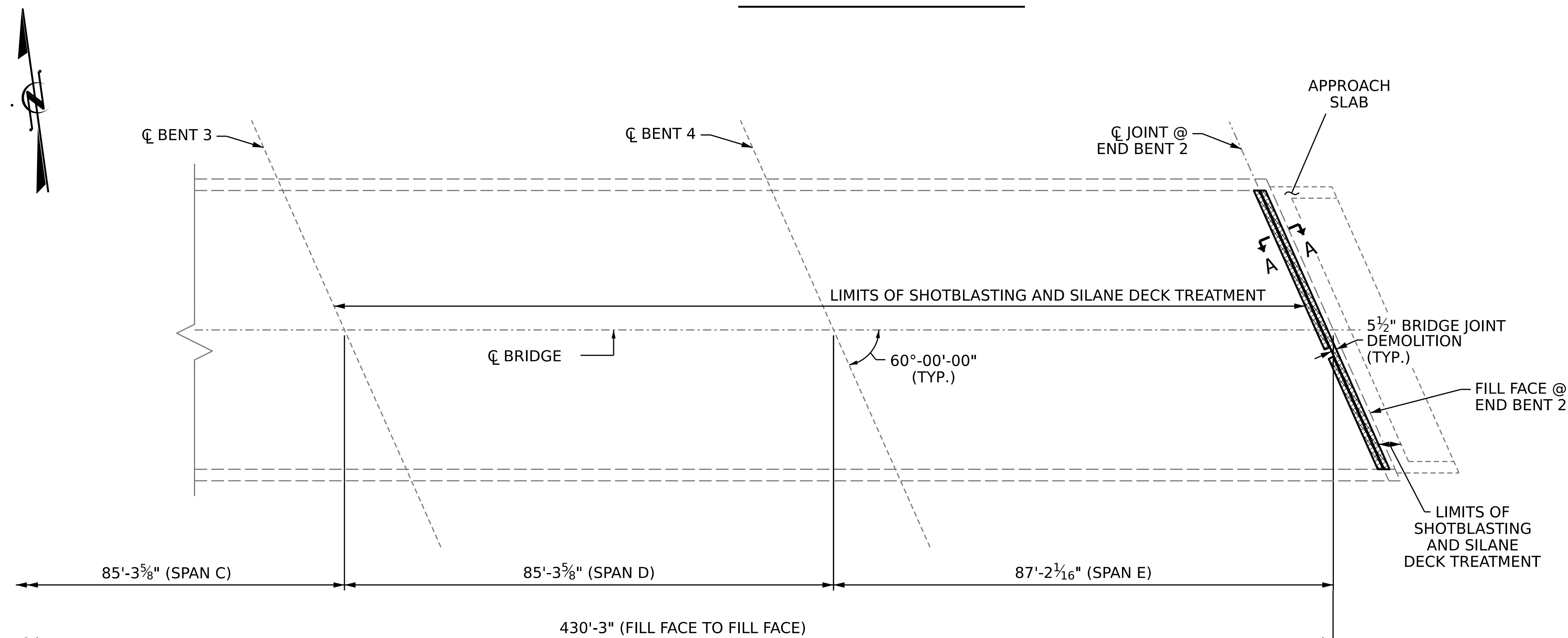
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S8-3
1			3			TOTAL SHEETS
2			4			5

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLAB

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,790.6 SY	
SILANE DECK TREATMENT	1,790.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	79.2 SY	



PLAN OF SPANS



PLAN OF SPANS

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S8-5.

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970253**



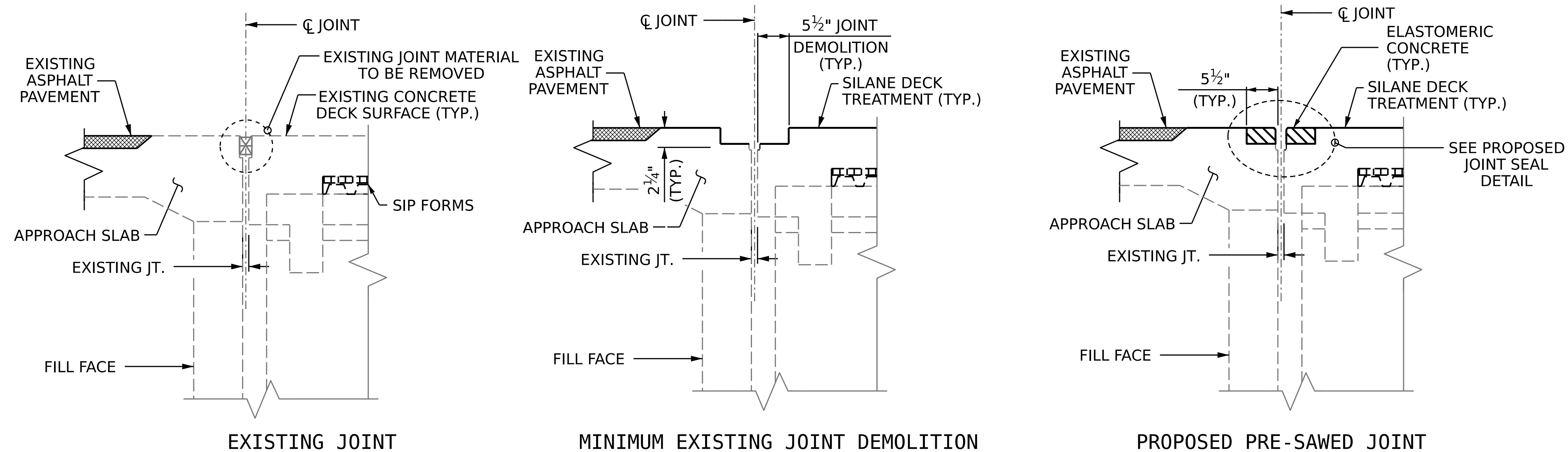
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD : _____ DATE : _____

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S8-4
1			3			TOTAL SHEETS
2			4			5



JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

NOTES

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

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

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

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

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

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

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

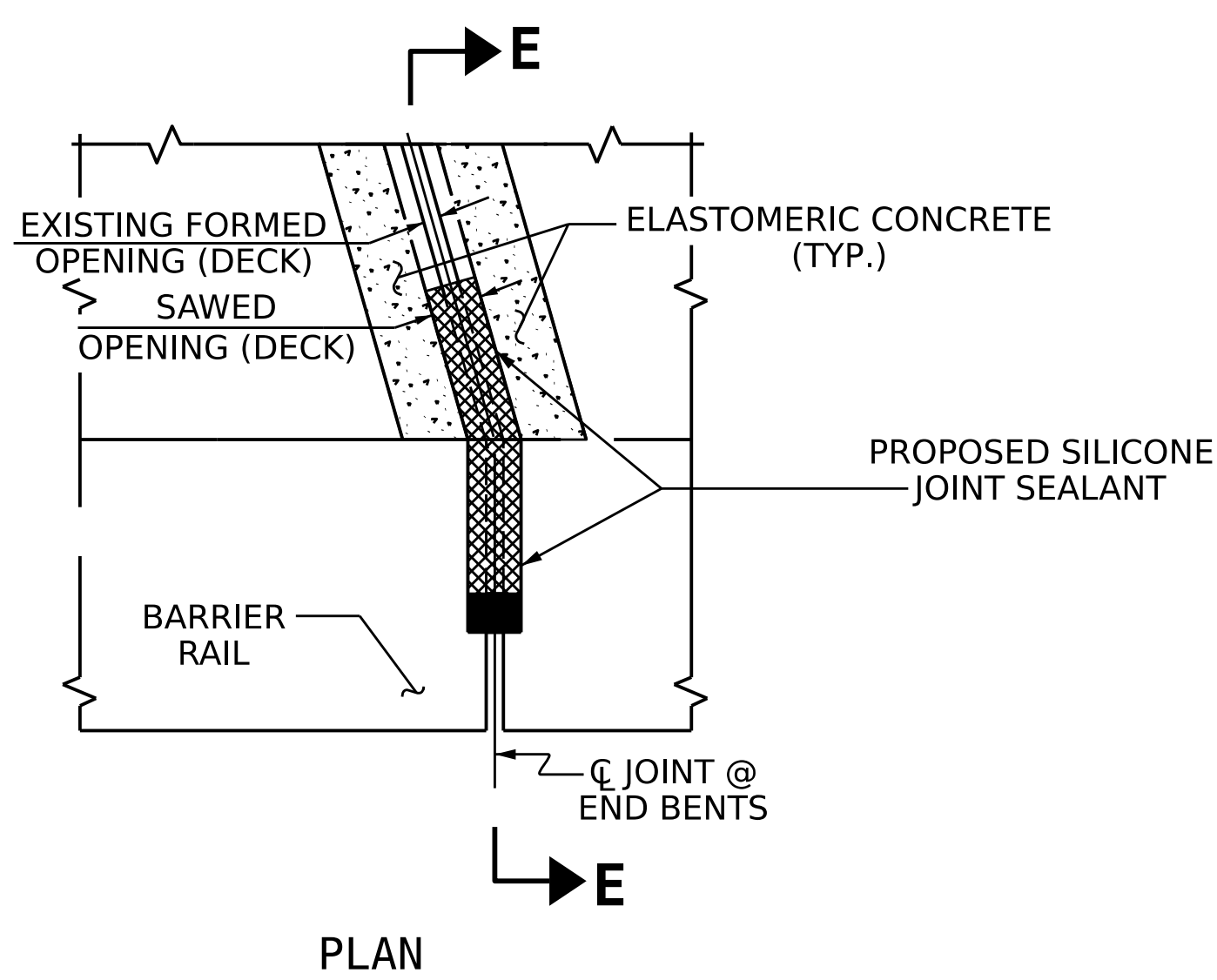
FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

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

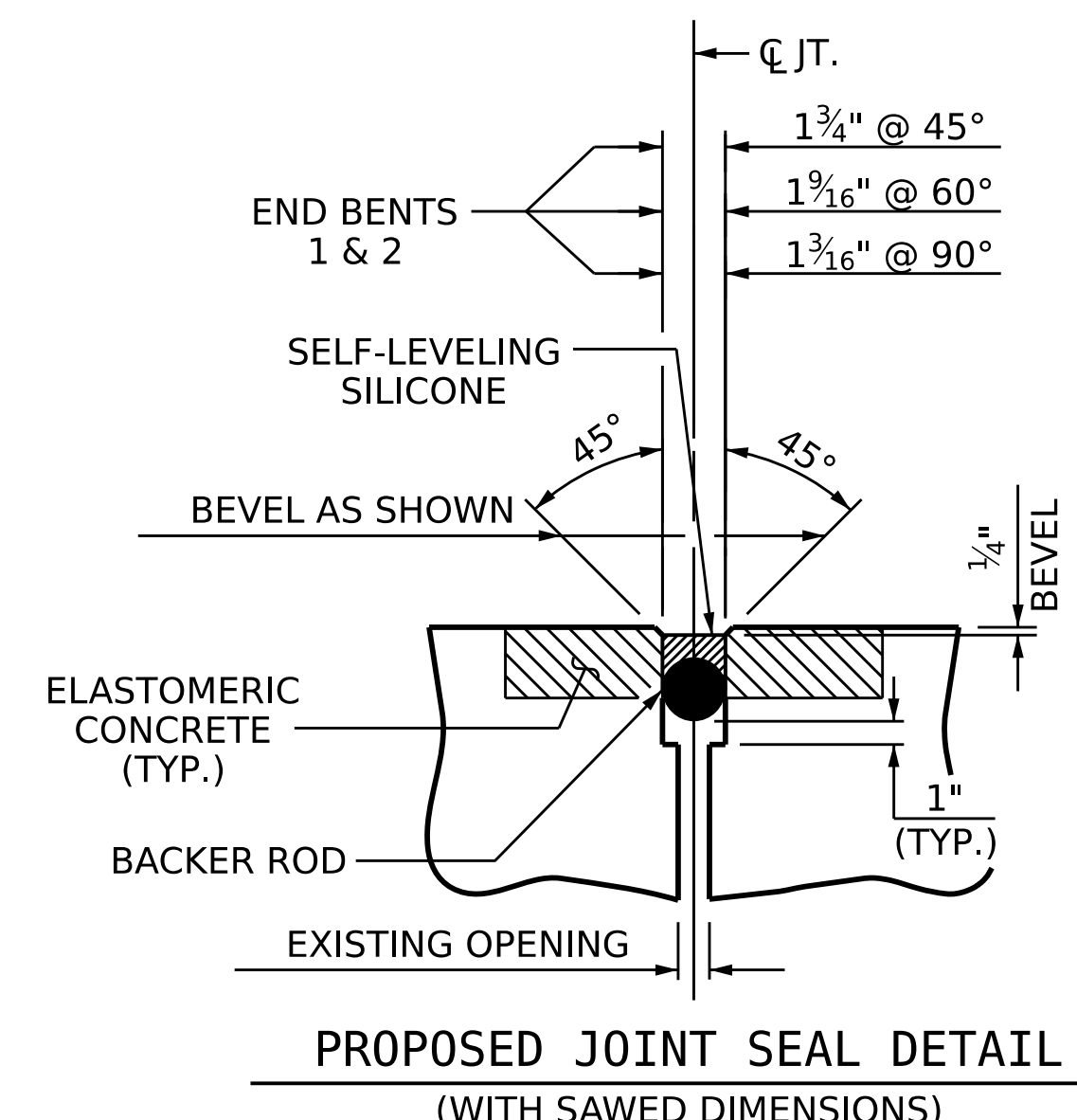
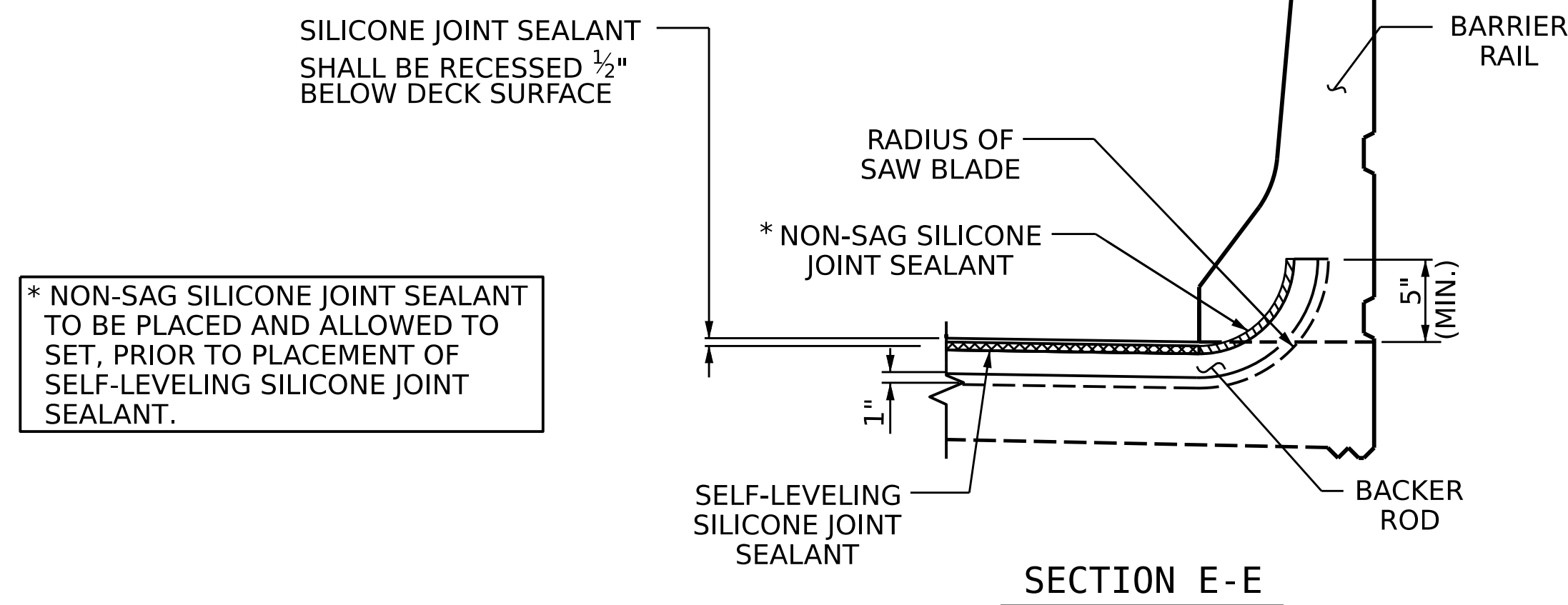
FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

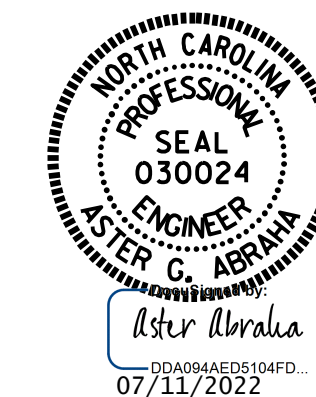
SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	14.9 CF	
POURABLE SILICONE JOINT SEALANT	86.4 LF	



JOINT DETAIL AT BARRIER RAIL



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970253**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

JOINT REPAIR DETAILS

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

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

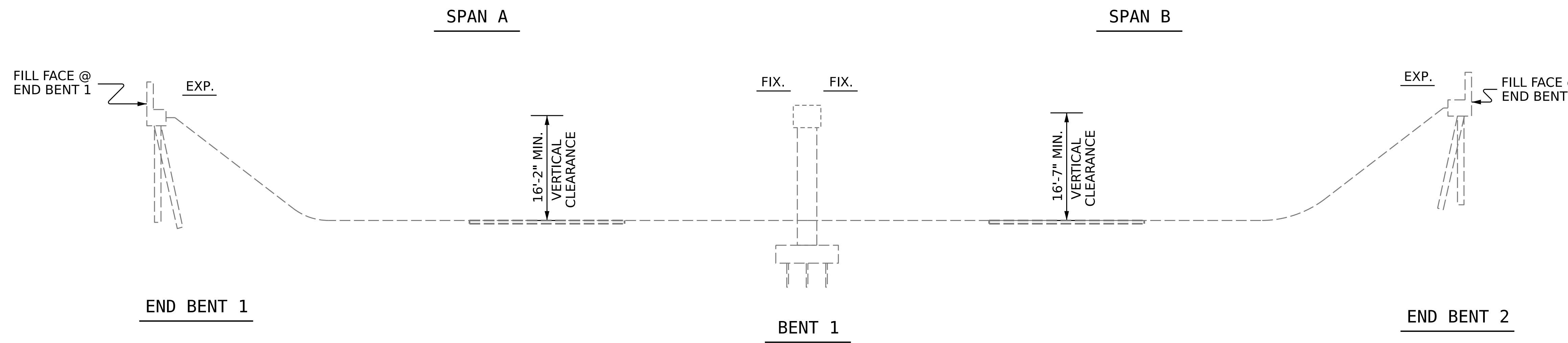
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S8-5
1			3			TOTAL SHEETS
2			4			5

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/21/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

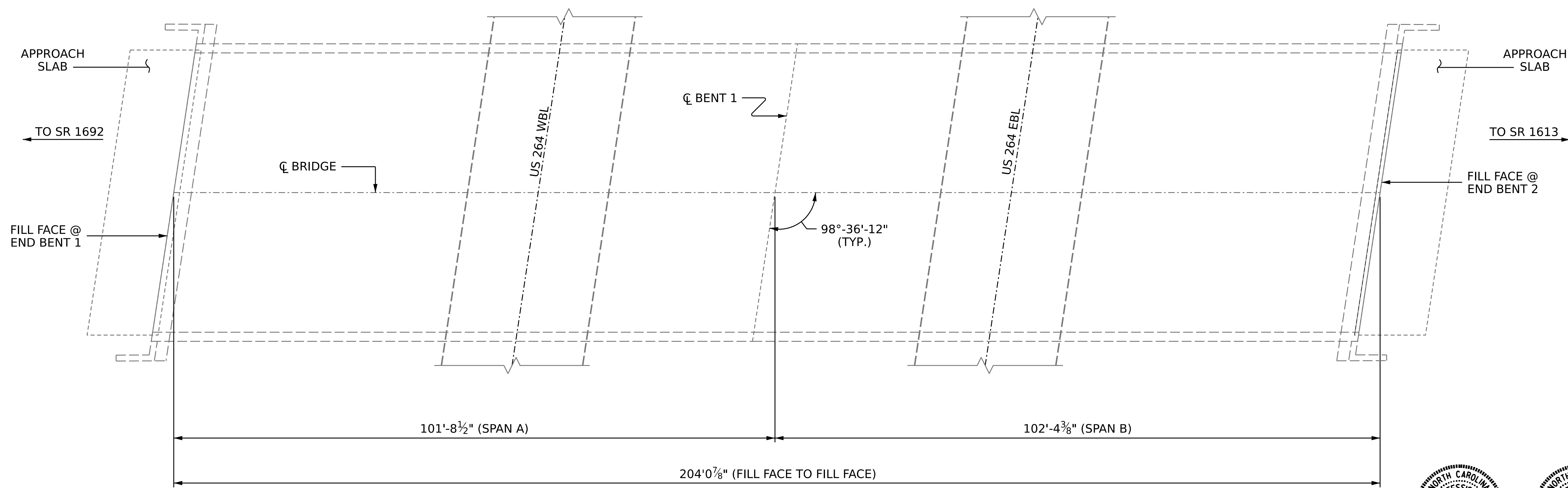
- PREPARE BRIDGE DECK SURFACE BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.
- REPAIR PRESTRESSED CONCRETE GIRDERS.
- REMOVE UNSOUND CONCRETE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



SECTION ALONG CL BRIDGE

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

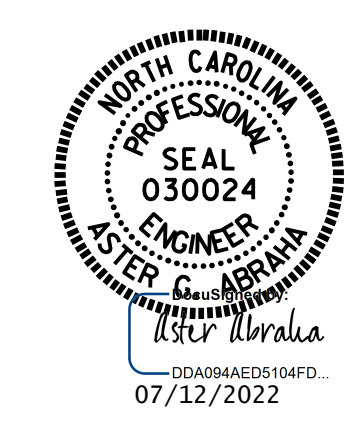
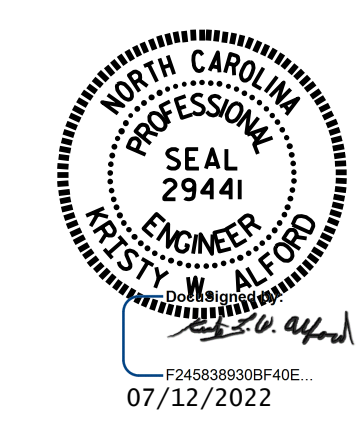
RESIDENT ENGINEER _____ DATE _____



PLAN

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

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970254**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON SR
 1606 OVER US 264
 BYPASS BETWEEN SR
 1692 AND SR 1613

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

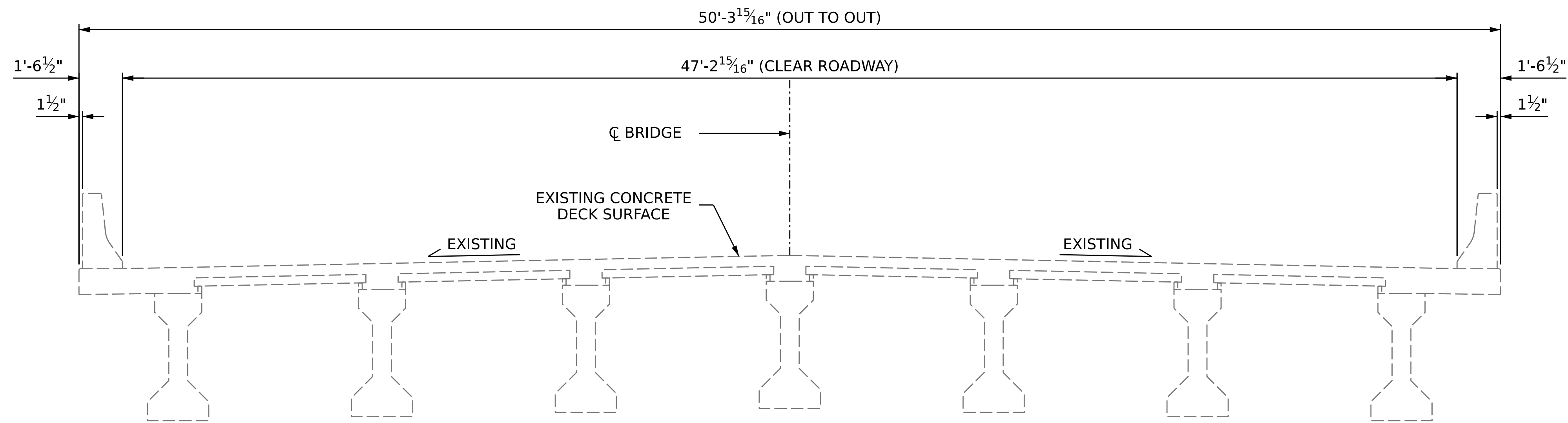
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-1
1			3			TOTAL SHEETS
2			4			6

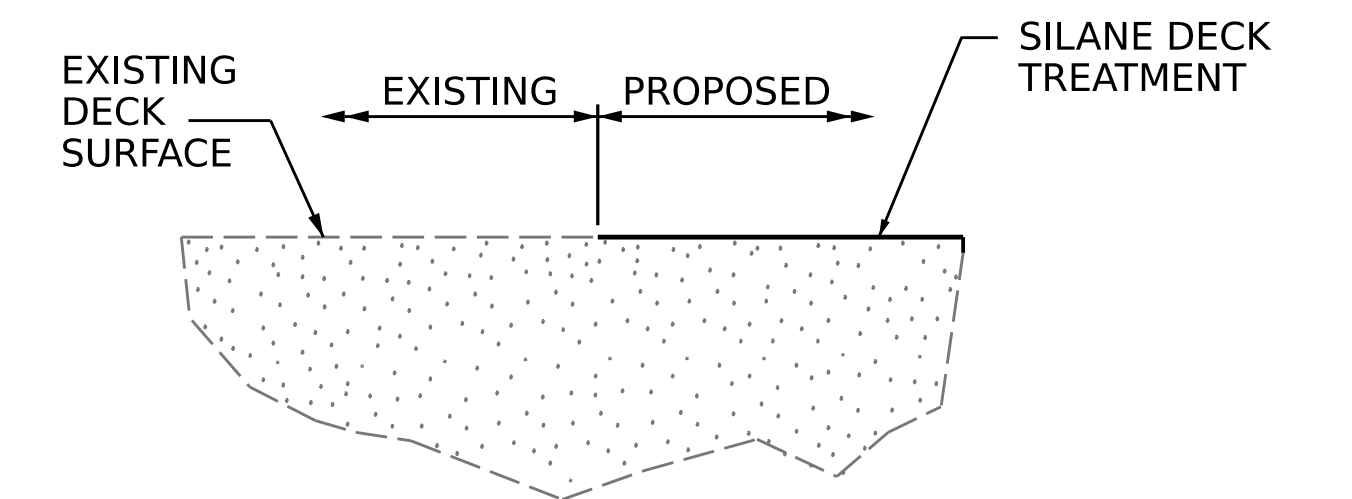
NOTES

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

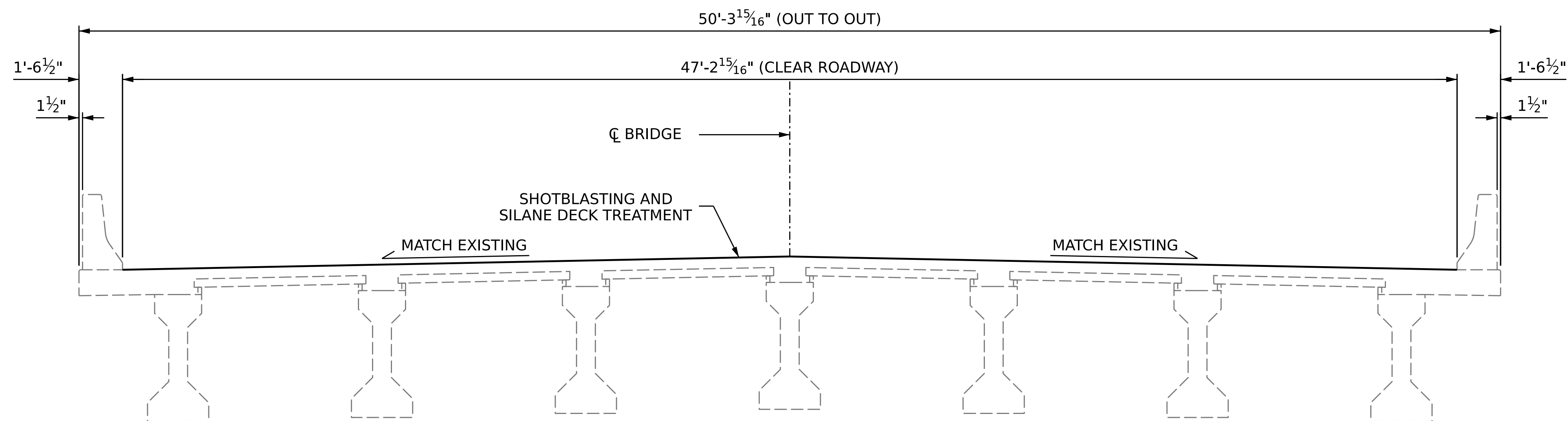
PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



TYPICAL SECTION
(EXISTING)



SILANE DECK TREATMENT DETAIL



TYPICAL SECTION
(PROPOSED)

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970254**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH


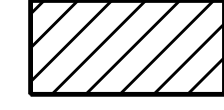
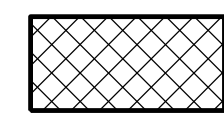
SUPERSTRUCTURE
 TYPICAL SECTION
 AND SILANE DECK
 TREATMENT DETAILS

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

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-2
1			3			TOTAL SHEETS
2			4			6

REPAIR KEY

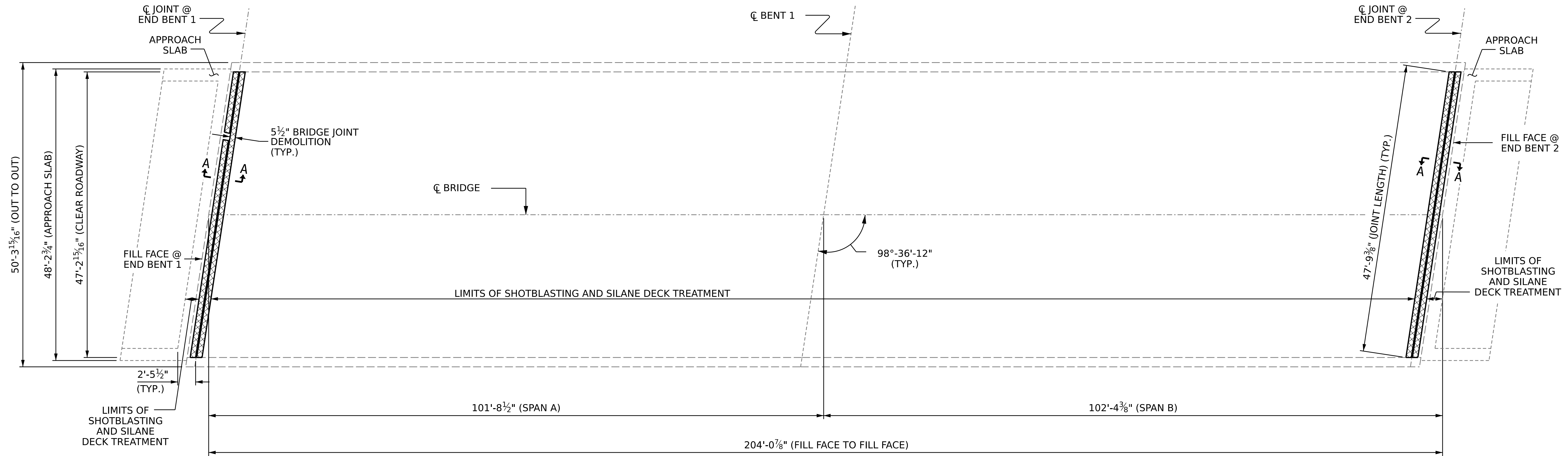
-  - SHOTBLASTING AND SILANE DECK TREATMENT
-  - CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
-  - BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S9-6.

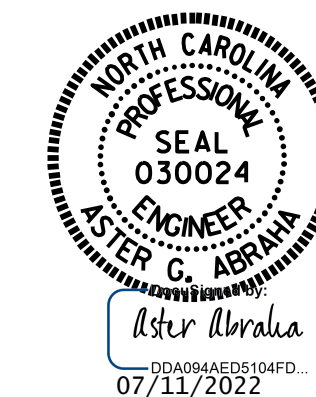
SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	1,075.5 SY	
SILANE DECK TREATMENT	1,075.5 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	87.6 SF	



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970254**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH



SILANE DECK TREATMENT

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

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-3
1			3			TOTAL SHEETS
2			4			6

REPAIR KEY

-  DIAPHRAGM REPAIR
-  PRESTRESSED CONCRETE GIRDER REPAIR

NOTES

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

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

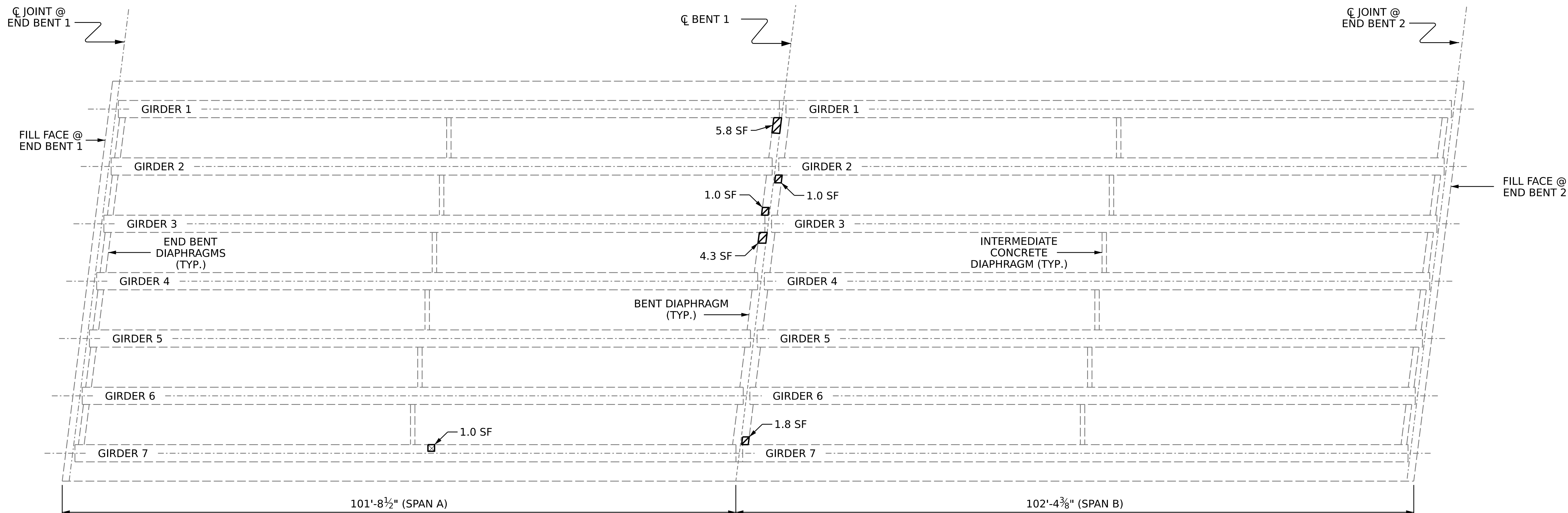
FOR CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS, SEE PRESTRESSED CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS SHEET S9-5.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK & OVERHANG	0.0	0.0		
BENT DIAPHRAGMS	13.9	4.6		
GIRDER REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
PC GIRDERS	1.0	0.3		

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



PLAN OF SPANS - UNDERSIDE REPAIRS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970254**



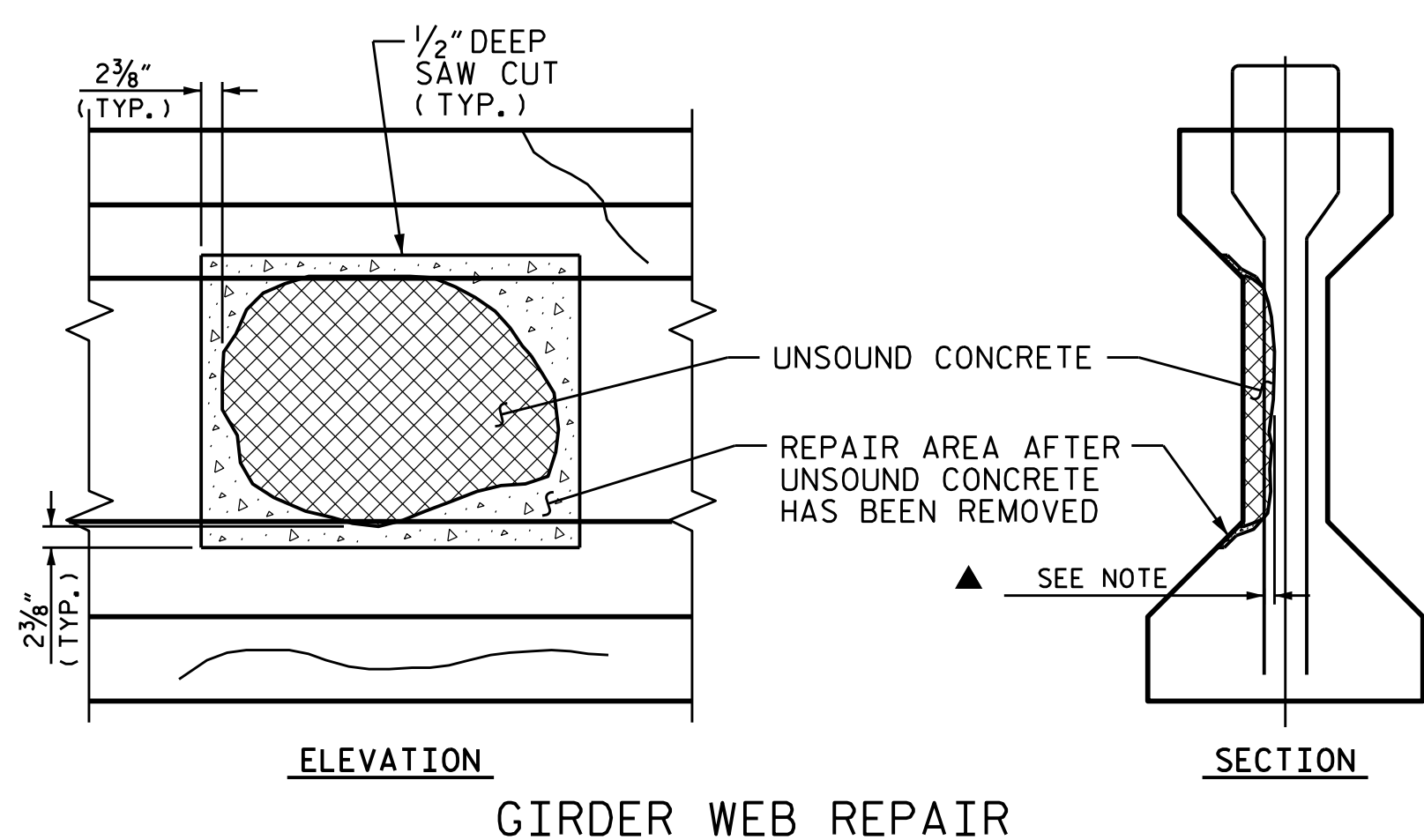
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUPERSTRUCTURE
 CONCRETE REPAIRS**

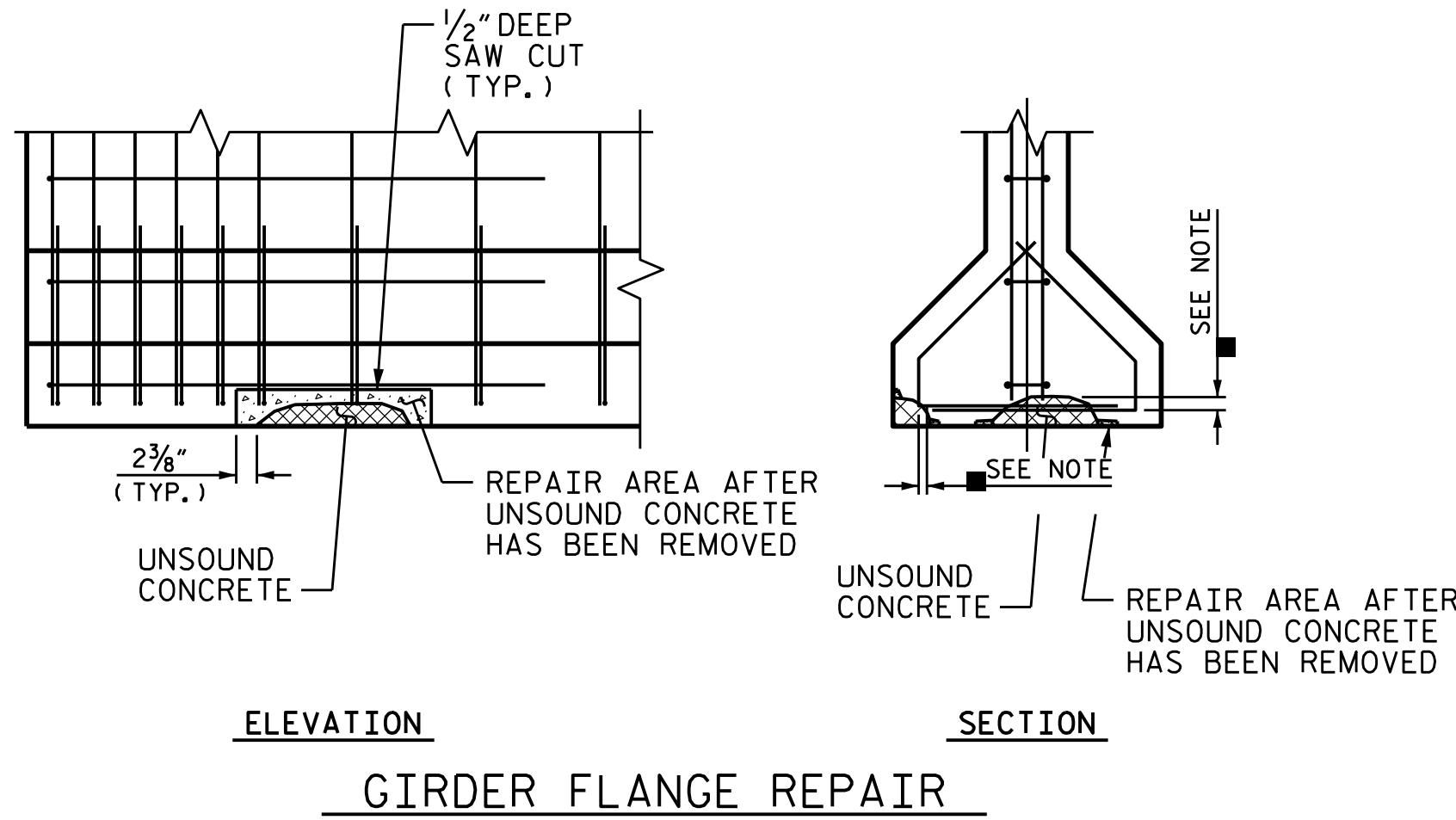
DRAWN BY : G. AYES DATE : 5/2022
 CHECKED BY : A. G. ABRAHA DATE : 5/2022
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S9-4
2			4			TOTAL SHEETS 6

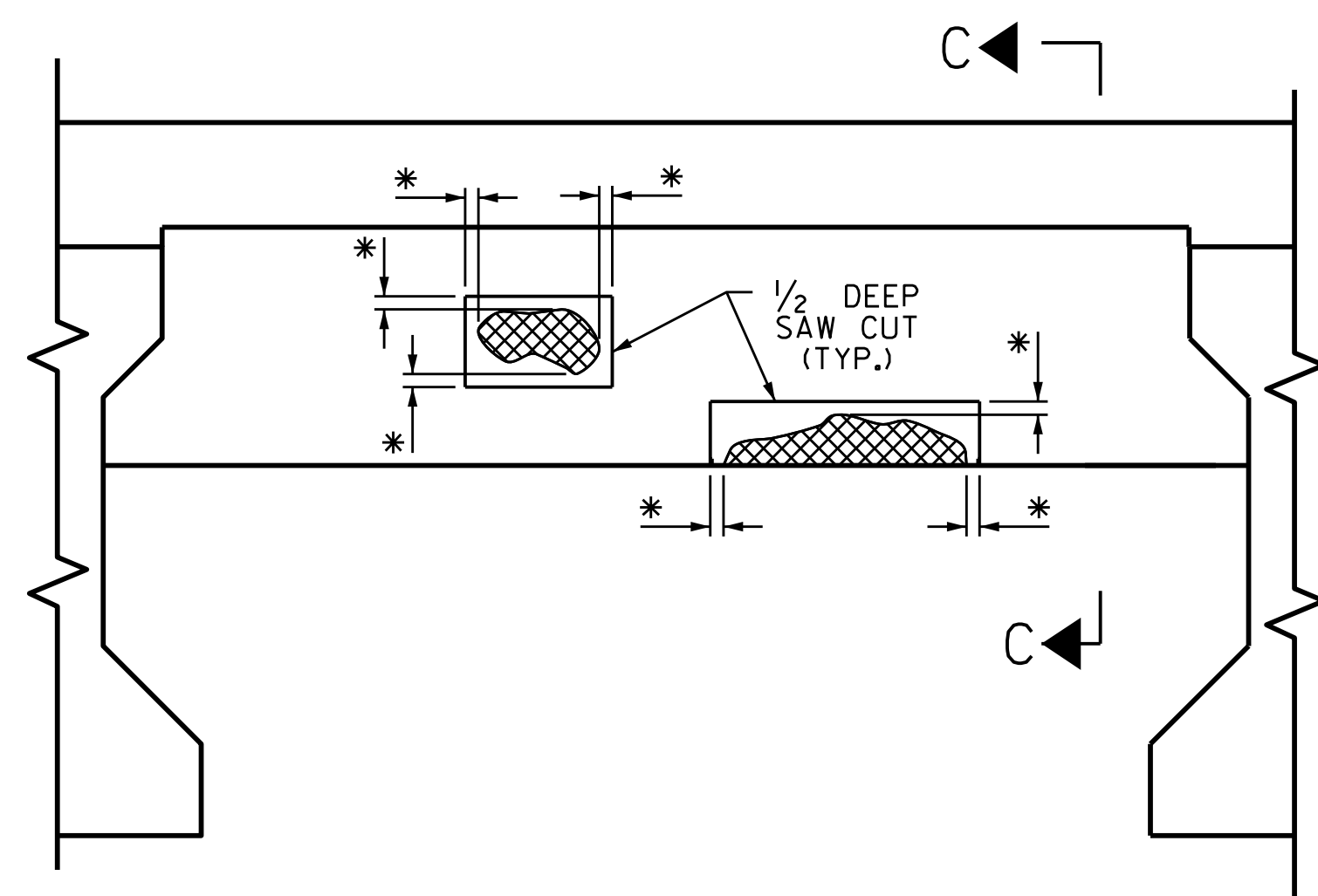


GIRDER WEB REPAIR



GIRDER FLANGE REPAIR

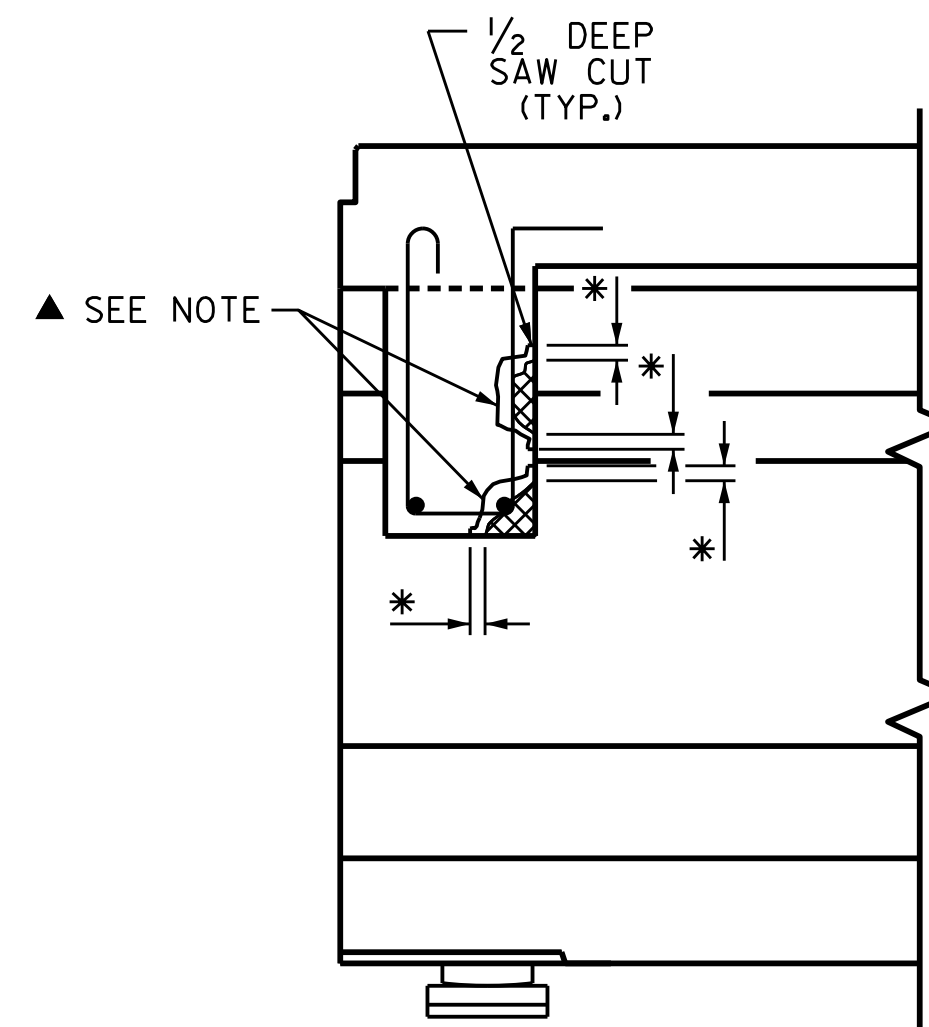
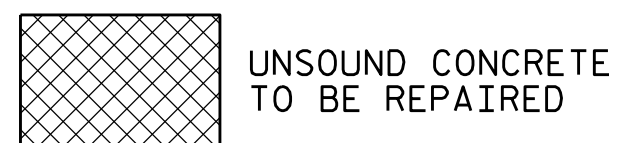
PRESTRESSED GIRDER REPAIR



TYPICAL SECTION

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

REPAIR KEY:



SECTION C-C

BENT DIAPHRAGM REPAIR DETAIL

(EXAMPLE DETAILS ONLY. ACTUAL REBAR SIZE & LOCATION MAY VARY)

NOTES:

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

PRESTRESSED GIRDER REPAIR SEQUENCE:

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

PROJECT NO. HI-0006
WILSON COUNTY
BRIDGE NO. 970254

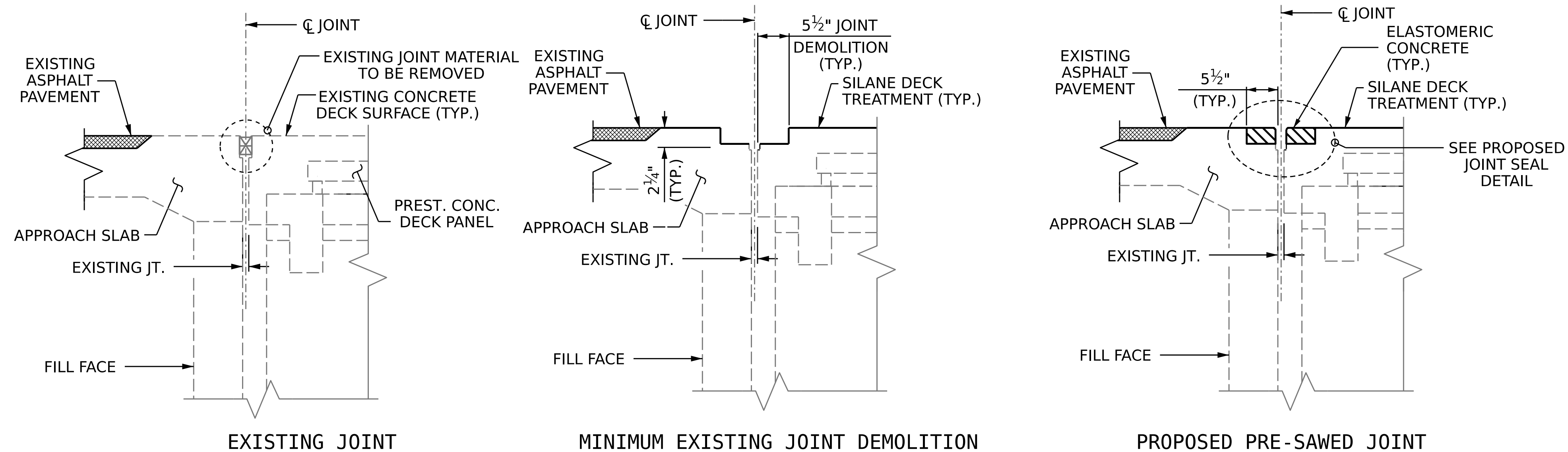


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
PRESTRESSED CONCRETE
GIRDER AND DIAPHRAGM
REPAIR DETAILS

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

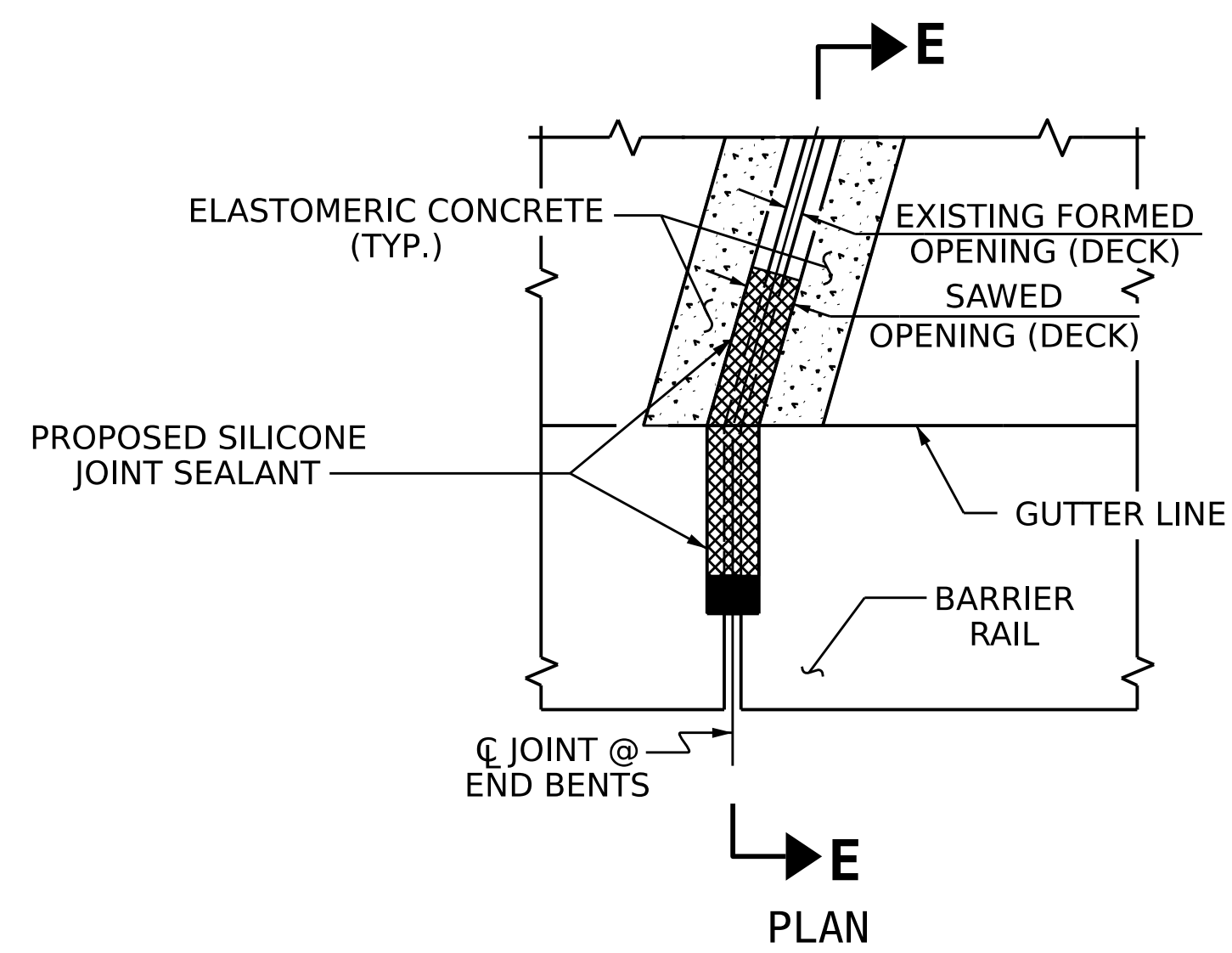
DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-5
1			3			TOTAL SHEETS
2			4			6

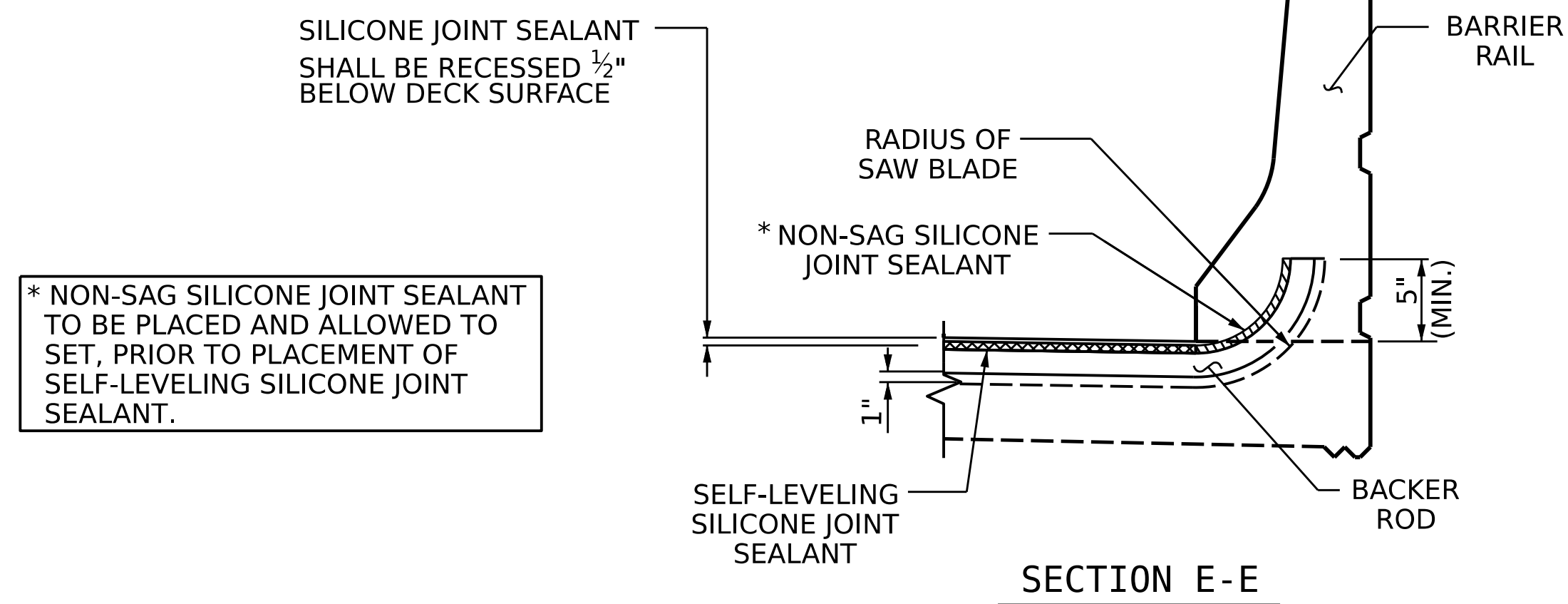


JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	16.4 CF	
POURABLE SILICONE JOINT SEALANT	95.6 LF	

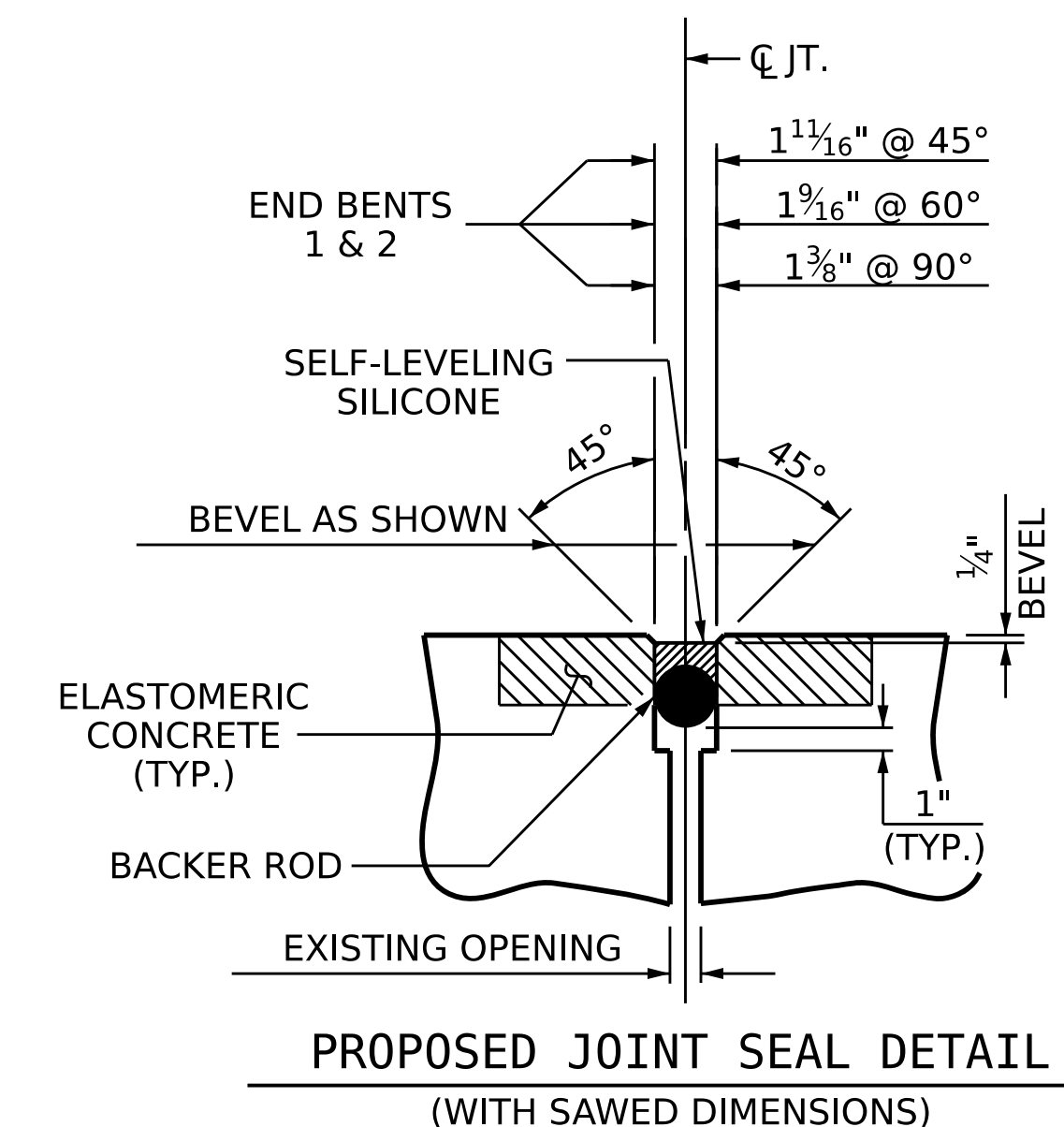


JOINT DETAIL AT BARRIER RAIL

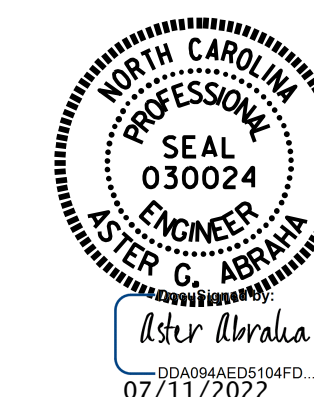


NOTES

- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.
- THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE BACKER ROD FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.
- ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.
- THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.
- POURABLE SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.
- DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.
- QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.
- FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.
- FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970254**



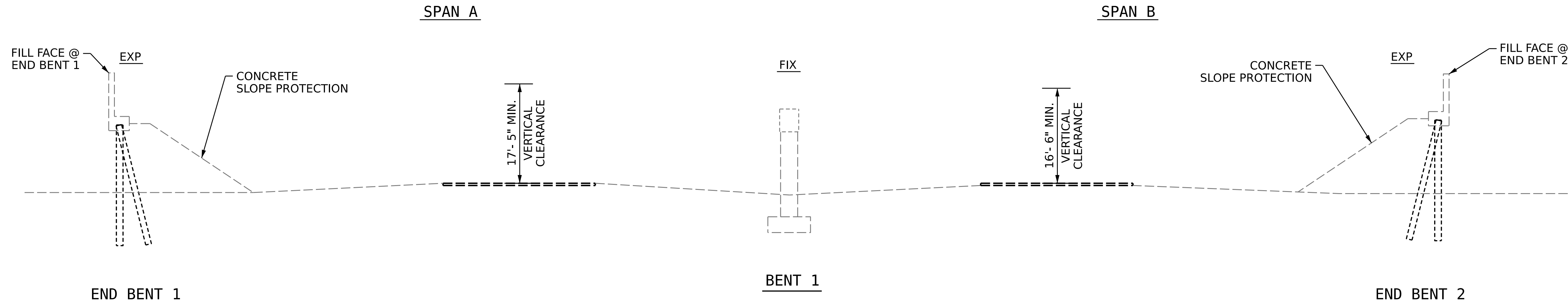
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

JOINT REPAIR DETAILS

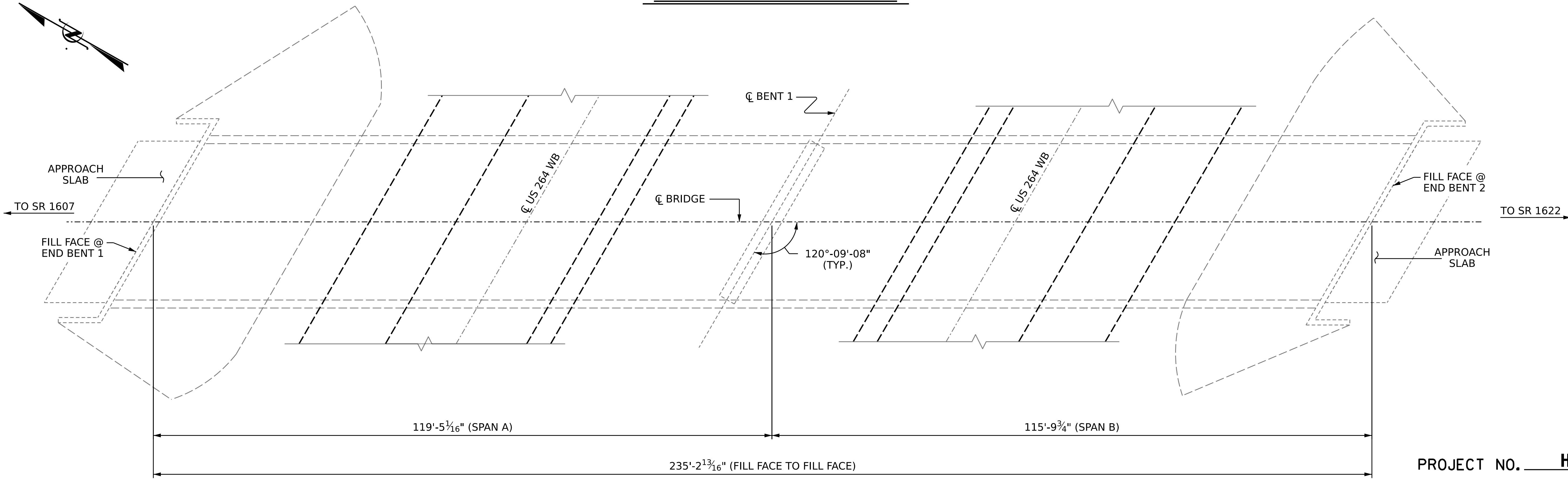
DRAWN BY : G. AYES DATE : 5/2022
 CHECKED BY : A. G. ABRAHA DATE : 5/2022
 DESIGN ENGINEER OF RECORD : -- DATE : --

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S9-6
1			3			TOTAL SHEETS
2			4			6



SECTION ALONG ϕ BRIDGE



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

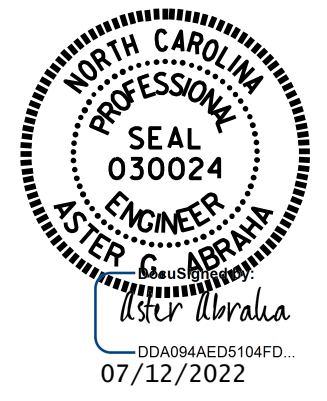
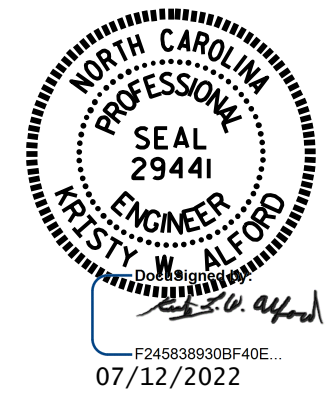
PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970255**

- NOTES**
- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 01/11/2022.
 - BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

- SCOPE OF WORK**
- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
 - PLACE SILANE DECK TREATMENT.
 - DEMOLISH EXISTING BRIDGE DECK JOINTS.
 - RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER _____ DATE _____



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON SR 1602
 OVER US 264 BYPASS BETWEEN
 SR 1607 AND SR 1622

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

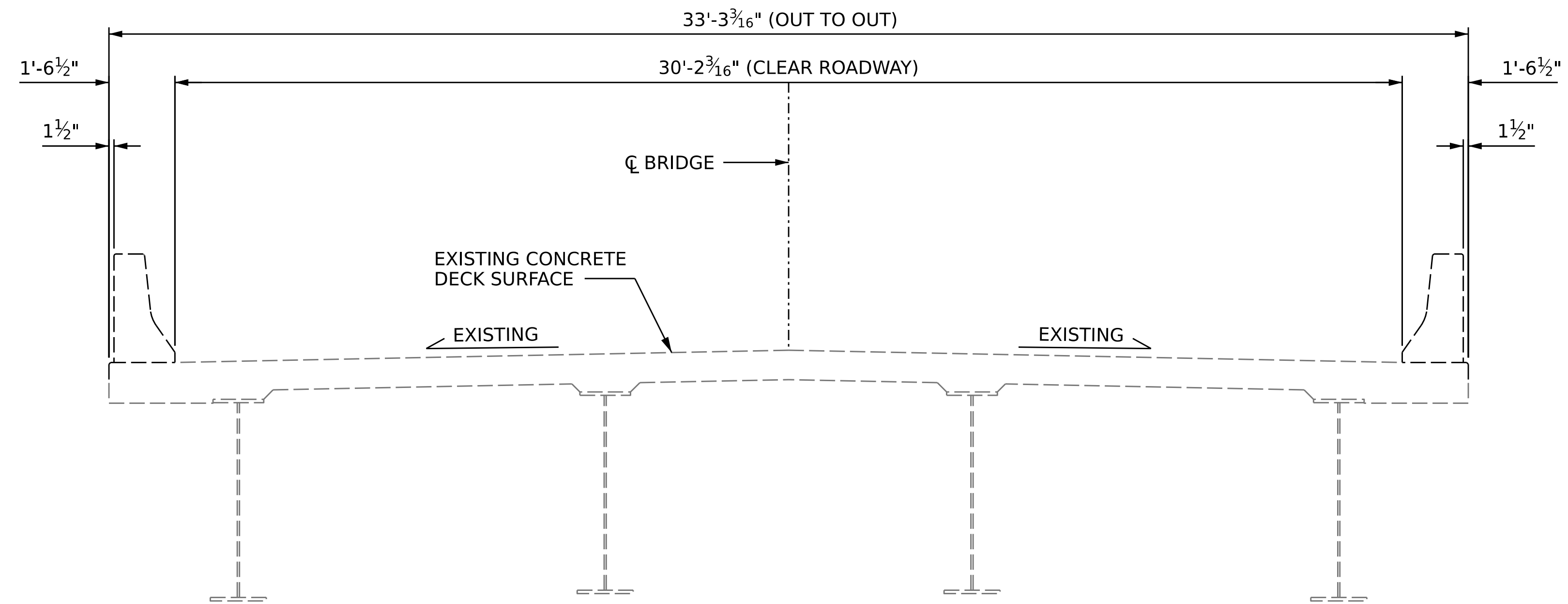
DOCUMENT NOT CONSIDERED
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 SIGNATURES COMPLETED

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

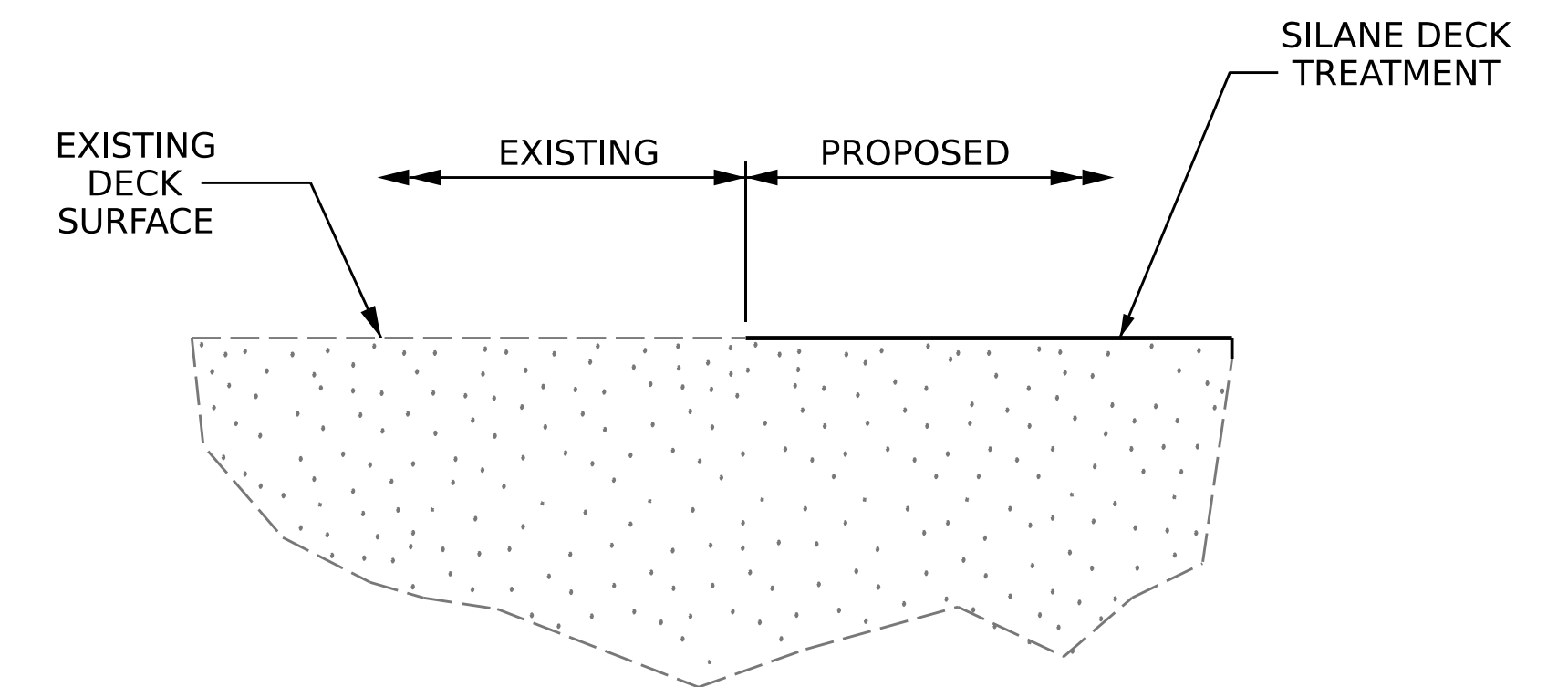
NOTES

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

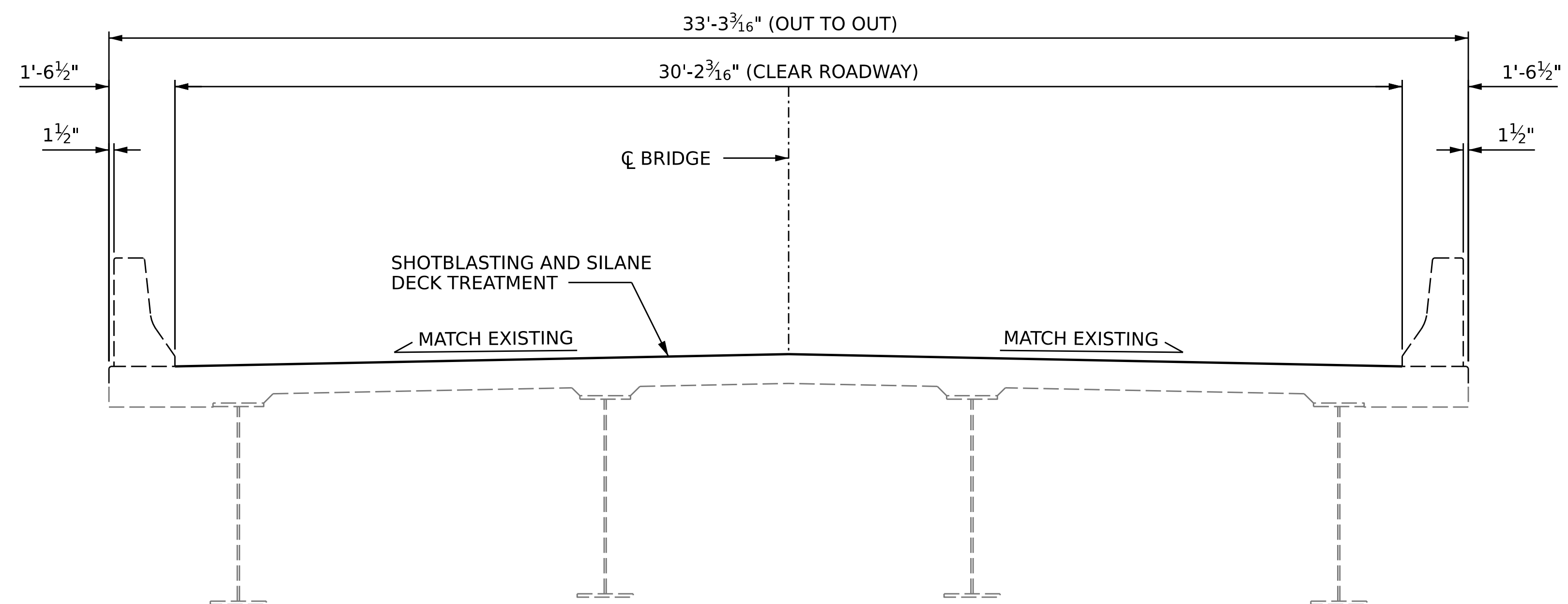
PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY ENGINEER.



TYPICAL SECTION
(EXISTING)

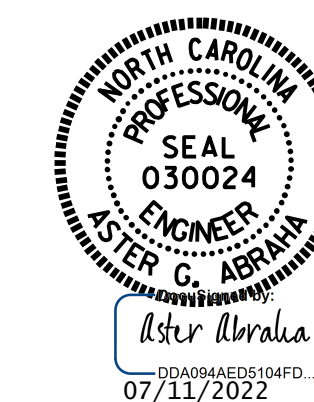


SILANE DECK TREATMENT DETAIL



TYPICAL SECTION
(PROPOSED)

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970255**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE

TYPICAL SECTION
 AND SILANE DECK
 TREATMENT DETAILS

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

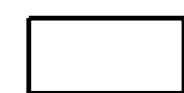
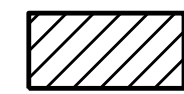
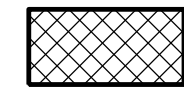
DOCUMENT NOT CONSIDERED
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 SIGNATURES COMPLETED

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

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

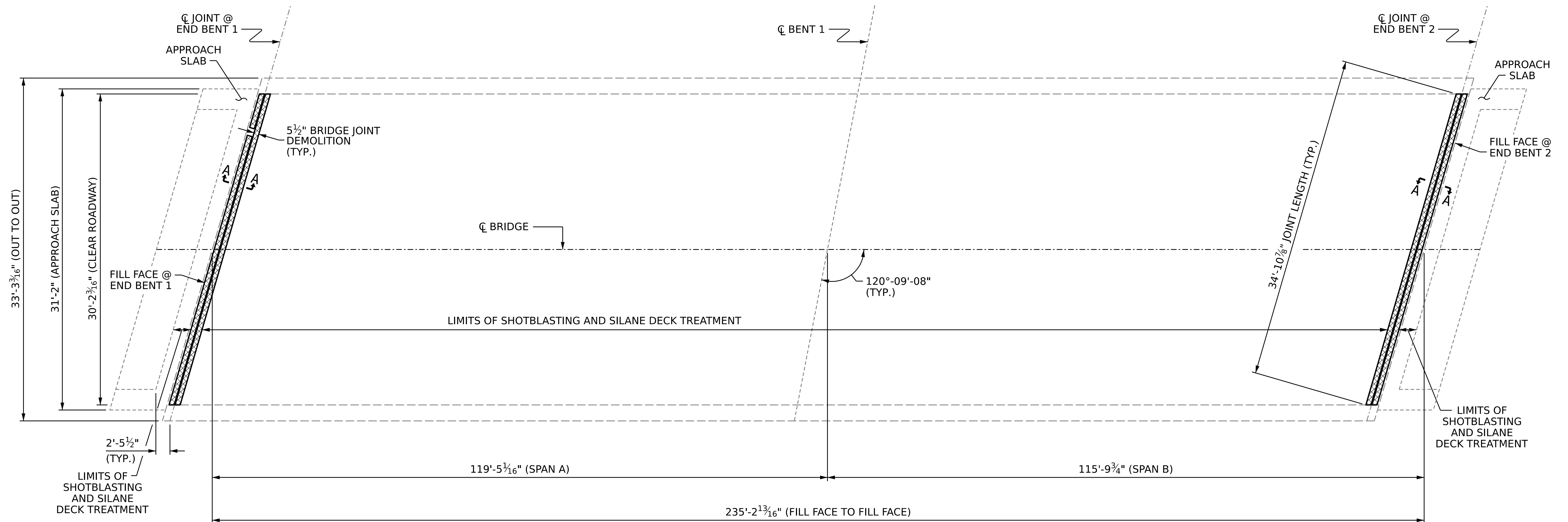
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	791.0 SY	
SILANE DECK TREATMENT	791.0 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	64.0 SF	

REPAIR KEY

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

NOTES

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- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S10-4.



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970255**



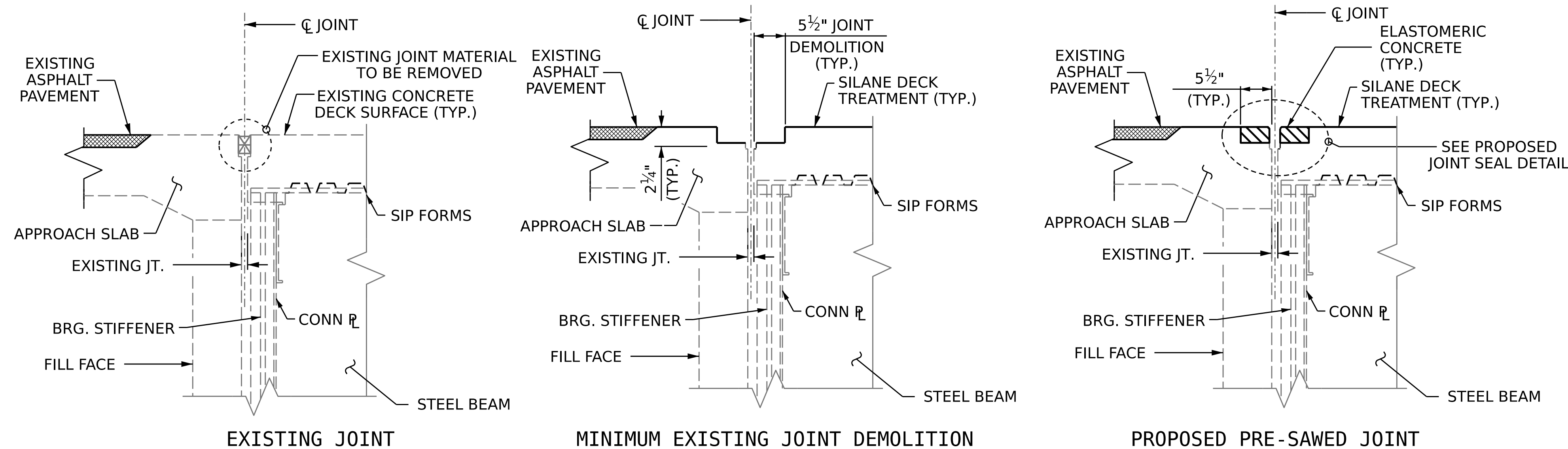
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

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

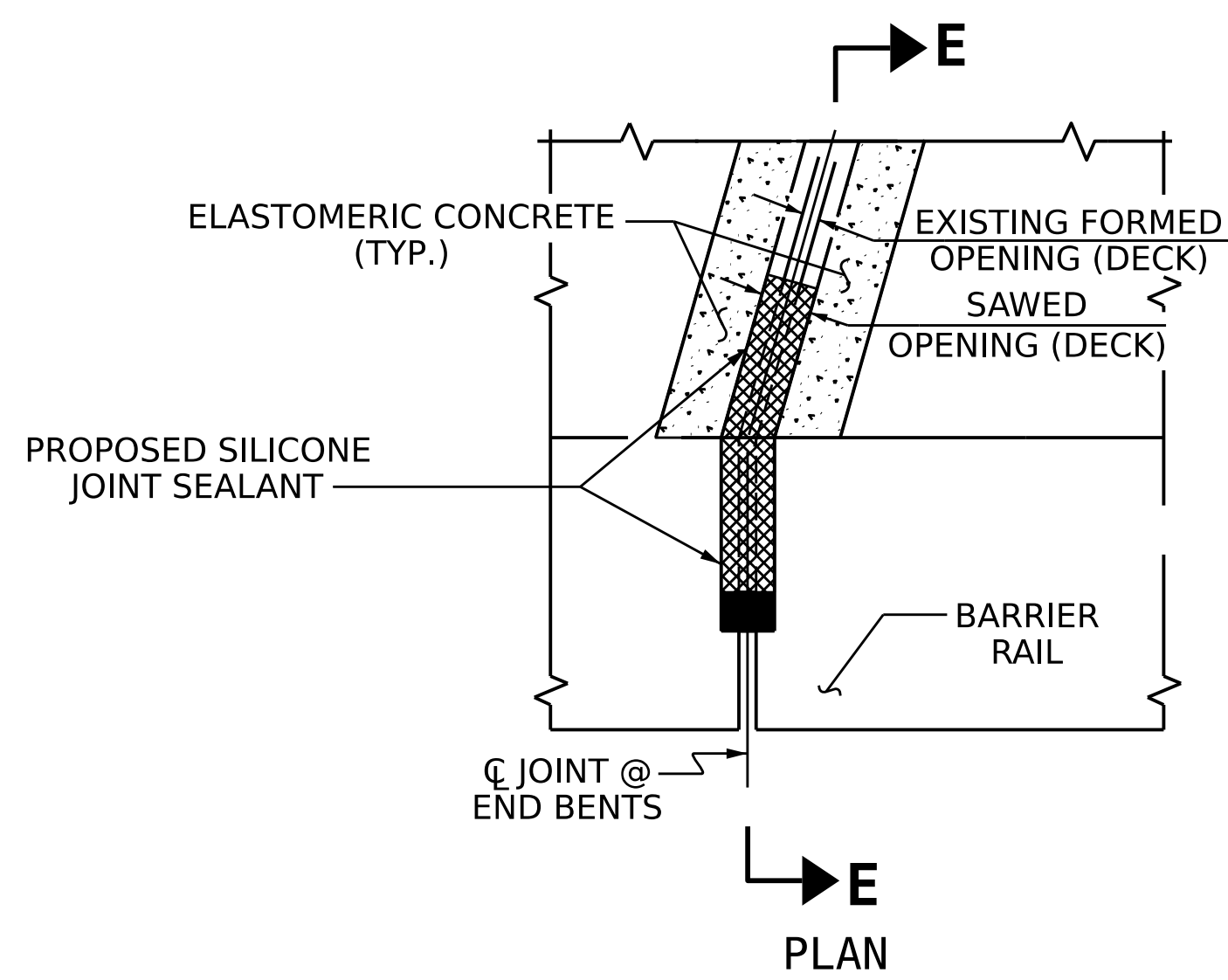
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1			3			TOTAL SHEETS
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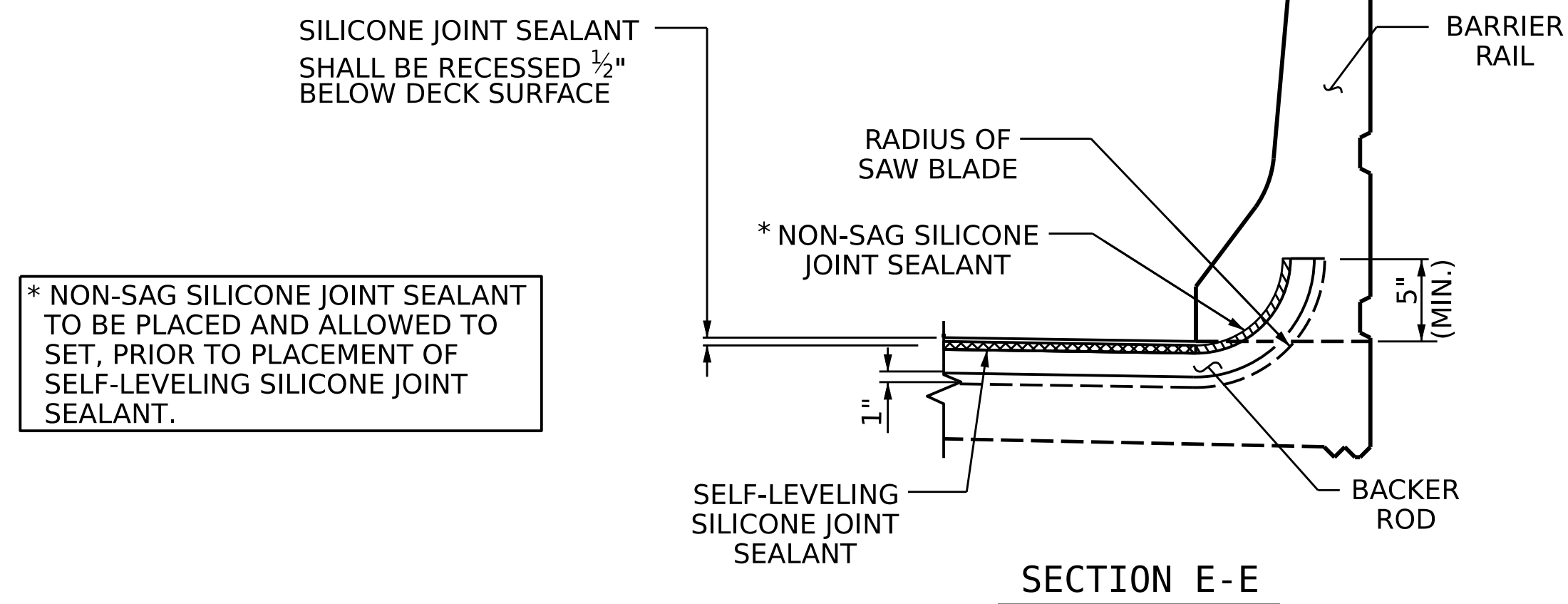


JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	12.0 CF	
POURABLE SILICONE JOINT SEALANT	69.8 LF	



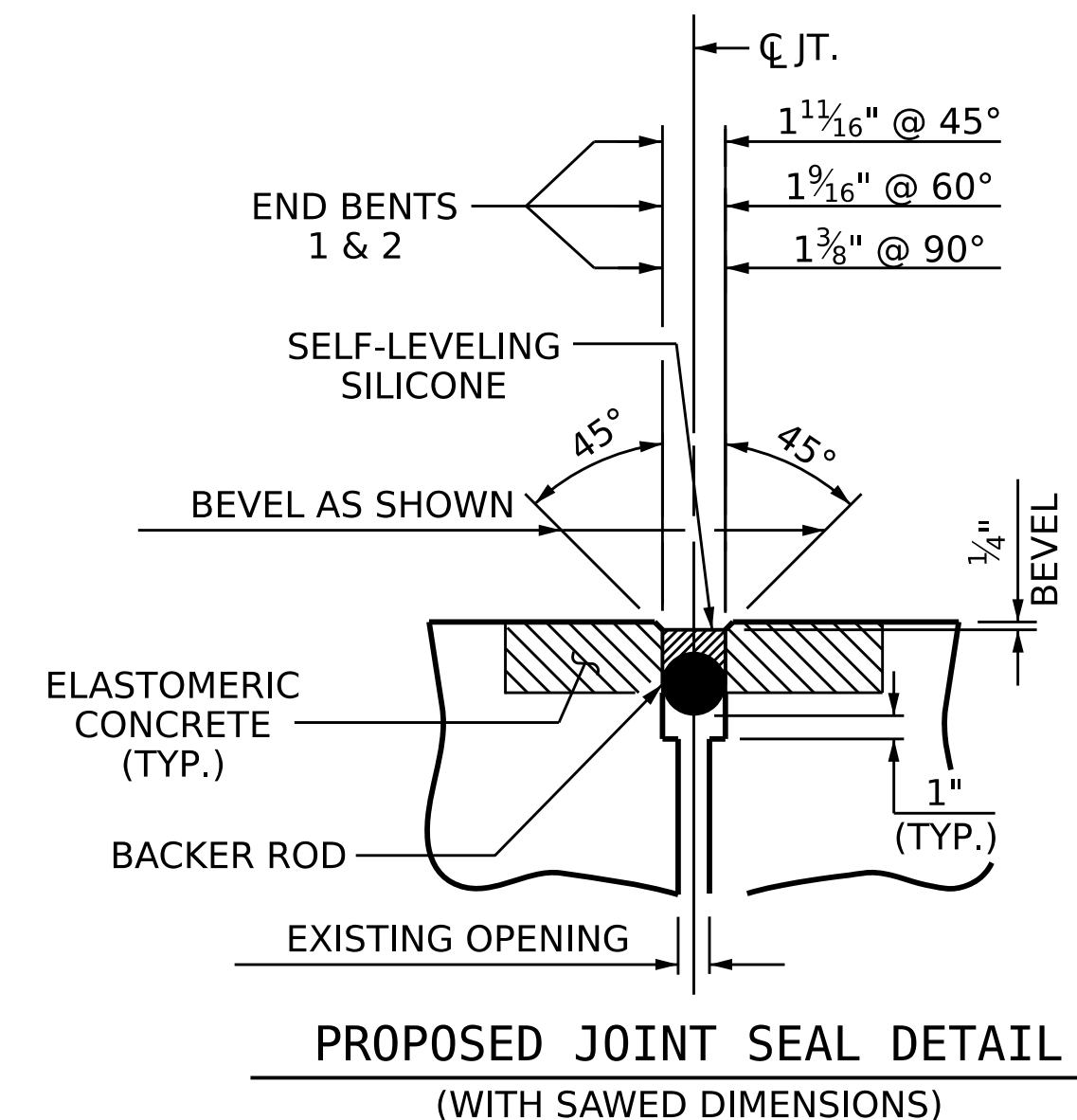
JOINT DETAIL AT BARRIER RAIL



NOTES

- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.
- THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE BACKER ROD FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.
- ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.
- THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.
- POURABLE SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.
- DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.
- QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.
- FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.
- FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROJECT NO. **HI-0006**
WILSON COUNTY
BRIDGE NO. **970255**



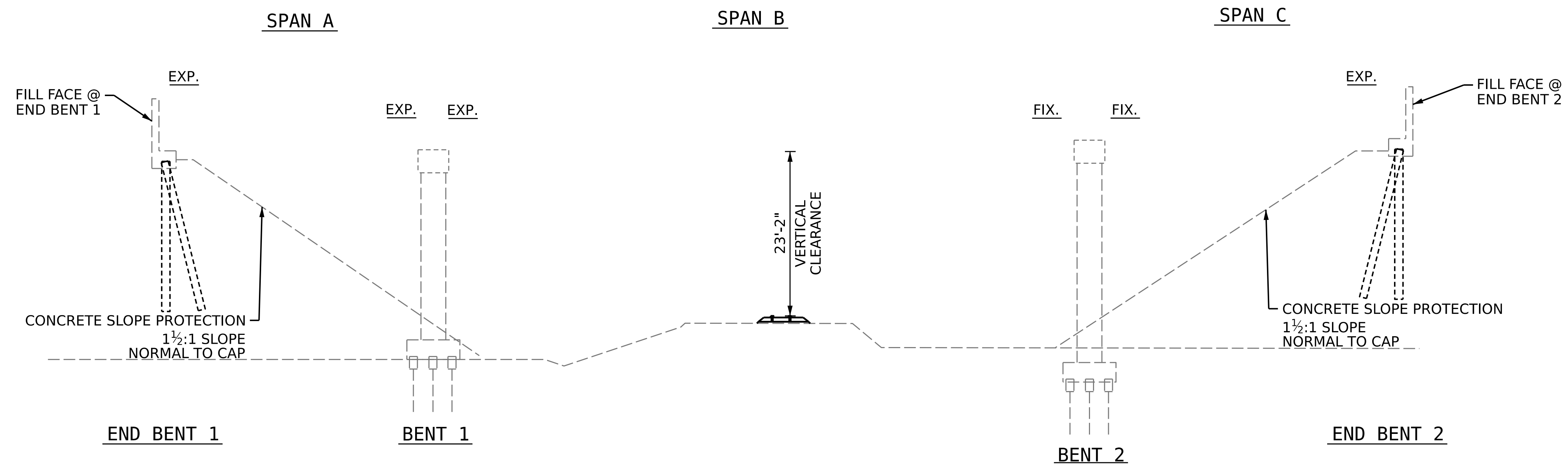
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

**JOINT REPAIR
DETAILS**

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

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

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



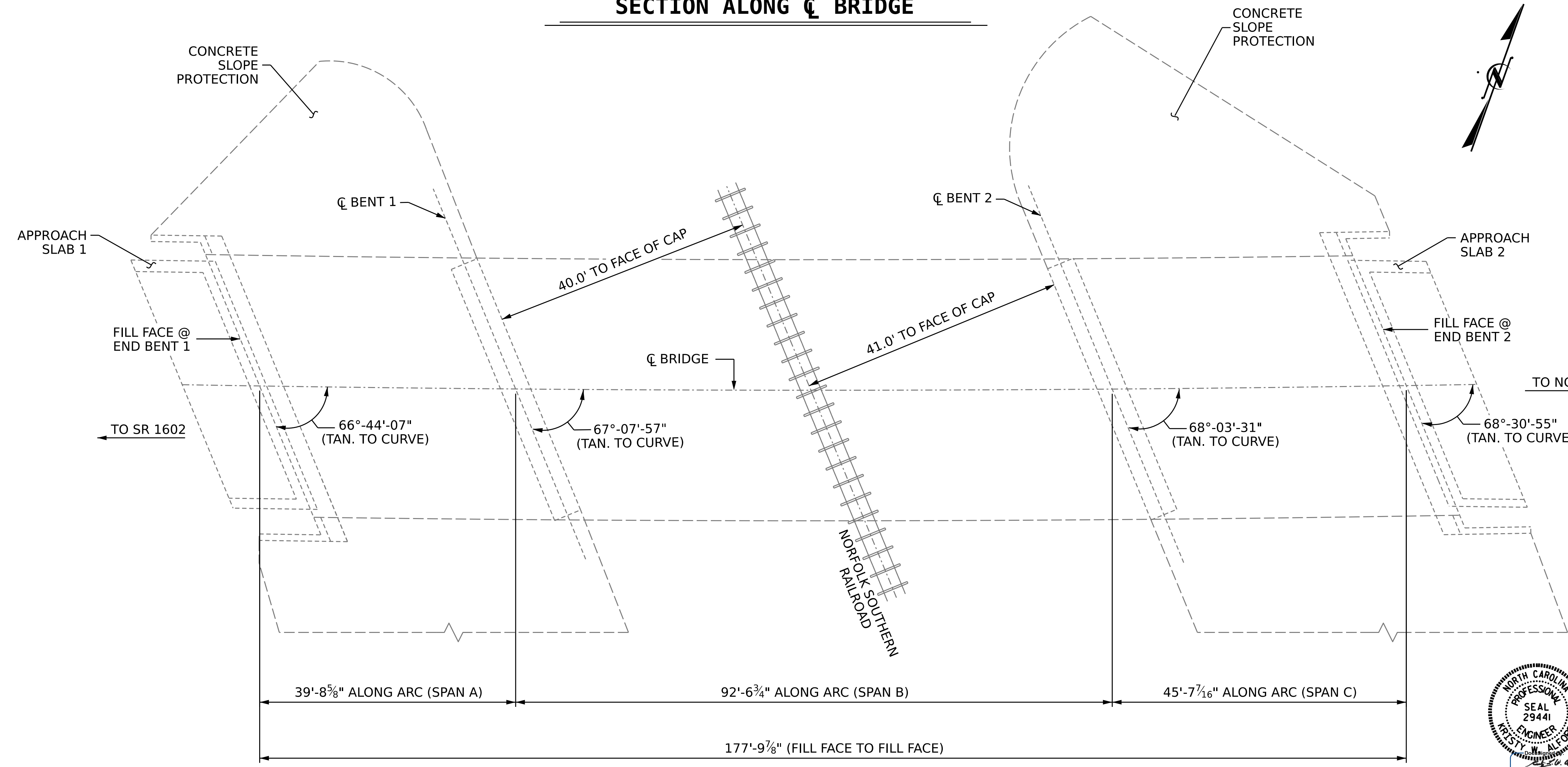
NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 12/20/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE, INSTALL BACKER ROD, AND POURABLE SILICONE JOINT SEALANT.

SECTION ALONG Q BRIDGE

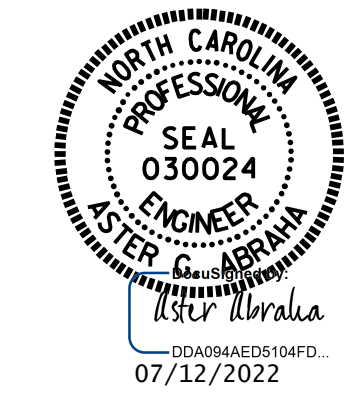
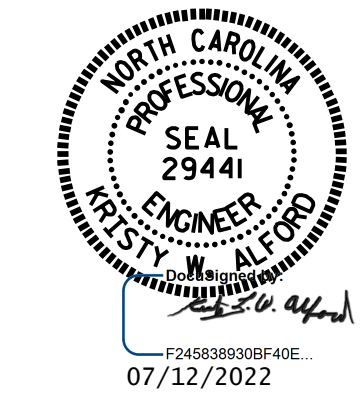


I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER _____ DATE _____

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970256**
 MILE POST - 178.59

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE OVER
 NORFOLK SOUTHERN RAILROAD
 ON US 264 BYPASS WESTBOUND
 BETWEEN SR 1602 AND NC 58



DRAWN BY : J. BALDWIN DATE : 5/2022
 CHECKED BY : A. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

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

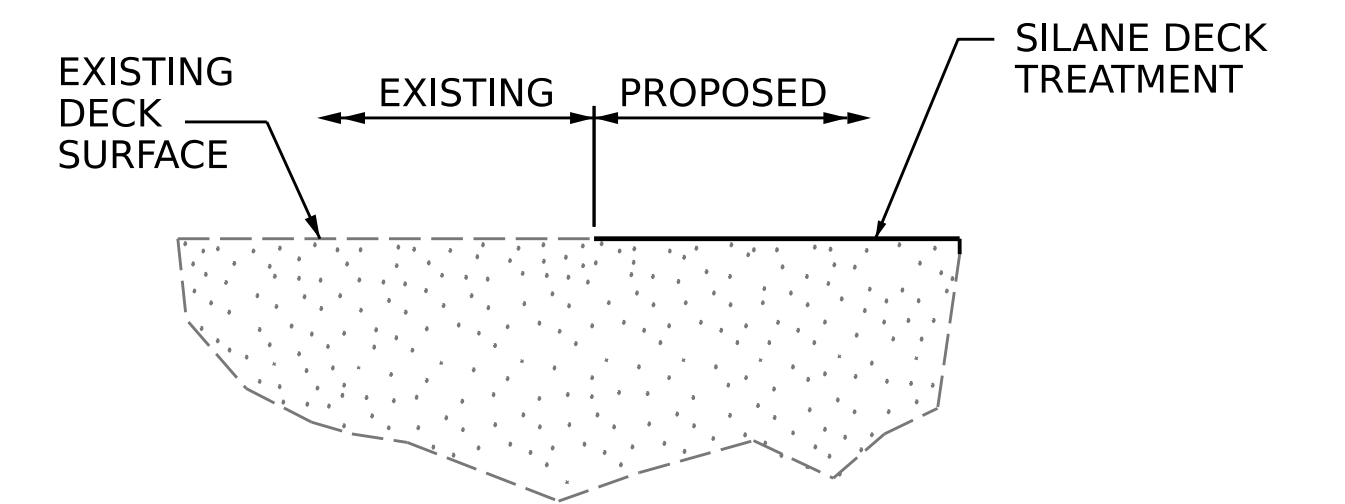
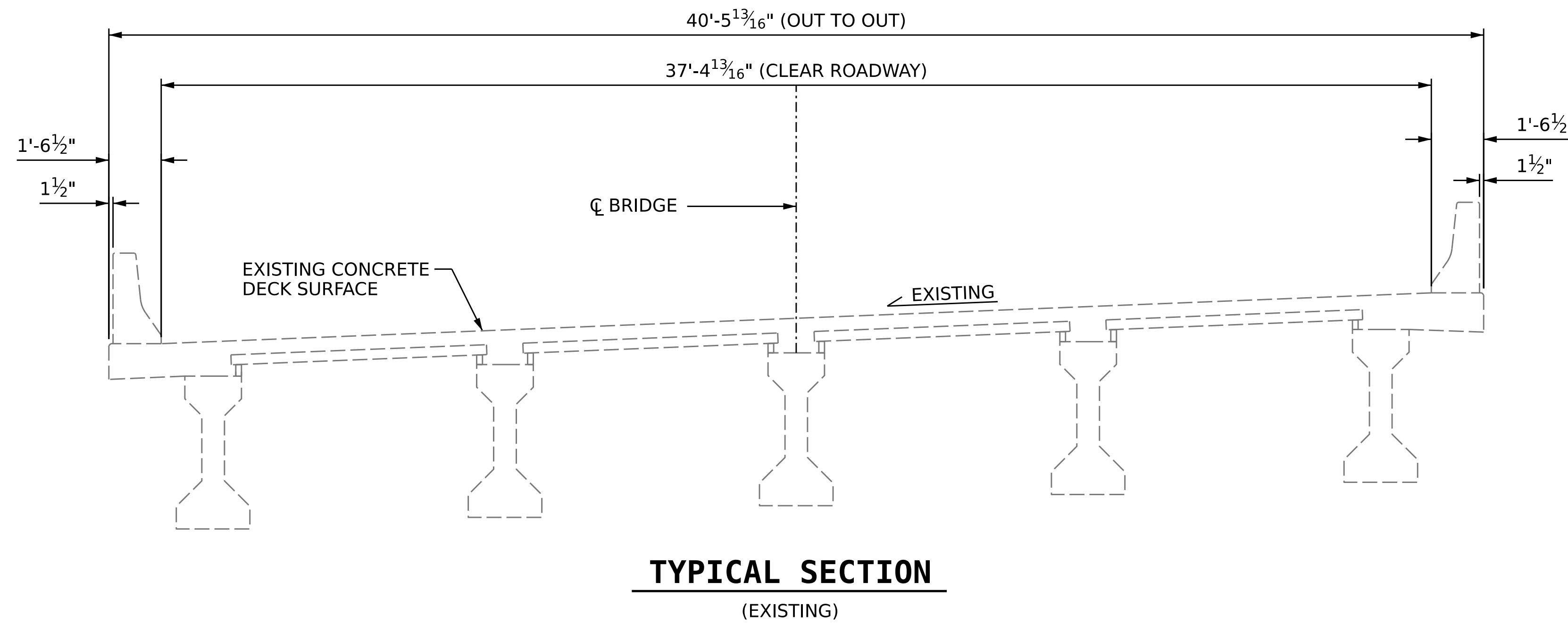
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

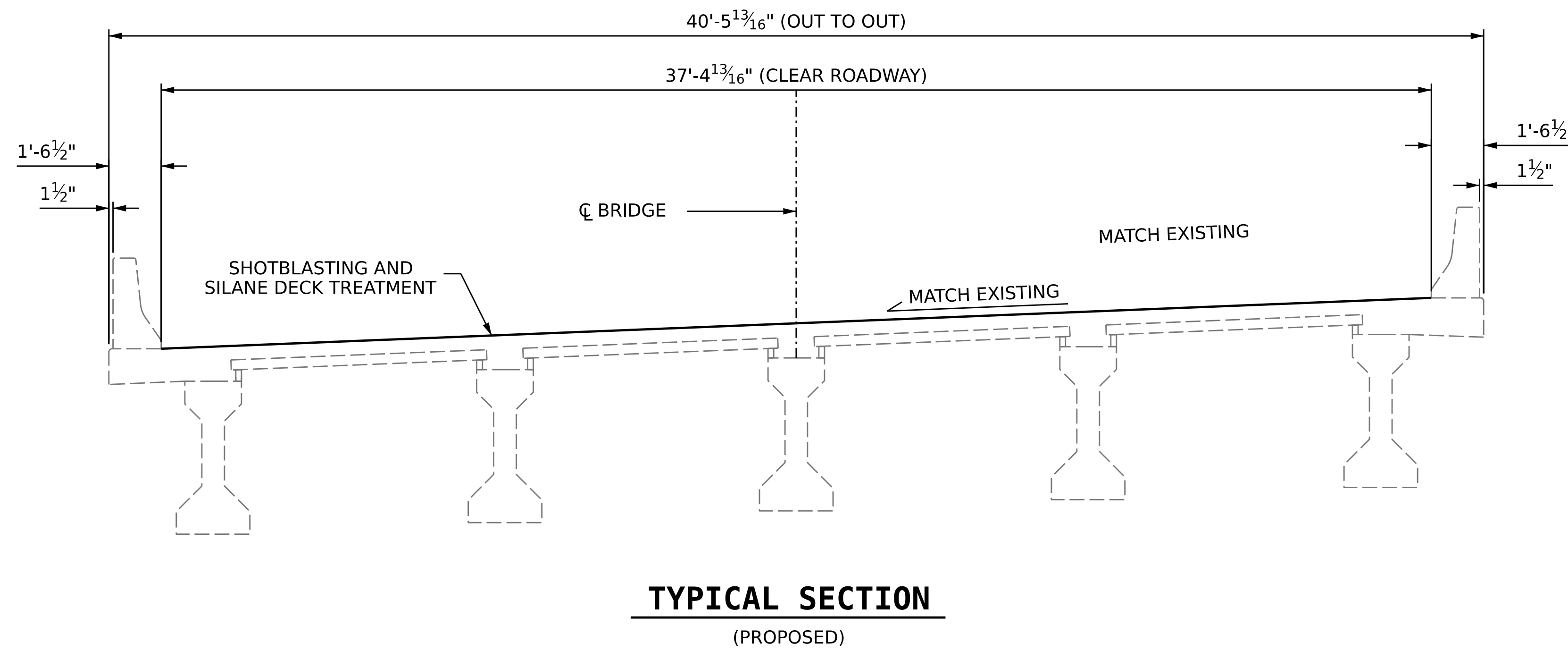
NOTES

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

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



SILANE DECK TREATMENT DETAIL



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970256**



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

DRAWN BY : J. BALDWIN DATE : 06/2022
 CHECKED BY : A. ABRAHA DATE : 06/2022
 DESIGN ENGINEER OF RECORD: DATE :


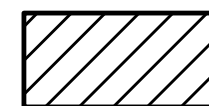
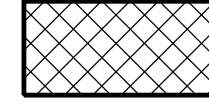
DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

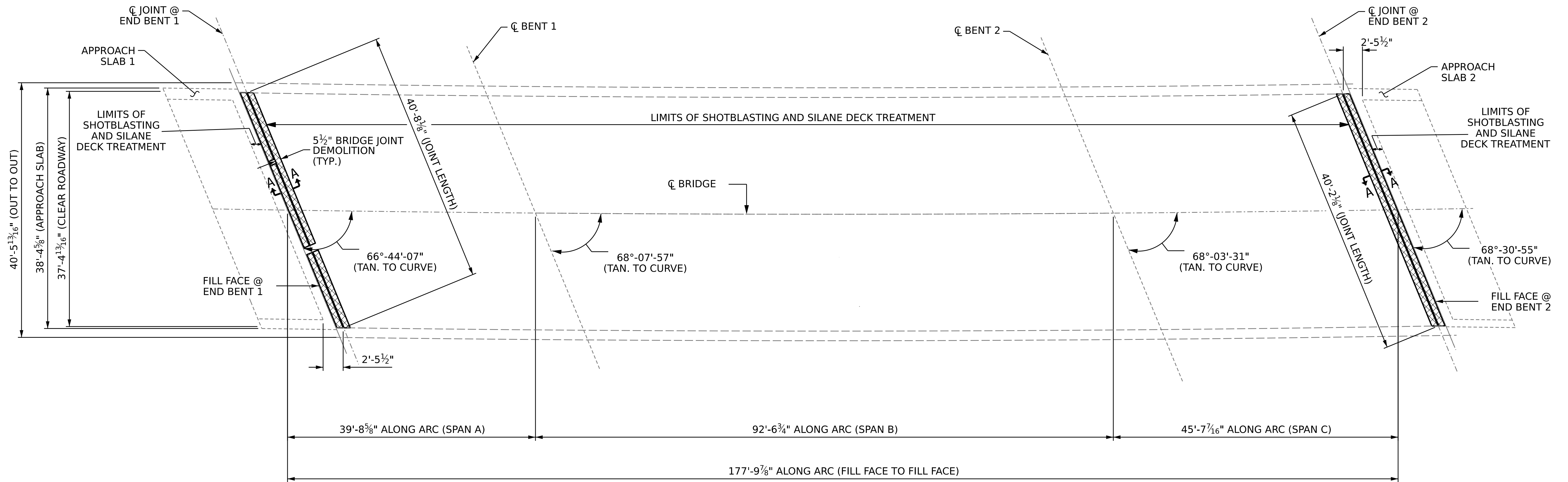
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	741.4 SY	
SILANE DECK TREATMENT	741.4 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	74.1 SF	

REPAIR KEY

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

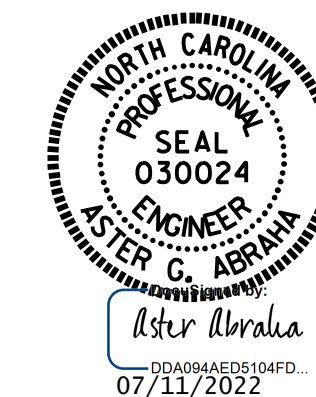
NOTES

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- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S11-4.



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970256**



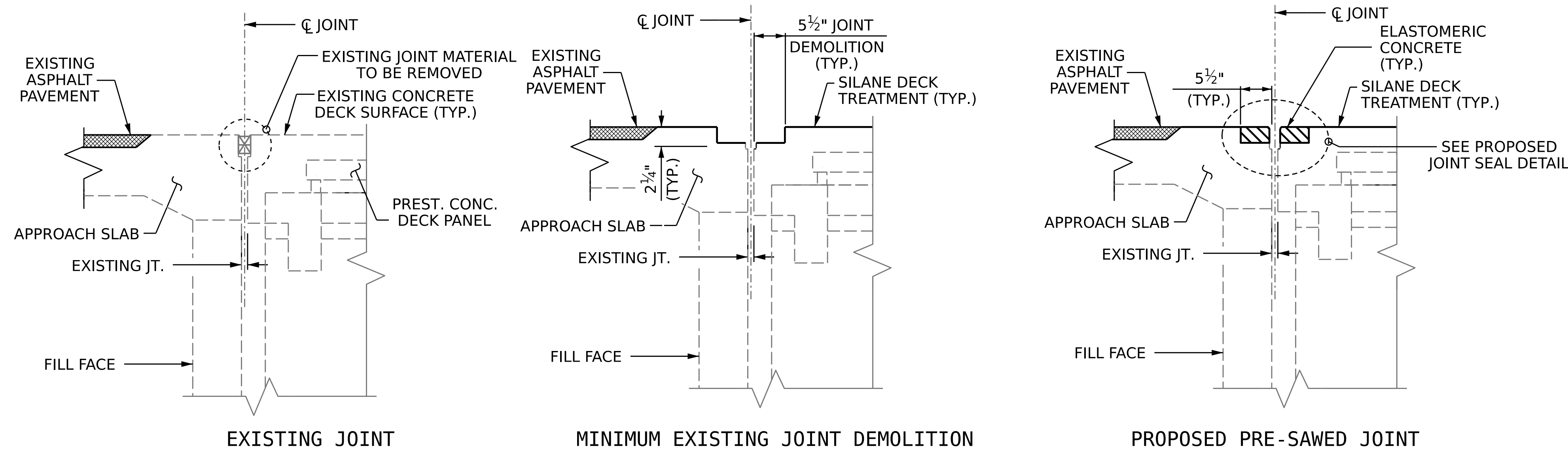
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

DRAWN BY : J. BALDWIN DATE : 6/2022
 CHECKED BY : A. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

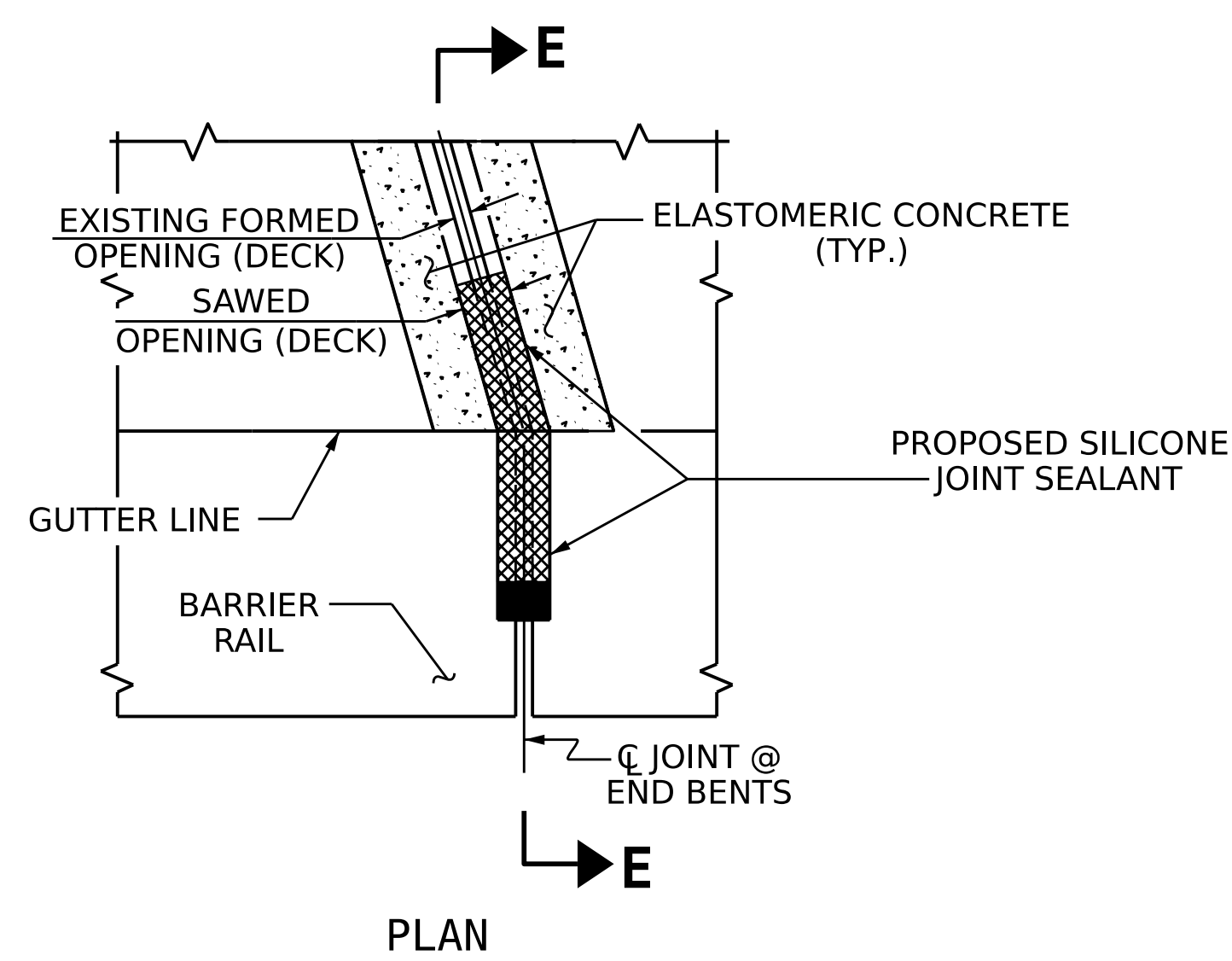
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S11-3
1			3			TOTAL SHEETS
2			4			4



JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

SUMMARY OF QUANTITIES

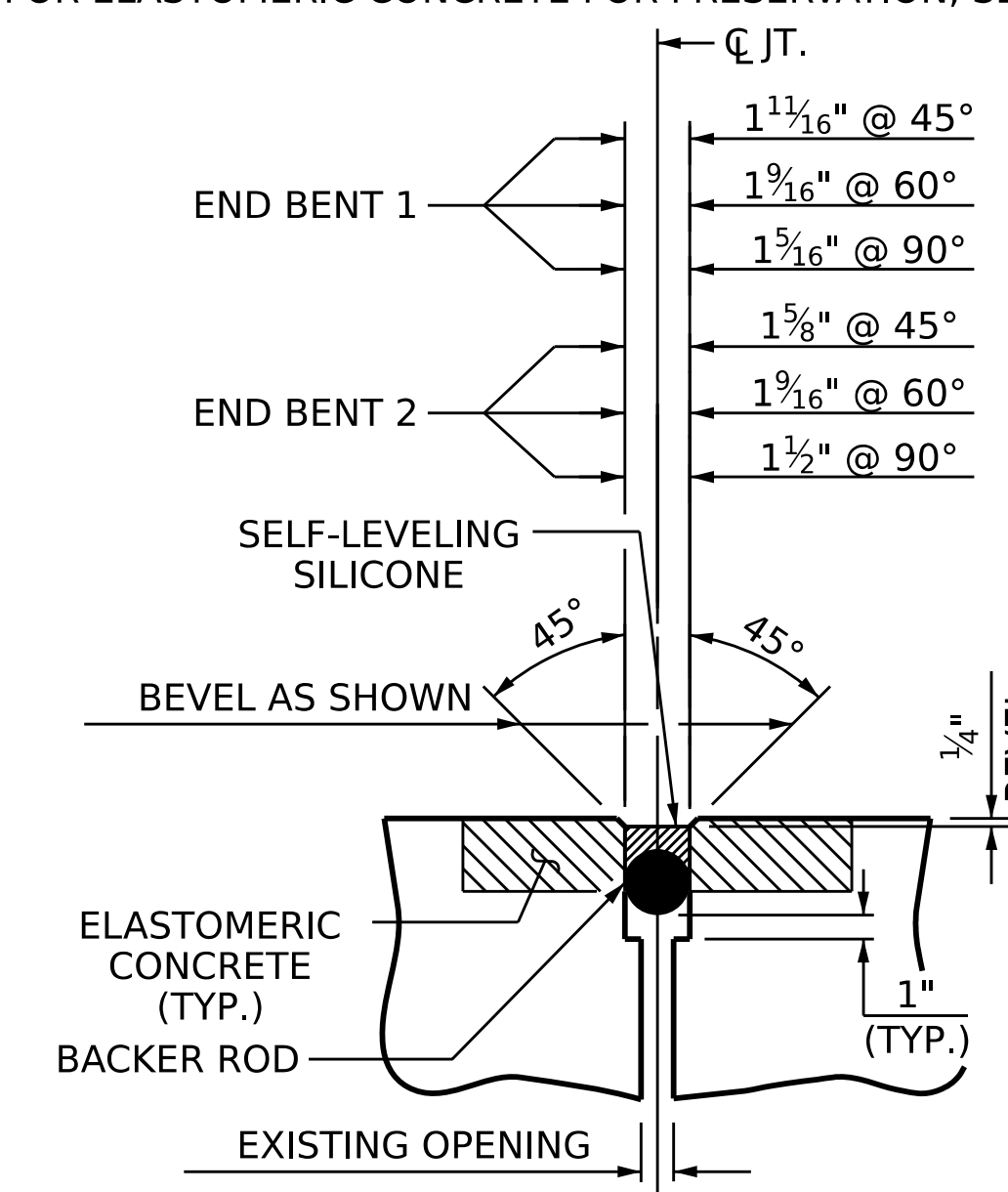
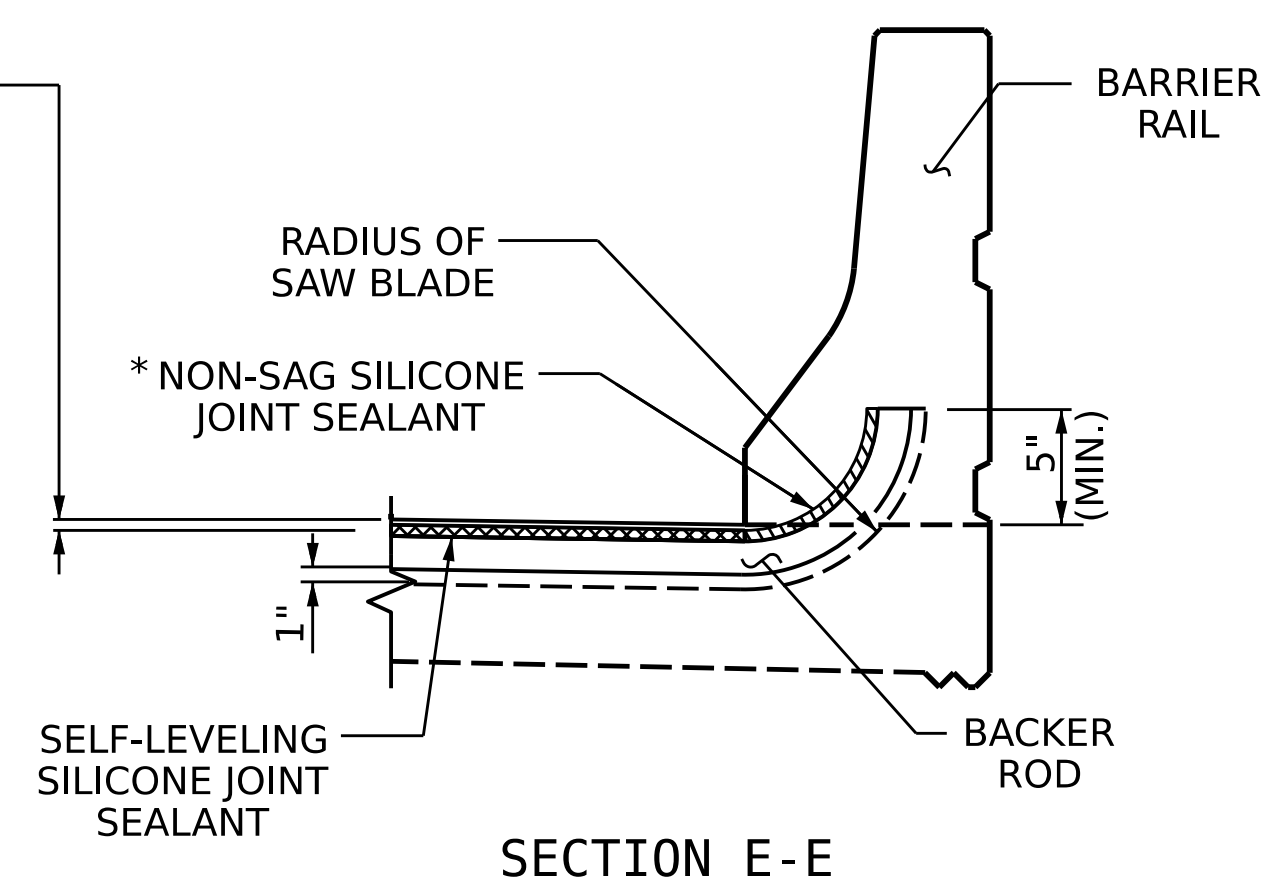
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.9 CF	
POURABLE SILICONE JOINT SEALANT	80.9 LF	



JOINT DETAIL AT BARRIER RAIL

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

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



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)



PROJECT NO. **HI-0006**
WILSON COUNTY
BRIDGE NO. **970256**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

DRAWN BY : J. BALDWIN DATE : 5/2022
CHECKED BY : A. ABRAHA DATE : 6/2022
DESIGN ENGINEER OF RECORD: -- DATE : --

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

NOTES

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

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

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

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

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

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

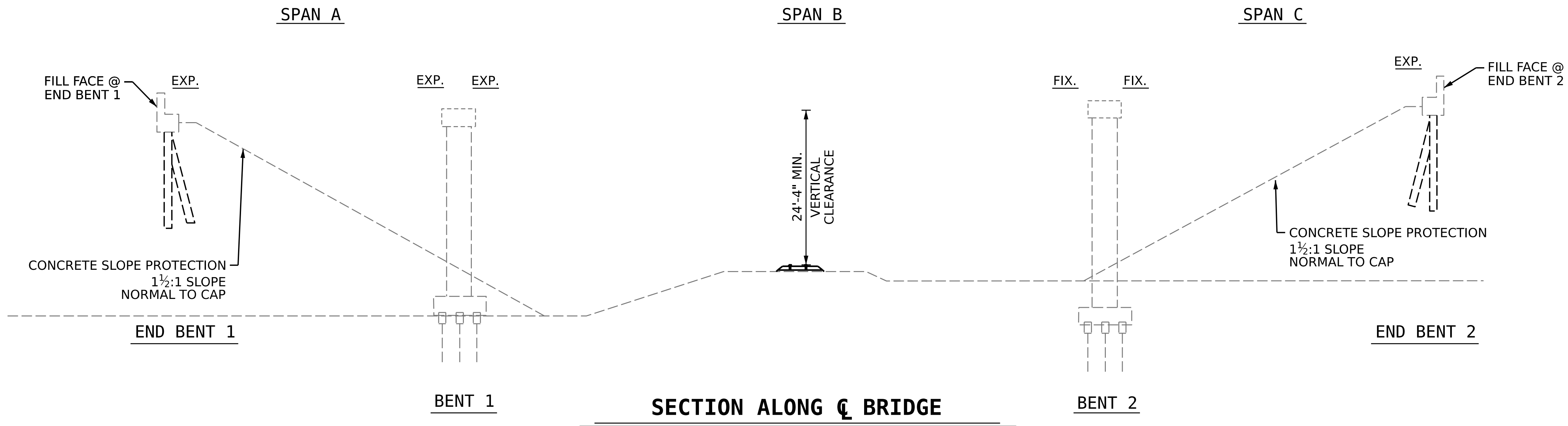
QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

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

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

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

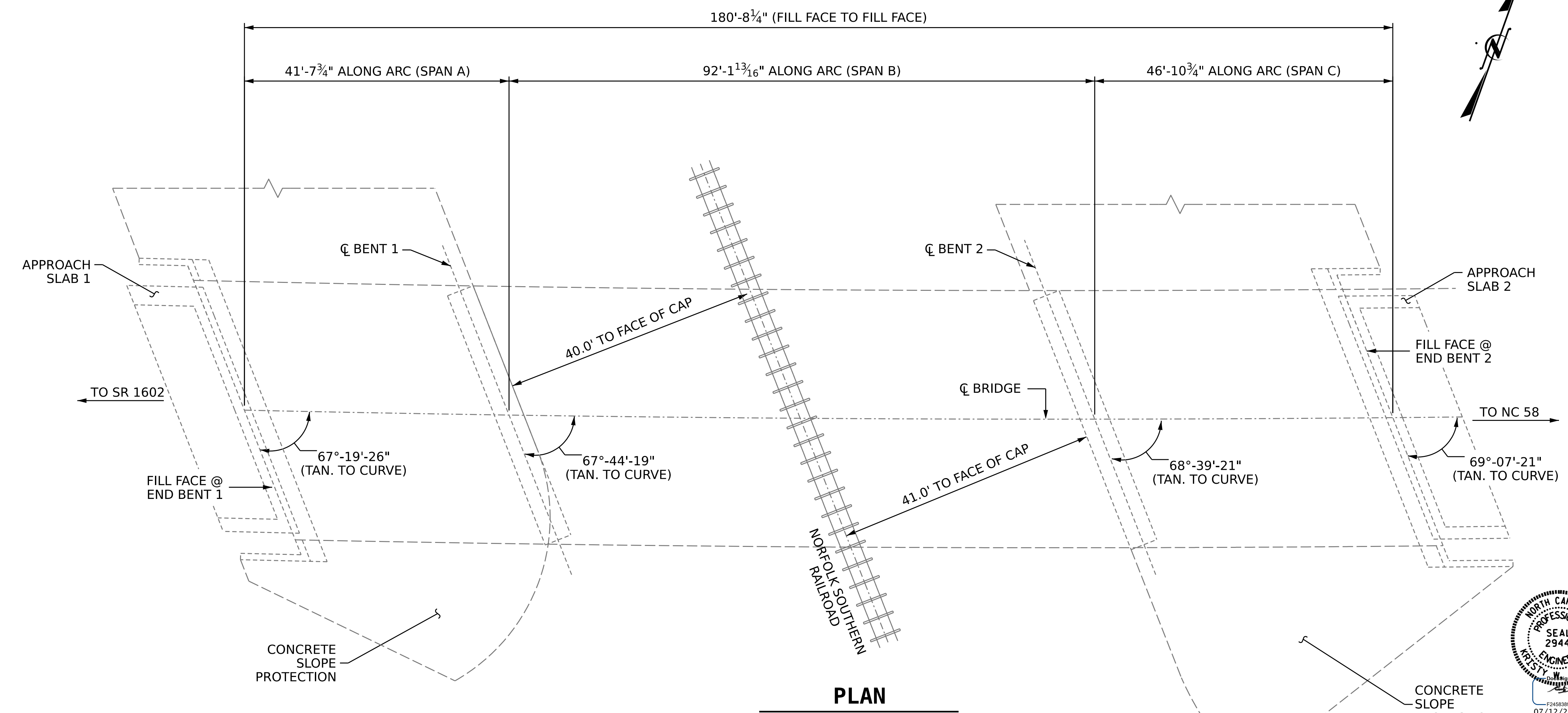


NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 12/20/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHOD.
- SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE, INSTALL BACKER ROD, AND POURABLE SILICONE JOINT SEALANT.

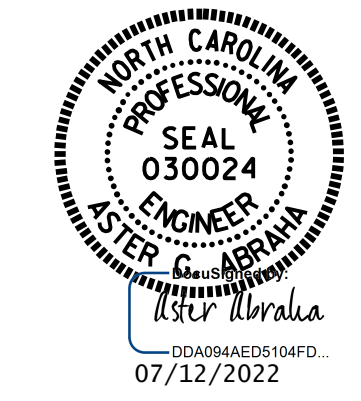
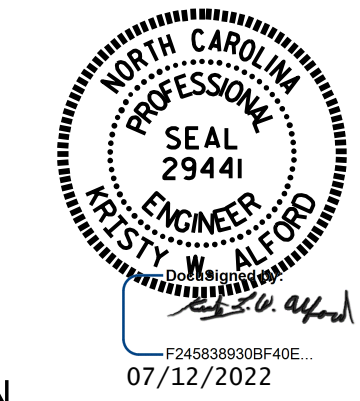


I HEREBY CERTIFY THAT THIS STRUCTURE WAS REHABILITATED ACCORDING TO THESE PLANS OR AS NOTED HEREIN.

RESIDENT ENGINEER _____ DATE _____

PROJECT NO. **HI-0006**
WILSON COUNTY
 STATION: **970257**
 MILE POST - 178.58

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE OVER
 NORFOLK SOUTHERN RAILROAD
 ON US 264 BYPASS EASTBOUND
 BETWEEN SR 1602 AND NC 58



DRAWN BY : J. BALDWIN DATE : 6/2022
 CHECKED BY : A. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

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

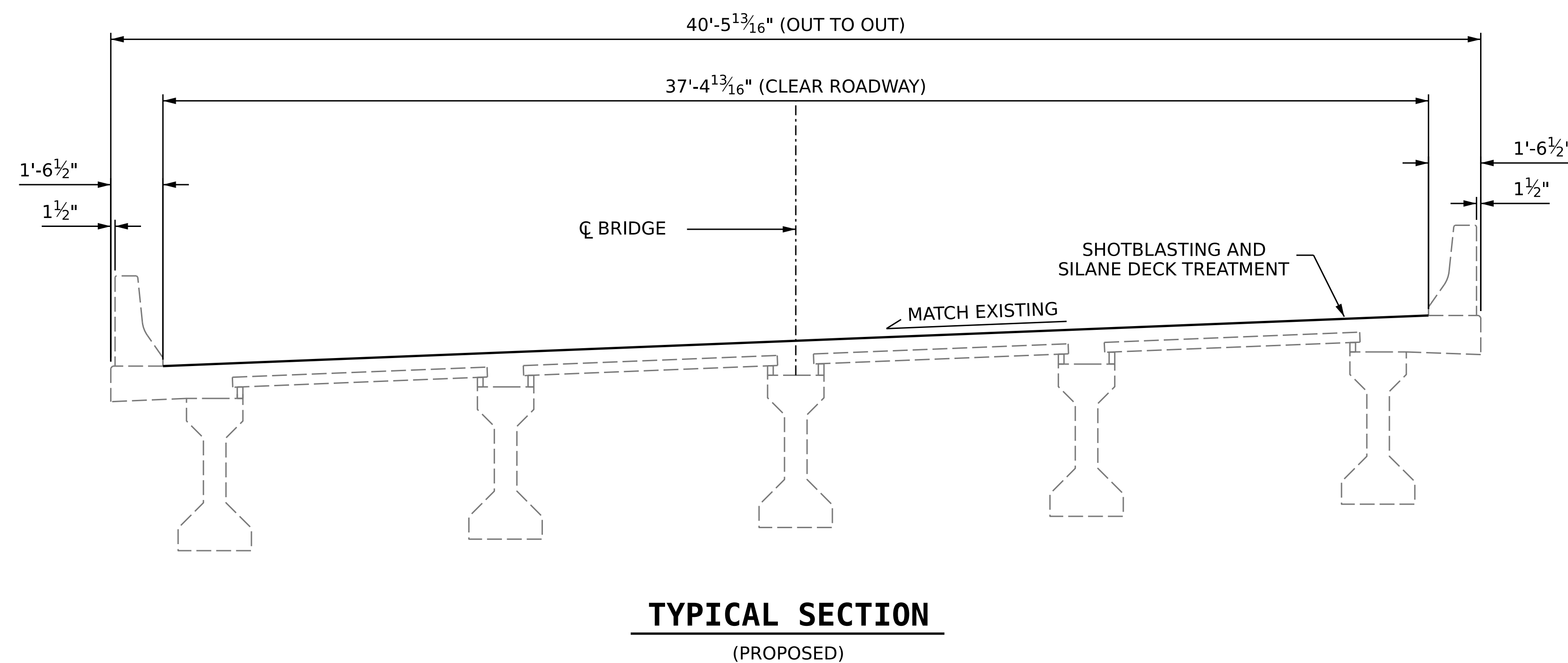
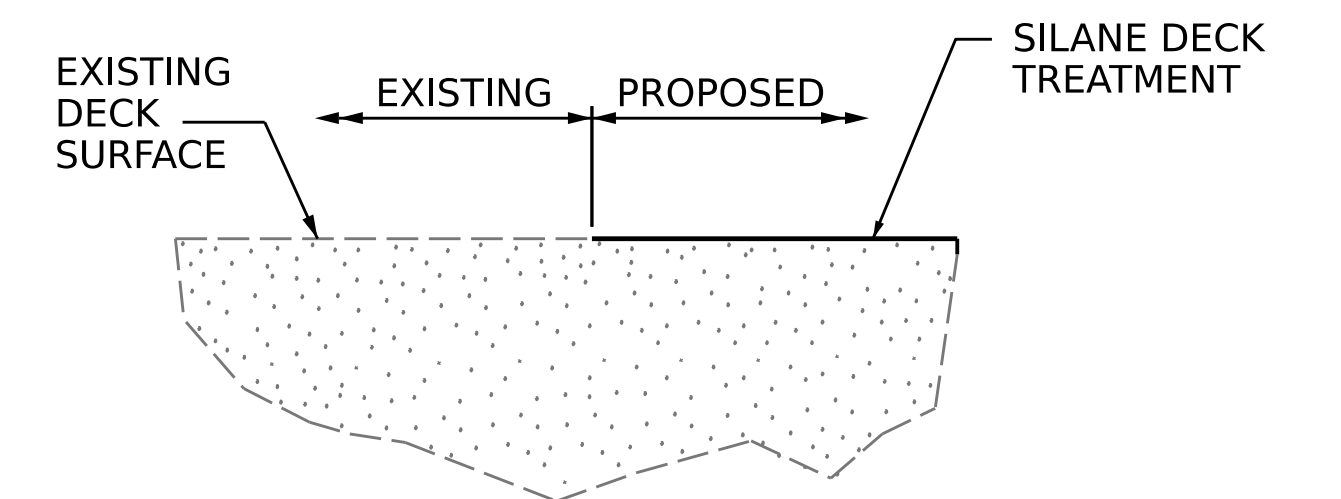
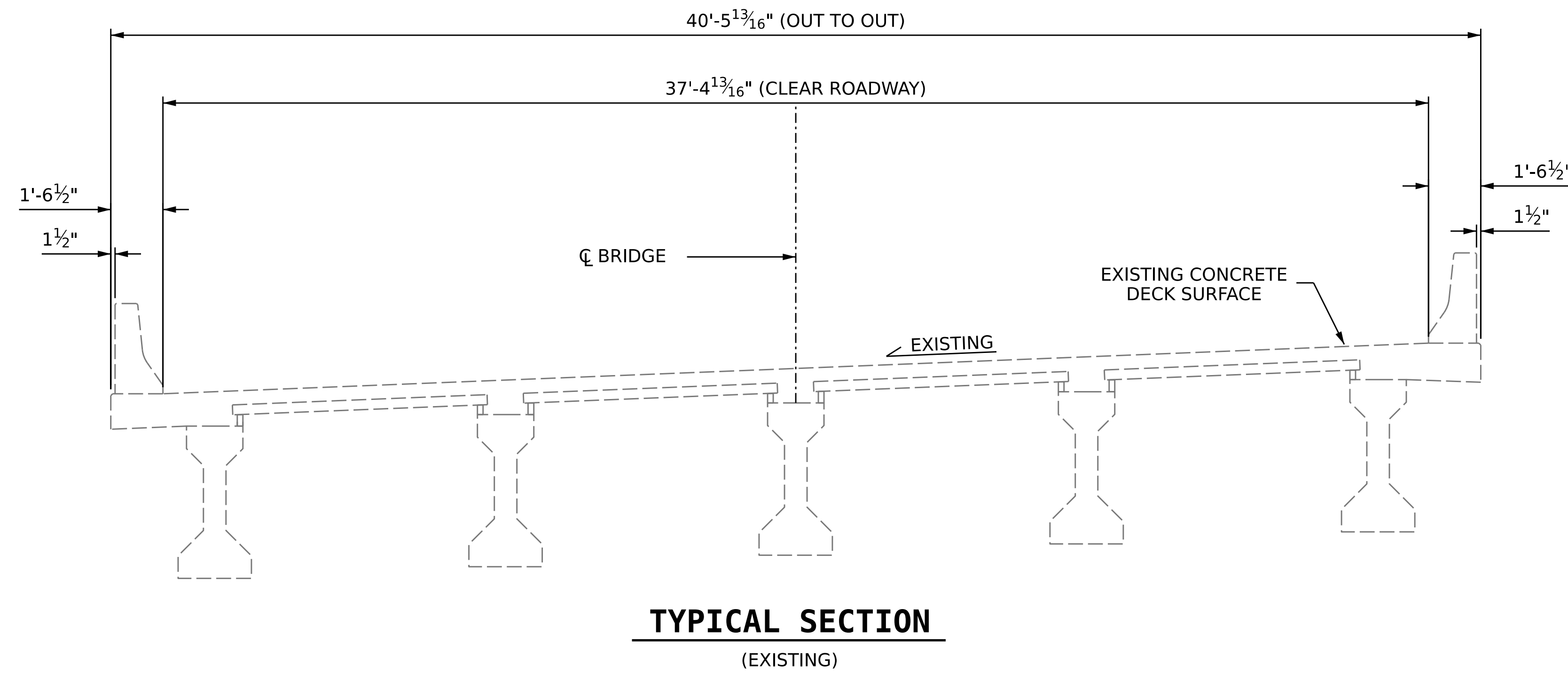
REVISIONS						SHEET NO. S12-1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 4
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES

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

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



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970257**



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

DRAWN BY : **J. BALDWIN** DATE : **06/2022**
 CHECKED BY : **A. ABRAHA** DATE : **06/2022**
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED


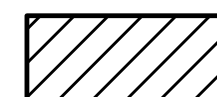

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S12-2
1			3			TOTAL SHEETS
2			4			4

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	753.7 SY	
SILANE DECK TREATMENT	753.7 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	73.9 SF	

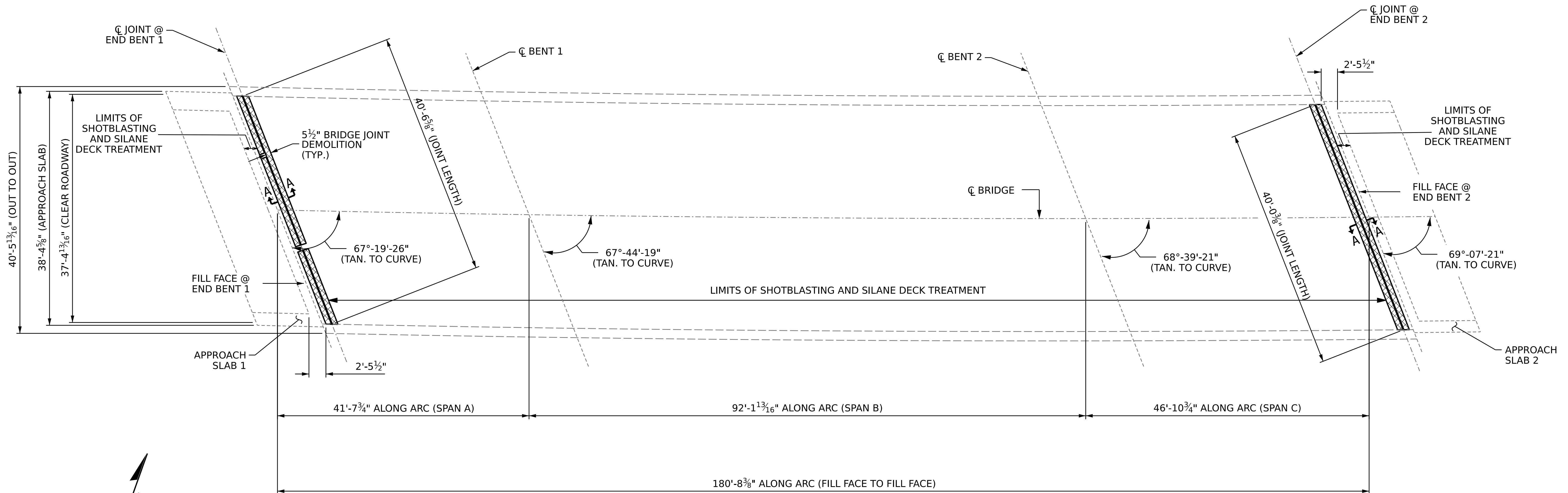
FOR SECTION A-A, SEE SHEET S11-3.

REPAIR KEY

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

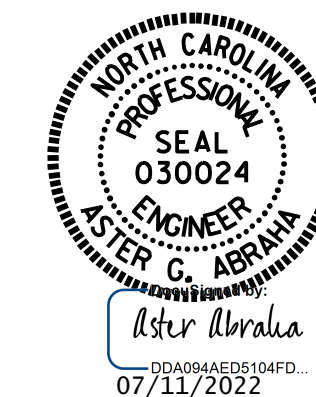
NOTES

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- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S12-4.



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970257**



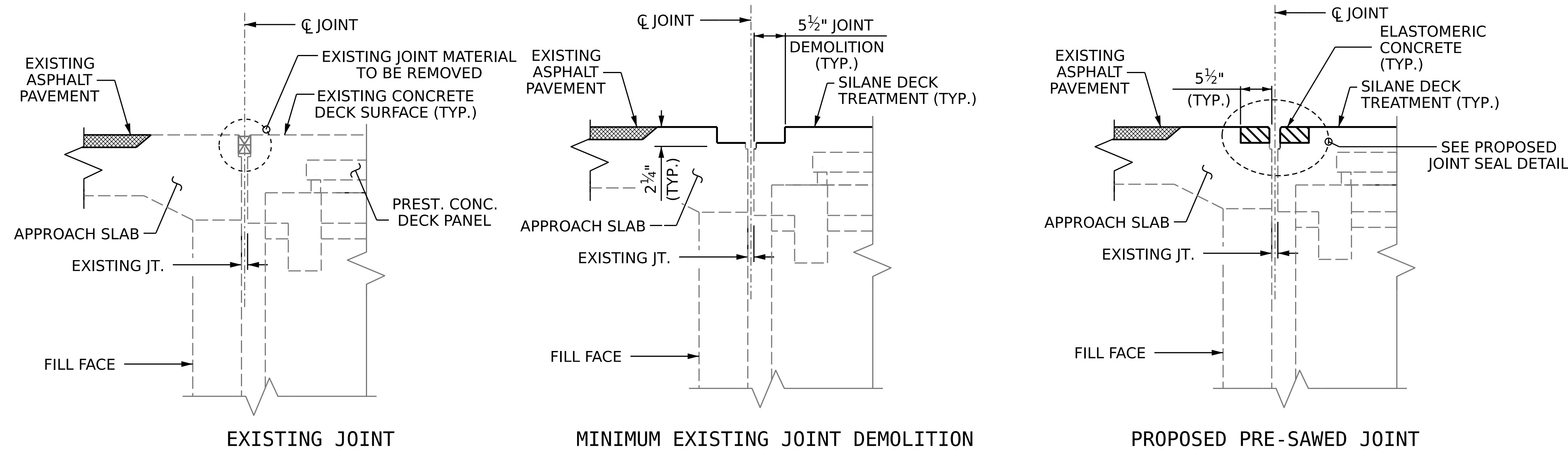
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

DRAWN BY : J. BALDWIN DATE : 6/2022
 CHECKED BY : A. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

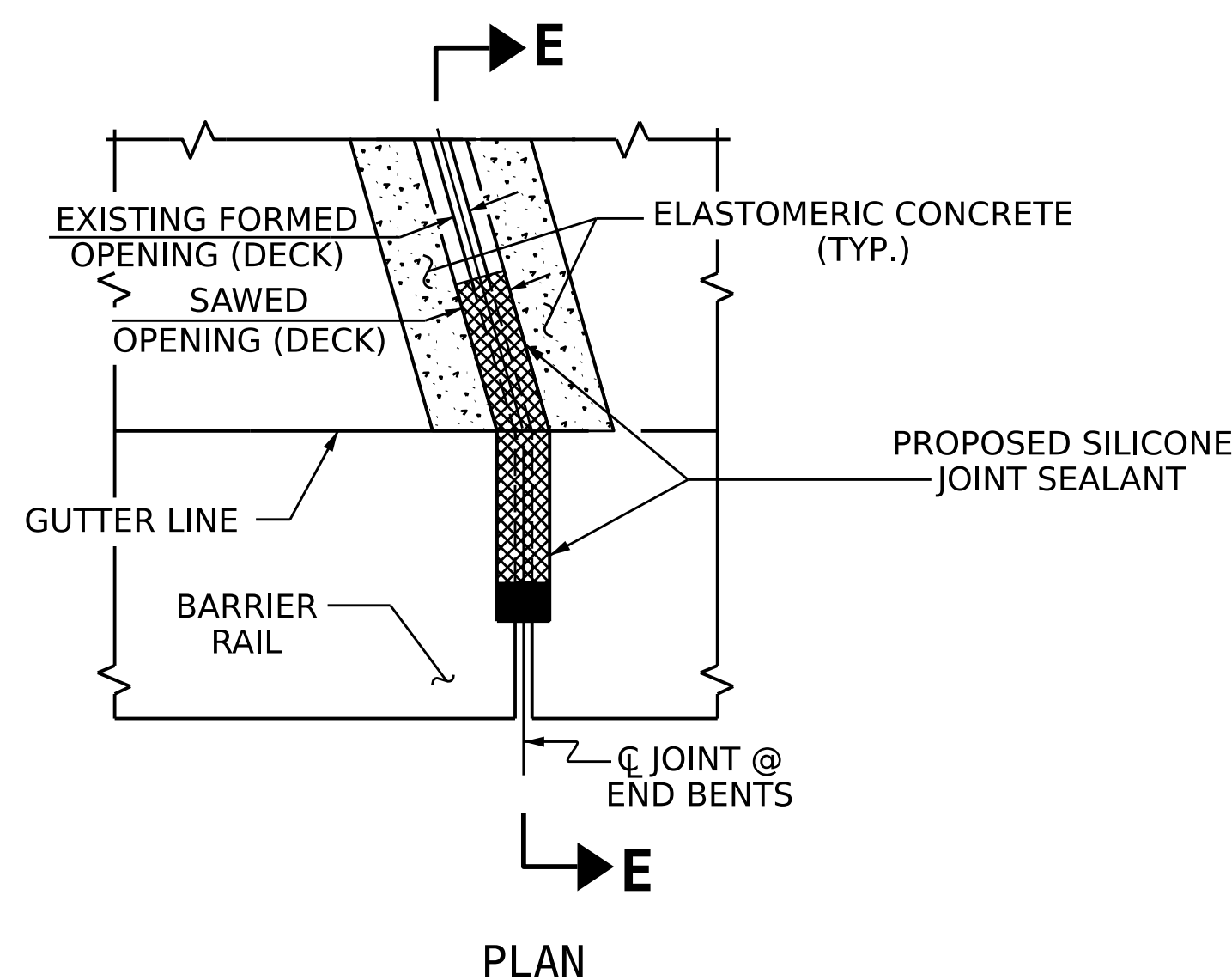
REVISIONS						SHEET NO. S12-3
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 4
2			4			



JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

SUMMARY OF QUANTITIES

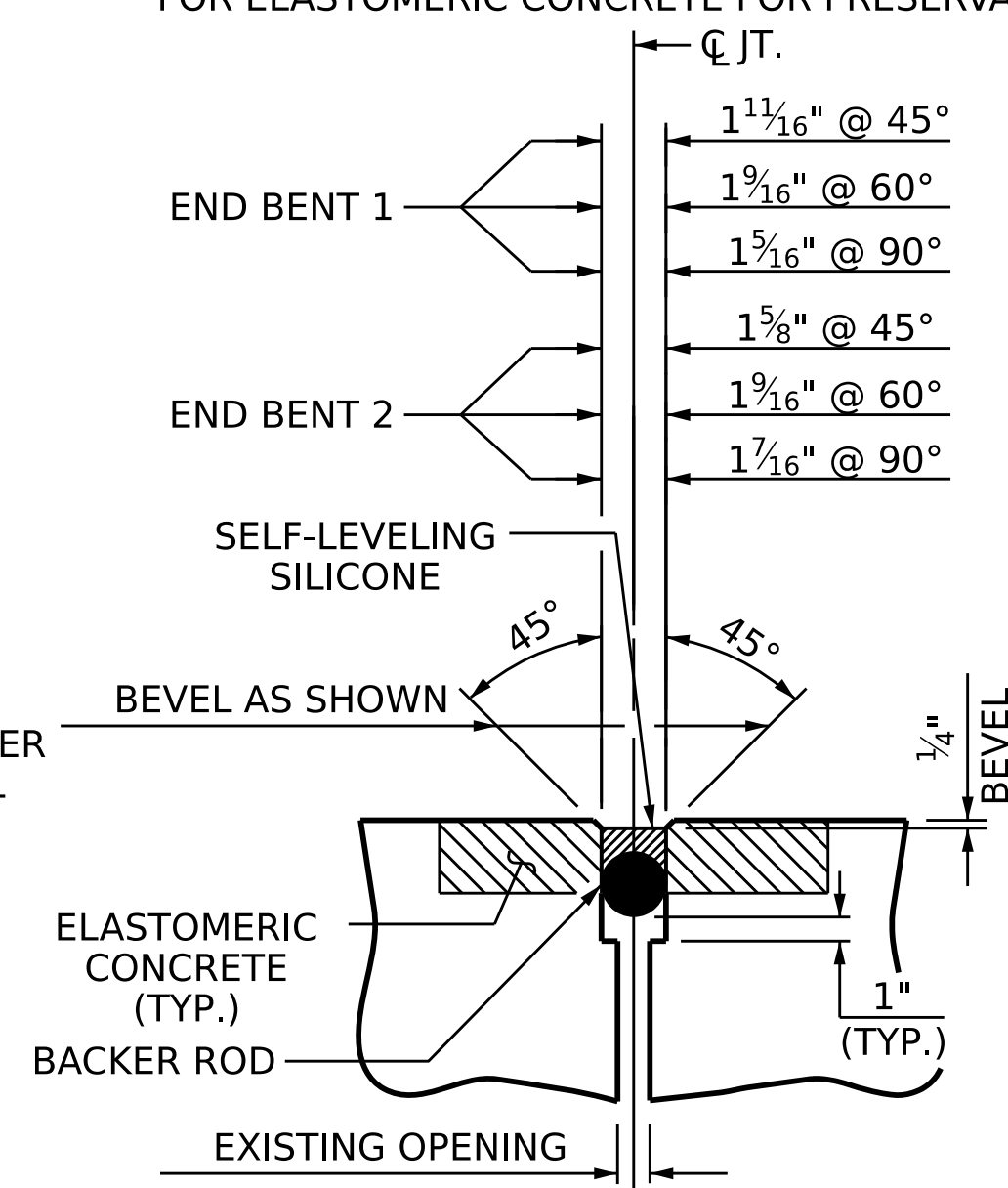
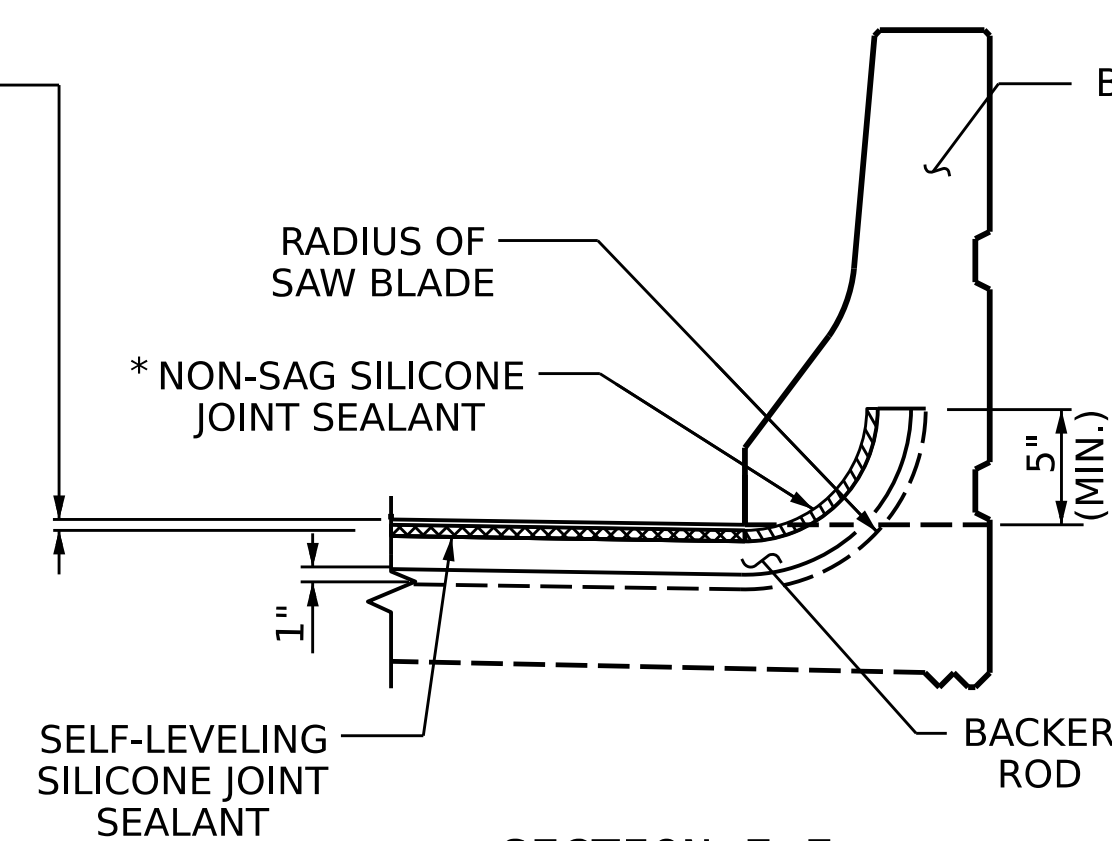
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	13.9 CF	
POURABLE SILICONE JOINT SEALANT	80.6 LF	



JOINT DETAIL AT BARRIER RAIL

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

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



PROPOSED JOINT SEAL DETAIL
(WITH SAWEED DIMENSIONS)

NOTES

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

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

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

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

THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

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

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

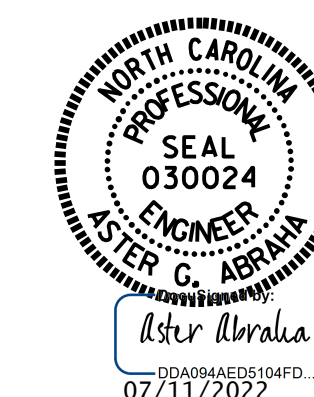
QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.

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

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

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROJECT NO. **HI-0006**
WILSON COUNTY
BRIDGE NO. **970257**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

**JOINT REPAIR
DETAILS**

DRAWN BY : J. BALDWIN DATE : 5/2022
CHECKED BY : A. ABRAHA DATE : 5/2022
DESIGN ENGINEER OF RECORD : -- DATE : --

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

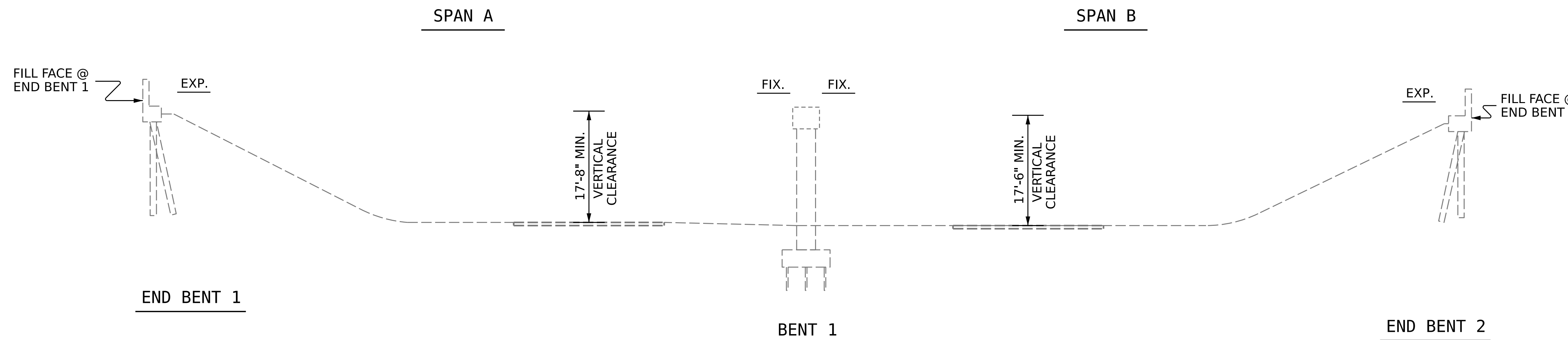
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S12-4
1			3			TOTAL SHEETS
2			4			4

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 06/21/2021.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

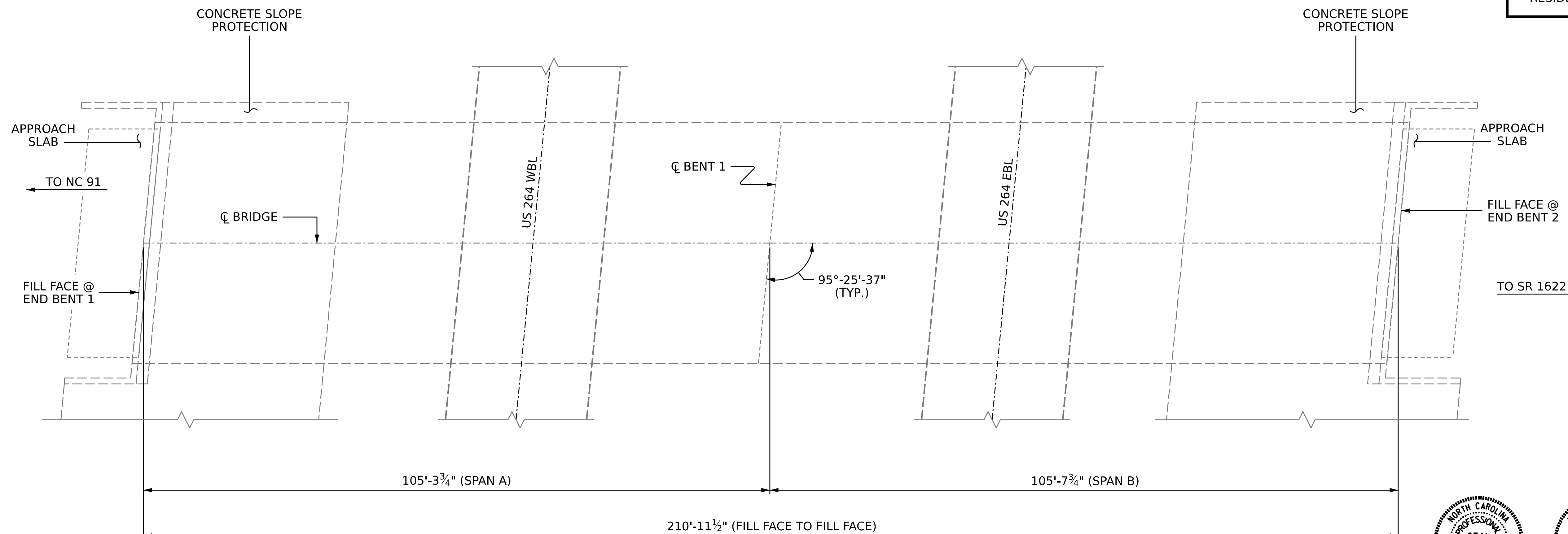
- PREPARE BRIDGE DECK SURFACE BY SHPTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.
- REPAIR PRESTRESSED CONCRETE GIRDERS.
- REMOVE UNSOUND CONCRETE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



SECTION ALONG CL BRIDGE

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

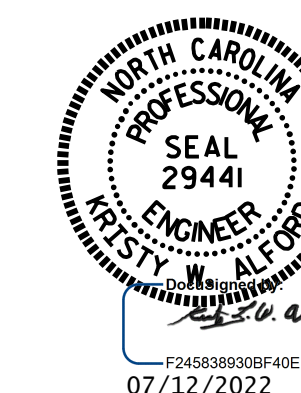
RESIDENT ENGINEER _____ DATE _____



PLAN

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

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970258**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON NC 58
 NORTHBOUND OVER US
 264 BYPASS BETWEEN
 SR 1622 AND NC 91

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

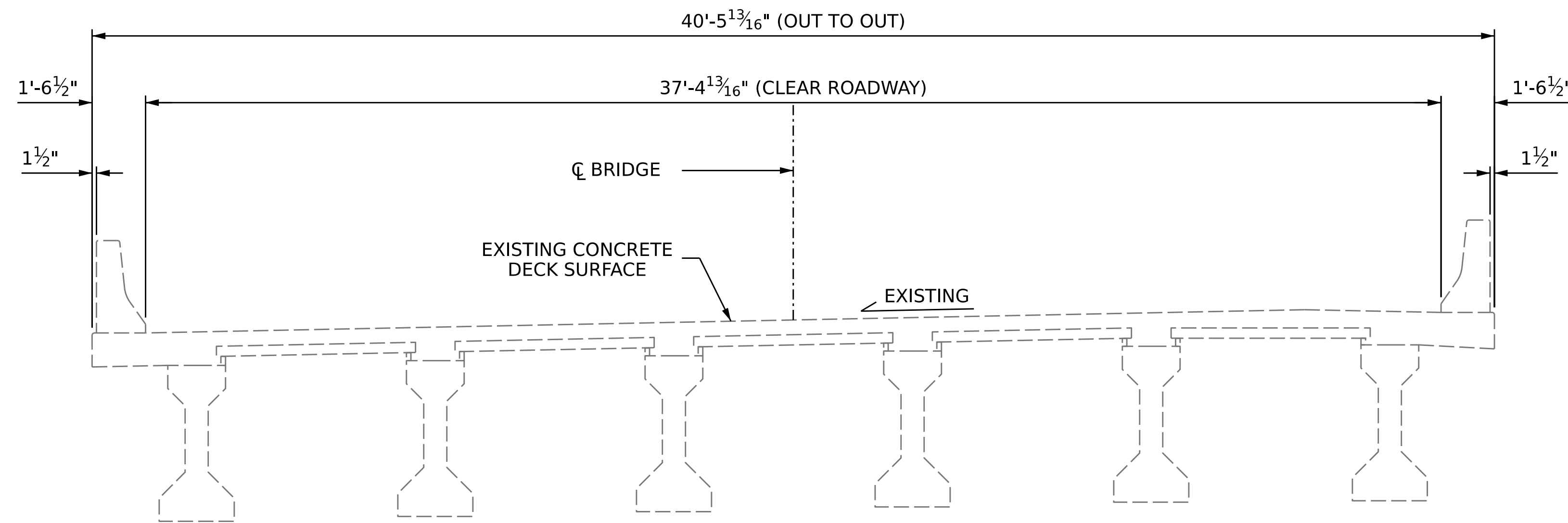
DOCUMENT NOT CONSIDERED
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 SIGNATURES COMPLETED

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NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			6

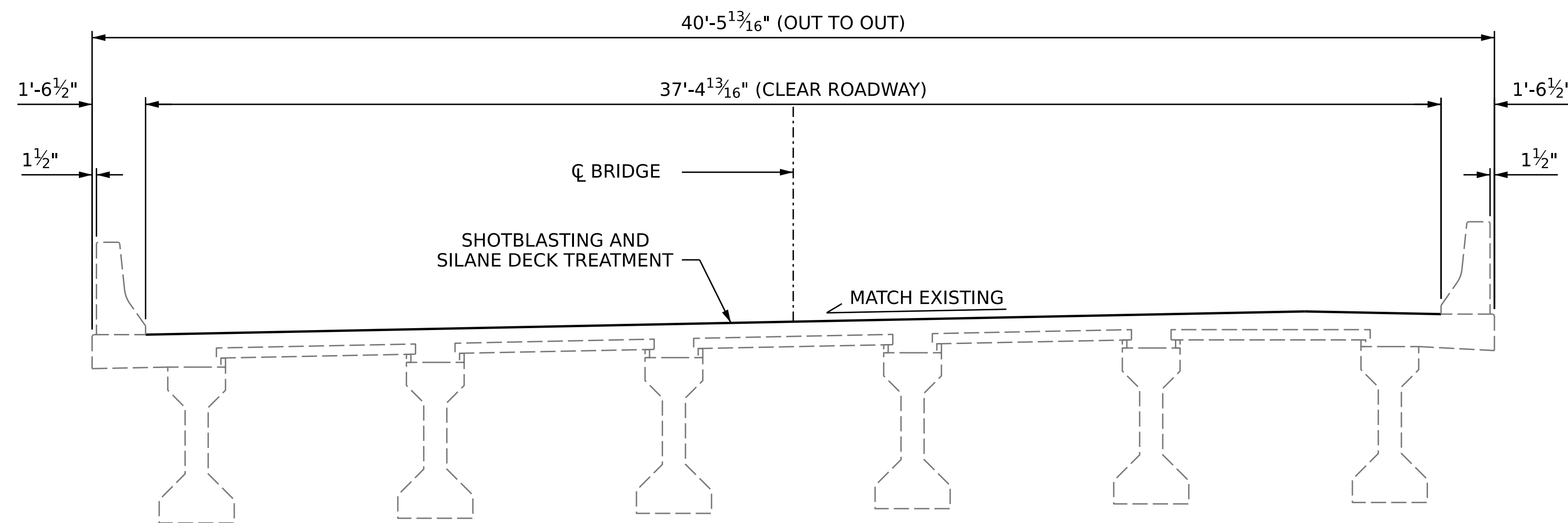
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SEE TRAFFIC PLANS FOR LANE WIDTH, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF SURFACE PREPARATION AND SILANE DECK TREATMENT.

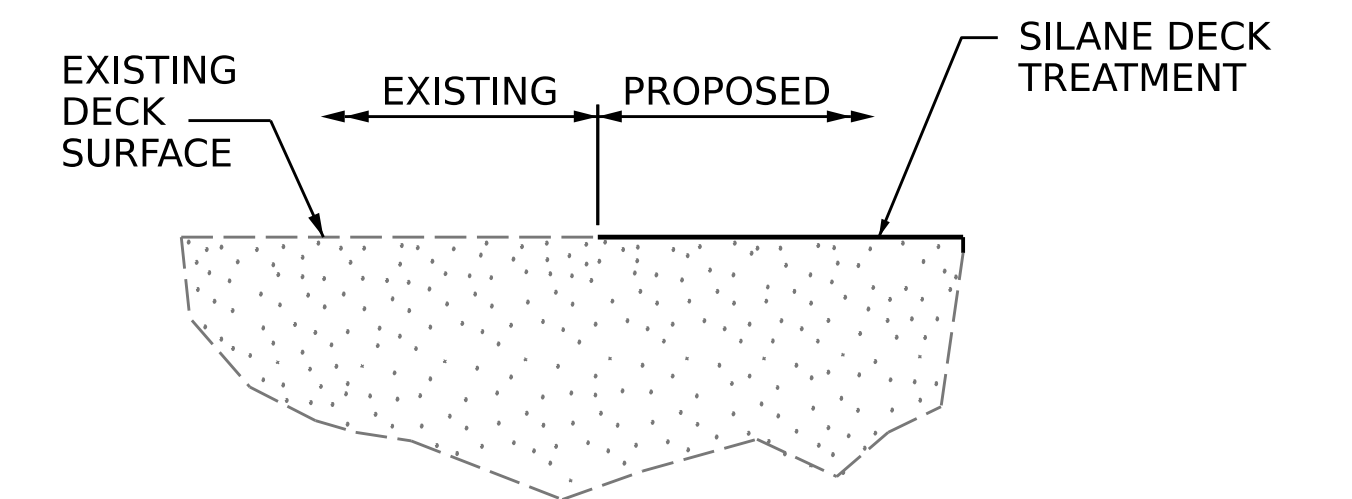
PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



TYPICAL SECTION
(EXISTING)



TYPICAL SECTION
(PROPOSED)



SILANE DECK TREATMENT DETAIL

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970258**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH




SUPERSTRUCTURE
 TYPICAL SECTION
 AND SILANE DECK
 TREATMENT DETAILS

REVISIONS						SHEET NO.
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1			3			6
2			4			

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

REPAIR KEY

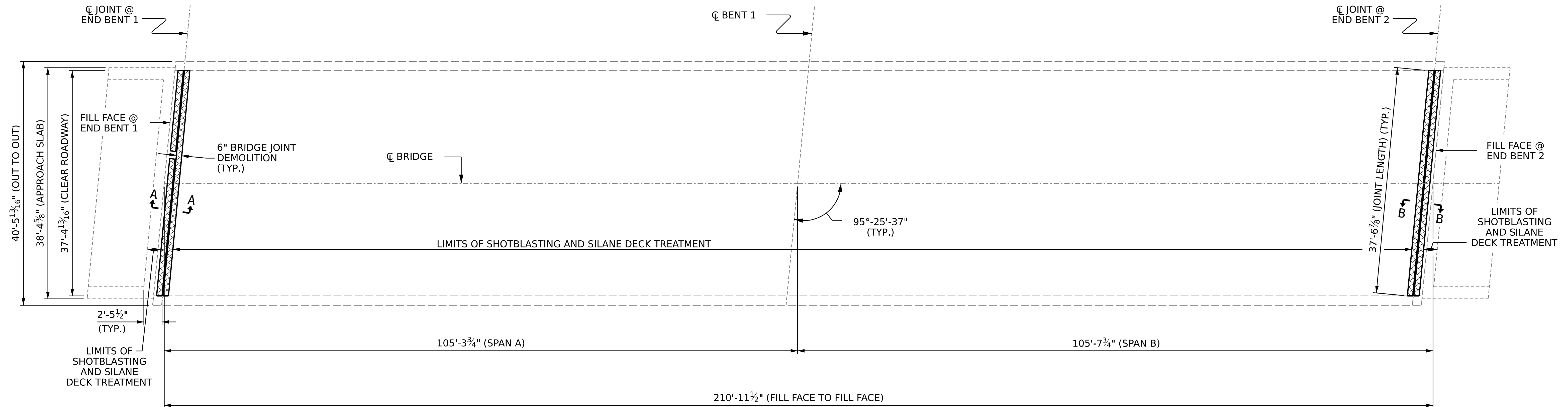
-  - SHOTBLASTING AND SILANE DECK TREATMENT
-  - CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
-  - BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A AND B-B, SEE JOINT REPAIR DETAILS SHEET S13-6.

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	879.8 SY	
SILANE DECK TREATMENT	879.8 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	75.1 SF	



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970258**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH



SILANE DECK TREATMENT

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

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REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
2			4			6

REPAIR KEY

-  DIAPHRAGM REPAIR
-  PRESTRESSED CONCRETE GIRDER REPAIR

NOTES

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

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

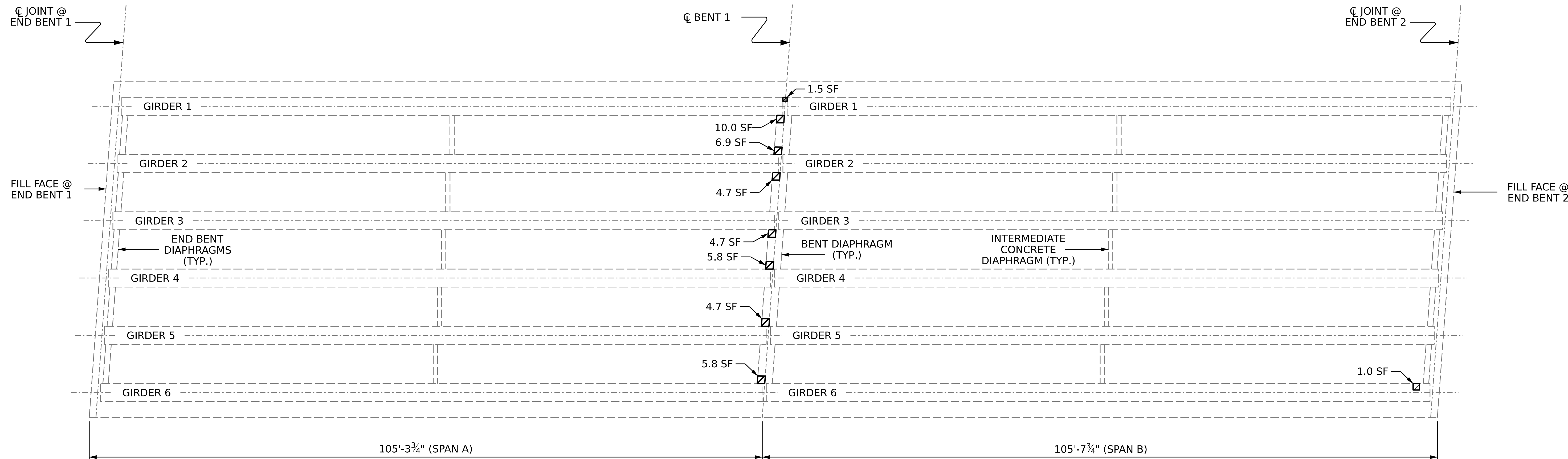
FOR CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS, SEE PRESTRESSED CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS SHEET S13-5.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK & OVERHANG	0.0	0.0		
BENT DIAPHRAGMS	44.1	14.7		
GIRDER REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
PC GIRDERS	1.0	0.3		

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



PLAN OF SPANS - UNDERSIDE REPAIRS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970258**



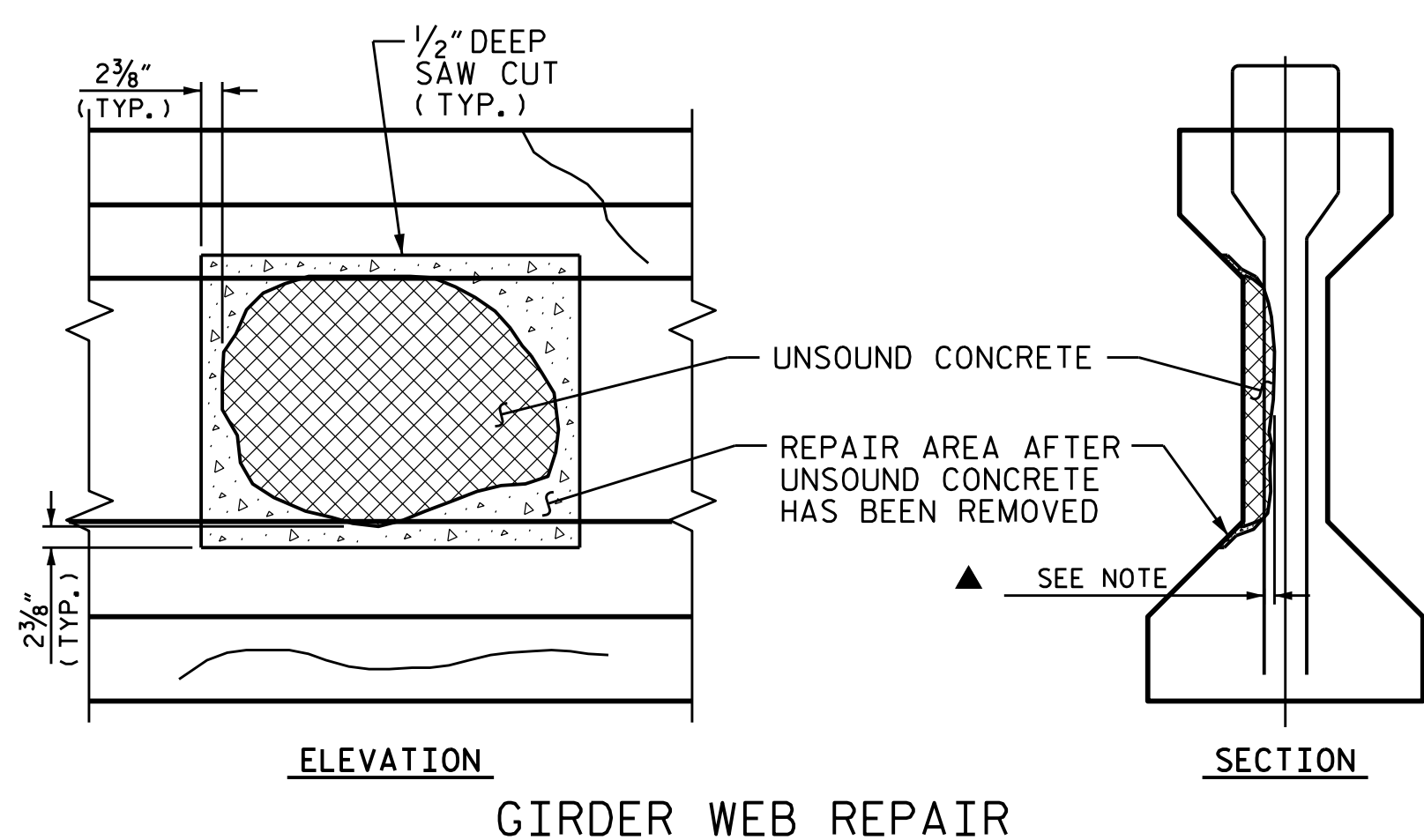
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE CONCRETE REPAIRS

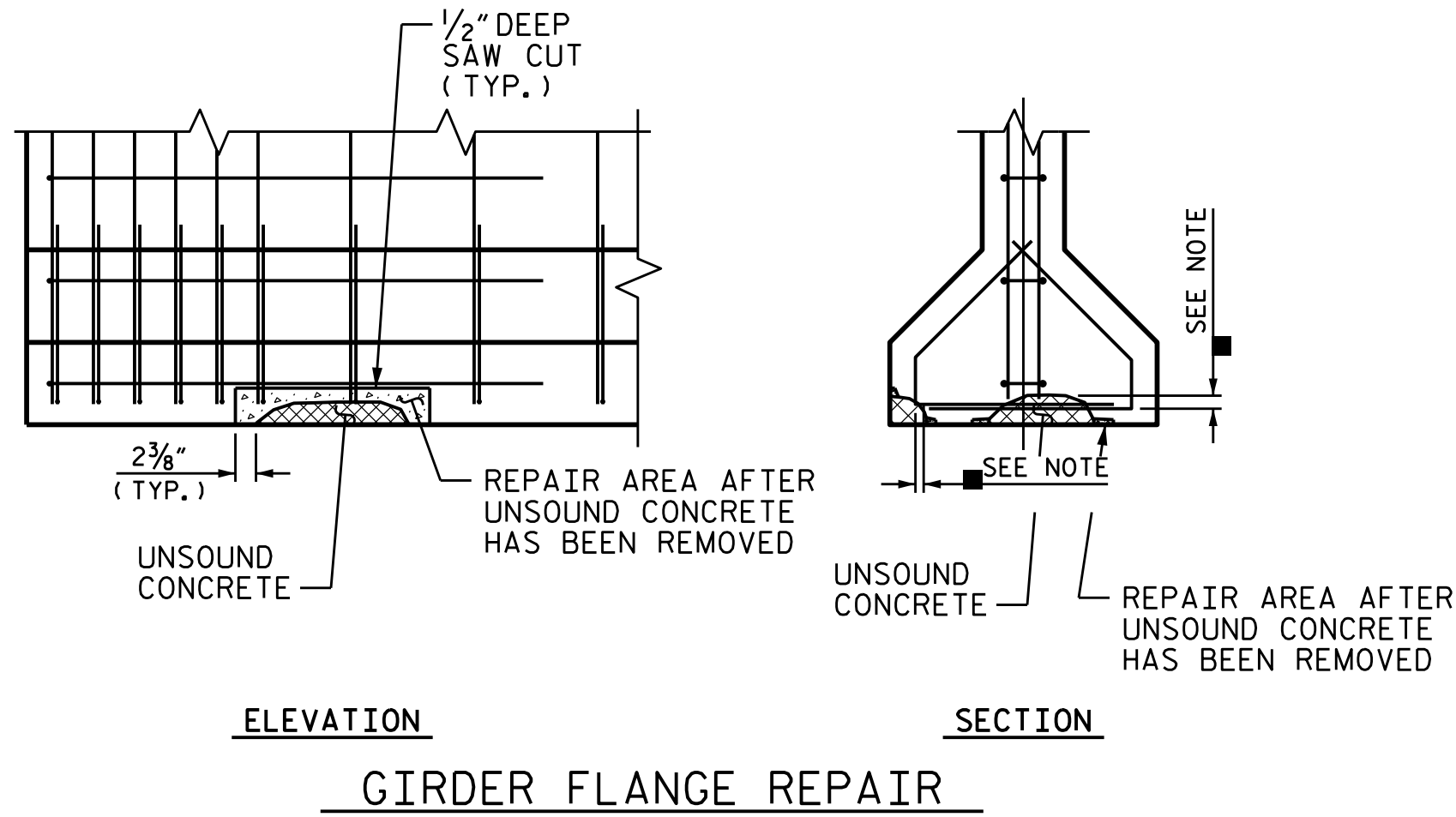
DRAWN BY : G. AYES DATE : 5/2022
 CHECKED BY : A. G. ABRAHA DATE : 5/2022
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
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2			4			6

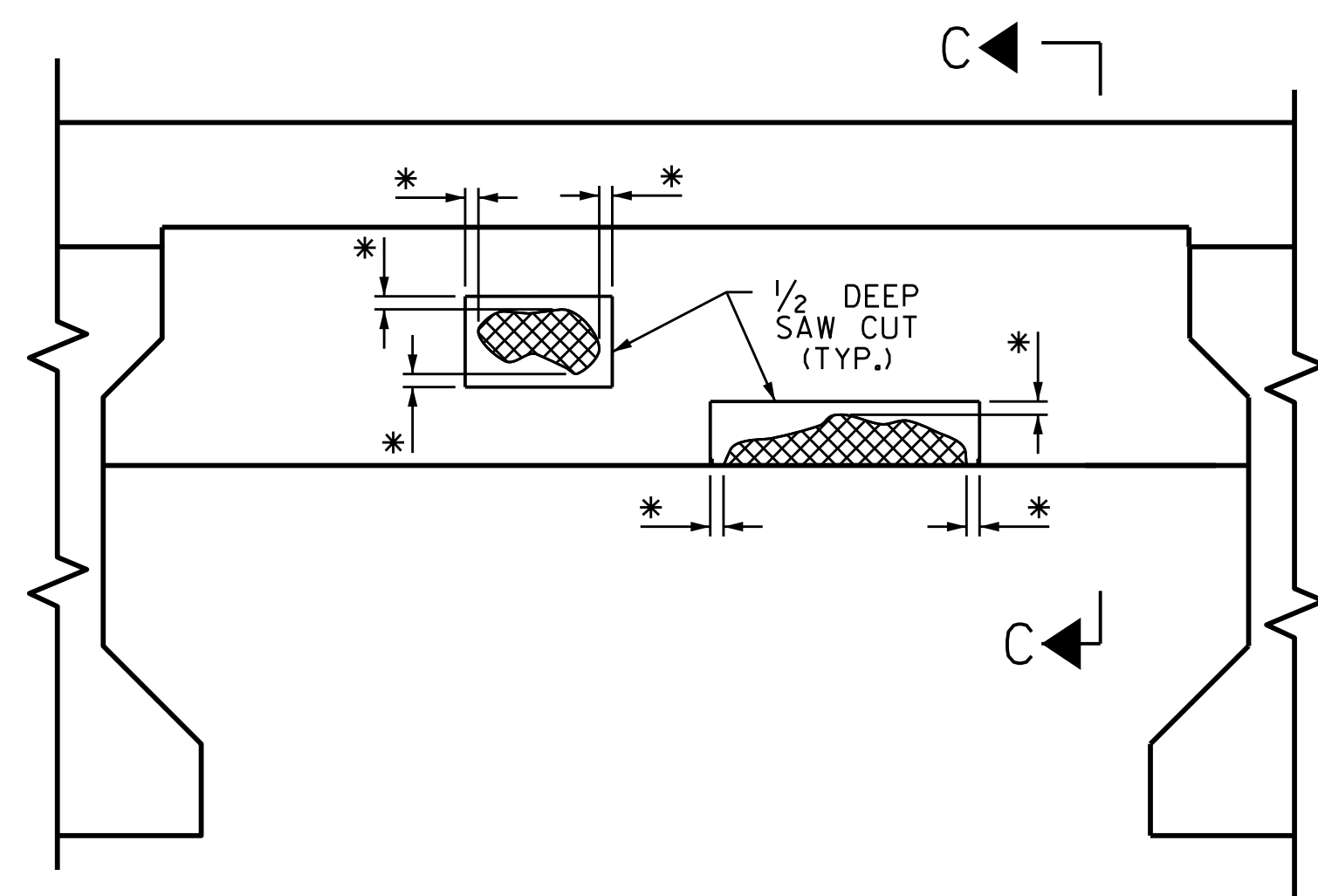


GIRDER WEB REPAIR



GIRDER FLANGE REPAIR

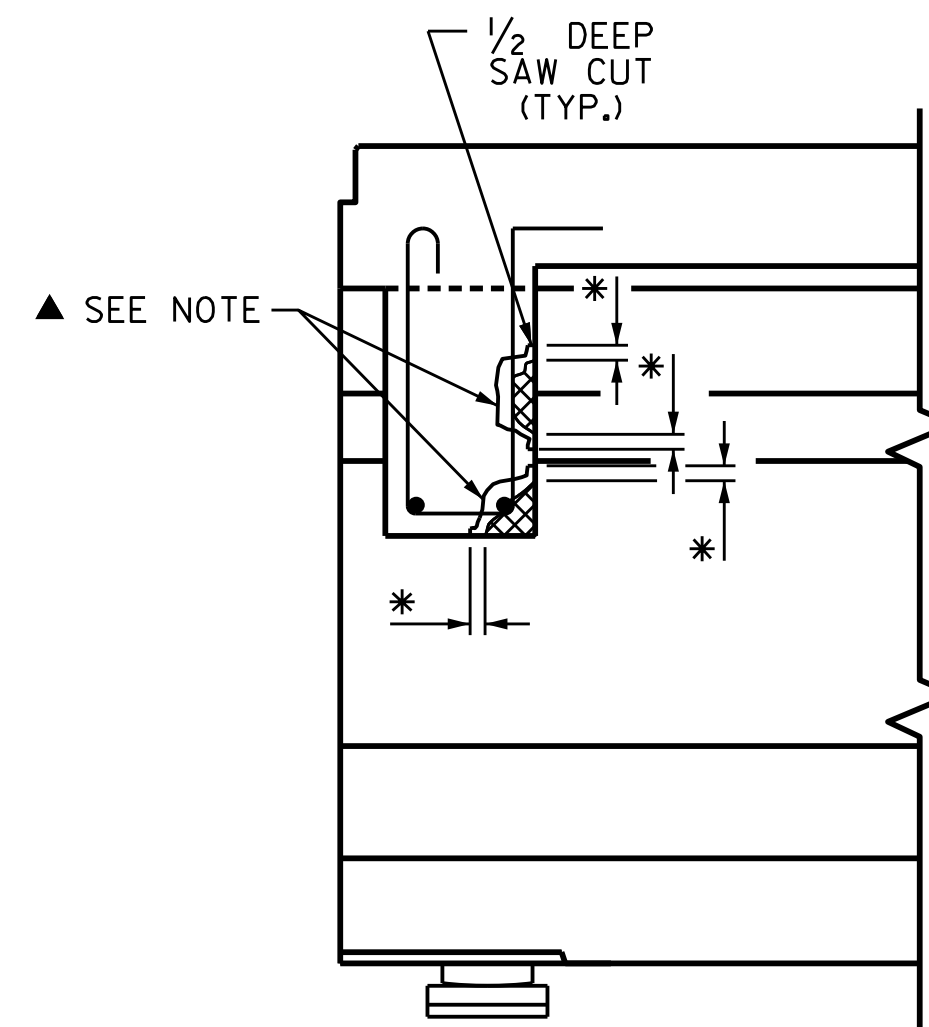
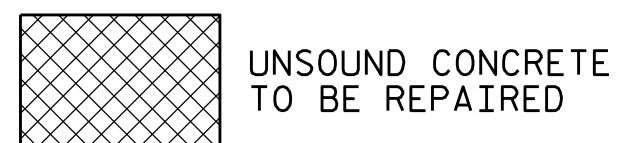
PRESTRESSED GIRDER REPAIR



TYPICAL SECTION

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

REPAIR KEY:



SECTION C-C

BENT DIAPHRAGM REPAIR DETAIL

(EXAMPLE DETAILS ONLY. ACTUAL REBAR SIZE & LOCATION MAY VARY)

NOTES:

PREPACKAGED MATERIAL IS REQUIRED.

CONSULT WITH THE ENGINEER TO DETERMINE PRELOADING REQUIREMENTS WHEN REPAIR IS WITHIN THE CENTER REGION OF THE BEAM (0.25L TO 0.75L).

FOR REPAIRS OVER TRAFFIC AND SHALLOW REPAIRS THAT DO NOT ENGAGE REINFORCEMENT, ANCHOR PATCH MATERIAL USING 1/4" GALVANIZED BOLTS, EPOXY ANCHORED WITH 2" EMBEDMENT. PLACE BOLTS IN A 6" GRID. USE A LATEX OR EPOXY PATCH MATERIAL FOR IMPROVED BOND. USE EXTREME CARE TO NOT DAMAGE STRANDS.

FOR PRESTRESSED CONCRETE GIRDER REPAIRS, SEE SPECIAL PROVISIONS.

PRESTRESSED GIRDER REPAIR SEQUENCE:

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

PROJECT NO. HI-0006
 WILSON COUNTY
 BRIDGE NO. 970258

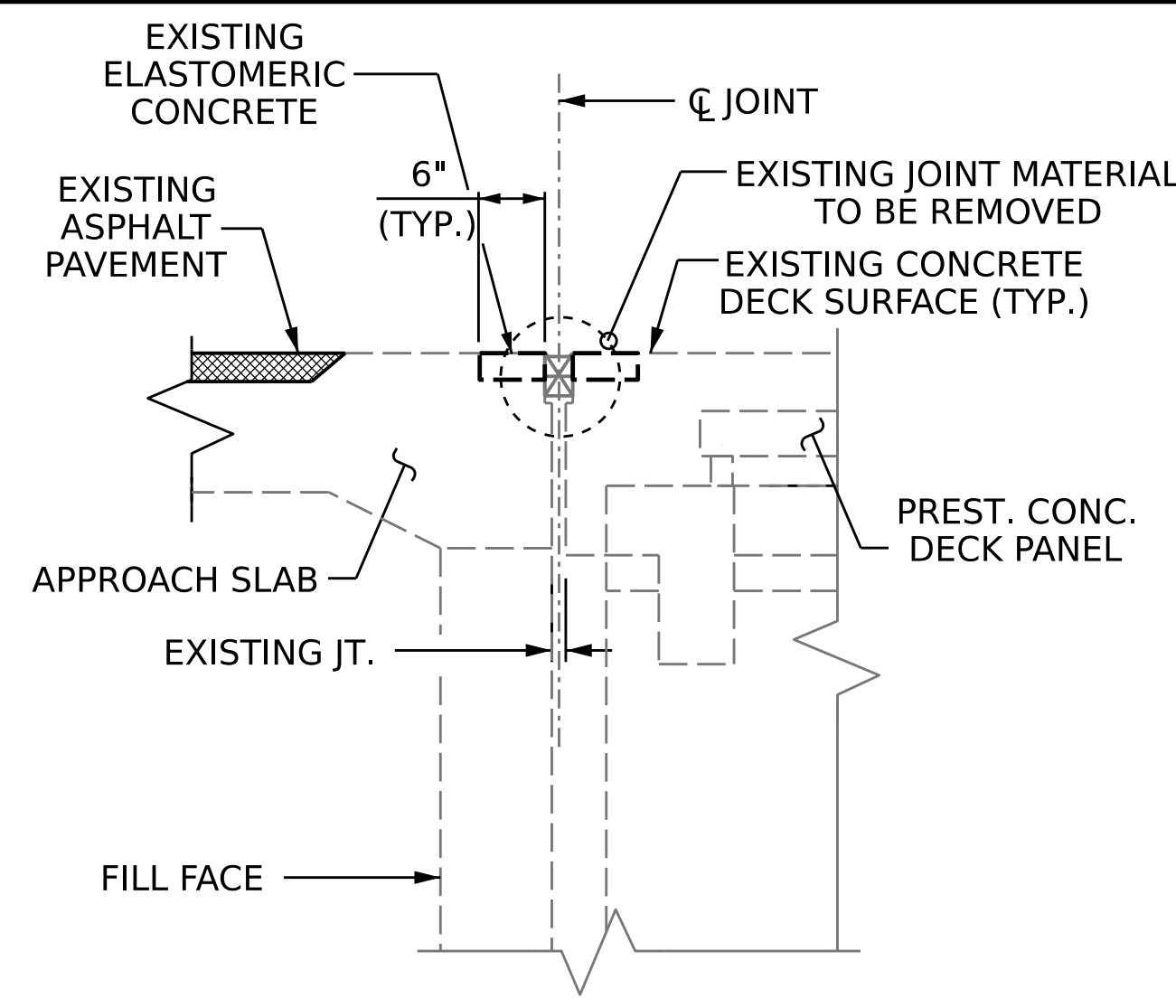


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 PRESTRESSED CONCRETE
 GIRDER AND DIAPHRAGM
 REPAIR DETAILS

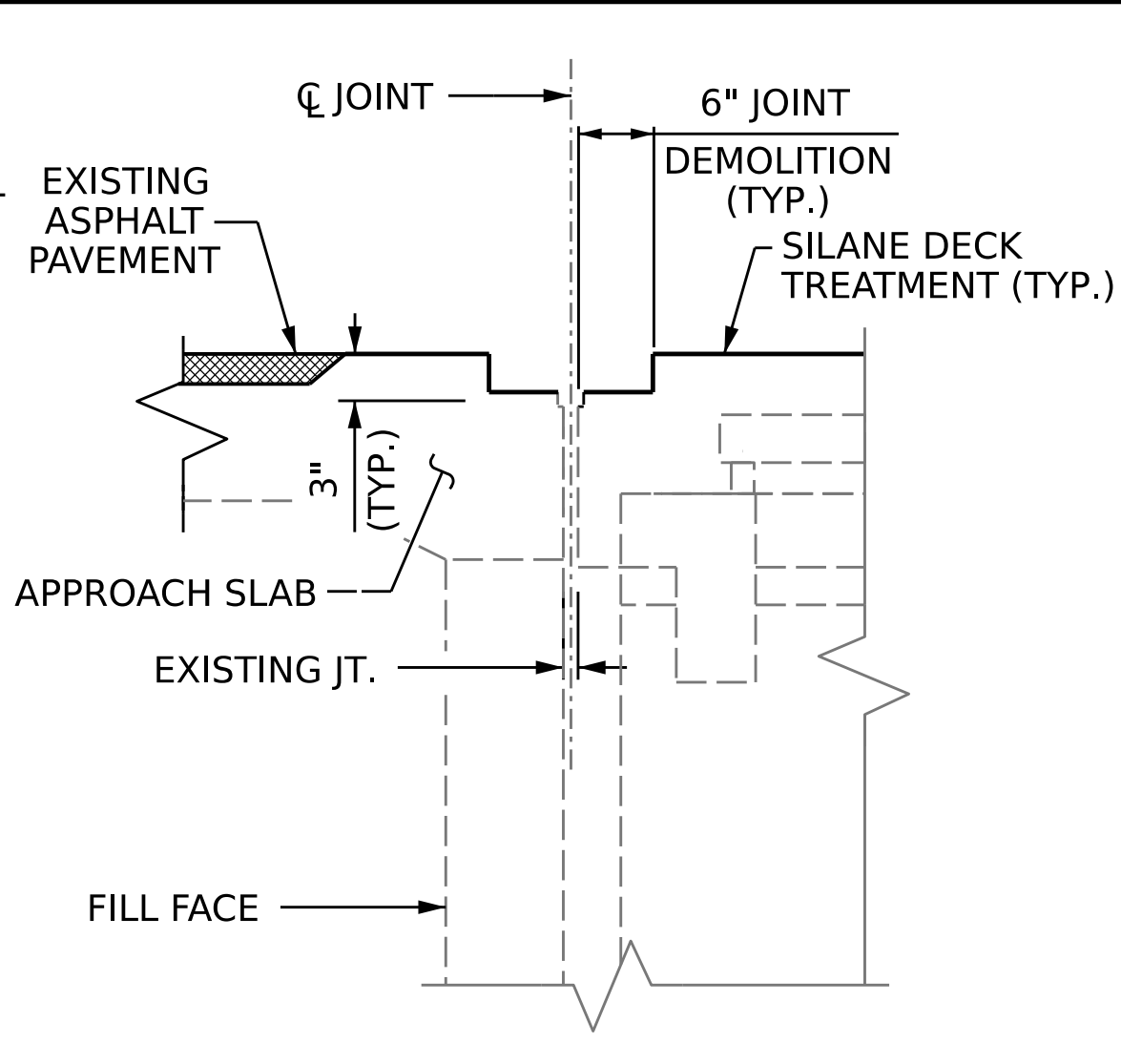
ASSEMBLED BY : G. AYES	DATE : 5/2022
CHECKED BY : A. G. ABRAHA	DATE : 5/2022
DRAWN BY : NAP 08/18	
CHECKED BY :	

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

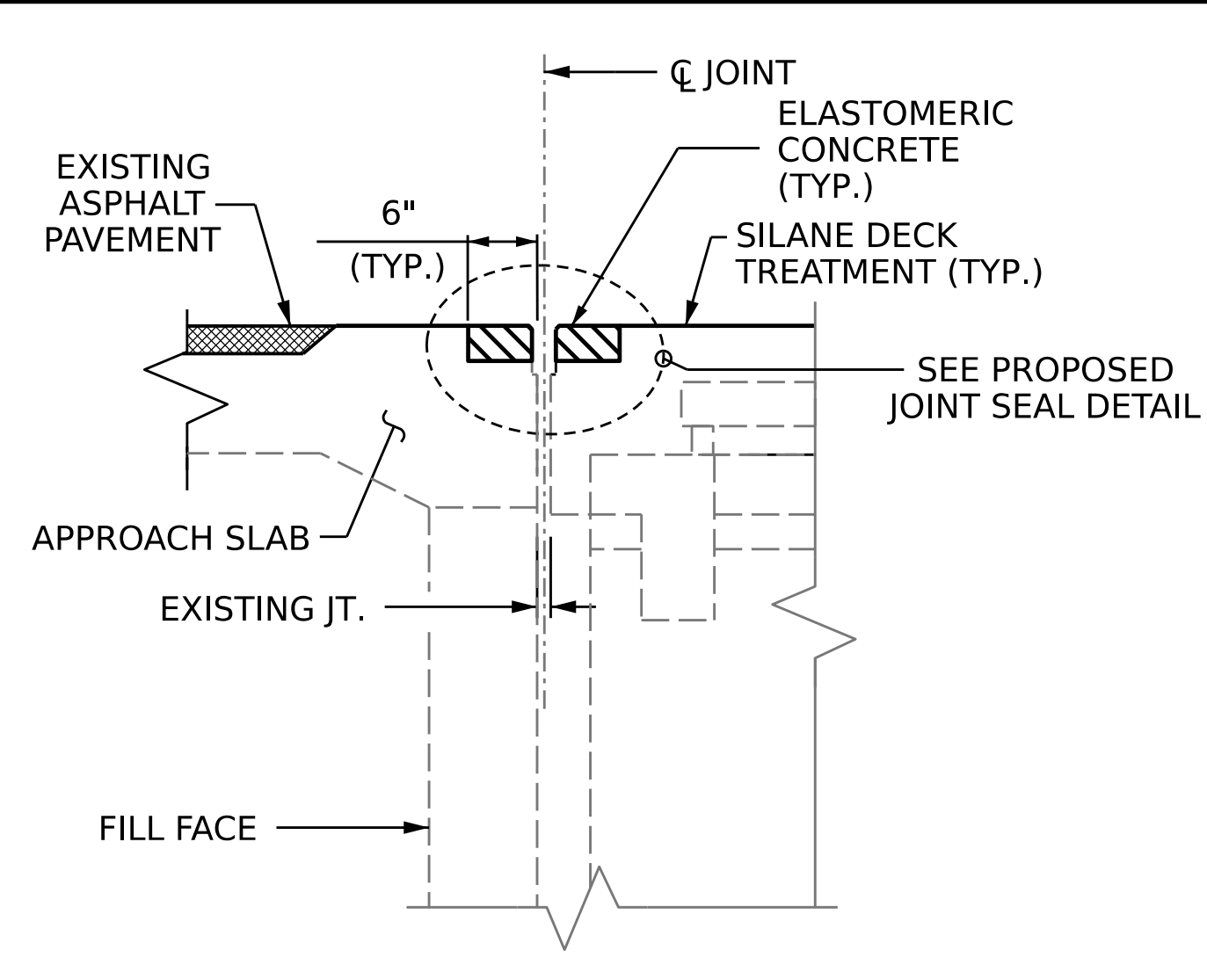
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2			4			TOTAL SHEETS 6



EXISTING JOINT



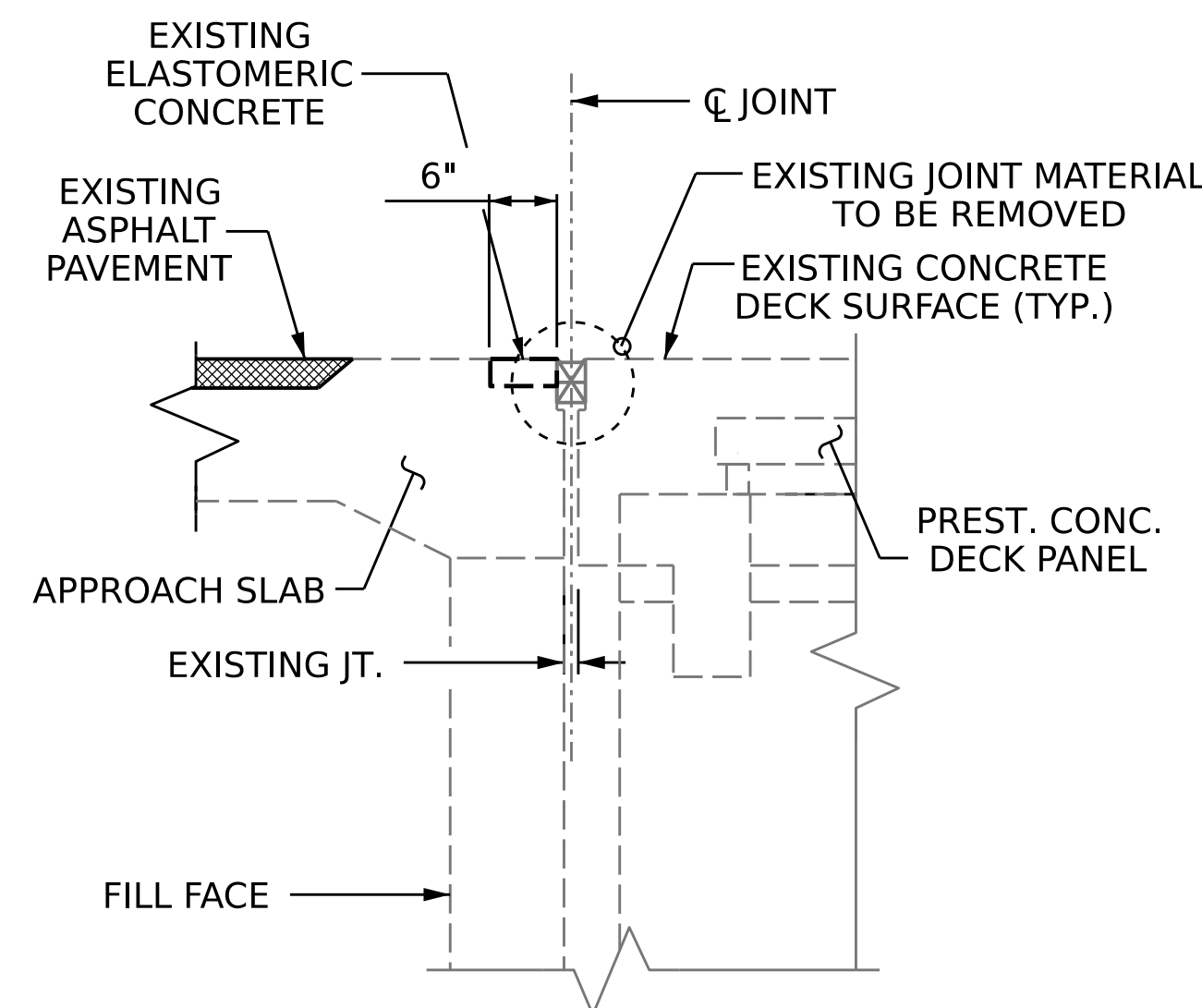
MINIMUM EXISTING JOINT DEMOLITION



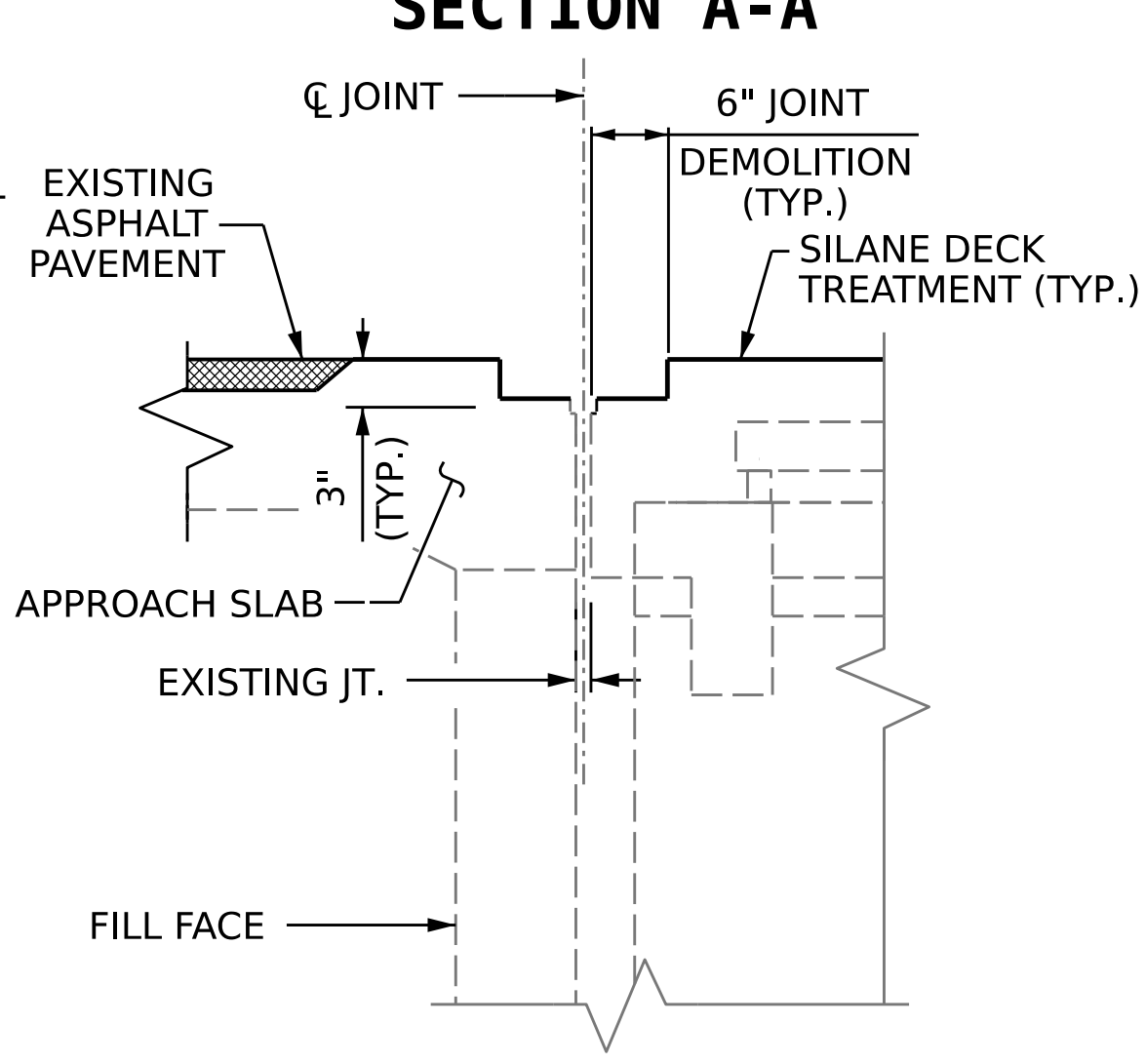
PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

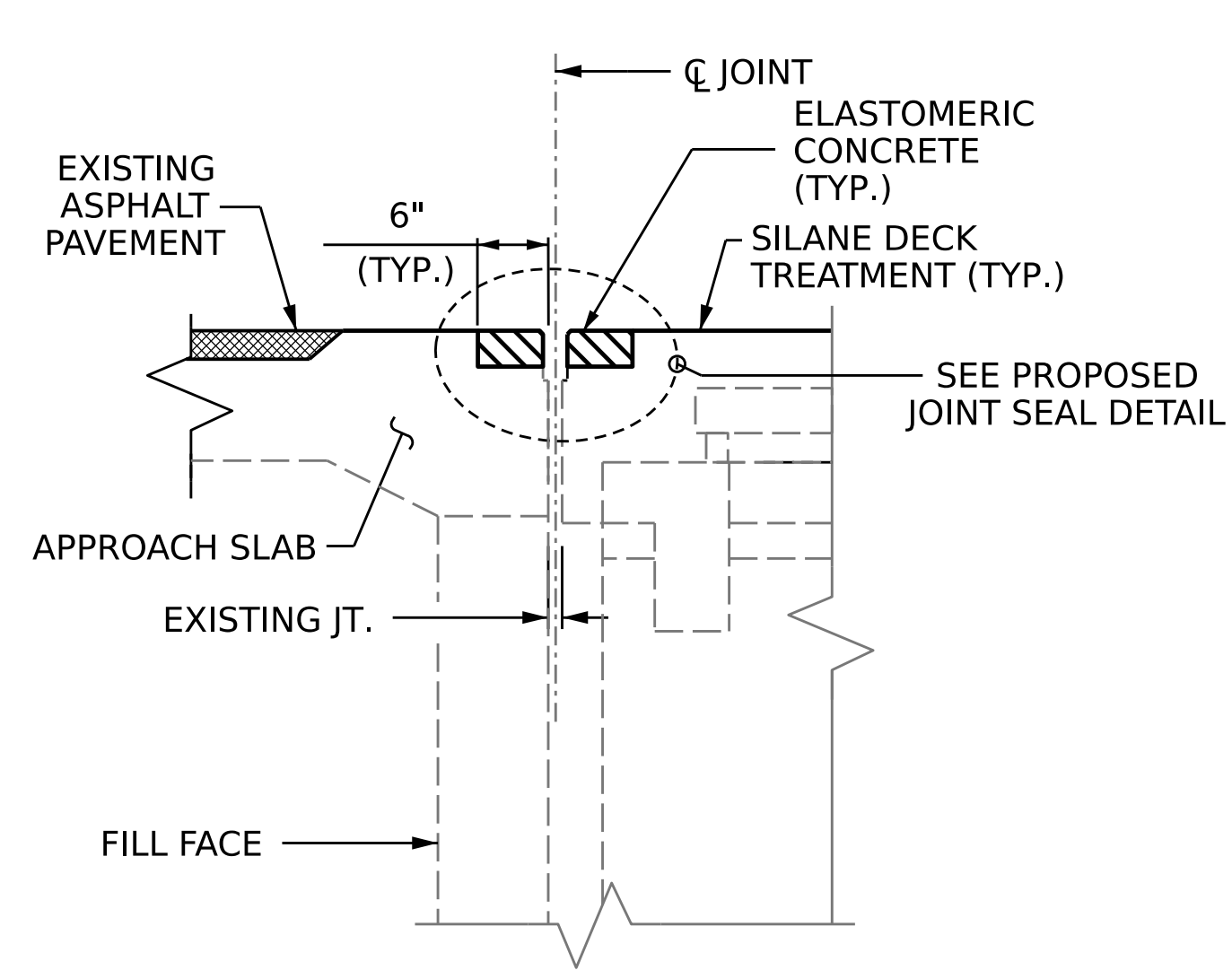
SECTION A-A



EXISTING JOINT



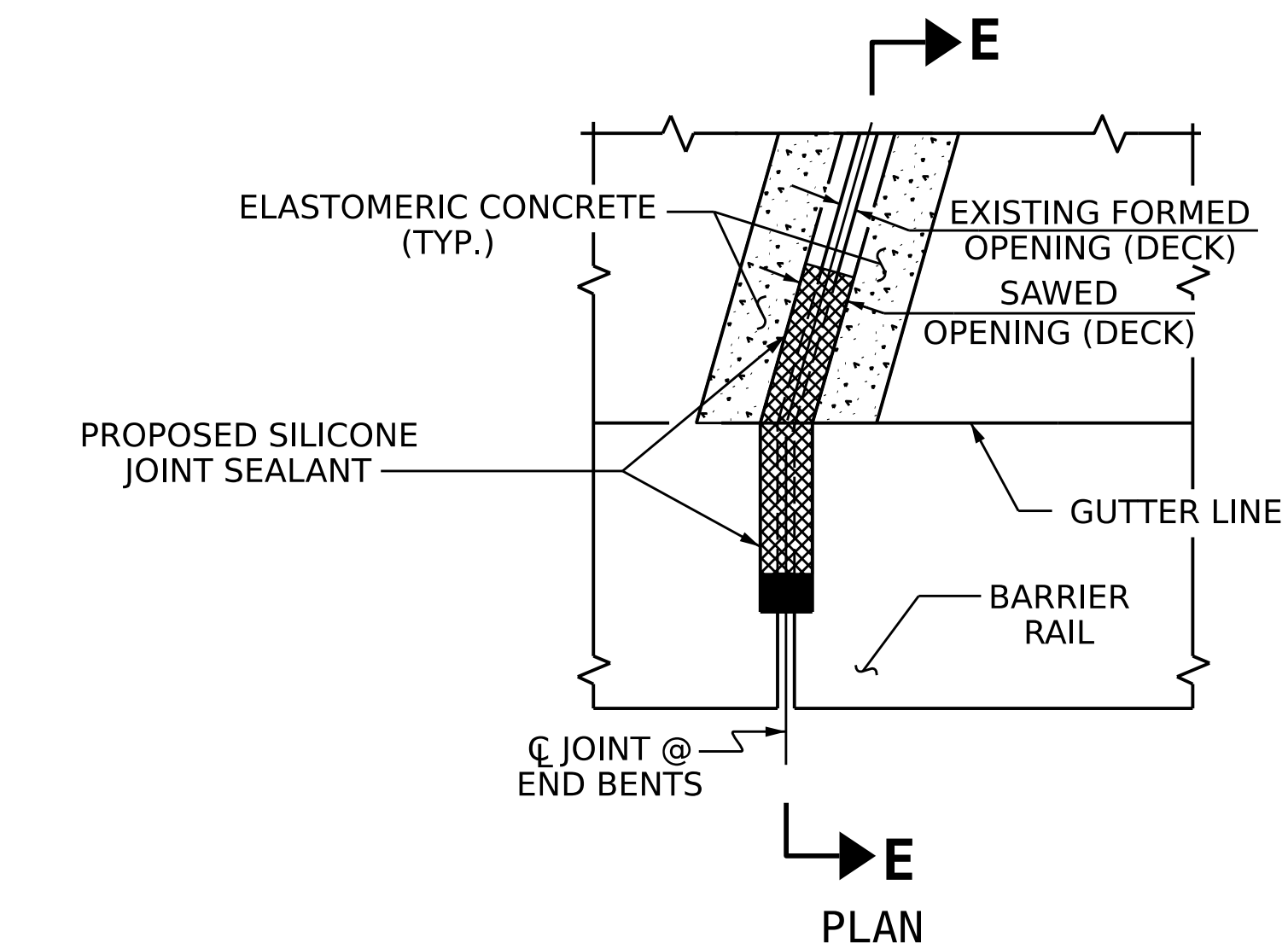
MINIMUM EXISTING JOINT DEMOLITION



PROPOSED PRE-SAWED JOINT

JOINT INSTALLATION SEQUENCE AT END BENTS

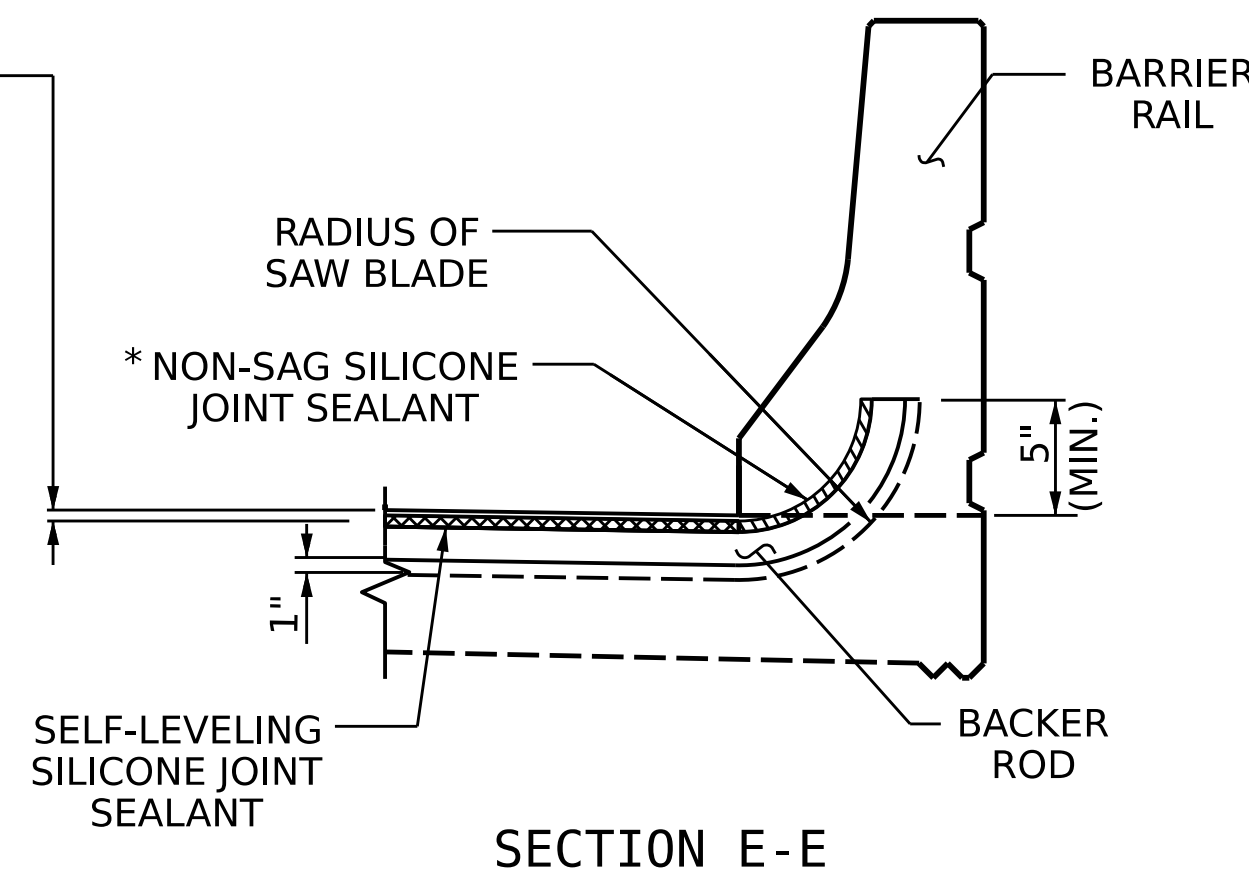
SECTION B-B



PLAN

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

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

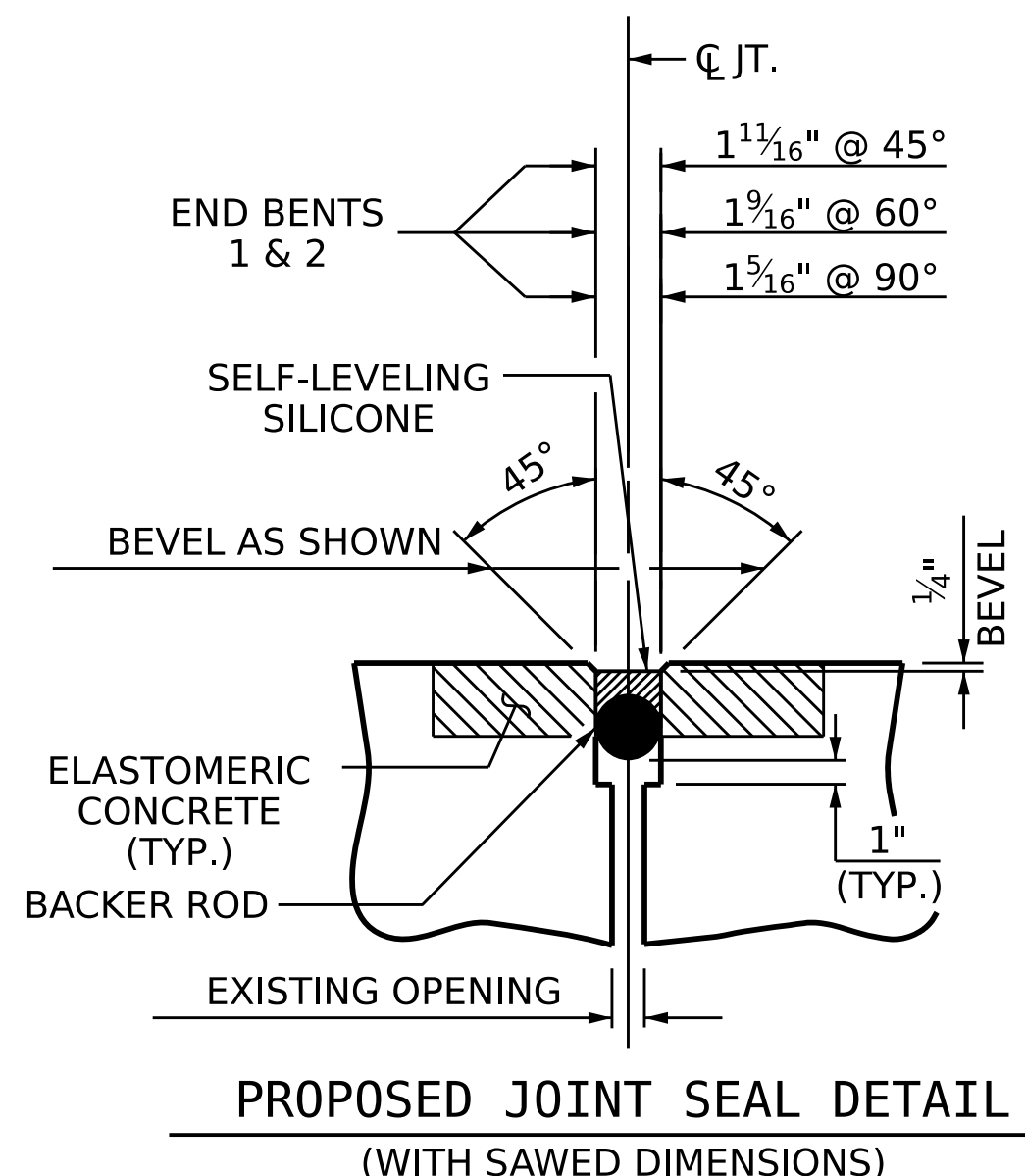


SECTION E-E

JOINT DETAIL AT BARRIER RAIL

NOTES

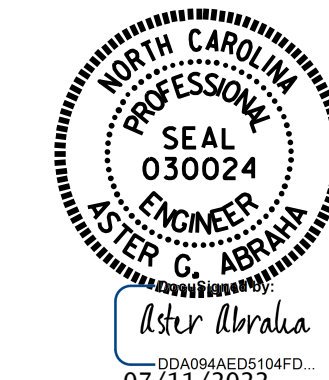
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.
- THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE BACKER ROD FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.
- ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.
- THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.
- POURABLE SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.
- DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.
- QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.
- FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.
- FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROPOSED JOINT SEAL DETAIL (WITH SAWED DIMENSIONS)

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	18.8 CF	
POURABLE SILICONE JOINT SEALANT	75.2 LF	

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970258**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

JOINT REPAIR DETAILS

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

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S13-6
1			3			TOTAL SHEETS
2			4			6

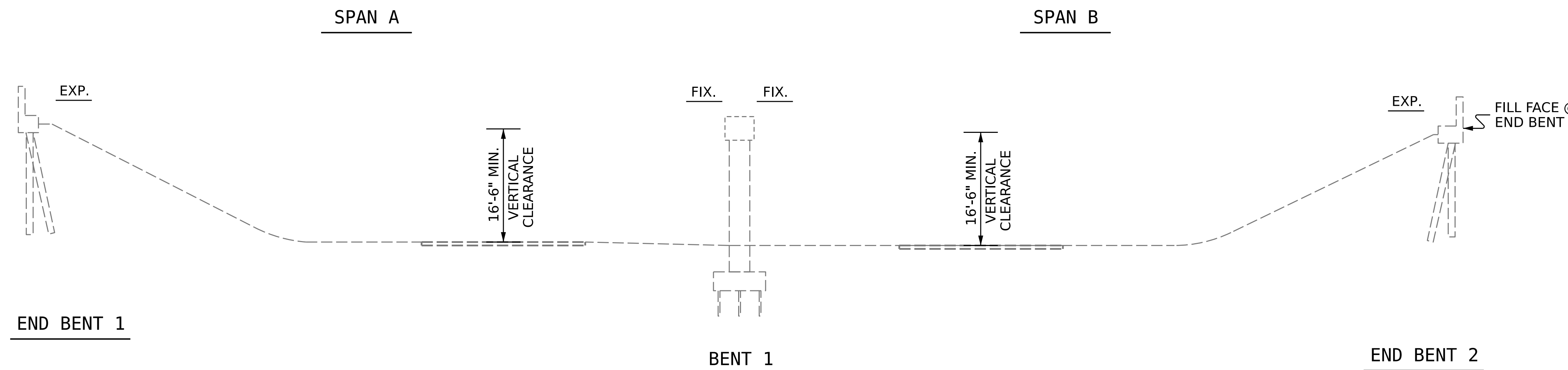
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 05/10/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

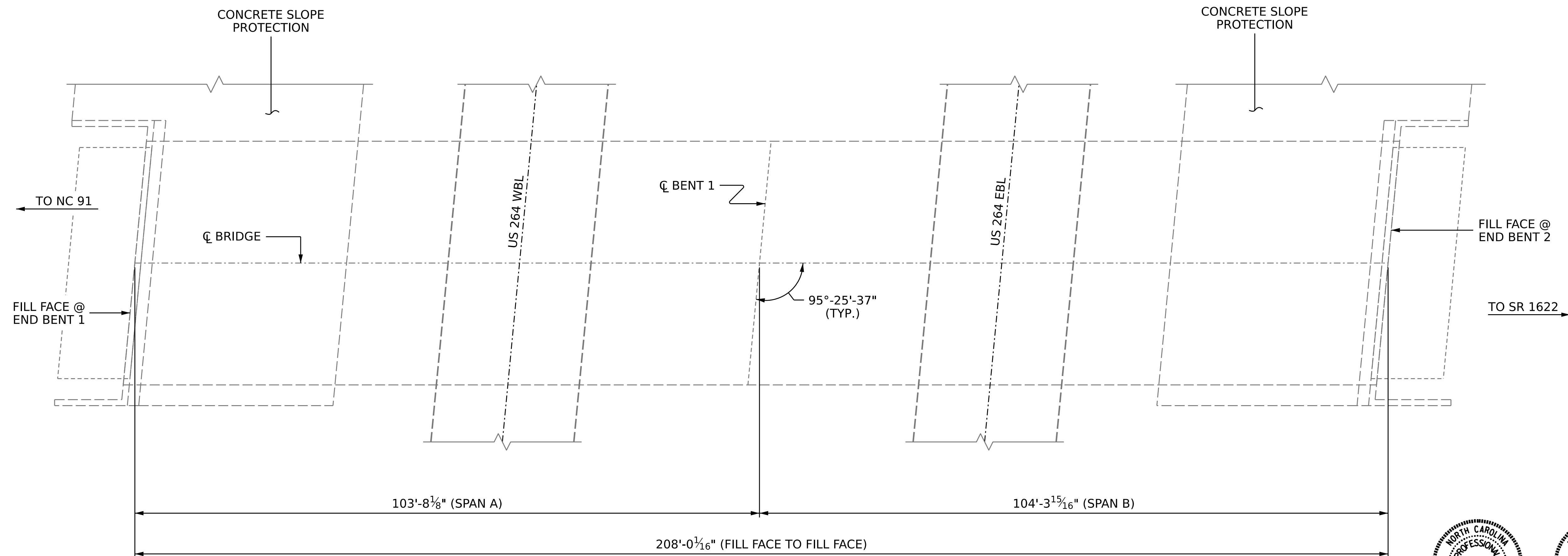
- PREPARE BRIDGE DECK SURFACE BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.



SECTION ALONG Q BRIDGE

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

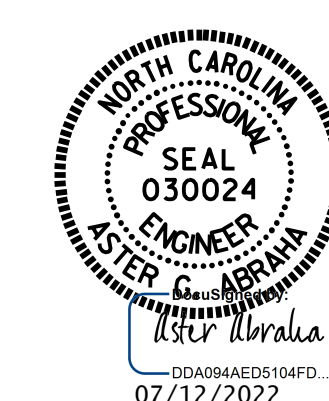
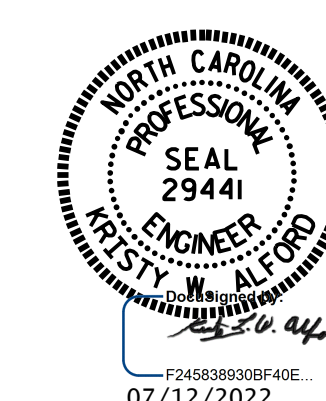
RESIDENT ENGINEER _____ DATE _____



PLAN

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

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970259**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON NC 58
 SOUTHBOUND OVER
 US 264 BYPASS BETWEEN
 SR 1622 AND NC 91

DRAWN BY : G. AYES DATE : 5/2022
 CHECKED BY : A. G. ABRAHA DATE : 5/2022
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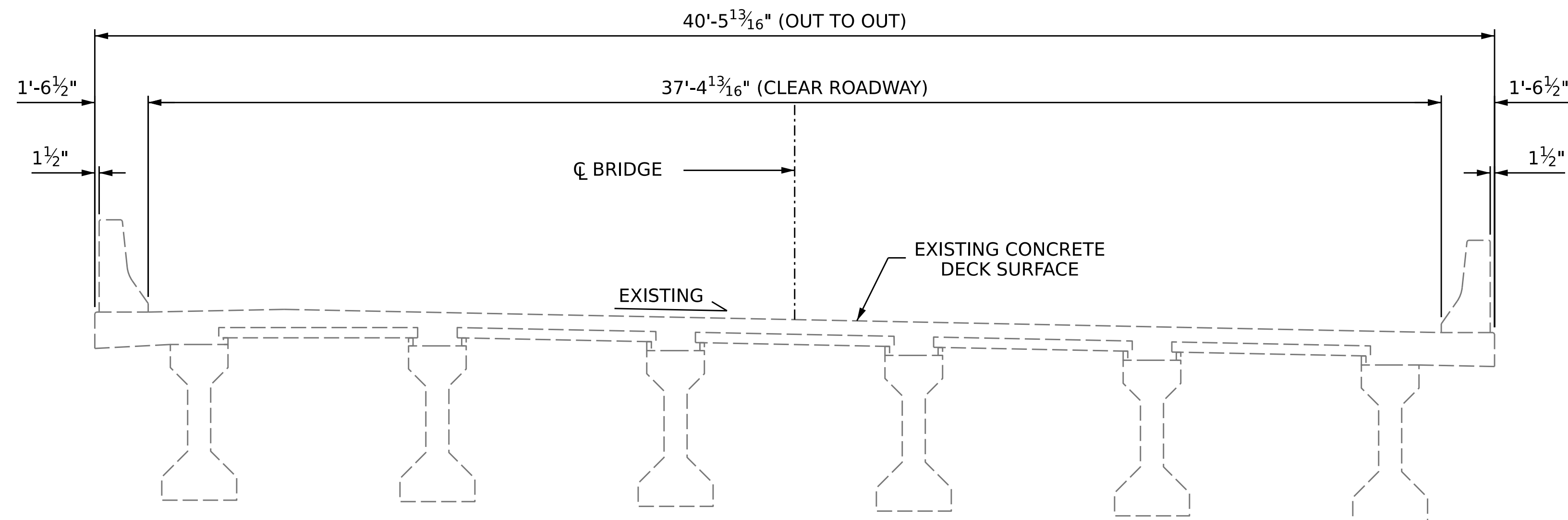
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1			3			TOTAL SHEETS
2			4			4

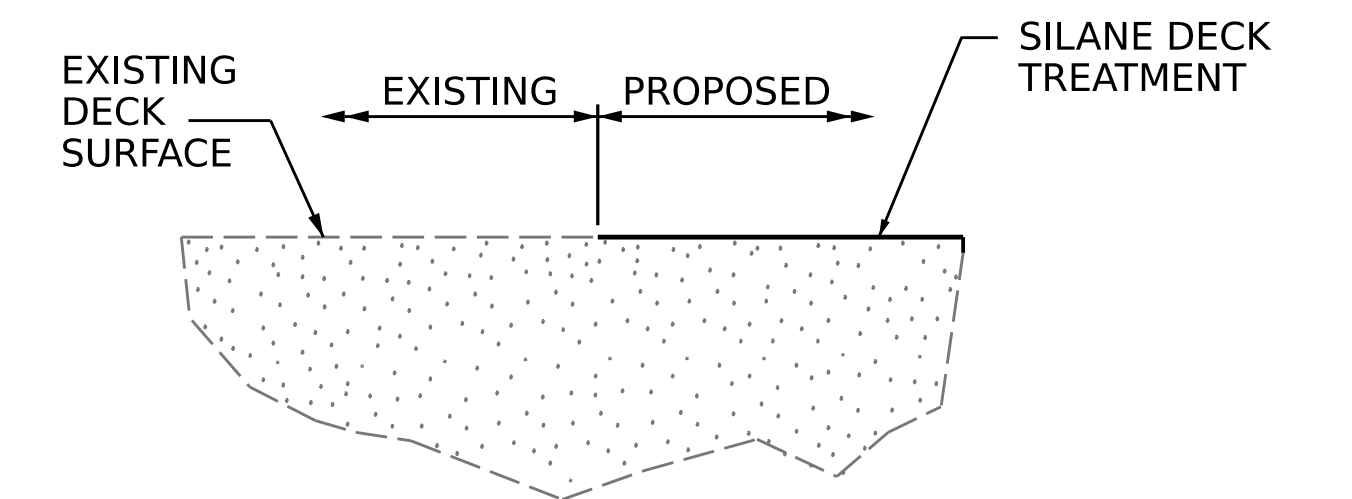
NOTES

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

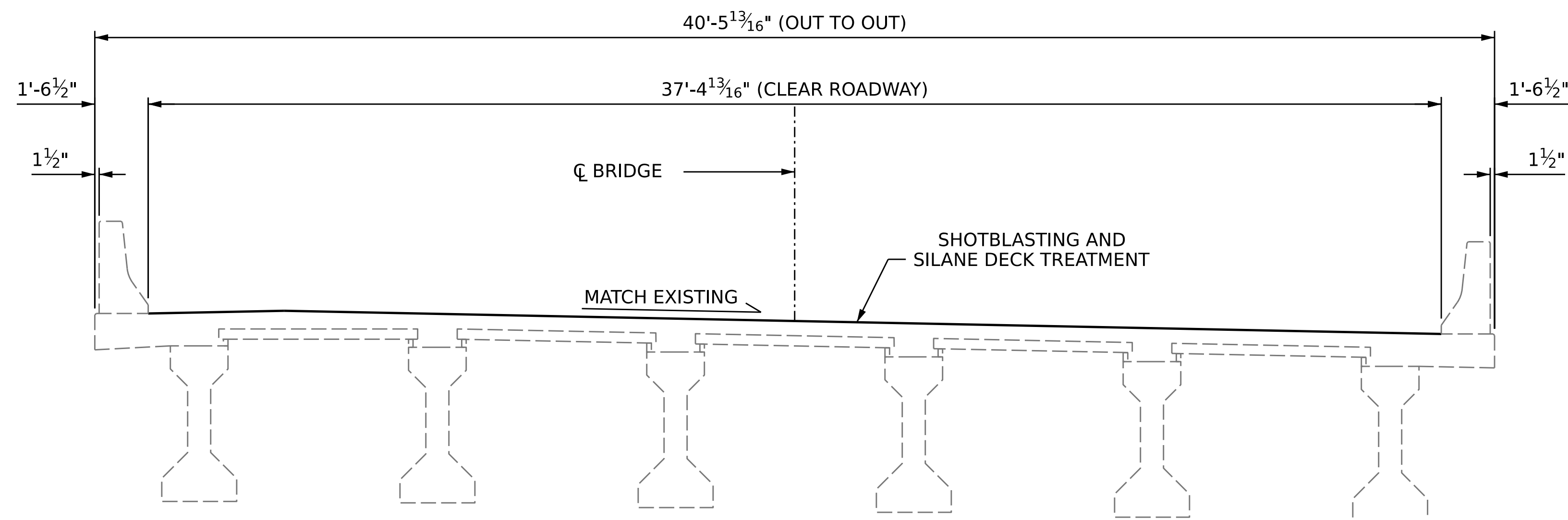
PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY THE ENGINEER.



TYPICAL SECTION
(EXISTING)

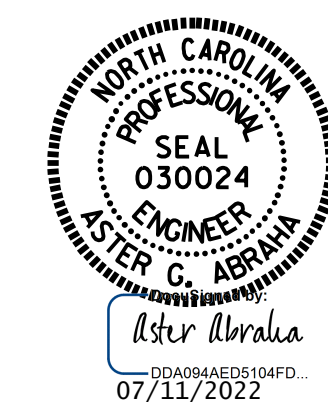


SILANE DECK TREATMENT DETAIL



TYPICAL SECTION
(PROPOSED)

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970259**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH


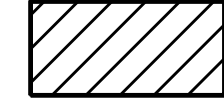
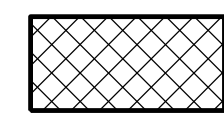
SUPERSTRUCTURE
 TYPICAL SECTION
 AND SILANE DECK
 TREATMENT DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S14-2
1			3			TOTAL SHEETS
2			4			4

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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

REPAIR KEY

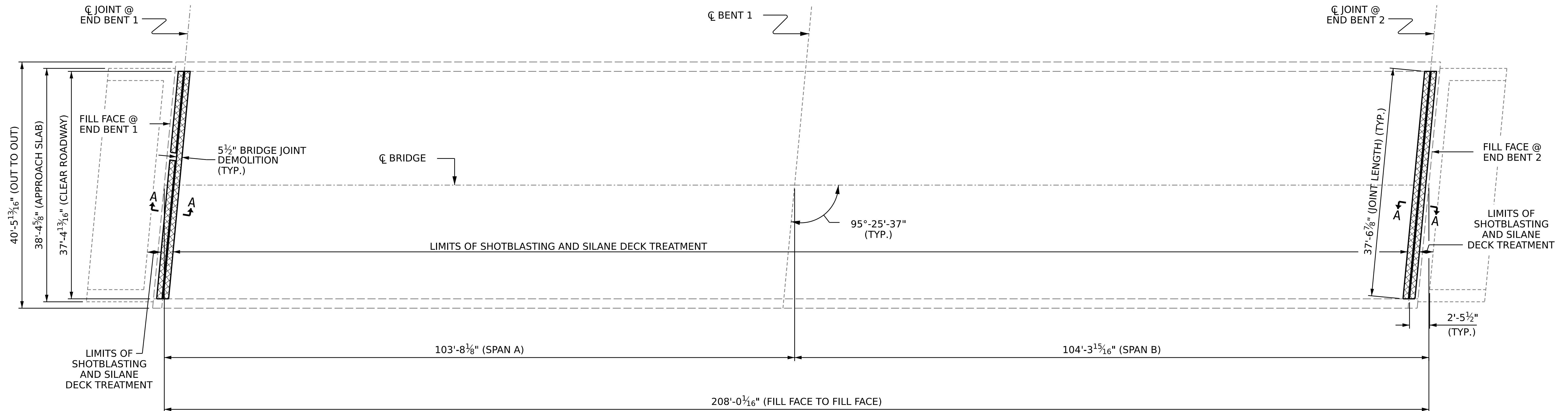
-  - SHOTBLASTING AND SILANE DECK TREATMENT
-  - CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
-  - BRIDGE JOINT DEMOLITION

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S14-4.

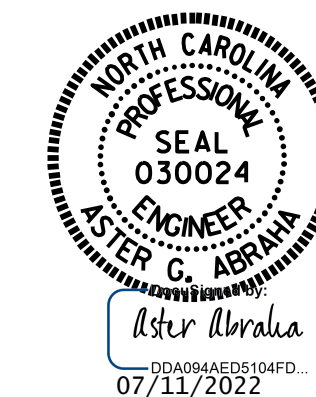
SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	872.2 SY	
SILANE DECK TREATMENT	872.2 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	68.9 SF	



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970259**



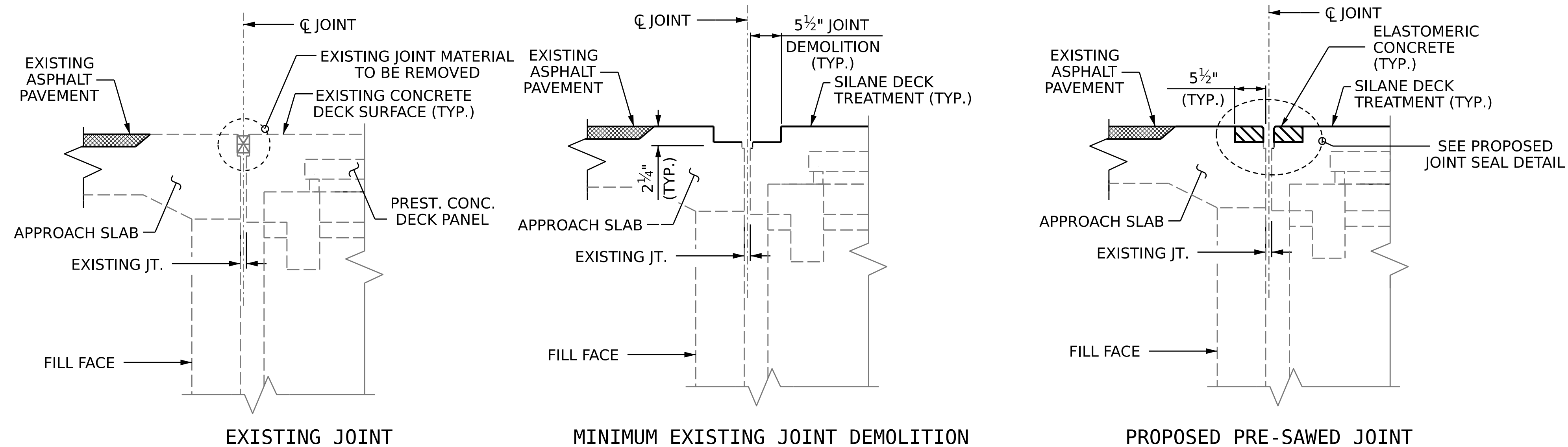
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

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

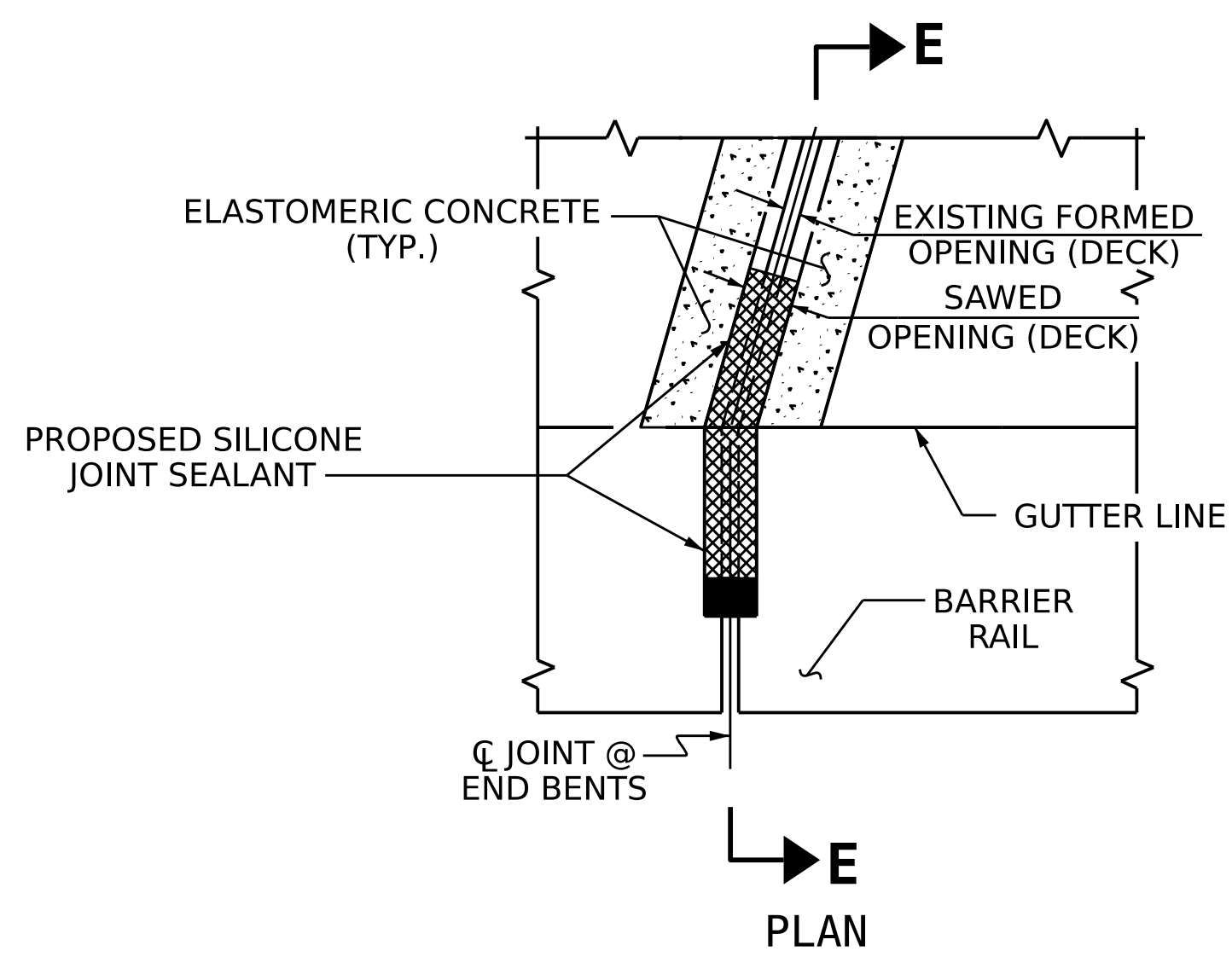
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 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S14-3
1			3			TOTAL SHEETS
2			4			4

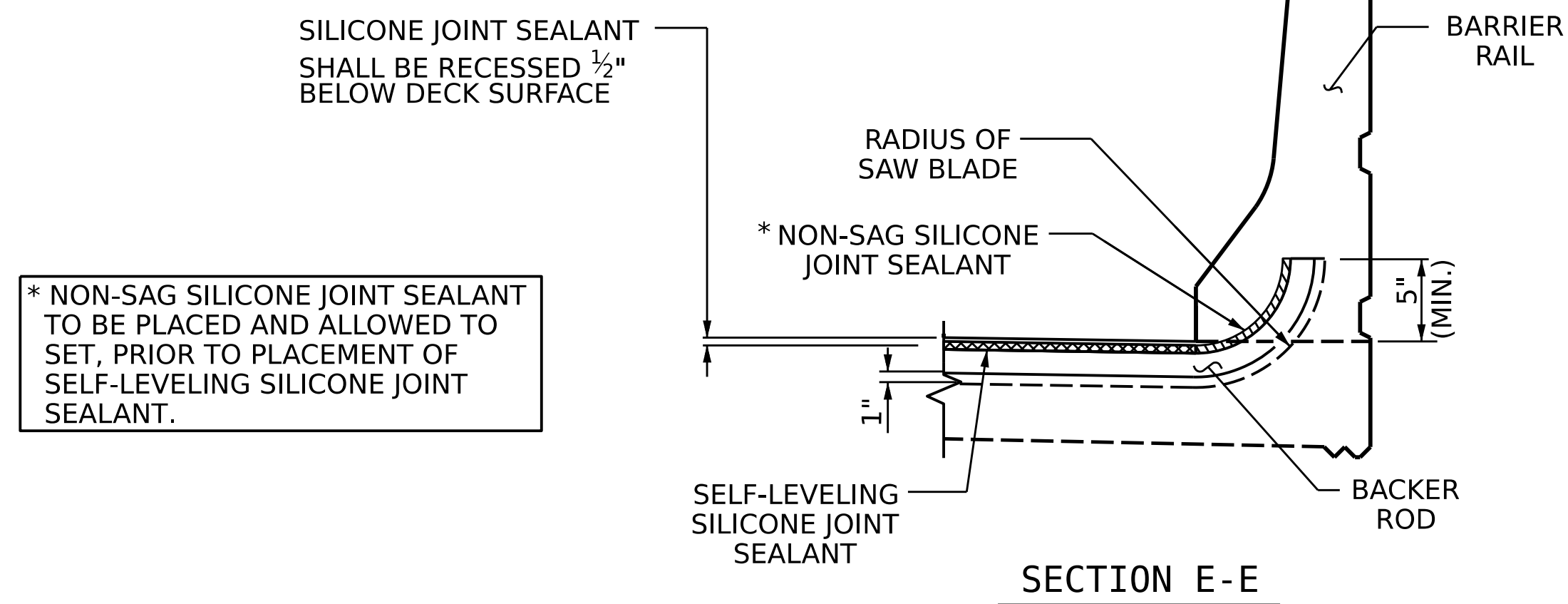


JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	12.9 CF	
POURABLE SILICONE JOINT SEALANT	75.2 LF	

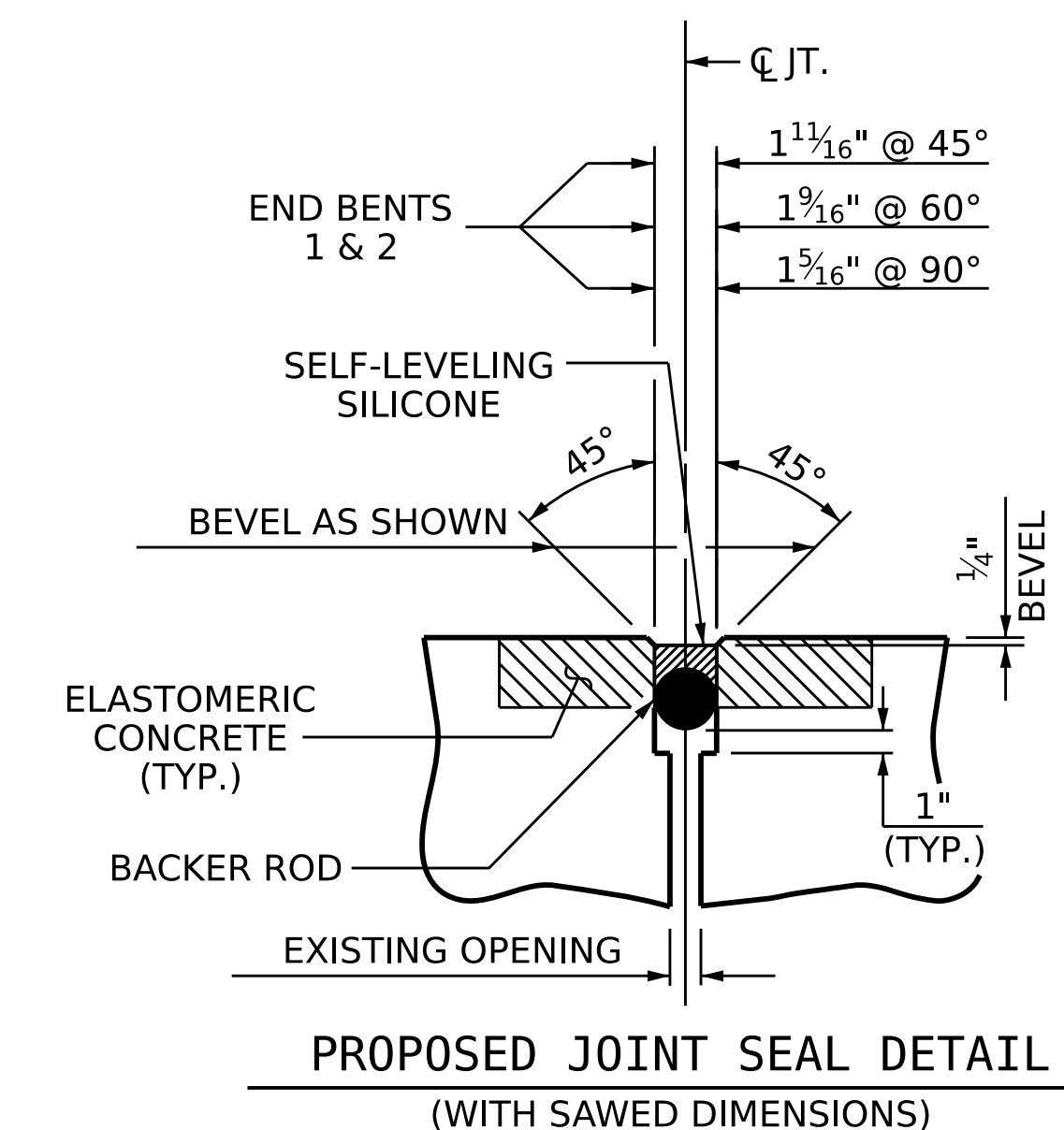


JOINT DETAIL AT BARRIER RAIL

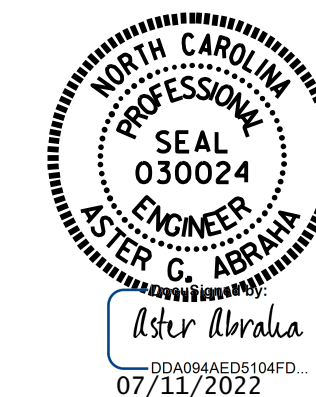


NOTES

- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.
- THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE BACKER ROD FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.
- ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.
- THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.
- POURABLE SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.
- DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.
- QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.
- FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.
- FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970259**



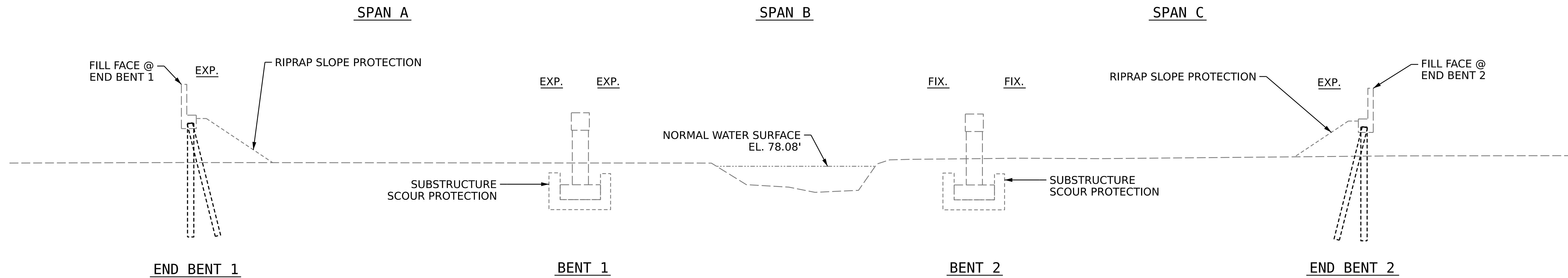
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**JOINT REPAIR
 DETAILS**

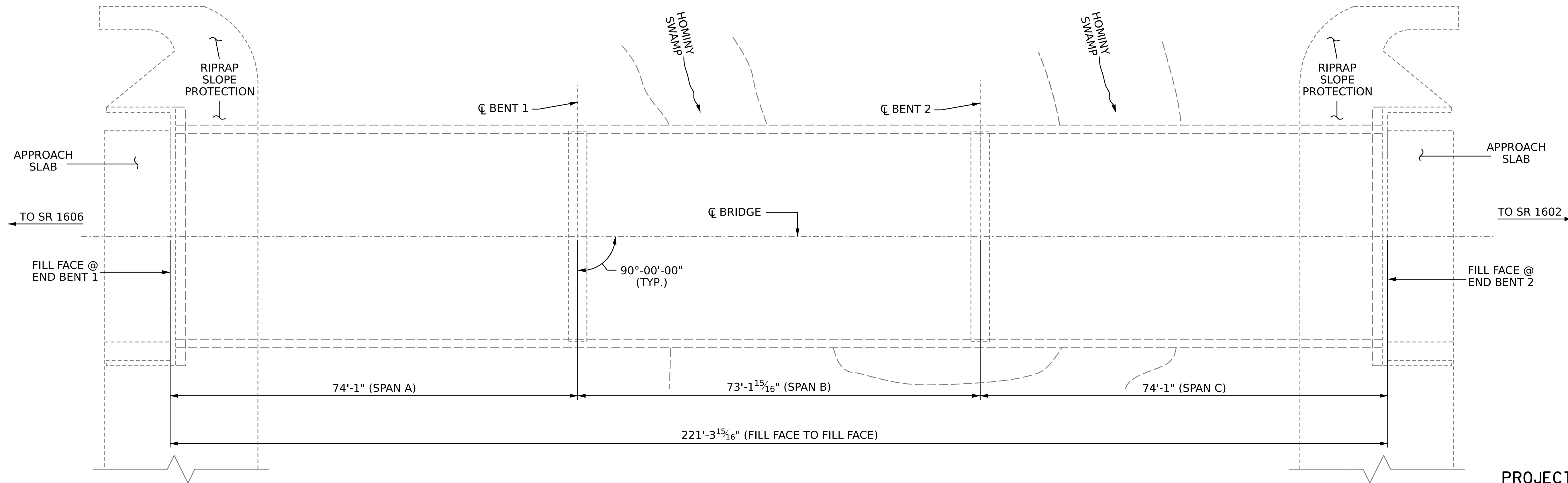
DRAWN BY : G. AYES DATE : 5/2022
 CHECKED BY : A. G. ABRAHA DATE : 5/2022
 DESIGN ENGINEER OF RECORD: -- DATE : --

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S14-4
1			3			TOTAL SHEETS
2			4			4



SECTION ALONG CL BRIDGE



PLAN

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

NOTES

- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 04/22/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

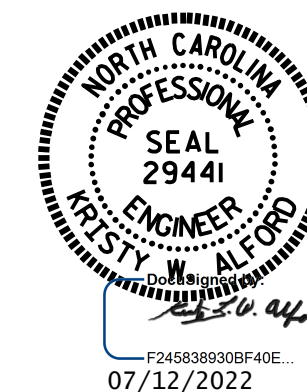
SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- PLACE SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER

DATE



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970260**

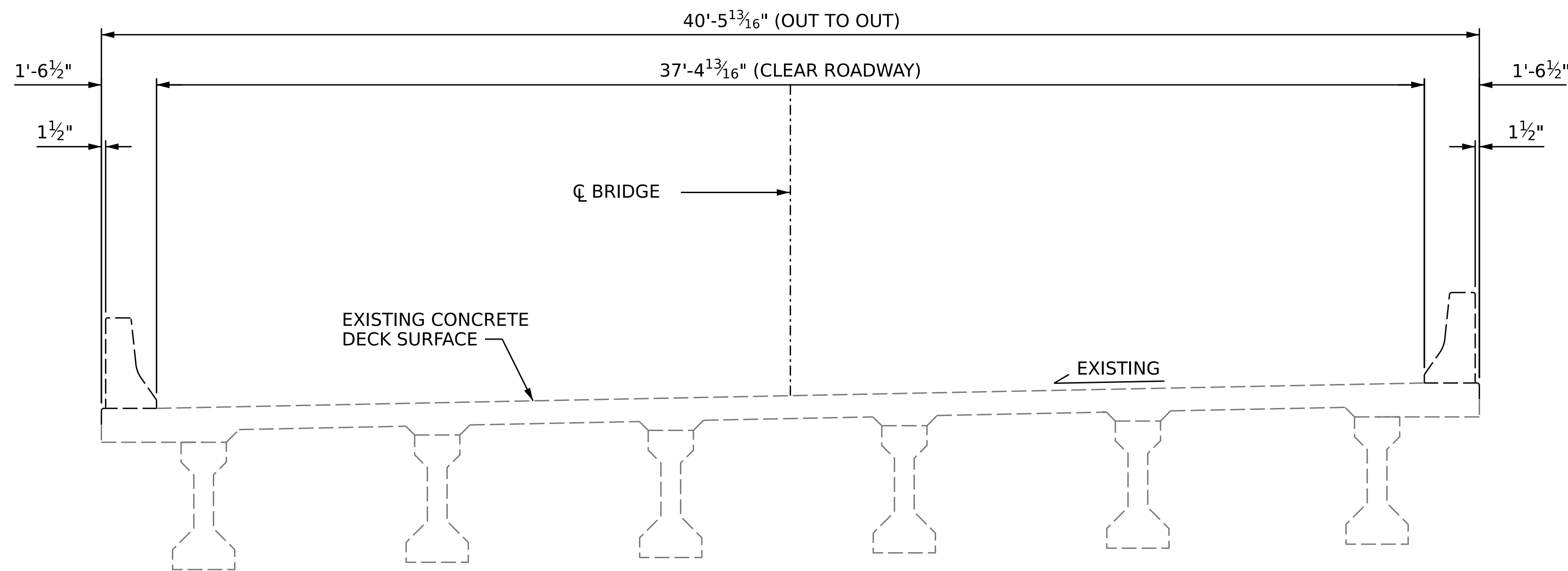
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON US 264
 BYPASS WESTBOUND OVER
 HOMINY SWAMP BETWEEN
 SR 1606 AND SR 1602

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

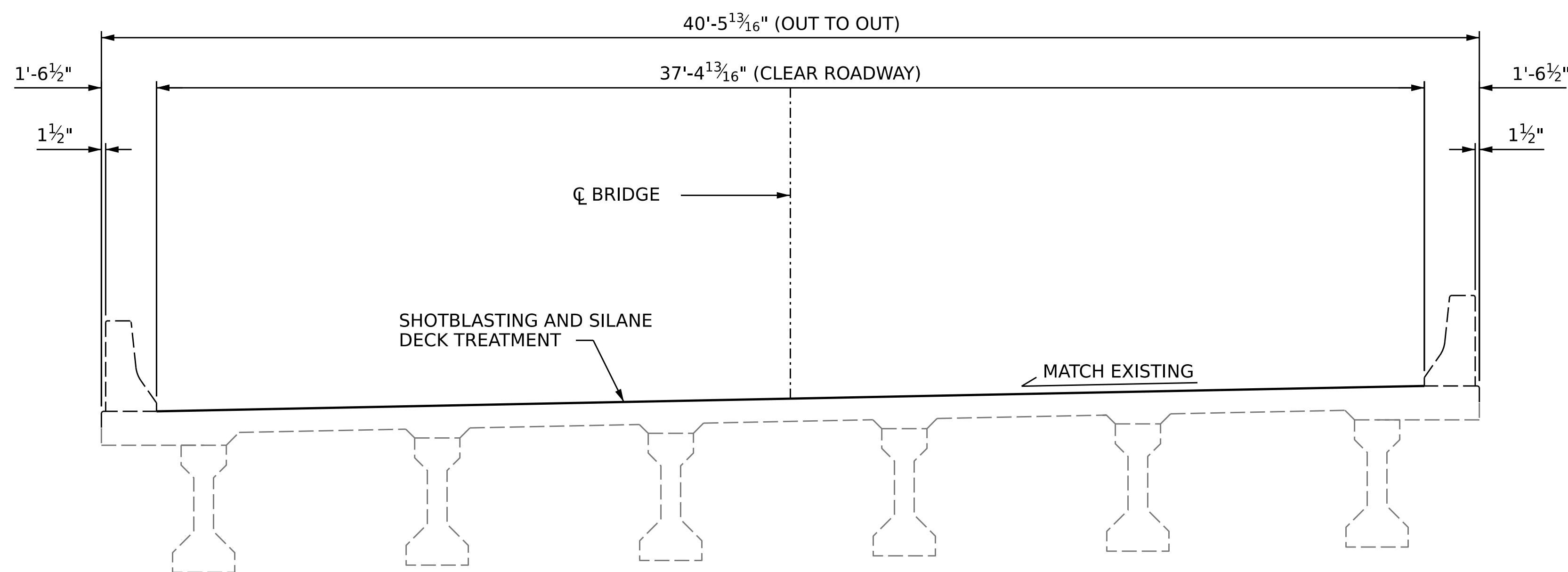
7/11/2022
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 aabraha

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S15-1
1			3			TOTAL SHEETS
2			4			4



TYPICAL SECTION
(EXISTING)

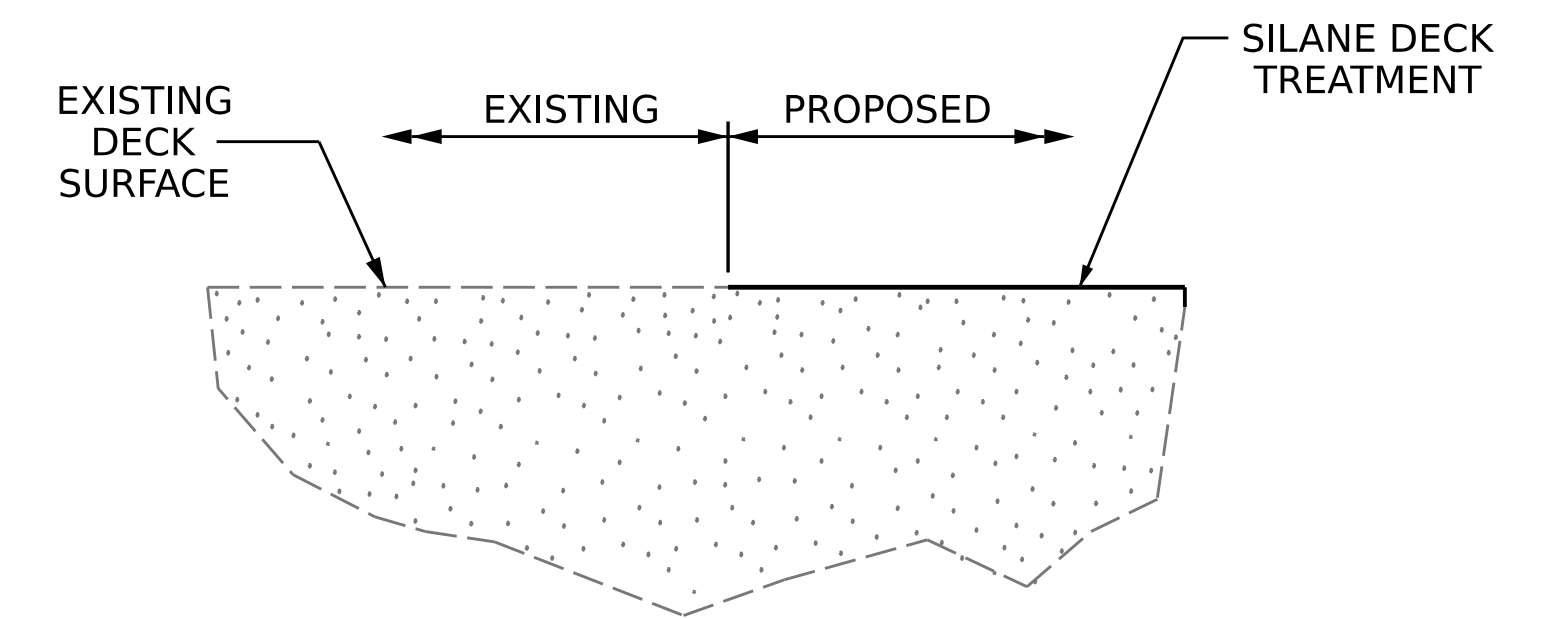


TYPICAL SECTION
(PROPOSED)

NOTES

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

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



SILANE DECK TREATMENT DETAIL

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970260**



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

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: DATE :

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO. S15-2 TOTAL SHEETS 4
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

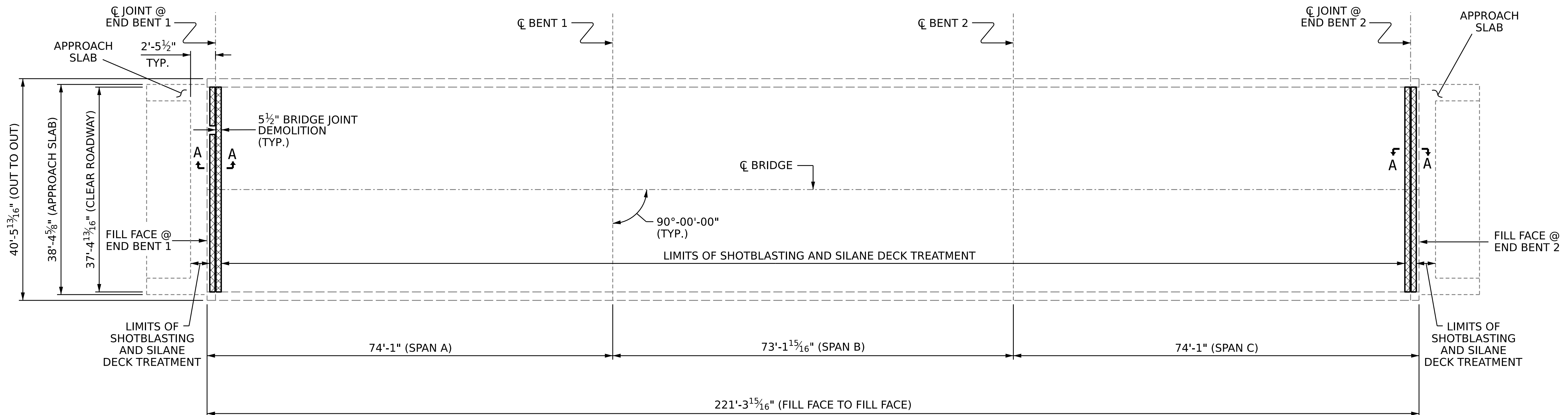
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	923.6 SY	
SILANE DECK TREATMENT	923.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	68.6 SF	

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
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- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S15-4.

REPAIR KEY

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



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970260**



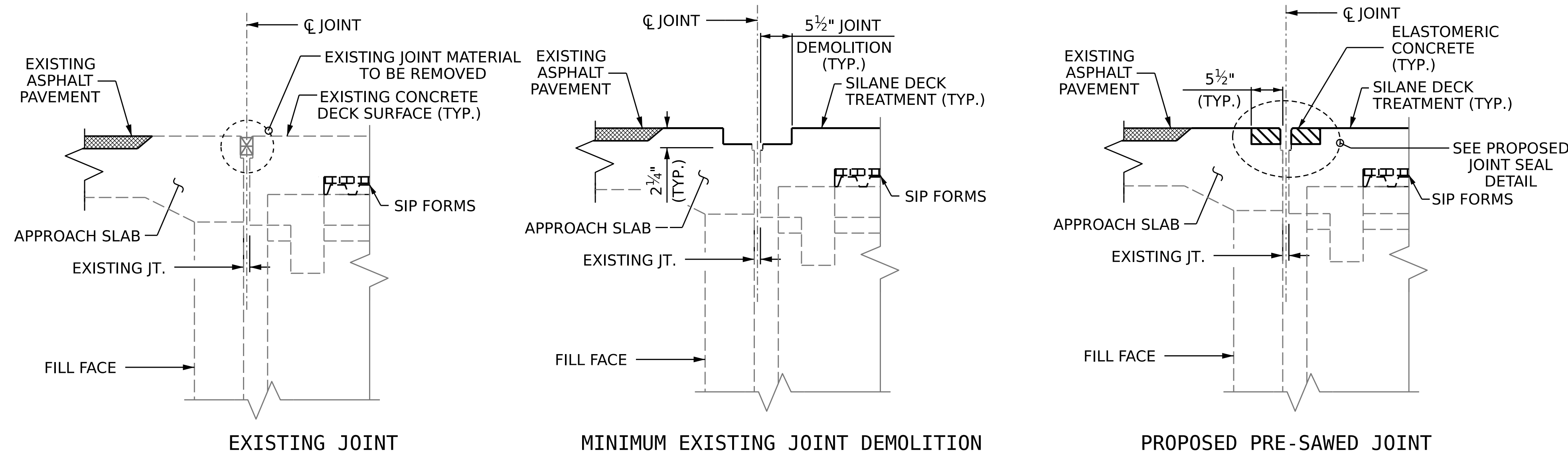
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

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

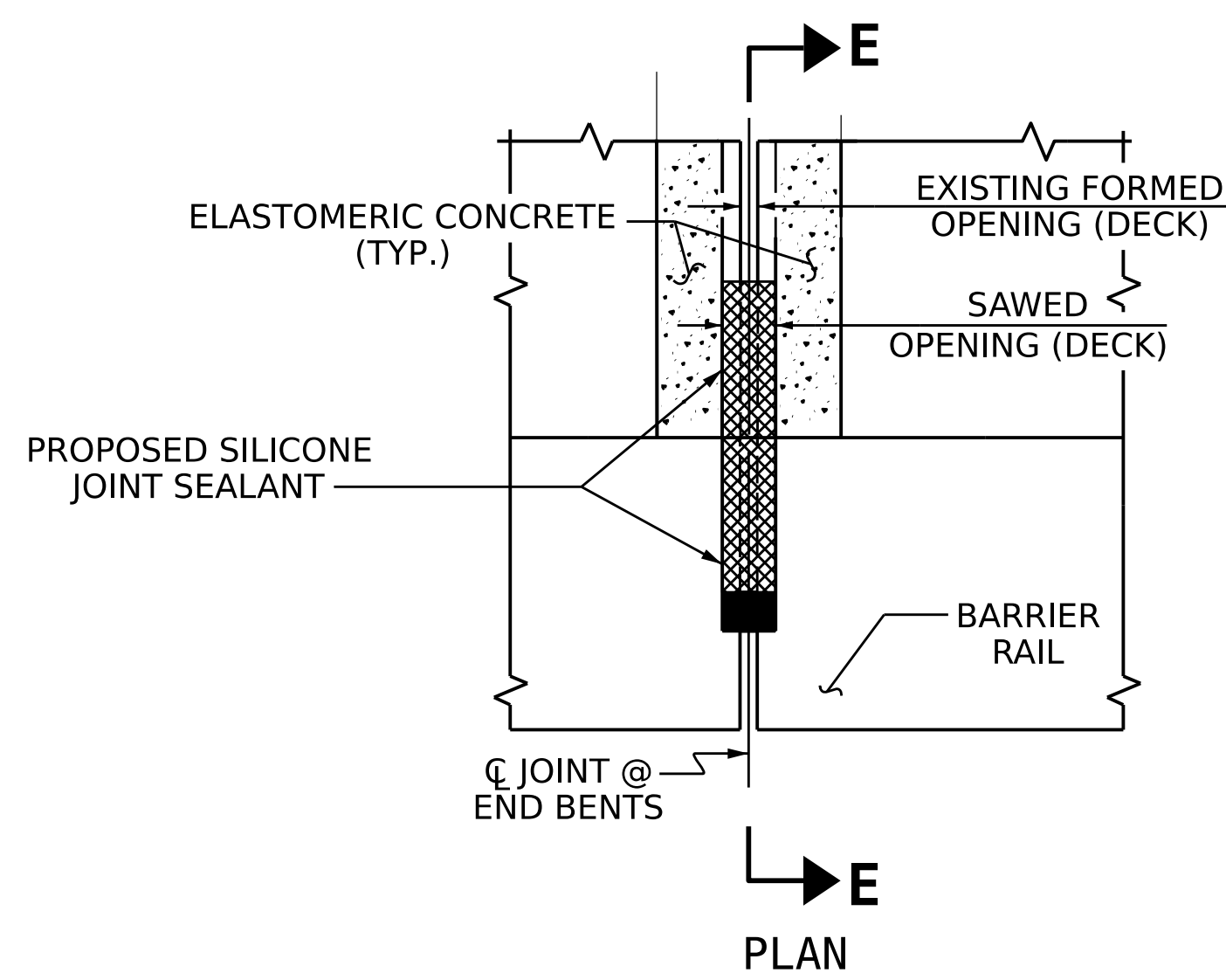
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S15-3
1			3			TOTAL SHEETS
2			4			4



JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

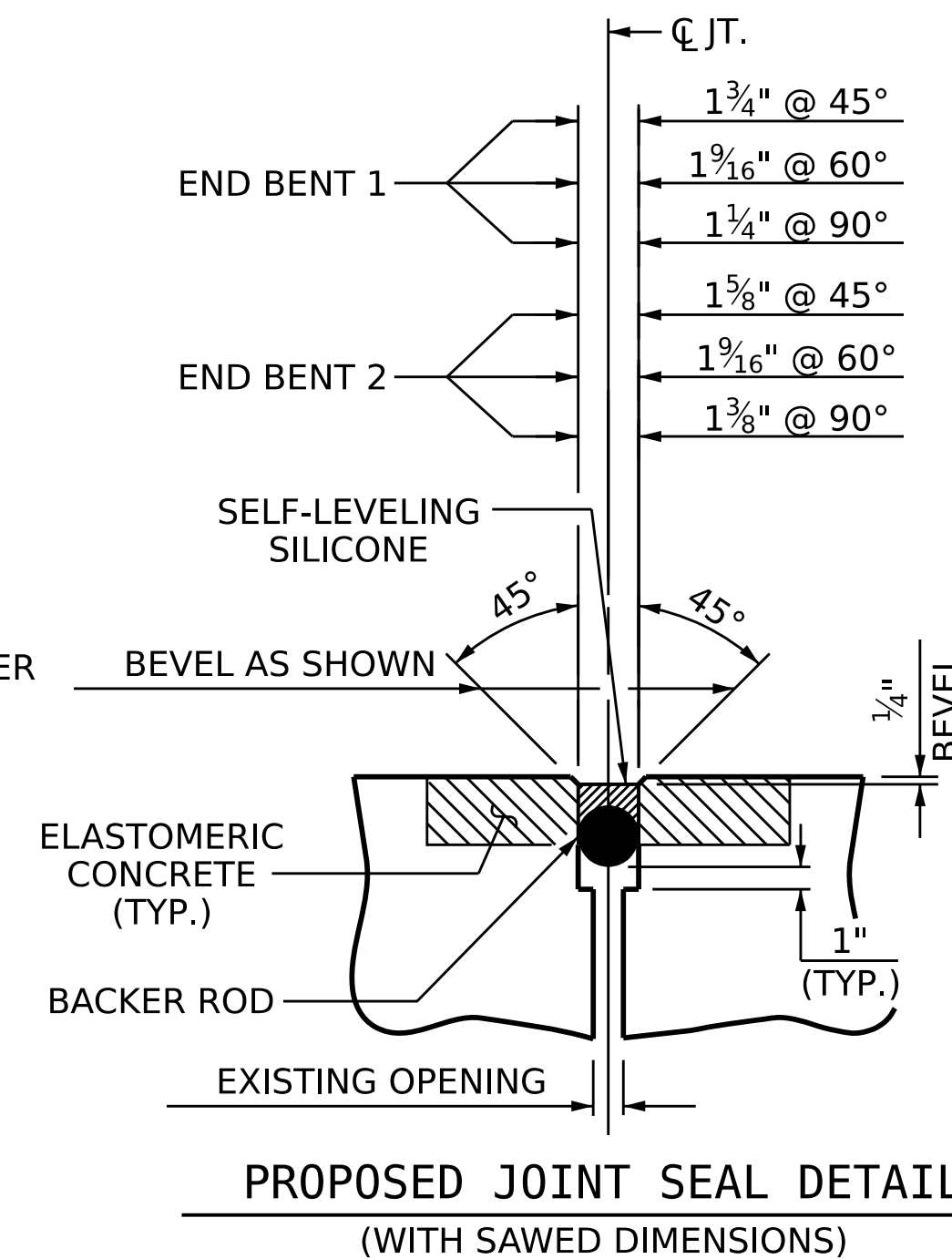
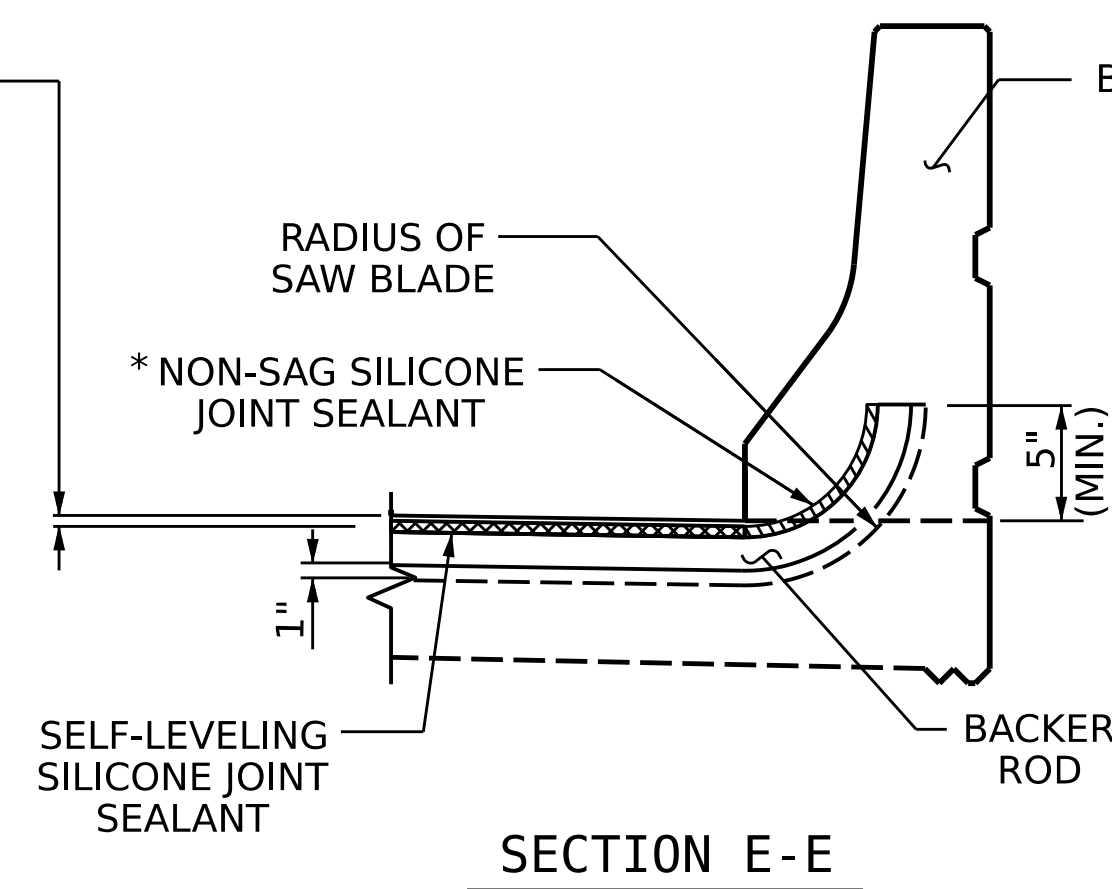
SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	12.9 CF	
POURABLE SILICONE JOINT SEALANT	74.8 LF	



JOINT DETAIL AT BARRIER RAIL

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

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



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

NOTES

- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.
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- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970260**



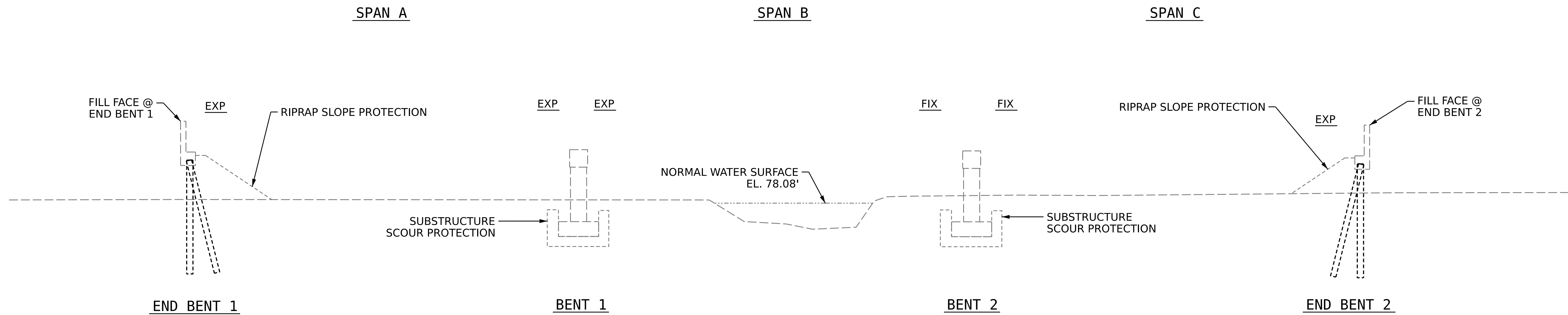
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

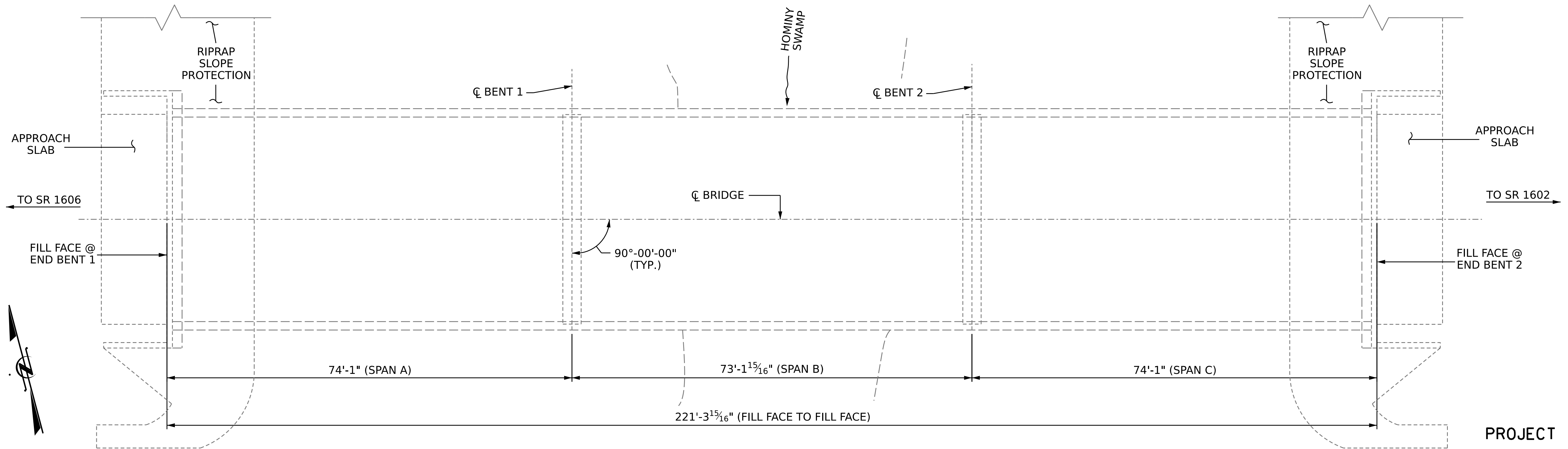
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 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: -- DATE : --

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S15-4
1			3			TOTAL SHEETS
2			4			4



SECTION ALONG CL BRIDGE



PLAN

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

NOTES

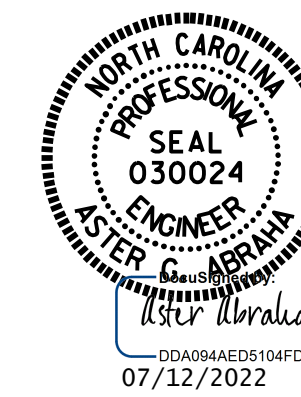
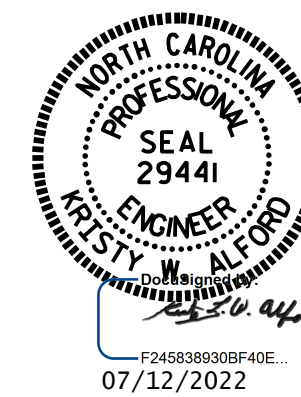
- PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND INSPECTION REPORT DATED 03/22/2022.
- BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE PLANS.

SCOPE OF WORK

- PREPARE BRIDGE DECK BY SHOTBLASTING METHODS.
- SILANE DECK TREATMENT.
- DEMOLISH EXISTING BRIDGE DECK JOINTS.
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND POURABLE SILICONE JOINT SEALANT.

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

RESIDENT ENGINEER _____ DATE _____



PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970261**

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 264
 BYPASS EASTBOUND OVER
 HOMINY SWAMP BETWEEN
 SR 1606 AND SR 1602

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S16-1
2			4			TOTAL SHEETS
						4

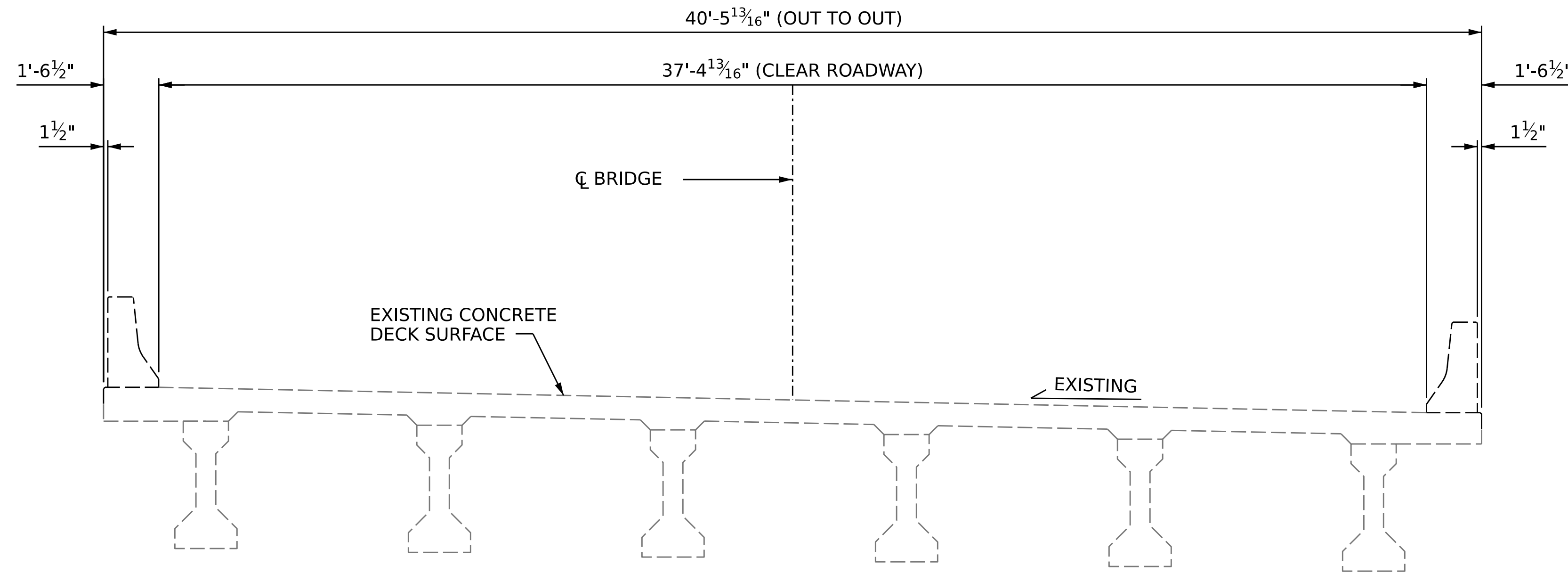
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: _____ DATE : _____

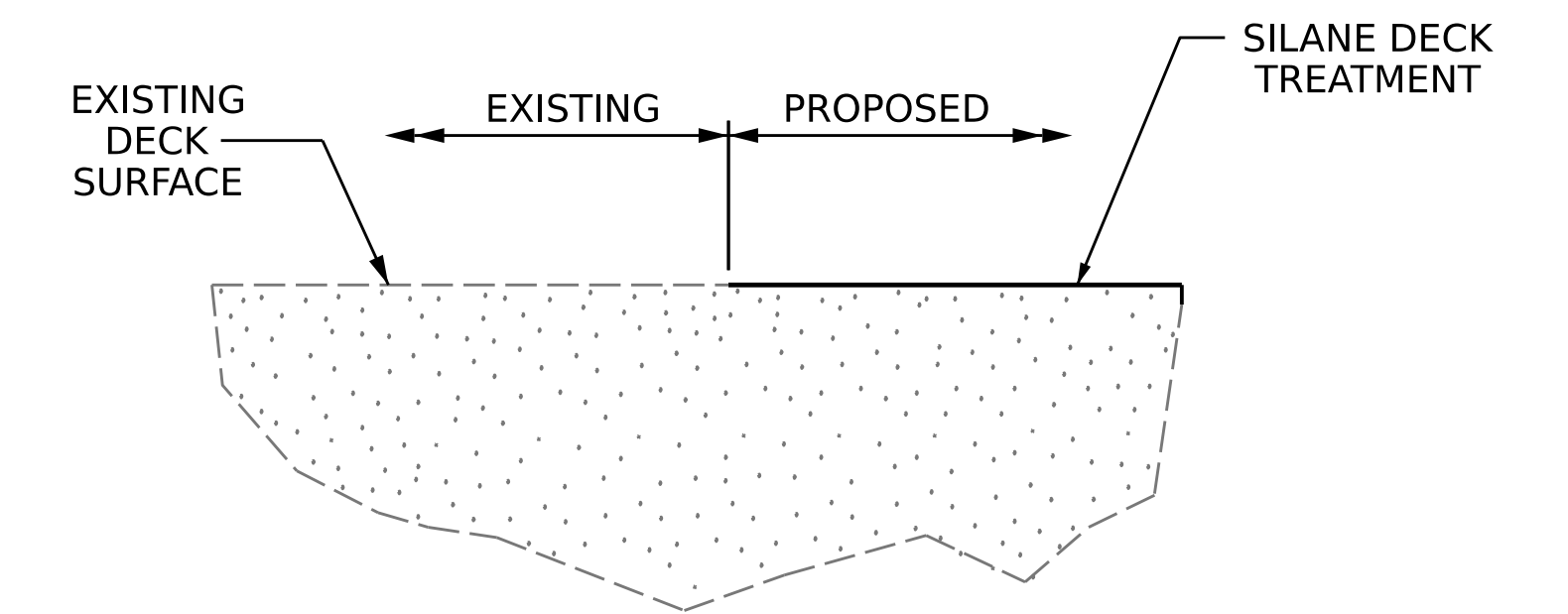
NOTES

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

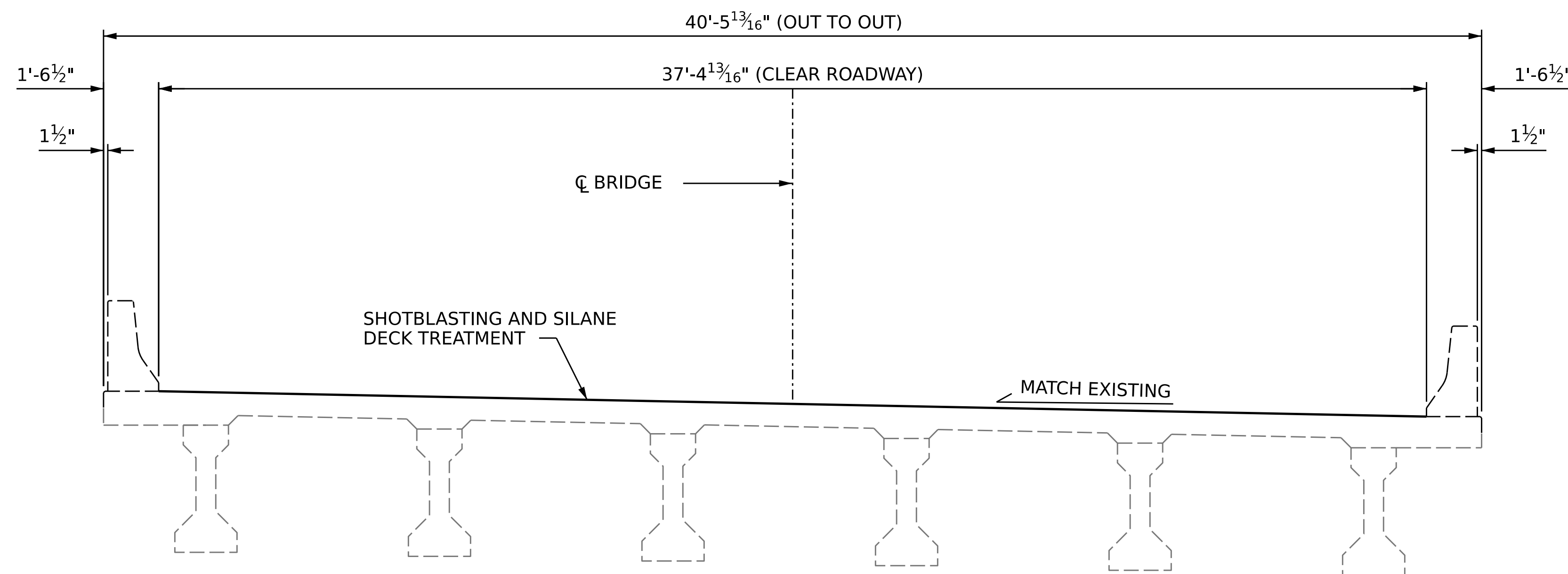
PROTECT TRAFFIC FROM REBOUND, DUST, OVERSPRAY, AND CONSTRUCTION ACTIVITIES. PROVIDE APPROPRIATE SHIELDING, AS REQUIRED AND/OR DIRECTED BY ENGINEER.



TYPICAL SECTION
(EXISTING)

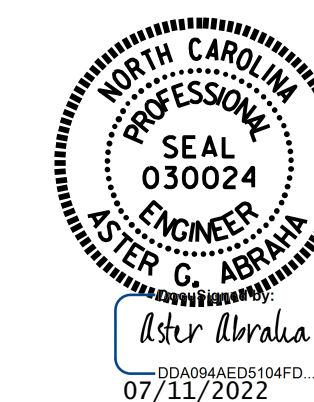


SILANE DECK TREATMENT DETAIL



TYPICAL SECTION
(PROPOSED)

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970261**



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

DRAWN BY : Z. HOWARD / G. AYES DATE : 4/2022
 CHECKED BY : A. G. ABRAHA DATE : 6/2022
 DESIGN ENGINEER OF RECORD: DATE :

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S16-2
1			3			TOTAL SHEETS
2			4			4

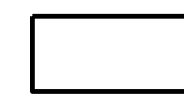
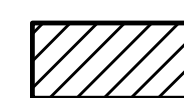
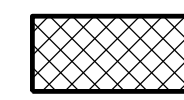
SUMMARY OF QUANTITIES FOR DECK AND APPROACH SLABS

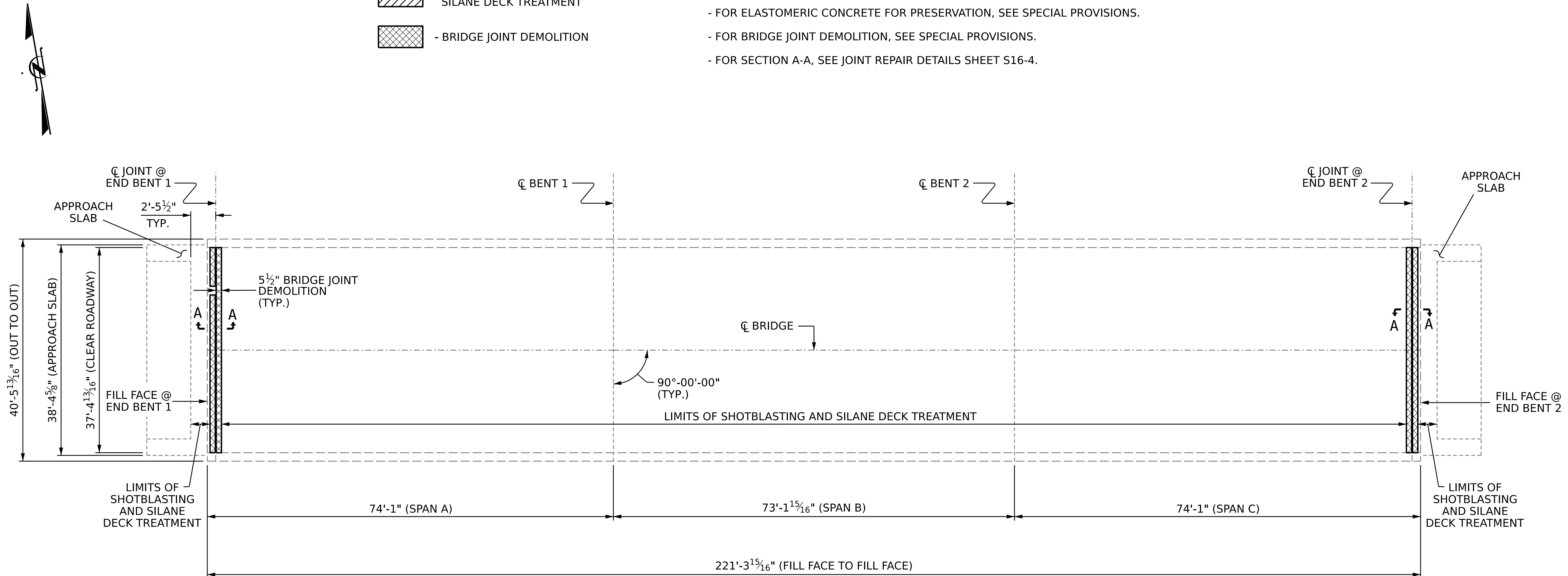
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	923.6 SY	
SILANE DECK TREATMENT	923.6 SY	
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	0 SF	
BRIDGE JOINT DEMOLITION	68.6 SF	

NOTES

- REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE SUMMARY OF QUANTITIES TABLE.
- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR SECTION A-A, SEE JOINT REPAIR DETAILS SHEET S16-4.

REPAIR KEY

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



PLAN OF SPANS

PROJECT NO. **HI-0006**
WILSON COUNTY
 BRIDGE NO. **970261**



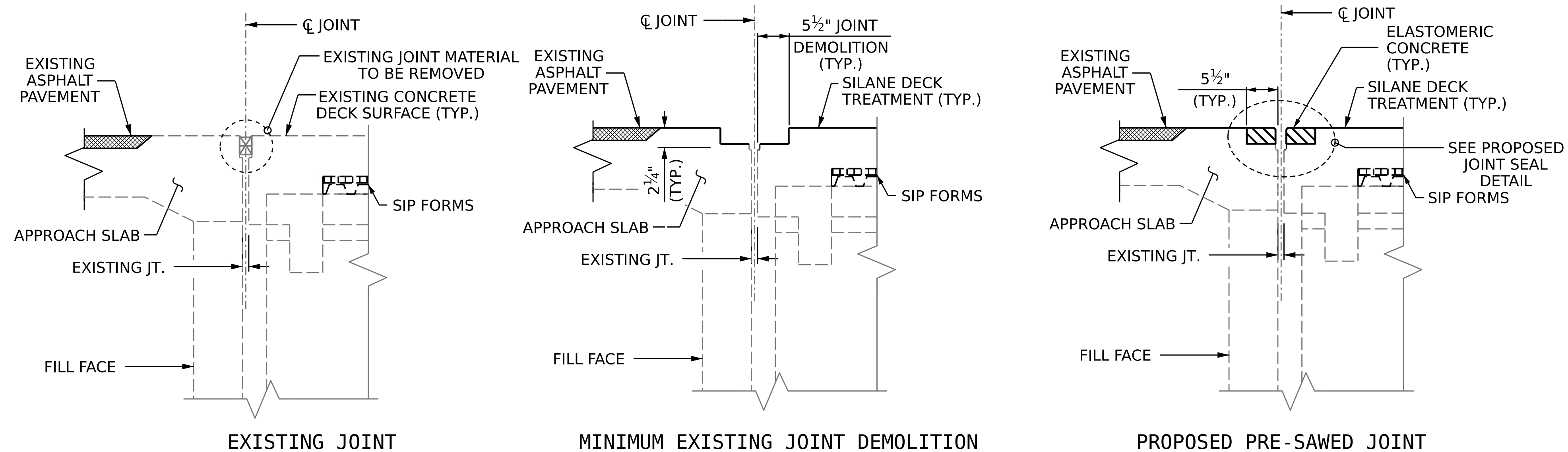
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SILANE DECK TREATMENT

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

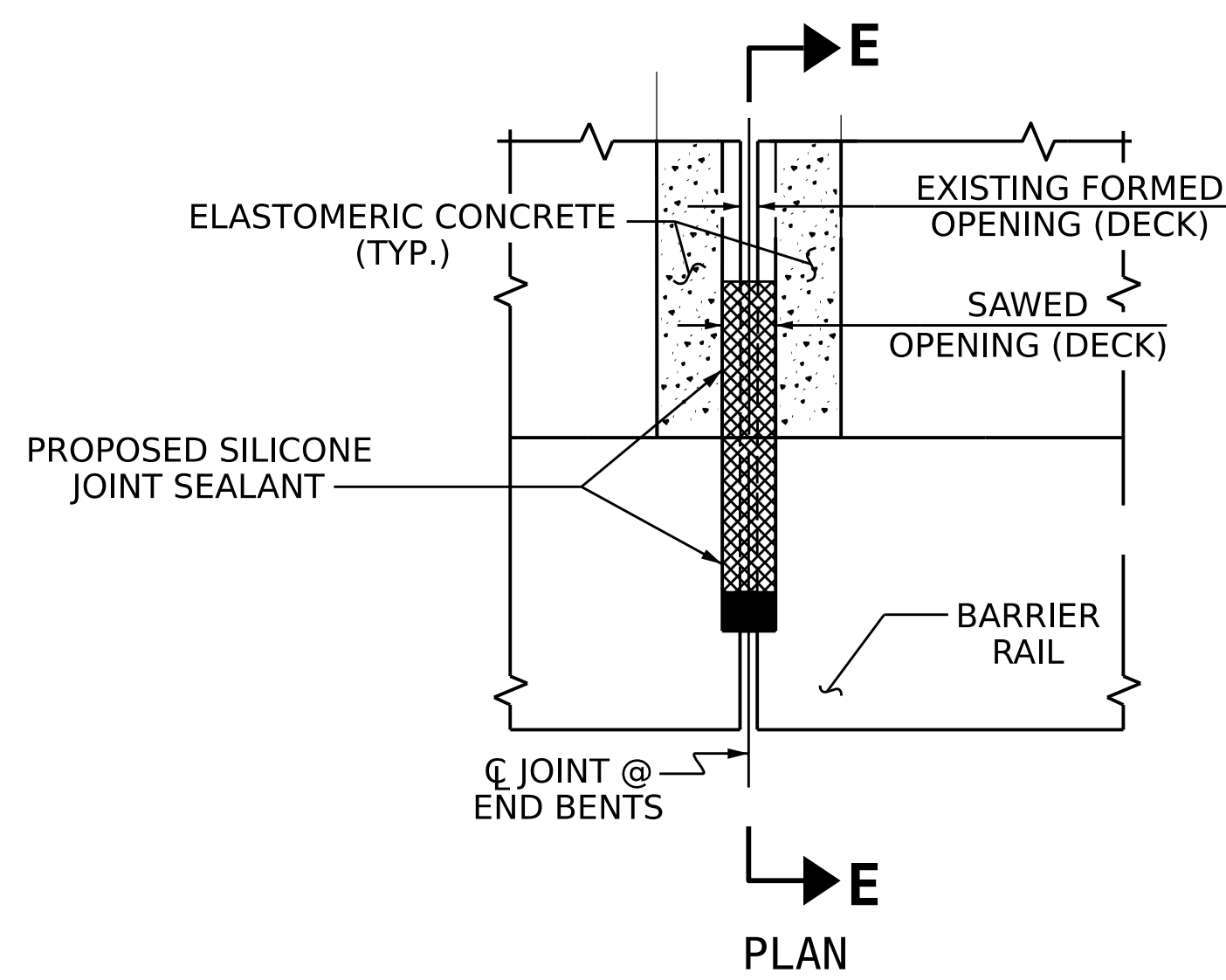
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JOINT INSTALLATION SEQUENCE AT END BENTS
SECTION A-A

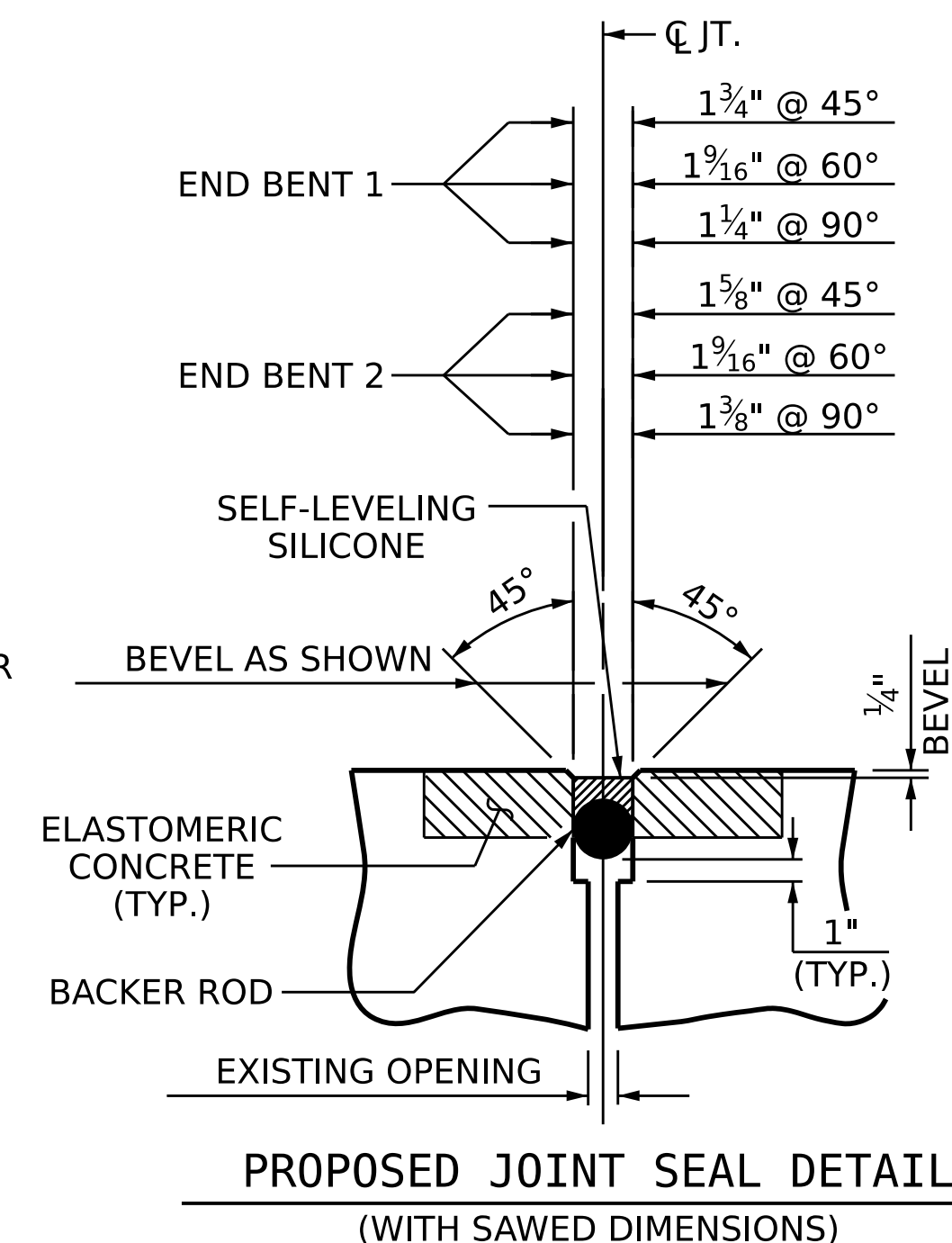
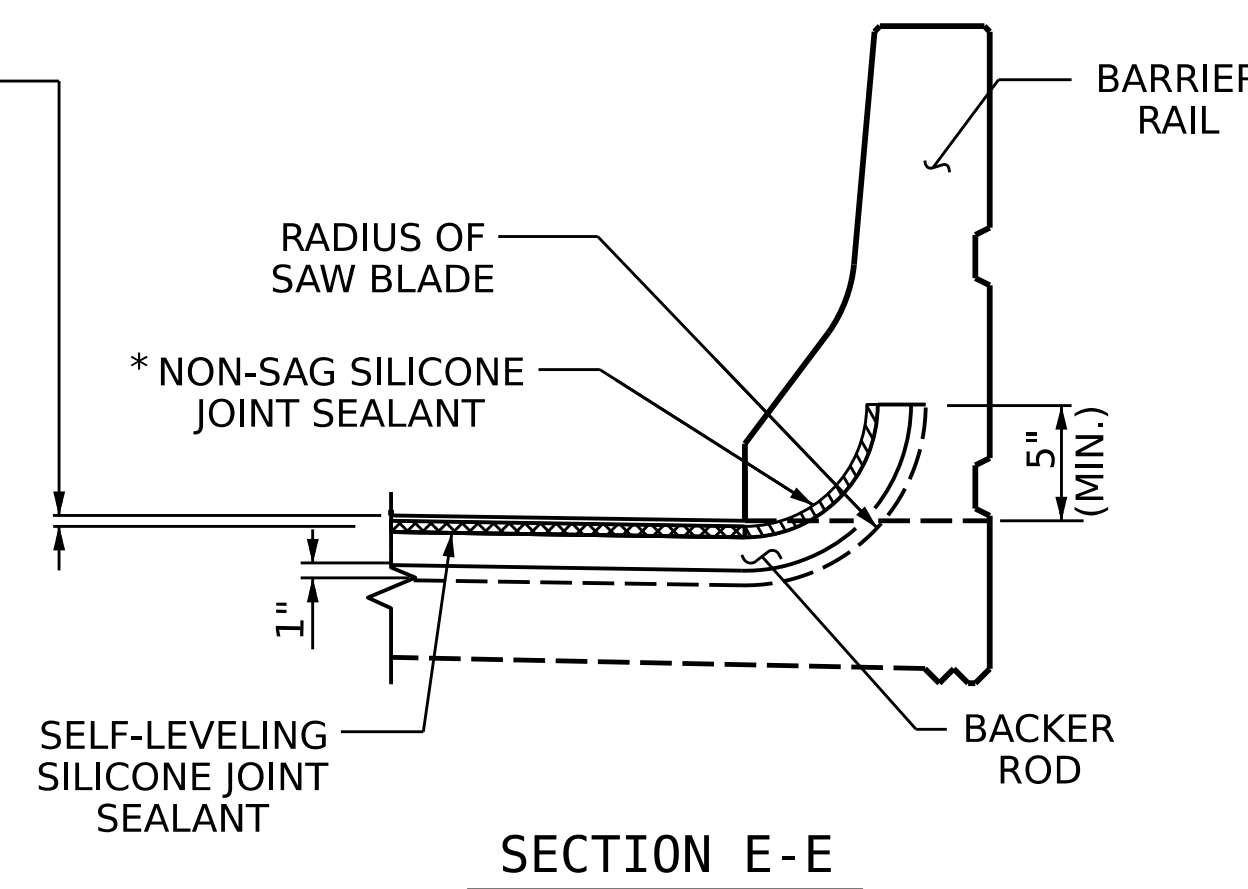
SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	12.9 CF	
POURABLE SILICONE JOINT SEALANT	74.8 LF	



JOINT DETAIL AT BARRIER RAIL

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

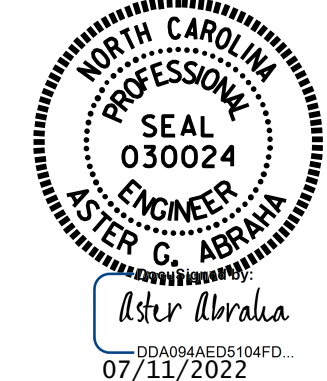
* NON-SAG SILICONE JOINT SEALANT TO BE PLACED AND ALLOWED TO SET, PRIOR TO PLACEMENT OF SELF-LEVELING SILICONE JOINT SEALANT.



PROPOSED JOINT SEAL DETAIL
(WITH SAWED DIMENSIONS)

NOTES

- FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE SILANE DECK TREATMENT IS COMPLETE.
- THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.
- THE MANUFACTURER IS TO PROVIDE THE NOMINAL UNCOMPRESSED SEAL WIDTH OF THE BACKER ROD FOR THE SIZE OF THE OPENING ON THE PLANS AND ACCOMMODATE THE MINIMUM EXPANSION SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL. CLEAN AND REPAIR AS NEEDED.
- ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION.
- THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT.
- POURABLE SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.
- DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS.
- FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.
- QUANTITIES SHOWN IN THE ELASTOMERIC CONCRETE FOR PRESERVATION TABLE ARE BASED ON THE MINIMUM JOINT DEMOLITION SHOWN.
- FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.
- FINAL SURFACE OF THE JOINT DEMOLITION AREA PRIOR TO PLACEMENT OF CONCRETE REPAIR MATERIAL OR ELASTOMERIC CONCRETE SHOULD BE REASONABLY FLAT AND LEVEL. ENGINEER SHALL DETERMINE THE ACCEPTABILITY OF THE SURFACE PRIOR TO PLACEMENT OF REPAIR CONCRETE OR ELASTOMERIC CONCRETE.
- FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.
- FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.



PROJECT NO. **HI-0006**
WILSON COUNTY
BRIDGE NO. **970261**

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

JOINT REPAIR DETAILS

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

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STANDARD NOTES

DESIGN DATA:

SPECIFICATIONS	-----	A.A.S.H.T.O. (CURRENT)
LIVE LOAD	-----	SEE PLANS
IMPACT ALLOWANCE	-----	SEE A.A.S.H.T.O.
STRESS IN EXTREME FIBER OF STRUCTURAL STEEL - AASHTO M270 GRADE 36	--	20,000 LBS. PER SQ. IN.
	--	27,000 LBS. PER SQ. IN.
	--	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION - GRADE 60	----	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	-----	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	-----	SEE A.A.S.H.T.O.
STRUCTURAL TIMBER - TREATED OR UNTREATED EXTREME FIBER STRESS	----	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	-----	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	-----	30 LBS. PER CU. FT. (MINIMUM)

MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2018 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N.C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED $\frac{3}{4}$ " WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO $\frac{1}{2}$ " RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A $\frac{1}{4}$ " FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A $\frac{1}{4}$ " RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE $\frac{7}{8}$ " \emptyset SHEAR STUDS FOR THE $\frac{3}{4}$ " \emptyset STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 - $\frac{7}{8}$ " \emptyset STUDS FOR 4 - $\frac{3}{4}$ " \emptyset STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF $\frac{7}{8}$ " \emptyset STUDS ALONG THE BEAM AS SHOWN FOR $\frac{3}{4}$ " \emptyset STUDS BASED ON THE RATIO OF 3 - $\frac{7}{8}$ " \emptyset STUDS FOR 4 - $\frac{3}{4}$ " \emptyset STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST $\frac{3}{16}$ " IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY $\frac{1}{16}$ " INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

ENGLISH

JANUARY, 1990

STD. NO. SN