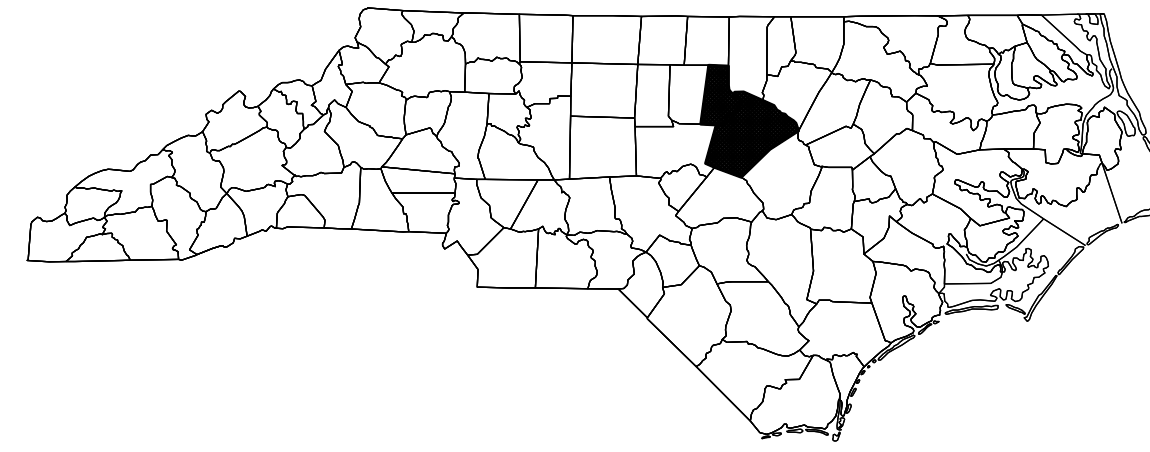


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

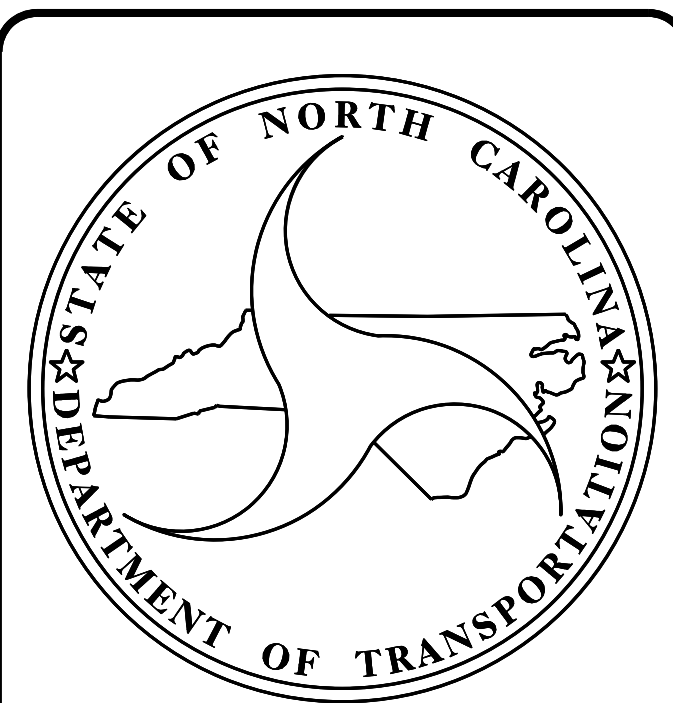
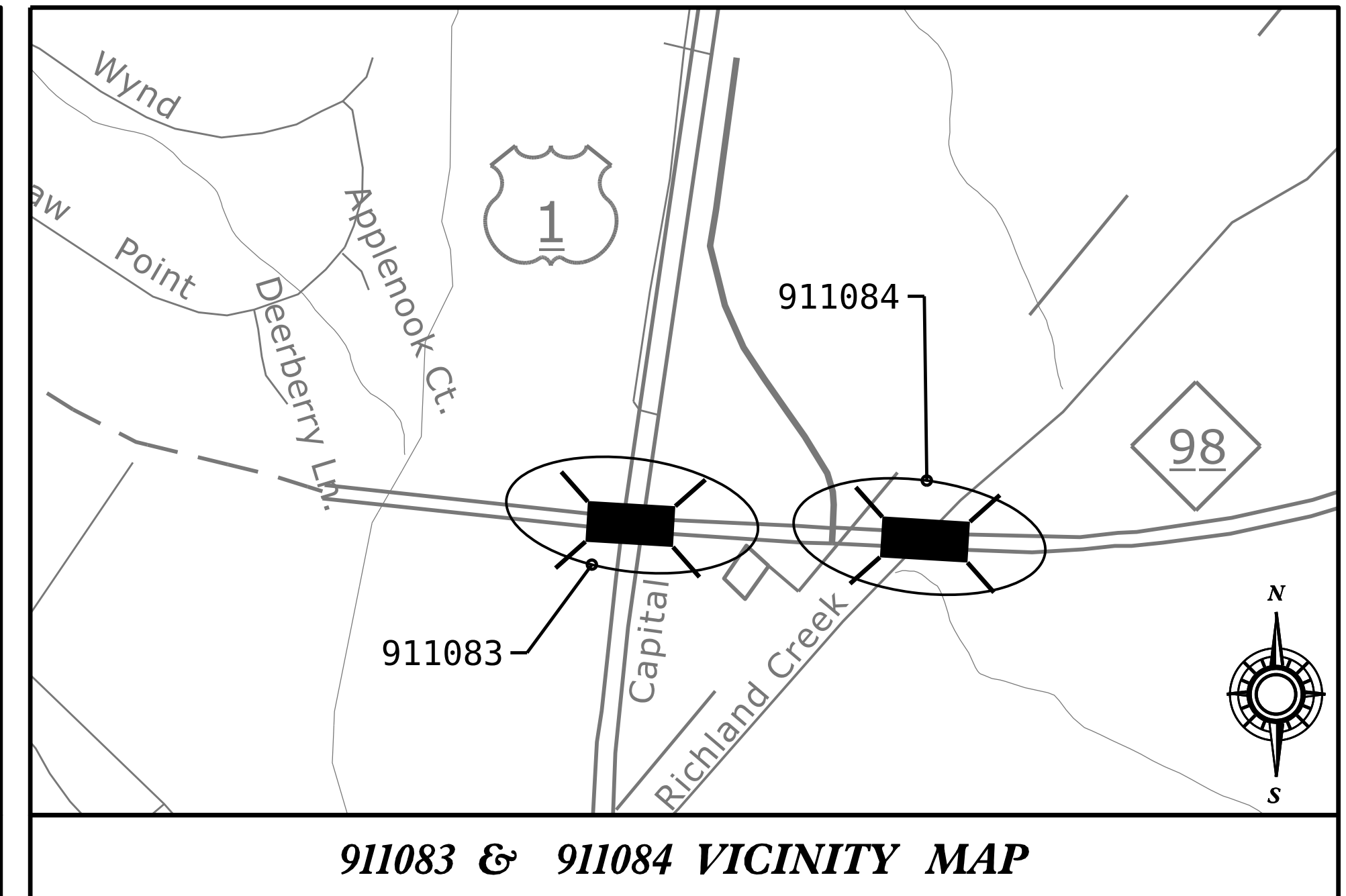
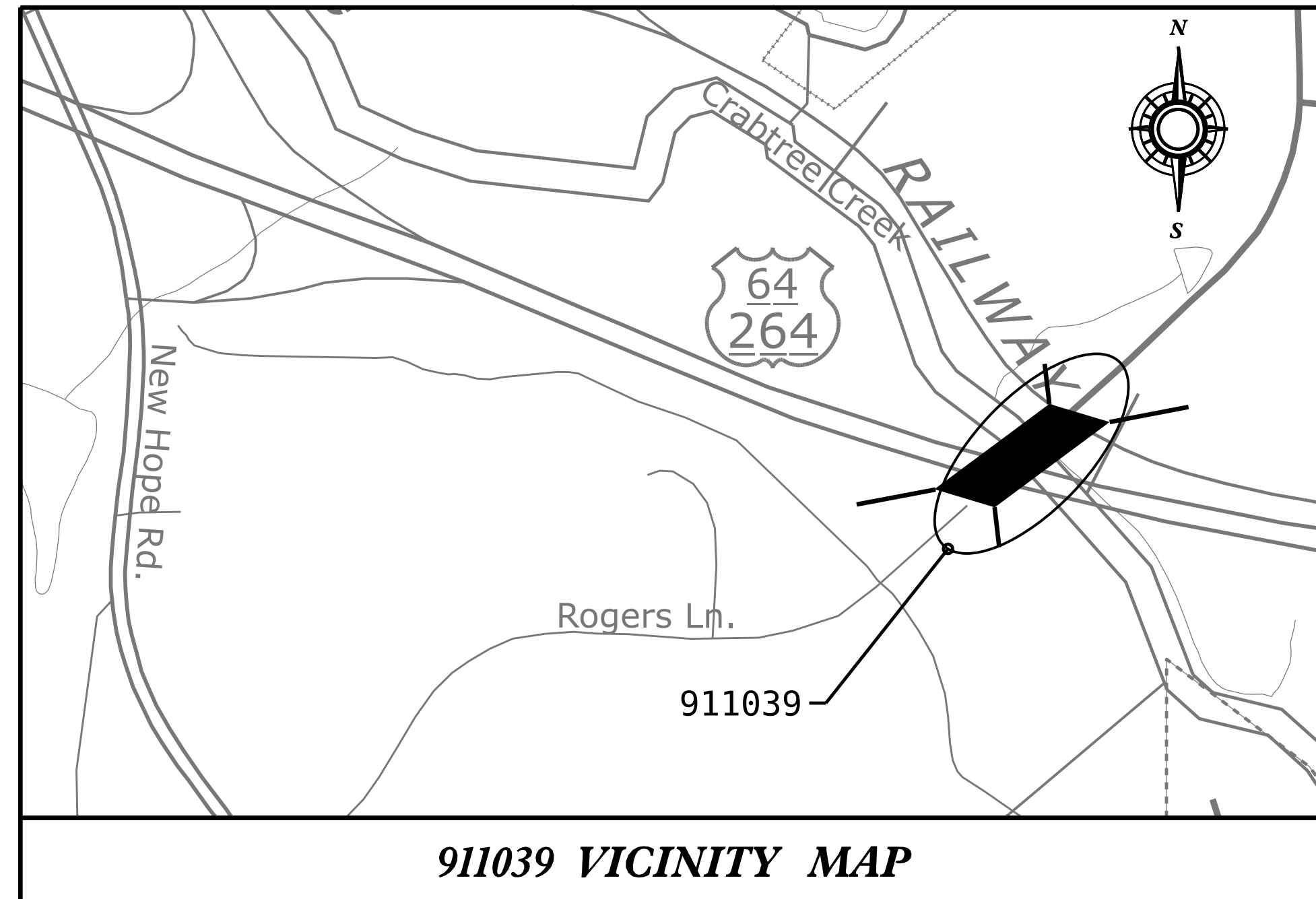
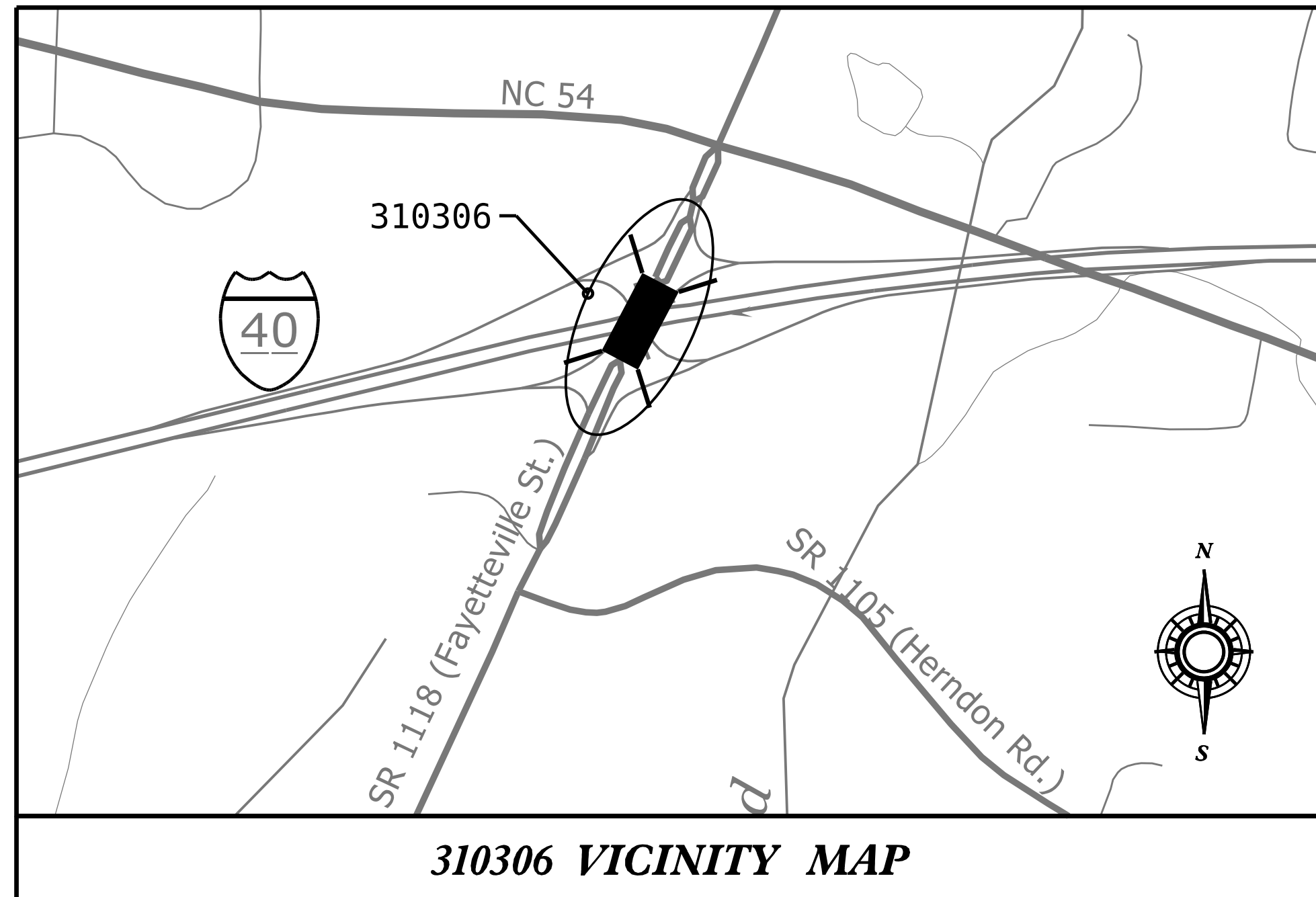


DURHAM & WAKE COUNTIES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	15BPR.124.3	1	73
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
15BPR.124.1		P.E.	
15BPR.124.3	—	CONST.	

LOCATION: BRIDGE #310306 ON SR 1118 (FAYETTEVILLE RD.) OVER I-40
 BRIDGE #911039 ON SR 2517 (ROGERS LN.) OVER I-87/US64/US264, CRABTREE CREEK AND NS RAILROAD
 BRIDGE #911083 ON NC-98 OVER US-1 (CAPITAL BLVD.)
 BRIDGE #911084 ON NC-98 OVER RICHLAND CREEK

TYPE OF WORK: BRIDGE PRESERVATION - MILLING AND REPAVING APPROACH ROADWAYS, DIAMOND GRINDING APPROACH SLAB, SHOTBLASTING AND SILANE DECK TREATMENT, FOAM JOINT REPLACEMENT, EXPANSION JOINT GLAND REPLACEMENT, MODULAR EXPANSION JOINT GLAND REPLACEMENT, SHOTBLASTING AND SILANE BARRIER RAIL TREATMENT, SAW CUTTING OF BARRIER RAIL, 3-BAR METAL RAIL SECTION REPLACEMENTS, CONCRETE MEDIAN ISLAND REPAIR, CLEANING AND PAINTING EXISTING STRUCTURE, CLEANING AND PAINTING EXISTING WEATHERING STEEL, CLEANING AND EPOXY COATING PRESTRESSED GIRDER ENDS, SHOTCRETE REPAIRS, CLEANING AND EPOXY COATING SUBSTRUCTURE CAPS, SLOPE PROTECTION VOID FILLING AND REPAIR.



DESIGN DATA

BRIDGE #310306 - ADT 34,000 - 2019
 BRIDGE #911039 - ADT 10,000 - 2019
 BRIDGE #911083 - ADT 30,000 - 2018
 BRIDGE #911084 - ADT 30,000 - 2018

PROJECT LENGTH

BRIDGE #310306 - 0.04 MILE
 BRIDGE #911039 - 0.11 MILE
 BRIDGE #911083 - 0.03 MILE
 BRIDGE #911084 - 0.08 MILE

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

2018 STANDARD SPECIFICATIONS

AUGUST 15, 2023
 LETTING DATE

KRISTY W. ALFORD, P.E.
 PROJECT ENGINEER

NICHOLAS A. PIERCE, P.E.
 PROJECT DESIGN ENGINEER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

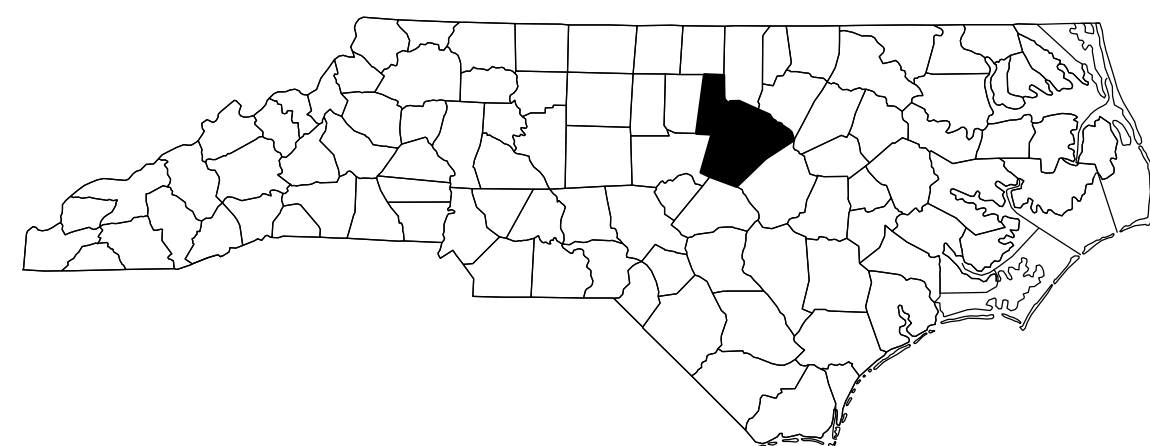
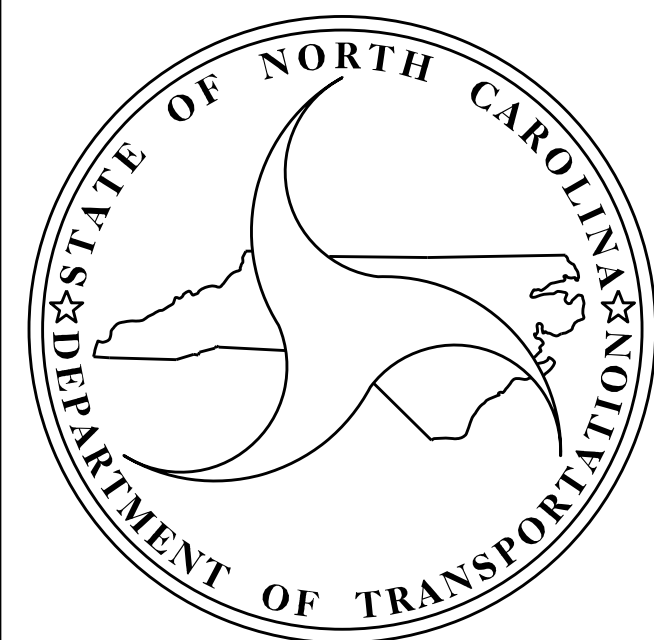
DURHAM & WAKE COUNTIES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	15BPR.124.3	1A	73
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
15BPR.124.1		P.E.	
15BPR.124.3	—	CONST.	

LOCATION: BRIDGE #310306 ON SR 1118 (FAYETTEVILLE RD.) OVER I-40
 BRIDGE #911039 ON SR 2517 (ROGERS LN.) OVER I-87/US64/US264, CRABTREE CREEK AND NS RAILROAD
 BRIDGE #911083 ON NC-98 OVER US-1 (CAPITAL BLVD.)
 BRIDGE #911084 ON NC-98 OVER RICHLAND CREEK

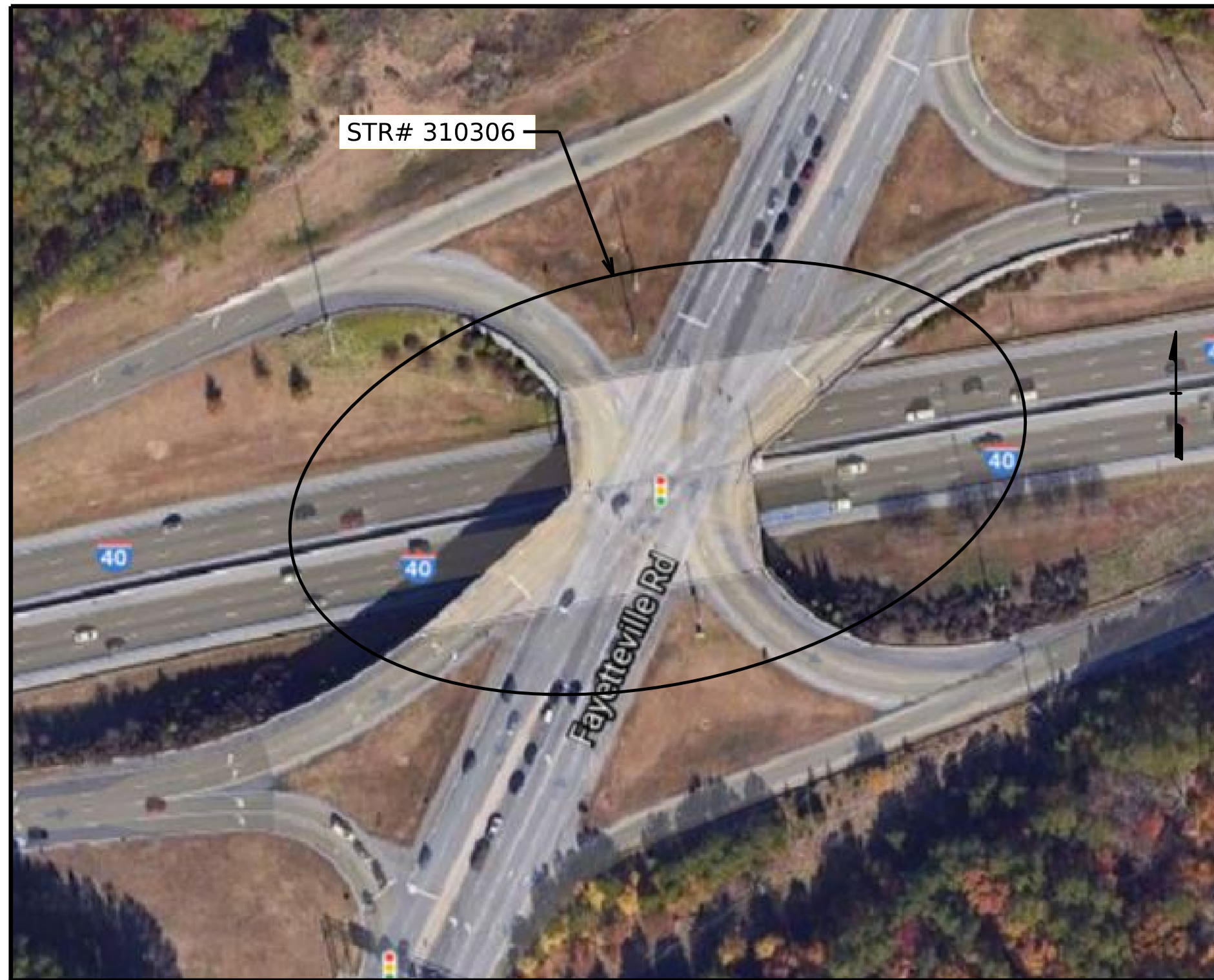
INDEX OF STRUCTURES SHEETS

<u>SHEET No.</u>	<u>DESCRIPTION</u>	<u>SHEET No.</u>	<u>DESCRIPTION</u>	<u>SHEET No.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET	S2-06	EXPANSION JOINT SEAL REPAIR SHEET 1	STRUCTURE No. 911084	
1A	INDEX OF SHEETS	S2-07	EXPANSION JOINT SEAL REPAIR SHEET 2	S4-01	GENERAL DRAWING
S-01	LOCATION SKETCHES	S2-08	MODULAR EXPANSION JOINT REPAIR	S4-02	TYPICAL SECTION
S-02	TOTAL BILL OF MATERIALS	S2-09	3 BAR METAL RAIL REPAIR SHEET 1	S4-03	DECK SURFACE REPAIR - SPAN A
STRUCTURE No. 310306		S2-10	3 BAR METAL RAIL REPAIR SHEET 2	S4-04	DECK SURFACE REPAIR - SPAN B
S1-01	GENERAL DRAWING	S2-11	3 BAR METAL RAIL REPAIR SHEET 3	S4-05	DECK SURFACE REPAIR - SPAN C
S1-02	TYPICAL SECTION	S2-12	DECK UNDERSIDE REPAIR - SPAN A	S4-06	DECK SURFACE REPAIR - SPAN D
S1-03	DECK SURFACE REPAIR - SPAN A	S2-13	DECK UNDERSIDE REPAIR - SPAN B	S4-07	FOAM JOINT REPAIR
S1-04	DECK SURFACE REPAIR - SPAN B	S2-14	DECK UNDERSIDE REPAIR - SPAN C	S4-08	DECK UNDERSIDE REPAIR - SPAN A
S1-05	FOAM JOINT REPAIR	S2-15	END BENT 1	S4-09	DECK UNDERSIDE REPAIR - SPAN B
S1-06	EXPANSION JOINT SEAL REPAIR	S2-16	BENT 1	S4-10	DECK UNDERSIDE REPAIR - SPAN C
S1-07	EXPANSION JOINT SEAL REPAIR SHEET 2	S2-17	BENT 2	S4-11	DECK UNDERSIDE REPAIR - SPAN D
S1-08	EXPANSION JOINT SEAL REPAIR SHEET 3	S2-18	END BENT 2	S4-12	END BENT 1
S1-09	CONCRETE BARRIER RAIL REPAIR	STRUCTURE No. 911083		S4-13	BENT 1 - SPAN A FACE
S1-10	DECK UNDERSIDE REPAIR	S3-01	GENERAL DRAWING	S4-14	BENT 1 - SPAN B FACE
S1-11	END BENT 1	S3-02	TYPICAL SECTION	S4-15	BENT 2 - SPAN B FACE
S1-12	BENT 1 - SPAN A FACE	S3-03	DECK SURFACE REPAIR - SPAN A	S4-16	BENT 2 - SPAN C FACE
S1-13	BENT 1 - SPAN B FACE	S3-04	DECK SURFACE REPAIR - SPAN B	S4-17	BENT 3 - SPAN C FACE
S1-14	END BENT 2	S3-05	FOAM JOINT REPAIR	S4-18	BENT 3 - SPAN D FACE
S1-15	INCIDENTAL MILLING	S3-06	CONCRETE BARRIER RAIL REPAIR	S4-19	END BENT 2
STRUCTURE No. 911039		S3-07	DECK UNDERSIDE REPAIR	S4-20	SLOPE PROTECTION REPAIR
S2-01	GENERAL DRAWING	S3-08	END BENT 1	S4-21	INCIDENTAL MILLING
S2-02	TYPICAL SECTION	S3-09	BENT 1 - SPAN A FACE	STANDARD SHEETS	
S2-03	DECK SURFACE REPAIR - SPAN A	S3-10	BENT 1 - SPAN B FACE	S-03	CAP AND COLUMN REPAIR DETAILS
S2-04	DECK SURFACE REPAIR - SPAN B	S3-11	END BENT 2	S-04	PRESTRESSED GIRDER REPAIR DETAILS
S2-05	DECK SURFACE REPAIR - SPAN C	S3-12	INCIDENTAL MILLING	SN	STANDARD NOTES



TYPE OF WORK:
 BRIDGE PRESERVATION - MILLING AND REPAVING APPROACH ROADWAYS, DIAMOND GRINDING APPROACH SLAB, SHOTBLASTING AND SILANE DECK TREATMENT, FOAM JOINT REPLACEMENT, EXPANSION JOINT GLAND REPLACEMENT, MODULAR EXPANSION JOINT GLAND REPLACEMENT, SHOTBLASTING AND SILANE BARRIER RAIL TREATMENT, SAW CUTTING OF BARRIER RAIL, 3-BAR METAL RAIL SECTION REPLACEMENTS, CONCRETE MEDIAN ISLAND REPAIR, CLEANING AND PAINTING EXISTING STRUCTURE, CLEANING AND PAINTING EXISTING WEATHERING STEEL, CLEANING AND EPOXY COATING PRESTRESSED GIRDER ENDS, SHOTCRETE REPAIRS, CLEANING AND EPOXY COATING SUBSTRUCTURE CAPS, SLOPE PROTECTION VOID FILLING AND REPAIR.

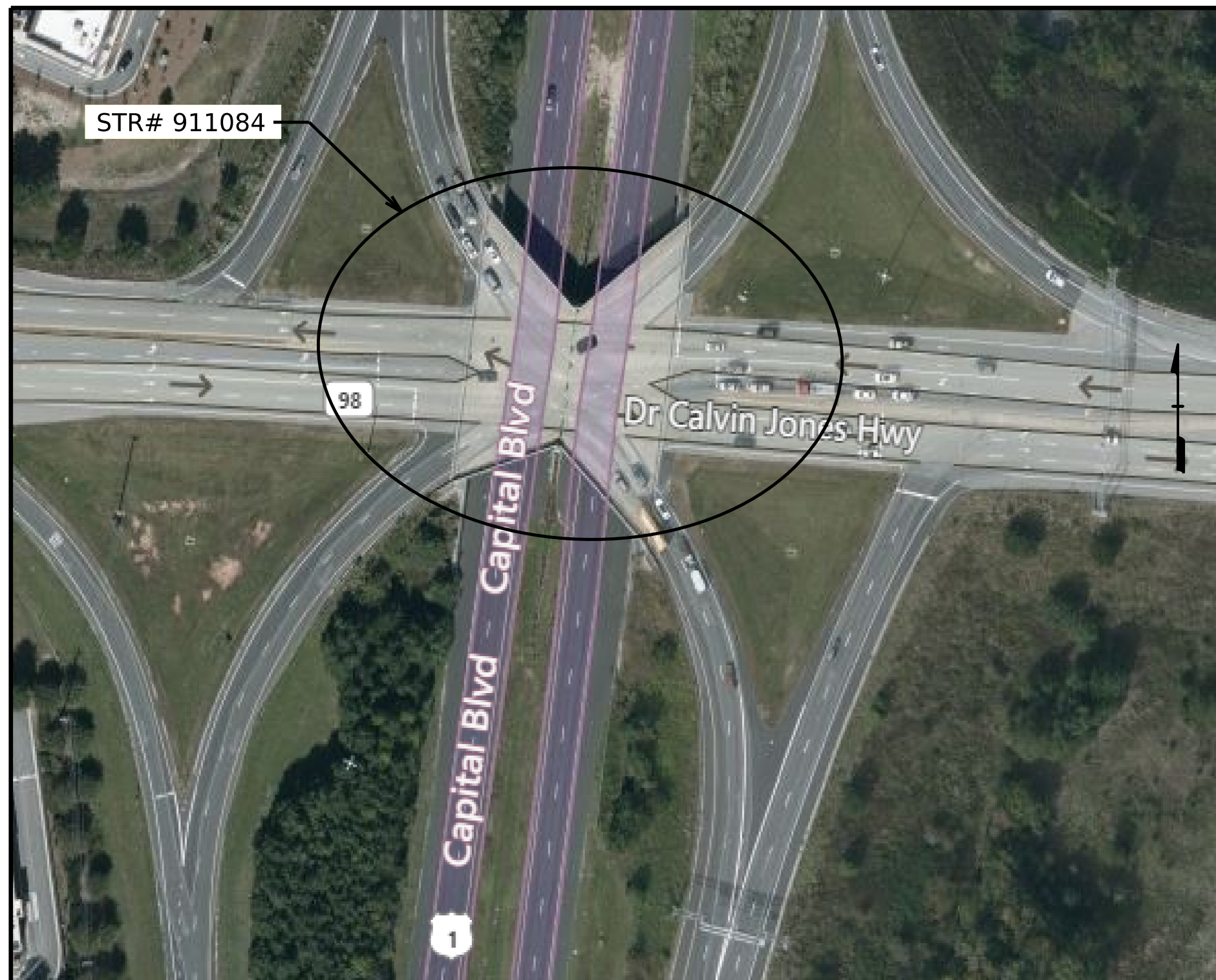
Prepared in the Office of:
DIVISION OF HIGHWAYS
 STRUCTURES MANAGEMENT UNIT
 1000 BIRCH RIDGE DR.
 RALEIGH, N.C. 27610



BRIDGE 310306 LOCATION SKETCH



BRIDGE 911039 LOCATION SKETCH



BRIDGE 911083 LOCATION SKETCH



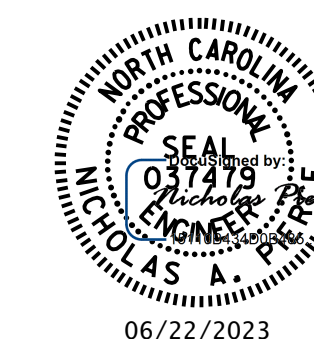
BRIDGE 911084 LOCATION SKETCH

NOTES

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

BRIDGE COORDINATES		
BRIDGE No.	LATITUDE	LONGITUDE
310306	35°-54' - 31.47"	78°-56' - 8.67"
911039	35°-46' - 26.39"	78°-32' - 56.61"
911083	35°-57' - 55.17"	78°-32' - 30.55"
911084	35°-57' - 54.40"	78°-32' - 17.67"

PROJECT NO. **15BPR.124.3**
DURHAM/WAKE COUNTY
 BRIDGE NO. **310306, 911039, 911083, 911084**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 LOCATION SKETCH

DRAWN BY : D.A. CANTRELL DATE : 03/2022
 CHECKED BY : A.Y. GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-01
2			4			TOTAL SHEETS 73

TOTAL BILL OF MATERIAL																
BRIDGE No.	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE TYPE S9.5B	ASPHALT BINDER PLANT MIX	INDUCTIVE LOOP SAWCUT	LEAD IN CABLE	POLLUTION CONTROL	RIP RAP CLASS B	GEOTEXTILE FOR DRAINAGE	CONCRETE REPAIRS	SHOTCRETE REPAIRS	PAINTING CONTAINMENT FOR BRIDGE #__	CLEANING AND REPAINTING OF BRIDGE #__	CLEANING AND PAINTING EXISTING WEATHERING STEEL FOR BRIDGE #__	EXPANSION JOINT SEALS FOR PRESERVATION	FOAM JOINT SEALS FOR PRESERVATION	MODULAR EXPANSION JOINT SEALS FOR PRESERVATION
	SQ.YDS.	TON	TON	LIN. FT.	LIN. FT.	LUMP SUM	TONS	SQ.YDS.	CU.FT.	CU.FT.	LUMP SUM	LUMP SUM	LUMP SUM	LIN.FT.	LIN.FT.	LIN.FT.
310306	2848.4	240	20	1,600	400	LUMP SUM	-	-	-	5.0	LUMP SUM	LUMP SUM	-	138.8	531.9	-
911039	-	-	-	-	-	LUMP SUM	-	-	-	-	LUMP SUM	-	LUMP SUM	73.4	-	73.4
911083	1969.8	170	15	1,600	400	LUMP SUM	-	-	-	-	LUMP SUM	-	LUMP SUM	-	513.0	-
911084	1698.4	140	10	1,200	200	-	180	200	9.5	13.3	-	-	-	-	325.0	-
TOTAL	6,516.6	550	45	4,400	1,000	LUMP SUM	180	200	9.5	18.3	LUMP SUM	LUMP SUM	LUMP SUM	212.2	1,369.9	73.4

TOTAL BILL OF MATERIAL															
BRIDGE No.	POURABLE SILICONE JOINT SEALANT	3 BAR METAL RAIL REPAIR	ELASTOMERIC CONCRETE FOR PRESERVATION	SLOPE PROTECTION VOID FILLING	BRIDGE JOINT DEMOLITION	EPOXY COATING	EPOXY COATING CONCRETE GIRDER ENDS	SURFACE PREPARATION FOR CONCRETE BARRIER	SILANE BARRIER RAIL TREATMENT	DIAMOND GRINDING CONCRETE APPROACH SLAB	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT	SAW CUTTING CONCRETE BARRIER RAIL		
	LIN.FT.	LIN.FT.	CU.FT.	LBS.	SQ.FT.	SQ.FT.	SQ.FT.	SQ.FT.	SQ.FT.	SQ.YDS.	SQ.YDS.	SQ.YDS.	EA.		
310306	1260.0	-	281.2	-	1017.2	3029.0	-	1940.4	1940.4	-	3701.2	3701.2	2		
911039	-	60.0	-	-	-	1448.0	-	-	-	-	4824.2	4824.2	-		
911083	898.0	-	141.1	-	567.7	2406.0	-	1861.3	1861.3	-	3023.6	3023.6	2		
911084	-	-	81.4	1260	293.6	2912.7	1664	3448.0	3448.0	210	4766.6	4766.6	-		
TOTAL	2,158.0	60.0	503.7	1,260	1,878.5	9,795.7	1,664	7,249.7	7,249.7	210	16,315.6	16,315.6	4		

NOTES

REPAIR LOCATIONS AND ESTIMATES OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS.

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

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

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

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

WORK ON THE BRIDGES SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL BELOW. THE CONTRACTOR SHALL SUBMIT PLANS FOR CONSTRUCTION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS AND THE PROJECT SPECIAL PROVISIONS.

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

FOR FINAL PAVEMENT MARKINGS AND MARKERS, SEE TRANSPORTATION MANAGEMENT PLANS.

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

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

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

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR EXPANSION JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR MODULAR EXPANSION JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR PAINTING EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.

FOR CLEANING AND PAINTING EXISTING WEATHERING STEEL FOR BRIDGE, SEE THE "PAINTING EXISTING WEATHERING STEEL STRUCTURE" SPECIAL PROVISION.

FOR PAINTING CONTAINMENT FOR BRIDGE AND POLLUTION CONTROL, SEE "PAINTING EXISTING WEATHERING STEEL STRUCTURE" AND "PAINTING EXISTING STRUCTURE" SPECIAL PROVISIONS.

FOR SAW CUTTING CONCRETE BARRIER RAIL, SEE SPECIAL PROVISIONS.

FOR SLOPE PROTECTION VOID FILLING, SEE SPECIAL PROVISIONS.

FOR SURFACE PREPARATION FOR CONCRETE BARRIER AND SILANE BARRIER RAIL TREATMENT, SEE "SILANE BARRIER RAIL TREATMENT" SPECIAL PROVISION.

FOR EPOXY COATING AND DEBRIS REMOVAL, SEE SPECIAL PROVISIONS.

FOR SHOTBLASTING BRIDGE DECK AND SILANE DECK TREATMENT, SEE "SILANE DECK TREATMENT" SPECIAL PROVISION.

FOR DIAMOND GRINDING CONCRETE APPROACH SLABS, SEE SPECIAL PROVISIONS.

FOR EPOXY COATING CONCRETE GIRDER ENDS, SEE SPECIAL PROVISIONS.

FOR VOLUMETRIC MIXER, SEE SPECIAL PROVISIONS.

FOR 3 BAR METAL RAIL REPAIR, SEE SPECIAL PROVISIONS.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

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

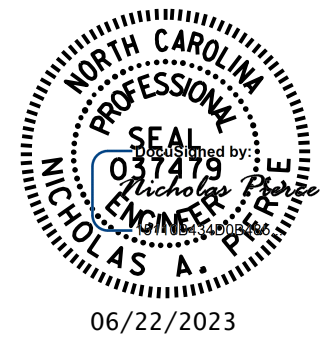
FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

FOR THERMAL SPRAYED COATING, SEE SPECIAL PROVISIONS.

UNANTICIPATED ITEMS:

ITEM DESCRIPTION	UNIT
VOLUMETRIC MIXER	LUMP SUM
CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	SQ.FT.
EPOXY RESIN INJECTION	LIN. FT.
REPAIRS TO PRESTRESSED CONCRETE GIRDERS	CU. FT.

PROJECT NO. **15BPR.124.3**
DURHAM/WAKE COUNTY
 BRIDGE NO. **310306, 911039**
911083, 911084



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

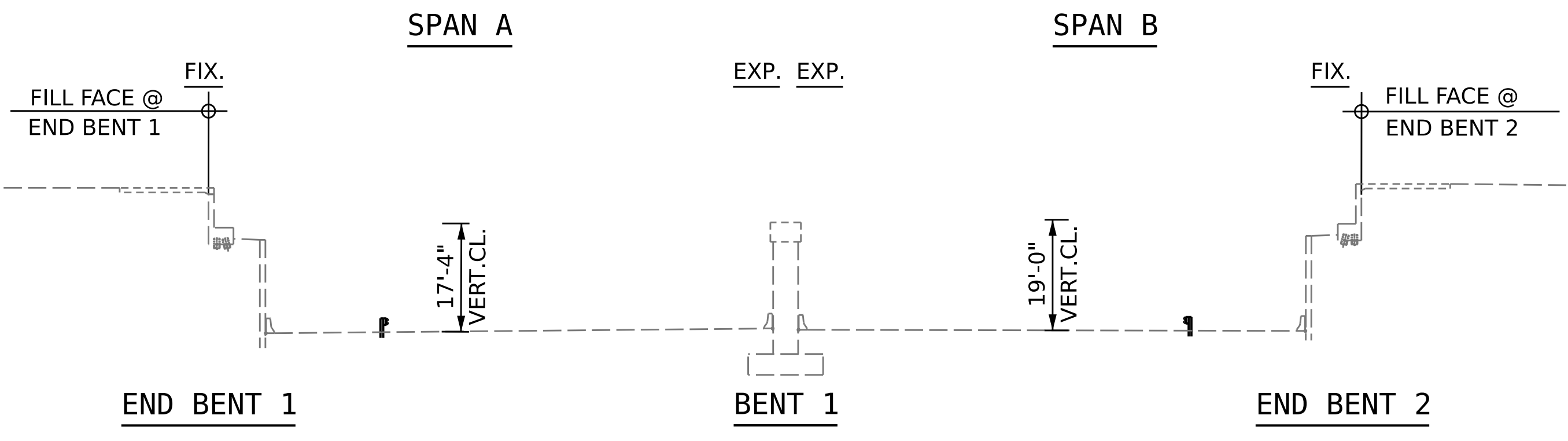
GENERAL DRAWING
BILL OF MATERIAL

DRAWN BY : N.A. PIERCE DATE : 10/2022
 CHECKED BY : J.D. HAWK DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

REVISIONS						SHEET NO. S-02 TOTAL SHEETS 73
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

8/26/21



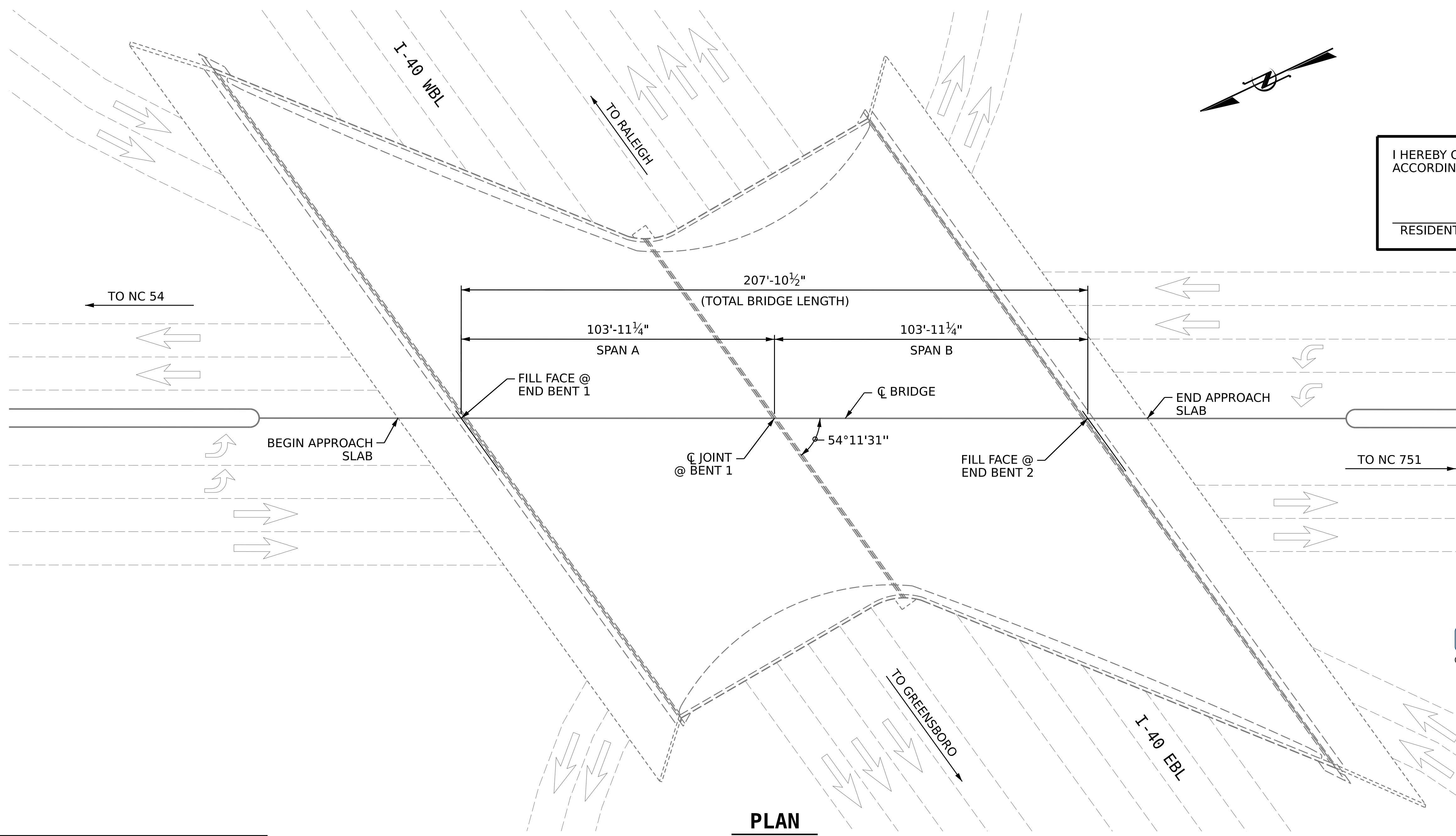
NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 08/05/2021.

BRIDGE ORIENTATION CONFORMS TO THE EXISTING BRIDGE PLANS.

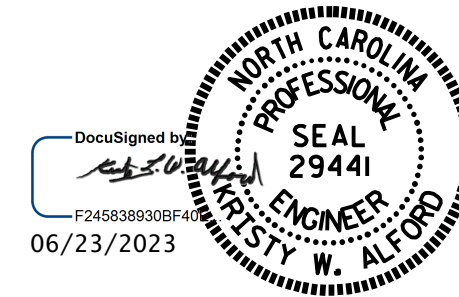
SCOPE OF WORK

- SAW CUT EXISTING BARRIER RAIL AND DECK.
- SHOTBLAST BRIDGE DECK AND BARRIER RAILS.
- APPLY SILANE DECK SEALANT TO PREPARED TOP OF BRIDGE DECK.
- APPLY SILANE BARRIER TREATMENT TO BARRIER RAILS.
- REMOVE EXISTING JOINT MATERIAL AND INSTALL FOAM JOINTS.
- REPLACE EXISTING JOINT GLAND OF EXPANSION JOINT SEAL.
- CLEAN AND PAINT STRUCTURAL STEEL.
- REMOVE DEBRIS FROM TOP OF EXISTING END BENT & BENT CAPS AND APPLY EPOXY COATING.
- REMOVE EXISTING SLOPE PROTECTION EXPANSION JOINT MATERIAL AND INSTALL POURABLE SILICONE JOINT SEALANT.



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

RESIDENT ENGINEER _____ DATE _____



PROJECT NO. **15BPR.124.3**
 DURHAM COUNTY
 BRIDGE NO. **310306**

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON SR 1118
 (FAYETTEVILLE ROAD)
 OVER I-40 BETWEEN
 NC 54 AND NC 751

DRAWN BY : N.A. PIERCE DATE : 03/2022
 CHECKED BY : A.Y. GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

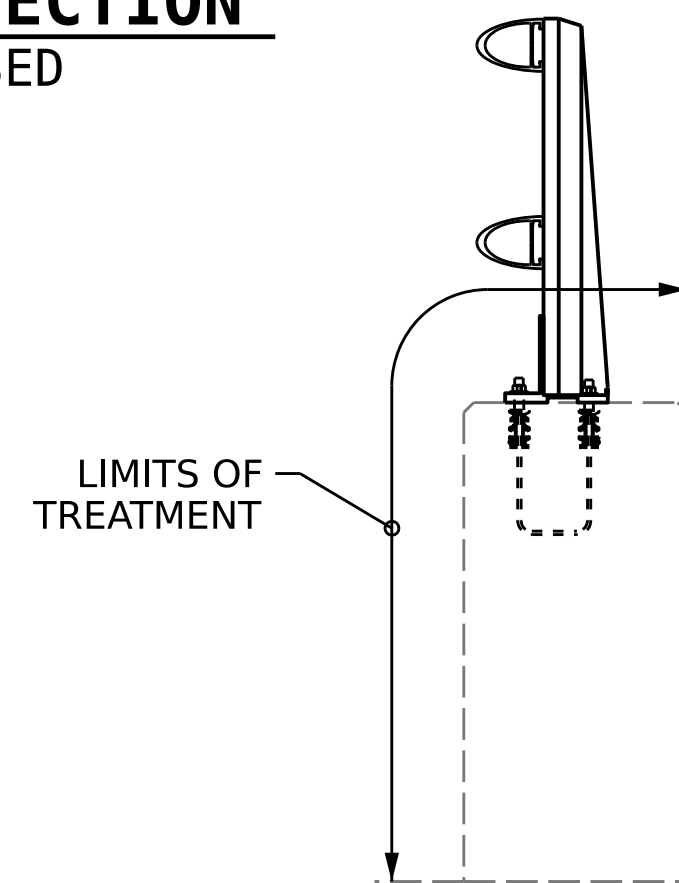
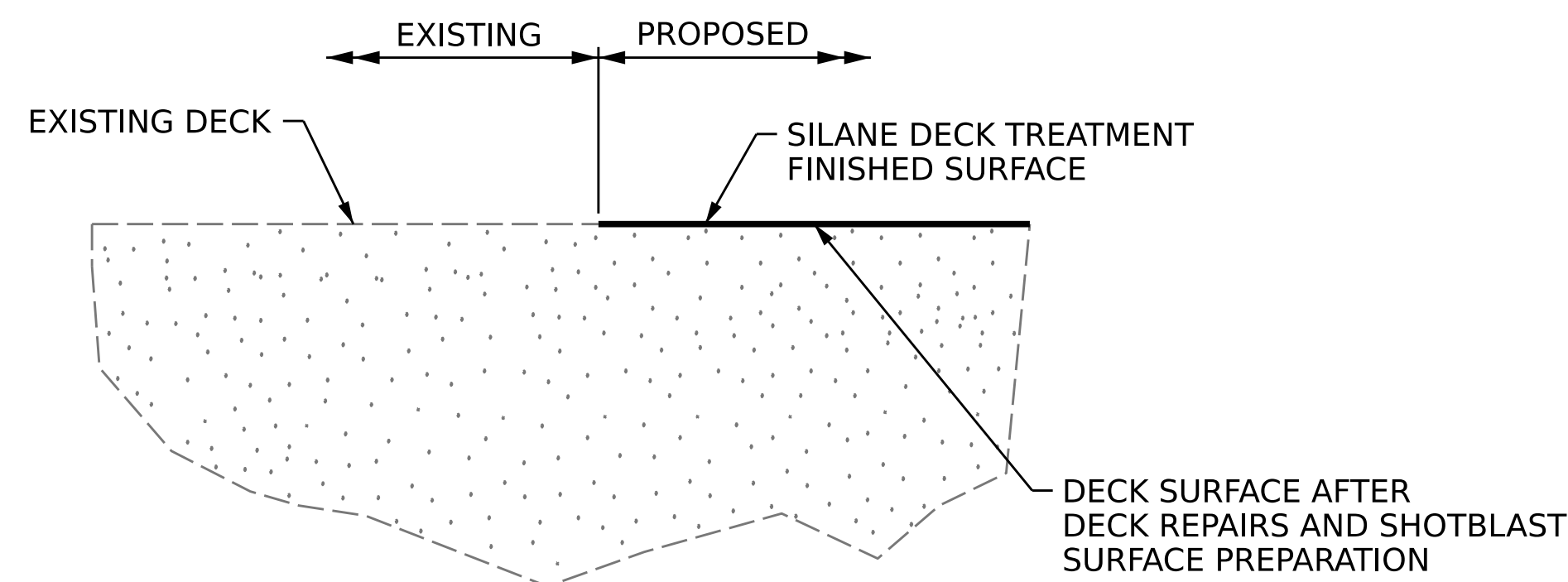
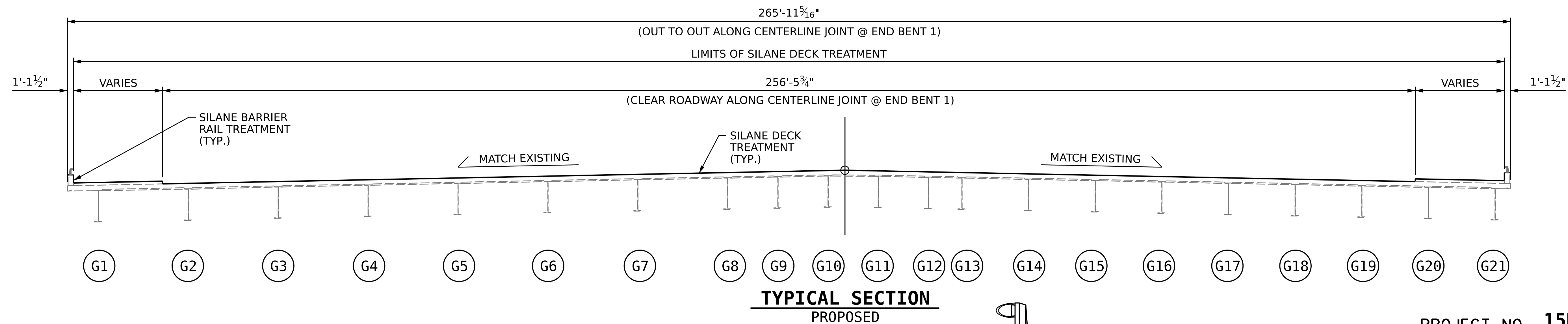
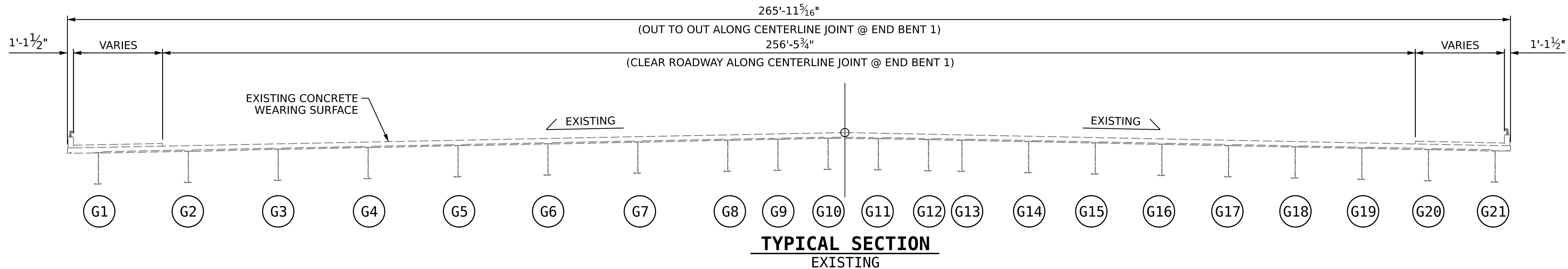
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-01
1			3			TOTAL SHEETS
2			4			15

NOTES

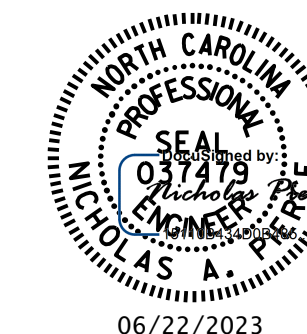
SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR SURFACE PREPARATION AND SILANE DECK TREATMENT APPLICATION.

DIMENSIONS SHOWN ARE ALONG CENTERLINE OF JOINT AT END BENT 1.

DIMENSIONS VARY ALONG BRIDGE LENGTH.



PROJECT NO. **15BPR.124.3**
DURHAM COUNTY
 BRIDGE NO. **310306**



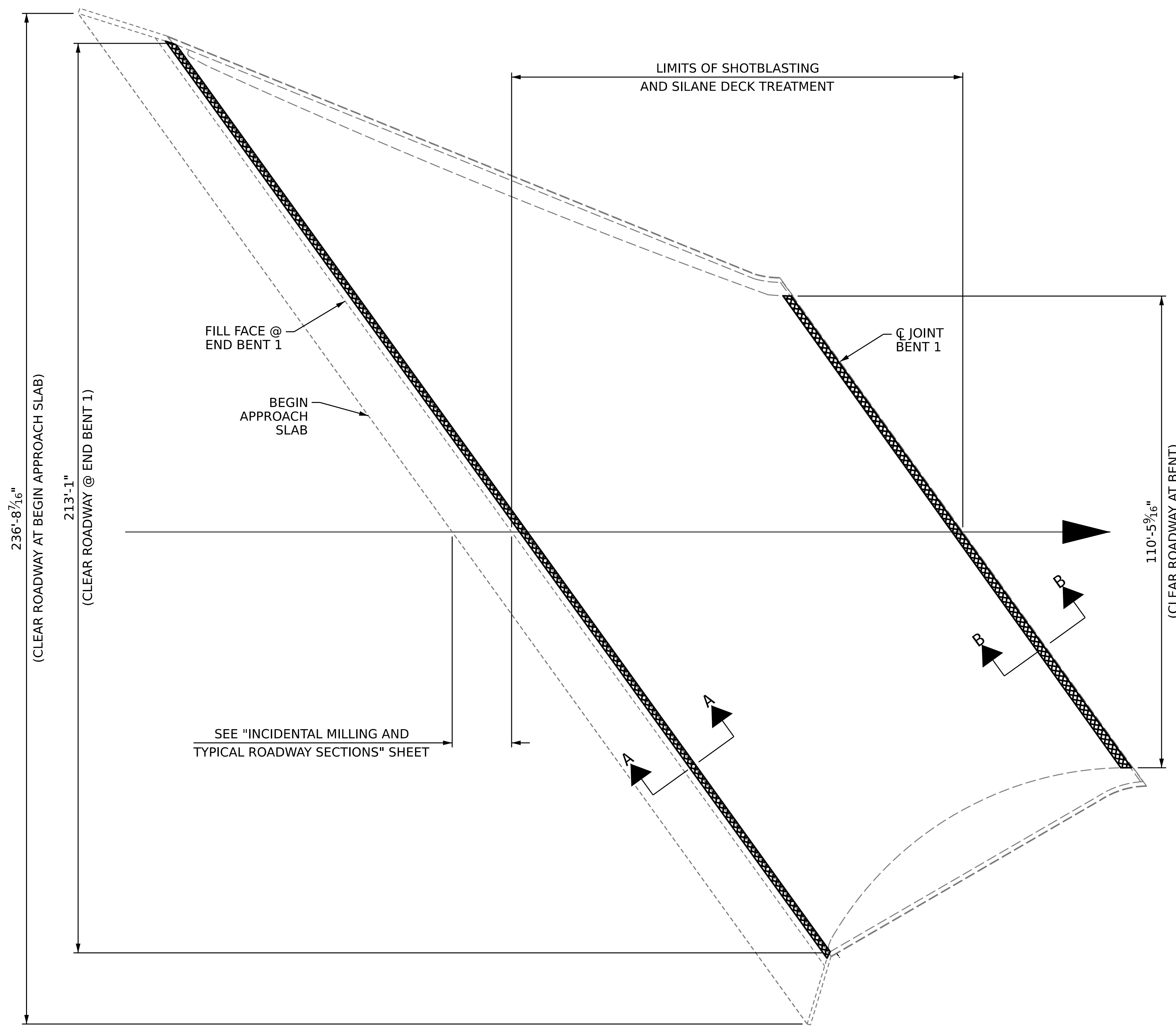
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

TYPICAL SECTION

DRAWN BY : N.A. PIERCE DATE : 03/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD: N.A. PIERCE DATE : 12/2022

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REVISIONS						SHEET NO. S1-02 TOTAL SHEETS 15
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			



DECK SURFACE REPAIR QUANTITY TABLE

SPAN A		
	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR	0.0 CU. FT	
SURFACE PREPARATION FOR CONCRETE BARRIER	754.2 SQ. FT.	
SILANE BARRIER RAIL TREATMENT	754.2 SQ. FT.	
SHOTBLASTING BRIDGE DECK	1424.6 SQ. YDS.	
SILANE DECK TREATMENT	1424.6 SQ. YDS.	
BRIDGE JOINT DEMOLITION	222.4 SQ. FT.	
APPROACH SLAB A		
	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR	0.0 CU. FT	
SURFACE PREPARATION FOR CONCRETE BARRIER	216.0 SQ. FT.	
SILANE BARRIER RAIL TREATMENT	216.0 SQ. FT.	
SHOTBLASTING BRIDGE DECK	426.0 SQ. YDS.	
SILANE DECK TREATMENT	426.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	286.2 SQ. FT.	



NOTES

DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR AFTER REMOVAL OF UNSOUND CONCRETE MIN. 2" CLEAR TO SAWCUT. SEE CONCRETE FOR DECK REPAIR SPECIAL PROVISION.

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

FOR SECTION A-A, SEE "FOAM JOINT SEALS FOR PRESERVATION DETAILS" SHEET.

FOR SECTION B-B, SEE "EXPANSION JOINT SEAL REPAIR DETAILS" SHEET 1 OF 2.

-  SHOTCRETE REPAIR AREA
-  BRIDGE JOINT DEMOLITION

PROJECT NO. **15BPR.124.3**
DURHAM COUNTY
 BRIDGE NO. **310306**

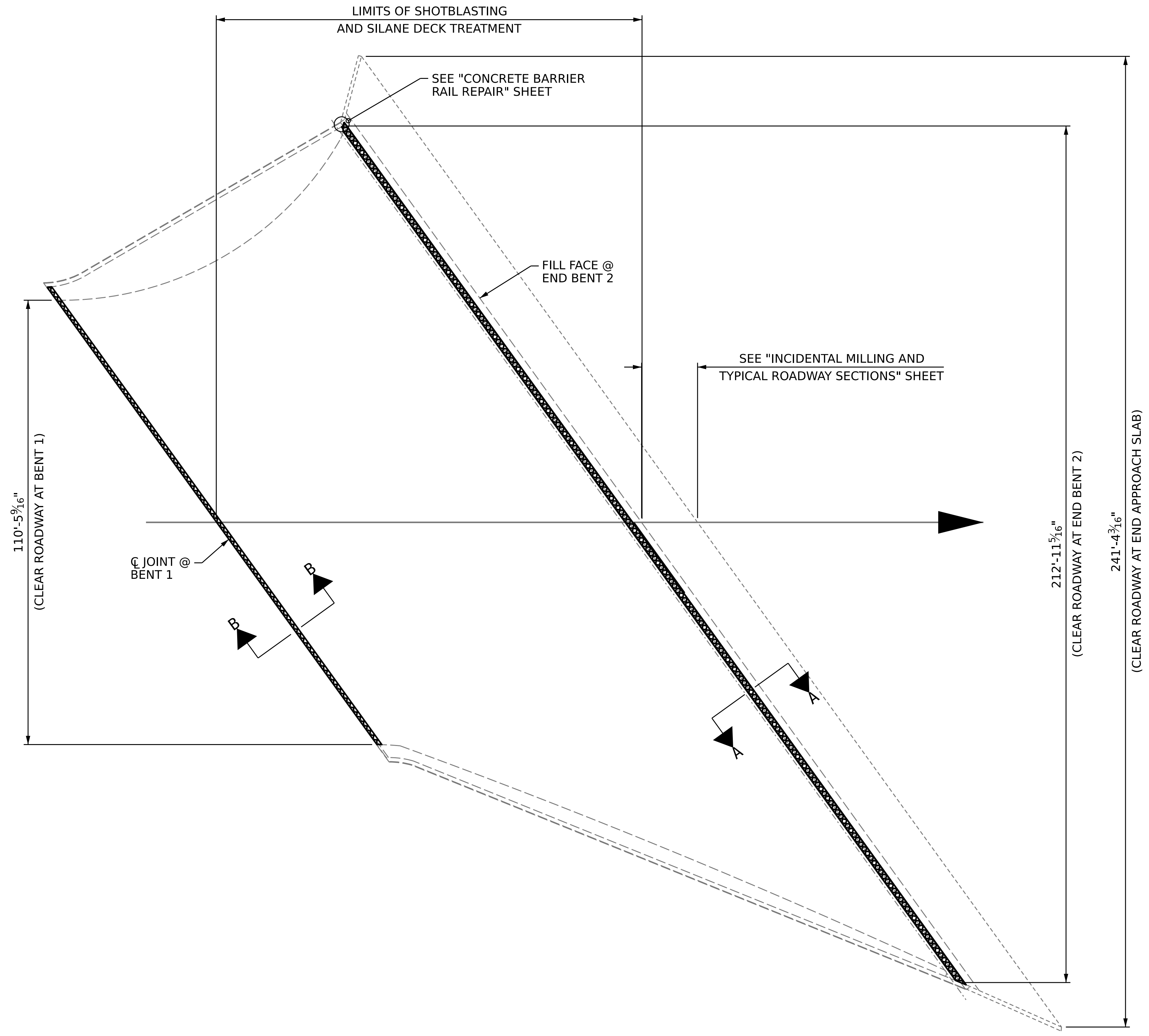


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 DECK SURFACE REPAIR
SPAN A AND APPROACH SLAB A

DRAWN BY : N.A. PIERCE DATE : 03/2022
 CHECKED BY : A.Y. GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

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1			3			S1-03
2			4			TOTAL SHEETS 15

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DECK SURFACE REPAIR QUANTITY TABLE

SPAN B		
	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR	0.0 CU. FT	
SURFACE PREPARATION FOR CONCRETE BARRIER	754.2 SQ. FT.	
SILANE BARRIER RAIL TREATMENT	754.2 SQ. FT.	
SHOTBLASTING BRIDGE DECK	1424.6 SQ. YDS.	
SILANE DECK TREATMENT	1424.6 SQ. YDS.	
BRIDGE JOINT DEMOLITION	222.4 SQ. FT.	
APPROACH SLAB B		
	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR	0.0 CU. FT	
SURFACE PREPARATION FOR CONCRETE BARRIER	216.0 SQ. FT.	
SILANE BARRIER RAIL TREATMENT	216.0 SQ. FT.	
SHOTBLASTING BRIDGE DECK	426.0 SQ. YDS.	
SILANE DECK TREATMENT	426.0 SQ. YDS.	
BRIDGE JOINT DEMOLITION	286.2 SQ. FT.	

NOTES

DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR AFTER REMOVAL OF UNSOUND CONCRETE. (MIN. 2" CLEAR TO SAWCUT). SEE CONCRETE FOR DECK REPAIR SPECIAL PROVISION.

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

FOR SECTION A-A, SEE "FOAM JOINT SEALS FOR PRESERVATION DETAILS" SHEET.

FOR SECTION B-B, SEE "EXPANSION JOINT SEAL REPAIR DETAILS" SHEET 1 OF 2.

- SHOTCRETE REPAIR AREA
- BRIDGE JOINT DEMOLITION

PROJECT NO. 15BPR.124.3
 _____ **DURHAM** _____ COUNTY
 BRIDGE NO. 310306



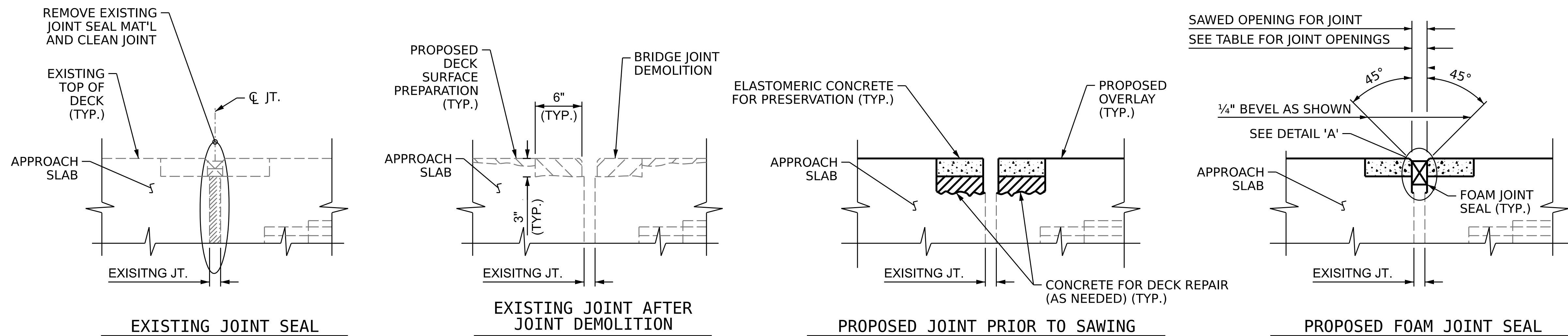
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 DECK SURFACE REPAIR
**SPAN B AND
 APPROACH SLAB B**

DRAWN BY : N.A. PIERCE DATE : 03/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

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1			3		
2			4		

SHEET NO. **S1-04**
 TOTAL SHEETS **15**



SECTION A-A AT END BENTS

NOTES

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

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

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

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

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

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

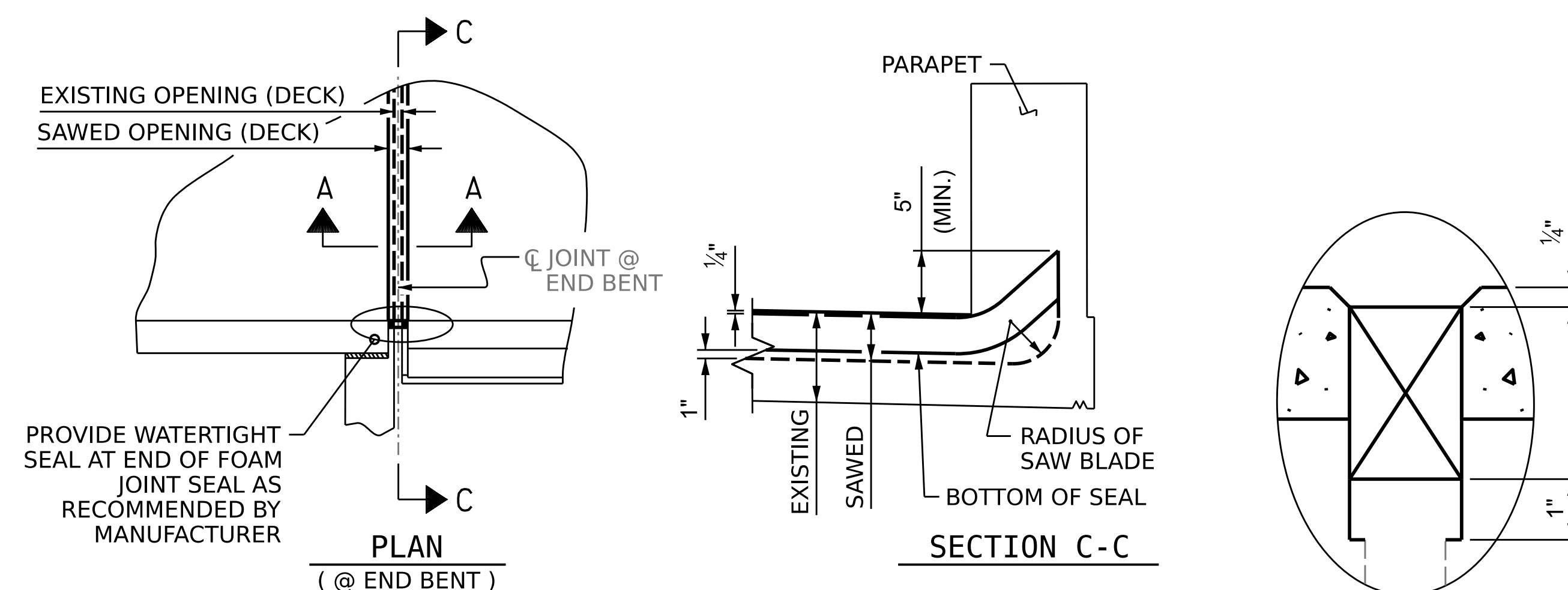
THE INSTALLED FOAM JOINTS SHALL BE WATER TIGHT.

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.

JOINT REPAIR QUANTITY TABLE		
	ESTIMATED	ACTUAL
FOAM JOINT SEALS FOR PRESERVATION	531.9 LIN.FT.	

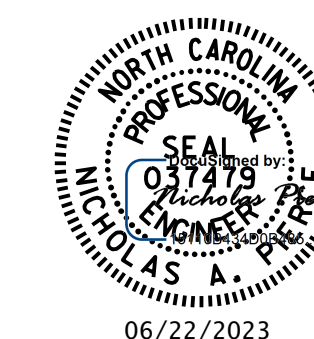
LOCATION	SAWED JT. OPENING (PERPENDICULAR TO JT.)		
	AT 45°	AT 60°	AT 90°
END BENT 1	1 3/8"	1 9/16"	1 11/16"
END BENT 2	1 3/8"	1 9/16"	1 11/16"

ELASTOMERIC CONCRETE FOR PRESERVATION		
LOCATION	ESTIMATED (CU.FT.)	ACTUAL (CU.FT.)
END BENT 1	133.0	
END BENT 2	133.0	
TOTAL	266.0	



JOINT SEAL DETAILS

PROJECT NO. **15BPR.124.3**
DURHAM COUNTY
 BRIDGE NO. **310306**

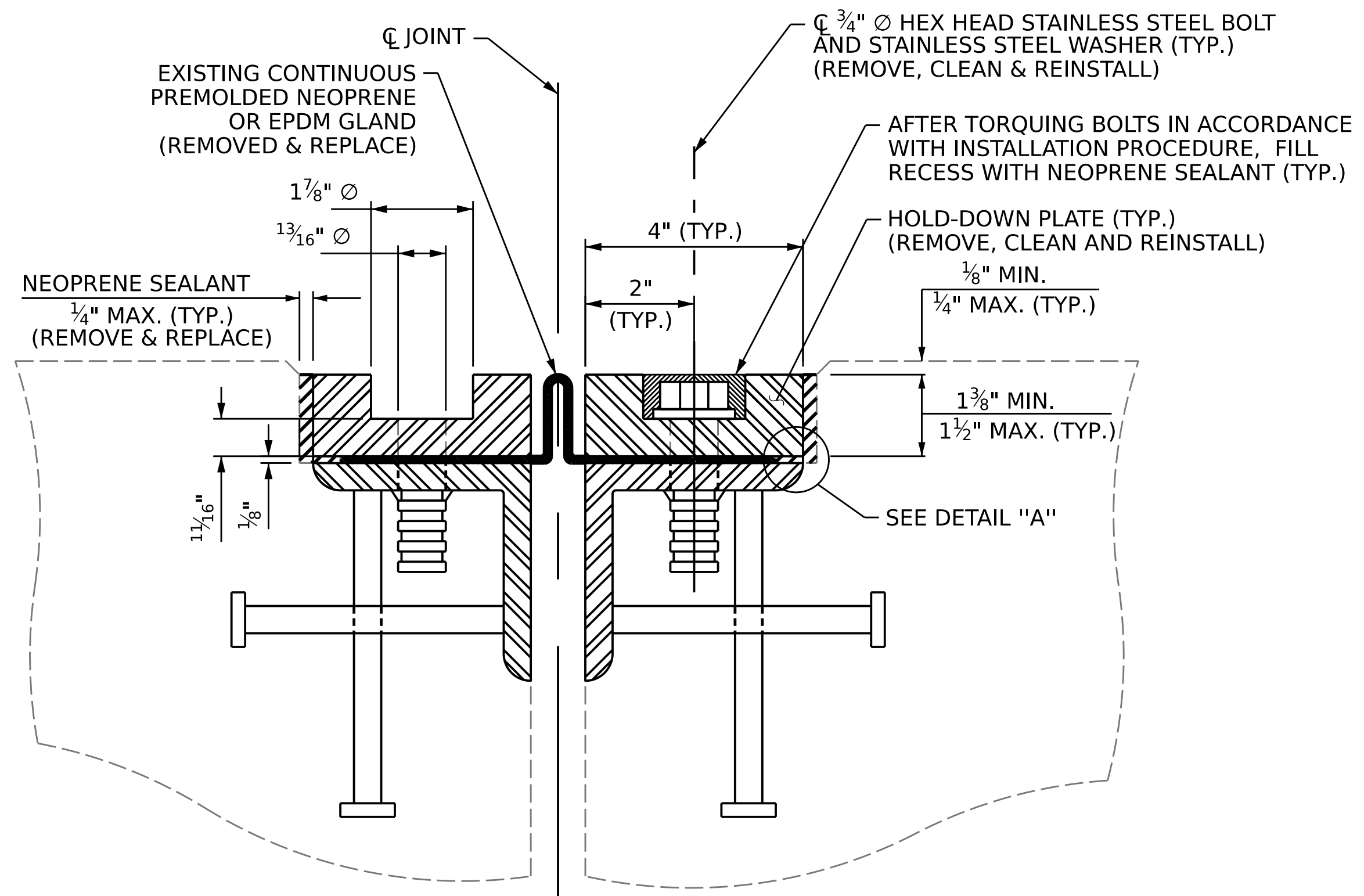


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
FOAM JOINT SEALS FOR PRESERVATION DETAILS

DRAWN BY : N.A. PIERCE DATE : 09/2020
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

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2			4			15



SUGGESTED REPAIR INSTALLATION PROCEDURE

1. LOOSEN THE EXISTING BOLTS AND HOLD-DOWN PLATES TO REMOVE AND REPLACE THE EXISTING GLAND.
2. REMOVE EXISTING BOLTS, COVER-PLATES, HOLD-DOWN PLATES AND GLAND AND CLEAN EXISTING BOLTS AND HOLD-DOWN PLATES FOR RE-USE.
3. REMOVE THE EXISTING NEOPRENE SEALANT AND CLEAN THE EXISTING BASE ANGLE AND BOLT HOLES OF OIL, GREASE AND OTHER LATENTS.
4. LAY THE NEW GLAND ON THE BASE ANGLE AND FIELD MARK THE NEW GLAND FOR THE BOLT HOLES. HOLES IN THE NEW GLAND SHALL BE PUNCHED $\frac{7}{8}"$ IN DIAMETER WITH A HAND PUNCH.
5. IN ORDER TO CHECK FOR PROPER ALIGNMENT, PLACE THE NEW GLAND AND HOLD-DOWN PLATES ON THE BASE ANGLE. DO NOT APPLY NEW NEOPRENE SEALANT. BOLT THE HOLD-DOWN PLATES TO THE BASE ANGLE, BUT DO NOT TIGHTEN. THE ENGINEER WILL INSPECT THE JOINT SEAL DEVICE FOR PROPER ALIGNMENT.
6. AFTER INSPECTION, REMOVE THE HOLD-DOWN PLATES AND NEW GLAND. APPLY NEW NEOPRENE SEALANT TO THE BASE ANGLE IN ACCORDANCE WITH THE "INSTALLATION SKETCH". PLACE NEW GLAND AND HOLD-DOWN PLATES ON THE BASE ANGLE. BOLT THE HOLD-DOWN PLATES TO THE BASE ANGLE ASSEMBLY AND TORQUE THE BOLTS TO 88 FT-LBS WITH A TORQUE WRENCH. CHECK THE TORQUE AFTER THREE (3) HOURS AND, IF NECESSARY, RETIGHTEN TO 88 FT-LBS. A FINAL CHECK SHALL BE MADE AT SEVEN (7) DAYS. TORQUE SHALL NOT BE LESS THAN 80 FT-LBS AFTER SEVEN (7) DAYS.
7. AFTER PROPER TORQUING, CLEAN THE BOLT HOLE RECESSES AND THE RECESS BETWEEN THE JOINT SEAL DEVICE AND CONCRETE. COMPLETELY FILL THESE RECESSES WITH NEW NEOPRENE SEALANT.
8. CONDUCT WATER-TIGHTNESS TEST.

GENERAL NOTES

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

THE MANUFACTURER IS TO PROVIDE THE NOMINAL GLAND SIZE BASED ON EXISTING JOINT OPENINGS AND ANTICIPATED MOVEMENTS.

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.

RETAIN ALL EXISTING HOLD-DOWN PLATES AND HARDWARE. CLEAN AND REPAIR AS NEEDED. CONTRACTOR SHALL REPLACE DAMAGED HOLD-DOWN PLATES AND/OR HARDWARE AS NEEDED OR DIRECTED BY THE ENGINEER AT NO EXTRA COST TO THE DEPARTMENT.

ALL HOLD-DOWN BOLTS SHALL CONFORM TO ASTM F593 ALLOY 304 STAINLESS STEEL AND WASHERS SHALL CONFORM TO ASTM F844 EXCEPT THEY SHALL BE MADE FROM ALLOY 304 STAINLESS STEEL.

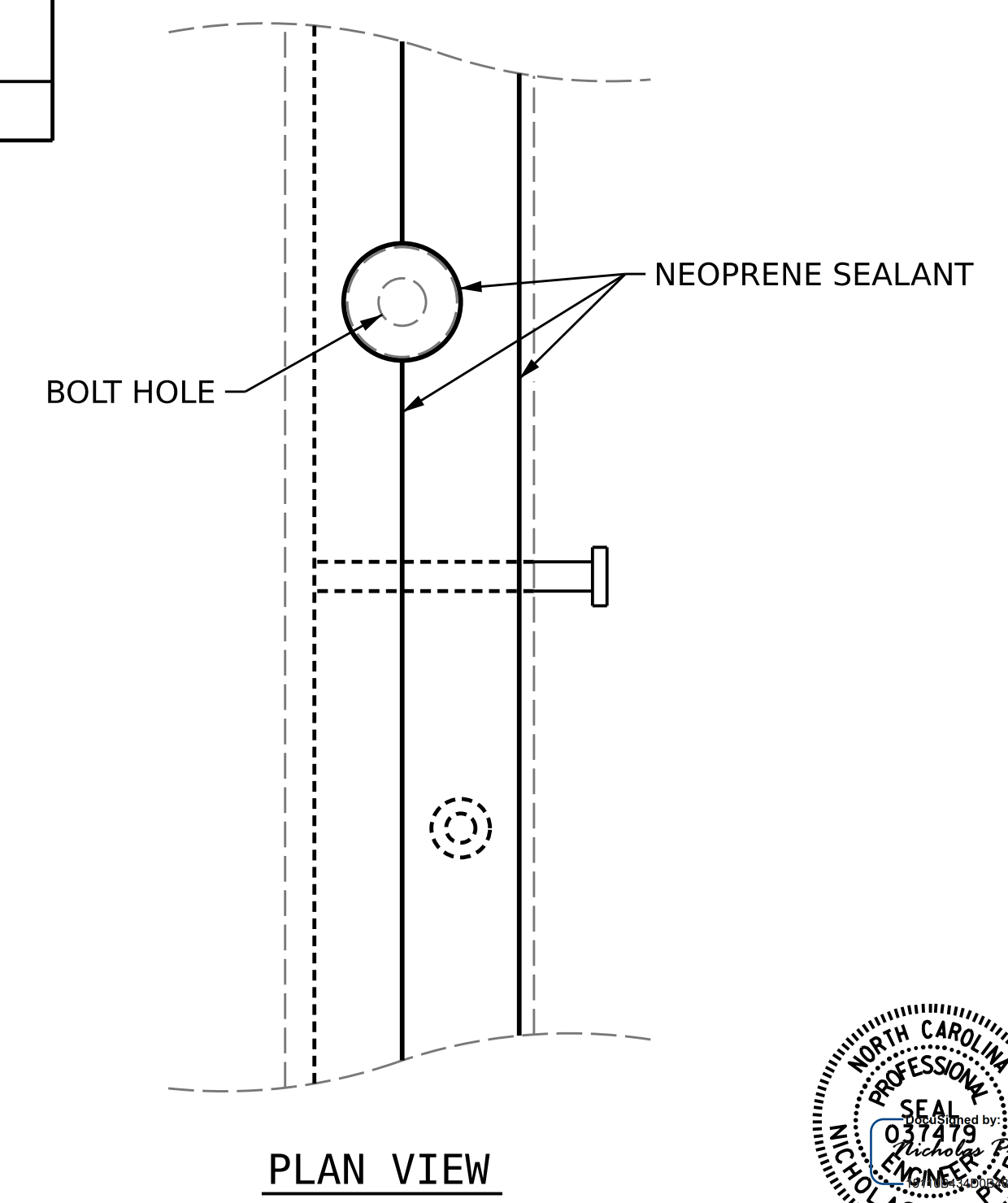
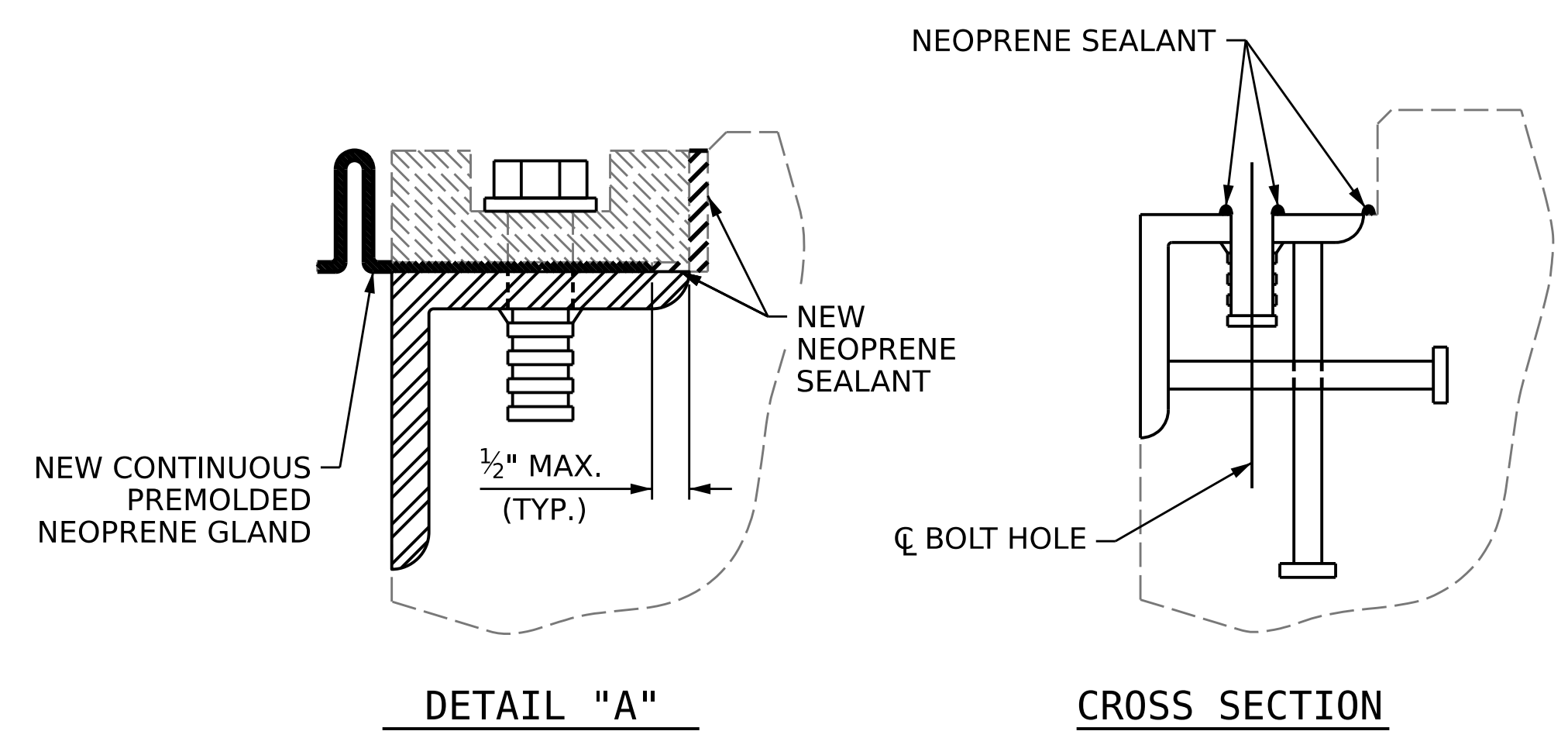
FOR EXPANSION JOINT SEAL FOR PRESERVATION, SEE SPECIAL PROVISIONS.

NO SEPARATE PAYMENT WILL BE MADE FOR REMOVING AND REINSTALLING MEDIAN, SIDEWALK AND BARRIER RAIL COVER PLATES. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE LINEAR FEET PRICE BID FOR "EXPANSION JOINT SEALS FOR PRESERVATION".

EXPANSION JOINT DETAILS SECTION B-B AT BENT 1

MOVEMENT AND SETTING AT JOINT					
LOCATION	SKIEW ANGLE	TOTAL MOVEMENT (ALONG ϕ RDWY)	PERPENDICULAR JOINT OPENING AT 30°F	PERPENDICULAR JOINT OPENING AT 60°F	PERPENDICULAR JOINT OPENING AT 90°F
BENT 1	54°11'31"	2 $\frac{3}{8}"$	3 $\frac{1}{2}"$	3"	2 $\frac{1}{2}"$

JOINT REPAIR QUANTITY TABLE		
	ESTIMATED	ACTUAL
EXPANSION JOINT SEALS FOR PRESERVATION	138.8 LIN. FT.	



INSTALLATION SKETCH

PROJECT NO. 15BPR.124.3
 DURHAM COUNTY
 BRIDGE NO. 310306

SHEET 1 OF 3

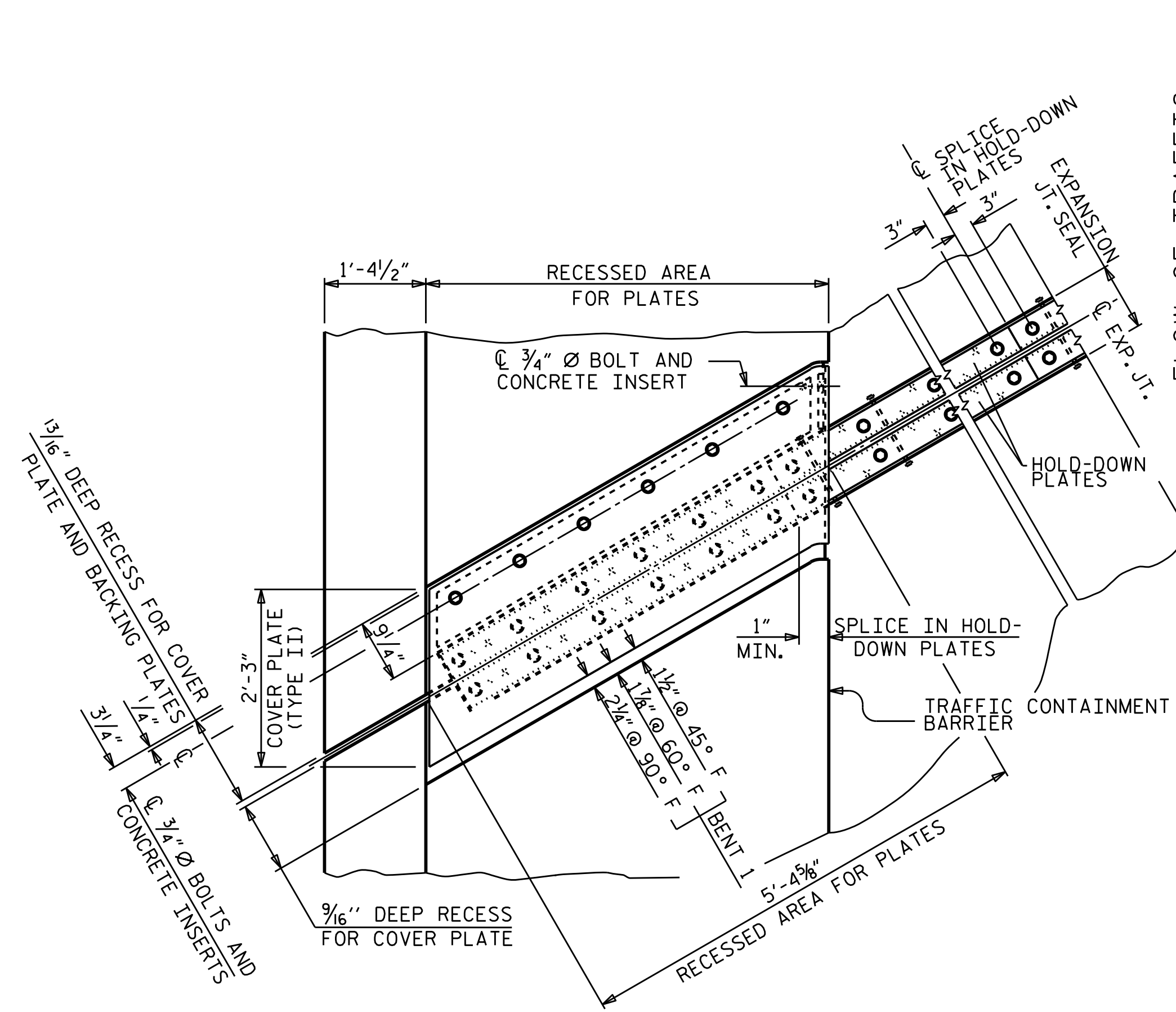


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
EXPANSION JOINT SEAL REPAIR DETAILS

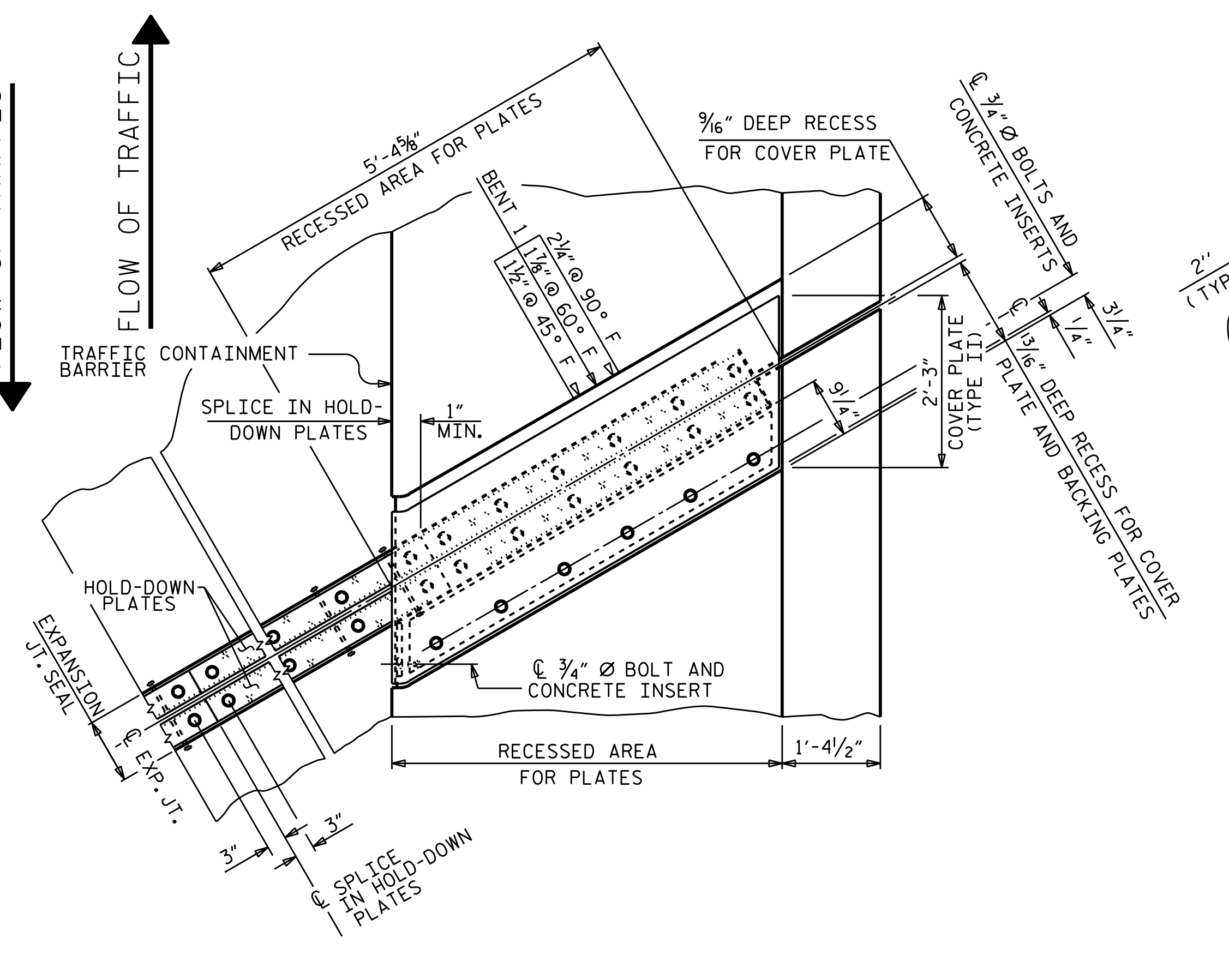
DRAWN BY : N.A. PIERCE DATE : 03/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

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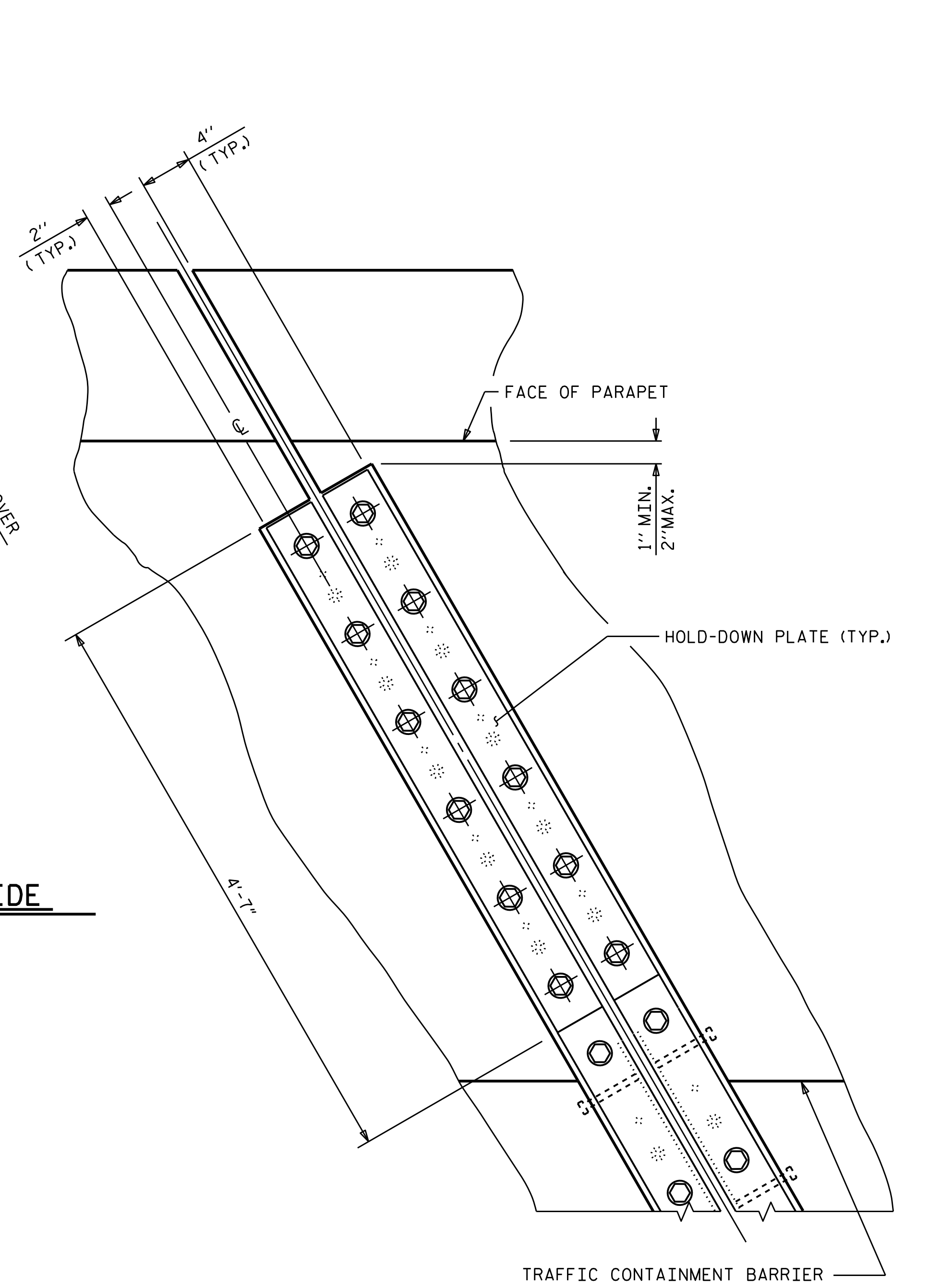
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NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S1-06
2			4			TOTAL SHEETS 15



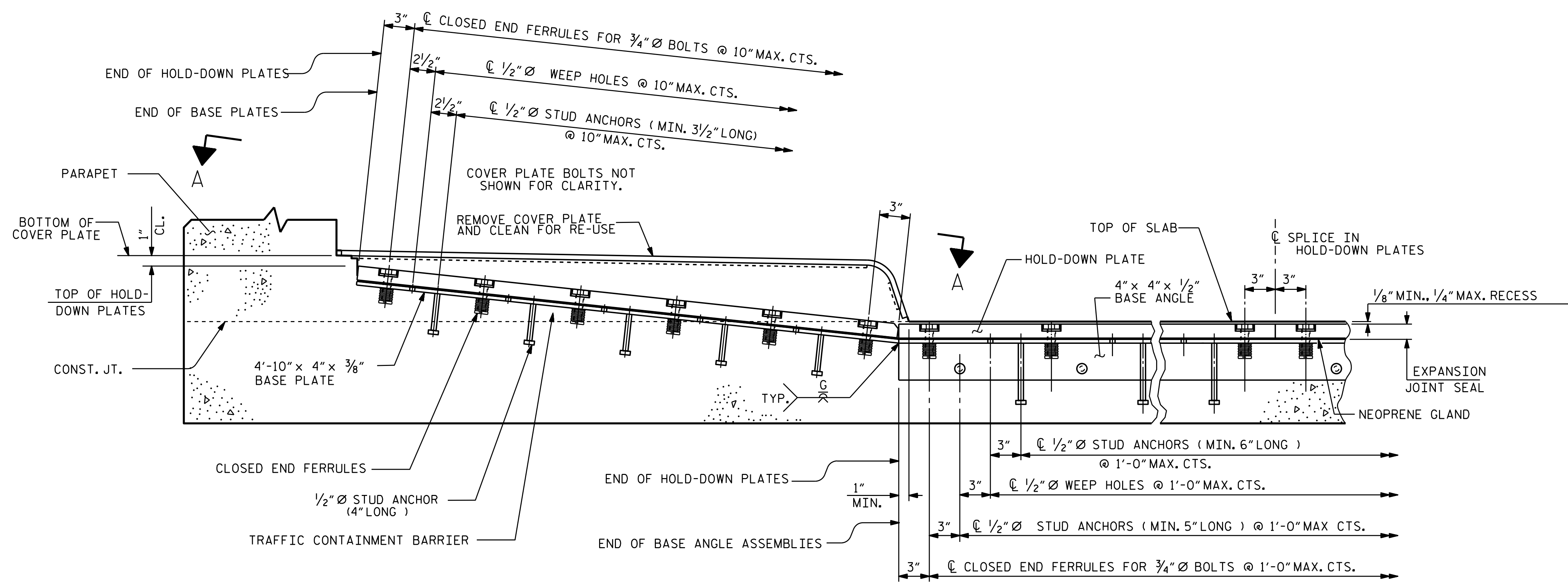
PLAN OF EXPANSION JOINT SEAL - LEFT SIDE



PLAN OF EXPANSION JOINT SEAL - RIGHT SIDE



SECTION A - A



SECTION THRU TRAFFIC CONTAINMENT BARRIER NORMAL TO JOINT

PROJECT NO. **15BPR.124.3**
DURHAM COUNTY
 BRIDGE NO. **310306**
 SHEET 2 OF 3

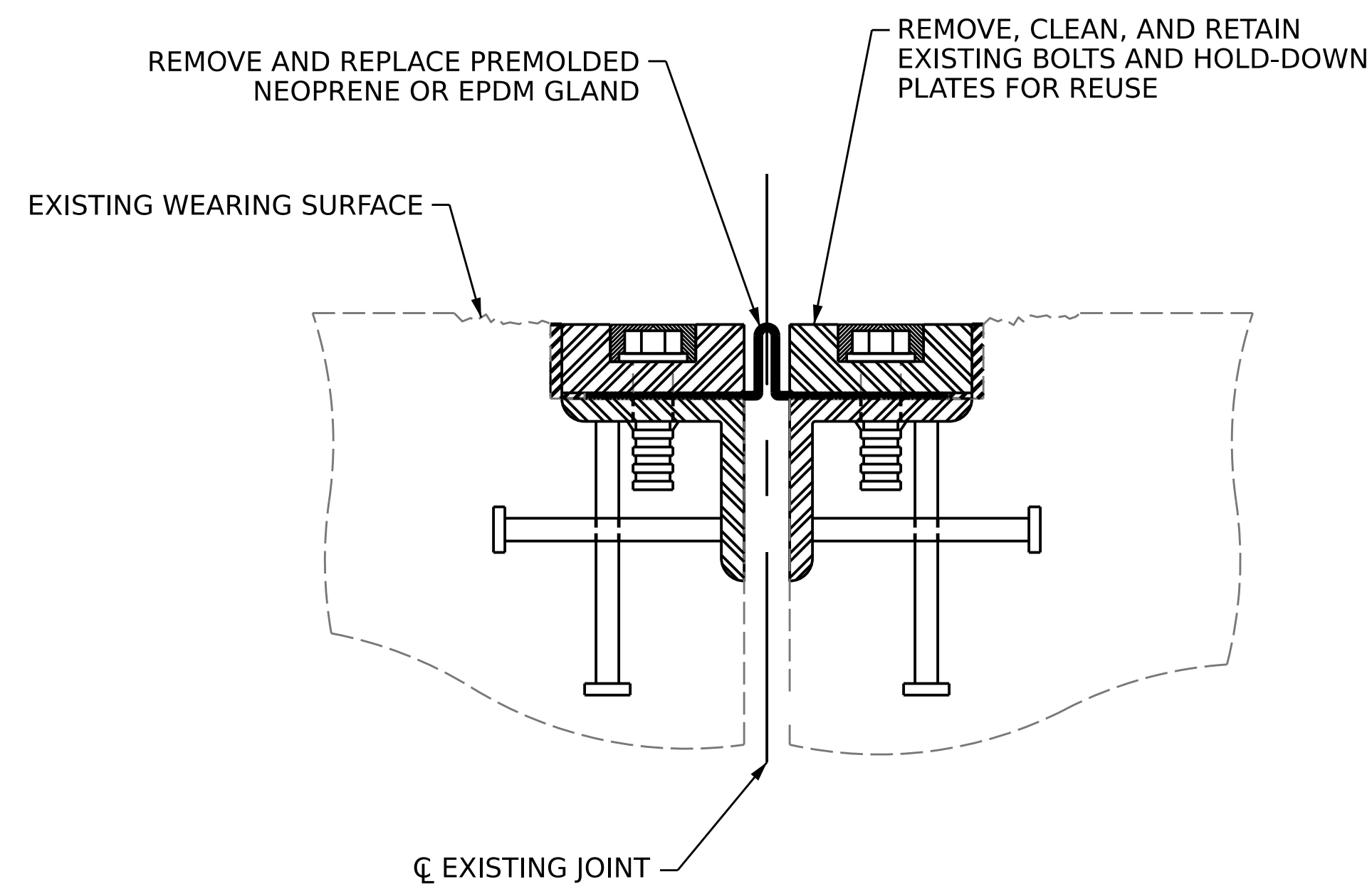


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
**EXPANSION JOINT SEAL
 REPAIR DETAILS**

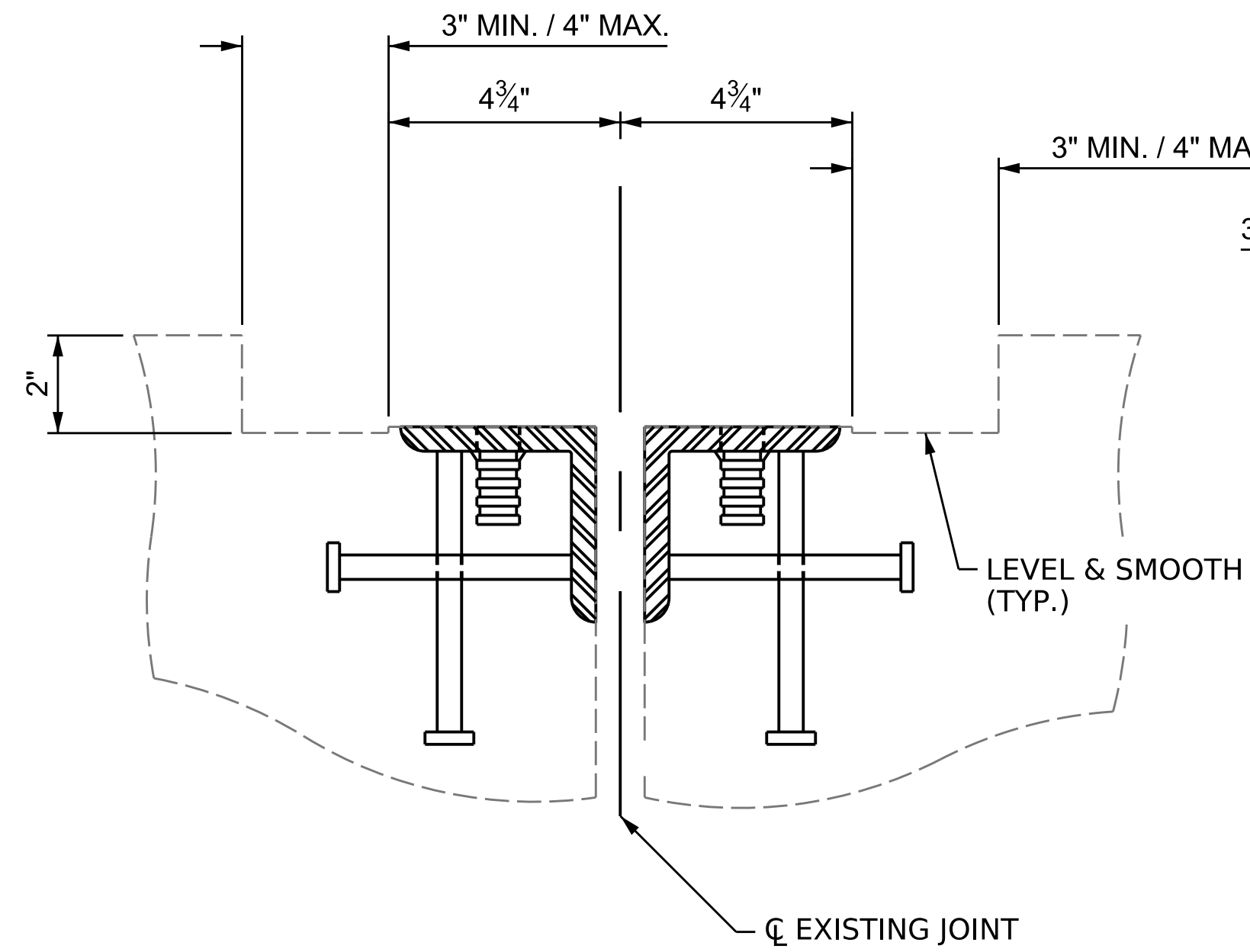
DRAWN BY : **R.L.PUTEK** DATE: **11/2022**
 CHECKED BY : **A.Y.GODFREY** DATE: **11/2022**
 DESIGN ENGINEER OF RECORD: **N.A. PIERCE** DATE: **12/2022**

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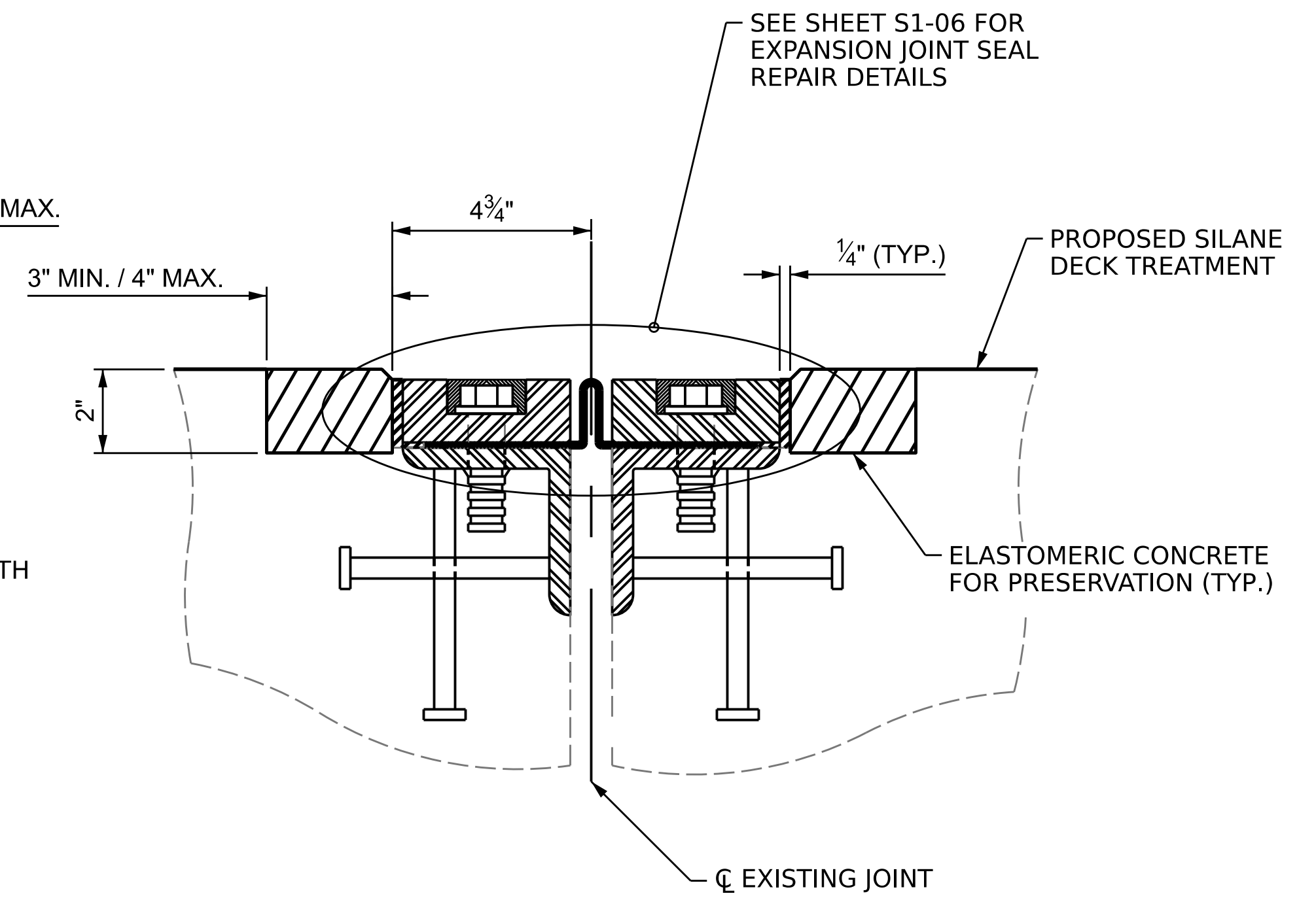
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NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 15
2			4			



EXISTING EXPANSION JOINT SEAL



EXISTING JOINT AFTER DEMOLITION



PROPOSED EXPANSION JOINT SEAL

ELASTOMERIC CONCRETE FOR PRESERVATION

LOCATION	ESTIMATED (CU.FT.)	ACTUAL (CU.FT.)
BENT 1	15.2	
TOTAL	15.2	

NOTES:

MAKE CONTINUOUS PARALLEL SAW CUTS 2" DEEP ALONG EACH SIDE OF EXISTING JOINT.

EACH SAW CUT SHALL MEASURE A MINIMUM OF 7³/₄" FROM \varnothing JOINT TO A MAXIMUM OF 8³/₄" FROM \varnothing JOINT.

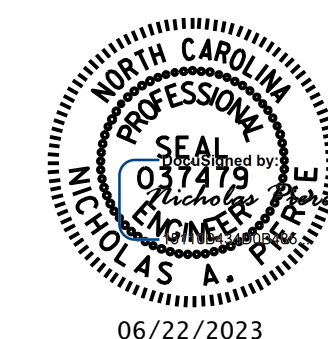
CONCRETE REMOVAL SHALL CREATE A CLEAN AND SMOOTH VOID AS SHOWN FOR THE LENGTH OF THE JOINT BETWEEN TRAFFIC CONTROL ISLANDS FOR THE PLACEMENT OF ELASTOMERIC CONCRETE FOR PRESERVATION.

PROJECT NO. **15BPR.124.3**

DURHAM COUNTY

BRIDGE NO. **310306**

SHEET 3 OF 3



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

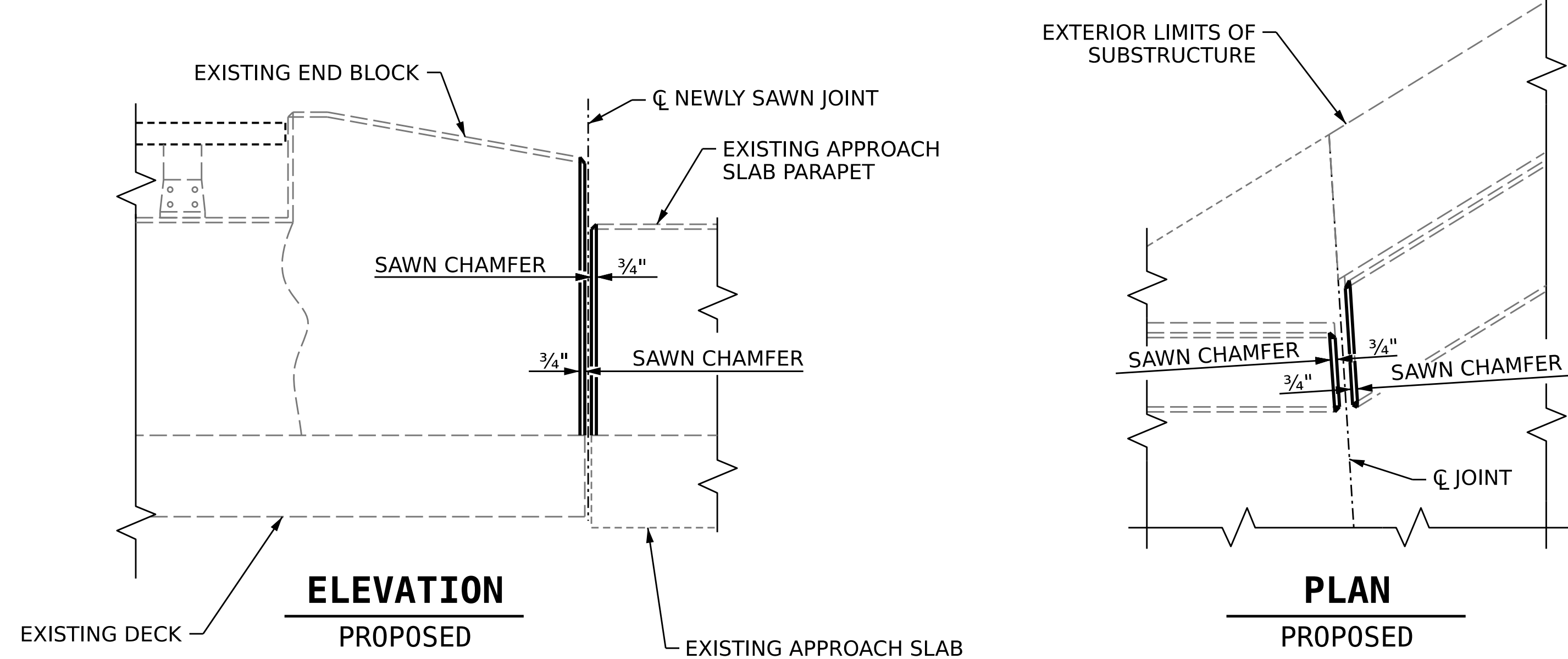
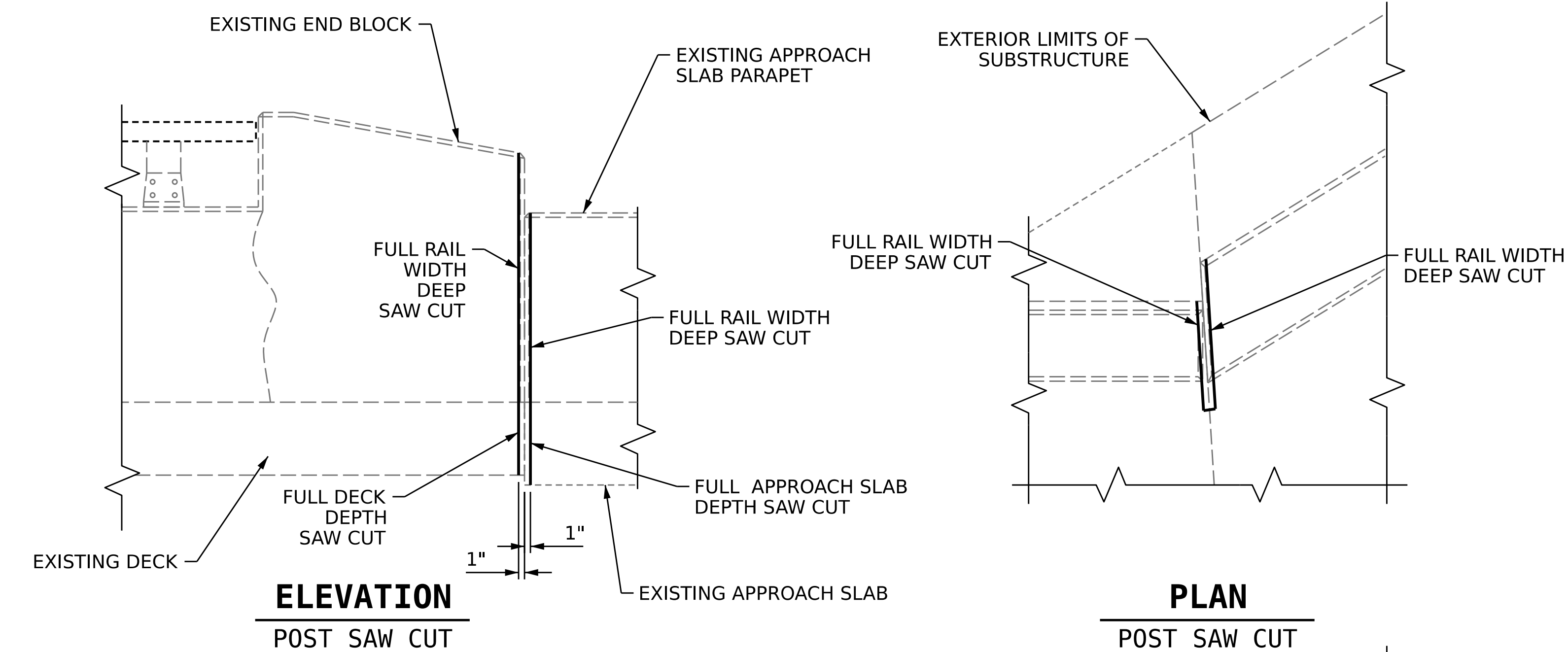
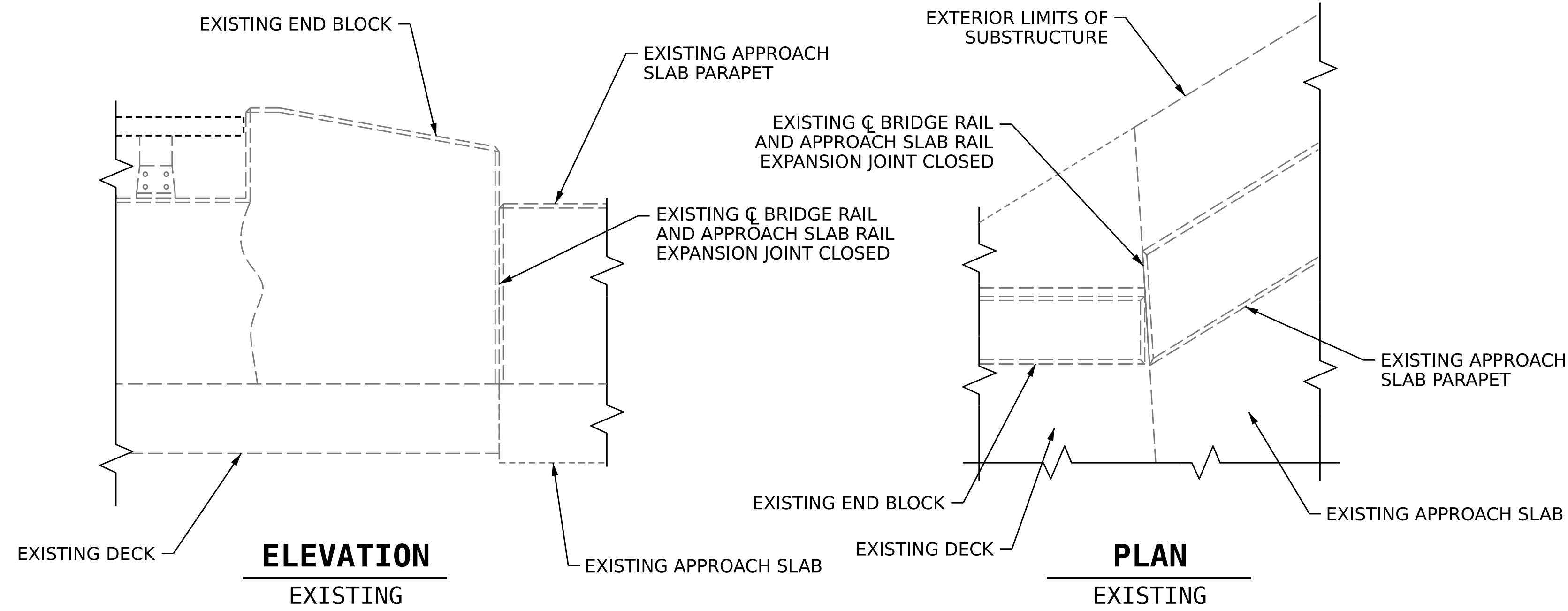
EXPANSION JOINT SEAL REPAIR DETAILS

DRAWN BY : R.L.PUTEK DATE : 10/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

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2			4			15

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NOTES

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

THE CONTRACTOR SHALL TAKE CARE DURING BARRIER RAIL REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE, WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALL 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 BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.

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

SAW CUT 1 INCH MEASURED FROM THE ENDS OF THE EXISTING END BLOCK OR PARAPET AS SHOWN ON THE PLANS. CARE SHALL BE TAKEN NOT TO CUT OR DAMAGE REINFORCING STEEL DURING CONCRETE REMOVAL. ANY DAMAGED OR EXPOSED REINFORCING STEEL SHALL BE EPOXY COATED AS DIRECTED BY THE ENGINEER AND SHALL BE INCIDENTAL TO THE CONCRETE BARRIER RAIL REPAIR.

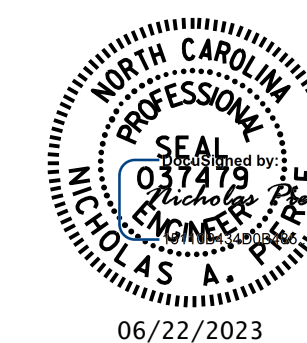
SAW CUT 3/4 INCH CHAMFERS ON ALL EXPOSED FACES OF THE BARRIER RAILS ON FRESHLY CUT EXPANSION JOINTS.

FOR CONCRETE BARRIER REPAIR LOCATIONS, SEE DECK SURFACE REPAIR SHEETS.

SAW CUTTING CONCRETE BARRIER RAIL

DESCRIPTION	QUANTITY
FULL RAIL WIDTH DEEP AND FULL DECK DEPTH SAW CUT	1 EA.
FULL RAIL WIDTH DEEP AND APPROACH SLAB FULL DEPTH SAW CUT	1 EA.

PROJECT NO. **15BPR.124.3**
 DURHAM COUNTY
 BRIDGE NO. **310306**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

CONCRETE BARRIER RAIL REPAIR

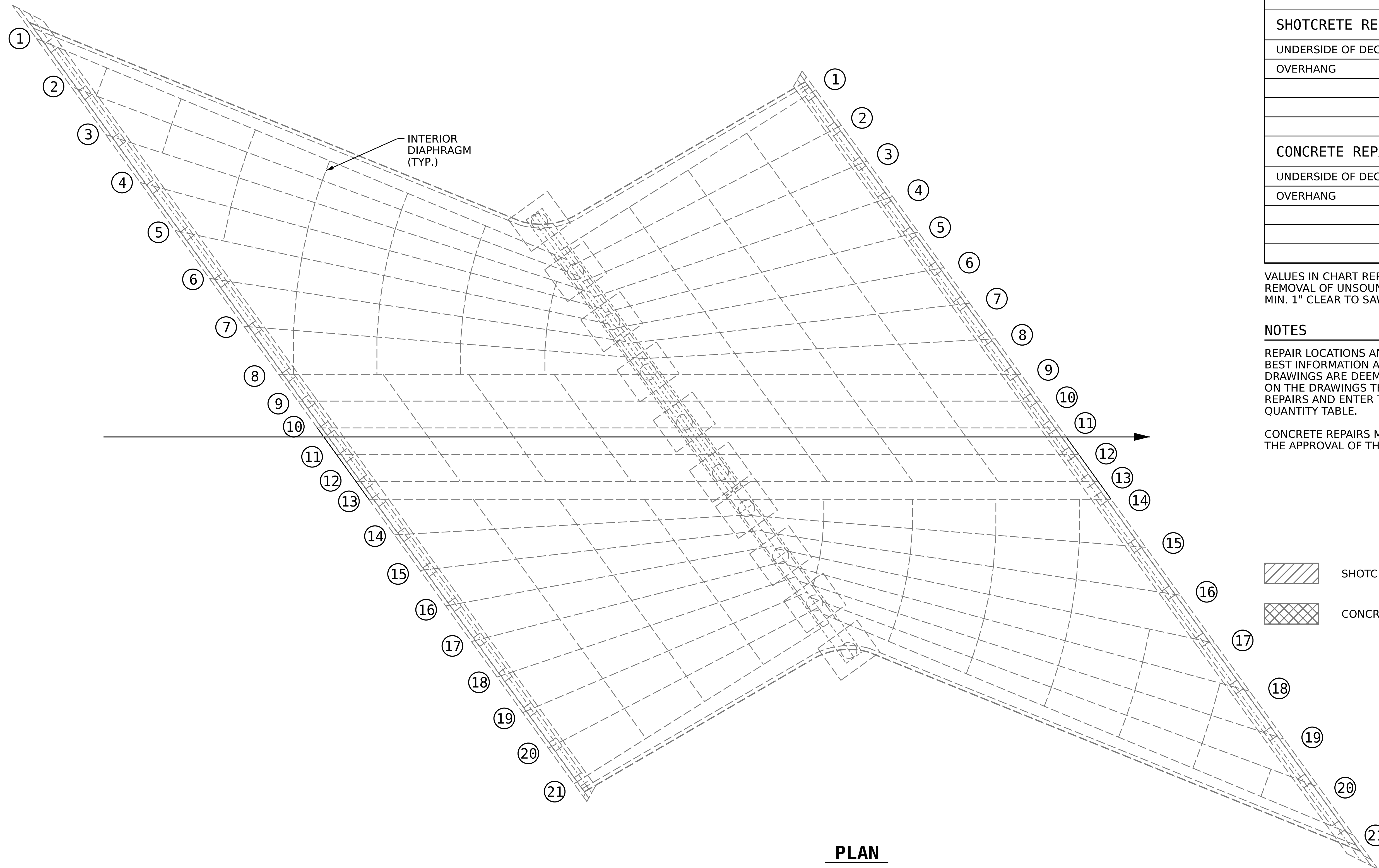
DRAWN BY : N.A. PIERCE / R.L. PUTEK DATE : 09/2022
 CHECKED BY : A.Y. GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

8/22/2023
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 aygodfrey

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2			4			15

8/26/21



INTERIOR DIAPHRAGM (TYP.)

PLAN

DECK UNDERSIDE REPAIR QUANTITY TABLE

SPAN A & SPAN B	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK	0	0		
OVERHANG	0	0		
	0	0		
	0	0		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK	0	0		
OVERHANG	0	0		
	0	0		
	0	0		

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

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 DECK UNDERSIDE REPAIR QUANTITY TABLE.

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

- SHOTCRETE REPAIR AREA
- CONCRETE REPAIR AREA

PROJECT NO. **15BPR.124.3**
DURHAM COUNTY
 BRIDGE NO. **310306**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 DECK UNDERSIDE REPAIR
SPAN A & SPAN B

DRAWN BY : N.A. PIERCE DATE : 03/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO. S1-10 TOTAL SHEETS 15
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

NOTES

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




CLEAN AND REMOVE DEBRIS FROM THE TOP OF THE CAP AND APPLY EPOXY PROTECTIVE COATING. EPOXY COATING SHALL BE APPLIED TO THE TOP SURFACE OF THE CAP. THE CONTRACTOR SHALL NOT COAT THE AREA OF THE CAP BENEATH THE MASONRY PLATES.

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

REMOVAL OF DEBRIS AND DISPOSAL OF EXISTING JOINT SEALANT MATERIAL FROM SLOPE PROTECTION PRIOR TO PLACEMENT OF BACKER ROD AND POURABLE SILICONE JOINT SEALANT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.

POURABLE SILICONE JOINT SEALANT SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

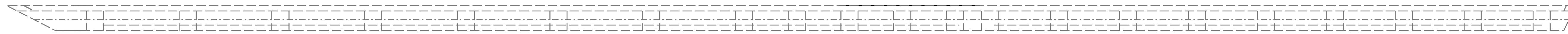
THE INSTALLED POURABLE SILICONE JOINT SEALANT SHALL BE WATER TIGHT.

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  EPOXY RESIN INJECTION

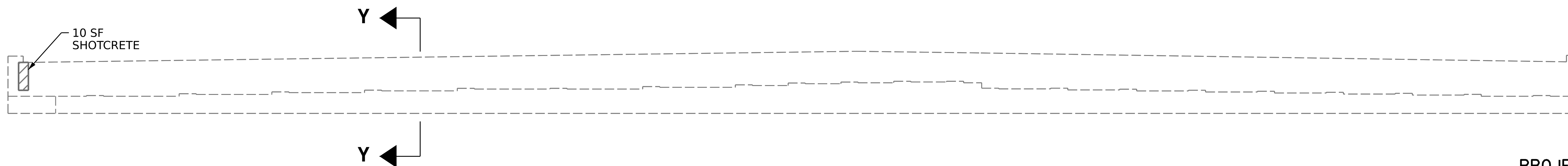
SUBSTRUCTURE REPAIR QUANTITY TABLE

END BENT 1	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
BACKWALL	10	5		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
BACKWALL	0	0		
EPOXY RESIN INJECTION		LINEAR FT		LINEAR FT
CAP		0		
BACKWALL		0		
EPOXY COATING		AREA SF		AREA SF
CAP		1050		
POURABLE SILICONE JT. SEALANT		LINEAR FT		LINEAR FT
JOINT		630		

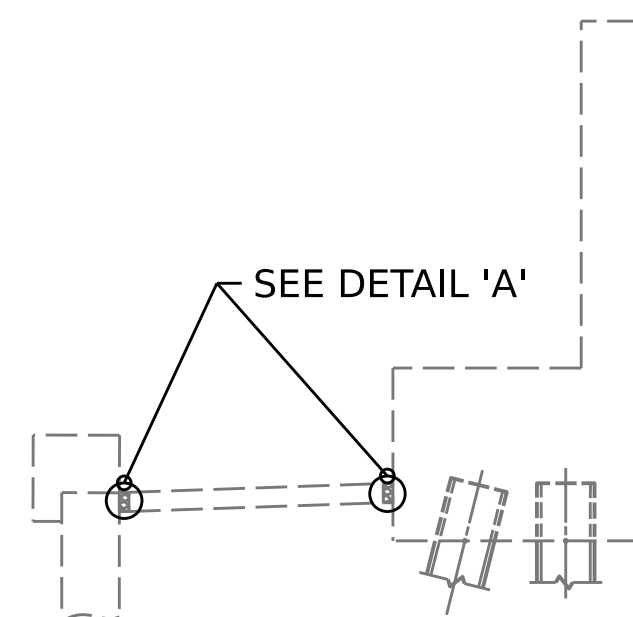
VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CLEAR TO SAWCUT. SEE REPAIR DETAILS.



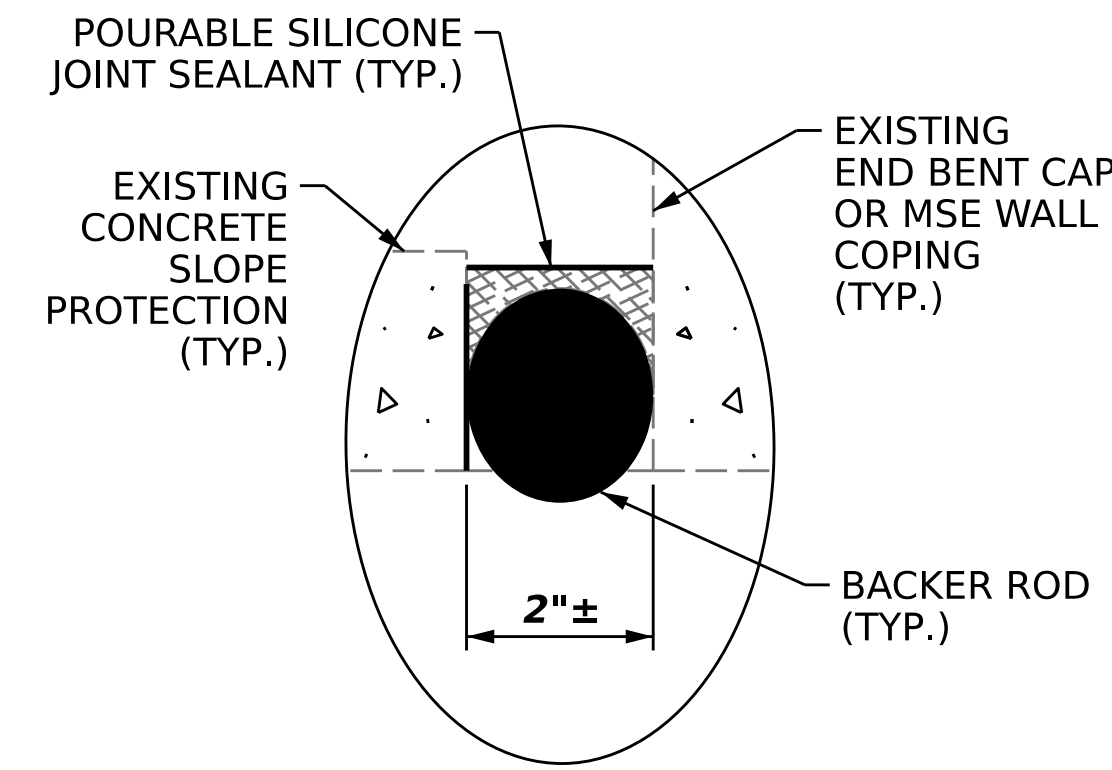
PLAN



ELEVATION

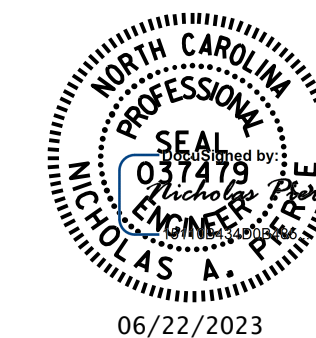


SECTION Y-Y



DETAIL 'A'

PROJECT NO. 15BPR.124.3
DURHAM COUNTY
BRIDGE NO. 310306



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

DRAWN BY : N.A. PIERCE DATE : 04/2022
CHECKED BY : A.Y.GODFREY DATE : 10/2022
DESIGN ENGINEER OF RECORD: N.A. PIERCE DATE : 12/2022

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO. S1-11 TOTAL SHEETS 15
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

SUBSTRUCTURE REPAIR QUANTITY TABLE				
BENT 1 - SPAN A FACE	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
COLUMN	0	0		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
COLUMN	0	0		
EPOXY RESIN INJECTION		LINEAR FT		LINEAR FT
CAP		0		
COLUMN		0		
EPOXY COATING		AREA SF		AREA SF
CAP		927		

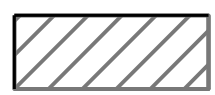
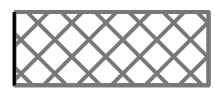

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE MIN. OF 1" BEHIND REBAR AND MIN. 1" CLEAR TO SAWCUT. SEE REPAIR DETAILS.

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 SUBSTRUCTURE REPAIR QUANTITY TABLE.

CLEAN AND REMOVE DEBRIS FROM THE TOP OF THE CAP AND APPLY EPOXY PROTECTIVE COATING. EPOXY COATING SHALL BE APPLIED TO THE TOP SURFACE OF THE CAP. THE CONTRACTOR SHALL NOT COAT THE AREA OF THE CAP BENEATH THE MASONRY PLATES. FOR EPOXY COATING, SEE SPECIAL PROVISIONS.

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

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  EPOXY RESIN INJECTION

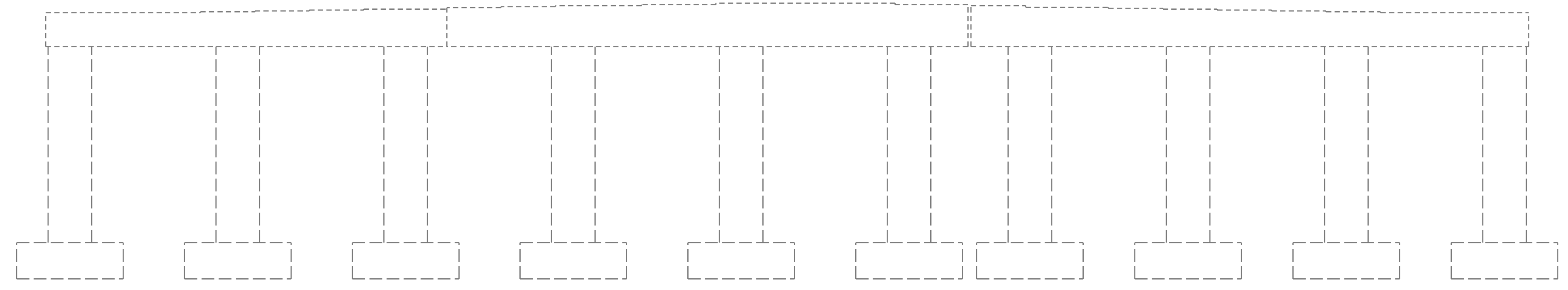
PROJECT NO. 15BPR.124.3
DURHAM COUNTY
 BRIDGE NO. 310306



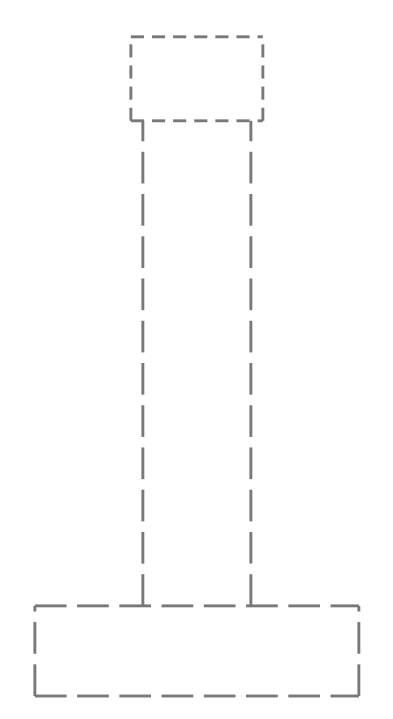
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE REPAIR
**BENT 1
 SPAN A FACE**



PLAN



ELEVATION



WEST END

DRAWN BY : N.A. PIERCE DATE : 04/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD: N.A. PIERCE DATE : 12/2022

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS					SHEET NO. S1-12 TOTAL SHEETS 15
NO.	BY:	DATE:	NO.	DATE:	
1			3		
2			4		

SUBSTRUCTURE REPAIR QUANTITY TABLE

BENT 1 - SPAN B FACE	QUANTITIES			
	ESTIMATE		ACTUAL	
	AREA SF	VOLUME CF	AREA SF	VOLUME CF
SHOTCRETE REPAIRS				
CAP	0	0		
COLUMN	0	0		
CONCRETE REPAIRS				
CAP	0	0		
COLUMN	0	0		
EPOXY RESIN INJECTION		LINEAR FT		LINEAR FT
CAP		0		
COLUMN		0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE MIN. OF 1" BEHIND REBAR AND MIN. 1" CLEAR TO SAWCUT. SEE REPAIR DETAILS.

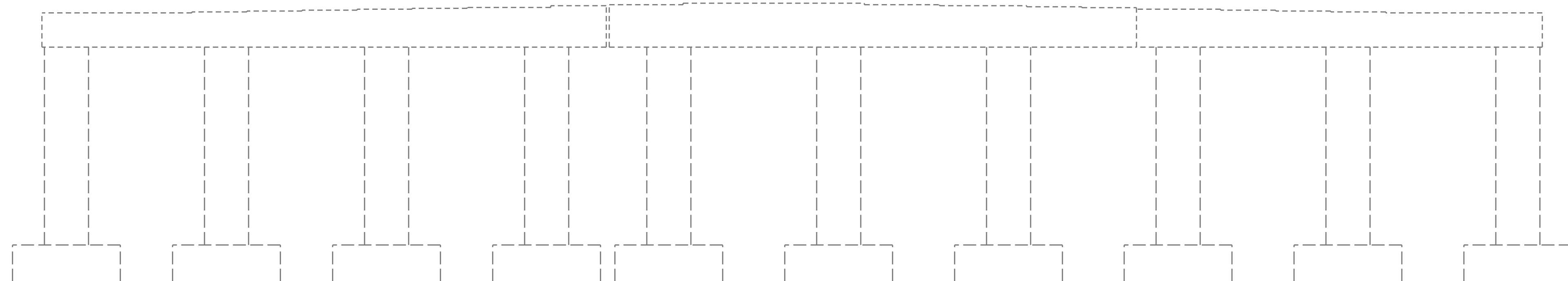
NOTES

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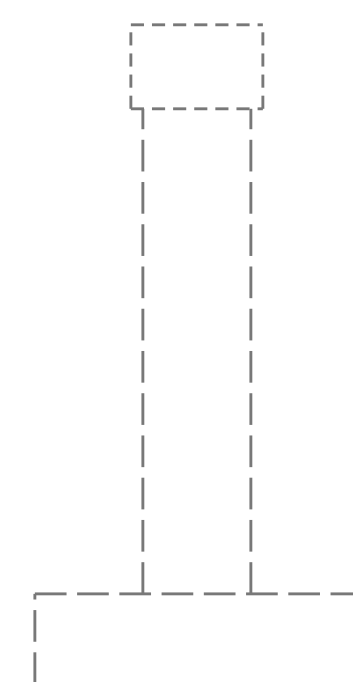
CONCRETE REPAIRS MAYBE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.






BOTTOM OF CAP



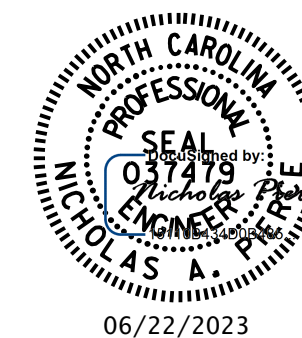
ELEVATION



EAST END

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  EPOXY RESIN INJECTION

PROJECT NO. **15BPR.124.3**
DURHAM COUNTY
 BRIDGE NO. **310306**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE REPAIR
BENT 1
SPAN B FACE

DRAWN BY : N.A. PIERCE DATE : 04/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD: N.A. PIERCE DATE : 12/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-13
1			3			TOTAL SHEETS
2			4			15

NOTES

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




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POURABLE SILICONE JOINT SEALANT SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

THE INSTALLED POURABLE SILICONE JOINT SEALANT SHALL BE WATER TIGHT.

-  SHOTCRETE REPAIR AREA
-  CONCRETE REPAIR AREA
-  EPOXY RESIN INJECTION

SUBSTRUCTURE REPAIR QUANTITY TABLE

END BENT 2	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
BACKWALL	0	0		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP	0	0		
BACKWALL	0	0		
EPOXY RESIN INJECTION		LINEAR FT		LINEAR FT
CAP		0		
BACKWALL		0		
EPOXY COATING		AREA SF		AREA SF
CAP		1052		
POURABLE SILICONE JT. SEALANT		LINEAR FT		LINEAR FT
JOINT		630		

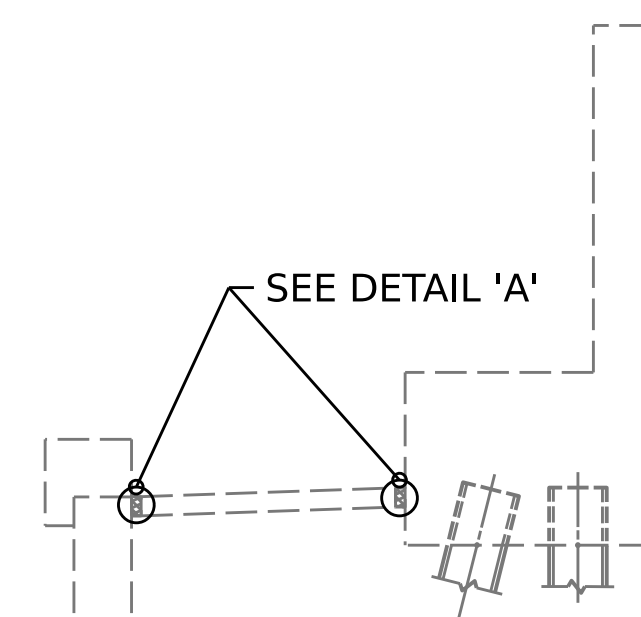
VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1" BEHIND REBAR AND MIN. 1" CLEAR TO SAWCUT. SEE REPAIR DETAILS.



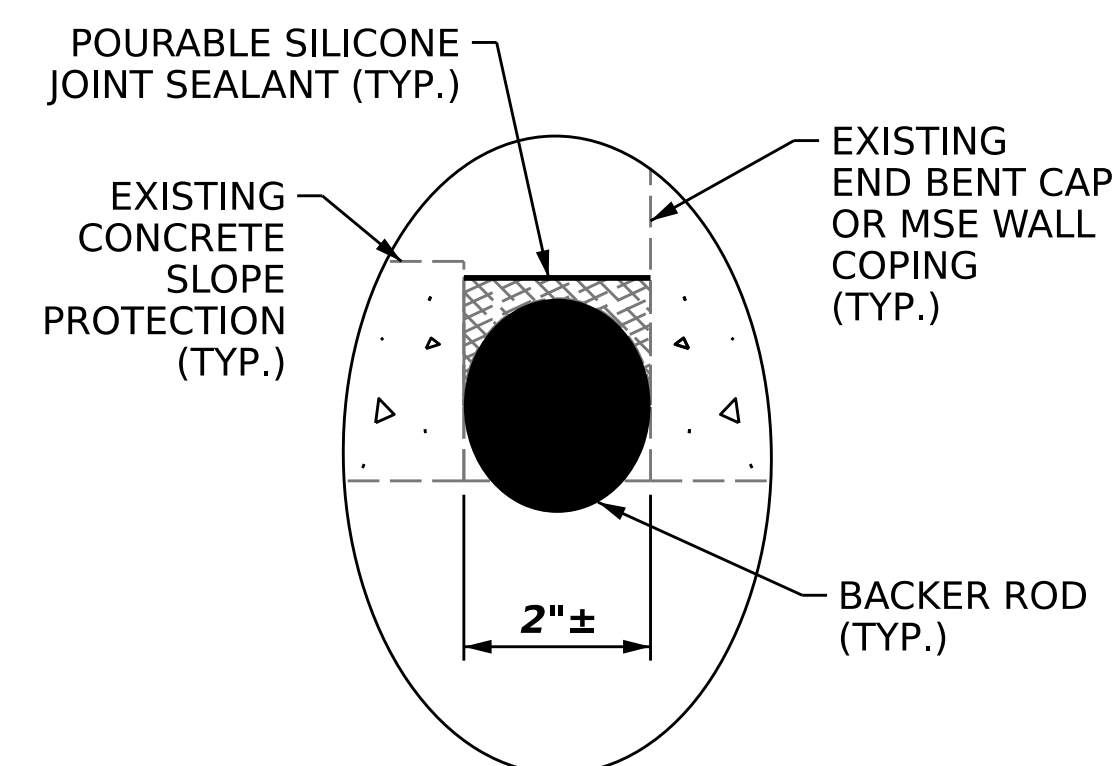
PLAN



ELEVATION

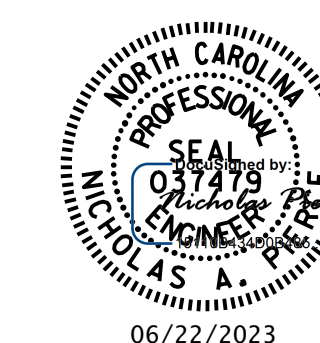


SECTION X-X



DETAIL 'A'

PROJECT NO. **15BPR.124.3**
DURHAM COUNTY
 BRIDGE NO. **310306**

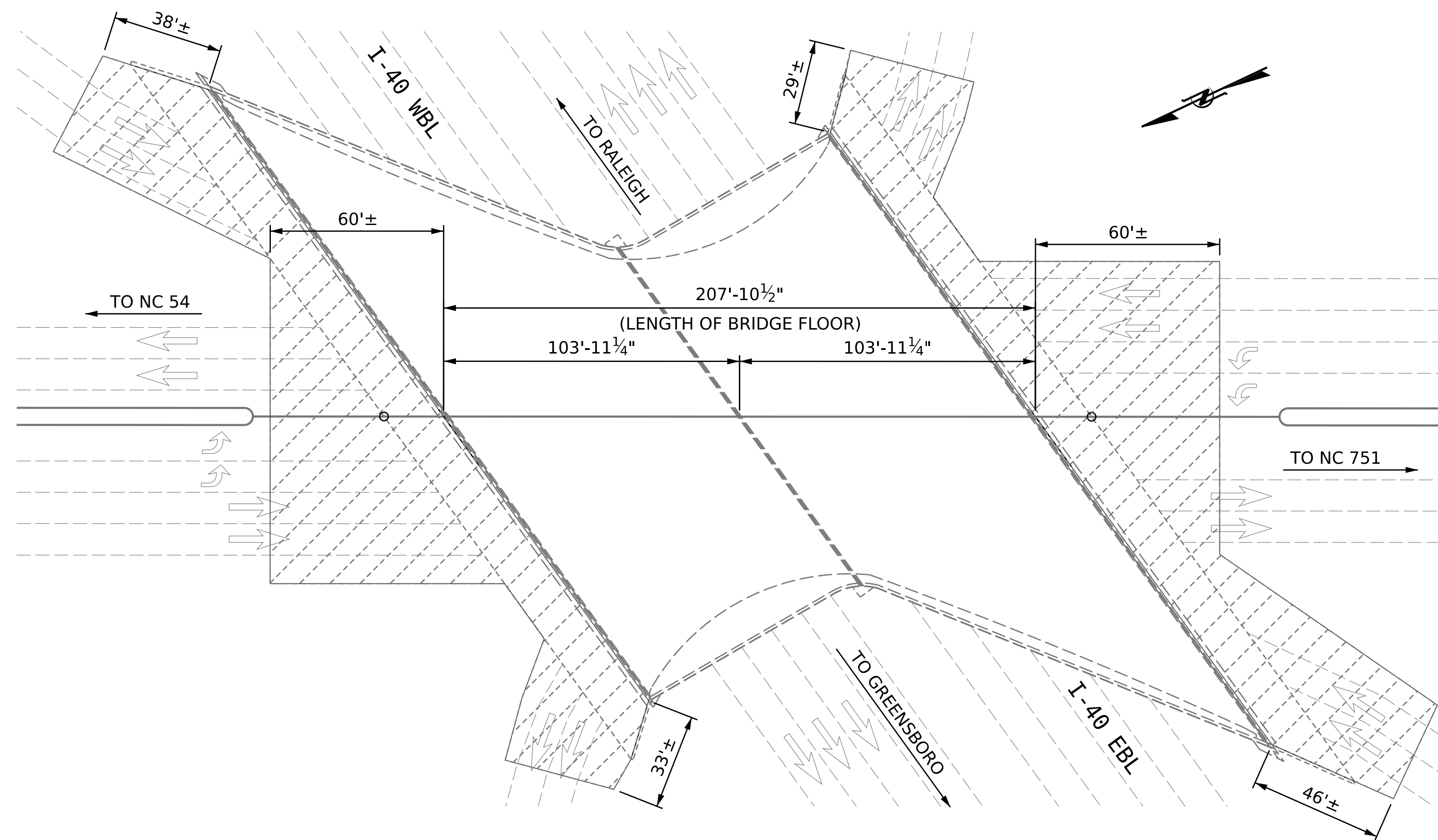


STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE REPAIR
END BENT 2

DRAWN BY : N.A. PIERCE DATE : 04/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD: N.A. PIERCE DATE : 12/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-14
1			3			TOTAL SHEETS
2			4			15



NOTES

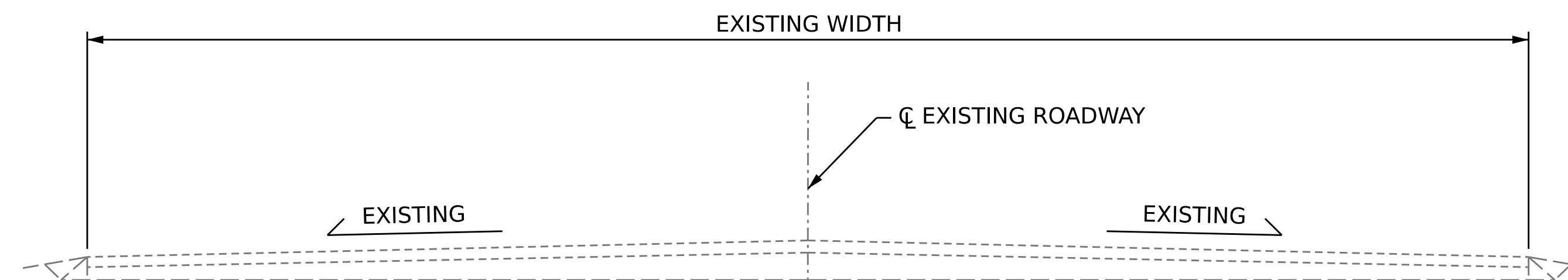
EXISTING APPROACH ASPHALT PAVEMENT SHALL BE MILLED AS NECESSARY TO ATTAIN MINIMUM 1 1/2" DEPTH OF NEW ASPHALT PAVEMENT. NEW ASPHALT PAVEMENT SHALL BE OF THICKNESS NECESSARY TO PROVIDE A SMOOTH TRANSITION BETWEEN THE ROADWAY AND THE BRIDGE DECK. THE NEW ASPHALT PAVEMENT THICKNESS MAY EXCEED 1 1/2" DUE TO SETTLEMENT OF THE EXISTING APPROACH.

EXISTING INDUCTIVE LOOPS ARE ANTICIPATED TO FALL WITHIN THE LIMITS OF APPROACH MILLING AT VARIOUS LOCATIONS. EXISTING INDUCTIVE LOOPS THAT ARE REMOVED OR DAMAGED DURING THE MILLING PROCESS ARE TO BE REPLACED IN ACCORDANCE WITH THE 2018 NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTION 1098-8 AND 1098-9 ALONG WITH NCDOT STANDARD ROADWAY DRAWING 1725.01.

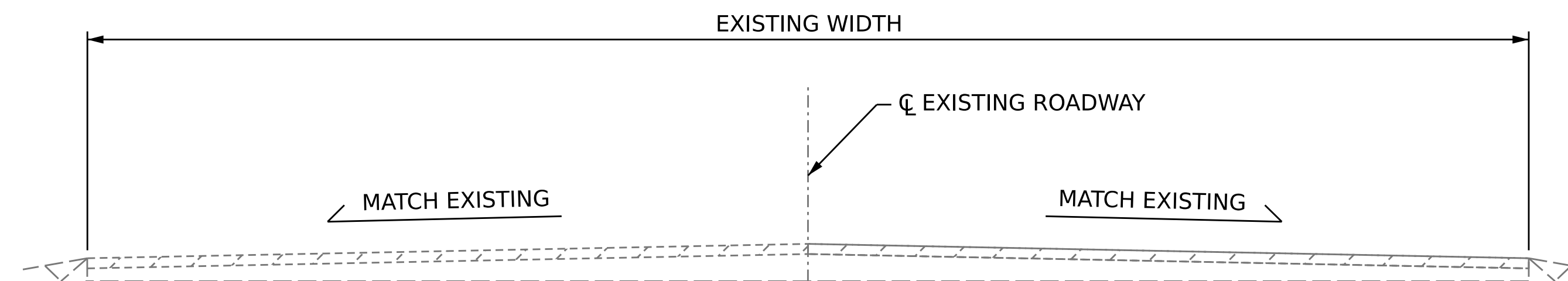
SUMMARY OF QUANTITIES		
	ESTIMATE	ACTUAL
INCIDENTAL MILLING	2848.4 SQ.YD.	
ASPHALT CONC SURFACE COURSE, TYPE S9.5B	240.0 TONS	
ASPHALT BINDER FOR PLANT MIX	20 TONS	
INDUCTIVE LOOP SAWCUT	1600 LIN. FT.	
LEAD IN CABLE	400 LIN. FT.	

C1	PROPOSED VARIABLE DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1 1/2" IN DEPTH OR GREATER THAN 2" IN DEPTH.
E	EXISTING PAVEMENT

INCIDENTAL MILLING

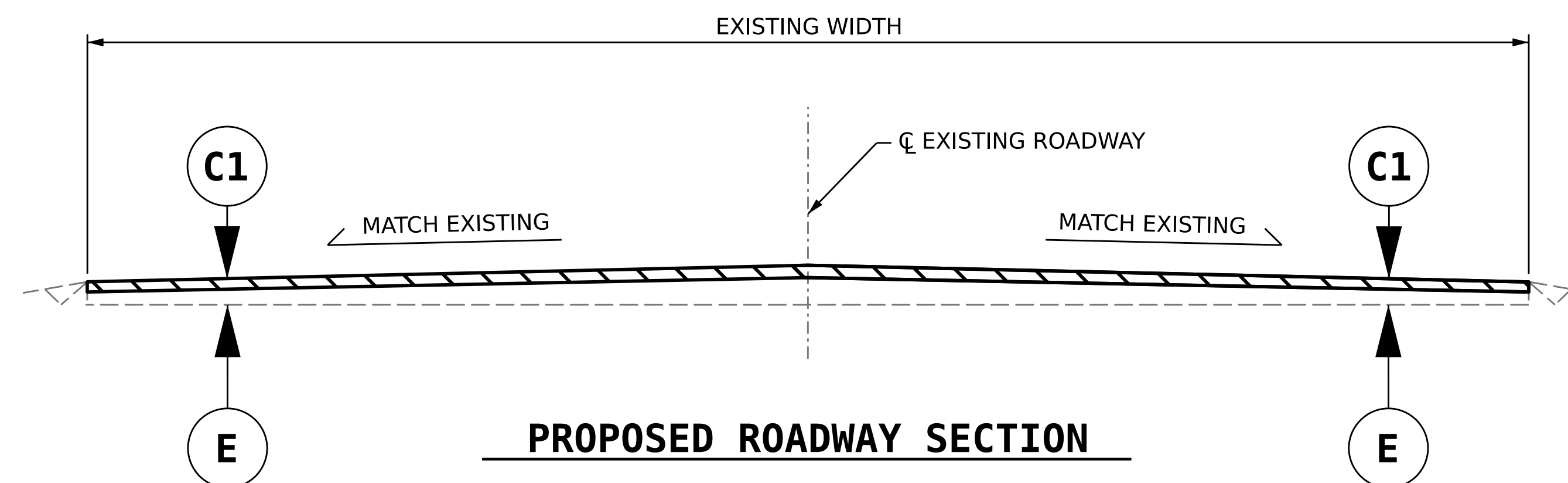


EXISTING ROADWAY SECTION



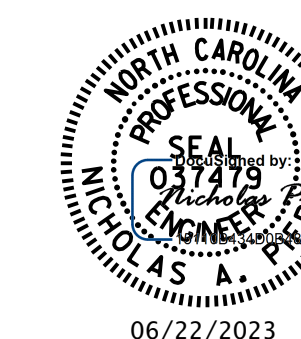
TYPICAL ROADWAY MILLING SECTION

(MILL TO 1 1/2" DEPTH)



PROPOSED ROADWAY SECTION

PROJECT NO. **15BPR.124.3**
DURHAM COUNTY
 BRIDGE NO. **310306**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

INCIDENTAL MILLING AND TYPICAL ROADWAY SECTIONS

DRAWN BY : R.L.PUTEK DATE : 10/2022
 CHECKED BY : A.Y.GODFREY DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-15
1			3			TOTAL SHEETS
2			4			15

8/26/21

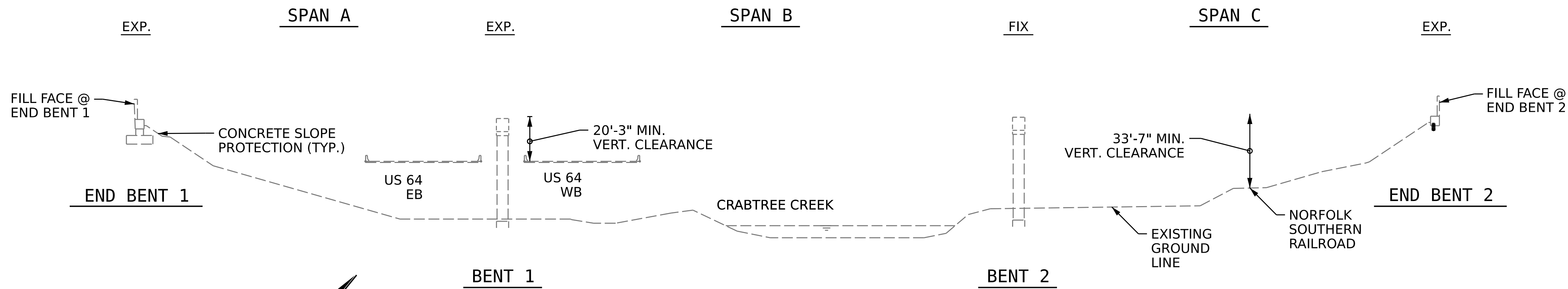
NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 03/08/2021.

BRIDGE ORIENTATION CONFORMS TO THE EXISTING BRIDGE PLANS.

SCOPE OF WORK

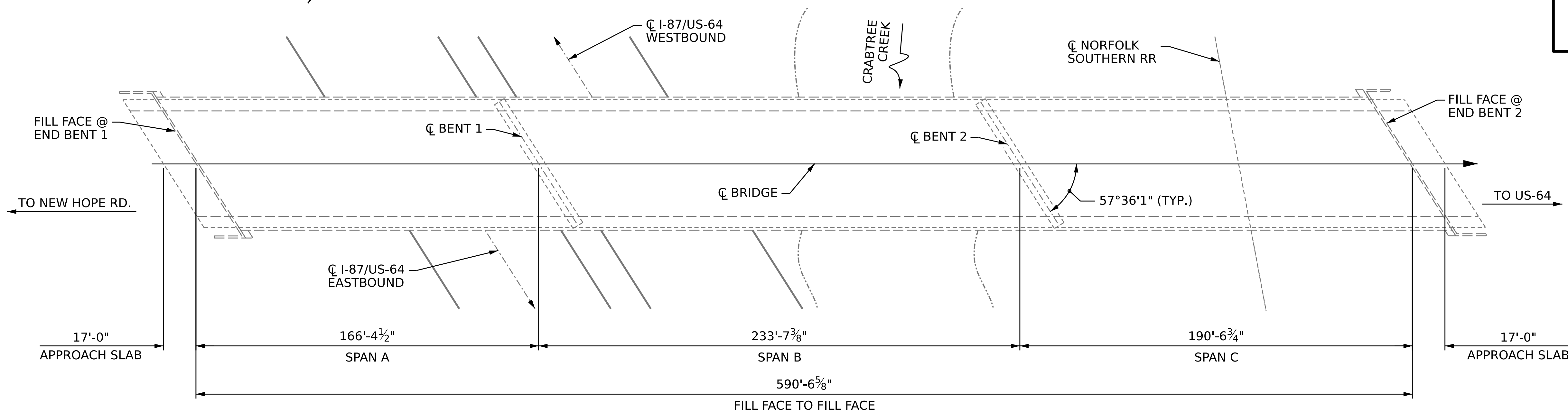
- SHOTBLAST BRIDGE DECK AND BARRIER RAILS.
- APPLY SILANE DECK TREATMENT TO PREPARED TOP OF BRIDGE DECK.
- APPLY SILANE BARRIER TREATMENT TO BARRIER RAILS.
- REPLACE EXISTING JOINT GLAND OF MODULAR EXPANSION JOINT.
- REPLACE EXISTING JOINT GLAND OF EXPANSION JOINT SEAL.
- REPLACE DAMAGED SECTIONS OF 3 BAR METAL RAIL.
- CLEAN AND PAINT WEATHERING STEEL.
- REMOVE DEBRIS FROM TOP OF EXISTING END BENT & BENT CAPS AND APPLY EPOXY COATING.



SECTION ALONG CL BRIDGE

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

RESIDENT ENGINEER _____ DATE _____

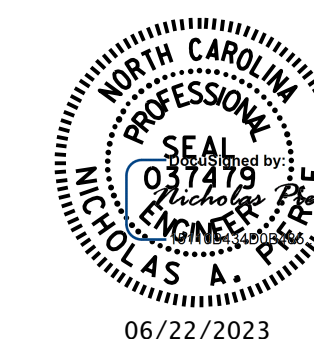


PLAN

PROJECT NO. **15BPR.124.3**

WAKE COUNTY

BRIDGE NO. **911039**



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON SR 2517
(ROGERS LANE) OVER I-87,
US64/264, CRABTREE CREEK
AND NS RAILROAD

DRAWN BY : D.A. CANTRELL/A.Y. GODFREY DATE : 09/2022
 CHECKED BY : N.A. PIERCE DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

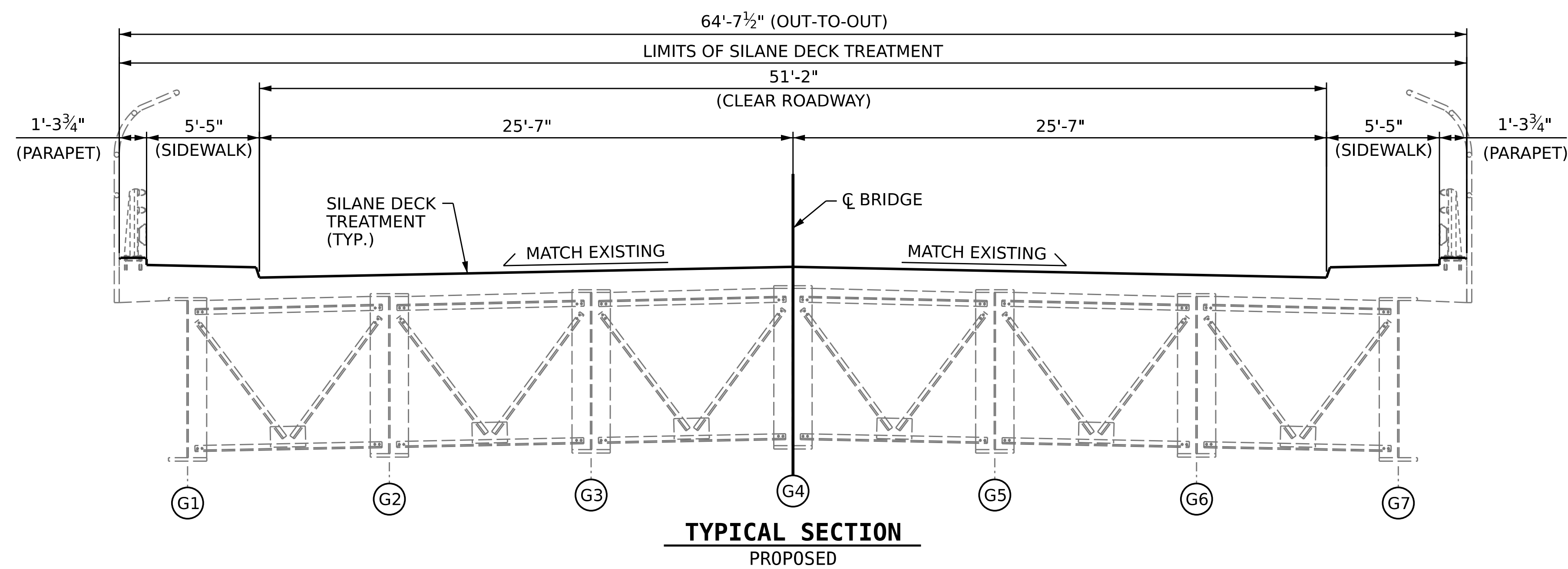
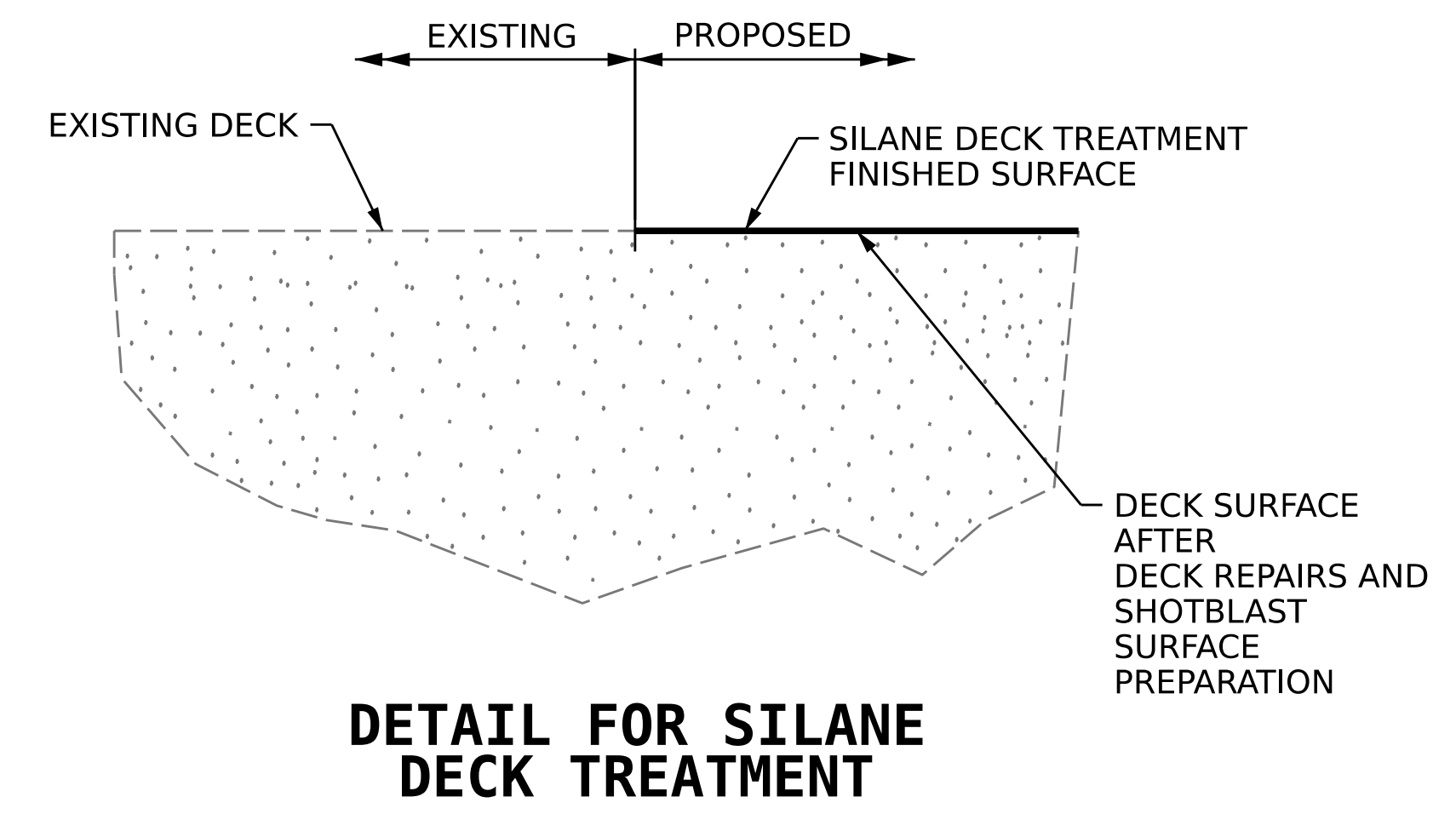
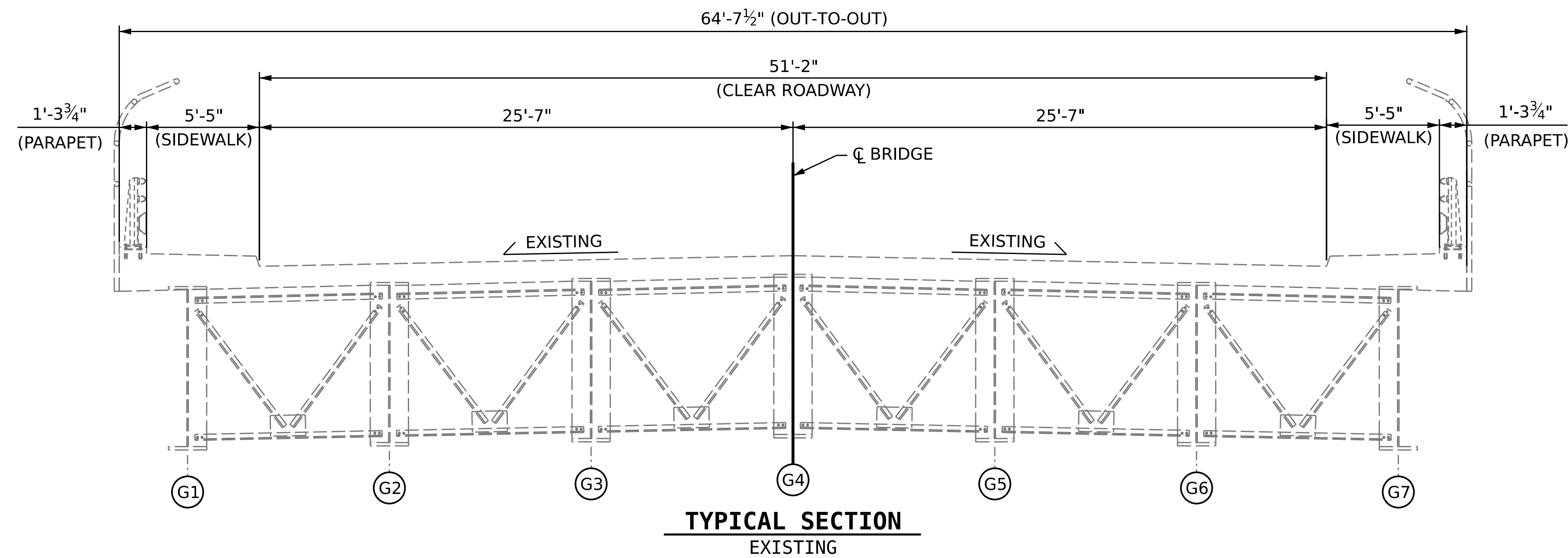
6/22/2023
 R:\Structures\Plans\15BPR124\402.001.15BPR124.SMU.GD01.S2-01.911039.dgn
 aygodfrey

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

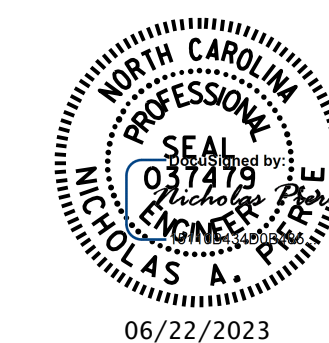
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-01
1			3			TOTAL SHEETS
2			4			18

NOTES

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



PROJECT NO. **15BPR.124.3**
 WAKE COUNTY
 BRIDGE NO. **911039**



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

TYPICAL SECTION

DRAWN BY : D.A. CANTRELL/A.Y. GODFREY DATE : 09/2022
 CHECKED BY : N.A. PIERCE DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

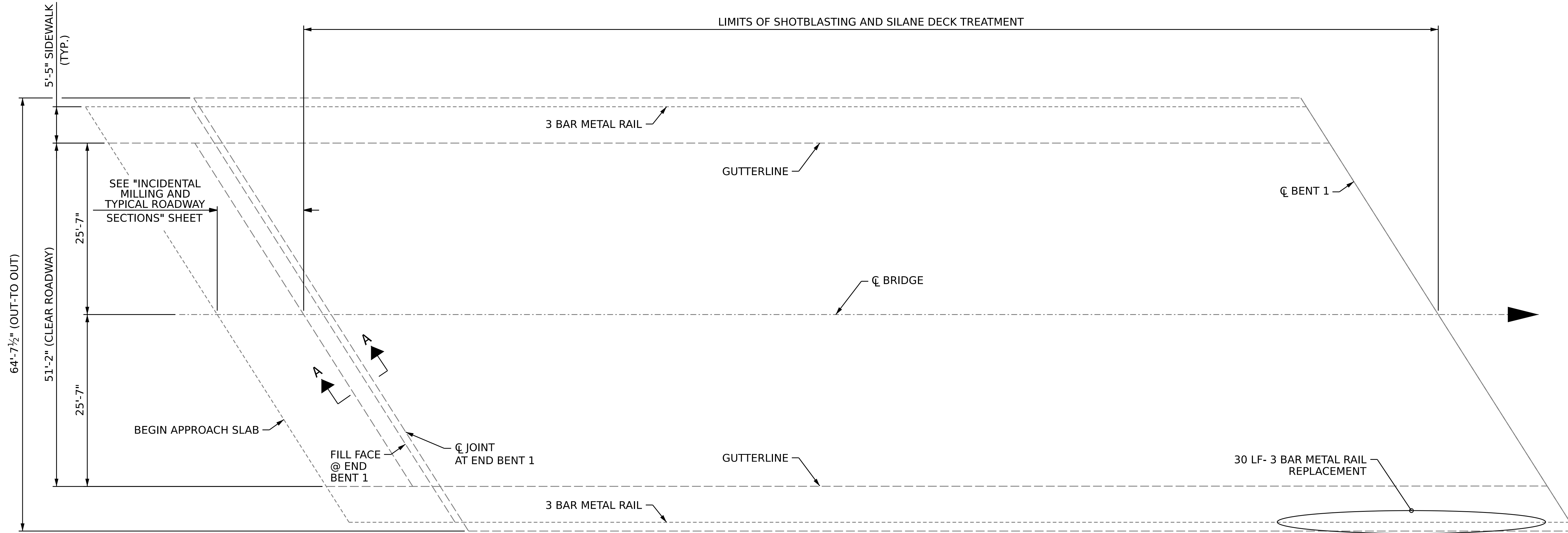
DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-02
1			3			TOTAL SHEETS
2			4			18

8/26/21

DECK SURFACE REPAIR QUANTITY TABLE

APPROACH SLAB A			SPAN A		
	ESTIMATE	ACTUAL		ESTIMATE	ACTUAL
3 BAR METAL RAIL REPLACEMENT	0.0 L.F.		3 BAR METAL RAIL REPLACEMENT	30.0 L.F.	
SHOTBLASTING BRIDGE DECK	19.7 SQ. YDS.		SHOTBLASTING BRIDGE DECK	1,348.0 SQ. YDS.	
SILANE DECK TREATMENT	19.7 SQ. YDS.		SILANE DECK TREATMENT	1,348.0 SQ. YDS.	
CONCRETE DECK REPAIR FOR SILANE TREATMENT	0.0 SQ. FT.		CONCRETE DECK REPAIR FOR SILANE TREATMENT	0.0 SQ. FT.	



APPROACH SLAB A

SPAN A

NOTES

DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR AFTER REMOVAL OF UNSOUND CONCRETE. (MIN. 2" CLEAR TO SAWCUT). SEE CONCRETE DECK REPAIR FOR SILANE TREATMENT SPECIAL PROVISION.

FOR SECTION A-A, SEE "MODULAR EXPANSION JOINT REPAIR" SHEET.

PROJECT NO. 15BPR.124.3
WAKE COUNTY
 BRIDGE NO. 911039

SHEET 1 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 DECK SURFACE REPAIR
**SPAN A AND
 APPROACH SLAB A**

DRAWN BY : D.A. CANTRELL/A.Y. GODFREY DATE : 09/2022
 CHECKED BY : N.A. PIERCE DATE : 10/2022
 DESIGN ENGINEER OF RECORD : N.A. PIERCE DATE : 12/2022

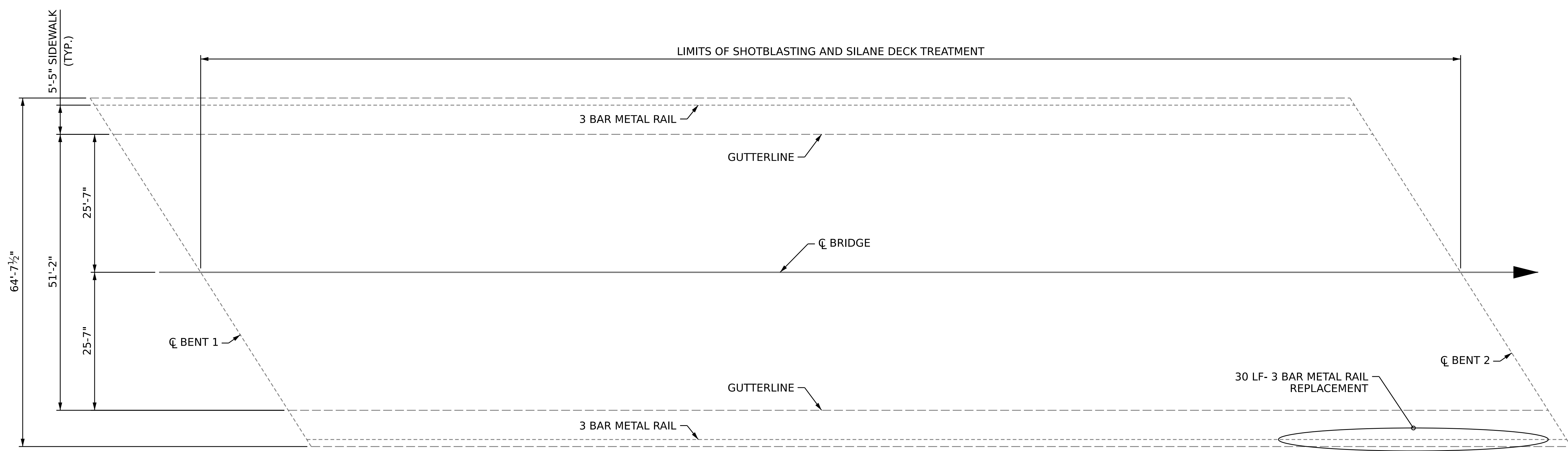
DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S2-03
2			4			TOTAL SHEETS 18

8/26/21

DECK SURFACE REPAIR QUANTITY TABLE

SPAN B		
	ESTIMATE	ACTUAL
3 BAR METAL RAIL REPLACEMENT	30.0 L.F.	
SHOTBLASTING BRIDGE DECK	1,892.8 SQ. YDS.	
SILANE DECK TREATMENT	1,892.8 SQ. YDS.	
CONCRETE DECK REPAIR FOR SILANE TREATMENT	0.0 SQ. FT.	



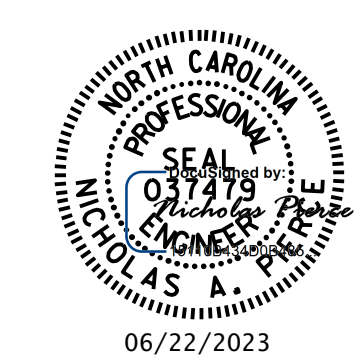
SPAN B

NOTES

DECK SURFACE REPAIR QUANTITIES REPRESENT ESTIMATED VALUES OF CLASS II SURFACE PREPARATION AND CONCRETE DECK REPAIR AFTER REMOVAL OF UNSOUND CONCRETE. (MIN. 2" CLEAR TO SAWCUT). SEE CONCRETE DECK REPAIR FOR SILANE TREATMENT SPECIAL PROVISION.

PROJECT NO. **15BPR.124.3**
WAKE COUNTY
 BRIDGE NO. **911039**

SHEET 2 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 DECK SURFACE REPAIR
SPAN B

DRAWN BY : D.A. CANTRELL/A.Y. GODFREY DATE : 09/2022
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-04
1			3			TOTAL SHEETS
2			4			18