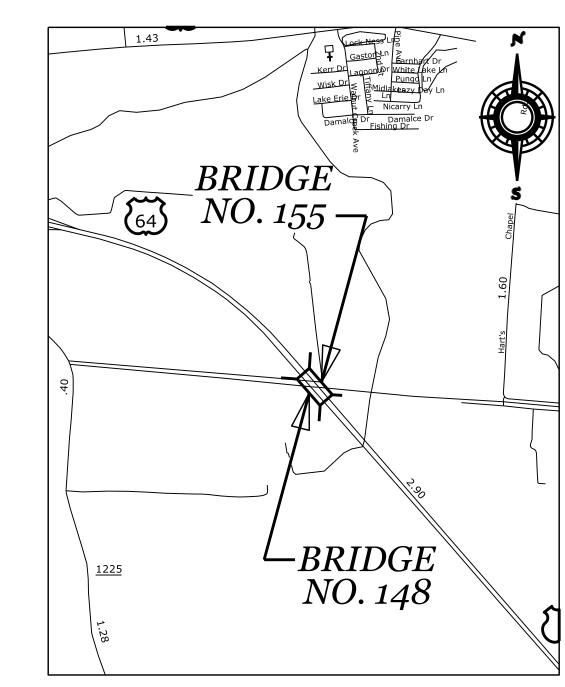
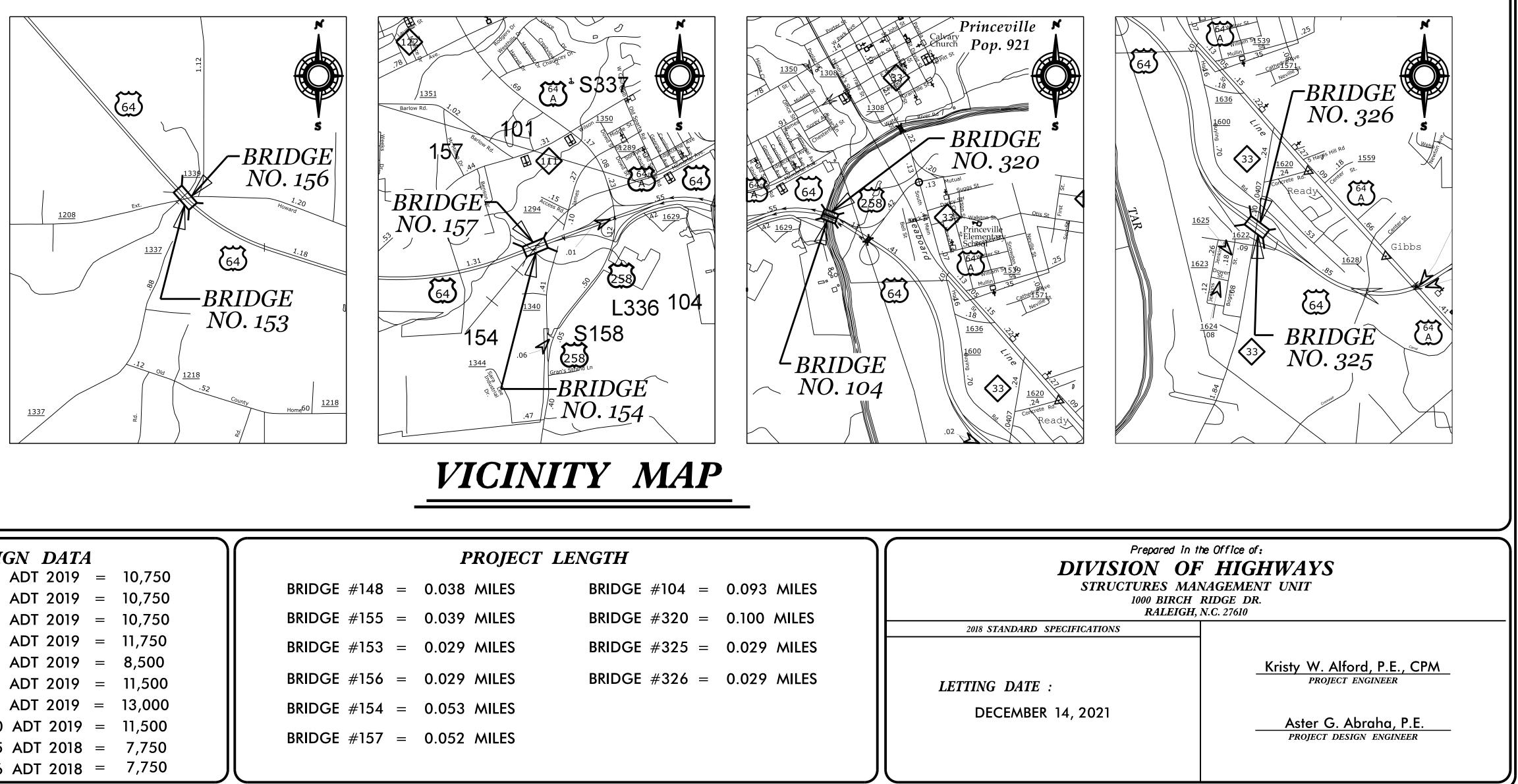


LOCATION:

BRIDGE	#320148	ON	US
BRIDGE	#320155	ON	U_{2}^{o}
BRIDGE	#320153	ON	U_{2}^{o}
BRIDGE	#320156	ON	US
BRIDGE	#320154	ON	US
BRIDGE	#320157	ON	US
BRIDGE	#320104	ON	US
BRIDGE	#320320	ON	U_{s}
BRIDGE	#320325	ON	U_{\cdot}
BRIDGE	#320326	ON	U_{\cdot}

BRIDGE PRESERVATION - CONCRETE DECK REPAIRS, PLACEMENT OF EPOXY OVERLAY HAND APPLICATION SYSTEM OR LATEX MODIFIED CONCRETE, RECONSTRUCTION OF BRIDGE DECK JOINTS AND SEALS, PRESTRESSED CONCRETE GIRDER REPAIRS, AND SUBSTRUCTURE REPAIRS WITH SHOTCRETE & EPOXY RESIN INJECTION.





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FLSTDEPARTMET		IONZYNI ON
PARTAIR	OF TRANSP	
	OF TRANSI	/

	DESI	GN .	DATA	1	
BRIDGE	#148	ADT	2019	=	10,750
BRIDGE	#155	ADT	2019	=	10,750
BRIDGE	#153	ADT	2019	=	10,750
BRIDGE	#156	ADT	2019	=	11,750
BRIDGE	#154	ADT	2019	=	8,500
BRIDGE	#157	ADT	2019	=	11,500
BRIDGE	#104	ADT	2019	=	13,000
BRIDGE	#320	ADT	2019	=	11,500
BRIDGE	#325	ADT	2018	=	7,750
BRIDGE	#326	ADT	2018	=	7,750

EDGECOMBE COUNTY

US 64 EBL OVER CSX RAILROAD. (DOT CROSSING #973750W, MILEPOST AB-129.19) US 64 WBL OVER CSX RAILROAD. (DOT CROSSING #973751D, MILEPOST AB-129.21) **US 64 WBL OVER SR 1208. US 64 EBL OVER SR 1208.** IS 64 EBL OVER CSX RAILROAD. (DOT CROSSING #938352A, MILEPOST ABL-2.29) IS 64 WBL OVER CSX RAILROAD. (DOT CROSSING #938351T, MILEPOST ABL-2.28) **US 64 EBL OVER TAR RIVER.** IS 64 WBL OVER TAR RIVER. **US 64 EBL OVER NC 33. US 64 WBL OVER NC 33.**

			LENGTH	PROJEC		
	5	0.093 MILES	BRIDGE #104 =	0.038 MILES	BRIDGE #148 =	
2018 STAN)	0.100 MILES	BRIDGE #320 =	0.039 MILES	BRIDGE #155 =	
	5	0.029 MILES	BRIDGE #325 =	0.029 MILES	BRIDGE #153 =	
LETTING L	5	0.029 MILES	BRIDGE #326 =	0.029 MILES	BRIDGE #156 =	
DECE				0.053 MILES	BRIDGE #154 =	
				0.052 MILES	BRIDGE #157 =	
	J					J

STATE	STA	TE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS		
N.C.		1	118			
STAT	E PROJ. NO.	F. A. PROJ. NO.	DESCRIPT	ION		
47	990.1.1	0087045	P.E.			
47	990.3.2	0087045	CONST.			







TYPE OF WORK:

SHEET No.	DESCRIPTION
1	TITLE SHEET
- IA	INDEX OF SHEETS
<u>S-1</u>	LOCATION SKETCHES
S -2	TOTAL BILL OF MATERIALS
STRUCTURE No. 32014	8
<i>S1–1</i>	GENERAL DRAWING
<i>S1–2</i>	TYPICAL SECTION
S1–3 THRU S1–5	SURFACE PREPARATION
<i>S1–</i> 6	JOINT REPAIR
<i>S1</i> –7	SUPERSTRUCTURE REPAIRS
<i>S1–8</i>	END BENTS
S1–9 THRU S1–10	BENTS
STRUCTURE No. 32015	5
S2–1	GENERAL DRAWING
S 2–2	TYPICAL SECTION
S2–3 THRU S2–5	SURFACE PREPARATION
S2-6	JOINT REPAIR
STRUCTURE No. 32015	3
S3–1	GENERAL DRAWING
S 3–2	TYPICAL SECTION
S3–3 THRU S3–5	SURFACE PREPARATION
S3-6	JOINT REPAIR
<i>S3</i> –7	END BENTS
S3–8 THRU S3–9	BENTS
STRUCTURE No. 32015	6
<i>S4–1</i>	GENERAL DRAWING
<i>S4–2</i>	TYPICAL SECTION
S4–3 THRU S4–5	SURFACE PREPARATION
<i>S4</i> –6	JOINT REPAIR

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

EDGECOMBE COUNTY

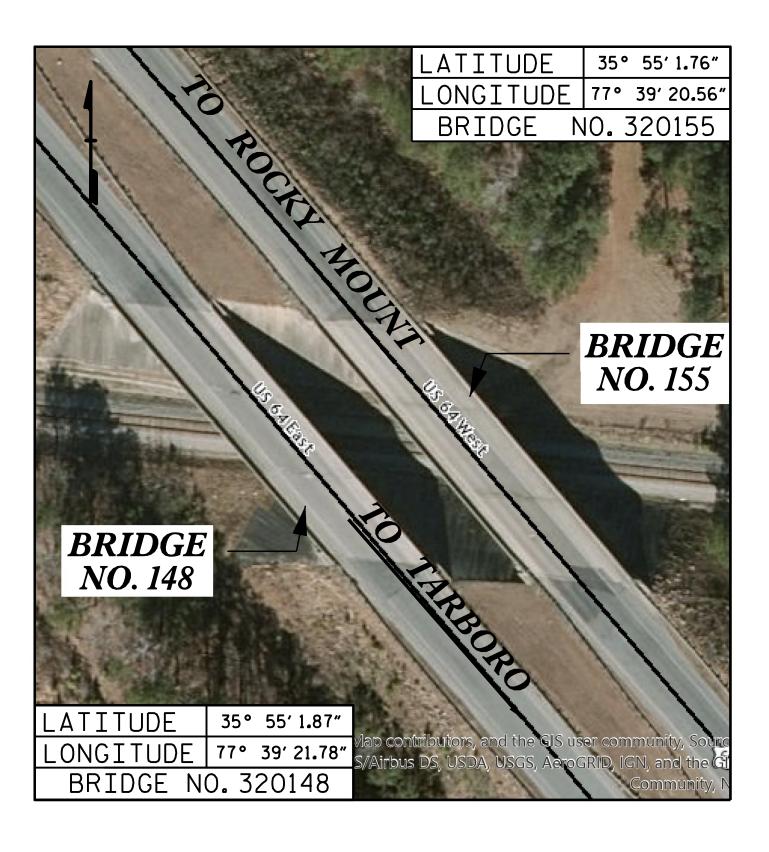
LOCATION: BRIDGE #320148 ON US 64 EBL OVER CSX RAILROAD. BRIDGE #320155 ON US 64 WBL OVER CSX RAILROAD. BRIDGE #320153 ON US 64 WBL OVER SR 1208. BRIDGE #320156 ON US 64 EBL OVER SR 1208. BRIDGE #320154 ON US 64 EBL OVER CSX RAILROAD. BRIDGE #320157 ON US 64 WBL OVER CSX RAILROAD. BRIDGE #320104 ON US 64 EBL OVER TAR RIVER. BRIDGE #320320 ON US 64 WBL OVER TAR RIVER. BRIDGE #320325 ON US 64 EBL OVER NC 33. BRIDGE #320326 ON US 64 WBL OVER NC 33.

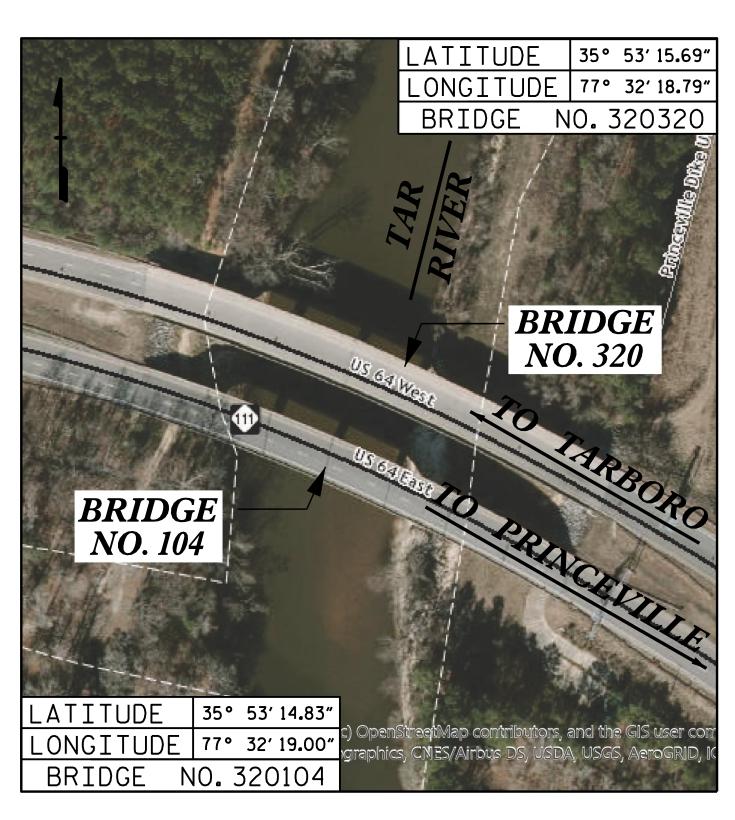
BRIDGE PRESERVATION - CONCRETE DECK REPAIRS, PLACEMENT OF EPOXY OVERLAY HAND APPLICATION SYSTEM OR LATEX MODIFIED CONCRETE, RECONSTRUCTION OF BRIDGE DECK JOINTS AND SEALS, PRESTRESSED CONCRETE GIRDER REPAIRS, AND SUBSTRUCTURE REPAIRS WITH SHOTCRETE & EPOXY RESIN INJECTION.

INDEX OF STRUCTURES SHEETS

SHEET No.	DESCRIPTION	SHEET No.	DESCRIPTION
<u>S4–7</u>	SUPERSTRUCTURE REPAIRS	<u>\$7-22</u>	APPROACH MILLING
S4 –8	END BENTS	STRUCTURE No. 3203	
S4-9 THRU S4-10	BENTS	S8–1	GENERAL DRAWING
STRUCTURE No. 320	154	S8– 2	TYPICAL SECTION
S 5–1	GENERAL DRAWING	S8–3 THRU S8–9	SURFACE PREPARATION
S 5–2	TYPICAL SECTION	<i>S8–10</i>	JOINT REPAIR
S5–3 THRU S5–5	SURFACE PREPARATION	S8–11 THRU S8–15	SUPERSTRUCTURE REPAIR
S 5–6	JOINT REPAIR	S8–16	END BENTS
S 5-7	SUPERSTRUCTURE REPAIRS	S8–17 THRU S8–22	BENTS
S 5–8	END BENTS	STRUCTURE No. 32032	25
S5-9 THRU S5-10	BENTS	S9–1	GENERAL DRAWING
STRUCTURE No. 320		<i>S</i> 9–2	TYPICAL SECTION
S6–1	GENERAL DRAWING	S9–3 THRU S9–5	SURFACE PREPARATION
S6 –2	TYPICAL SECTION	S9–6	JOINT REPAIR
S6–3 THRU S6–5	SURFACE PREPARATION	STRUCTURE No. 32032	26
S6-6	JOINT REPAIR	S10–1	GENERAL DRAWING
S6 -7	SUPERSTRUCTURE REPAIR	S10–2	TYPICAL SECTION
S6- 8	END BENTS	S10-3 THRU S10-5	SURFACE PREPARATION
S6–9 THRU S6–10	BENTS	<i>S10–6</i>	JOINT REPAIR
STRUCTURE No. 320	104	STANDARD SHEETS	
<i>S7–1</i>	GENERAL DRAWING	SD-1	PCG REPAIR DETAILS
S 7–2	TYPICAL SECTION	SD -2	CAP/COLUMN REPAIR DETAILS
S7–3 THRU S7–9	SURFACE PREPARATION	SN	STANDARD NOTES
<i>S7–10</i>	DECK REPAIR DETAILS		
S7–11 THRU S7–12	SUPERSTRUCTURE REPAIRS		
S7–13	DIAPHRAGM REPAIR DETAILS		
<i>S7–14</i>	JOINT REPAIR		
S7–15	END BENTS		
S7–16 THRU S7–21	BENTS		

STATE	STAT	CT REPERENCE NO. SHEET TOTA NO. SHEET		
N.C.		I-6041A	1A	118
STAT	E PROJ. NO.	F. A. PROJ. NO.	DESCRIPT	ION
47	990.1.2	0087045	P.E.	
479	990.3.2	0087045	CONS	БТ.

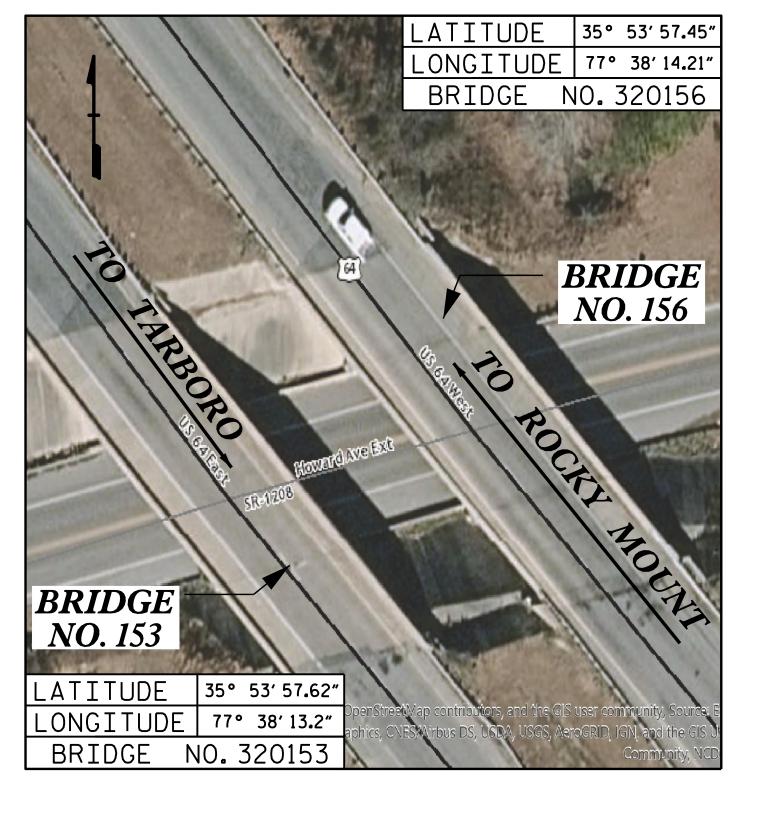


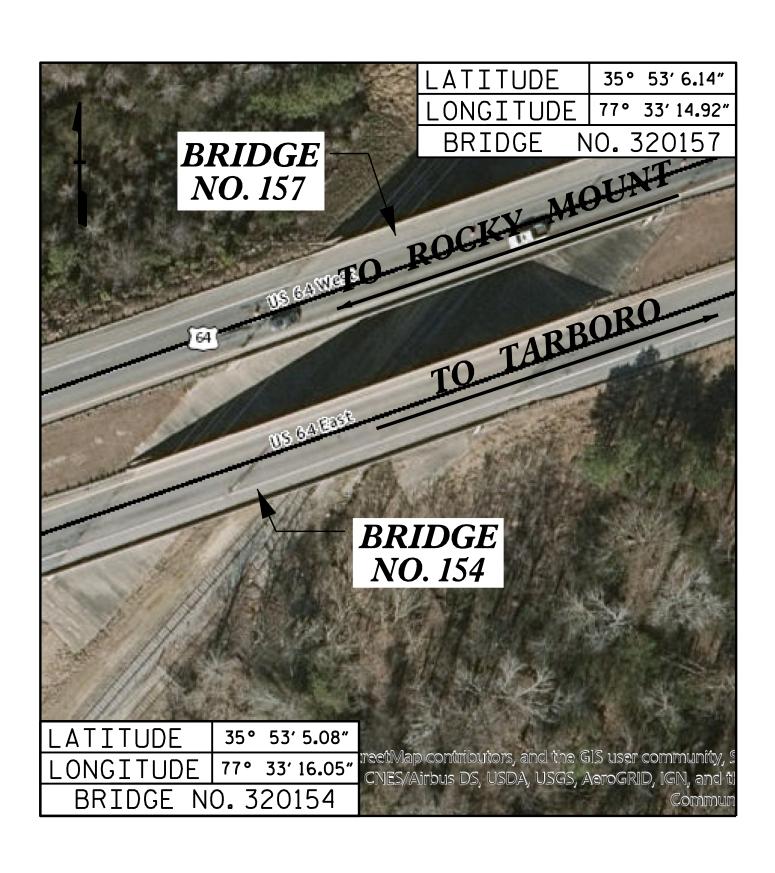


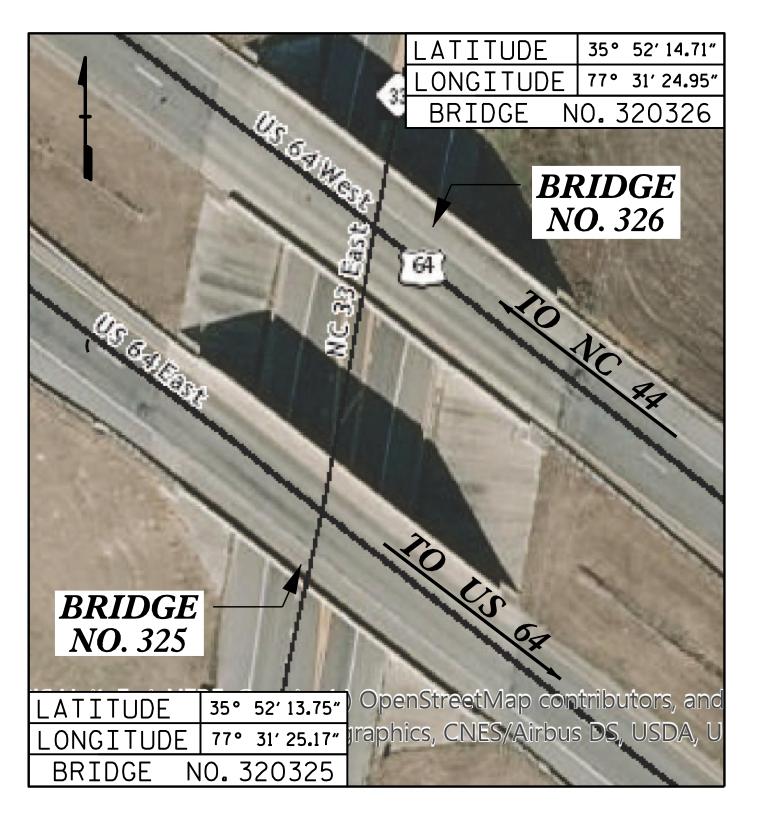
TO PERFORM AND COMPLETE THE PROJECT.

DRAWN BY :	S. T. SANDOR/A. Y. GODFREY	DATE : <u>11/2019</u>
CHECKED BY :_	A. G. ABRAHA	DATE : <u>12/2020</u>

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LOCATION SKETCH

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

PROJECT NOI-6041	Α								
<u>EDGECOMBE</u> co	UNTY								
BRIDGE NO.: <u>320104, 320</u>	148								
320153, 320154, 320	155								
320156, 320157, 320	320								
320325,& 320326									
STATE OF NORTH CAROLINA									
DEPARTMENT OF TRANSPORTA RALEIGH	TION								
DEPARTMENT OF TRANSPORTA RALEIGH SEAL 030024 LOCATION SKETCH									
LOCATION SKETCH	IES								
THE CONCEPTION OF THE TRANSPORT									
Docusigned by: Aster Abraha									
DDA094AED5104FD 7/23/2021 REVISIONS	SHEET NO.								
DOCUMENT NOT CONSIDERED NO. BY: DATE: NO. BY: DATE:	S-1								
FINAL UNLESS ALL 1 3 SIGNATURES COMPLETED 2 4	TOTAL SHEETS								
	118								

	TOTAL BILL OF MATERIAL																	
BRIDGE NO.	INCIDENTAL MILLING	ASPHALT CONCRETE SURFACE COURSE S9.5B	ASPHALT BINDER FOR PLANT MIX	GROOVING BRIDGE FLOORS	CLASS II SURFACE PREPARATION	LATEX MODIFIED CONCRETE OVERLAY	PLACING & FINISHING OF LATEX MODIFIED CONC.OVERLAY	CONCRETE REPAIRS	SHOTCRETE REPAIRS	EPOXY RESIN INJECTION	VOLUMETRIC MIXER	POURABLE SILICONE JOINT SEALANT	ELASTOMERIC CONCRETE FOR PRESERVATION	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR EPOXY OVERLAY	EPOXY OVERLAY HAND APPLICATION SYSTEM	HYDRO- DEMOLITION OF BRIDGE DECK	SCARIFYING BRIDGE DECK
	SQ.YD.	TONS	TONS	SQ.FT.	SQ.YD.	CU.YD.	SQ. YD.	CU.FT.	CU.FT.	LN.FT.	LUMP SUM	LN.FT.	CU.FT.	SQ.FT.	SQ.FT.	SQ.FT.	SQ.YD.	SQ. YD.
320104	1,541.7	126.8	10.0	20,703.5	5.0	137.4	2,473.4	4.3	402.3	30.0	LUMP SUM	280.3	58.9	256.8			2,473.4	2,473.4
320148									24.4		LUMP SUM	215.0	35.8	190.4	135.0	7,080		
320153									1.0	80.0	LUMP SUM	172.0	29.6	157.6	22.0	5,288		
320154									47.6		LUMP SUM	289.0	49.7	264.8	266.3	9,646		
320155											LUMP SUM	219.2	37.6	201.0	79.5	7,559		
320156								2.0	11.2			182.2	31.3	167.2		5,570		
320157								2.1	15.4		LUMP SUM	304.5	52.4	279.2	121.5	9,577		
320320									26.5			101.5	17.4	93.0		26,331		
320325												85.1	14.6	78.0		5,720		
320326												85.1	14.6	78.0		5,720		
TOTAL	1,541.7	126.8	10.0	20,703.5	5.0	137.4	2,473.4	8.4	528.4	110.0	LUMP SUM	1,933.9	341.9	1,766.0	624.3	82,491	2,473.4	2,473.4

GENERAL NOTES:

THIS REPAIR BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

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

EXISTING DIMENSIONS AND BRIDGE CONDITION ARE FROM THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE INFORMATION SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF ACTUAL DIMENSIONS AND CONDITIONS DIFFER. THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT FOR ANY DELAYS OF ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN WHAT IS SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

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

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

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

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

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

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

FOR NEW ASPHALT PLACEMENT, SEE STANDARD SPECIFICATIONS

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

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

FOR POURABLE SILICONE JOINT SEALANT, SEE SPECIAL PROVISIONS.

FOR EPOXY OVERLAY HAND APPLICATION SYSTEM. SEE SPECIAL PROVISIONS.

FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.

FOR VOLUMETRIC MIXER, SEE SPECIAL PROVISIONS.

DRAWN BY :	A. Y. GODFREY	DATE : <u>10/2021</u>
CHECKED BY :_	A. G. ABRAHA	DATE : <u>10/2021</u>

FOR SCARIFYING BRIDGE DECK, AND HYDRO-DEMOLITION OF BRIDGE DECK, SEE "LMC OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

THE CONTRACTOR SHALL PROVIDE A METHOD OF HANDLING UNEXPECTED BLOW THROUGH OF THE DECK.

DURING CONSTRUCTION, BERMS OR APPROPRIATE MEASURES SHALL BE USED TO ENSURE HYDRO-DEMOLITION WATER DOES NOT FLOW OR MIGRATE INTO ACTIVE TRAVEL LANES.

THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE "LMC OVERLAY SURFACE PREPARATION" SPECIAL PROVISION.

FOR LATEX MODIFIED CONCRETE OVERLAY, PLACING & FINISHING OF LATEX MODIFIED CONCRETE OVERLAY AND GROOVING BRIDGE FLOORS, SEE "LATEX MODIFIED CONCRETE" SPECIAL PROVISION.

FOR FALSEWORK AND FORMWORK. SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH PROPOSED STRUCTURE, SEE SPECIAL PROVISIONS.

THE RAILROAD TRACK TOP OF RAIL TO BOTTOM OF BEAM VERTICAL CLEARANCES ON THE PLANS ARE FROM THE BEST INFORMATION AVAILABLE. PRIOR TO BEGINNING BRIDGE CONSTRUCTION, VERIFY THE TOP OF RAIL TO BOTTOM OF BEAM CLEARANCES AND REPORT ANY VARIATIONS TO THE ENGINEER. ANY PLAN REVISIONS NECESSARY TO ACHIEVE THE REQUIRED MINIMUM CLEARANCE WILL BE PROVIDED BY THE DEPARTMENT.

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

FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES. SEE SPECIAL PROVISIONS.

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.

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

ITEM NO. DESCRIPTION

CLASS III SURFACE PREPARATION

UNIT SQ. YD.

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.

CSX RAILROAD NOTES (FOR BRIDGE NO. 148, 155, 154, & 157):

- SUBMISSION CRITERIA).
- REVIEWED BY CSXT WITH NO GUARANTEE OF APPROVAL.
- IMPACTED DUE TO THE WORK BEING PERFORMED.
- REMAIN CLEAR AT ALL TIMES.

- PROTECT ITS OPERATIONS AND PROPERTY.

DOCUME FΤ

1. THE CONTRACTOR MUST PLAN AND EXECUTE THE PROPOSED WORK TO CONTAIN ALL DEMOLITION DEBRIS AND PREVENT ITS DEPOSITION UPON CSXT PROPERTY, ESPECIALLY THE CSXT TRACK STRUCTURE, INCLUDING INSTALLATION OF A DEMOLITION DEBRIS SHIELD IF NECESSARY (SEE SECTION IV, PARAGRAPHS I AND J OF THE CSXT CONSTRUCTION

2. PLEASE NOTE THAT CSXT TYPICALLY DOES NOT PERMIT ANY REDUCTION TO THE EXISTING VERTICAL CLEARANCE(S) ABOVE THE EXISTING CSXT TRACK(S) AT ANY TIME DURING CONSTRUCTION. ANY PROPOSED TEMPORARY REDUCTION OF VERTICAL CLEARANCE MUST BE

3. THE CONTRACTOR MUST PLAN AND PERFORM THE WORK IN A MANNER SUCH THAT CSXT TRACKS AT THE PROJECT LOCATION REMAIN FULLY CAPABLE OF CARRYING RAIL TRAFFIC THROUGHOUT THE WORK PERIOD AND RAIL TRAFFIC IS NOT DELAYED OR OTHERWISE

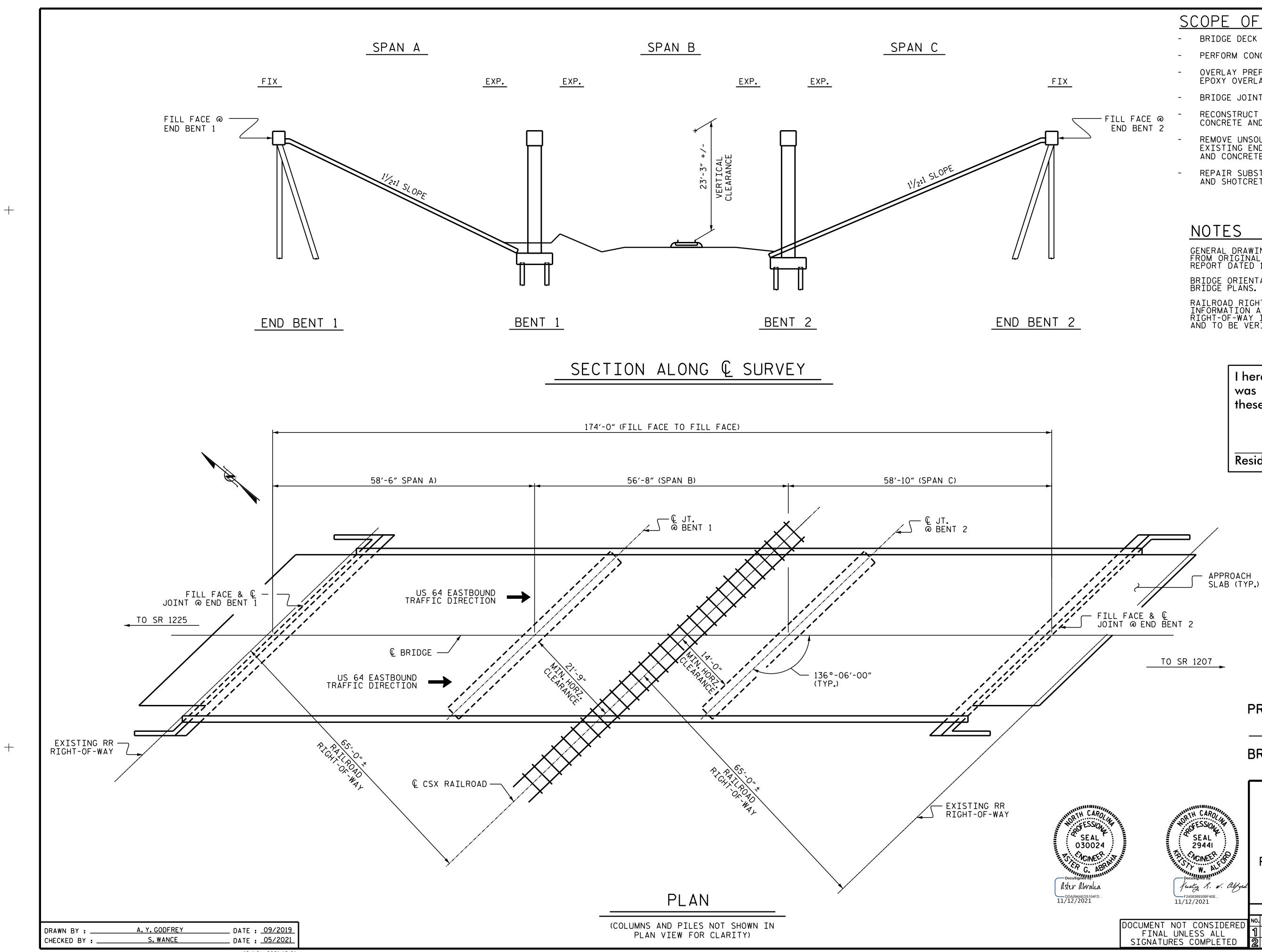
4. THE CONTRACTOR SHALL NOT BE PERMITTED TO USE THE CSXT RIGHT-OF-WAY FOR STORAGE OF MATERIALS OR EQUIPMENT DURING CONSTRUCTION. THE CSXT RIGHT-OF-WAY MUST

5. THE CONTRACTOR SHALL BE REQUIRED TO FULLY COMPLY WITH ALL FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS, REGULATIONS, STATUTES AND ORDINANCES AT ALL TIMES.

6. PLEASE NOTE THAT CSXT FACILITIES ARE NOT SUBJECT TO MISS UTILITY PROGRAMS. CONTRACTOR SHALL COORDINATE WITH CSXT TO HAVE THEIR FACILITIES MARKED IN THE FIELD. PRIOR TO PERFORMING WORK WITH THE POTENTIAL TO IMPACT BELOW-GRADE FACILITIES.CSXT WILL MARK OUT EXISTING CSXT FACILITIES.AT PROJECT EXPENSE.

7. PLEASE NOTE THAT A CSXT FLAGMAN MAY BE REQUIRED FOR ANY WORK WHICH REQUIRES ENTRY ONTO THE CSXT RIGHT-OF-WAY. ANY WORK THAT HAS POTENTIAL TO FOUL CSXT TRACK. AND ANY WORK TO BE PERFORMED WITHIN 50 FEET OF THE CENTERLINE OF TRACK. CSXT SHALL HAVE SOLE AUTHORITY TO DETERMINE THE NEED FOR FLAGGING REQUIRED TO

PR	JECT	NO.	I	-6041	Α
	EDGE	COME	BE		ITIES
BRI	DGE N	10.: <u>3</u> 2	20104	4,320	148
	3201	153,3	2015	4,320)155
		•		7,320)320,
	320.	325,8	& 3Z	0326	
			E OF NORTH CA		
NUMBER CAROLAND	DEPA	RTMENT	OF TRA RALEIGH	NSPORTA	TION
SEAL 030024					
030024	BI	LL O	F MA	TERI	AL
Docusigned by					
lster Abralia DDA094AED5104FD 11/12/2021					0
		REVIS	SIONS		SHEET NO.
OCUMENT NOT CONSIDERED	NO. BY:	DATE:	NO. BY:	DATE:	S-2
FINAL UNLESS ALL	1		3		TOTAL SHEETS
SIGNATURES COMPLETED	2		4		118



12-NOV-2021 12:01 S:\DPG1\Division4\I-6041A\Preliminary\Bridges 320148 & 320155\402_001_I-6041A_SMU_ GD_320148.dgn aabraha

SCOPE OF WORK

- BRIDGE DECK PREPARATION BY SHOTBLASTING METHODS.
- PERFORM CONCRETE DECK REPAIRS IN PREPARED AREAS.
- OVERLAY PREPARED TOP OF BRIDGE DECK WITH EPOXY OVERLAY.
- BRIDGE JOINT DEMOLITION.
- RECONSTRUCT BRIDGE JOINTS AND INSTALL ELASTOMERIC CONCRETE AND POURABLE SILICONE JOINT SEALANT.
 - REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING END BENTS AND BENTS AREA FOR SHOTCRETE AND CONCRETE REPAIRS.
 - REPAIR SUBSTRUCTURE USING EPOXY RESIN INJECTION AND SHOTCRETE REPAIRS.

GENERAL DRAWING AND PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 1/4/2021. BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

RAILROAD RIGHT-OF-WAY IS TAKEN FROM THE BEST INFORMATION AVAILABLE AND NOT EXACT.RAILROAD RIGHT-OF-WAY IS FOR INFORMATION PURPOSES ONLY AND TO BE VERIFIED IN THE FIELD.

I hereby certify that this structure was rehabilitated according to these plans or as noted therein.

Resident Engineer

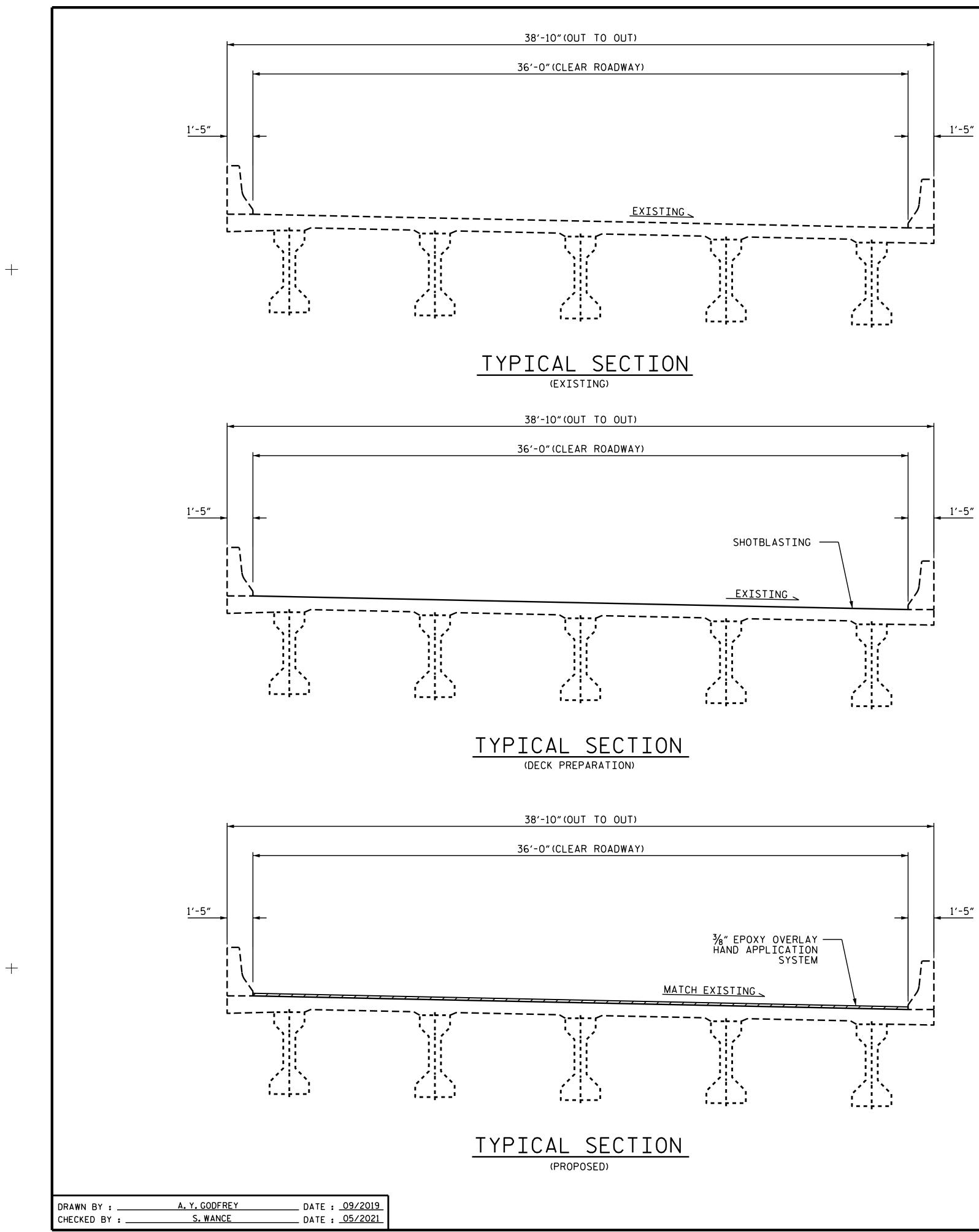
Date

PROJECT NO	I-60	41A
EDGECOME		
BRIDGE NO.		
STATE OF NO	TRANSPO	RTATION

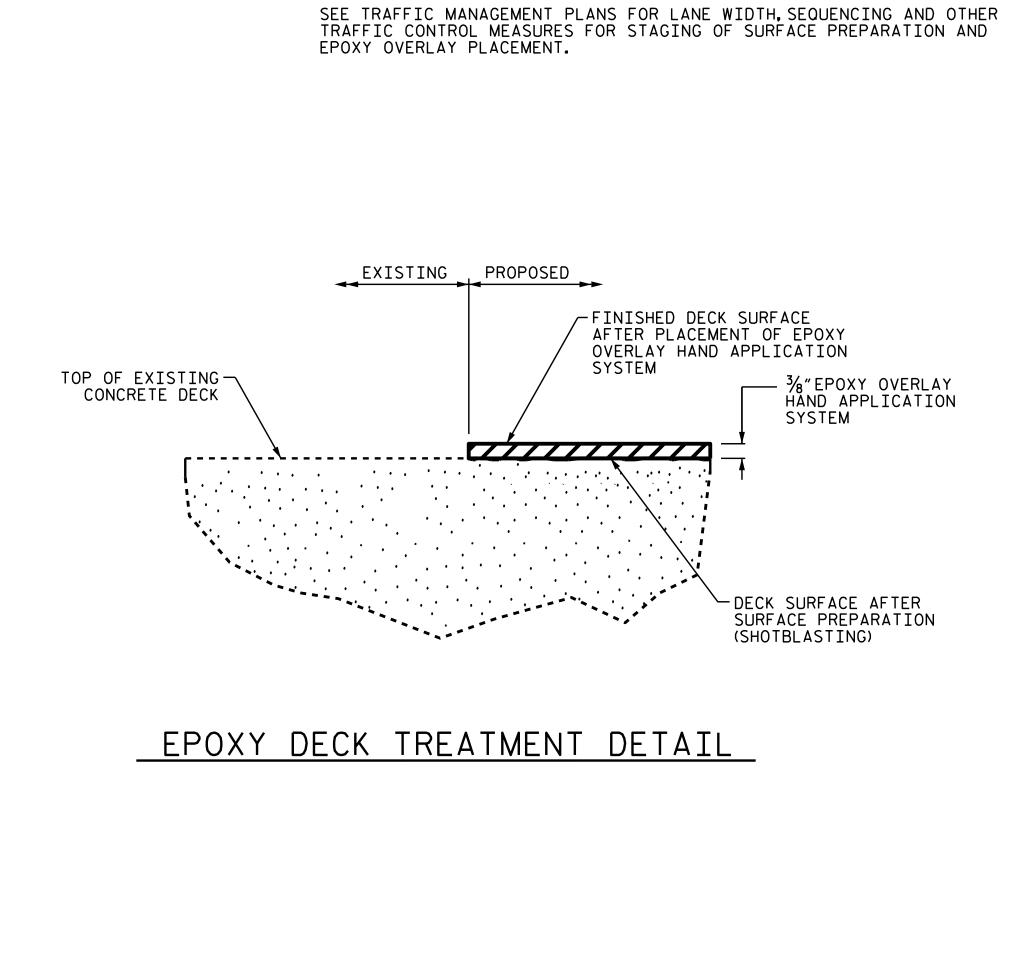
RALEIGH GENERAL DRAWING

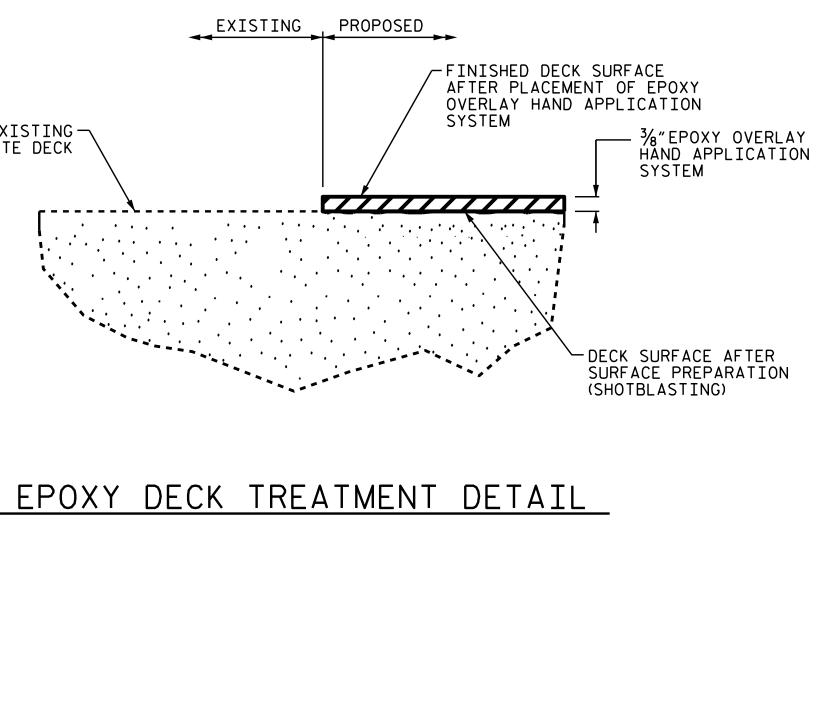
FOR BRIDGE NO.148 ON US 64 BETWEEN SR 1225 & 1207 OVER CSX RAILROAD

11/12/2021		REVISIONS				SHEET NO.	
		DV.				0.175	S1-1
DOCUMENT NOT CONSIDERED	N0.	BY:	DATE:	N0.	BY:	DATE:	
FINAL UNLESS ALL	1			3			TOTAL SHEETS
SIGNATURES COMPLETED	2			4			118



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NOTES

PROJECT NO	I-6041A	
EDGECOM	IBE COUN	ΤY
BRIDGE NO	320148	

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

TYPICAL SECTION AND SURFACE PREPARATION DETAILS

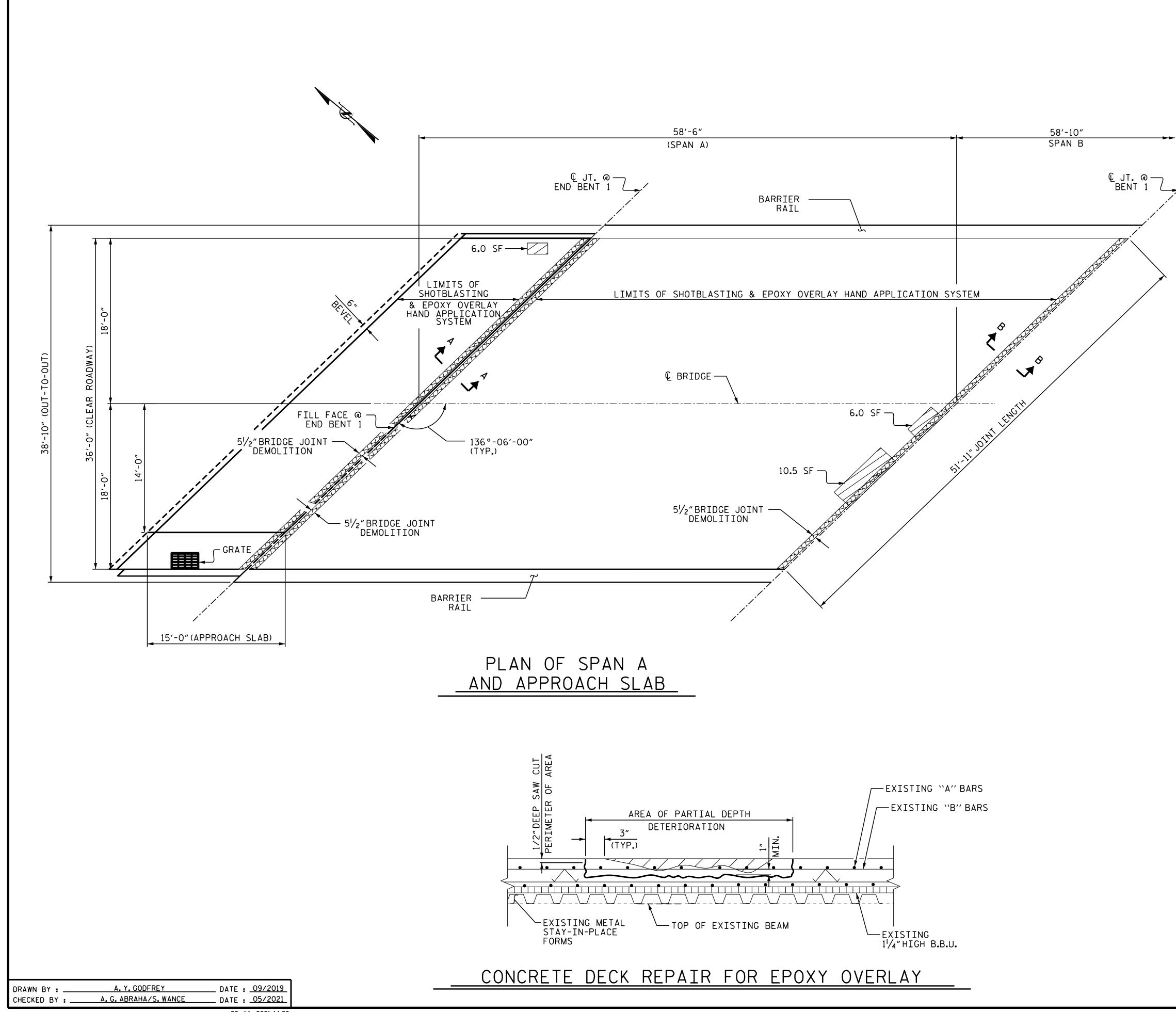
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SEAL 7 030024

TO POINEER

DocuSigned by: Aster Abraha



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SUMMARY OF QUANTITIES FOR SPAN A AND APPROACH SLAB

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	2,540 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	22 . 5 SF	
BRIDGE JOINT DEMOLITION	71.4 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 AS- BUILT REPAIR QUANTITIES TABLE.

FOR EPOXY OVERLAY HAND APPLICATION SYSTEM SEE SPECIAL PROVISIONS.

FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS AND THE DETAIL ON THIS SHEET. FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE

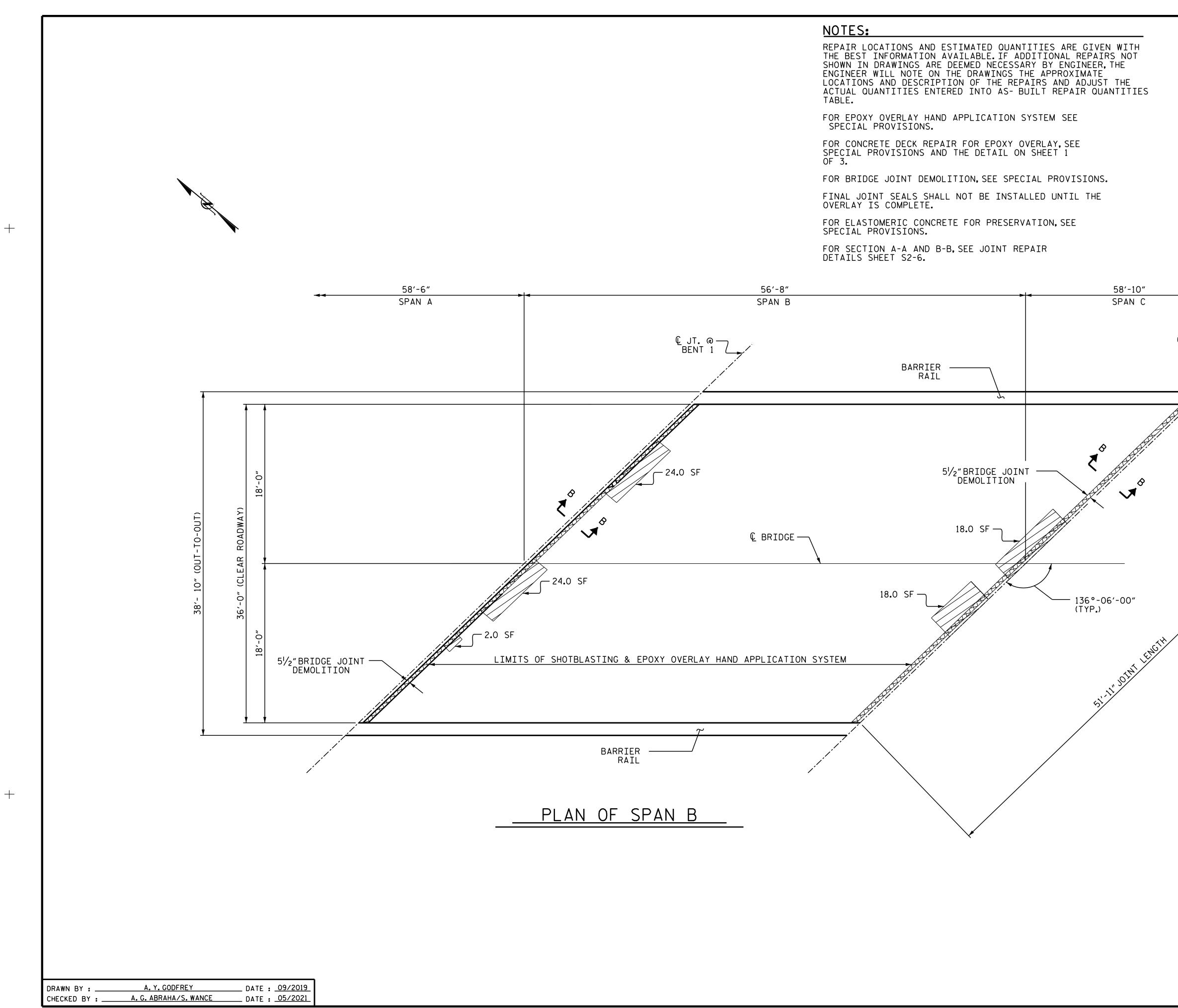
FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY IS COMPLETE. FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE

SPECIAL PROVISIONS. FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS. FOR SECTION A-A AND B-B, SEE JOINT REPAIR DETAILS SHEET S2-6.

REPAIR KEY

-	SHOTBLASTING AND EPOXY OVERLAY OF BRIDGE DECK
-	CONCRETE DECK REPAIR FOR EPOXY OVERLAY
-	BRIDGE JOINT DEMOLITION

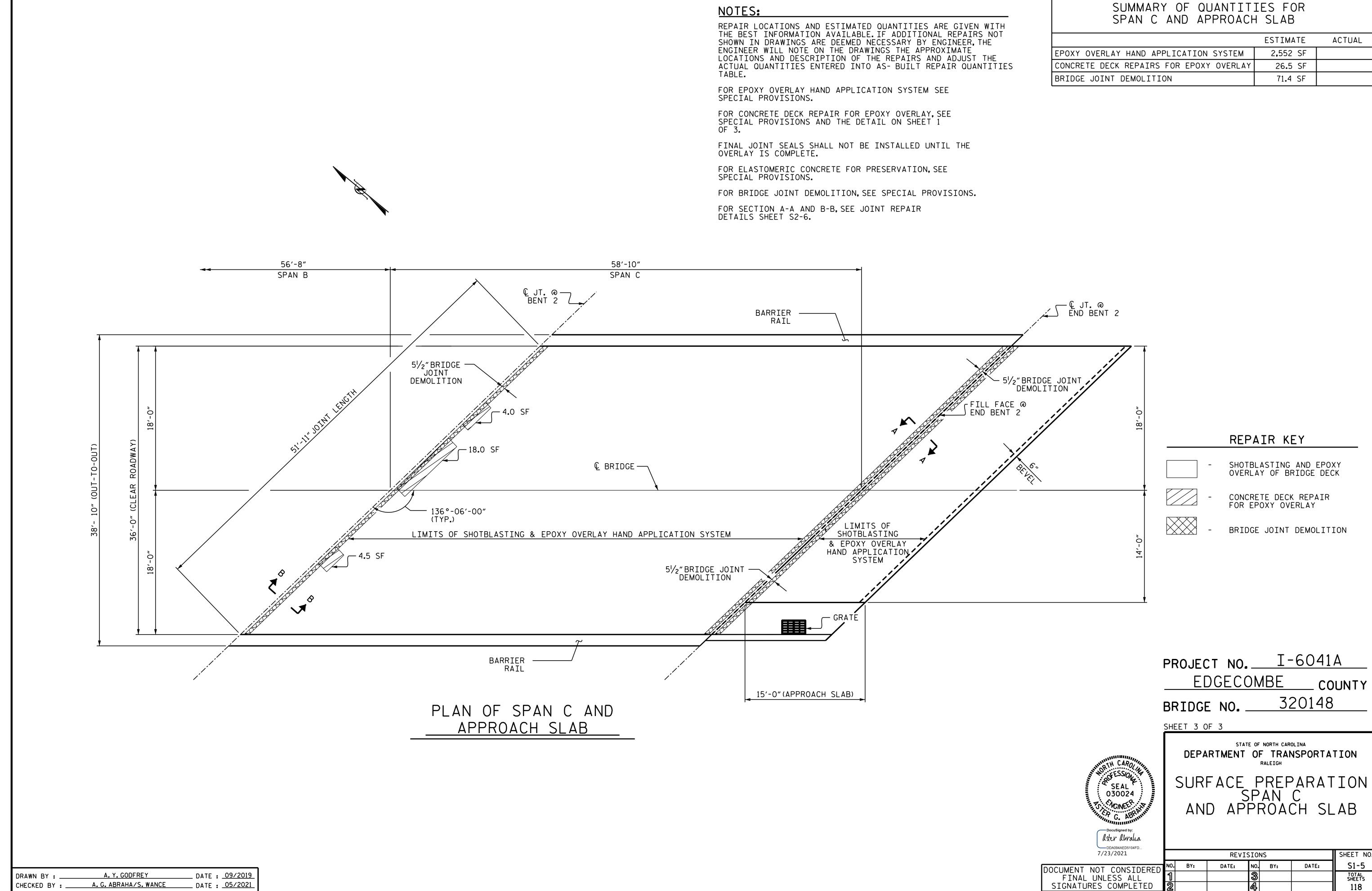
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		ESTIMATE	ACTUAL
EPOXY OVERLAY HA	ND APPLICATION SYSTEM	1,988 SF	ACTUAL
	PAIRS FOR EPOXY OVERLA		
BRIDGE JOINT DEM	OLITION	47.6 SF	
F. @			
		AIR KEY	
	- SHOTB OVERL	LASTING AND EP AY OF BRIDGE DI	OXY ECK
		ETE DECK REPAIF POXY OVERLAY	2
	- BRIDG	E JOINT DEMOLI	TION

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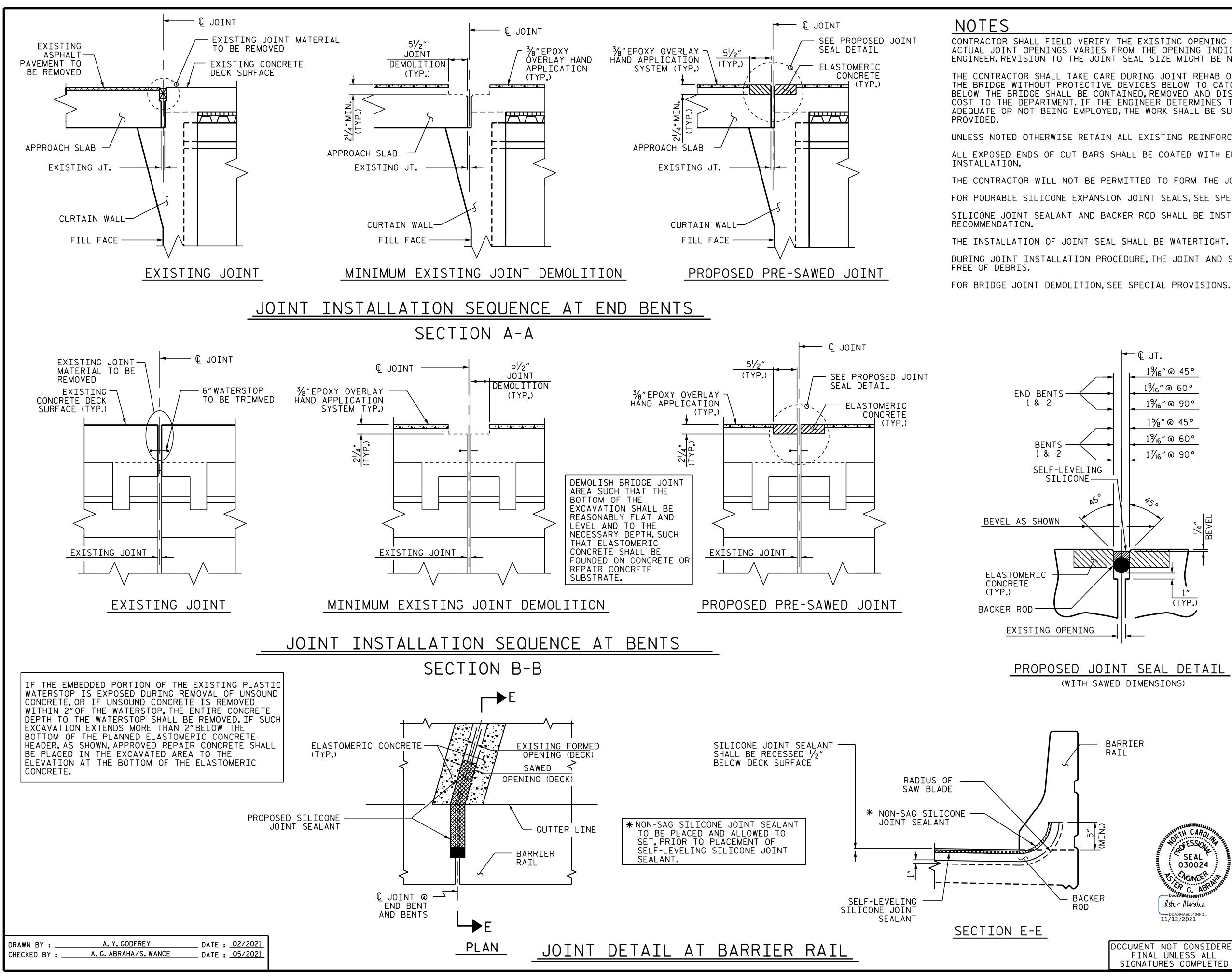


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	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	2,552 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	26.5 SF	
BRIDGE JOINT DEMOLITION	71.4 SF	

)GECC E NO	OMBE	<u>-6041</u> co 20148	UNTY
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SIGNATURES COMPLETED	2		4		118



CONTRACTOR SHALL FIELD VERIFY THE EXISTING 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 MIGHT BE NECESSARY.

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

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

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT. FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS. SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S

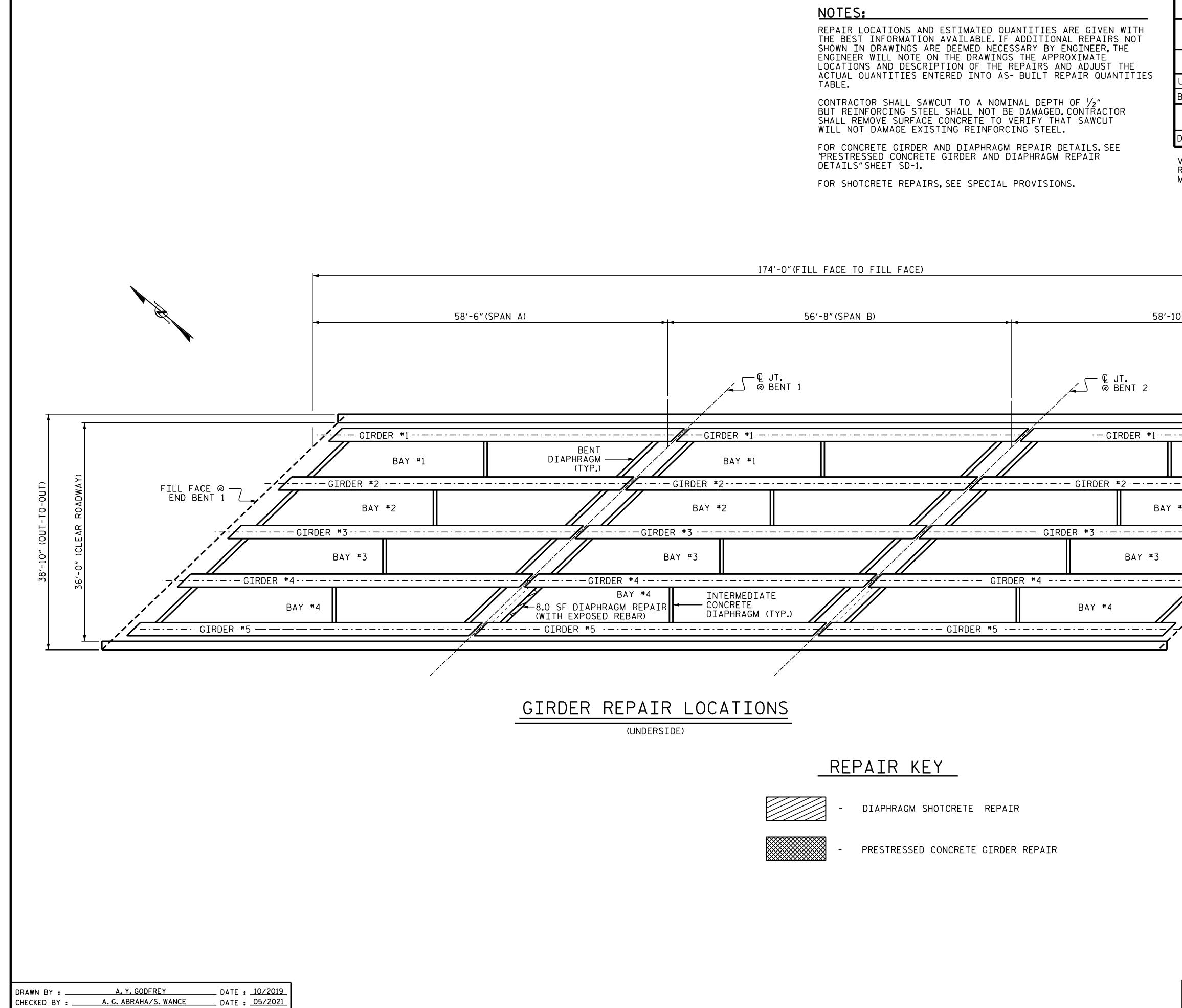
DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND

ŀ	← Q JT.
	1 ⁹ /16″@ 45°
	1% ₁₆ ″@ 60°
	1 ⁹ /16″@ 90°
	1 ⁵ ⁄8″@ 45°
	1%16″@ 60°
	17/16″@ 90°
-	₹5°
	BEVEL
	<u>1"</u> (TYP.)

SUMMARY O	F QUANTITI	[ES
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	35.8 CF	
POURABLE SILICONE JOINT SEALANT	215.0 LF	

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VED	DIN	IENSIC	NS)			•

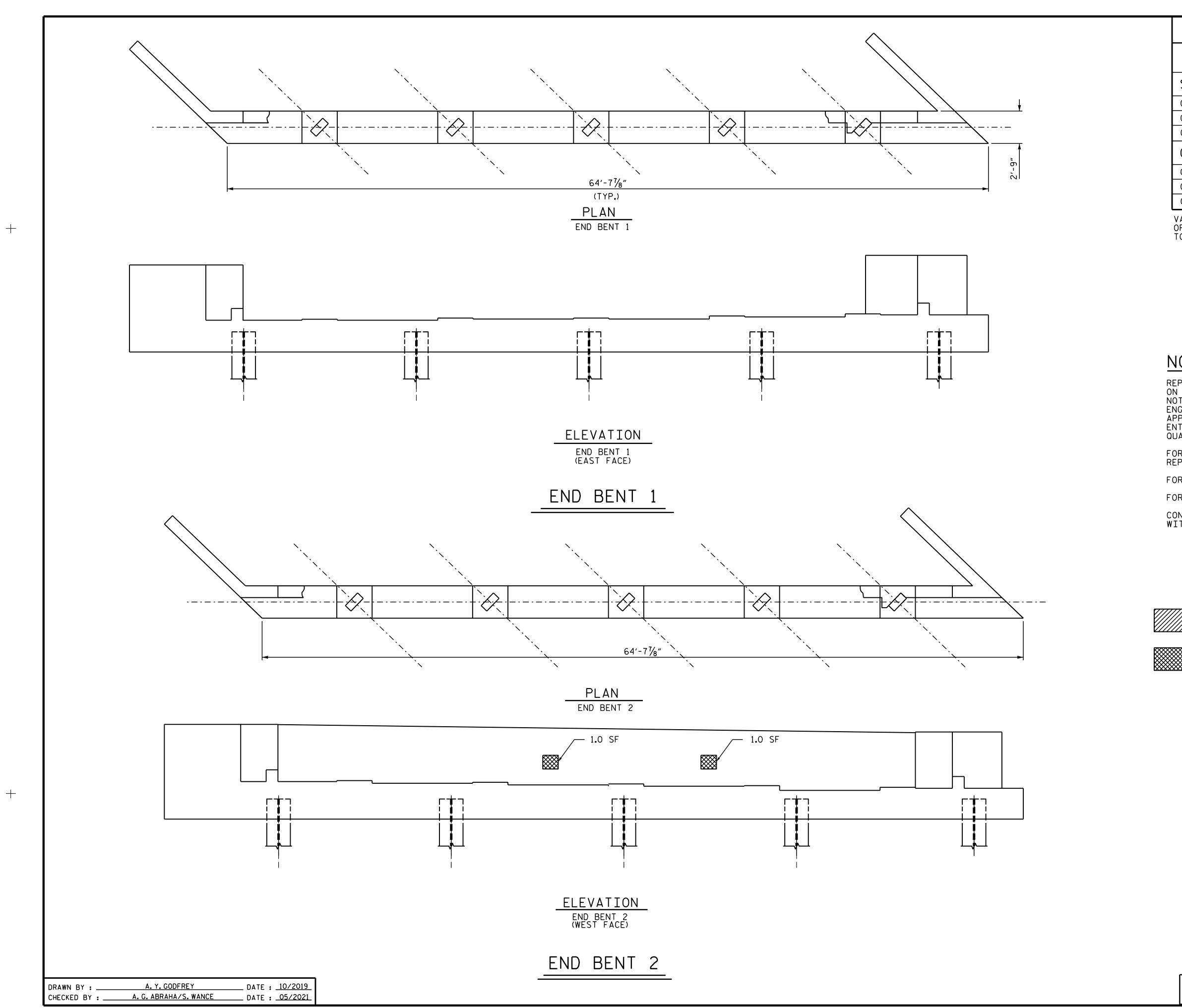
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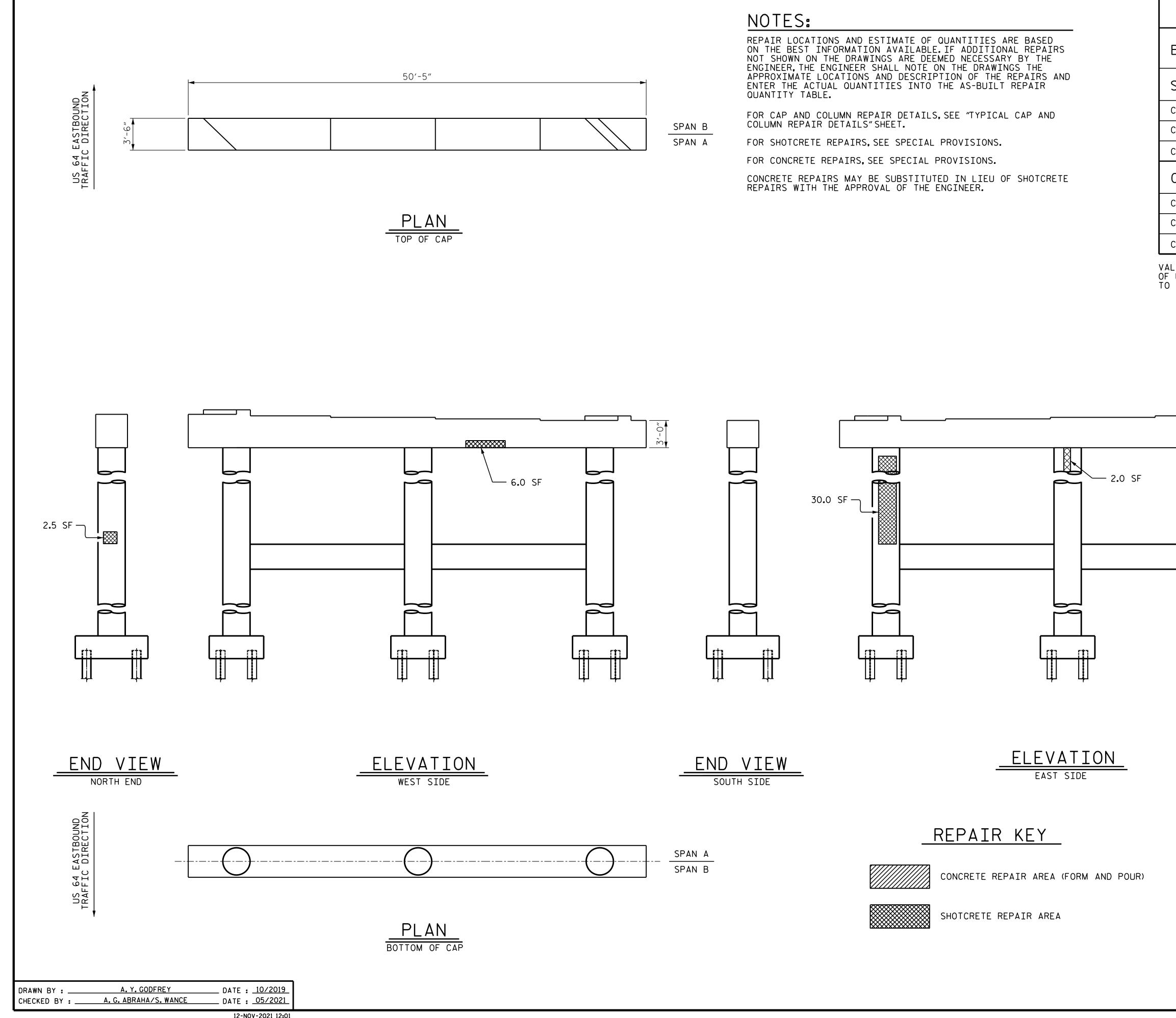


REPAIR QL	ΙΔΝΙΤΤ	ΤΥ ΤΔ	RI F	
		QUANTI		
UNDERSIDE OF DECK	ESTI			UAL
SHOTCRETE REPAIRS	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.
UNDERSIDE OF DECK & OVERHANG BENT DIAPHRAGMS	0.0	0.0	5.1 .	
GIRDER REPAIRS				
DECK GIRDERS	1.0	0.4		
VALUES IN CHART REPRESENT EST REMOVAL OF UNSOUND CONCRETE, M MIN. 2"CL TO SAWCUT. SEE REPAIR	IIN.OF 1"BE	PAIR TOTALS HIND REBAR	S AFTER R AND	
O" (SPAN C)		7		
	L FACE @ BENT 2			
BRI KAROUMAN K	EDGE DGE NC	10. 1 COMBE COMBE 32 STATE OF NORTH C NT OF TR RALEIGH ERSTRI RETE	20148 ANSPORT	OUNTY
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REPAIR QU	JANTI	ΤΥ ΤΑΕ	BLE	
REPAIRS END BENT 1 & 2	ESTI	QUANTI ⁻ MATE	TIES ACT	
SHOTCRETE REPAIRS	AREA	VOLUME	AREA	VOLUME
CAP (VERTICAL FACE)	SF 2.0	CF 1.0	SF	CF
CAP (HORIZONTAL, CORNER)	0.0	0.0		
COLUMN	0.0	0.0		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE) CAP (HORIZONTAL, CORNER)	0.0	0.0		
COLUMN	0.0	0.0		
OF UNSOUND CONCRETE, MIN. OF 1" TO SAWCUT. SEE ``TYPICAL CAP AN				
NOTES:				_
N THE BEST INFORMATION AVAILA OT SHOWN ON THE DRAWINGS ARE NGINEER, THE ENGINEER SHALL NOT PPROXIMATE LOCATIONS AND DESC NTER THE ACTUAL QUANTITIES IN JANTITY TABLE. OR CAP AND COLUMN REPAIR DETA EPAIR DETAILS" SHEET. OR SHOTCRETE REPAIRS, SEE SPECIA OR CONCRETE REPAIRS, SEE SPECIA ONCRETE REPAIRS MAY BE SUBSTI ITH THE APPROVAL OF THE ENGINE REPAIR KEY	DEEMED NEC TE ON THE D RIPTION OF TO THE AS- ILS, SEE "T ILS, SEE	ESSARY BY T PRAWINGS THE THE REPAIR BUILT REPAI (PICAL CAP A IONS.	HE S AND R AND COLUN	
CONCRETE REPAIR AREA	- (FORM AND	POUR)		
SHOTCRETE REPAIR ARE	۵			
	EDGE	10. <u>I</u> COMBE 0. <u>32</u>	C(
	DEPARTME	STATE OF NORTH CAN		TION
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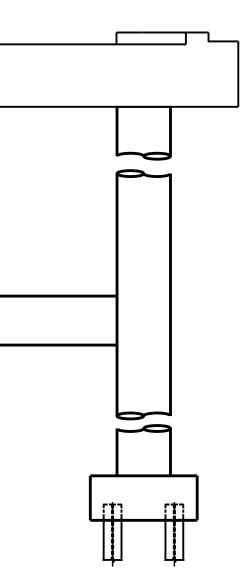
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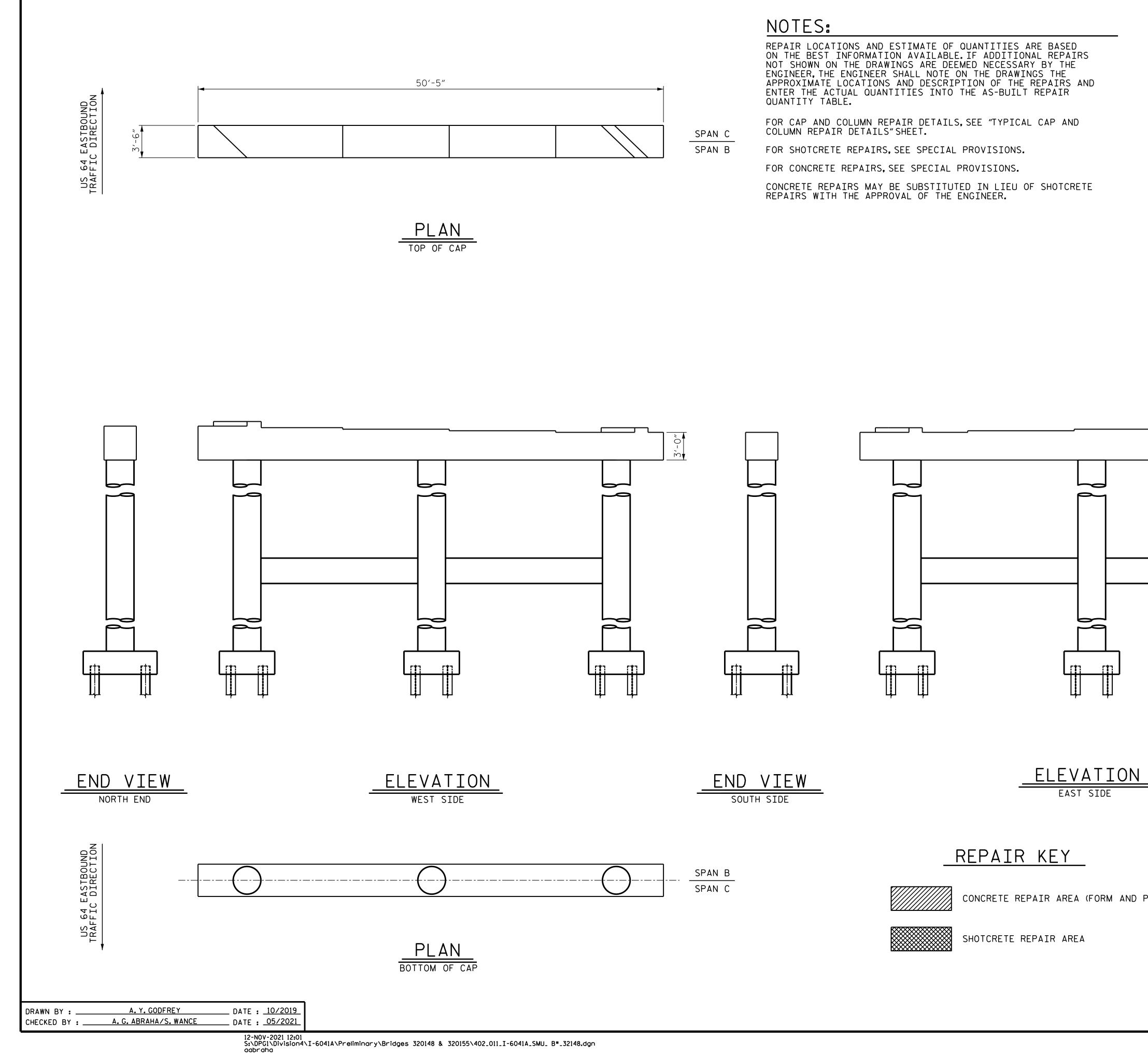
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	NOTES:	REPAIR (JUANT	ITY TA	BLE	
	REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED			QUANT	ITIES	
	ON THE BEST INFORMATION AVAILABLE.IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER,THE ENGINEER SHALL NOTE ON THE DRAWINGS THE	BENT 1	EST	IMATE	ACI	TUAL
	APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.	SHOTCRETE REPAIR	AREA SF	VOLUME CF	AREA SF	VOLUME CF
	FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND	CAP (VERTICAL FACE)	6.0	3.0		
SPAN B	COLUMN REPAIR DETAILS" SHEET.	CAP (HORIZONTAL FACE)	0.0	0.0		
SPAN A	FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS. FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.	COLUMN	34.5	17.3		
	CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.	CONCRETE REPAIR				
		CAP (VERTICAL FACE)	0.0	0.0		
		CAP (HORIZONTAL FACE)	0.0	0.0		
		COLUMN	0.0	0.0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1"BEHIND REBAR AND MIN. 2"CLEARANCE TO SAWCUT. SEE ``TYPICAL CAP AND COLUMN REPAIR DETAILS'' SHEET.



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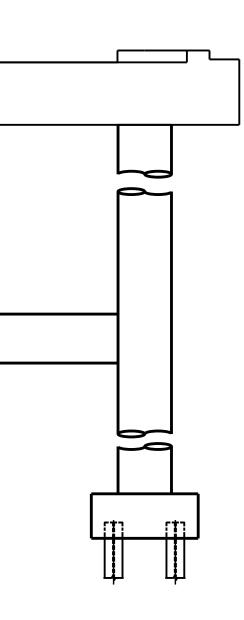


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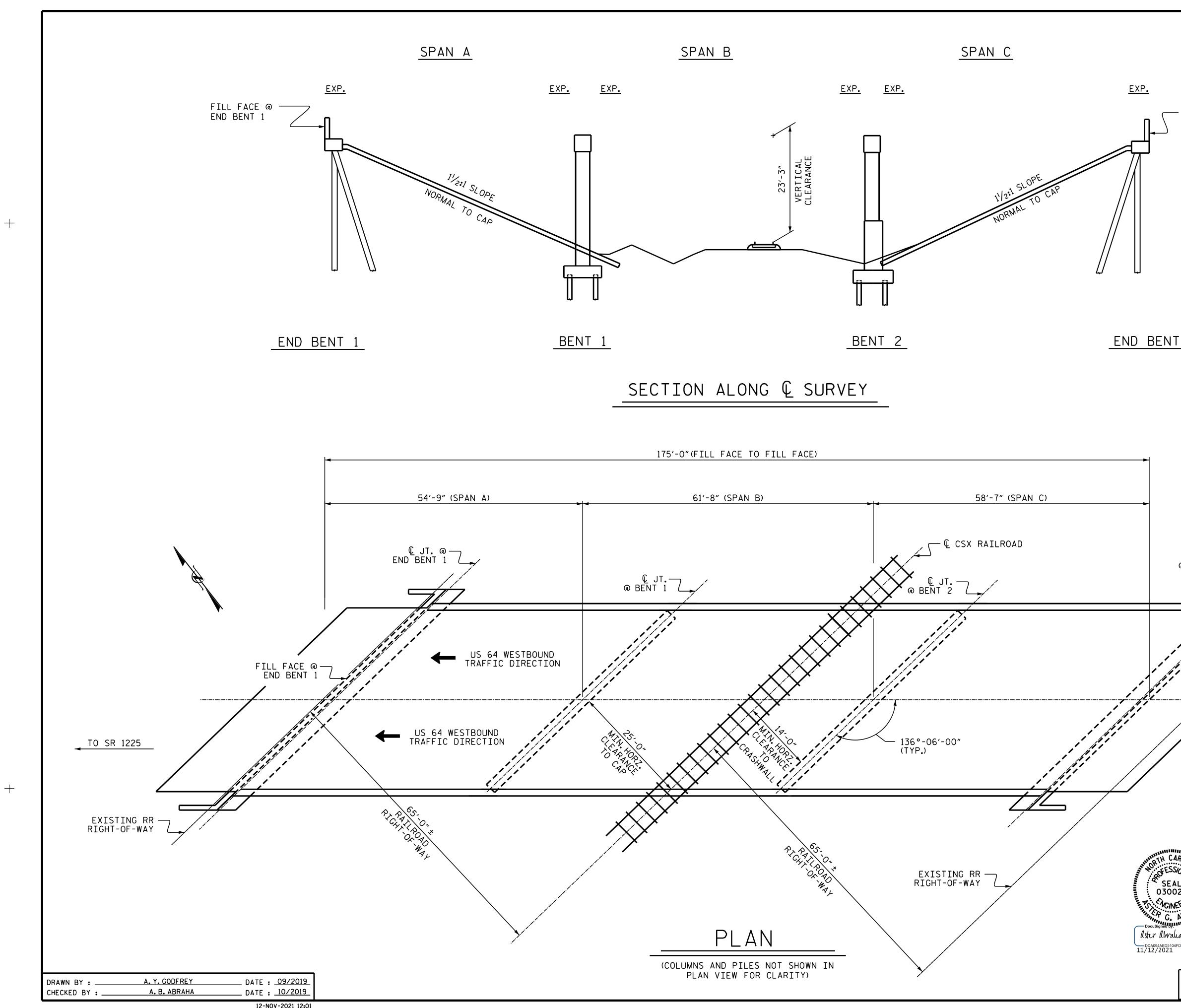
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	REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED			QUANT	ITIES	
	NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE	BENT 2	EST	IMATE	AC	TUAL
	APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.	SHOTCRETE REPAIR	AREA SF	VOLUME CF	AREA SF	VOLUME CF
	FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND	CAP (VERTICAL FACE)	0.0	0.0		
SPAN C	COLUMN REPAIR DETAILS" SHEET.	CAP (HORIZONTAL FACE)	0.0	0.0		
SPAN B	FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.	COLUMN	0.0	0.0		-
	FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.					<u> </u>
CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.	CONCRETE REPAIR					
		CAP (VERTICAL FACE)	0.0	0.0		
		CAP (HORIZONTAL FACE)	0.0	0.0		
		COLUMN	0.0	0.0		

CONCRETE REPAIR AREA (FORM AND POUR)

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1"BEHIND REBAR AND MIN. 2"CLEARANCE TO SAWCUT. SEE ``TYPICAL CAP AND COLUMN REPAIR DETAILS'' SHEET.

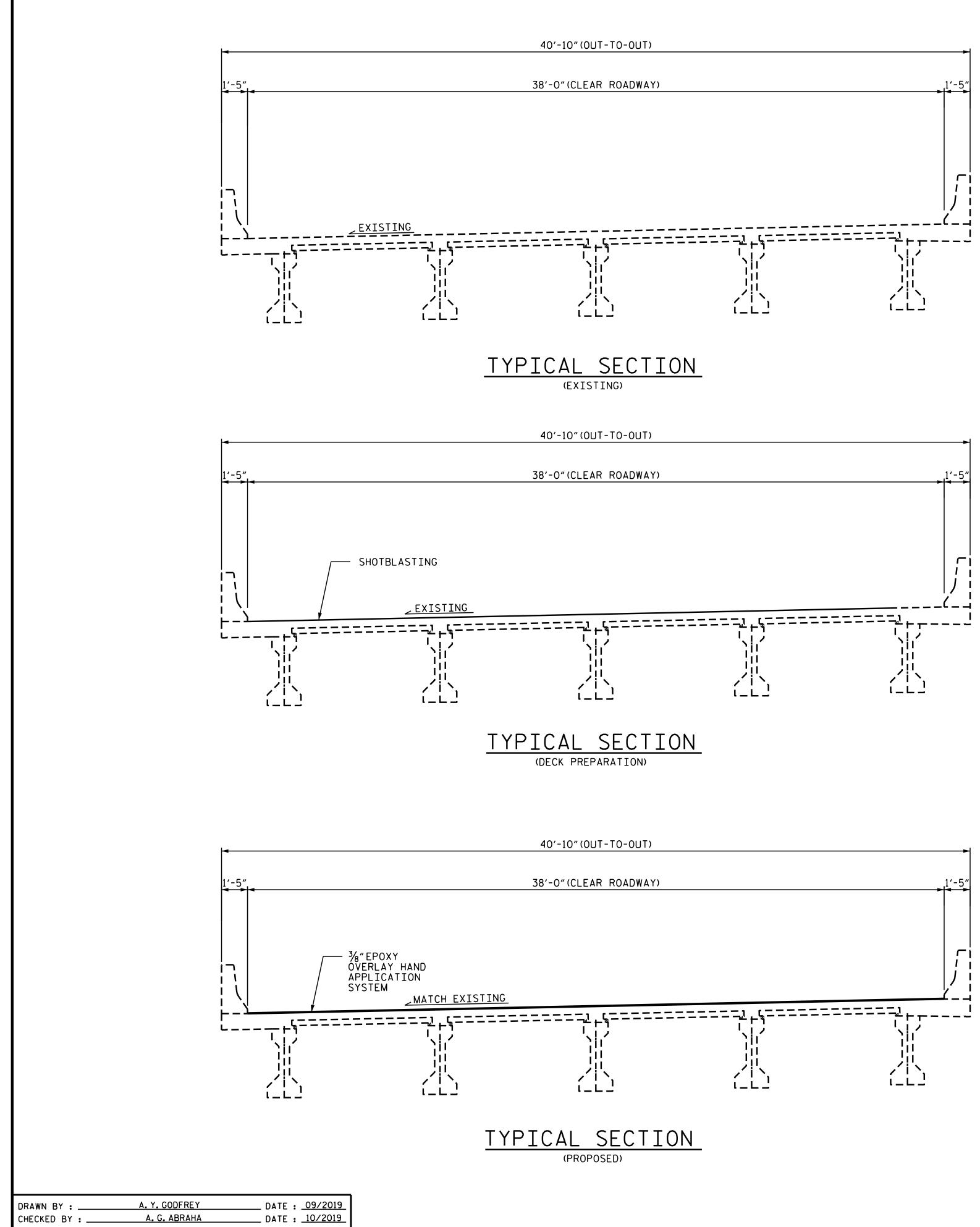


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<u>SCOF</u>	PE OF W	/ORK			
- BRIDGE METHOD	DECK PREPARA S.	TION WITH	H SHOTBLA	STING	
- PERFORM AREAS.	A CONCRETE DE	ECK REPAIF	RS IN PRE	PARED	
	Y PREPARED TO OVERLAY.	OP OF BRID	GE DECK	WITH	
- FILL FACE	JOINT DEMOL	ITION.			
	TRUCT BRIDGE MERIC CONCRE			CKER	
ROD AN	D SILICONE J	DINT SEAL	ANT.		
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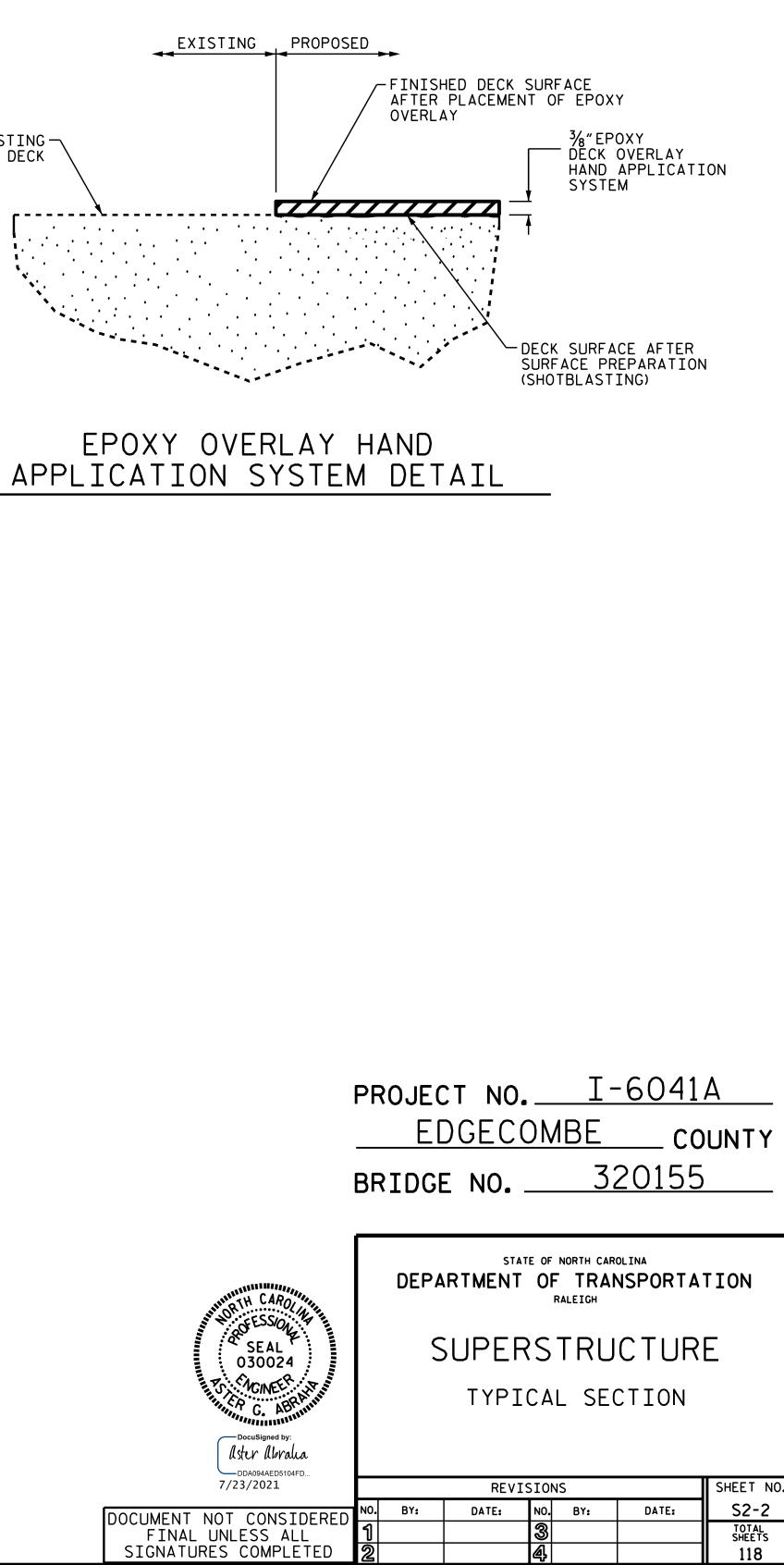
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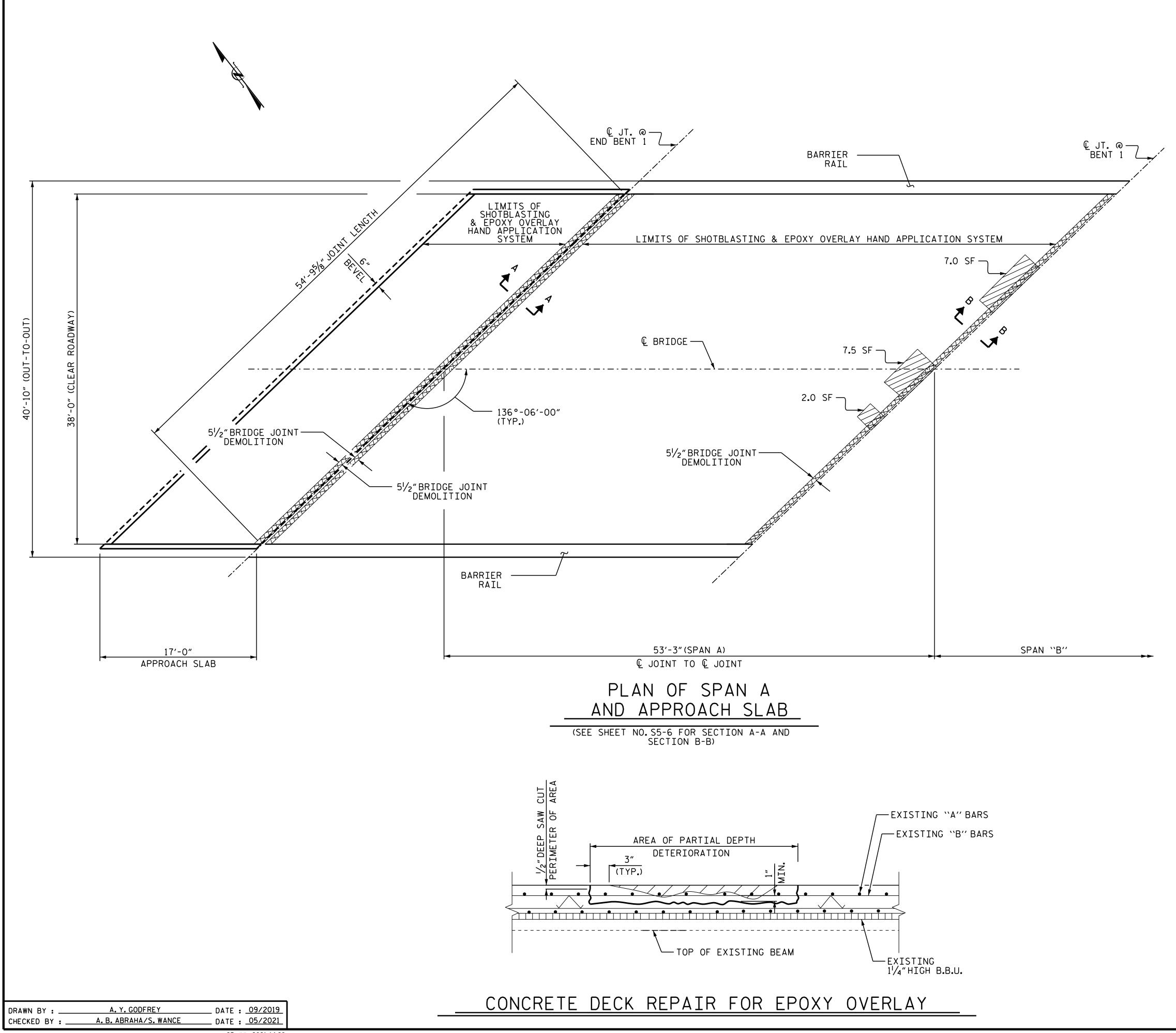


NOTES

SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND EPOXY OVERLAY PLACEMENT.



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SUMMARY OF QUANTITIES FOR SPAN A AND APPROACH SLAB

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	2,560 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	16 . 5 SF	
BRIDGE JOINT DEMOLITION	75.4 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 AS- BUILT REPAIR QUANTITIES TABLE.

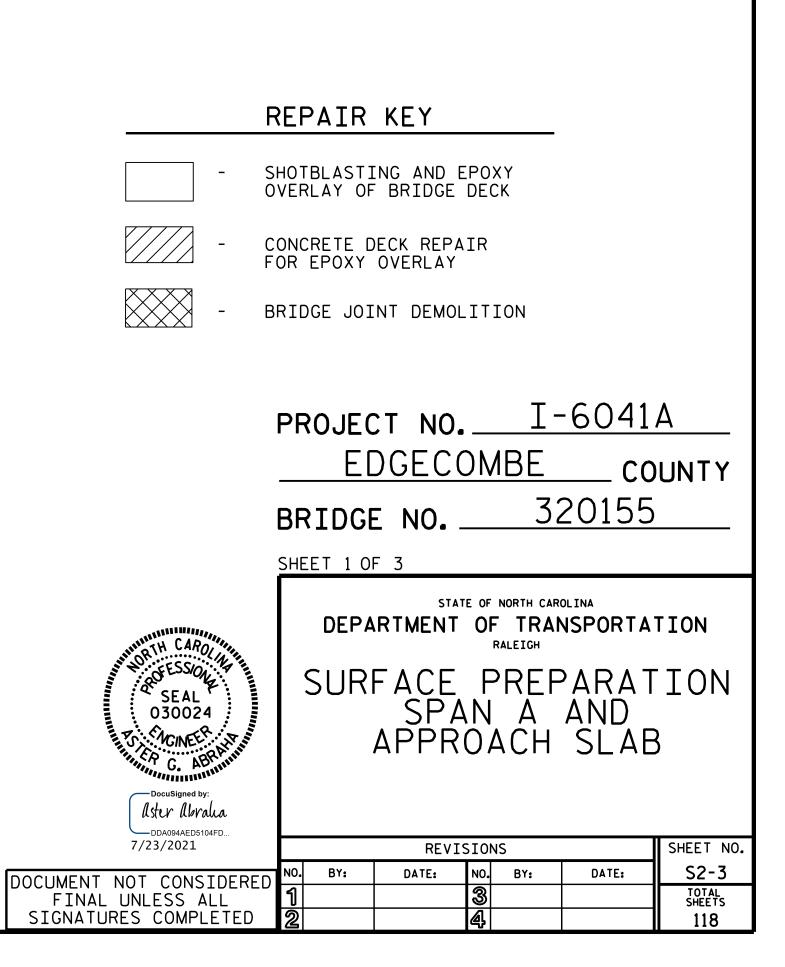
FOR EPOXY OVERLAY HAND APPLICATION SYSTEM, SEE SPECIAL PROVISIONS.

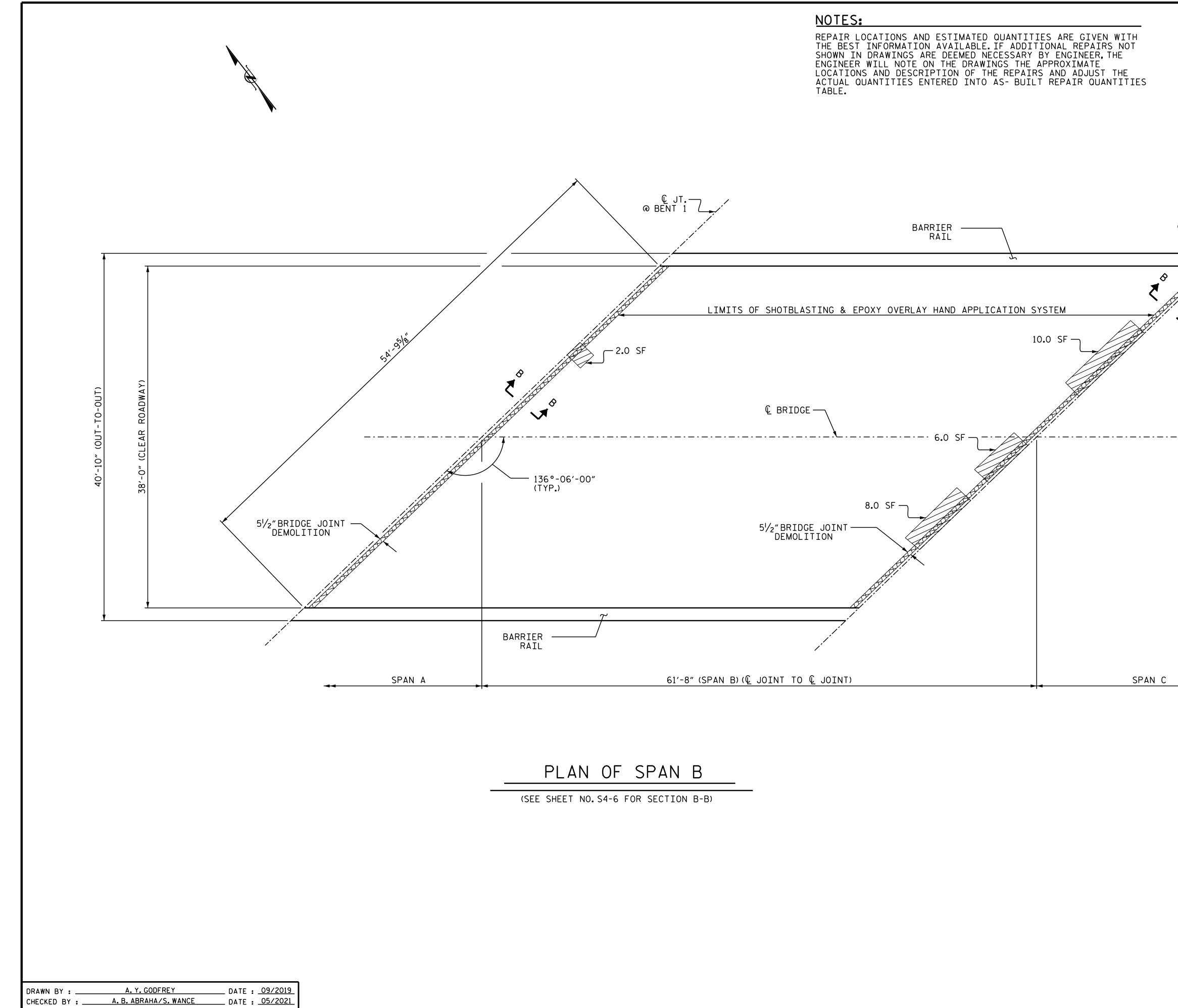
FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.

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

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.





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SUMMARY OF QUANTITIES FOR SPAN B

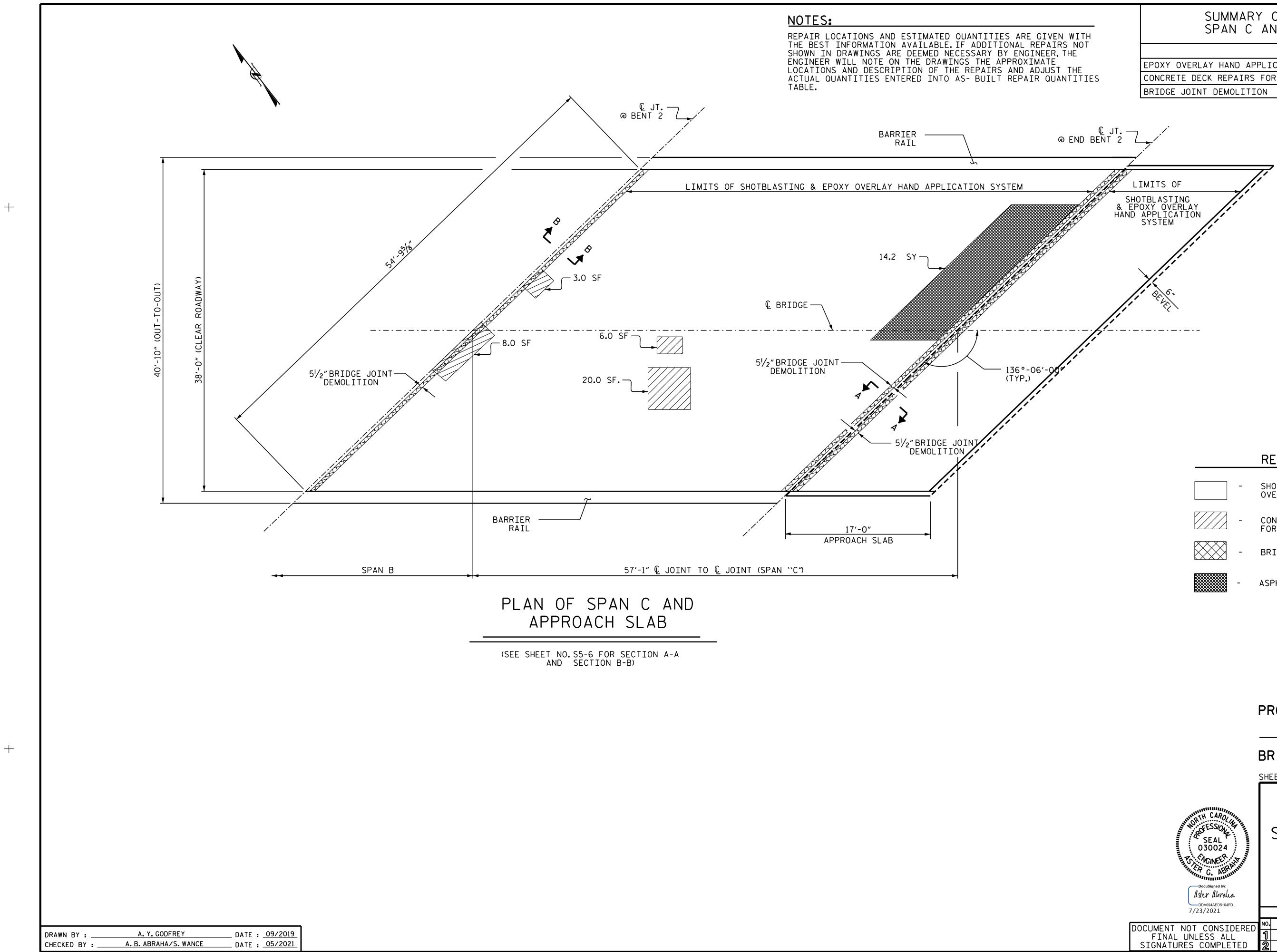
	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	2,293 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	26.0 SF	
BRIDGE JOINT DEMOLITION	50.2 SF	
BRIDGE JOINT DEMOLITION		

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REPAIR KEY

- SHOTBLASTING AND EPOXY OVERLAY OF BRIDGE DECK CONCRETE DECK REPAIR FOR EPOXY OVERLAY -
- BRIDGE JOINT DEMOLITION

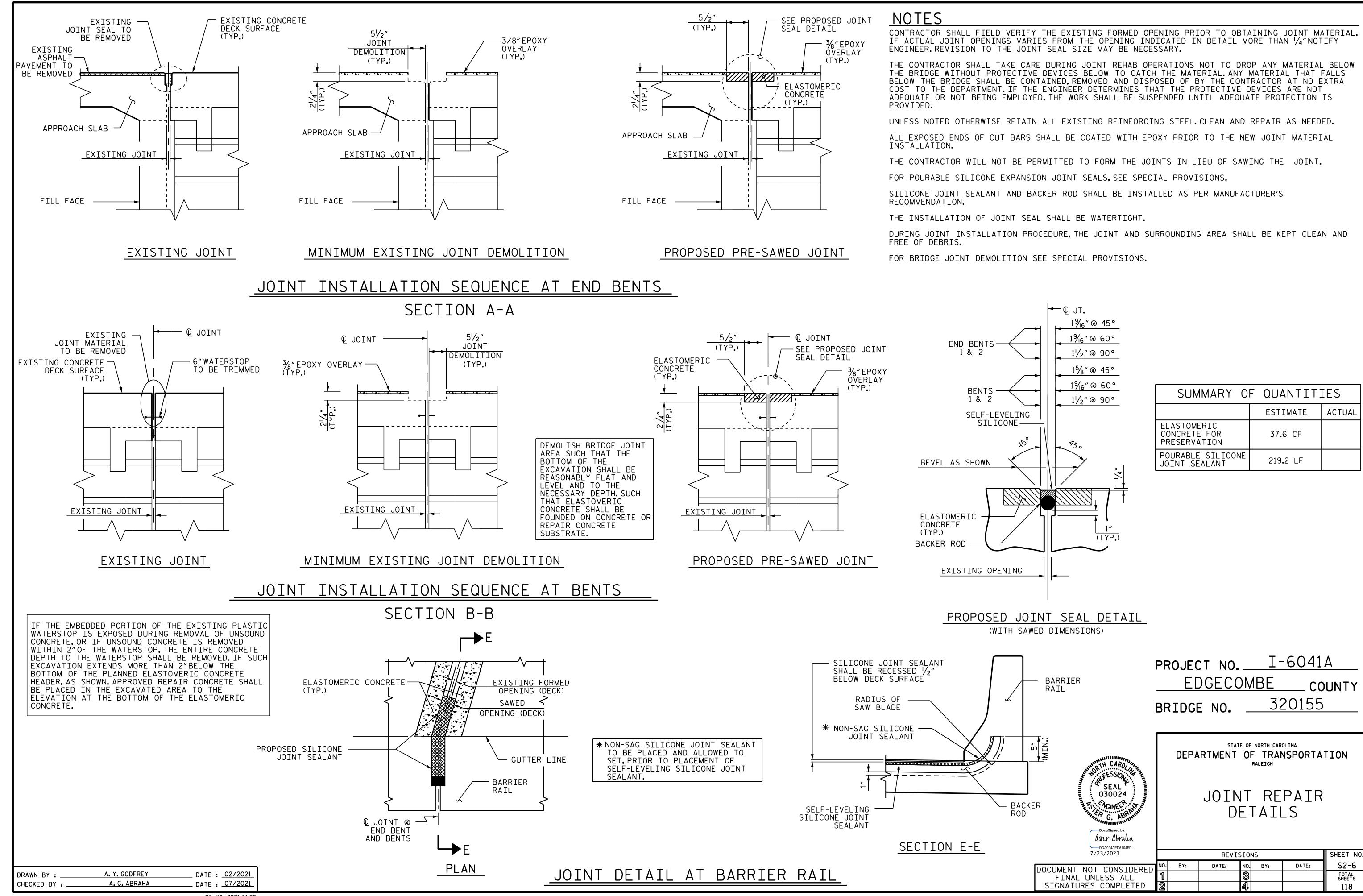
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SUMMARY OF QUANTITIES FOR SPAN C AND APPROACH SLAB						
	ESTIMATE ACTUAL					
EPOXY OVERLAY HAND APPLICATION SYSTEM	2,706 SF					
CONCRETE DECK REPAIRS FOR EPOXY OVERLA	Y 37.0 SF					
BRIDGE JOINT DEMOLITION	75.4 SF					

- SHOTBLASTING AND EPOXY OVERLAY OF BRIDGE DECK
- CONCRETE DECK REPAIR FOR EPOXY OVERLAY
- BRIDGE JOINT DEMOLITION
- ASPHALT WEARING SURFACE TO BE REMOVED

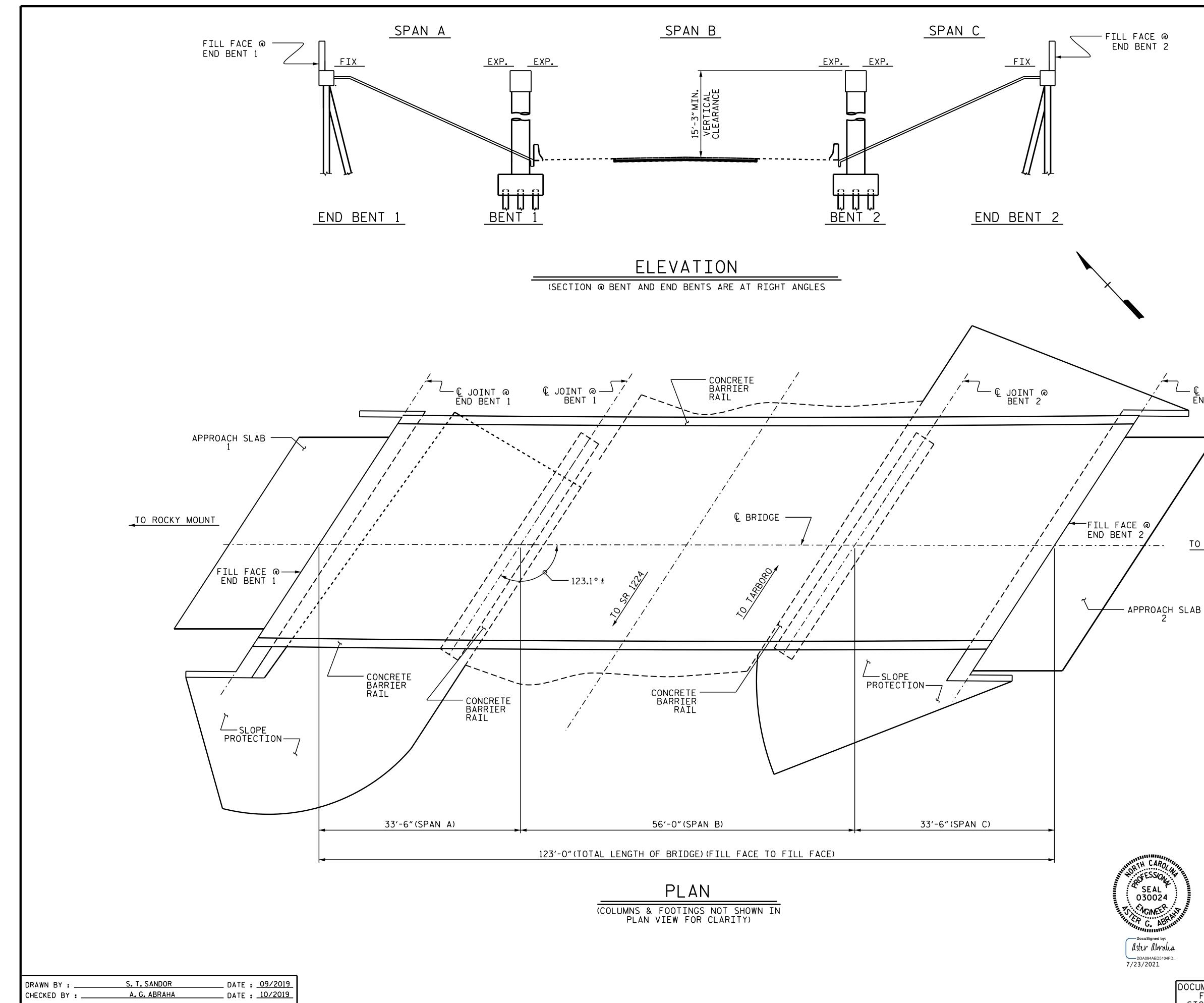
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SUMMARY OF QUANTITIES			
	ESTIMATE	ACTUAL	
ELASTOMERIC CONCRETE FOR PRESERVATION	37.6 CF		
POURABLE SILICONE JOINT SEALANT	219.2 LF		

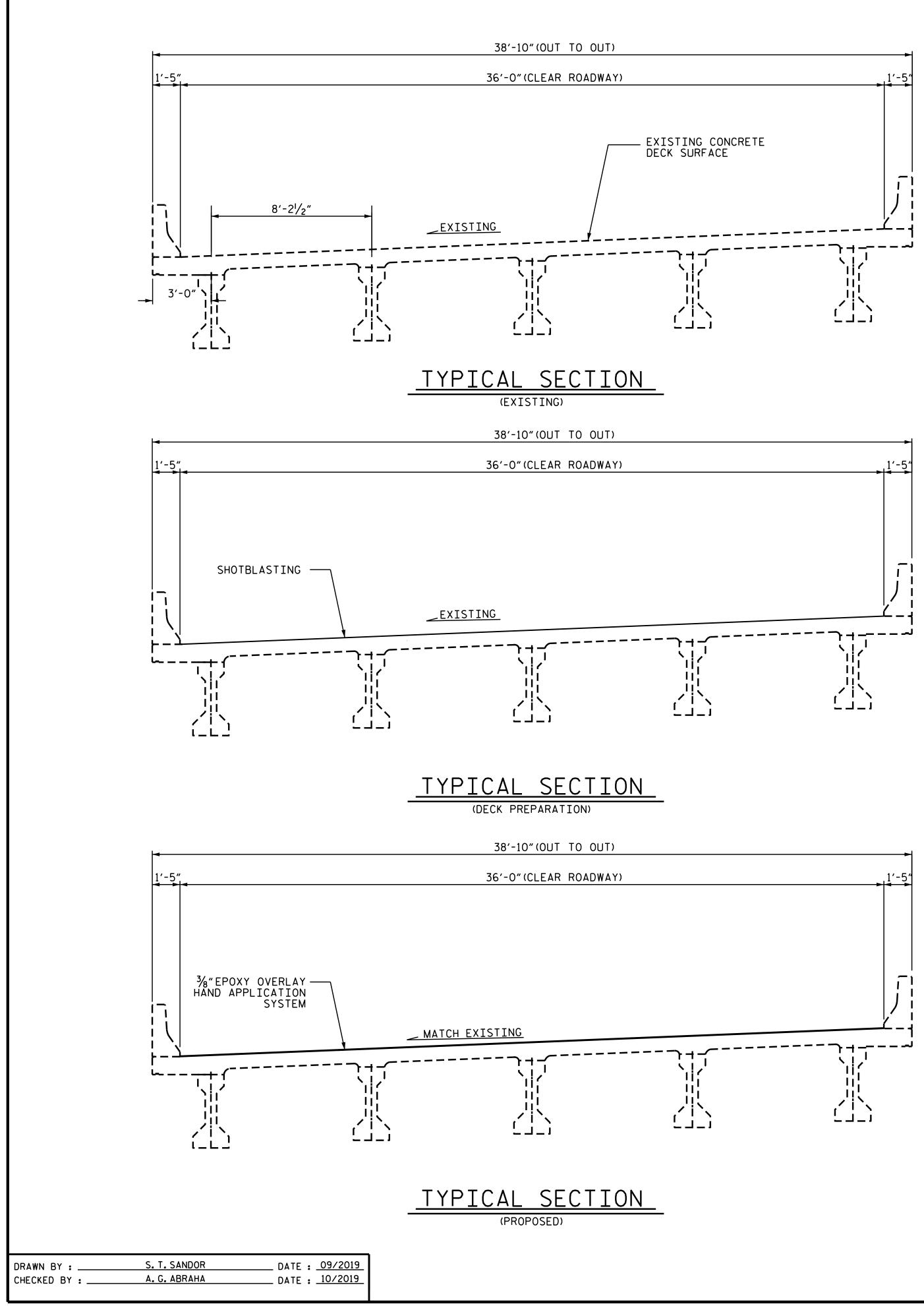


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SCOPE OF WORK BRIDGE DECK PREPARATION BY SHOTBLASTING METHODS. -PERFORM CONCRETE DECK REPAIRS IN PREPARED AREAS. _ OVERLAY PREPARED TOP OF BRIDGE DECK WITH -EPOXY OVERLAY. BRIDGE JOINT DEMOLITION. -RECONSTRUCT BRIDGE JOINTS AND INSTALL ELASTOMERIC CONCRETE AND POURABLE SILICONE JOINT SEALANT. REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING END BENTS AND BENTS AREA FOR SHOTCRETE AND CONCRETE REPAIRS. REPAIR SUBSTRUCTURE USING EPOXY RESIN INJECTION AND SHOTCRETE REPAIRS. NOTES GENERAL DRAWING AND PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND THE ROUTINE INSPECTION, DATED 01/02/2019 AND 01/25/2021. - BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE. - Q JOINT @ END BENT 2 I hereby certify that this structure was rehabilitated according to these plans or as noted therein. **Resident Engineer** Date TO TARBORO PROJECT NO. I-6041A EDGECOMBE _ COUNTY 320153 BRIDGE NO._

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH GENERAL DRAWING FESSION SEAL 29441 · ACINEE FOR BRIDGE NO.153 ON US 64 BYP EBL OVER SR 1208 Justy R. W. alfor F245838930BF40E... 7/23/2021 SHEET NO. REVISIONS S3-1 DATE: DATE: BY: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED BY: NO. TOTAL SHEETS

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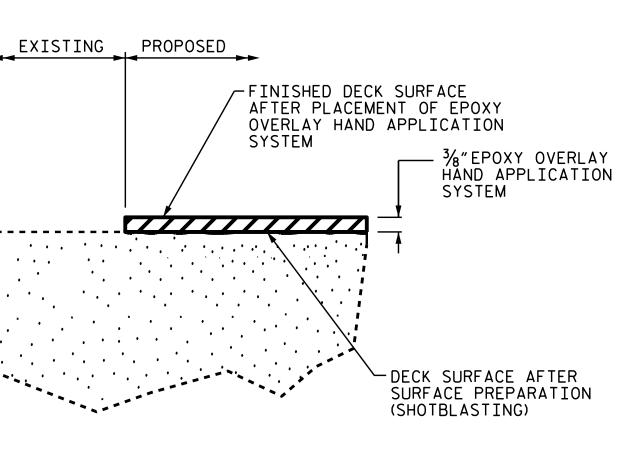
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TOP OF EXISTING CONCRETE DECK • •

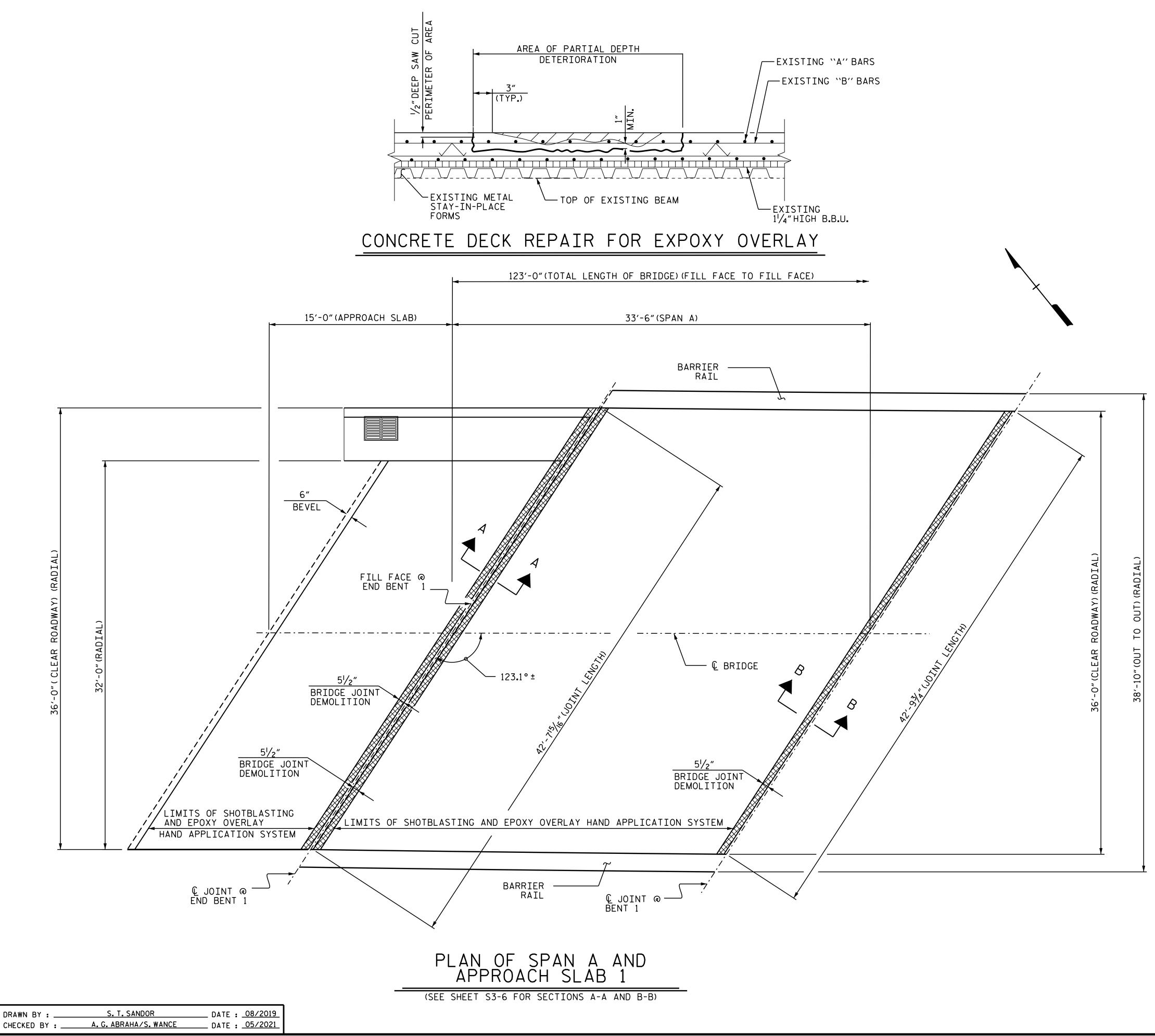
NOTES

SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND EPOXY OVERLAY PLACEMENT.



EPOXY DECK TREATMENT DETAIL

	PROJEC E[BRIDGE	DGECC	MBE		A UNTY
RTH CAROLANT WITH CAROLANT OF SEAL 030024		RTMENT	RALEIGH	NSPORTA	
030024 FS. SCINEF. C. ABRAININ DocuSigned by:		AND	SUR		
Lster Abralia DDA094AED5104FD 7/23/2021		REVIS	SIONS		SHEET NO.
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SUMMARY OF QUANTITIES FOR SPAN A AND APPROACH SLAB 1					
ESTIMATE ACTUAL					
EPOXY OVERLAY HAND APPLICATION SYSTEM	1,658 SF				
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF				
BRIDGE JOINT DEMOLITION	58.8 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 AS- BUILT REPAIR QUANTITIES TABLE.

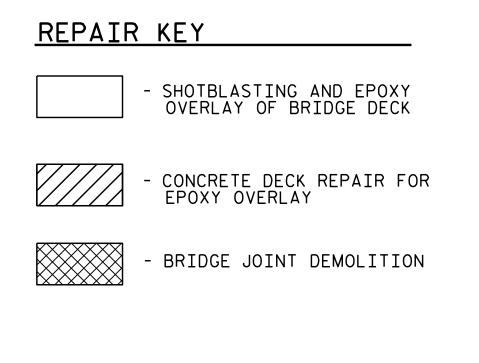
FOR EPOXY OVERLAY HAND APPLICATION SYSTEM, SEE SPECIAL PROVISIONS.

FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS AND DETAIL ON THIS SHEET.

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

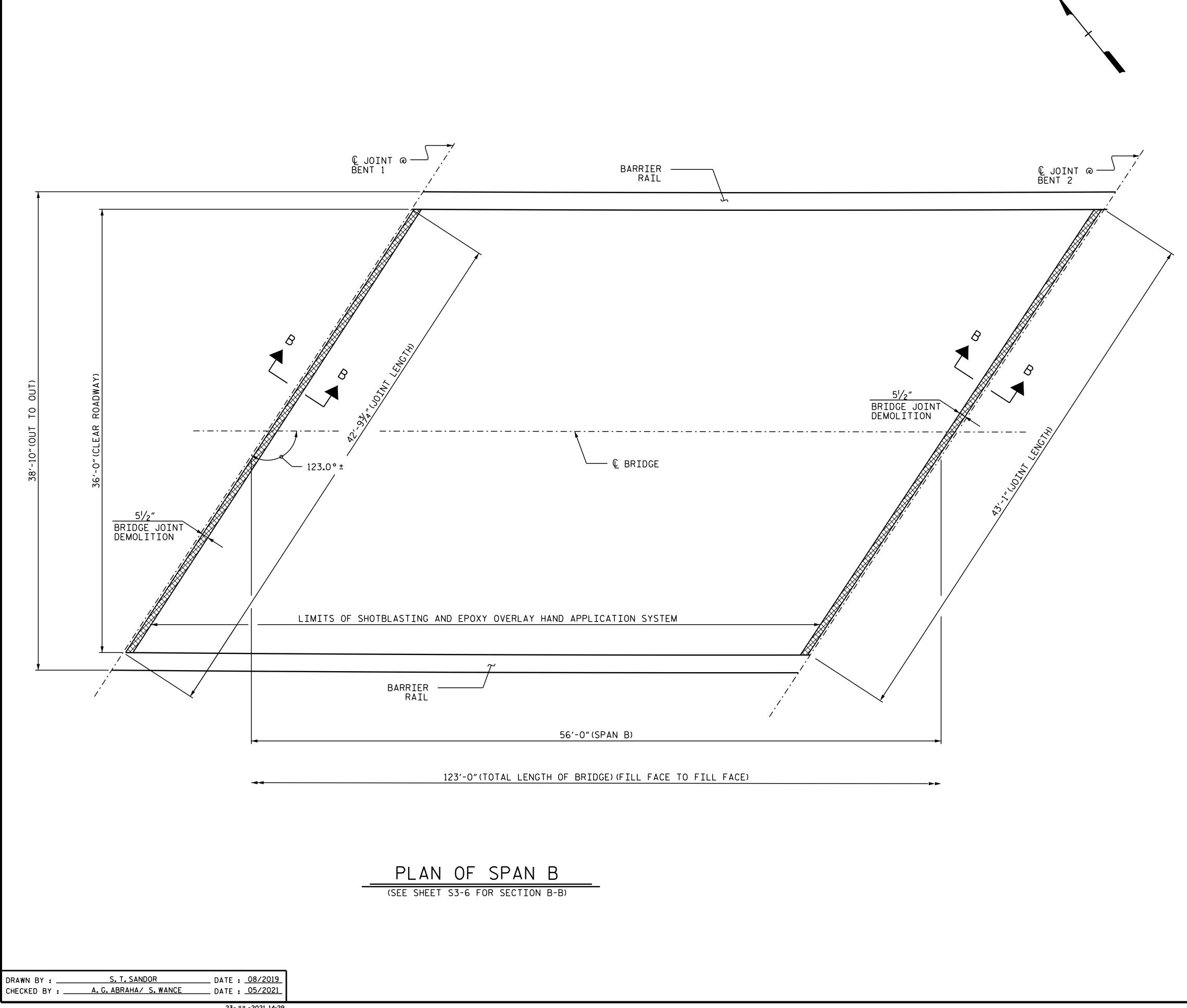
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.



NO DEFICIENCIES NOTED DURING FIELD INSPECTION. THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SHOTBLASTING FOR POTENTIAL CONCRETE DECK REPAIR FOR EPOXY OVERLAY

	PROJEC E[BRIDGE	DGECO	DM	BE	CO	A UNTY
	SHEET 1 OF	- 3				
TH CAROLANT	DEPA	_	OF	NORTH CARC TRAN ALEIGH	NSPORTA	TION
SEAL O30024		SPA	N	Α	PARAT AND SLAB	
DocuSigned by: Aster Abralia DDA094AED5104FD						
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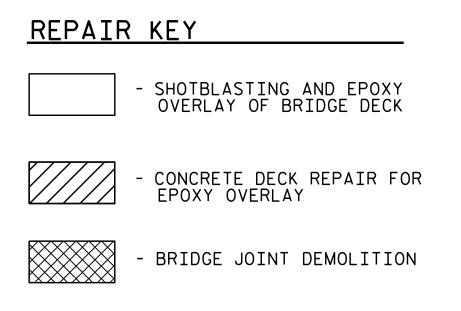
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SUMMARY OF QUANTITIES FOR SPAN B

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	1,972 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	39 . 4 SF	

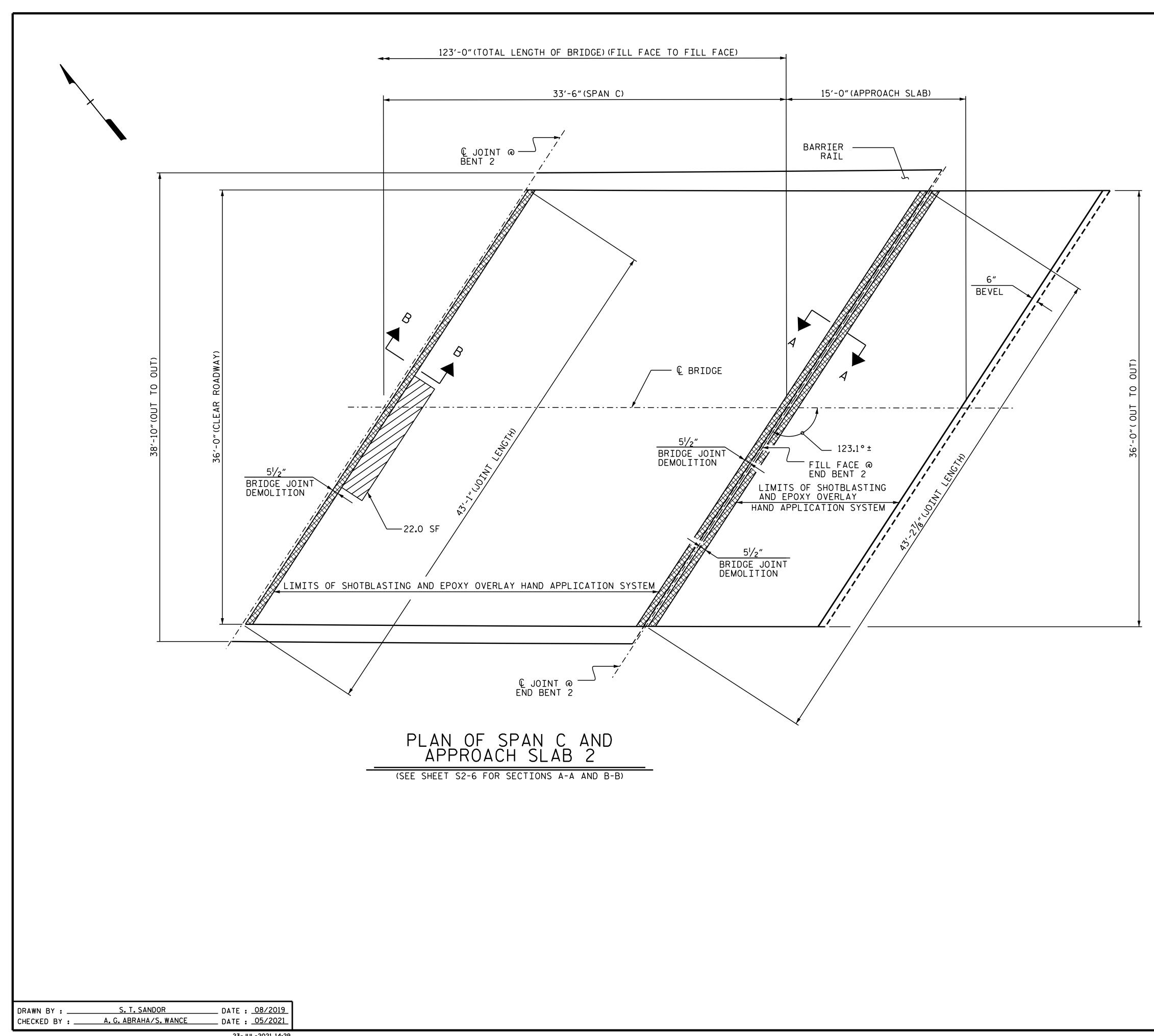
NOTES:

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 AS- BUILT REPAIR QUANTITIES TABLE.



NO DEFICIENCIES NOTED DURING FIELD INSPECTION. THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SHOTBLASTING FOR POTENTIAL CONCRETE DECK REPAIR FOR EPOXY OVERLAY

	PROJEC E[BRIDGE) <u>GECC</u> E NO. -	OMBE		A UNTY
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					TION
SEAL O30024 Docusigned by: Uster Abraha	SURI	FACE S	PREF PAN	PARAT B	ION
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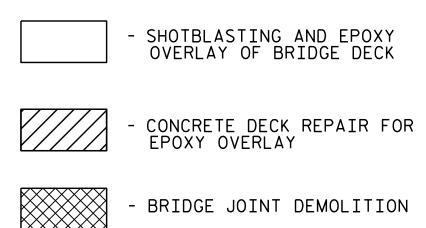


SUMMARY OF QUANTITIES FOR SPAN C AND APPROACH SLAB 2					
ESTIMATE ACTUAL					
EPOXY OVERLAY HAND APPLICATION SYSTEM	1,658 SF				
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	22.0 SF				
BRIDGE JOINT DEMOLITION	59 . 4 SF				

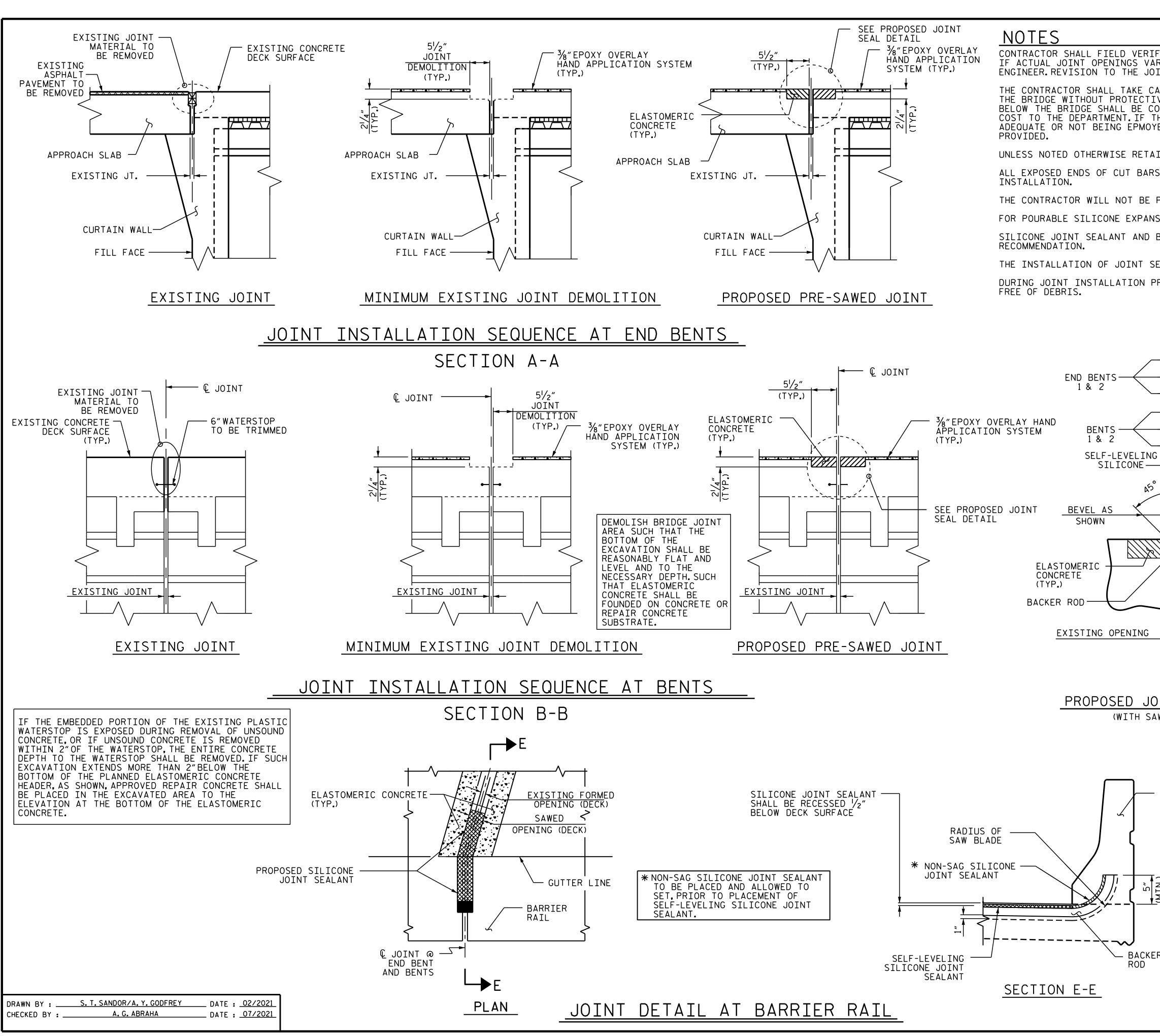
NOTES:

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 AS- BUILT REPAIR QUANTITIES TABLE.

REPAIR KEY



		DGECC E NO	<u>DMBE</u>	<u>-6041</u> cc 0153	A DUNTY	
REAL 030024	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SURFACE PREPARATION SPAN C AND					
DocuSigned by: Uster Abralia 7/23/2021		PPRO REVIS	ACH	SLAB	SHEET NO.	
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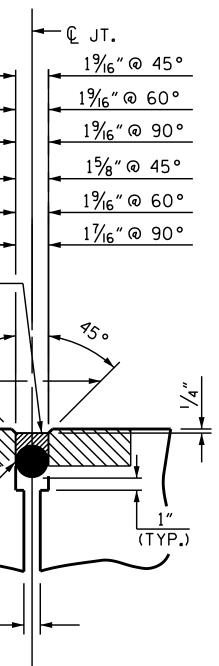
CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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

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

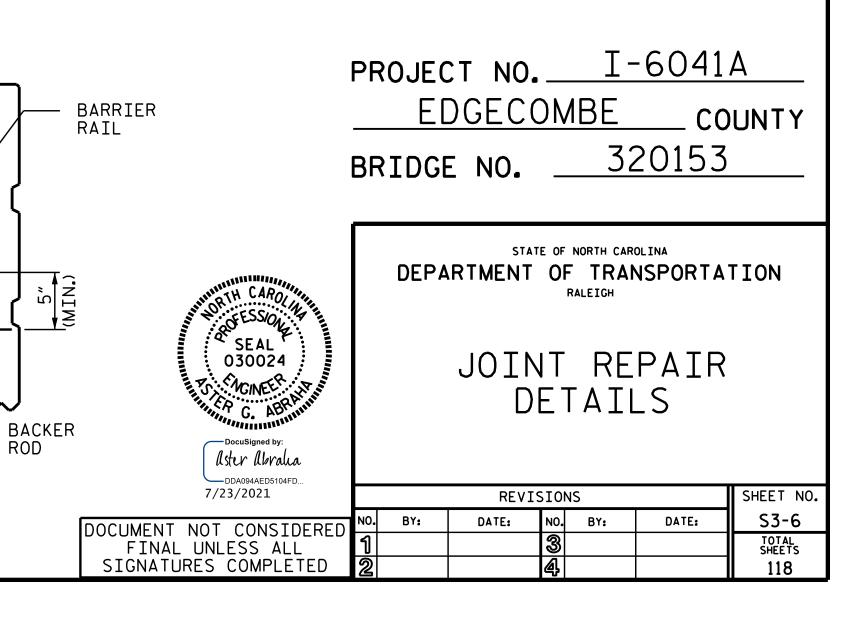
THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEW OF SAWING THE JOINT. FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS. SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S

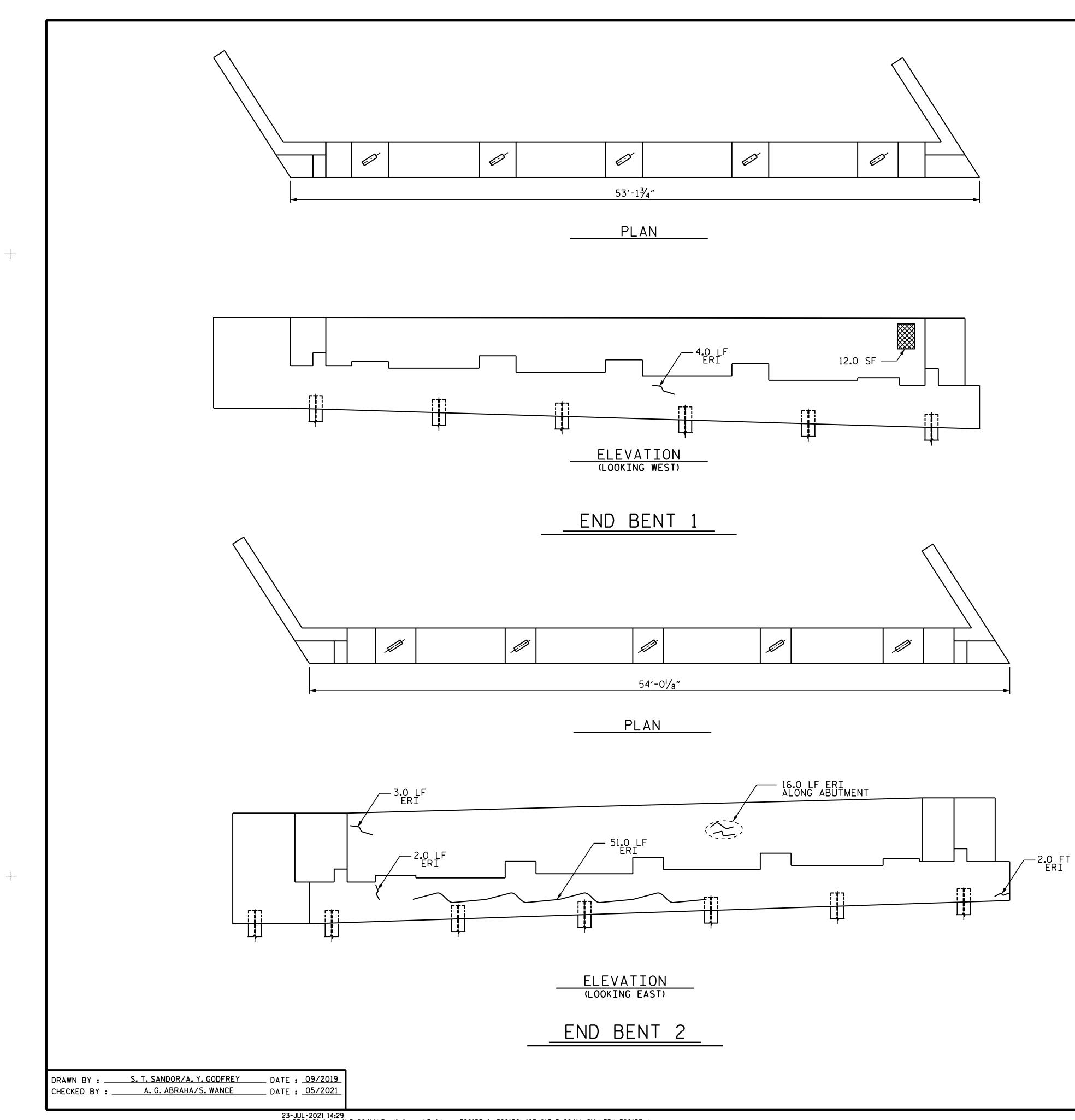
THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT. DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURRONDING AREA SHALL BE KEPT CLEAN AND



SUMMARY O	F QUANTITI	IES
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	29.6 CF	
POURABLE SILICONE JOINT SEALANT	172.0 LF	

PROPOSED JOINT SEAL DETAIL (WITH SAWED DIMENSIONS)





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REPAIR QUANTITY TABLE						
		QUANT	ITIES			
END BENT 1 & 2	ESTI	ΜΑΤΕ	ACT	UAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
CAP (VERTICAL FACE)	0.0	0.0				
CAP (HORIZONTAL, CORNER)	0.0	0.0				
COLUMN	0.0	0.0				
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
CAP (VERTICAL FACE)	0.0	0.0				
CAP (HORIZONTAL, CORNER)	0.0	0.0				
COLUMN	0.0	0.0				
EPOXY RESIN INJECTI	ON	LF		LF		
САР		78.0				
COLUMN		0.0				

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

NOTES:

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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 LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

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

REPAIR KEY

CONCRETE REPAIR AREA (FORM AND POUR)

SHOTCRETE REPAIR AREA

م SEAL 030024

 DocuSigned by Aster Abraha

S . ACINEE

EPOXY RESIN INJECTION (ERI)

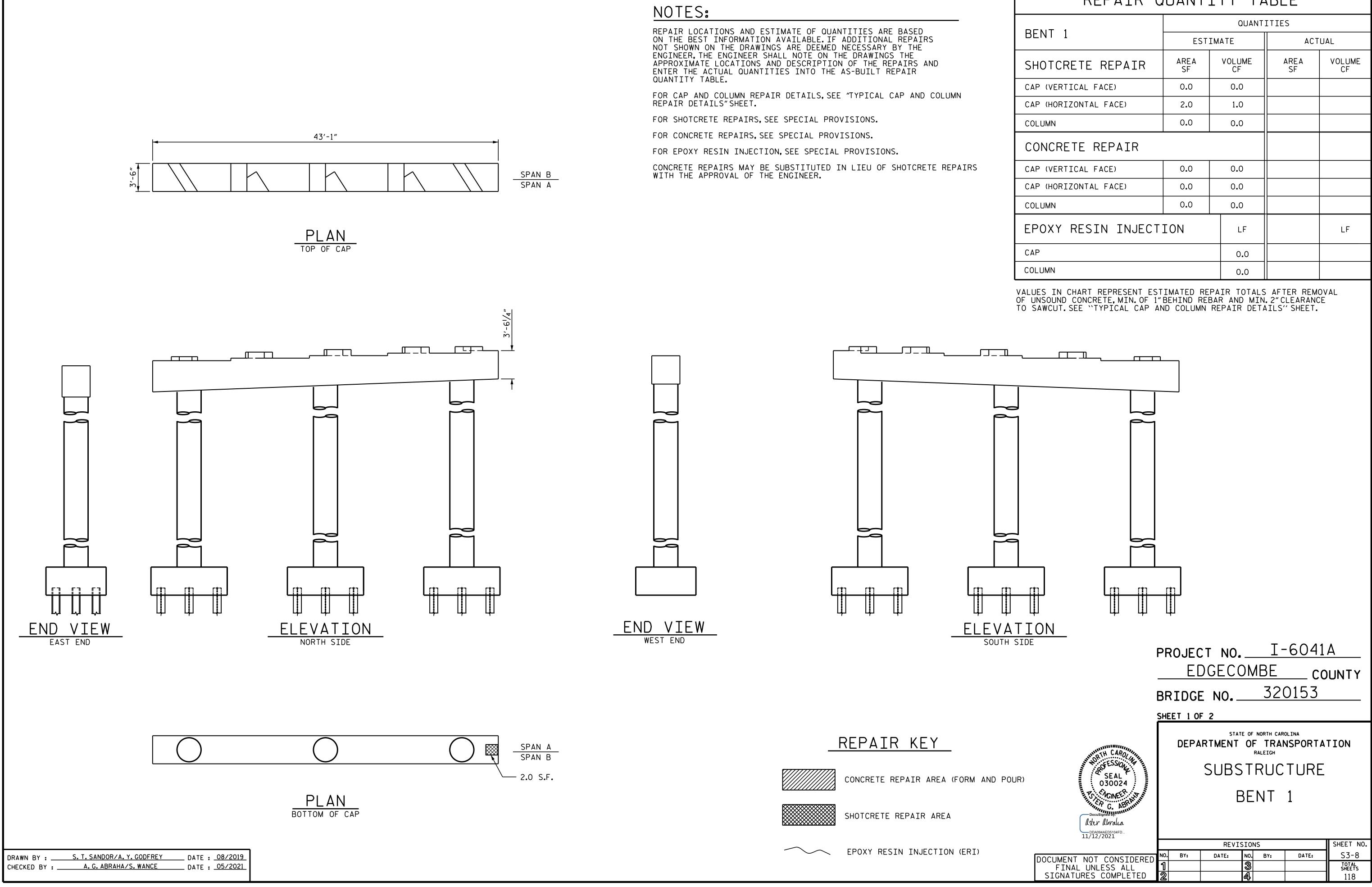
PROJECT NO. I-6041A EDGECOMBE _ COUNTY

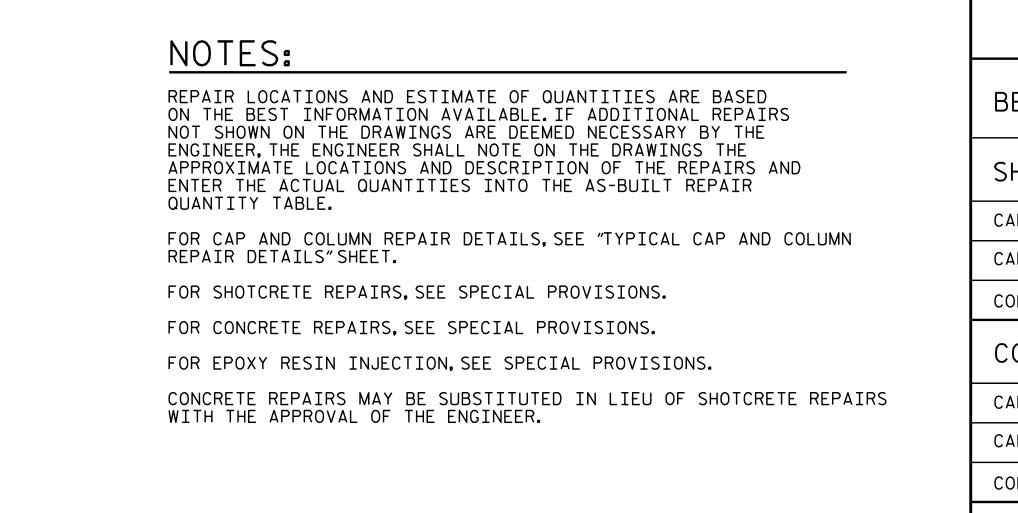
320153 BRIDGE NO.____

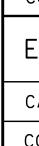
> STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

END BENTS REPAIR

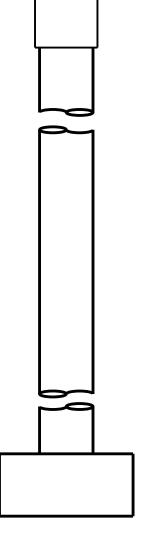
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SIGNATURES COMPLETED	2			4			118

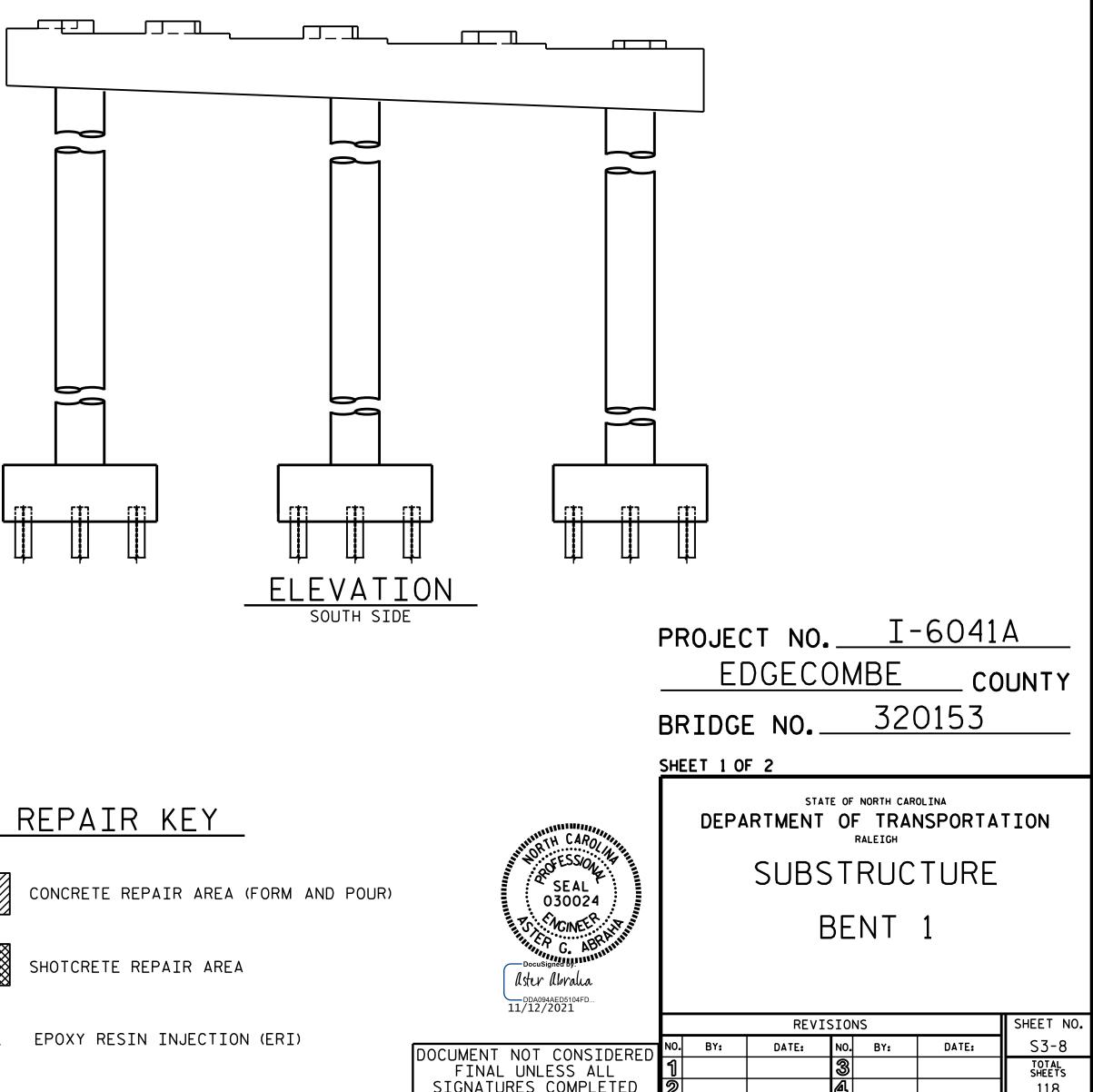




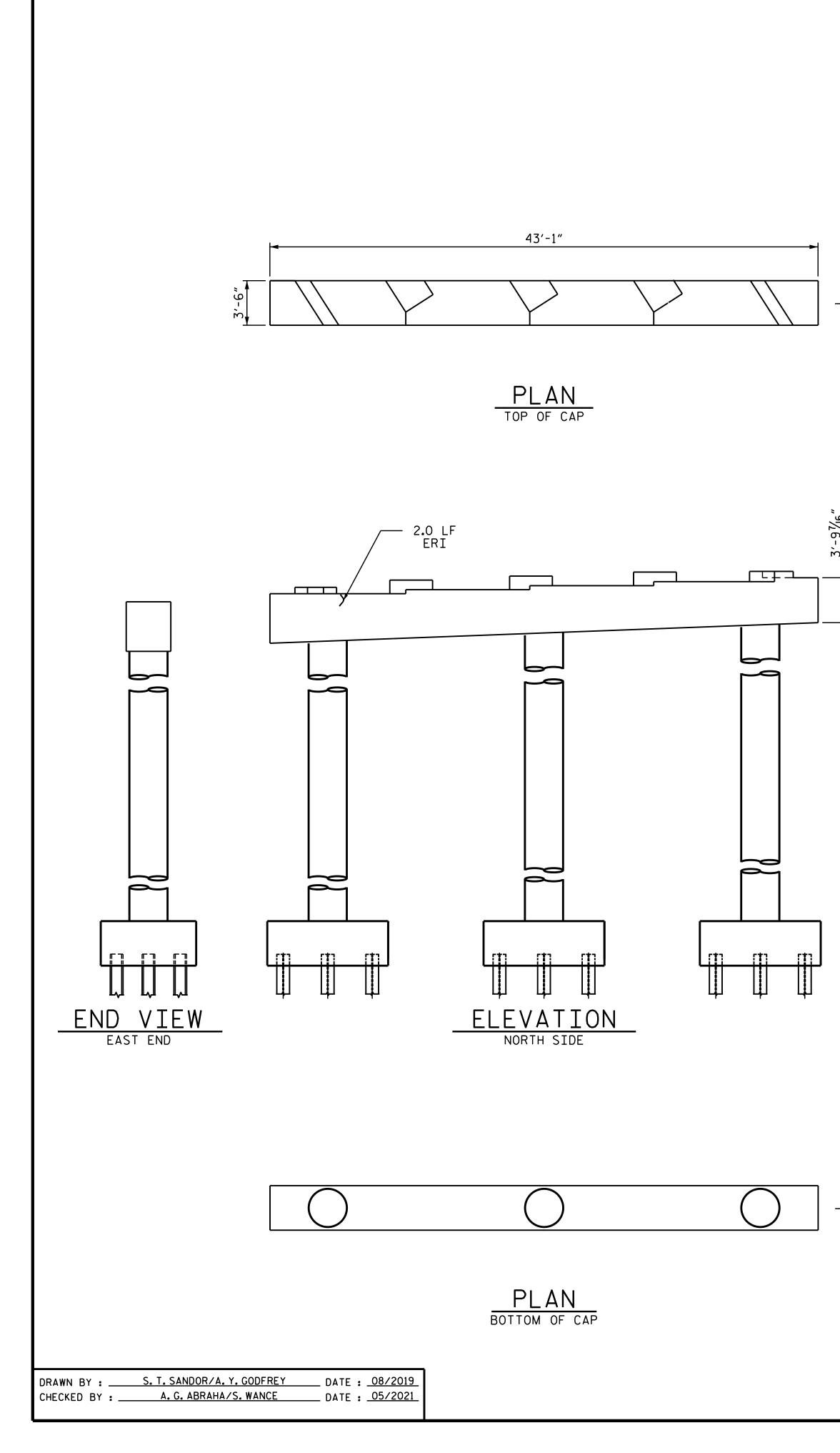








REPAIR QUANTITY TABLE						
		QUANT	ITIES			
SENT 1	EST	IMATE	ACT	UAL		
HOTCRETE REPAIR	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
AP (VERTICAL FACE)	0.0	0.0				
AP (HORIZONTAL FACE)	2.0	1.0				
OLUMN	0.0	0.0				
ONCRETE REPAIR						
AP (VERTICAL FACE)	0.0	0.0				
AP (HORIZONTAL FACE)	0.0	0.0				
OLUMN	0.0	0.0				
POXY RESIN INJECT	LF		LF			
AP	0.0					
OLUMN		0.0				
ap (horizontal face) olumn POXY RESIN INJECT: ap	0.0	0.0 0.0 LF 0.0		LF		



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 LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

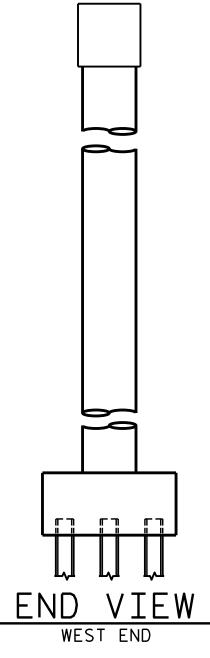
FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

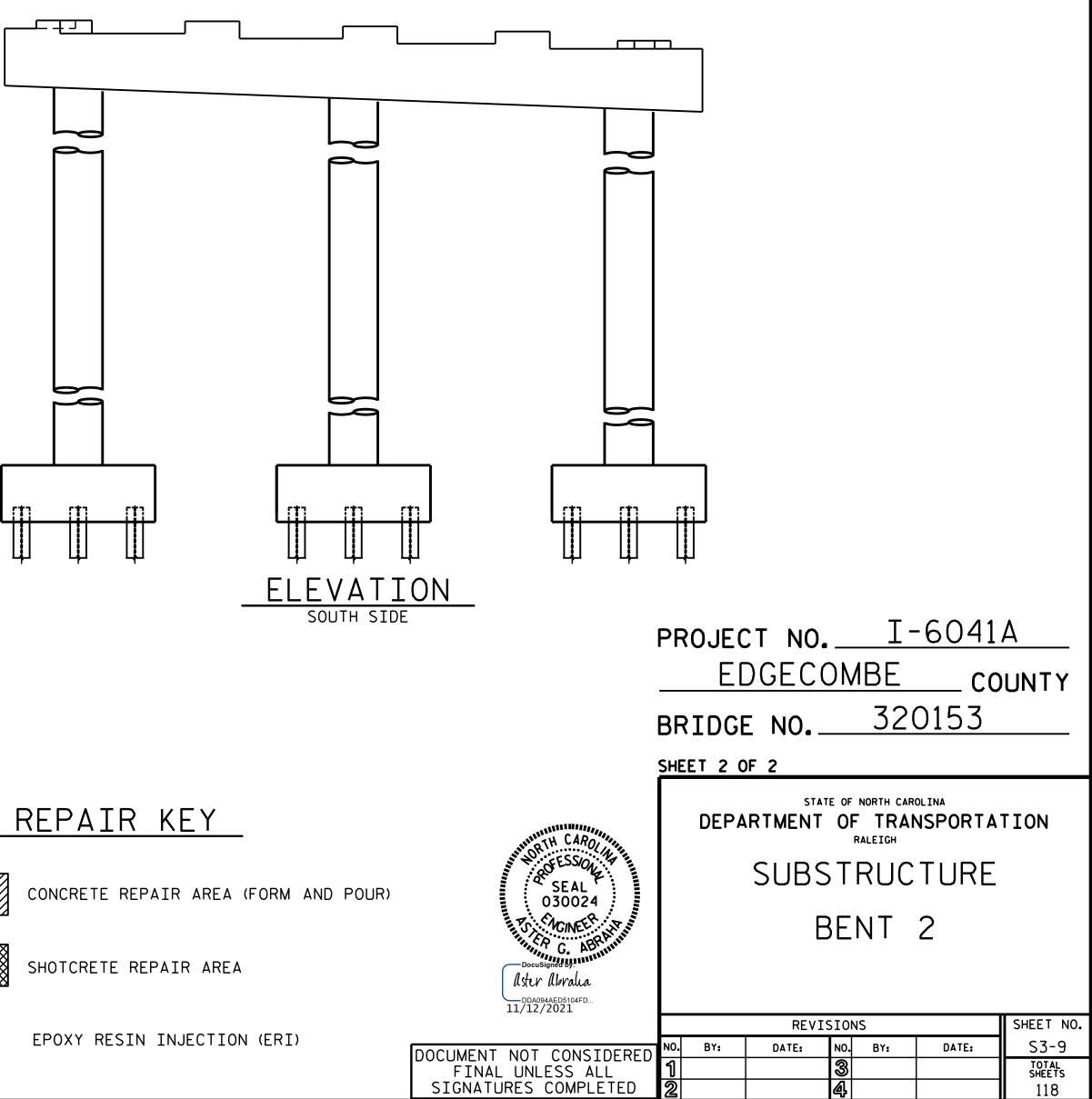
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.

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





REPAIR KEY



SPAN C

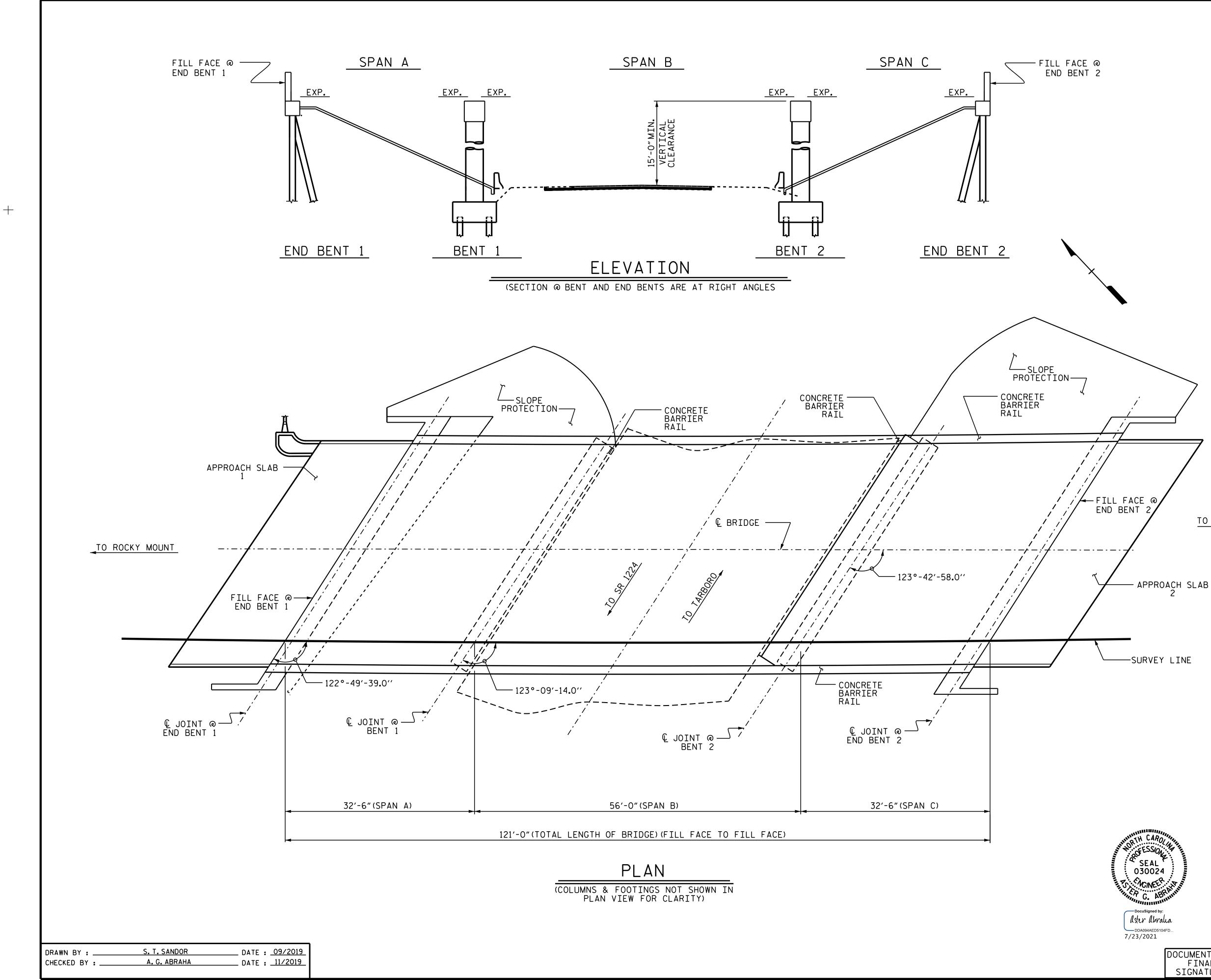
SPAN B



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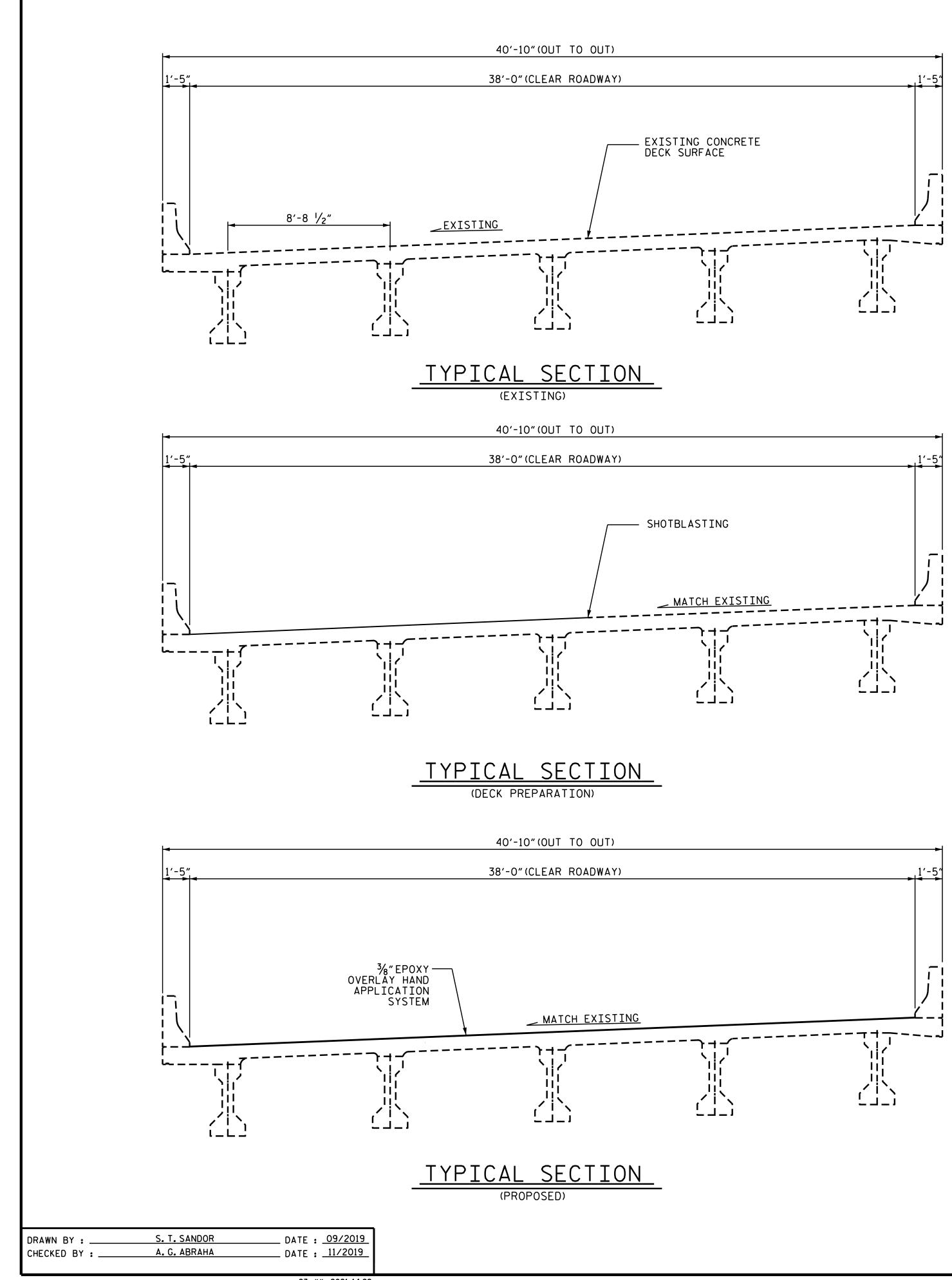
REPAIR QUANTITY TABLE						
			QUANT	ITIES		
BENT 2	EST	IMATE		ACT	UAL	
SHOTCRETE REPAIR	AREA SF	VOLI CI		AREA SF	VOLUME CF	
CAP (VERTICAL FACE)	0.0	0.	0			
CAP (HORIZONTAL FACE)	0.0	0.	0			
COLUMN	0.0	0.	0			
CONCRETE REPAIR						
CAP (VERTICAL FACE)	0.0	0.	0			
CAP (HORIZONTAL FACE)	0.0	0.	0			
COLUMN	0.0	0.0 0.0				
EPOXY RESIN INJECTION			LF		LF	
САР			2.0			
COLUMN		C	0.0			

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

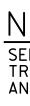


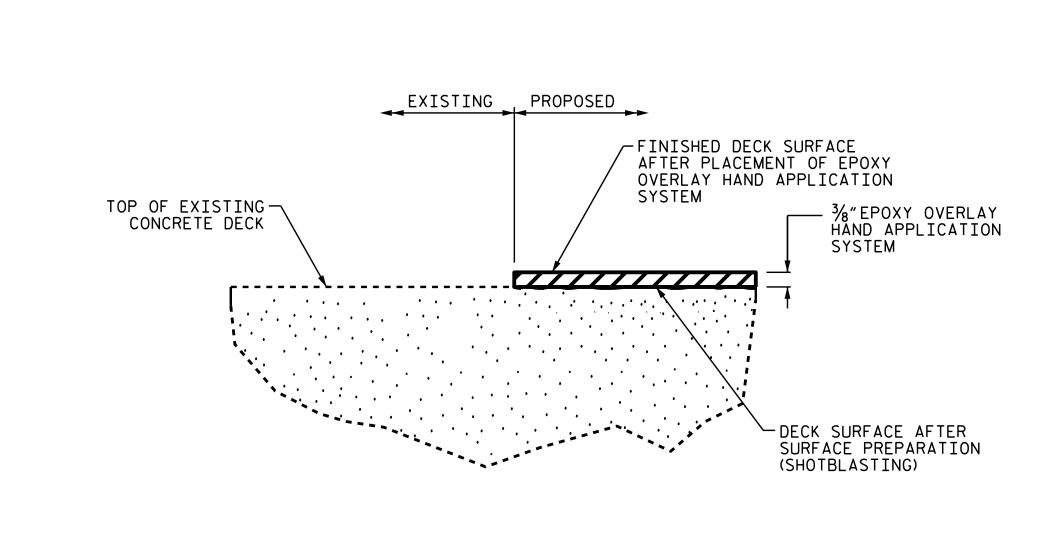
SCOPE OF WORK BRIDGE DECK PREPARATION BY SHOTBLASTING METHODS. -PERFORM CONCRETE DECK REPAIRS IN PREPARED AREAS. -OVERLAY PREPARED TOP OF BRIDGE DECK WITH -EPOXY OVERLAY. BRIDGE JOINT DEMOLITION. -RECONSTRUCT BRIDGE JOINTS AND INSTALL ELASTOMERIC CONCRETE AND POURABLE SILICONE JOINT SEALANT. REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING END BENTS AND BENTS AREA FOR SHOTCRETE AND CONCRETE REPAIRS. REPAIR SUBSTRUCTURE USING EPOXY RESIN INJECTION AND SHOTCRETE REPAIRS. NOTES GENERAL DRAWING AND PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND THE ROUTINE INSPECTION, DATED 02/02/2019 AND 02/15/2021. - BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE. I hereby certify that this structure was rehabilitated according to these plans or as noted therein. **Resident Engineer** Date TO TARBORO PROJECT NO. I-6041A EDGECOMBE _ COUNTY 320156 BRIDGE NO._ STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH GENERAL DRAWING OFESSION 2944I FOR BRIDGE NO. 156 ON US 64 WBL OVER SR 1208 BETWEEN SR 1218 AND SR 1225 72: CNCINEER F245838930BF40E... 7/23/2021 SHEET NO. REVISIONS S4-1 DATE: DATE: BY: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED BY: NO. TOTAL SHEETS

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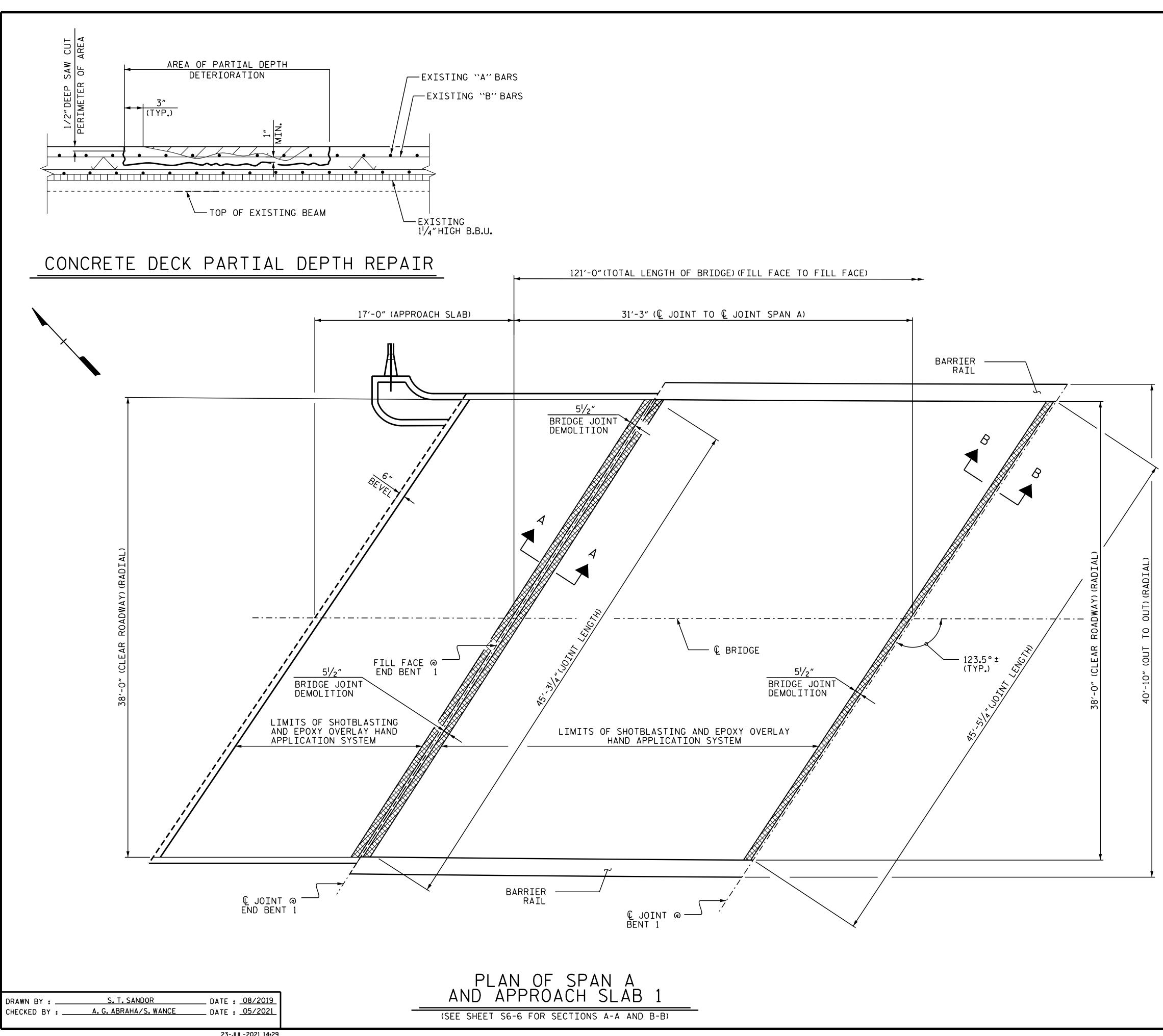
NOTES

SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND EPOXY OVERLAY PLACEMENT.

EPOXY DECK TREATMENT DETAIL

	PROJECT NO. <u>I-6</u> EDGECOMBE BRIDGE NO. <u>3201</u>	_ COUNTY
AND SEAL O30024 Docusigned by: Uster Abraha	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSF RALEIGH TYPICAL SEC AND SURFA PREPARATION [PORTATION CTION ACE

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SUMMARY	OF	QUANTITIES	FOR	SPAN	Α	AND
		APPROACH SL	AB 1			

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	1,743 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	62.4 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 AS- BUILT REPAIR QUANTITIES TABLE.

FOR EPOXY OVERLAY HAND APPLICATION SYSTEM, SEE SPECIAL PROVISIONS.

FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.

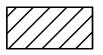
FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY IS COMPLETE.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

REPAIR KEY

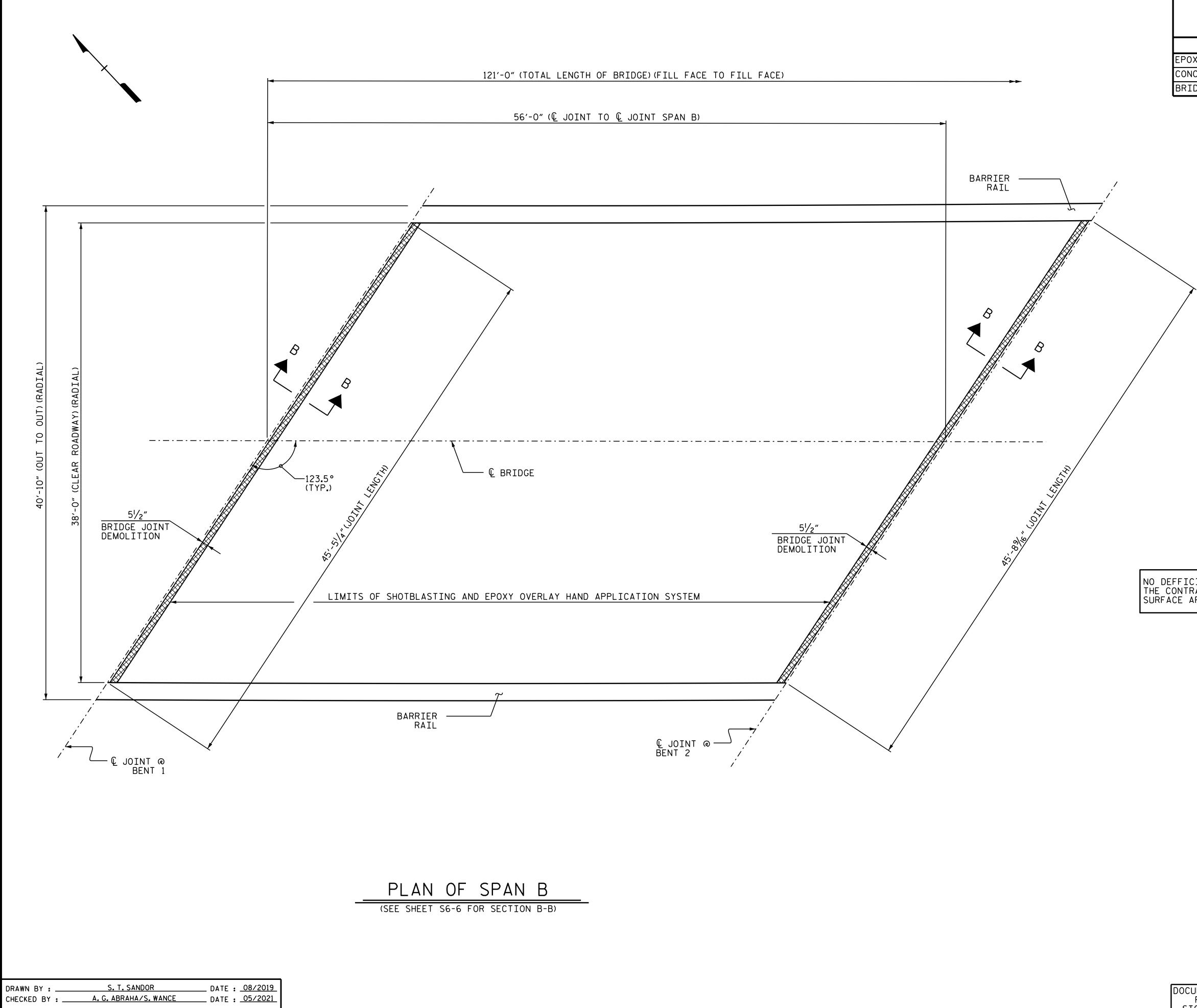
- SHOTBLASTING AND EPOXY OVERLAY OF BRIDGE DECK



- CONCRETE DECK REPAIR FOR EPOXY OVERLAY
- - BRIDGE JOINT DEMOLITION

NO DEFICIENCIES NOTED DURING FIELD INSPECTION. THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SHOTBLASTING FOR POTENTIAL CONCRETE DECK REPAIR FOR EPOXY OVERLAY

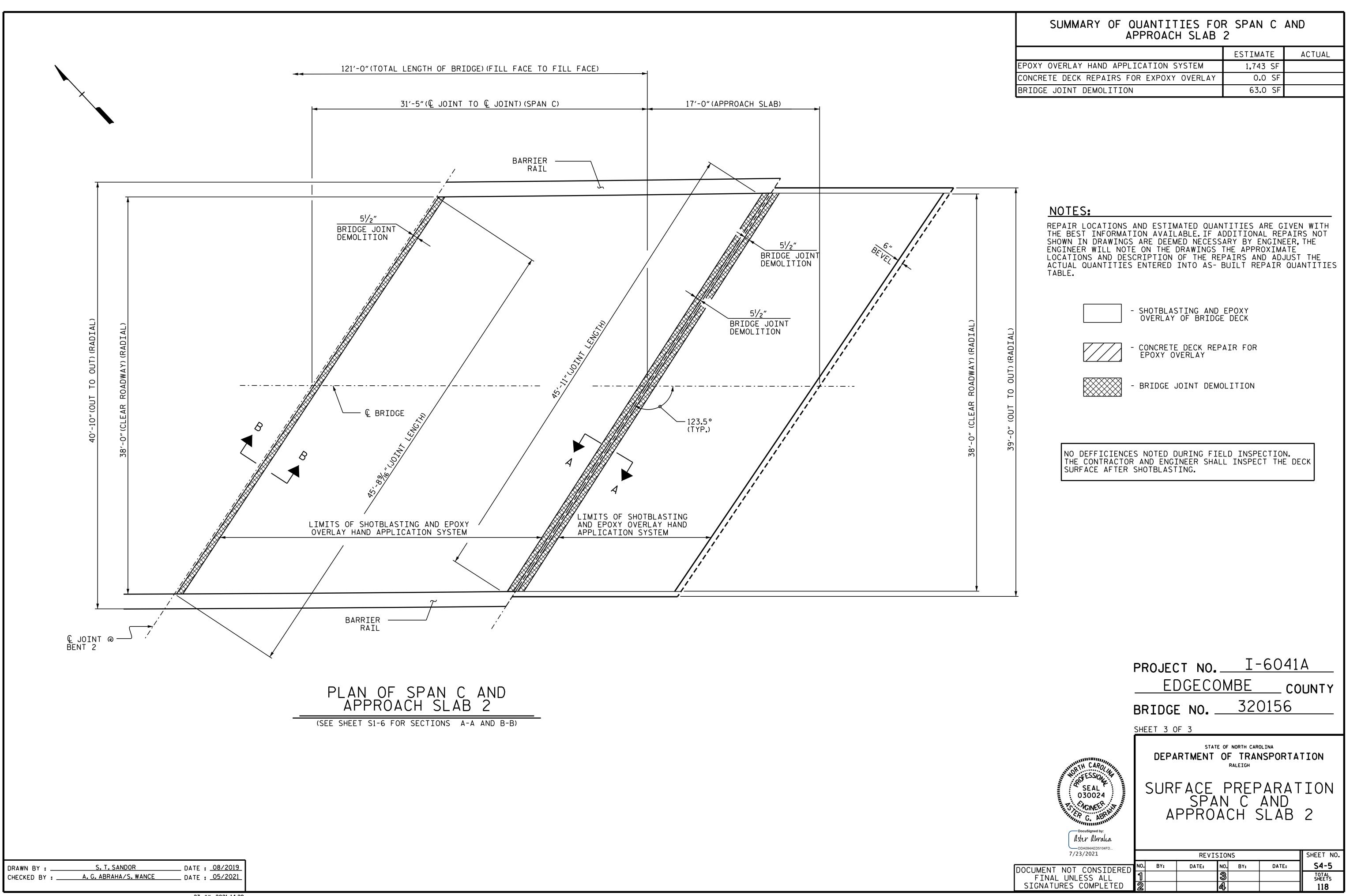
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	SHEET 1 O	- 3				
TH CAROLAN	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
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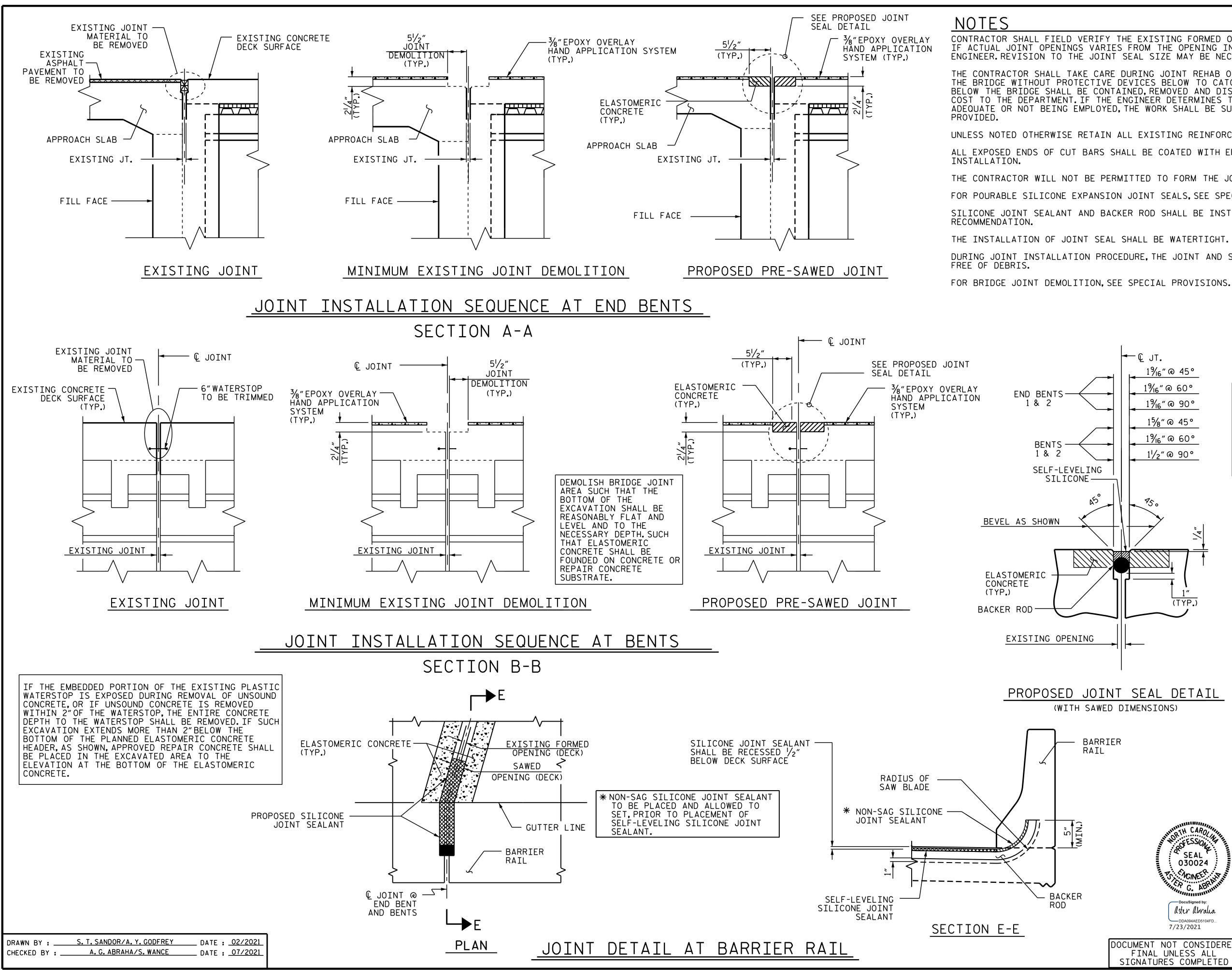


	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	2,084 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	41.8 SF	

THE BEST INFORMATI SHOWN IN DRAWINGS ENGINEER WILL NOTE LOCATIONS AND DESC	AND ESTIMATED QUANTITIES ARE GIVEN WITH ION AVAILABLE. IF ADDITIONAL REPAIRS NOT ARE DEEMED NECESSARY BY ENGINEER, THE ON THE DRAWINGS THE APPROXIMATE CRIPTION OF THE REPAIRS AND ADJUST THE ENTERED INTO AS- BUILT REPAIR QUANTITIES				
<u>REPAIR KEY</u>	,				
- SHOTBLASTING AND EPOXY OVERLAY OF BRIDGE DECK					
- CONO EPO	CRETE DECK REPAIR FOR XY OVERLAY				
- BRI	DGE JOINT DEMOLITION				
CIENCES NOTED DURING RACTOR AND ENGINEER S AFTER SHOTBLASTING.					
	PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY BRIDGE NO. <u>320156</u> SHEET 2 OF 3				
Bocusigned by: DDDA094AED5104FD 7/23/2021	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SURFACE PREPARATION SPAN B				

REVISIONS SHEET NU DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED **S4-4** DATE: DATE: NO. BY: total sheets 118





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

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

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

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT. FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS. SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S

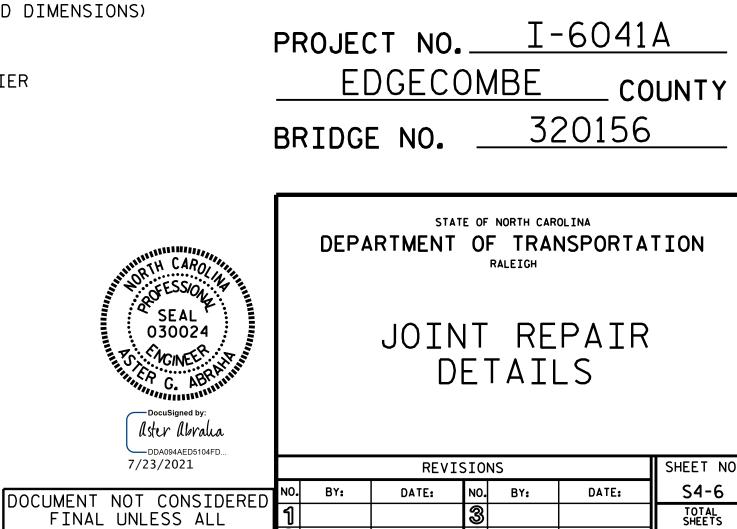
DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND

		← @_ JT.
		1 ⁹ ∕16″@ 45°
		1% ₁₆ ″@ 60°
		1%i6″@ 90°
		1 ⁵ ⁄8″@ 45°
		1 ⁹ / ₁₆ ″ @ 60°
		1 ¹ /2″@ 90°
•		
		95.
		[<u>1"</u> (TYP.)
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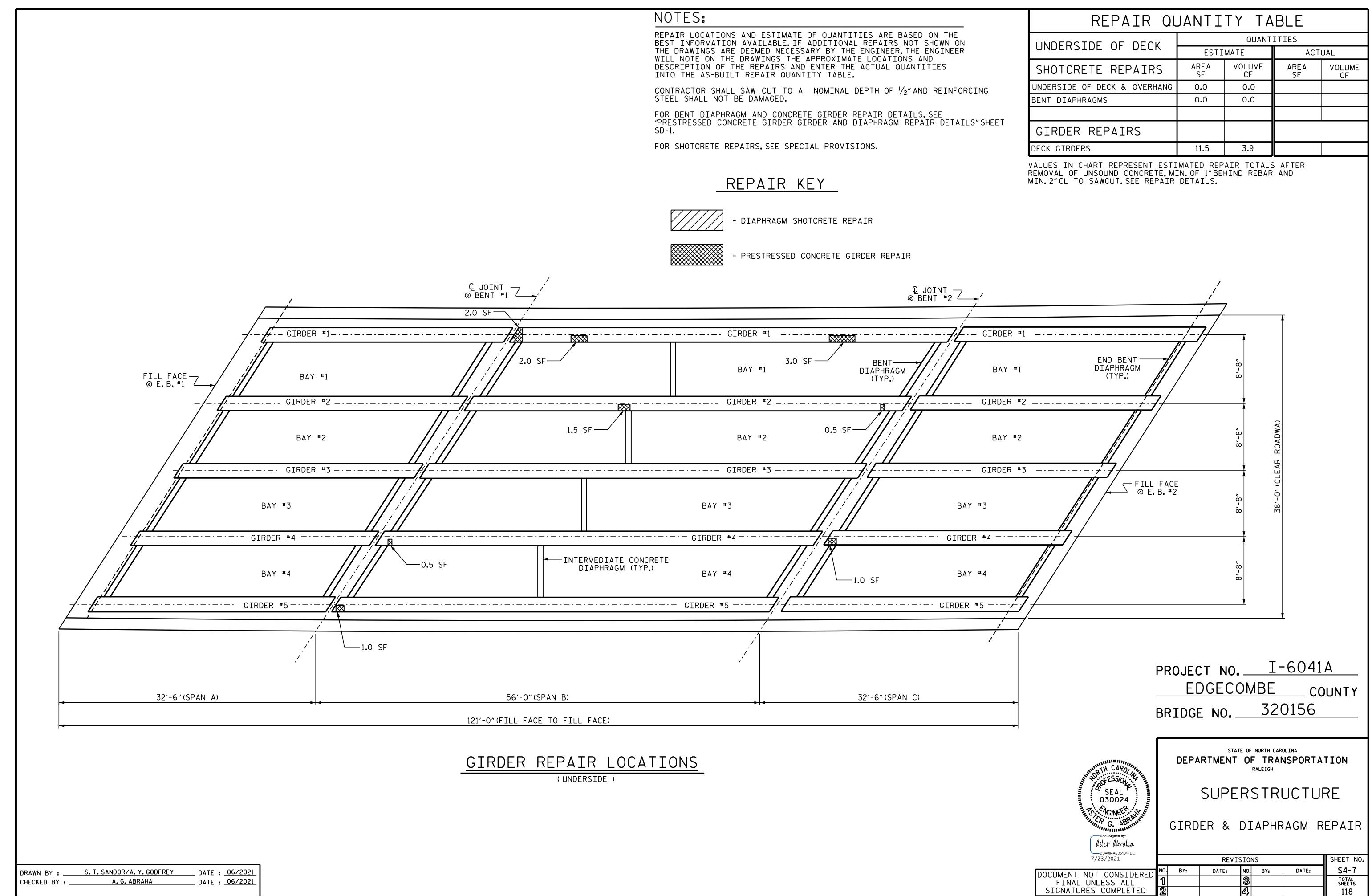
SUMMARY O	QUANTITIES	
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	31.3 CF	
POURABLE SILICONE JOINT SEALANT	182.2 LF	

N	Т	SEAL	DETAI	L
D	DI	MENSION	NS)	

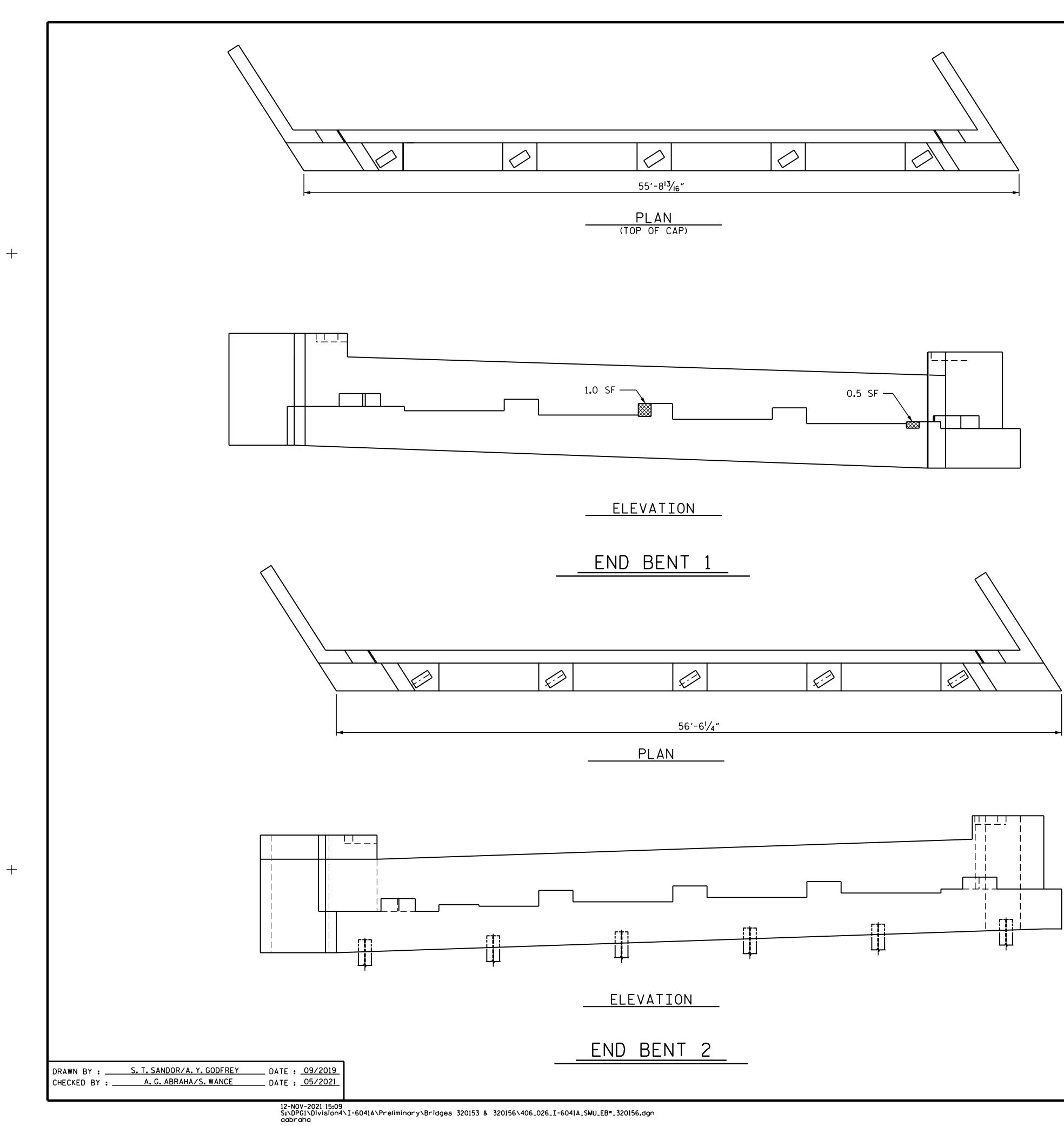
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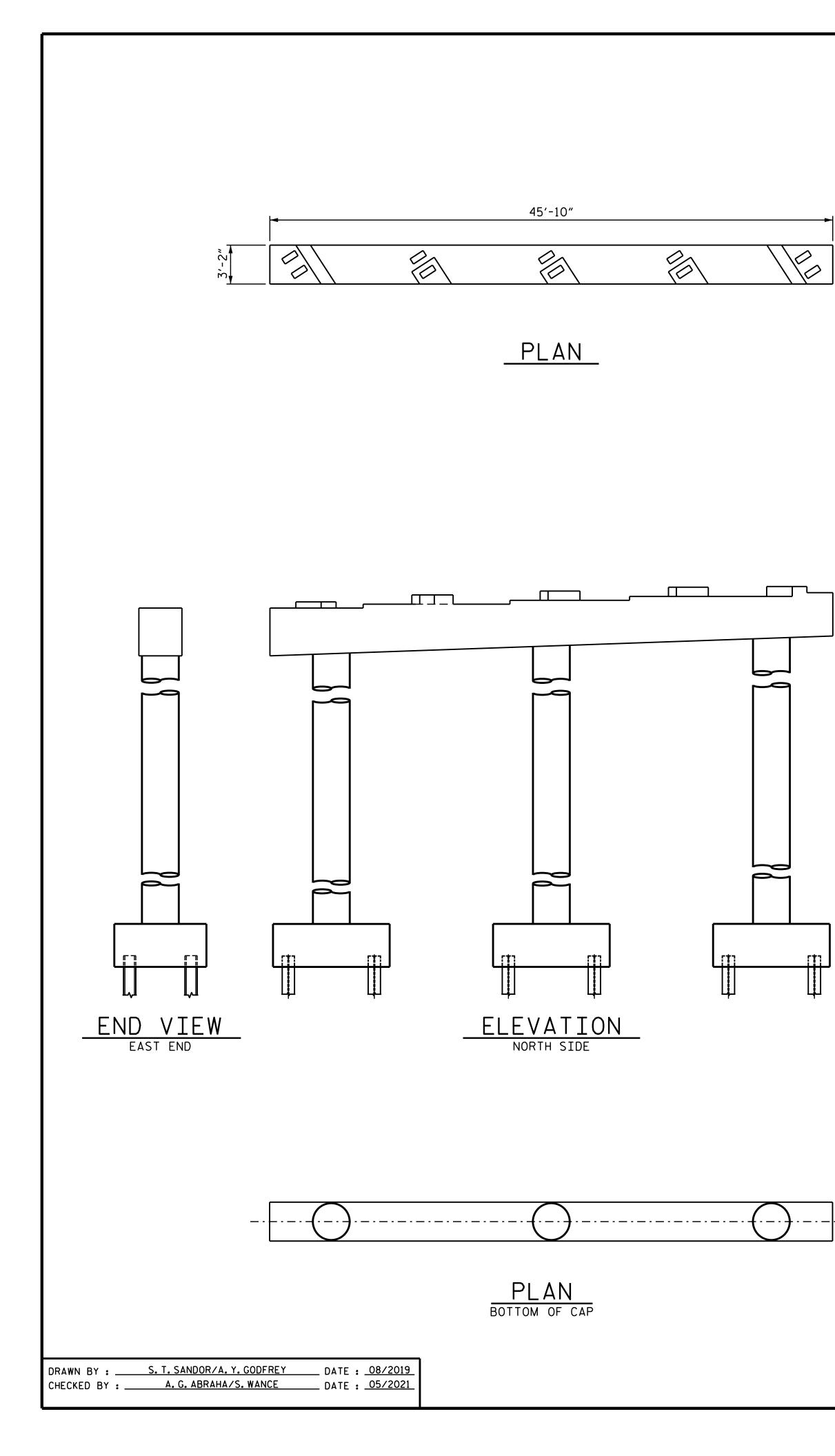


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REPAIR Q	UANT	ITY T	ABLE	
REPAIRS		QUA	NTITIES	
END BENT 1 & 2	ES	STIMATE	AC	TUAL
CONCRETE REPAIRS	AREA SF	VOLUME CF	E AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	0.0	0.0		
COLUMN	0.0	0.0		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	E AREA SF	VOLUME CF
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL, CORNER)	1.5	0.8		
COLUMN	0.0	0.0		
NOTES: REPAIR LOCATIONS AND ESTIMATE ON THE BEST INFORMATION AVAIL NOT SHOWN ON THE DRAWINGS ARE	ABLE.IF		REPAIRS	
ENGINEER, THE ENGINEER SHALL NO APPROXIMATE LOCATIONS AND DES ENTER THE ACTUAL QUANTITIES I QUANTITY TABLE. FOR CAP AND COLUMN REPAIR DET REPAIR DETAILS" SHEET.	SCRIPTION NTO THE	N OF THE RE AS-BUILT R	EPAIRS AND EPAIR	UMN
FOR SHOTCRETE REPAIRS, SEE SPEC	CIAL PRO	VISIONS.		
FOR CONCRETE REPAIRS, SEE SPEC	IAL PROV	ISIONS.		
CONCRETE REPAIRS MAY BE SUBST WITH THE APPROVAL OF THE ENGIN		N LIEU OF	SHOTCRETE F	REPAIRS
REPAIR CONCRETE REPAR SHOTCRETE REPAR	AIR AREA		POUR)	
	EDC	ECOME	<u>I-604</u> <u>3E</u> c 320156	COUNTY
OR SEAL OBOO24		MENT OF	RTH CAROLINA TRANSPORT EIGH REPA	
Docusiana and the second secon				TIVO
Ister Abralia DDA094AED5104FD				INS
		REVISIONS		SHEET NO.
DDA094AED5104FD	BY:		BY: DATE:	

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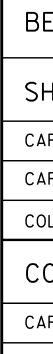
REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE BASED ON THE BEST INFORMATION AVAILABLE.IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES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

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

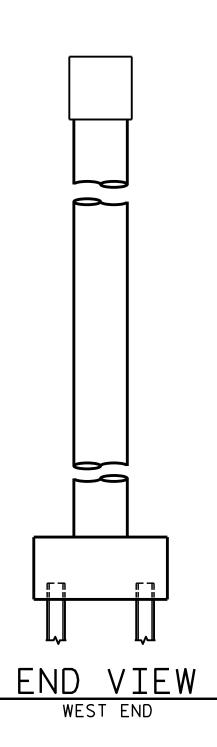
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

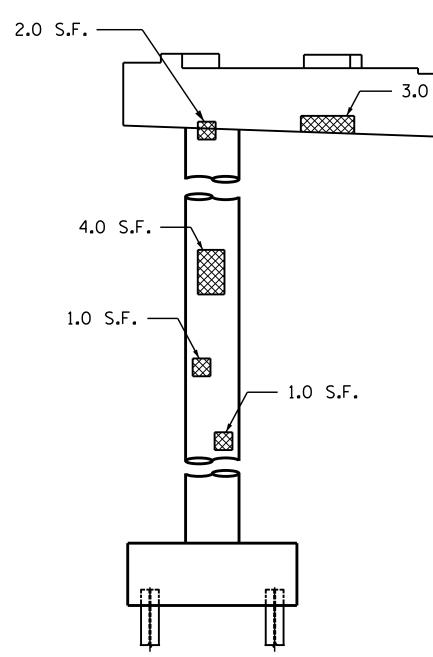
CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.



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VALU OF UI TO S



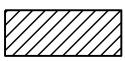


SPAN A SPAN B

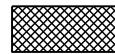
SPAN B

SPAN A



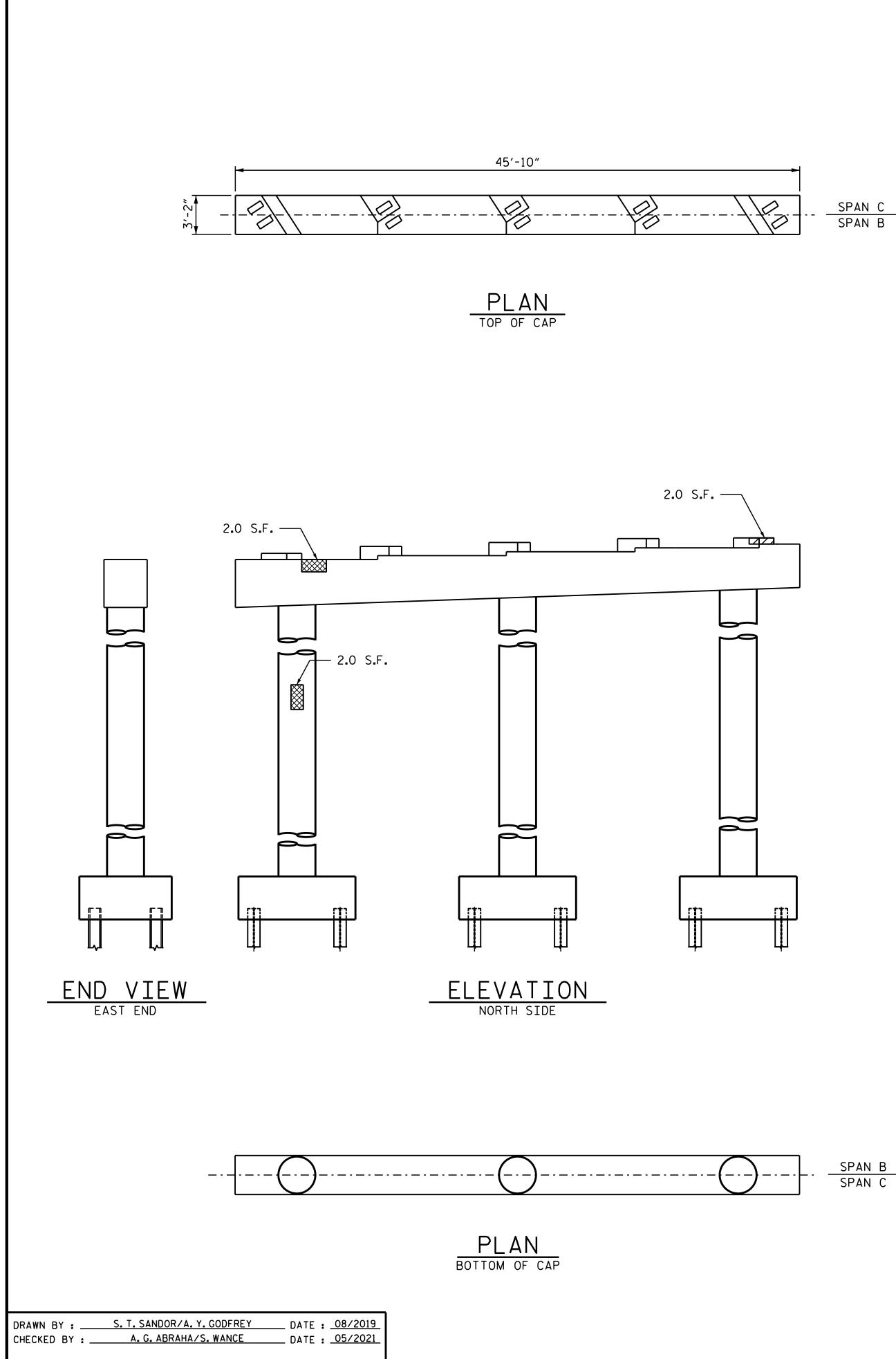


CONCRETE REPAIR AREA (FORM AND POUR)



SHOTCRETE REPAIR AREA

REPAIR (QUANT	ITY TA	BLE	
BENT 1		QUANT	ITIES	
	ES	TIMATE	ACT	TUAL
SHOTCRETE REPAIR	AREA SF	VOLUME CF	AREA SF	VOLUME CF
CAP (VERTICAL FACE)	5.0	2.5		
CAP (HORIZONTAL FACE)	0.0	0.0		
COLUMN	6.0	3.0		
CONCRETE REPAIR				
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL FACE)	0.0	0.0		
COLUMN	0.0	0.0		
ELEVATION SOUTH SIDE				1 4
	ED	T NO	<u>BE</u> c	COUNTY
[BRIDGE	NO	520156)
	SHEET 1 OF			
Bocusigned by: Docusigned by:		SUBSTR	TRANSPORT	E
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FINAL UNLESS ALL SIGNATURES COMPLETED	12	<u> ৩</u>		TOTAL Sheets 118



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 LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

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FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

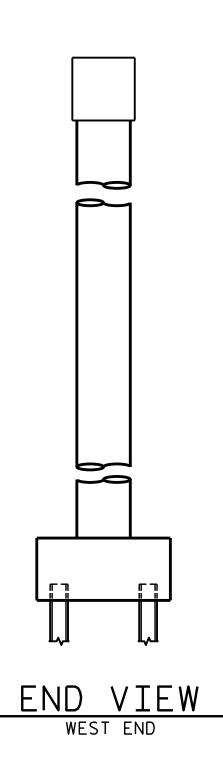
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

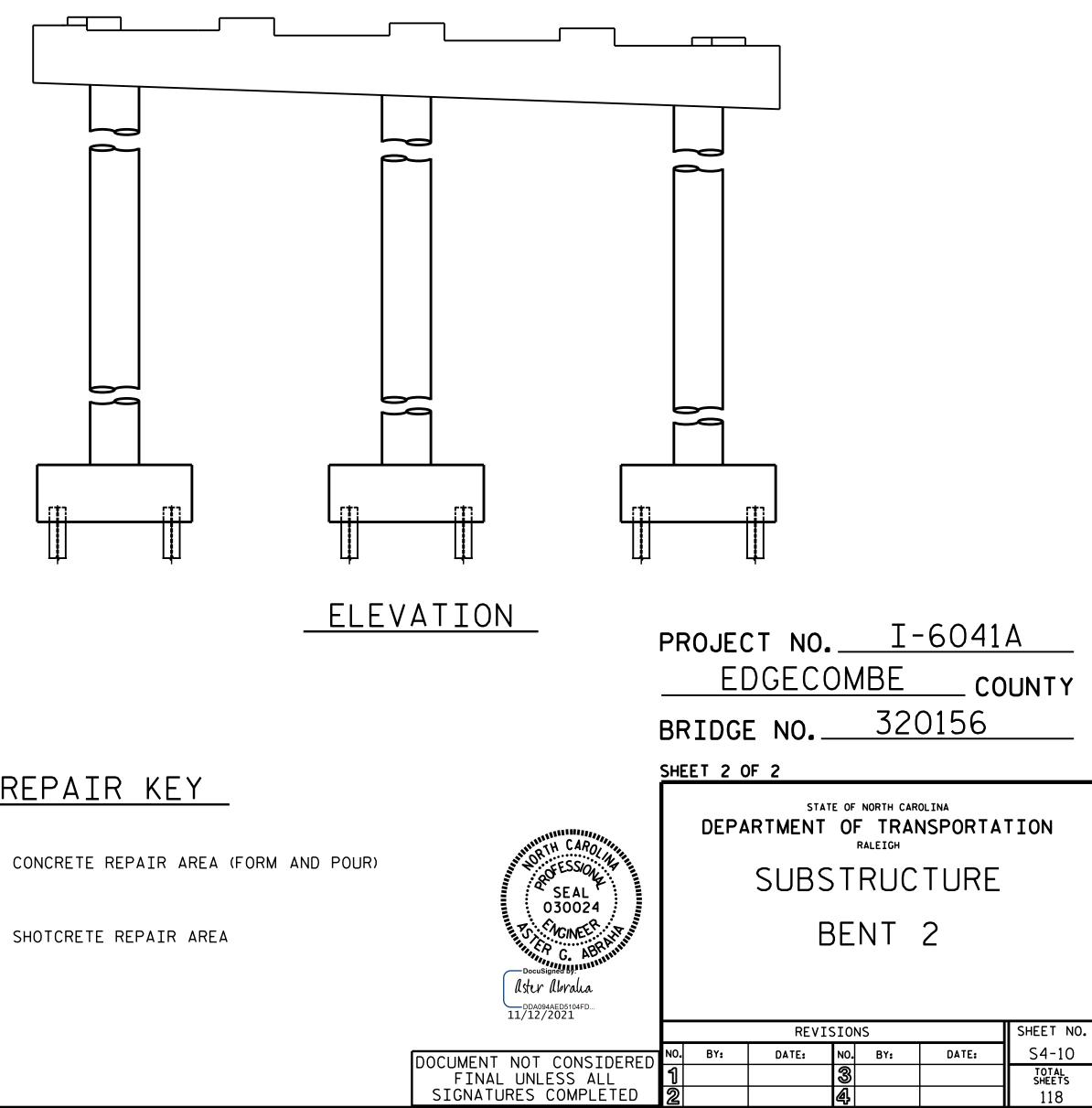
CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.



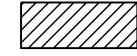
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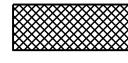
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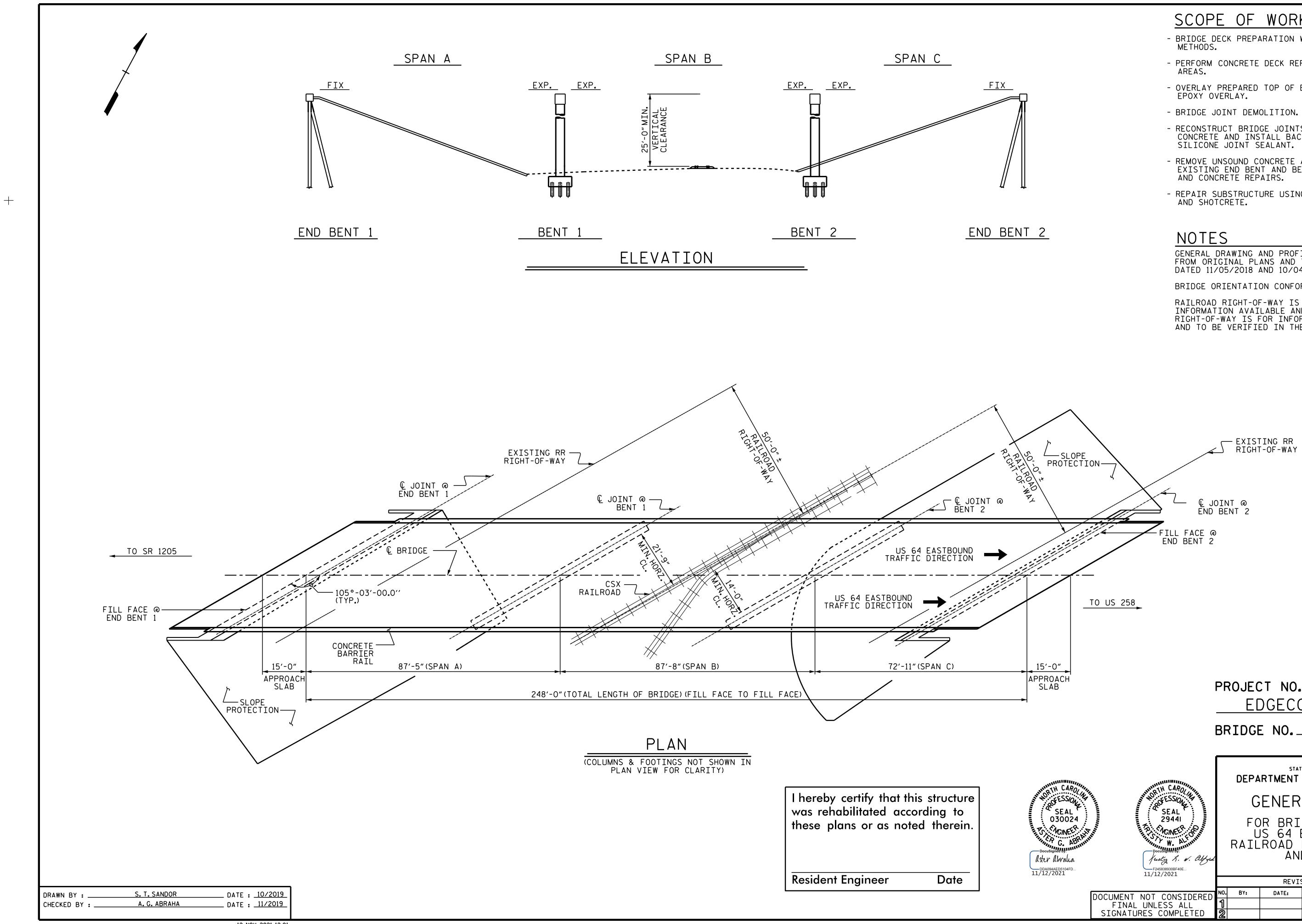


REPAIR KEY





REPAIR Q	UANT	ITY TA	BLE	
		QUANT	ITIES	
BENT 2	EST	IMATE	AC	TUAL
SHOTCRETE REPAIR	AREA SF	VOLUME CF	AREA SF	VOLUME CF
AP (VERTICAL FACE)	2.0	1.0		
AP (HORIZONTAL FACE)	0.0	0.0		
OLUMN	2.0	1.0		
CONCRETE REPAIR				
AP (VERTICAL FACE)	2.0	1.0		
AP (HORIZONTAL FACE)	0.0	0.0		
OLUMN	0.0	0.0		
UES IN CHART REPRESENT EST UNSOUND CONCRETE, MIN. OF 1" SAWCUT. SEE ``TYPICAL CAP AN	BEHIND RE	BAR AND MIN	2" CLEARAN	CE



SCOPE OF WORK

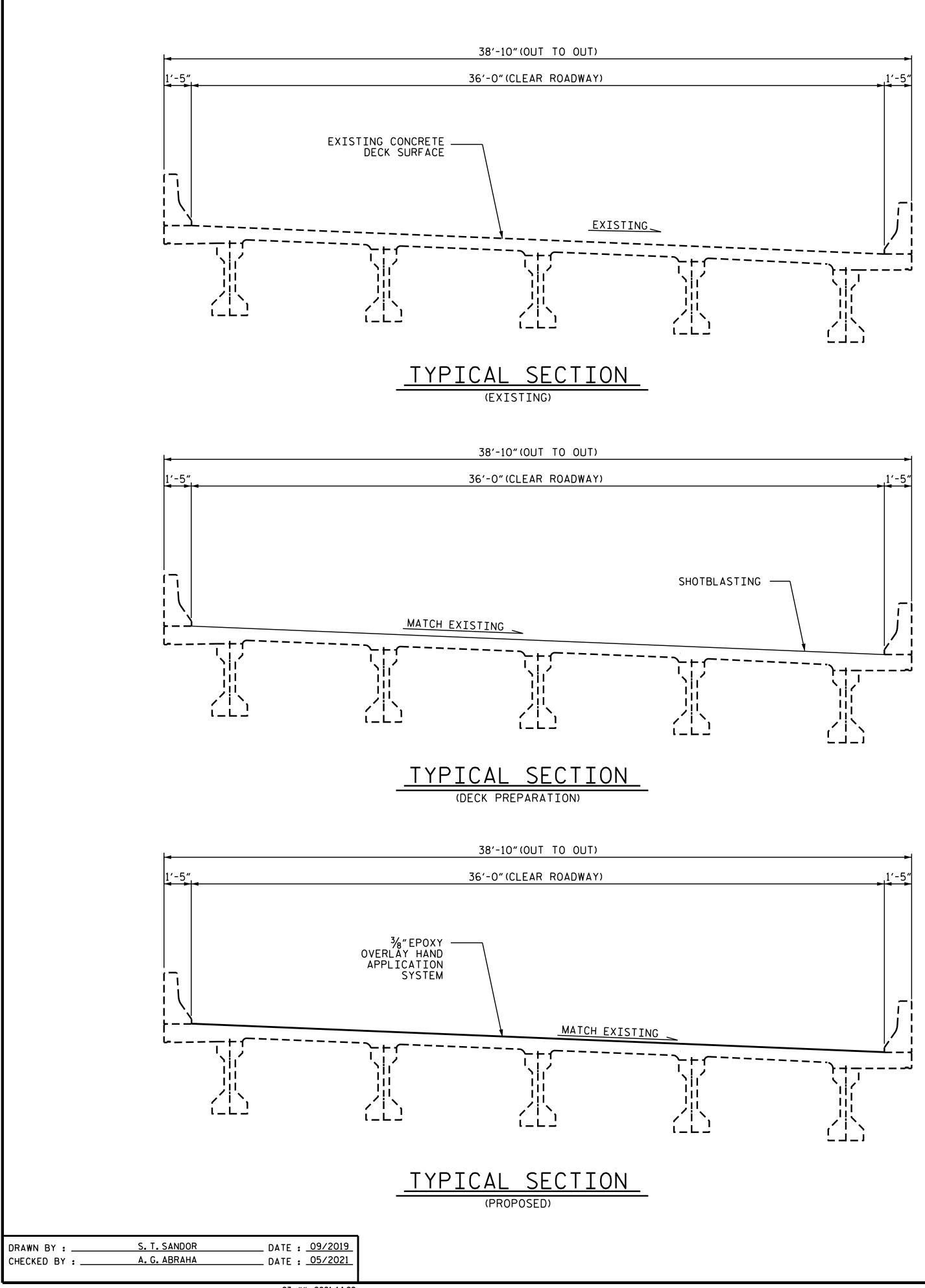
- BRIDGE DECK PREPARATION WITH SHOTBLASTING
- PERFORM CONCRETE DECK REPAIRS IN PREPARED
- OVERLAY PREPARED TOP OF BRIDGE DECK WITH
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND
- REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING END BENT AND BENT AREAS FOR SHOTCRETE AND CONCRETE REPAIRS.
- REPAIR SUBSTRUCTURE USING EPOXY RESIN INJECTION AND SHOTCRETE.

GENERAL DRAWING AND PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND THE ROUTINE INSPECTION, DATED 11/05/2018 AND 10/04/2020.

BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE

RAILROAD RIGHT-OF-WAY IS TAKEN FROM THE BEST INFORMATION AVAILABLE AND NOT EXACT. RAILROAD RIGHT-OF-WAY IS FOR INFORMATION PURPOSES ONLY AND TO BE VERIFIED IN THE FIELD.

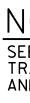
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SEAL 29441	G FC L	RTMENT ENER OR BRI IS 64 E ROAD ANI	RALEIGH DGE NC EBL OV BETWEE D US 2	NSPORTA RAWIN 154 0 ER CSX N SR 1	NG N 1205	
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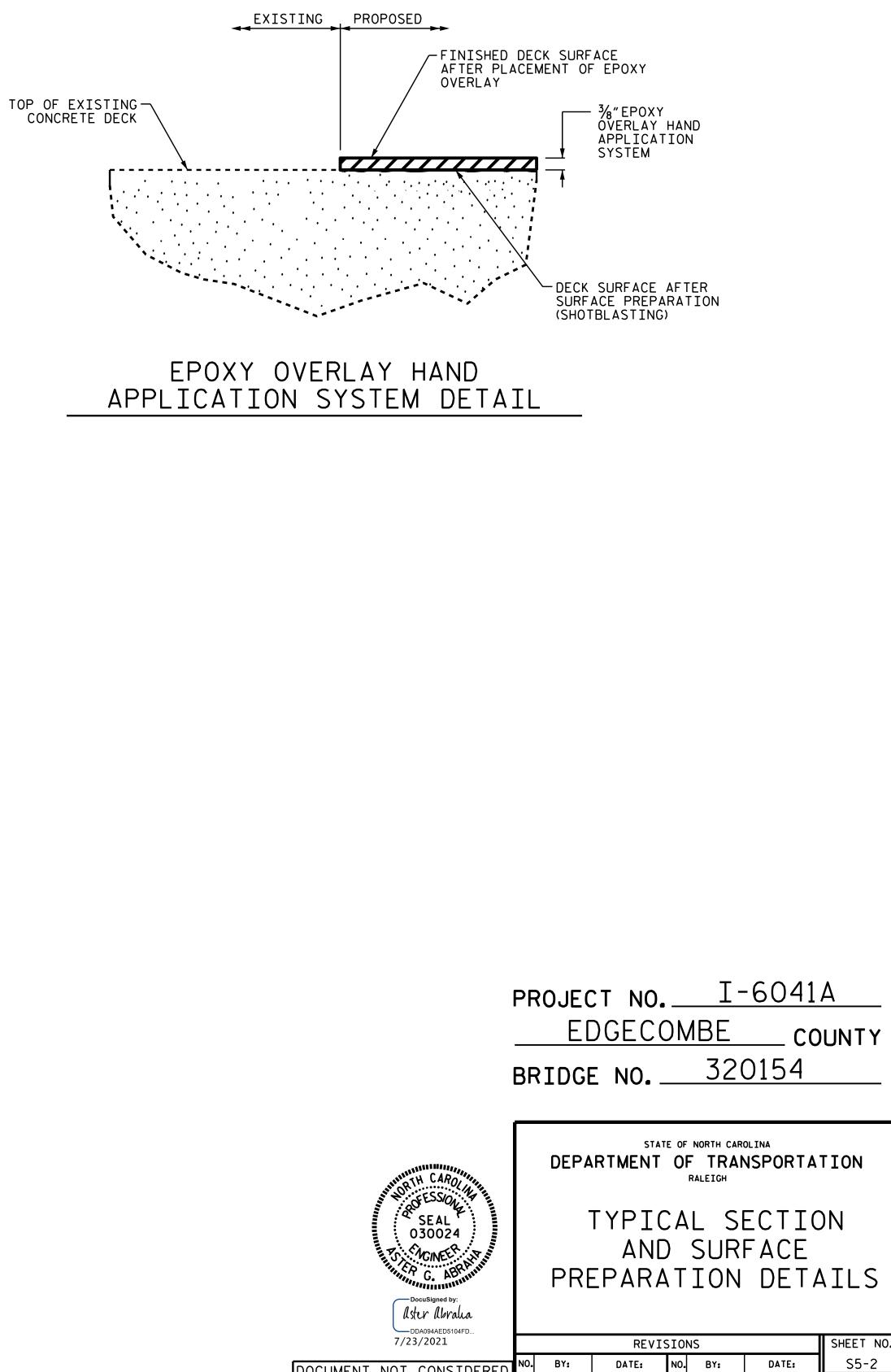


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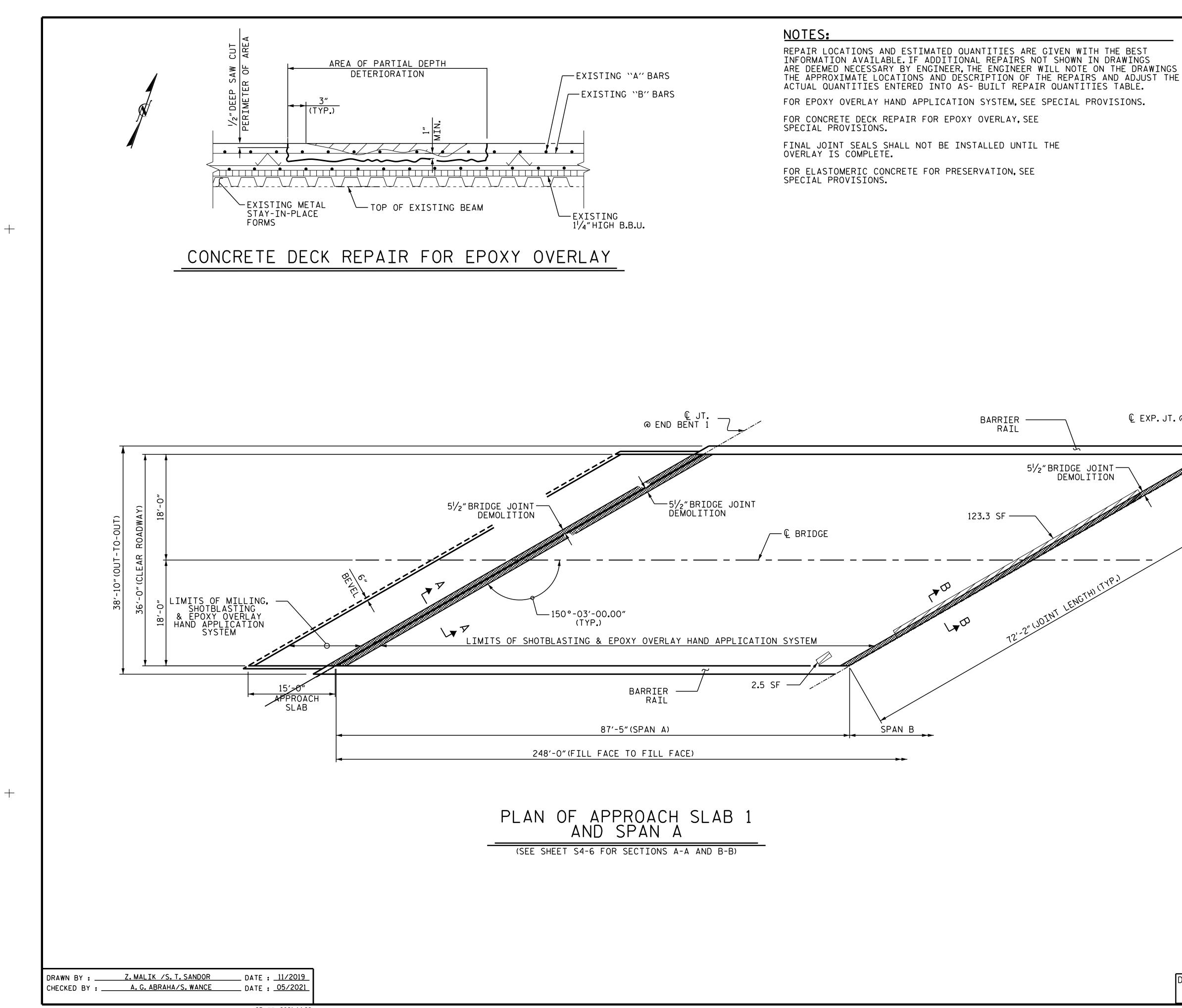
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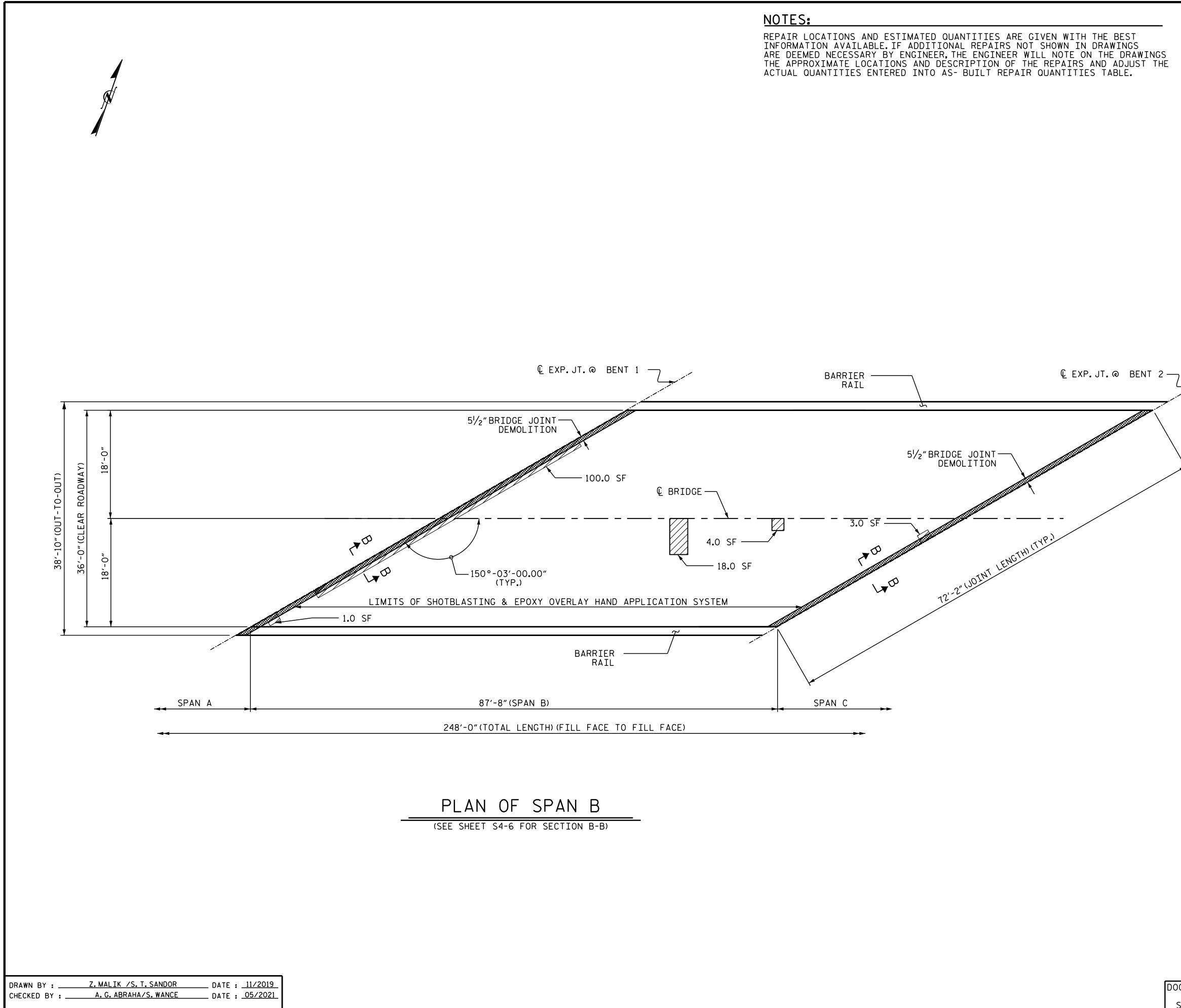


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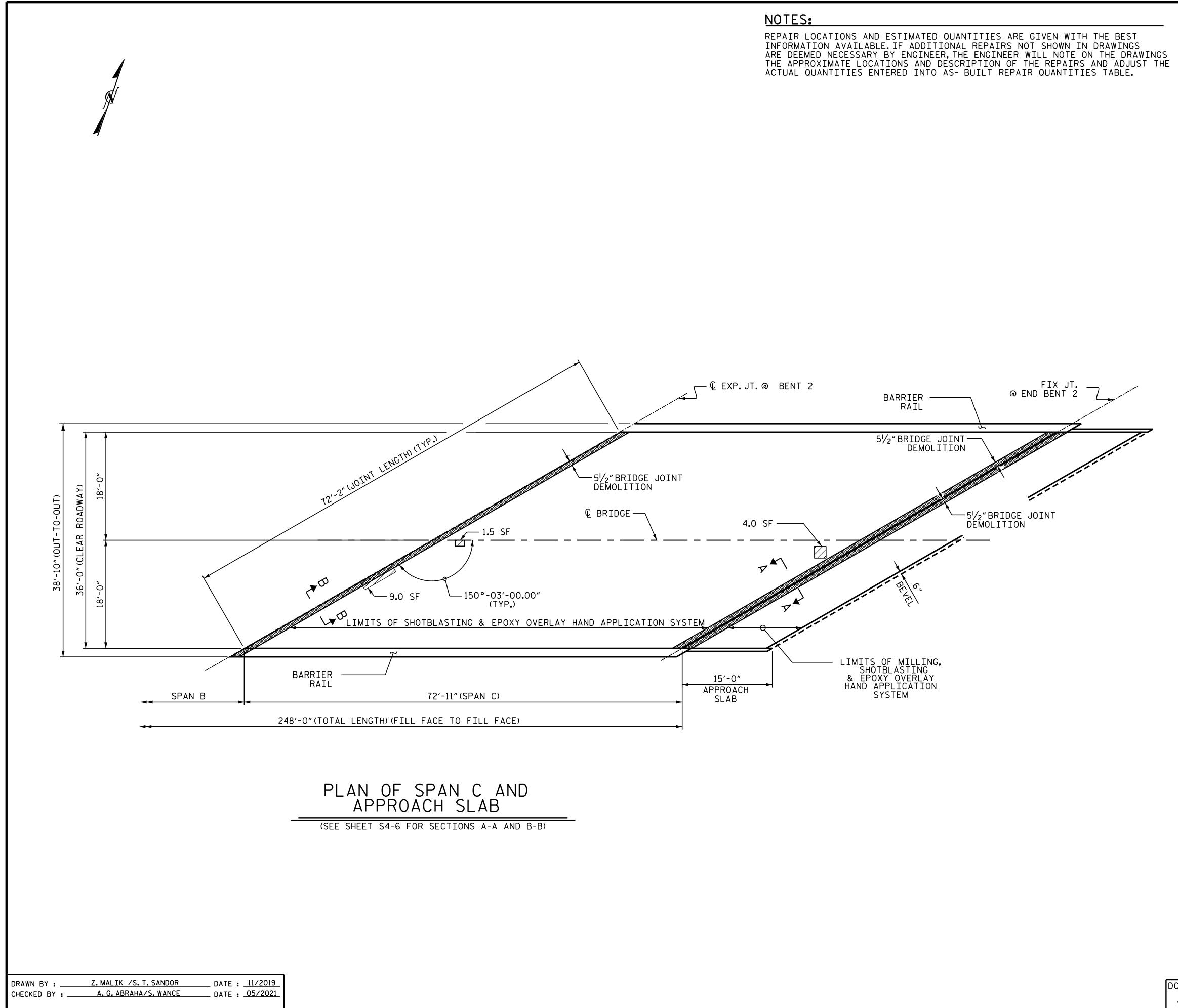
SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND EPOXY OVERLAY PLACEMENT.



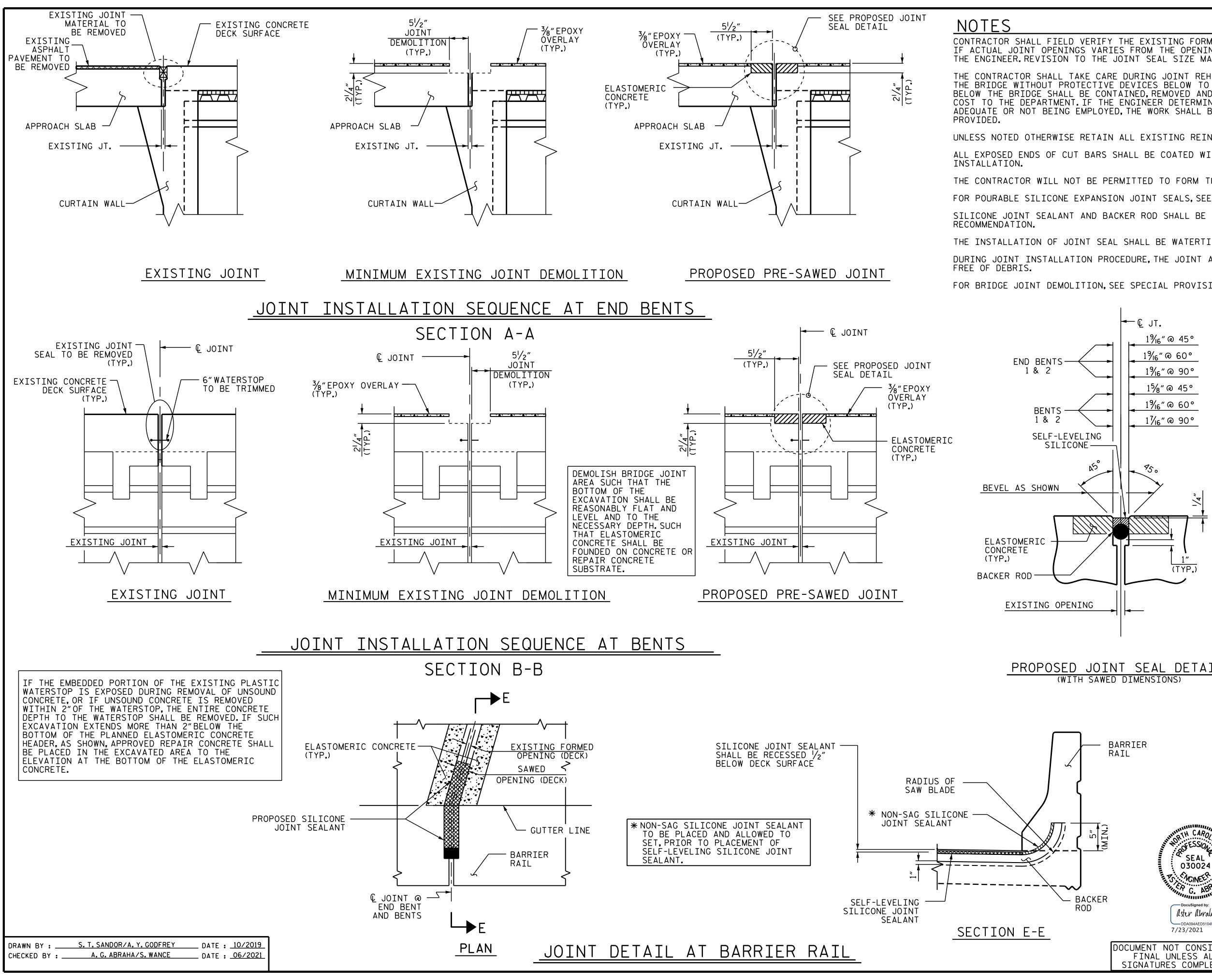
		AND APPROA		1	
			ES	ΓΙΜΑΤΕ	ACTUAL
SYST	EM	AND APPLICATION		541 SF	
OVER	LAY	PAIRS FOR EPOXY	1	.25.8 SF	
BRID	GE JOINT DEN	IOLITION		99.3 SF	
		77	F BRIDGE DEC	ΪK	
		- BRIDGE JOI	NT DEMOLIT	EON	
BENT	1				
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				Τ-604	11 Δ
		PROJECT		_	
		<u> </u>	ECOMB	Ξ (COUNTY
		EDG BRIDGE M	ECOMB	Ξ (COUNTY
		<u> </u>	ECOMBI NO. 3	<u> </u>	COUNTY
	WITH CARO	EDG BRIDGE N SHEET 1 OF 3	ECOMB	20154 CAROLINA RANSPOR	COUNTY
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	DocuSigned by:	EDG BRIDGE N SHEET 1 OF 3 DEPARTI	ECOMBE NO. 3 STATE OF NORTH MENT OF TI RALEIG	E (20154 CAROLINA RANSPOR	COUNTY 1 TATION



SUMMARY OF QUANTITIE	S FOR SPA	NB
	ESTIMATE	ACTUA
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,084 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	126.0 SF	
BRIDGE JOINT DEMOLITION	66.2 SF	
- SHOTBLASTING AN OVERLAY OF BRID - CONCRETE DECK R EPOXY OVERLAY	DGE DECK	
- BRIDGE JOINT DE	EMOLITION	
PROJECT NO. EDGECO)41A _ COUNT
BRIDGE NO	32015	54
SHEET 2 OF 3		
	TE OF NORTH CAROLINA OF TRANSPO RALEIGH	RTATION
SEAL 030024 SURFACE S SURFACE S	PREPAF Span b	ATIO
Aster Abralia		
Lster Abraha DDA094AED5104FD 11/12/2021	SIONS NO. BY: DA	SHEET



SUMMARY OF QUANTITIE APPROACH S		AND
	ESTIMATE	ACTUA
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,021 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	14 . 5 SF	
BRIDGE JOINT DEMOLITION	99.3 SF	
- SHOTBLASTING OVERLAY OF E CONCRETE DEC EPOXY OVERLA BRIDGE JOINT	BRIDGE DECK K REPAIR FOR	
	DEMOLITION	
	10. <u>I-6041</u>	Α
		DUNT
BRIDGE NO	<u>320154</u>	
SHEET 3 OF 3		
DEPARTME	STATE OF NORTH CAROLINA	TION
SURFAC SEAL 030024	RALEIGH PAN C AND PROACH SLAE	TIO B
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lster Abralia DDA094AED5104FD 7/23/2021	REVISIONS	SHEET
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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 THE ENGINEER.REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY.

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THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEW OF SAWING THE JOINT. FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS. SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S

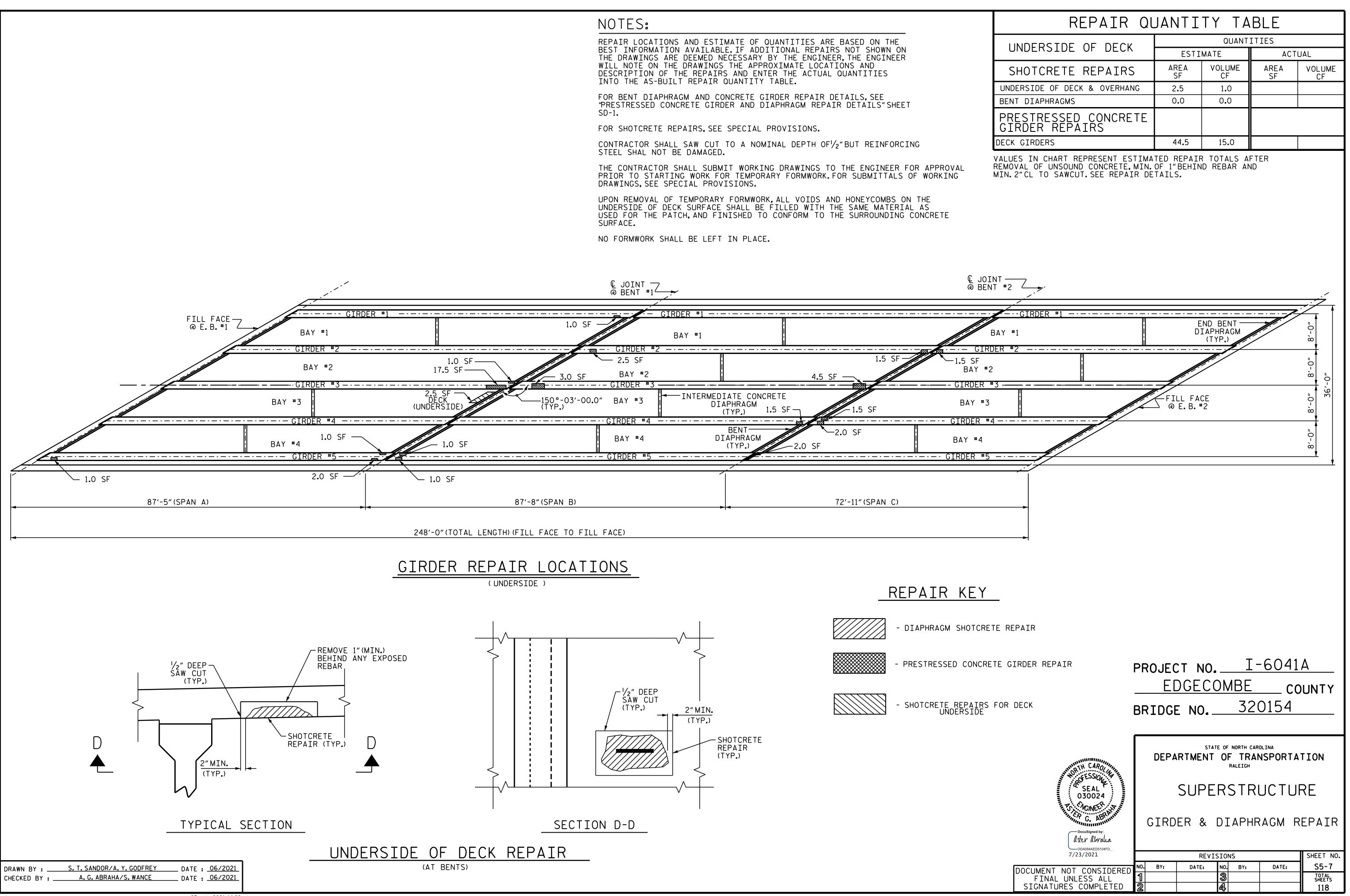
THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT. DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISION.

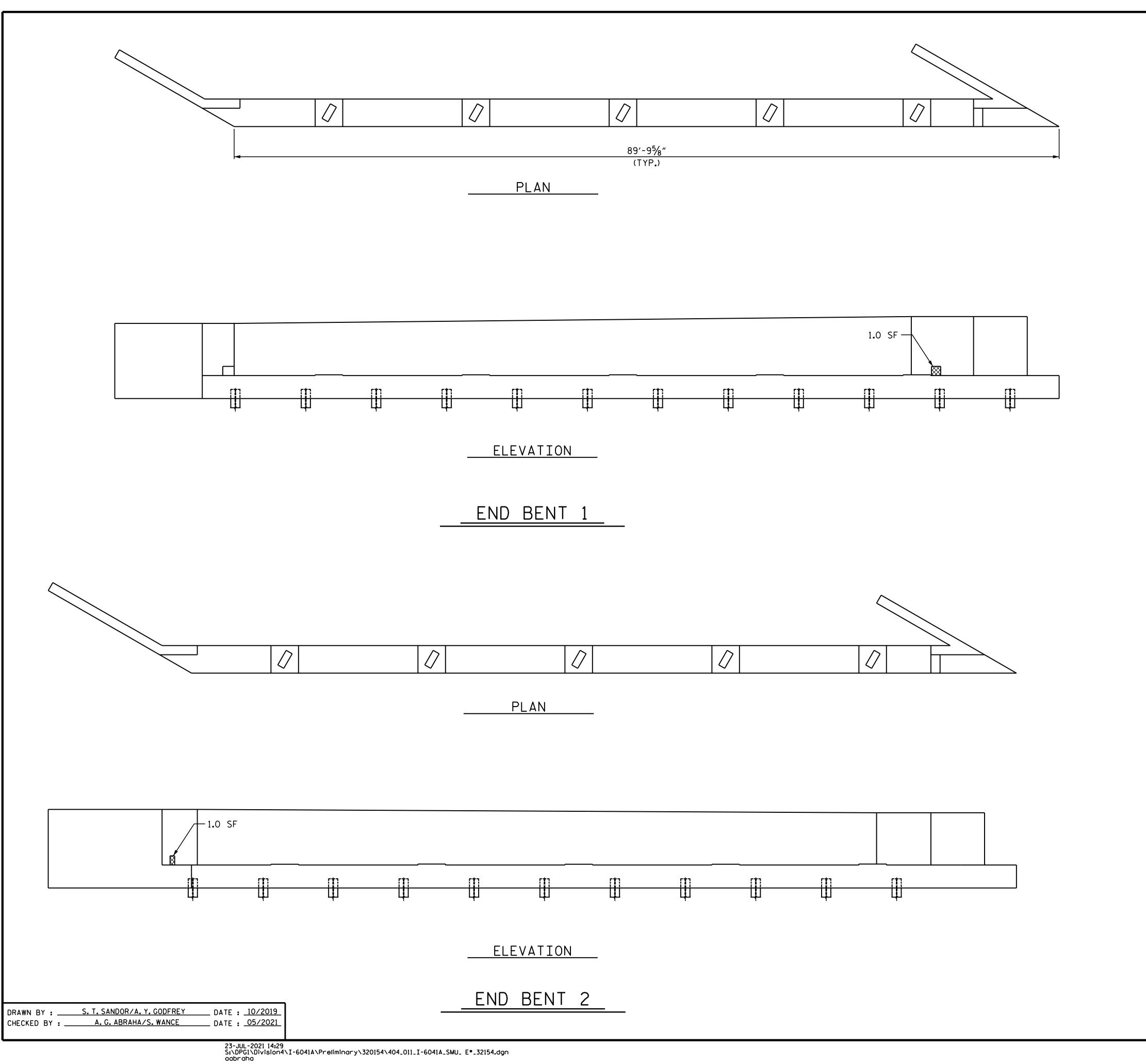
SUMMARY O	F QUANTITI	[ES
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	49.7 CF	
POURABLE SILICONE JOINT SEALANT	289.0 LF	

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Ð	DI	MENSIO	NS)	

BARRIER RAIL		<u>E[</u>	CT NO. DGECC E NO.		1BE	<u>-6041</u> co 20154	A OUNTY
THE STORESSION	NINATAR	DEPA		OF	NORTH CARG	NSPORTA	TION
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lster Abra DDA094AED510 7/23/2021	lia		REVIS	STON	15		SHEET NO.
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REPAIR QUANTITY TABLE						
REPAIRS		QUANT	ITIES			
END BENT 1 & 2	ESTI	ΜΑΤΕ	ACT	UAL		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
CAP (VERTICAL FACE)	0.0	0.0				
CAP (HORIZONTAL, CORNER)	0.0	0.0				
COLUMN	0.0	0.0				
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
CAP (VERTICAL FACE)	2.0	1.0				
CAP (HORIZONTAL, CORNER)	0.0	0.0				
COLUMN	0.0	0.0				

-

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1"BEHIND REBAR AND MIN. 2"CLEARANCE TO SAWCUT. SEE ``TYPICAL CAP AND COLUMN REPAIR DETAILS'' SHEET.

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 LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

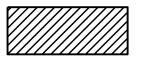
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FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

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

REPAIR KEY



CONCRETE REPAIR AREA (FORM AND POUR)



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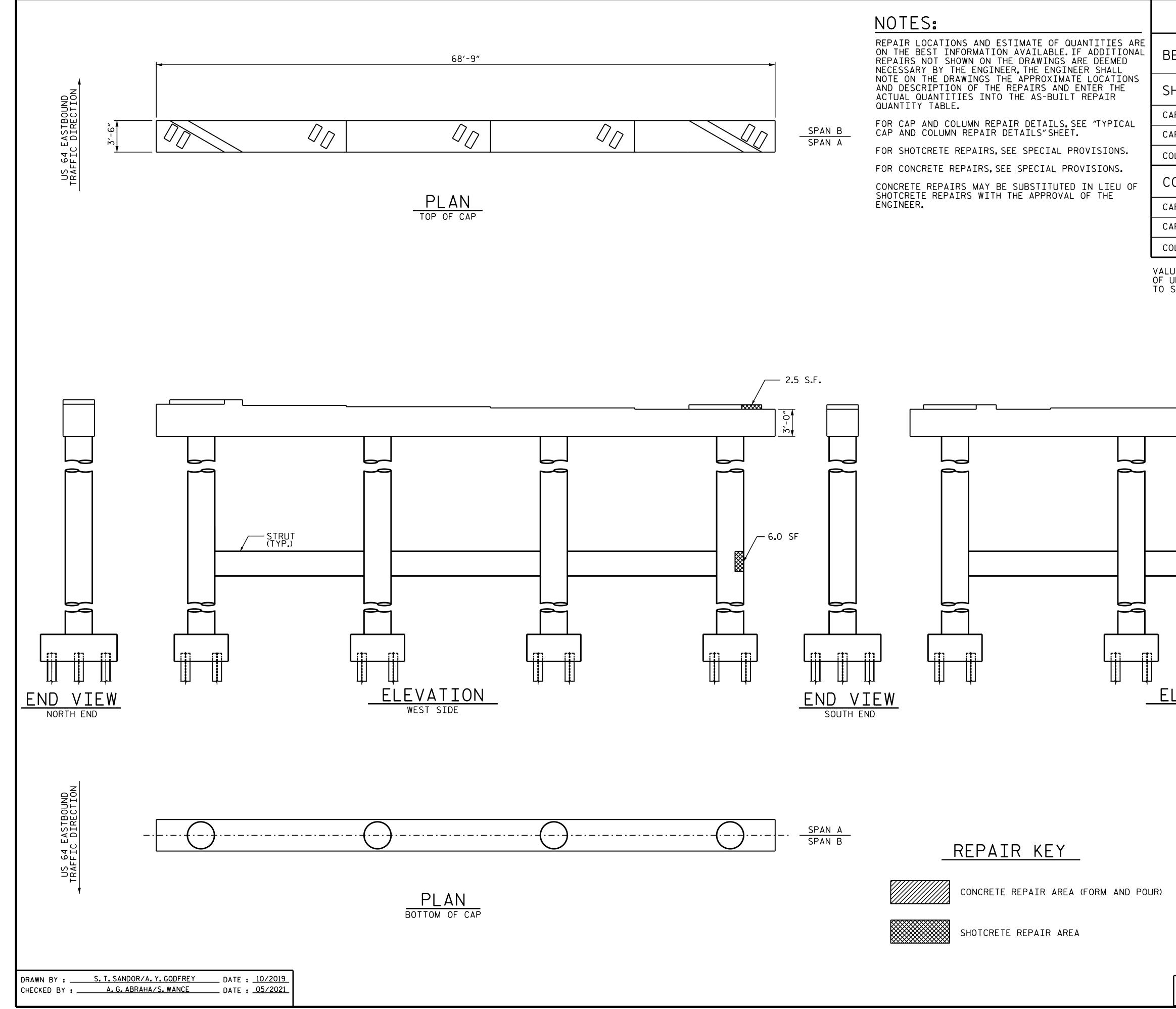
 DocuSigned by Aster Abraha SHOTCRETE REPAIR AREA

PROJECT NO. I-6041A EDGECOMBE COUNTY BRIDGE NO. 320154

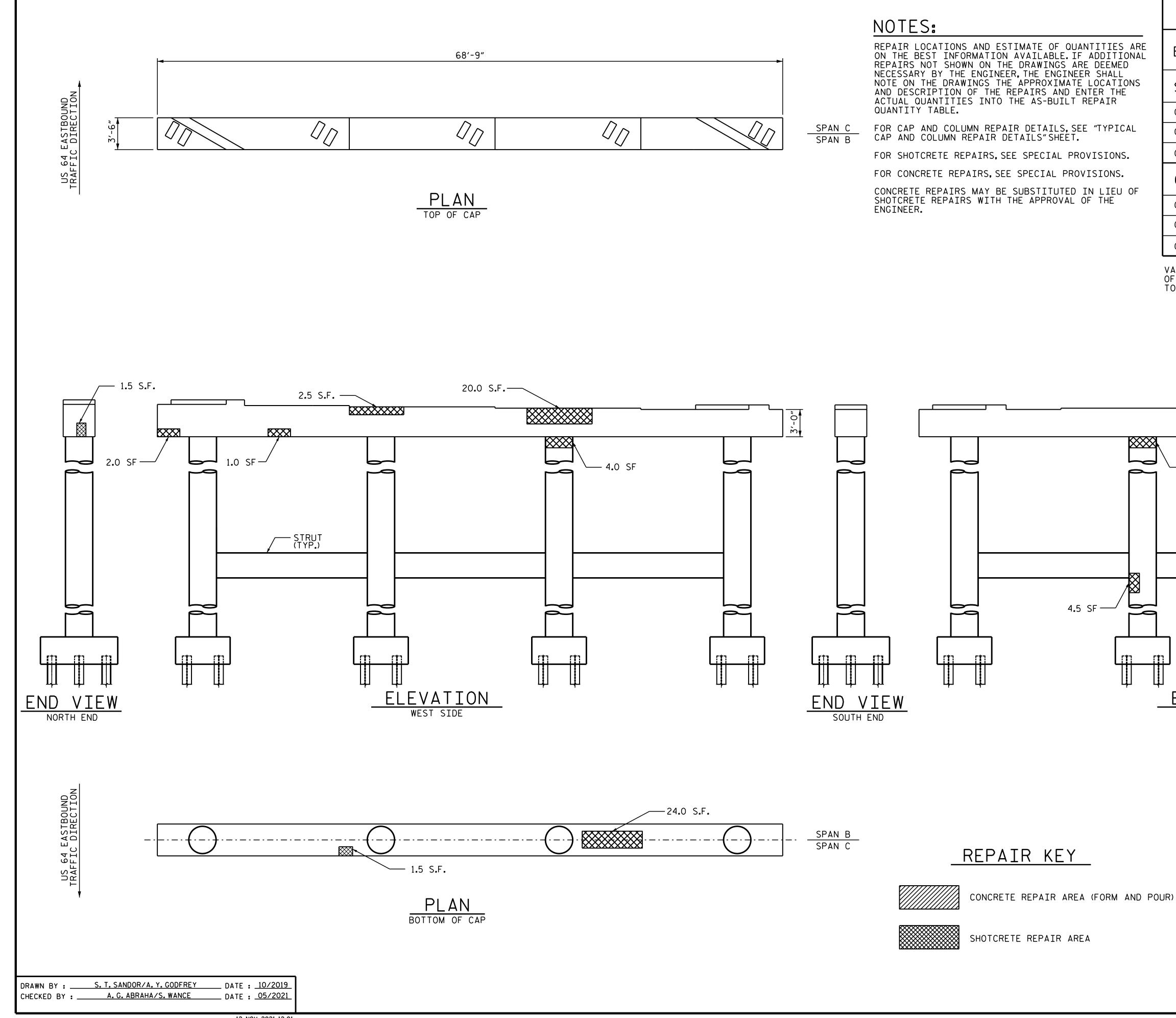
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

END BENTS REPAIR

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7/23/2021		REVISIONS					SHEET NO.
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SIGNATURES COMPLETED	2			4			118



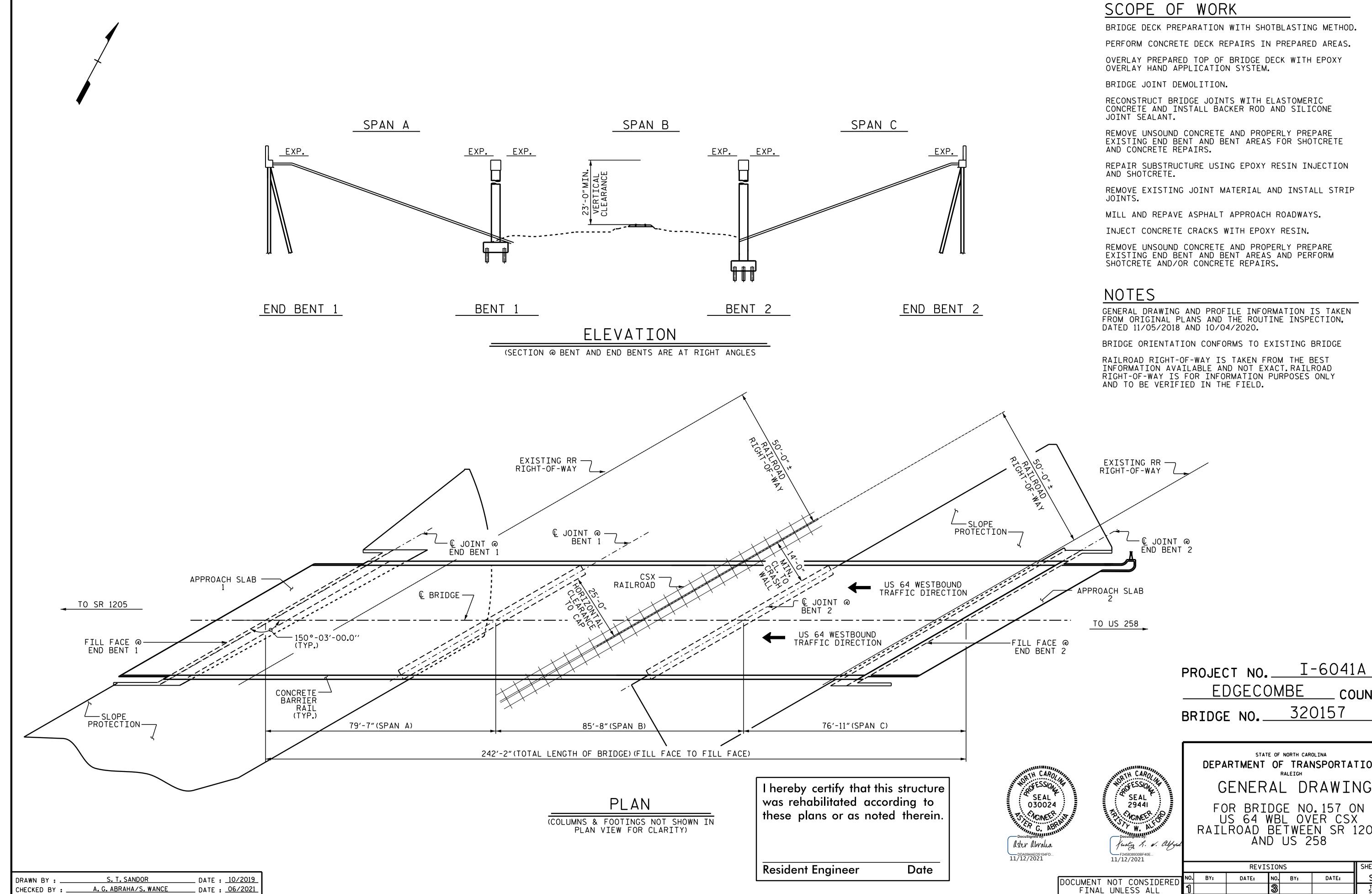
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REPAIR C				
BENT 1	EST	QUANTI IMATE		TUAL
SHOTCRETE REPAIR	AREA	VOLUME CF	AREA	VOLUME
AP (VERTICAL FACE)	0.0	0.0	55	
AP (VERTICAL FACE)	2.5	1.3		
OLUMN	6.0	3.0		
CONCRETE REPAIR	1			
	0.0	0.0		
AP (VERTICAL FACE) AP (HORIZONTAL FACE)	0.0	0.0		
OLUMN	0.0	0.0		
		0.0		
LEVATION EAST SIDE				
E	ED BRIDGE HEET 1 OF DEPAR	T NO GECOMB NO 2 STATE OF NOR TMENT OF T RALE SUBSTRU BEN	E 320154 TH CAROLINA TRANSPORT IGH	COUNTY
DDA094AED5104FD 11/12/2021		REVISIONS		SHEET NO.
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	2	4		118



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	ΝΟΤΓς	REPAIR Q	UANT	ITY TA	BLE	
	NOTES: REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE ON THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED	BENT 2	EST	QUANT: IMATE	ITIES ACT	UAL
	NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS	SHOTCRETE REPAIR	AREA SF	VOLUME	AREA	VOLUME
	AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.	CAP (VERTICAL FACE)	27.0	CF 13 . 5	SF	CF
SPAN C SPAN B	FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.	CAP (HORIZONTAL FACE)	25.5	12.8		
SPAN B	FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.	COLUMN	17.5	8.8		
	FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.	CONCRETE REPAIR				
	CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.	CAP (VERTICAL FACE)	0.0	0.0		
		CAP (HORIZONTAL FACE)	0.0	0.0		
		COLUMN	0.0	0.0		
						J]
4.0 SF		- 4.0 SF 5.0 S.F.				
	4.5 SF 4.5 SF 5.5 SF 5.5 SF 5.5 SF 5.5 SF 5.5 SF 5.5 SF 5.5 SF 5.5 SF 5.5 SF 5.					
24.0 S.F.		– B			<u>I-604</u> 3 <u>E</u> c 320154	OUNTY
) · · · · · · · · · · · · · · · · · · ·	REPAIR KEY CONCRETE REPAIR AREA (FORM AND POL SHOTCRETE REPAIR AREA	JR) JR) JR) JR) JR) JR) JR) JR) JR) JR)		STATE OF NOR TMENT OF RALE SUBSTR BEN	UCTUR	
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BRIDGE DECK PREPARATION WITH SHOTBLASTING METHOD. PERFORM CONCRETE DECK REPAIRS IN PREPARED AREAS.

OVERLAY PREPARED TOP OF BRIDGE DECK WITH EPOXY OVERLAY HAND APPLICATION SYSTEM.

RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND SILICONE

REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING END BENT AND BENT AREAS FOR SHOTCRETE

REPAIR SUBSTRUCTURE USING EPOXY RESIN INJECTION

REMOVE EXISTING JOINT MATERIAL AND INSTALL STRIP

MILL AND REPAVE ASPHALT APPROACH ROADWAYS.

INJECT CONCRETE CRACKS WITH EPOXY RESIN.

REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING END BENT AND BENT AREAS AND PERFORM SHOTCRETE AND/OR CONCRETE REPAIRS.

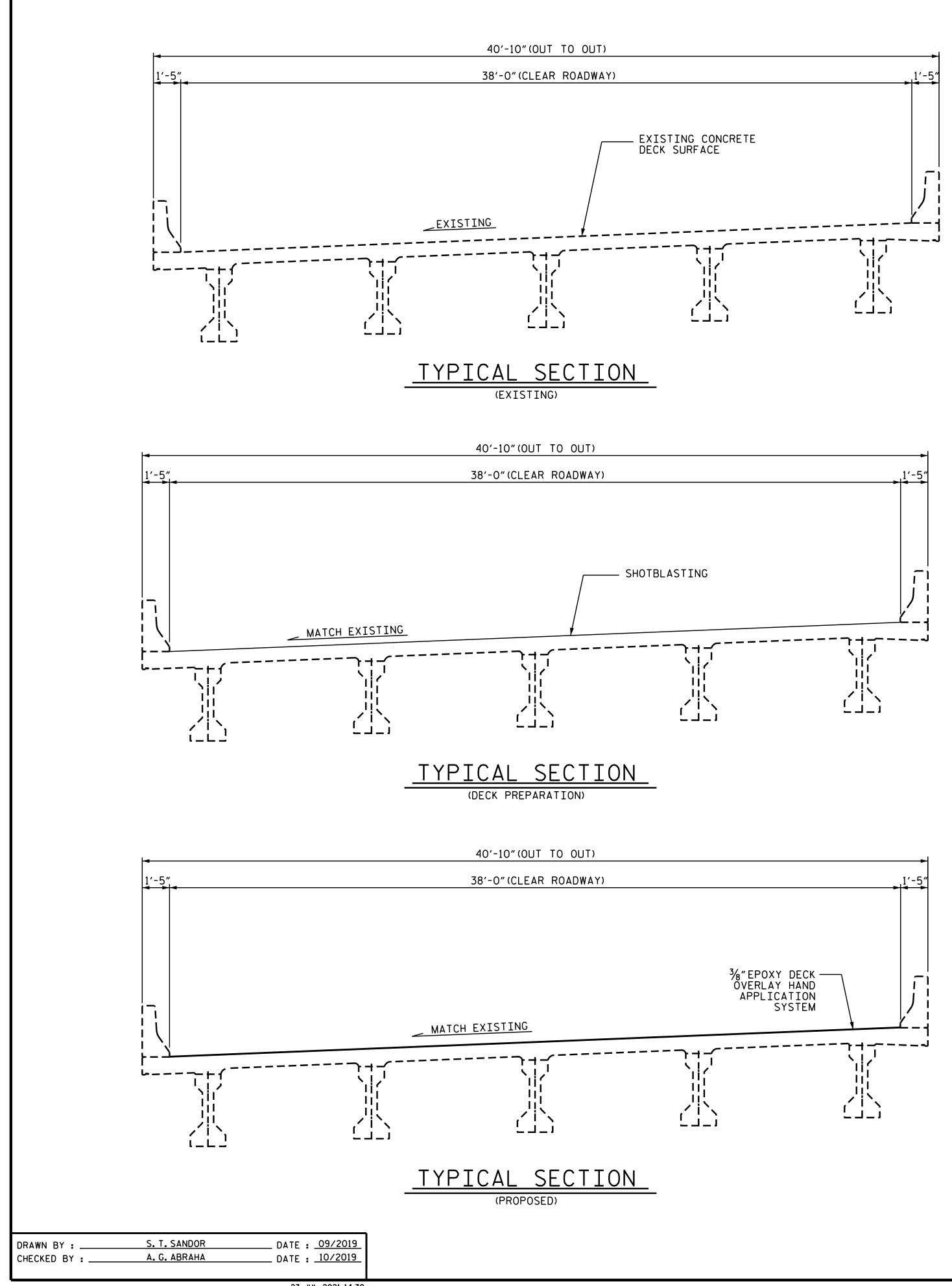
GENERAL DRAWING AND PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND THE ROUTINE INSPECTION,

BRIDGE ORIENTATION CONFORMS TO EXISTING BRIDGE

RAILROAD RIGHT-OF-WAY IS TAKEN FROM THE BEST INFORMATION AVAILABLE AND NOT EXACT. RAILROAD RIGHT-OF-WAY IS FOR INFORMATION PURPOSES ONLY

EDGECOMBE _ COUNTY 320157 BRIDGE NO._ STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH GENERAL DRAWING FOR BRIDGE NO.157 ON US 64 WBL OVER CSX RAILROAD BETWEEN SR 1205 AND US 258

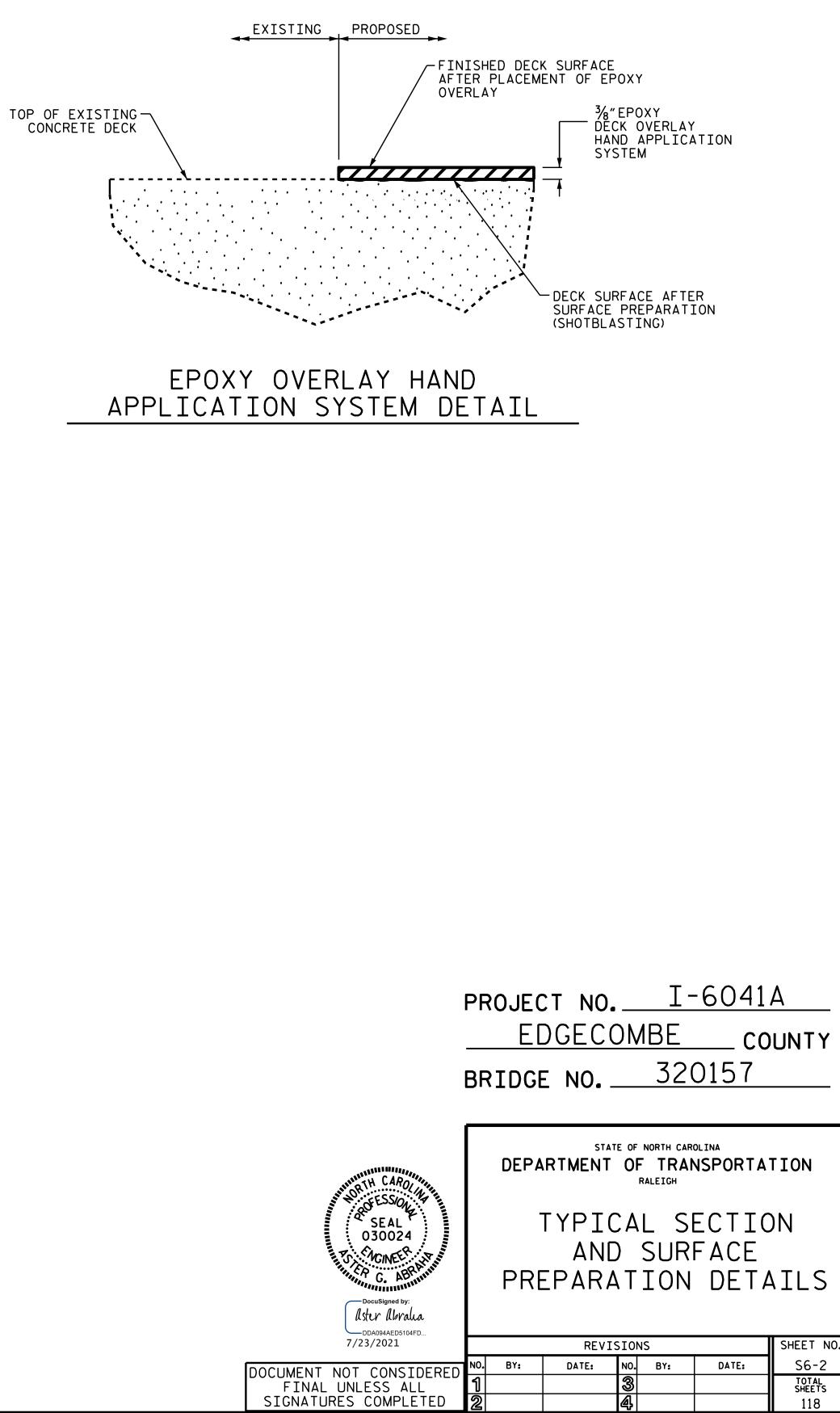
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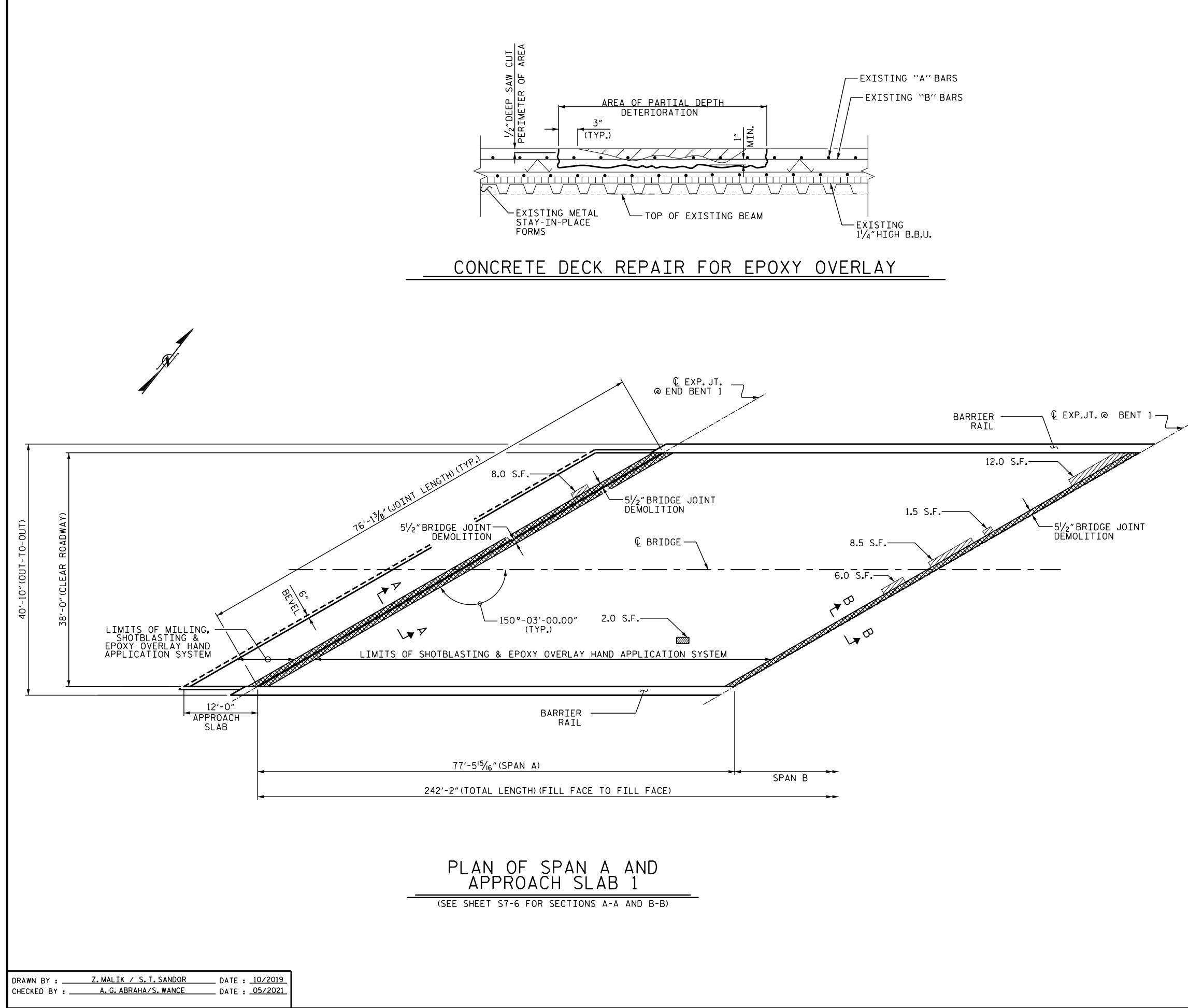






NOTES

SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND EPOXY OVERLAY PLACEMENT.

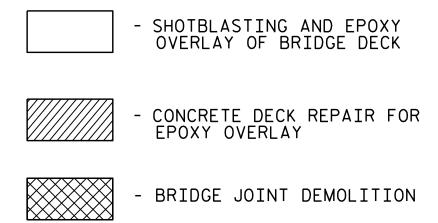


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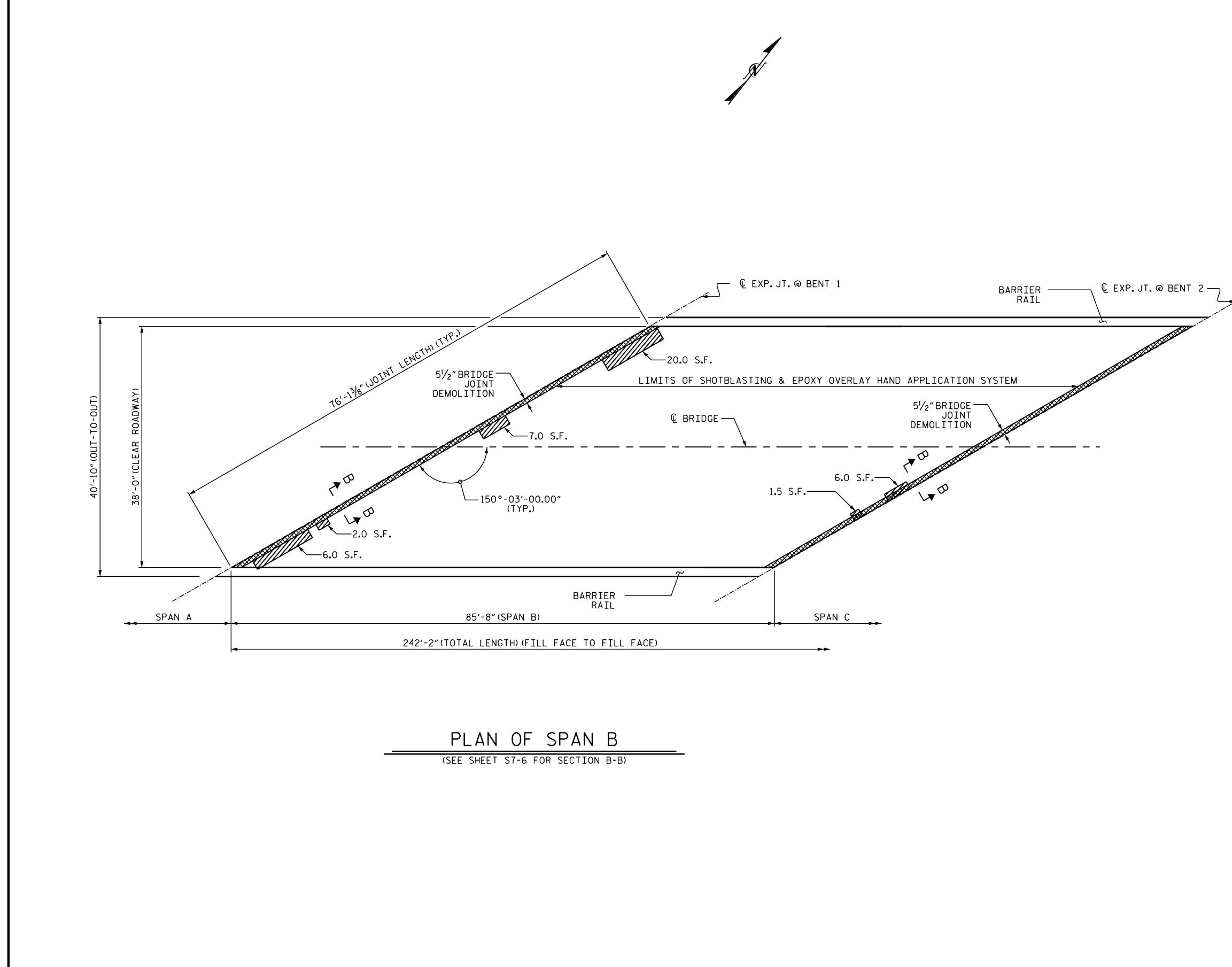
SUMMARY OF QUANTITIES FOR AND SPAN A		I SLAB 1
	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,249 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	38.0 SF	
BRIDGE JOINT DEMOLITION	104.7 SF	

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 AS- BUILT REPAIR QUANTITIES TABLE. FOR EPOXY OVERLAY HAND APPLICATION SYSTEM, SEE SPECIAL PROVISIONS. FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS. FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY IS COMPLETE. FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS. FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.



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CHECKED BY :	A.G. ABRAHA/S. WANCE	DATE : <u>05/2021</u>

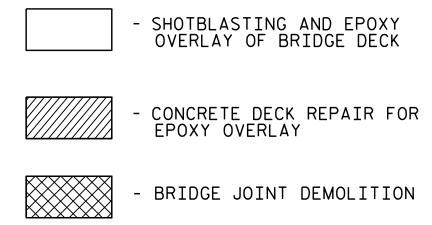
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SUMMARY OF QUANTITIES FOR SPAN B

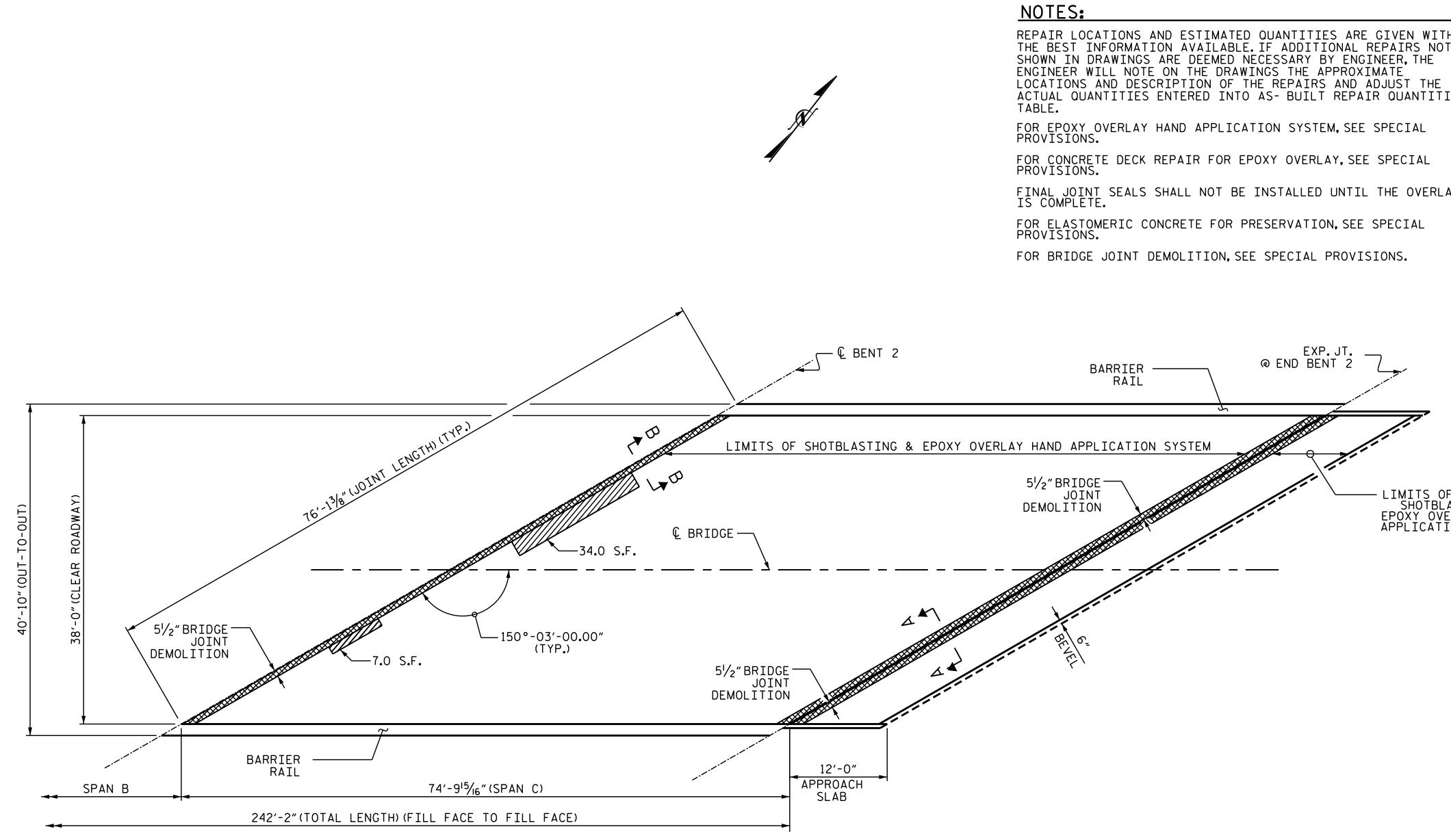
	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,180 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	42 . 5 SF	
BRIDGE JOINT DEMOLITION	69.8 SF	

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 AS- BUILT REPAIR QUANTITIES TABLE. FOR EPOXY OVERLAY HAND APPLICATION SYSTEM, SEE SPECIAL PROVISIONS. FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS. FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY IS COMPLETE. FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS. FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.



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PLAN OF SPAN C AND APPROACH SLAB 2

(SEE SHEET S7-6 FOR SECTIONS A-A AND B-B)

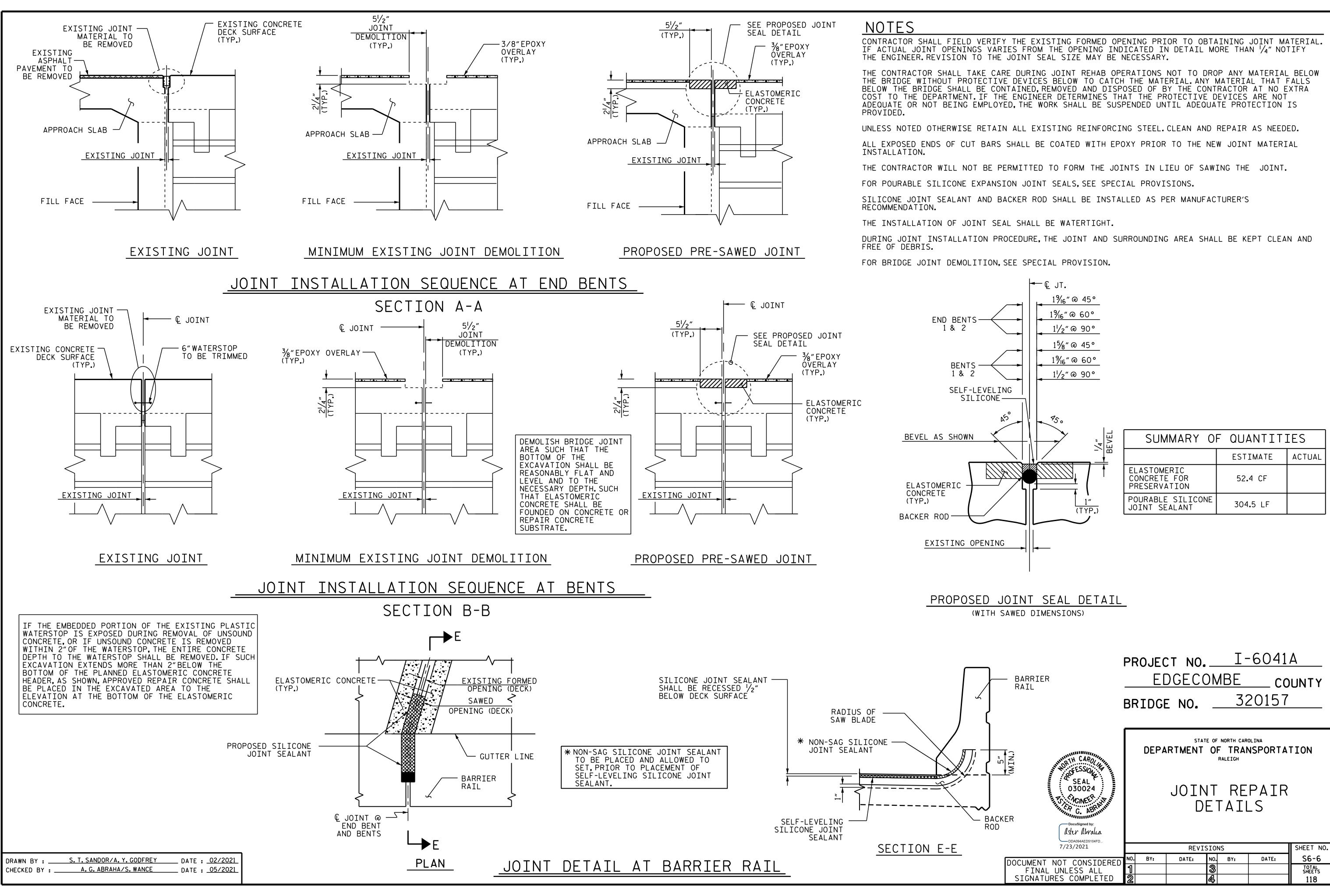
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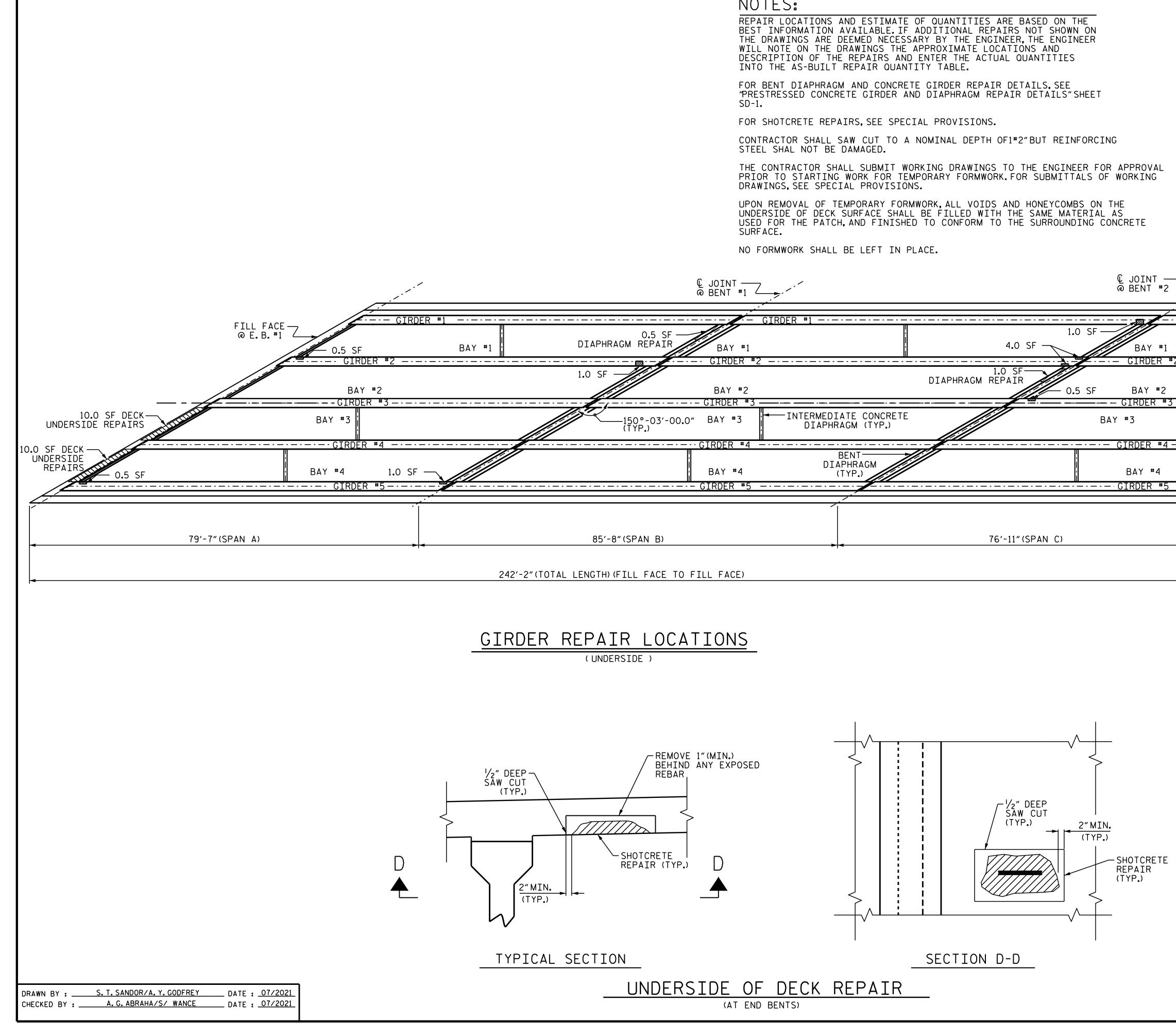
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ITH	SUMMARY OF QUANTITIES APPROACH SLA		AND
NOT E		ESTIMATE	ACTUAL
HE ITIES	EPOXY OVERLAY HAND APPLICATION SYSTEM	3,148 SF	
TITES	CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	41.0 SF	
	BRIDGE JOINT DEMOLITION	104.7 SF	
RLAY			
OF MI BLASTI OVERLA	ING & Y HAND		
ATION :	SYSTEM		
	- SHOTBLASTING AN OVERLAY OF BRID		
	OVERLAT OF BRIL	JGE DECK	
	- CONCRETE DECK R	EPAIR FOR	
	EPOXY OVERLAY		
	- BRIDGE JOINT DE	MOLITION	
	PROJECT NO.	T-604	<u>41</u> Δ
	EDGECC		COUNTY
	BRIDGE NO	32015	(
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		E OF NORTH CAROLINA	TATTON
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	OR SEAL F SURFACE 030024 SPA	PREPAR	ATION
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	APPR	OACH SL	46
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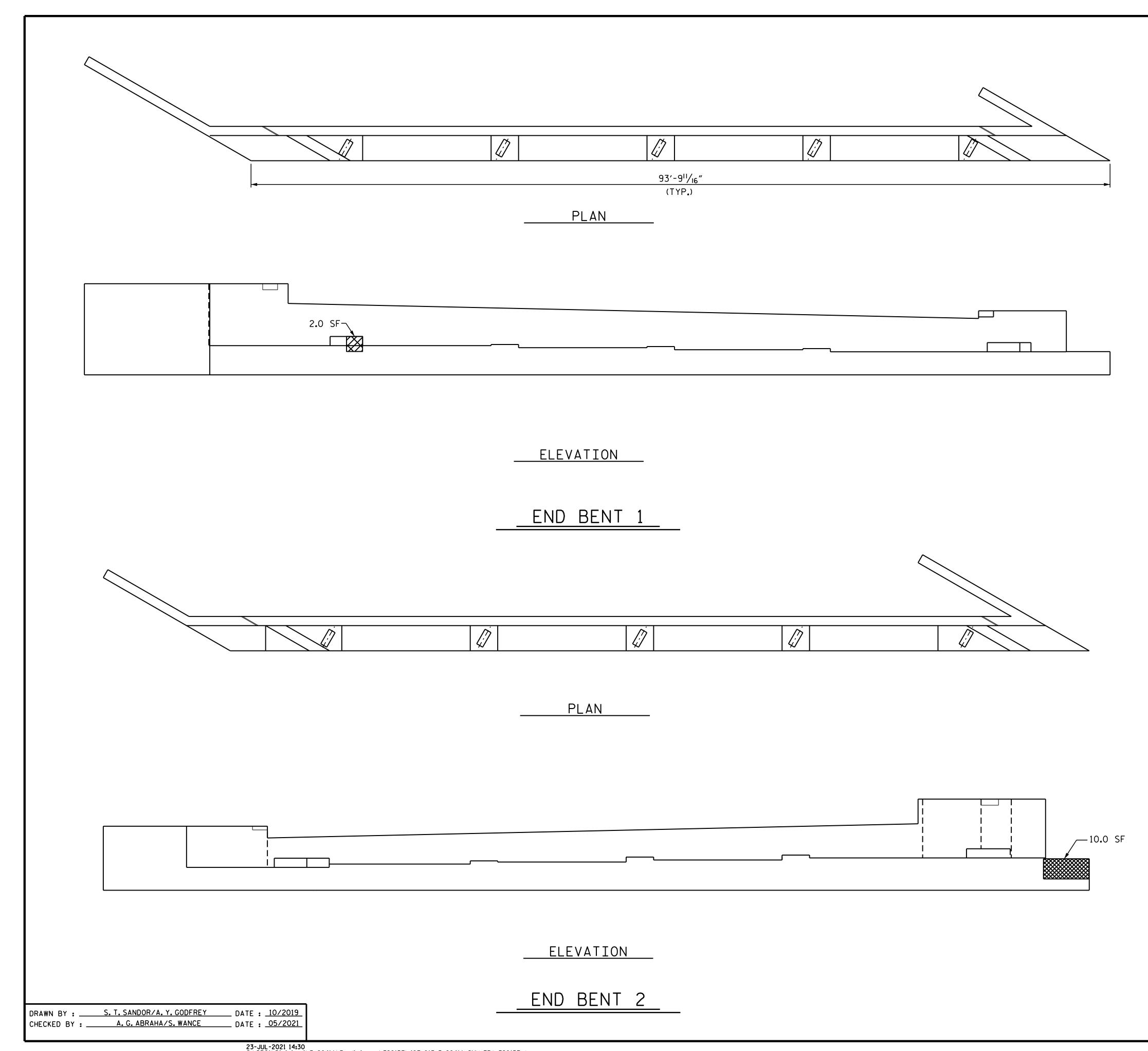


SUMMARY O	F QUANTITI	[ES
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	52.4 CF	
POURABLE SILICONE JOINT SEALANT	304 . 5 LF	



	NOTES:		
	REPAIR LOCATIONS AND ESTIMATE O BEST INFORMATION AVAILABLE.IF A THE DRAWINGS ARE DEEMED NECESSAN WILL NOTE ON THE DRAWINGS THE AN DESCRIPTION OF THE REPAIRS AND I INTO THE AS-BUILT REPAIR QUANTI	DDITIONAL REPAIRS NOT SHOWN ON RY BY THE ENGINEER, THE ENGINEER PPROXIMATE LOCATIONS AND ENTER THE ACTUAL QUANTITIES	-
	FOR BENT DIAPHRAGM AND CONCRETE "PRESTRESSED CONCRETE GIRDER AND SD-1.	GIRDER REPAIR DETAILS, SEE DIAPHRAGM REPAIR DETAILS"SHEET	-
	FOR SHOTCRETE REPAIRS, SEE SPECIA	AL PROVISIONS.	-
	CONTRACTOR SHALL SAW CUT TO A N STEEL SHAL NOT BE DAMAGED.	NOMINAL DEPTH OF1#2"BUT REINFORCI	NG
		RKING DRAWINGS TO THE ENGINEER FO PORARY FORMWORK.FOR SUBMITTALS OF	
	UNDERSIDE OF DECK SURFACE SHALL	VORK,ALL VOIDS AND HONEYCOMBS ON BE FILLED WITH THE SAME MATERIAL TO CONFORM TO THE SURROUNDING C	THE AS
	NO FORMWORK SHALL BE LEFT IN PL	ACE.	
€ JOIN @ BENT			© JOINT @ BENT #2
	- <u>GIRDER #1</u>	1.0 SF –	GI
	Y #1 DER #2	4.0 SF	BAY #1
1.0 SF —	#2	1.0 SF DIAPHRAGM REPAIR 0.5 SF	BAY #2
			GIRDER #3
150°-03'-00.0" BAY (TYP.)	#3 INTERMEDIATE CONCRETE DIAPHRAGM (TYP.)	В	BAY #3
			- GIRDER #4
BAY	#4 BENT DIAPHRAGM (TYP.)		BAY #4
GIRDEF	₹ #5	· _ · _ · _ · _ · _ · _ · _ · _ · _ · _	— · GIRDER #5 —
85'-8" (SPAN B)		76'-11" (SPAN C)	
	> <		

REPAIR QL	JANTT	ΤΥ ΤΔ	BLE	
		QUANT		
UNDERSIDE OF DECK	ESTI	ΜΑΤΕ	AC	ΓUAL
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK & OVERHANG	20.0	6.7	JF	CF
BENT DIAPHRAGMS	1.5	0.5		
GIRDER REPAIRS				
DECK GIRDERS	9.5	3.2		
/ALUES IN CHART REPRESENT ESTI REMOVAL OF UNSOUND CONCRETE,MI MIN.2″CL TO SAWCUT.SEE REPAIR	N. OF 1" BEI			
		1.0 SF		
IRDER #1				
		ND BENT		8,-6"
<u> </u>	·_·	(TYP.)		ω
		T.		۔ و
				- 0 [*]
	FILL FA	CE		6″
	△ @ E. B.	#2		8,-(
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				8,-0
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REPAIR QUANTITY TABLE						
REPAIRS	QUANTITIES					
END BENT 1 & 2	ESTI	ΜΑΤΕ	ACT	UAL		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
CAP (VERTICAL FACE)	0.0	0.0				
CAP (HORIZONTAL, CORNER)	0.0	0.0				
COLUMN	0.0	0.0				
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
CAP (VERTICAL FACE)	12.0	6.0				
CAP (HORIZONTAL, CORNER)	0.0	0.0				
COLUMN	0.0	0.0				

-

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1"BEHIND REBAR AND MIN. 2"CLEARANCE TO SAWCUT. SEE ``TYPICAL CAP AND COLUMN REPAIR DETAILS'' SHEET.

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 LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

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

REPAIR KEY

CONCRETE REPAIR AREA (FORM AND POUR)

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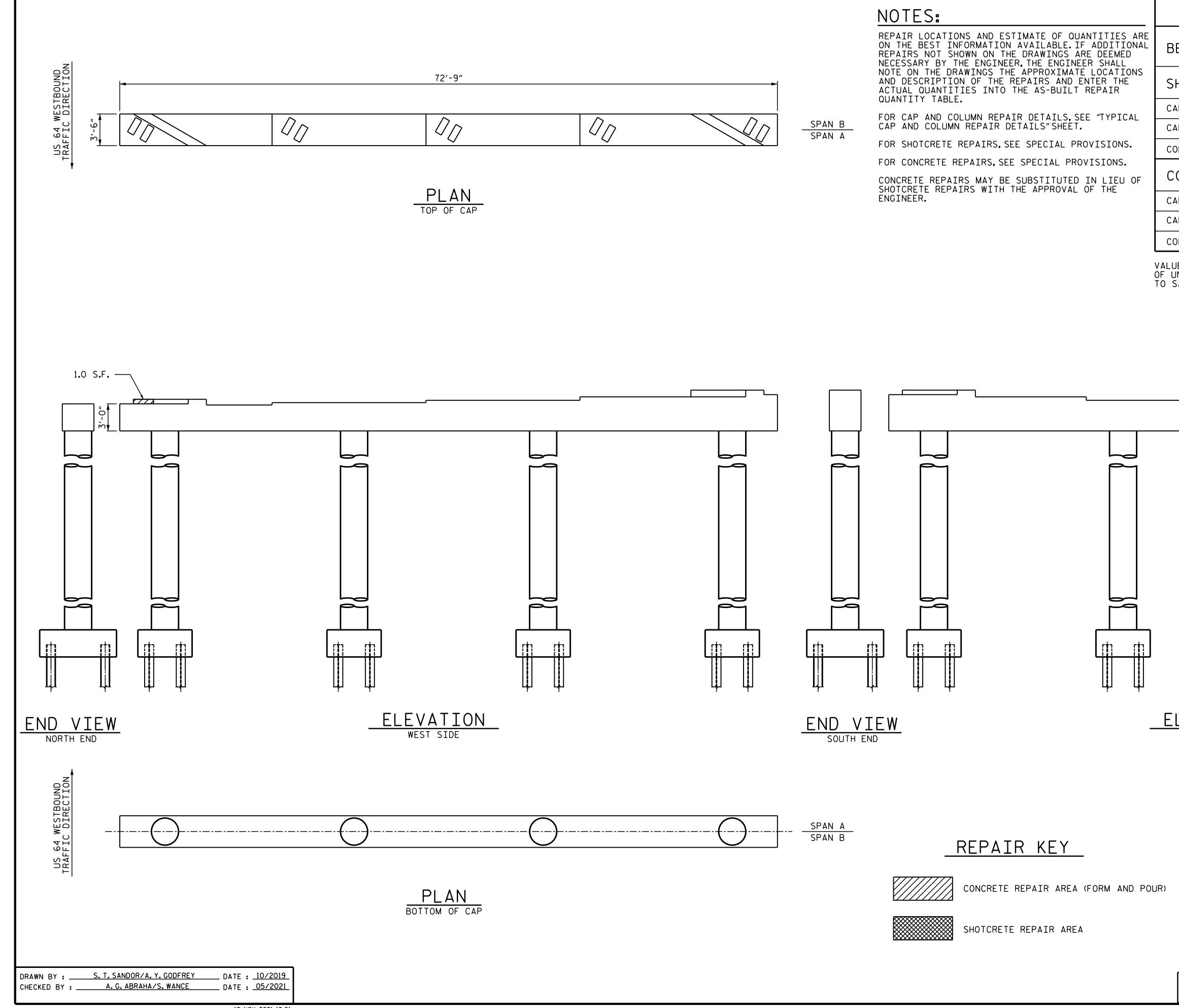
SHOTCRETE REPAIR AREA

PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY BRIDGE NO. <u>320157</u>

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

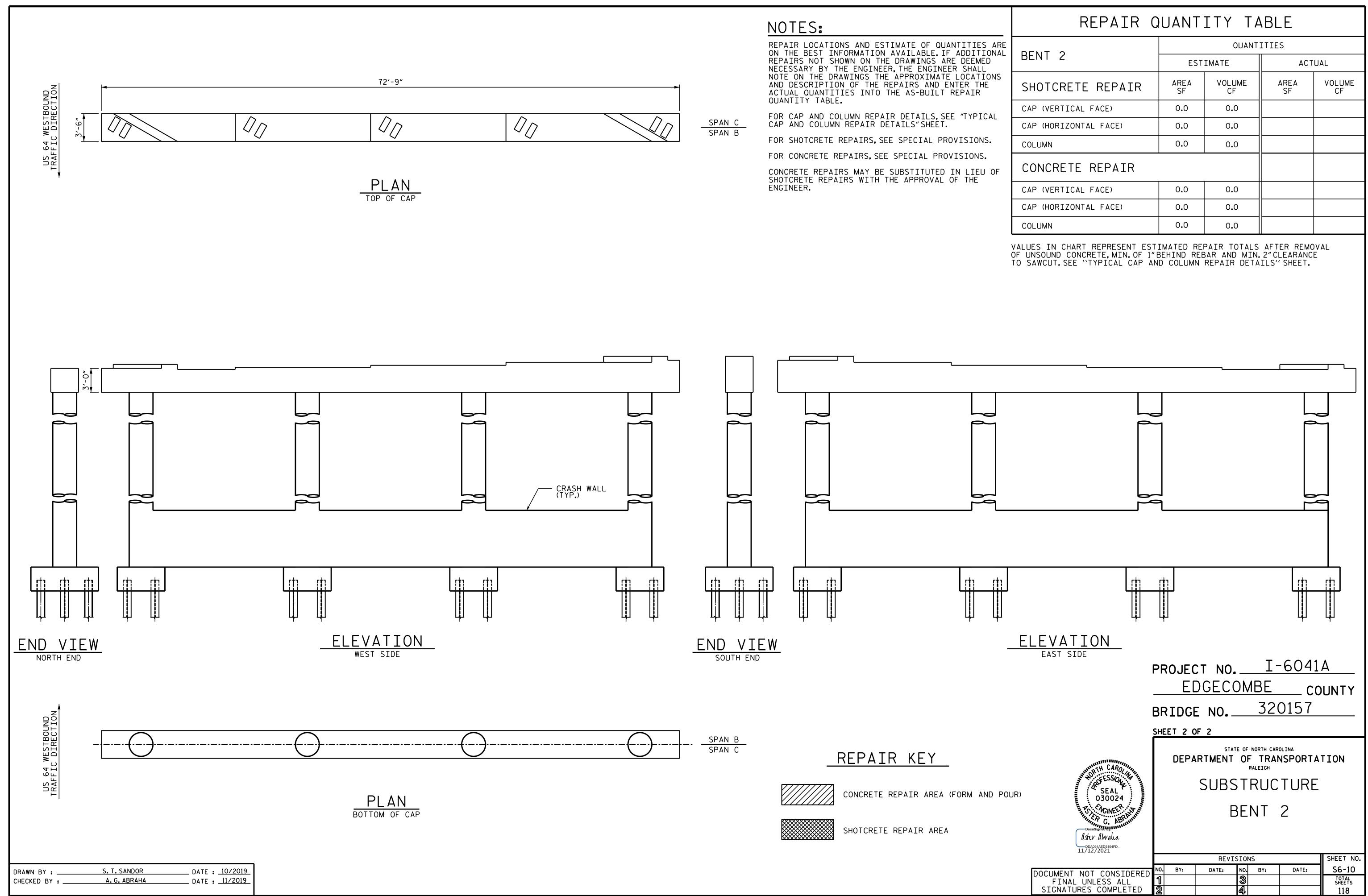
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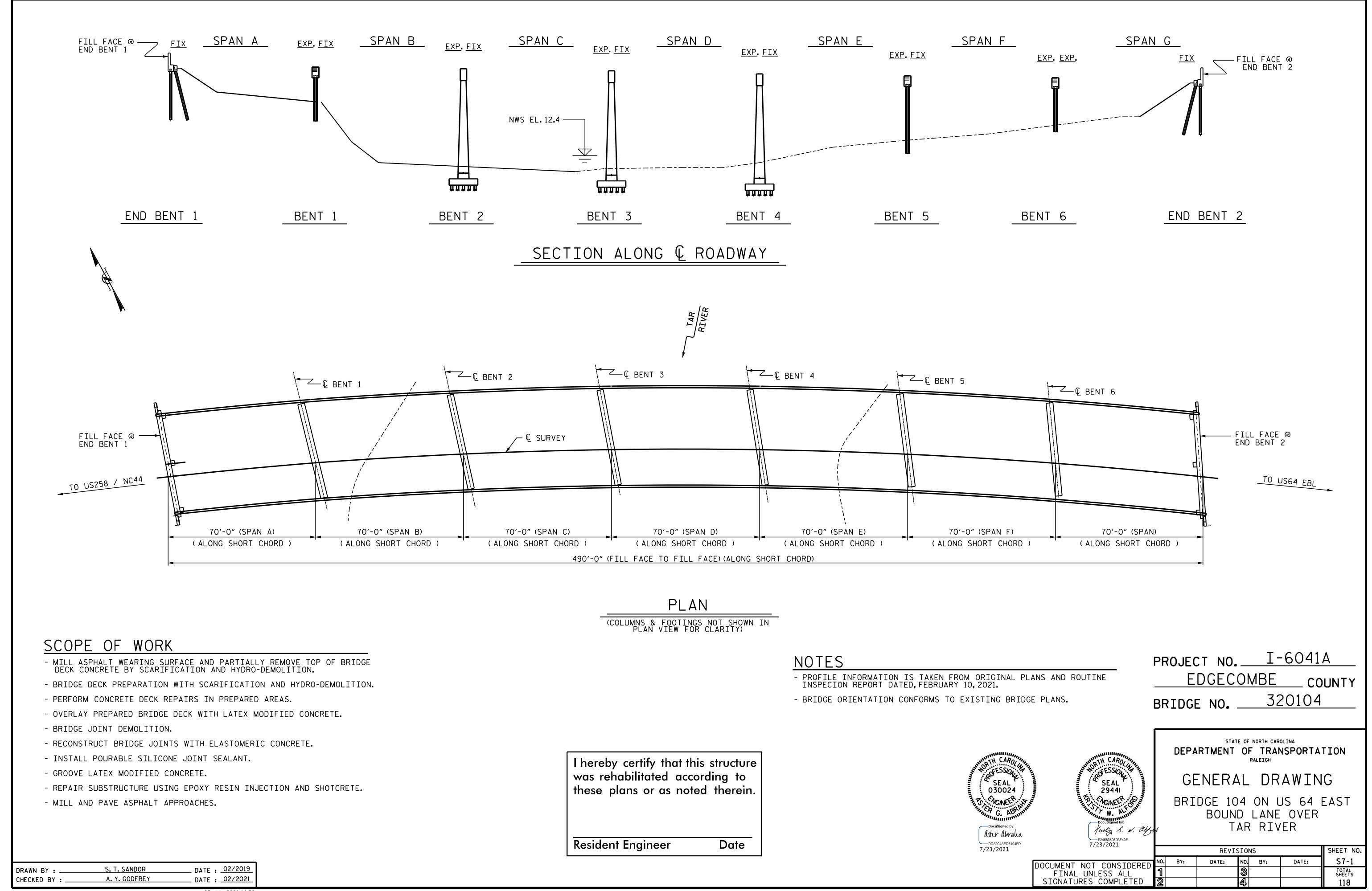


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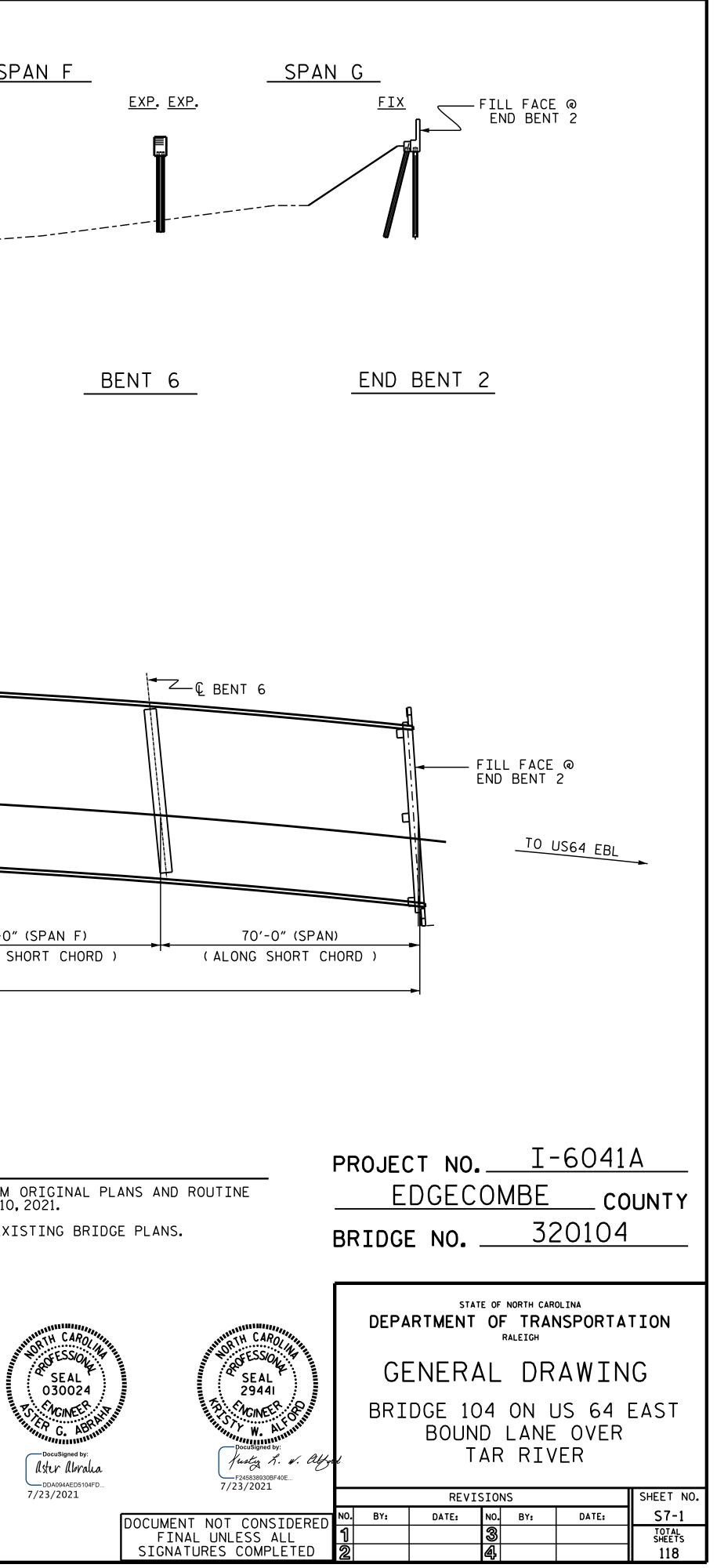
		NOTES:		REPAIR	QUANT	ITY TA	BLE	
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		REPAIRS NOT SHOWN ON THE NECESSARY BY THE ENGINEE NOTE ON THE DRAWINGS THE	F DRAWINGS ARE DEEMED	BENT 1	EST	TIMATE	ACT	UAL
		AND DESCRIPTION OF THE F ACTUAL QUANTITIES INTO	REPAIRS AND ENTER THE	SHOTCRETE REPAIR	AREA SF	VOLUME CF	AREA SF	VOLUME CF
		QUANTITY TABLE. For cap and column repa:	IR DETAILS.SEE "TYPICAL	CAP (VERTICAL FACE)	0.0	0.0		
\Box	SPAN B SPAN A	CAP AND COLUMN REPAIR DE	ETAILS" SHEET.	CAP (HORIZONTAL FACE)	0.0	0.0		
•		FOR CONCRETE REPAIRS, SE		COLUMN	0.0	0.0		
		CONCRETE REPAIRS MAY BE SHOTCRETE REPAIRS WITH T		CONCRETE REPAIR	1			
		ENGINEER.		CAP (VERTICAL FACE)	0.0	0.0		
				CAP (HORIZONTAL FACE)	2.1	1.1		
			l	COLUMN	0.0	0.0		
٦								
	END VI	EEW		ELEVATION				
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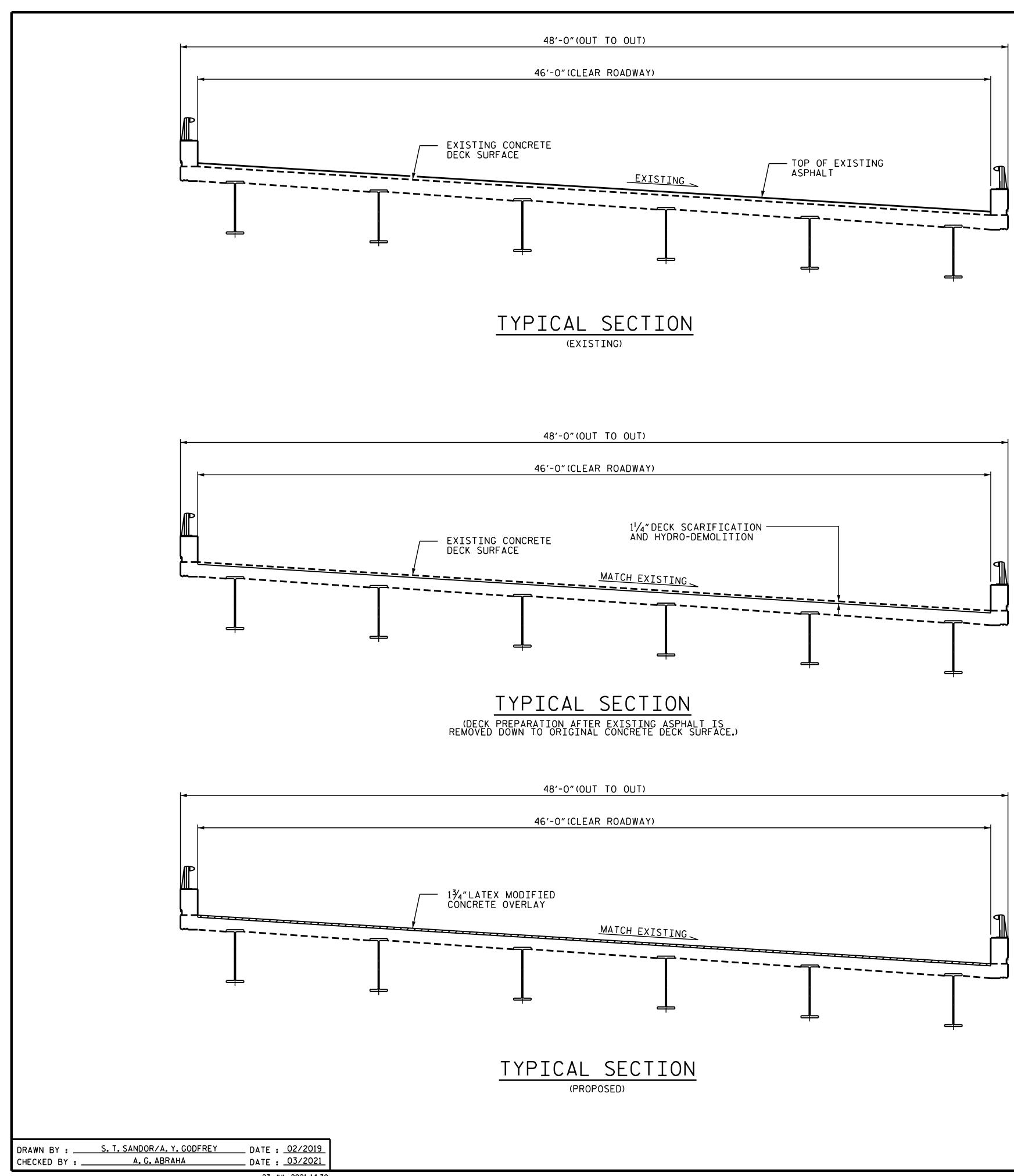


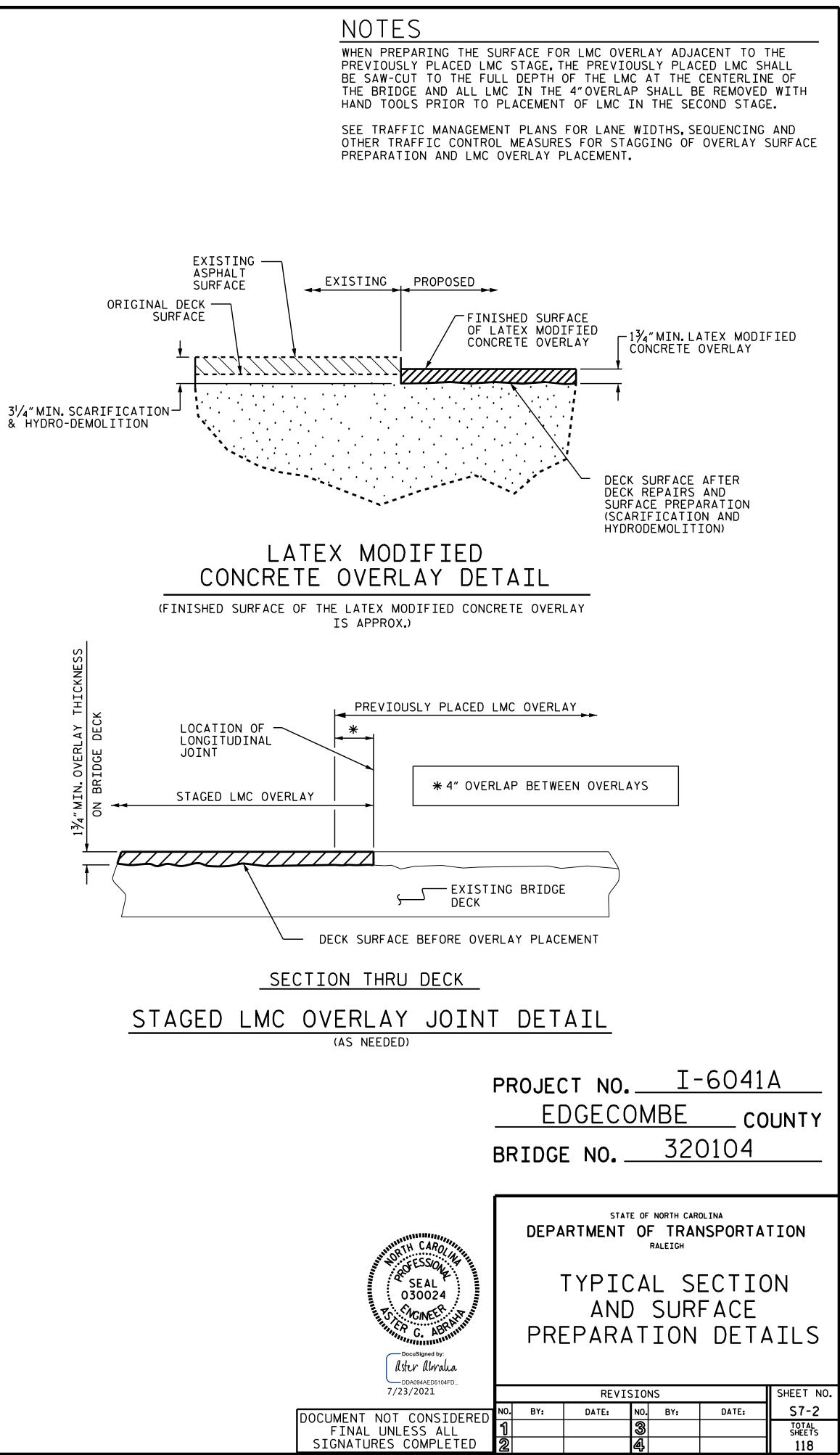
		NOTES:	
		REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE ON THE BEST INFORMATION AVAILABLE.IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL	BE
►		NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.	SH
		FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL	CAF
$\langle 1 \rangle \rangle \rangle \langle 1 \rangle \rangle \rangle \rangle \rangle \rangle \langle 1 \rangle \rangle \rangle \rangle \rangle $	PAN C	CAP AND COLUMN REPAIR DETAILS" SHEET.	CAF
		FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.	COL
		FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.	
		CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE	CC
		ENGINEER.	CAF
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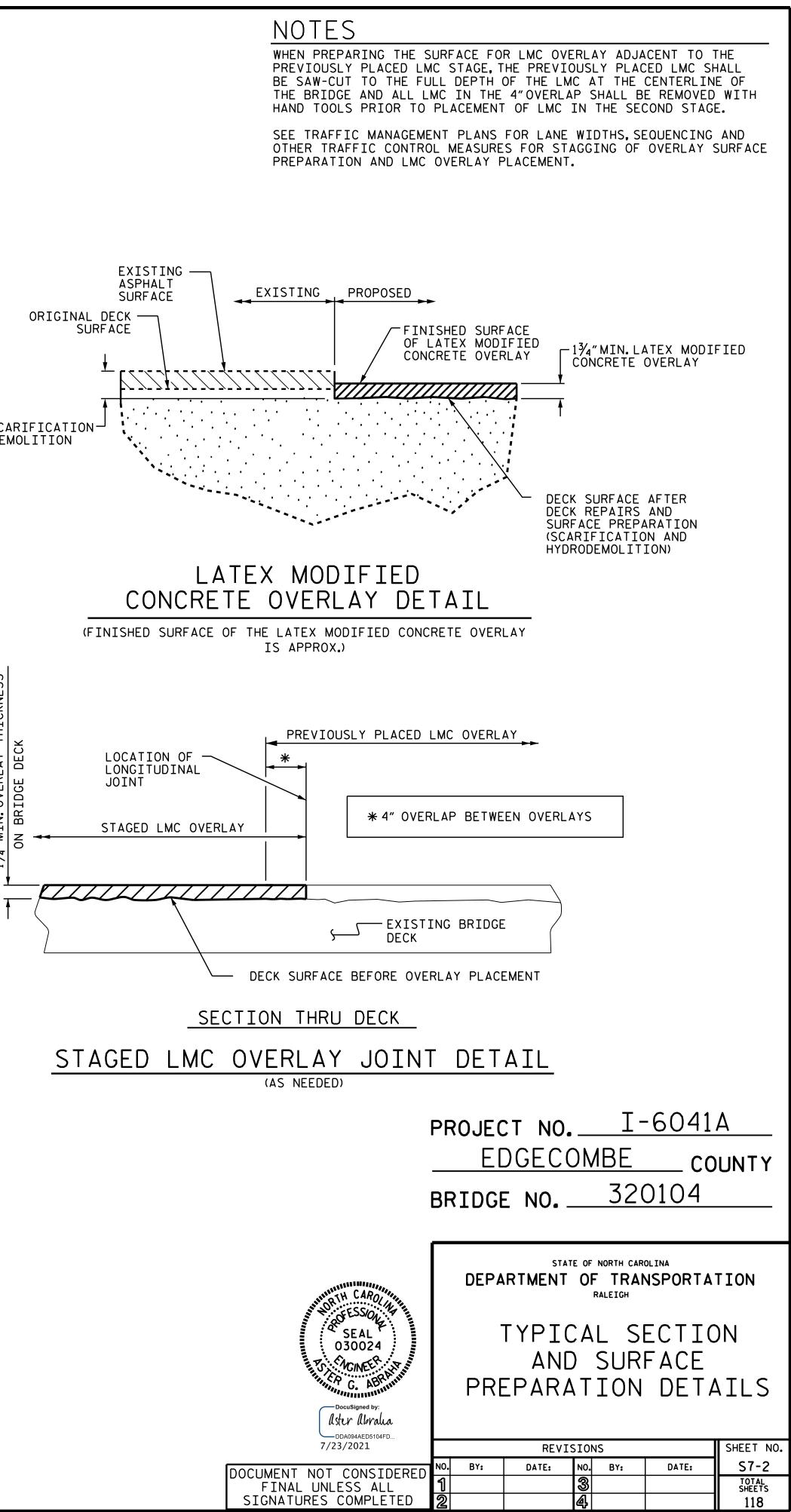


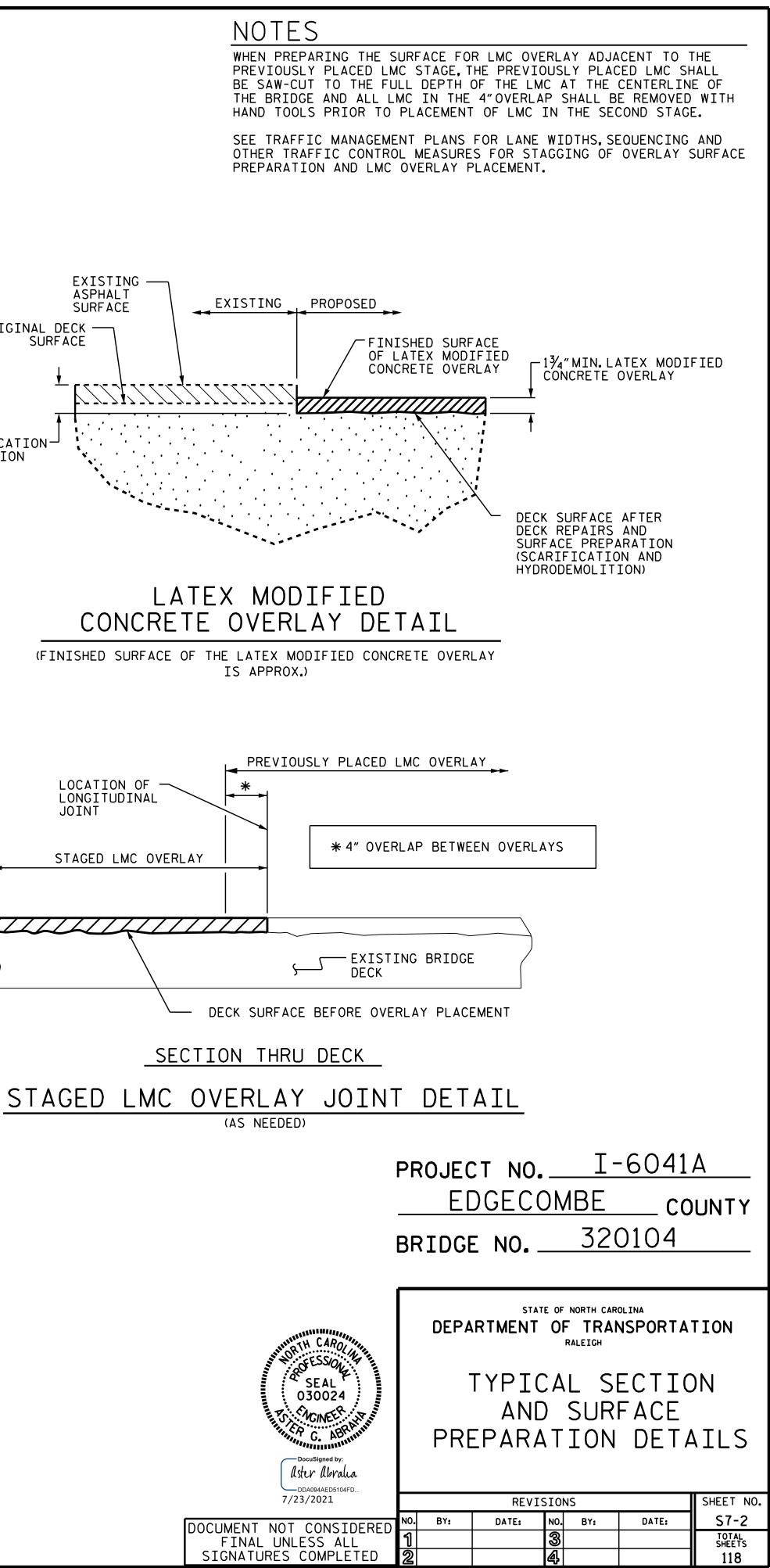
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CHECKED BY :	A.Y.GODFREY	DATE : <u>02/2021</u>

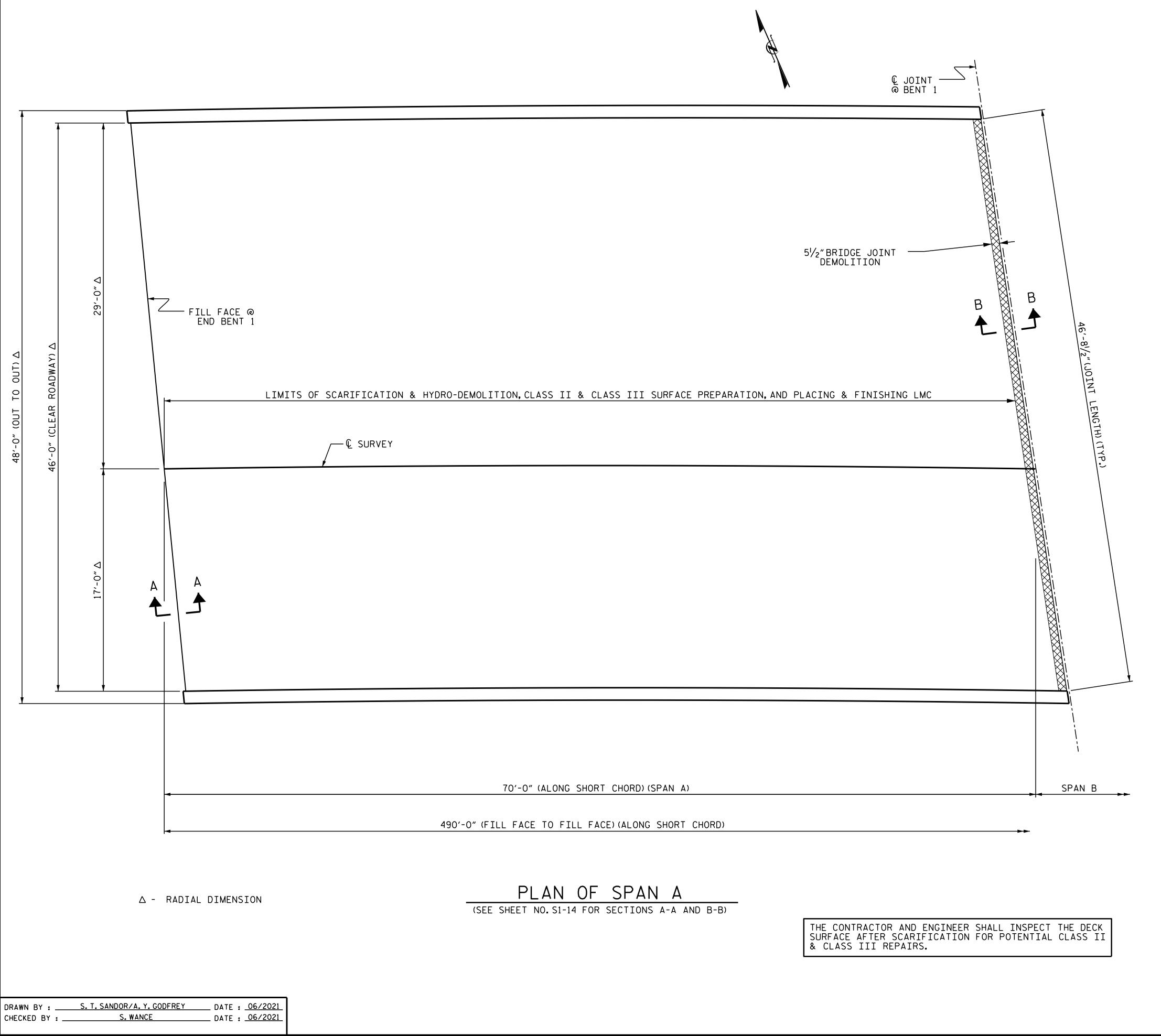












SUMMARY OF QUANTITIES FOR SPAN A

	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	355.2 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	355.2 SY	
CLASS II SURFACE PREPARATION	-	
CLASS III SURFACE PREPARATION	-	
LATEX MODIFIED CONCRETE OVERLAY	19.7 CY	
PLACING AND FINISHIING LATEX MODIFIED CONCRETE OVERLAY	355 . 2 SY	
GROOVING BRIDGE DECK	2,972.0 SF	
BRIDGE JOINT DEMOLITION	21.4 SF	

NOTES:

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FOR CONCRETE FOR DECK REPAIR, SEE SPECIAL PROVISIONS.

THE BOUNDARIES OF AREAS IDENTIFIED FOR CLASS II (PARTIAL DEPTH) SURFACE PREPARATION ARE APPROXIMATE AND MAY NOT REFLECT ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AT THE PROJECT SITE.

EXISTING JOINTS AND DECK DRAINS SHALL BE SEALED PRIOR TO BEGINNING SURFACE PREPARATION OF THE BRIDGE DECK.

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

FOR OVERLAY OF BRIDGE WITH LATEX MODIFIED CONCRETE, SEE SPECIAL PROVISIONS.

FOR LMC OVERLAY SURFACE PREPARATION, SEE SPECIAL PROVISIONS.

THE CONTRACTOR MUST COLLECT, TREAT AND DISPOSE OF RUN-OFF WATER FROM THE HYDRO-DEMOLITION PROCESS, SEE LMC OVERLAY SURFACE PREPARATION SPECIAL PROVISION.

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

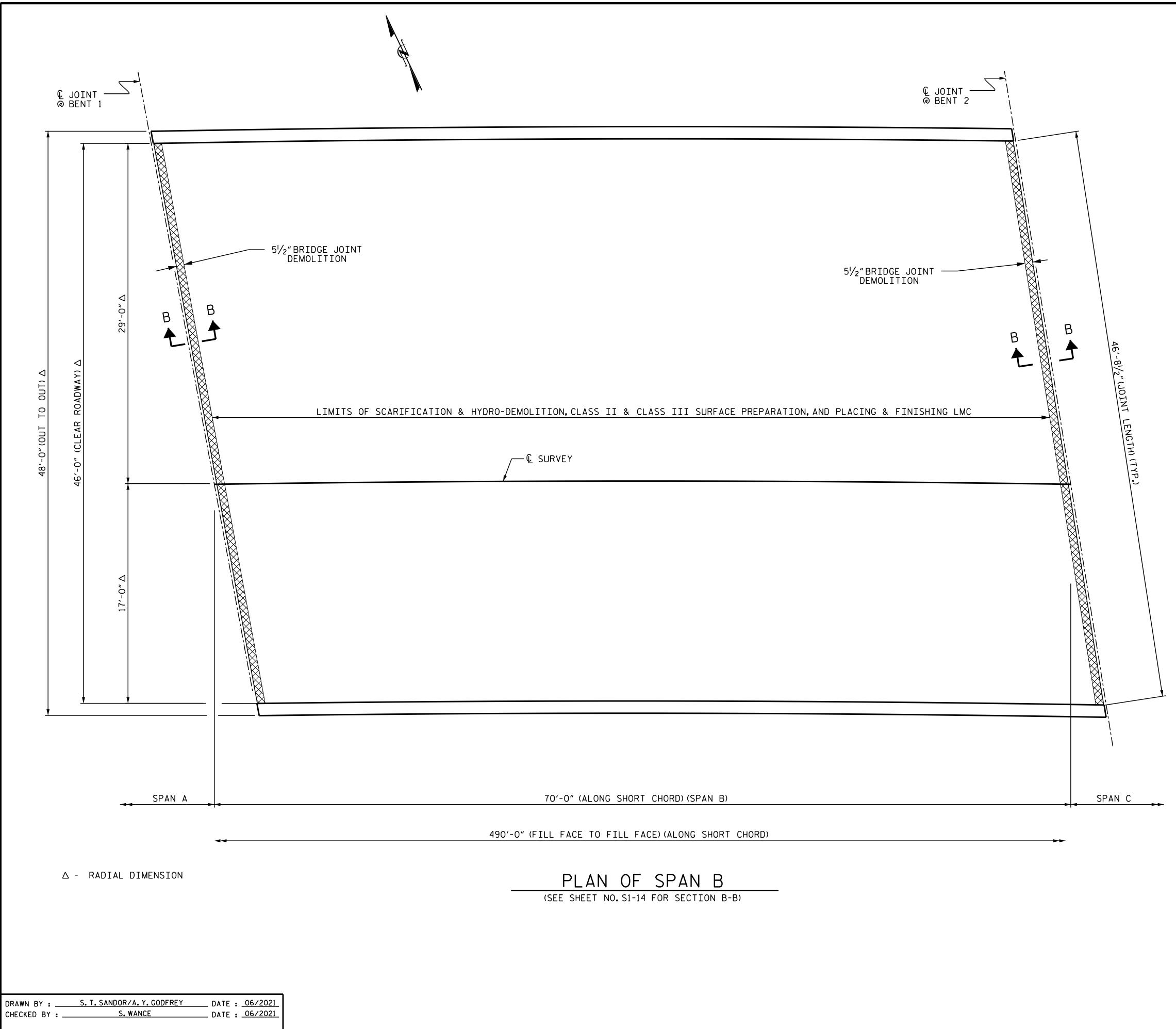
FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.



- APPROX.AREA CLASS II SURFACE PREPARATION



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FINAL UNLESS ALL SIGNATURES COMPLETED	1		3 4		total sheets 118

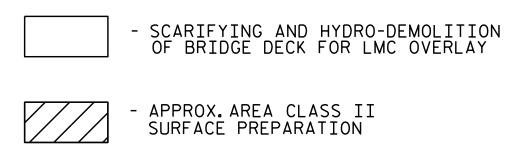


SUMMARY OF QUANTITIES FOR SPAN B

	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	352.6 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	352.6 SY	
CLASS II SURFACE PREPARATION	-	
CLASS III SURFACE PREPARATION	-	
LATEX MODIFIED CONCRETE OVERLAY	19.6 CY	
PLACING AND FINISHIING LATEX MODIFIED CONCRETE OVERLAY	352 . 6 SY	
GROOVING BRIDGE DECK	2,951.9 SF	
BRIDGE JOINT DEMOLITION	42.8 SF	

NOTES:

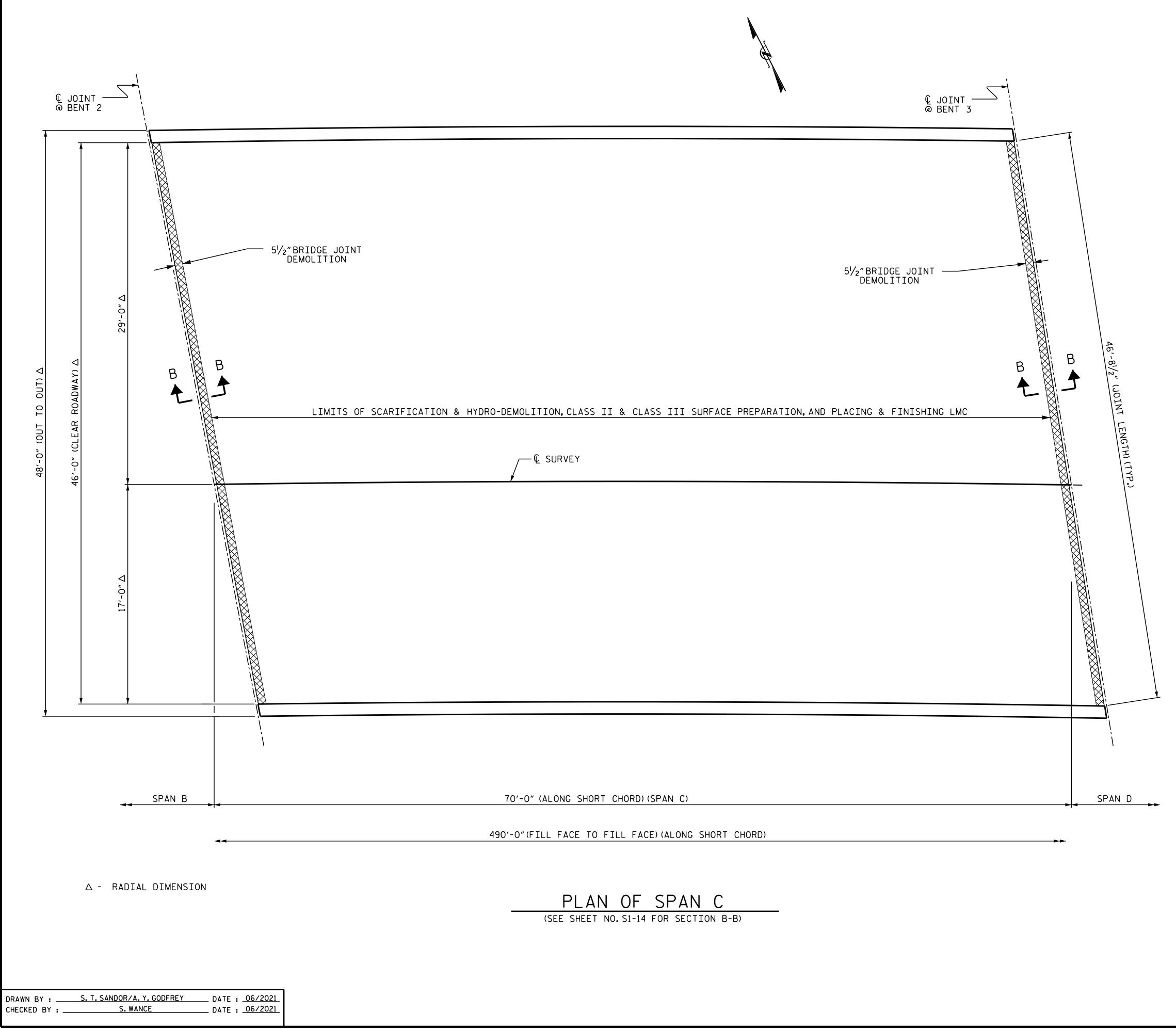
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED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



- BRIDGE JOINT DEMOLITION

THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SCARIFICATION FOR POTENTIAL CLASS II & CLASS III REPAIRS.

	E) <u>GEC(</u> E NO. _	<u>I-</u> DMBE 32(00	A UNTY	
TH CARO	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SEAL 030024	SUR		PREF SPAN	PARAT B	ION	
DocuSigned by: Aster Abraha DDA094AED5104FD 7/23/2021		05117				
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SIGNATURES COMPLETED	2		4		118	

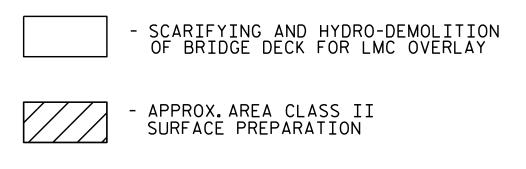


SUMMARY OF QUANTITIES FOR SPAN C

	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	352.6 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	352.6 SY	
CLASS II SURFACE PREPARATION	-	
CLASS III SURFACE PREPARATION	-	
LATEX MODIFIED CONCRETE OVERLAY	19.6 CY	
PLACING AND FINISHIING LATEX MODIFIED CONCRETE OVERLAY	352 . 6 SY	
GROOVING BRIDGE DECK	2,951.9 SF	
BRIDGE JOINT DEMOLITION	42.8 SF	

NOTES:

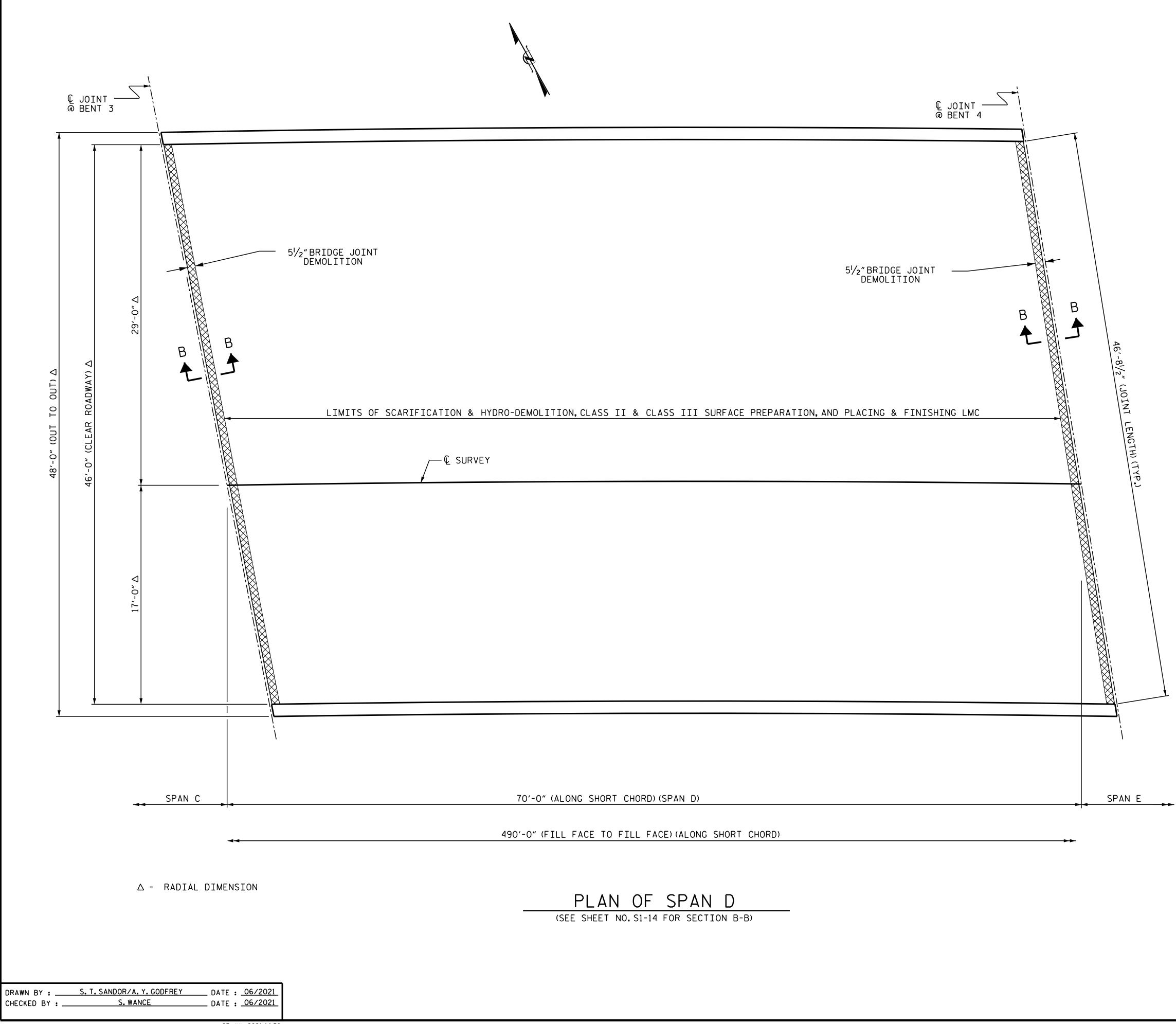
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED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



- BRIDGE JOINT DEMOLITION

THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SCARIFICATION FOR POTENTIAL CLASS II & CLASS III REPAIRS.

PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY BRIDGE NO. <u>320104</u> SHEET 3 OF 7						
SEAL O30024 Docusigned by:	SURFACE PREPARATION SURFACE PREPARATION SPAN					
Lster Abralia DDA094AED5104FD 7/23/2021		REVIS	STONS		SHEET NO.	
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FINAL UNLESS ALL	1		3		TOTAL SHEETS	
SIGNATURES COMPLETED	2		4		118	

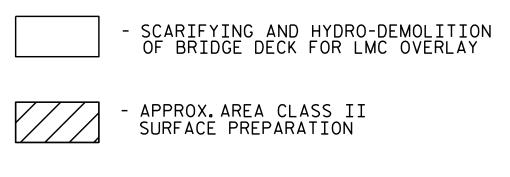


SUMMARY OF QUANTITIES FOR SPAN D

	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	352.6 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	352.6 SY	
CLASS II SURFACE PREPARATION	-	
CLASS III SURFACE PREPARATION	-	
LATEX MODIFIED CONCRETE OVERLAY	19.6 CY	
PLACING AND FINISHIING LATEX MODIFIED CONCRETE OVERLAY	352.6 SY	
GROOVING BRIDGE DECK	2,951.9 SF	
BRIDGE JOINT DEMOLITION	42.8 SF	

NOTES:

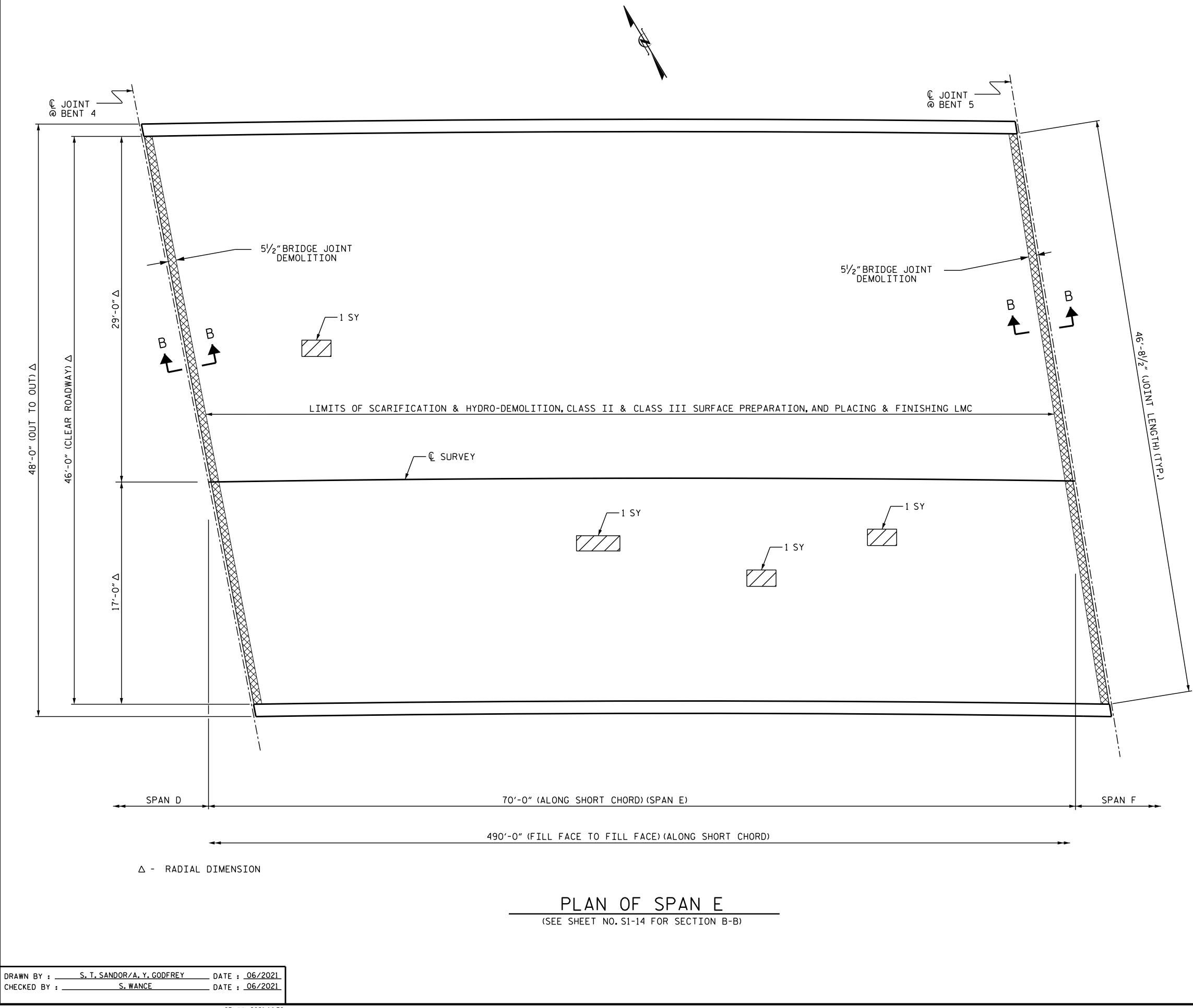
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED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



- BRIDGE JOINT DEMOLITION

THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SCARIFICATION FOR POTENTIAL CLASS II REPAIRS.

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OFESSION SEAL 030024	DEPA		E OF NORTH CAR OF TRAN RALEIGH		TION
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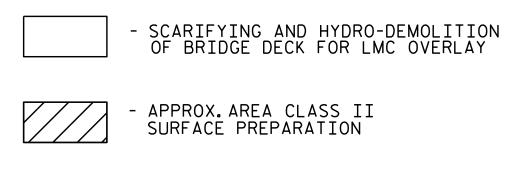


SUMMARY OF QUANTITIES FOR SPAN E

	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	352.6 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	352.6 SY	
CLASS II SURFACE PREPARATION	4.0 SY	
CLASS III SURFACE PREPARATION	-	
LATEX MODIFIED CONCRETE OVERLAY	19.6 CY	
PLACING AND FINISHIING LATEX MODIFIED CONCRETE OVERLAY	352 . 6 SY	
GROOVING BRIDGE DECK	2,951.9 SF	
BRIDGE JOINT DEMOLITION	42.8 SF	

NOTES:

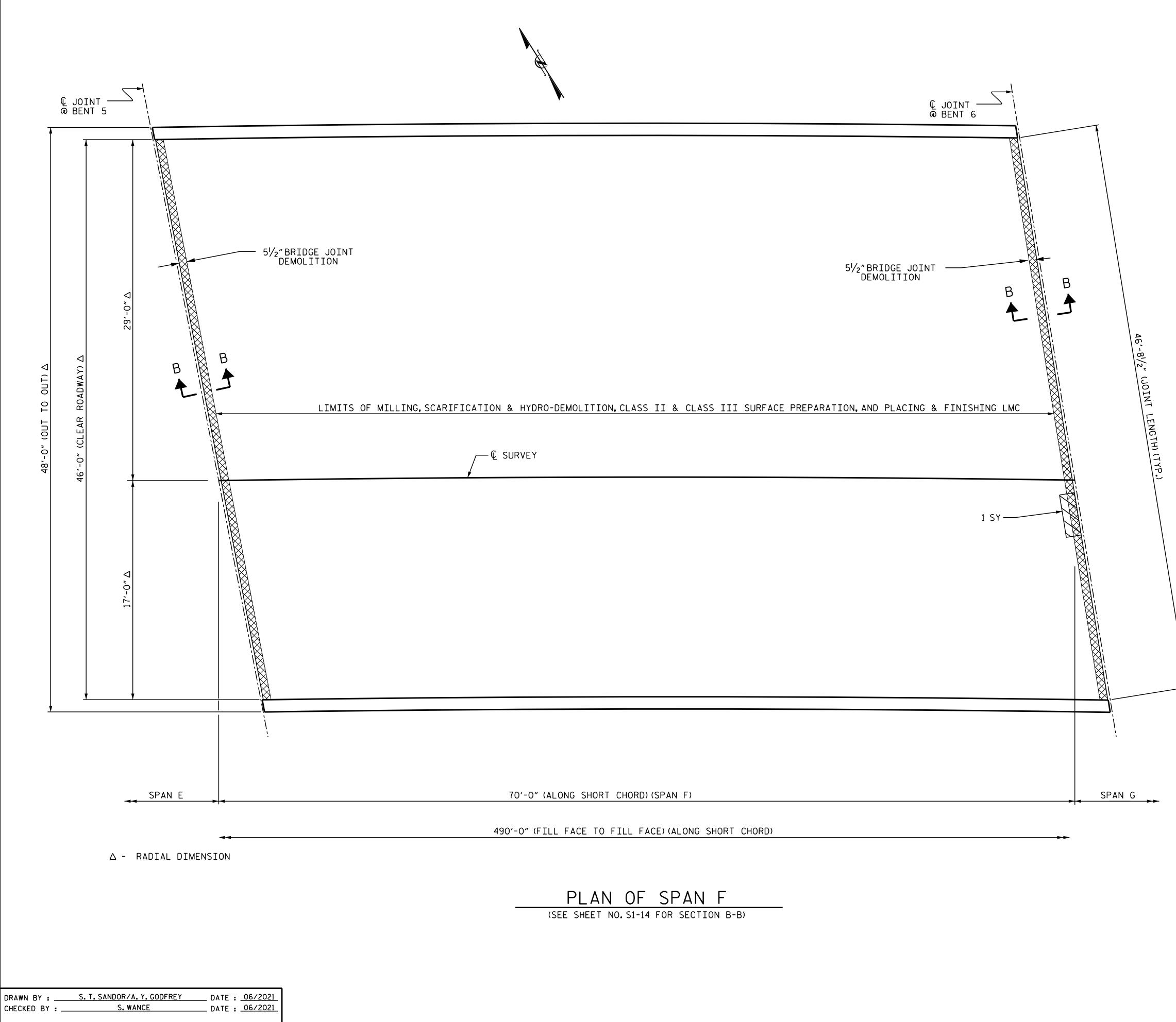
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED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



- BRIDGE JOINT DEMOLITION

THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SCARIFICATION FOR POTENTIAL CLASS II & CLASS III REPAIRS.

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OR ESSION AT THE ORDER OF THE O		RTMENT	RALEIGH	NSPORTA PARAT	
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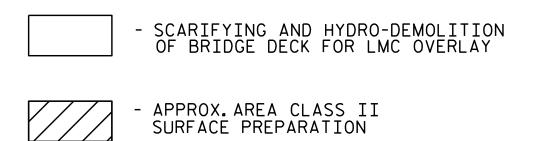


SUMMARY OF QUANTITIES FOR SPAN F

	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	352.6 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	352.6 SY	
CLASS II SURFACE PREPARATION	1.0 SY	
CLASS III SURFACE PREPARATION	-	
LATEX MODIFIED CONCRETE OVERLAY	19.6 CY	
PLACING AND FINISHIING LATEX MODIFIED CONCRETE OVERLAY	352.6 SY	
GROOVING BRIDGE DECK	2,951.9 SF	
BRIDGE JOINT DEMOLITION	42.8 SF	

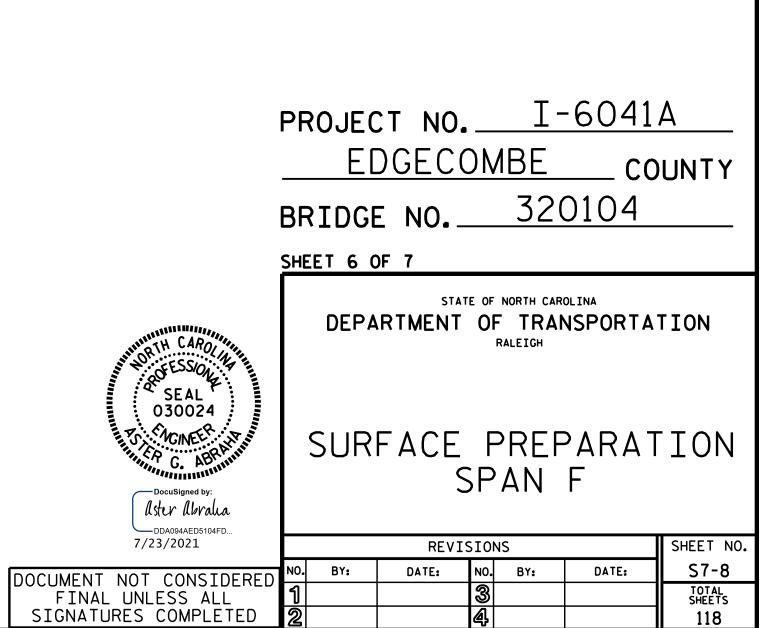
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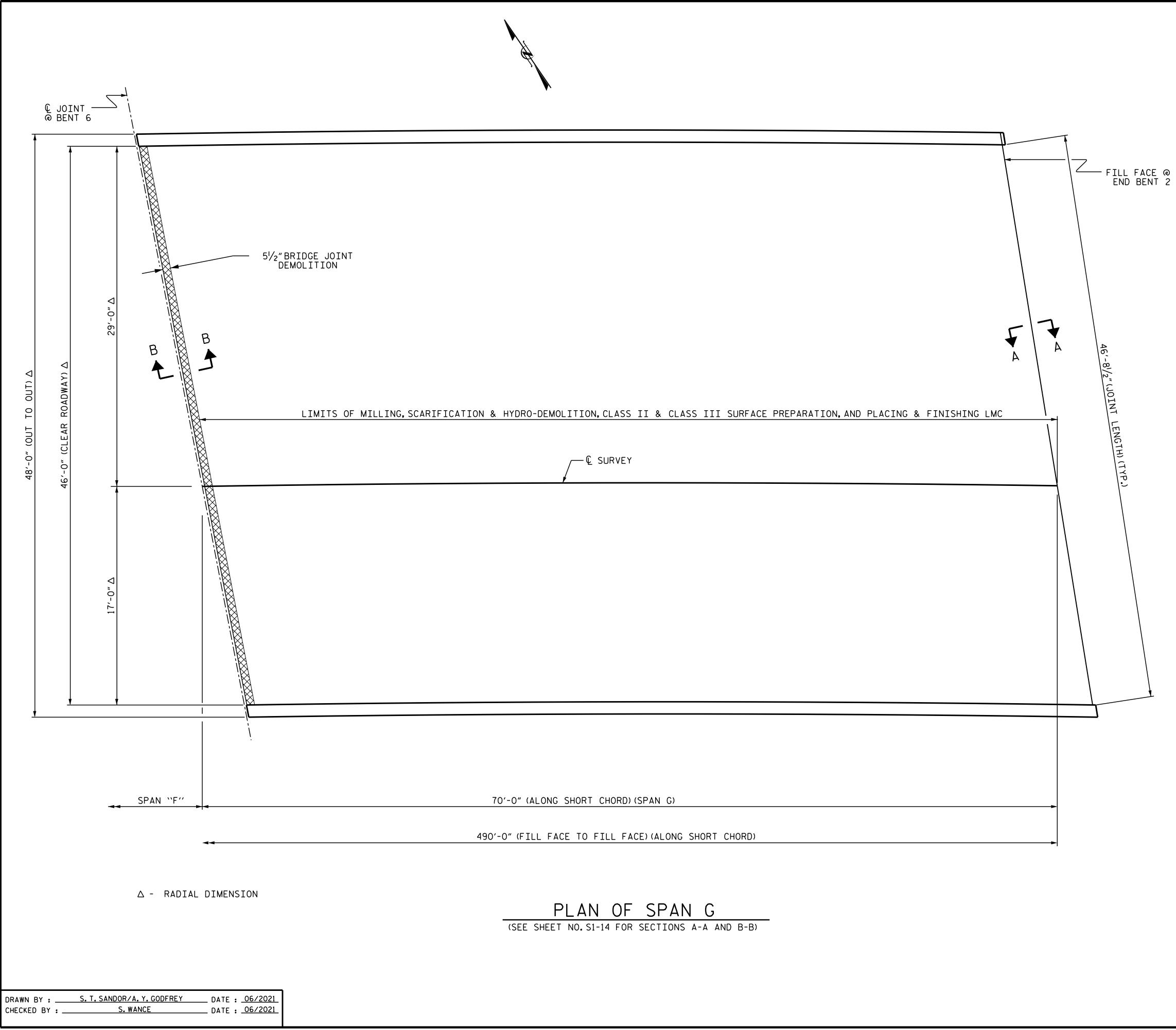
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THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SCARIFICATION FOR POTENTIAL CLASS II AND CLASS III REPAIRS.



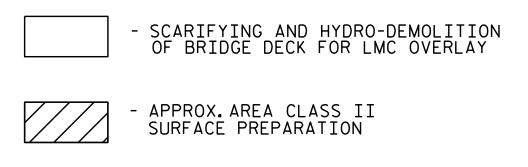


SUMMARY OF QUANTITIES FOR SPAN G

	ESTIMATE	ACTUAL
SCARIFYING BRIDGE DECK	355.2 SY	
HYDRO-DEMOLITION OF BRIDGE DECK	355.2 SY	
CLASS II SURFACE PREPARATION	-	
CLASS III SURFACE PREPARATION	-	
LATEX MODIFIED CONCRETE OVERLAY	19.7 CY	
PLACING AND FINISHIING LATEX MODIFIED CONCRETE OVERLAY	355 . 2 SY	
GROOVING BRIDGE DECK	2,972.0 SF	
BRIDGE JOINT DEMOLITION	21.4 SF	

NOTES:

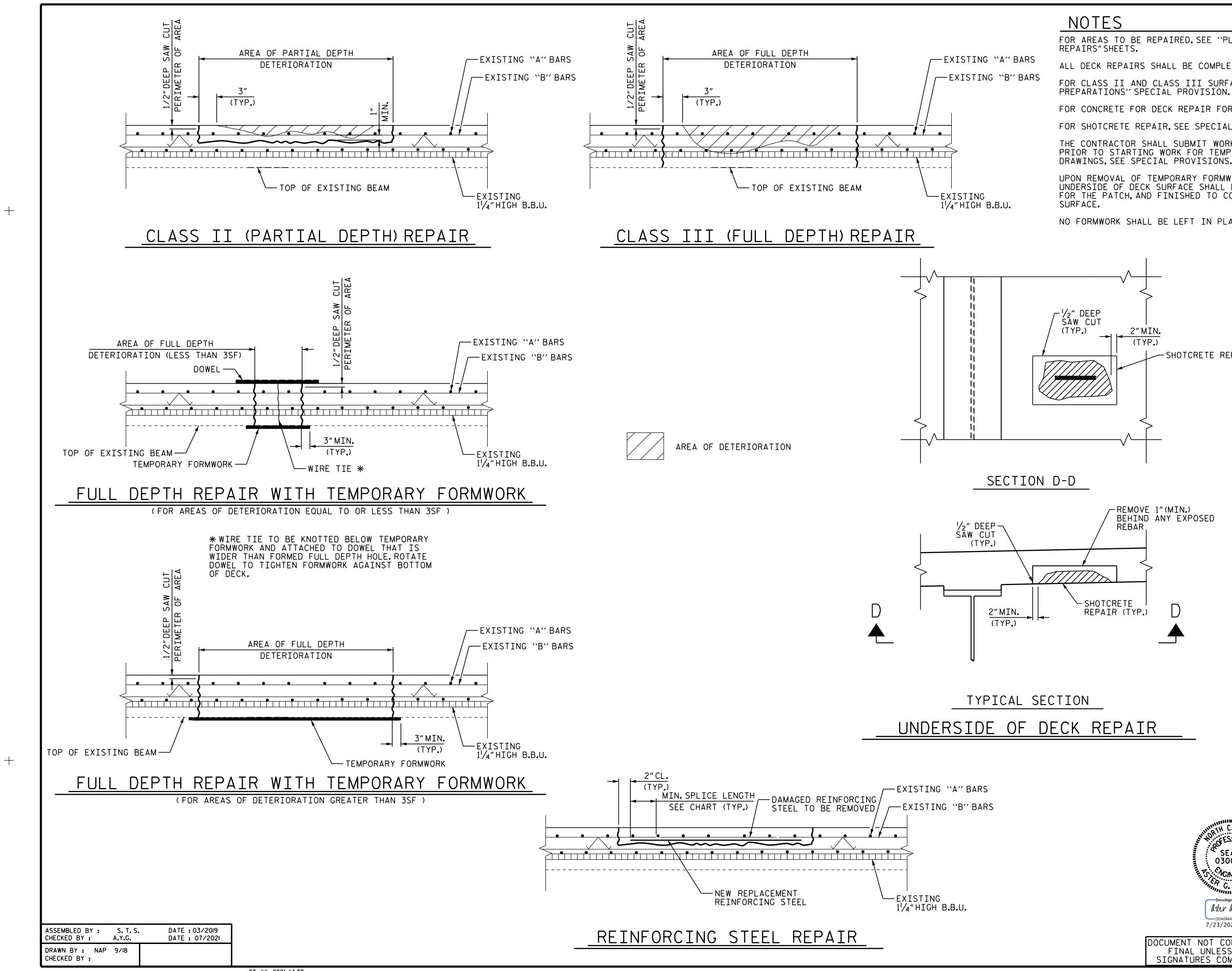
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- BRIDGE JOINT DEMOLITION

THE CONTRACTOR AND ENGINEER SHALL INSPECT THE DECK SURFACE AFTER SCARIFICATION FOR POTENTIAL CLASS II & CLASS III REPAIRS.

) <u>GECC</u> E NO. _)MBE	<u>-6041</u> co <u>0104</u>	A OUNTY
	DEPA			OLINA NSPORTA	TION
SEAL 030024 BCS/CREPRATING	SUR		PREF PAN	PARAT G	ION
Aster Abraha DDA094AED5104FD 7/23/2021		REVIS	TONS		SHEET NO.
	NO. BY:	DATE:	NO. BY:	DATE:	ST-9
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL	1		3		TOTAL SHEETS
SIGNATURES COMPLETED	2		4		118



FOR AREAS TO BE REPAIRED, SEE "PLAN OF SPAN" AND "SUPERSTRUCTURE CONCRETE ALL DECK REPAIRS SHALL BE COMPLETED PRIOR TO PLACEMENT OF OVERLAY. FOR CLASS II AND CLASS III SURFACE PREPARATION, SEE "OVERLAY SURFACE FOR CONCRETE FOR DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS. FOR SHOTCRETE REPAIR. SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING WORK FOR TEMPORARY FORMWORK.FOR SUBMITTALS OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

UPON REMOVAL OF TEMPORARY FORMWORK, ALL VOIDS AND HONEYCOMBS ON THE UNDERSIDE OF DECK SURFACE SHALL BE FILLED WITH THE SAME MATERIAL AS USED FOR THE PATCH, AND FINISHED TO CONFORM TO THE SURROUNDING CONCRETE

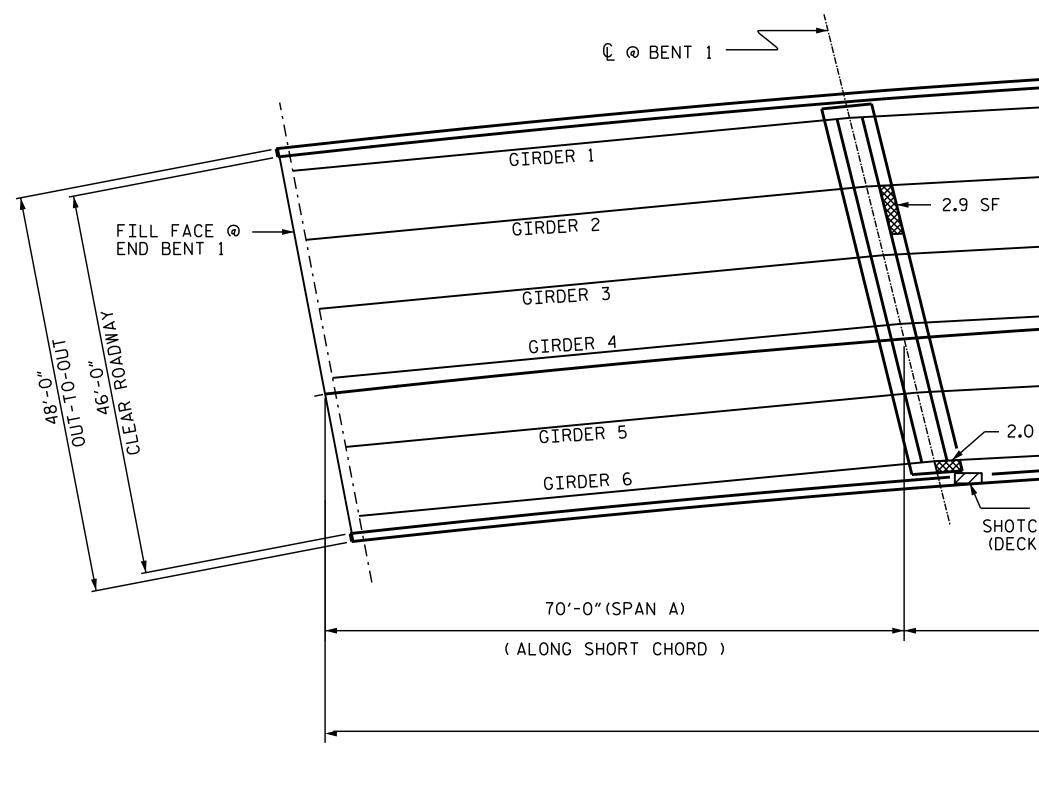
NO FORMWORK SHALL BE LEFT IN PLACE.

-REMOVE 1"(MIN.) BEHIND ANY EXPOSED

D

SUPERSTRUCTURE REINFORCING STEEL LENGTHS ARE BASED ON THE								
FOLL	FOLLOWING MINIMUM SPLICE LENGTHS							
BAR SLABS, PARAPET, SIZE AND BARRIER RAIL								
	EPOXY COATED	UNCOATED	EPOXY COATED	UNCOATED	RAIL			
* 4	2'-0"	1'-9″	2'-0"	1'-9″	2'-9"			
# 5	2'-6"	2'-2"	2'-6″	2'-2"	3′-5″			
# 6	3'-0″	2'-7″	3'-10"	2'-7″	4'-4"			
# 7	5'-3″	3′-6″						
# 8	6'-10"	4'-7″						

<u> </u>	NO EDGE GES NO	COMB	E		_COUN	TIES
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7/23/2021	REVISIONS SHEET NO.					
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DRAWN BY : _	A. Y. GODFREY	DATE : 06/2021
CHECKED BY :	A.G.ABRAHA/S.WANCE	DATE : <u>07/2021</u>

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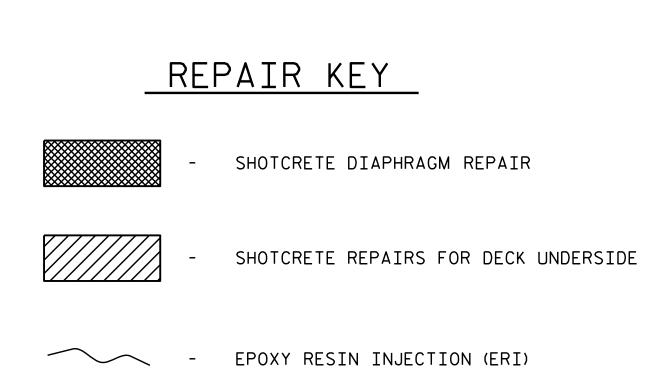
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FOR OVERHANG AND DIAPHRAGM REPAIR DETAILS, SEE "OVERHANG & DIAPHRAGM REPAIR DETAILS" SHEET.
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.
FOR EPOXY RESIN INJECTION. SEE SPECIAL PROVISIONS.

		MATCHLINE ————>
€ @ BENT 2	Q @ BENT 3	- 1.1 SF
GIRDER 1	GIRDER 1	GIRDER 1
GIRDER 2	GIRDER 2 1.2 SF	
GIRDER 3	← 1.0 SF GIRDER 3 3.5 SF → GIRDER 4	GIRDER 3 - 2.7 SF GIRDER 4
GIRDER 4 Q SURVEY 2.4 SF	END 3.5 SF-	
GIRDER 5 4.6 SF	GIRDER 5 3.4 SF GIRDER 6 6.0 LF ER	3.4 SF
1.0 SF CRETE REPAIR CRETE REPAIR (DECK UNDERSIDE)	1.3 SF	4.5 SF
(UNDERSIDE) 70'-0"(SPAN B)	70'-0"(SPAN C)	70'-0" (SPAN D)
(ALONG SHORT CHORD)	<pre>(ALONG SHORT CHORD)</pre>	<pre>(ALONG SHORT CHORD)</pre>

490'-0"(FILL FACE TO FILL FACE)(ALONG SHORT ARC)

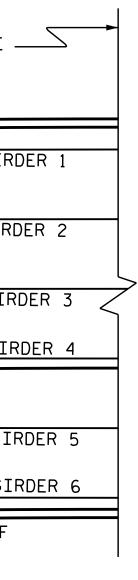
OVERHANG AND DIAPHRAGM REPAIR LOCATIONS

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



REPAIR QUANTITY TABLE					
UNDERSIDE OF DECK	QUANTITIES				
UNDERSIDE OF DECK	ESTIMATE		ACTUAL		
SHOTCRETE REPAIRS	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.	
UNDERSIDE OF DECK & OVERHANG	10.9	3.7			
BENT DIAPHRAGMS	38.0	12.7			
EPOXY RESIN INJECTION		L.F.		L.F.	
BENT DIAPHRAGMS		6.0			

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



PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY BRIDGE NO. <u>320104</u> SHEET 1 OF 2					
TH CAROLAN	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH				
SEAL O30024 DocuMagagedebass	SUPERSTRUCTURE CONCRETE REPAIRS				
DDA094AED5104FD 11/12/2021					
					SHEET NO. S7-11
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SIGNATURES COMPLETED	2		4 4		118

DRAWN BY : CHECKED BY :	A.Y.GODFREY A.G.ABRAHA/S.WANCE	DATE : <u>06/2021</u> DATE : <u>07/2021</u>		
		06/2021		
				OVERHANG
		70'-0"(SPAN D) (ALONG SHORT CHORD)	-▶ ◄	70'-0" (SPAN E) (ALONG SHORT CHO
			1.3 SF	
		GIRDER 5 GIRDER 6	4.1 SF	GIRDER 5 GIRDER 6
		3.5 SF →	4.1 SF	GIRDER 3 GIRDER 4
		GIRDER 2 GIRDER 3	BENT DIA (TYP.)	

1.8 SF —

GIRDER 1

— € @ BENT 4

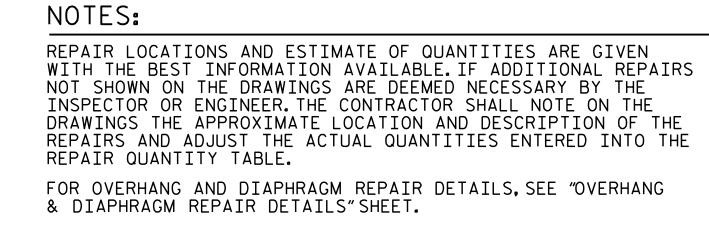
— 1.0 SF

GIRDER 1

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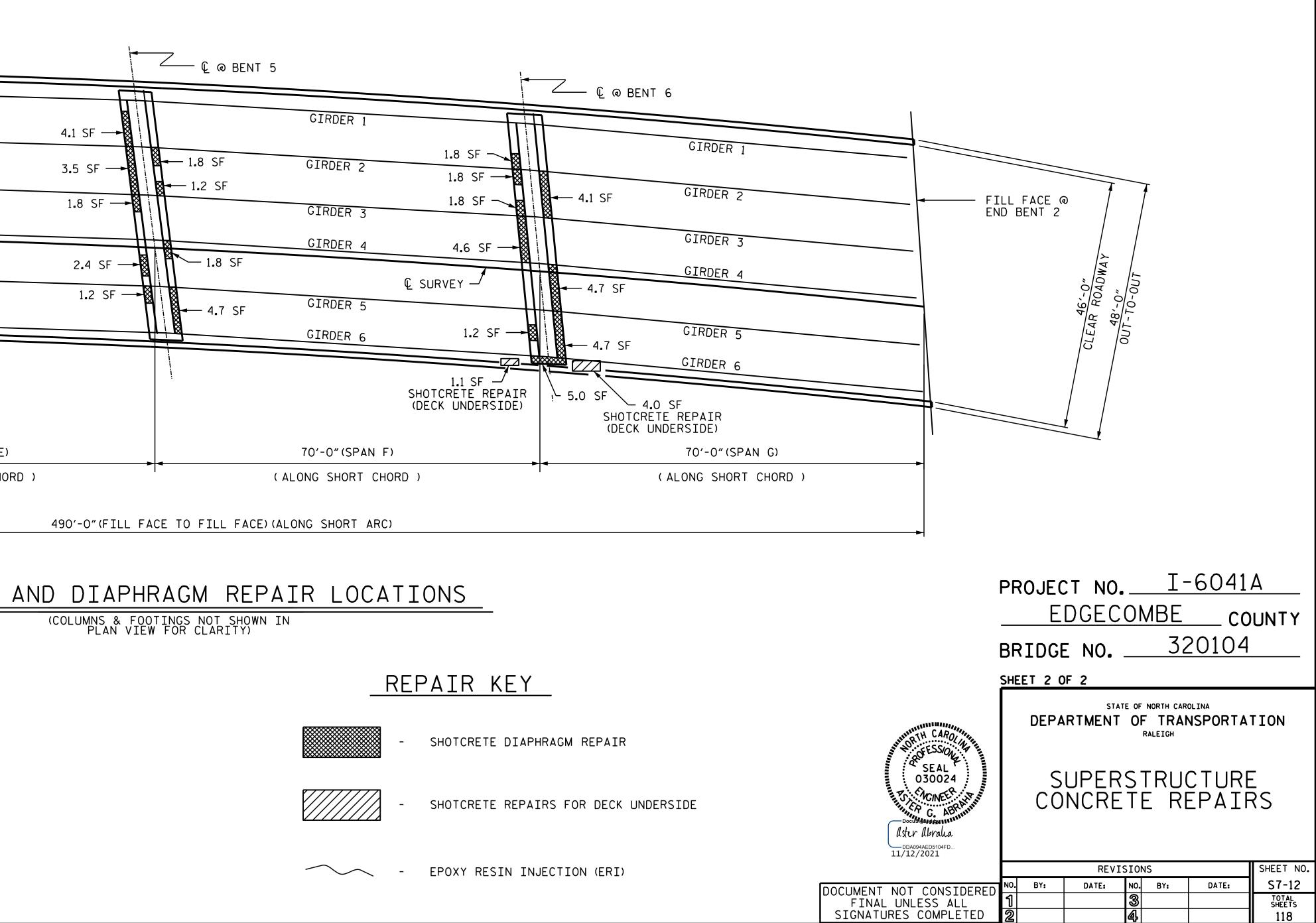
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MATCHLINE



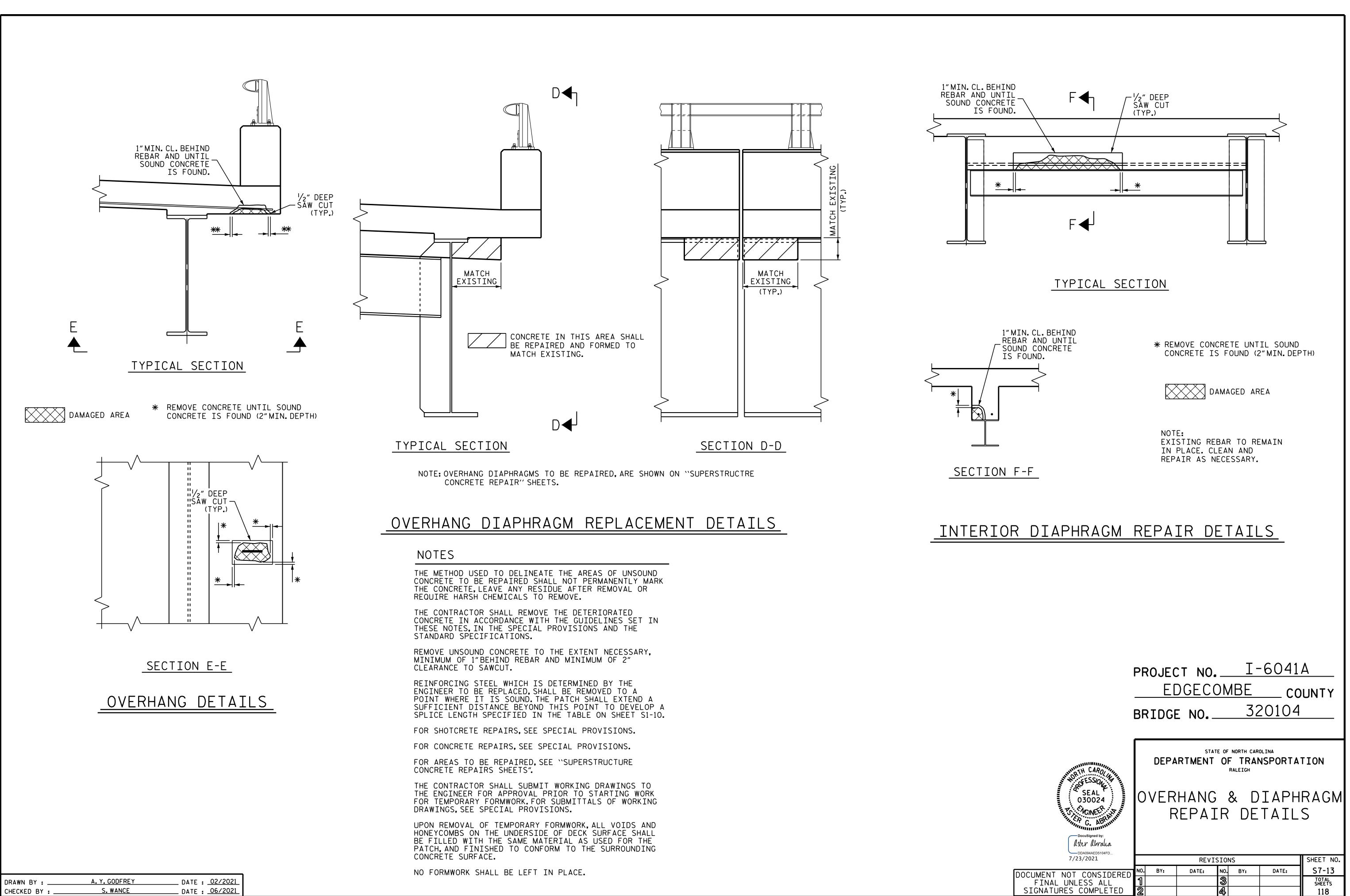
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

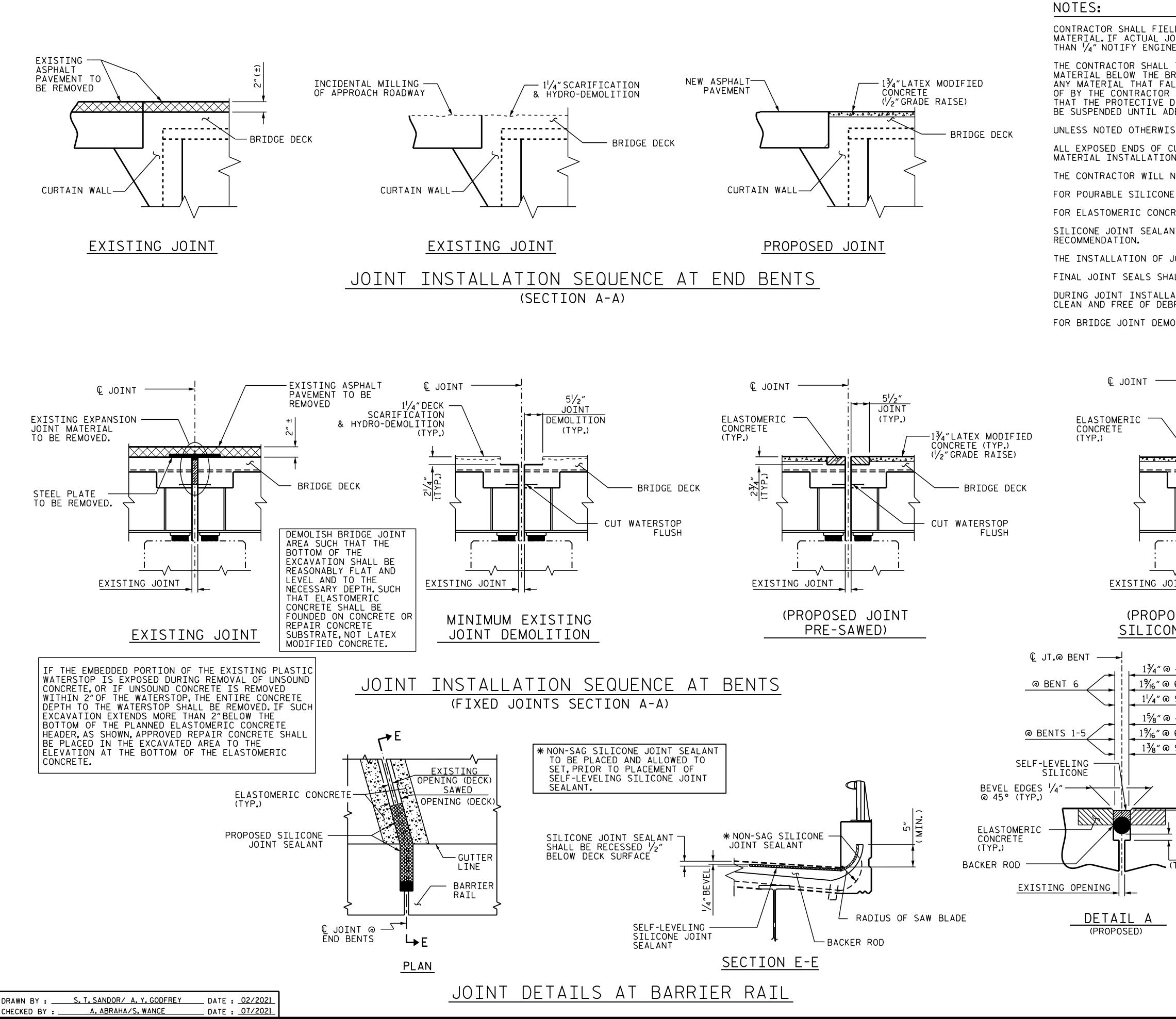
FOR EPOXY RESIN INJECTION, SEE SPECIAL PROVISIONS.



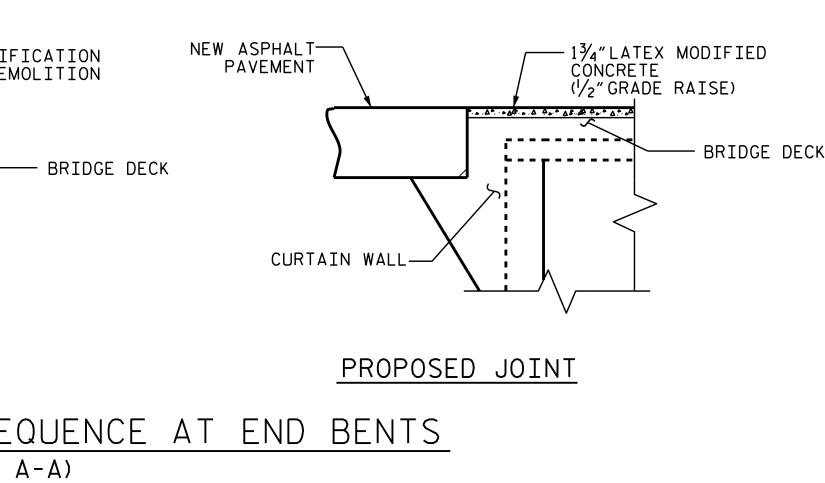
REPAIR QUANTITY TABLE						
UNDERSIDE OF DECK	QUANTITIES					
UNDERSIDE OF DECK	ESTIMATE		ACTUAL			
SHOTCRETE REPAIRS	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.		
UNDERSIDE OF DECK & OVERHANG	13.2	4.4				
BENT DIAPHRAGMS	59.9	19.9				
EPOXY RESIN INJECTION		L.F.		C.F.		
BENT DIAPHRAGMS		0.0				

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





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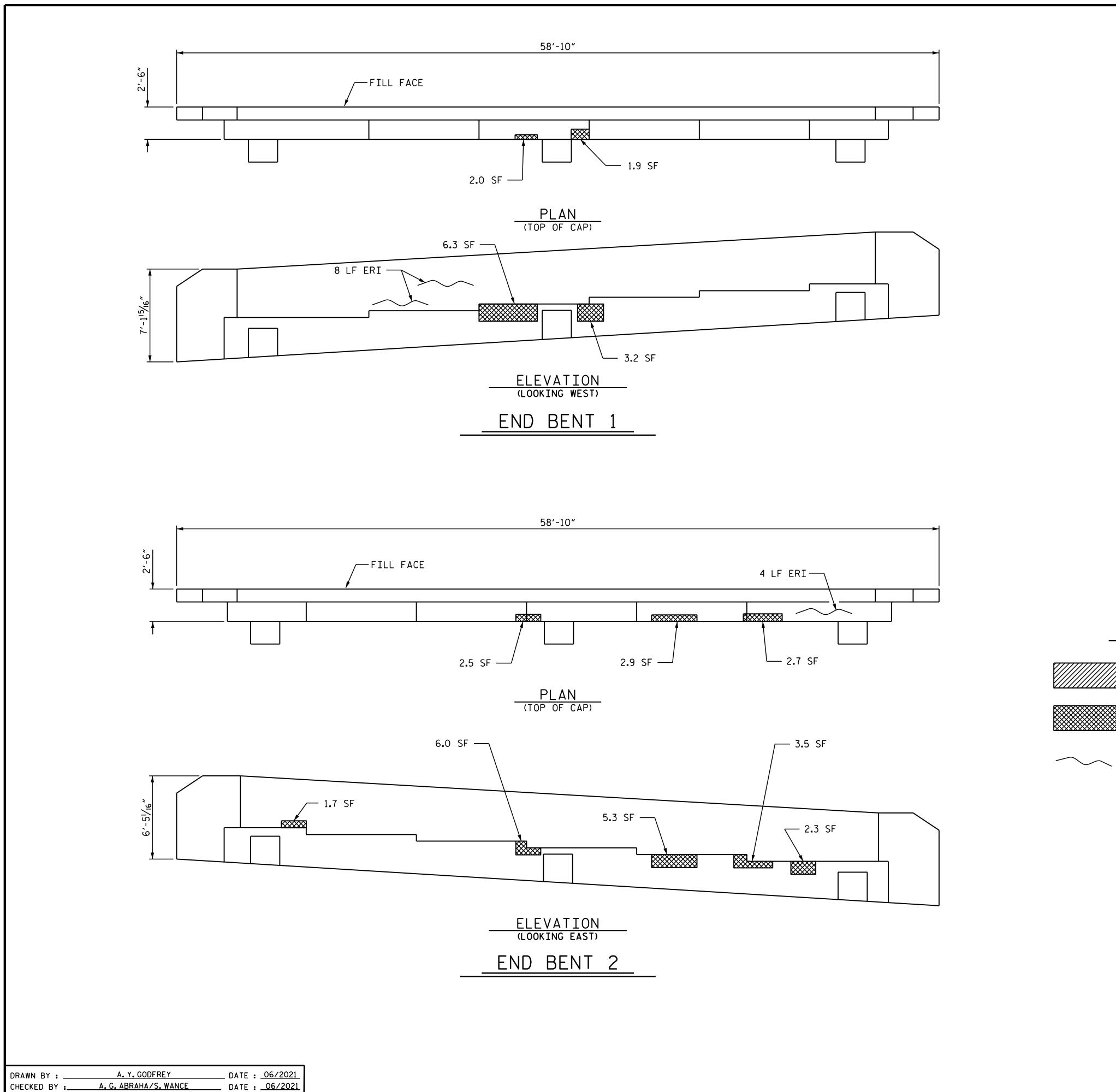
- SEE DETAIL A -1¾″LATEX MODIFIED CONCRETE (TYP.) BRIDGE DECK EXISTING JOINT SUMMARY OF QUANTITIES (PROPOSED POURABLE ACTUAL ESTIMATE SILICONE JOINT SEAL ELASTOMERIC CONCRETE FOR 58.9 CF PRESERVATION 1³⁄4″@ 45° POURABLE SILICONE 280.3 LF JOINT SEALANT 1⁹/16"@ 60° 1¹/4″@ 90° 15⁄8″@ 45° 1%₁₆″@ 60° 1³⁄8″@ 90° I-6041A PROJECT NO._ EDGECOMBE COUNTY 320104 BRIDGE NO. STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION TYP RALEIGH H CARO * OFESSION . SUPERSTRUCTURE ኛ SEAL 030024 3, ACINEER JOINT REPAIR DETAILS Aster Abraha DDA094AED5104FD.. 11/12/2021 SHEET NO. REVISIONS S7-14 DATE: DATE: IO. BY: BY: DOCUMENT NOT CONSIDERED TOTAL SHEETS FINAL UNLESS ALL

CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED. THE WORK SHALL

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. 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 BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED. UNLESS NOTED OTHERWISE RETAIN ALL EXISTING REINFORCING STEEL.CLEAN AND REPAIR AS NEEDED. ALL EXPOSED ENDS OF CUT BARS SHALL BE COATED WITH EPOXY PRIOR TO THE NEW JOINT MATERIAL INSTALLATION. THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT. FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS. FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS. SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT. FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY IS COMPLETE. DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND FREE OF DEBRIS. FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

SIGNATURES COMPLETED

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FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS. FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS. CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.

REPAIR KEY

CONCRETE REPAIR AREA (FORM AND POUR)

SHOTCRETE REPAIR AREA

EPOXY RESIN INJECTION (ERI)

REPAIR QUANTITY TABLE					
REPAIRS		QUANT	ITIES		
END BENT 1 & 2	ESTI	MATE	ACT	UAL	
SHOTCRETE REPAIRS	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.	
CAP (VERTICAL FACE)	4.0	2.0			
CAP (HORIZONTAL, CORNER)	36.3	18.2			
COLUMN	0.0	0.0			
CONCRETE REPAIRS	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.	
CAP (VERTICAL FACE)	0.0	0.0			
CAP (HORIZONTAL, CORNER)	0.0	0.0			
COLUMN	0.0	0.0			
EPOXY RESIN INJECTI	ON	L.F.		L.F.	
CAP		12.0			
COLUMN		0.0			

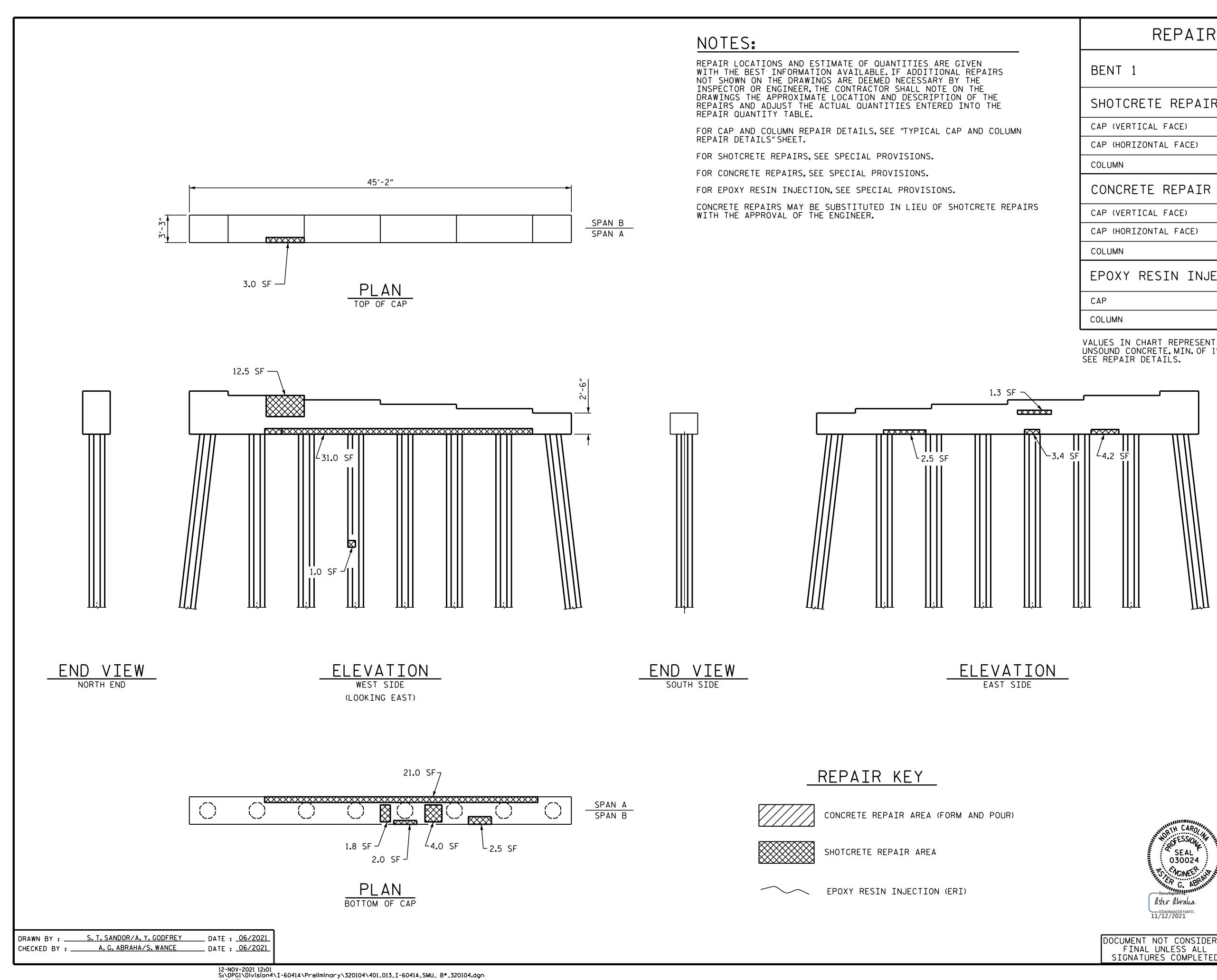
VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF UNSOUND CONCRETE, MIN. OF 1"BEHIND REBAR AND MIN. 2"CL TO SAWCUT. SEE REPAIR DETAILS.

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 LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

		DGECC	<u>MBE</u>		A UNTY
SEAL 030024 BCCUSigned by: USTUR ALVALLA DDA094AED5104FD.	DEPA	SUBS R END	RALEIGH	NSPORTA TURE R 1 &	TION
7/23/2021					SHEET NO.
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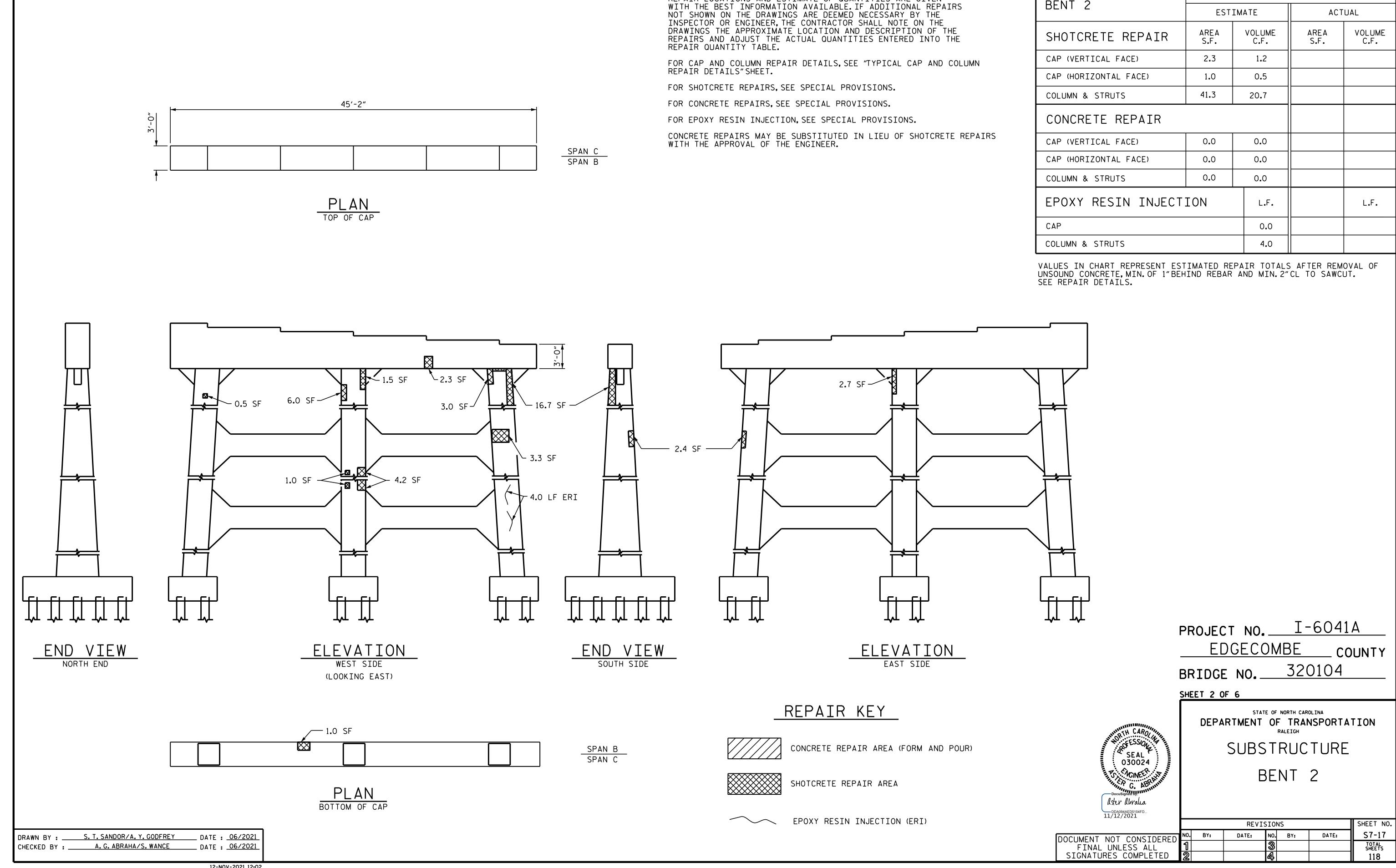
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aabraha

REPAIR QUANTITY TABLE				
		QUANT	ITIES	
BENT 1	EST	ΙΜΑΤΕ	ACT	UAL
HOTCRETE REPAIR	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.
AP (VERTICAL FACE)	54.9	27.5		
AP (HORIZONTAL FACE)	34.3	17.2		
OLUMN	1.0	0.5		
CONCRETE REPAIR				
AP (VERTICAL FACE)	0.0	0.0		
AP (HORIZONTAL FACE)	0.0	0.0		
OLUMN	0.0	0.0		
POXY RESIN INJECT	ION	L.F.		L.F.
AP		0.0		
OLUMN		0.0		
		•	••	

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

	PROJEC			Т-	6041	۸
	<u>EDGECOMBE</u> COUNTY BRIDGE NO. <u>320104</u>					
	BRIDGE	<u>NU.</u>		520		
	SHEET 1 OF	6				
TH CARO,	DEPA		OF	NORTH CARC TRAN RALEIGH	NSPORTA	TION
SEAL 030024		SUBS	T	RUC	TURE	
THE C. ABRINN	BENT 1					
Docusigned by: Aster Abraha DDA094AED5104FD						
DDA094AED5104FD 11/12/2021		REVIS	SION	IS		SHEET NO.
CUMENT NOT CONSIDERED	NO. BY:	DATE:	NO.	BY:	DATE:	S7-16
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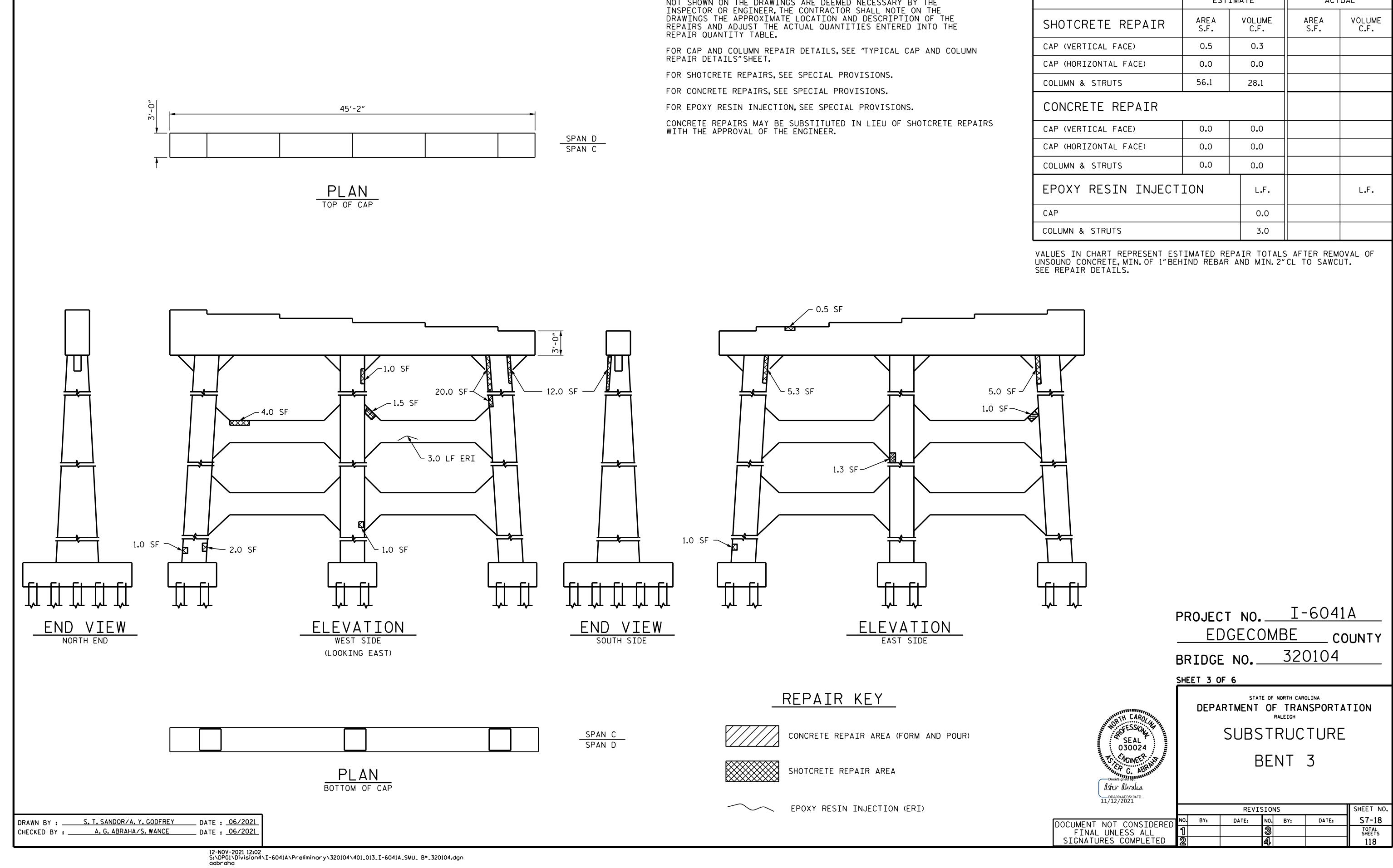
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NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE.IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE

REPAIR QUANTITY TABLE				
		QUANT	ITIES	
SENT 2	EST	ΙΜΑΤΕ	ACT	UAL
SHOTCRETE REPAIR	AREA VOLUME S.F. C.F.		AREA S.F.	VOLUME C.F.
AP (VERTICAL FACE)	2.3	1.2		
AP (HORIZONTAL FACE)	1.0	0.5		
OLUMN & STRUTS	41.3	20.7		
CONCRETE REPAIR				
AP (VERTICAL FACE)	0.0	0.0		
AP (HORIZONTAL FACE)	0.0	0.0		
OLUMN & STRUTS	0.0	0.0		
POXY RESIN INJECT	ION	L.F.		L.F.
AP		0.0		
OLUMN & STRUTS		4.0		



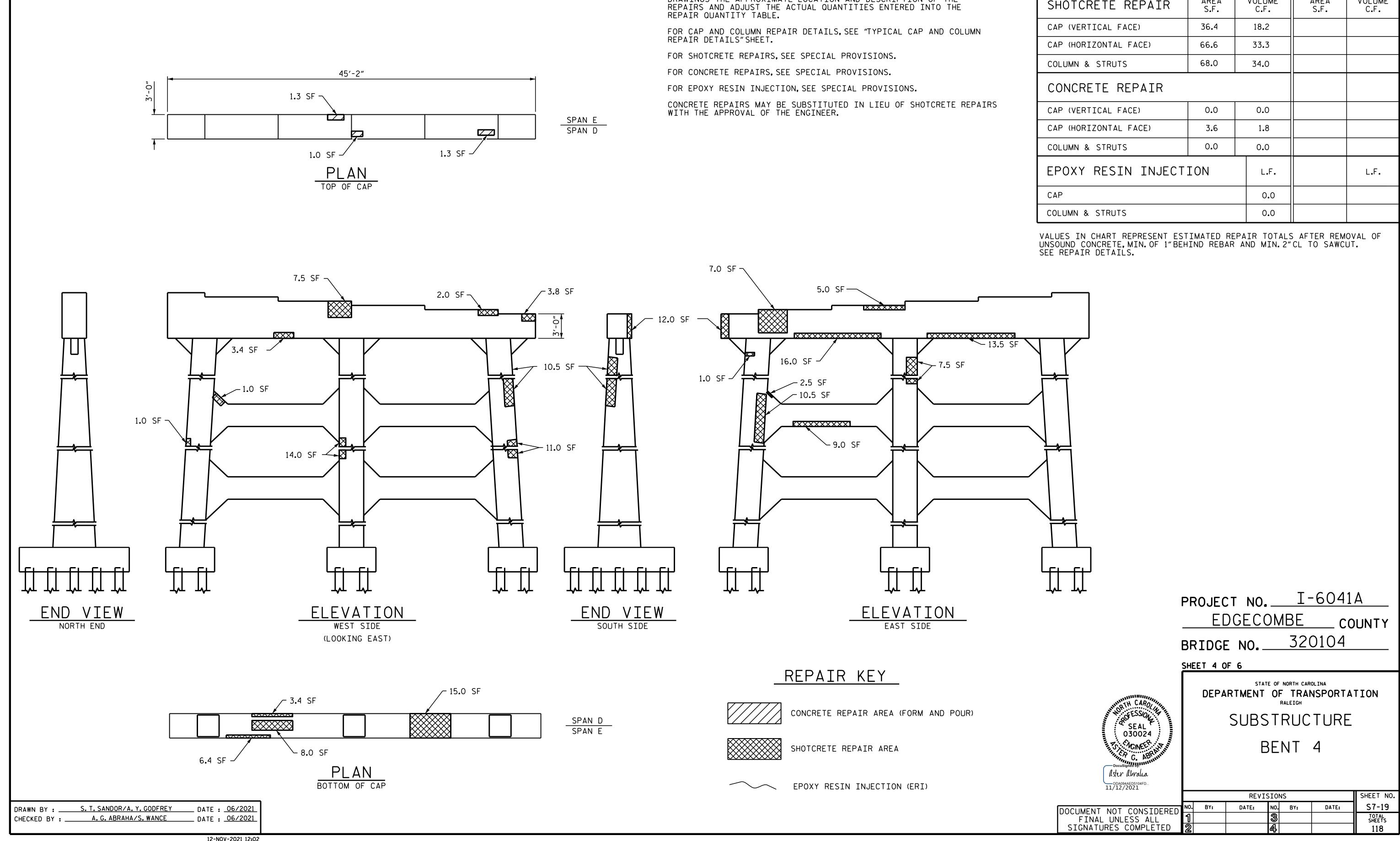
NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE.IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE

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REPAIR QUANTITY TABLE				
		QUANT	ITIES	
BENT 3	EST	ΙΜΑΤΕ	ACT	UAL
SHOTCRETE REPAIR	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.
CAP (VERTICAL FACE)	0.5	0.3		
CAP (HORIZONTAL FACE)	0.0	0.0		
COLUMN & STRUTS	56.1	28.1		
CONCRETE REPAIR				
CAP (VERTICAL FACE)	0.0	0.0		
CAP (HORIZONTAL FACE)	0.0	0.0		
COLUMN & STRUTS	0.0	0.0 0.0		
EPOXY RESIN INJECTION				L.F.
САР		0.0		
COLUMN & STRUTS		3.0		



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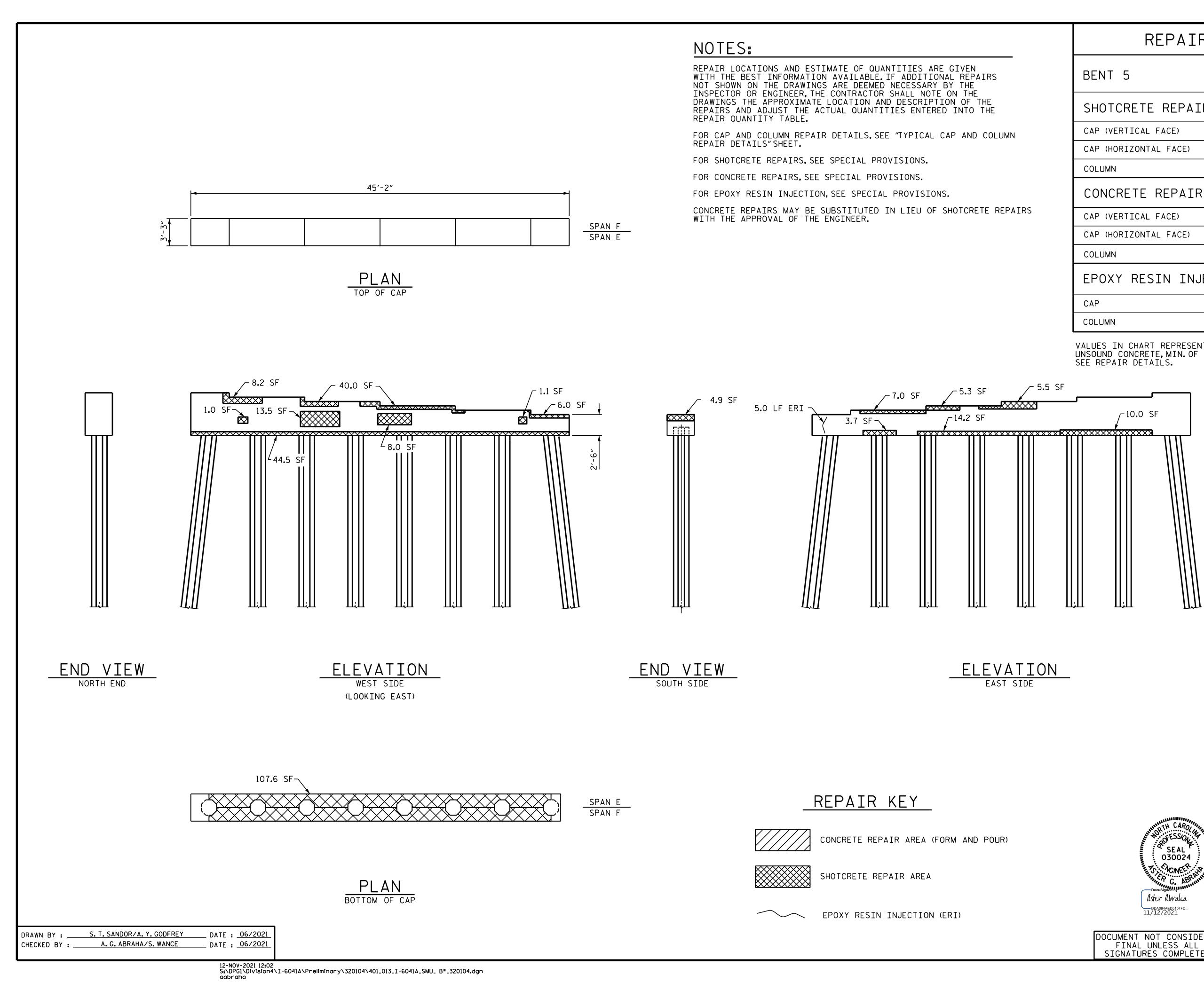
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NOTES:

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

REPAIR QUANTITY TABLE					
		QUANT	ITIES		
BENT 4	EST	ΙΜΑΤΕ	ACT	UAL	
SHOTCRETE REPAIR	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.	
CAP (VERTICAL FACE)	36.4	18.2			
CAP (HORIZONTAL FACE)	66.6	33.3			
COLUMN & STRUTS	68.0	34.0			
CONCRETE REPAIR					
CAP (VERTICAL FACE)	0.0	0.0			
CAP (HORIZONTAL FACE)	3.6	1.8			
COLUMN & STRUTS	0.0	0.0			
EPOXY RESIN INJECTION				L.F.	
CAP		0.0			
COLUMN & STRUTS		0.0			

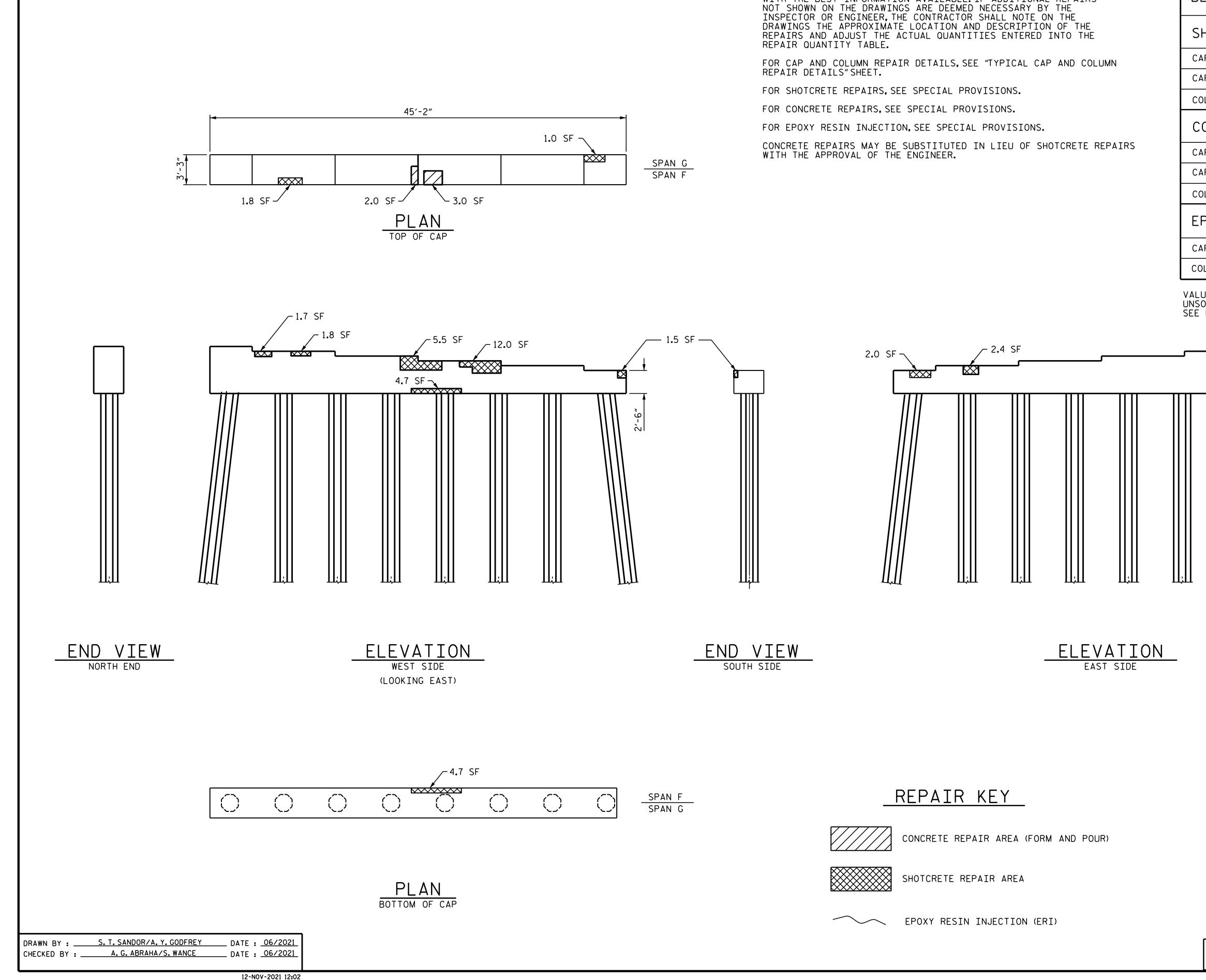


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REPAIR QUANTITY TABLE				
		QUANT	ITIES	
ENT 5	EST	IMATE	ACT	UAL
HOTCRETE REPAIR	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.
AP (VERTICAL FACE)	172.9	86.5		
AP (HORIZONTAL FACE)	107.6	53.8		
OLUMN	0.0	0.0		
ONCRETE REPAIR				
AP (VERTICAL FACE)	0.0	0.0		
AP (HORIZONTAL FACE)	0.0	0.0		
OLUMN	0.0 0.0			
POXY RESIN INJECT	ION	L.F.		L.F.
AP		5.0		
OLUMN		0.0		
		•	• •	•

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

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REAL 030024		SUBS	Т	RUC	TURE	
030024	BENT 5					
Docusigned By. Aster Abraha						
DDA094AED5104FD 11/12/2021						
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FINAL UNLESS ALL	1		3			TOTAL SHEETS
SIGNATURES COMPLETED	2		4			118



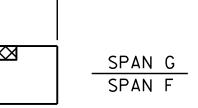
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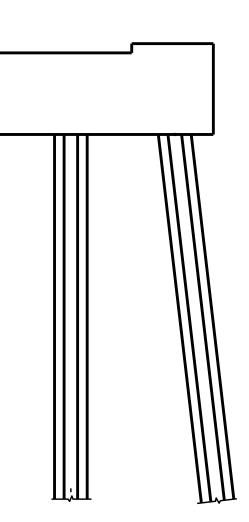
NOTES:

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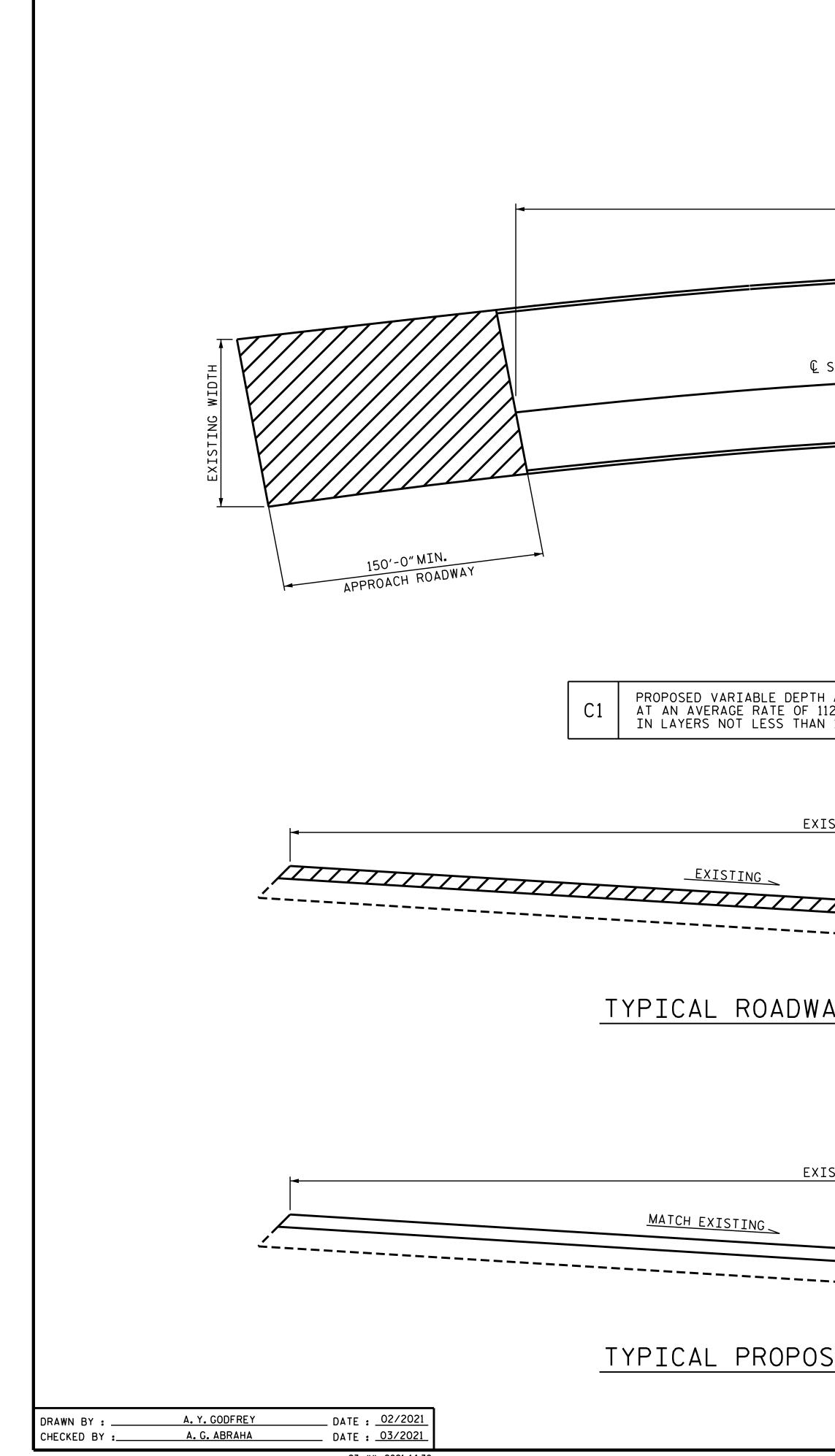


REPAIR QUANTITY TABLE					
		QUANT	ITIES		
BENT 6	EST	ΙΜΑΤΕ	ACT	UAL	
SHOTCRETE REPAIR	AREA S.F.	VOLUME C.F.	AREA S.F.	VOLUME C.F.	
CAP (VERTICAL FACE)	31.6	15.8			
CAP (HORIZONTAL FACE)	7.5	3.8			
COLUMN	0.0	0.0			
CONCRETE REPAIR					
CAP (VERTICAL FACE)	0.0	0.0			
CAP (HORIZONTAL FACE)	5.0	2.5			
COLUMN	0.0	0.0			
EPOXY RESIN INJECTION				L.F.	
CAP		0.0			
COLUMN		0.0			

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

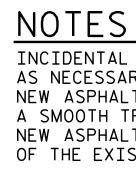


PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> county BRIDGE NO. <u>320104</u>					
	SHEET 6 OF	6			
NORTH CAROLANT NORTH CAROLANT SEAL 030024	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH				
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030024	5	000		IONE	
TS NONEER		BF	ENT	6	
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DDA094AED5104FD 11/12/2021					
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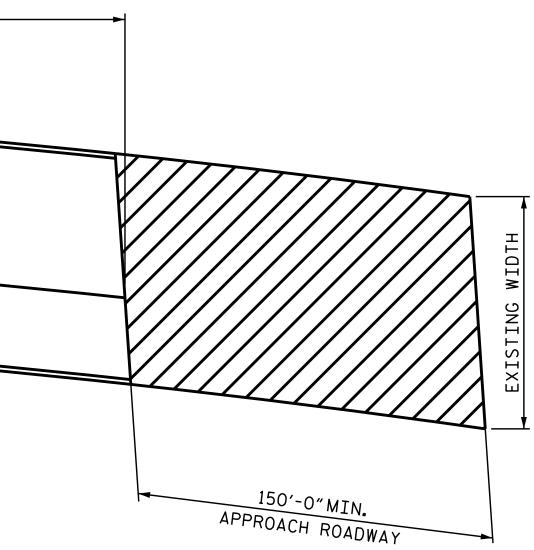
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490'-0" (FILL FACE TO FILL FACE) (ALONG SHORT ARC) € SURVEY € SURVEY -----PLAN INCIDENTAL MILLING PROPOSED VARIABLE DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1"DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN $1\frac{1}{2}$ " IN DEPTH OR GREATER THAN 2"DEPTH. INCID EXISTING WIDTH ASPHA COURS ASPHA PLANT — € SURVEY TYPICAL ROADWAY MILLING SECTION EXISTING WIDTH (C1)

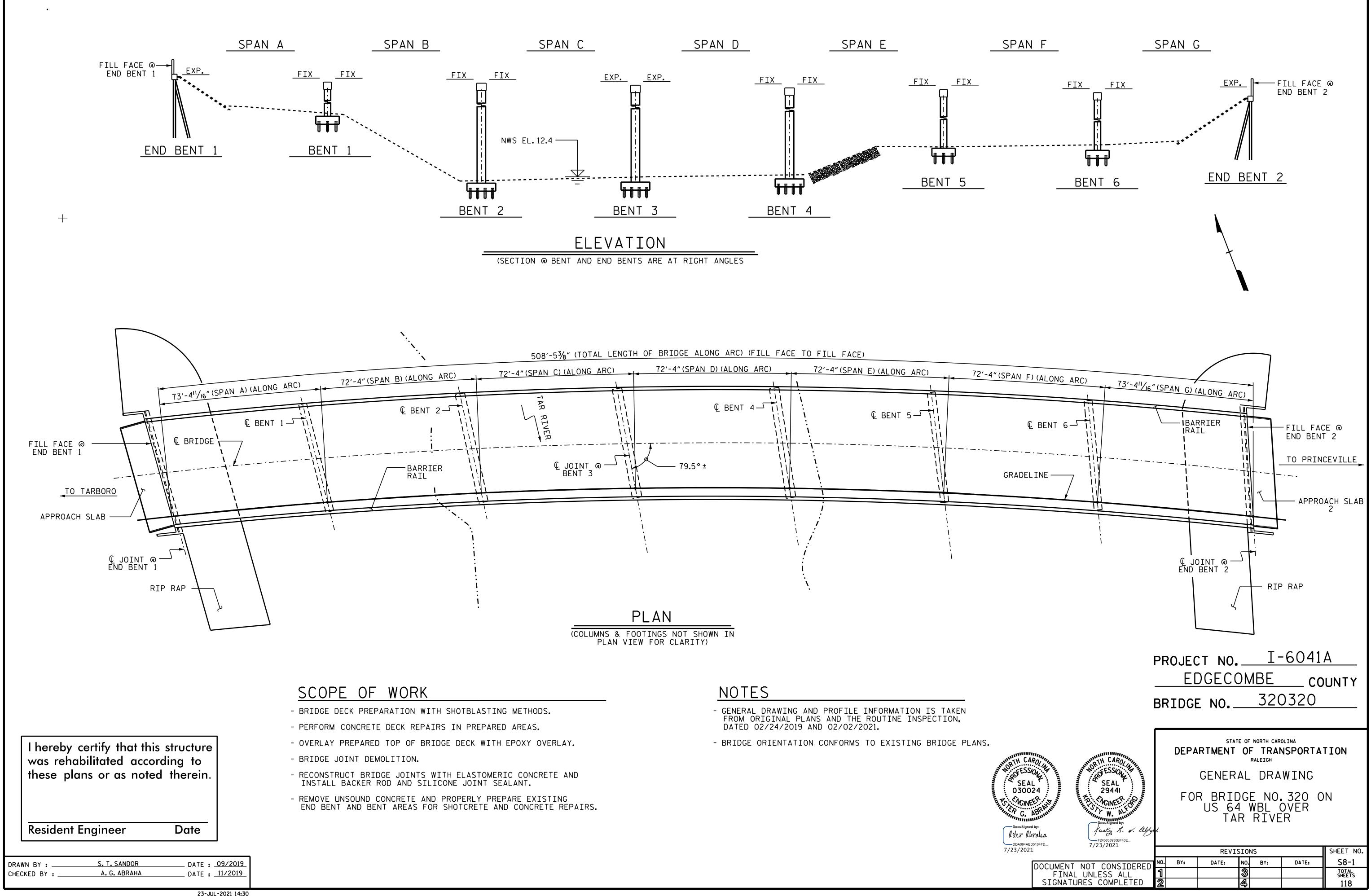
TYPICAL PROPOSED ROADWAY SECTION

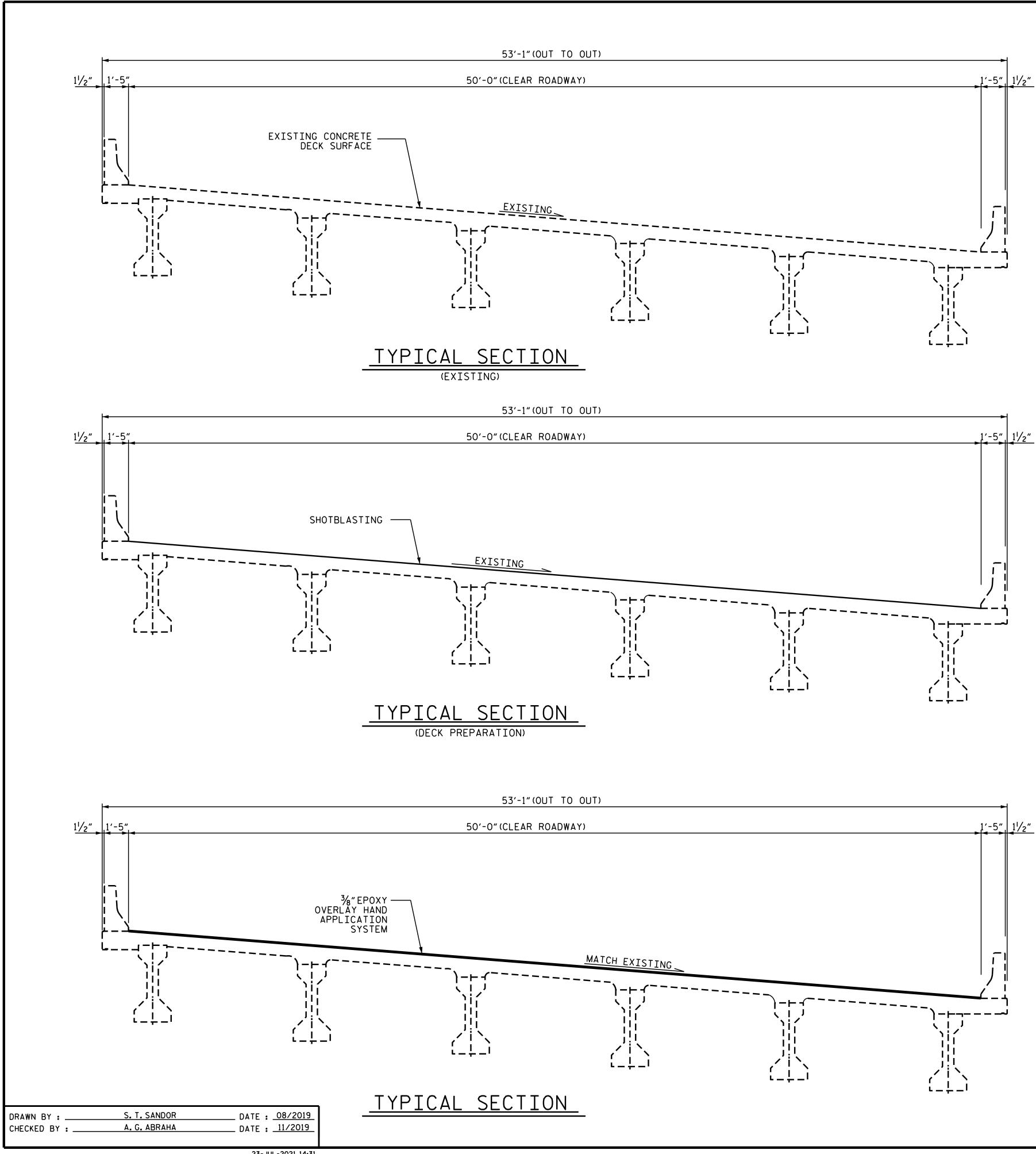
INCIDENTAL MILLING - EXISTING APPROACH ASPHALT PAVING TO BE MILLED AS NECESSARY TO ATTAIN MINIMUM 11/2" DEPTH OF NEW ASPHALT PAVING. NEW ASPHALT PAVEMENT SHALL BE OF THICKNESS NECESSARY TO PROVIDE A SMOOTH TRANSITION BETWEEN THE ROADWAY AND THE BRIDGE DECK. THE NEW ASPHALT PAVEMENT THICKNESS MAY EXCEED 11/2" DUE TO SETTLEMENT OF THE EXISTING APPROACH.

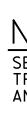


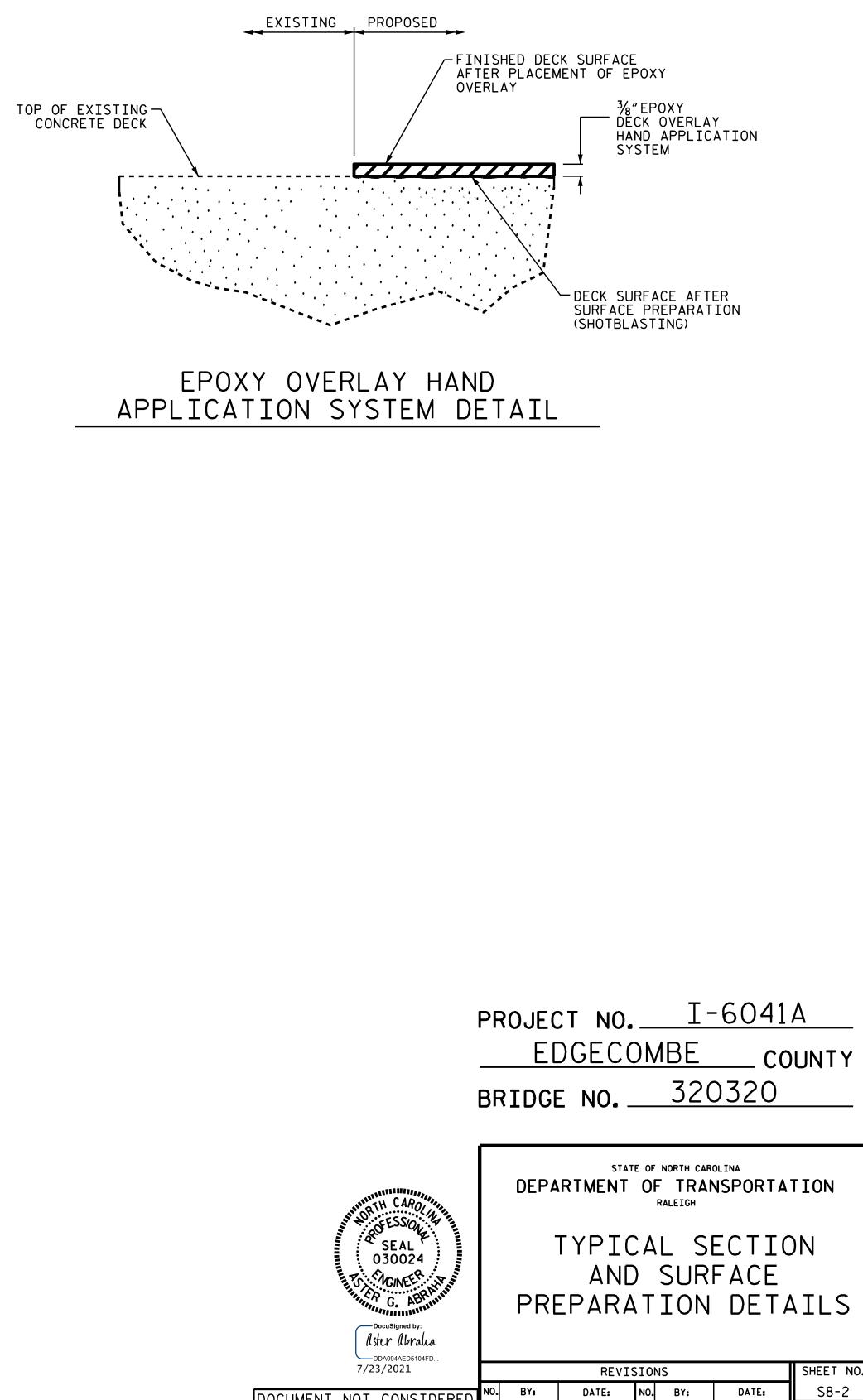
SUMMARY OF QUANTITIES						
	ESTIMATE	ACTUAL				
DENTAL MILLING	1,541.7 S.Y.					
LT CONCRETE SURFACE SE, TYPE S9.5B	126.8 TONS					
LT BINDER FOR MIX	10.0 TONS					

PROJECT NO. I-6041A EDGECOMBE COUNTY BRIDGE NO. 320104 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH FESSION SEAL F 030024 APPROACH MILLING ABRAM AND TYPICAL ROADWAY SECTIONS ocuSigned by Aster Abraha DDA094AED5104FD... 7/23/2021 SHEET NO. REVISIONS S7-22 DATE: DATE: BY: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED BY: NO. TOTAL SHEETS 118

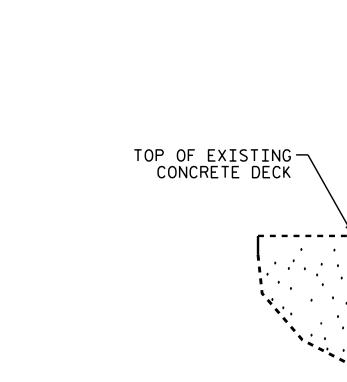


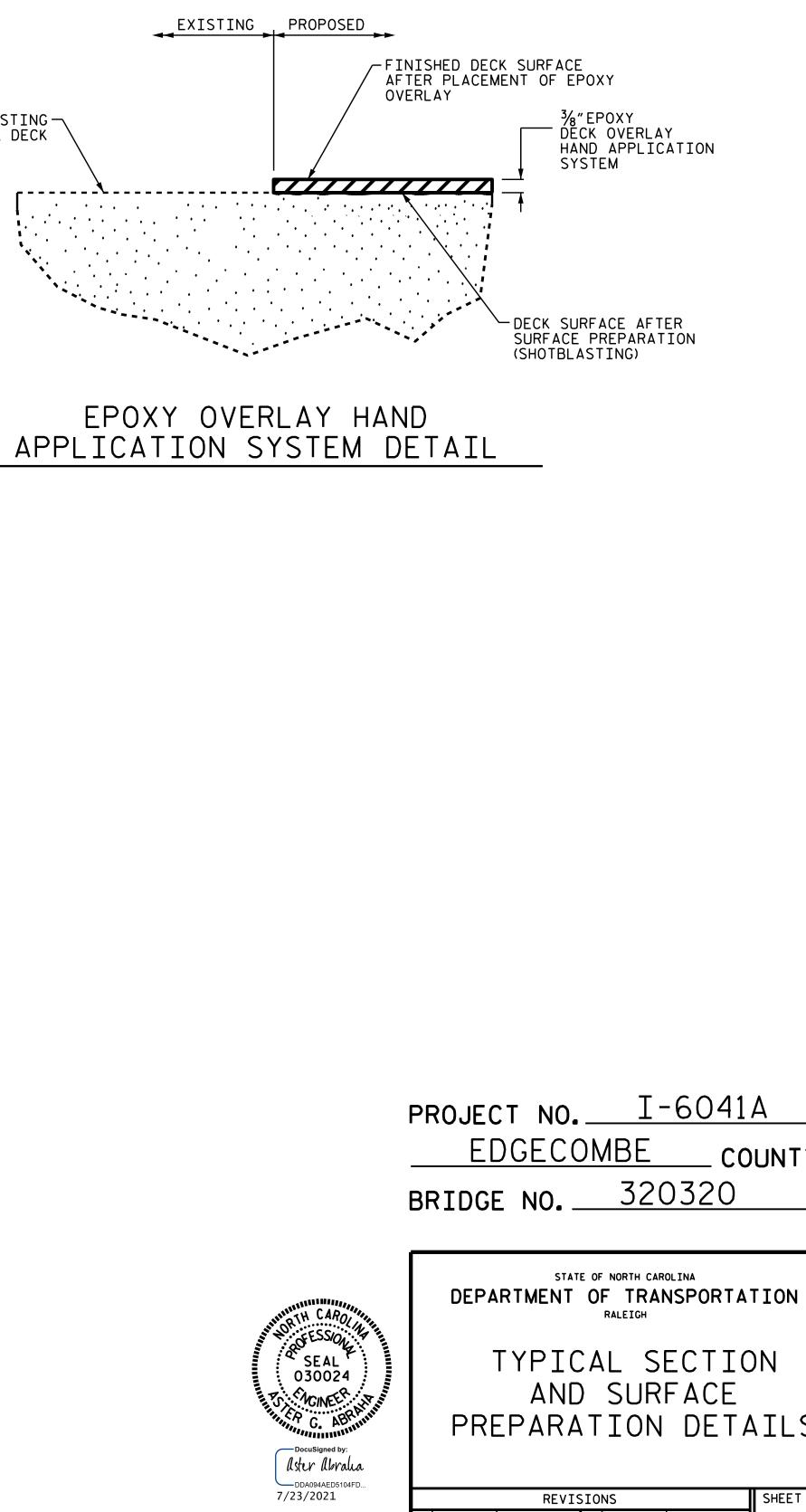






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DATE:

TOTAL SHEETS

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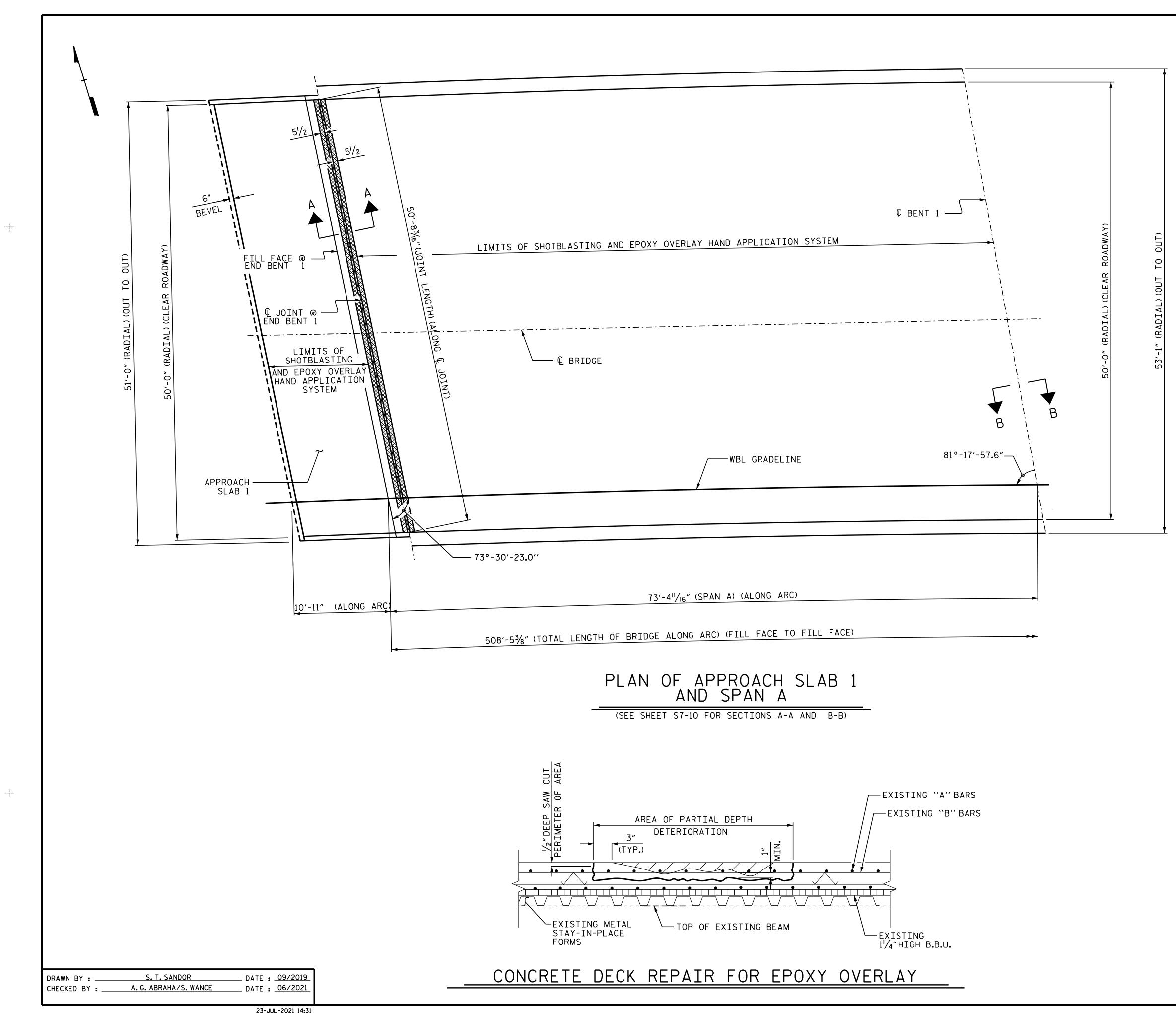
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DATE:

BY:

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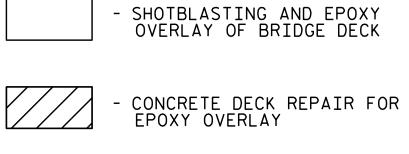
SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND EPOXY OVERLAY PLACEMENT.



SUMMARY (OF QUANTITIES F APPROACH SLAE		AND
		ESTIMATE	ACTUAL
POXY OVERLAY HAN	D APPLICATION SYSTEM	4,145 S.F.	

CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 S.F.	
BRIDGE JOINT DEMOLITION	46.5 S.F.	

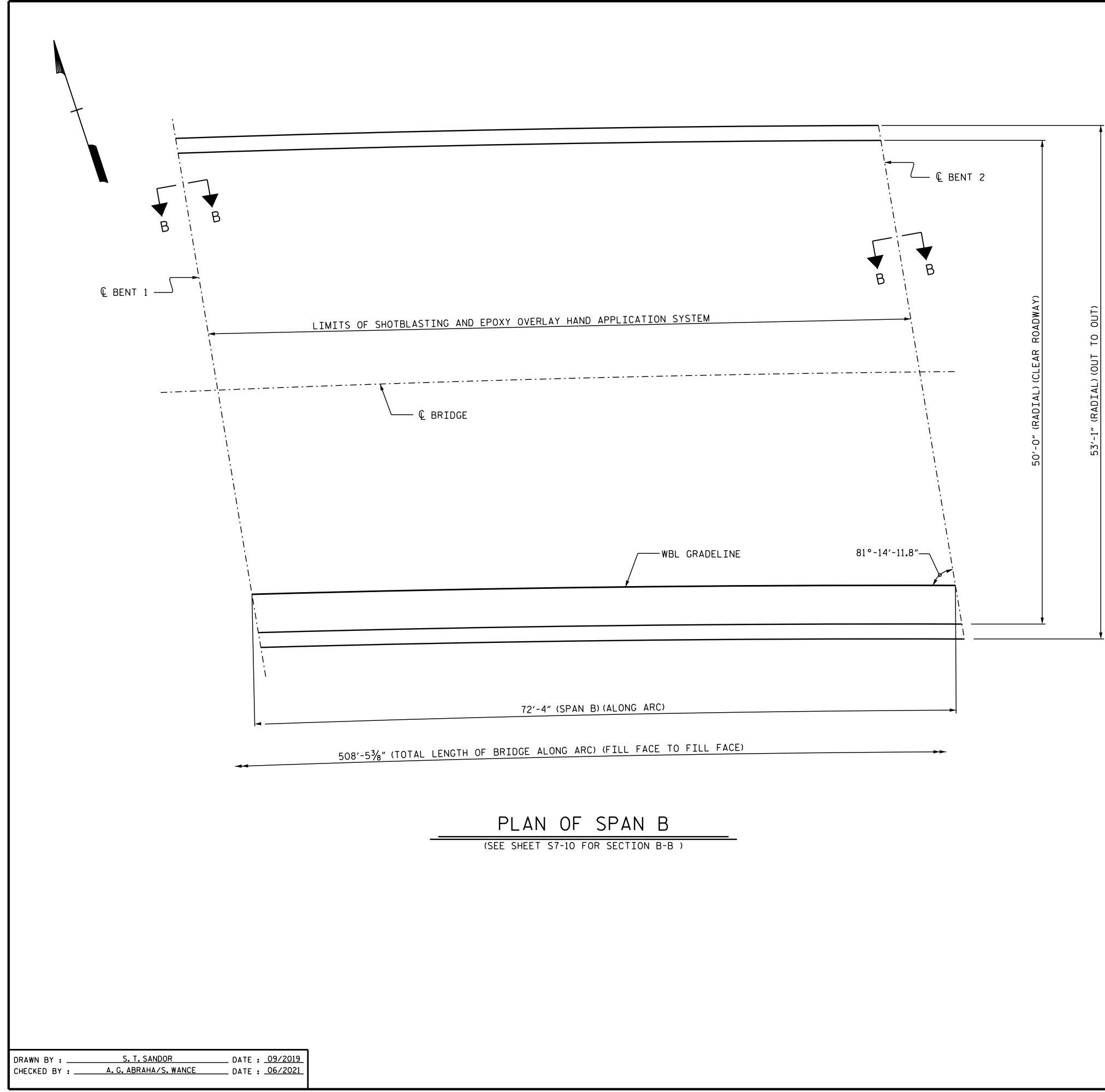
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO ACTUAL REPAIR QUANTITIES TABLE.
FOR EPOXY OVERLAY HAND APPLICATION SYSTEM, SEE SPECIAL PROVISIONS.
FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.
FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE OVERLAY IS COMPLETE.
FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.
FOR JOINT DEMOLITION, SEE SPECIAL PROVISIONS.





BRIDGE JOINT DEMOLITION

	PROJECT NO. <u>I-60</u> EDGECOMBE BRIDGE NO. <u>320</u> SHEET 1 OF 7	
SEAL O30024 HTS: MORETRAIN SEAL O30024 Docusigned by: Uster Abraha	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORT RALEIGH SURFACE PREPAF SPAN A AN APPROACH SL	RATION
DDA094AED5104FD 7/23/2021		SHEET NO.
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	NO. BY: DATE: NO. BY: DA 1 3 4 4 4 4	ATE: S8-3 TOTAL SHEETS 118



SUMMARY OF QUANTITIES FOR SPAN B

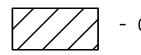
	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,617.0 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	0.0 SF	

NOTES:

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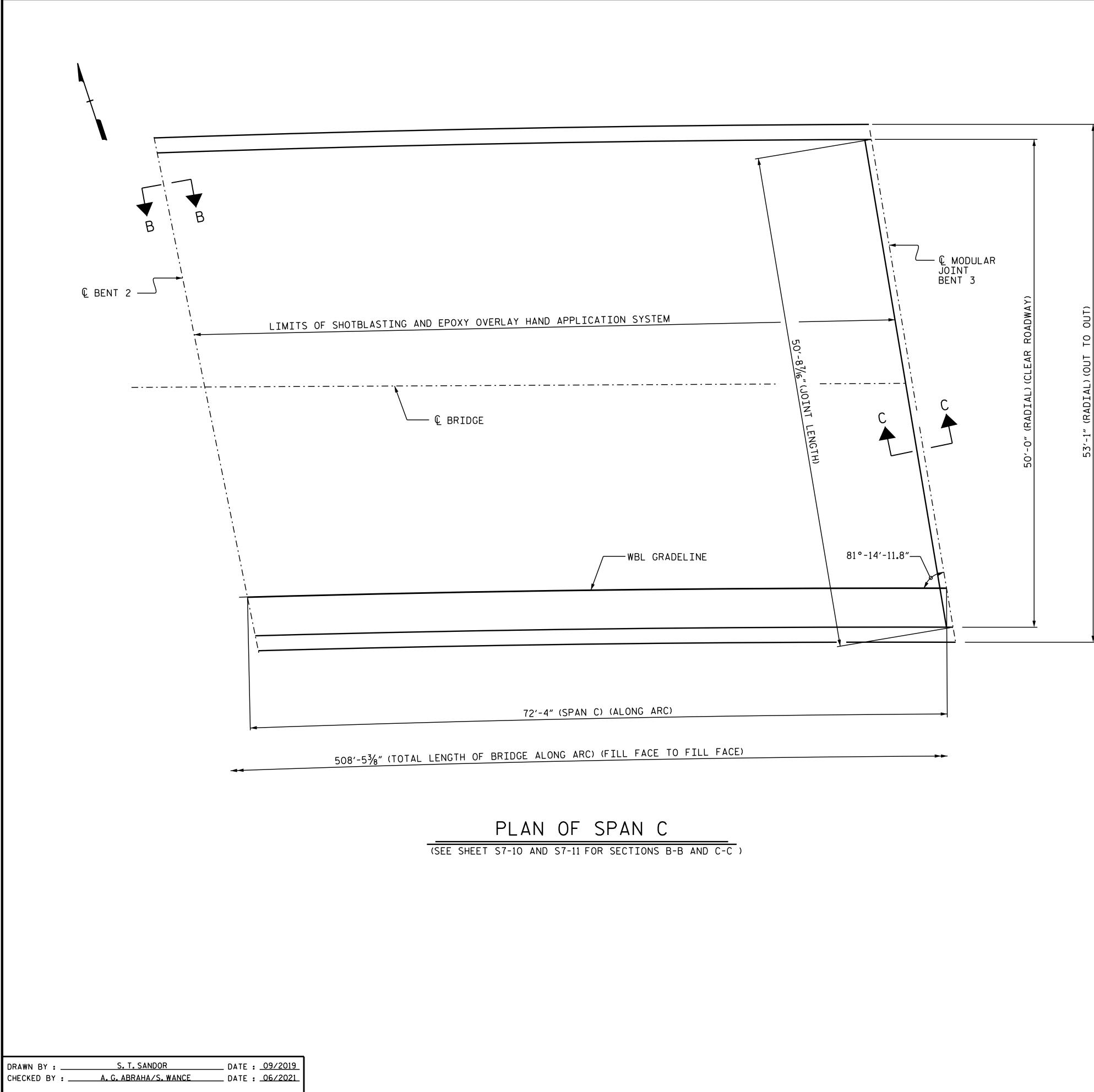
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CONCRETE DECK REPAIR FOR EPOXY OVERLAY

	PROJEC	CT NO.	I-	-6041	Α
		DGECO			UNTY
	BRIDGE	E NO	32	20320)
SHEET 2 OF 7					
ATT CAROLINA	DEPA	STATE RTMENT	OF NORTH CAR OF TRAN RALEIGH		TION
SEAL 030024	SURI	FACE S	PREF PAN	PARAT B	ION
DocuSigned by: Aster Abralia					
DDA094AED5104FD 7/23/2021	REVISIONS SHEET NO.				
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FINAL UNLESS ALL SIGNATURES COMPLETED	1 2		3 4		total sheets 118



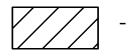
SUMMARY OF QUANTITIES FOR SPAN C

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,595 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	0.0 SF	

NOTES:

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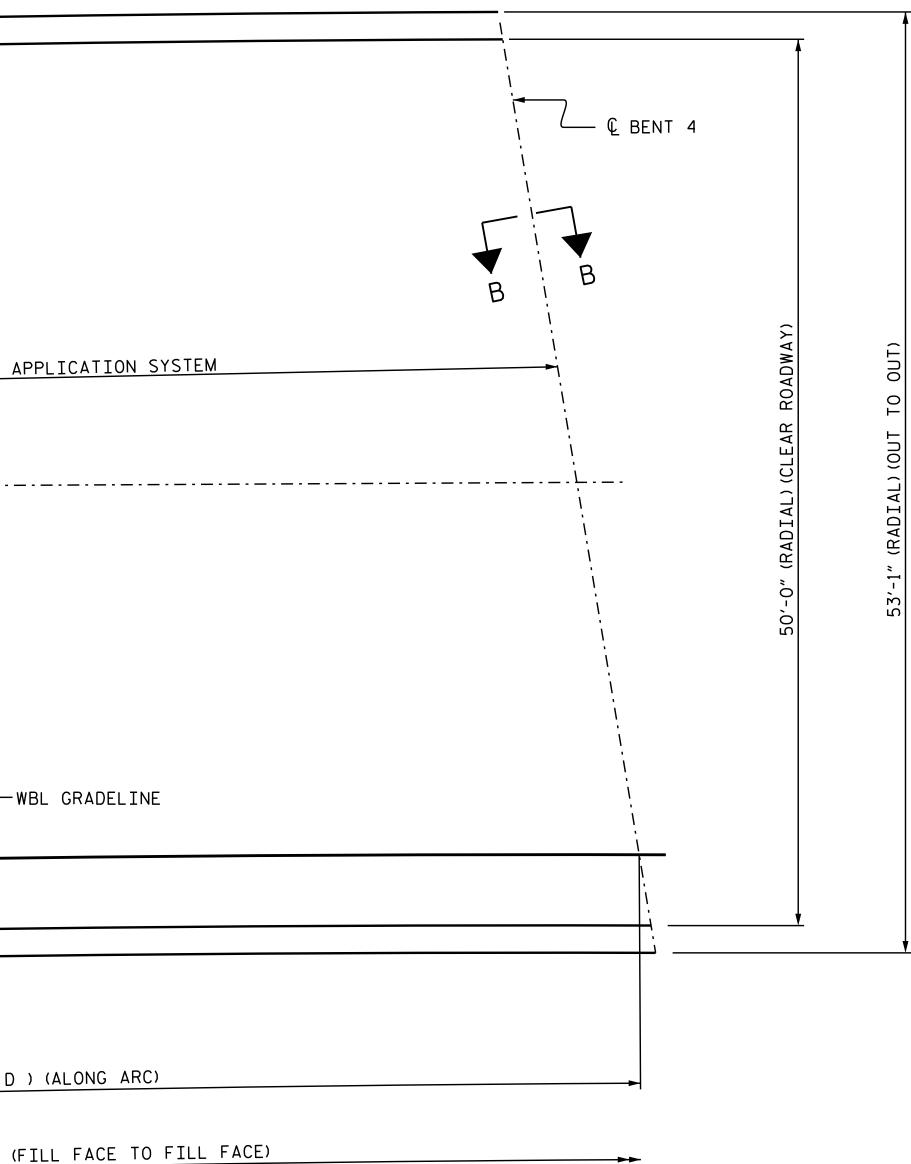




CONCRETE DECK REPAIR FOR EPOXY OVERLAY

	PROJEC E[CT NO. DGECC			
	BRIDGE	E NO	32	20320)
	SHEET 3 O	F 7			
NUMBER CAROLAND	DEPA	-	E OF NORTH CAR OF TRAN RALEIGH	OLINA NSPORTA	TION
SEAL 030024	SURI	FACE S	PREF PAN	PARAT C	ION
DocuSigned by: Uster Abralia DDA094AED5104FD					
7/23/2021		REVIS	SIONS		SHEET NO.
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FINAL UNLESS ALL SIGNATURES COMPLETED	1		<u> </u>		total Sheets 118

	1		
	MODULAR OINT ENT 3 (TO BE ETAINED)		LIMITS OF SHOTBLASTING AND EPOXY OVERLAY HAND
	50'-87/16" (JOINT LENGTH)		© BRIDGE
			72'-4" (SPAN E 508'-5%" (TOTAL LENGTH OF BRIDGE ALONG ARC) PLAN OF S
DRAWN BY : CHECKED BY :	S. T. SANDOR A. G. ABRAHA/S. WANCE	DATE : <u>09/2019</u> DATE : <u>06/2021</u>	SEE SHEET ST-10 AND ST-11 FOR



SPAN D

SECTIONS B-B AND C-C)

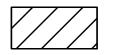
SUMMARY OF QUANTITIES FOR SPAN D

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,595 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	0.0 SF	

NOTES:

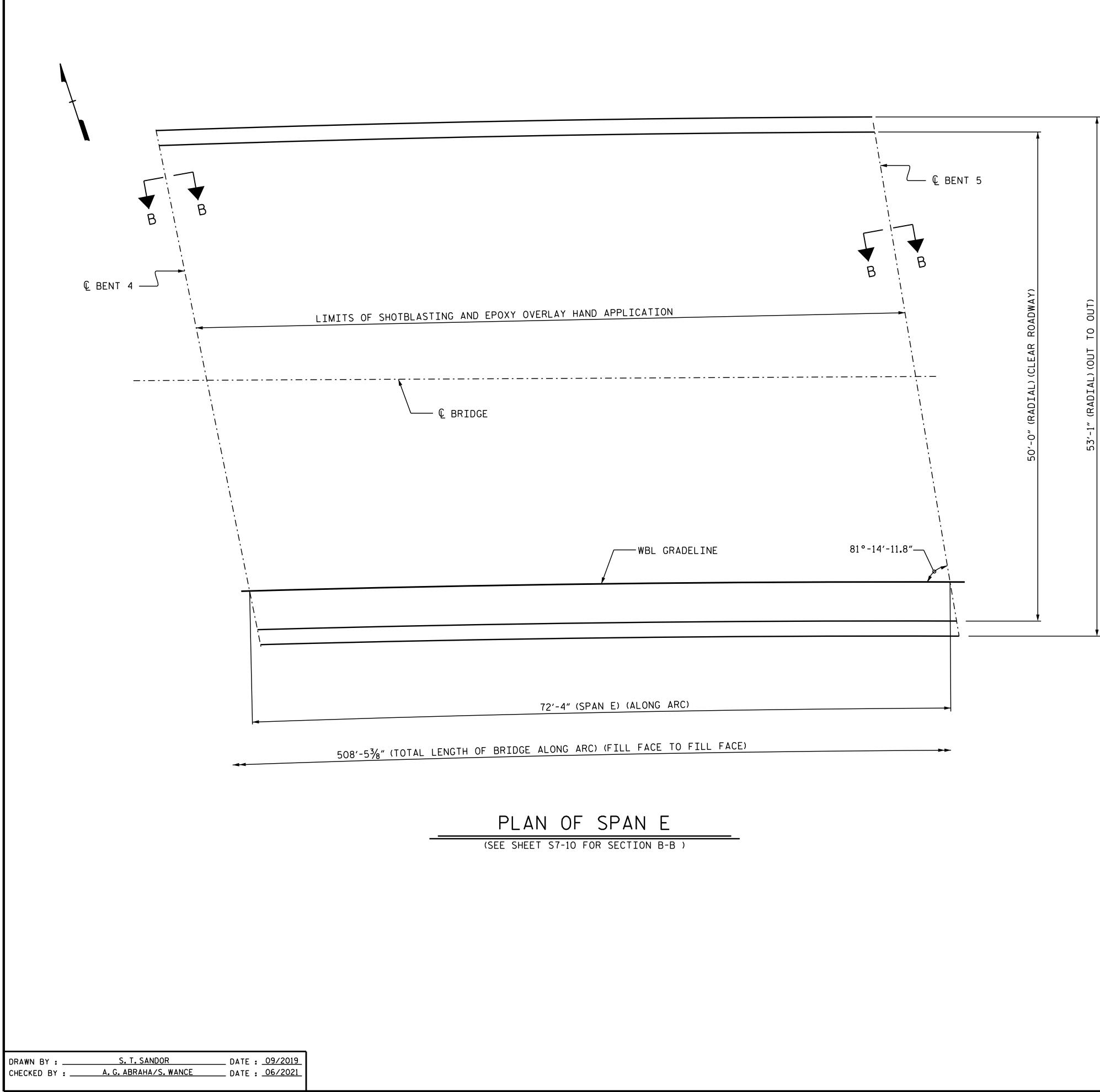
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- CONCRETE DECK REPAIR FOR EPOXY OVERLAY

	PROJEC E[CT NO. DGECC	MBE		UNTY
	BRIDGE	E NO.	32	20320)
	SHEET 4 O)F 7			
NORTH CAROLINA	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH				
SEAL 030024	SURI	FACE S	PREF PAN	PARAT D	ION
Aster Abralia					
DDA094AED5104FD 7/23/2021		REVIS	TONS		SHEET NO.
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DOCUMENT NOT CONSIDERED	1		3		TOTAL SHEETS
SIGNATURES COMPLETED	2		4		118



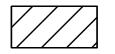
SUMMARY OF QUANTITIES FOR SPAN E

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,617 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	0.0 SF	

NOTES:

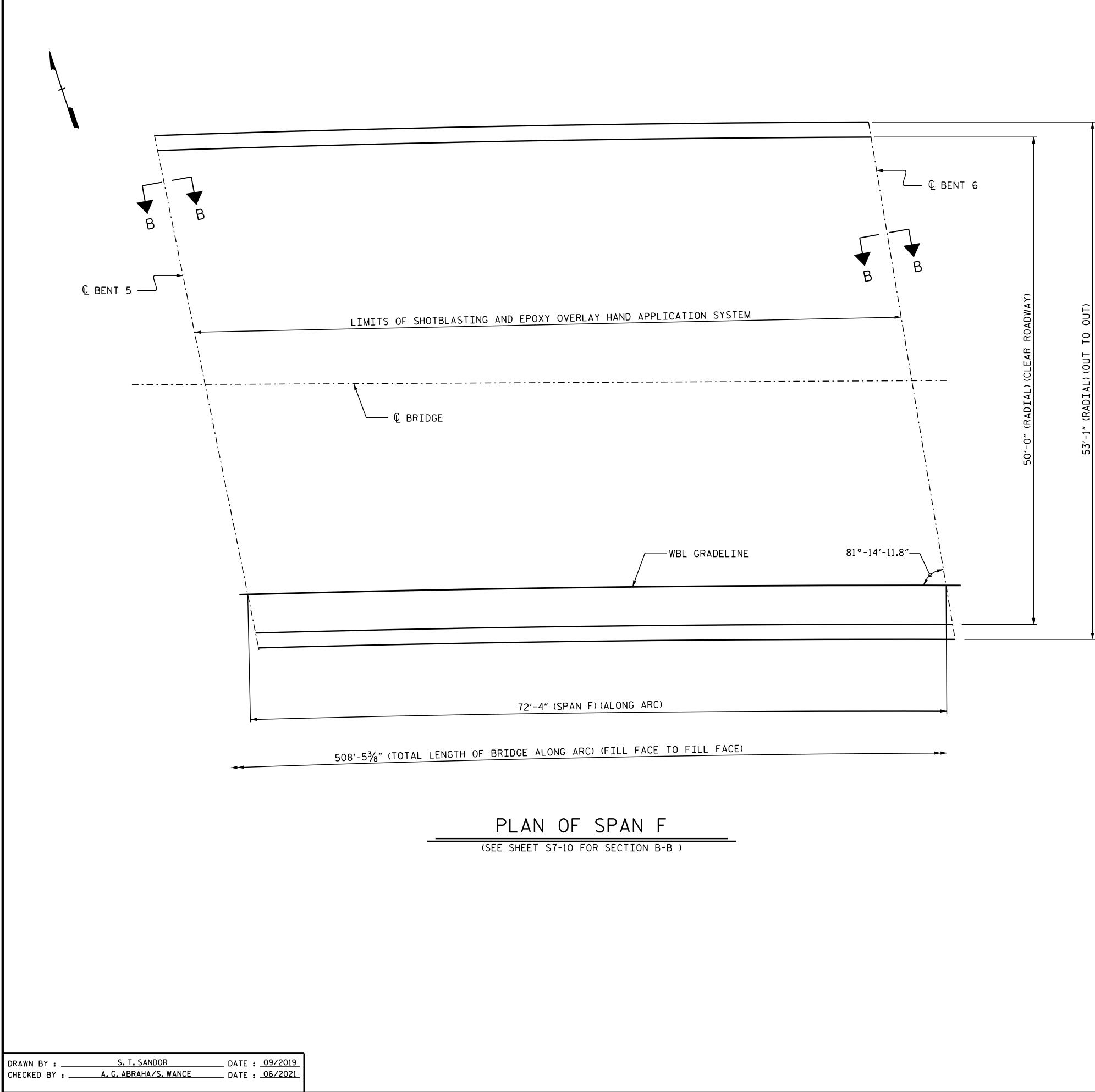
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CONCRETE DECK REPAIR FOR EPOXY OVERLAY

	PROJEC E[BRIDGE	DGECC	OMBE	<u>-6041</u> co 2032C	UNTY
	SHEET 5 0)F 7			
NOTESSION THE	DEPA		E OF NORTH CAR OF TRAI RALEIGH	OLINA NSPORTA	TION
SEAL 030024	SURI	FACE S	PREF PAN	PARAT E	ION
Aster Abralia					
DDA094AED5104FD 7/23/2021		REVIS	SIONS		SHEET NO.
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FINAL UNLESS ALL SIGNATURES COMPLETED	1		3 4		SHEETS 118



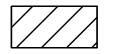
SUMMARY OF QUANTITIES FOR SPAN F

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	3,617 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	0.0 SF	

NOTES:

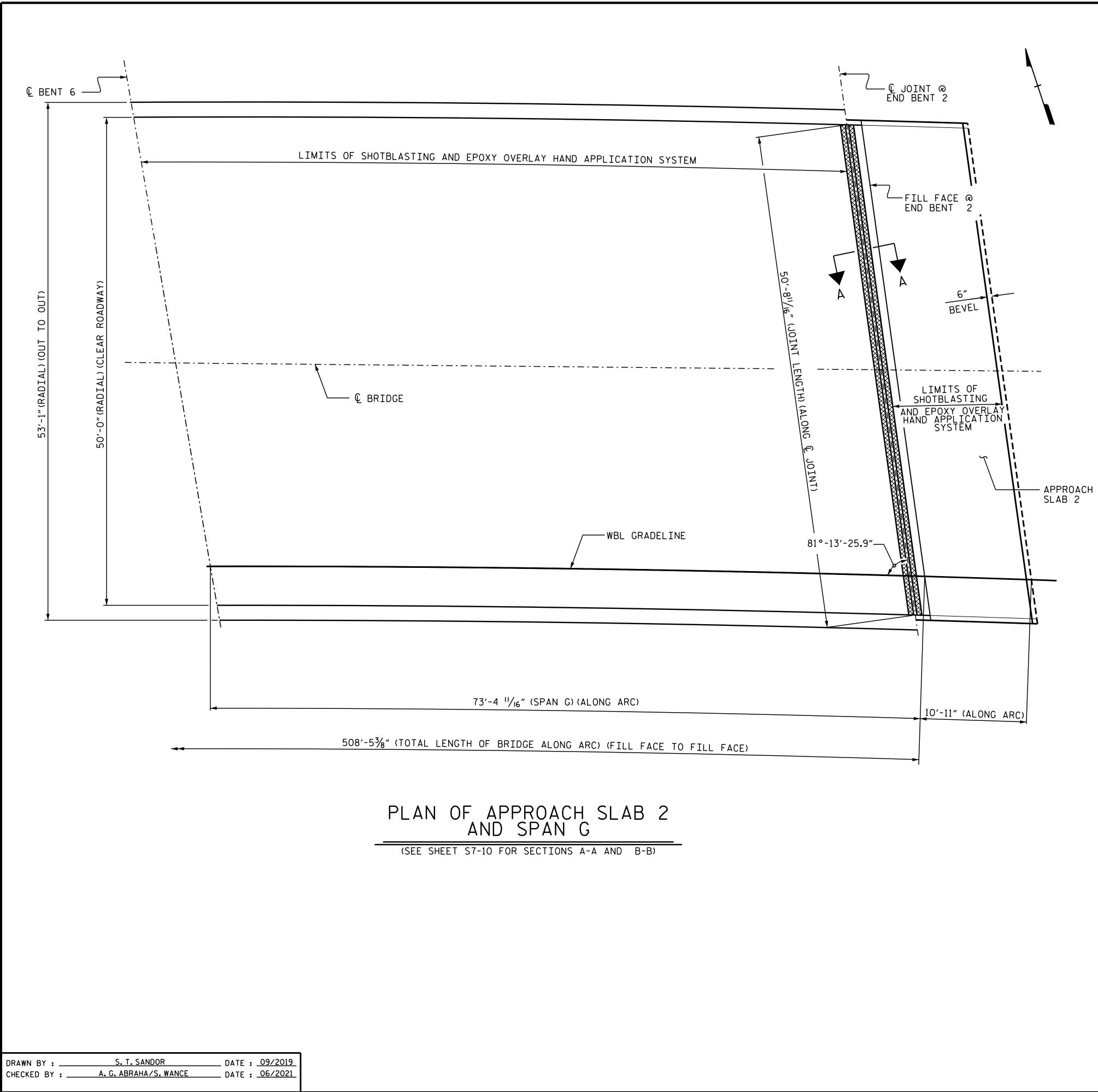
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN IN DRAWINGS ARE DEEMED NECESSARY BY ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED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





CONCRETE DECK REPAIR FOR EPOXY OVERLAY

		CT NO. DGECC		- <u>6041</u> co	A UNTY
BRIDGE NO. 320320					
TH CAROLAN		STAT	E OF NORTH CAR OF TRAI RALEIGH	OLINA NSPORTA	TION
SEAL 030024 HILL C. CONEER AND	SURI	FACE S	PREF PAN	PARAT F	ION
Aster Abralia					
DDA094AED5104FD 7/23/2021		REVIS	SIONS		SHEET NO.
DOCUMENT NOT CONSIDERED	NO. BY:	DATE:	NO. BY:	DATE:	S8-8
FINAL UNLESS ALL SIGNATURES COMPLETED	1		<u> </u>		total sheets 118



SUMMARY OF QUANTITIES F	OR SPAN C	AND
APPROACH SLAE	32	
EPOXY OVERLAY HAND APPLICATION SYSTEM	ESTIMATE 4,145 SF	ACTUAL
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	46.5 SF	
NOTES: REPAIR LOCATIONS AND ESTIMATED OUAN THE BEST INFORMATION AVAILABLE. IF A SHOWN IN DRAWINGS ARE DEEMED NECESS ENGINEER WILL NOTE ON THE DRAWINGS LOCATIONS AND DESCRIPTION OF THE REI ACTUAL QUANTITIES ENTERED INTO ACTU TABLE. - SHOTBLASTING AND OVERLAY OF BRIDGE - CONCRETE DECK REP EPOXY OVERLAY	DDITIONAL REF ARY BY ENGINE THE APPROXIMA PAIRS AND ADJ AL REPAIR QUA E DECK	PAIRS NOT ER, THE TE UST THE
- BRIDGE JOINT DEMO		
NO DEFICIENCIES NOTED DURING THE CONTRACTOR AND ENGINEER SURFACE AFTER SCARIFICATION REPAIRS.	SHALL INSPECT	THE DECK
PROJECT NO EDGECO BRIDGE NO SHEET 7 OF 7		COUNTY

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

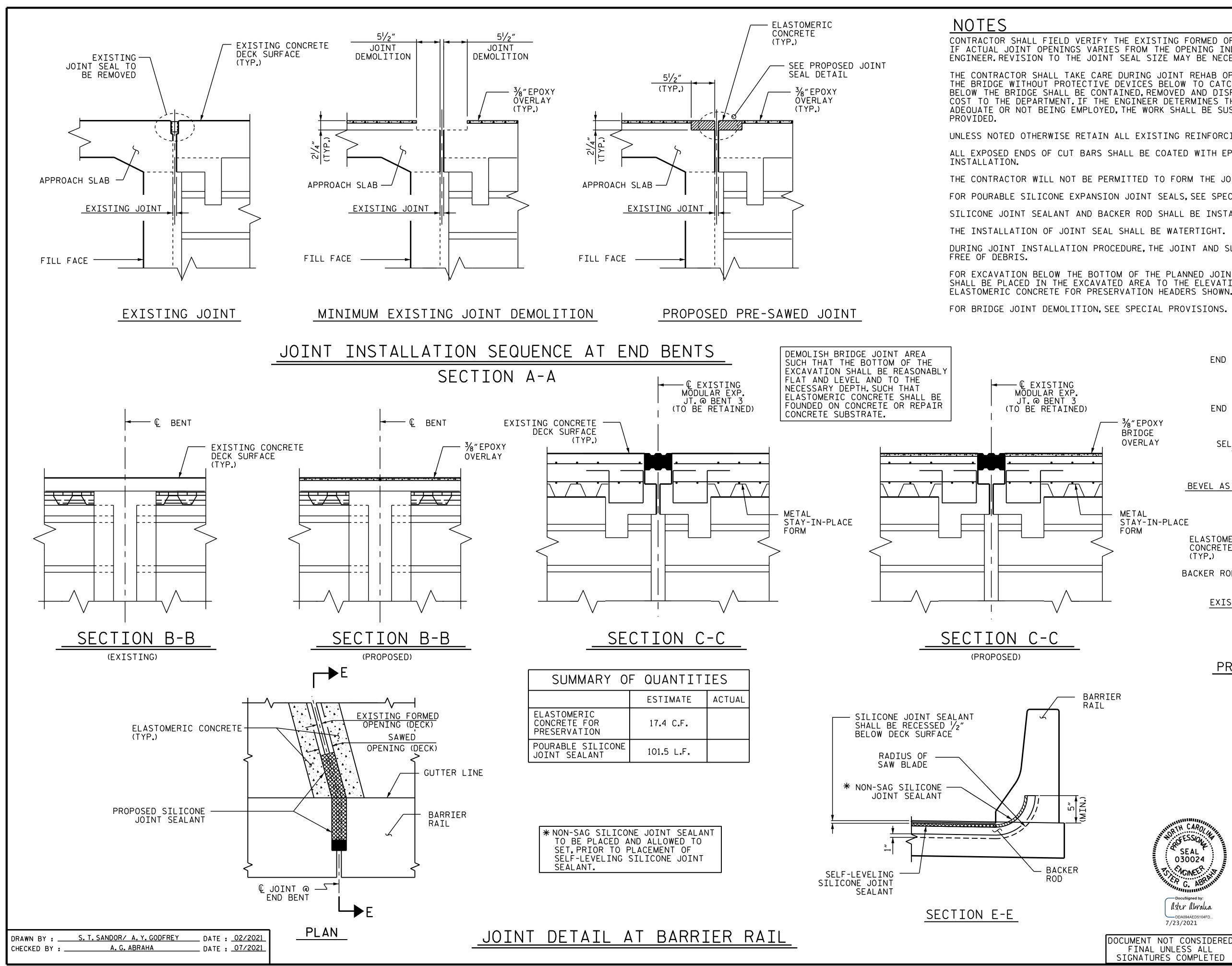
SURFACE PREPARATION SPAN G AND APPROACH SLAB 2

DDA094AED5104FD 11/12/2021							
			REVI	SION	S		SHEET NO.
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· FESSION *

SEAL 030024

Aster Abraha



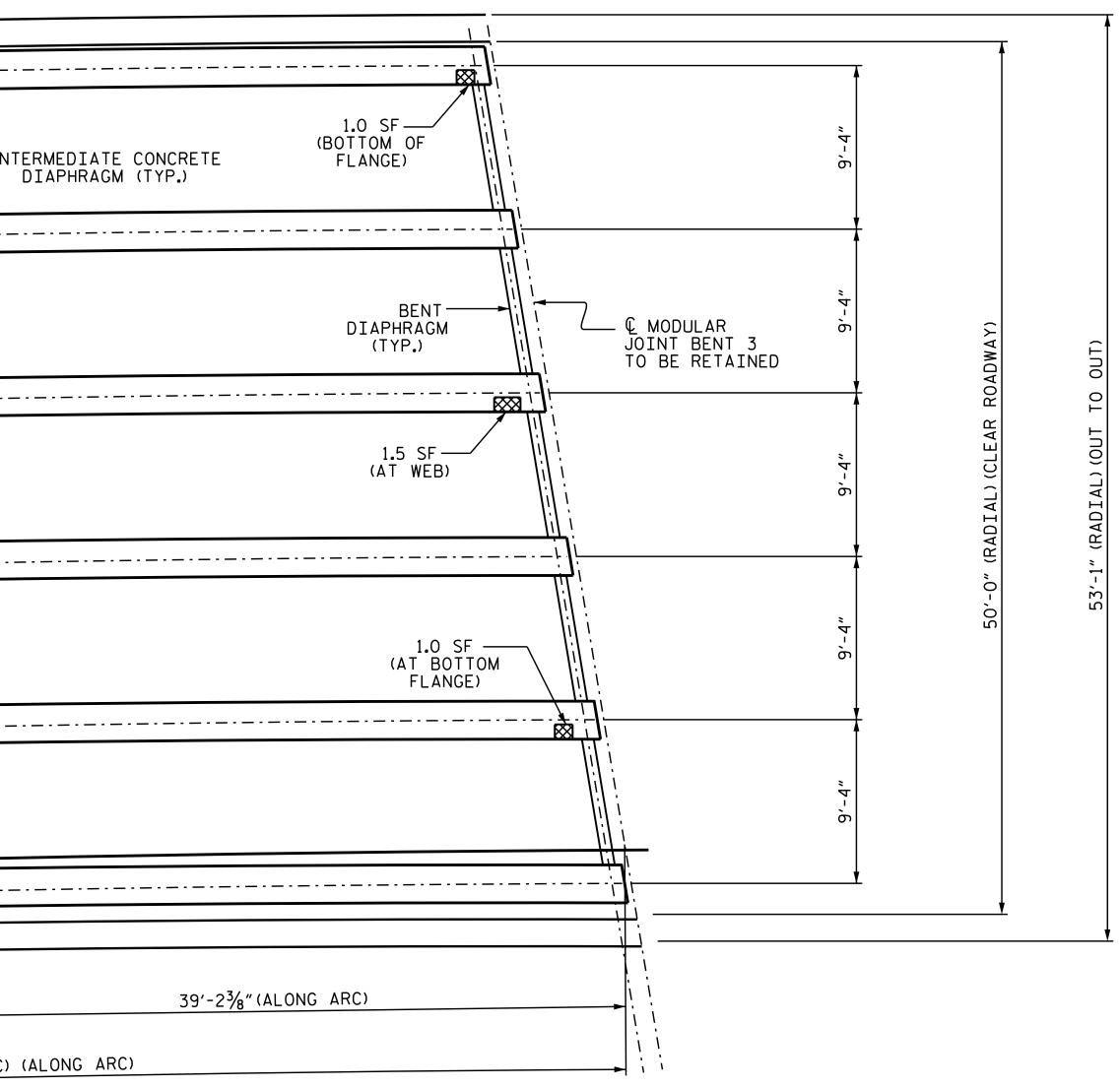
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+

CONTRACTOR SHALL FIELD VERIFY THE EXISTING FORMED OPENING PRIOR TO OBTAINING JOINT MATERIAL. IF ACTUAL JOINT OPENINGS VARIES FROM THE OPENING INDICATED IN DETAIL MORE THAN 1/4" NOTIFY ENGINEER. REVISION TO THE JOINT SEAL SIZE MAY BE NECESSARY. THE CONTRACTOR SHALL TAKE CARE DURING JOINT REHAB OPERATIONS NOT TO DROP ANY MATERIAL BELOW THE BRIDGE WITHOUT PROTECTIVE DEVICES BELOW TO CATCH THE MATERIAL. ANY MATERIAL THAT FALLS BELOW THE BRIDGE SHALL BE CONTAINED, REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO EXTRA COST TO THE DEPARTMENT. IF THE ENGINEER DETERMINES THAT THE PROTECTIVE DEVICES ARE NOT ADEQUATE OR NOT BEING EMPLOYED. THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS 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 THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT. FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS. SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION DURING JOINT INSTALLATION PROCEDURE. THE JOINT AND SURROUNDING AREA HALL BE KEPT CLEAN AND 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 ← @ JT. 1¹¹/₁₆″@45° 1%₁₆″@ 60° END BENT 1 15/16″@ 90° 1³⁄4″@ 45° 1%6″@60° END BENT 2 1¹/4″@ 90° ⅔″EPOXY BRIDGE OVERLAY SELF -LEVELING -SILICONE Ś 75° BEVEL AS SHOWN METAL STAY-IN-PLACE FORM ELASTOMERIC CONCRETE (TYP.) (TYP.) BACKER ROD EXISTING OPENING PROPOSED JOINT SEAL DETAIL (WITH SAWED DIMENSIONS) PROJECT NO. <u>I-6041</u>A EDGECOMBE COUNTY 320320 BRIDGE NO. STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH H CAR FESSION, ኛ SEAL JOINT REPAIR 030024 S, ACINEE DETAILS Aster Abraha DDA094AED5104FD.. 7/23/2021 SHEET NO. REVISIONS S8-10 DATE: DATE: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED BY: BY: TOTAL SHEETS

118

	2.0 SF BENT DIAPHGRAM REPAIR	- GIRDER #1	
		BAY #1	IN
		- GIRDER #2	
	E BENT 2	BAY #2	
		GIRDER #3	· _ · · _ · _ · _ ·
		BAY #3	
		··-·GIRDER #4	
		BAY #4	
		GIRDER #5	<u>i</u> i
		BAY #5	
		GIRDER #6	
	<u>i [i]</u>		
		72'	-4" (SPAN C)
		OVERHANG AND DIA	PHRAGI
			SPAN
DRAWN BY : CHECKED BY :	S. T. SANDOR DATE : 09/2019 A. G. ABRAHA/S. WANCE DATE : 06/2021		



M REPAIR LOCATIONS

С

REPAIR QUANTITY TABLE FOR SPAN C						
UNDERSIDE OF DECK		QUANT	ITIES			
UNDERSIDE OF DECK	ESTI	ΜΑΤΕ	ACT	UAL		
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
UNDERSIDE OF DECK & OVERHANG	0.0	0.0				
BENT DIAPHRAGMS	2.0 1.0					
PRESTRESSED CONCRETE GIRDER REPAIRS						
GIRDERS	3.5	1.8				
VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER						

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

NOTES:

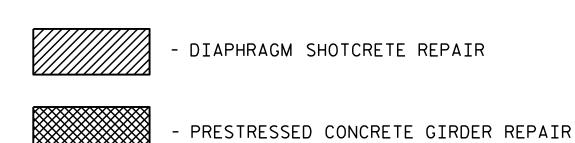
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CONTRACTOR SHALL SAWCUT TO A NOMINAL DEPTH OF 1/2" BUT REINFORCING STEEL SHALL NOT BE DAMAGED.CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT WILL NOT DAMAGE EXISTING REINFORCING STEEL.

FOR CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS, SEE PRESTRESSED CONCRETE GIRDER AND DIAPHRAGM REPAIR DETAILS SHEET SD-1.

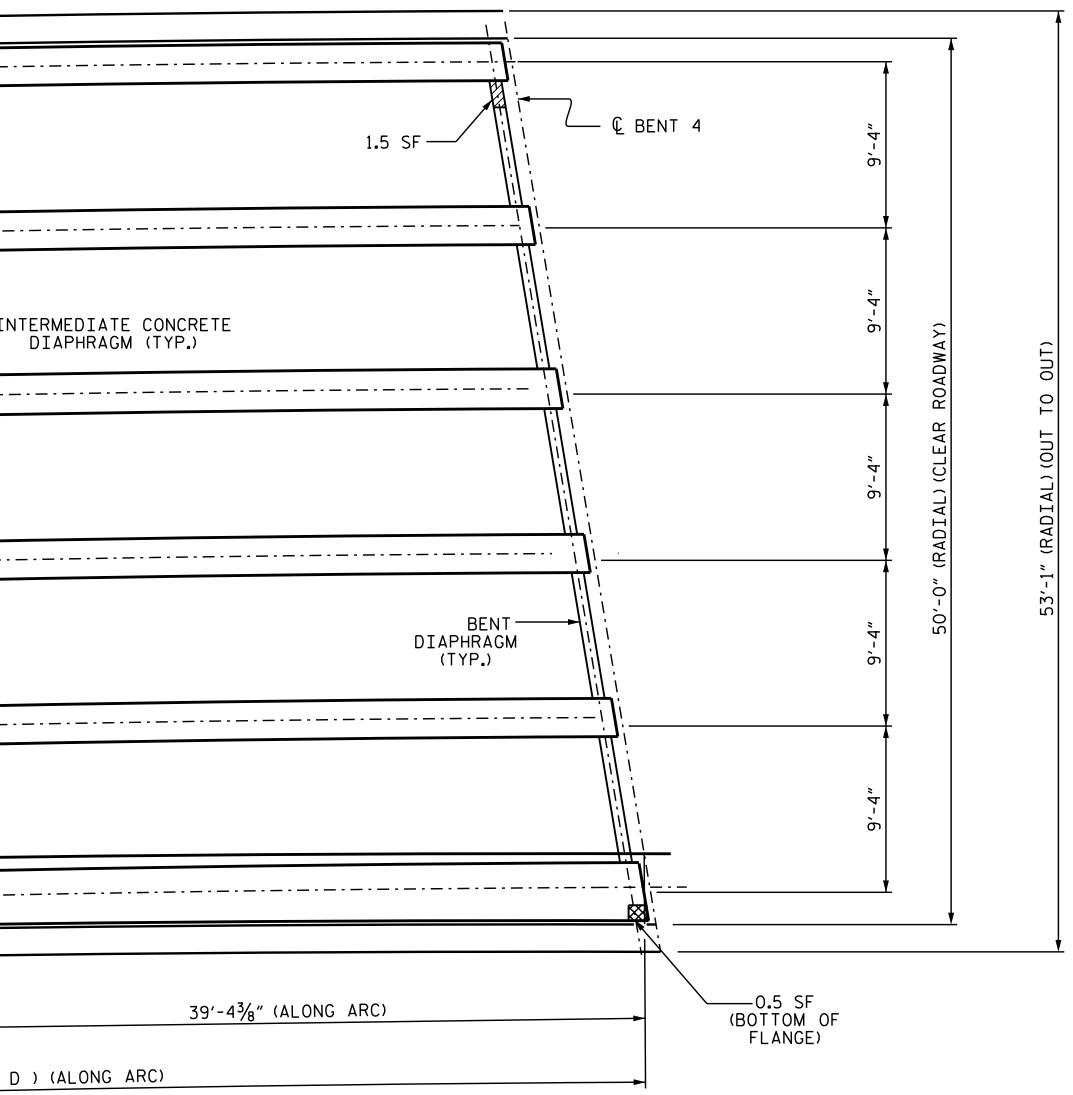
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

REPAIR KEY



PROJECT NO. I-6041A EDGECOMBE _ COUNTY 320320 STATION:_ SHEET 1 OF 5 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH FESSION م SEAL 030024 SUPERSTRUCTURE CONCRETE REPAIRS S. ACINEE SPAN C DocuSigned by Aster Abraha DDA094AED5104FD... 7/23/2021 SHEET NO. REVISIONS S8-11 DATE: DATE: BY: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED BY: NO. total sheets 118

€ MODULAR — JOINT BENT 3		
	O.5 SF BENT DIAPHGRAM REPAIR	
		-4" (SPAN
	OVERHANG AND DIA	PHRAC span



GM REPAIR LOCATIONS

D

REPAIR QUANTITY TABLE FOR SPAN D					
UNDERSIDE OF DECK		QUANT	ITIES		
SIDERSIDE OF DECK	ESTI	ΜΑΤΕ	ACT	UAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF	
UNDERSIDE OF DECK & OVERHANG	0.0	0.0			
BENT DIAPHRAGMS	2.0	1.0			
PRESTRESSED CONCRETE GIRDER REPAIRS					
GIRDERS	0.5	0.5			

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

REPAIR KEY

DIAPHRAGM SHOTCRETE REPAIR
 PRESTRESSED CONCRETE GIRDER REPAIR

PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY

STATION: 320320

SHEET 2 OF 5

H CARO

SEAL 6 030024

DocuSigned by: Aster Abraha

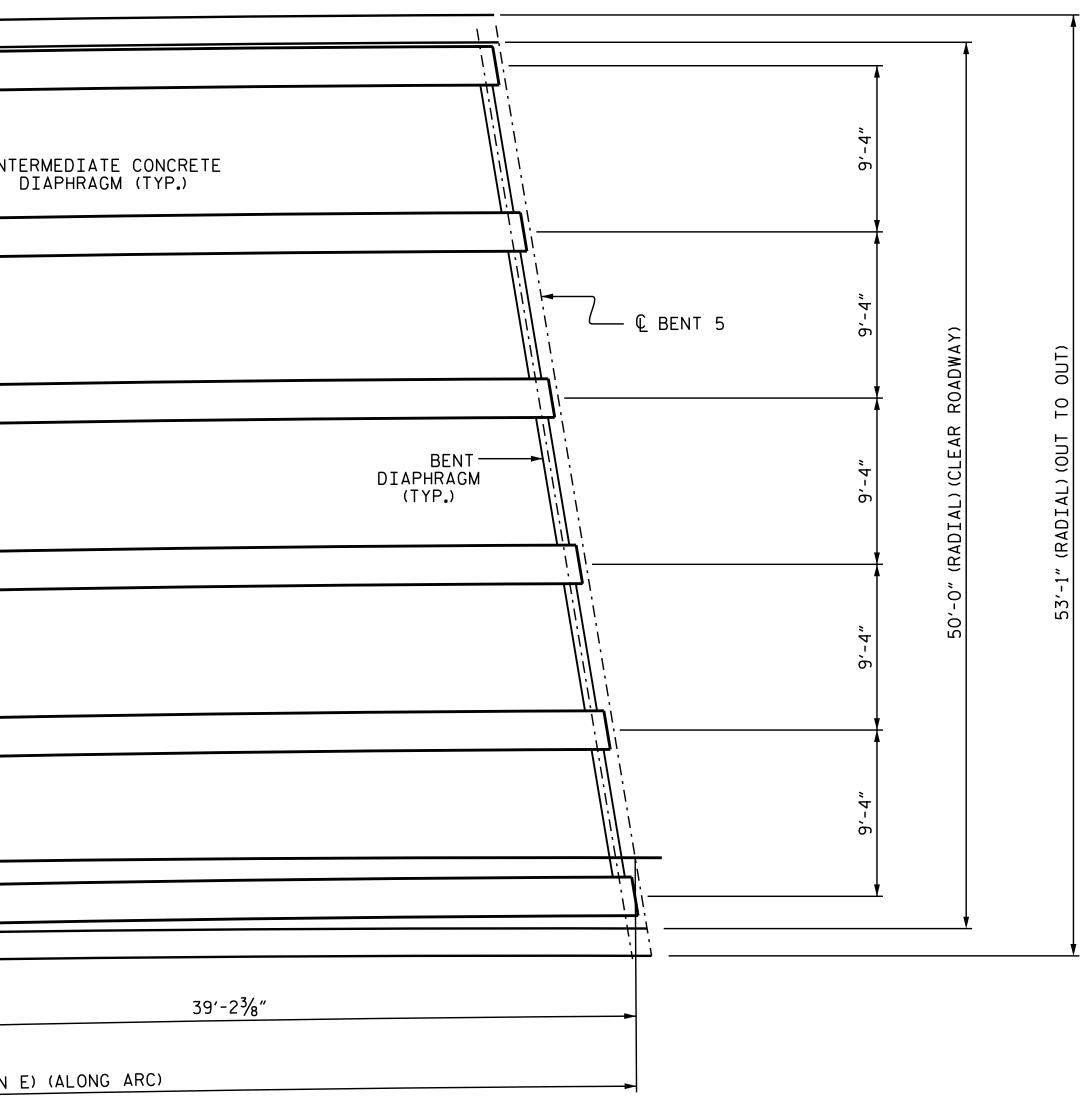
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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

SUPERSTRUCTURE CONCRETE REPAIRS SPAN D

7/23/2021 REVISIONS	SHEET NO.
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	I.O SF TTOM OF LANGE)			
© BENT 4				
				72'-4" (SPAN
		OVERHANG	AND DIA	
				SPAN (
DRAWN BY :S. T. SANDOR CHECKED BY :A. G. ABRAHA/S. WANCE	DATE : <u>09/2019</u> DATE : <u>06/2021</u>			



M REPAIR LOCATIONS

E

REPAIR QUANTITY TABLE SPAN E					
UNDERSIDE OF DECK		QUANT	ITIES		
UNDERSIDE OF DECK	ESTI	ΜΑΤΕ	ACT	UAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF	
UNDERSIDE OF DECK & OVERHANG	0.0	0.0			
ENT DIAPHRAGMS 0.0 0.0		0.0			
PRESTRESSED CONCRETE GIRDER REPAIRS					
GIRDERS 1.0 0.5					

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

REPAIR KEY

DIAPHRAGM SHOTCRETE REPAIR
PRESTRESSED CONCRETE GIRDER REPAIR

PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY

STATION: 320320

SHEET 3 OF 5

H CARO

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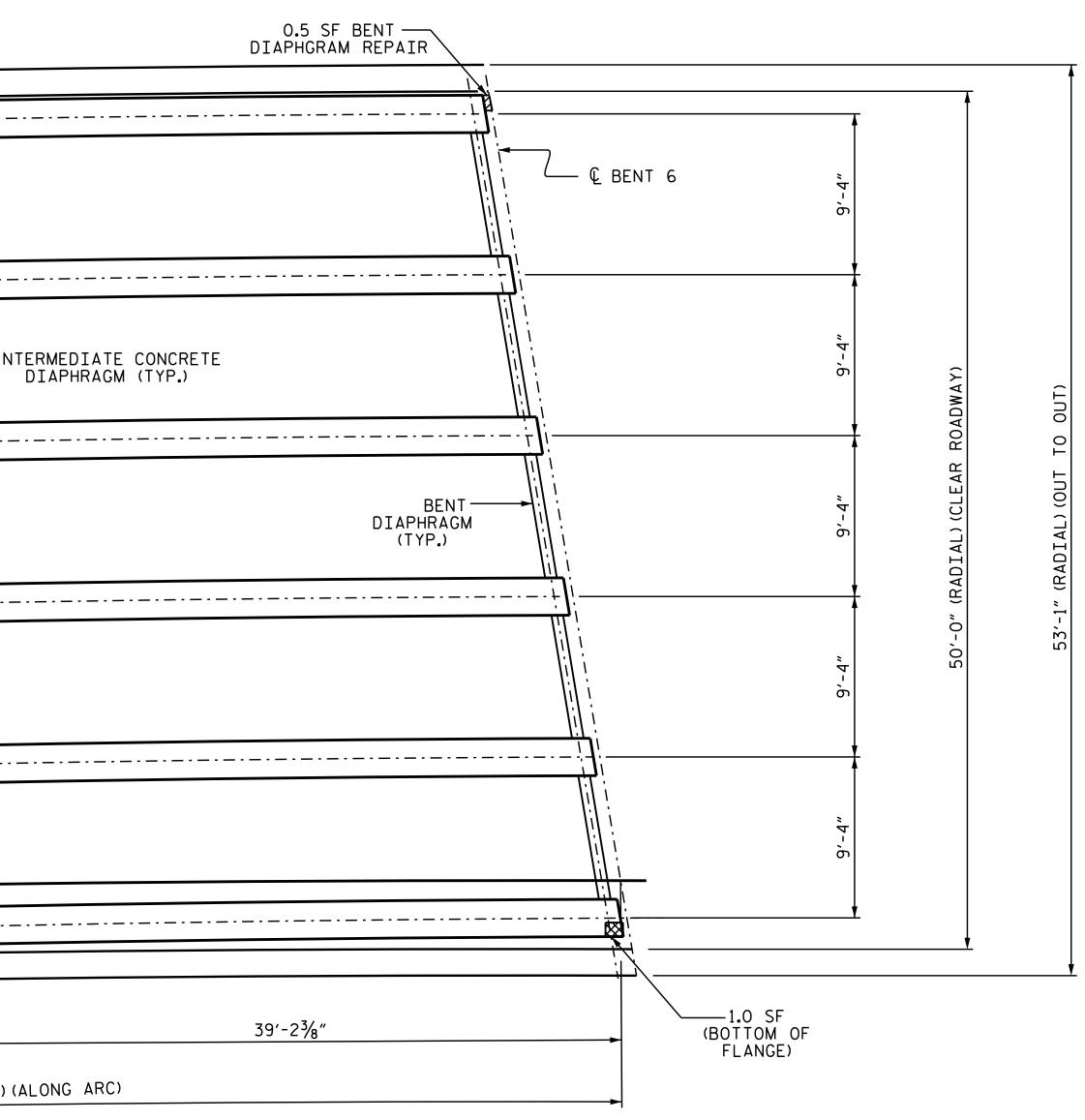
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DocuSigned by: Aster Abralia STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

SUPERSTRUCTURE CONCRETE REPAIRS SPAN E

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SIGNATURES COMPLETED	2			4			118

	O.5 SF BE DIAPHGRAM F	ENT REPAIR				
€ BENT						
			OVERHA	<u>ANG AN</u>) DIAPI	(SPAN F) HRAG SPAN
DRAWN BY :A.G	<u>S.T.SANDOR</u> DATE : . .ABRAHA/S.WANCE DATE : .	<u>09/2019</u> 06/2021				



M REPAIR LOCATIONS

REPAIR QUANTITY TABLE FOR SPAN F					
UNDERSIDE OF DECK		QUANT	ITIES		
UNDERSIDE OF DECK	ESTI	MATE	ACT	UAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF	
UNDERSIDE OF DECK & OVERHANG	0.0	0.0			
BENT DIAPHRAGMS	1.5	0.8			
PRESTRESSED CONCRETE GIRDER REPAIRS					
GIRDERS	1.0	0.5			

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

REPAIR KEY

DIAPHRAGM SHOTCRETE REPAIR
 PRESTRESSED CONCRETE GIRDER REPAIR

PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY

STATION: 320320

SHEET 4 OF 5

H CAROL

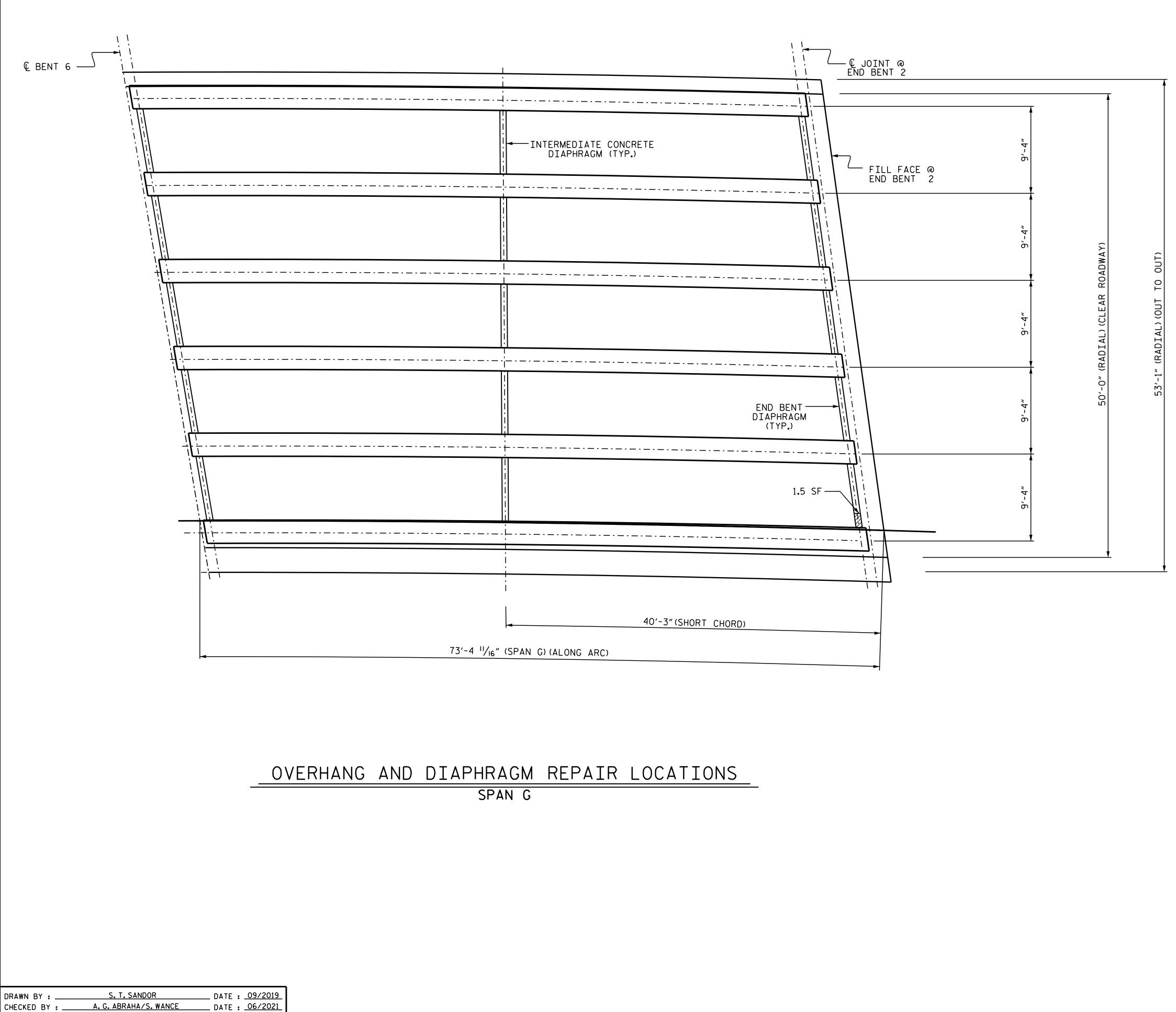
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SUPERSTRUCTURE CONCRETE REPAIRS SPAN F

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REPAIR QUANTIT	Υ ΤΑΕ	BLE FO	DR SP	AN G
UNDERSIDE OF DECK		QUANT	ITIES	
UNDERSIDE OF DECK	ESTI	ΜΑΤΕ	ACT	UAL
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK & OVERHANG	0.0	0.0		
BENT DIAPHRAGMS	1.5	0.8		
PRESTRESSED CONCRET	E GIRDI	ER REPA	IRS	
GIRDERS	0.0	0.0		

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

REPAIR KEY

- DIAPHRAGM SHOTCRETE REPAIR - PRESTRESSED CONCRETE GIRDER REPAIR

PROJECT NO. I-6041A EDGECOMBE _ COUNTY

320320 STATION:__

SHEET 5 OF 5

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SEAL * 030024

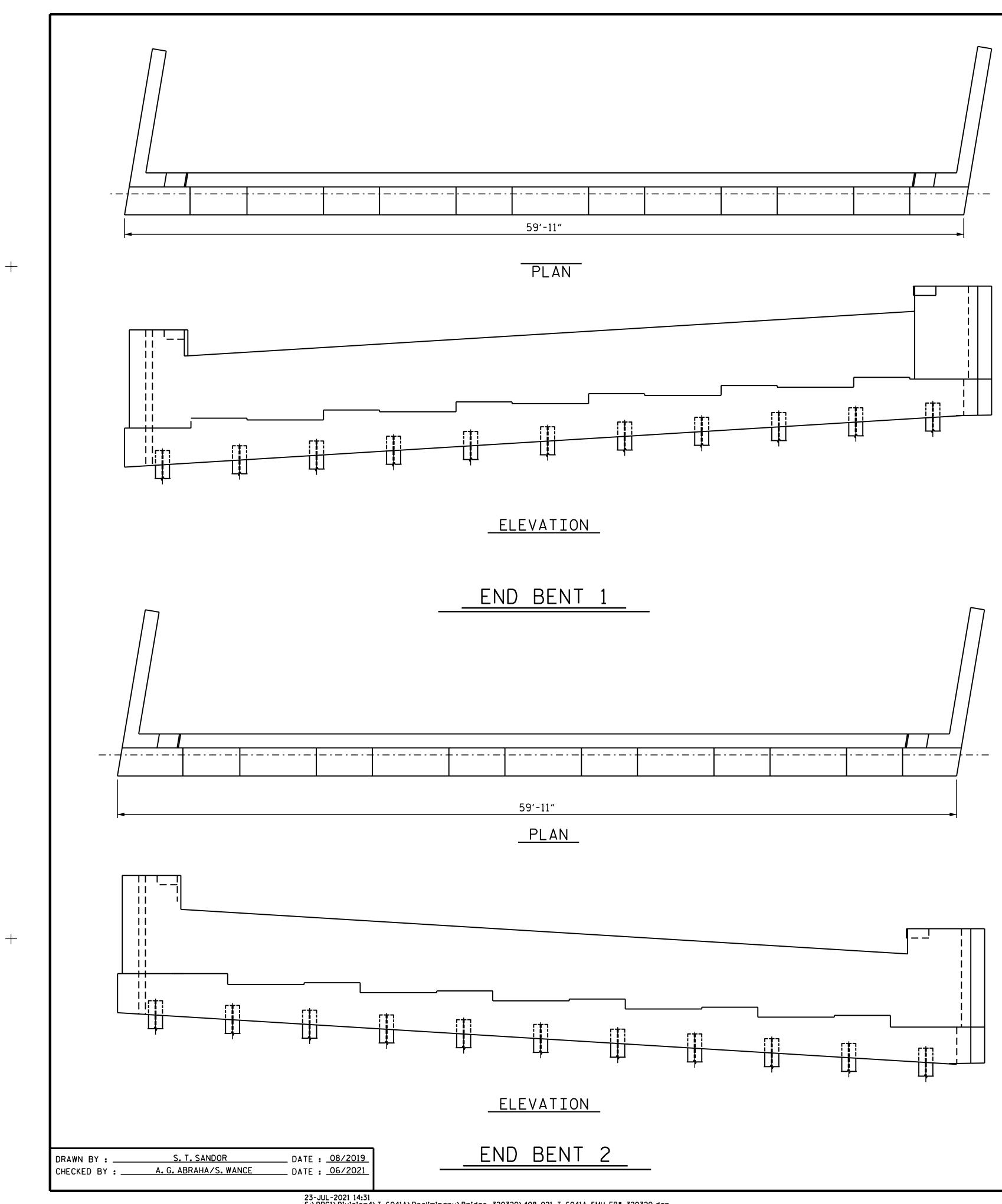
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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

SUPERSTRUCTURE CONCRETE REPAIRS SPAN G

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FINAL UNLESS ALL	1			3			TOTAL SHEETS
SIGNATURES COMPLETED	2			4			118



aabraha

NO DEFICIENCIES NOTED DURING FIELD INSPECTION. THE CONTRACTOR AND ENGINEER SHALL RE-INSPECT THE END BENTS FOR POTENTIAL REPAIRS.



REPAIR QUANTITY TABLE						
REPAIRS		QUANT	ITIES			
END BENT 1 & 2	ESTI	ΜΑΤΕ	ACT	UAL		
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
CAP (VERTICAL FACE)	0.0	0.0				
CAP (HORIZONTAL, CORNER)	0.0	0.0				
COLUMN	0.0	0.0				
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF		
CAP (VERTICAL FACE)	0.0	0.0				
CAP (HORIZONTAL, CORNER)	0.0	0.0				
COLUMN	0.0	0.0				

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

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 LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ENTER THE ACTUAL QUANTITIES INTO THE AS-BUILT REPAIR QUANTITY TABLE.

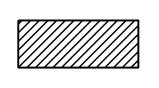
FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

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

REPAIR KEY



CONCRETE REPAIR AREA (FORM AND POUR)



SHOTCRETE REPAIR AREA

م SEAL 030024

DocuSigned by Aster Abraha

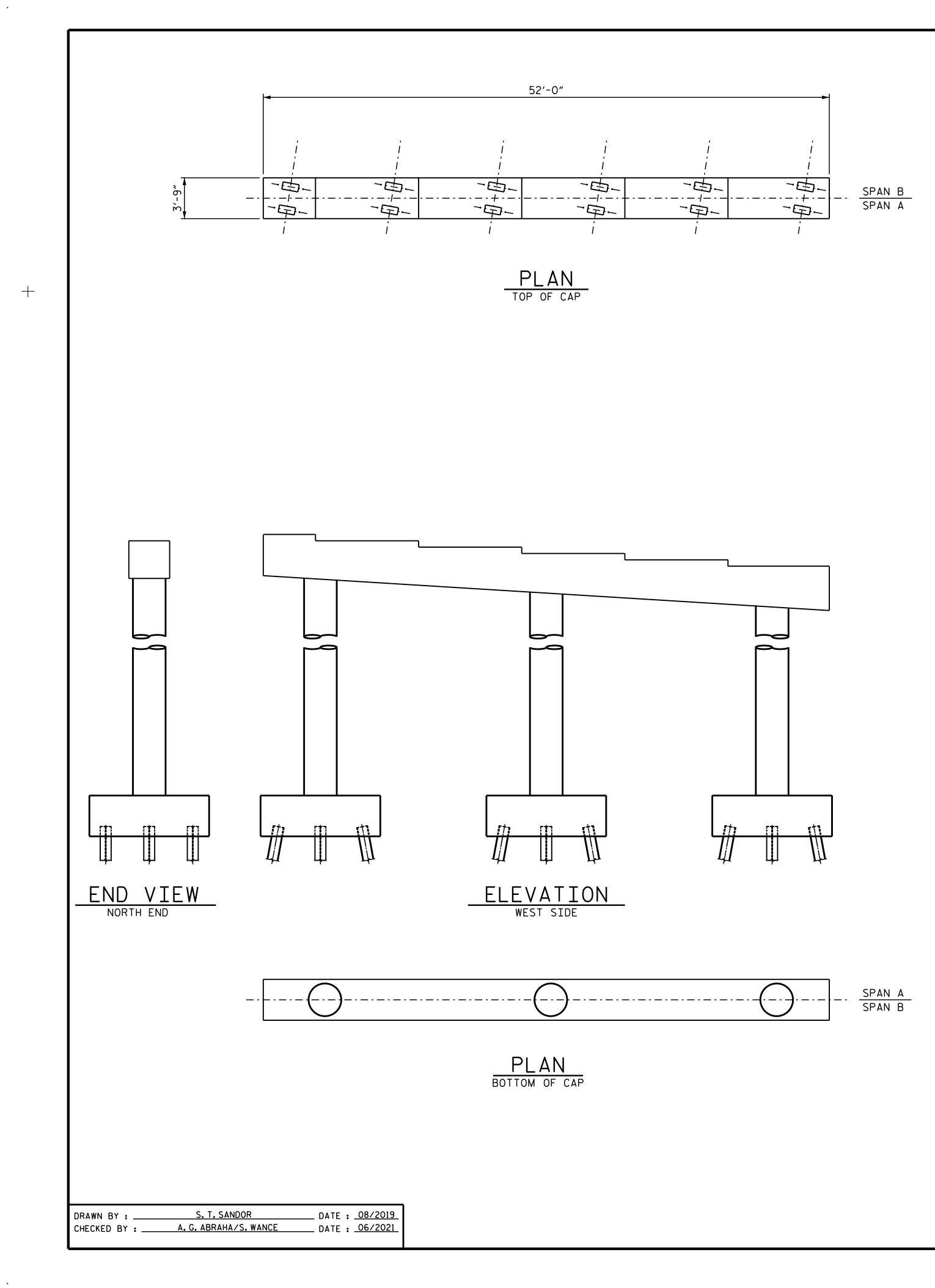
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PROJECT NO. I-6041A EDGECOMBE _ COUNTY BRIDGE NO. 320320

> STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

END BENT REPAIRS

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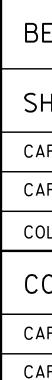
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FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

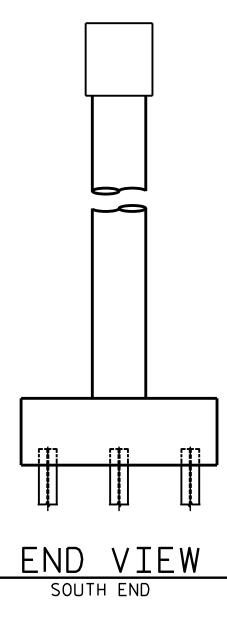
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

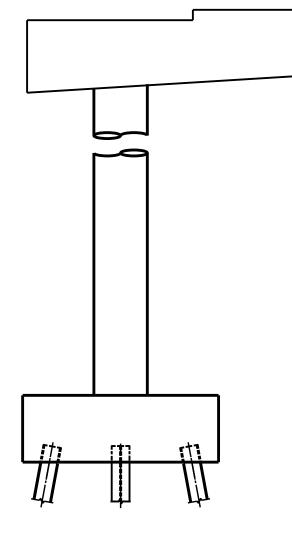
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

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

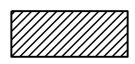






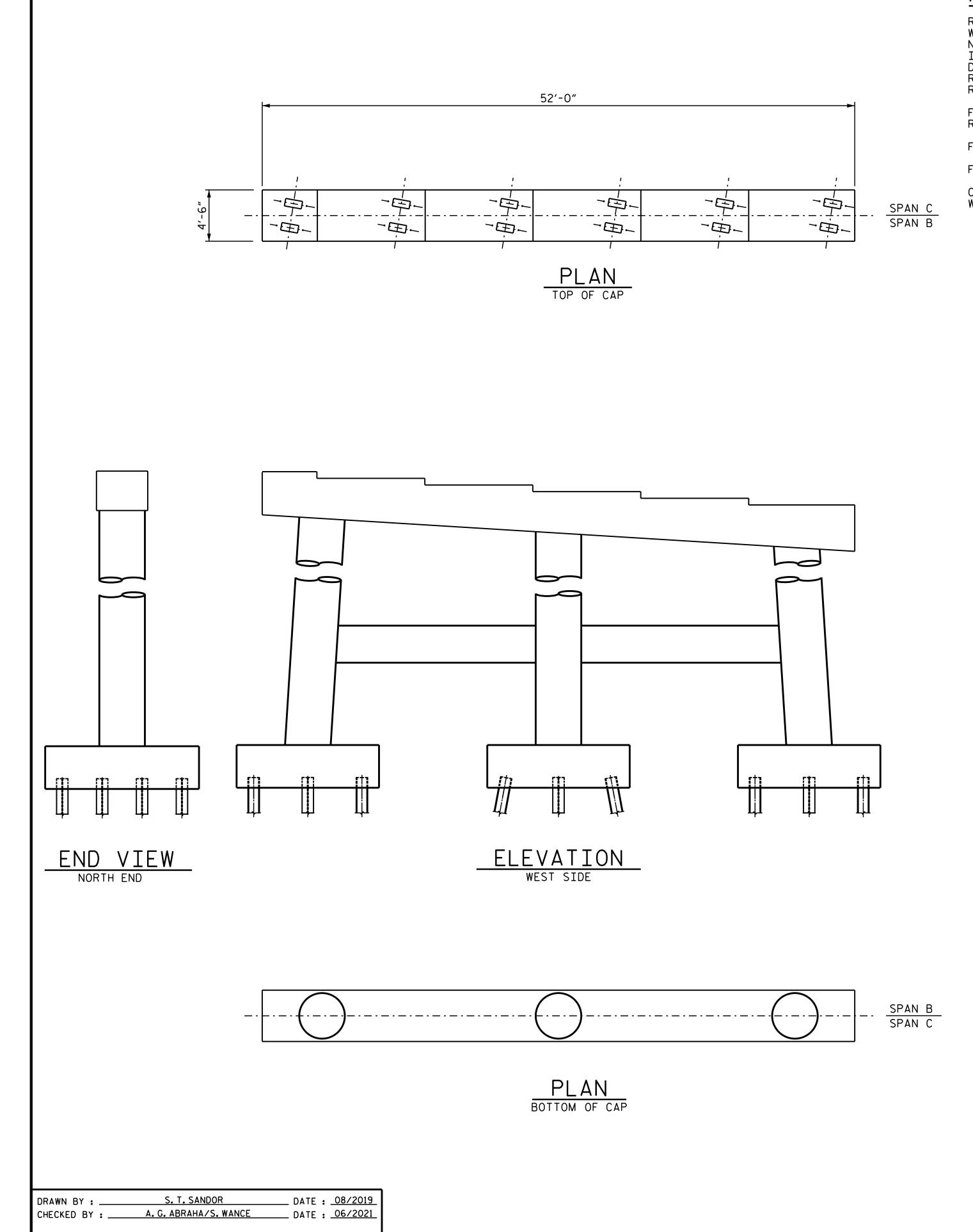


REPAIR KEY



CONCRETE REPAIR AREA (FORM AND POUR)

Lest MARE ACTUAL HOTCRETE REPAIR AREA VOLUME AREA VOLUME AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 ONCRETE REPAIR 0.0 0.0 0.0 0.0 ONCRETE REPAIR 0.0 0.0 0.0 0.0 AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 ONCRETE REPAIR 0.0 0.0 0.0 0.0 AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 DUMN 0.0 0.0 0.0 0.0 0.0 LEST STORE MUN CONCERSENT ISTIMATED REPARAND MIN. 2"CLEARANCE TO SAWOUT. FEELEVATION EDGECOMBE COUNTY ELEVATION EAST STOR PROJECT NO								
ENT 1 ESTIMATE ACTUAL HOTCRETE REPAIR AREA VOLUME AREA VOLUME AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 ONCRETE REPAIR 0.0 0.0 0.0 0.0 ONCRETE REPAIR 0.0 0.0 0.0 0.0 AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 ONCRETE REPAIR 0.0 0.0 0.0 0.0 AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 DULUN 0.0 0.0 0.0 0.0 0.0 LIS IN CHART PEPRESENT ISTIMATED REPAIR TOTALS AFTER REMOVAL OF UND CONCRETE, MIN. OF 1' BEHIND REBAR AND MIN. 2'CLEARANCE TO SAWCUT. PROJECT NO. I-6041A ELEVATION EAST SIDE PROJECT NO. I-6041A EDGECOMBE EDGECOMBE COUNTY BRIDGE NO. 320320 SHEET 10' F SHEET 1 OF 6 SUBSTRUCTURE BENT 1 SUBSTRUCTURE DEVANTIONALESS ALL IN ONTO INSTRUCTURE BENT 1 SHEET NO	REPAIR QUANTITY TABLE							
Lot LMATE ACTUAL HOTCRETE REPAIR APEA VOLUME APEA VOLUME AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 DURN 0.0 0.0 0.0 0.0 0.0 ONCRETE REPAIR 0.0 0.0 0.0 0.0 0.0 AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 0.0 ONCRETE REPAIR 0.0 0.0 0.0 0.0 0.0 0.0 DUMN 0.0 0.0 0.0 0.0 0.0 0.0 0.0 LIES IN CHART REPRESENT ESTIMATED REPATE TOTALS AFTER REMOVAL OF DUBD CONCERT, MIN. 0° 1° BENIND REBAR AND MIN. 2° CLEARANCE TO SANCUT. REPATE DETAILS. ELEVATION EAST STDE PROJECT NO. I-6041A EDGECOMBE COUNTY BRIDGE NO. 320320 SHEET 10° G SUB STRUCTURE SUB STRUCTURE BENT 1 SUB STRUCTURE BENT 1 SHEET NO		QUANTITIES						
NOTICE IE REPAIR SF CF SF	BENT 1	EST	IMATE	ACT	UAL			
AP (HORIZONTAL FACE) O.0 ONCRETE REPAIR ONCRETE REPAIR AP (VERTICAL FACE) O.0 O.0 O.0 ONCRETE REPAIR AP (VERTICAL FACE) O.0	HOTCRETE REPAIR							
DULINN 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	AP (VERTICAL FACE)	0.0	0.0					
ONCRETE REPAIR	AP (HORIZONTAL FACE)	0.0	0.0					
AP (VERTICAL FACE) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	OLUMN	0.0	0.0					
AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	ONCRETE REPAIR							
DULINN 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	AP (VERTICAL FACE)	0.0	0.0					
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FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

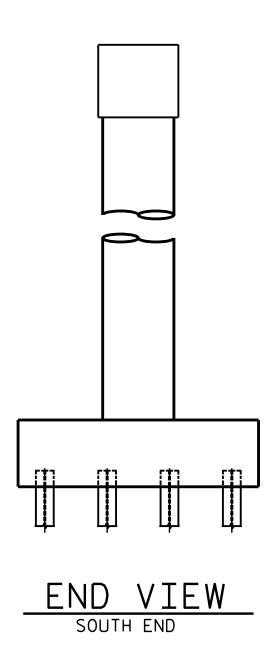
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

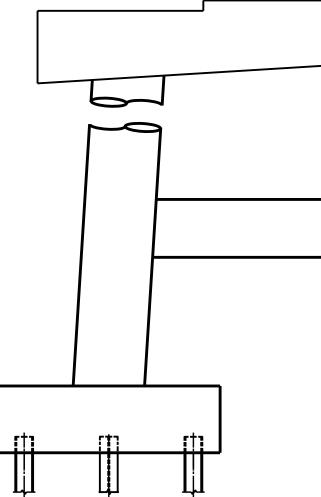
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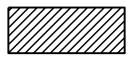


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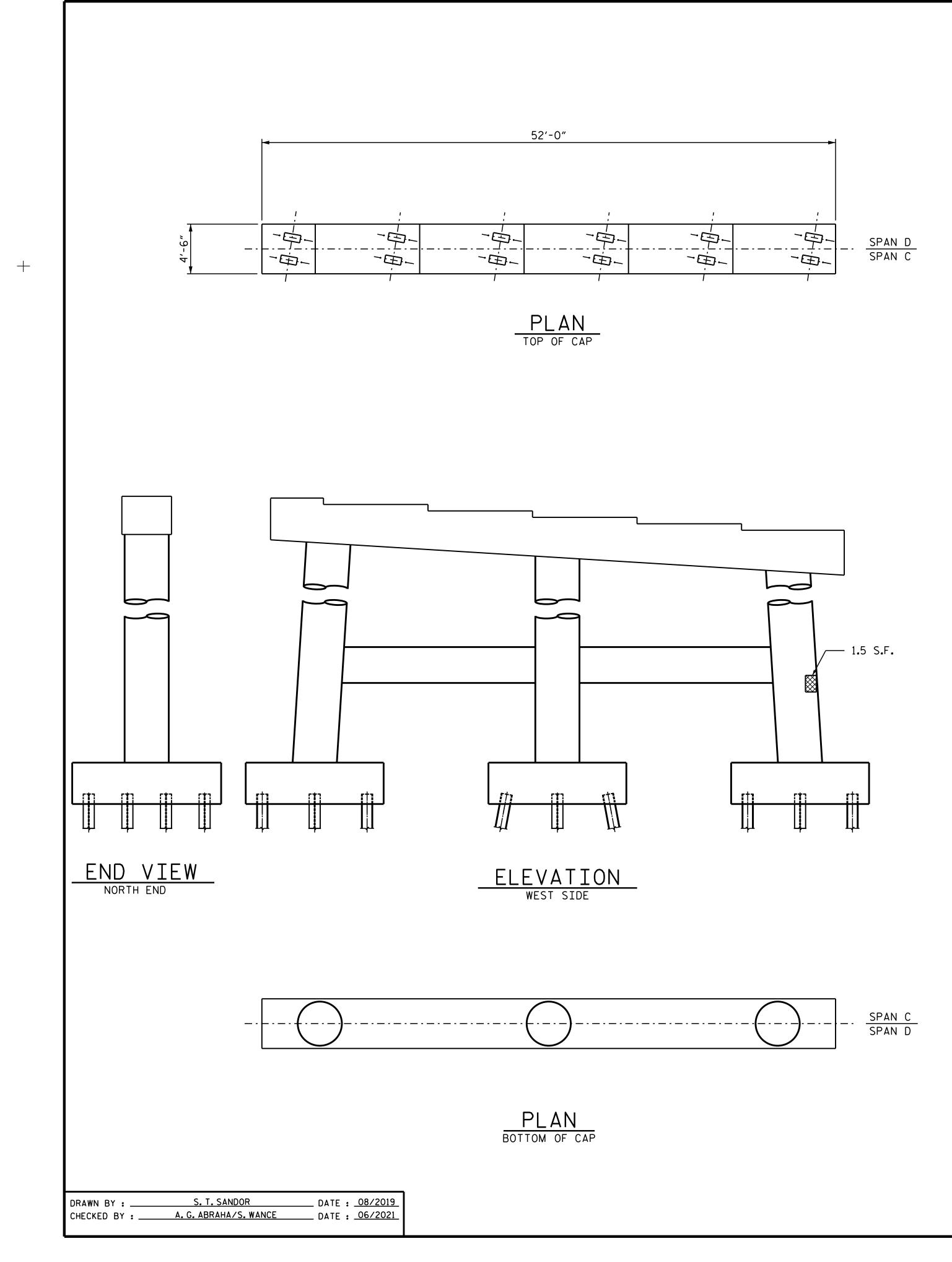


REPAIR KEY



CONCRETE REPAIR AREA (FORM AND POUR)

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ENT 2 ENT 2 ESTIMATE ACTUAL HOTCRETE REPAIR AREA VOLUME AREA VOLUME AP (VERTICAL FACE) 0.0 0.0 0.0 0.0 AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 CONCRETE REPAIR Image: Concentration of the second of th	REPAIR Q	UANT	ITY TA	ABLE	
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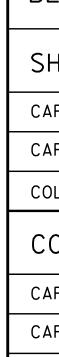
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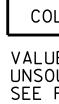
FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

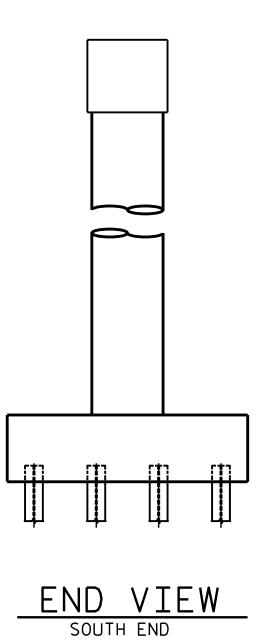
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

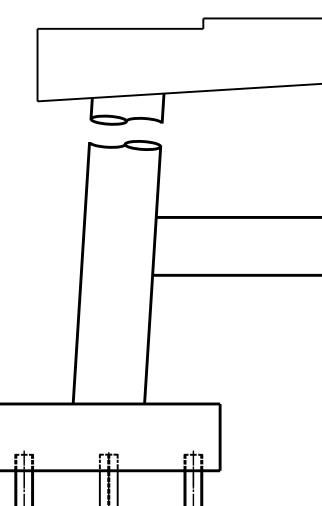
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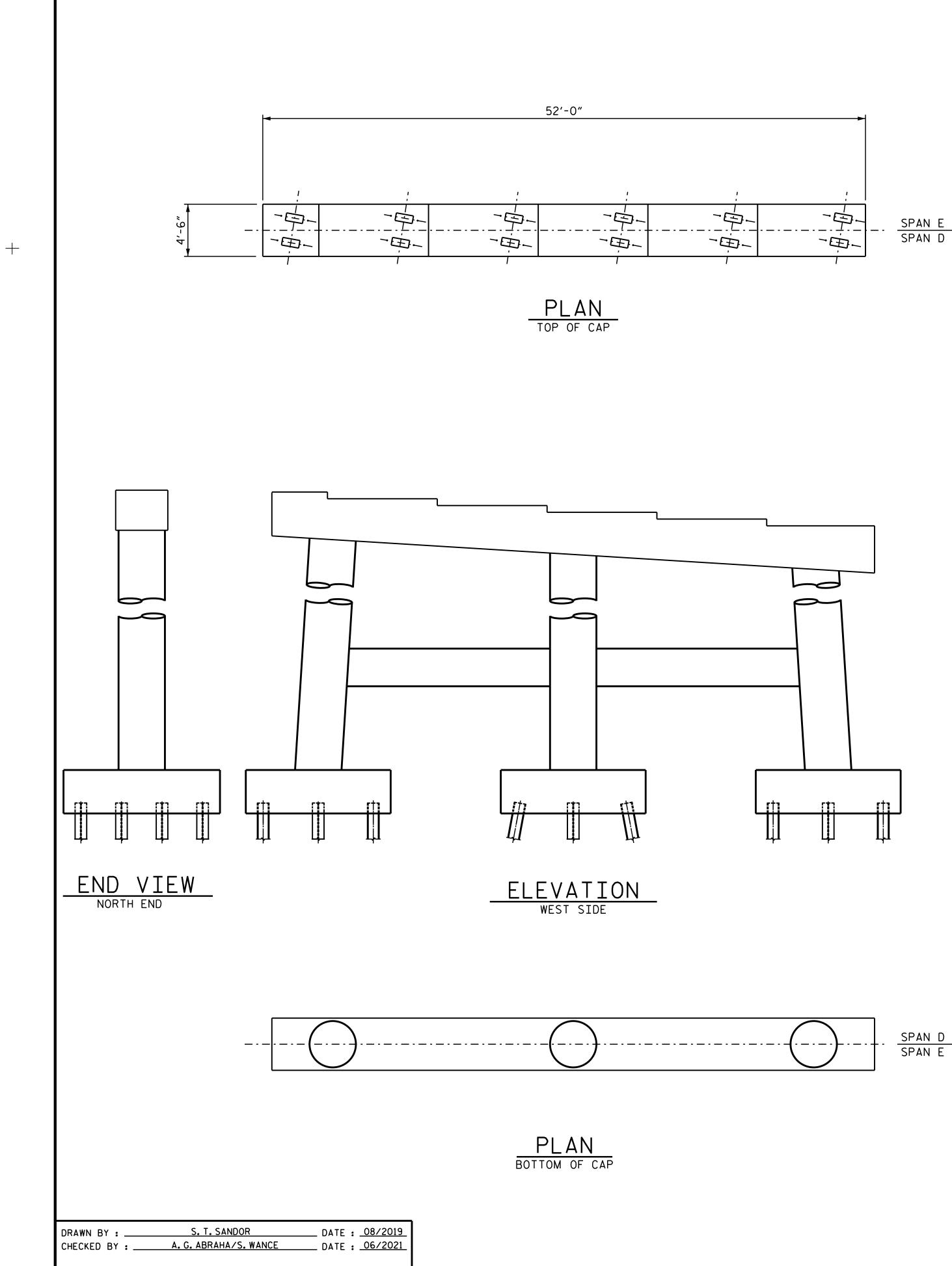


REPAIR KEY



CONCRETE REPAIR AREA (FORM AND POUR)

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	SHOTCRETE REPAIR				
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	CAP (HORIZONTAL FACE)	0.0	0.0		
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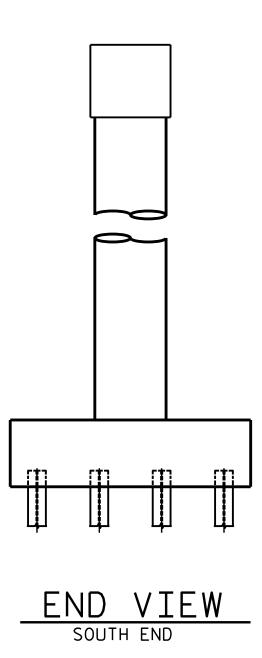
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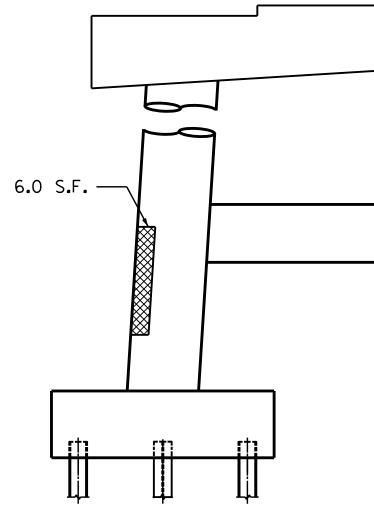
CONCRETE REPAIRS MAY BE SUBSTITUTED IN LIEU OF SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.





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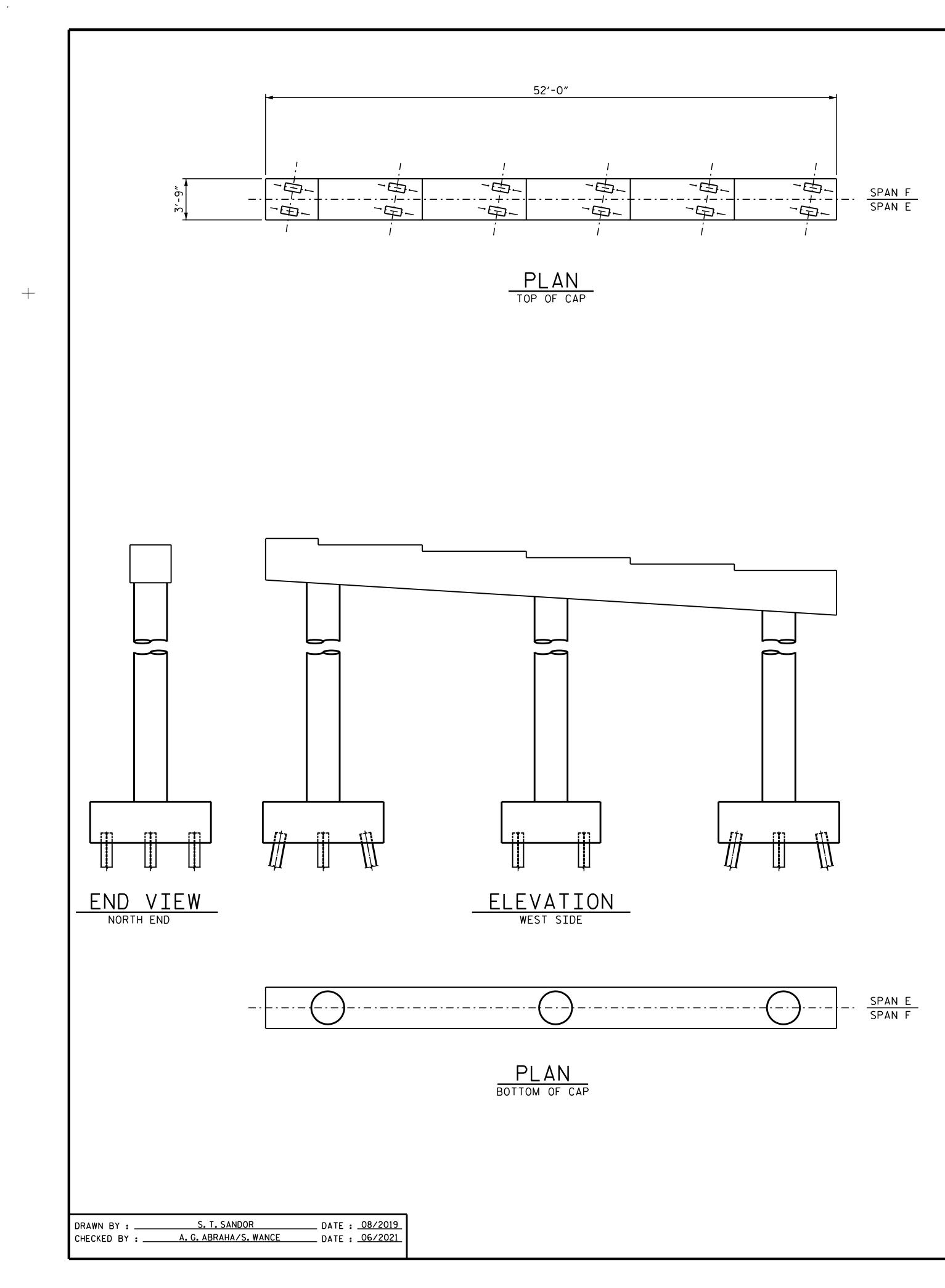
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REPAIR KEY



CONCRETE REPAIR AREA (FORM AND POUR)

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AP (HORIZONTAL FACE)	0.0	0.0		
OLUMN	6.0	3.0		
CONCRETE REPAIR				
AP (VERTICAL FACE)	0.0	0.0		
AP (HORIZONTAL FACE)	0.0	0.0		
OLUMN	0.0	0.0		
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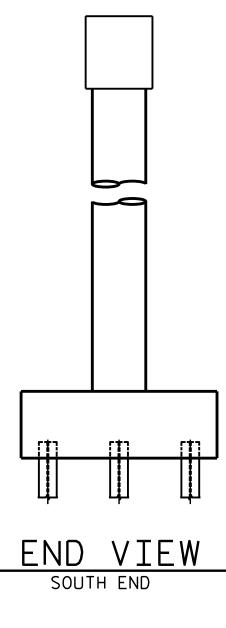
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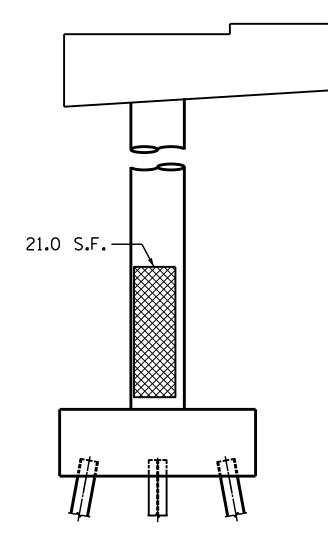
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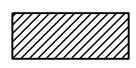


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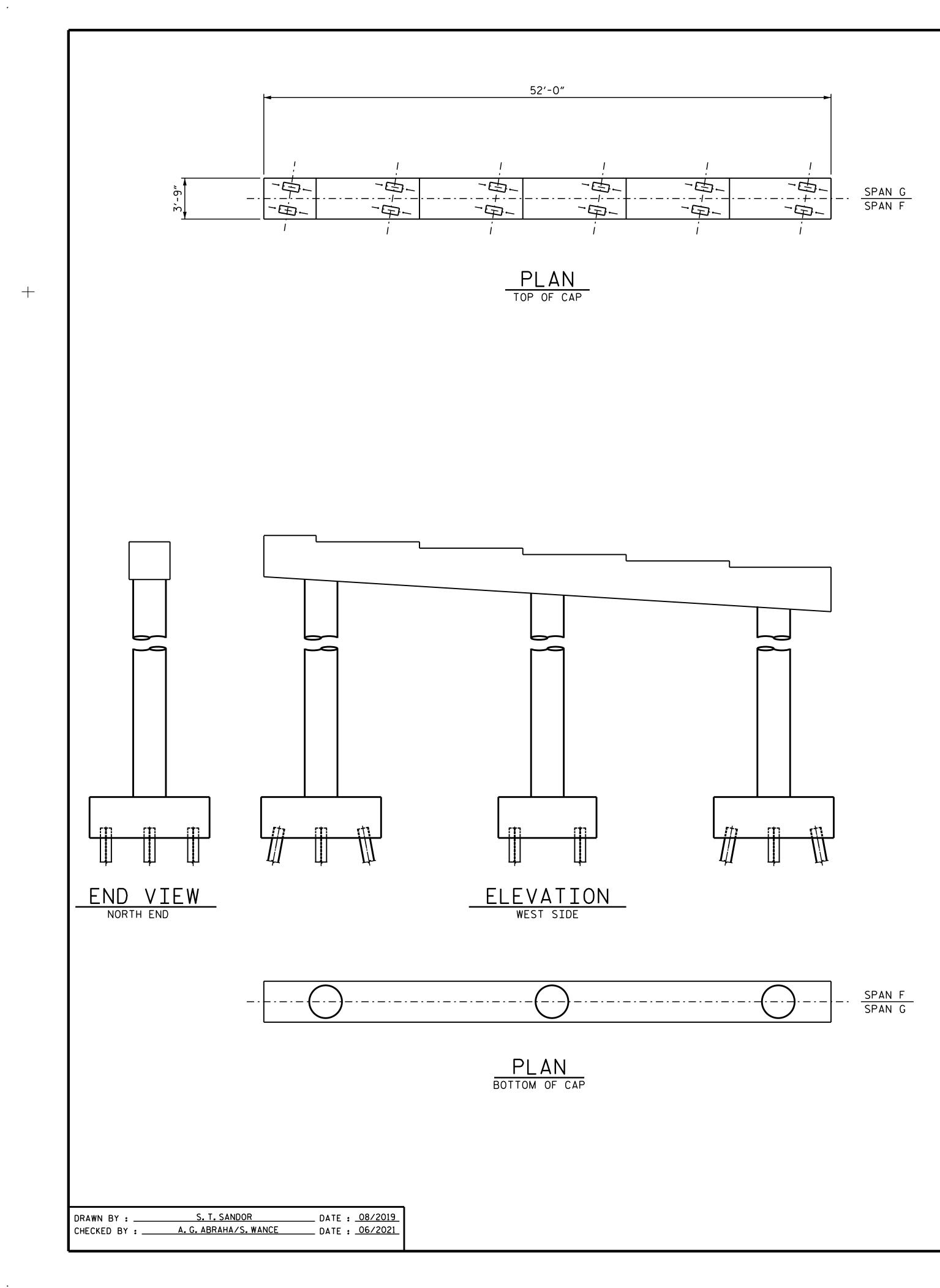


REPAIR KEY



CONCRETE REPAIR AREA (FORM AND POUR)

AP (VERTICAL FACE) 0.0 0.0 0.0 AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.					
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DULINN 21.0 10.5 ONCRETE REPAIR	AP (VERTICAL FACE)	0.0	0.0		
ONCRETE REPAIR	AP (HORIZONTAL FACE)	0.0	0.0		
AP (VERTICAL FACE) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	OLUMN	21.0	10.5		
AP (HORIZONTAL FACE) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	ONCRETE REPAIR				
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DOUNDE CONCRETE, MIN. OF 1"BEHIND REBAR AND MIN. 2"CLEARANCE TO SAWCUT. REPAIR DETAILS.	OLUMN	0.0	0.0		
EAST SIDE PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY BRIDGE NO. <u>320320</u> SHEET 5 OF 6 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUBSTRUCTURE BENT 5 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL DOCUMENT NOT CONSIDERED NO BY: DATE: NO BY: DATE: SB-21 JUL 33 JUL 34 JUL 33 JUL 34 JUL 33 JUL 34 JUL 34 JU					
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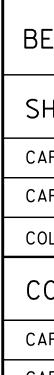
REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE.IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE INSPECTOR OR ENGINEER, THE CONTRACTOR SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

FOR CAP AND COLUMN REPAIR DETAILS, SEE "TYPICAL CAP AND COLUMN REPAIR DETAILS" SHEET.

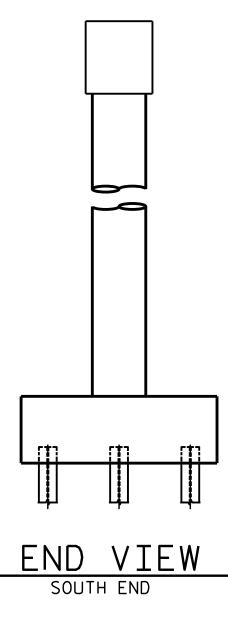
FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

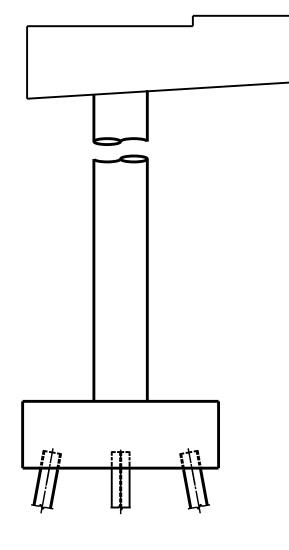
FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

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

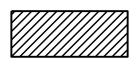






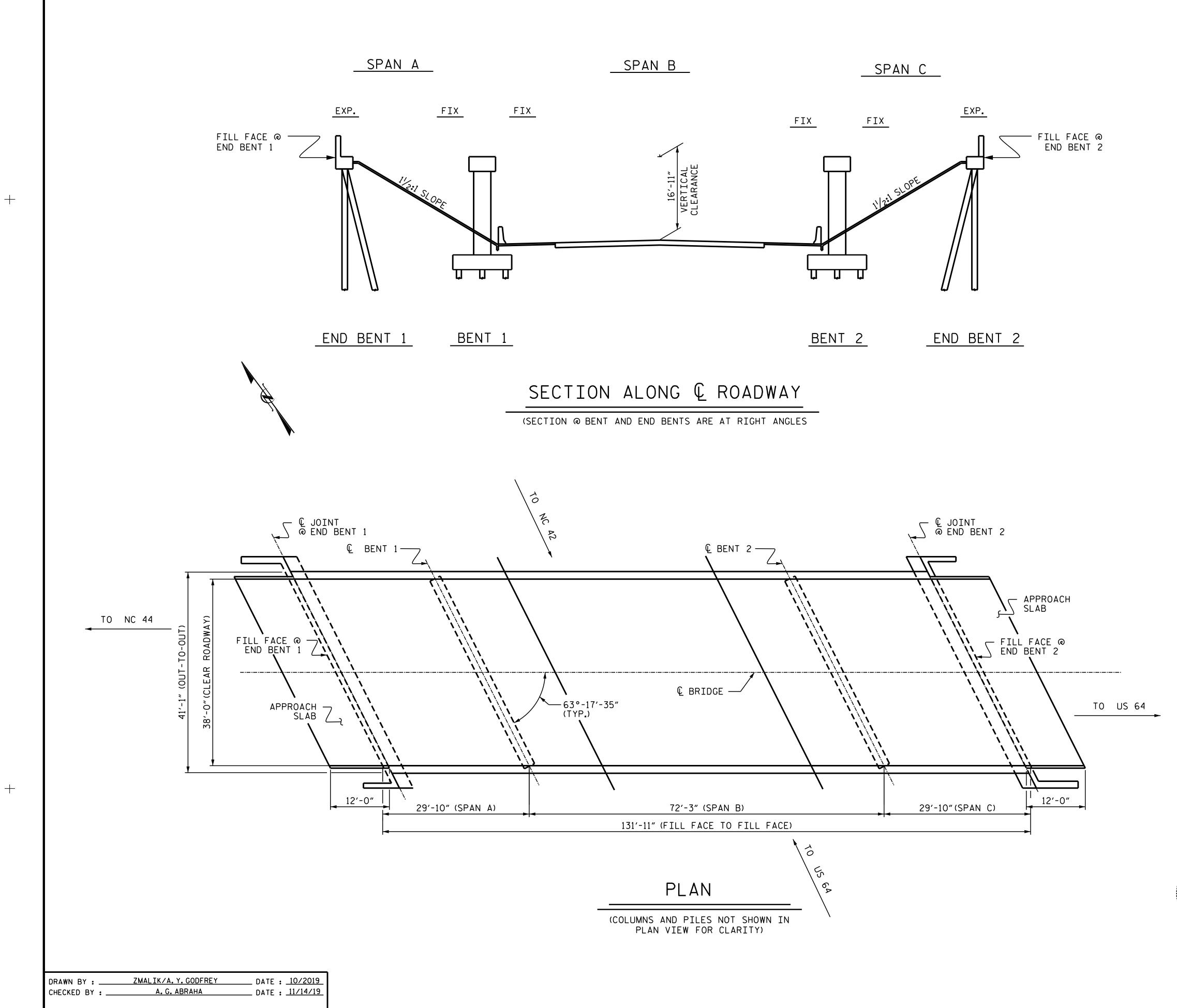


REPAIR KEY



CONCRETE REPAIR AREA (FORM AND POUR)

REPAIR	QUANT	ITY TA	BLE		
	QUANTITIES				
ENT 6	ESTIMATE		ACTUAL		
HOTCRETE REPAIR	AREA SF	VOLUME CF	AREA SF	VOLUME CF	
AP (VERTICAL FACE)	0.0	0.0			
AP (HORIZONTAL FACE)	0.0	0.0			
OLUMN	10.5	5.3			
ONCRETE REPAIR					
AP (VERTICAL FACE)	0.0	0.0			
AP (HORIZONTAL FACE)	0.0	0.0			
OLUMN	0.0	0.0			
		10.5 S.F.			
ELEVATIO	<u>N</u>				
				COUNTY	
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SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- PERFORM CONCRETE DECK REPAIRS IN PREPARED AREAS. -
- OVERLAY PREPARED TOP OF BRIDGE DECK WITH EPOXY OVERLAY.
- BRIDGE JOINT DEMOLITION. -
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND SILICONE JOINT SEALANT.

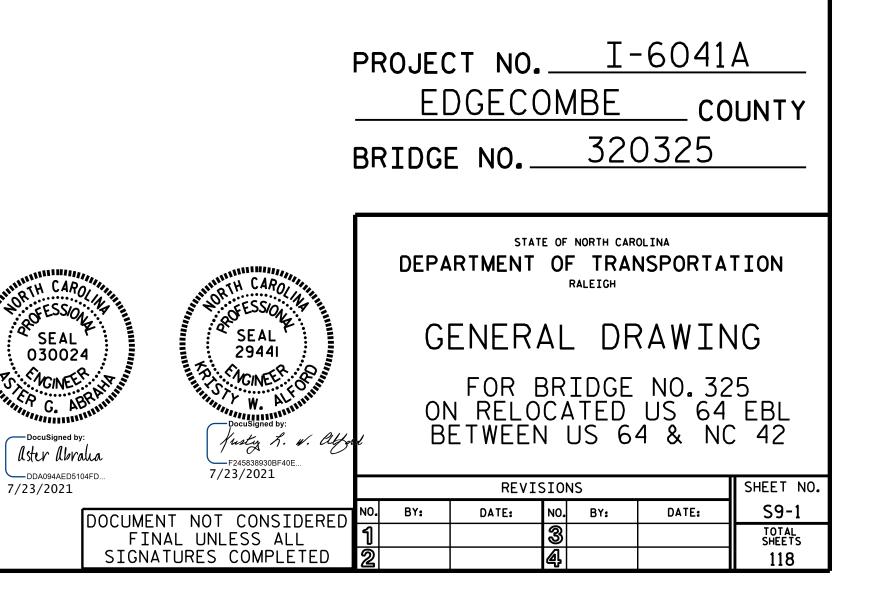
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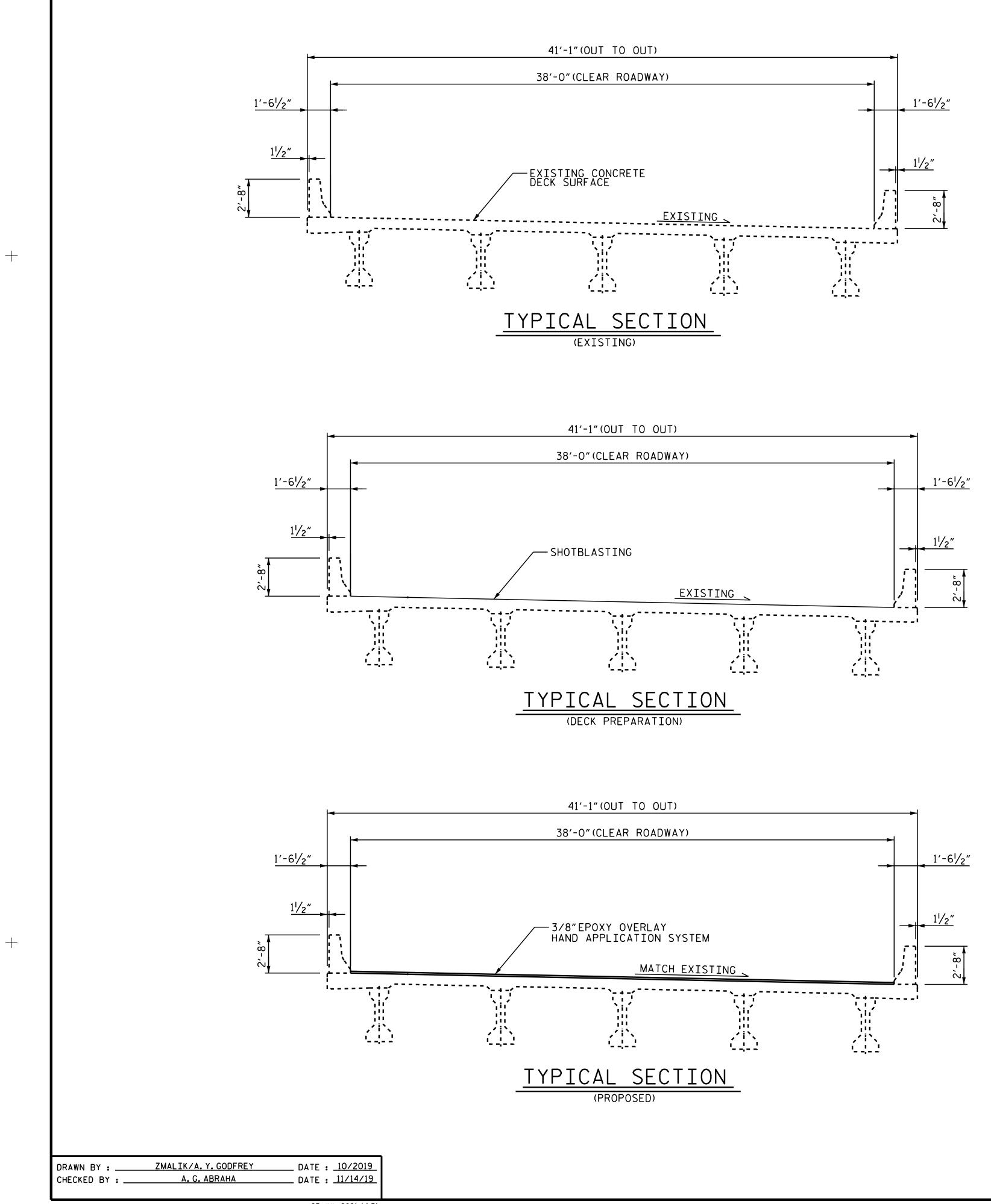
GENERAL DRAWING AND PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 11/13/2018 AND 11/10/2020 BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

> I hereby certify that this structure was rehabilitated according to these plans or as noted therein.

Resident Engineer

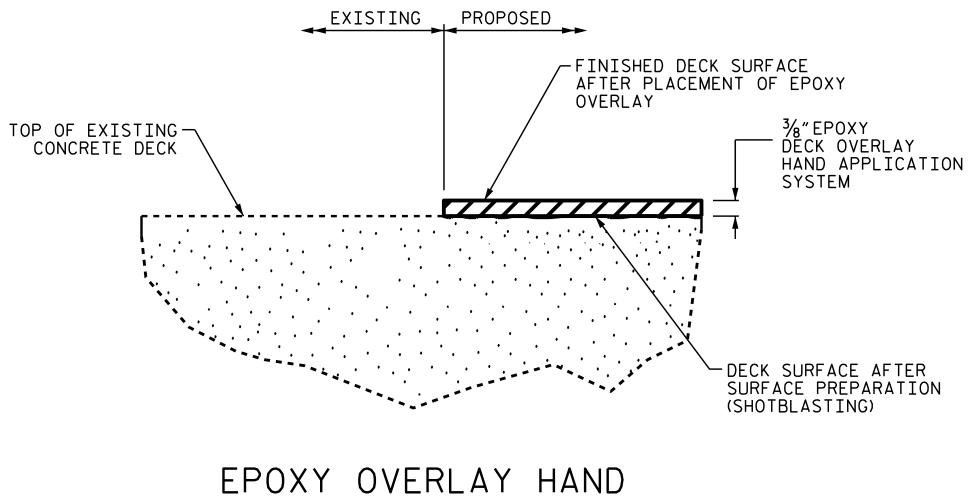
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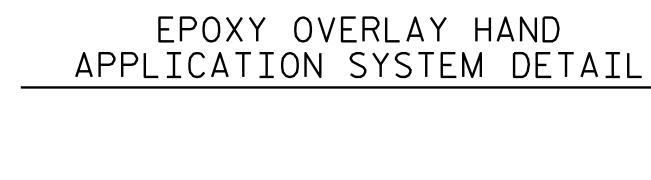




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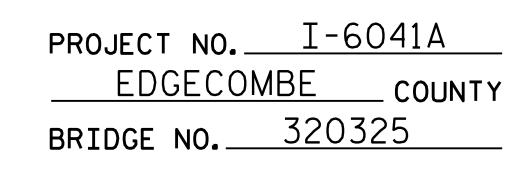




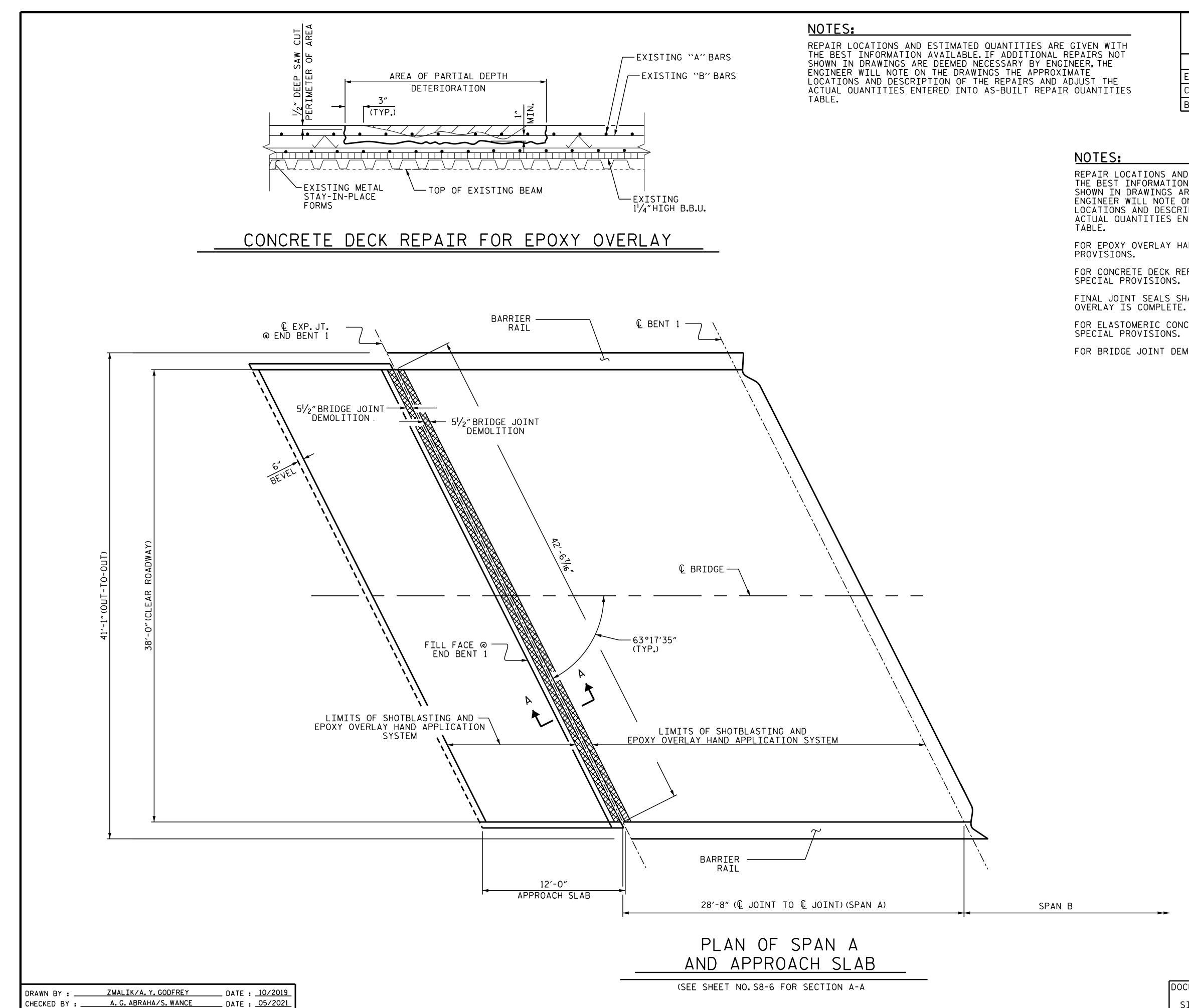




SEE TRAFFIC MANAGEMENT PLANS FOR LANE WIDTHS, SEQUENCING AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND EPOXY OVERLAY PLACEMENT.



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SUMMARY OF QUANTITIES FOR SPAN A AND APPROACH SLAB

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	1,487 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	39 . 0 SF	

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 AS- BUILT REPAIR QUANTITIES

FOR EPOXY OVERLAY HAND APPLICATION SYSTEM, SEE SPECIAL

FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE

FINAL JOINT SEALS SHALL NOT BE INSTALLED UNTIL THE

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

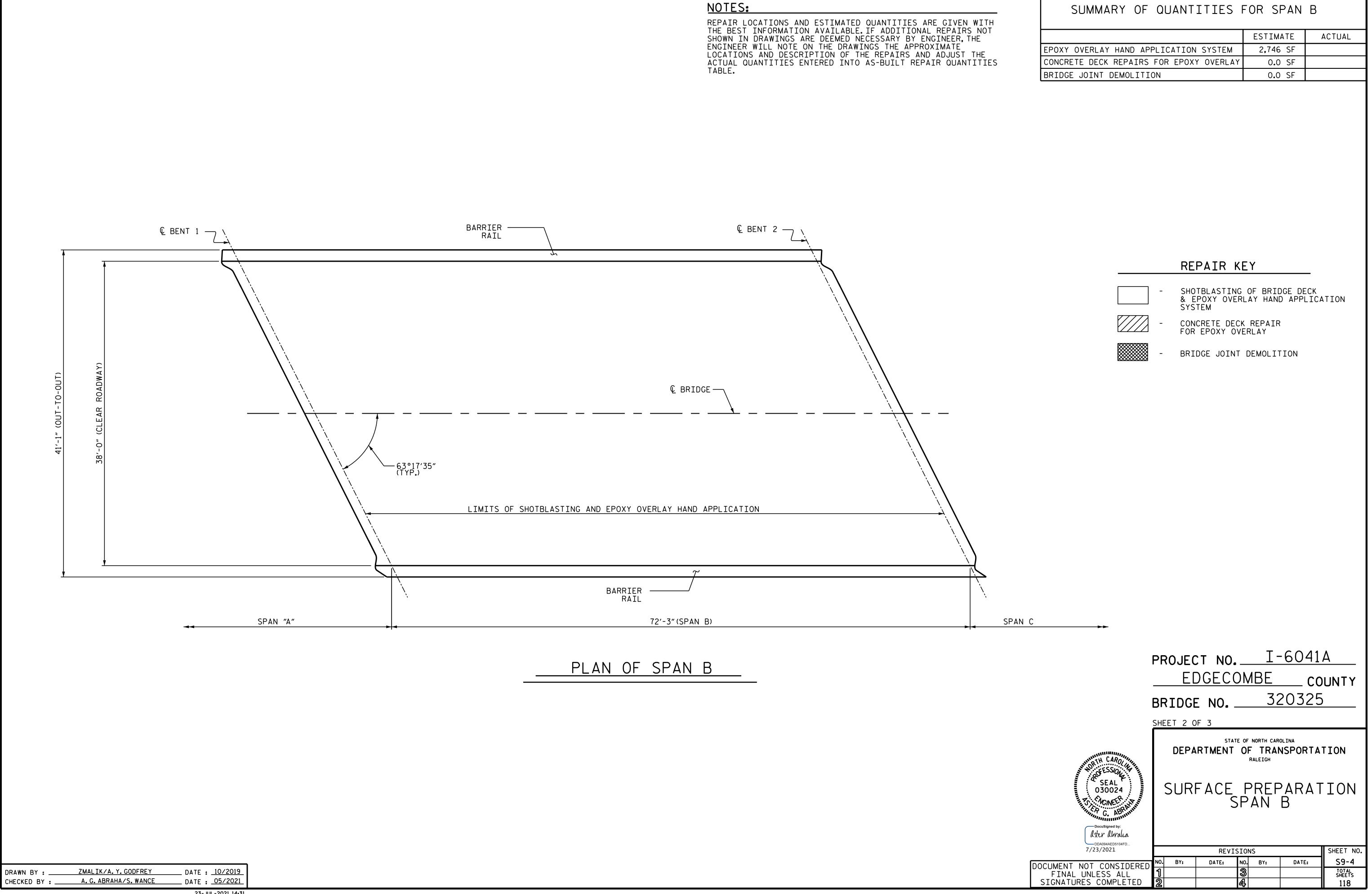
REPAIR KEY

	SHOTBLASTING OF BRIDGE DECK & EPOXY OVERLAY HAND APPLICATION SYSTEM
-	CONCRETE DECK REPAIR FOR EPOXY OVERLAY

BRIDGE JOINT DEMOLITION

PROJECT NO. I-6041A EDGECOMBE _ COUNTY BRIDGE NO. 320325 SHEET 1 OF 3 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH FESSION SURFACE PREPARATION SPAN A AND APPROACH SLAB © SEAL 7 030024 ACINEE? Aster Abraha DDA094AED5104FD... 7/23/2021 SHEET NO REVISIONS S9-3 DATE: DATE: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED BY: LON BY: TOTAL SHEETS

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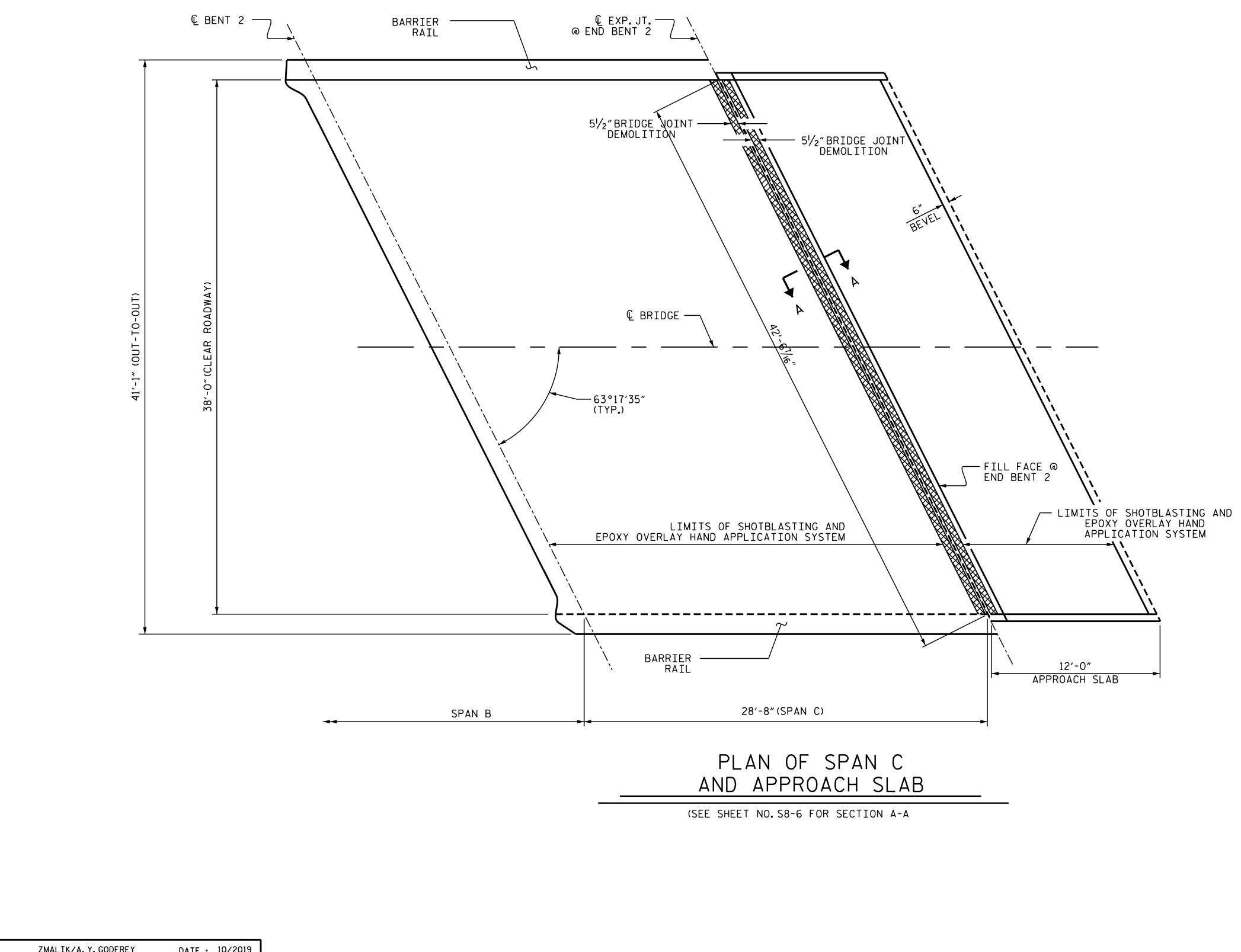
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SUMMARY	OF	QUANTITIES	FOR	SPAN B	3
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	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	2,746 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	0.0 SF	

	-	SHOTBLASTING OF BRIDGE DECK & EPOXY OVERLAY HAND APPLICATION SYSTEM
	-	CONCRETE DECK REPAIR FOR EPOXY OVERLAY
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DRAWN BY :	ZMALIK/A.Y.GODFREY	DATE :	10/2019
CHECKED BY	A. G. ABRAHA/S. WANCE	DATE :	05/2021

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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 AS- BUILT REPAIR QUANTITIES TABLE.

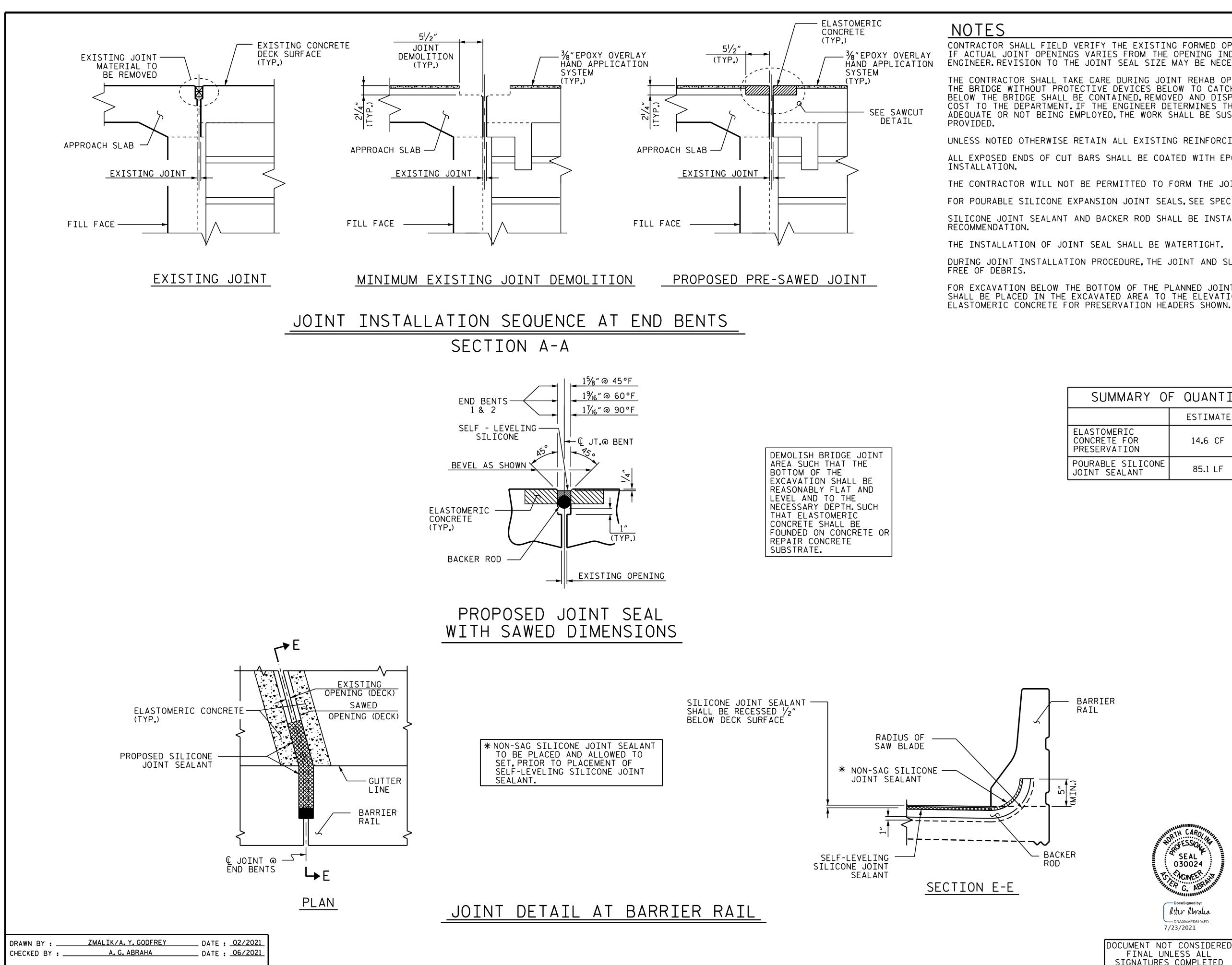
SUMMARY OF QUANTITIES FOR SPAN C AND APPROACH SLAB

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	1,487 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	39.0 SF	

REPAIR KEY

-	SHOTBLASTING OF BRIDGE DECK & EPOXY OVERLAY HAND APPLICATION SYSTEM
-	CONCRETE DECK REPAIR FOR EPOXY OVERLAY
-	BRIDGE JOINT DEMOLITION

	PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> county BRIDGE NO. <u>320325</u>				
	SHEET 3 C)F 3			
AND ROUTE SCOULANT	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH				
POFESSION F	SURI	FACE SPA APPRO	PREF N C DACH	PARAT AND SLAE	ION 3
Docusigned by: Aster Abraha					
DDA094AED5104FD 7/23/2021	REVISIONS SHEET NO.				
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FINAL UNLESS ALL SIGNATURES COMPLETED	1		3 4		total sheets 118



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

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

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

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT. FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS.

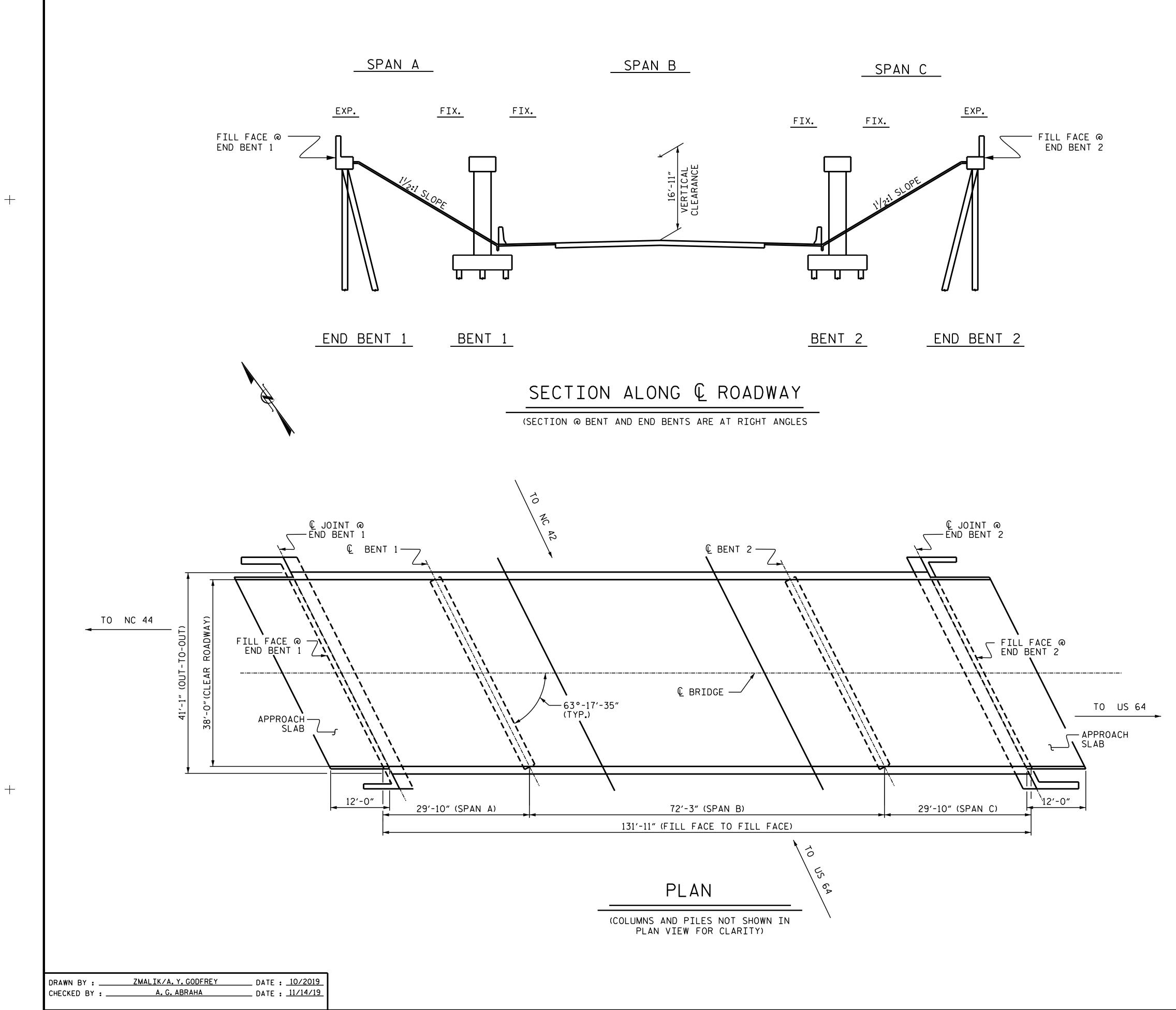
SILICONE JOINT SEALANT AND BACKER ROD SHALL BE INSTALLED AS PER MANUFACTURER'S

DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND

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

UMMARY O	QUANTITIES			
	ESTIMATE	ACTUAL		
OMERIC ETE FOR RVATION	14.6 CF			
BLE SILICONE SEALANT	85.1 LF			

ER		
	PROJECT NO. <u>I-604</u>	1 A
		OUNTY
	BRIDGE NO	5
	STATE OF NORTH CAROLINA	ATION
OR SEAL O30024	RALEIGH	
© SEAL 030024	JOINT REPAIF	2
HE S. VOINEL. APPArt	DETAILS	
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DOCUMENT NOT CONSIDERED	NO. BY: DATE: NO. BY: DATE:	<u>\$9-6</u>
FINAL UNLESS ALL SIGNATURES COMPLETED	1 3 2 4	TOTAL SHEETS 118



SCOPE OF WORK

- BRIDGE DECK PREPARATION WITH SHOTBLASTING METHODS.
- PERFORM CONCRETE DECK REPAIRS IN PREPARED -AREAS.
- OVERLAY PREPARED TOP OF BRIDGE DECK WITH EPOXY OVERLAY. -
- BRIDGE JOINT DEMOLITION. -
- RECONSTRUCT BRIDGE JOINTS WITH ELASTOMERIC CONCRETE AND INSTALL BACKER ROD AND SILICONE JOINT SEALANT.

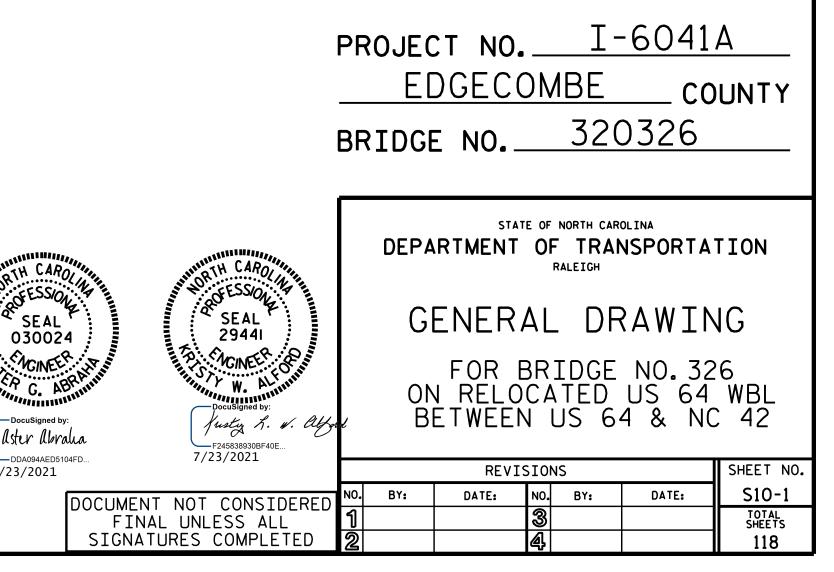
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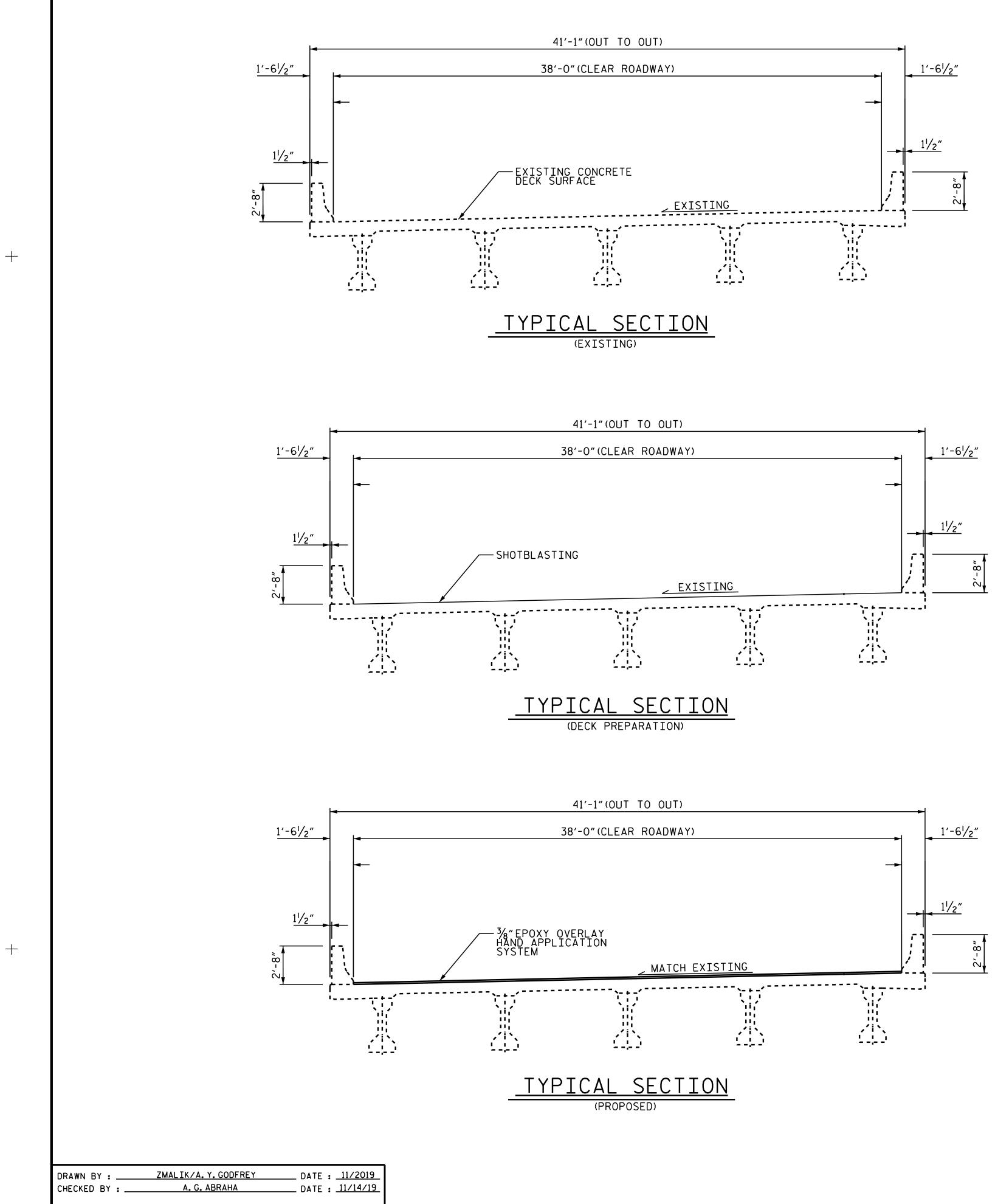
GENERAL DRAWING AND PROFILE INFORMATION IS TAKEN FROM ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 2/19/2019 AND 02/09/2021. BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS.

> I hereby certify that this structure was rehabilitated according to these plans or as noted therein.

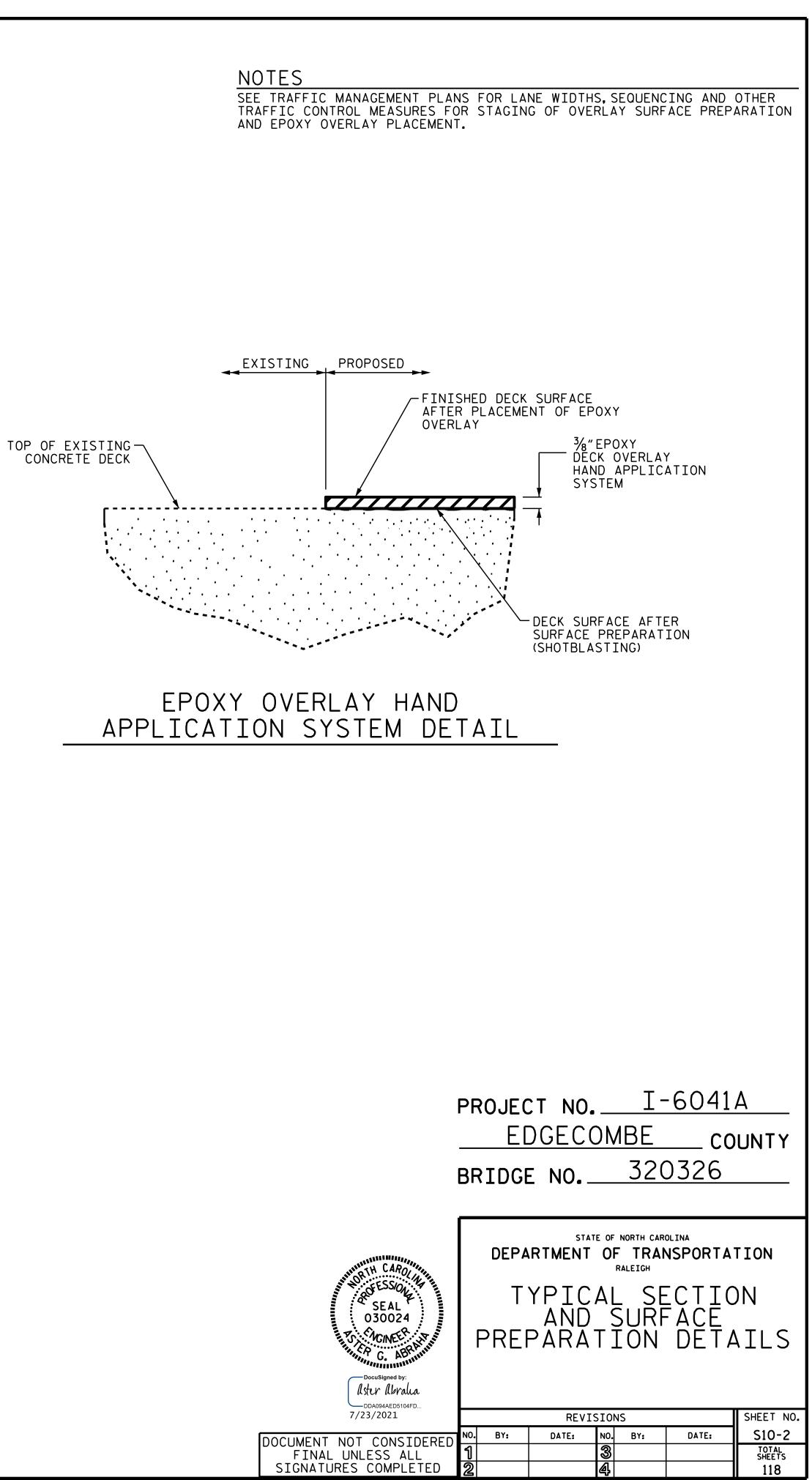
Resident Engineer

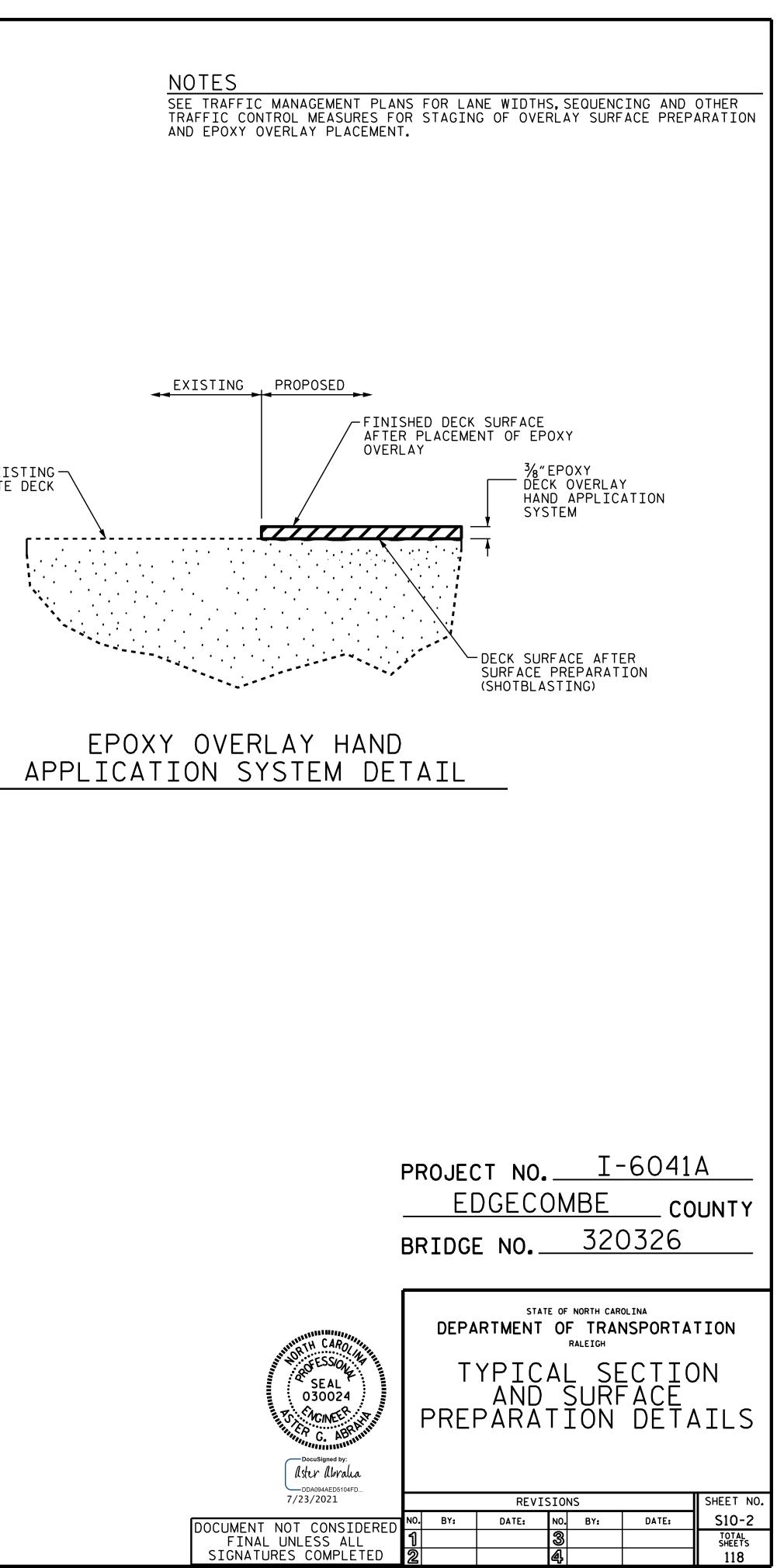
Date

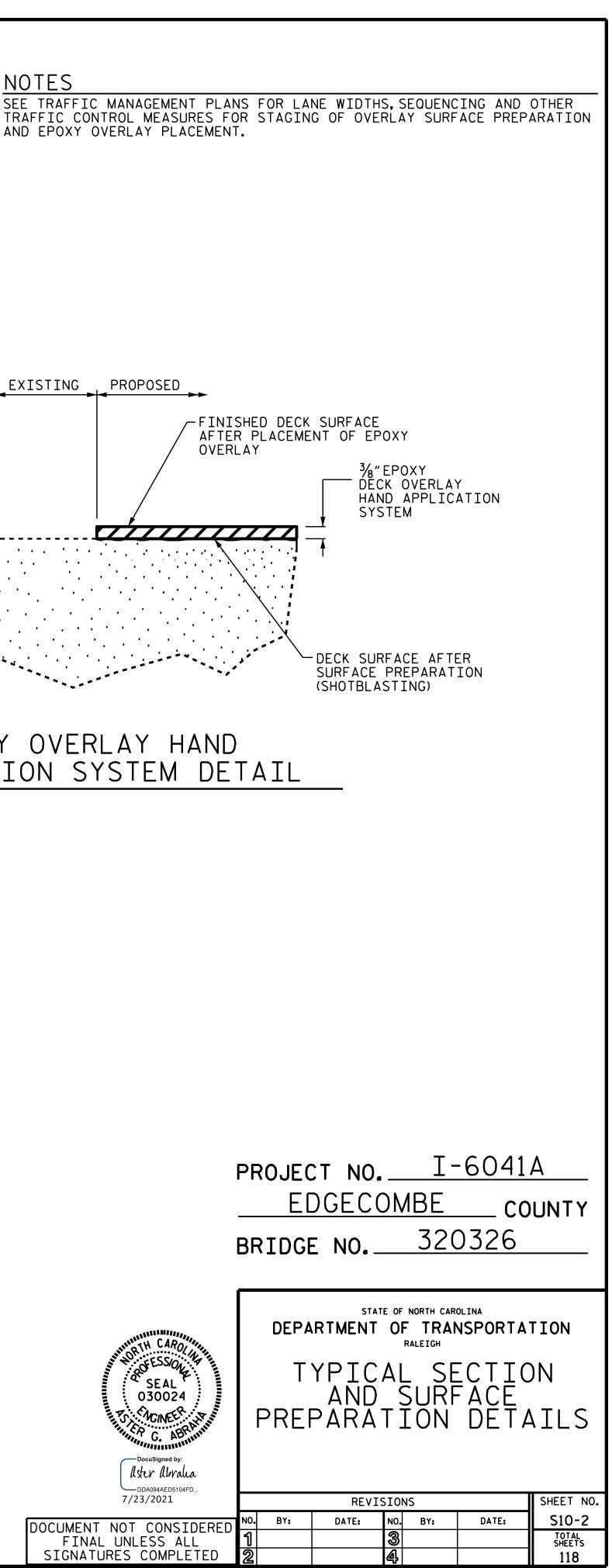


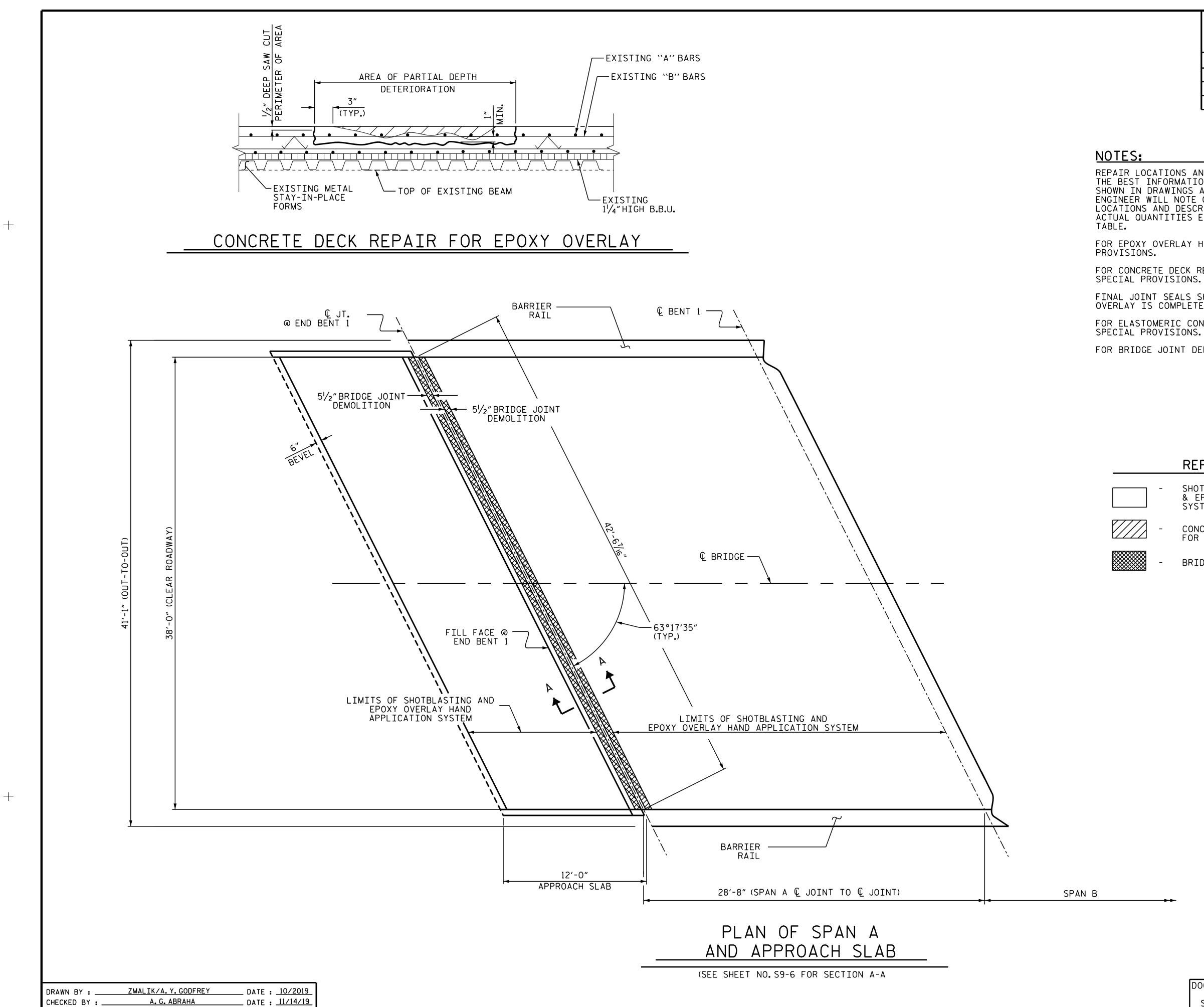


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SUMMARY OF QUANTITIES FOR SPAN A AND APPROACH SLAB

	ESTIMATE	ACTUAL
EPOXY OVERLAY HAND APPLICATION SYSTEM	1,487 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	39.0 SF	

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 AS- BUILT REPAIR QUANTITIES

FOR EPOXY OVERLAY HAND APPLICATION SYSTEM, SEE SPECIAL

FOR CONCRETE DECK REPAIR FOR EPOXY OVERLAY, SEE SPECIAL PROVISIONS.

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

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

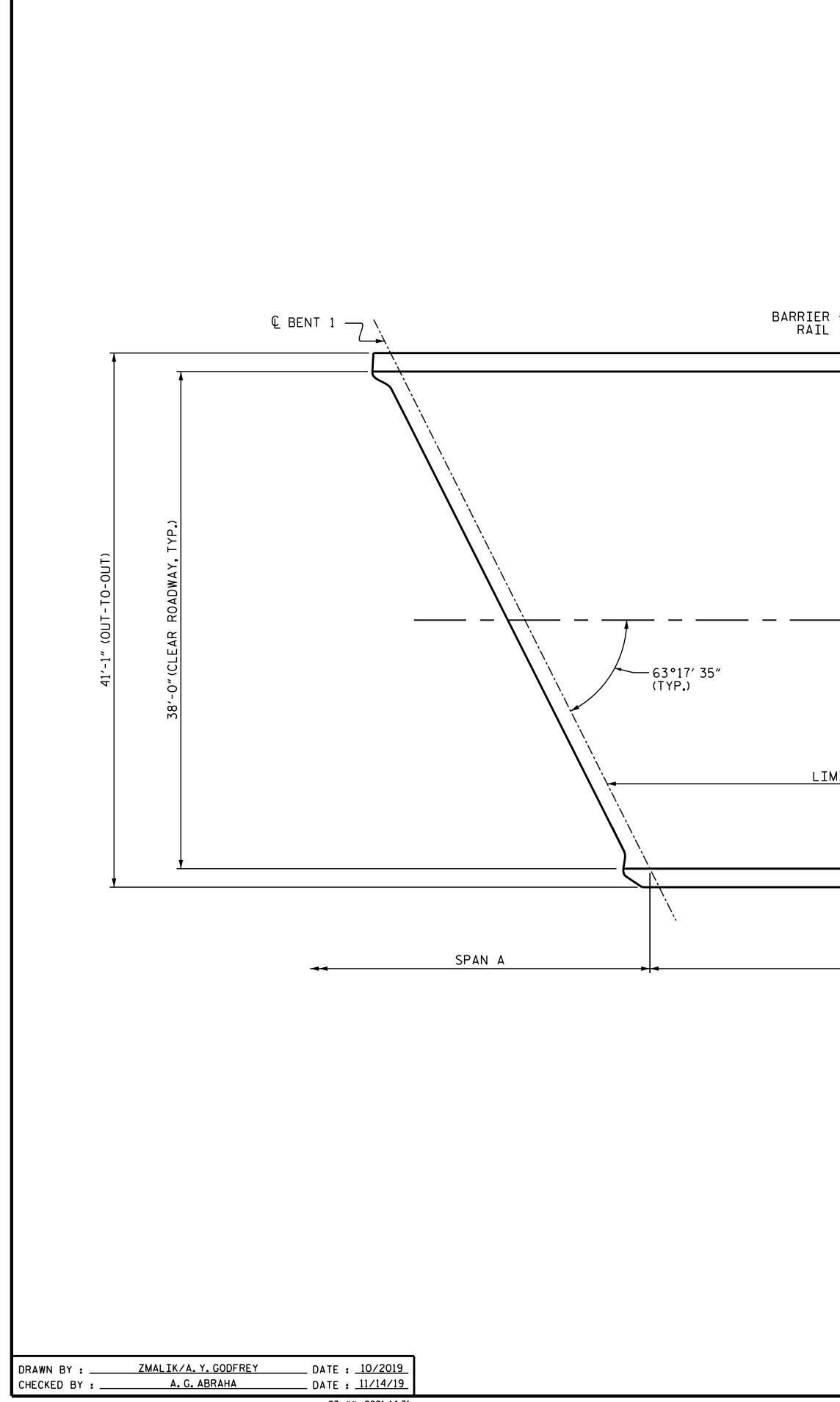
REPAIR KEY

SHOTBLASTING OF BRIDGE DECK & EPOXY OVERLAY HAND APPLICATION SYSTEM

CONCRETE DECK REPAIR FOR EPOXY OVERLAY

BRIDGE JOINT DEMOLITION

	PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY BRIDGE NO. <u>320326</u> SHEET 1 OF 3					
Bocusigned by: UDA094AED5104FD	SHEET 1 OF 3 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SURFACE PREPARATION SPAN A AND APROACH SLAB					
7/23/2021	REVISIONS SHEET NO. NO. BY: DATE: NO. BY: DATE: S10-3					
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	1		3 4			TOTAL SHEETS 118

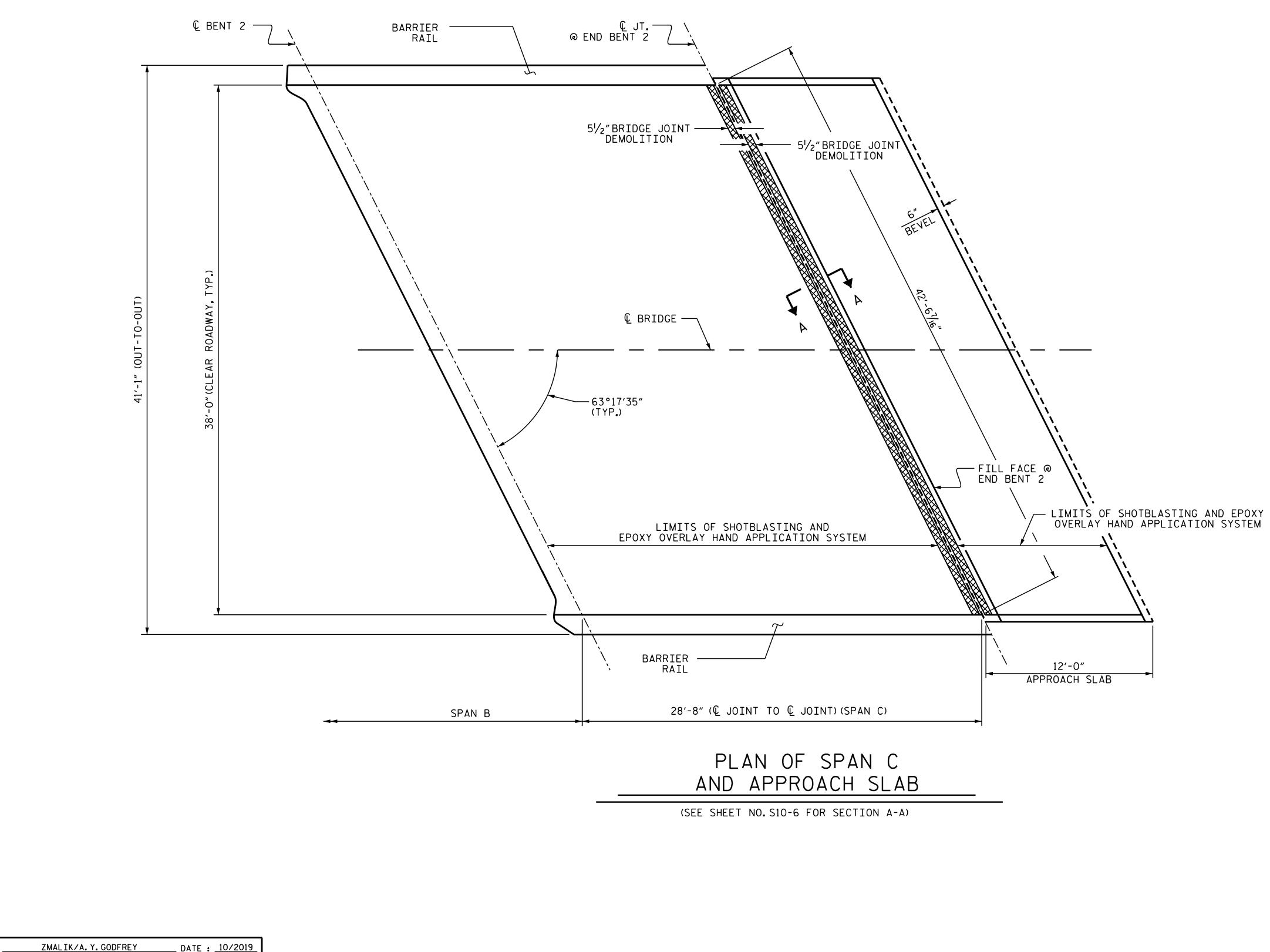


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PLAN OF SPAN B

PROJECT NO. <u>I-6041A</u> <u>EDGECOMBE</u> COUNTY BRIDGE NO. <u>320326</u> SHEET 2 OF 3 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SURFACE PREPARATION SPAN B				
PROJECT NO. <u>I-6041A</u> PROJECT NO. <u>I-6041A</u> PROJECT NO. <u>I-6041A</u> EDGECOMBE COUNTY BRIDGE NO. <u>320326</u> SHEET 2 OF 3 DEPARTMENT OF REMOVERATION SURFACE PREPARATION SURFACE PREPARATION	SUMMARY OF	QUANTITIES F	OR SPAN ``	В''
			ESTIMATE	ACTUAL
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CHECKED BY : _	A. G. ABRAHA	DATE : _1	1/14/19

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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 AS- BUILT REPAIR QUANTITIES TABLE.

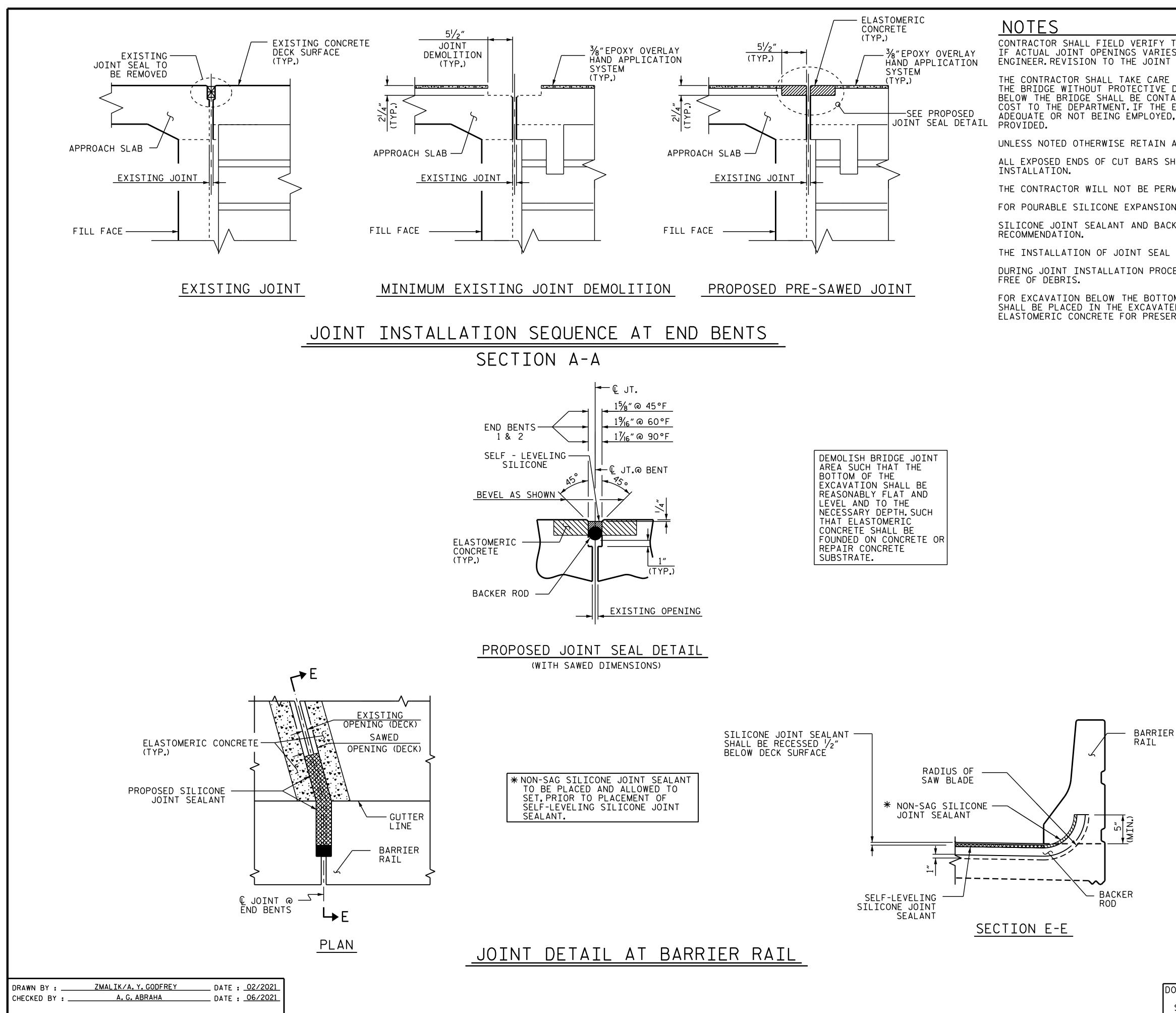
SUMMARY OF QUANTITIES FOR SPAN ``C'' AND APPROACH SLAB

	ESTIMATE	
EPOXY OVERLAY HAND APPLICATION SYSTEM	1,487 SF	
CONCRETE DECK REPAIRS FOR EPOXY OVERLAY	0.0 SF	
BRIDGE JOINT DEMOLITION	39.0 SF	

REPAIR KEY

 SHOTBLASTING OF BRIDGE DECK & EPOXY OVERLAY SYSTEM I
 CONCRETE DECK REPAIR FOR EPOXY OVERLAY
 BRIDGE JOINT DEMOLITION

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

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

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

THE CONTRACTOR WILL NOT BE PERMITTED TO FORM THE JOINTS IN LIEU OF SAWING THE JOINT. FOR POURABLE SILICONE EXPANSION JOINT SEALS, SEE SPECIAL PROVISIONS.

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

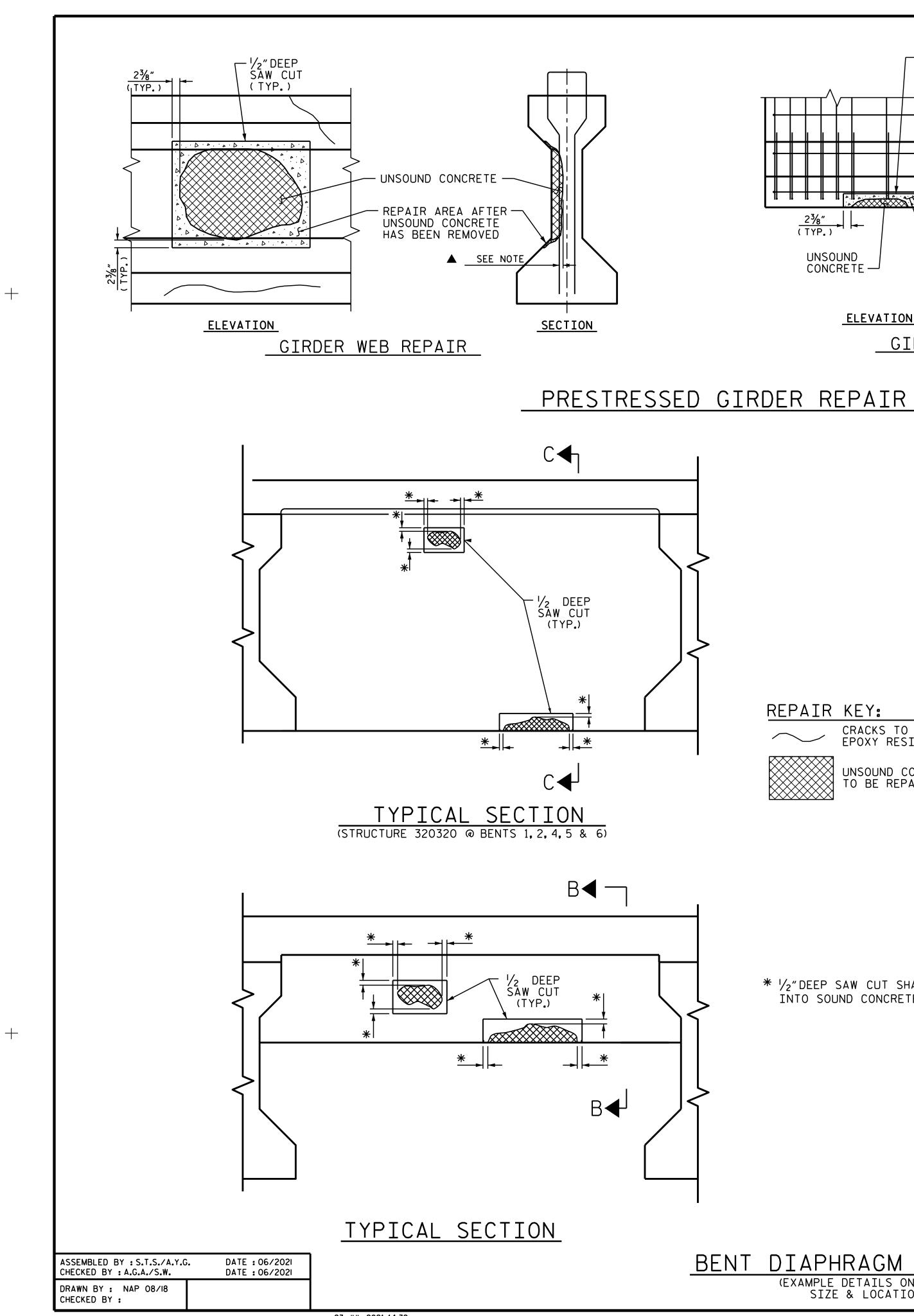
THE INSTALLATION OF JOINT SEAL SHALL BE WATERTIGHT.

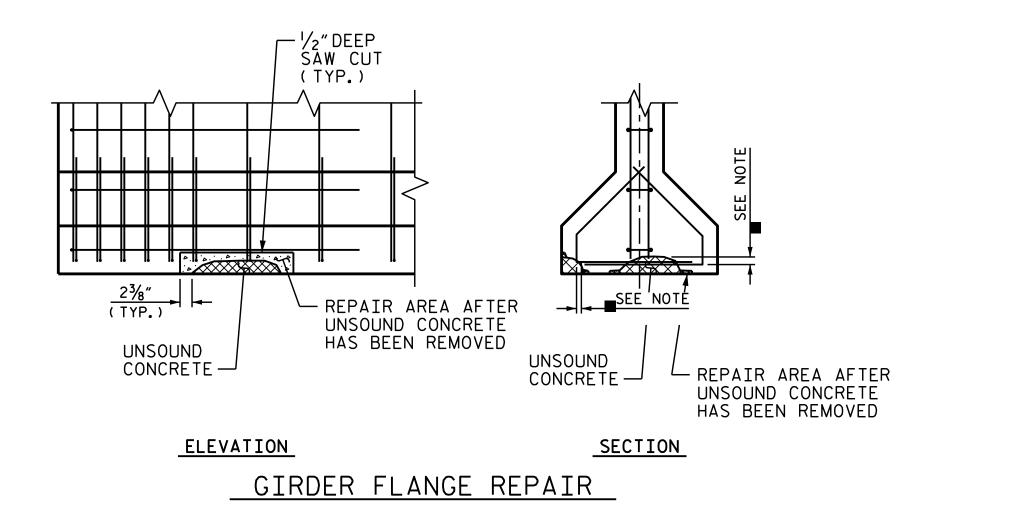
FOR EXCAVATION BELOW THE BOTTOM OF THE PLANNED JOINT DEMOLITION, CONCRETE FOR DECK REPAIR SHALL BE PLACED IN THE EXCAVATED AREA TO THE ELEVATION AT BOTTOM OF THE PROPOSED ELASTOMERIC CONCRETE FOR PRESERVATION HEADERS SHOWN.

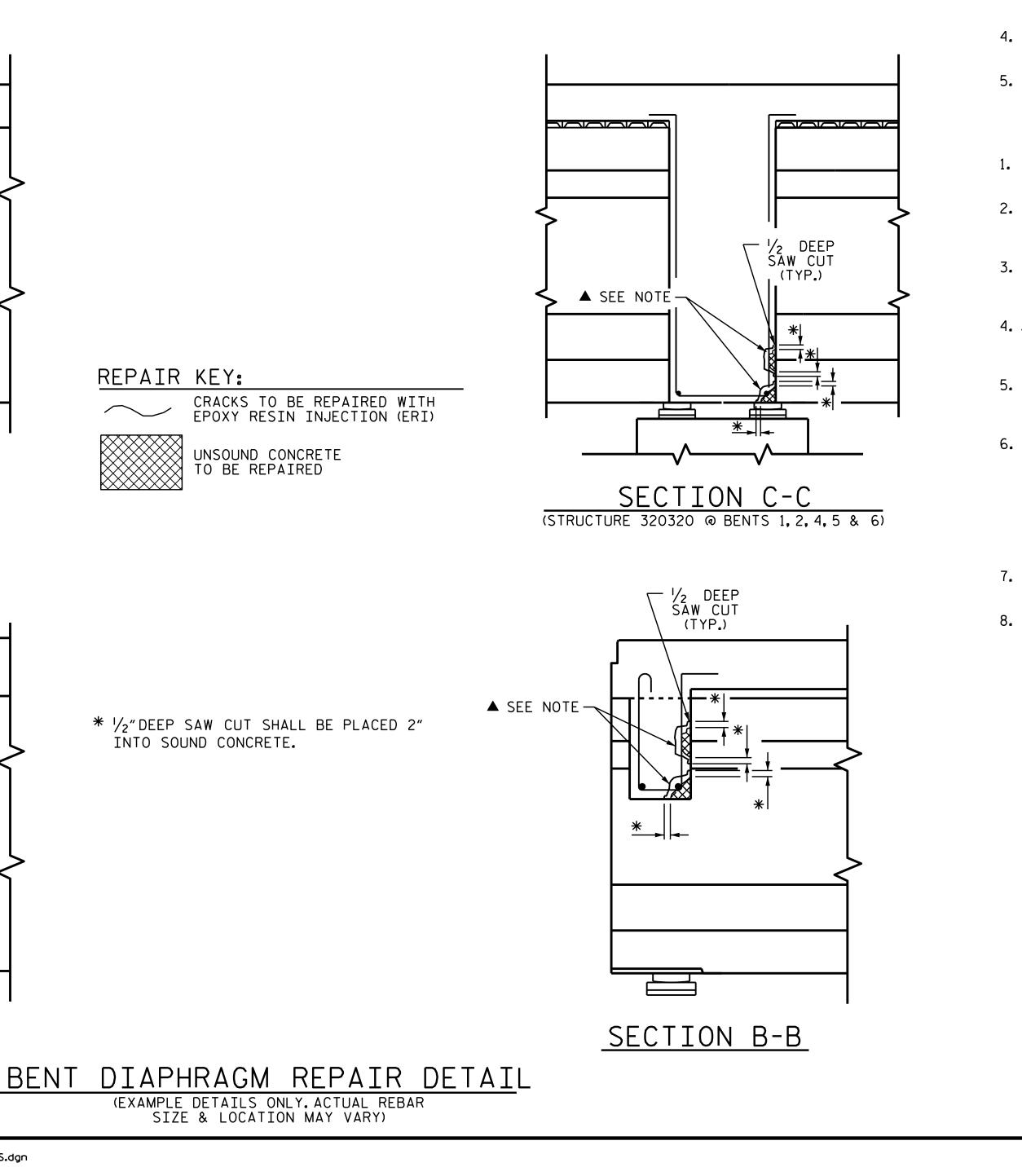
DURING JOINT INSTALLATION PROCEDURE, THE JOINT AND SURROUNDING AREA SHALL BE KEPT CLEAN AND

SUMMARY O	F QUANTIT	IES
	ESTIMATE	ACTUAL
ELASTOMERIC CONCRETE FOR PRESERVATION	14.6 CF	
POURABLE SILICONE JOINT SEALANT	85.1 LF	

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NOTES:

2.

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.

FOR EPOXY RESIN INJECTION (ERI). SEE SPECIAL PROVISIONS.

FOR EPOXY COATING CONCRETE GIRDER ENDS. SEE SPECIAL PROVISIONS.

PRESTRESSED GIRDER STRAND REPAIR SEQUENCE:

AS APPROPRIATE, REMOVE LIVE LOAD FROM REPAIR AREA BY EITHER CLOSING BRIDGE TO TRAFFIC OR SHIFTING TRAFFIC AWAY FROM REPAIR AREA.

MEASURE OUT THE AREA NEEDED TO HAVE ADEQUATE ROOM TO SPLICE THE BROKEN OR DAMAGED STRAND. IF MULTIPLE STRANDS ARE BROKEN ADJACENT TO ONE ANOTHER THEN THE SPLICES SHALL BE STAGGERED. SEE "SPLICE OFFSET" ABOVE. AFTER YOU HAVE DETERMINED THE REPAIR AREA NEEDED, SAW CUT A MINIMUM OF $\frac{1}{2}$ at right angles around the damaged area. Chip out rest of concrete to a sufficient REPAIR DEPTH.

SPLICE STRANDS USING THE MECHANICAL SPLICE STRAND ASSEMBLY AND TENSION TO REQUIRED FORCE PER THE MANUFACTURER'S GUIDELINES.

PATCH REPAIR AREA AS PER THE REPAIRS TO PRESTRESSED CONCRETE GIRDERS SPECIAL PROVISION. PROFILE OF GIRDER MAY NEED TO BE INCREASED AROUND REPAIR AREA TO PROVIDE PROPER COVER.

AFTER REPAIR MATERIAL HAS CURED PLACE TRAFFIC BACK ON BRIDGE OR REPAIRED AREA OF BRIDGE.

PRESTRESSED GIRDER REPAIR SEQUENCE:

SOUND CONCRETE TO DETERMINE EXTENTS OF REPAIR LOCATION.

REMOVE SURFACE CONCRETE TO VERIFY THAT SAWCUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL.SAW CUT AROUND REPAIR AREA TO A NOMINAL DEPTH OF $\frac{1}{2}$ ".

REMOVE CONCRETE WITHIN SAW CUT AREA TO MINIMUM $\frac{1}{2}$ " DEPTH. IF CONCRETE IS DAMAGED BEYOND THE ORIGINAL SAW CUT, A NEW SAW CUT IS REQUIRED.

IF MORE THAN HALF THE CIRCUMFERENCE OF A REINFORCING BAR IS EXPOSED 4. ▲ DURING THIS PROCESS, REMOVE ADDITIONAL CONCRETE TO 1" BEHIND THE BAR. THIS DOES NOT APPLY TO PRESTRESSED STRANDS.

ALL UNSOUND CONCRETE MUST BE REMOVED, HOWEVER, PRESTRESSED STRANDS 5. ■ SHOULD NOT BE DISTURBED UNLESS ABSOLUTELY NECESSARY. USE EXTREME CARE TO NOT DAMAGE STRANDS.

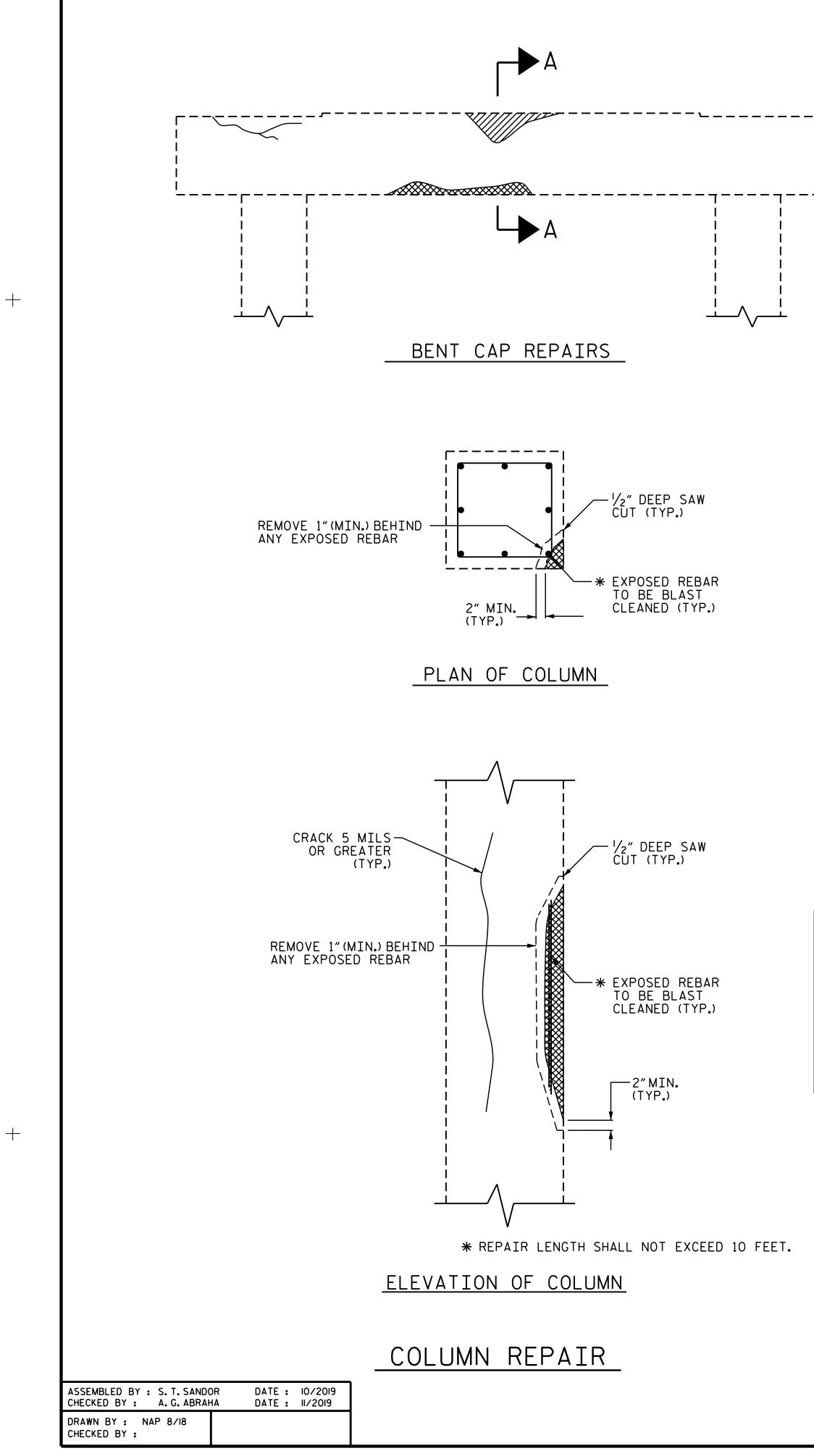
CLEAN ALL EXPOSED REINFORCING BARS AND PRESTRESSED STRANDS IN ACCORDANCE WITH THE REPAIRS TO PRESTRESSED CONCRETE GIRDERS SPECIAL PROVISION. FOR BARS WITH MORE THAN 10% SECTION LOSS, SPLICE AND SECURELY TIE SUPPLEMENTAL REINFORCING BARS AS NEEDED. NOTE AND PROVIDE DETAILED DOCUMENTATION, INCLUDING LOCATION AND SEVERITY, OF ALL DAMAGE TO PRESTRESSED STRANDS THAT EXCEEDS 10% SECTION LOSS. IF FIVE OR MORE STRANDS ARE DAMAGED, NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF REPAIR MATERIAL.

REMOVE ALL LOOSE OR WEAKENED MATERIAL THEN CLEAN THE REPAIR AREA OF DIRT, GREASE, OIL, AND FOREIGN MATTER.

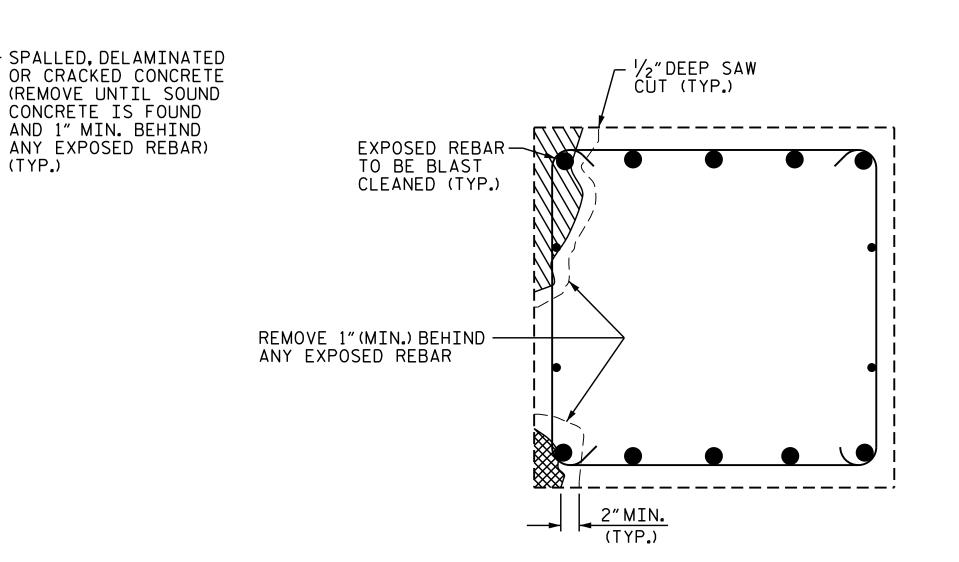
PREPARE SURFACE AND PLACE APPROVED REPAIR MATERIAL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. MAXIMUM AGGREGATE SIZE FOR REPAIR MATERIAL SHALL NOT EXCEED $\frac{2}{3}$ THE MINIMUM REPAIR DEPTH.

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REPAIR KEY

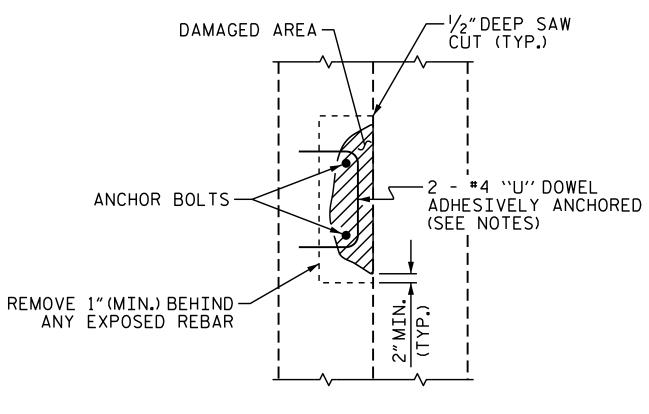
SECTION A-A

CAP REPAIR

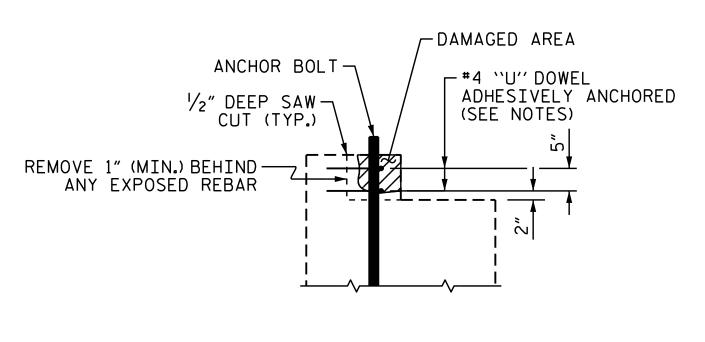
SHOTCRETE REPAIR AREA

EPOXY RESIN INJECTION (ERI)

CONCRETE REPAIR AREA (FORM AND POUR)







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PEDESTAL WALL REPAIR

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

NOTES

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

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

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

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

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

SIMULTANEOUS REMOVAL OF UNSOUND CONCRETE MAY BE PERMITTED ON MORE THAN ONE FACE OF A CAP AND/OR COLUMN, BUT NO MORE THAN ½ OF THE CIRCUMFERENCE SHALL BE REMOVED AT ONE TIME. IF REMOVAL EXTENDS MORE THAN 11/2" BEHIND THE MAIN REINFORCING BARS, NOTIFY THE ENGINEER PRIOR TO PROCEEDING. ON COLUMNS AND PILES, NO MORE THAN 10 VERTICAL FEET MAY BE EXPOSED AT ONE TIME BEFORE PLACEMENT OF REPAIR CONCRETE.

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

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

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

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

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

FOR EPOXY RESIN INJECTION (ERI), SEE SPECIAL PROVISIONS.

CLEAN ALL EXPOSED REINFORCING BARS AND PRESTRESSED STRANDS IN ACCORDANCE WITH APPROPRIATE SPECIAL PROVISIONS.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.

	PROJ. NO. <u>I-6041A</u> <u>EDGECOMBE</u> county BRIDGE NO. <u>320104, 320148,</u> 320153, 320154, 320156, 320157, 320320				
Bocusigned by: DDA094AED5104FD	DEPARTMENT OF TRANSPORTATION RALEIGH STANDARD TYPICAL CAP AND COLUMN REPAIR DETAILS				
7/23/2021	REVISIONS SHEET NO.				
OCUMENT NOT CONSIDERED	NO. BY:		NO. BY:	DATE:	SD-2
FINAL UNLESS ALL SIGNATURES COMPLETED	1 2		3 4		total sheets 118

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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 SO.IN.
- AASHTO M270 GRADE 50W -	27,000 LBS.PER SQ.IN.
- AASHTO M270 GRADE 50 -	27,000 LBS.PER SQ.IN.
REINFORCING STEEL IN TENSION	
GRADE 60	24,000 LBS.PER SO.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 2012 "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 3/4" WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO 1-1/2" RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A 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 1/4" RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

DOWELS:

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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.

STANDARD NOTES

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

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 5/16" 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 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.

