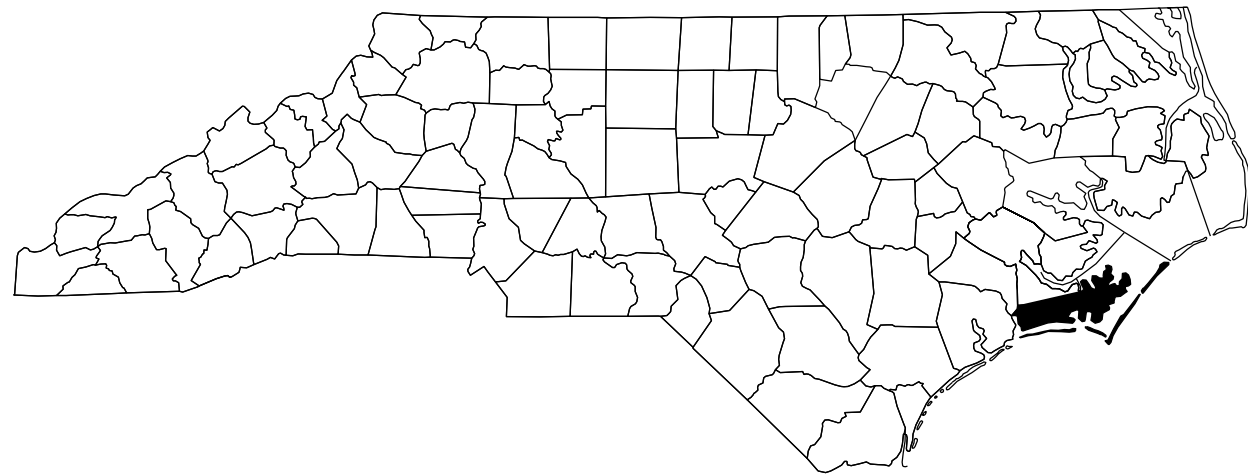


PROJECT: 15BPR.131

CONTRACT: C205185

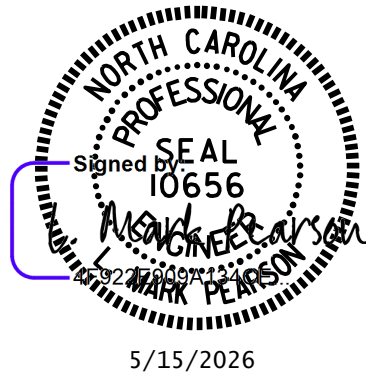


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

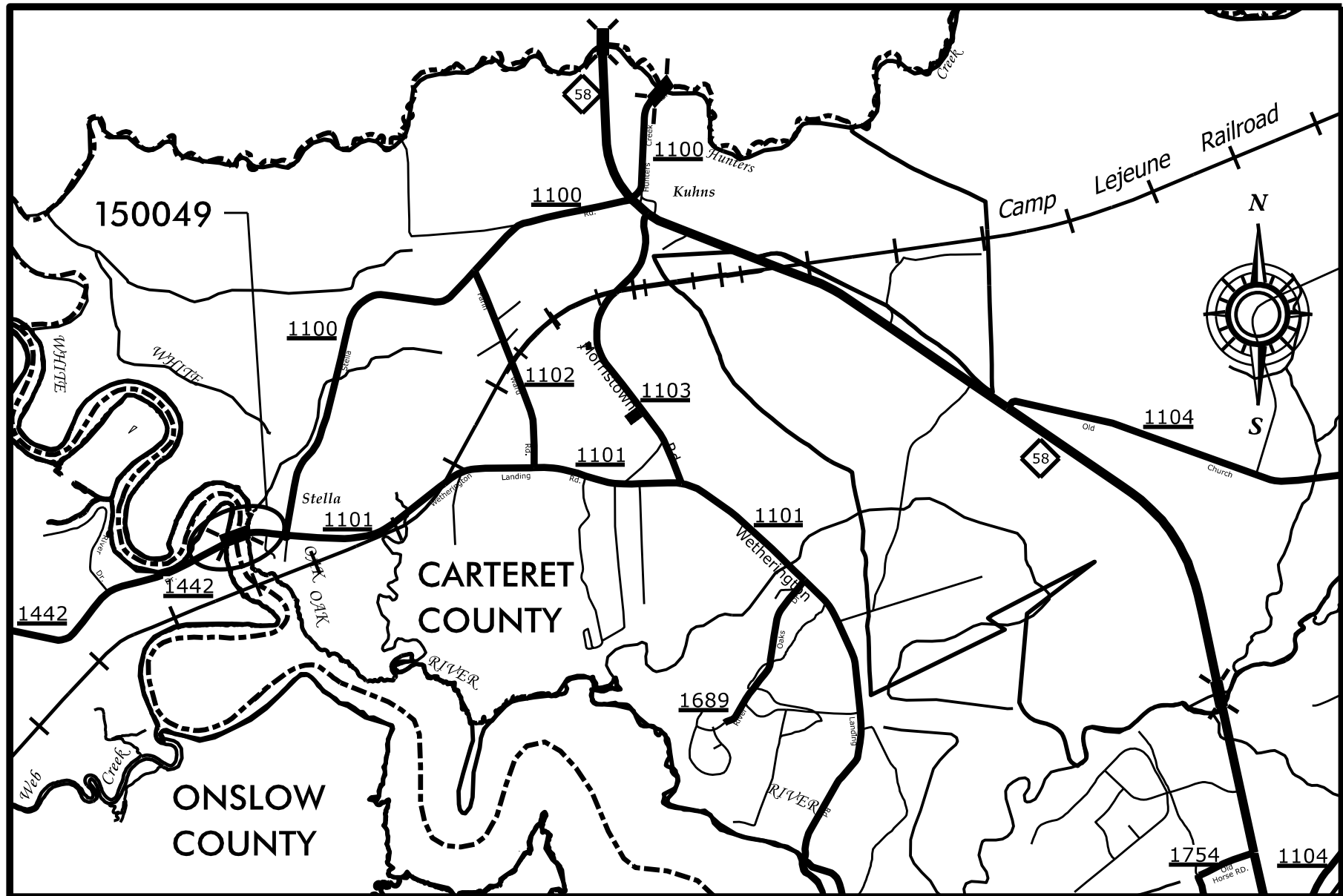
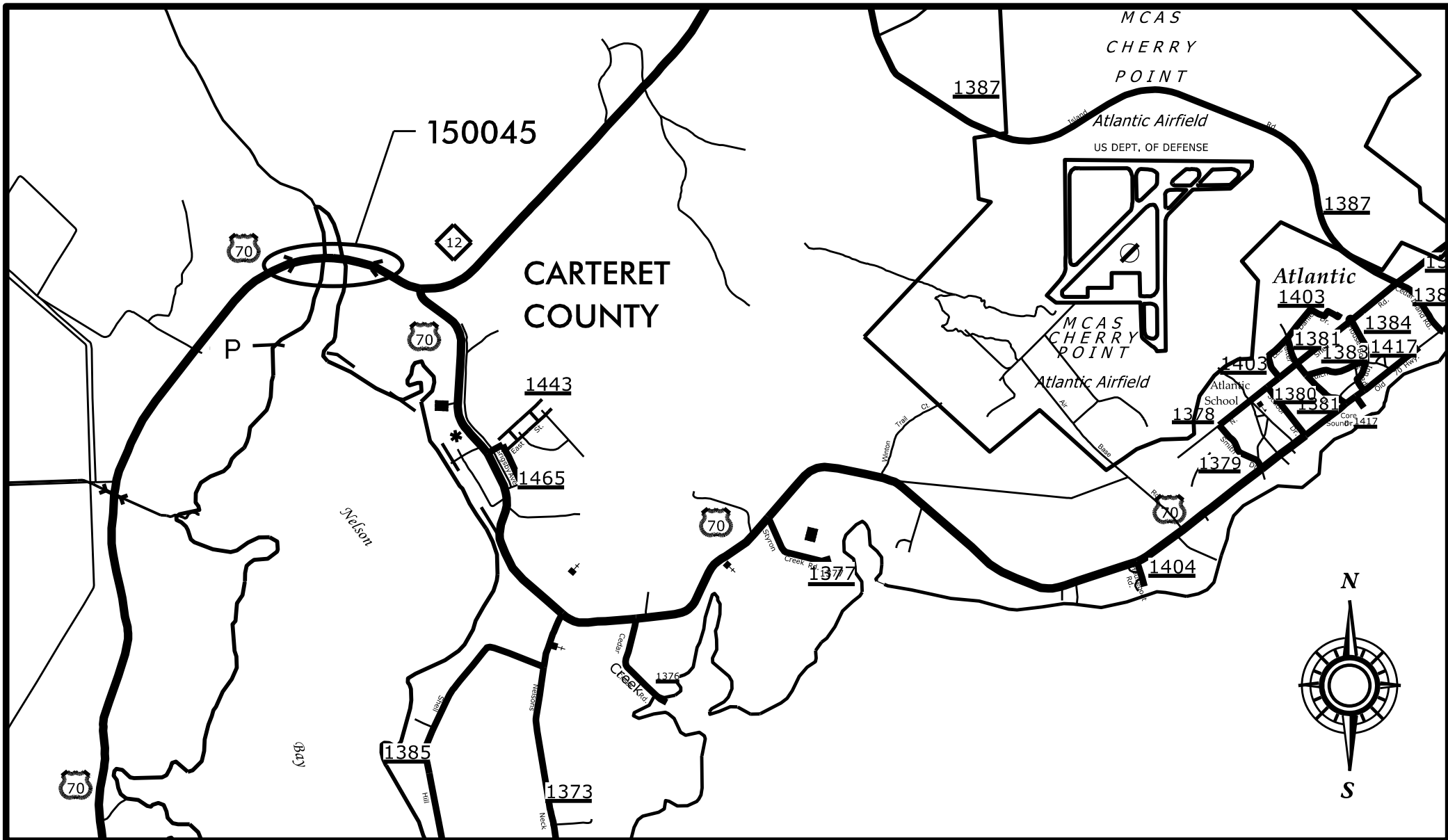
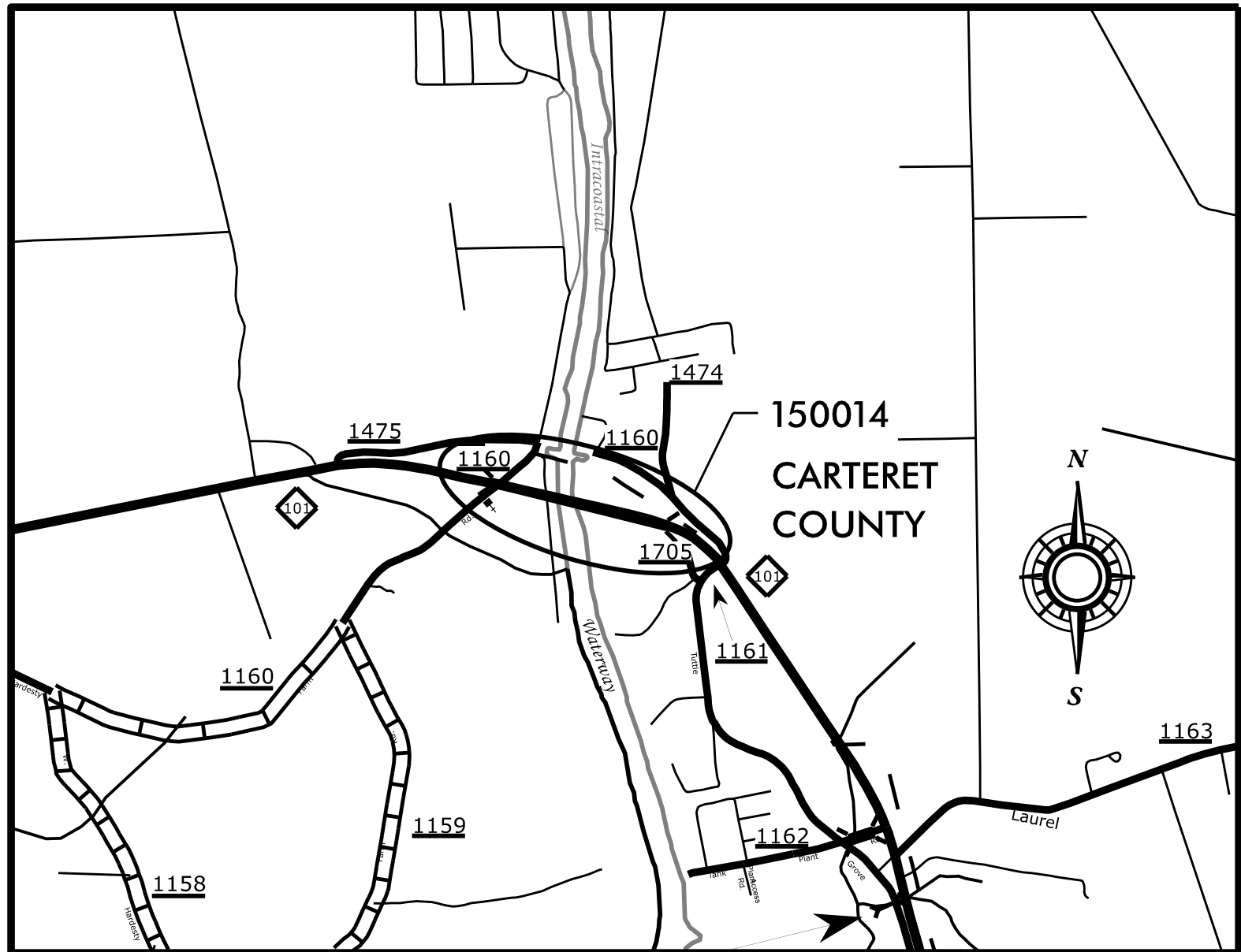
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	15BPR.131	1	112
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
15BPR.131.1	-	P.E.	
15BPR.131.3	-	CONST.	

CARTERET AND ONSLOW COUNTIES

LOCATION: BRIDGE No. 150014 ON NC 101 OVER ICWW
BRIDGE No. 150045 ON US 70 OVER SALTERS CREEK
BRIDGE No. 150049 ON SR 1442 (STELLA ROAD) AND SR 1101 (WETHERINGTON LANDING ROAD)
OVER WHITE OAK RIVER

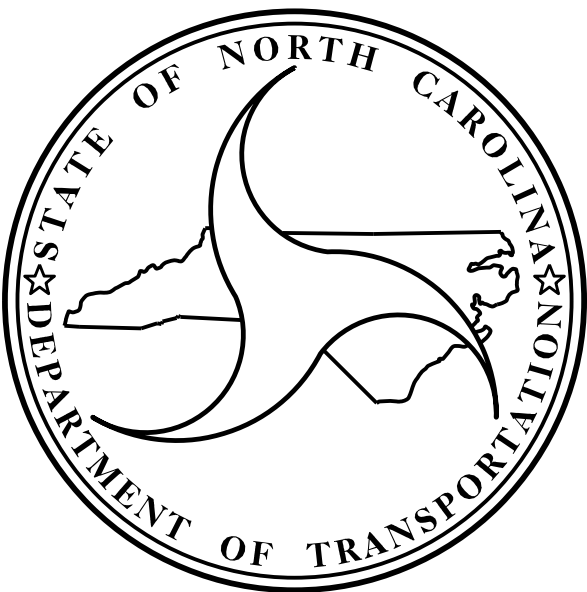


TYPE OF WORK: BRIDGE PRESERVATION – DECK REPAIR, BARRIER RAIL REPAIR, EPOXY OVERLAY, SILANE DECK SEALANT, FOAM JOINT SEAL FOR PRESERVATION, SILANE TREATMENT TO BARRIER RAIL, EPOXY COATING CONCRETE GIRDERS, EPOXY COAT PRESTRESSED CONCRETE GIRDER ENDS, PRESTRESSED CONCRETE GIRDER REPAIR, EPOXY COATING AND DEBRIS REMOVAL, CONCRETE REPAIR, SHOTCRETE REPAIR



STRUCTURE

VICINITY MAPS – CARTERET AND ONSLOW COUNTIES



DESIGN DATA		
CARTERET COUNTY		
BRIDGE No. 150014	ADT 2021 =	7,600
BRIDGE No. 150045	ADT 2021 =	1,800
CARTERET – ONSLOW COUNTIES		
BRIDGE No. 150049	ADT 2022 =	2,400

PROJECT LENGTH		
CARTERET COUNTY		
BRIDGE No. 150014	=	0.56 MILES
BRIDGE No. 150045	=	0.28 MILES
CARTERET – ONSLOW COUNTIES		
BRIDGE No. 150049	=	0.44 MILES

Prepared for the Office of:
DIVISION OF HIGHWAYS
STRUCTURES MANAGEMENT UNIT
1000 Birch Ridge Dr.
Raleigh NC, 27610



WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165

2024 STANDARD SPECIFICATIONS

LETTING DATE:
07/21/2026

JACOB P. SHERMAN, PE
PROJECT ENGINEER

L. MARK PEARSON, PE
PROJECT DESIGN ENGINEER

PROJECT: 15BPR.131

CONTRACT: C205185

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

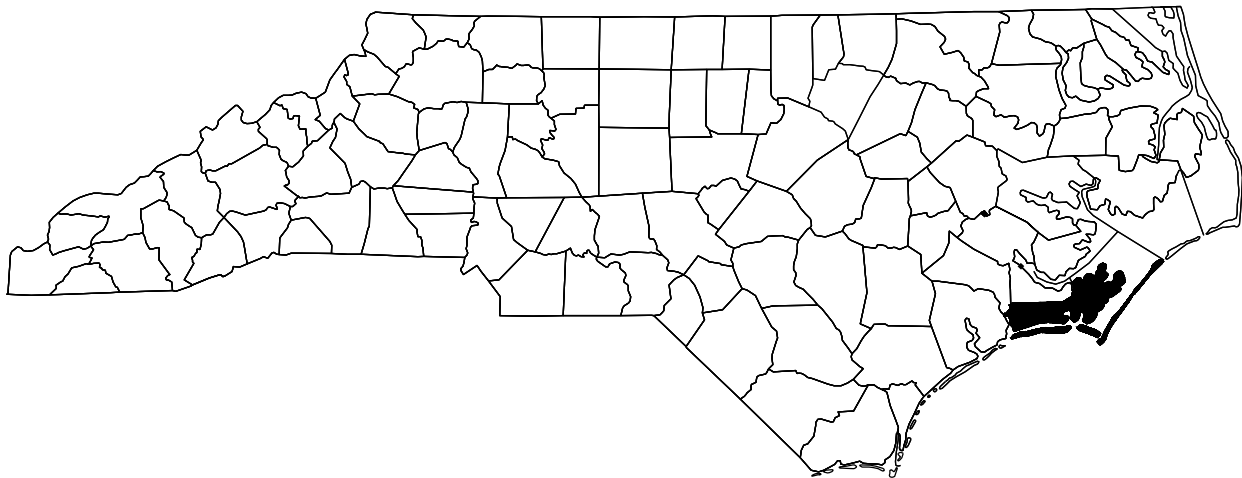
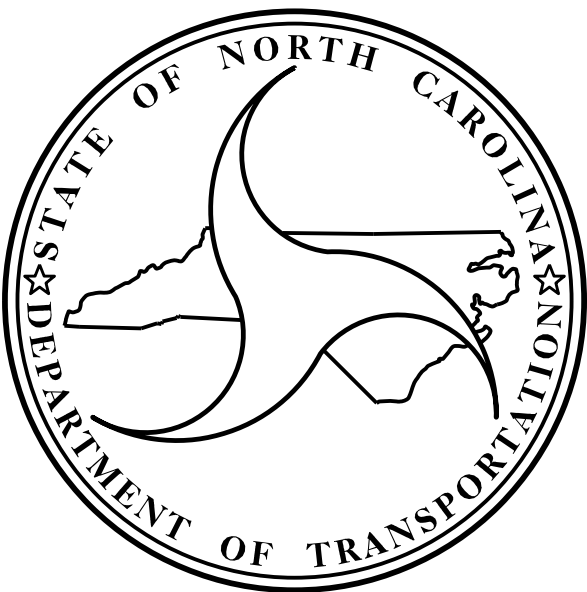
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	15BPR.131	1A	112
STATE PROJ.NO.	F.A.PROJ.NO.	DESCRIPTION	
15BPR.131.1 for PE	-	P.E.	
15BPR.131.3 for CON	-	CONST.	

CARTERET AND ONSLOW COUNTIES

LOCATION: BRIDGE No.150014 ON NC 101 OVER ICWW
BRIDGE No.150045 ON US 70 OVER SALTERS CREEK
BRIDGE No.150049 ON SR 1442 (STELLA ROAD) AND SR 1101 (WETHERINGTON LANDING ROAD)
OVER WHITE OAK RIVER

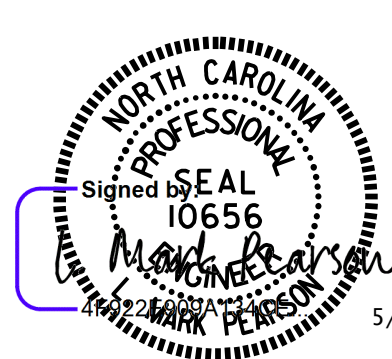
INDEX OF STRUCTURE SHEETS

SHEET No.	DESCRIPTION	SHEET No.	DESCRIPTION	SHEET No.	DESCRIPTION
1	TITLE SHEET	STRUCTURE No.150014 S1-01 THRU S1-08	GENERAL DRAWING	STRUCTURE No.150045 S2-01 THRU S2-04	GENERAL DRAWING
1A	INDEX OF STRUCTURE SHEET	S1-09	TYPICAL SECTION	S2-05	TYPICAL SECTION
S-1	LOCATION SKETCHES	S1-10 THRU S1-21	PLAN OF SPANS REPAIRS	S2-06 THRU S2-11	PLAN OF SPANS REPAIRS
S-2	TOTAL BILL OF MATERIALS	S1-22 THRU S1-52	GIRDER AND DIAPHRAGM REPAIRS	S2-12 THRU S2-29	GIRDER AND DIAPHRAGM REPAIRS
S-3	GENERAL NOTES	S1-53	EPOXY COATING OF GIRDERS LOCATION AND QUANTITY	S2-30 THRU S2-32	SUBSTRUCTURE REPAIRS
		S1-54	BEAM END EPOXY COATING DETAILS		
SHEET No.	DESCRIPTION	SHEET No.	DESCRIPTION	SHEET No.	DESCRIPTION
STRUCTURE No.150049 S3-01 THRU S3-06	GENERAL DRAWING	STANDARD SHEETS SD-1	TYPICAL CAP AND PILE REPAIR DETAIL	STANDARD SHEET SN	STANDARD NOTES
S3-07	TYPICAL SECTION	SD-2	FOAM JOINT SEAL DETAILS		
S3-08 THRU S3-14	PLAN OF SPANS REPAIRS	SD-3	FOAM JOINT SEAL QUANTITIES		
		SD-4	PRESTRESSED CONCRETE GIRDER REPAIR DETAILS		
		SD-5	BEAM END COATING DETAILS		
		SD-6	TOP OF CAP EPOXY COATING QUANTITIES		



TYPE OF WORK:
BRIDGE PRESERVATION - DECK REPAIR, BARRIER RAIL REPAIR, EPOXY OVERLAY, SILANE DECK SEALANT, FOAM JOINT SEAL FOR PRESERVATION, SILANE TREATMENT TO BARRIER RAIL, EPOXY COATING CONCRETE GIRDERS, EPOXY COAT PRESTRESSED CONCRETE GIRDER ENDS, PRESTRESSED CONCRETE GIRDER REPAIR, EPOXY COATING AND DEBRIS REMOVAL, CONCRETE REPAIR, SHOTCRETE REPAIR

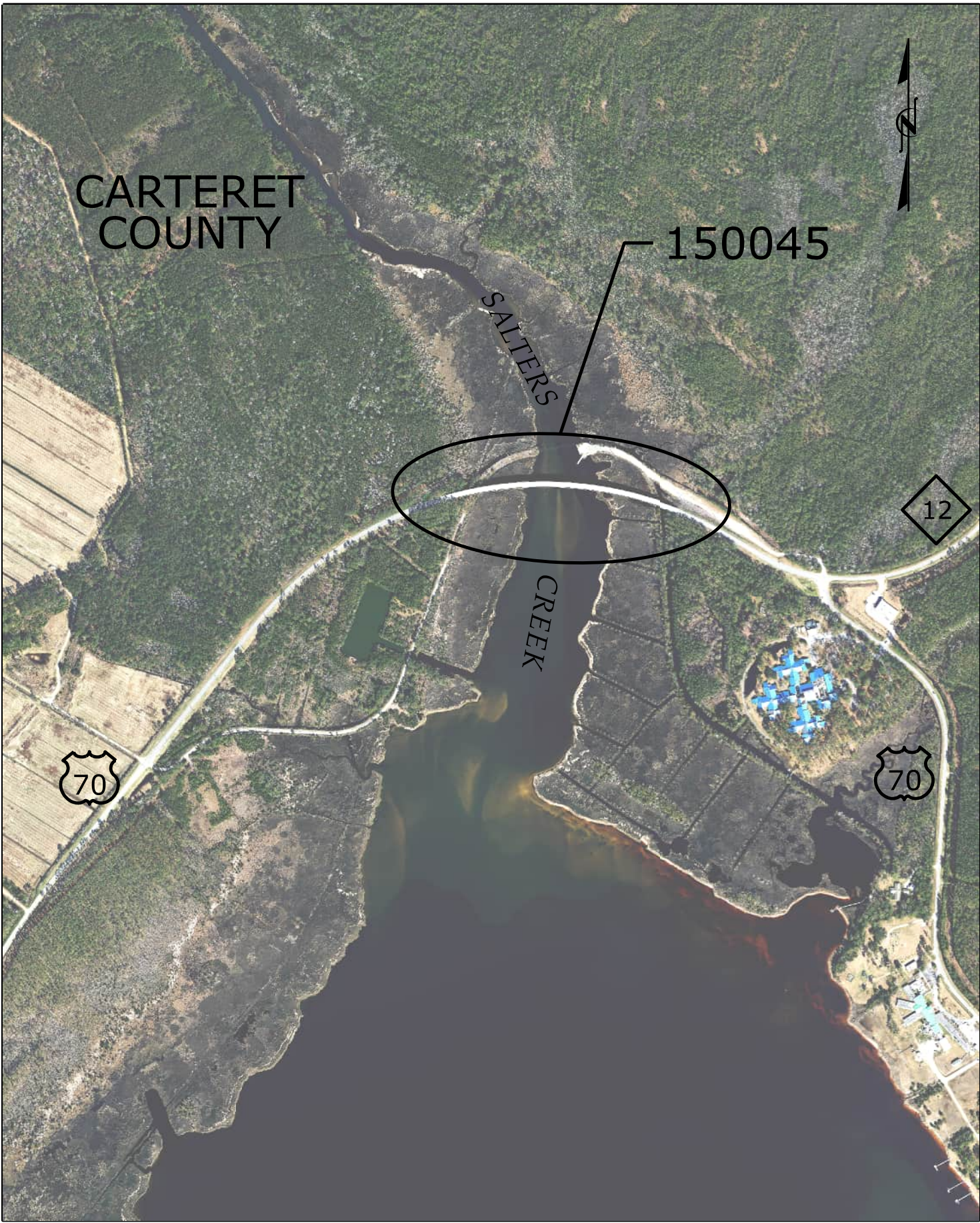
Prepared for the Office of:
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1000 Birch Ridge Dr.
Raleigh NC, 27610



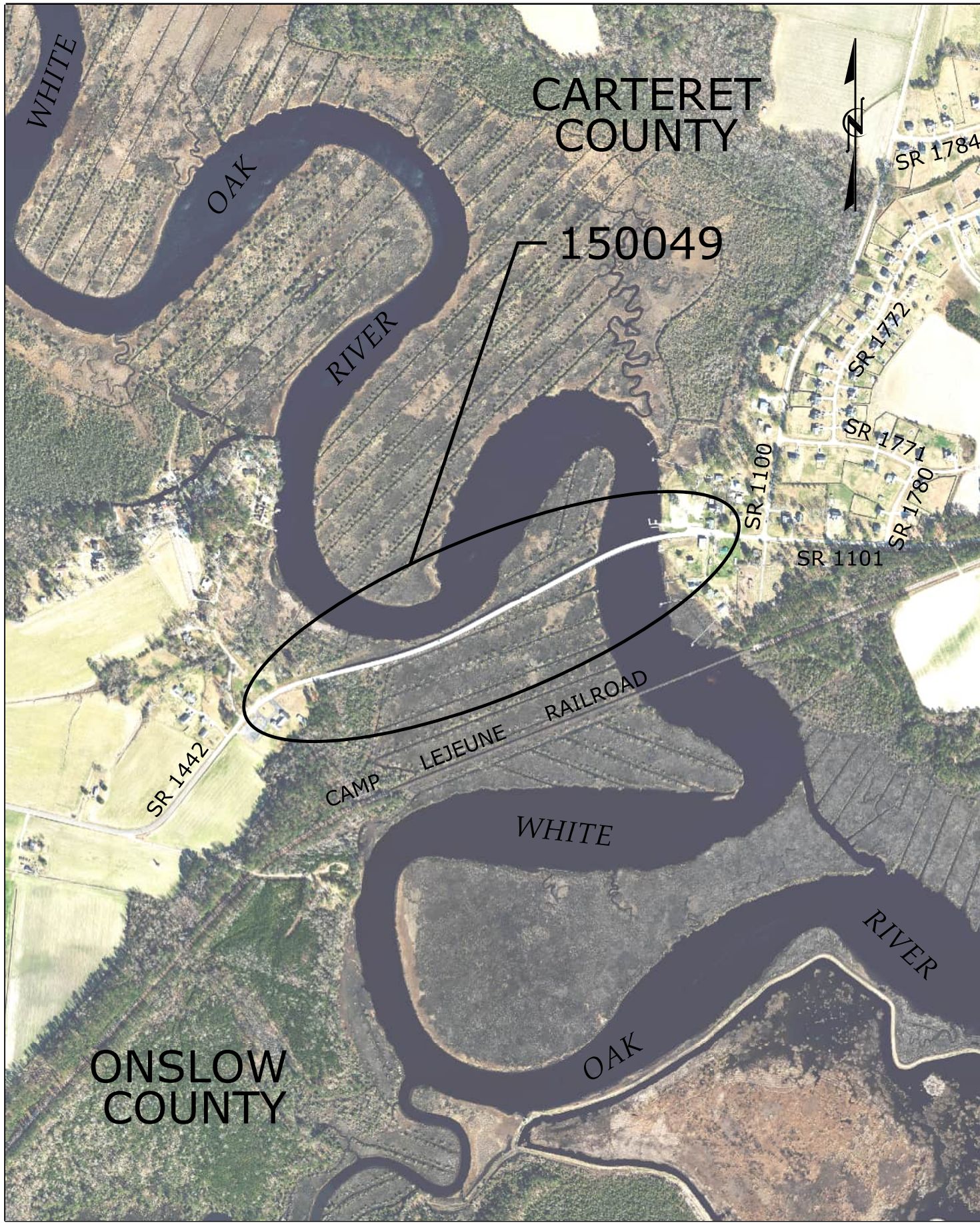
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WSP USA Inc.
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SUITE 400
RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165



BRIDGE No. 150014 LOCATION SKETCH



BRIDGE No. 150045 LOCATION SKETCH



BRIDGE No. 150049 LOCATION SKETCH

NOTE

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

BRIDGE COORDINATES

BRIDGE No.	LATITUDE	LONGITUDE
150014	34°-49'-31.54" N	76°-41'-29.96" W
150045	34°-53'-29.75" N	76°-24'-01.94" W
150049	34°-46'-29.01" N	77°-09'-12.74" W

PROJECT NO. 15BPR.131
CARTERET-ONSLOW COUNTIES
BRIDGE NO. 150014, 150045, 150049

DRAWN BY : B. K. JACKSON DATE : APRIL 2026
CHECKED BY : M. PEARSON DATE : APRIL 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APRIL 2026

4/30/2026
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USMA128682



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RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165



5/1/2026

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SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

LOCATION SKETCHES

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-1
2			4			TOTAL SHEETS 112

TOTAL BILL OF MATERIAL															
BRIDGE NO.	CONCRETE REPAIRS	FOAM JOINT SEALS FOR PRESERVATION	ELASTOMERIC CONCRETE FOR PRESERVATION	REPAIRS TO PRESTRESSED CONCRETE GIRDERS	BEAM END EPOXY COATINGS	BRIDGE JOINT DEMOLITION	CONCRETE DECK REPAIR FOR EPOXY OVERLAY	CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT	EPOXY COATING	EPOXY COATING CONCRETE GIRDERS	EPOXY OVERLAY SYSTEM II	SILANE BARRIER RAIL TREATMENT	SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	SHOTBLASTING BRIDGE DECK	SILANE DECK TREATMENT
	CU. FT.	LIN. FT.	CU. FT.	CU. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. FT.	SQ. YD.	SQ. YD.
150014	3	994	231	2	1398	906		1	3587	50259		20990	20990	9909	9909
150045	6	665	152	76.5	901	608	7		3083		48001	10659	10659	5339	
150049		476	112			443			186			16284	16284	8321	8321
TOTAL	9	2135	495	78.5	2299	1957	7	1	6856	50259	48001	47933	47933	23569	18230

PAY ITEM	UNIT
SPLICING OF PRESTRESSING STRANDS	EACH
EPOXY RESIN INJECTION	LINEAR FEET

4/27/2026

Document Not Considered
Final Unless All
Signatures Completed

TOTAL
BILL OF MATERIAL

REVISIONS						SHEET NO. S-2 TOTAL SHEETS 112
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

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NOTES

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

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

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

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

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

LONGITUDINAL CONSTRUCTION JOINTS OF OVERLAYS SHALL BE LOCATED ALONG THE CENTERLINE OR EDGE OF TRAVEL LANES.

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

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.

CONTRACTOR SHALL DETERMINE EXTENT OF WORKING AREA, STAGING PROCESS, AND INSTALL COVER ASSEMBLY AS NECESSARY TO MEET THE REQUIREMENTS OF TRAFFIC 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 CONTROL OF TRAFFIC AND LIMITS ON PHASING OF CONSTRUCTION, SEE TRANSPORTATION MANAGEMENT PLANS.

ALL PROPOSED EXPANSION JOINT DIMENSIONS, OPENINGS AND BLOCKOUTS ARE SHOWN AT 60 DEGREES FAHRENHEIT. CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTALLATION GUIDELINES AND MAKE ANY NECESSARY ADJUSTMENTS.

FOR SHOTBLASTING BRIDGE DECK, SEE SILANE DECK TREATMENT AND EPOXY OVERLAY SYSTEM II SPECIAL PROVISIONS.

FOR SURFACE PREPARATION FOR CONCRETE BARRIER RAIL, SEE SILANE BARRIER RAIL TREATMENT SPECIAL PROVISIONS.

MARINE TRAFFIC CONSTRUCTION SIGNS SHALL BE PLACED ON BOTH FACES OF EACH BRIDGE AT THE LOCATIONS WHERE WORK IS BEING PERFORMED. PLACEMENT OF SIGNS SHALL BE SUCH THAT THEY ARE CLEARLY VISIBLE TO THE APPROACHING MARINE TRAFFIC. BARGES LEFT IN WATER IN LOW LIGHT CONDITIONS SHALL BE ILLUMINATED SO AS TO BE VISIBLE TO MARINE TRAFFIC.

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

FOR MAINTENANCE OF WATER TRAFFIC, SEE SPECIAL PROVISIONS

FOR COORDINATION WITH COAST GUARD, SEE SPECIAL PROVISIONS.

FOR SECURING VESSELS, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR SHOTCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

CONCRETE REPAIRS MAY BE REPLACED WITH SHOTCRETE REPAIRS WITH THE APPROVAL OF THE ENGINEER.

FOR EPOXY OVERLAY SYSTEM II, SEE SPECIAL PROVISIONS.

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

FOR EPOXY COATING CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

FOR WORKING IN, OVER OR ADJACENT TO NAVIGABLE WATERS, SEE SPECIAL PROVISIONS.

FOR BEAM END EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

FOR SPLICING OF PRESTRESSING STRANDS, SEE SPECIAL PROVISIONS.

FOR CONCRETE WORK FOR JOINT PLACEMENT, SEE SPECIAL PROVISIONS.

FOR EPOXY COATING AND DEBRIS REMOVAL, SEE SPECIAL PROVISIONS.

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

FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

FOR FOAM JOINT SEALS FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR BRIDGE JOINT DEMOLITION, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE SPECIAL PROVISIONS.

FOR SILANE BARRIER RAIL TREATMENT, SEE SPECIAL PROVISIONS.

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

PROJECT NO. 15BPR.131
CARTERET-ON SLOW COUNTIES
150014, 150045
BRIDGE NO. 150049

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL NOTES

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			112

5/1/2026

PROFESSIONAL SEAL

10656

M. PEARSON

Professional Engineer

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

WSP

WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165

DRAWN BY : B. K. JACKSON DATE : APRIL 2026

CHECKED BY : M. PEARSON DATE : APRIL 2026

DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APRIL 2026

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 04/20/2021.

BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.

SCOPE OF WORK

PREPARE TOP OF BRIDGE DECK SURFACE BY SHOTBLASTING METHODS.

CONCRETE DECK REPAIR FOR SILANE TREATMENT.

PREPARE TRAFFIC SIDE FACE AND TOP OF BARRIER RAIL BY SHOTBLASTING METHODS.

CONCRETE BARRIER RAIL REPAIR FOR SILANE TREATMENT.

APPLY SILANE TREATMENT TO CONCRETE BARRIER RAIL.

APPLY SILANE DECK TREATMENT TO TOP OF BRIDGE DECK SURFACE.

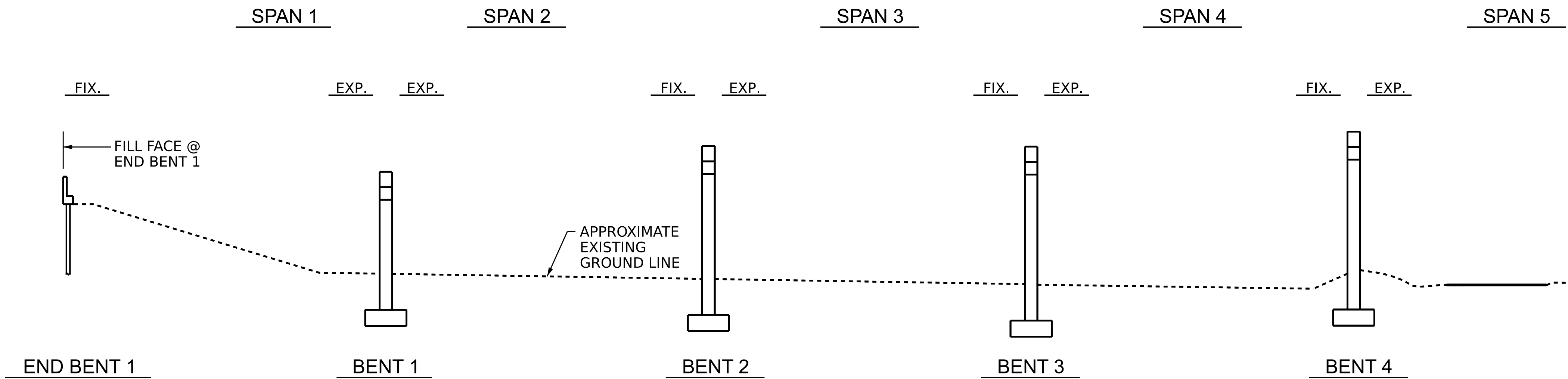
REMOVE EXISTING JOINT MATERIAL AND INSTALL FOAM JOINT SEALS FOR PRESERVATION.

REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING PRESTRESSED CONCRETE GIRDERS FOR CONCRETE REPAIRS.

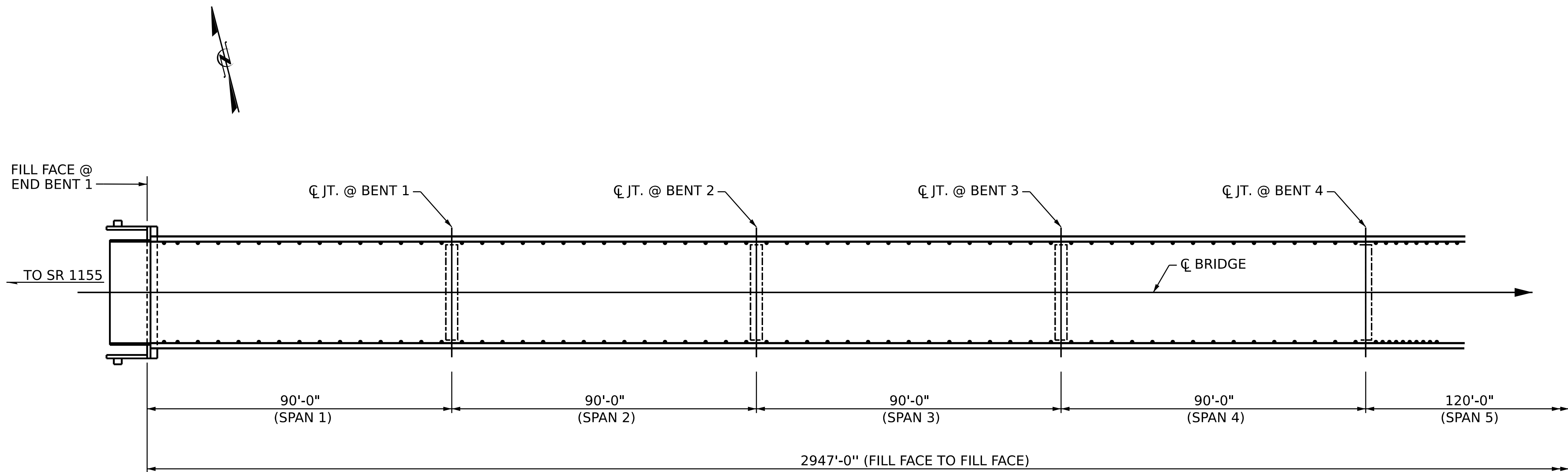
CLEAN AND EPOXY COAT EXISTING PRESTRESSED CONCRETE GIRDER ENDS.

REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING AREAS FOR SHOTCRETE AND CONCRETE REPAIRS.

REMOVE DEBRIS FROM TOP OF EXISTING END BENT AND INTERIOR BENT CAPS AND APPLY EPOXY COATING.



SECTION ALONG CL BRIDGE



PLAN

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW
FOR CLARITY, FOOTINGS ARE NOT SHOWN IN PLAN VIEW

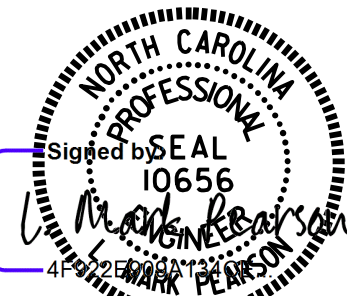
I hereby certify that this structure
was rehabilitated according to these
plans or as noted therein.

Resident Engineer

Date



WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165



4/23/2026

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PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 1 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

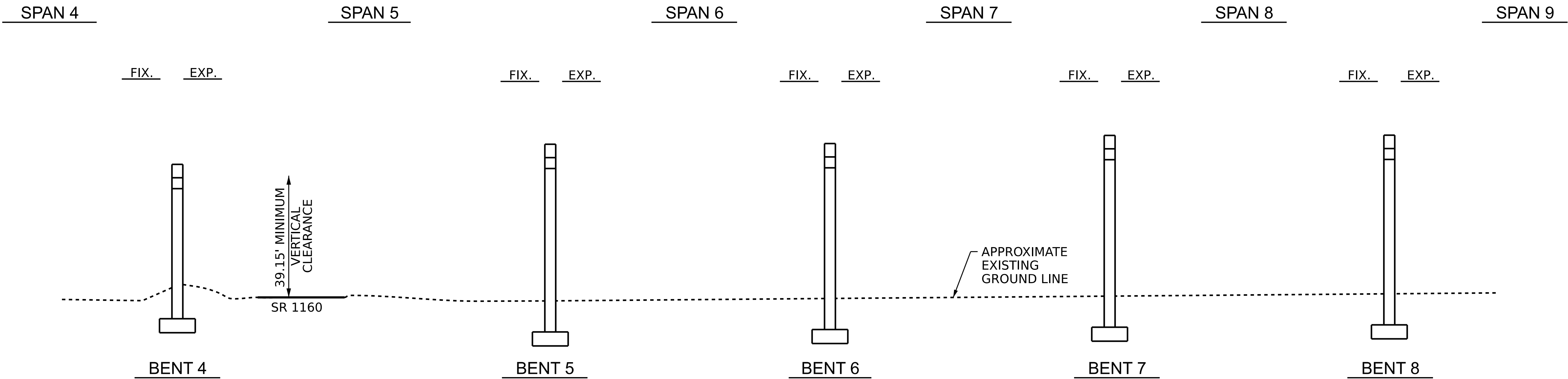
GENERAL DRAWING

FOR BRIDGE ON NC 101
OVER ICWW
BETWEEN NEW BERN RD. AND CORE CREEK

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

TOTAL
SHEETS
112

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

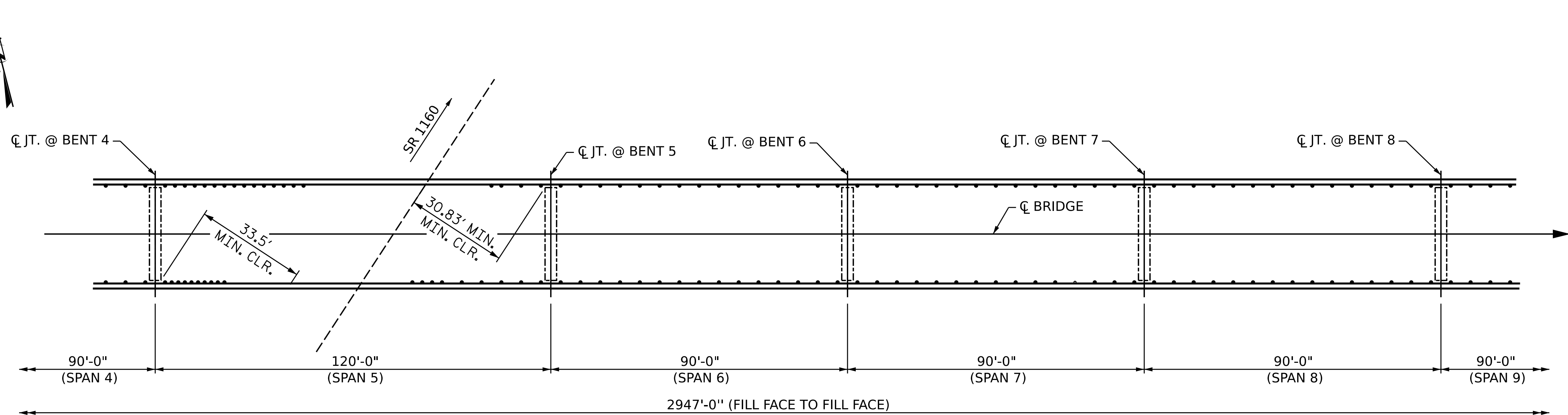


SECTION ALONG CL BRIDGE

NOTES

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BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.



PLAN

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW
FOR CLARITY, FOOTINGS ARE NOT SHOWN IN PLAN VIEW

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 2 OF 8

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-02
2			4			TOTAL SHEETS 112

DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

4/22/2026
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USMA128682

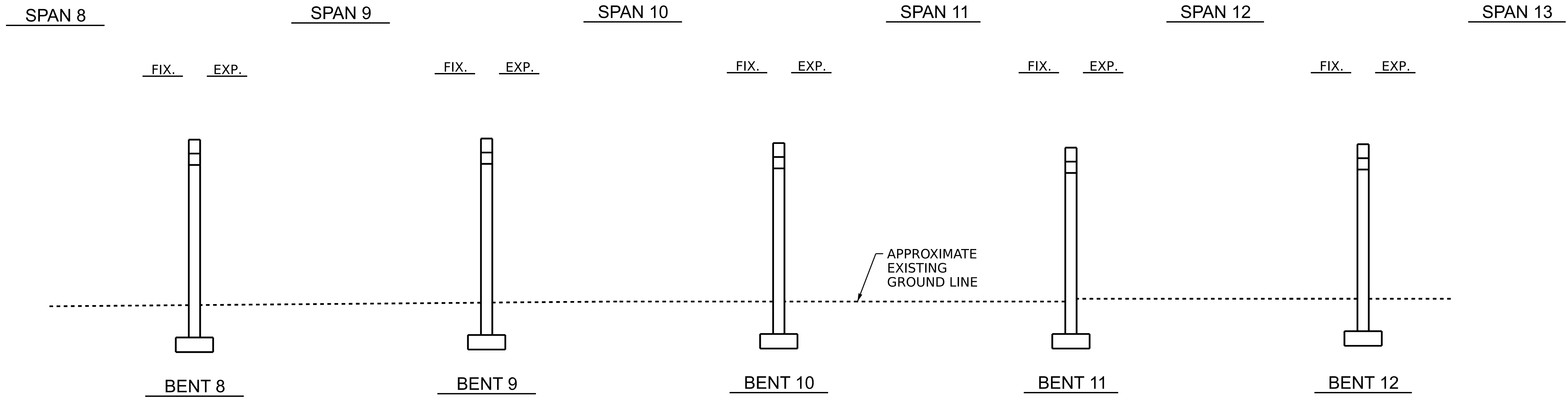


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4/23/2026

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SIGNATURES COMPLETED

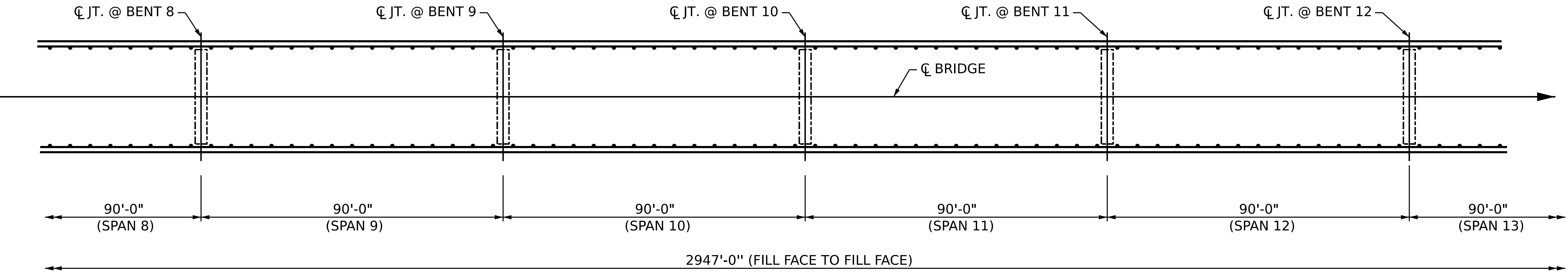


SECTION ALONG CL BRIDGE

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 04/20/2021.

BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.



PLAN

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW
FOR CLARITY, FOOTINGS ARE NOT SHOWN IN PLAN VIEW

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 3 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON NC 101
OVER ICWW
BETWEEN NEW BERN RD. AND CORE CREEK

Professional Engineer Seal for Mark Pearson, License No. 10656, State of North Carolina. The seal includes the text 'NORTH CAROLINA PROFESSIONAL ENGINEER', 'Mark Pearson', '10656', and '4/23/2026'.

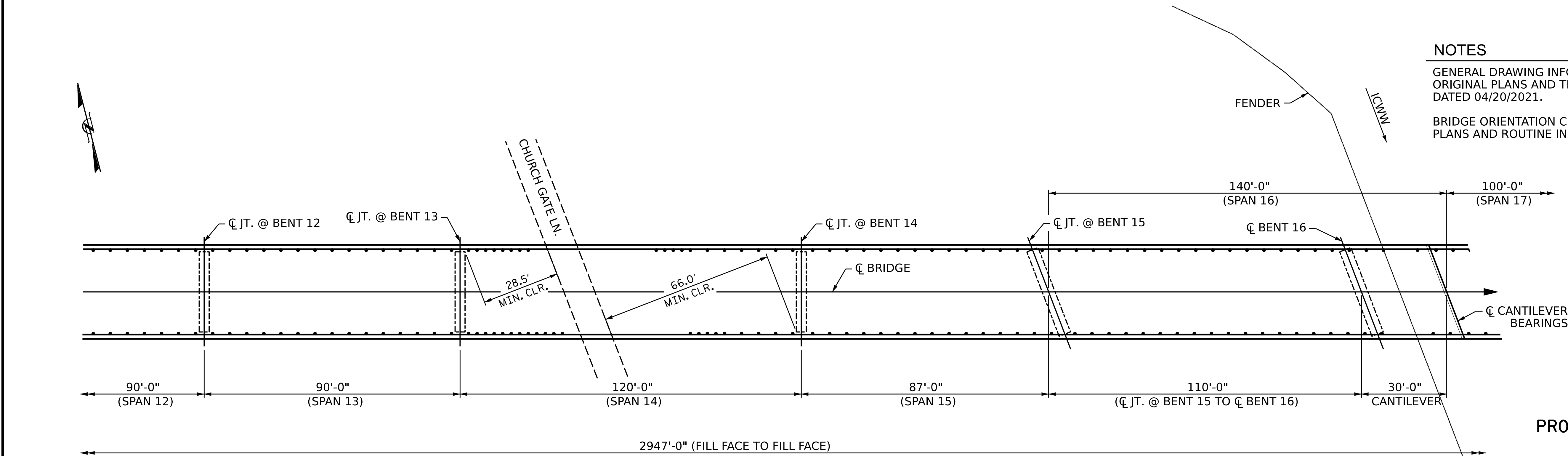
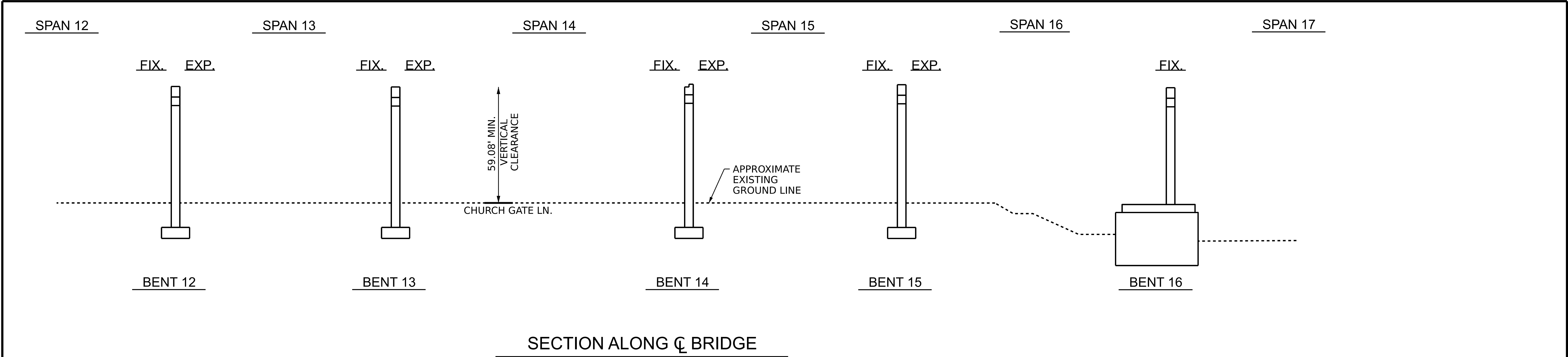
wsp
WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

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

SHEET NO.
S1-03
TOTAL SHEETS
112

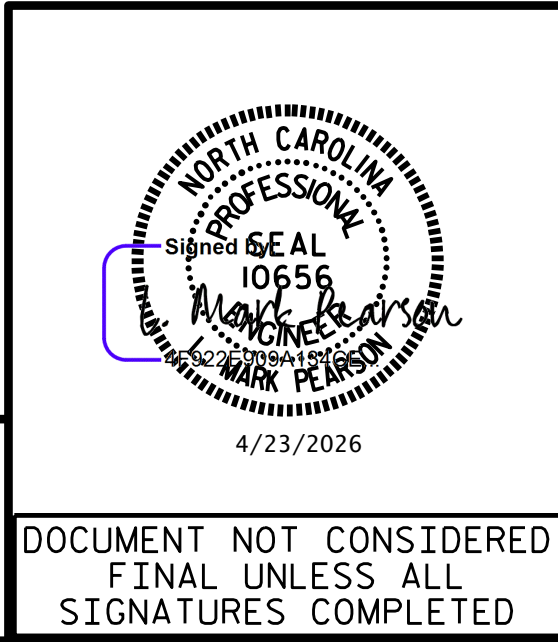
DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026



PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 4 OF 8

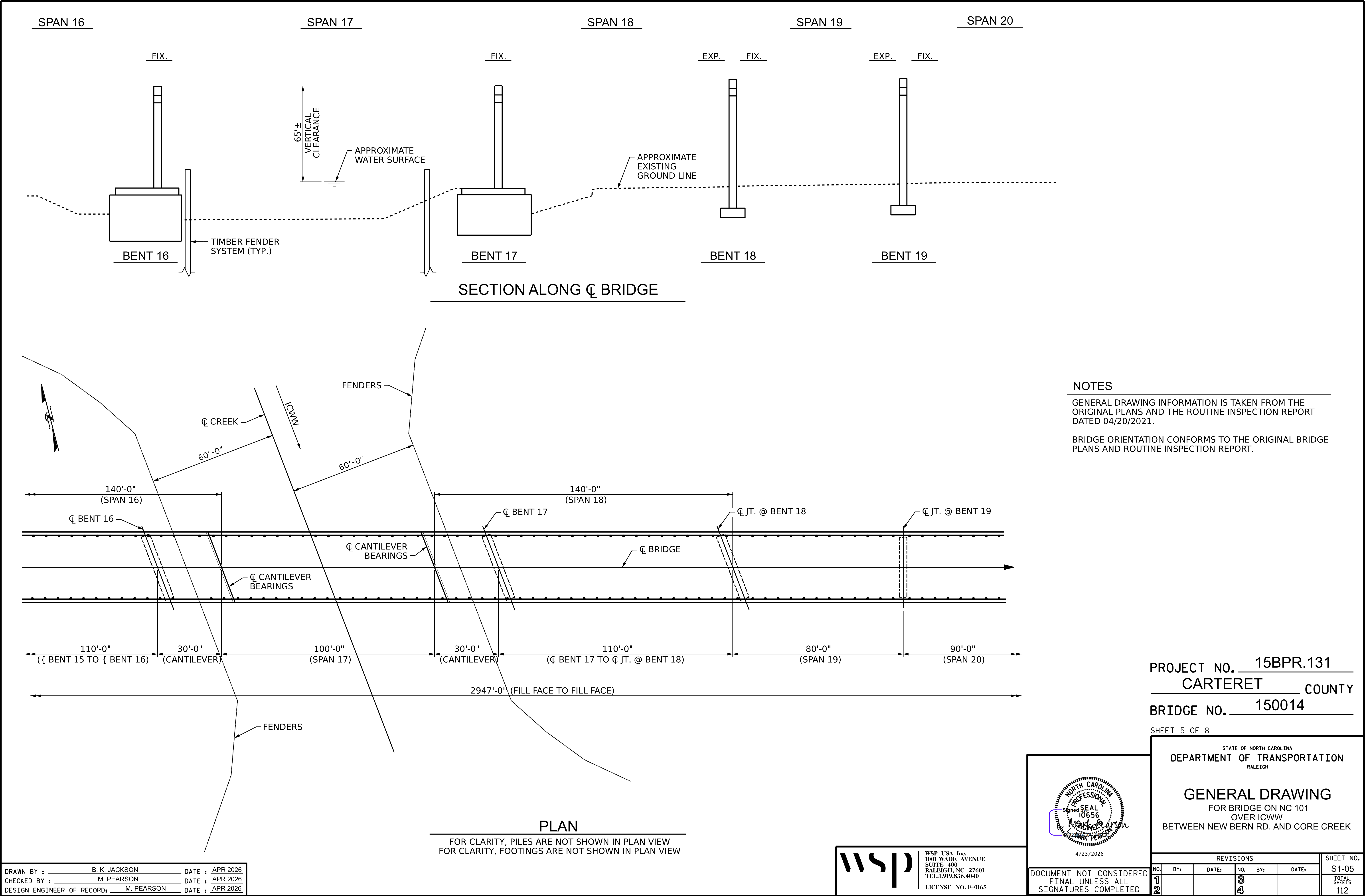
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH							
GENERAL DRAWING FOR BRIDGE ON NC 101 OVER ICWW BETWEEN NEW BERN RD. AND CORE CREEK							
REVISIONS						SHEET NO. S1-04	
NO.	BY:	DATE:	NO.	BY:	DATE:		
1			3			TOTAL SHEETS	
2			4			112	

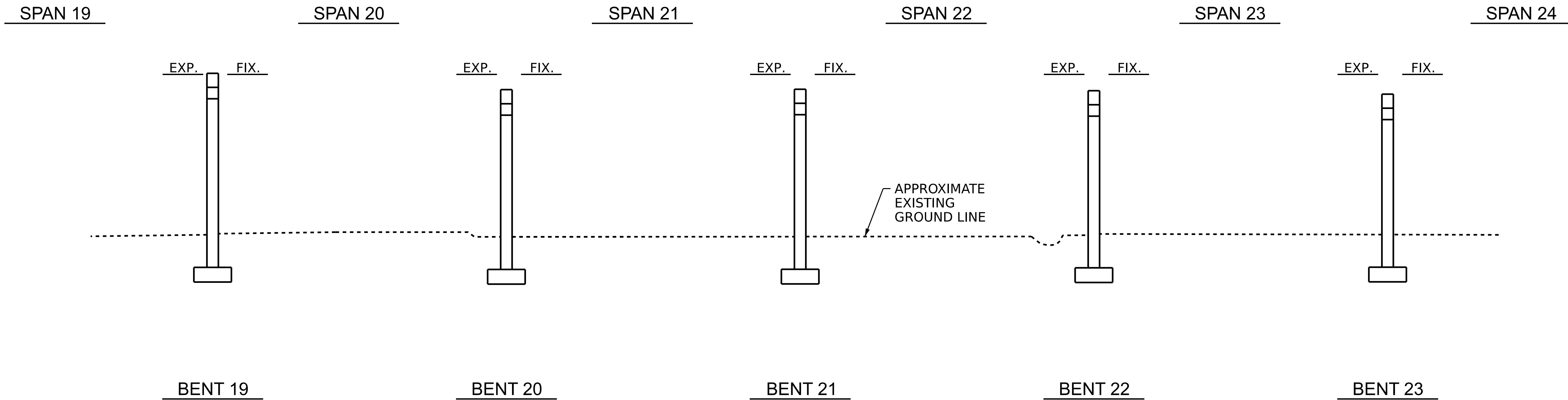


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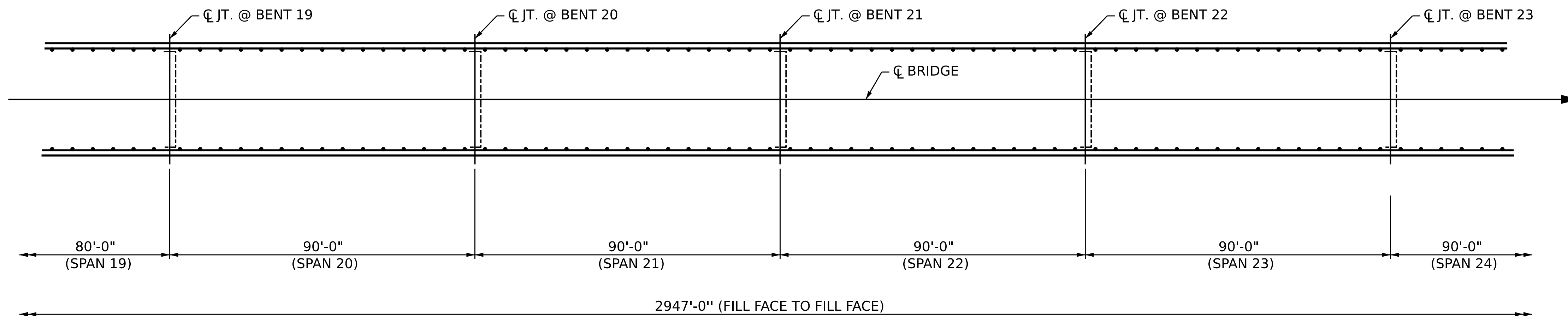


SECTION ALONG CL BRIDGE

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 04/20/2021.

BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.



PLAN

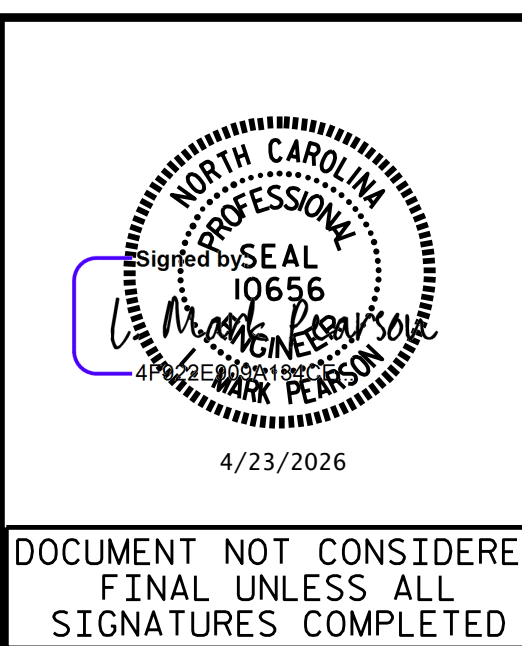
FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW
FOR CLARITY, FOOTINGS ARE NOT SHOWN IN PLAN VIEW

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 6 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON NC 101
OVER ICWW
BETWEEN NEW BERN RD. AND CORE CREEK



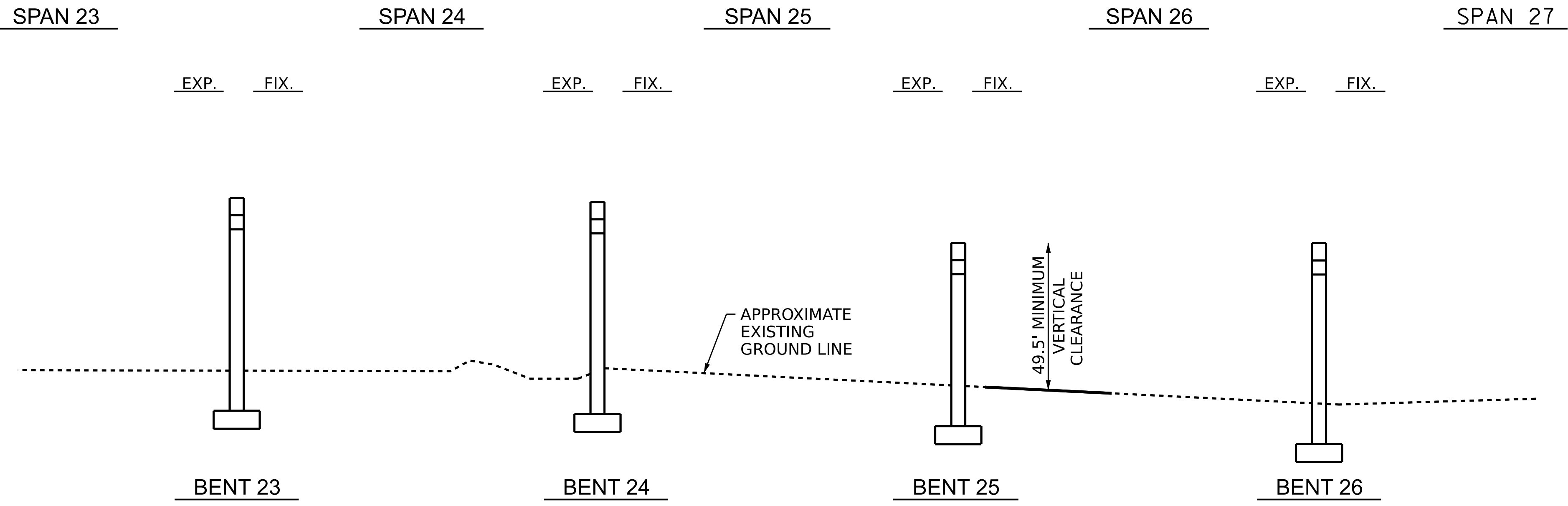
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-06
2			4			
TOTAL SHEETS						112

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CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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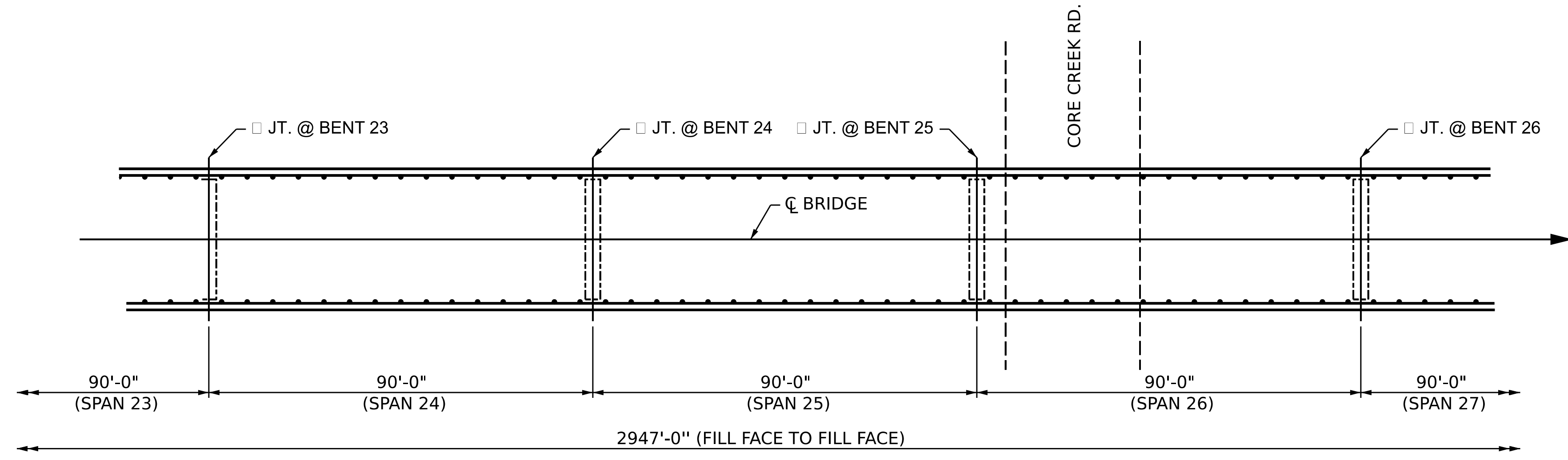


SECTION ALONG CL BRIDGE

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 04/20/2021.

BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.



PLAN

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW
FOR CLARITY, FOOTINGS ARE NOT SHOWN IN PLAN VIEW

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 7 OF 8

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON NC 101
OVER ICWW
BETWEEN NEW BERN RD. AND CORE CREEK

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-07
2			4			TOTAL SHEETS 112

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DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026



NOTES

BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE
PLANS AND ROUTINE INSPECTION REPORT.



PROJECT NO. 15BPR.131
CARTERET COUNTY
 BRIDGE NO. 150014

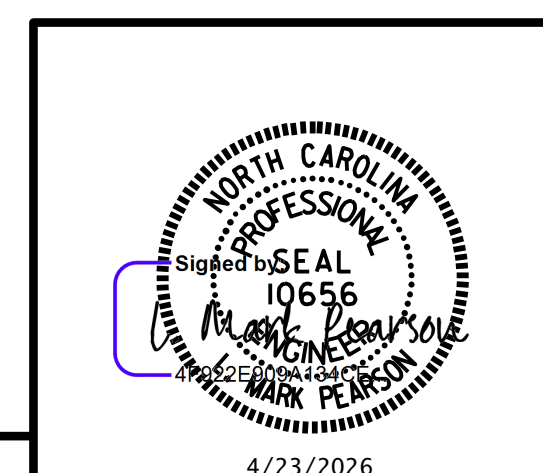
SHEET 8 OF 8

GENERAL DRAWING

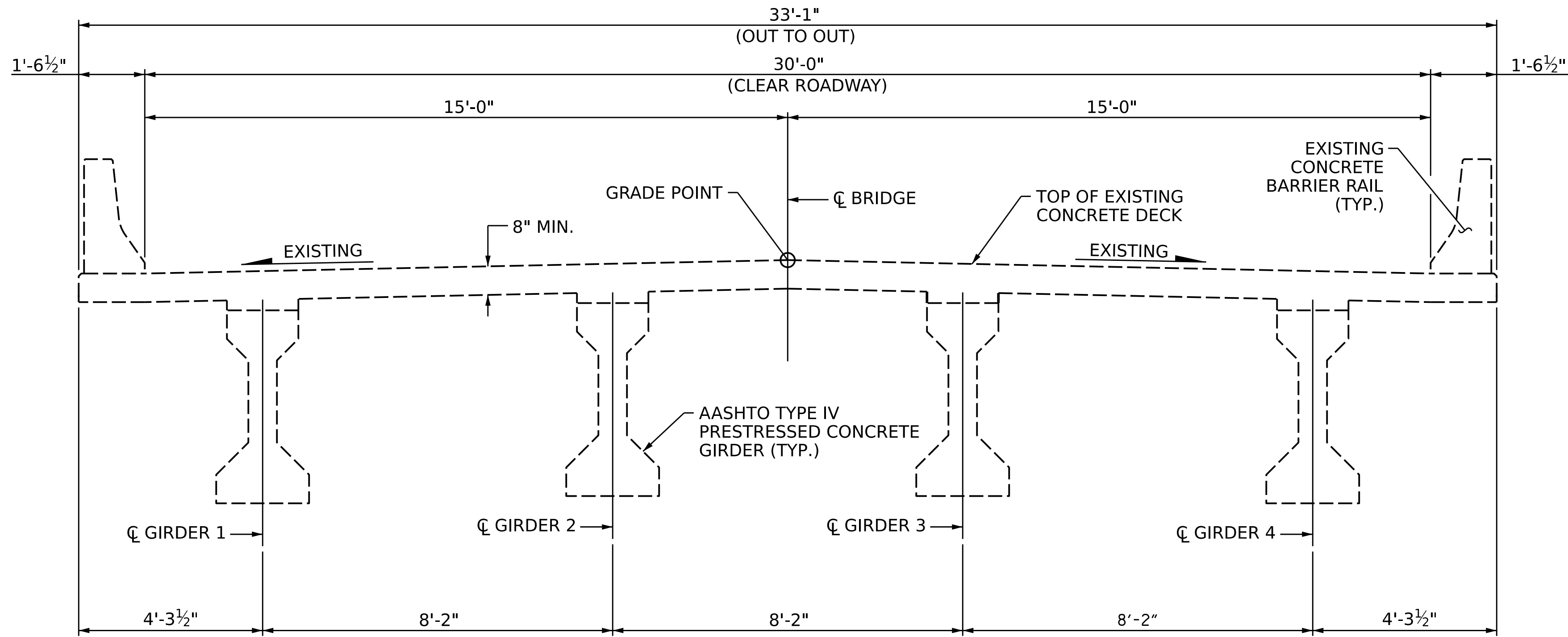
FOR BRIDGE ON NC 101
OVER ICWW
TWEEN NEW BERN RD. AND CORE CREEK

REVISONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-08
1			3			TOTAL SHEETS
2			4			112

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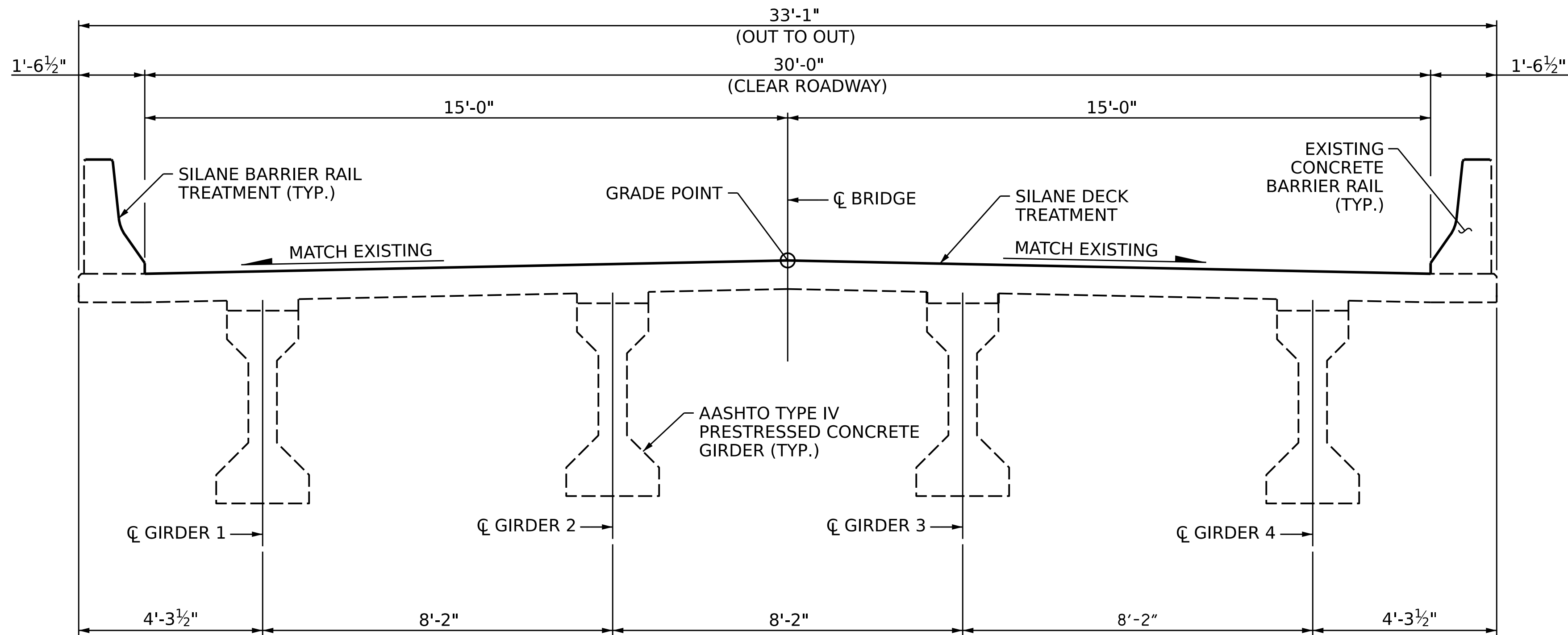


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TYPICAL SECTION

(EXISTING)
SPANS 1 THRU 4, 6 THRU 13 AND 15 THRU 31 ARE SHOWN
SPANS 5 AND 14 SIMILAR BUT HAVE AASHTO TYPE VI
PRESTRESSED CONCRETE GIRDERS.



TYPICAL SECTION

(PROPOSED)
SPANS 1 THRU 4, 6 THRU 13 AND 15 THRU 31 ARE SHOWN
SPANS 5 AND 14 SIMILAR BUT HAVE AASHTO TYPE VI
PRESTRESSED CONCRETE GIRDERS.

NOTES

SEE CONTRACT DOCUMENTS FOR LANE WIDTHS, SEQUENCING, AND
OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF DECK AND RAIL
SURFACE PREPARATION AND DECK AND BARRIER RAIL SEAL PLACEMENT.

FOR SILANE BARRIER RAIL TREATMENT, SEE SPECIAL PROVISIONS.

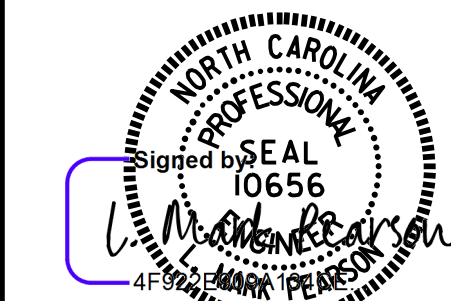
FOR SILANE DECK TREATMENT, SEE SPECIAL PROVISIONS.

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

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

TYPICAL SECTION



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1			3			TOTAL SHEETS
2			4			112

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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS"
SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL
WILL BE TREATED WITH SILANE PENETRANT SEALER.

APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	42 SQ.YD.	
SILANE DECK TREATMENT	42 SQ.YD.	
BRIDGE QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	300 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	634 SQ.FT.	
SILANE DECK TREATMENT	300 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	634 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	66 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	15 CU.FT.	
BRIDGE JOINT DEMOLITION	60 SQ.FT.	

LEGEND

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



PROJECT NO. 15BPR.131
CARTERET COUNTY
 BRIDGE NO. 150014

SHEET 1 OF 12

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

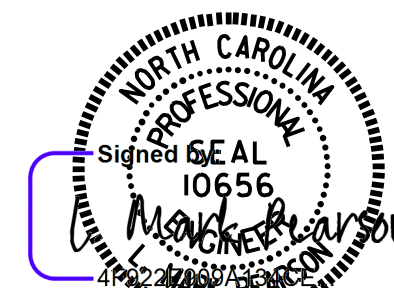
DECK SURFACE REPAIRS SPAN 1 AND APPROACH SLAB

DRAWN BY : B. K. JACKSON DATE : APR 2026
 CHECKED BY : M. PEARSON DATE : APR 2026
 DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-10
1			3			TOTAL SHEETS
2			4			112

BRIDGE QUANTITIES

THE QUANTITIES FOR SPANS 2 THRU 4, SPANS 6 THRU 13, SPAN 20, SPANS 22 THRU 25 AND SPANS 27 THRU 30 ARE SHOWN ON SHEET S1-11A.

NOTES

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

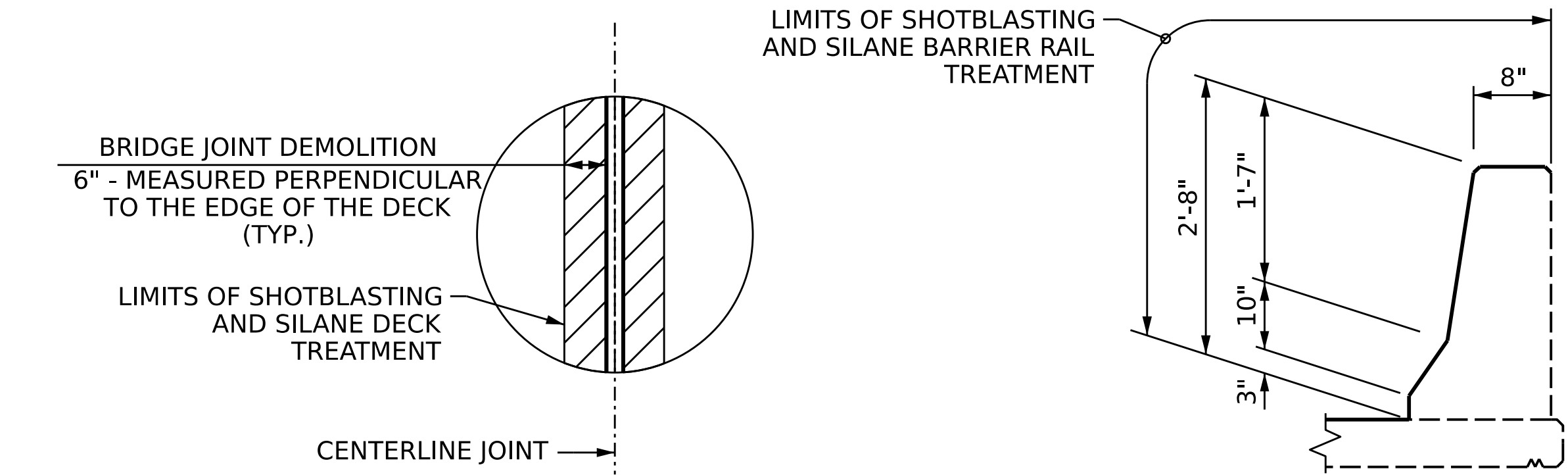
FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

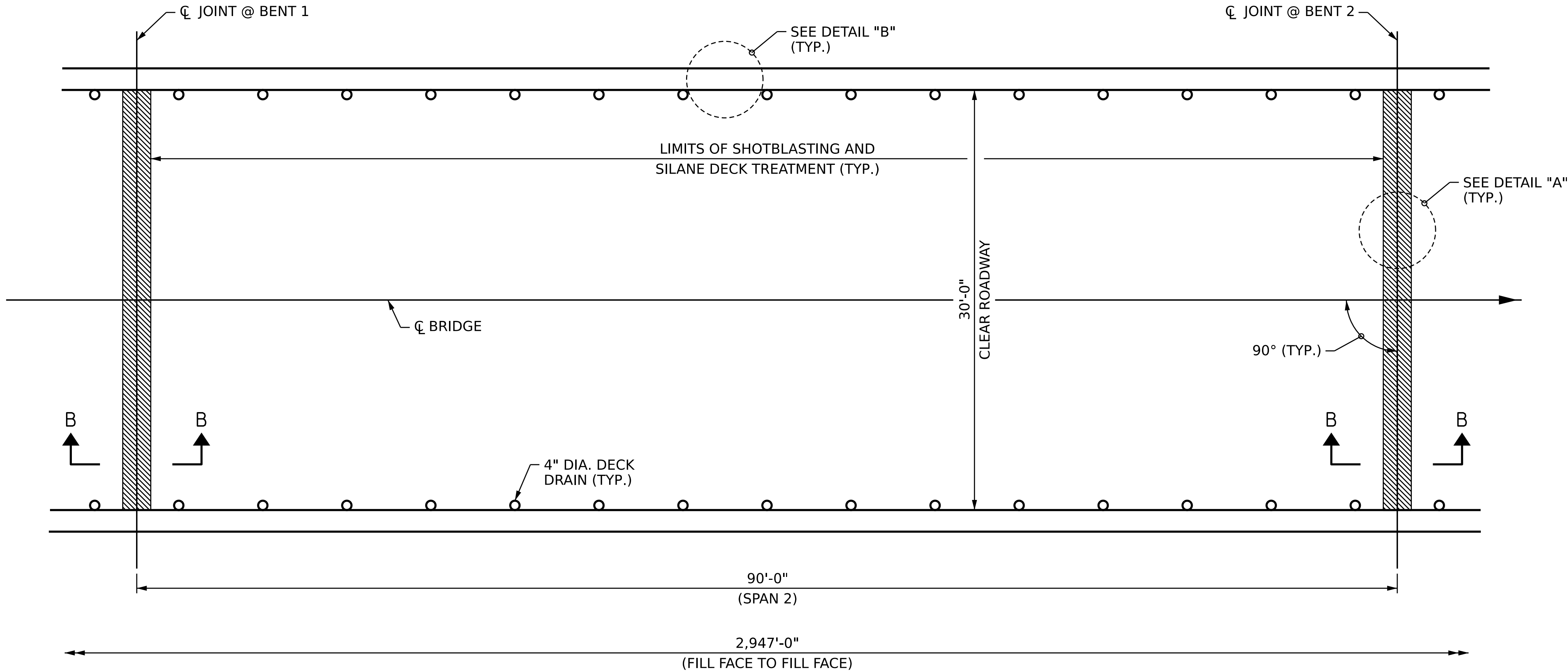
LEGEND

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



DETAIL "A"

DETAIL "B"



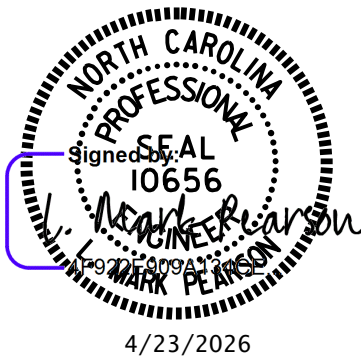
PLAN - SPAN 2

SPAN 2 SHOWN
SPANS 3 AND 4, SPANS 6 THRU 13
SPAN 20, SPANS 22 THRU 25,
SPANS 27 THRU 30 SIMILAR

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 2 OF 12

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
DECK SURFACE REPAIRS
PARTIAL SPANS 2 THRU 4
SPANS 6 THRU 13, SPAN 20,
SPANS 22 THRU 25 AND
SPANS 27 THRU 30



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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-11
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026



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BRIDGE 150014 SHEET 2 OF 12 QUANTITIES																				
	SPAN 2		SPAN 3		SPAN 4		SPAN 6		SPAN 7		SPAN 8		SPAN 9		SPAN 10		SPAN 11		SPAN 12	
	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.	
SILANE DECK TREATMENT	300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.	
BRIDGE JOINT DEMOLITION	30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.	

BRIDGE 150014 SHEET 2 OF 12 QUANTITIES - CONTINUED																				
	SPAN 13		SPAN 20		SPAN 22		SPAN 23		SPAN 24		SPAN 25		SPAN 27		SPAN 28		SPAN 29		SPAN 30	
	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.	
SILANE DECK TREATMENT	300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.		300 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.		648 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.		33 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.		7.5 CU.FT.	
BRIDGE JOINT DEMOLITION	30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.		30 SQ.FT.	

BRIDGE 150014 SHEET 2 OF 12 QUANTITIES - TOTAL		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	6,000 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	12,960 SQ.FT.	
SILANE DECK TREATMENT	6,000 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	12,960 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	660 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	150 CU.FT.	
BRIDGE JOINT DEMOLITION	600 SQ.FT.	

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 2A OF 12



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
DECK SURFACE REPAIRS
PARTIAL SPANS 2 THRU 4
SPANS 6 THRU 13, SPAN 20,
SPANS 22 THRU 25 AND
SPANS 27 THRU 30

REVISIONS						SHEET NO. S1-11A
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 112
2			4			

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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1001 WADE AVENUE
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RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS"
SHEET.

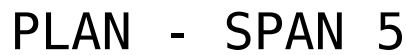
FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL
WILL BE TREATED WITH SILANE PENETRANT SEALER.

BRIDGE QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	400 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	845 SQ.FT.	
SILANE DECK TREATMENT	400 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	845 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	33 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	8 CU.FT.	
BRIDGE JOINT DEMOLITION	30 SQ.FT.	
CONCRETE REPAIRS		

 BRIDGE JOINT DEMOLITION
 CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
 SHOTBLAST BRIDGE DECK AND SILANE DECK TREATMENT



PROJECT NO. 15BPR.131
CARTERET COUNTY
 BRIDGE NO. 150014

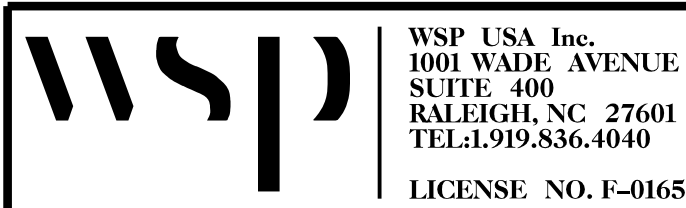
SHEET 3 OF 12

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK SURFACE REPAIRS PARTIAL SPAN 5

DRAWN BY : B. K. JACKSON DATE : APR 2026
 CHECKED BY : M. PEARSON DATE : APR 2026
 DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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REVISIONS						SHEET NO. S1-12
NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			



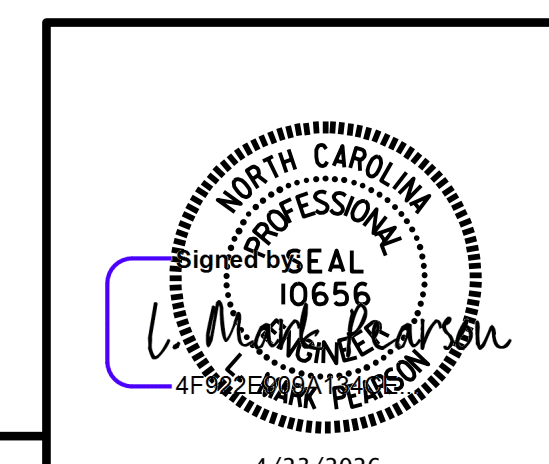
BRIDGE QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	400 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	845 SQ.FT.	
SILANE DECK TREATMENT	400 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	845 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	33 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	8 CU.FT.	
BRIDGE JOINT DEMOLITION	30 SQ.FT.	
CONCRETE REPAIRS	0.68 SQ.FT.	

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



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-13 TOTAL SHEETS 112
1			3			
2			4			

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SIGNATURES COMPLETED

BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	290 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	613 SQ.FT.	
SILANE DECK TREATMENT	290 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	613 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	35 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	9 CU.FT.	
BRIDGE JOINT DEMOLITION	33 SQ.FT.	
CONCRETE REPAIRS	0.49 SQ.FT.	

LEGEND

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

NOTES

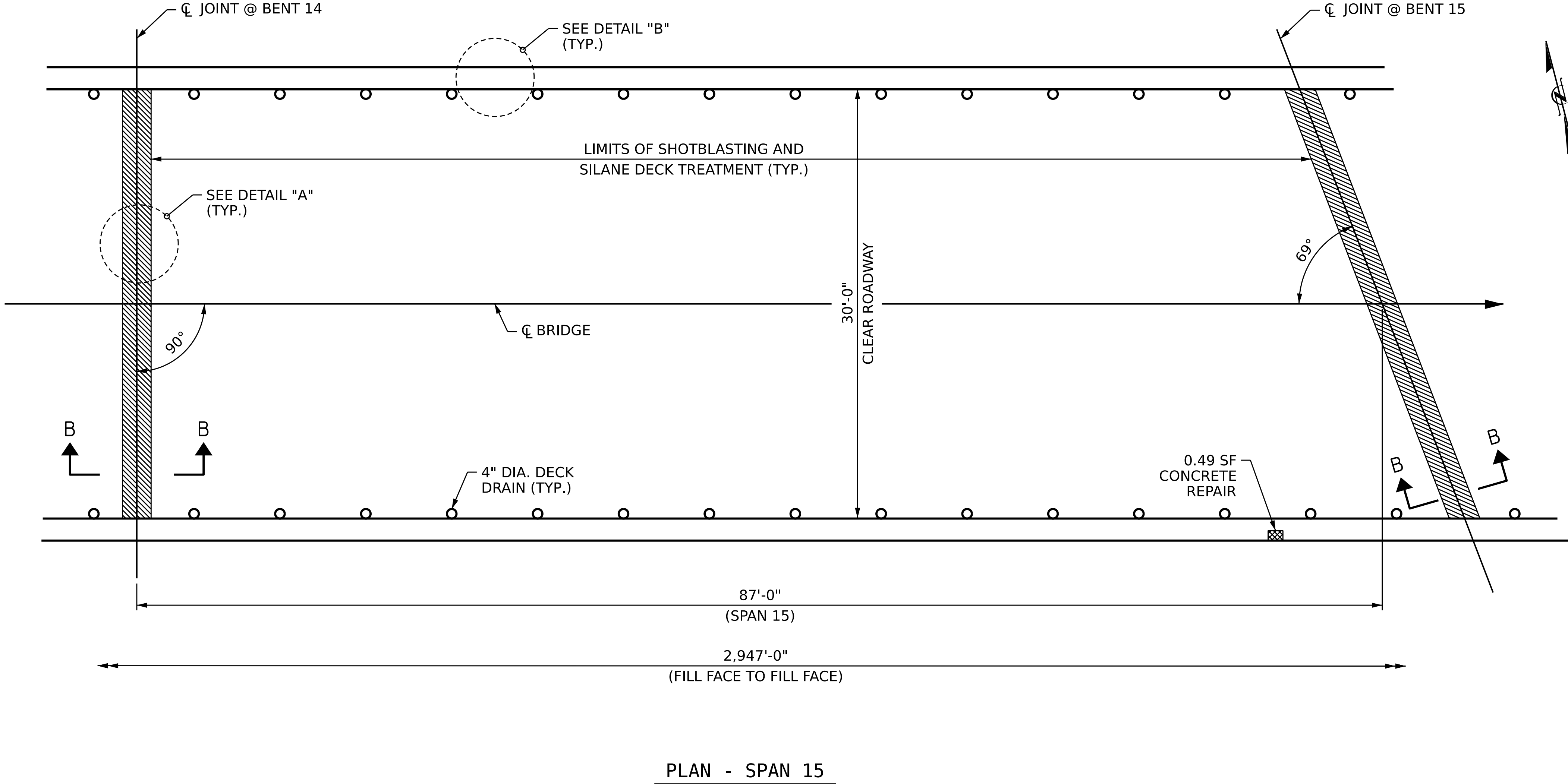
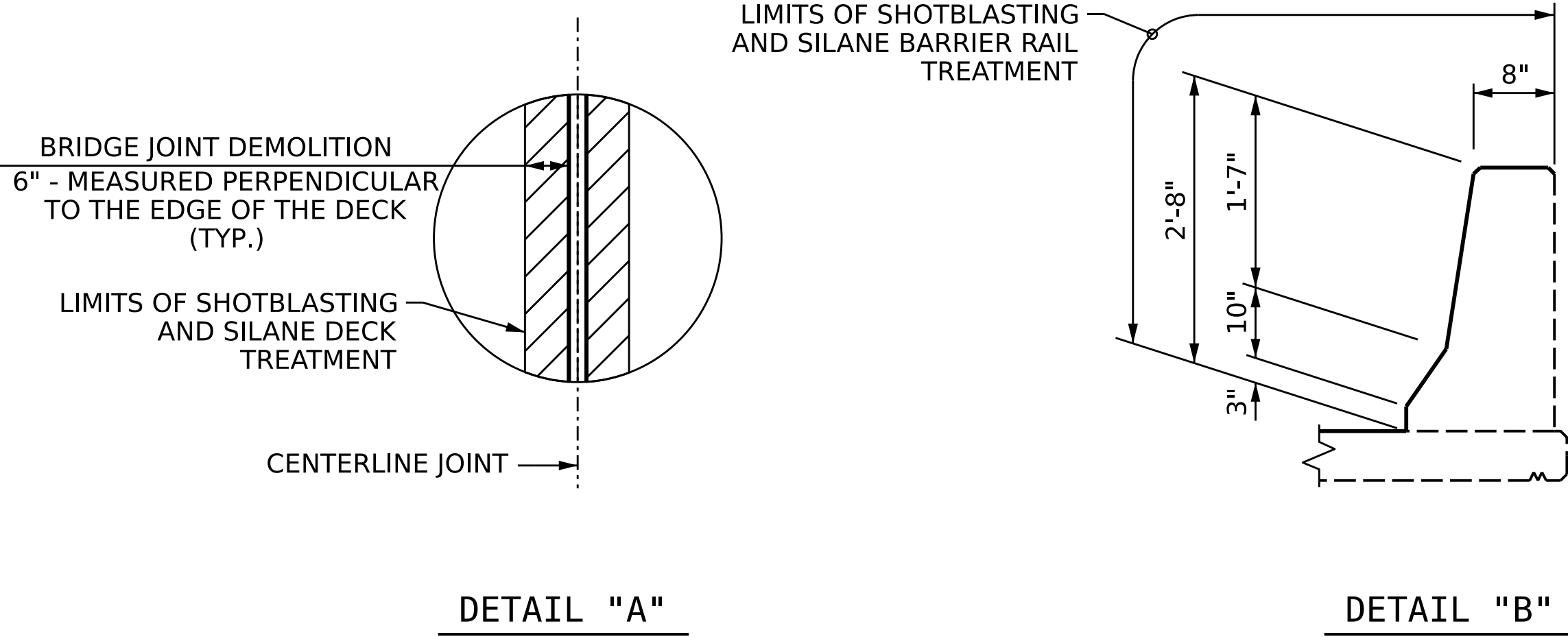
REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

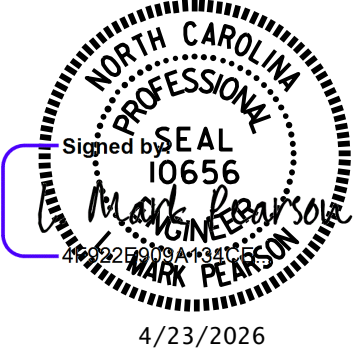


PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 5 OF 12

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK SURFACE REPAIRS
PARTIAL SPAN 15

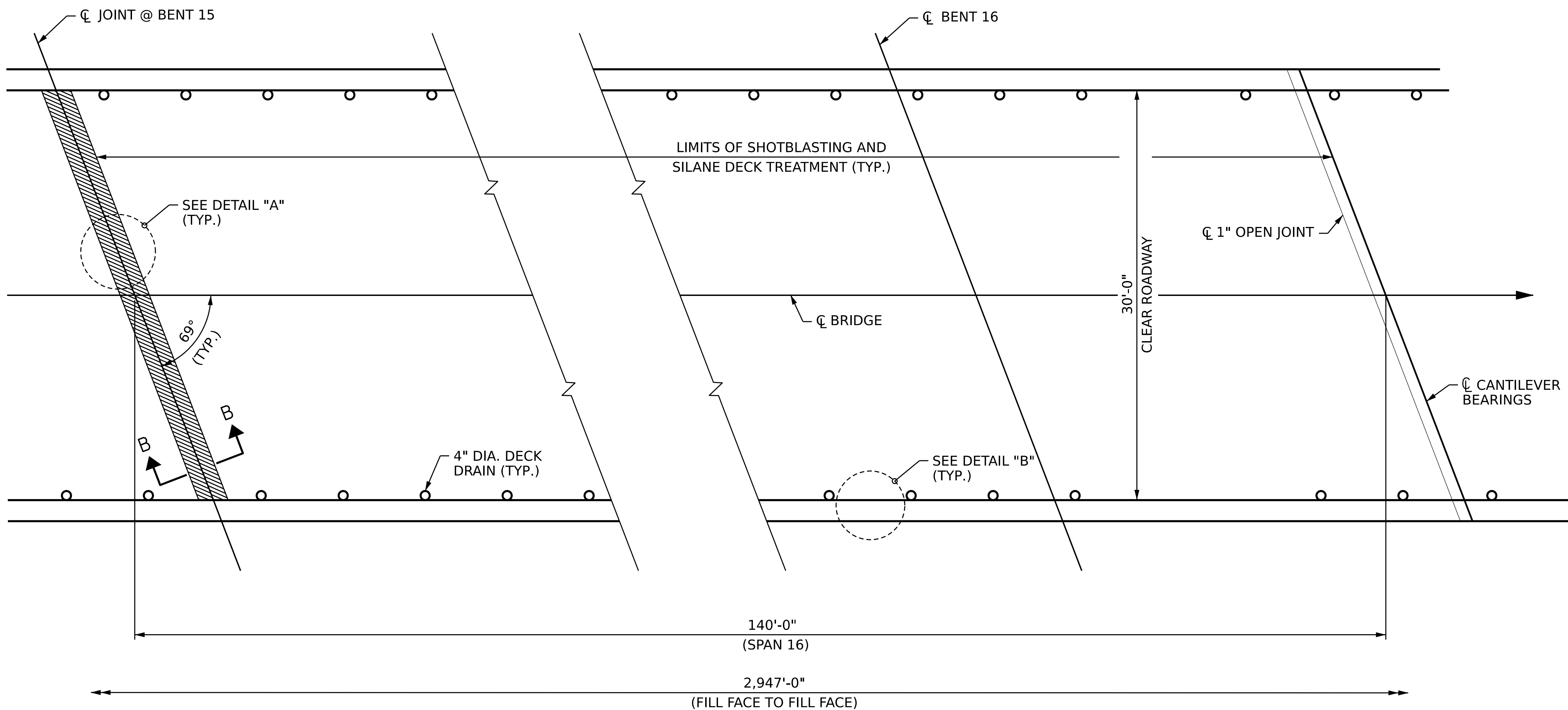


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REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
2			4			112

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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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SUITE 400
RALEIGH, NC 27601
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NOTES

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS"
SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL
WILL BE TREATED WITH SILANE PENETRANT SEALER.

BRIDGE QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	467 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	986 SQ.FT.	
SILANE DECK TREATMENT	467 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	986 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION		
ELASTOMERIC CONCRETE FOR PRESERVATION		
BRIDGE JOINT DEMOLITION		
CONCRETE REPAIRS		

LEGEND

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

PROJECT NO. 15BPR.131
CARTERET COUNTY
 BRIDGE NO. 150014

SHEET 6 OF 12

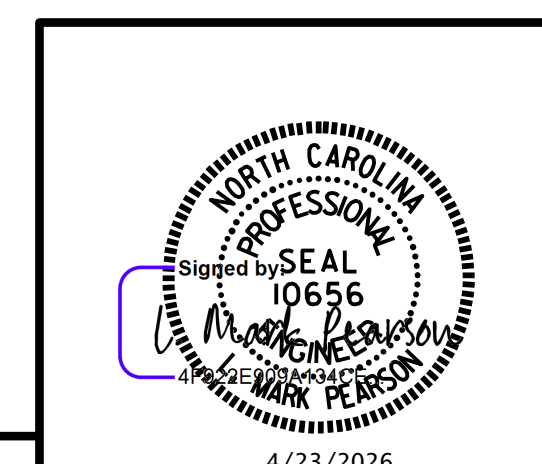
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK SURFACE REPAIRS PARTIAL SPAN 16

STATE OF NORTH CAROLINA

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

RALEIGH



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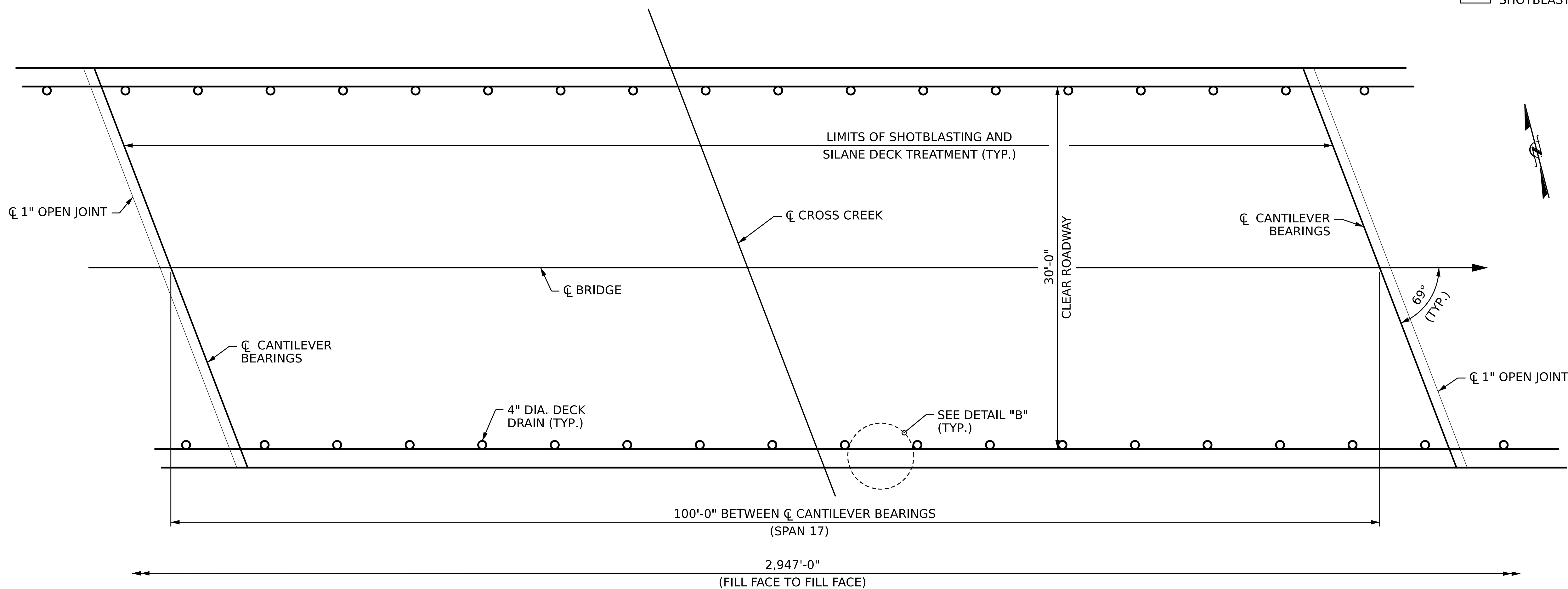
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 CHECKED BY : M. PEARSON DATE : APR 2026
 DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 1.919.836.4040
LICENSE NO. F-0165

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REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
2			4			112



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

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL
WILL BE TREATED WITH SILANE PENETRANT SEALER.

LEGEND

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

PLAN - SPAN 17

SHEET 7 OF 12

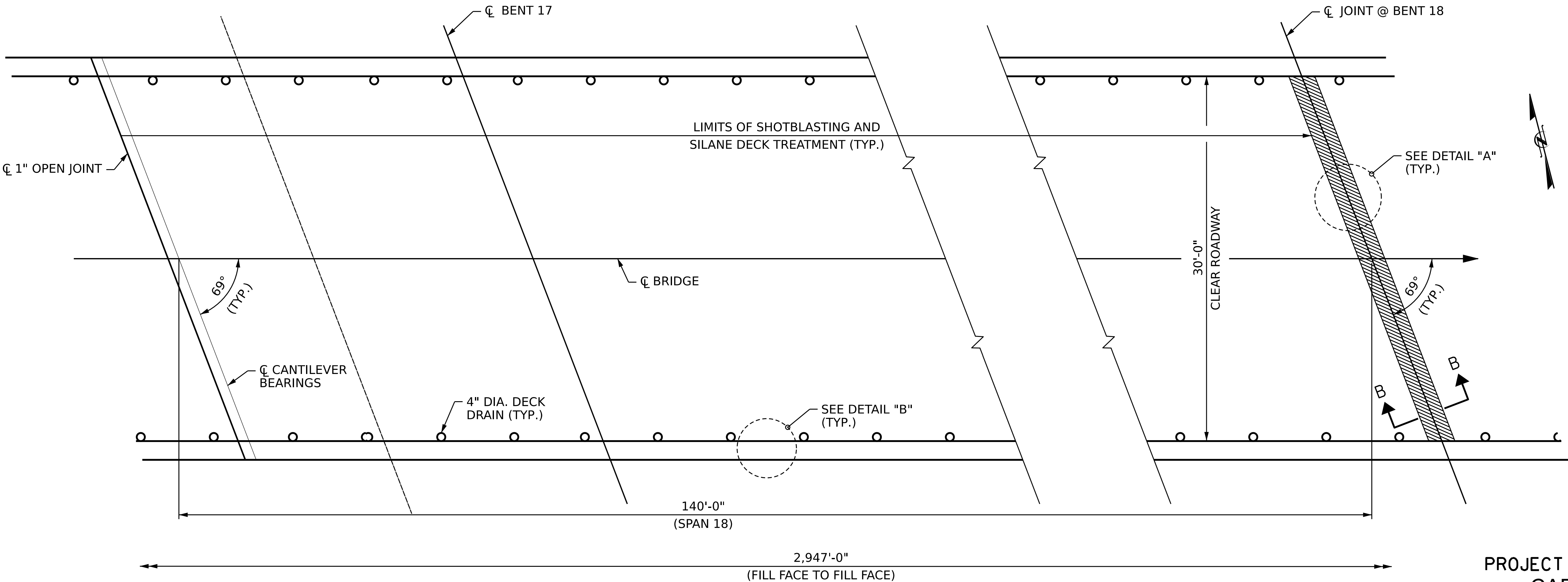
DECK SURFACE REPAIRS PARTIAL SPAN 17



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-16
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REPAIR LOCATIONS AND ESTIMATED QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER WILL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATIONS AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE AS-BUILT REPAIR QUANTITY TABLE.

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS"
SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL
WILL BE TREATED WITH SILANE PENETRANT SEALER.

BRIDGE QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	467 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	986 SQ.FT.	
SILANE DECK TREATMENT	467 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	986 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	35 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	9 CU. FT.	
BRIDGE JOINT DEMOLITION	33 SQ. FT.	
CONCRETE REPAIRS		

 BRIDGE JOINT DEMOLITION
 CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT
 SHOTBLAST BRIDGE DECK AND SILANE DECK TREATMENT

PROJECT NO. 15BPR.131
CARTERET COUNTY
 BRIDGE NO. 150014

SHEET 8 OF 12

STATE OF NORTH CAROLINA
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RALEIGH

DECK SURFACE REPAIRS PARTIAL SPAN 18

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-17
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2			4			

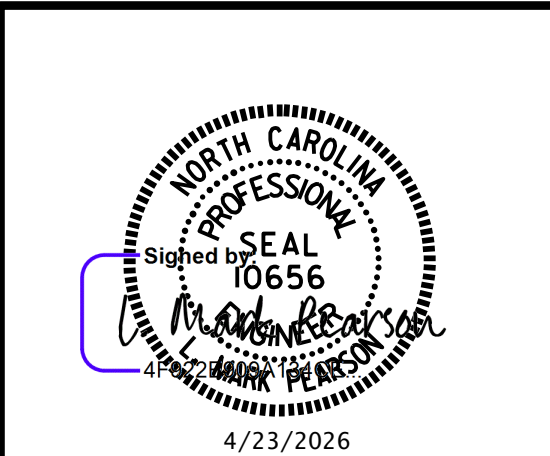
DRAWN BY : B. K. JACKSON DATE : APR 2026
 CHECKED BY : M. PEARSON DATE : APR 2026
 DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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RALEIGH, NC 27601
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BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	267 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	564 SQ.FT.	
SILANE DECK TREATMENT	267 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	564 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	33 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	8 CU. FT.	
BRIDGE JOINT DEMOLITION	30 SQ. FT.	
CONCRETE REPAIRS		

LEGEND

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

NOTES

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

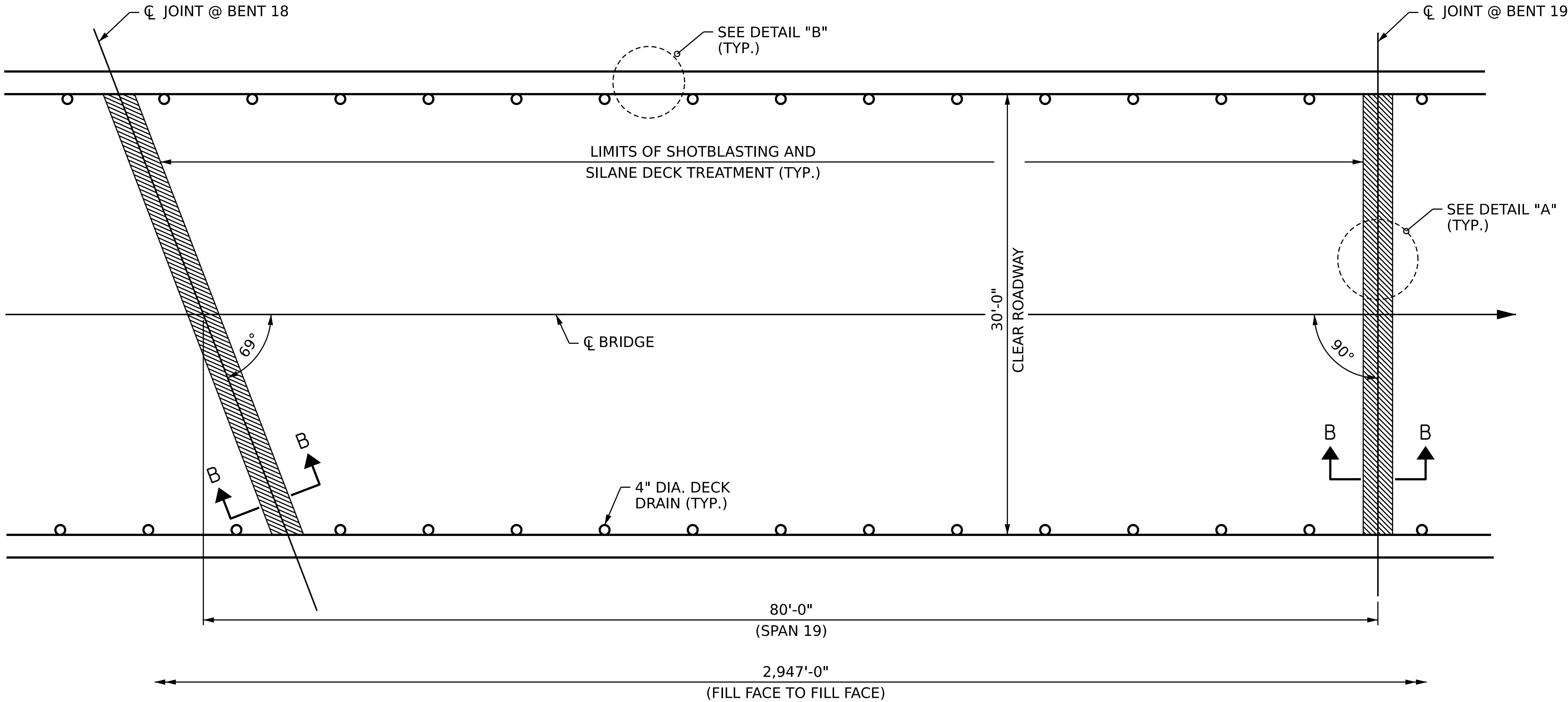
FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

DETAIL "A"

DETAIL "B"



PLAN - SPAN 19

DRAWN BY : B. K. JACKSON DATE : APR 2026
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STATE OF NORTH CAROLINA
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RALEIGH
DECK SURFACE REPAIRS
PARTIAL SPAN 19
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PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

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REVISIONS						SHEET NO.
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1			3			TOTAL SHEETS
2			4			112

BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	300 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	634 SQ.FT.	
SILANE DECK TREATMENT	300 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	634 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	33 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	8 CU. FT.	
BRIDGE JOINT DEMOLITION	30 SQ. FT.	
CONCRETE REPAIRS	1.0 SQ.FT.	

LEGEND

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

NOTES

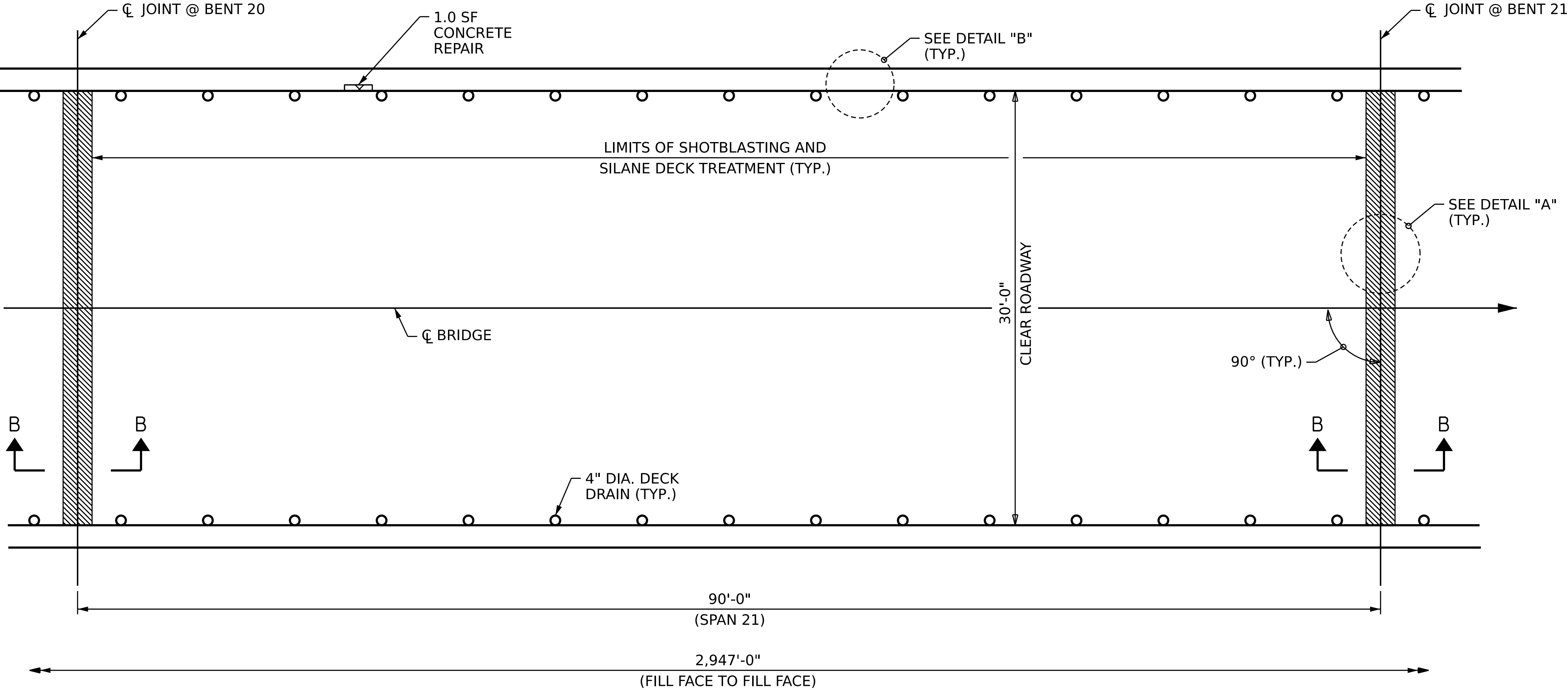
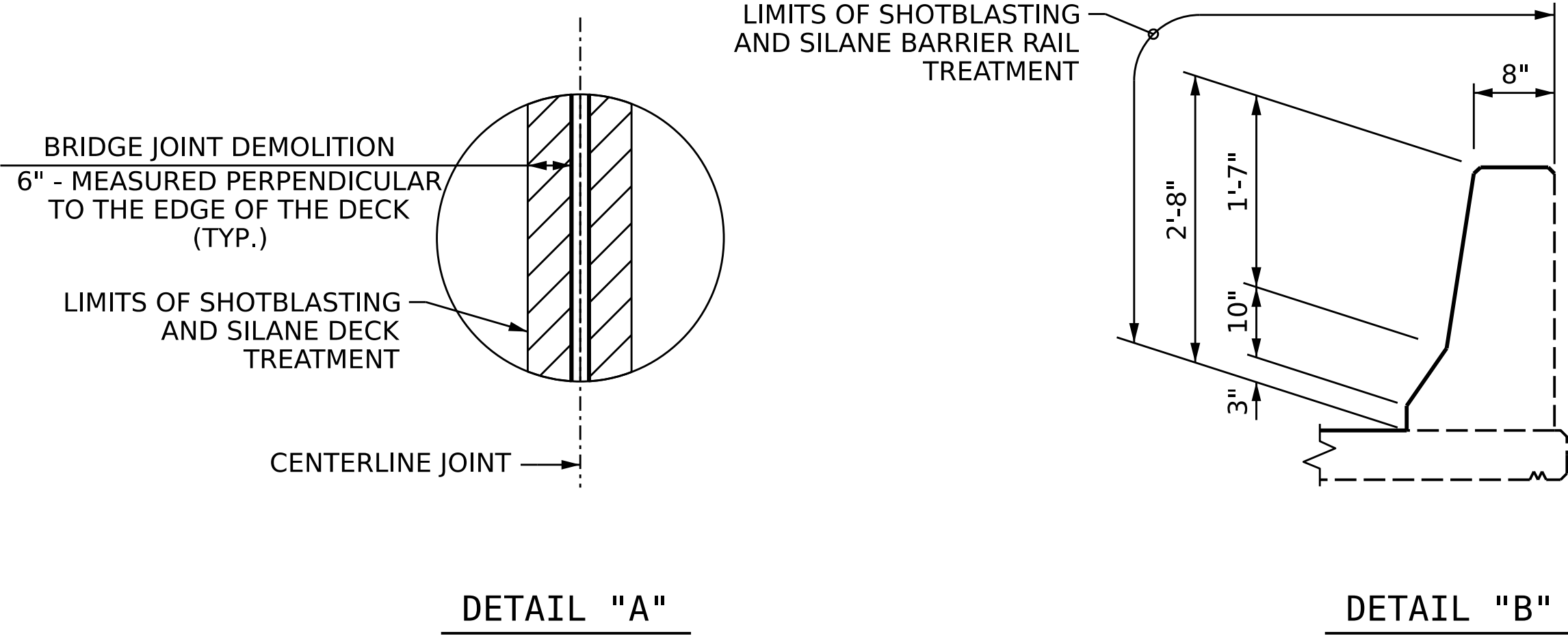
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FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.



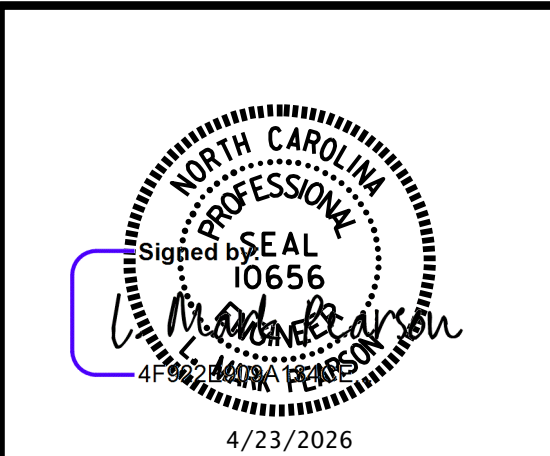
PLAN - SPAN 21

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 10 OF 12

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK SURFACE REPAIRS
PARTIAL SPAN 21



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2			4			TOTAL SHEETS 112

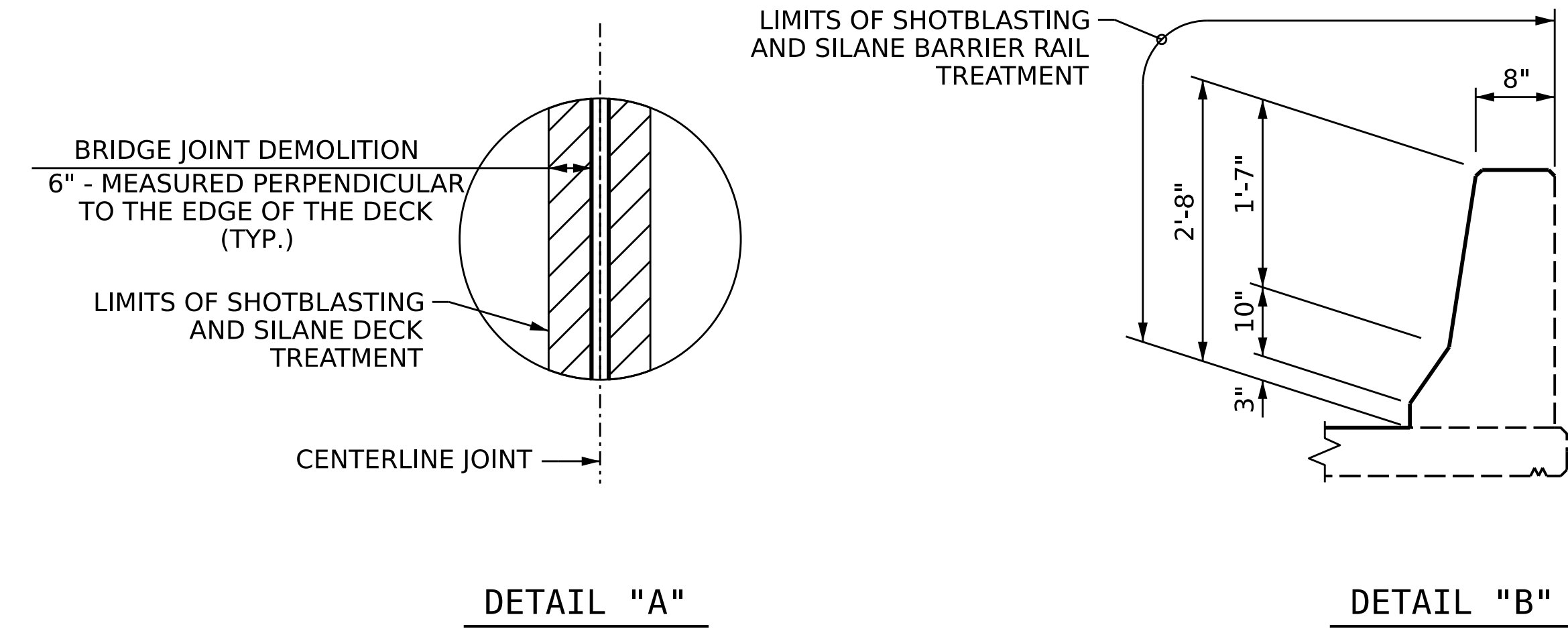
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CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026



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LICENSE NO. F-0165

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FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

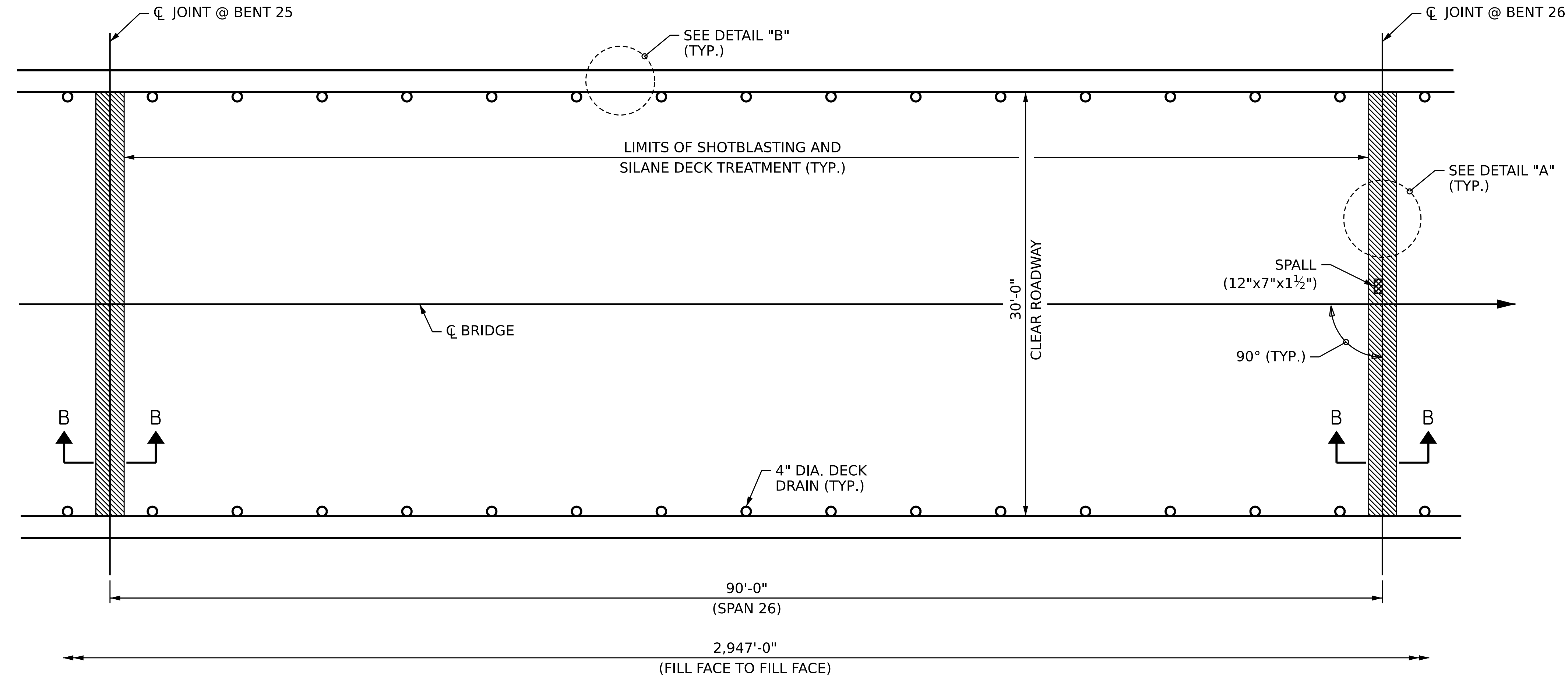
ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
CONCRETE DECK REPAIR FOR SILANE TREATMENT	1 SQ.FT.	
SHOTBLASTING BRIDGE DECK	300 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	585 SQ.FT.	
SILANE DECK TREATMENT	300 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	585 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	33 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	8 CU. FT.	
BRIDGE JOINT DEMOLITION	30 SQ. FT.	
CONCRETE REPAIRS		

LEGEND

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



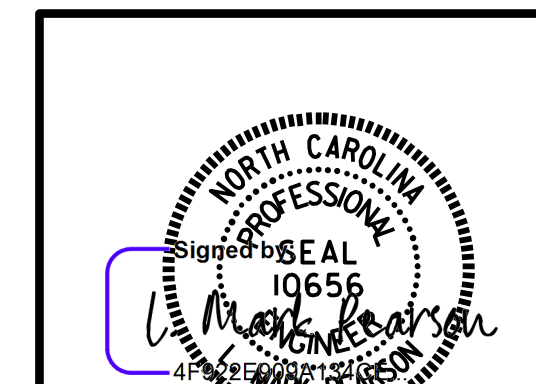
PLAN - SPAN 26

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 11 OF 12

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK SURFACE REPAIRS
PARTIAL SPAN 26



4/23/2026

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1			3			S1-20
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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APPROACH SLAB QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	42 SQ.YD.	
SILANE DECK TREATMENT	42 SQ.YD.	
BRIDGE QUANTITIES		
	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	300 SQ.YD.	
SILANE BARRIER RAIL TREATMENT	634 SQ.FT.	
SILANE DECK TREATMENT	300 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	634 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	33 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	8 CU. FT.	
BRIDGE JOINT DEMOLITION	30 SQ. FT.	

NOTES

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

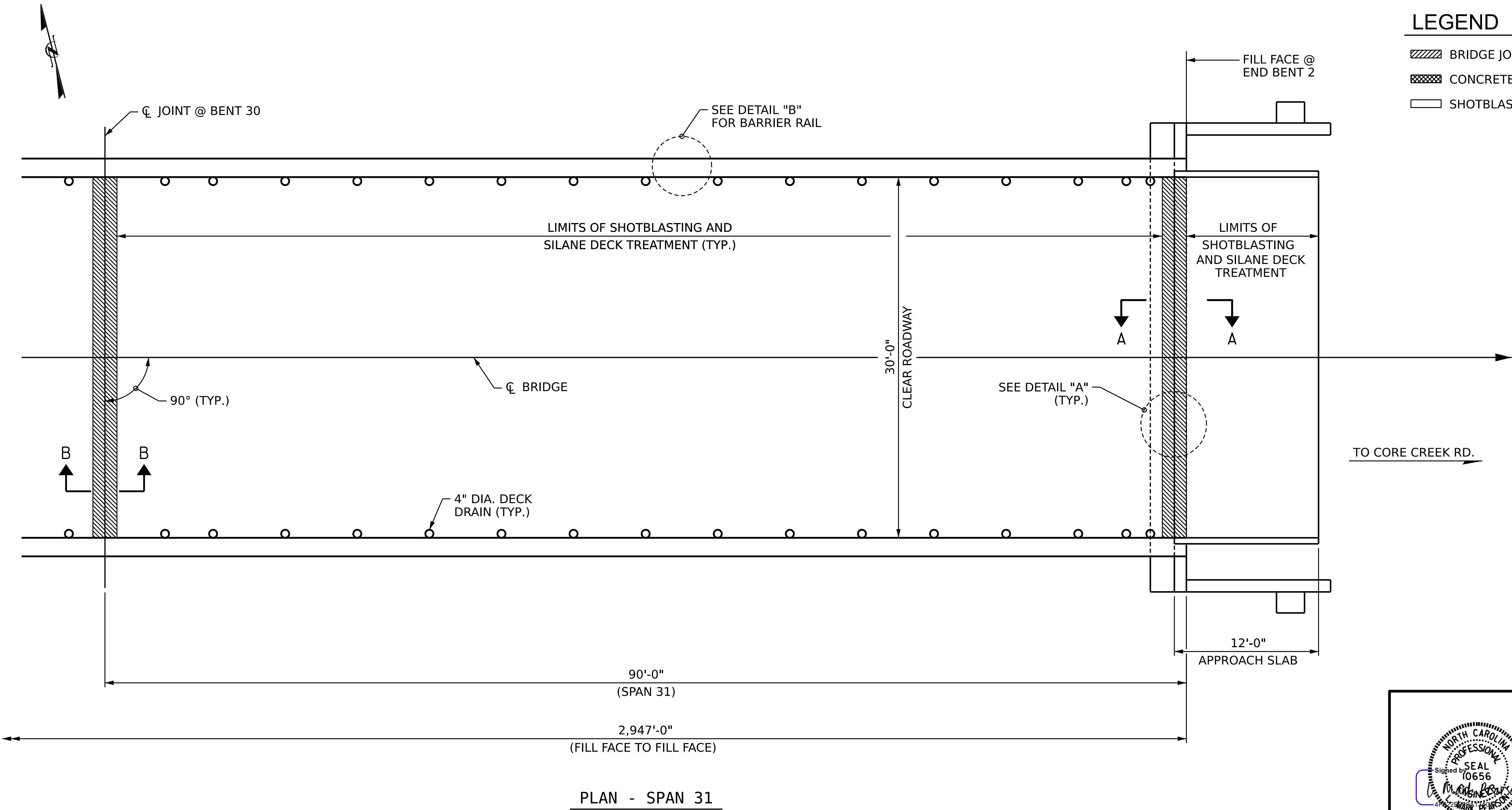
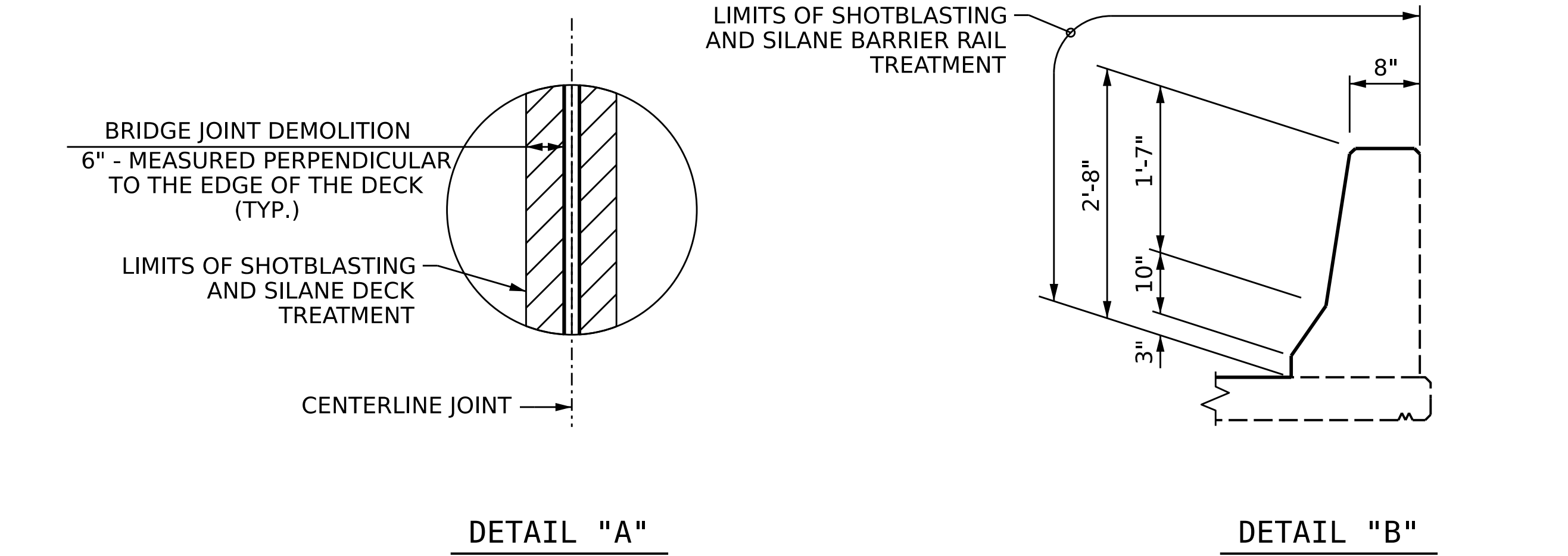
FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR SILANE DECK TREATMENT SHALL BE COMPLETE PRIOR TO SHOTBLAST OF ENTIRE DECK SURFACE FOR PREPARATION FOR SILANE DECK TREATMENTS.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

LEGEND

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



PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 12 OF 12

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DECK SURFACE REPAIRS
PARTIAL SPAN 31
AND APPROACH SLAB

REVISIONS						SHEET NO. S1-21
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS 112
1			3			
2			4			

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Signed by
M. PEARSON

Professional Engineer

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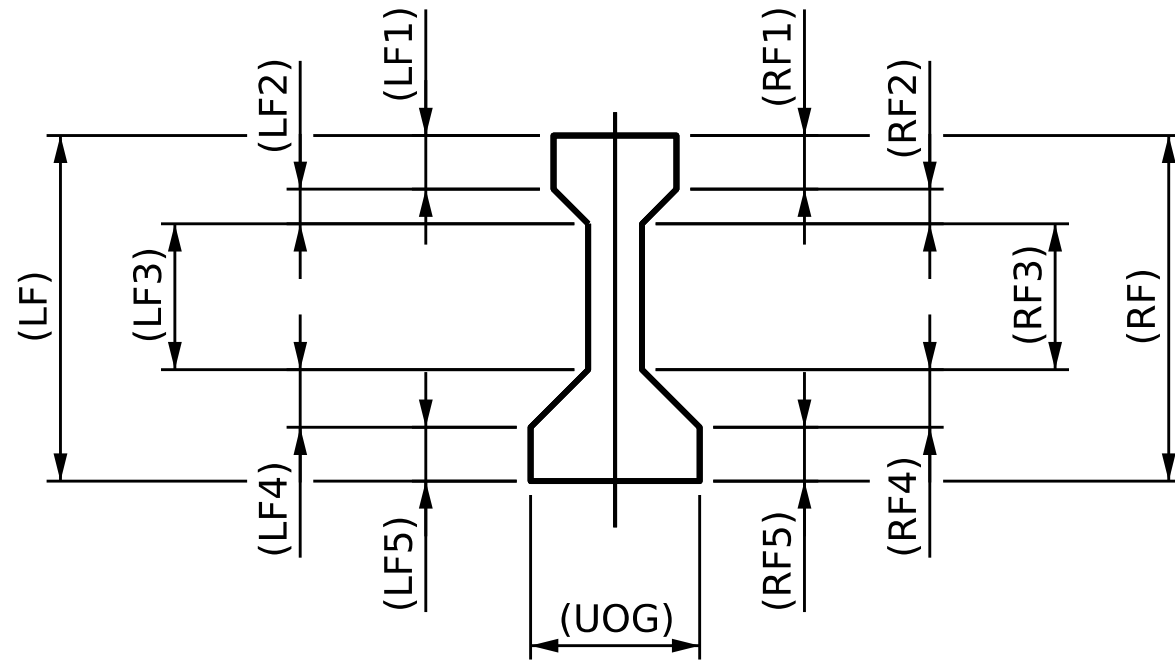
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TEL: 919.856.4040
LICENSE NO. F-0165

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1783				

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

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

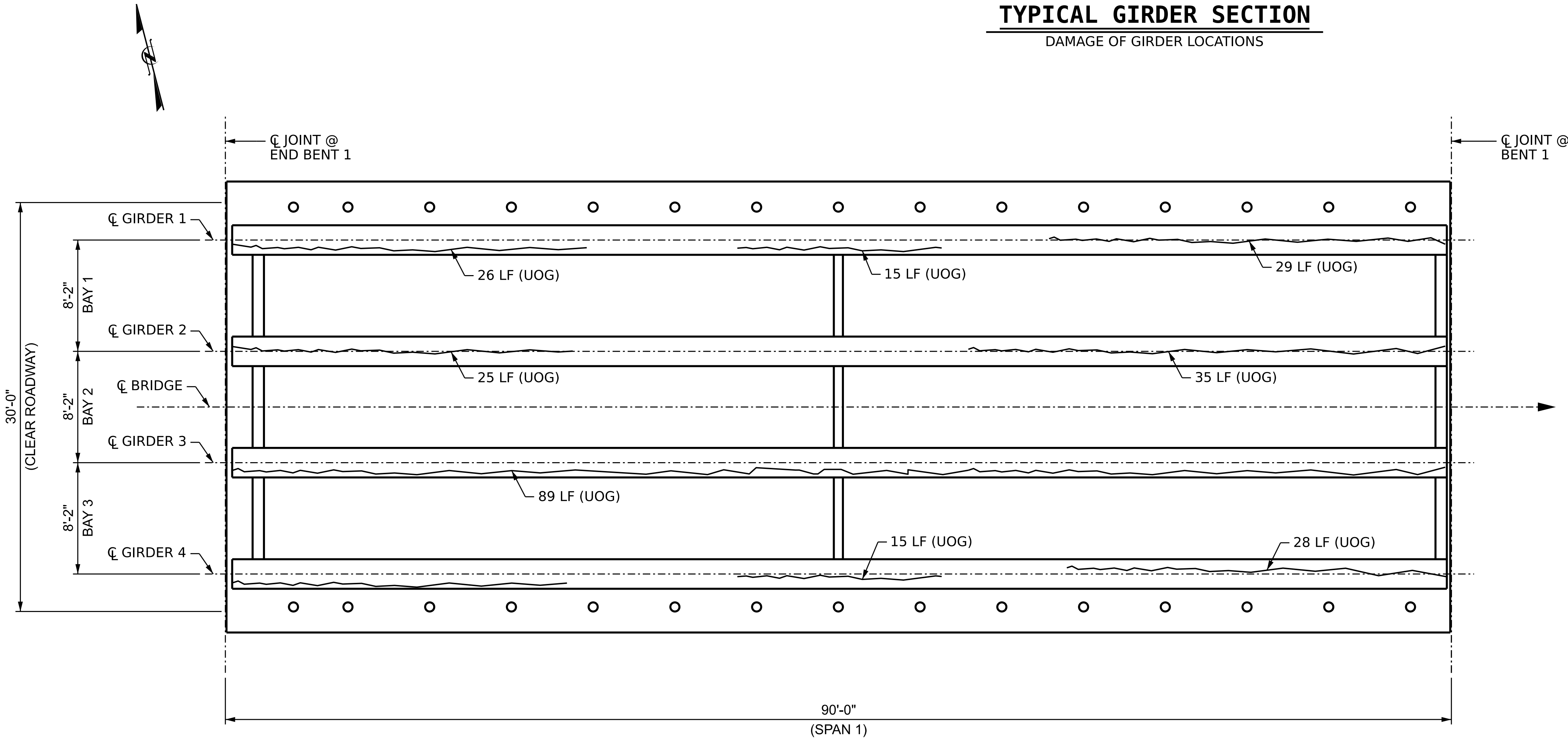
QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE MIN. 3.5" DEEP.

EPOXY COATING CONCRETE GIRDERS QUANTITIES ARE INTENDED TO EXTEND 1' BEYOND ANY CRACK SHOWN. CRACKS WIDER THAN 15 MILS WILL REQUIRE EPOXY RESIN INJECTION. CRACKS REQUIRING EPOXY RESIN INJECTION ARE ALSO EPOXY COATED. EPOXY COATING TO TAKE PLACE AFTER EPOXY RESIN INJECTION IS COMPLETED.

UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".

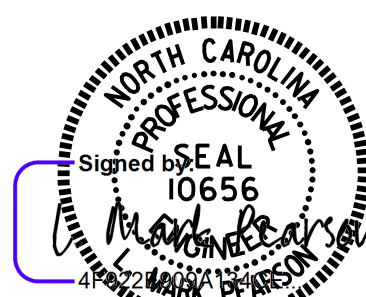


PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 1 OF 31



4/23/2026

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 1

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S1-22
2			4			TOTAL SHEETS 112

DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

4/22/2026
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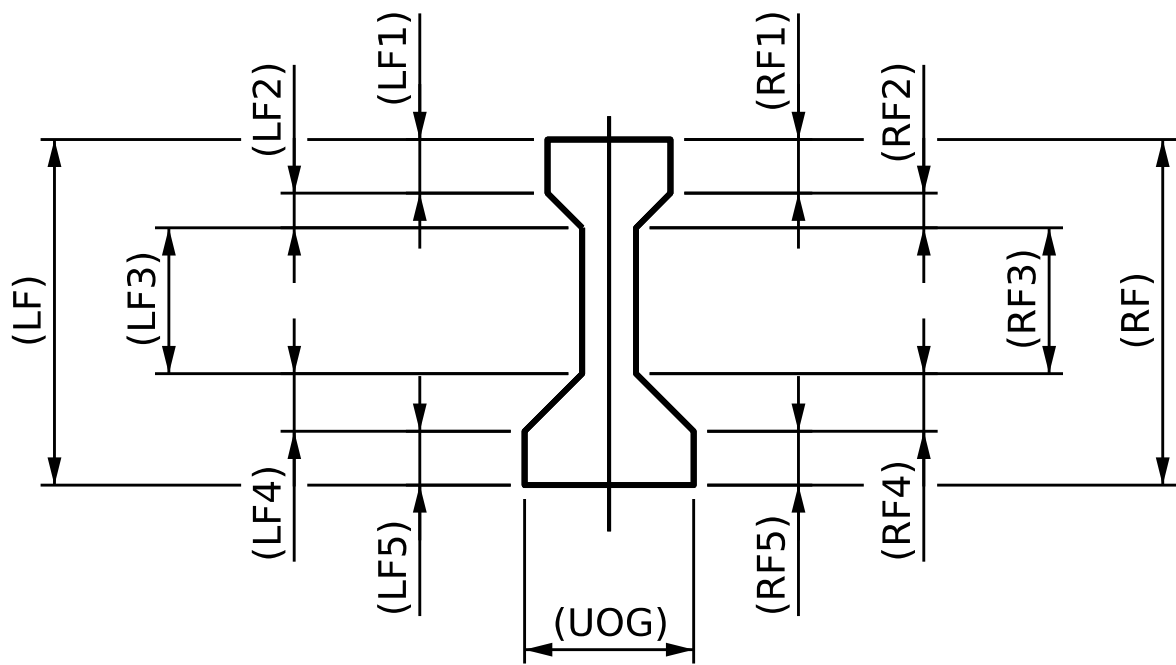


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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1743				

NOTES

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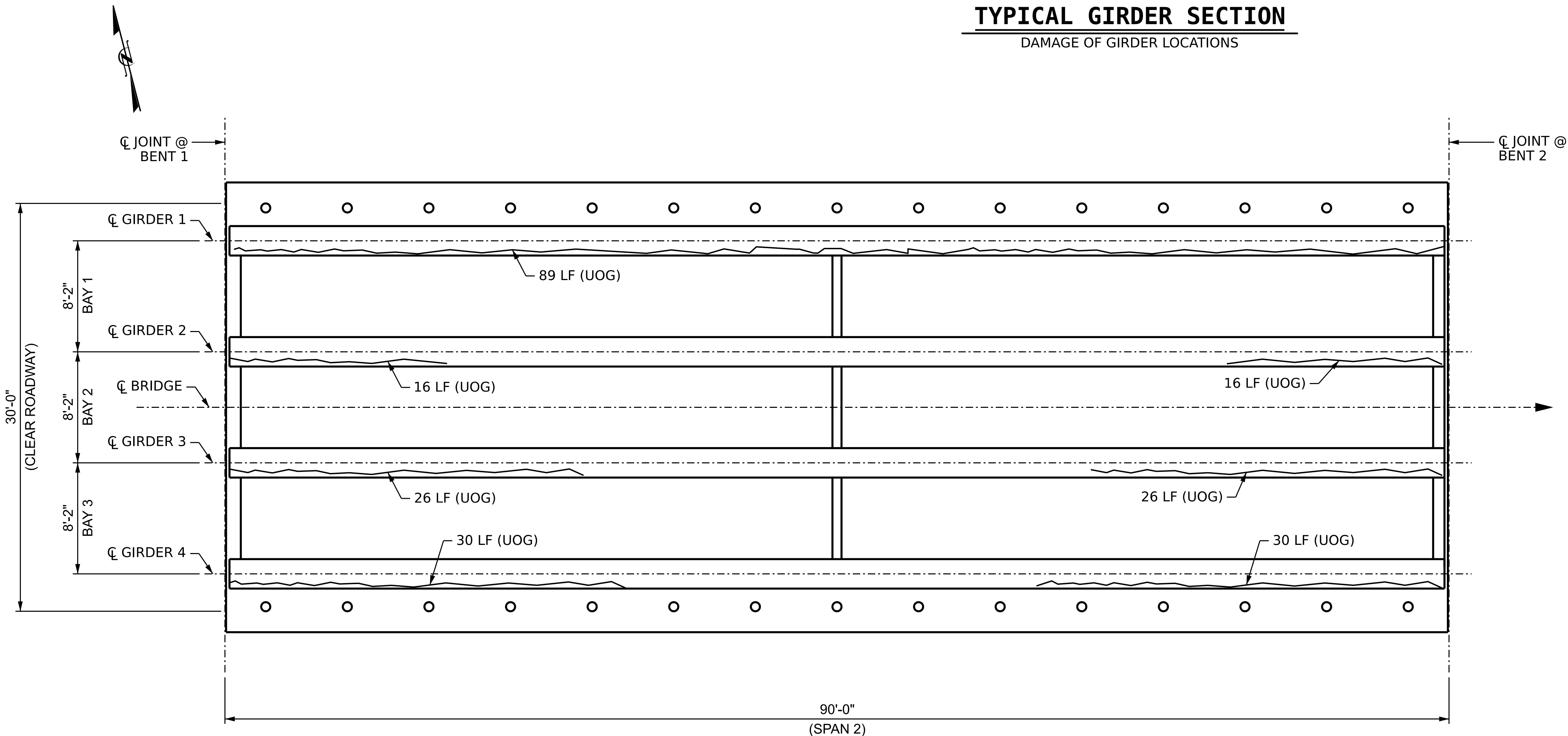
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UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 2 OF 31

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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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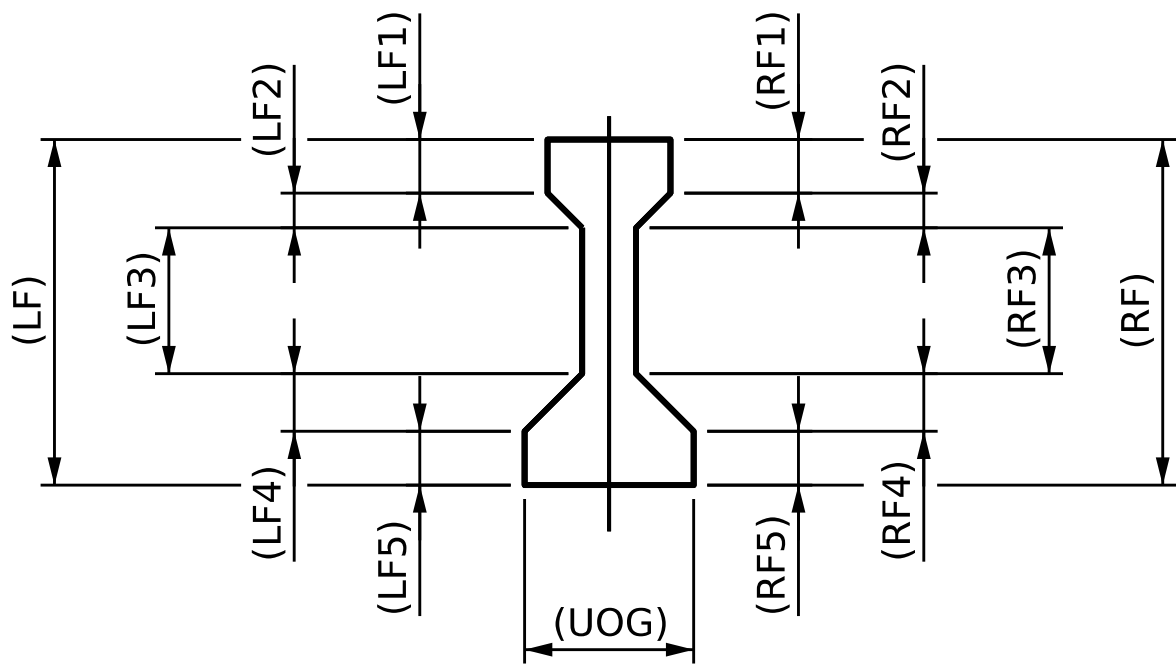
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GIRDER AND DIAPHRAGM
REPAIRS
SPAN 2
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-23
1			3			TOTAL SHEETS
2			4			112

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		2184				

NOTES

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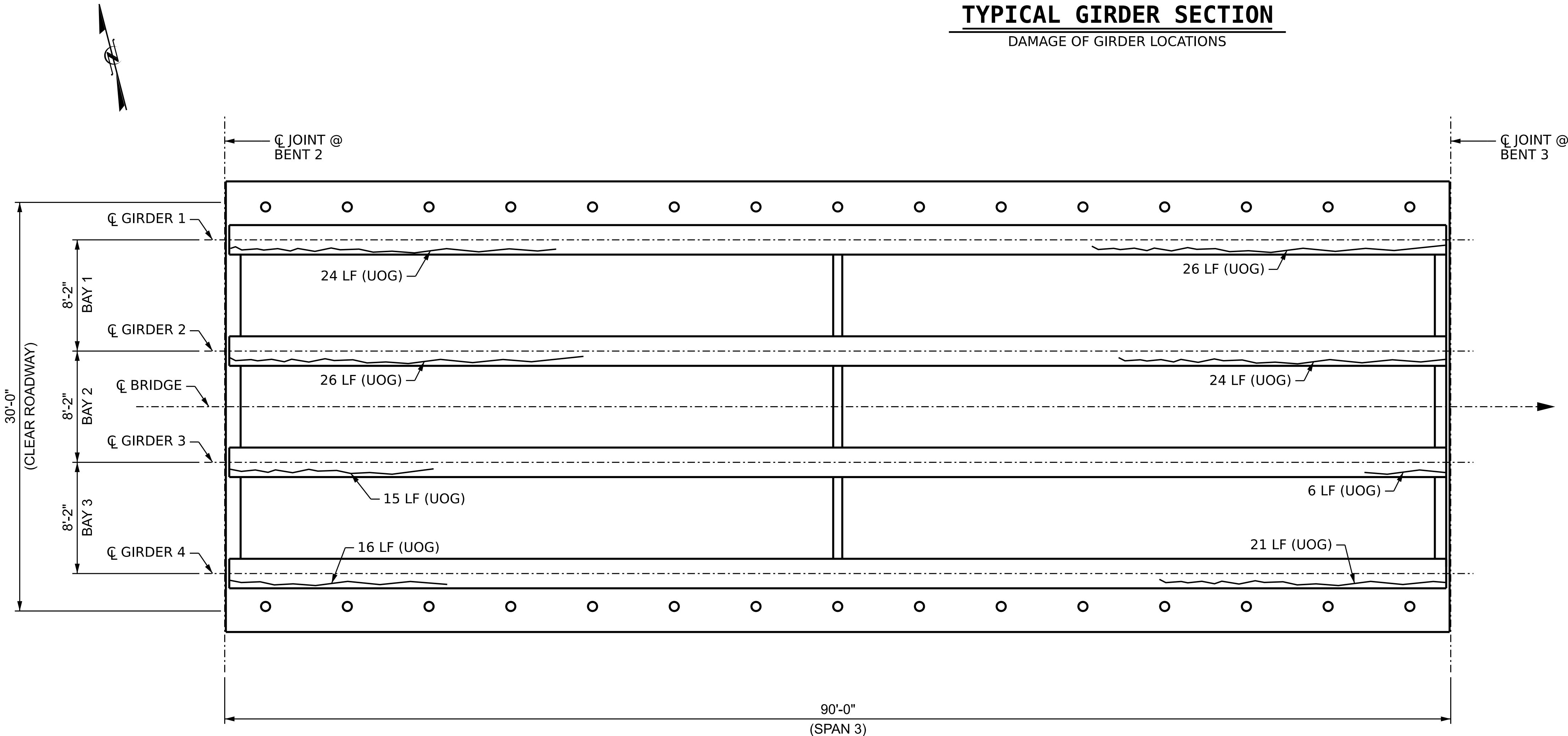
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FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 3 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 3



4/23/2026



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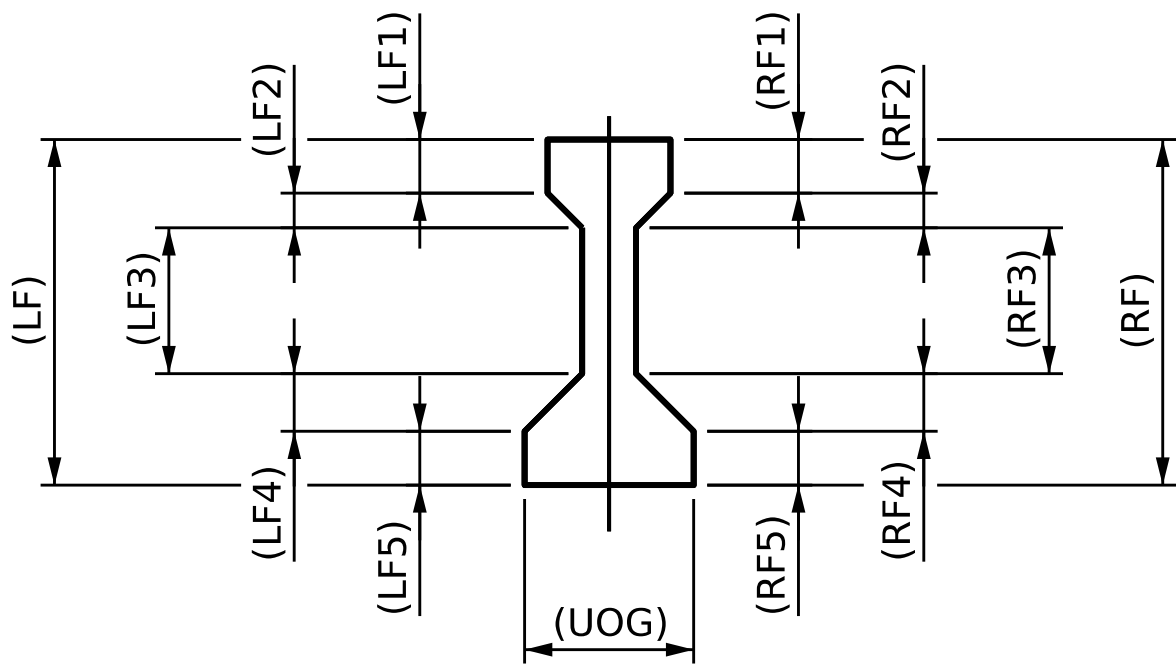
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-24
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1583				

NOTES

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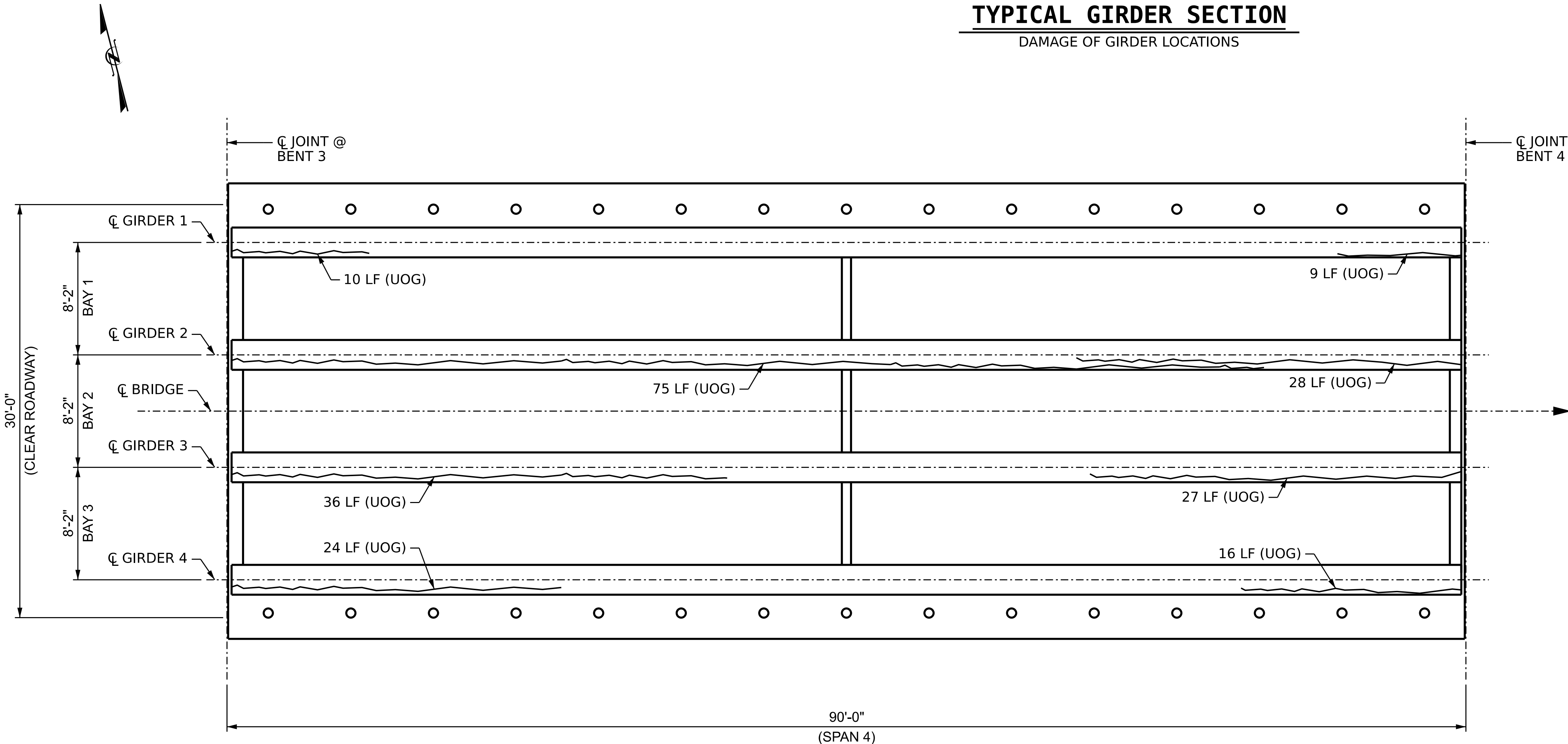
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 4 OF 31

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE GIRDER AND DIAPHRAGM REPAIRS SPAN 4						SHEET NO. S1-25 TOTAL SHEETS 112	
REVISIONS							
NO.	BY:	DATE:	NO.	BY:	DATE:		
1			3				
2			4				

REPAIR QUANTITY TABLE						
UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		61				
EPOXY COATING CONCRETE GIRDERS		1521				

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".

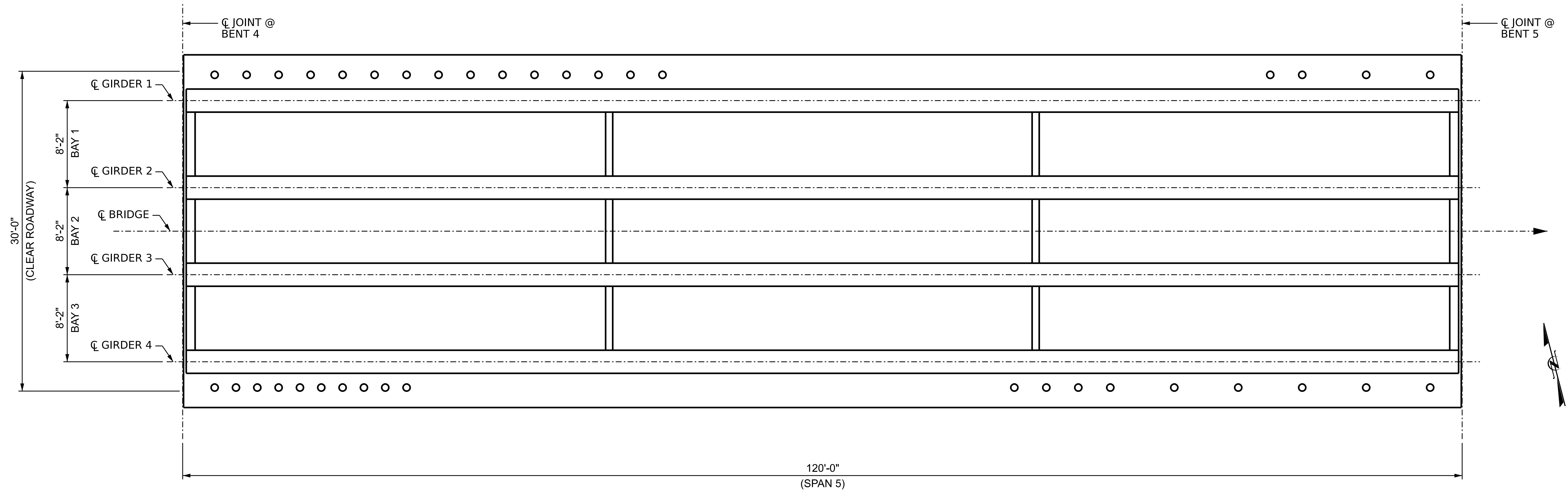
LEGEND		
SF	SQUARE FEET	DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK	GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG	
ERI	EPOXY RESIN INJECTION	DECK REPAIR
(UOG)	UNDERSIDE OF GIRDER	CRACK
(LF)	LEFT FACE OF GIRDER	
(RF)	RIGHT FACE OF GIRDER	

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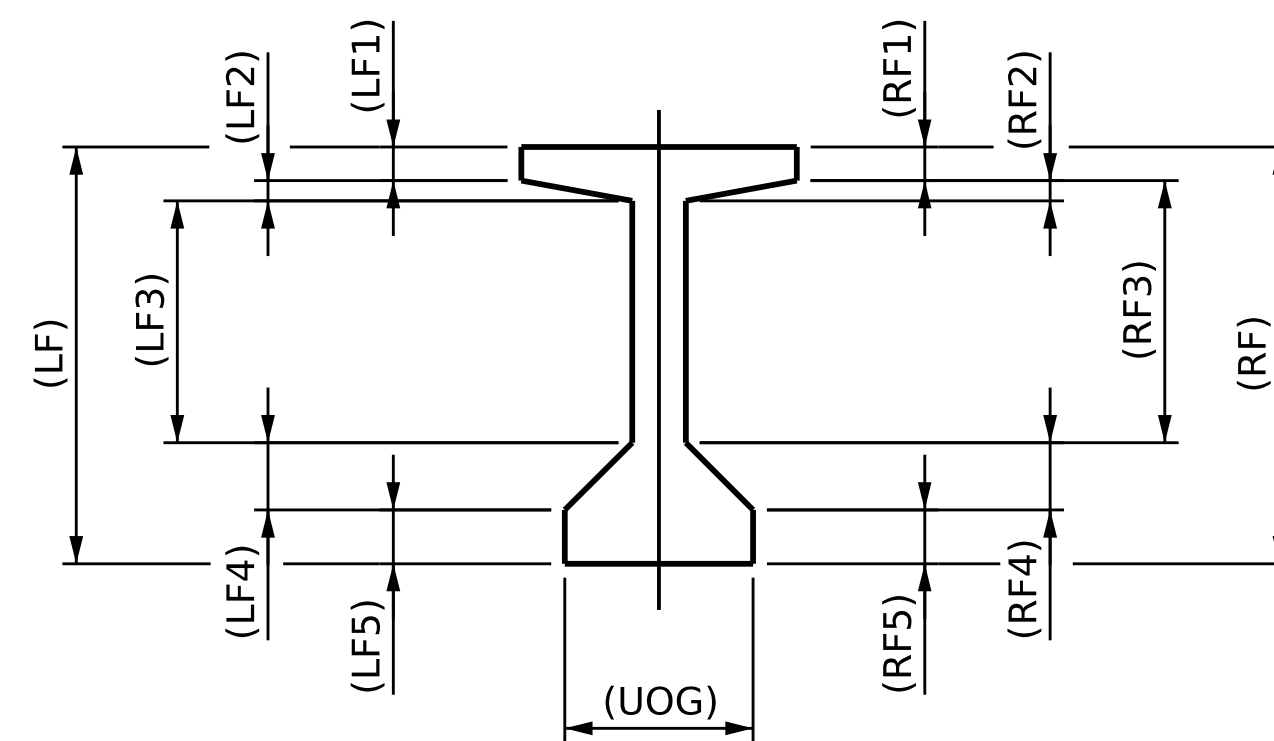
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UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.



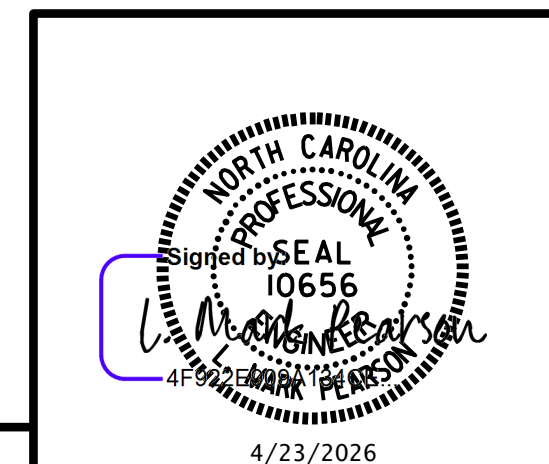
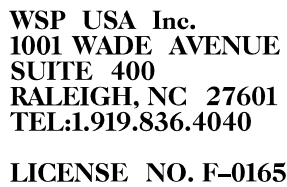
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DAMAGE OF GIRDER LOCATIONS

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PROJECT NO. 15BPR.131
CARTERET COUNTY
 BRIDGE NO. 150014

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

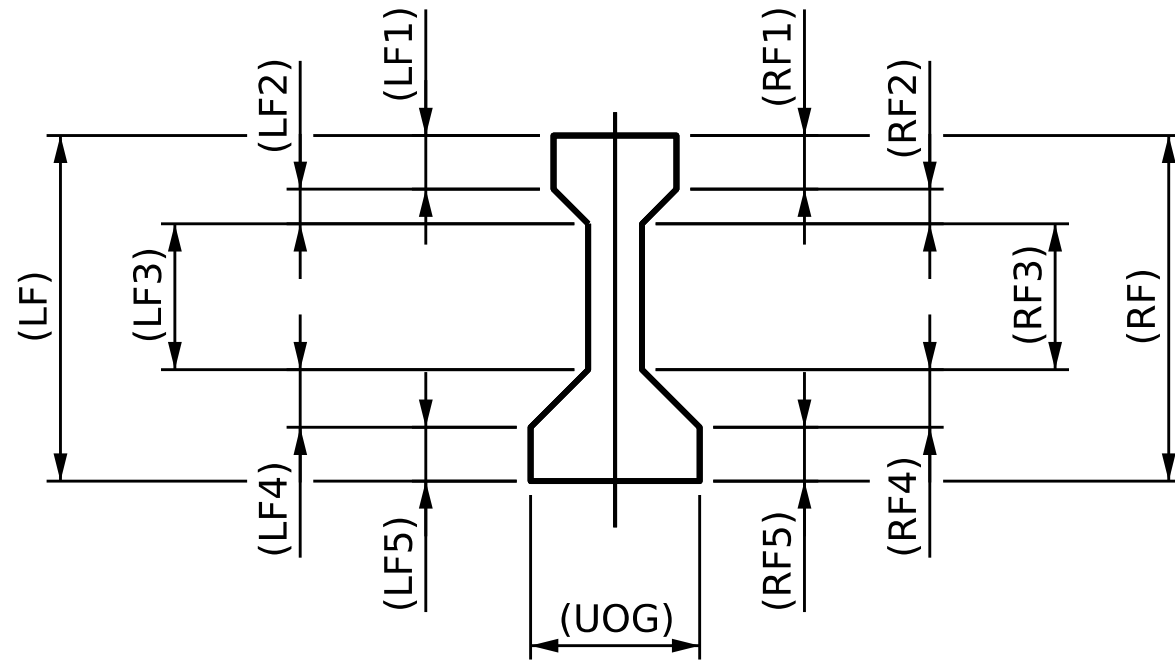
SUPERSTRUCTURE GIRDER AND DIAPHRAGM REPAIRS SPAN 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 5

REVISIONS						SHEET NO. S1-26
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 112
2			4			

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1672				

NOTES

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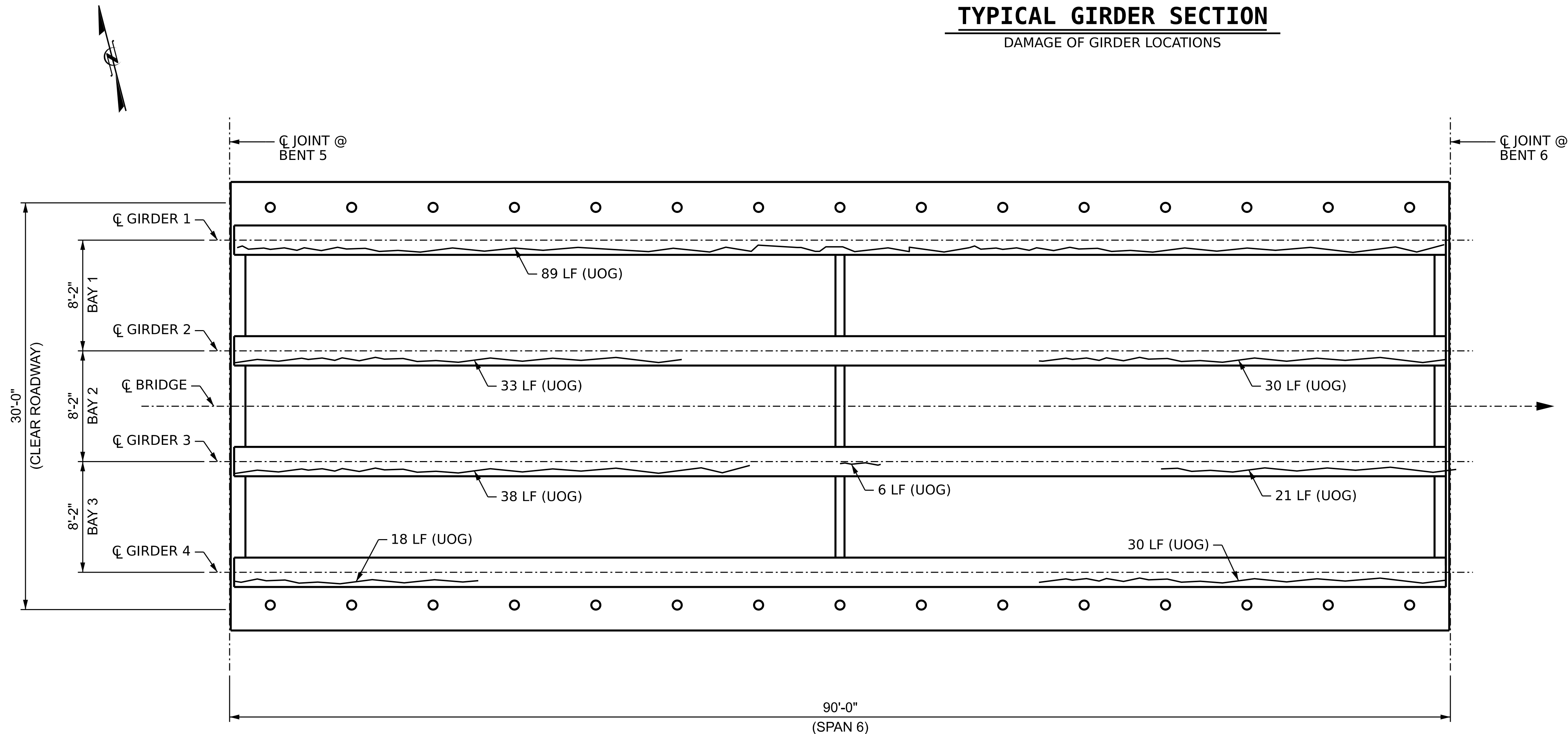
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FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 6 OF 31

DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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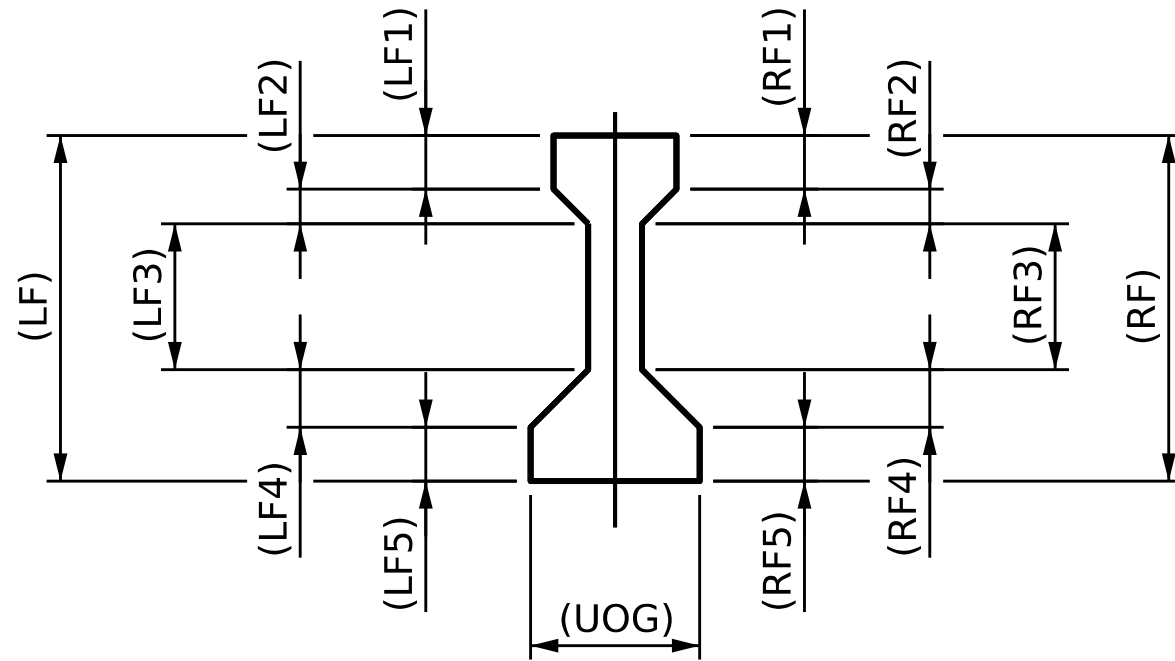
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REPAIRS
SPAN 6
4/23/2026
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-27
2			4			TOTAL SHEETS 112

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1783				

NOTES

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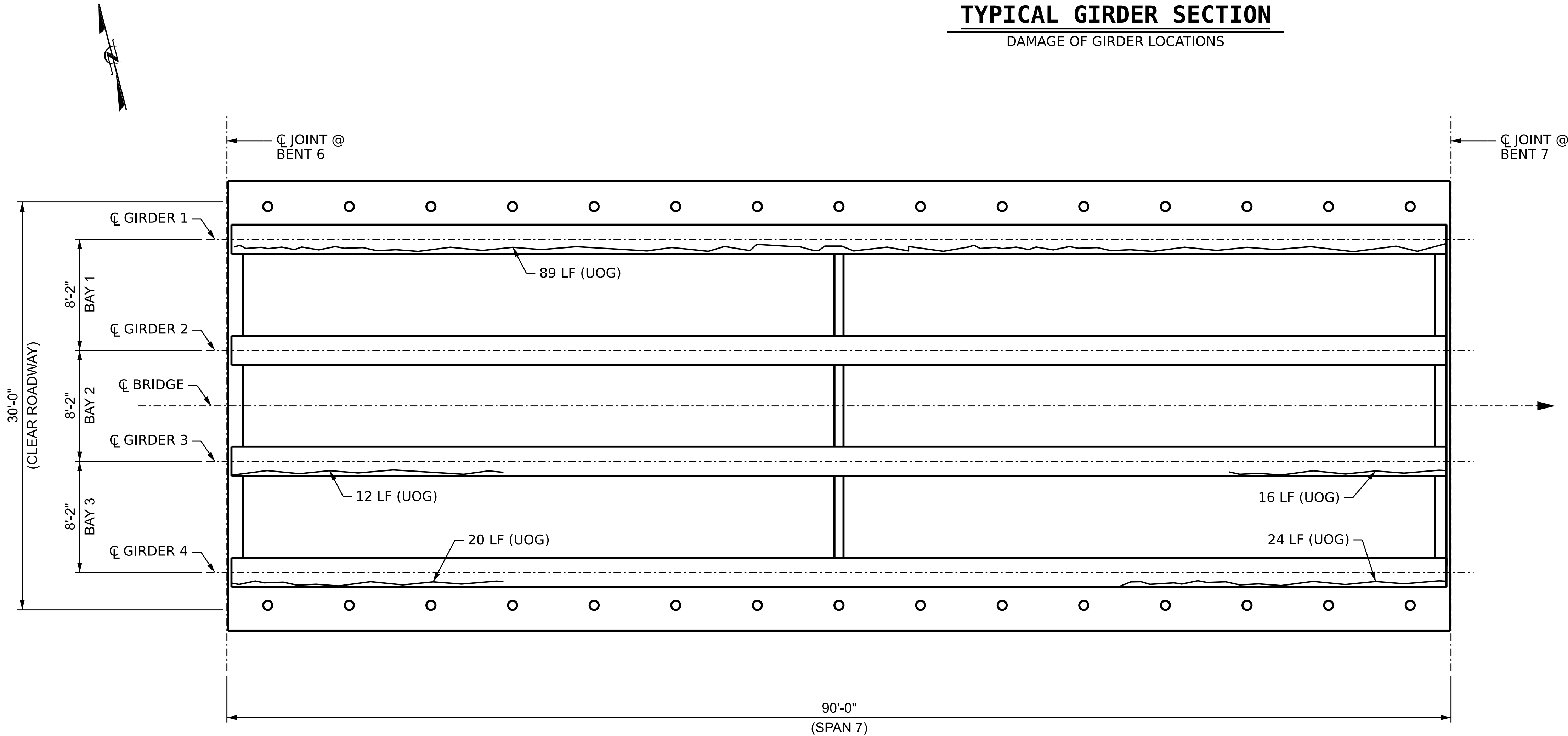
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UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 7 OF 31

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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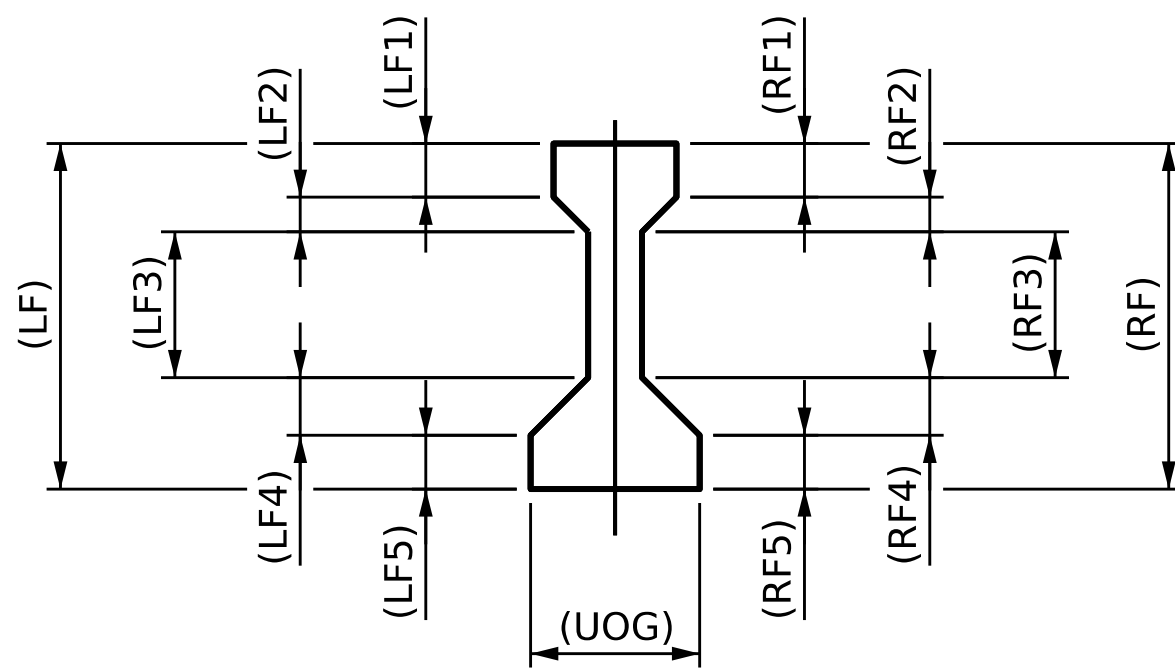
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RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165

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DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 7
4/23/2026
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-28
2			4			TOTAL SHEETS 112

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		2064				

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

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

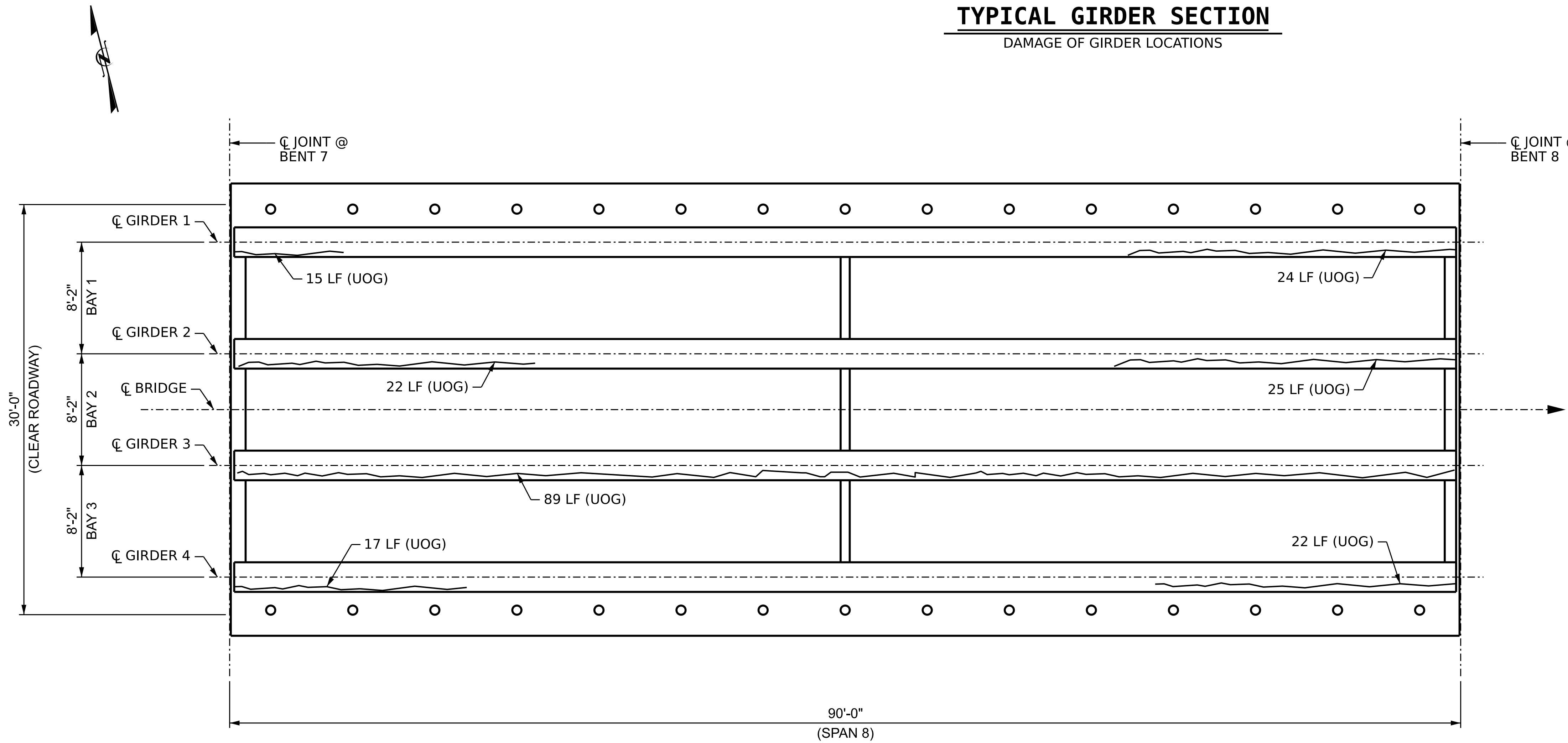
QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE MIN. 3.5" DEEP.

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UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

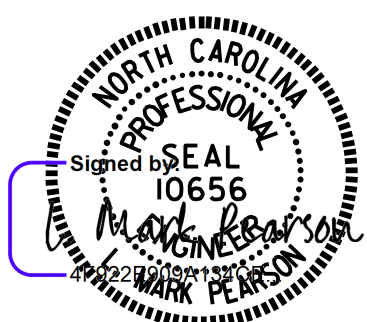
SHEET 8 OF 31

DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

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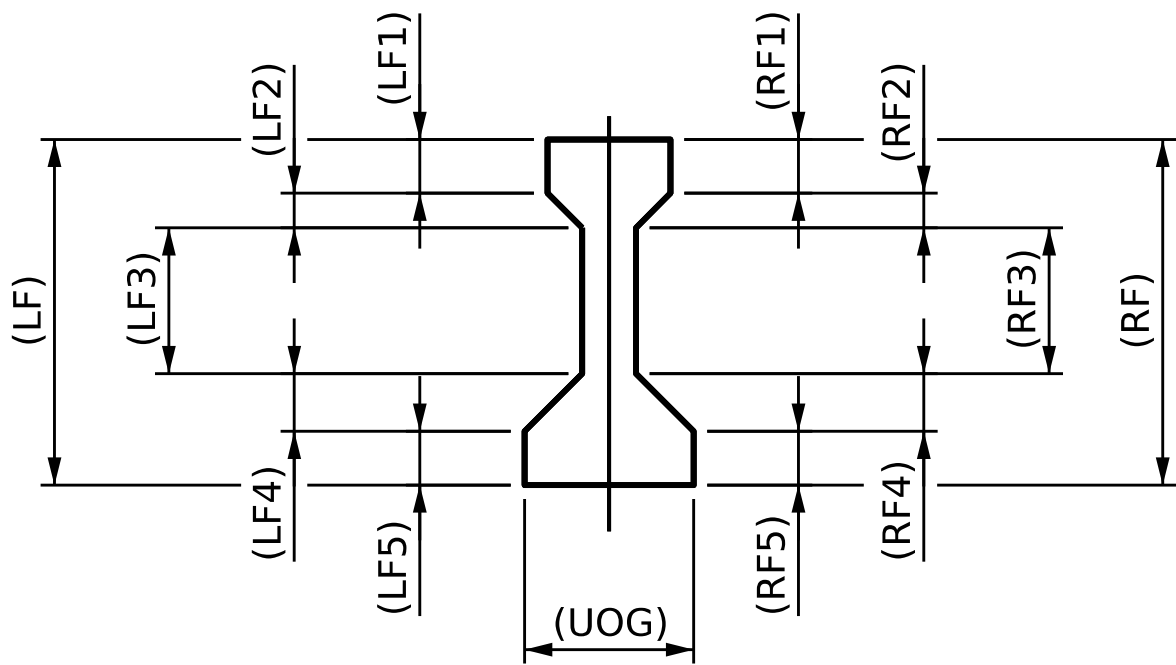
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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 8

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-29
2			4			TOTAL SHEETS 112

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1823				

NOTES

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FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

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

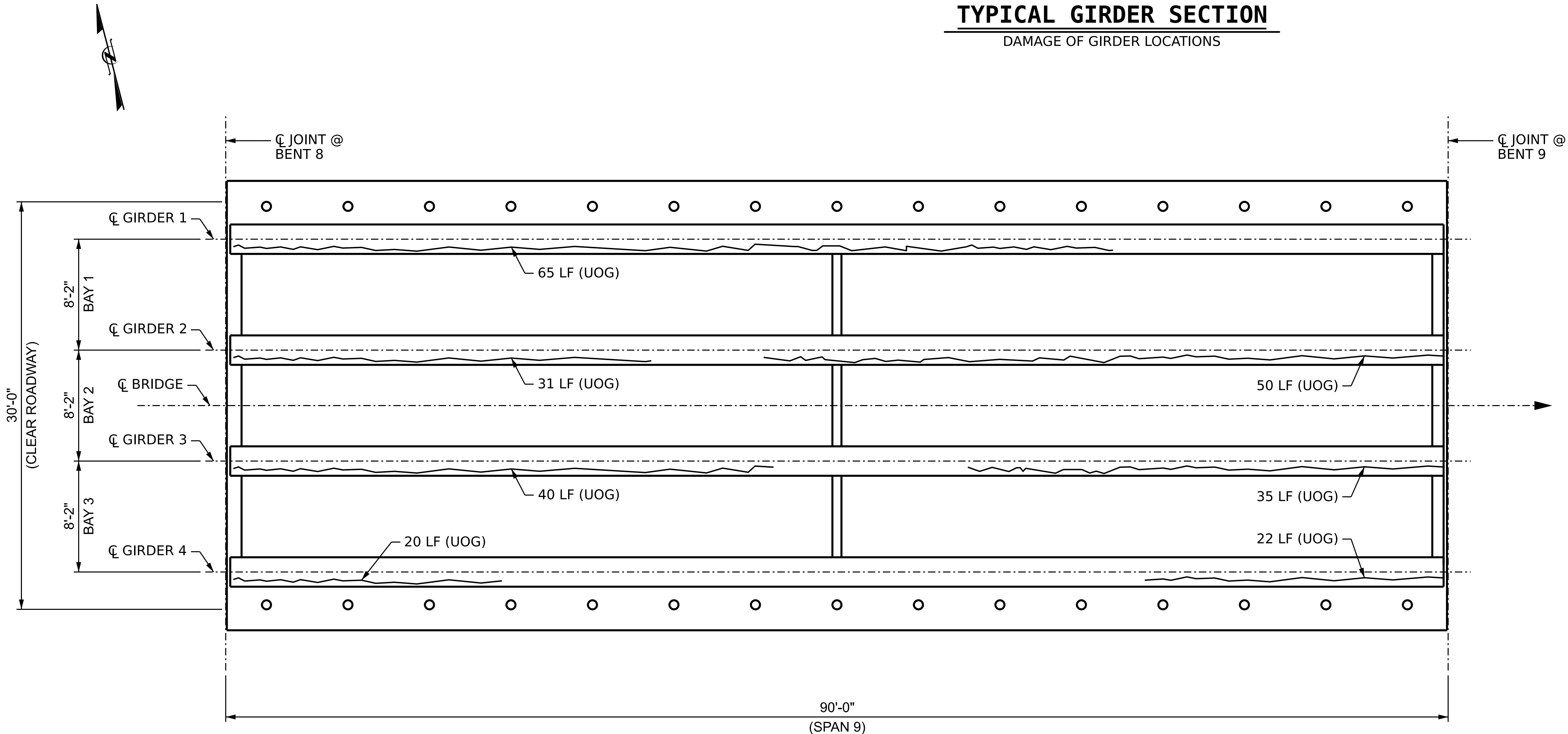
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FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 9 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 9



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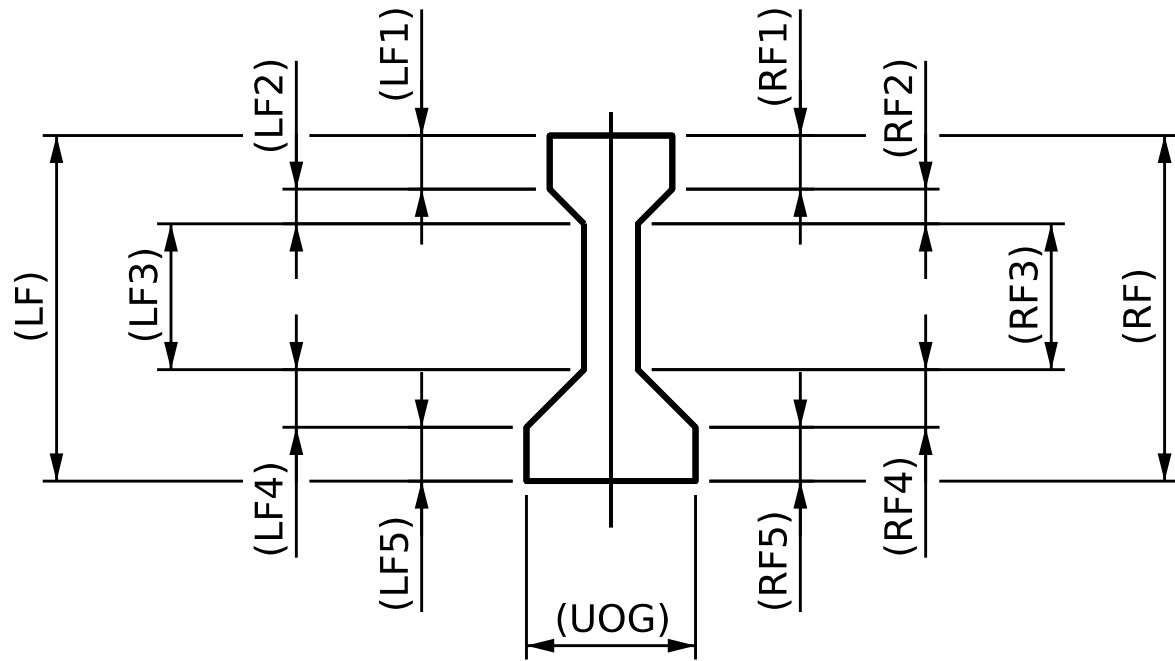
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-30
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		2002				

NOTES

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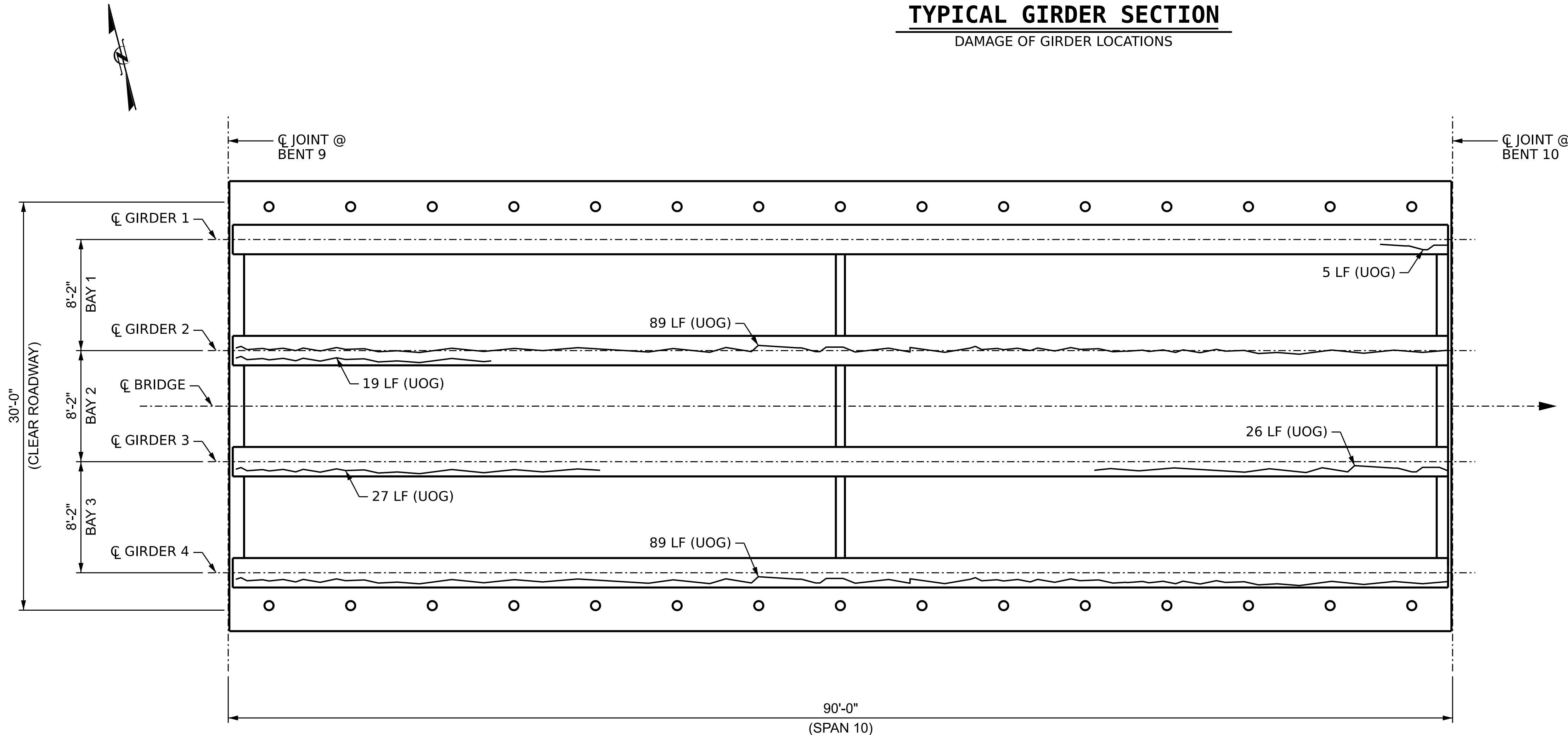
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

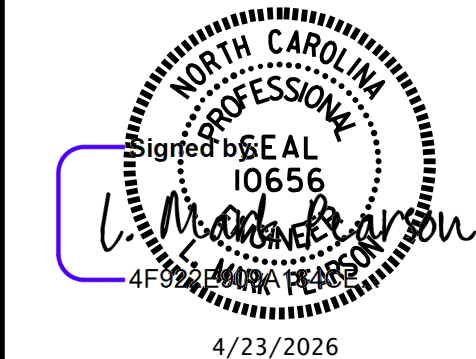
CARTERET COUNTY

BRIDGE NO. 150014

SHEET 10 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 10



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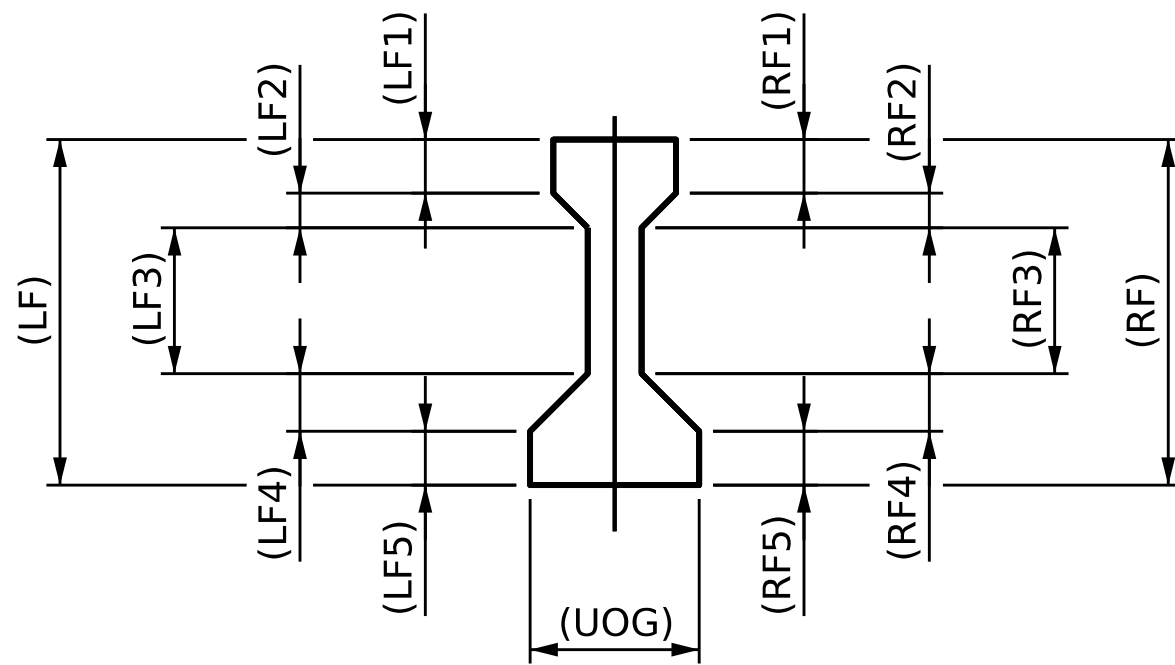
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-31
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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RALEIGH, NC 27601
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LICENSE NO. F-0165

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		2146				

NOTES

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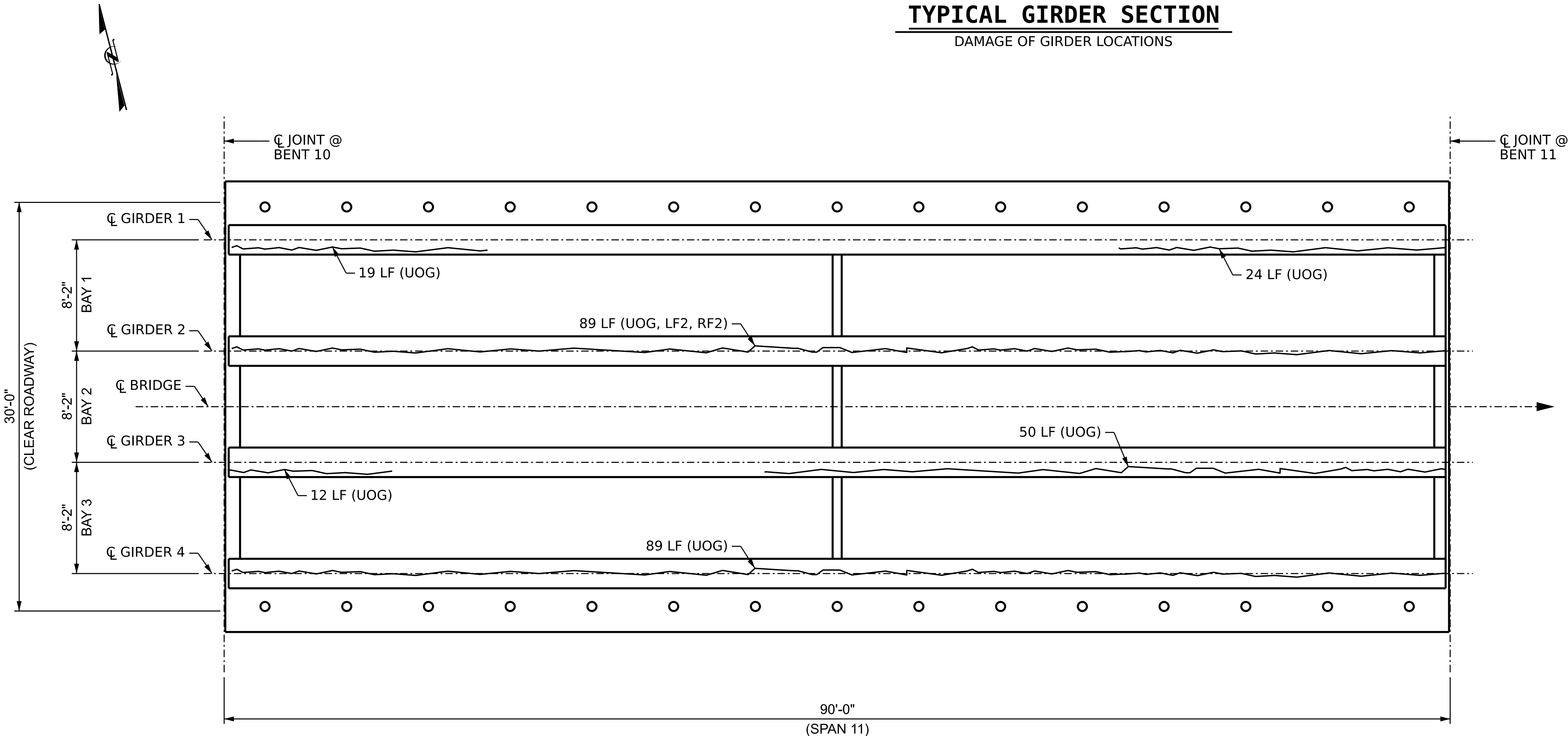
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 11 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 11



4/23/2026

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-32
2			4			TOTAL SHEETS 112

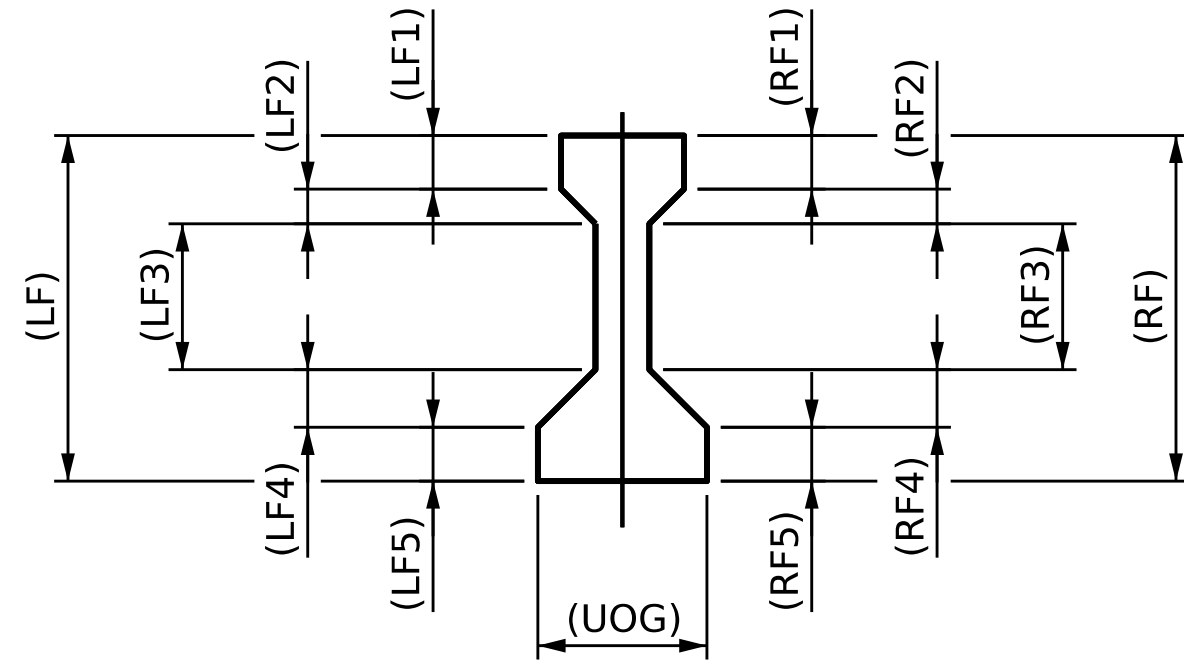
DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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RALEIGH, NC 27601
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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		2130				

NOTES

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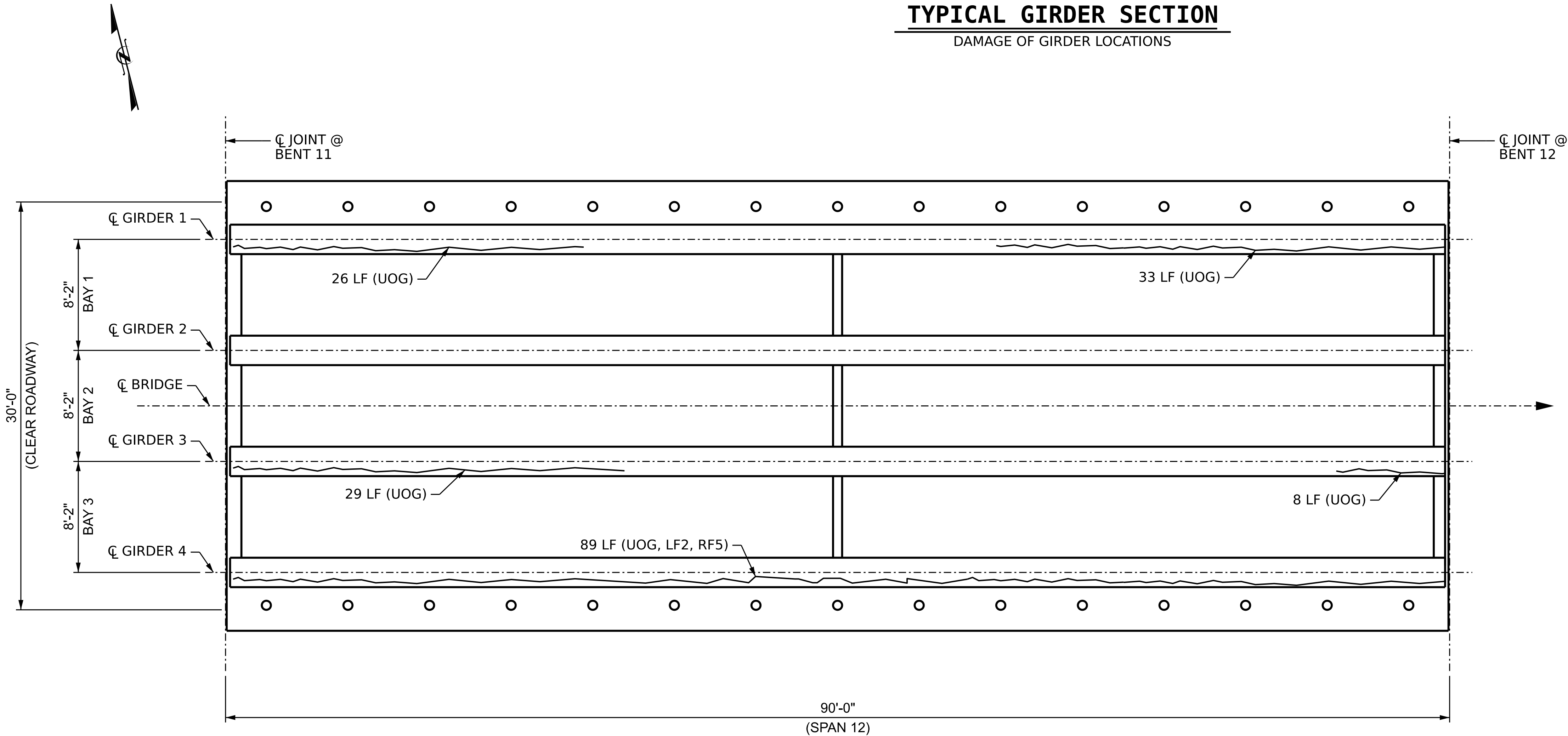
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 12 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 12



4/23/2026

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SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-33
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

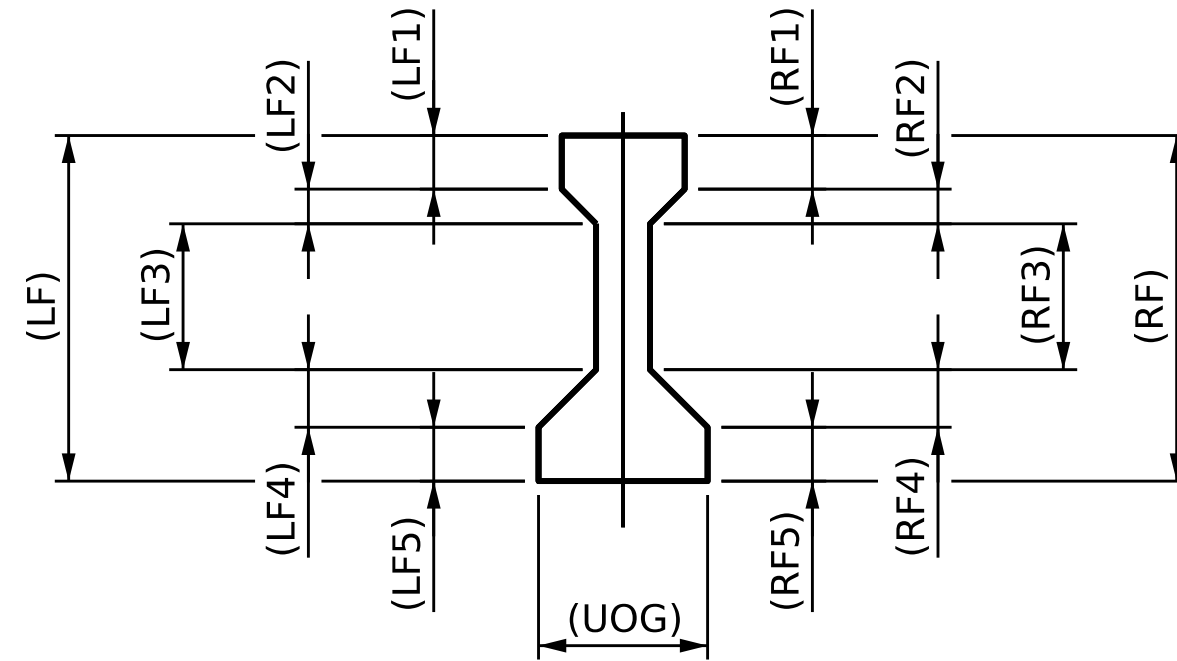
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1001 WADE AVENUE
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RALEIGH, NC 27601
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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
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(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1717				

NOTES

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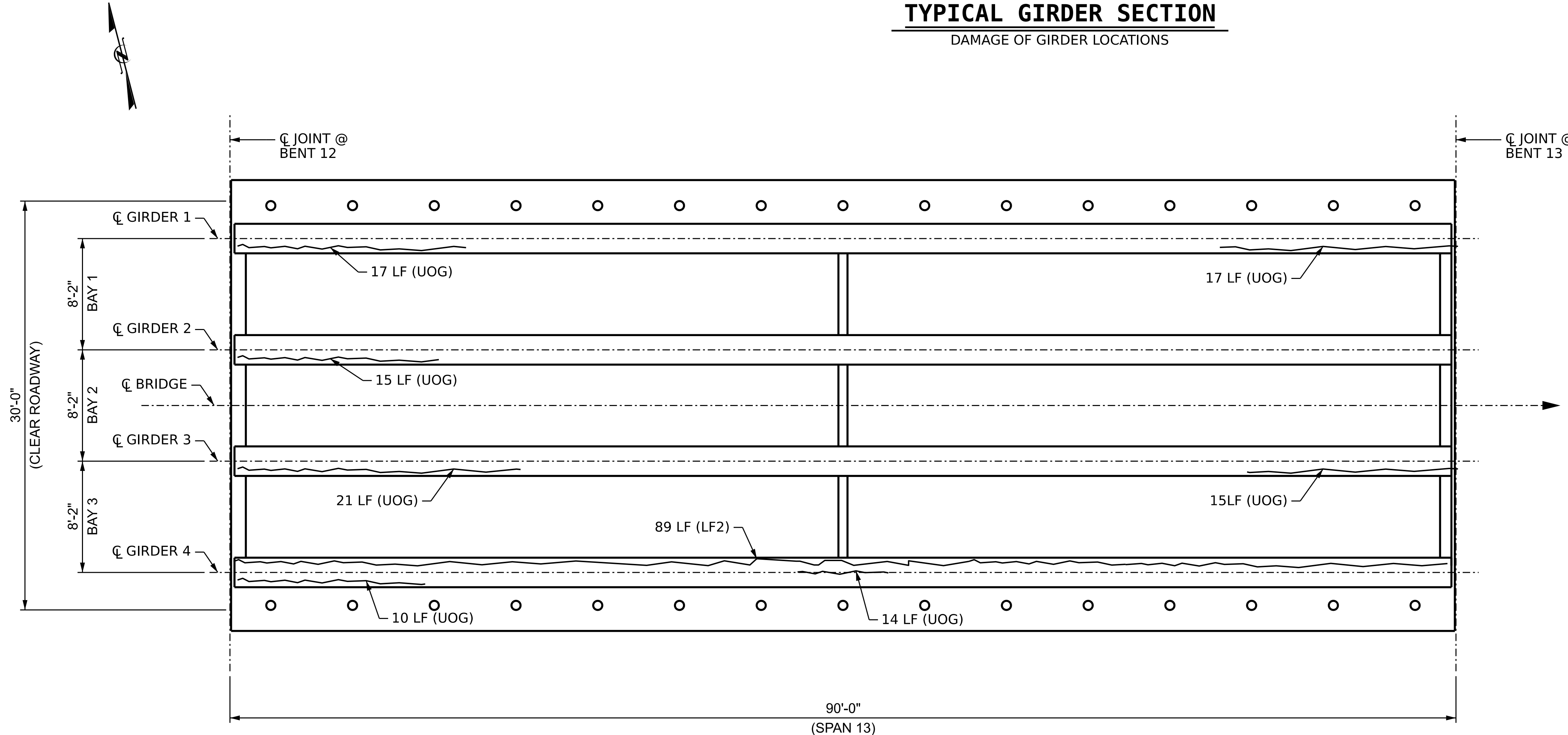
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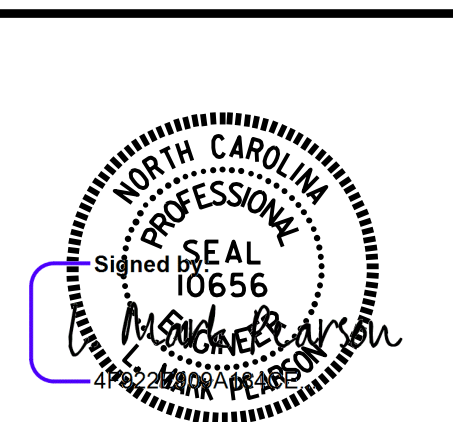


PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 13 OF 31



4/23/2026

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 13

REVISIONS

NO.	BY	DATE	NO.	BY	DATE	SHEET NO.
1			3			S1-34
2			4			TOTAL SHEETS 112

DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

4/22/2026
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USMA128682

wsp
WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165

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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

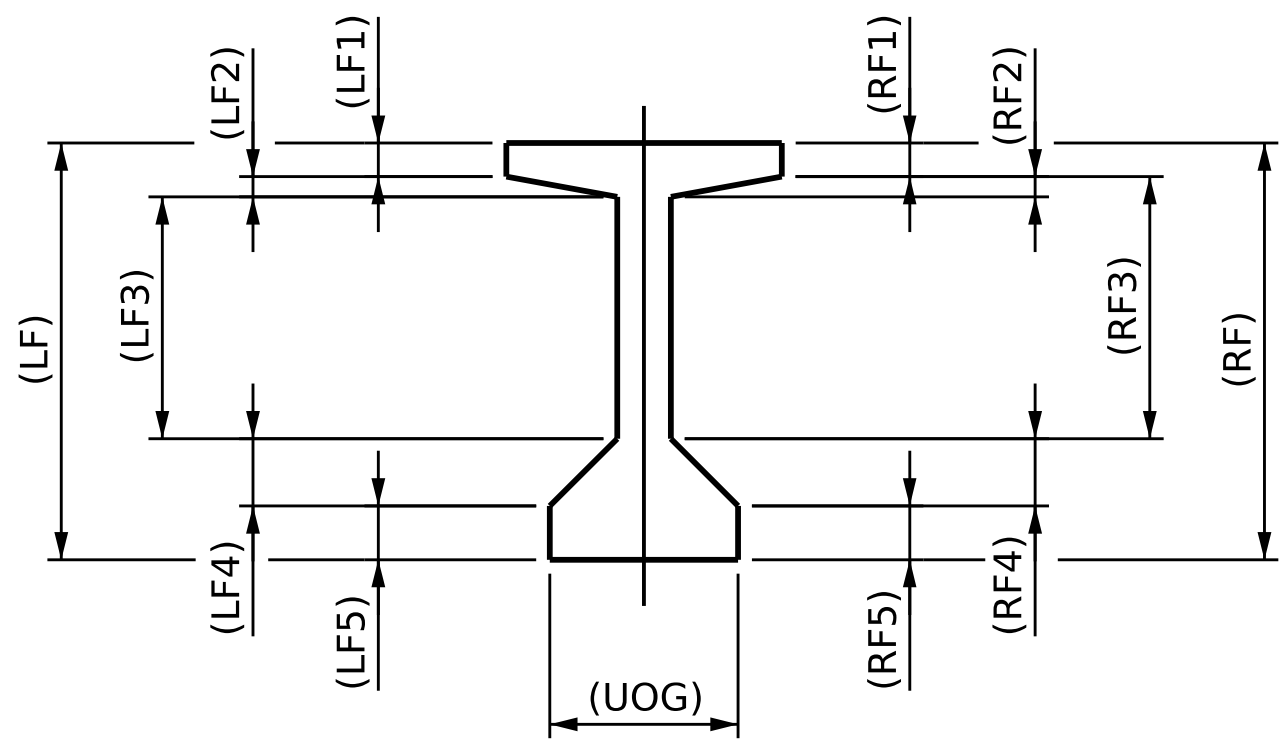
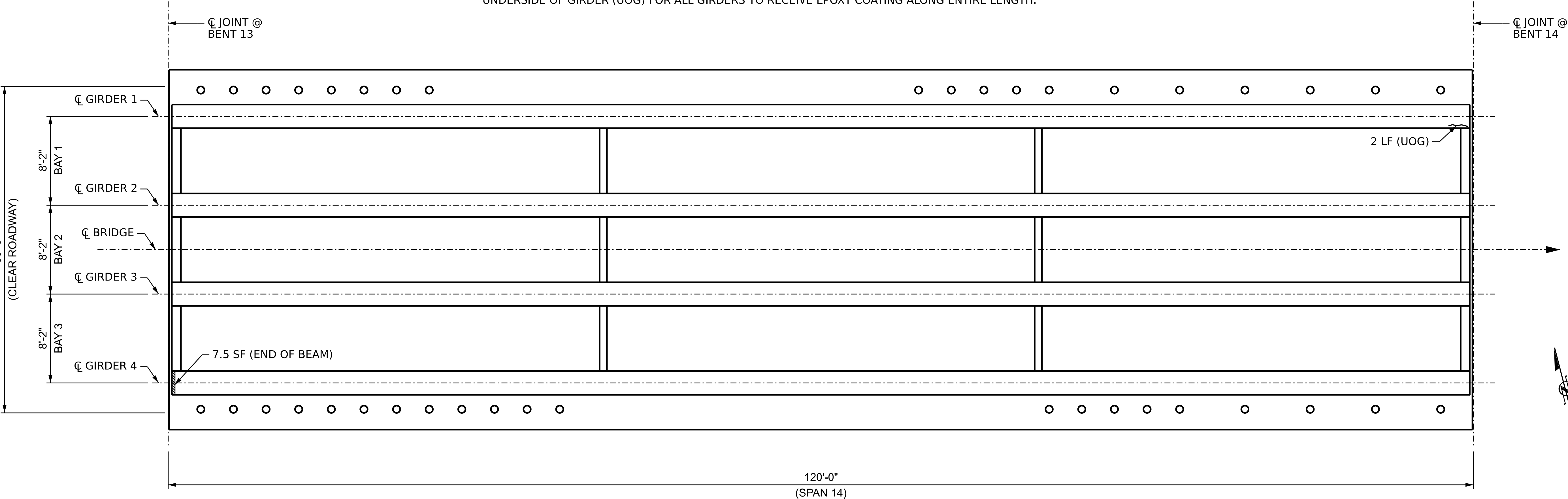
FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

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

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE MIN. 3.5" DEEP.

EPOXY COATING CONCRETE GIRDERS QUANTITIES ARE INTENDED TO EXTEND 1' BEYOND ANY CRACK SHOWN. WIDER CRACKS REQUIRING EPOXY RESIN INJECTION ARE ALSO EPOXY COATED. EPOXY COATING TO TAKE PLACE AFTER EPOXY RESIN INJECTION IS COMPLETED.

UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 14 OF 31

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE GIRDER AND DIAPHRAGM REPAIRS SPAN 14						REVISIONS			SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:				S1-35
1			3						TOTAL SHEETS
2			4						112

PROFESSIONAL SEAL
10656
M. PEARSON
REGISTERED PROFESSIONAL ENGINEER
NORTH CAROLINA

4/23/2026

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

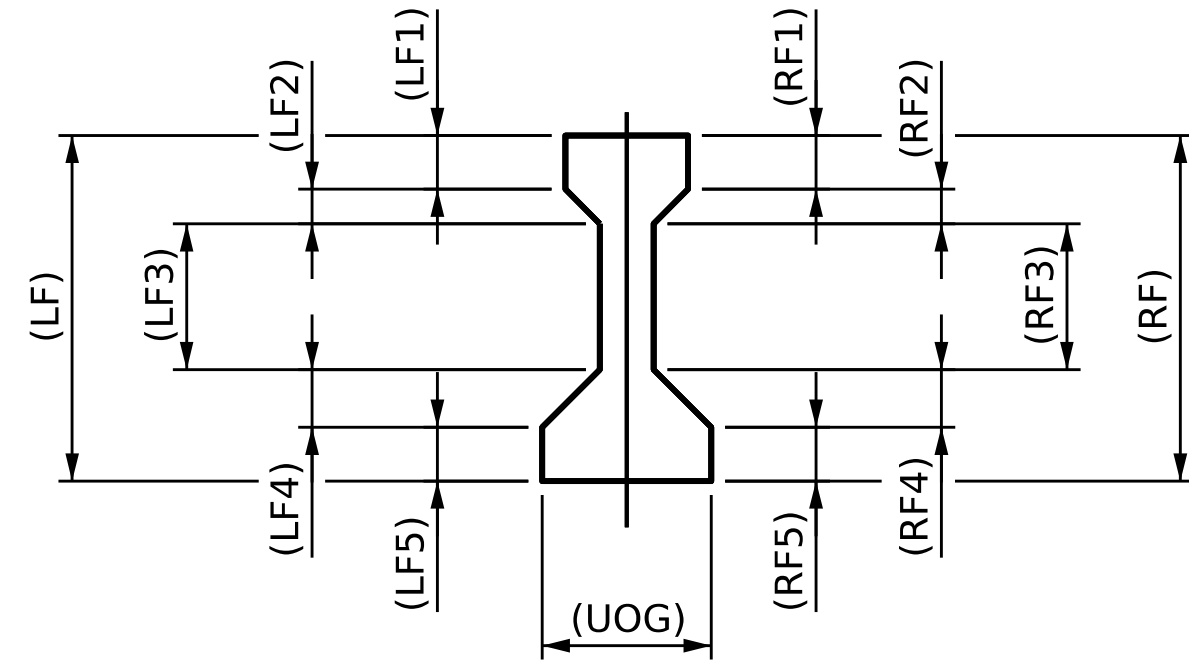
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WSP USA Inc.
1001 WADE AVENUE
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RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165

DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1236				

NOTES

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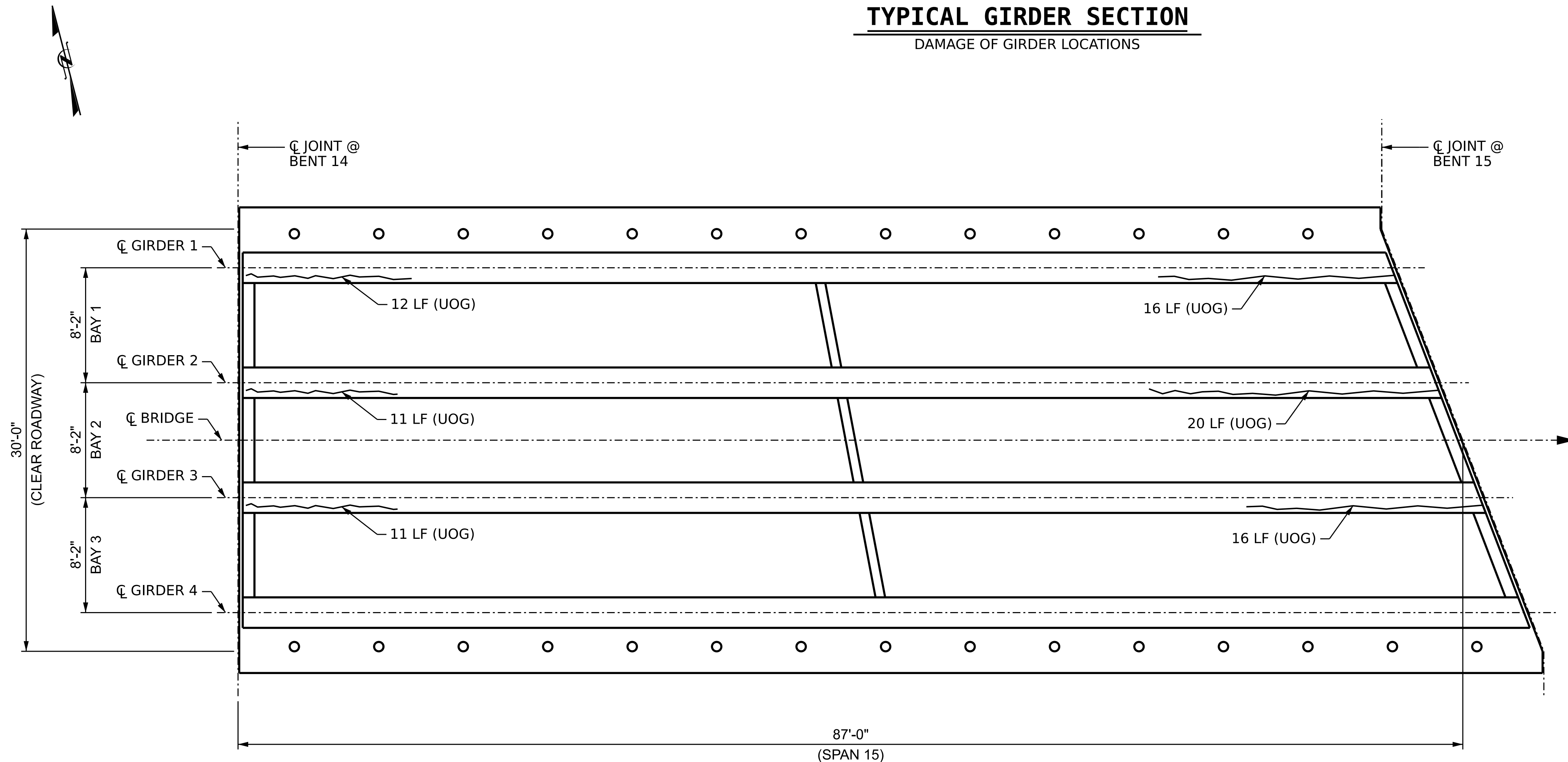
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UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 15 OF 31



4/23/2026

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 15

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S1-36
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026



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LICENSE NO. F-0165

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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

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FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

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

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE MIN. 3.5" DEEP.

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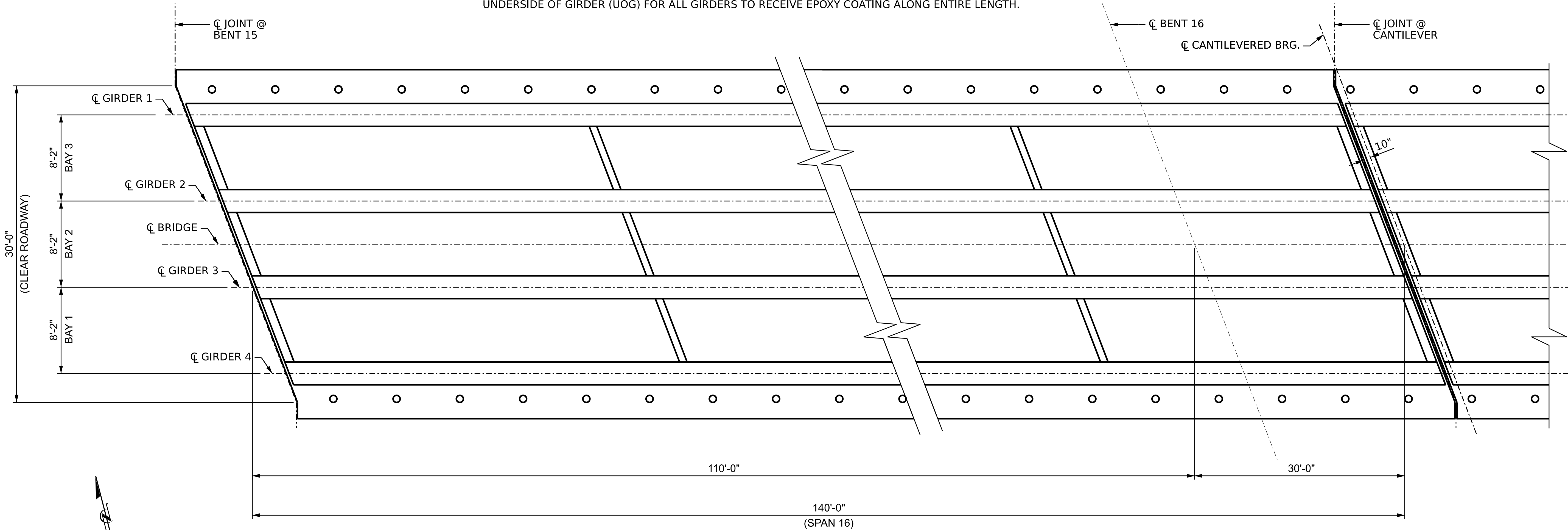
UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1395				

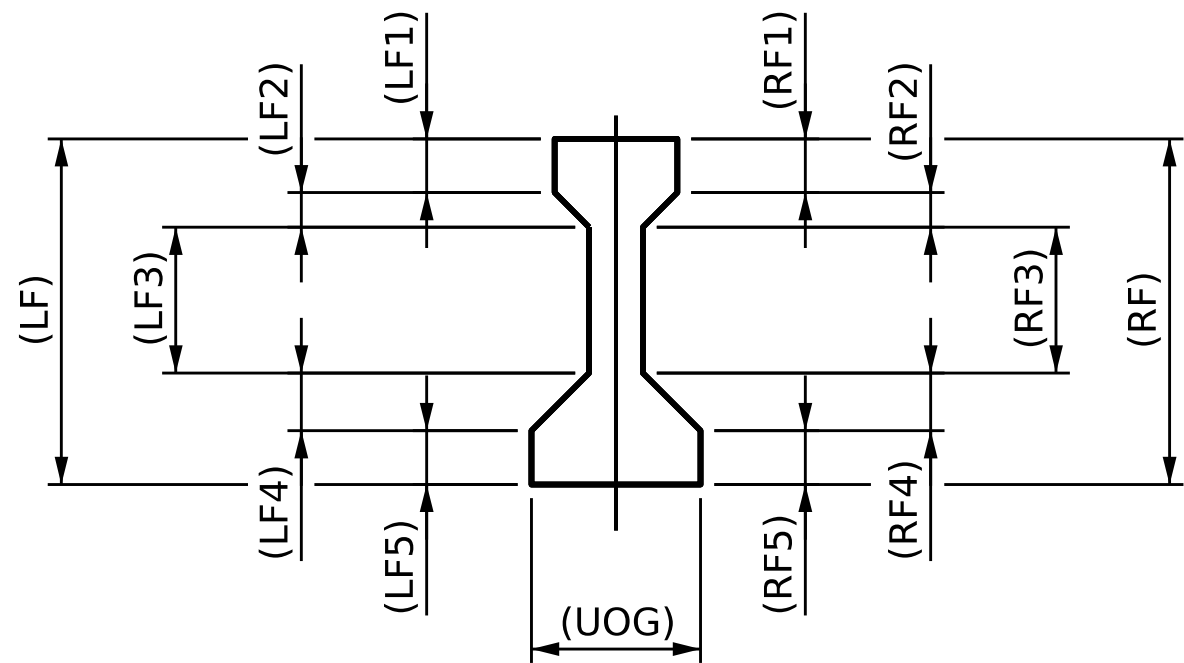
FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

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USMA128682

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LICENSE NO. F-0165

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PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 16 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 16

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-37
2			4			TOTAL SHEETS 112

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		

NOTES

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FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

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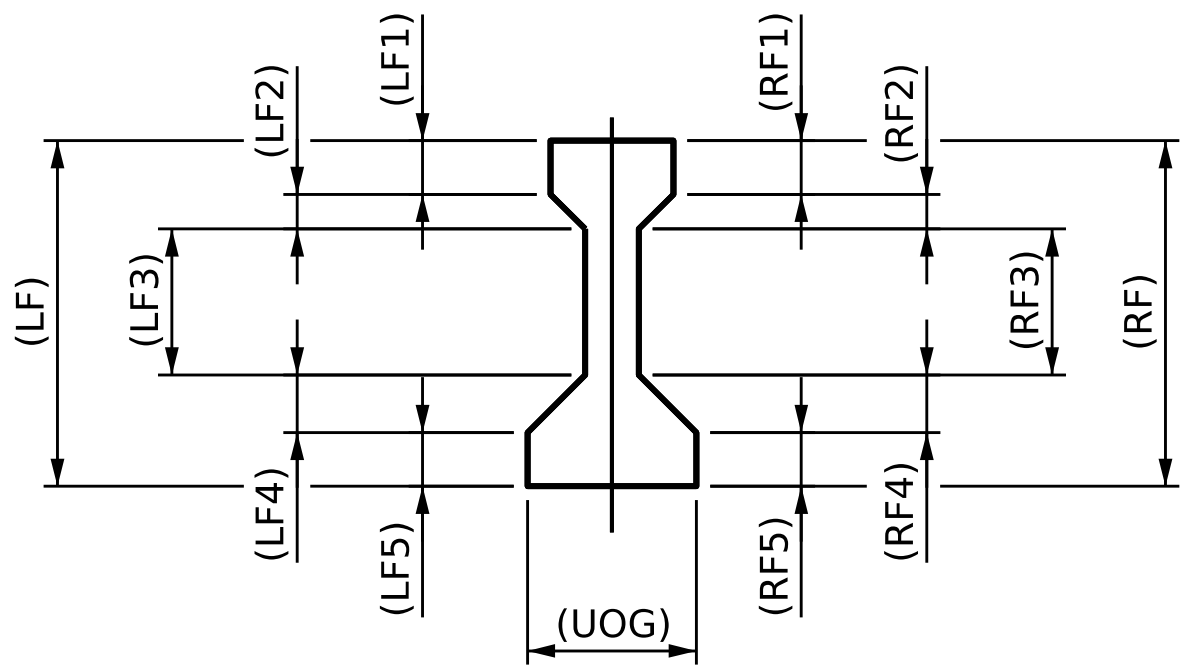
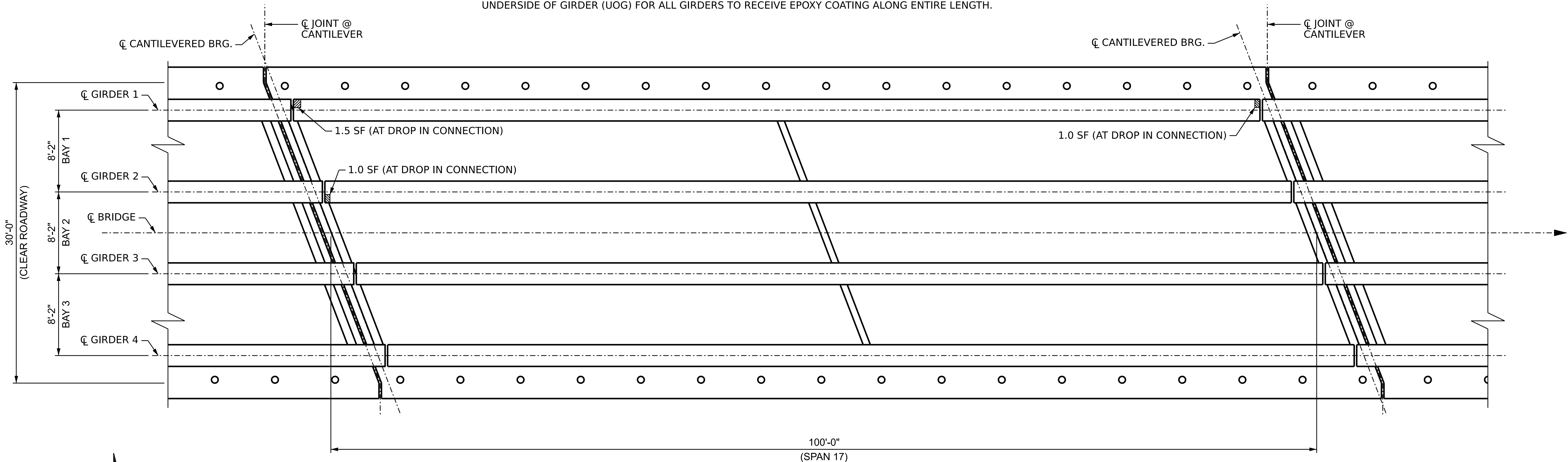
UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER		3.5	2			
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1989				

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 17 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 17



4/23/2026

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-38
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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USMA128682

WSP
WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		

NOTES

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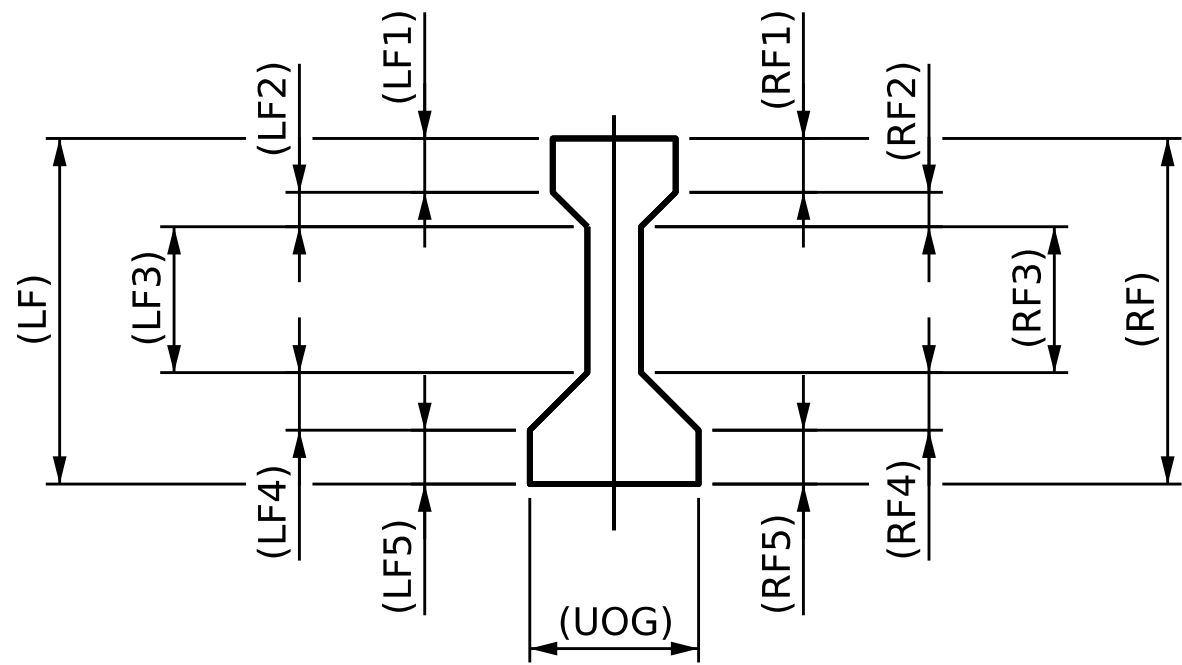
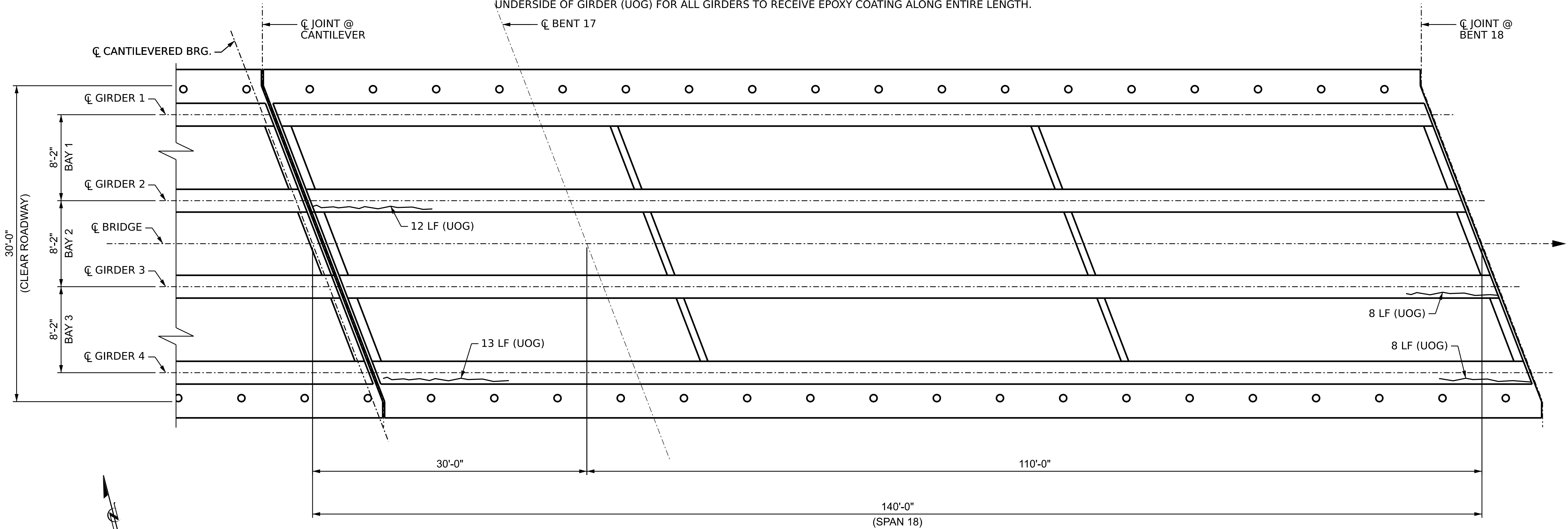
UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1596				

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 18 OF 31

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

4/22/2026
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1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165



4/23/2026

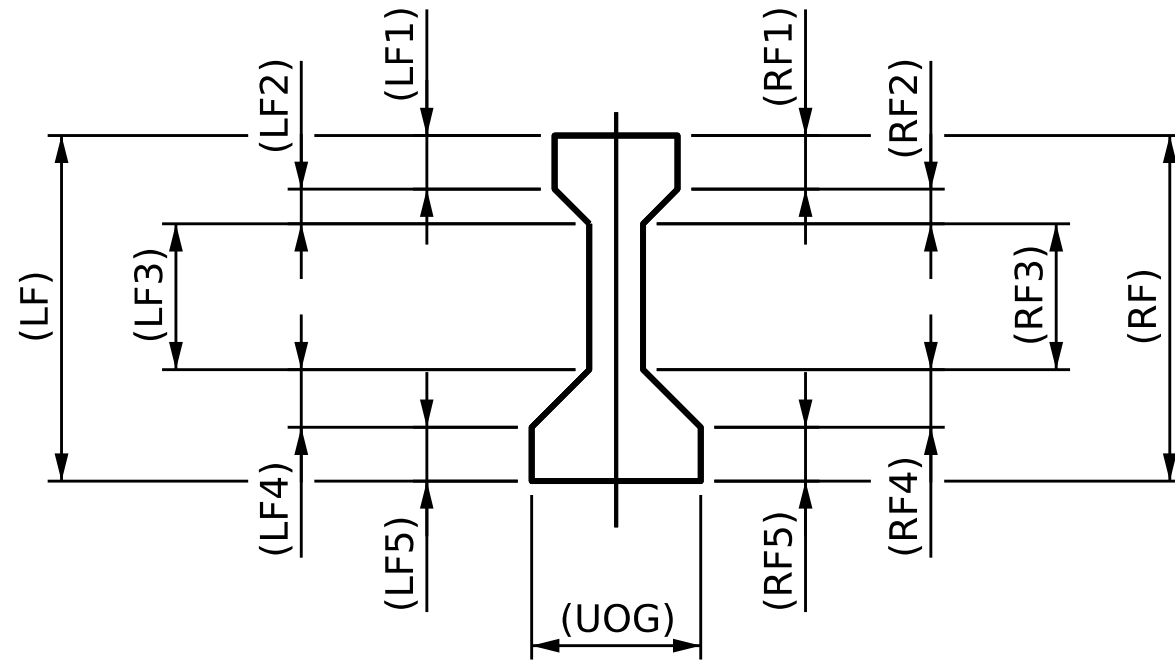
DOCUMENT NOT CONSIDERED
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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 18

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-39
2			4			TOTAL SHEETS 112

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1527				

NOTES

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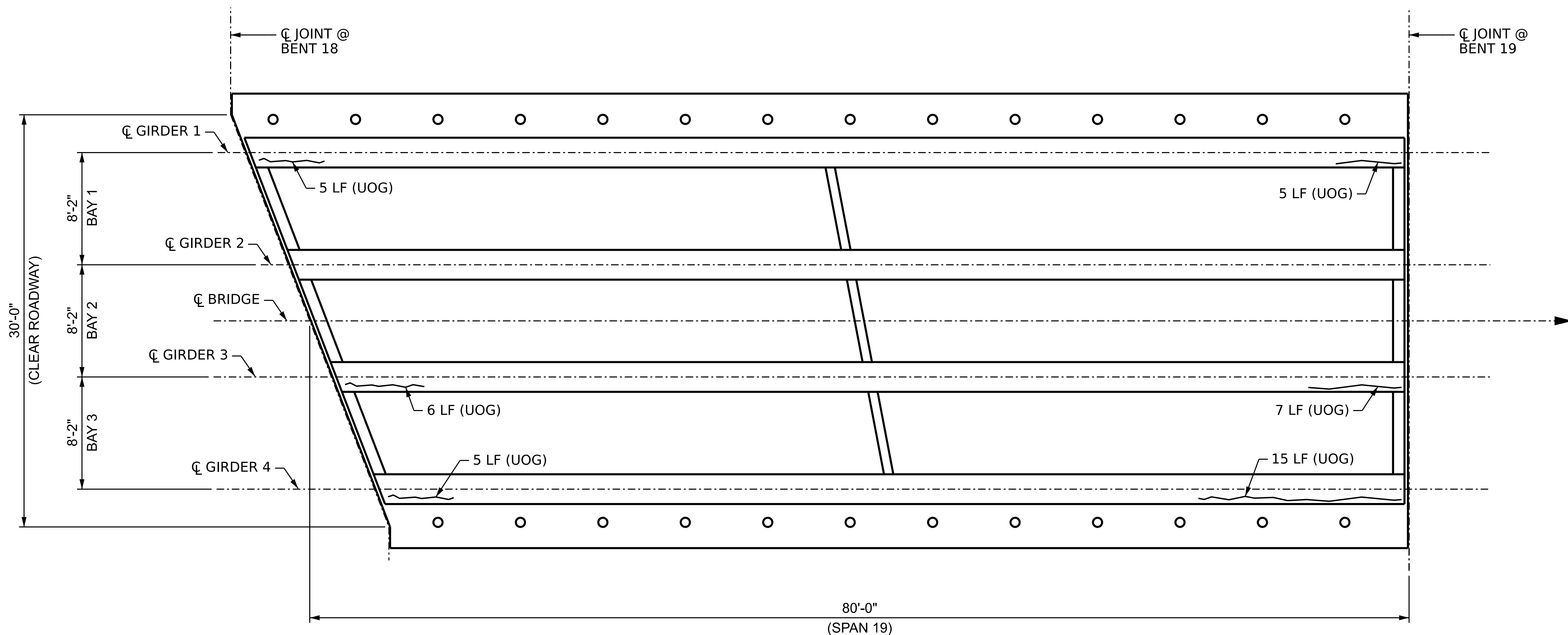
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FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

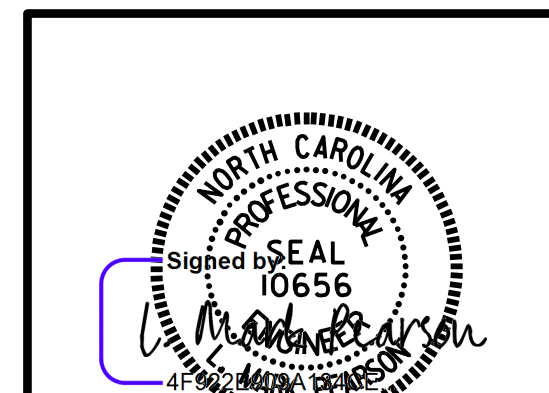
CARTERET COUNTY

BRIDGE NO. 150014

SHEET 19 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 19



4/23/2026



WSP USA Inc.
1001 WADE AVENUE
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RALEIGH, NC 27601
TEL: 919.836.4040
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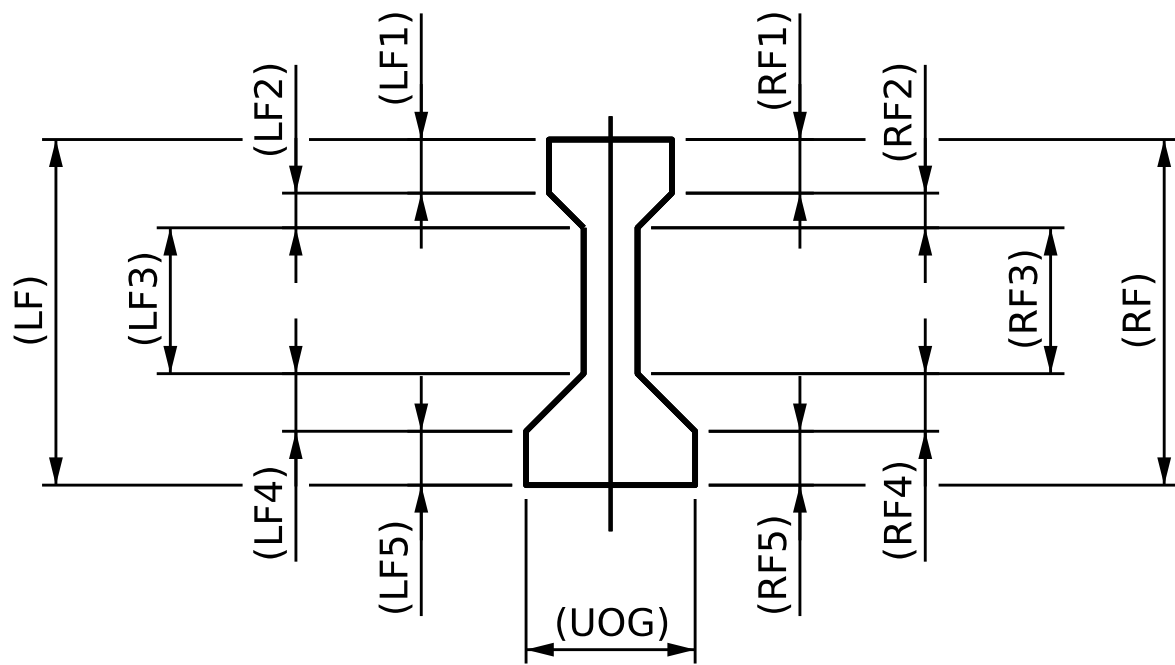
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-40
2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
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USMA128682

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1181				

NOTES

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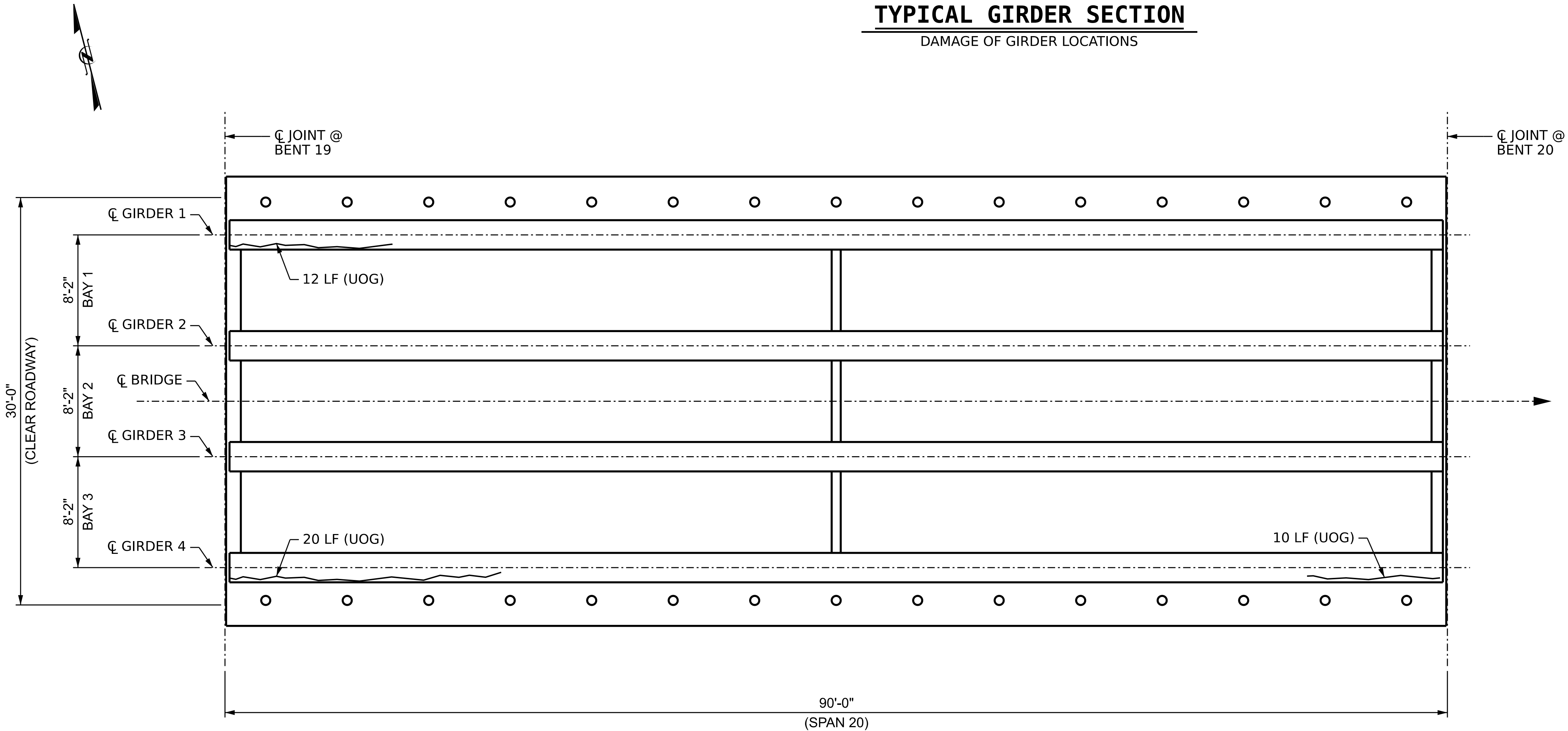
QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE MIN. 3.5" DEEP.

EPOXY COATING CONCRETE GIRDERS QUANTITIES ARE INTENDED TO EXTEND 1' BEYOND ANY CRACK SHOWN. WIDER CRACKS REQUIRING EPOXY RESIN INJECTION ARE ALSO EPOXY COATED. EPOXY COATING TO TAKE PLACE AFTER EPOXY RESIN INJECTION IS COMPLETED.

UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 20 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 20



4/23/2026



WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165

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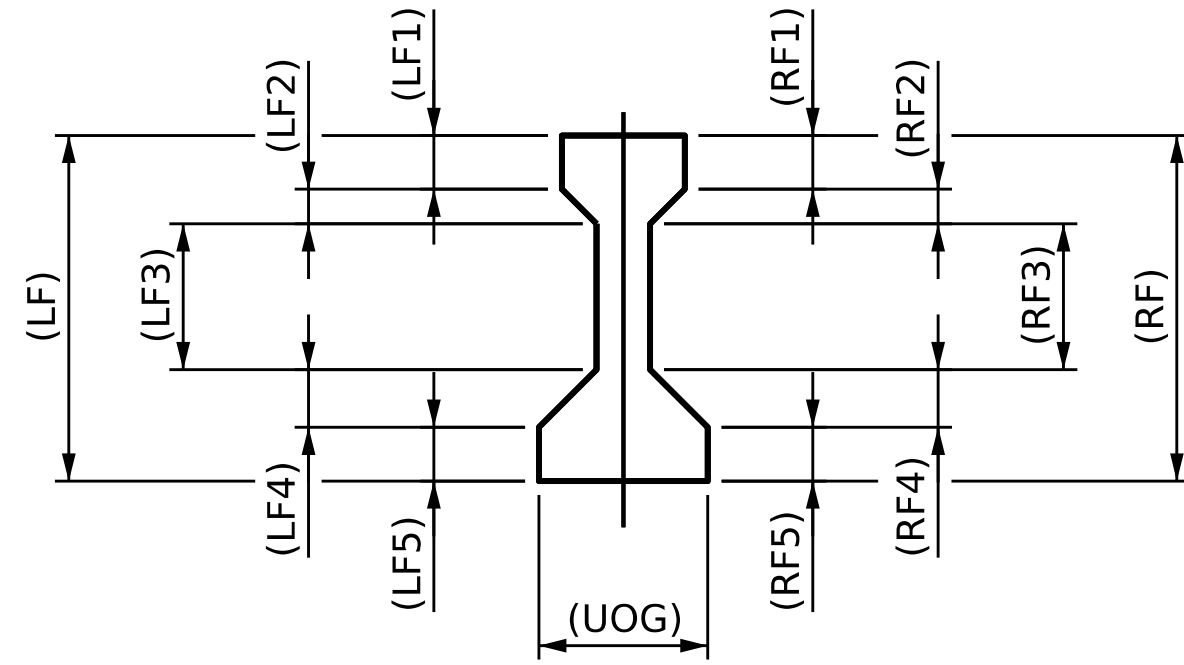
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NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			TOTAL SHEETS 112

DRAWN BY : B. K. JACKSON DATE : APR 2026
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USMA128682

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1181				

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

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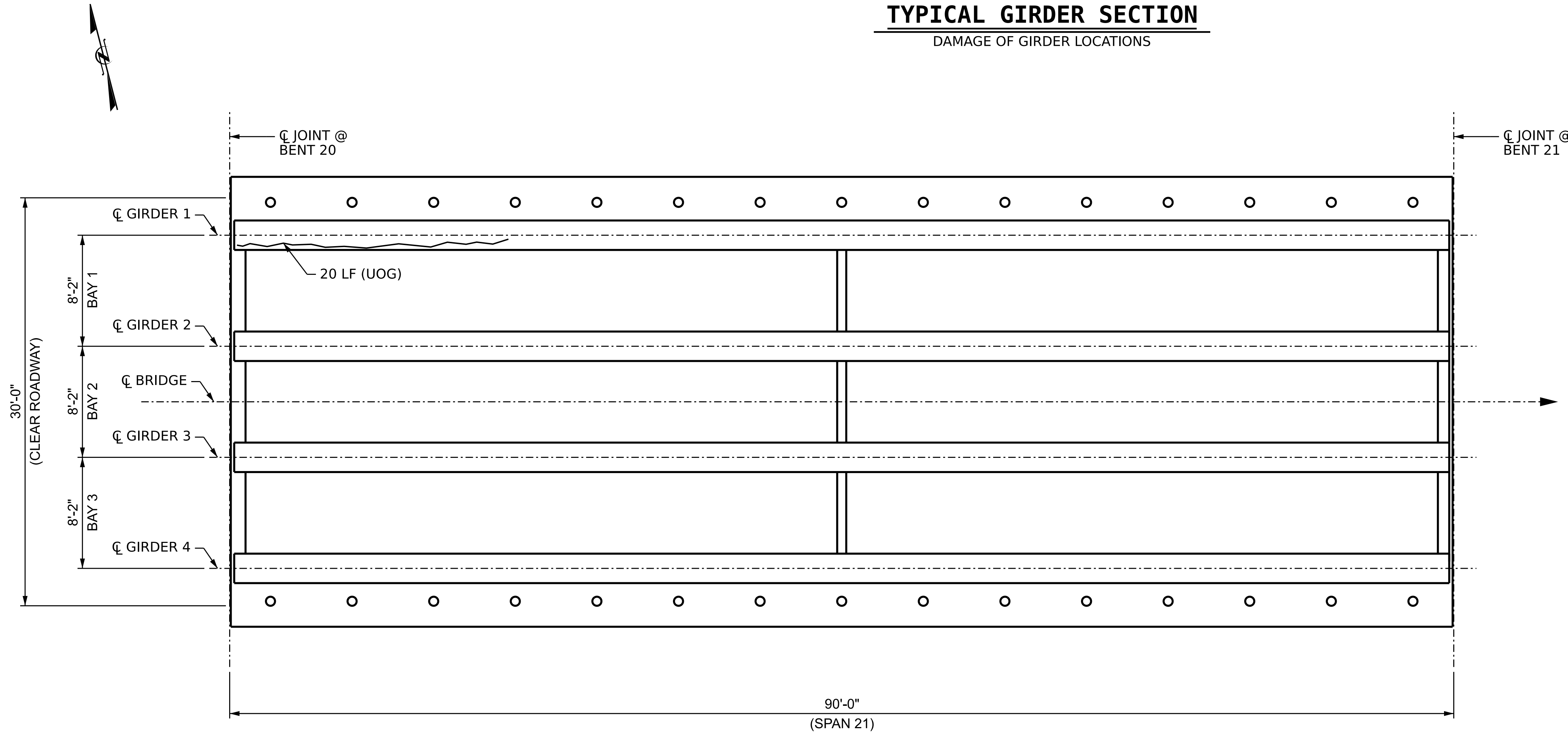
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UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

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FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".

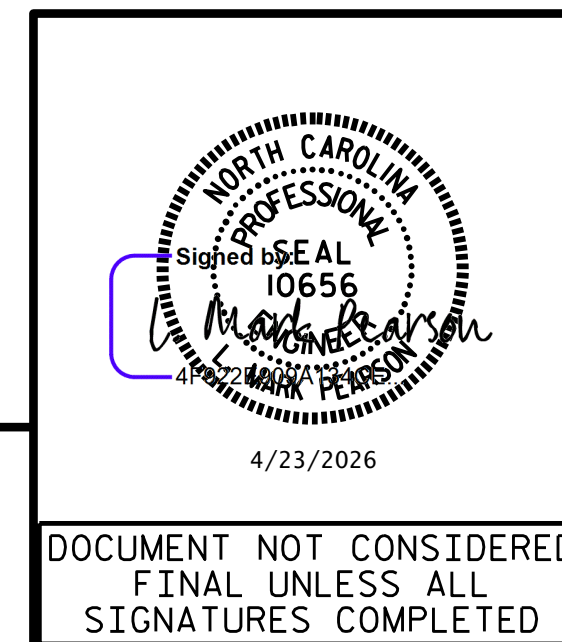


PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 21 OF 31



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE GIRDER AND DIAPHRAGM REPAIRS SPAN 21					
REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
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2			4		
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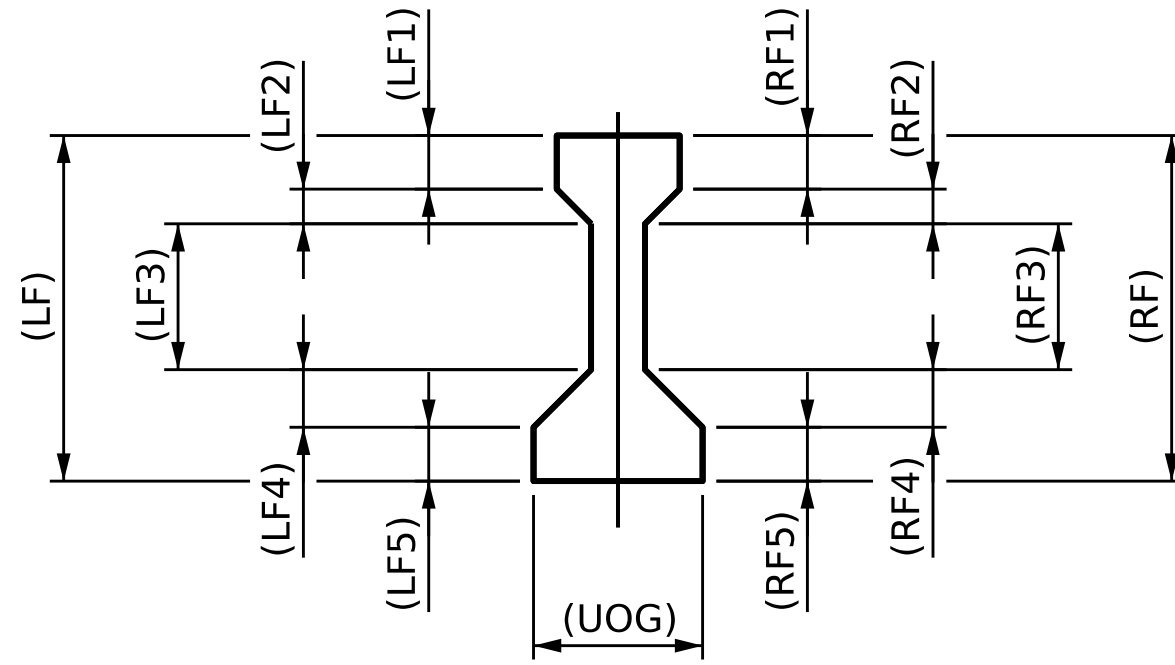
DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

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USMA128682

wsp
WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1302				

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

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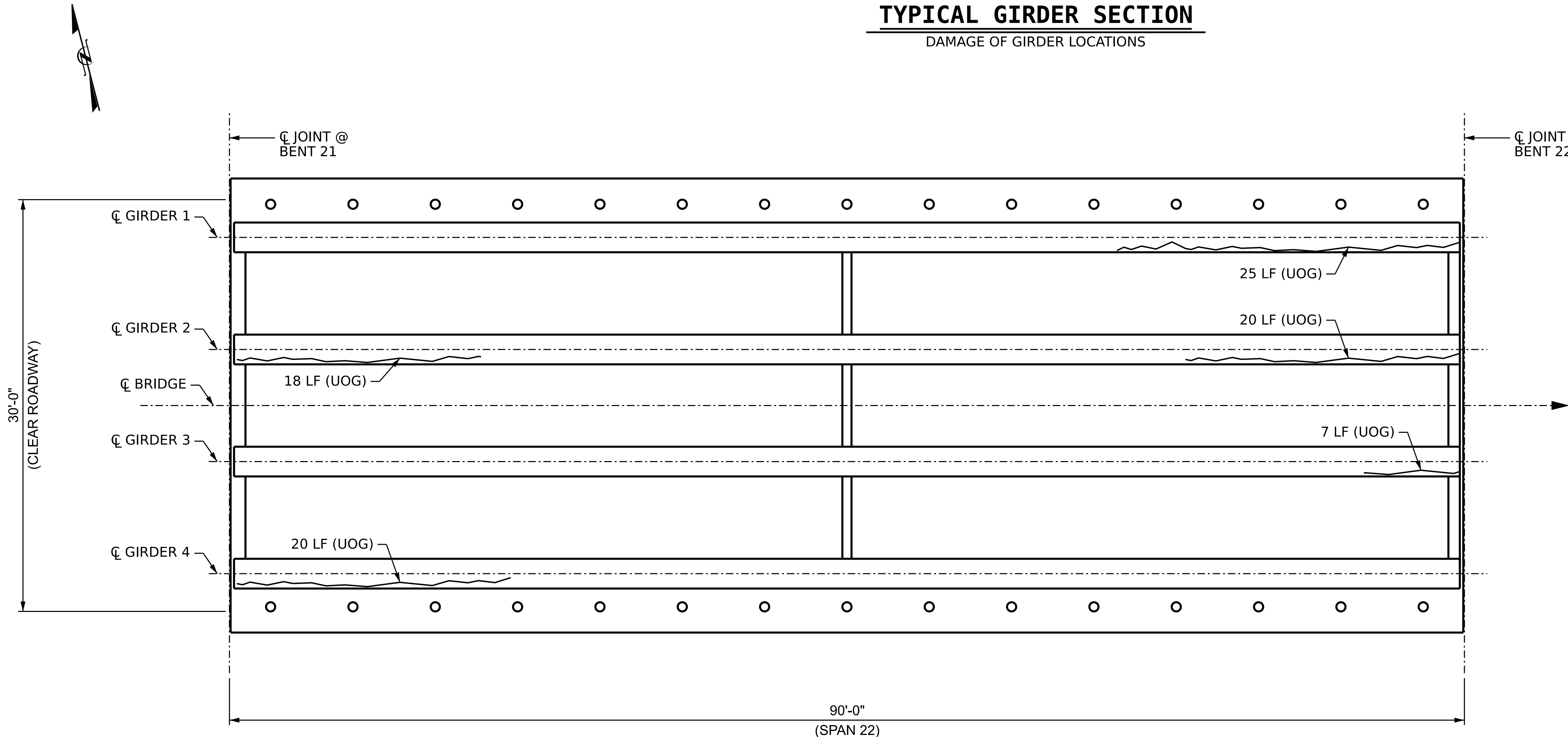
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UNDERSIDE OF GIRDER (UOG) FOR ALL GIRDERS TO RECEIVE EPOXY COATING ALONG ENTIRE LENGTH.

FOR BEAM END EPOXY COATINGS DETAILS, SEE "BEAM END COATING DETAILS" SHEET "S1-54".

FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 22 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 22



4/23/2026

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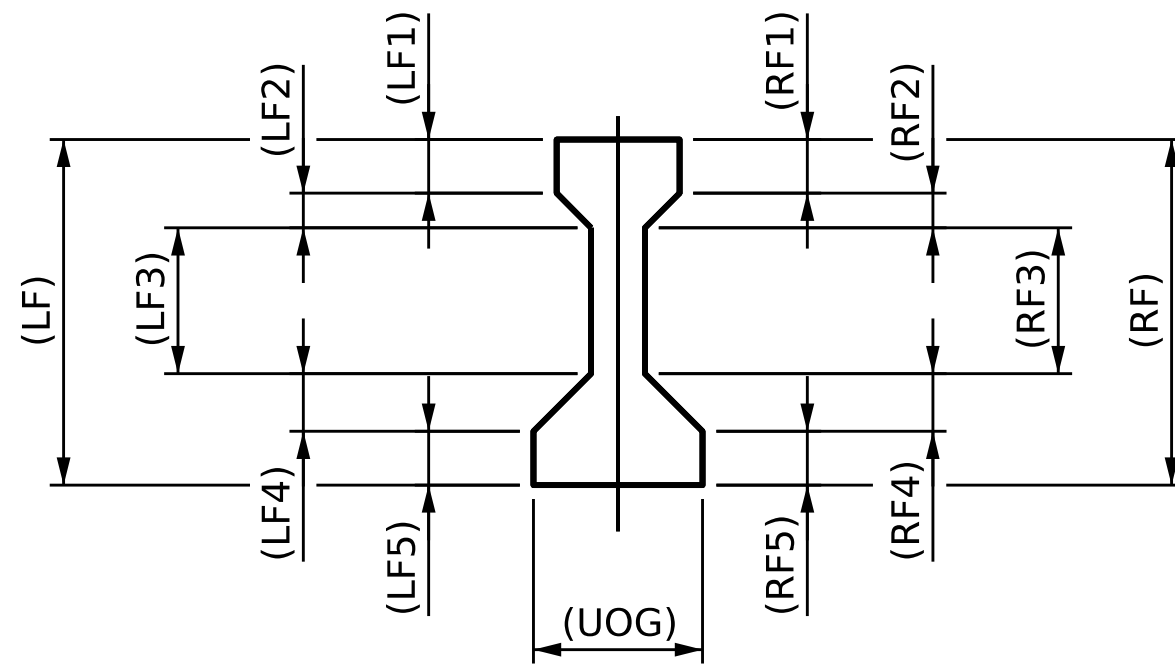
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-43
2			4			TOTAL SHEETS 112

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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1382				

NOTES

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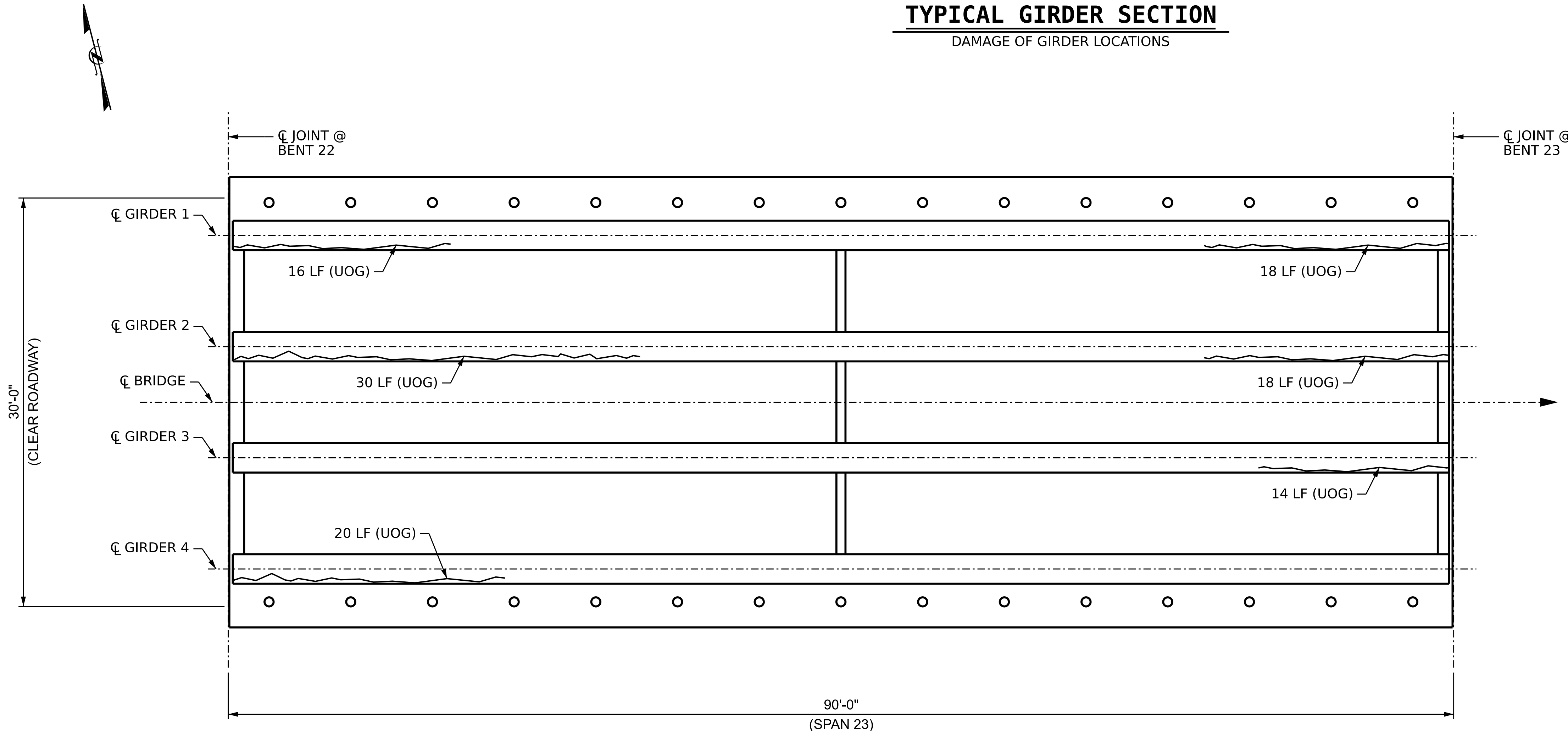
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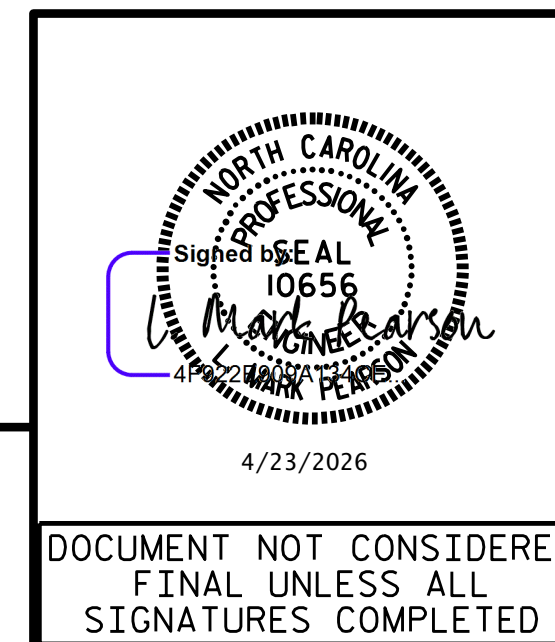


PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 23 OF 31



STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

SUPERSTRUCTURE

GIRDER AND DIAPHRAGM

REPAIRS

SPAN 23

REVISIONS

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SHEET NO.

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TOTAL SHEETS

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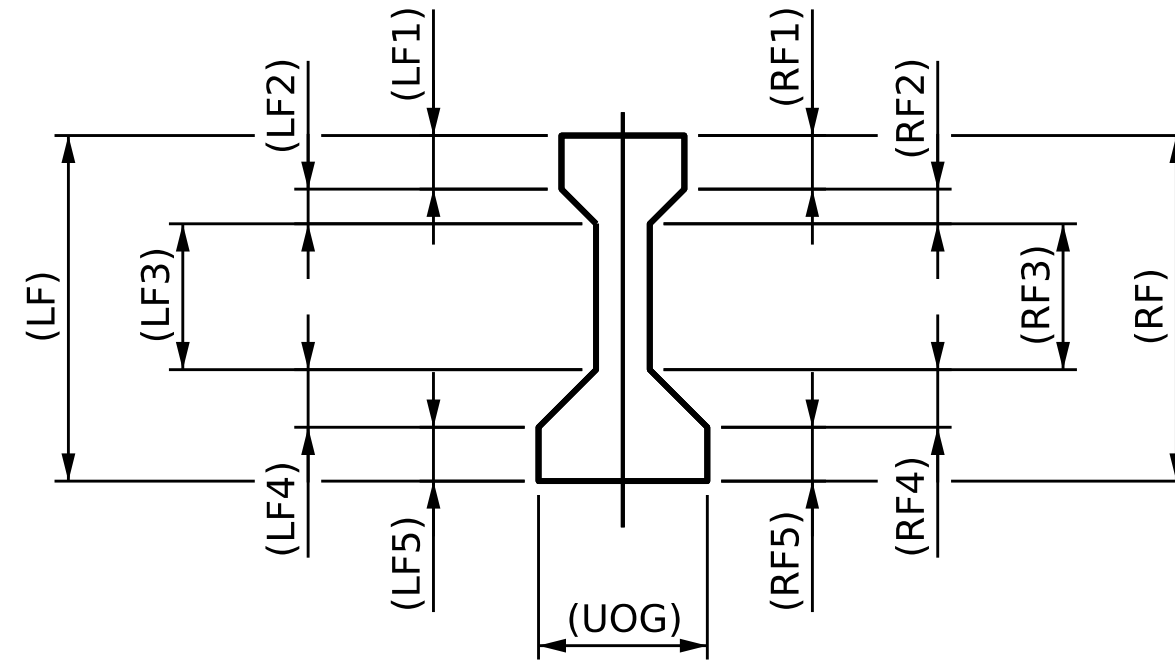
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CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

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USMA128682



LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1181				

NOTES

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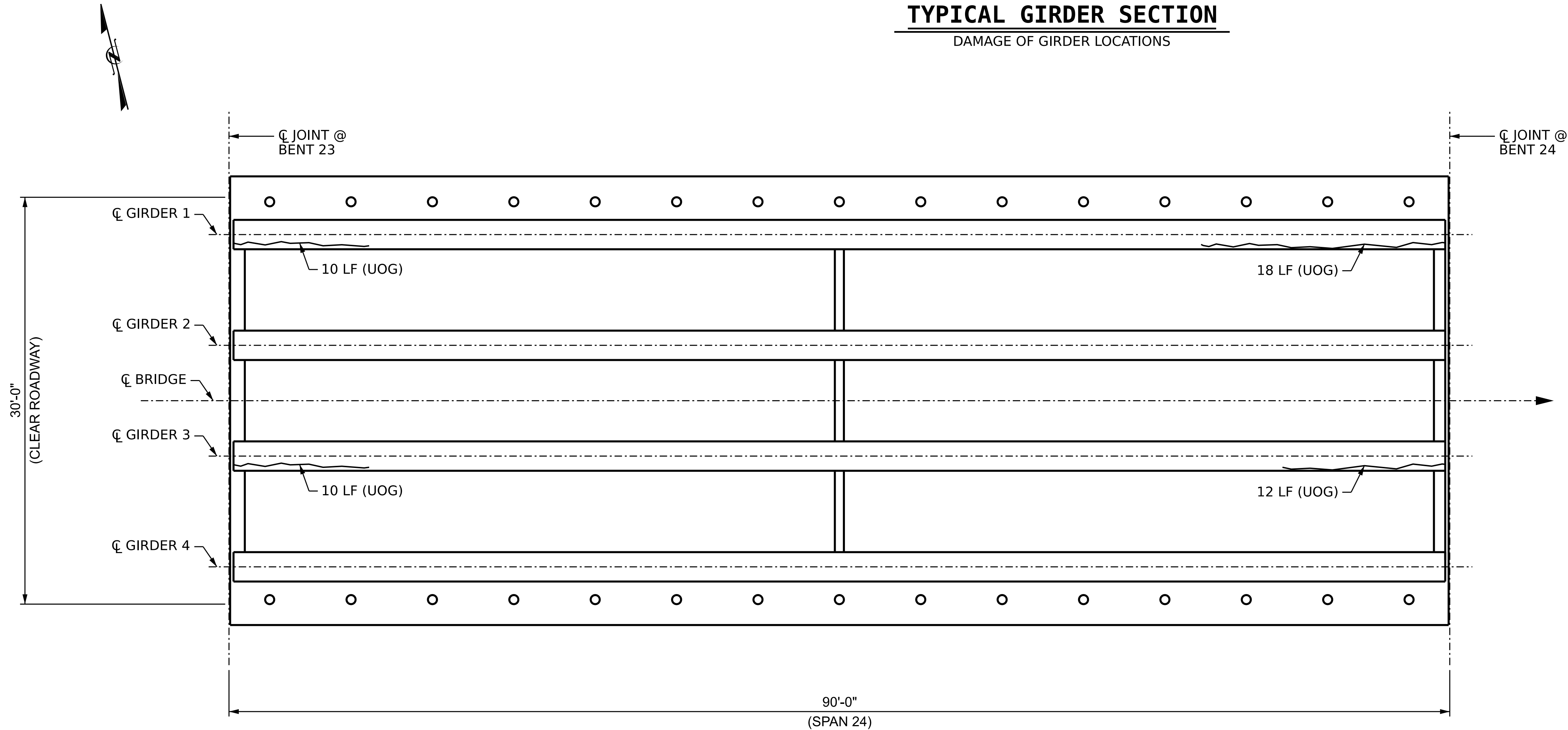
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FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 24 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 24



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REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
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2			4			TOTAL SHEETS 112

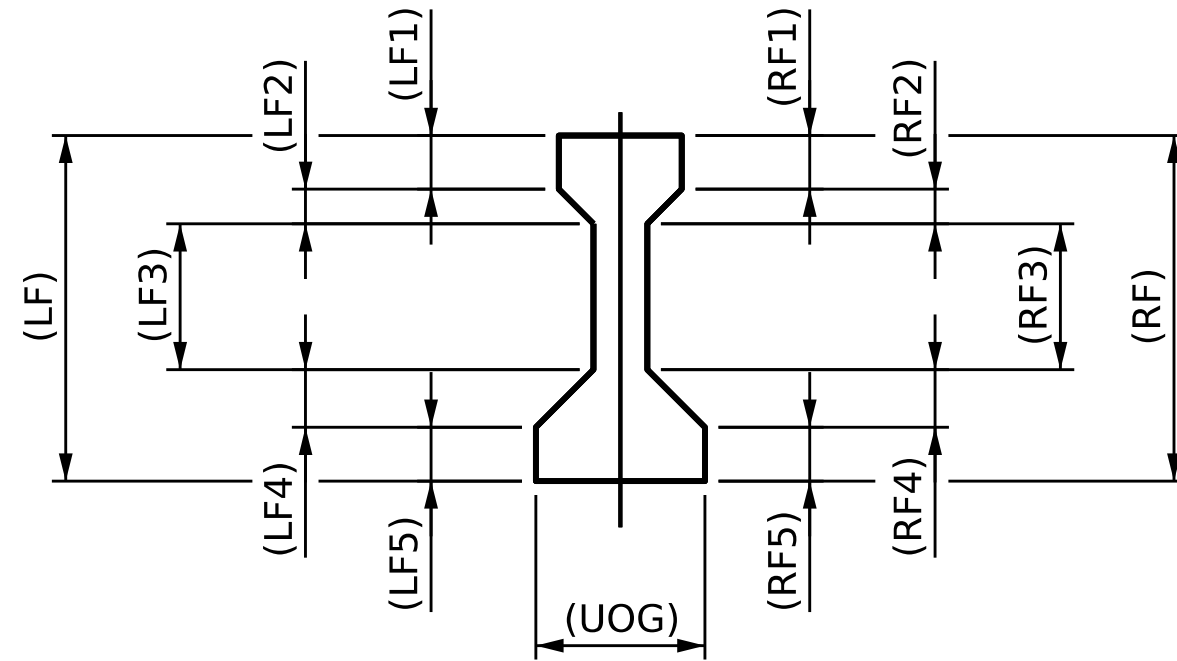
DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

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USMA128682

wsp
WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1181				

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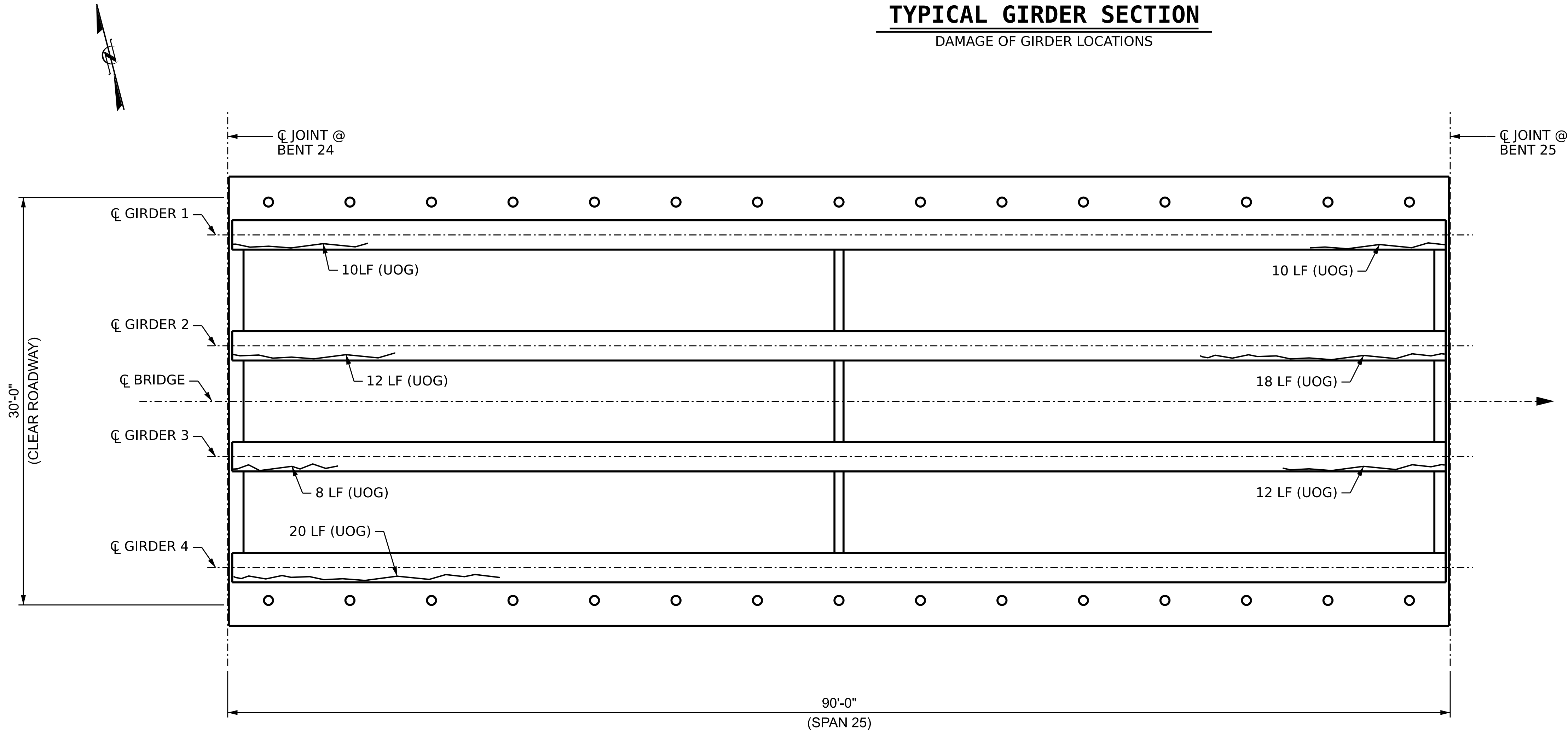
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FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".



PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 25 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 25



4/23/2026

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FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY	DATE	NO.	BY	DATE	
1			3			S1-46
2			4			TOTAL SHEETS 112

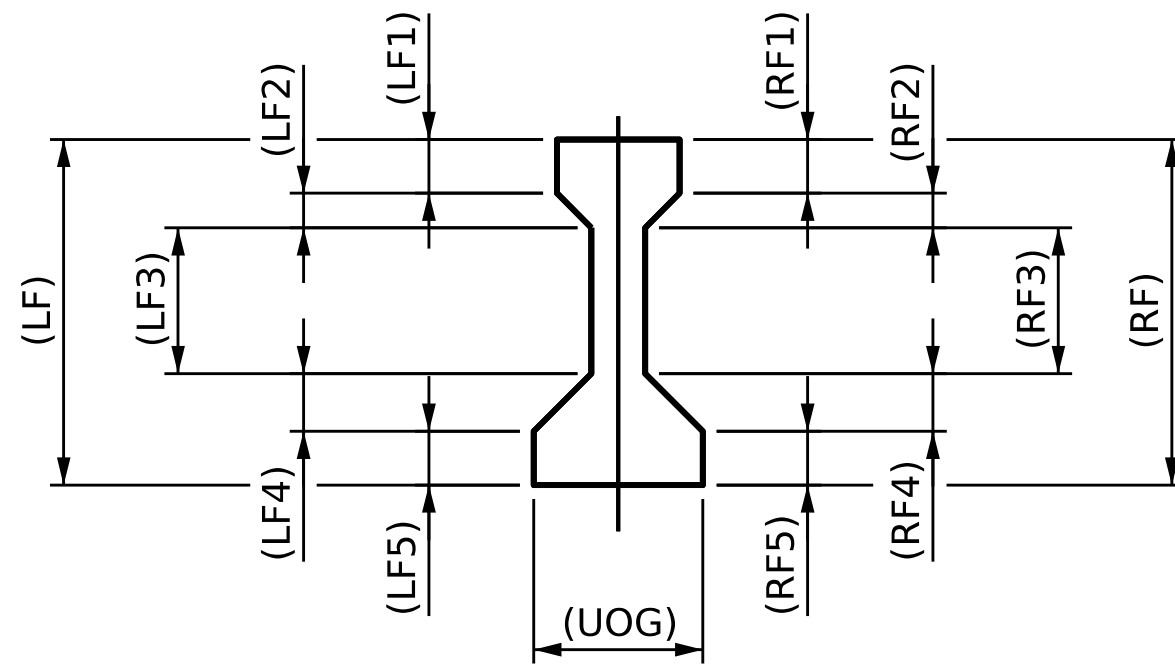
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CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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USMA128682

WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1181				

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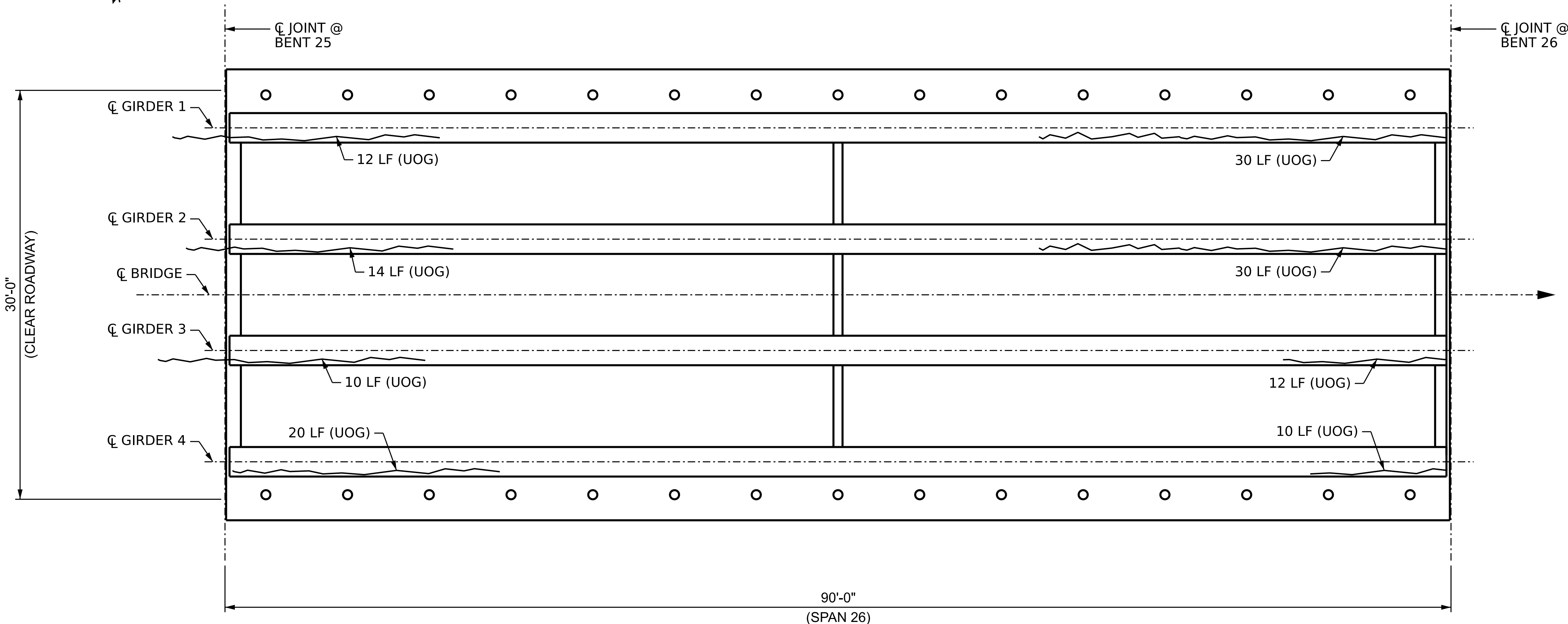
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 26 OF 31



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE GIRDER AND DIAPHRAGM REPAIRS SPAN 26						SHEET NO. S1-47	
REVISIONS						TOTAL SHEETS 112	
NO.	BY	DATE	NO.	BY	DATE		
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DRAWN BY :	B. K. JACKSON	DATE :	APR 2026
CHECKED BY :	M. PEARSON	DATE :	APR 2026
DESIGN ENGINEER OF RECORD:	M. PEARSON	DATE :	APR 2026

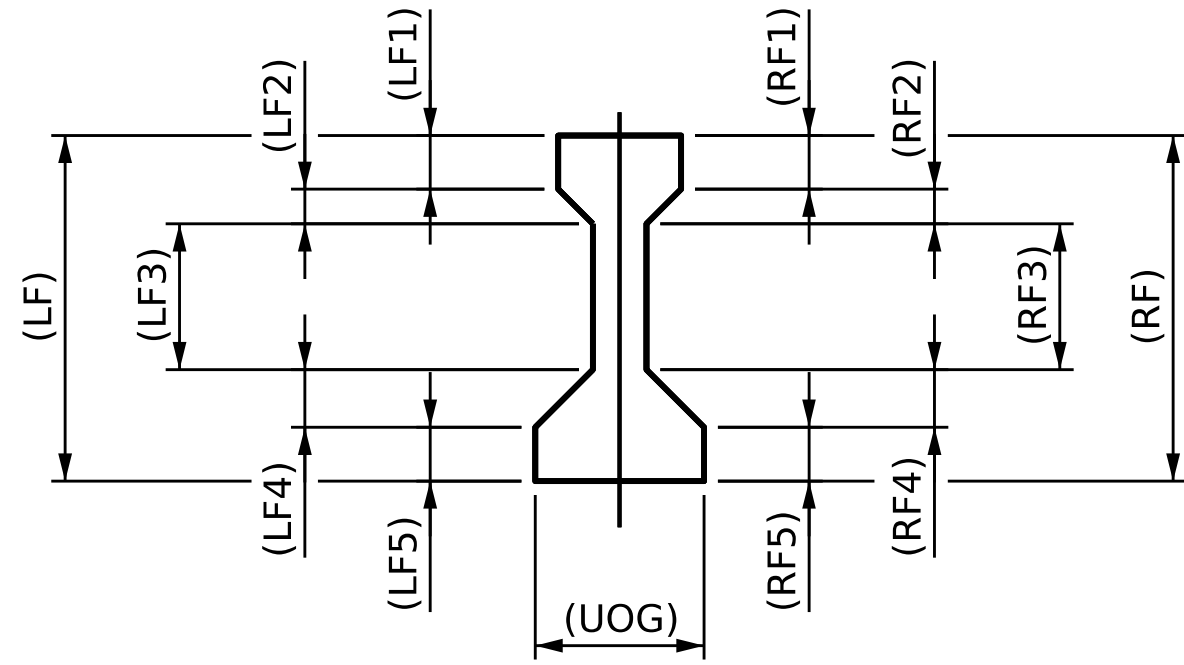
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1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.836.4040
LICENSE NO. F-0165

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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1630				

NOTES

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

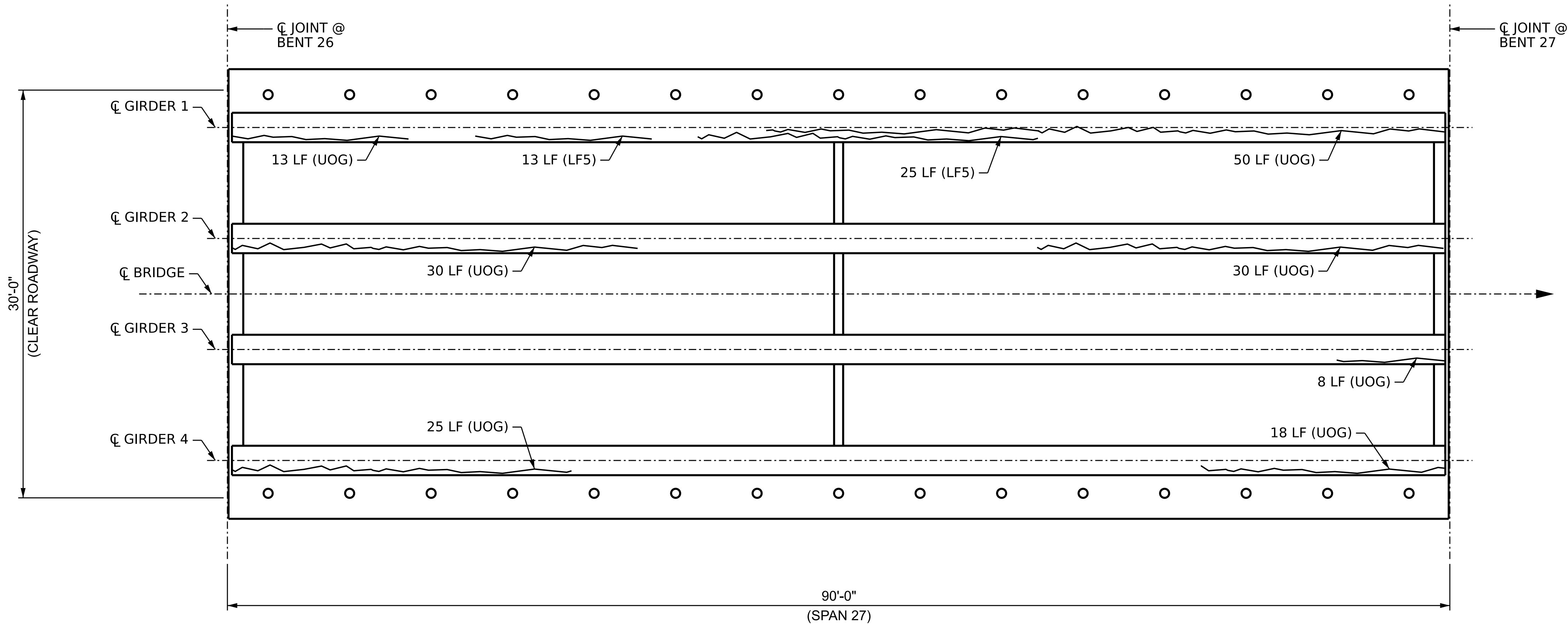
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FOR PRESTRESSED CONCRETE GIRDER REPAIR DETAILS, SEE "TYPICAL PRESTRESSED CONCRETE GIRDER REPAIR DETAILS" SHEET "SD-4".

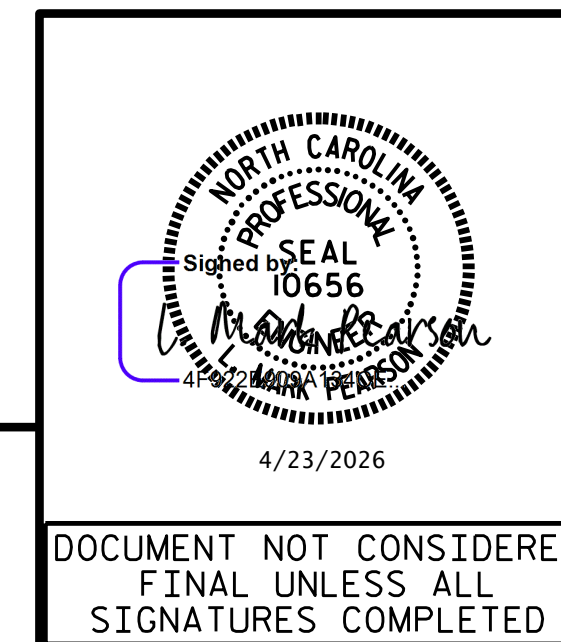


PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 27 OF 31



STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

SUPERSTRUCTURE

GIRDER AND DIAPHRAGM

REPAIRS

SPAN 27

REVISIONS

SHEET NO.

S1-48

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NO.

BY:

DATE:

NO.

BY:

DATE:

1

2

3

4

TOTAL SHEETS

112

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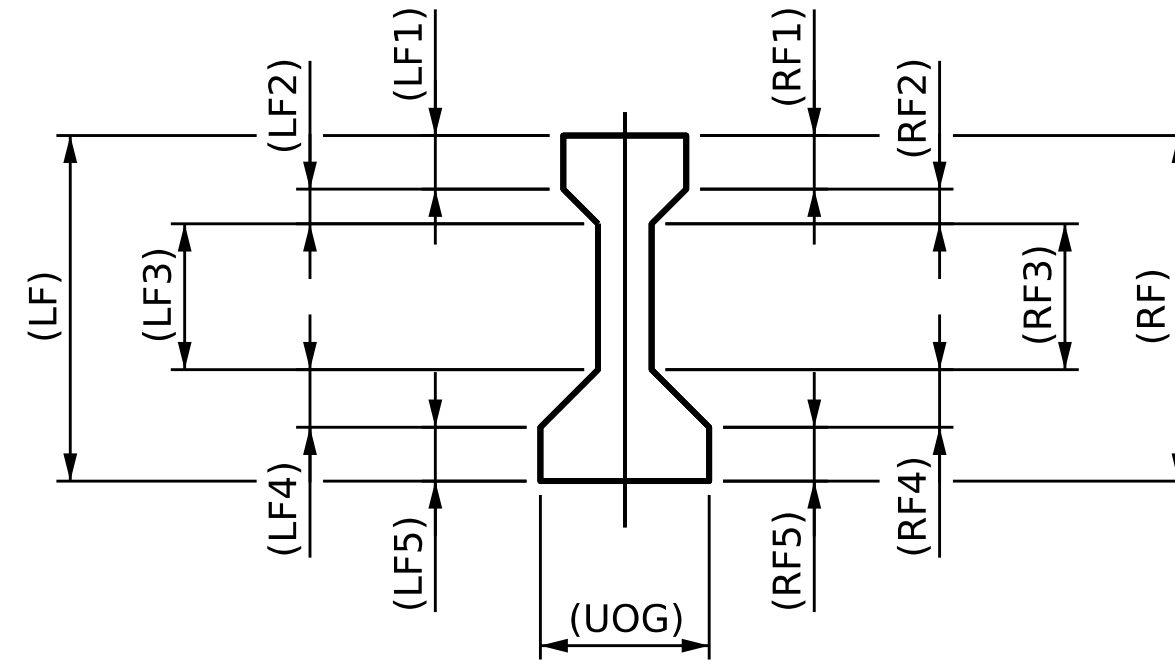
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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1422				

NOTES

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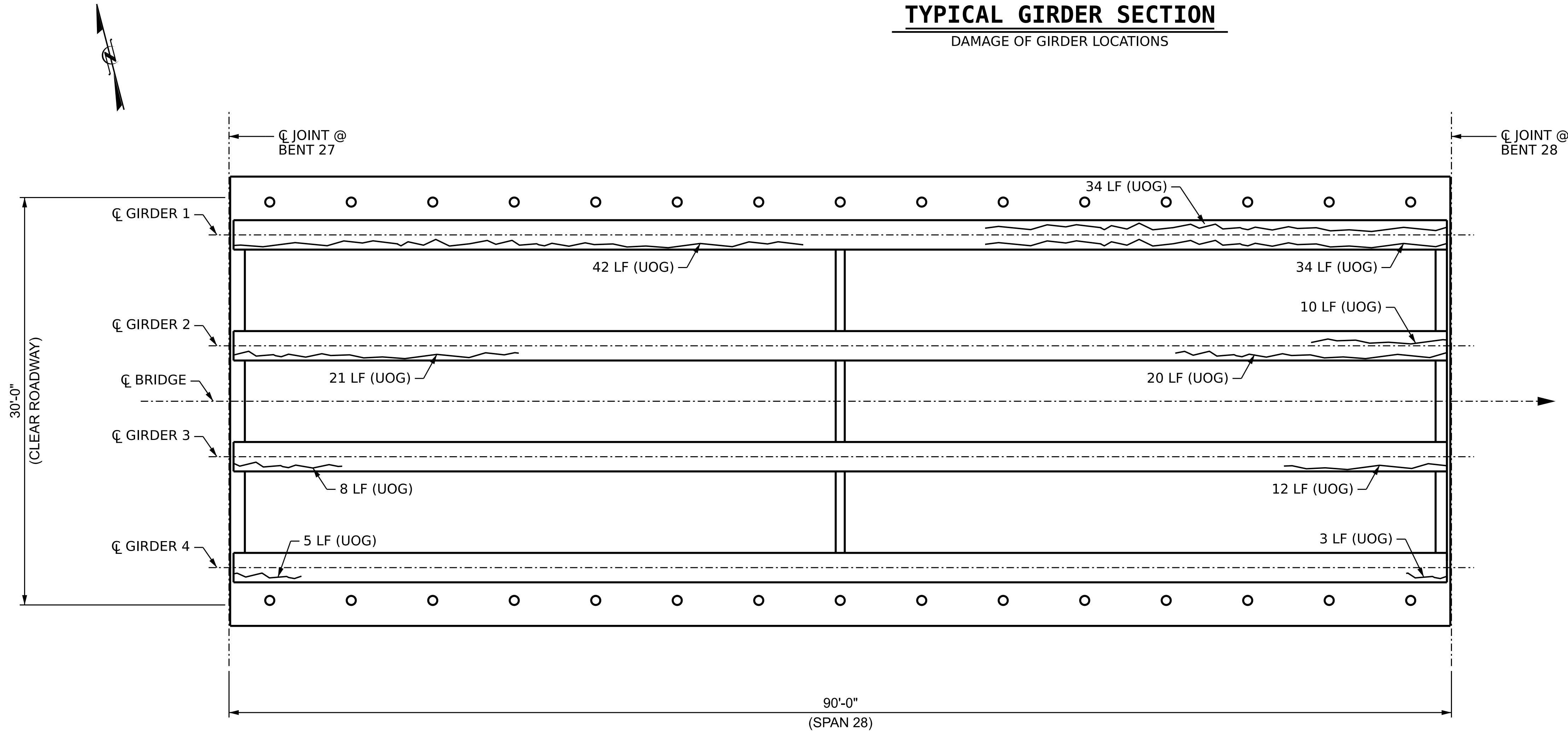
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 28 OF 31

DRAWN BY : B. K. JACKSON DATE : APR 2026
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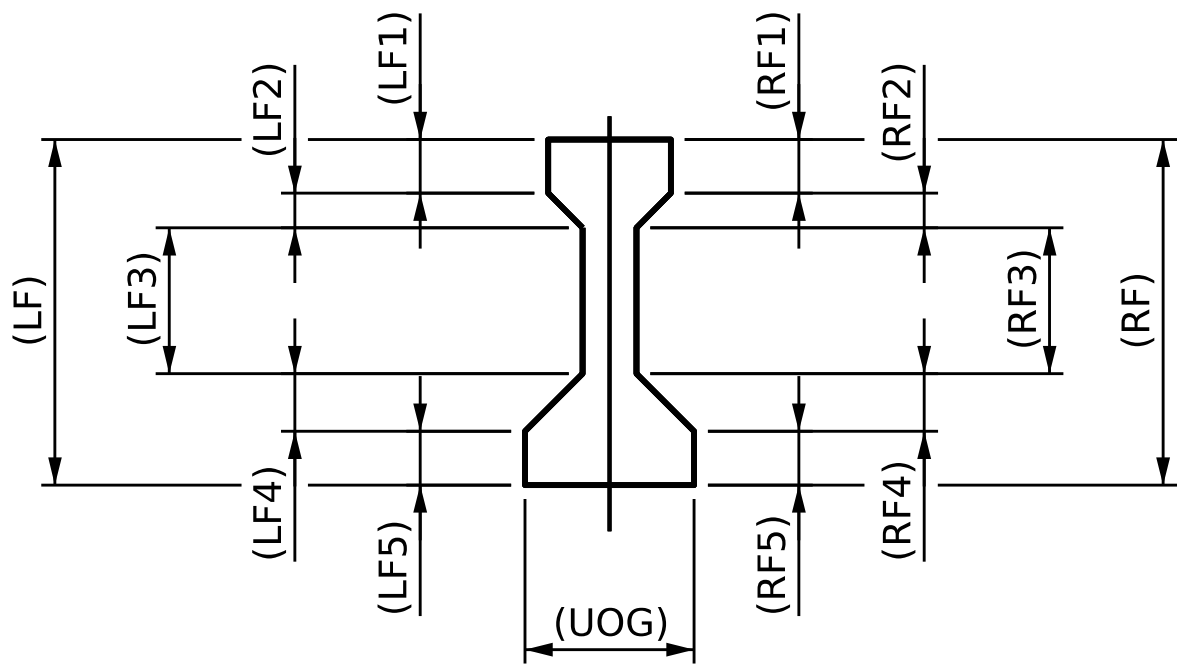
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DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 28

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-49
2			4			TOTAL SHEETS 112

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
(LF)	LEFT FACE OF GIRDER		
(RF)	RIGHT FACE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

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	ESTIMATE			ACTUAL		
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REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1823				

NOTES

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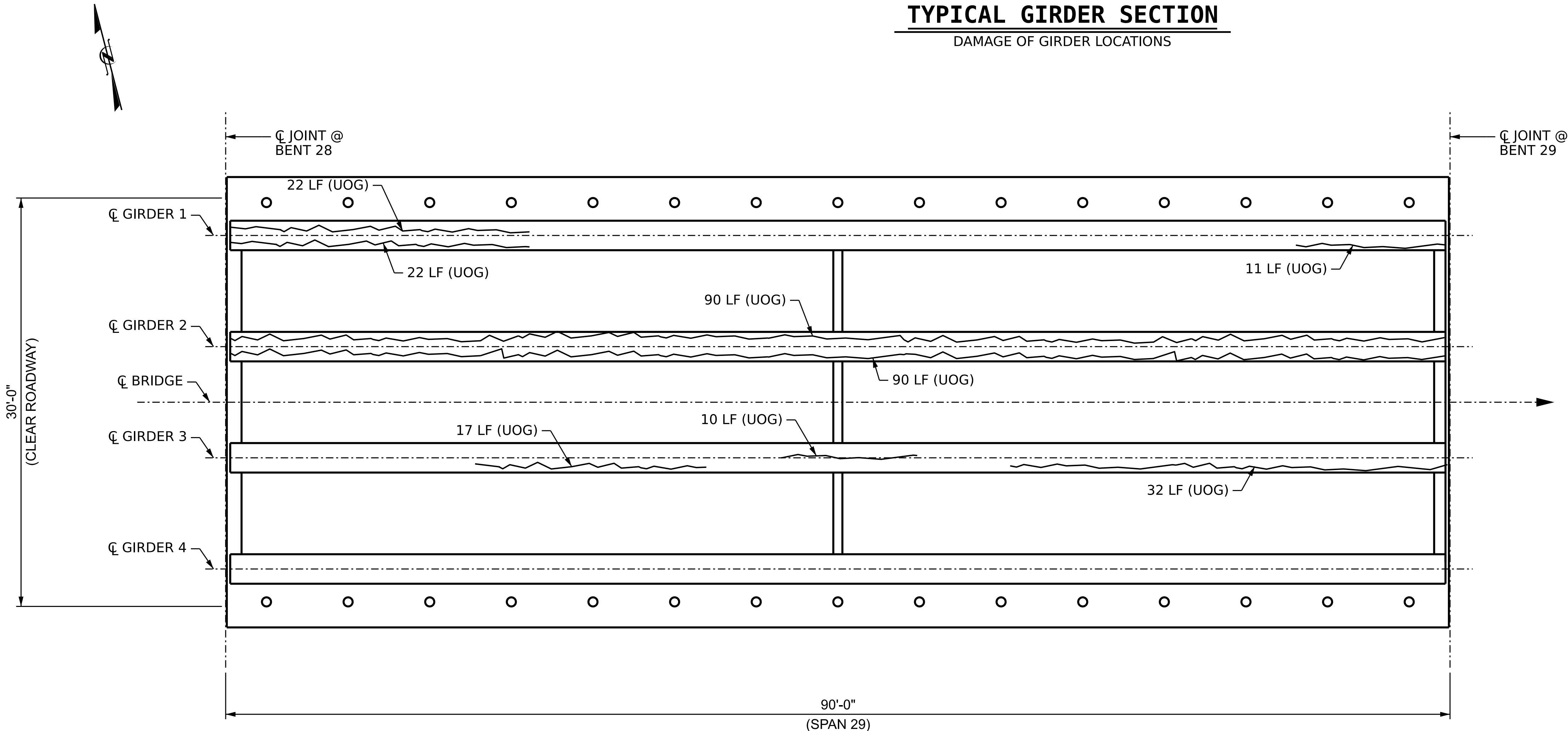
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 29 OF 31

DRAWN BY : B. K. JACKSON DATE : APR 2026
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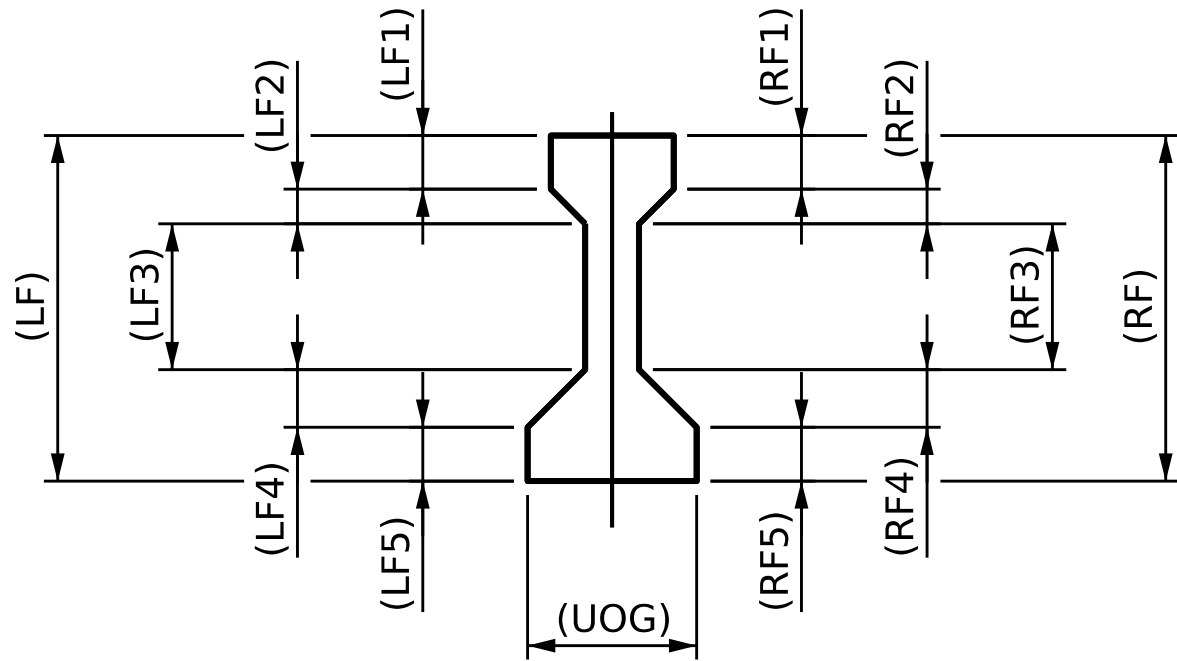
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RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 29
4/23/2026
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-50
1			3			TOTAL SHEETS
2			4			112

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
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TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

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	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1675				

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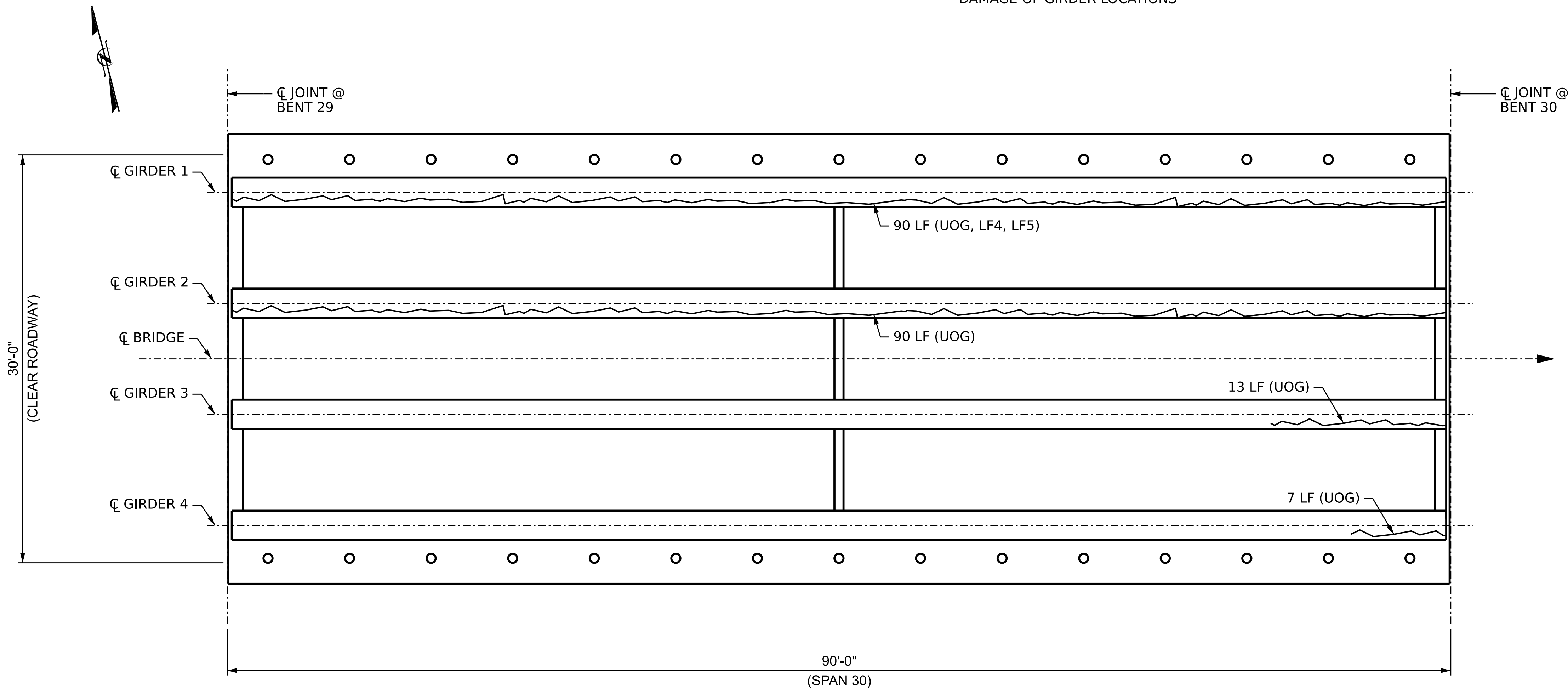
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

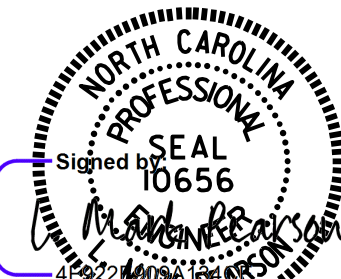
PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150014

SHEET 30 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 30



4/23/2026

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
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2			4			TOTAL SHEETS 112

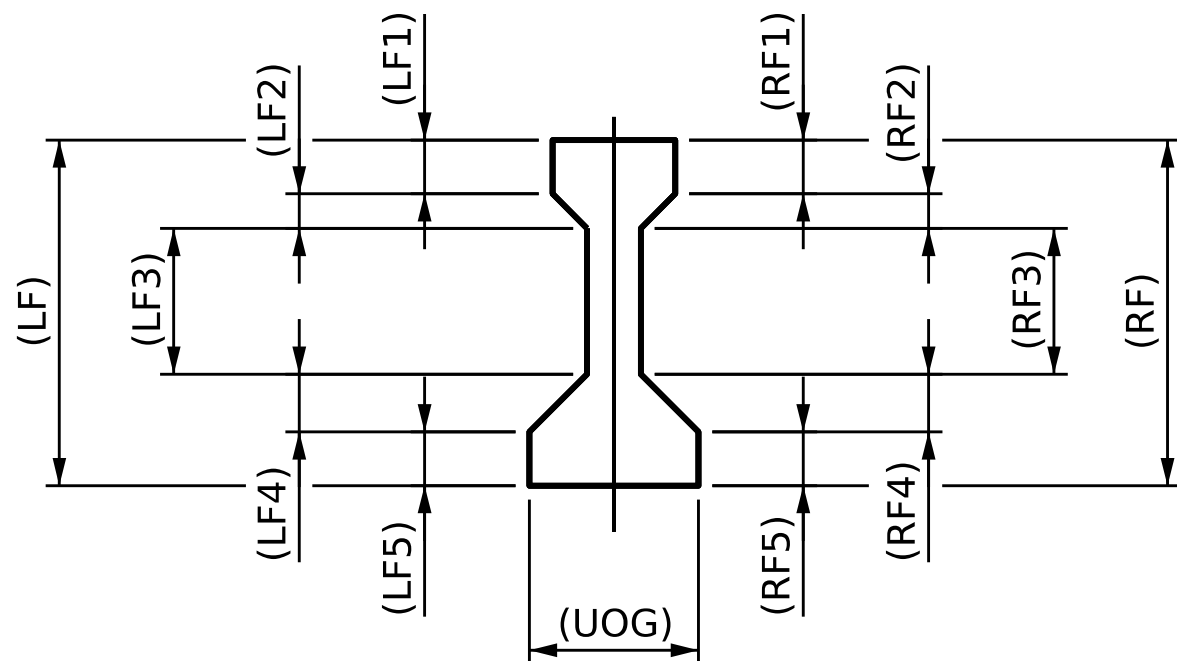
DRAWN BY : B. K. JACKSON DATE : APR 2026
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1001 WADE AVENUE
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LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
ERI	EPOXY RESIN INJECTION		CRACK
(UOG)	UNDERSIDE OF GIRDER		
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TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

REPAIR QUANTITY TABLE

UNDERSIDE OF DECK	QUANTITIES					
	ESTIMATE			ACTUAL		
	LENGTH LF	AREA SF	VOLUME CF	LENGTH LF	AREA SF	VOLUME CF
REPAIRS TO PRESTRESSED CONCRETE GIRDER						
BEAM END EPOXY COATINGS		44				
EPOXY COATING CONCRETE GIRDERS		1705				

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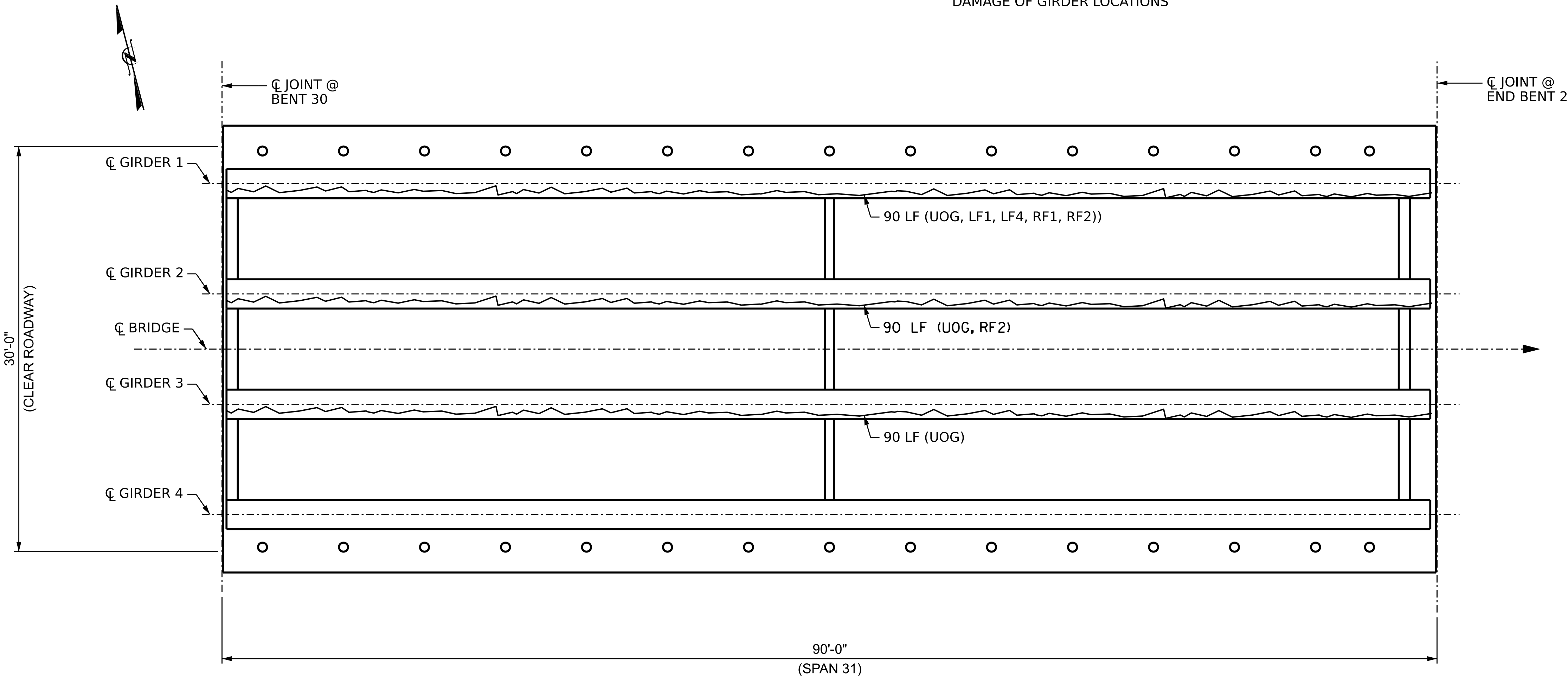
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PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014

SHEET 31 OF 31

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 31



4/23/2026

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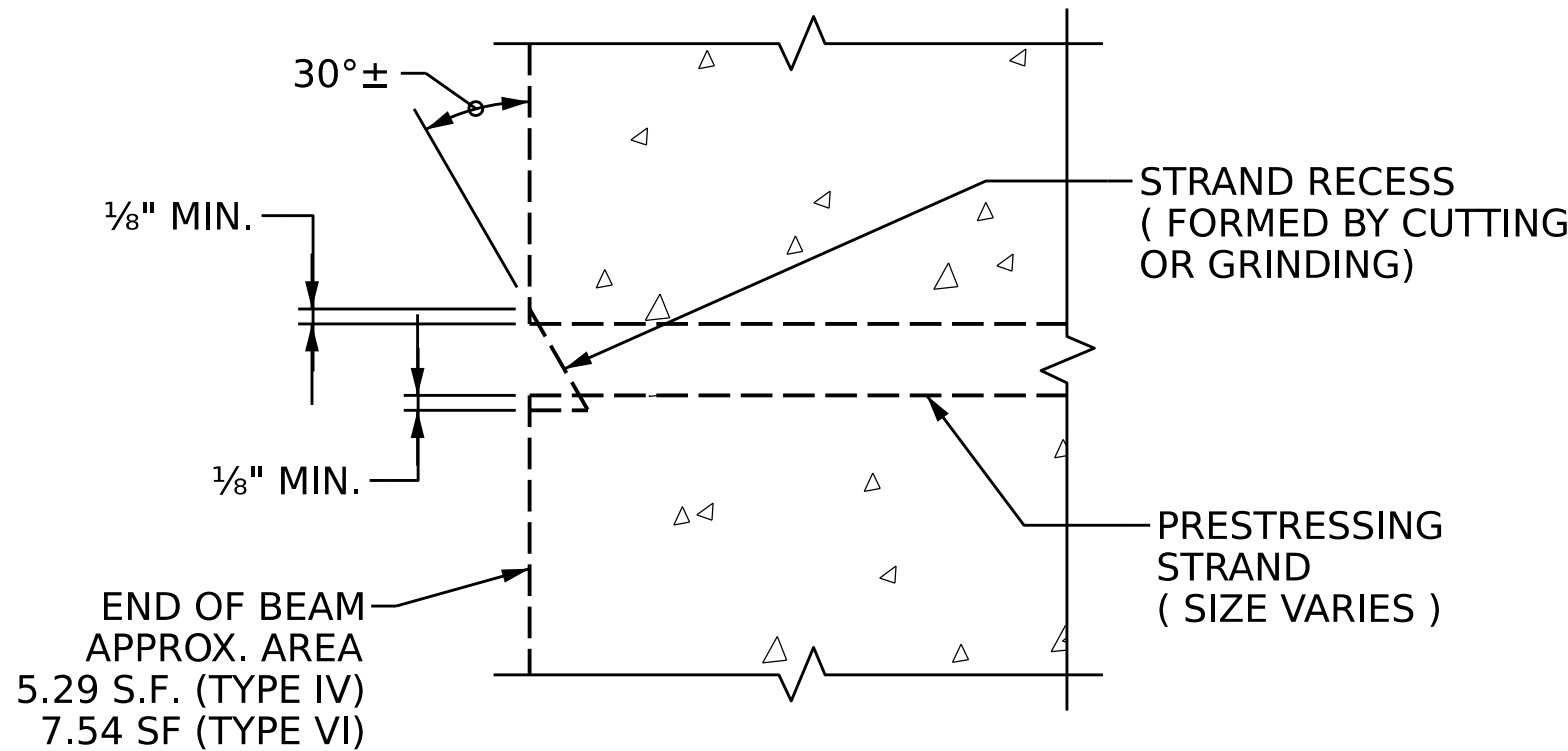
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-52
2			4			TOTAL SHEETS 112

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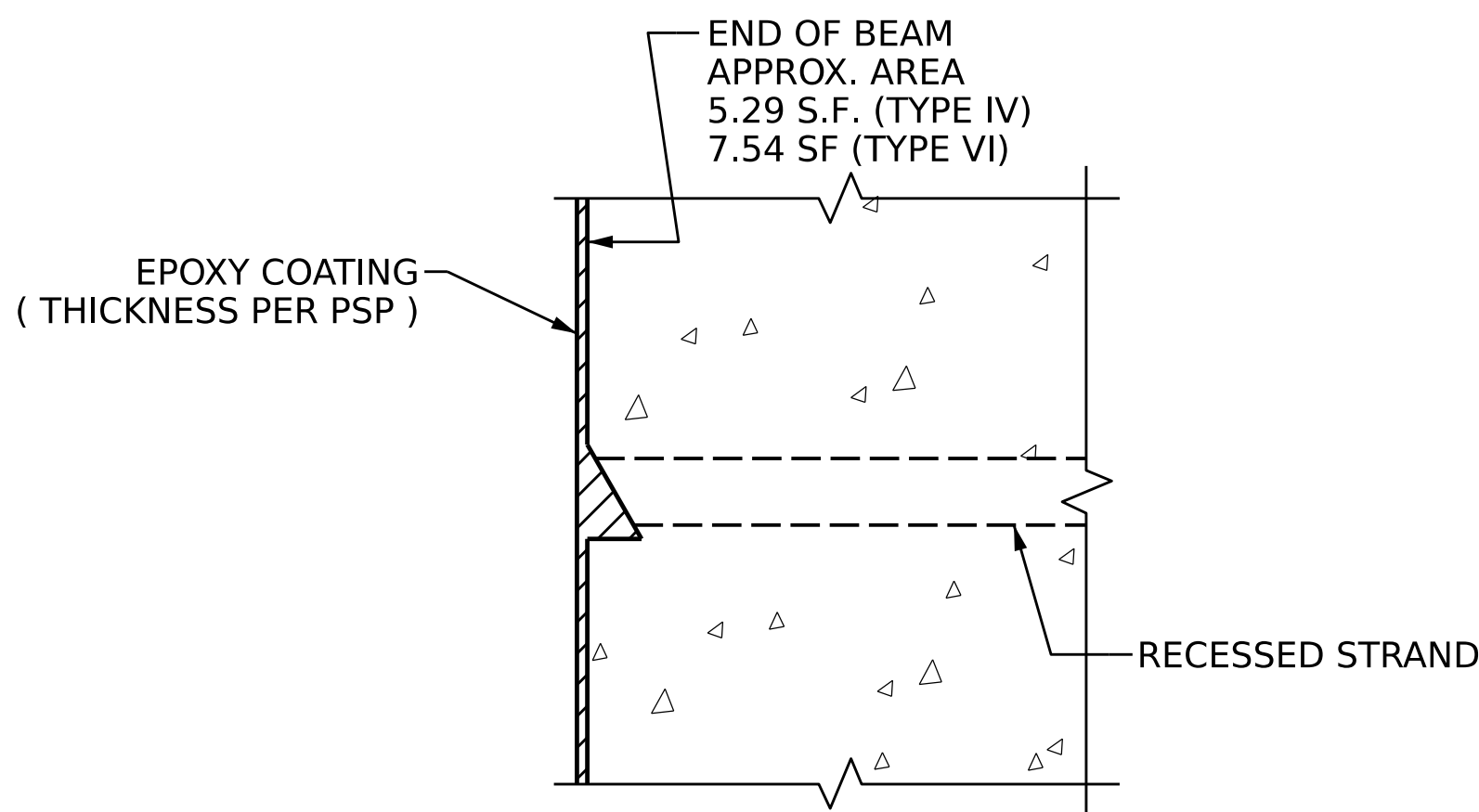
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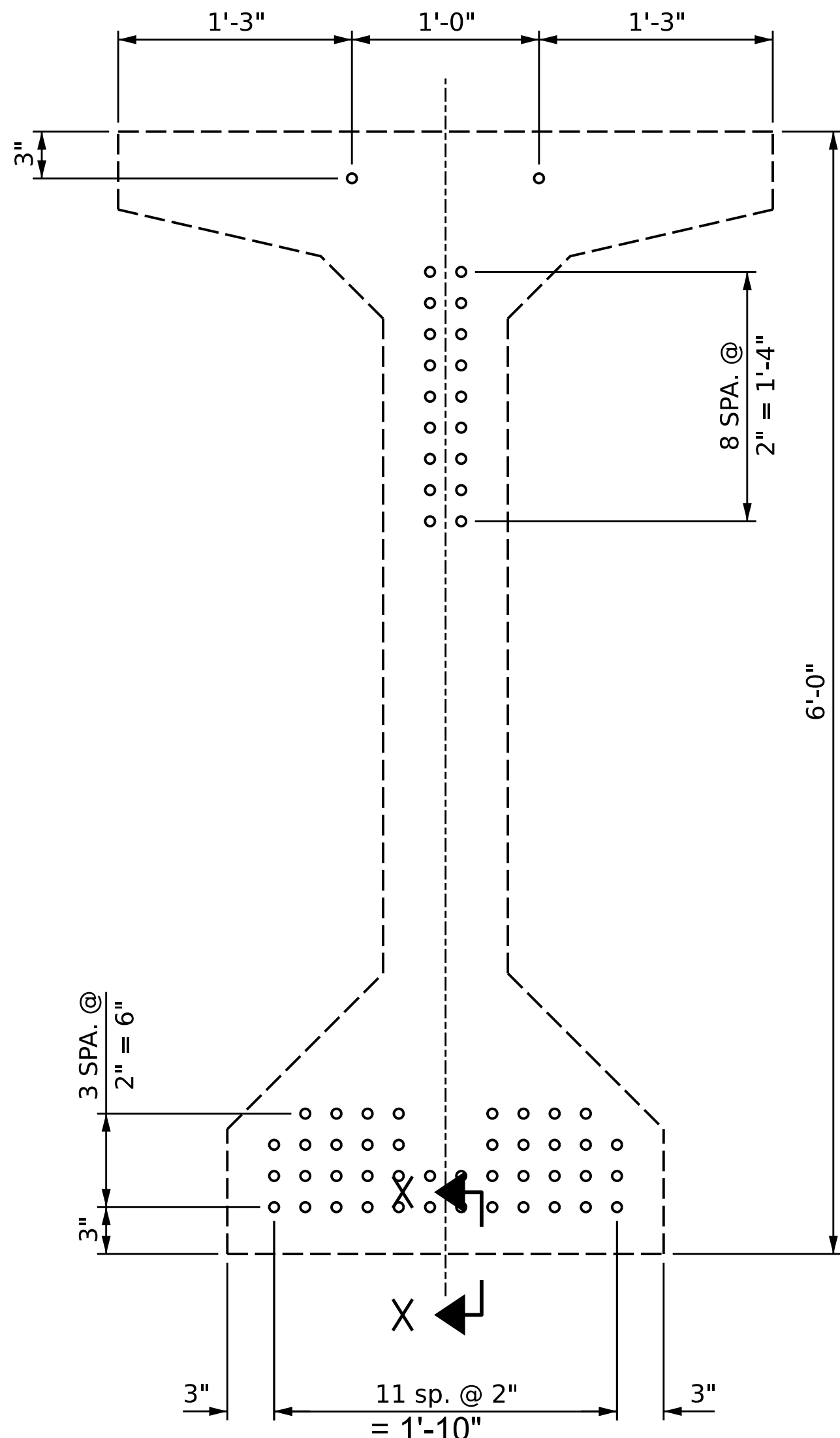
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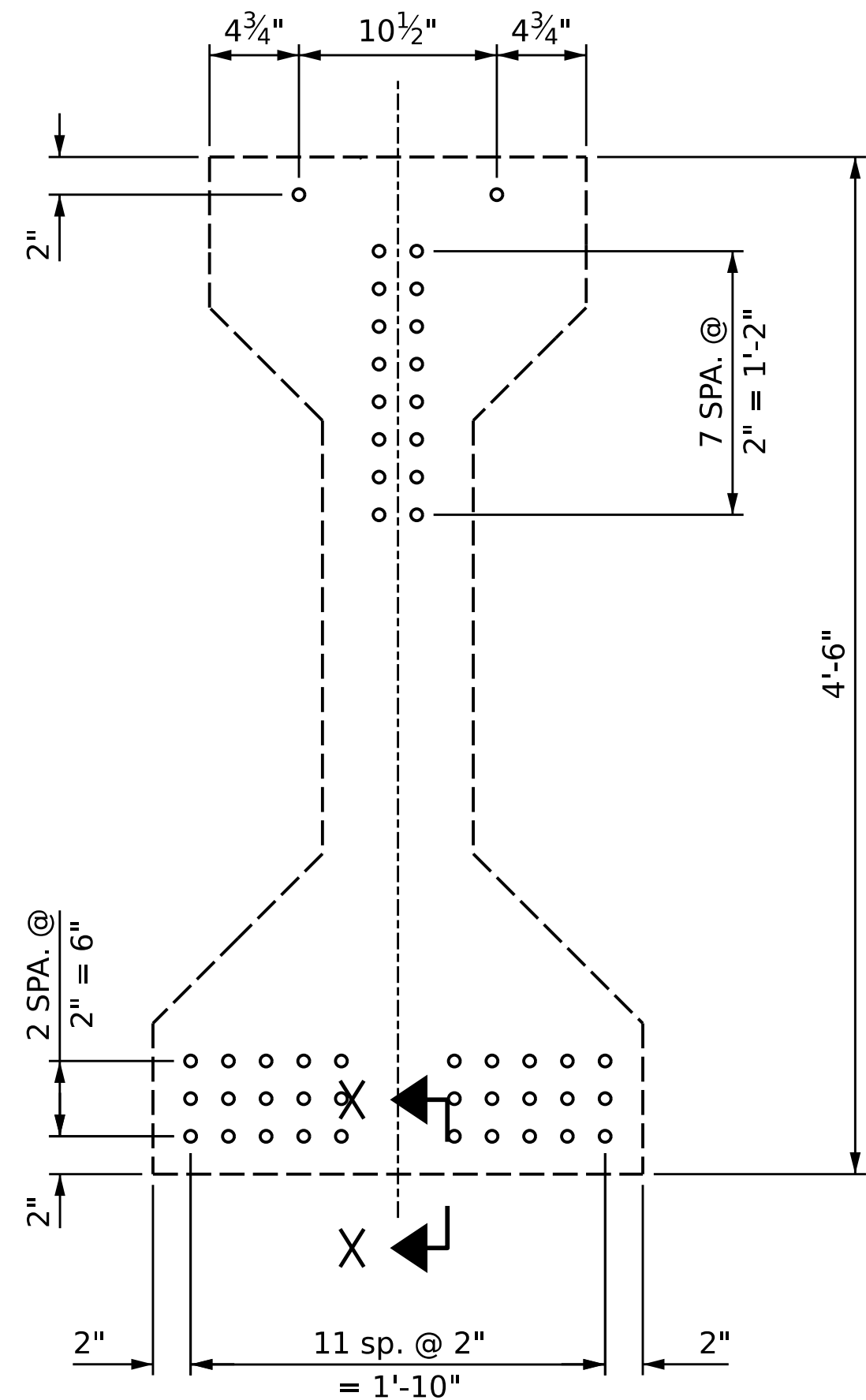
**TYPICAL STRAND SECTION X-X
SHOWING CUT STRAND RECESS LIMITS**



**TYPICAL STRAND SECTION X-X
AFTER EPOXY PROTECTIVE COATING**



**STANDARD PATTERN
AT BEAM END (TYPE VI)**



**STANDARD PATTERN
AT BEAM END (TYPE IV)**

NOTES

CLEAN AND COAT THE BEAM ENDS IN ACCORDANCE WITH PROJECT SPECIAL PROVISIONS.

PREPARE BEAM ENDS TO RECEIVE COATING TO A MINIMUM CONCRETE SURFACE PROFILE (CSP) OF CSP 3 PER ICRI GUIDELINES 310.2 CLEAN AND ROUGHEN SURFACES TO MAKE ABSORPTIVE BY MECHANICAL MEANS OR ABRASIVE BLASTING.

UPON COMPLETION OF MECHANICAL/BLASTING SURFACE PREP, WASH THOROUGHLY WITH CLEAN POTABLE WATER AND ALLOW TO DRY. TEST MOISTURE PER PSP PRIOR TO EPOXY APPLICATION.

APPLY TWO LAYERS OF TYPE 4A EPOXY PER SECTION 1081.

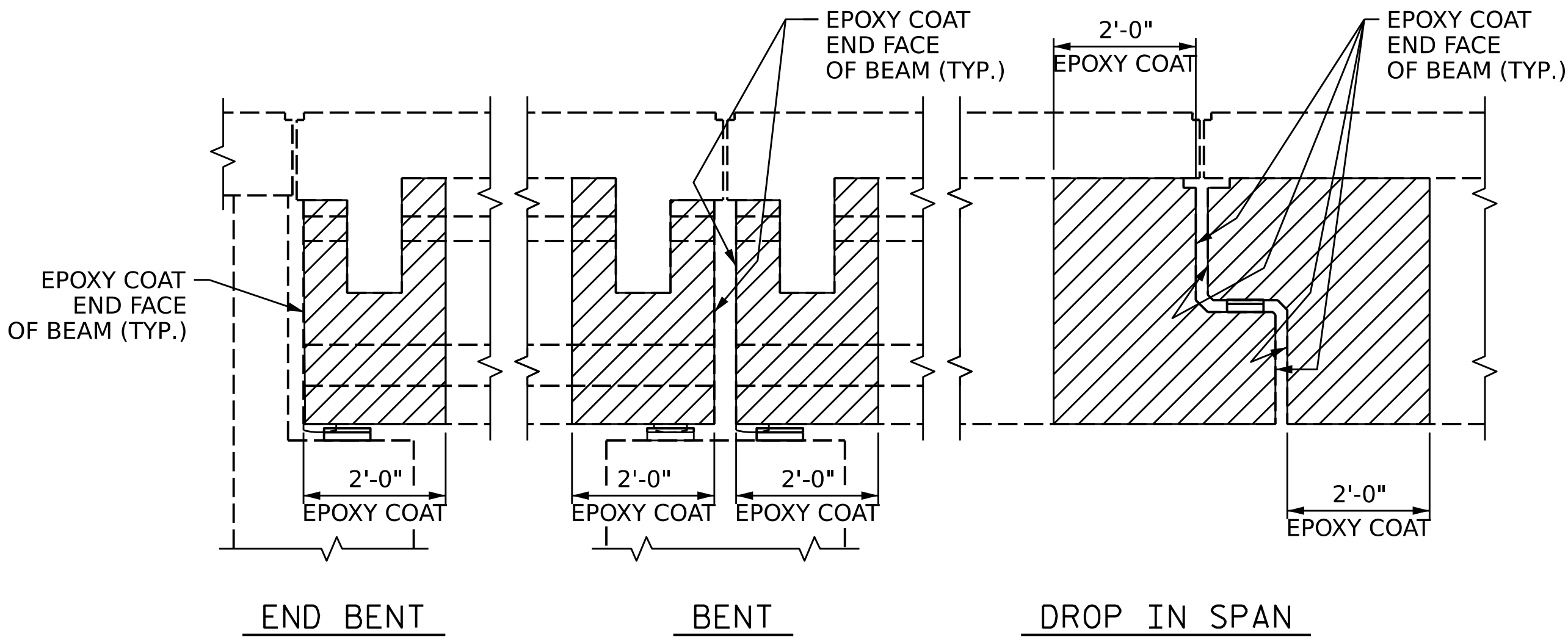
ALL BLAST MEDIA AND DEBRIS SHALL BE CONTAINED, REMOVED FROM THE SITE AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

FOR BEAM END EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

**GIRDER END EPOXY
PROTECTIVE COATING
QUANTITIES**

	PER BENT SF	TOTAL SF
END BENTS 1 & 2 (4 GIRDER ENDS PER BENT)	22	44
BENTS 1-3, 6-12, 15-30 (8 GIRDER ENDS PER BENT)	44	1,144
BENTS 4 AND 13 (8 GIRDER ENDS PER BENT)	52	104
BENTS 5 & 14 (8 GIRDER ENDS PER BENT)	52	104

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150014



LIMITS OF EPOXY COATING

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REVISIONS						SHEET NO. S1-54 TOTAL SHEETS 112
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 04/19/2021.

BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.

SCOPE OF WORK

PREPARE TOP OF BRIDGE DECK SURFACE AND ROADWAY FACE OF RAILS BY SHOT BLASTING METHODS.

CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II.

APPLY EPOXY OVERLAY SYSTEM II TO TOP OF BRIDGE DECK.

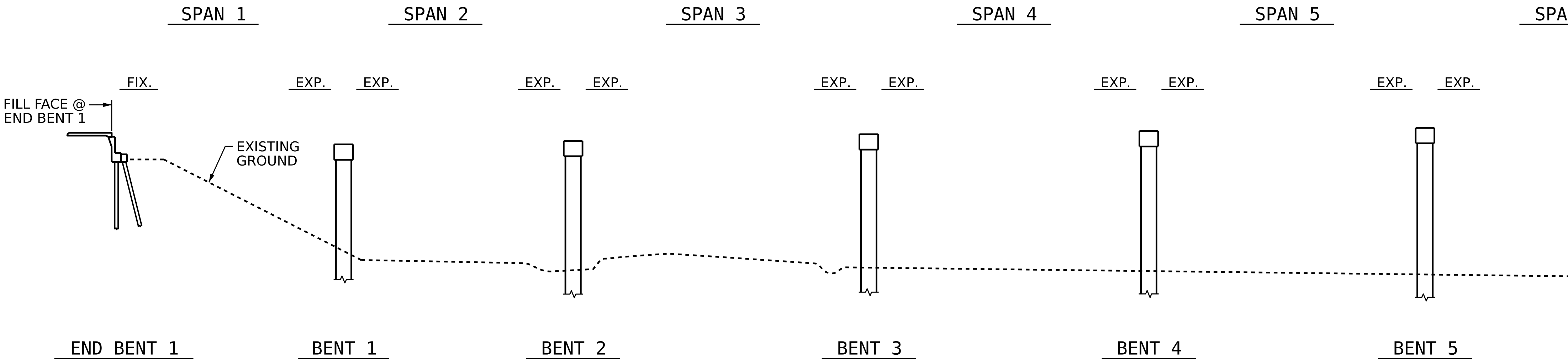
INSTALL FOAM JOINT SEALS AT INTERIOR BENTS.

REMOVE UNSOUND CONCRETE AND PROPERLY PREPARE EXISTING PRESTRESSED GIRDERS FOR CONCRETE REPAIRS.

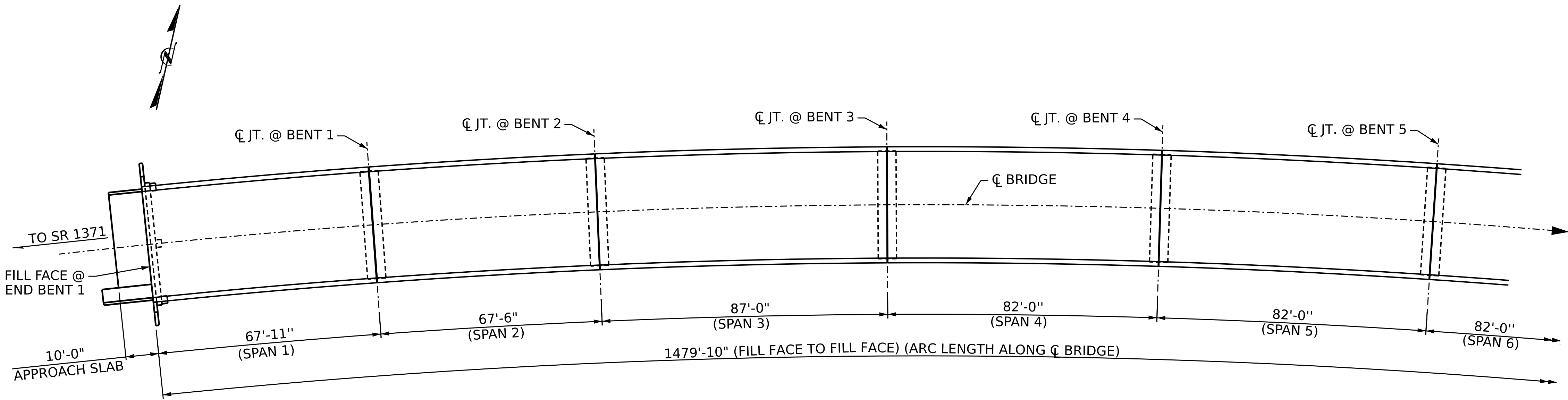
CLEAN AND EPOXY COAT EXISTING PRESTRESSED CONCRETE GIRDER ENDS.

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

REMOVE DEBRIS FROM TOP OF EXISTING END BENT AND INTERIOR BENT CAPS AND APPLY EPOXY COATING.



SECTION ALONG ϕ BRIDGE



PLAN

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 1 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 70
OVER SALTERS CREEK
BETWEEN SR 1371 AND NC 12



4/23/2026

DOCUMENT NOT CONSIDERED
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SIGNATURES COMPLETED

REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
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SHEET NO.
S2-01
TOTAL SHEETS
112

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

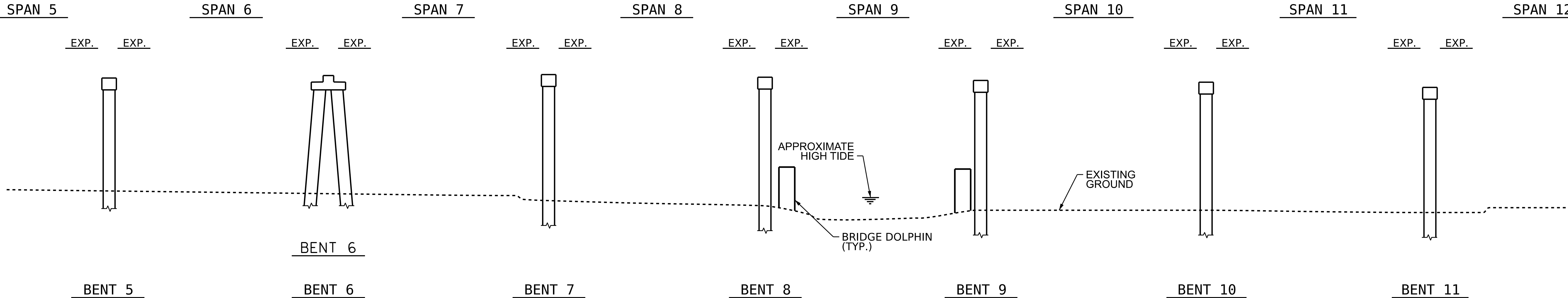
I hereby certify that this structure was rehabilitated according to these plans or as noted therein.

Resident Engineer

Date



WSP USA Inc.
1001 WADE AVENUE
SUITE 400
RALEIGH, NC 27601
TEL: 919.856.4040
LICENSE NO. F-0165

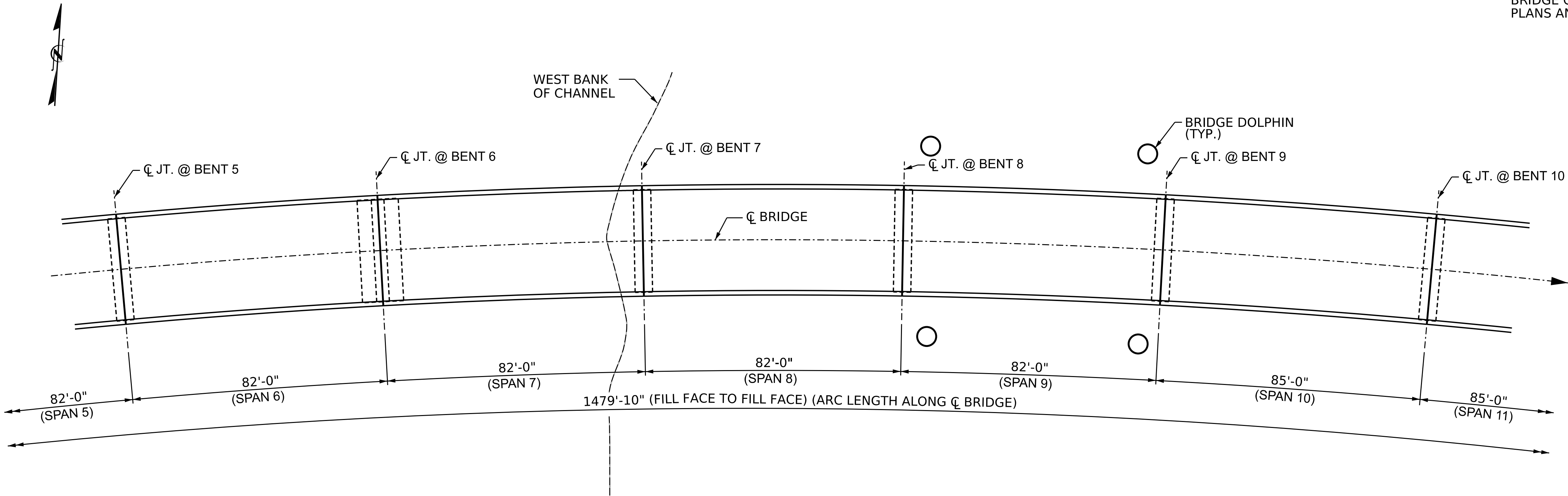


SECTION ALONG CL BRIDGE

NOTES

GENERAL DRAWING INFORMATION IS TAKEN FROM THE ORIGINAL PLANS AND THE ROUTINE INSPECTION REPORT DATED 04/19/2021.

BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.



PLAN

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 2 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 70
OVER SALTERS CREEK
BETWEEN SR 1371 AND NC 12



4/23/2026

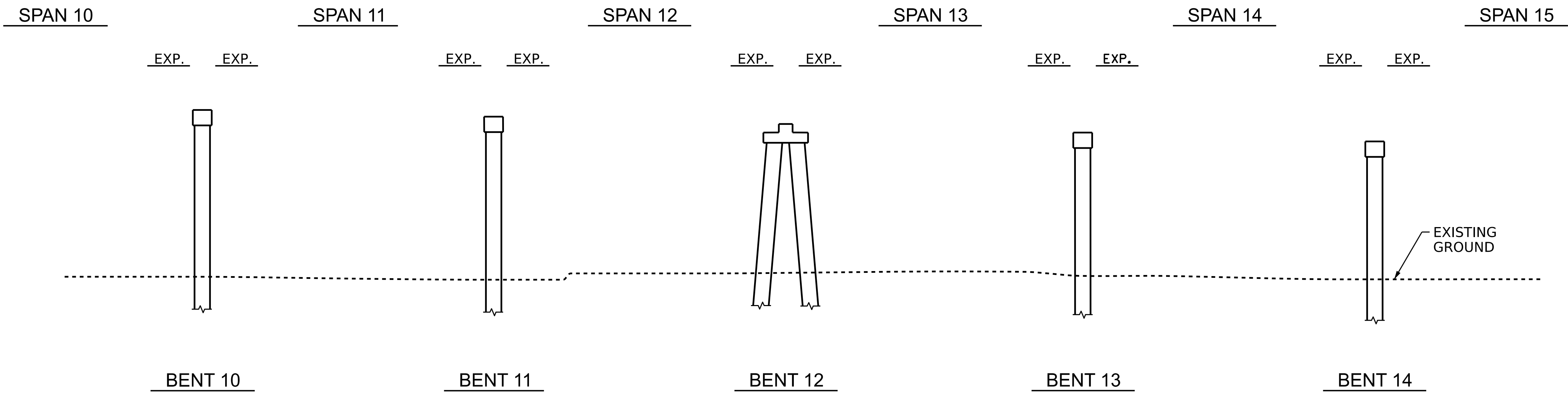


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NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S2-02
2			4			
TOTAL SHEETS						112

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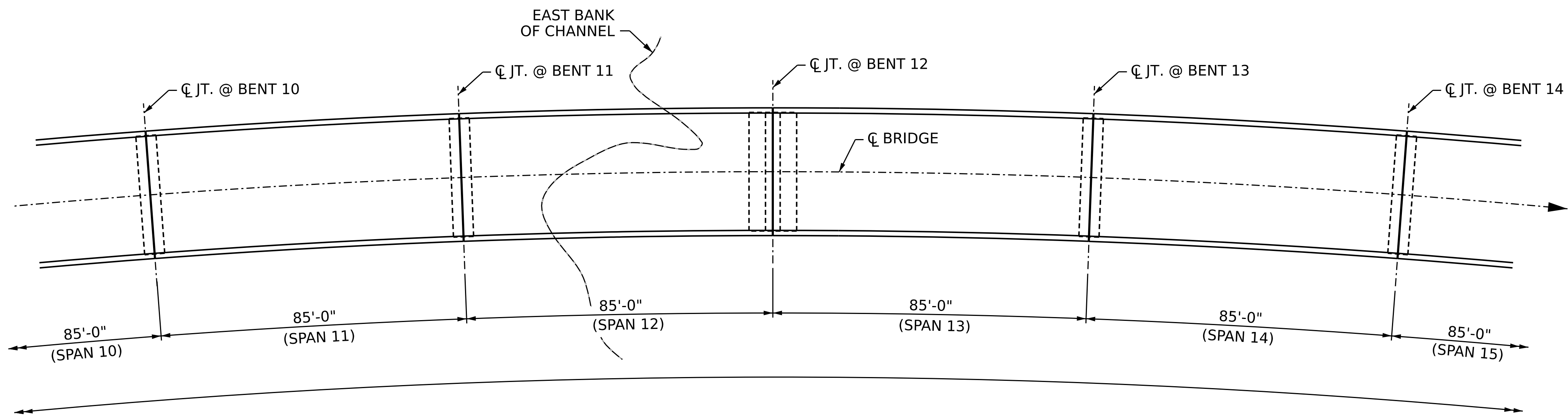


SECTION ALONG ϕ BRIDGE

NOTES

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BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.



PLAN

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 3 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 70
OVER SALTERS CREEK
BETWEEN SR 1371 AND NC 12



4/23/2026

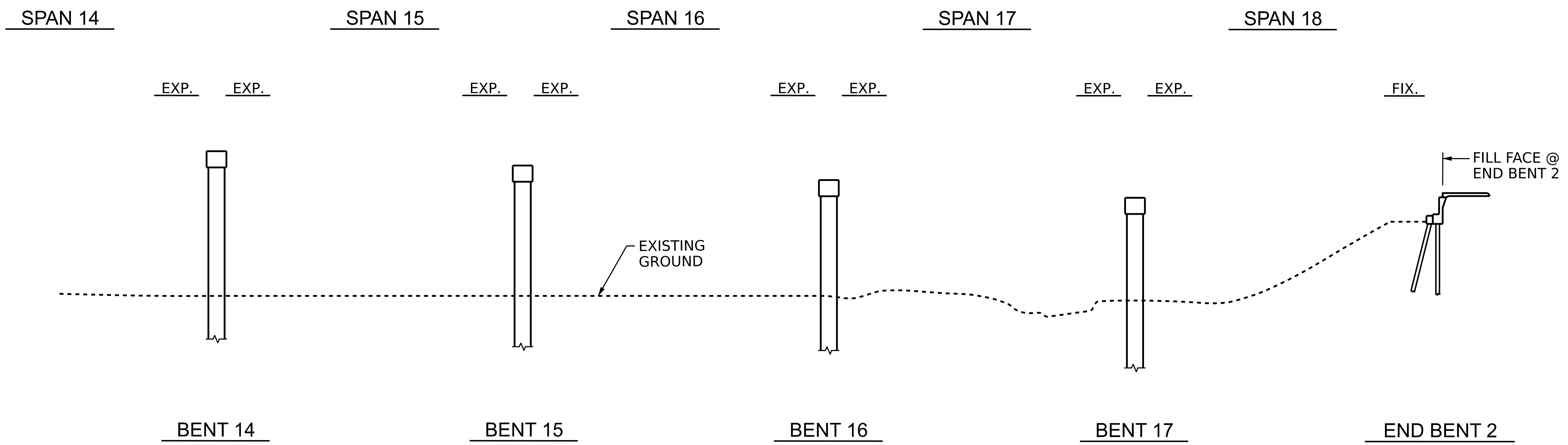
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TOTAL SHEETS						112

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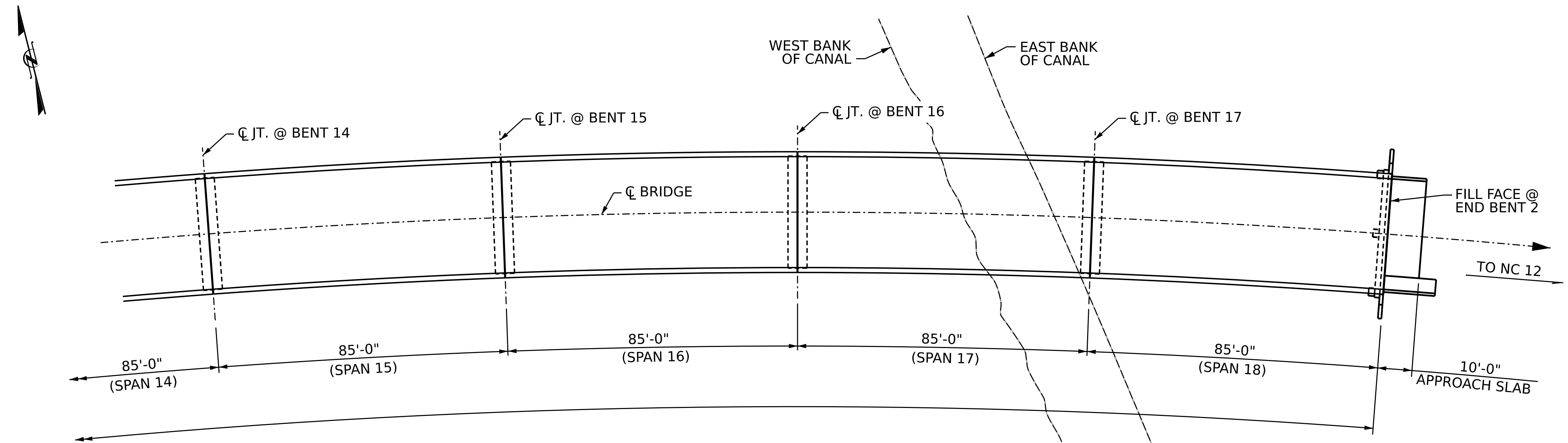


SECTION ALONG ϕ BRIDGE

NOTES

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BRIDGE ORIENTATION CONFORMS TO THE ORIGINAL BRIDGE PLANS AND ROUTINE INSPECTION REPORT.



PLAN

FOR CLARITY, PILES ARE NOT SHOWN IN PLAN VIEW

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

FOR BRIDGE ON US 70
OVER SALTERS CREEK
BETWEEN SR 1371 AND NC 12



4/23/2026

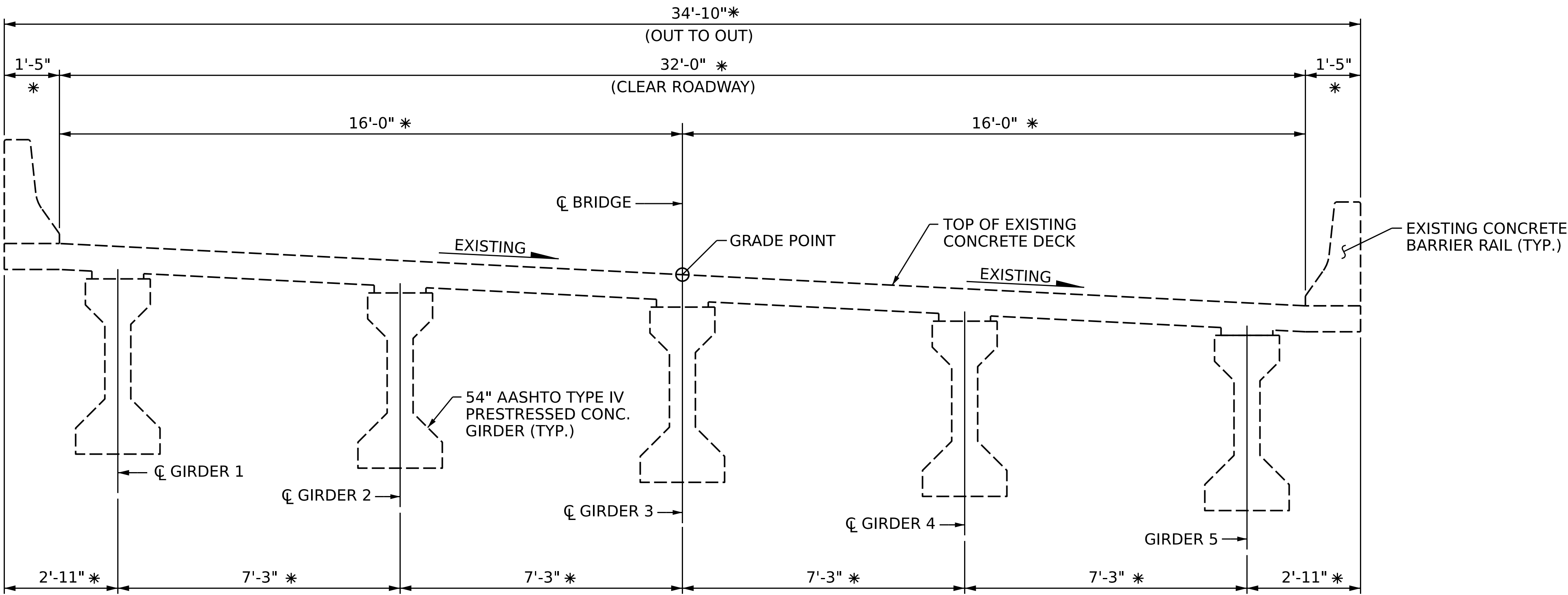
DOCUMENT NOT CONSIDERED
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2			4			

TOTAL SHEETS
112

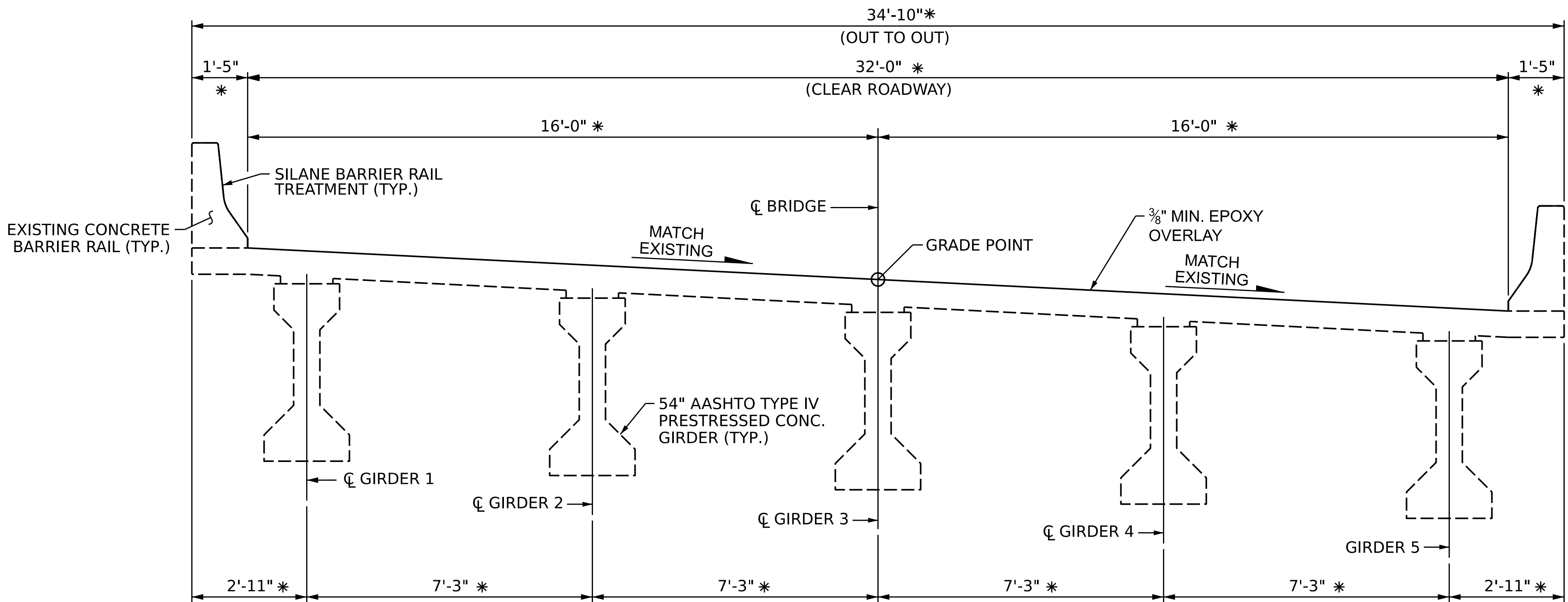
DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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TYPICAL SECTION
(EXISTING)

* DIMENSIONS ARE RADIAL



TYPICAL SECTION
(PROPOSED)

NOTES

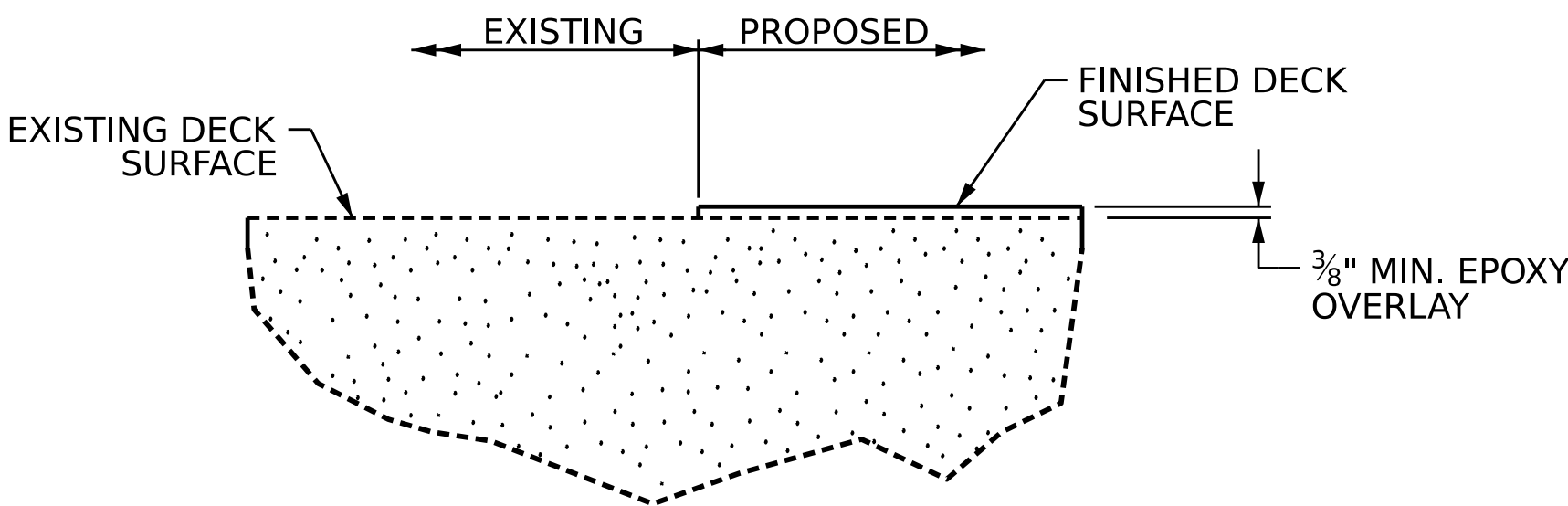
SEE CONTRACT DOCUMENTS FOR LANE WIDTHS, SEQUENCING, AND OTHER TRAFFIC CONTROL MEASURES FOR STAGING OF OVERLAY SURFACE PREPARATION AND DECK SEAL PLACEMENT.

FOR EPOXY OVERLAY SYSTEM II, SEE SPECIAL PROVISIONS.

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

FOR SURFACE PREPARATION FOR CONCRETE BARRIER RAIL, SEE SPECIAL PROVISIONS.

FOR SILANE BARRIER RAIL TREATMENT, SEE SPECIAL PROVISIONS.



DETAIL FOR EPOXY OVERLAY

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045



4/23/2026

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

TYPICAL SECTION AND EPOXY OVERLAY DETAILS

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

4/22/2026
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REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO.
S2-05
TOTAL SHEETS
112

NOTES

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FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE "JOINT DETAILS" SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II SHALL BE COMPLETED PRIOR TO SHOTBLASTING OF ENTIRE DECK SURFACE FOR PREPARATION FOR EPOXY OVERLAY SYSTEM II.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

APPROACH SLAB QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	36 SQ.YD.	
CONCRETE DECK REPAIR FOR EPOXY OVERLAY		
EPOXY OVERLAY SYSTEM II	320 SQ.FT.	

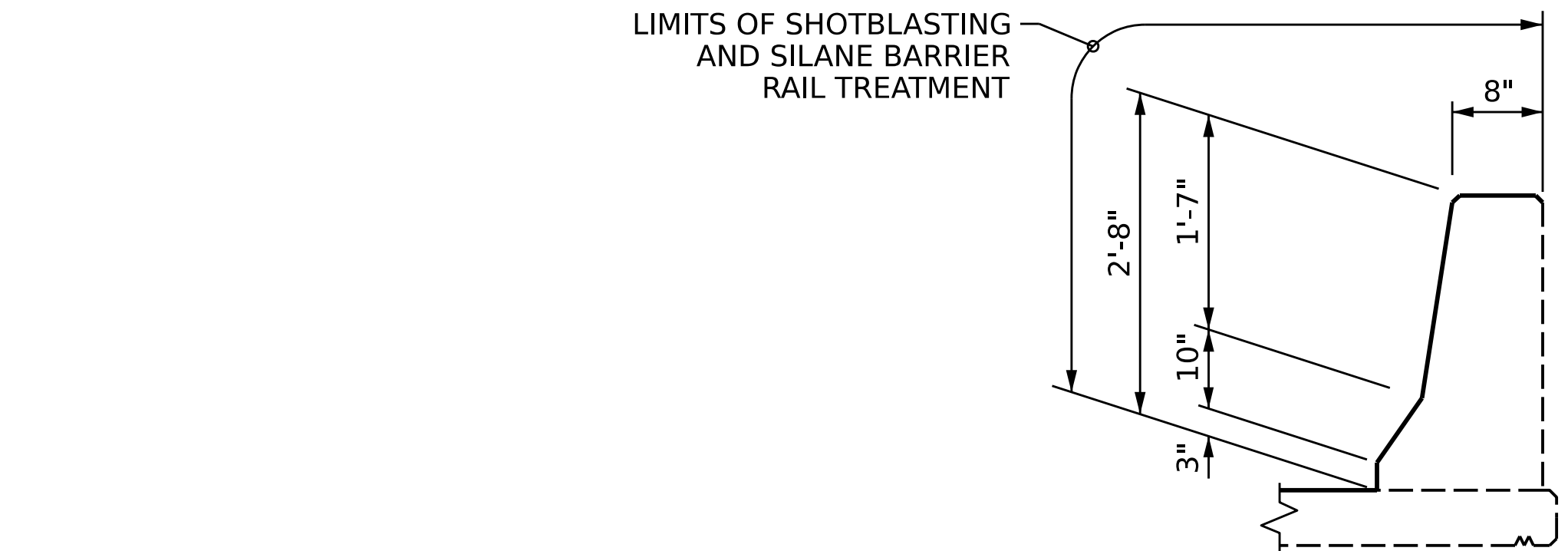
BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	482 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	975 SQ.FT.	
CONCRETE DECK REPAIR FOR EPOXY OVERLAY		
EPOXY OVERLAY SYSTEM II	4335 SQ.FT.	
SILANE BARRIER RAIL TREATMENT	975 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	105 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	24 CU.FT.	
BRIDGE JOINT DEMOLITION	96 SQ.FT.	

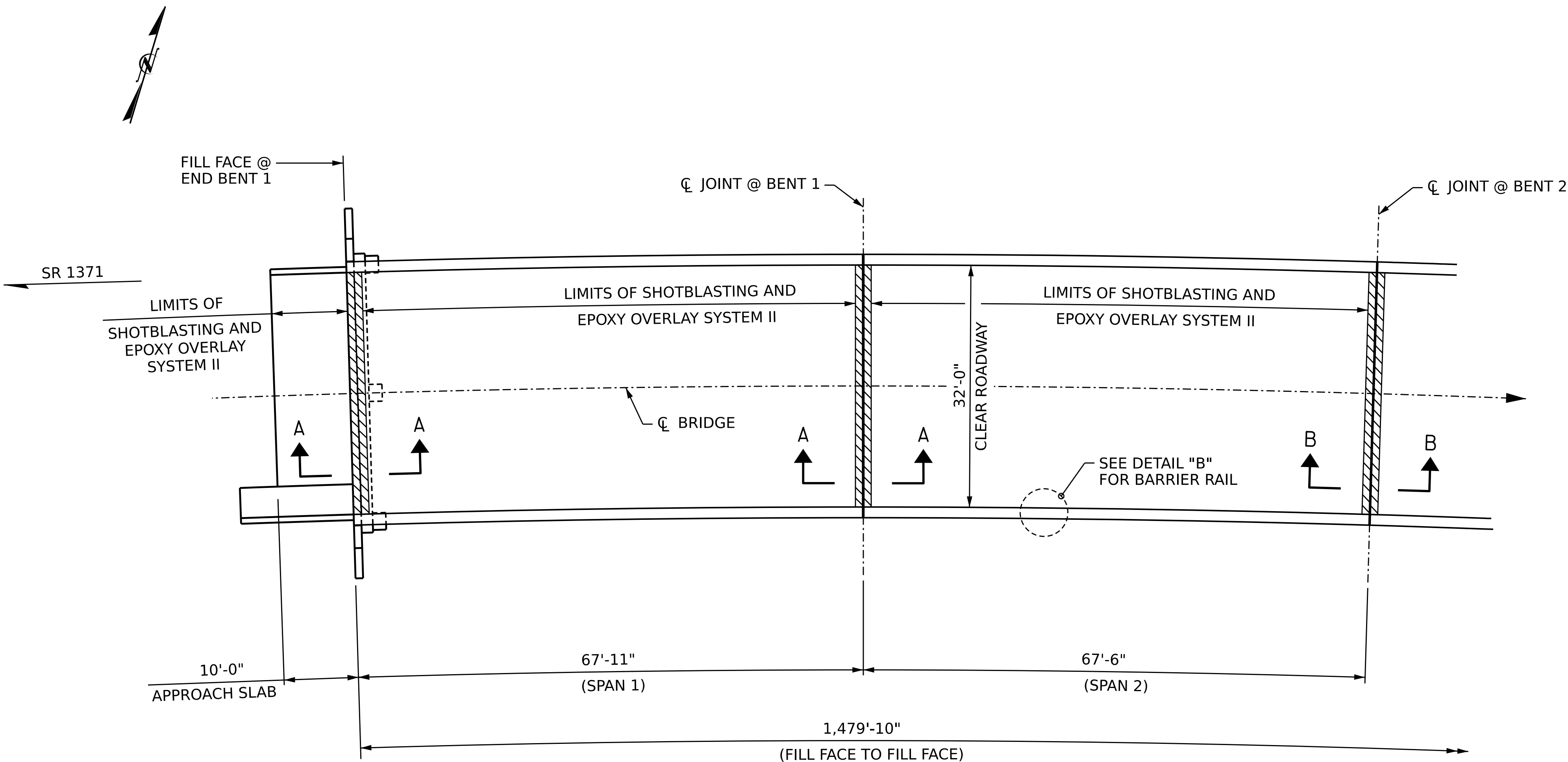
BRIDGE JOINT DEMOLITION AND ELASTOMERIC CONCRETE FOR PRESERVATION

CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II

SHOTBLAST BRIDGE DECK AND EPOXY OVERLAY SYSTEM II



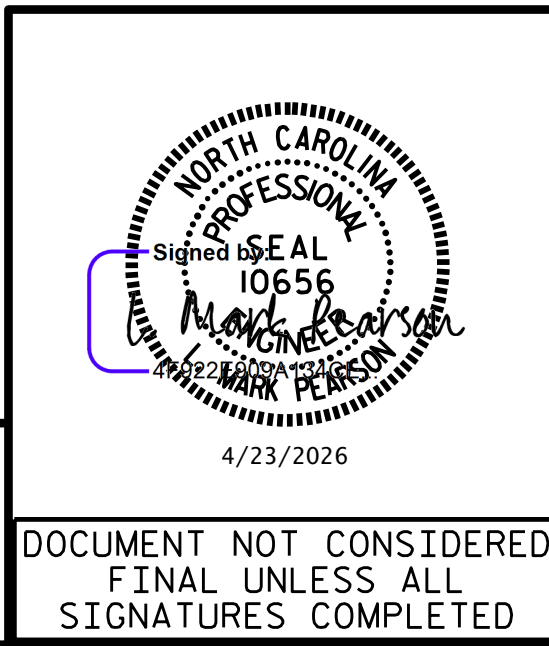
DETAIL "B"



PLAN - SPANS 1 AND 2

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 1 OF 6



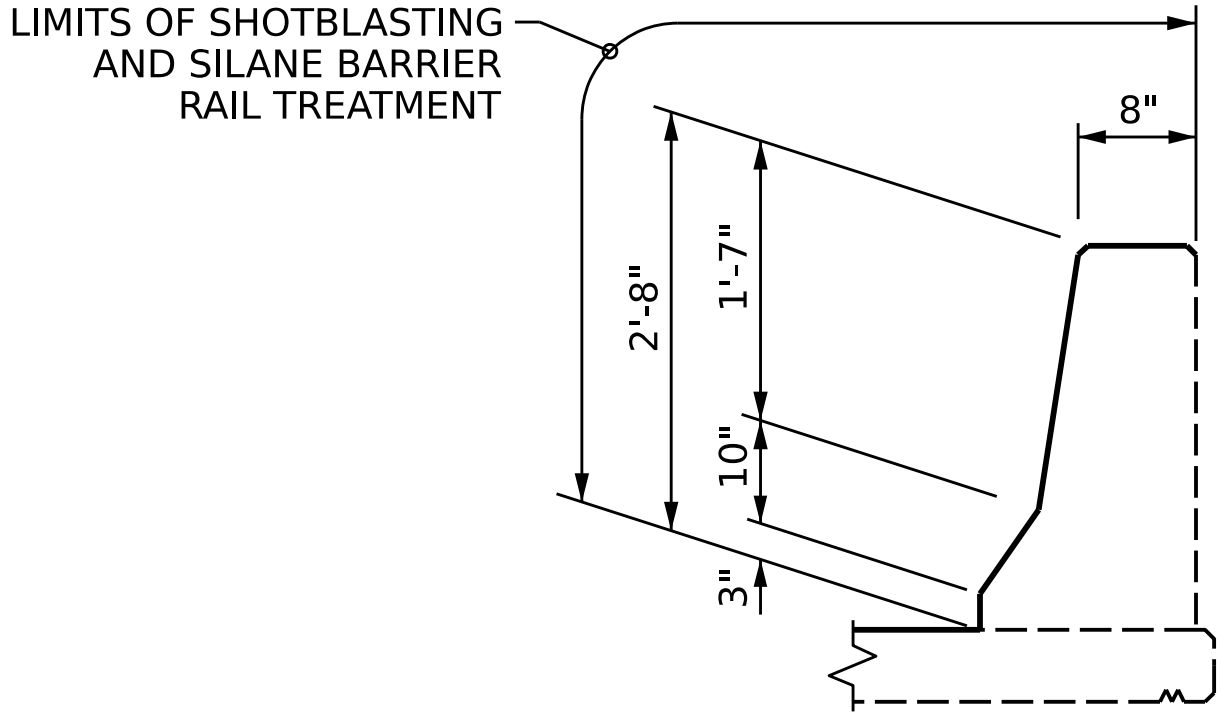
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE DECK SURFACE REPAIRS PARTIAL SPANS 1, 2 AND APPROACH SLAB						SHEET NO. S2-06	
REVISIONS						TOTAL SHEETS 112	
NO.	BY:	DATE:	NO.	BY:	DATE:		
1			3				
2			4				

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DETAIL "B"

NOTES

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE "JOINT DETAILS" SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

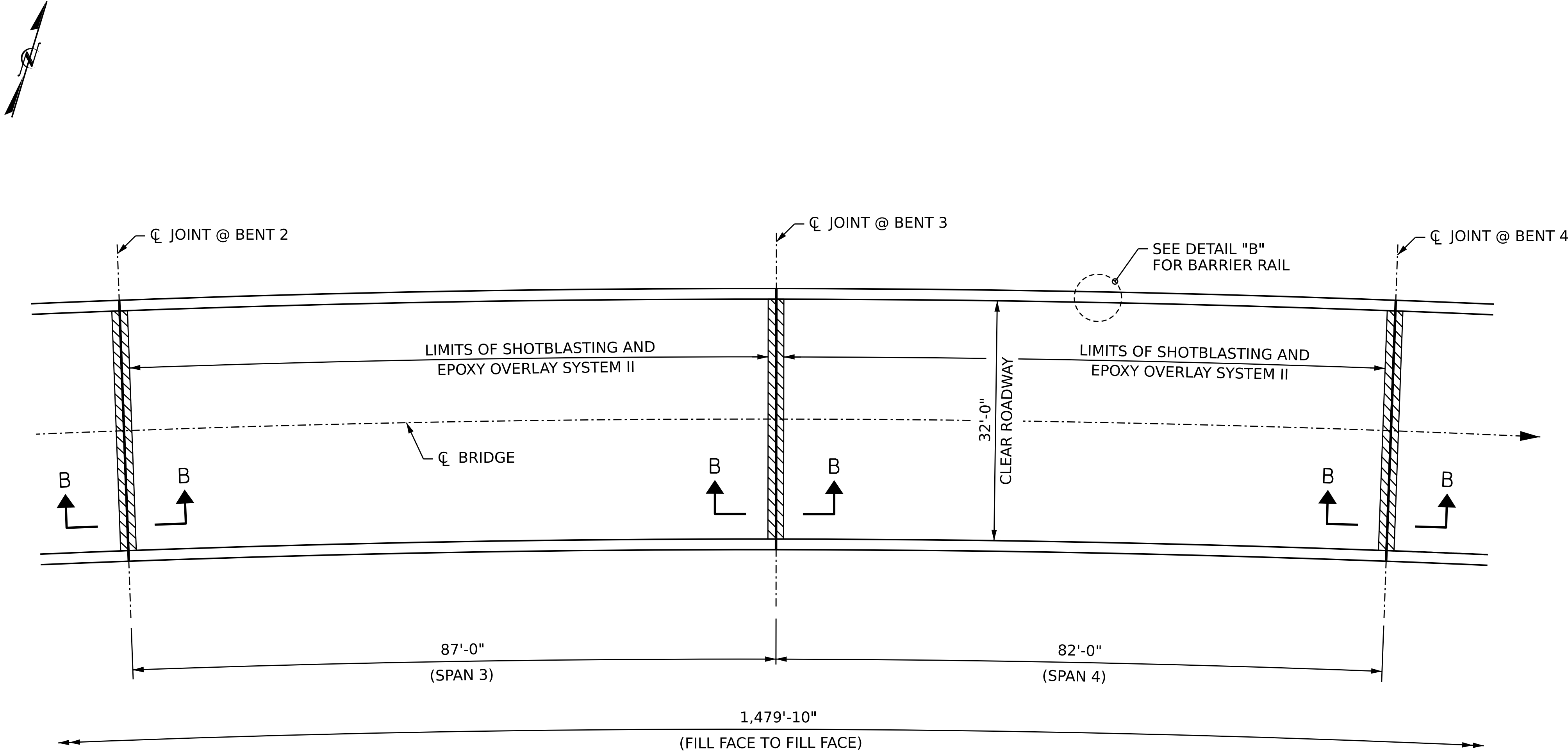
CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II SHALL BE COMPLETED PRIOR TO SHOTBLASTING OF ENTIRE DECK SURFACE FOR PREPARATION FOR EPOXY OVERLAY SYSTEM II.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	601 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	1217 SQ.FT.	
CONCRETE DECK REPAIR FOR EPOXY OVERLAY		
EPOXY OVERLAY SYSTEM II	5410 SQ.FT.	
SILANE BARRIER RAIL TREATMENT	1217 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	70 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	16 CU.FT.	
BRIDGE JOINT DEMOLITION	64 SQ.FT.	

- BRIDGE JOINT DEMOLITION AND ELASTOMERIC CONCRETE FOR PRESERVATION
- CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II
- SHOTBLAST BRIDGE DECK AND EPOXY OVERLAY SYSTEM II



PLAN - SPANS 3 AND 4

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 2 OF 6



STATE OF NORTH CAROLINA						SHEET NO. S2-07 TOTAL SHEETS 112
DEPARTMENT OF TRANSPORTATION						
RALEIGH						
SUPERSTRUCTURE						
DECK SURFACE REPAIRS						
PARTIAL SPANS 3 AND 4						
REVISIONS						
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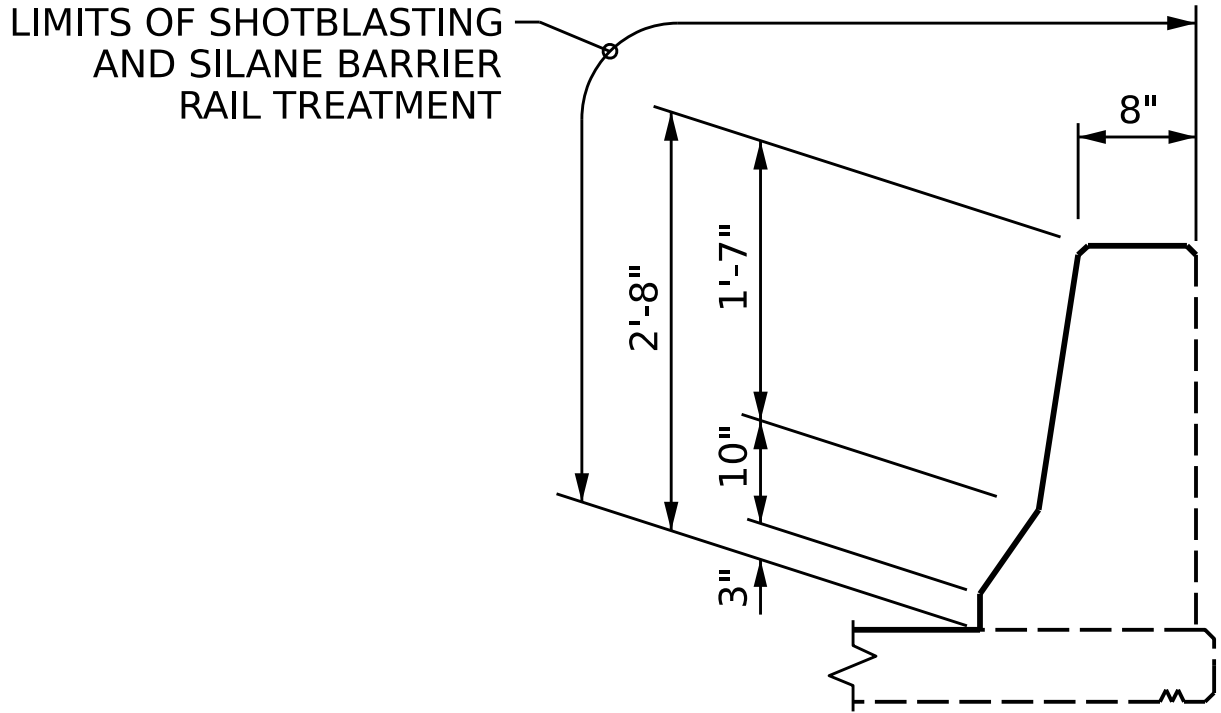
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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SIGNATURES COMPLETED

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DETAIL "B"

NOTES

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE "JOINT DETAILS" SHEET.

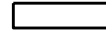
FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

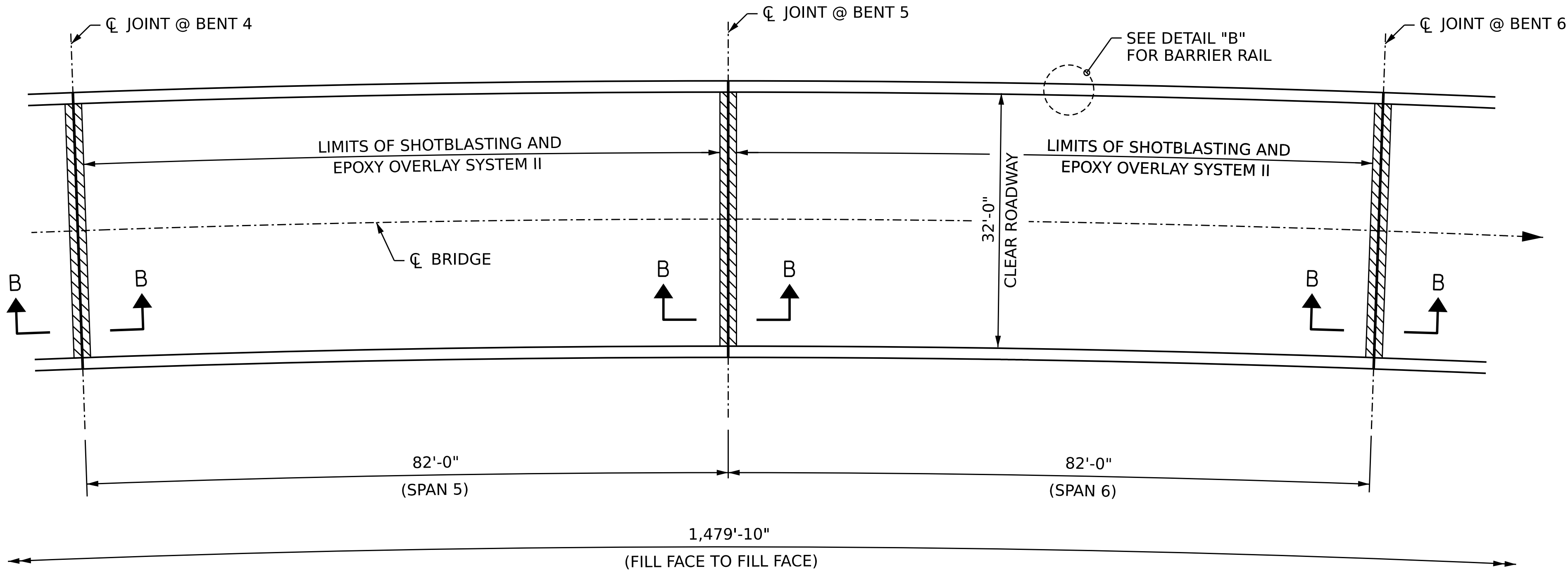
CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II SHALL BE COMPLETED PRIOR TO SHOTBLASTING OF ENTIRE DECK SURFACE FOR PREPARATION FOR EPOXY OVERLAY SYSTEM II.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	585 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	1181 SQ.FT.	
CONCRETE DECK REPAIR FOR EPOXY OVERLAY		
EPOXY OVERLAY SYSTEM II	5248 SQ.FT.	
SILANE BARRIER RAIL TREATMENT	1181 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	70 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	16 CU.FT.	
BRIDGE JOINT DEMOLITION	64 SQ.FT.	

-  BRIDGE JOINT DEMOLITION AND ELASTOMERIC CONCRETE FOR PRESERVATION
-  CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II
-  SHOTBLAST BRIDGE DECK AND EPOXY OVERLAY SYSTEM II



PLAN - SPANS 5 AND 6

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 3 OF 6



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE DECK SURFACE REPAIRS PARTIAL SPANS 5 AND 6						SHEET NO. S2-08	
REVISIONS						TOTAL SHEETS 112	
NO.	BY:	DATE:	NO.	BY:	DATE:		
1			3				
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

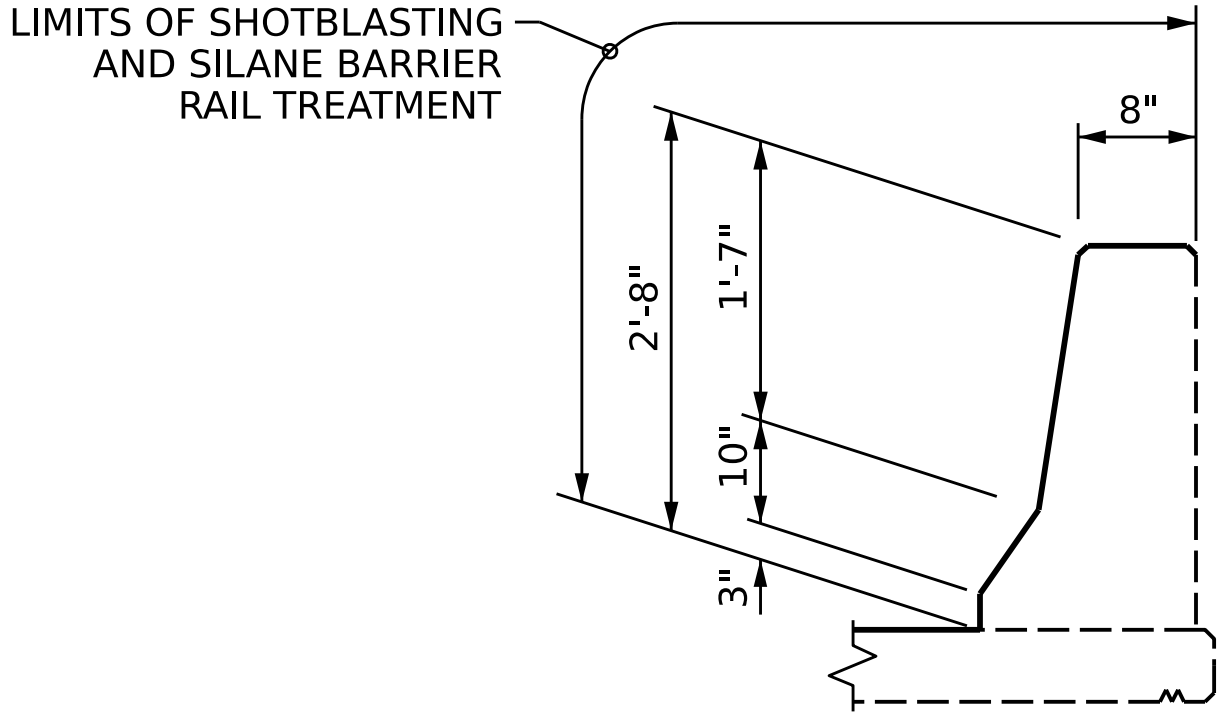


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DETAIL "B"

NOTES

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FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE "JOINT DETAILS" SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

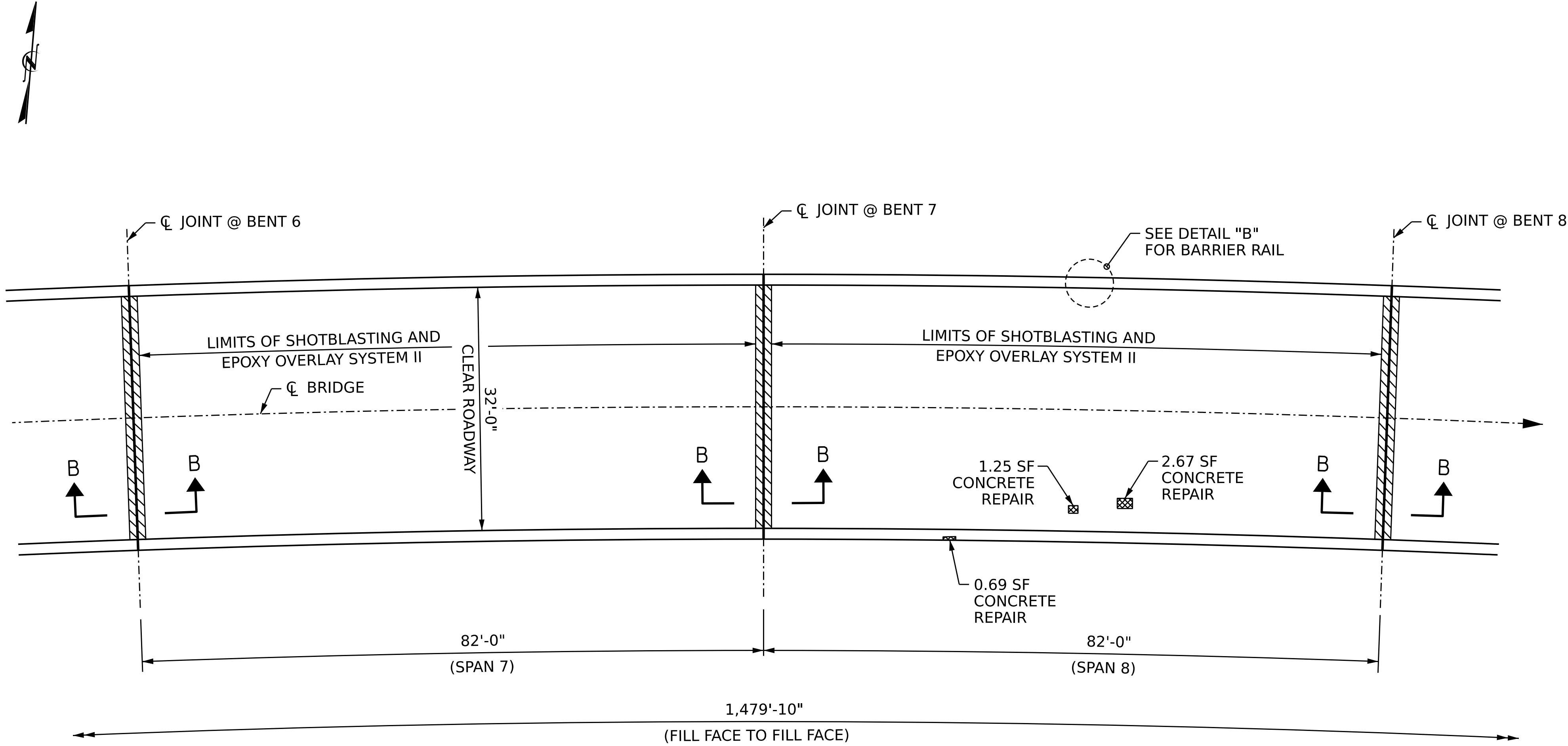
CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II SHALL BE COMPLETED PRIOR TO SHOTBLASTING OF ENTIRE DECK SURFACE FOR PREPARATION FOR EPOXY OVERLAY SYSTEM II.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	585 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	1181 SQ.FT.	
CONCRETE DECK REPAIR FOR EPOXY OVERLAY		
EPOXY OVERLAY SYSTEM II	5248 SQ.FT.	
SILANE BARRIER RAIL TREATMENT	1181 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	70 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	16 CU.FT.	
BRIDGE JOINT DEMOLITION	64 SQ.FT.	

- BRIDGE JOINT DEMOLITION AND ELASTOMERIC CONCRETE FOR PRESERVATION
- CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II
- SHOTBLAST BRIDGE DECK AND EPOXY OVERLAY SYSTEM II



PLAN - SPANS 7 AND 8

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 4 OF 6



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
DECK SURFACE REPAIRS
PARTIAL SPANS 7 AND 8

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-09	
1			3			TOTAL SHEETS	
2			4			112	

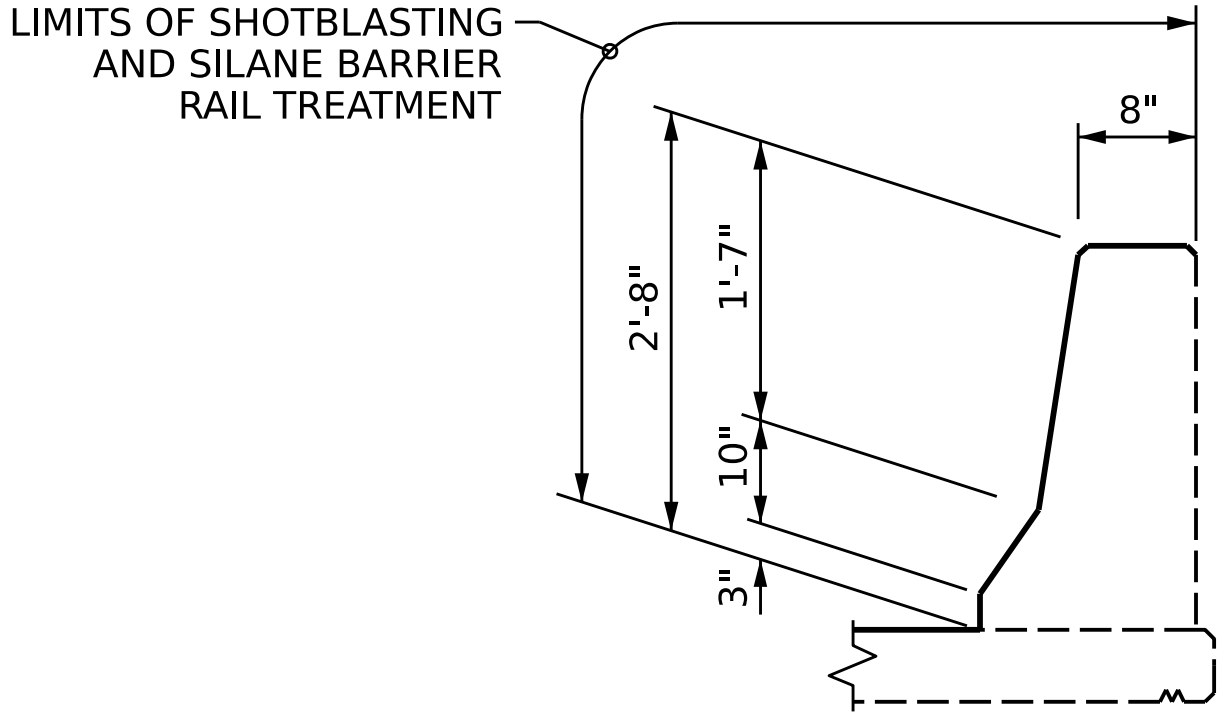
DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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DETAIL "B"

NOTES

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FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE "JOINT DETAILS" SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

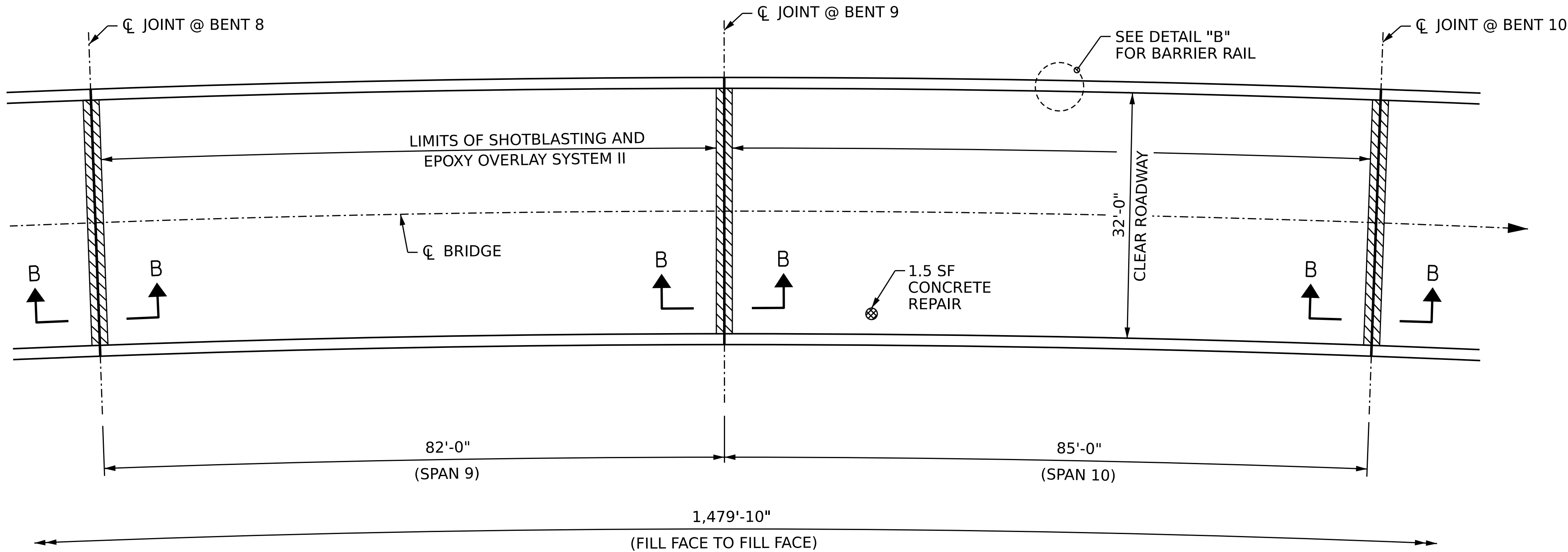
CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II SHALL BE COMPLETED PRIOR TO SHOTBLASTING OF ENTIRE DECK SURFACE FOR PREPARATION FOR EPOXY OVERLAY SYSTEM II.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	594 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	1205 SQ.FT.	
CONCRETE DECK REPAIR FOR EPOXY OVERLAY	2 SQ.FT.	
EPOXY OVERLAY SYSTEM II	5345 SQ.FT.	
SILANE BARRIER RAIL TREATMENT	1205 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	70 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	16 CU.FT.	
BRIDGE JOINT DEMOLITION	64 SQ.FT.	

- BRIDGE JOINT DEMOLITION AND ELASTOMERIC CONCRETE FOR PRESERVATION
- CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II
- SHOTBLAST BRIDGE DECK AND EPOXY OVERLAY SYSTEM II



PLAN - SPANS 9 AND 10

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 5 OF 6

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

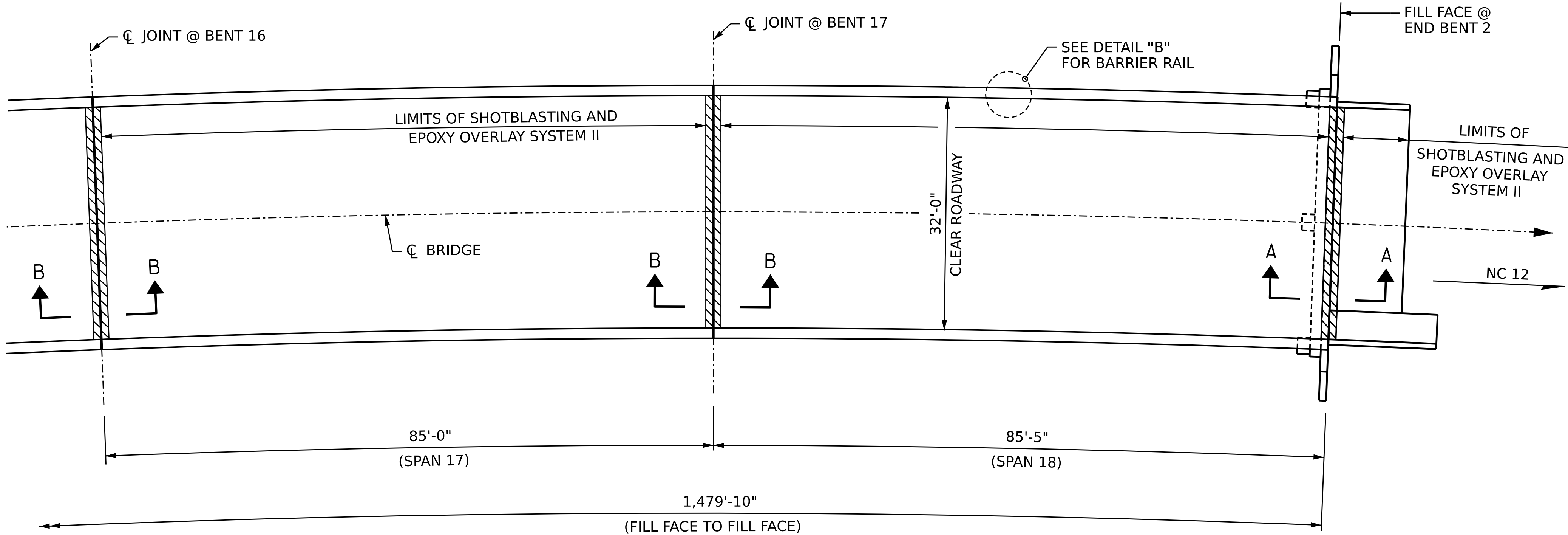
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WSP USA Inc.
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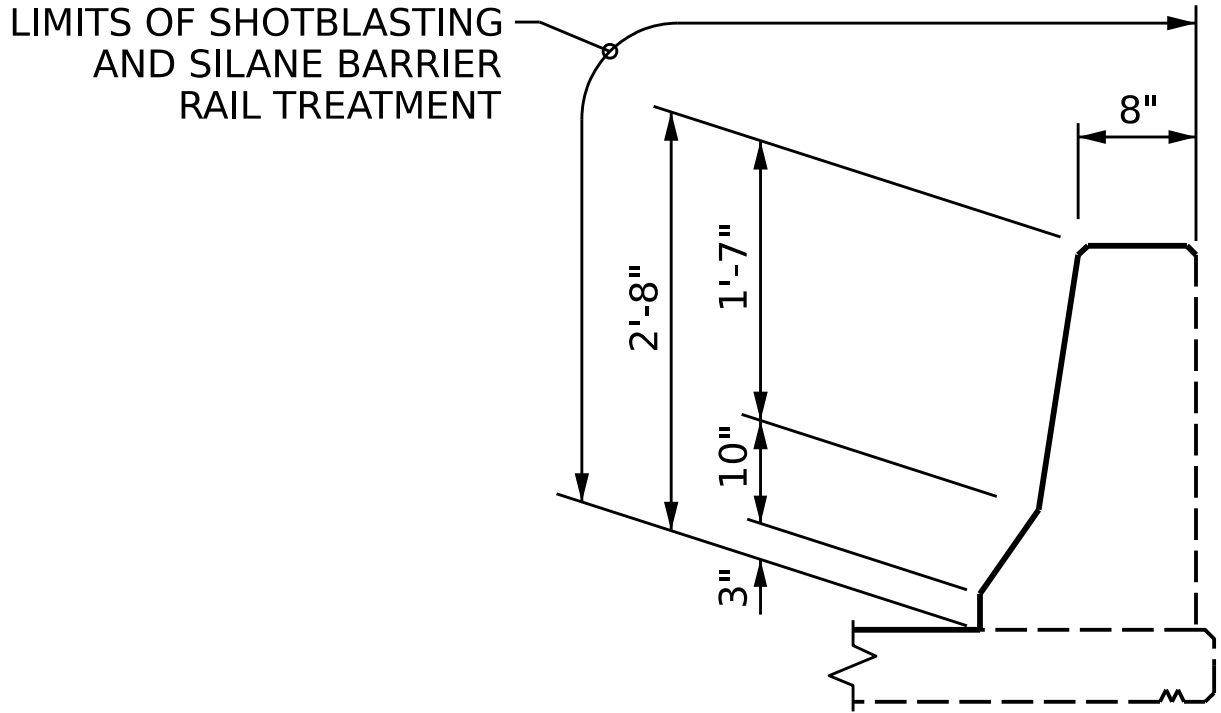
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
**PLAN OF SPANS REPAIRS
PARTIAL SPANS 9 AND 10**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-10
1			3			TOTAL SHEETS
2			4			112



PLAN - SPANS 11 THRU 18

SPANS 17 AND 18 SHOWN
SPANS 11 THRU 16 SIMILAR
TO SPAN 17



DETAIL "B"

NOTES

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

FOR BRIDGE JOINT DEMOLITION, SEE "JOINT DETAILS" SHEET.

FOR ELASTOMERIC CONCRETE FOR PRESERVATION, SEE "JOINT DETAILS" SHEET.

FOR SECTION A-A AND B-B, SEE "JOINT DETAILS" SHEET.

CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II SHALL BE COMPLETED PRIOR TO SHOTBLASTING OF ENTIRE DECK SURFACE FOR PREPARATION FOR EPOXY OVERLAY SYSTEM II.

ONLY INNER SURFACE AND TOP SURFACE OF BARRIER RAIL WILL BE TREATED WITH SILANE PENETRANT SEALER.

APPROACH SLAB QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING APPROACH SLAB	36 SQ.YD.	
CONCRETE DECK REPAIR FOR EPOXY OVERLAY		
EPOXY OVERLAY SYSTEM II	320 SQ.FT.	

BRIDGE QUANTITIES

	ESTIMATE	ACTUAL
SHOTBLASTING BRIDGE DECK	2420 SQ.YD.	
SURFACE PREPARATION FOR CONCRETE BARRIER RAIL	4900 SQ.FT.	
CONCRETE DECK REPAIR FOR EPOXY OVERLAY		
EPOXY OVERLAY SYSTEM II	21775 SQ.FT.	
SILANE BARRIER RAIL TREATMENT	4900 SQ.FT.	
FOAM JOINT SEALS FOR PRESERVATION	280 LIN.FT.	
ELASTOMERIC CONCRETE FOR PRESERVATION	64 CU.FT.	
BRIDGE JOINT DEMOLITION	256 SQ.FT.	

BRIDGE JOINT DEMOLITION AND ELASTOMERIC CONCRETE FOR PRESERVATION

CONCRETE DECK REPAIR FOR EPOXY OVERLAY SYSTEM II

SHOTBLAST BRIDGE DECK AND EPOXY OVERLAY SYSTEM II

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 6 OF 6



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
DECK SURFACE REPAIRS
PARTIAL SPANS 11 THRU 18

DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S2-11
2			4			TOTAL SHEETS 112

NOTES

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FOR PRESTRESSED GIRDER AND BENT DIAPHRAGM REPAIR DETAILS, SEE ``TYPICAL GIRDER AND DIAPHRAGM REPAIR DETAILS'' SHEET SD-4.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

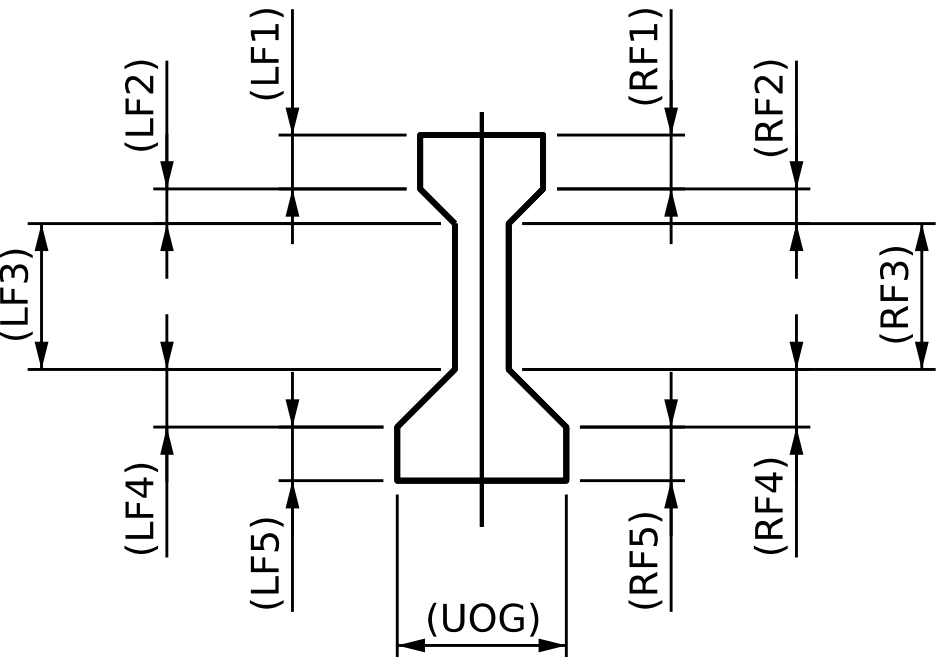
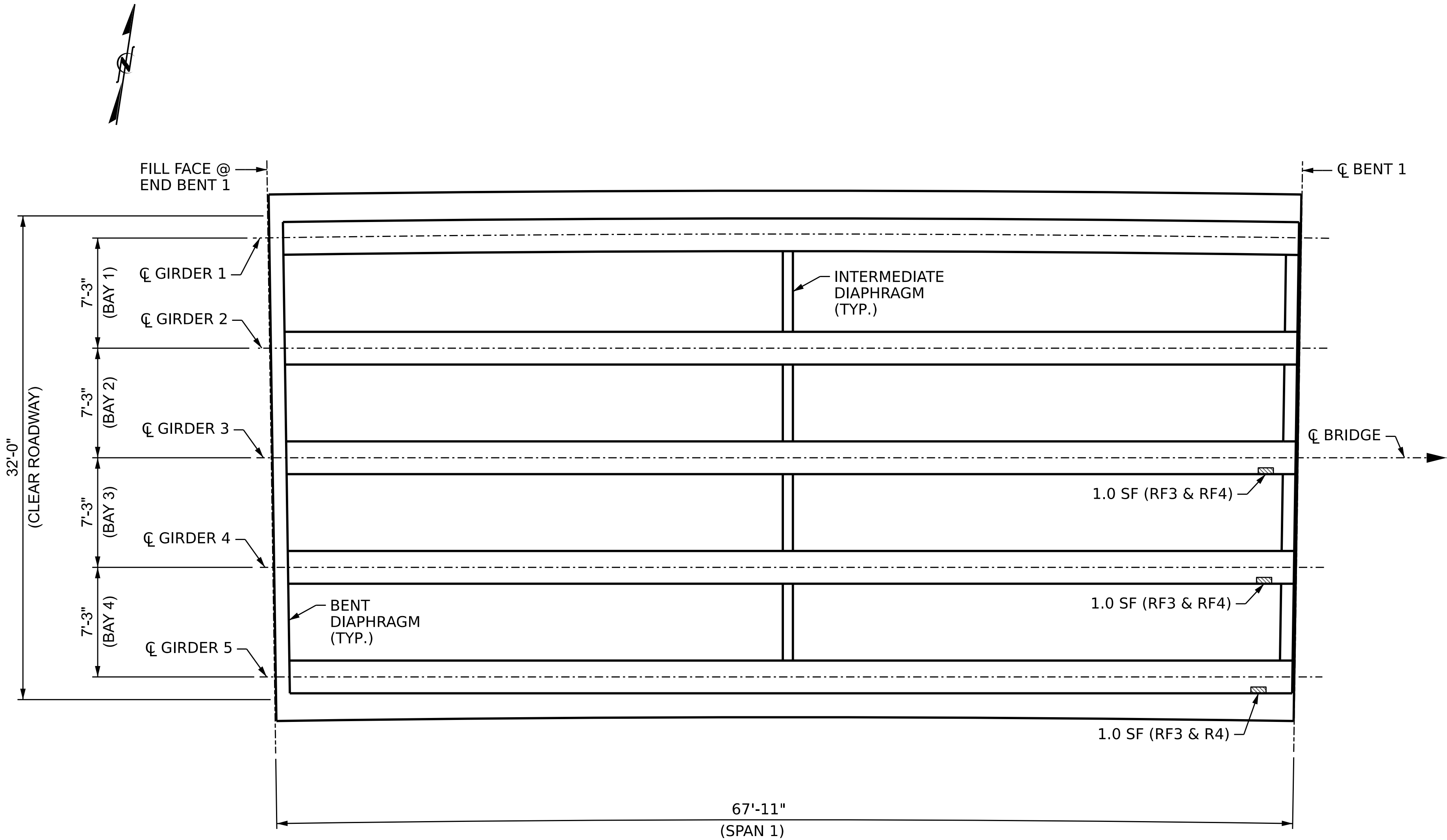
FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE				
UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK AND OVERHANG				
BENT DIAPHRAGMS				
GIRDER REPAIRS				
REPAIRS TO PRESTRESSED CONCRETE GIRDERS	3.0	1.0		

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

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE 3.5" DEEP.

LEGEND			
SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
(UOG)	UNDERSIDE OF GIRDER		



PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 1 OF 18

PLAN OF SPANS
(UNDERSIDE, VERTICAL PROJECTION)

DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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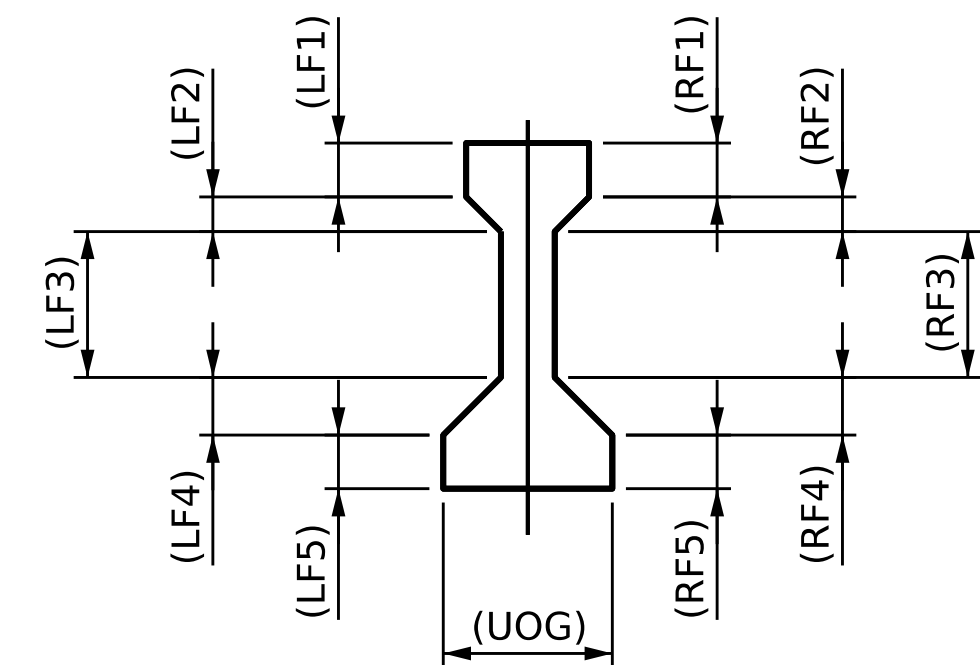
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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE GIRDER AND DIAPHRAGM REPAIRS SPAN 1						SHEET NO.	
REVISIONS						S2-12	
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS	
1			3			112	
2			4				

UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK AND OVERHANG				
BENT DIAPHRAGMS				
GIRDER REPAIRS				
REPAIRS TO PRESTRESSED CONCRETE GIRDERS	6.5	2.0		

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE 3.5" DEEP.

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
(UOG)	UNDERSIDE OF GIRDER		

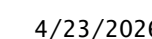


DAMAGE OF GIRDER LOCATIONS

SHEET 2 OF 18

(UNDERSIDE, VERTICAL PROJECTION)

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NOTES

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FOR PRESTRESSED GIRDER AND BENT DIAPHRAGM REPAIR DETAILS, SEE ``TYPICAL GIRDER AND DIAPHRAGM REPAIR DETAILS'' SHEET SD-4.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

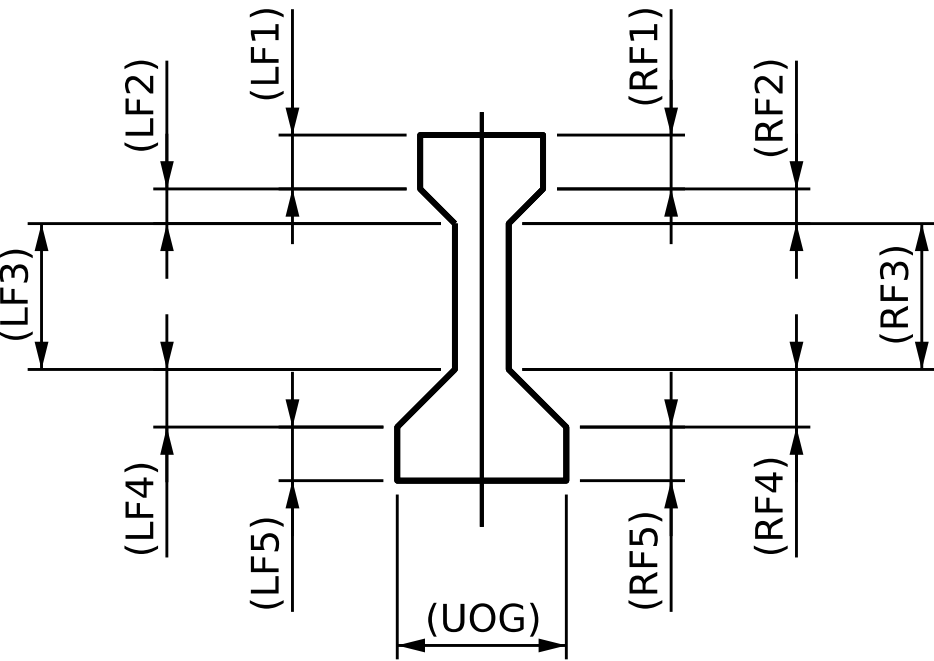
FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE				
UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK AND OVERHANG				
BENT DIAPHRAGMS				
GIRDER REPAIRS				
REPAIRS TO PRESTRESSED CONCRETE GIRDERS	9.5	3.0		

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

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE 3.5" DEEP.

LEGEND			
SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
(UOG)	UNDERSIDE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

PROJECT NO. 15BPR.131

CARTERET COUNTY

BRIDGE NO. 150045

SHEET 3 OF 18

PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

SUPERSTRUCTURE

GIRDER AND DIAPHRAGM

REPAIRS

SPAN 3



DRAWN BY : B. K. JACKSON DATE : APR 2026

CHECKED BY : M. PEARSON DATE : APR 2026

DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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

SHEET NO.

S2-14

TOTAL SHEETS

112

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

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FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE

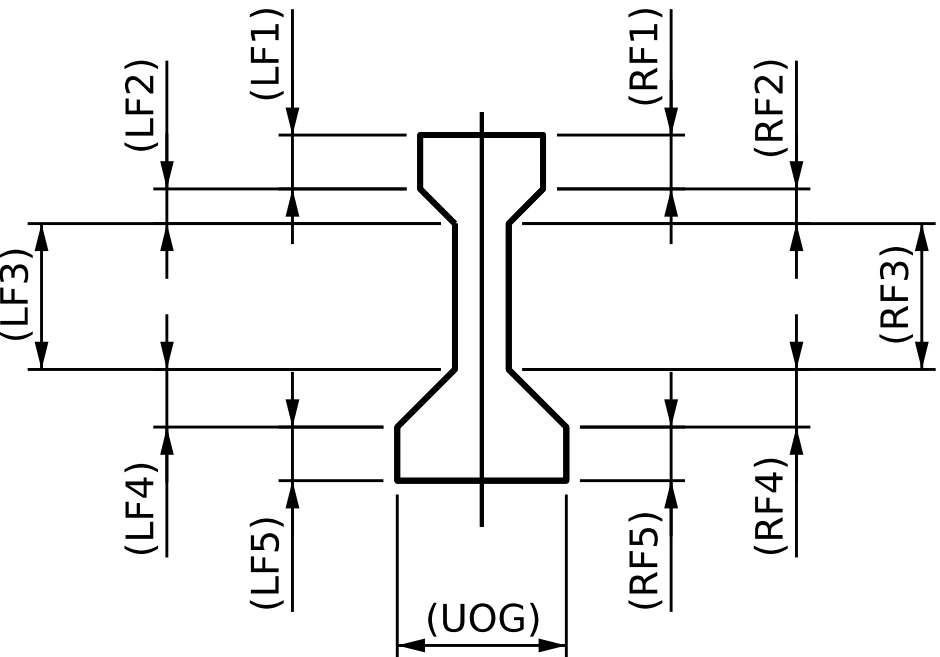
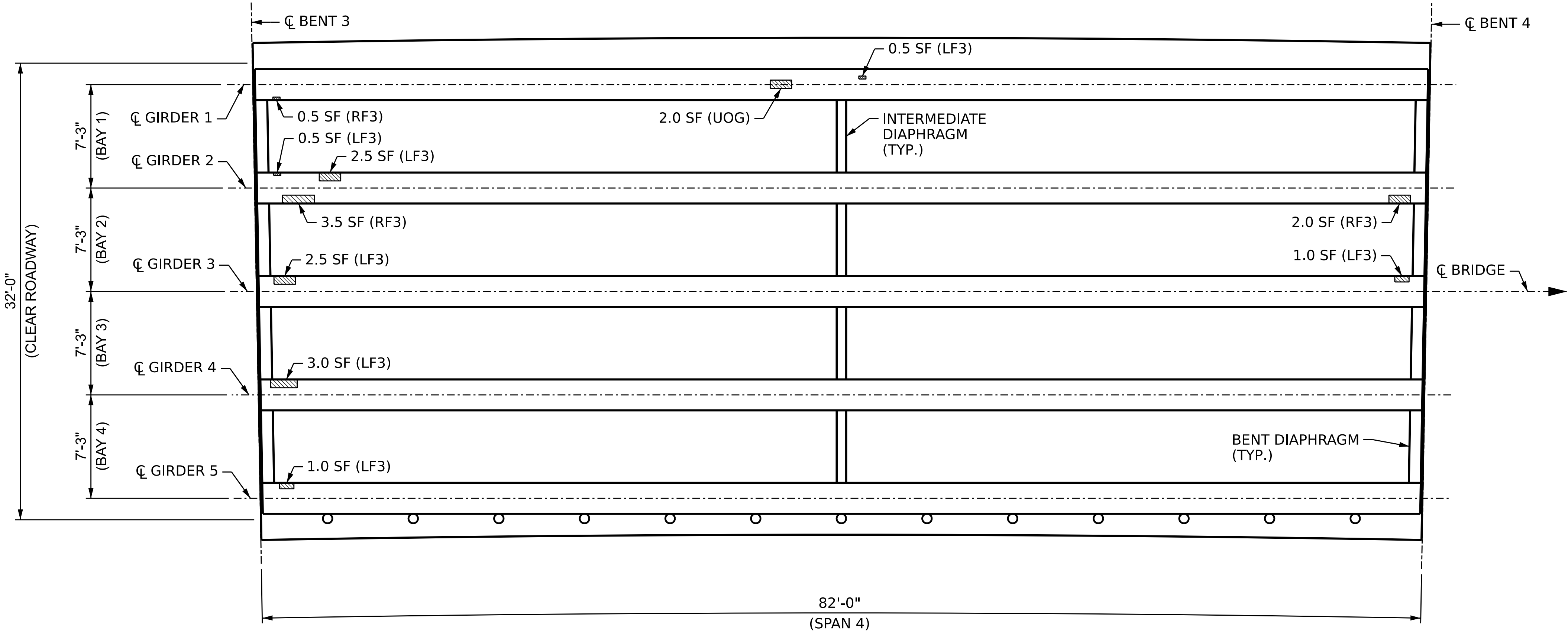
UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK AND OVERHANG				
BENT DIAPHRAGMS				
GIRDER REPAIRS				
REPAIRS TO PRESTRESSED CONCRETE GIRDERS	19.0	6.0		

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

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE 3.5" DEEP.

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
(UOG)	UNDERSIDE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 4 OF 18

PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

DRAWN BY : B. K. JACKSON DATE : APR 2026
CHECKED BY : M. PEARSON DATE : APR 2026
DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE GIRDER AND DIAPHRAGM REPAIRS SPAN 4						SHEET NO. S2-15 TOTAL SHEETS 112
REVISIONS						
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

FOR PRESTRESSED GIRDER AND BENT DIAPHRAGM REPAIR DETAILS, SEE ``TYPICAL GIRDER AND DIAPHRAGM REPAIR DETAILS'' SHEET SD-4.

FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE

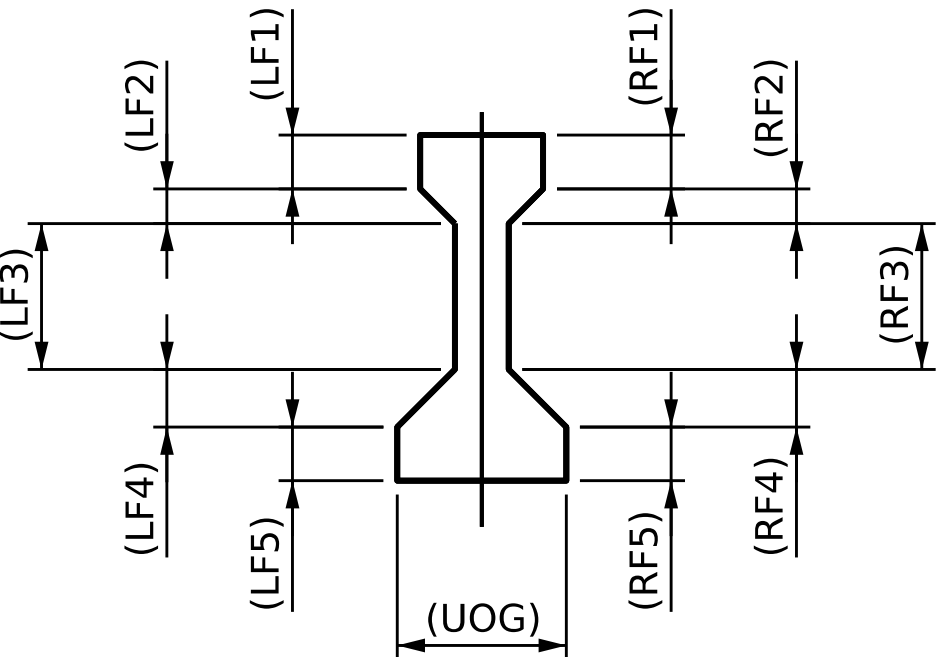
UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK AND OVERHANG				
BENT DIAPHRAGMS				
GIRDER REPAIRS				
REPAIRS TO PRESTRESSED CONCRETE GIRDERS	5.0	1.5		

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

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE 3.5" DEEP.

LEGEND

SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
(UOG)	UNDERSIDE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 5 OF 18

PLAN OF SPANS

(UNDERSIDE, VERTICAL PROJECTION)

DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 GIRDER AND DIAPHRAGM
 REPAIRS
 SPAN 5

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-16
1			3			TOTAL SHEETS 112
2			4			

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 REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

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FOR CONCRETE REPAIRS, SEE SPECIAL PROVISIONS.

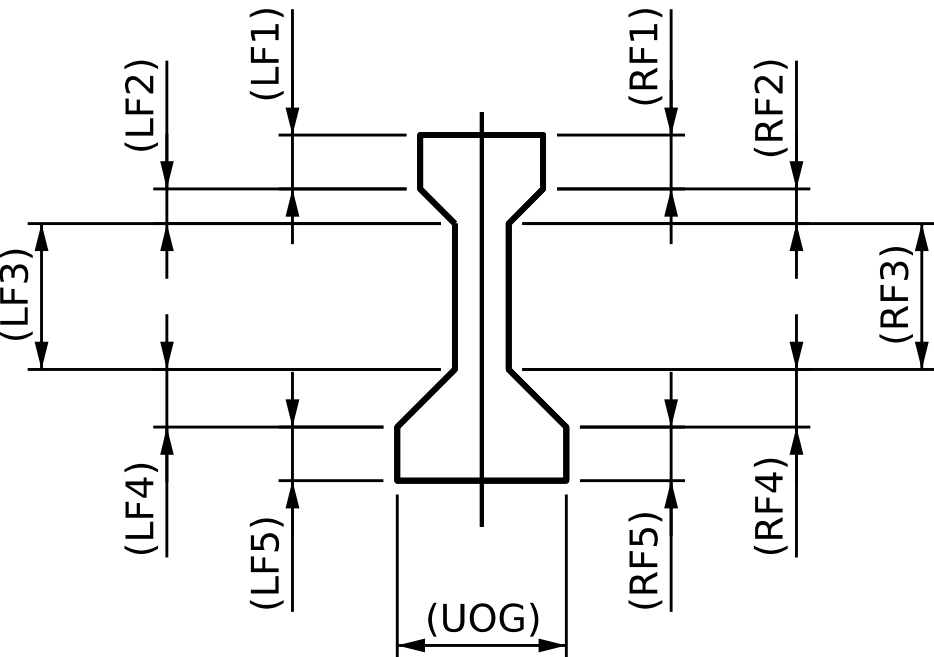
FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE				
UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK AND OVERHANG				
BENT DIAPHRAGMS				
GIRDER REPAIRS				
REPAIRS TO PRESTRESSED CONCRETE GIRDERS	6.0	2.0		

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

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE 3.5" DEEP.

LEGEND			
SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
(UOG)	UNDERSIDE OF GIRDER		



TYPICAL GIRDER SECTION

DAMAGE OF GIRDER LOCATIONS

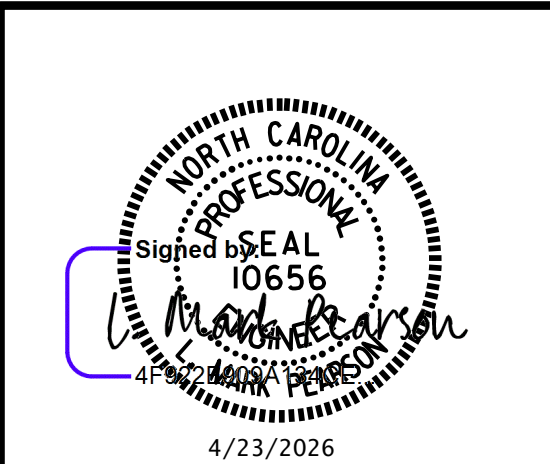
PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 6 OF 18

PLAN OF SPANS
(UNDERSIDE, VERTICAL PROJECTION)

DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
GIRDER AND DIAPHRAGM
REPAIRS
SPAN 6

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-17
1			3			TOTAL SHEETS 112
2			4			

NOTES

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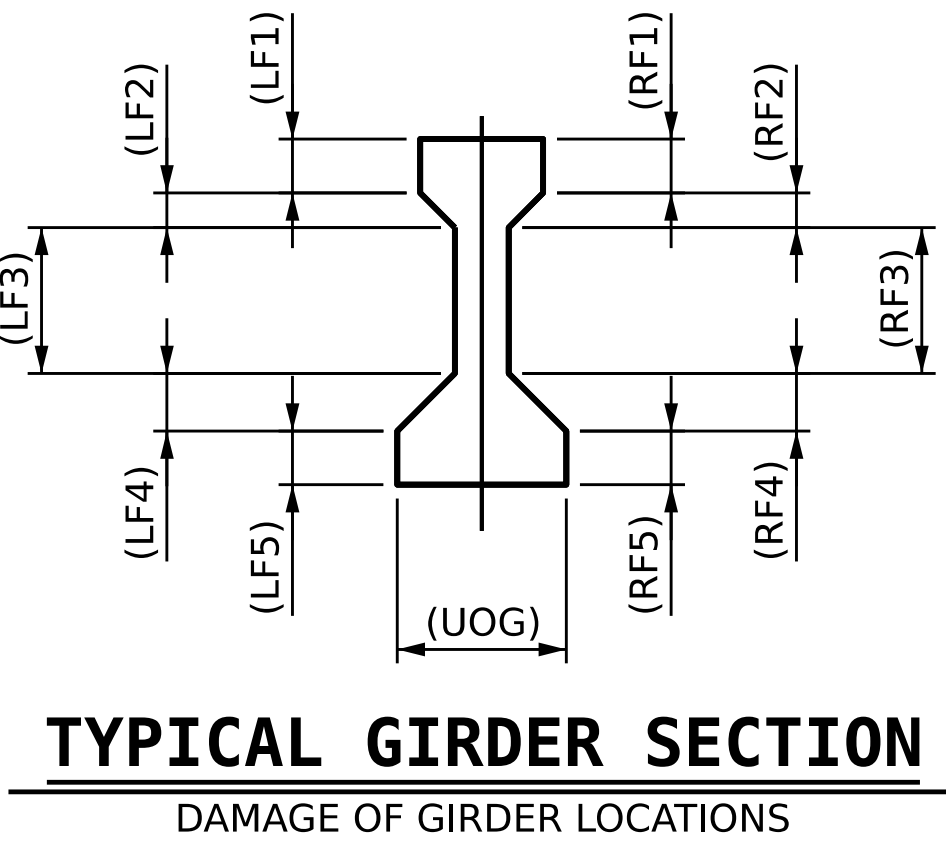
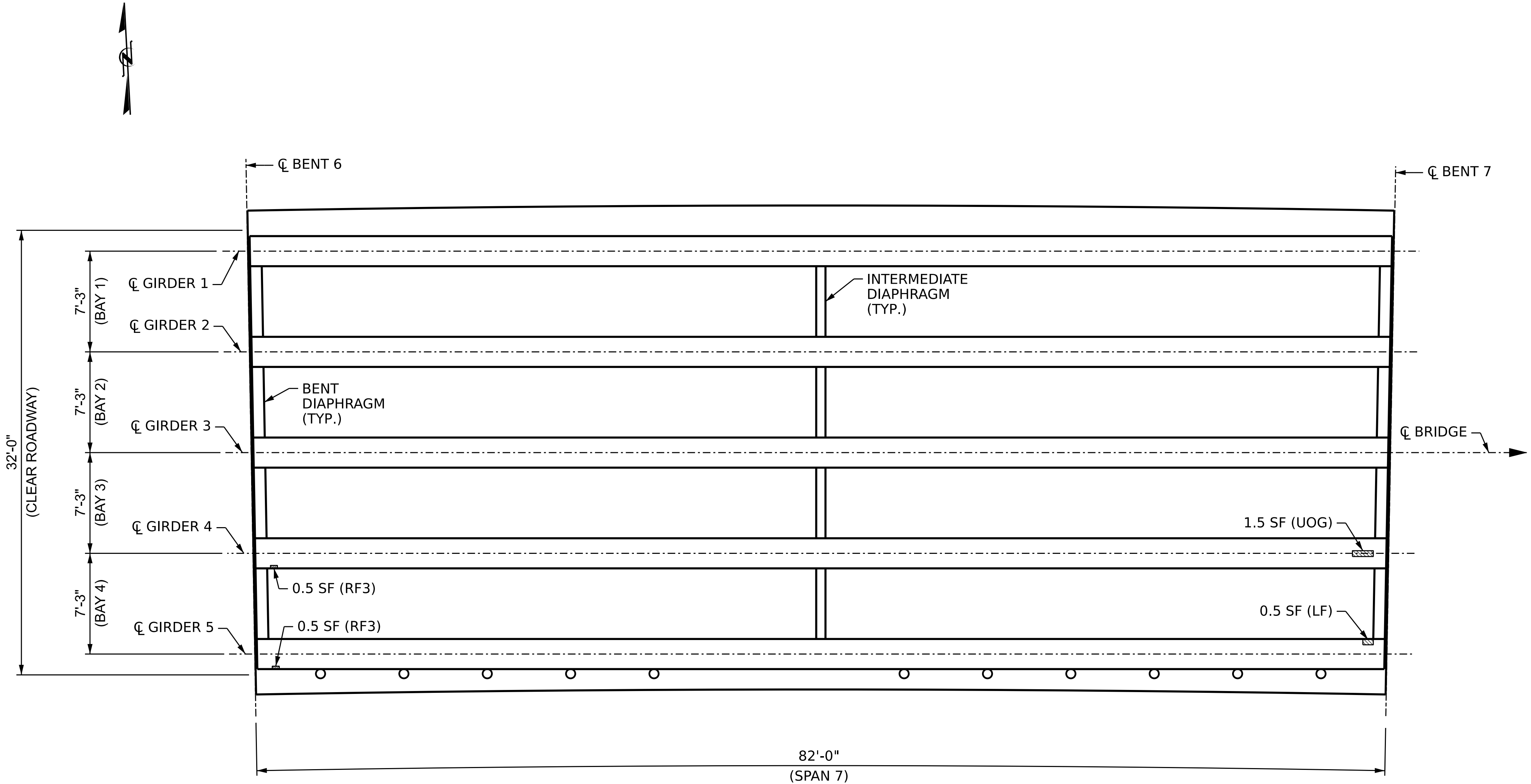
FOR REPAIRS TO PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

REPAIR QUANTITY TABLE				
UNDERSIDE OF DECK	QUANTITIES			
	ESTIMATE		ACTUAL	
CONCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
UNDERSIDE OF DECK AND OVERHANG				
BENT DIAPHRAGMS				
GIRDER REPAIRS				
REPAIRS TO PRESTRESSED CONCRETE GIRDERS	3.0	1.0		

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

QUANTITIES ASSUME ALL SPALLS AND DELAMINATIONS TO BE 3.5" DEEP.

LEGEND			
SF	SQUARE FEET		DIAPHRAGM REPAIR
(UOD)	UNDERSIDE OF DECK		GIRDER REPAIR
(BOH)	BOTTOM OF OVERHANG		DECK REPAIR
(UOG)	UNDERSIDE OF GIRDER		



PROJECT NO. 15BPR.131
CARTERET COUNTY
BRIDGE NO. 150045

SHEET 7 OF 18

PLAN OF SPANS
(UNDERSIDE, VERTICAL PROJECTION)

DRAWN BY : B. K. JACKSON DATE : APR 2026
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DESIGN ENGINEER OF RECORD: M. PEARSON DATE : APR 2026

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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH SUPERSTRUCTURE GIRDER AND DIAPHRAGM REPAIRS SPAN 7						SHEET NO.	
REVISIONS						S2-18	
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS	
1			3			112	
2			4				