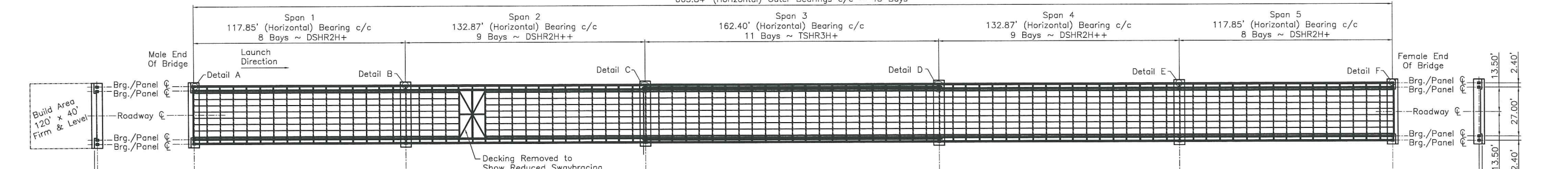
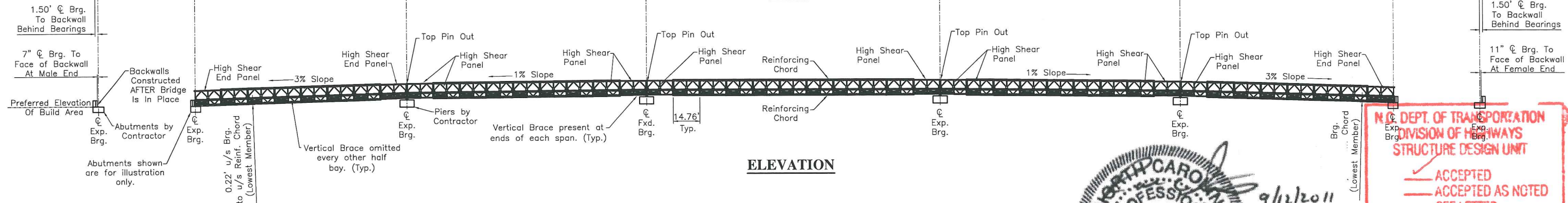


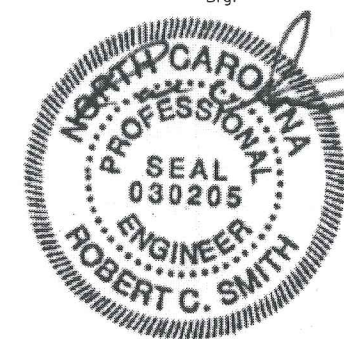
663.84' (Horizontal) Outer Bearings c/c ~ 45 Bays



PLAN



ELEVATION

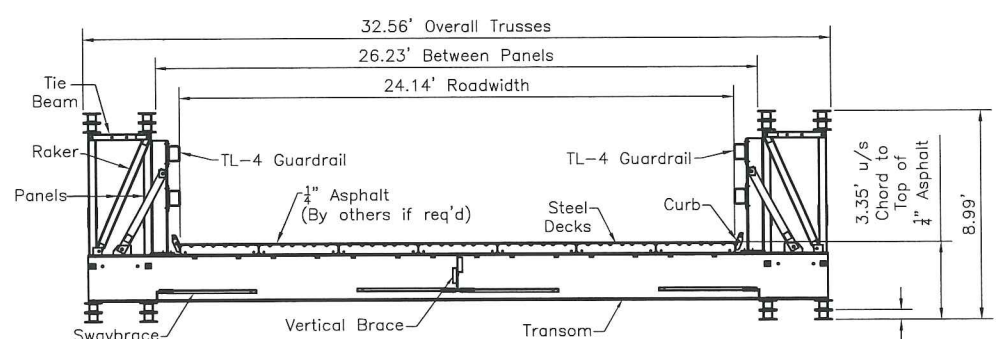


**NC DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE DESIGN UNIT**

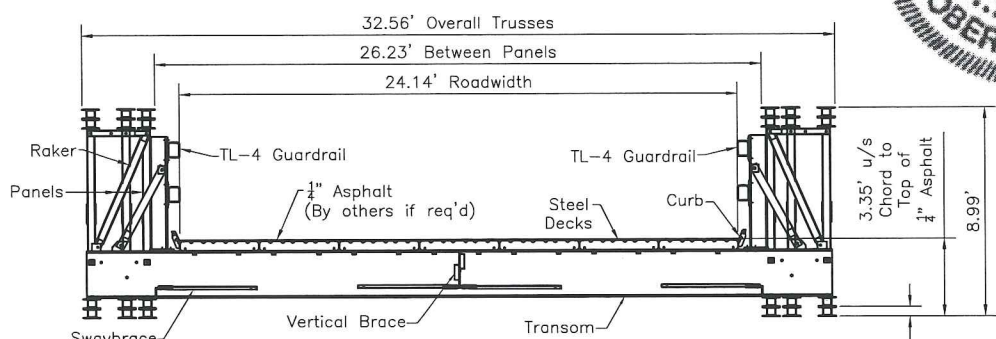
ACCEPTED
 ACCEPTED AS NOTED
 SEE LETTER
 RETURN FOR CORRECTION

SEP 13 2011

JAG



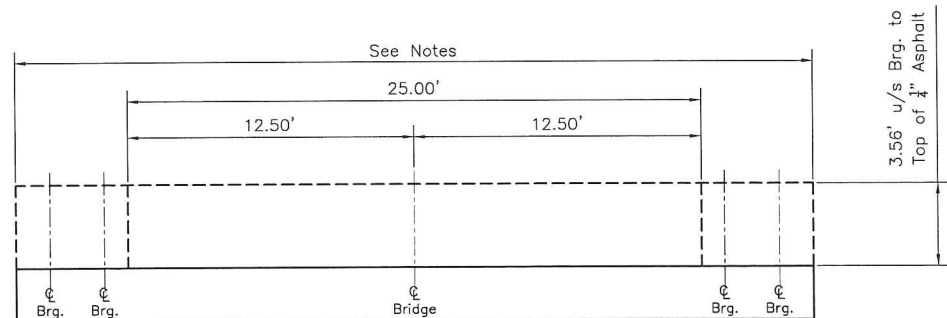
TYPICAL SECTION @ SPANS 1, 2, 4, & 5



TYPICAL SECTION @ SPAN 3

Reactions in Kips. 1 Kip = 1000 lbs.
Live Reactions (max. and min.) are concurrent. Difference is due to eccentricity of loading.
Exposed area of bridge (for calculating wind load) is 5.22 sq. ft. per ft.

- NOTES:**
- Live Load is HL-93.
 - Abutments and anchor bolts by contractor.
 - Due to the nature of modular bridging, Dimensional tolerances can accumulate. Mabey Bridge recommends the following:
 - Construct backwalls after bridge is in place.
 - Cast 3" dia. voids at anchor bolt locations. GROUT in anchor bolts after bridge is in position.
 - No drilling, welding, or alterations of any kind to Mabey-supplied equipment without written permission of Mabey and Shore, Inc. Engineering Dept. Equipment must be used in the manner intended, according to the supplied drawings(s) and calculations.
 - All expansion bearings shall be greased at installation.



TYPICAL VIEW OF BACKWALL

UNFACTORED CORNER REACTIONS												
	ABUTMENT 1 UNFACTORED		PIER 1 UNFACTORED		PIER 2 UNFACTORED		PIER 3 UNFACTORED		PIER 4 UNFACTORED		ABUTMENT 2 UNFACTORED	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
DL	60	60	125	125	160	160	160	160	125	125	60	60
DL (SURF)	5	5	10	10	10	10	10	10	10	10	5	5
LL	135	120	185	160	200	175	200	175	185	160	135	120

General Arrangement Showing
(8Bay; 9Bay; 11Bay; 9Bay; 8Bay)
Mabey Universal
24.14' Roadwidth
HL-93 Live Loading
(DSHR2H+;DSHR2H++;TSHR3H+;
DSHR2H++;DSHR2H+) Trusses

Client NC DOT		
Job Name	Location Cape Hatteras, NC	
Drawn By C.J.	Date 09/08/11	Dwg. No. BR0063797SUB01
Checked By P.O.	Date 09/08/11	Order no.
Revision	Sheet 1 of 2	Scale Do Not Scale

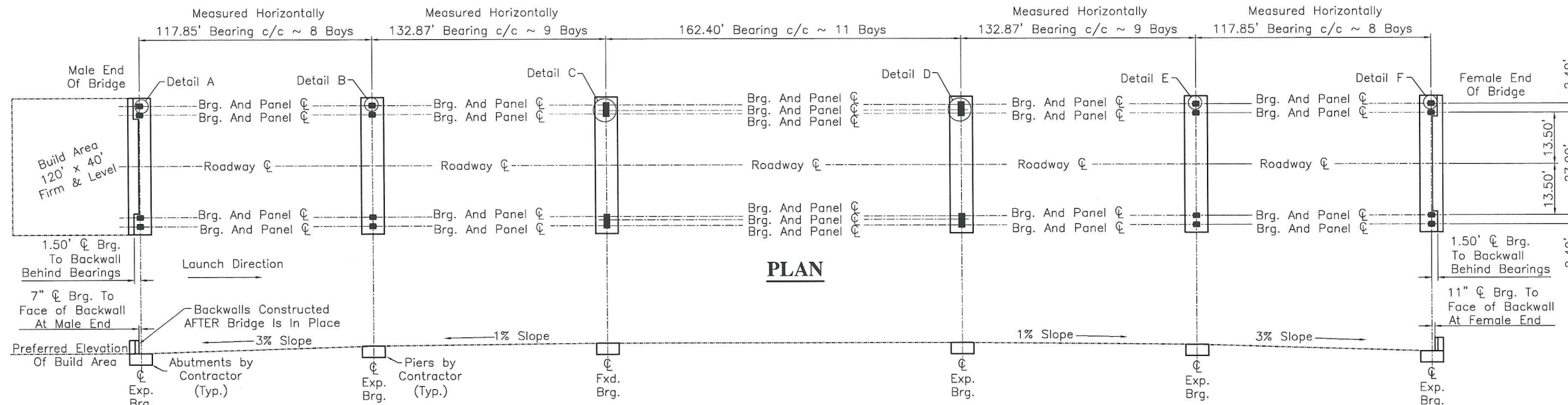


MABEY BRIDGE AND SHORE INC

6770 DORSEY RD. ELKRIDGE, MD. 21075

TEL : 410 379 2800
FAX : 410 379 2801

MABEY BRIDGE & SHORE INC TEL 410-379-2800 FAX 410-379-2801



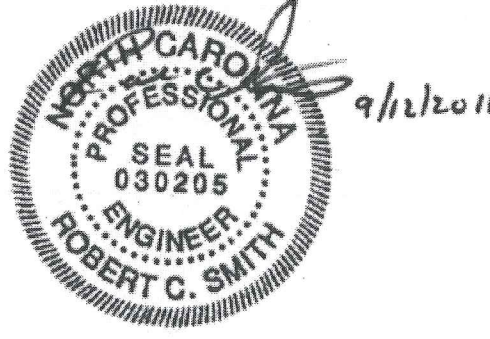
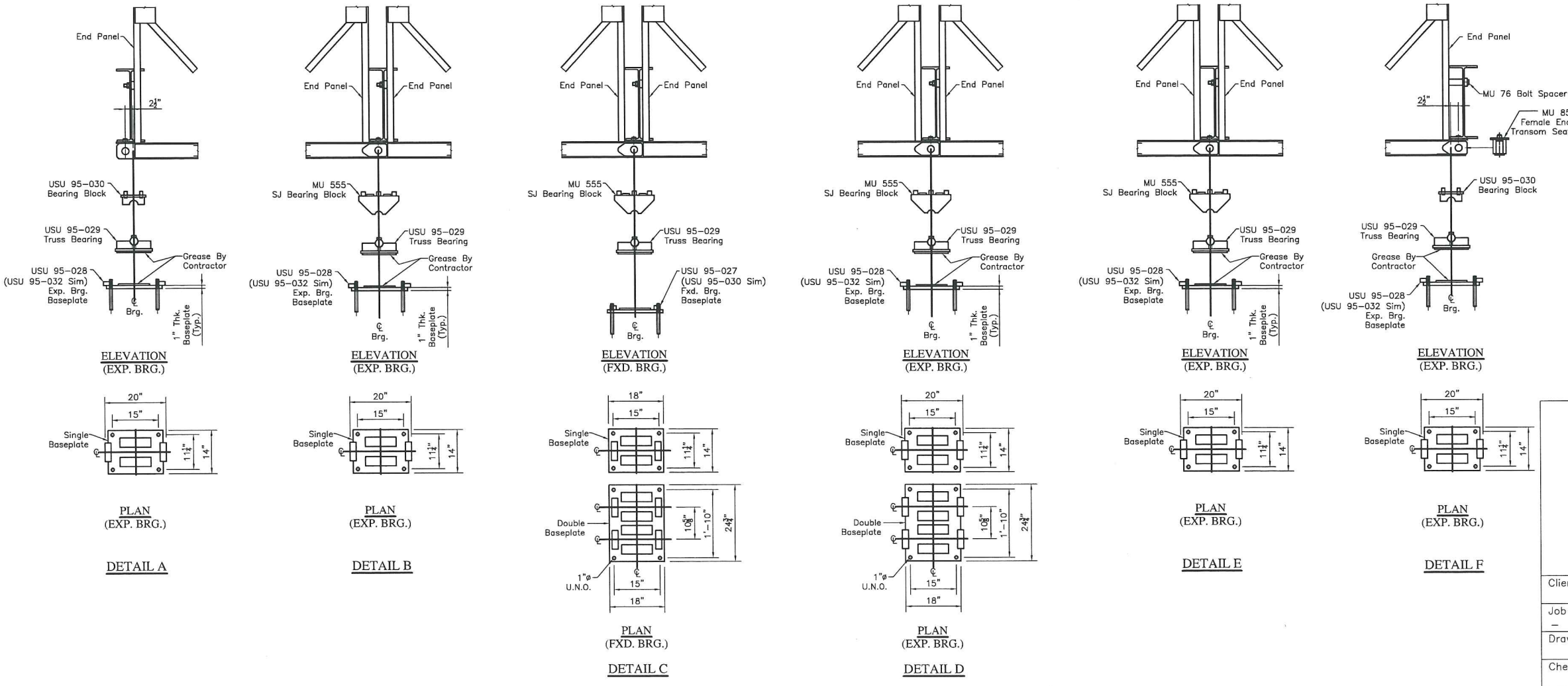
PLAN

ELEVATION

**N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE DESIGN UNIT**

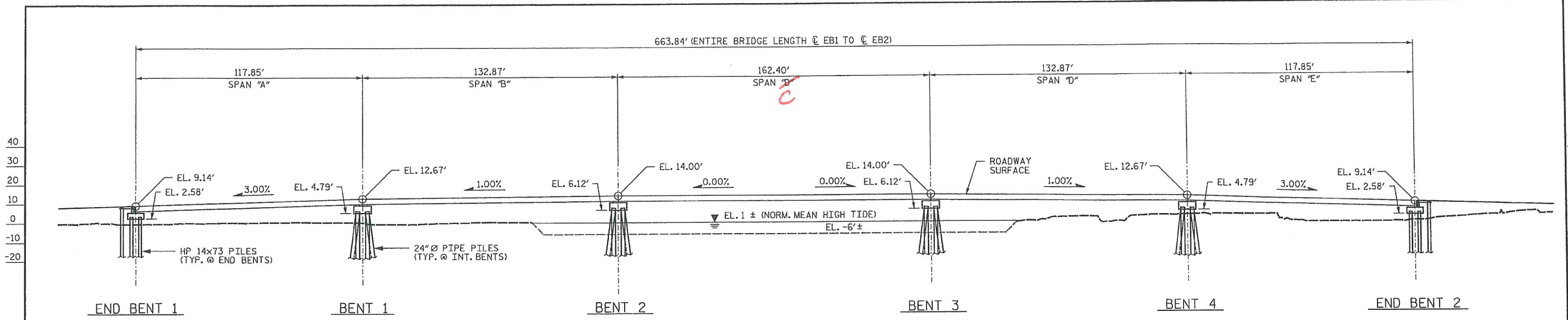
ACCEPTED
ACCEPTED AS NOTED
SEE LETTER
RETURN FOR CORRECTION

SEP 13 2011
JAG

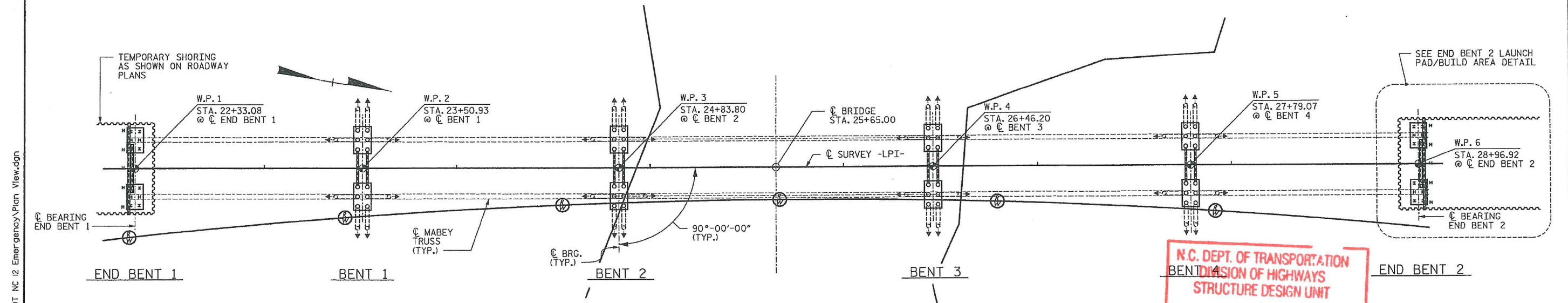


General Arrangement Showing
(8Bay; 9Bay; 11Bay; 9Bay; 8Bay)
Mabey Universal
24.14' Roadwidth
HL-93 Live Loading
(DSHR2H+;DSHR2H++;TSHR3H+;
DSHR2H++;DSHR2H+) Trusses

Client NC DOT		
Job Name		Location Cape Hatteras, NC
Drawn By C.J.	Date 09/08/11	Dwg. No. BR0063797SUB01
Checked By P.O.	Date 09/08/11	Order no.
Revision	Sheet 2 of 2	Scale Do Not Scale



SECTION ALONG C-LPI-



PLAN VIEW

(MABEY TRUSS SHOWN FOR INFORMATION ONLY)

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE DESIGN UNIT

ACCEPTED
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 SEE LETTER
 RETURN FOR CORRECTION

SEP 13 2011

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PROJECT NO. 13201.1028011
 DARE COUNTY
 STATION: 25+65.00 -LPI-
 SHEET 1 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 TEMPORARY BRIDGE
 ON NC-12 OVER PEA
 ISLAND BREACH

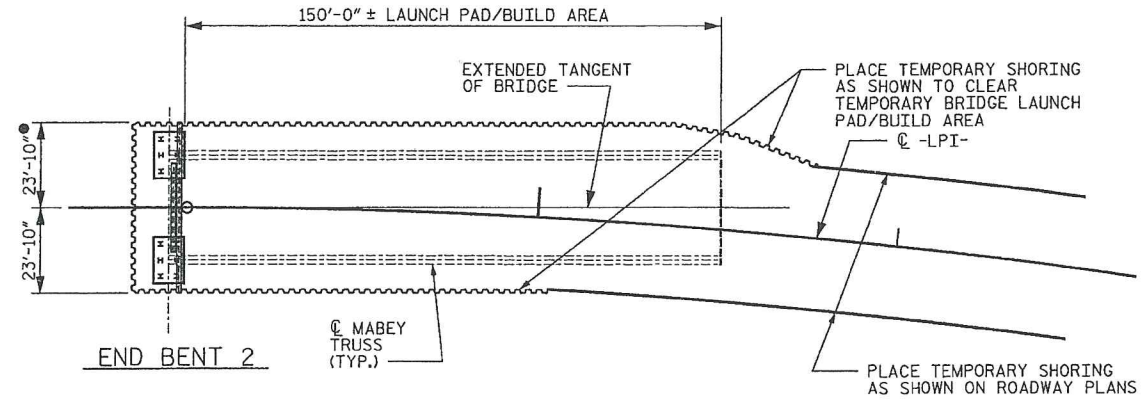


LEGEND
 O & I VERTICAL
 O -> BATTER 1/2:12

NOTE: ALL COMPONENTS SHALL BE PROTECTED FROM CORROSION BY GALVANIZATION AND OR AS DIRECTED BY THE ENGINEER.

NOTE: SUPERSTRUCTURE SHOWN FOR INFORMATION ONLY. SEE MABEY BRIDGE PLANS FOR ADDITIONAL INFORMATION.

THE SHORING LIMITS SHOWN ARE MEASURED PERPENDICULAR TO THE C OF THE BRIDGE. ONCE PAST THE BRIDGE THE SHORING SHALL CONTINUE TO BE MEASURED PERPENDICULAR TO AN EXTENDED TANGENT OF THE BRIDGE UNTIL THE TEMPORARY BRIDGE LAUNCH PAD CAN BE CLEARED.



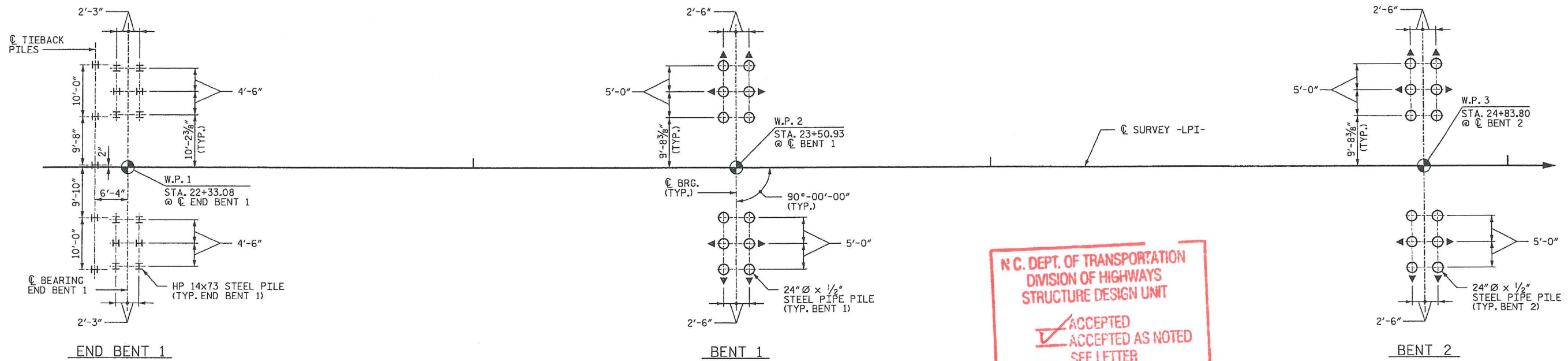
END BENT 2 LAUNCH PAD/BUILD AREA DETAIL

DRAWN BY: TRL/CLG DATE: 9-11
 CHECKED BY: TJT DATE: 9-11

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 Charlotte, NC 28208
 NC License No. F-0991

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

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 9/9/2011



FOUNDATION LAYOUT

(DIMENSIONS TO PILES ARE TO C AT BOTTOM OF FOOTING/CAP)

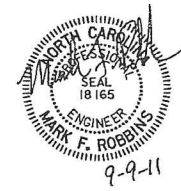
**N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 STRUCTURE DESIGN UNIT**
 ✓ ACCEPTED
 ACCEPTED AS NOTED
 — SEE LETTER
 — RETURN FOR CORRECTION

SEP 13 2011
Mark F. Robbins

NOTES:

1. FOOTING/CAP PILES AT END BENTS 1 & 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 50 TONS PER PILE. DRIVE PILES TO A REQUIRED DRIVING RESISTANCE OF 84 TONS PER PILE. THE ESTIMATED PILE LENGTH IS 50 FEET.
2. TIEBACK PILES AT END BENT 1 ARE DESIGNED FOR A FACTORED HORIZONTAL FORCE OF 7 KIPS. PILES SHALL BE DRIVEN A MINIMUM OF 30 FEET BELOW ELEVATION 8.5.
3. END BENT PILES AND TIEBACK PILES SHALL BE HP 14x73 PILES AND BE GALVANIZED PER THE NCDOT STANDARD SPECIFICATIONS. PILES SHALL BE AASHTO M270 GRADE 50.
4. FOOTING/CAP PILES AT BENTS 1-4 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE. DRIVE PILES TO A REQUIRED DRIVING RESISTANCE OF 300 TONS PER PILE. THE ESTIMATED PILE LENGTH IS 65 FEET.
5. INSTALL PILES AT BENTS 1-4 TO A TIP ELEVATION NO HIGHER THAN -50.0 FEET.
6. BENT PILES SHALL BE 24" Ø PIPE PILES WITH 1/2" WALL THICKNESS AND BE GALVANIZED PER THE NCDOT STANDARD SPECIFICATIONS. PILES SHALL BE ASTM A252 GRADE 3(MOD) (fy = 50 ksi) OR APPROVED EQUIVALENT.
7. TESTING THE FIRST PRODUCTION PILE, PER PILE TYPE, WITH THE PILE DRIVING ANALYZER (PDA) DURING DRIVING IS REQUIRED.
8. THE STRUCTURE HAS BEEN DESIGNED FOR A SCOUR ELEVATION OF -22 FEET.

LEGEND
 ○ & I VERTICAL
 ○ ► BATTER 1/2:12



PROJECT NO. 13201.1028011
 DARE _____ COUNTY
 STATION: 25+65.00 -LPI-

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
TEMPORARY BRIDGE ON
NO-12 OVER PEA
ISLAND BREACH

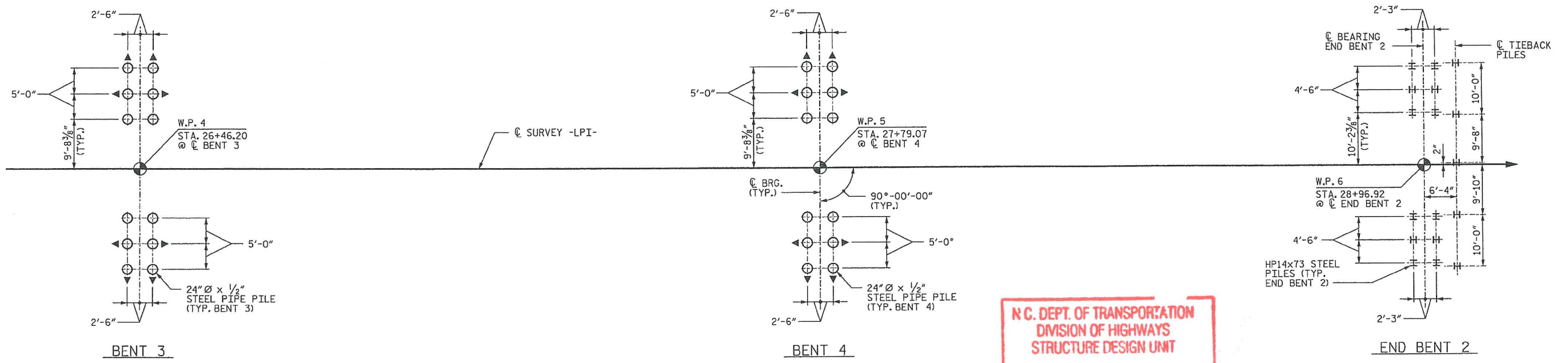
REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	2
1			3			TOTAL SHEETS
2			4			11

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 100D West Morehead St., Ste. 200
 Charlotte, NC 28208
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 CHECKED BY : TJT DATE : 9-11

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FOUNDATION LAYOUT

(DIMENSIONS TO PILES ARE TO C AT BOTTOM OF FOOTING/CAP)

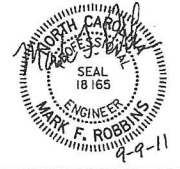
NOTES:
 1. SEE SHEET 2 OF 3 FOR NOTES.

LEGEND
 ○ & I VERTICAL
 ○ ► BATTER 1/2±12

N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE DESIGN UNIT

ACCEPTED
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 SEE LETTER
 RETURN FOR CORRECTION

SEP 13 2011
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PROJECT NO. 13201.1028011
 DARE COUNTY
 STATION: 25+65.00 -LPI-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

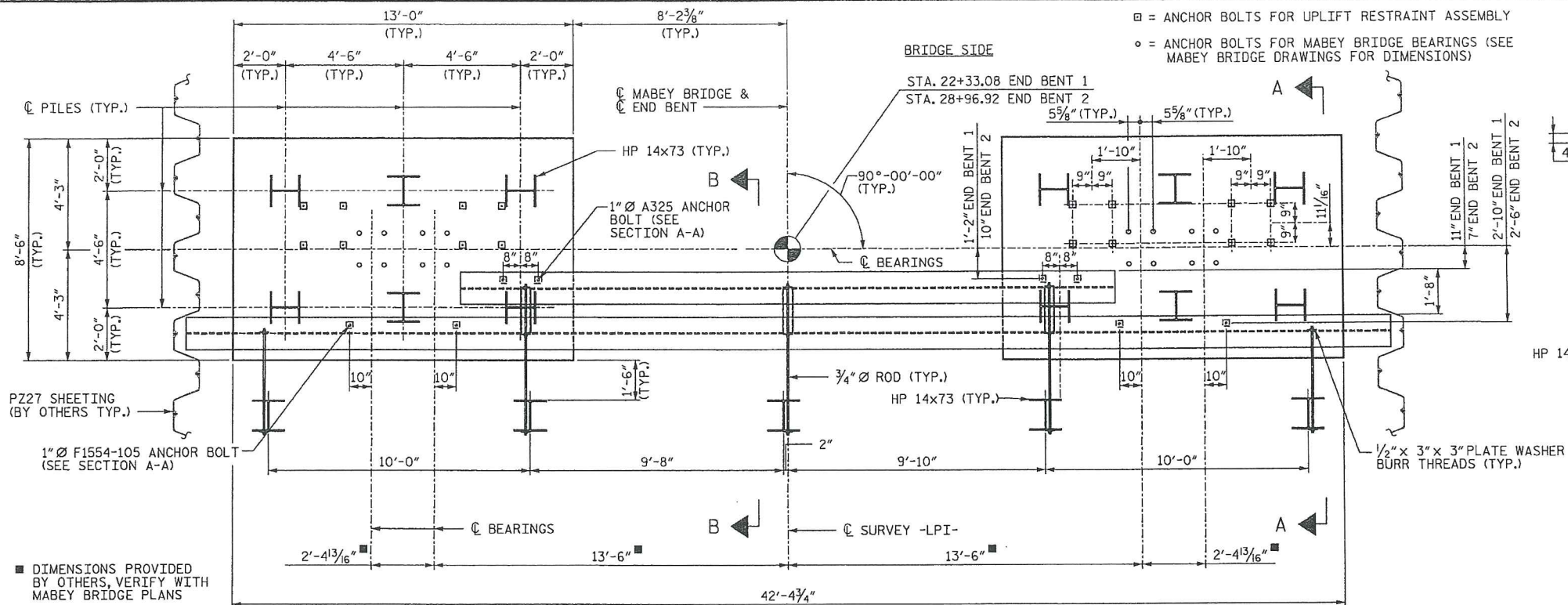
GENERAL DRAWING
 TEMPORARY BRIDGE ON
 NC-12 OVER PEA
 ISLAND BREACH

DRAWN BY : CLG DATE : 9-11
 CHECKED BY : TJT DATE : 9-11

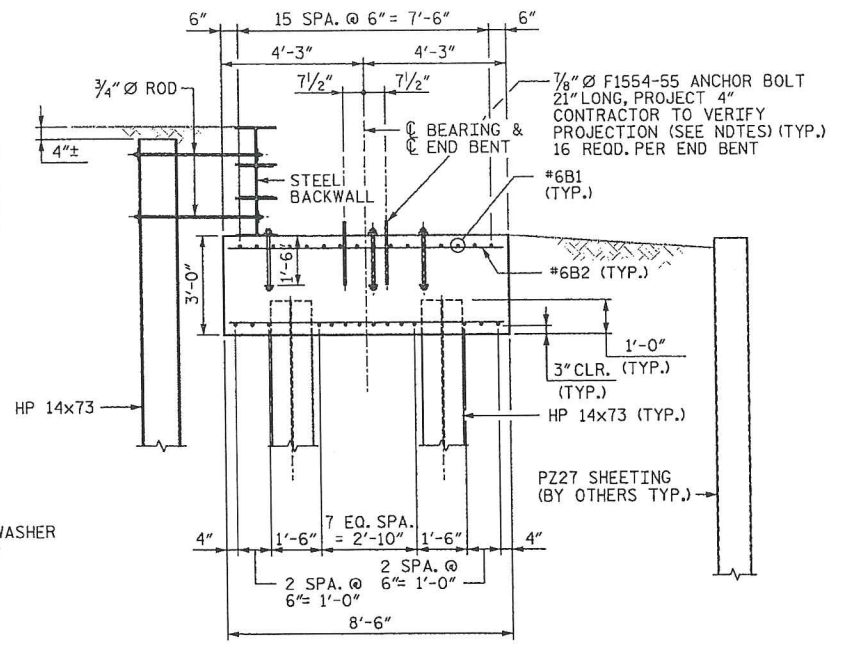
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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			11
2			4			

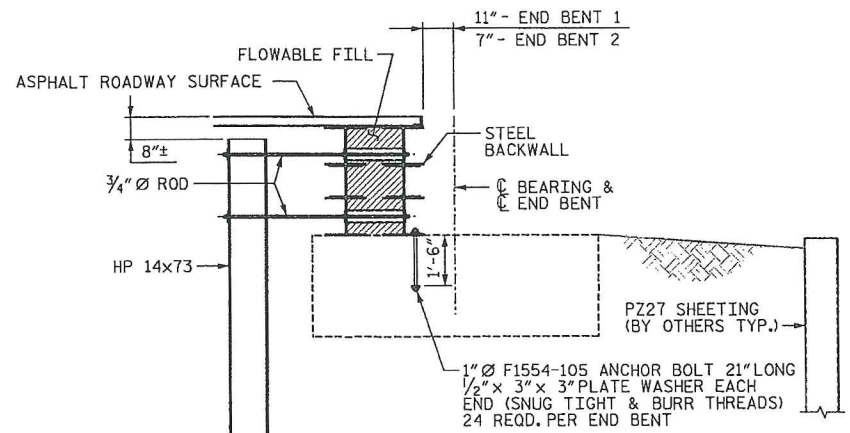
- = ANCHOR BOLTS FOR UPLIFT RESTRAINT ASSEMBLY
- = ANCHOR BOLTS FOR MABEY BRIDGE BEARINGS (SEE MABEY BRIDGE DRAWINGS FOR DIMENSIONS)



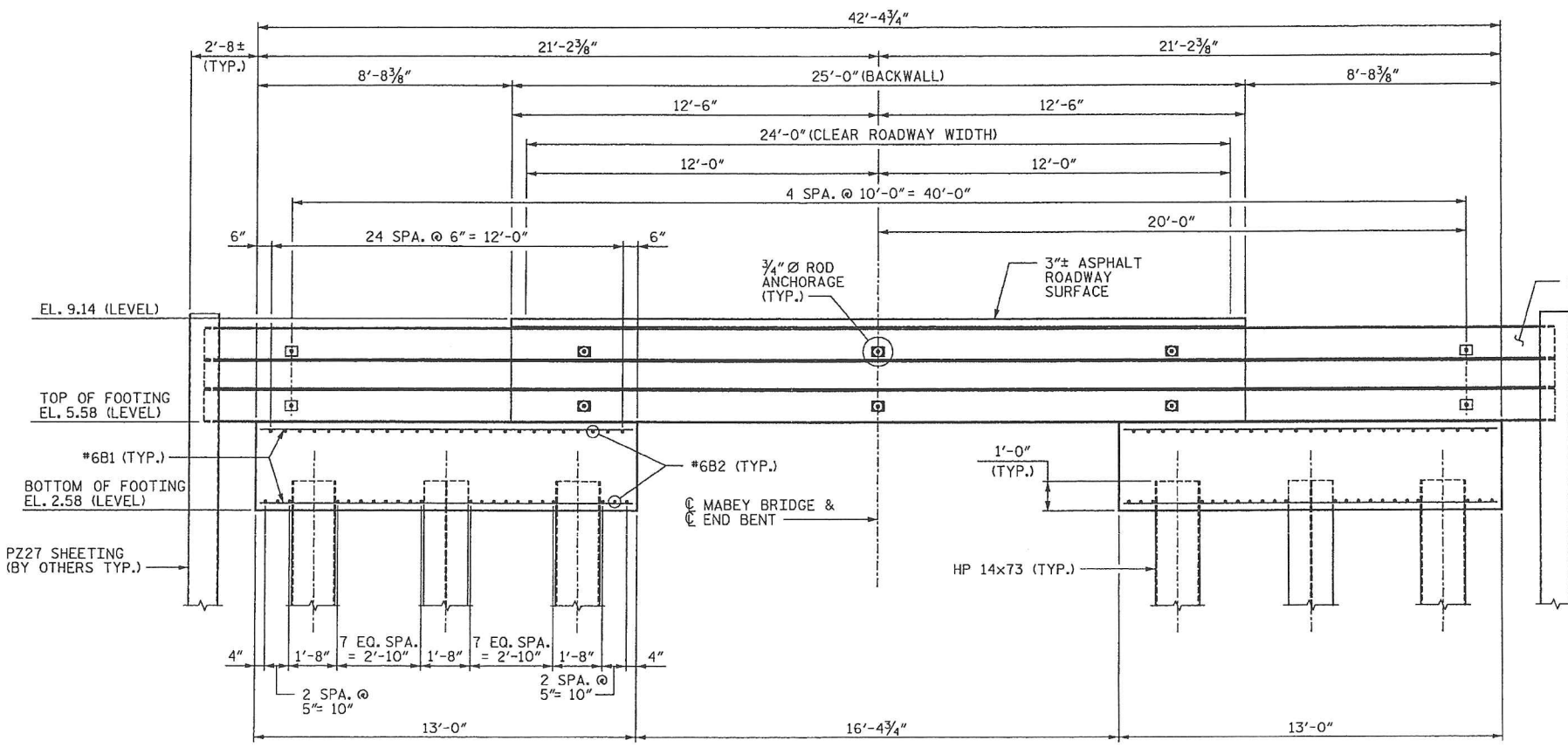
NOTE: BEARING PLATES NOT SHOWN, SEE MABEY BRIDGE PLANS. VERIFY ANCHOR BOLT SPACING WITH MABEY PLANS.



SECTION A-A
(SEE PILE ANCHORAGE DETAIL FOR ADDITIONAL REINFORCEMENT)



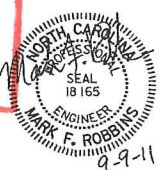
SECTION B-B



ELEVATION

(REINFORCING SHOWN IS TYPICAL)
(SEE PILE ANCHORAGE DETAIL FOR ADDITIONAL REINFORCEMENT)

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 STRUCTURE DESIGN UNIT
 ACCEPTED
 ACCEPTED AS NOTED
 SEE LETTER
 RETURN FOR CORRECTION
 SEP 13 2011
Mark F. Robbins



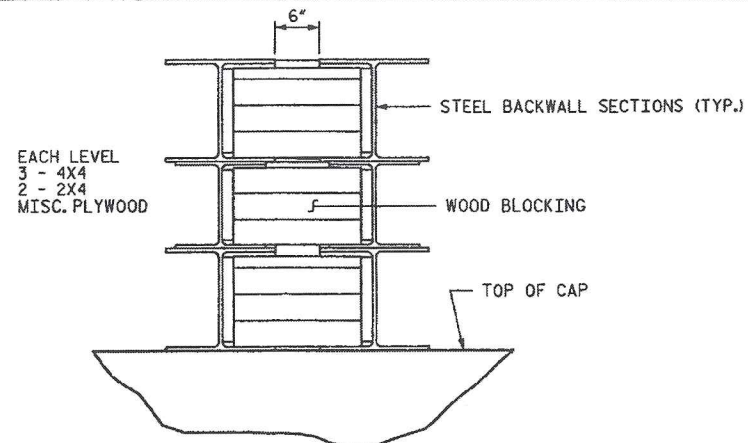
PROJECT NO. 13201.1028011
 DARE COUNTY
 STATION: 25+65.00 -LPI-

SHEET 1 OF 3
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 END BENTS

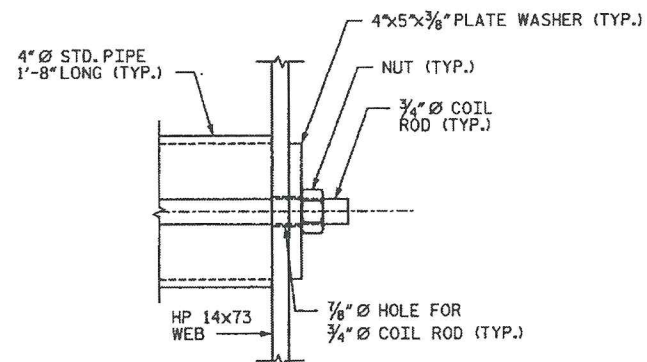
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NO.	BY:	DATE:	NO.	BY:	DATE:	4
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2			4			11

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 Charlotte, NC 28208
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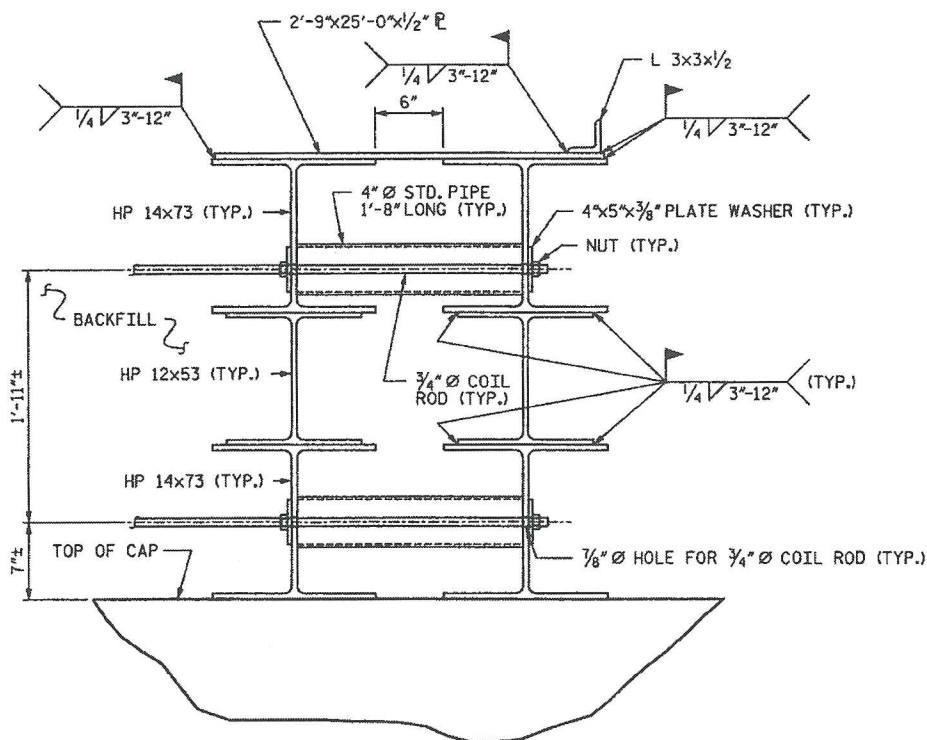
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END BLOCKING DETAIL
(WOOD BLOCKING TO CONTAIN FLOWABLE FILL)

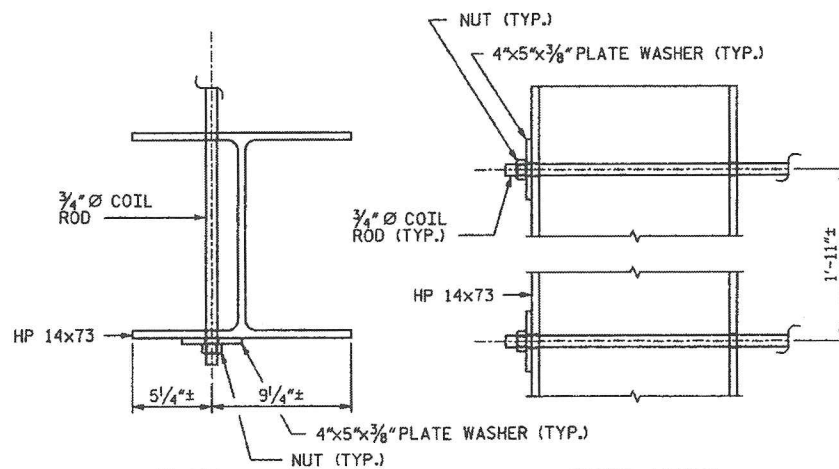


DETAIL A



STEEL BACKWALL DETAIL

(FRONT HP SECTIONS ARE ONLY IN MIDDLE 25'-0" OF BACKWALL)
(SEE ASPHALT RETAINING ANGLE DETAIL FOR ADDITIONAL DETAILS)



COIL ROD CONNECTION DETAIL

CONSTRUCTION SEQUENCE:

1. DRIVE PILES TO REQUIRED TONNAGE, SEE GENERAL DRAWING SHEET 2 OF 3.
2. CONSTRUCT CAST-IN-PLACE FOOTING PER PLANS.
3. PLACE STEEL BACKWALL ON FOOTINGS WITHOUT TOP PLATE ATTACHED.
4. BLOCK END OF BACKWALL AND FILL VOID WITH FLOWABLE FILL.
5. CONNECT 3/4" Ø COIL RODS TO TIEBACK PILES.
6. PLACE AND WELD TOP PLATE AND L 3X3X1/2" ON BACKWALL.
7. FILL BEHIND BACKWALL.
8. PAVE 3"± ASPHALT ROADWAY SURFACE.

NOTES:

1. FOR ADDITIONAL NOTES, SEE GENERAL DRAWING SHEET 2 OF 3.
2. SUPERSTRUCTURE LOADS PROVIDED BY OTHERS:
(END BENT EACH FOOTING)

DEAD LOAD	LIVE LOAD
65 k	135 k

Pier each footing 165k 235k
3. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, DATED JANUARY 2006.
4. ALL WELDING SHALL BE IN ACCORDANCE WITH CURRENT AWS SPECIFICATIONS.
5. ALL STRUCTURAL STEEL SHALL BE IN GOOD CONDITION AND MEET THE REQUIREMENTS OF AASHTO M270 GRADE 50 AND SHALL BE GALVANIZED PER THE STANDARD SPECIFICATIONS.
6. ALL CONCRETE SHALL BE CLASS AA.
7. ALL REINFORCING STEEL SHALL BE GRADE 60.
8. END BENT 1 IS THE FEMALE END OF THE MABEY BRIDGE AND END BENT 2 IS THE MALE END OF THE MABEY BRIDGE.
9. REINFORCING STEEL MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS AND HP PILES.
10. FOR MABEY BRIDGE ANCHOR BOLT DIMENSIONS, DETAILS AND NOTES, SEE MABEY BRIDGE DRAWINGS.
11. ALL ELEVATIONS SHOWN IN FEET UNLESS NOTED OTHERWISE.
12. 3/4" Ø COIL ROD SHALL BE DAYTON SUPERIOR B-12 ROD WITH A SAFE WORKING LOAD IN TENSION OF 18,000 LBS OR APPROVED EQUAL.
13. PLATE WASHER SHALL BE DAYTON SUPERIOR B11 FLAT WASHER WITH A SAFE WORKING LOAD OF 14,000 LBS OR APPROVED EQUAL.
14. NUT SHALL BE DAYTON SUPERIOR B13 STANDARD COIL NUT WITH A SAFE WORKING LOAD OF 9,000 LBS IN TENSION OR APPROVED EQUAL.
15. CONTRACTOR SHALL COORDINATE SHEETING WITH END BENT LOCATION AND BACKWALL SUCH THAT NO CONFLICT OCCURS.
16. BACKFILL BEHIND BACKWALL SHALL NOT OCCUR UNTIL FLOWABLE FILL HAS SET AND TIE BACKS ARE CONNECTED TO HP 14x73 TIEBACK PILES.
17. IF FUTURE STORM EVENTS REQUIRE THE NEED FOR ADDITIONAL SPANS, THE ENGINEER SHALL BE CONTACTED PRIOR TO ANY FUTURE EXTENSION OF THIS BRIDGE. THE ADDITIONAL SPAN ADJACENT TO THE END BENTS SHALL NOT EXCEED THE LENGTH OF THE CURRENT SPAN SUPPORTED BY THE END BENT.
18. CONTRACTOR MAY USE GROUT CANS (PER MABEY PLANS) TO INSTALL MABEY BEARING ANCHOR BOLTS. GROUT CANS SHALL NOT BE USED ON BRIDGE RESTRAINT SYSTEM ANCHOR BOLTS.

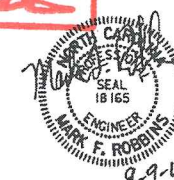
N.C. DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE DESIGN UNIT

ACCEPTED
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SEE LETTER
RETURN FOR CORRECTION

SEP 13 2011

Mr. [Signature]

PROJECT NO. 13201.1028011
DARE _____ COUNTY _____
STATION: 25+65.00 -LPI-
SHEET 2 OF 3



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

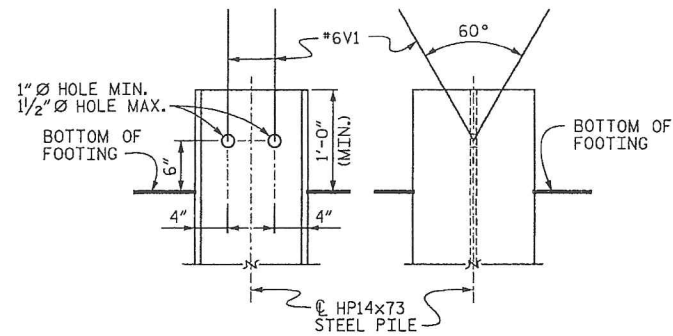
END BENTS

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	5	
1			3			TOTAL SHEETS 11	
2			4				

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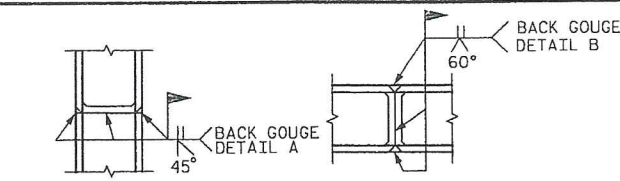
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DRAWN BY: TJT DATE: 9-11
CHECKED BY: JTG DATE: 9-11

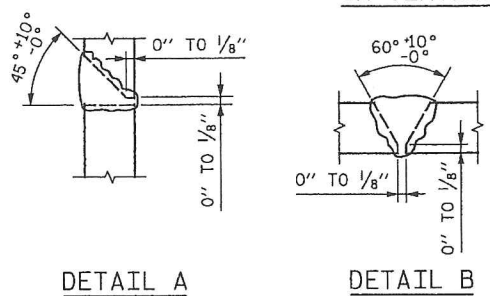


PILE ANCHORAGE DETAIL

HOLES SHALL BE DRILLED.
REINFORCING BARS SHALL BE TIED OR WEDGED TIGHTLY
AGAINST THE TOP OF THE HOLE



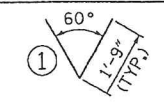
PILE SPLICE DETAILS



▲ POSITION OF PILE DURING WELDING.

PILE SPLICE DETAILS

BAR TYPES



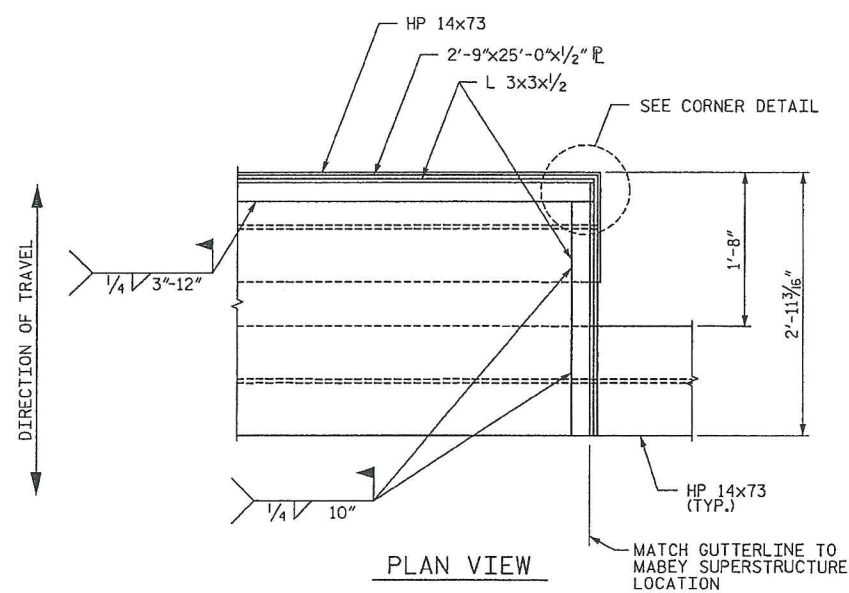
ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL - ONE END BENT

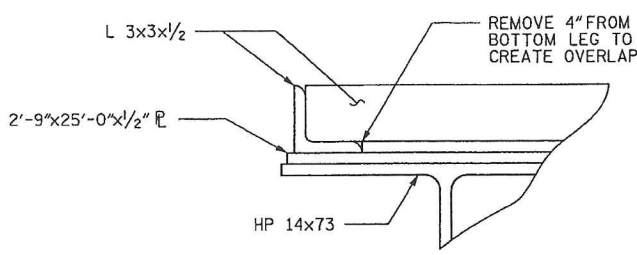
MARK	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	60	#6	STR	12'-8"	1142
B2	94	#6	STR	8'-2"	1153
V1	24	#6	1	3'-6"	126

QUANTITIES - ONE END BENT

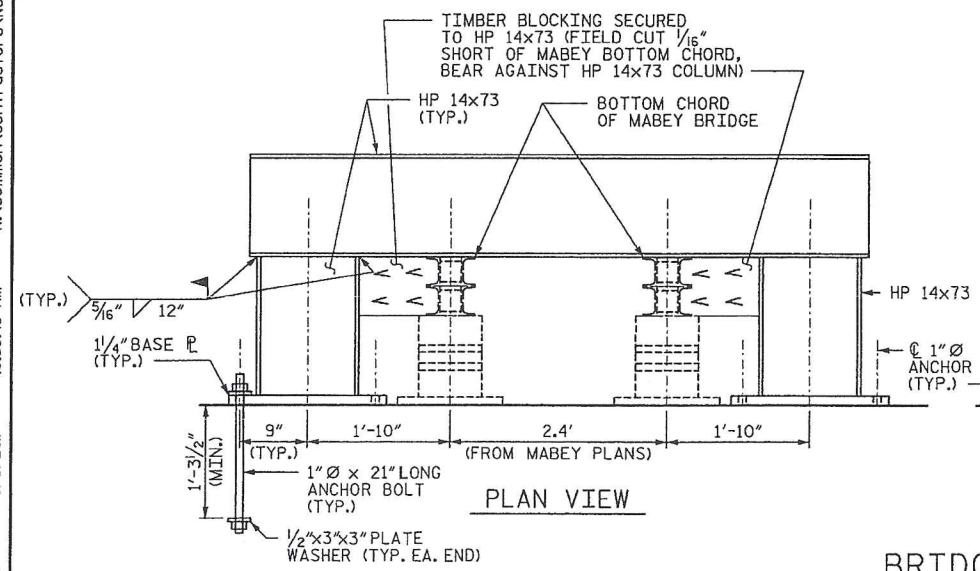
REINFORCING STEEL	LBS.	2,421
CLASS AA CONCRETE		
POUR 1 (2 FOOTINGS)	CU. YDS.	24.6
BACKWALL STEEL		
HP12x53 STEEL PILES	NO.	2
	LIN. FT.	73
HP14x73 STEEL PILES	NO.	4
	LIN. FT.	146
BEARING PILES		
HP14x73 STEEL PILES	NO.	12
	LIN. FT.	600
BACKWALL ANCHORAGE		
HP14x73 STEEL PILES	NO.	5
	LIN. FT.	150



ASPHALT RETAINING ANGLE

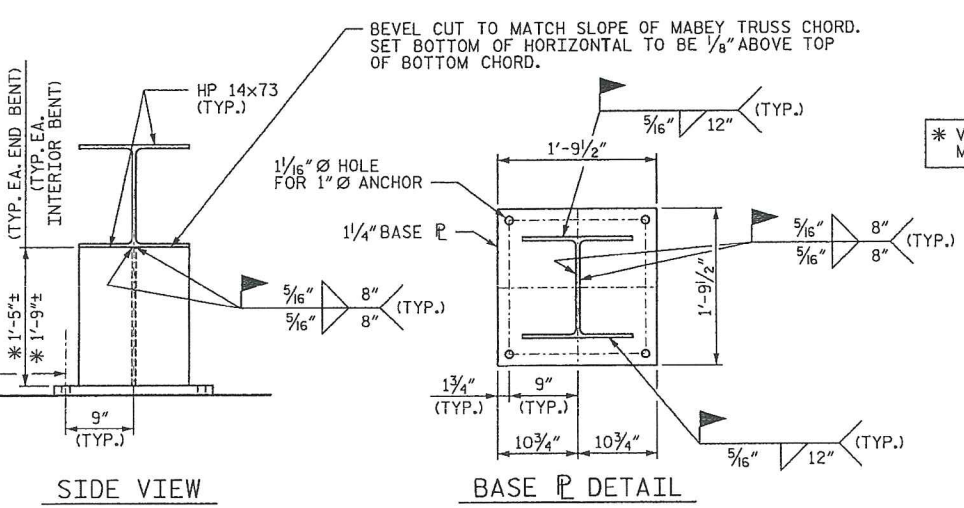


CORNER DETAIL

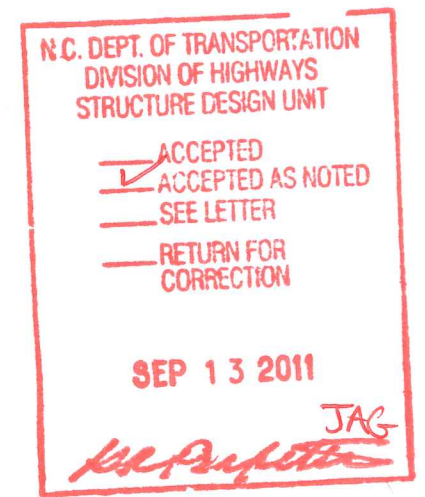


BRIDGE RESTRAINT SYSTEM

(TYPICAL AT ALL END BENT AND BENT LOCATIONS.)
(FOR PLACEMENT ALONG THE FOOTING, SEE PLAN VIEW OF BENT OR END BENT)



* VERIFY DIMENSIONS WITH
MABEY BRIDGE PLANS

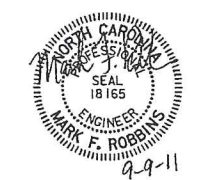


PROJECT NO. 13201.1028011
DARE COUNTY
STATION: 25+65.00 -LPI-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

END BENTS



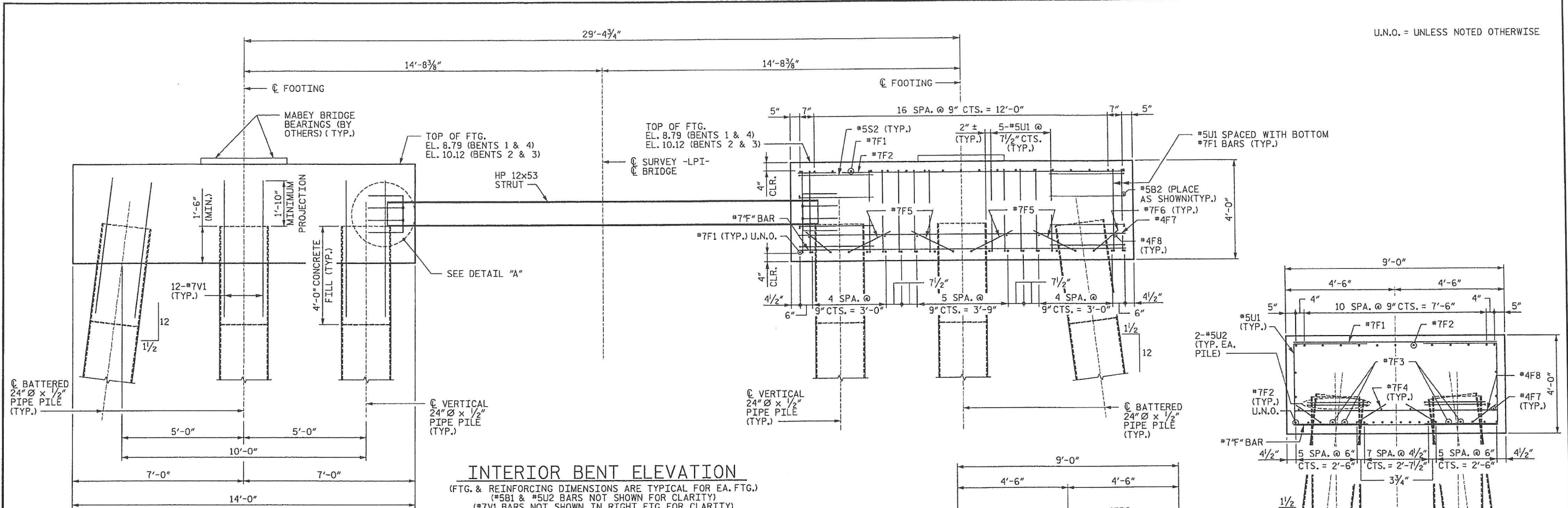
STV/Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28206
NC License No. F-0991

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	6
1			3			TOTAL SHEETS
2			4			11

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DRAWN BY: TJT DATE: 9-11
CHECKED BY: JTG DATE: 9-11

U.N.O. = UNLESS NOTED OTHERWISE



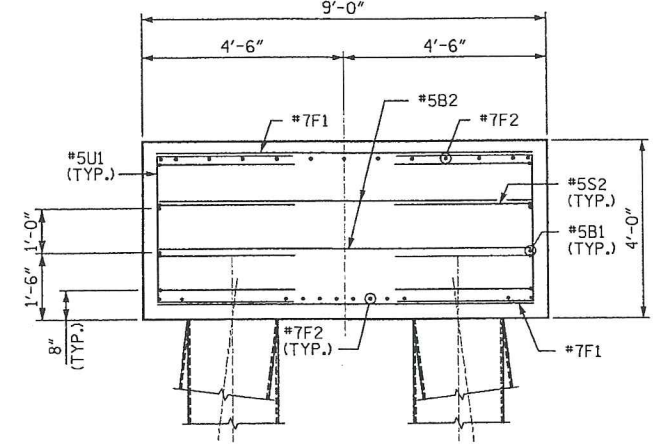
INTERIOR BENT ELEVATION

(FTG. & REINFORCING DIMENSIONS ARE TYPICAL FOR EA. FTG.)
 (#5B1 & #5U2 BARS NOT SHOWN FOR CLARITY)
 (#7V1 BARS NOT SHOWN IN RIGHT FTG. FOR CLARITY)
 (REINFORCING NOT SHOWN IN LEFT FTG. FOR CLARITY)
 (SEE "ANCHOR BOLT LAYOUT" ON INTERIOR BENT DETAILS SHEET 3 OF 4 & 4 OF 4 FOR ANCHOR BOLT LOCATIONS)

N.C. DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 STRUCTURE DESIGN UNIT

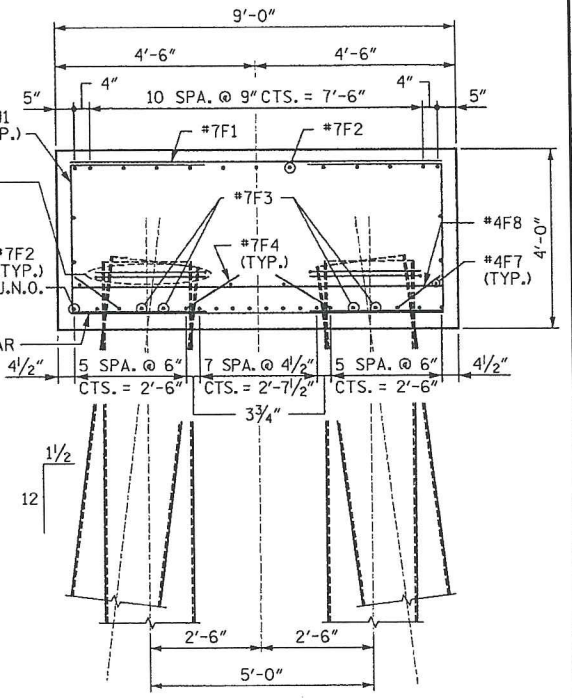
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 ACCEPTED AS NOTED
 SEE LETTER
 RETURN FOR CORRECTION

SEP 13 2011
Mark F. Robbins



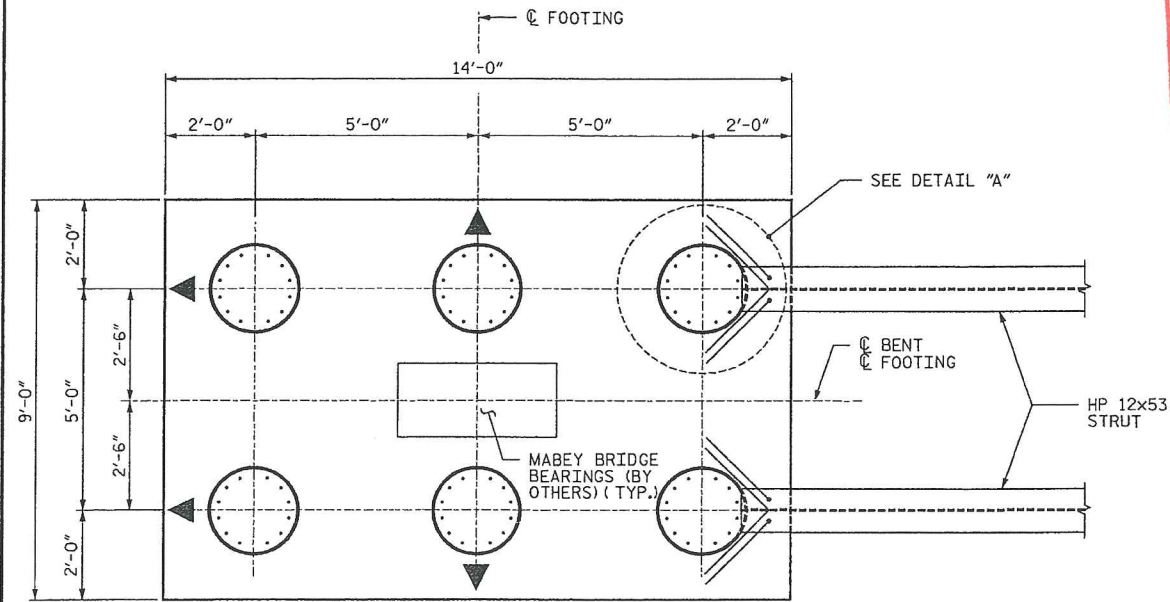
END VIEW

(#7F3 & #7F4 BARS NOT SHOWN FOR CLARITY)



FOOTING SECTION

(#7V1, #5S2 & #5B2 BARS NOT SHOWN FOR CLARITY)



PARTIAL FOOTING PLAN

(TYP. EACH FOOTING)

▲ BATTER 1/2:12

NOTES:

1. CONCRETE FOR FOOTINGS SHALL BE CLASS AA (f'c = 4,500 PSI).
2. ALL REINFORCING STEEL SHALL BE GRADE 60.
3. FOR PIPE PILE INFORMATION, SEE GENERAL DRAWING SHEET 2 OF 3.
4. REINFORCING MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS AND HP 12x53 STRUT.
5. FIELD BENT #7F4, #7F5 & #7F6 AS NECESSARY TO CLEAR PILES.
6. FOR MABEY BRIDGE ANCHOR BOLT DIMENSIONS, DETAILS AND NOTES, SEE MABEY BRIDGE DRAWINGS.
7. FOR "BRIDGE RESTRAINT SYSTEM", SEE END BENT SHEET 3 OF 3.



9-9-11

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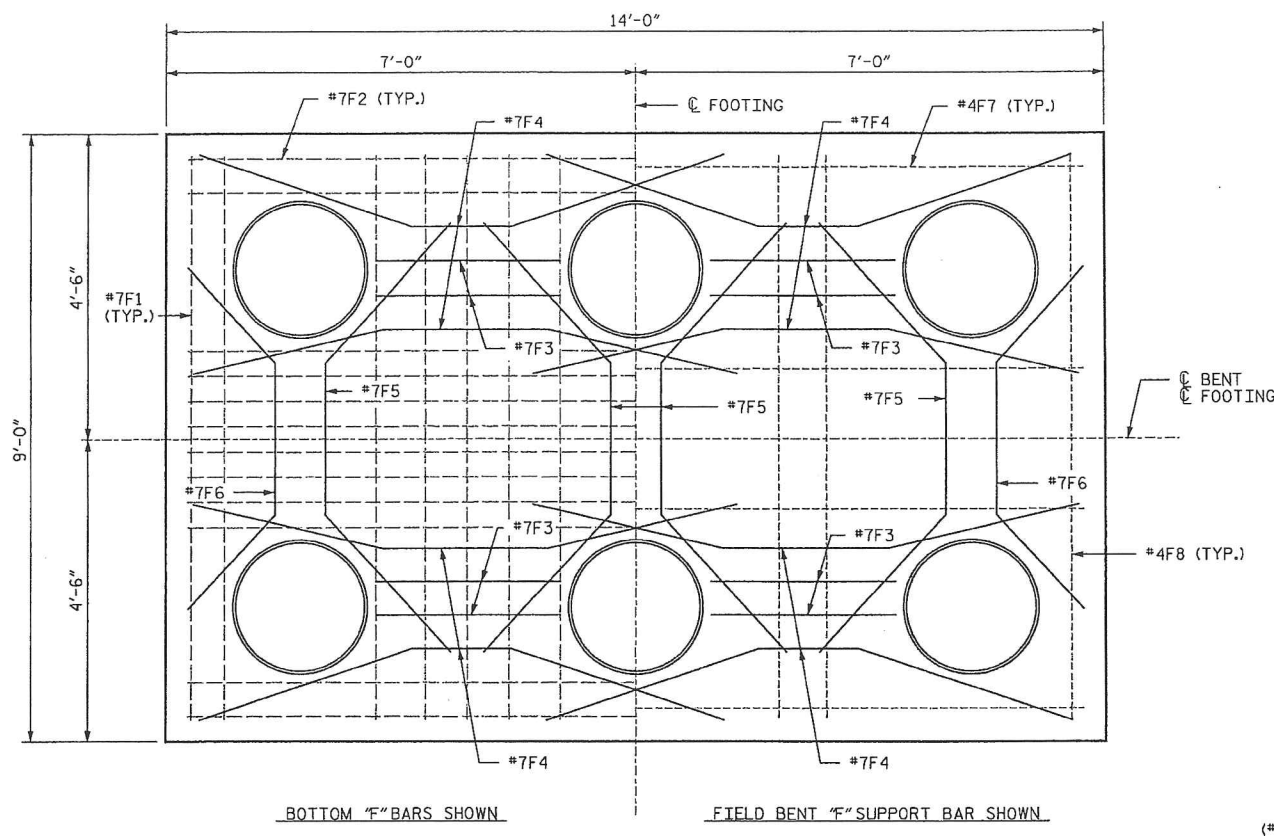
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 DARE COUNTY
 STATION: 25+65.00 -LPI-

SHEET 1 OF 4

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
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2			4			11

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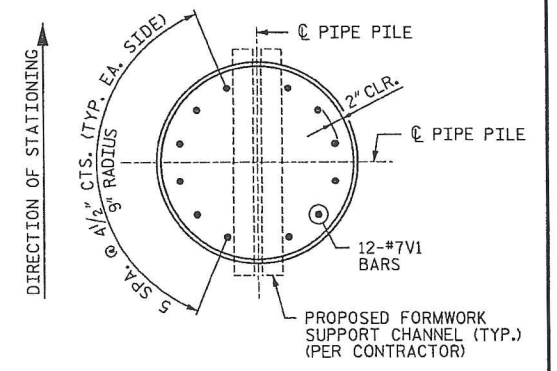
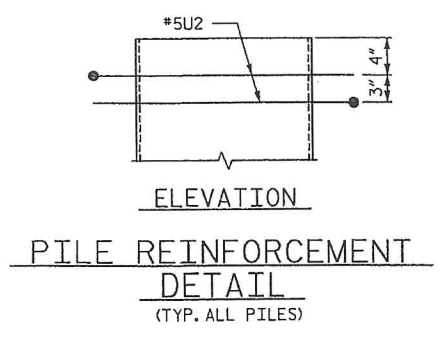
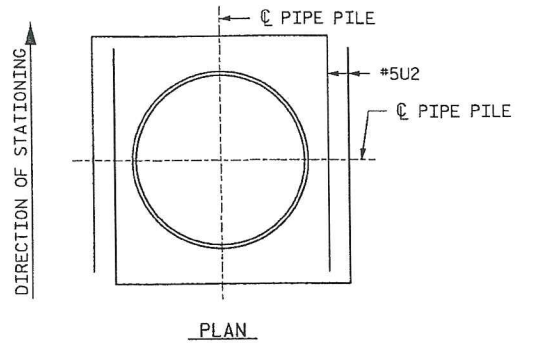
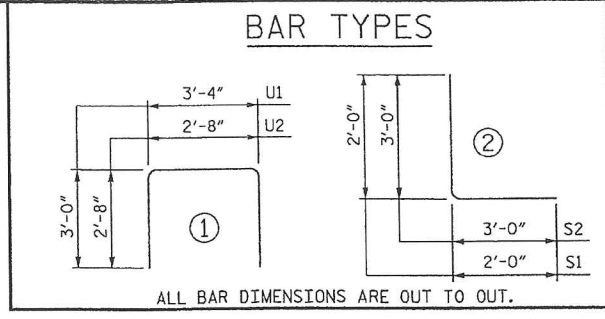
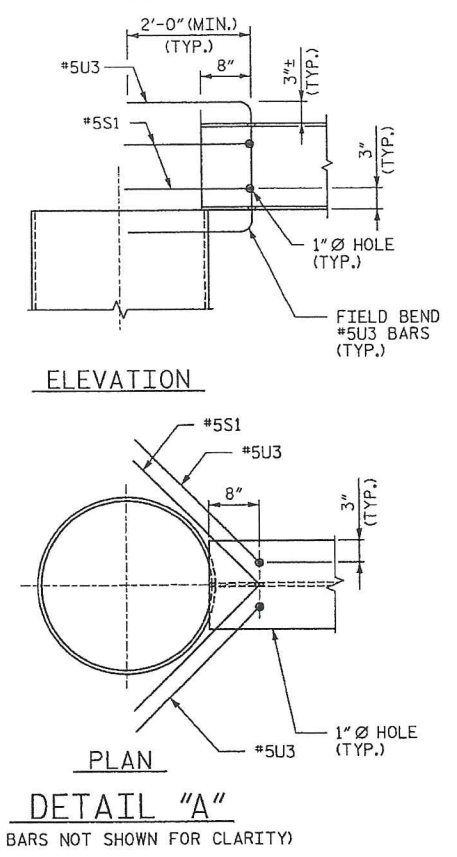
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BOTTOM "F" BARS SHOWN FIELD BENT "F" SUPPORT BAR SHOWN

PARTIAL REINFORCING PLAN
 (PLAN SHOWN FOR #7F3, #7F4, #7F5 & #7F6 BAR LOCATIONS)
 (FIELD BEND #7F4, #7F5 & #7F6 AS NECESSARY TO CLEAR PILES)

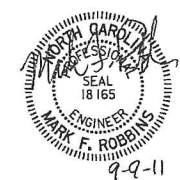
LEGEND	
---	F1 OR F2 BAR
---	F7 OR F8 BAR



TYPICAL SECTION THRU CONCRETE FILL

BILL OF MATERIAL					
REINFORCING STEEL FOR ONE BENT					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#5	STR.	13'-4"	111
B2	8	#5	STR.	8'-4"	70
F1	66	#7	STR.	8'-4"	1,124
F2	50	#7	STR.	13'-4"	1,363
F3	16	#7	STR.	2'-8"	87
F4	16	#7	STR.	8'-3"	270
F5	8	#7	STR.	8'-5"	138
F6	4	#7	STR.	6'-10"	56
F7	8	#4	STR.	13'-4"	71
F8	12	#4	STR.	8'-4"	67
S1	8	#5	2	4'-0"	33
S2	32	#5	2	6'-0"	200
U1	56	#5	1	9'-4"	545
U2	24	#5	1	8'-0"	200
U3	8	#5	STR.	5'-6"	46
V1	144	#7	STR.	5'-8"	1,668
REINFORCING STEEL				LBS.	6,049
CLASS AA CONCRETE				C.Y.	40.6

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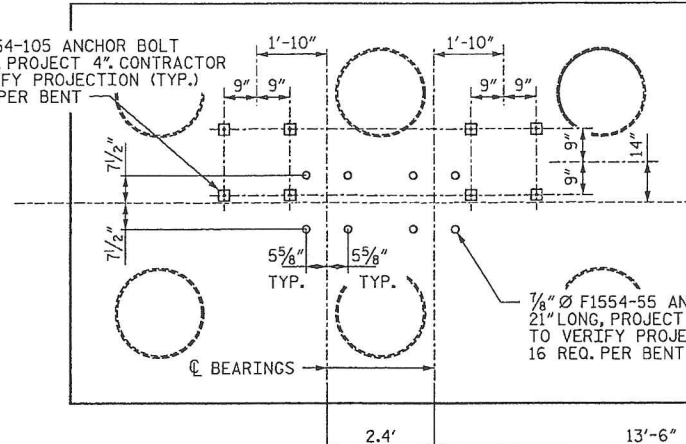
PROJECT NO. 13201.1028011
 DARE COUNTY
 STATION: 25+65.00 -LPI-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
INTERIOR BENTS					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
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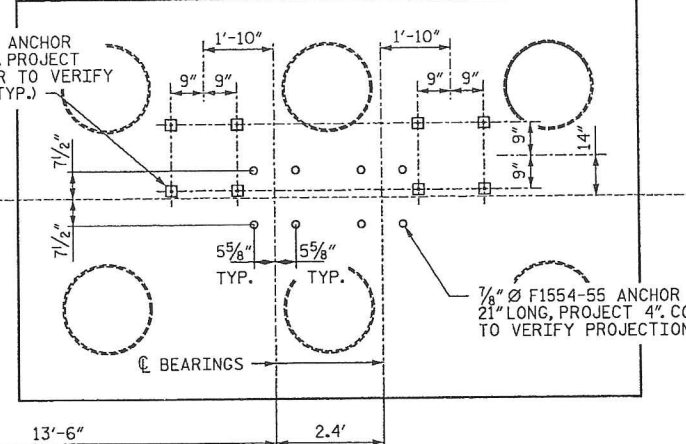
SHEET 2 OF 4

SHEET NO.	8
TOTAL SHEETS	11

1" Ø F1554-105 ANCHOR BOLT
21" LONG, PROJECT 4". CONTRACTOR
TO VERIFY PROJECTION (TYP.)
16 REQ. PER BENT



1" Ø F1554-105 ANCHOR BOLT
21" LONG, PROJECT 4". CONTRACTOR
TO VERIFY PROJECTION (TYP.)



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DIVISION OF HIGHWAYS
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BENT 4

☉ SURVEY -LPI-

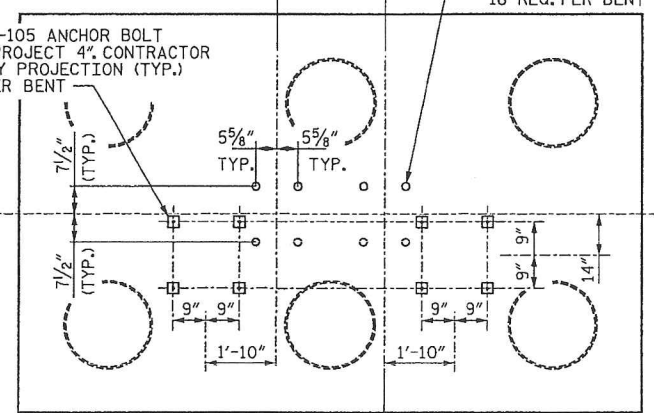
NOTE: BEARING PLATES NOT SHOWN,
SEE MABEY BRIDGE PLANS.
VERIFY ANCHOR BOLT SPACING
WITH MABEY PLANS.

- ☐ = ANCHOR BOLTS FOR UPLIFT RESTRAINT ASSEMBLY
- ☉ = ANCHOR BOLTS FOR MABEY BRIDGE BEARINGS (SEE MABEY BRIDGE DRAWINGS FOR DIMENSIONS)

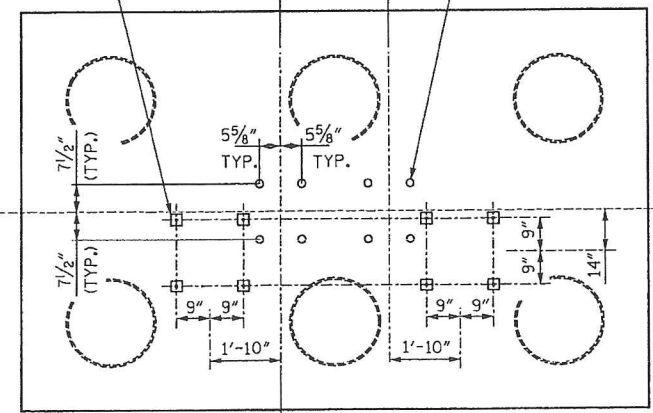
NOTE: CONTRACTOR MAY USE GROUT CANS (PER MABEY PLANS) TO INSTALL MABEY BEARING ANCHOR BOLTS. GROUT CANS SHALL NOT BE USED ON BRIDGE RESTRAINT SYSTEM ANCHOR BOLTS.

LOOKING UPSTATION

1" Ø F1554-105 ANCHOR BOLT
21" LONG, PROJECT 4". CONTRACTOR
TO VERIFY PROJECTION (TYP.)
16 REQ. PER BENT



1" Ø F1554-105 ANCHOR BOLT
21" LONG, PROJECT 4". CONTRACTOR
TO VERIFY PROJECTION (TYP.)

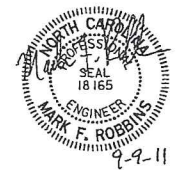


7/8" Ø F1554-55 ANCHOR BOLT
21" LONG, PROJECT 4". CONTRACTOR
TO VERIFY PROJECTION (TYP.)
16 REQ. PER BENT

BENT 1

ANCHOR BOLT LAYOUT

(SEE END BENT SHEET 3 OF 3 FOR "BRIDGE RESTRAINT SYSTEM" AND NOTES)



PROJECT NO. 13201.1028011
DARE COUNTY
STATION: 25+65.00 -LPI-
SHEET 3 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

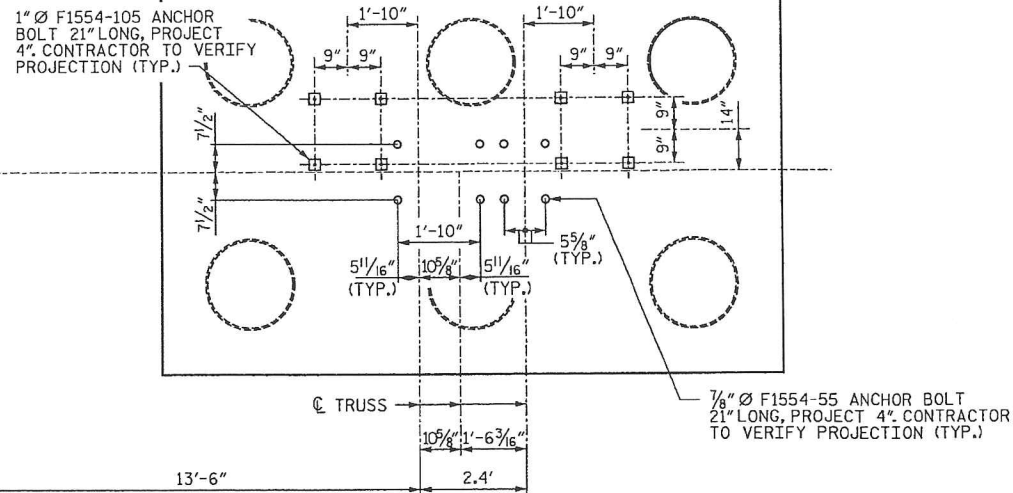
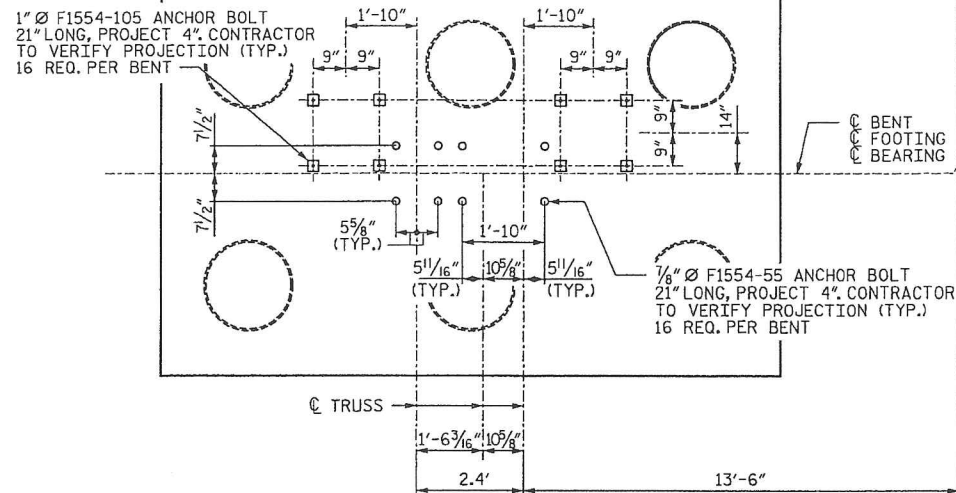
**INTERIOR BENTS 1 & 4
ANCHOR BOLT LAYOUT**

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NO.	BY:	DATE:	NO.	BY:	DATE:	9
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2			4			11

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SEE LETTER
RETURN FOR CORRECTION

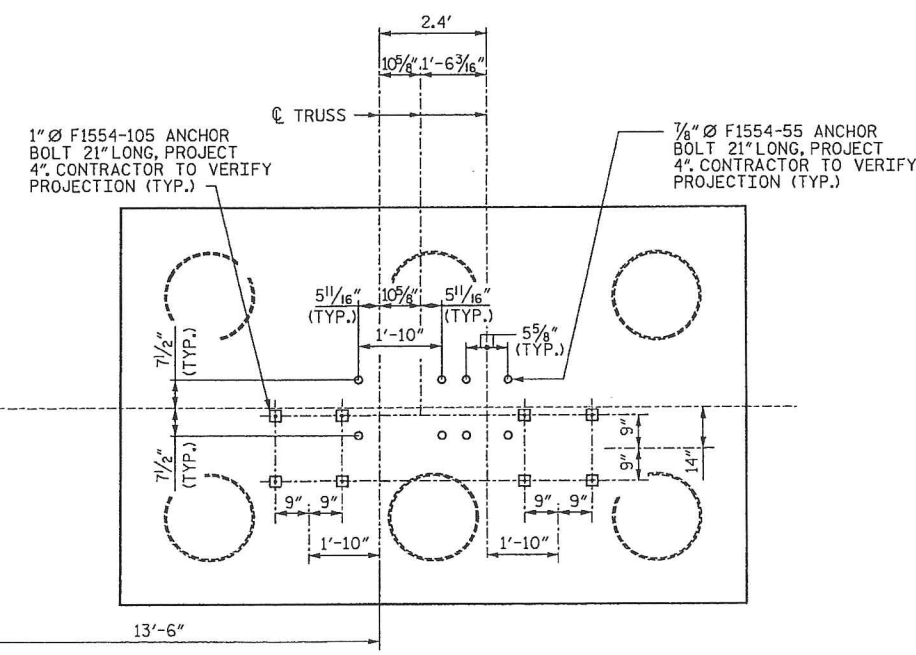
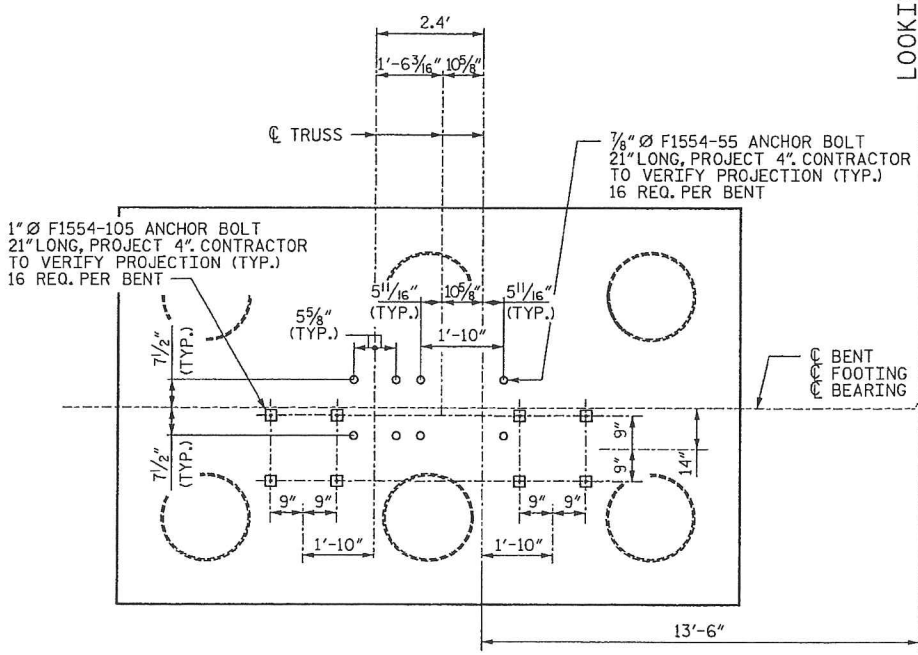
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NOTE: BEARING PLATES NOT SHOWN,
SEE MABEY BRIDGE PLANS.
VERIFY ANCHOR BOLT SPACING
WITH MABEY PLANS.

NOTE: CONTRACTOR MAY USE GROUT CANS (PER
MABEY PLANS) TO INSTALL MABEY BEARING
ANCHOR BOLTS. GROUT CANS SHALL NOT
BE USED ON BRIDGE RESTRAINT SYSTEM
ANCHOR BOLTS.

- = ANCHOR BOLTS FOR UPLIFT RESTRAINT ASSEMBLY
- = ANCHOR BOLTS FOR MABEY BRIDGE BEARINGS (SEE MABEY BRIDGE DRAWINGS FOR DIMENSIONS)



ANCHOR BOLT LAYOUT
(SEE END BENT SHEET 3 OF 3 FOR "BRIDGE RESTRAINT SYSTEM" AND NOTES)

DRAWN BY : CLG DATE : 9-11
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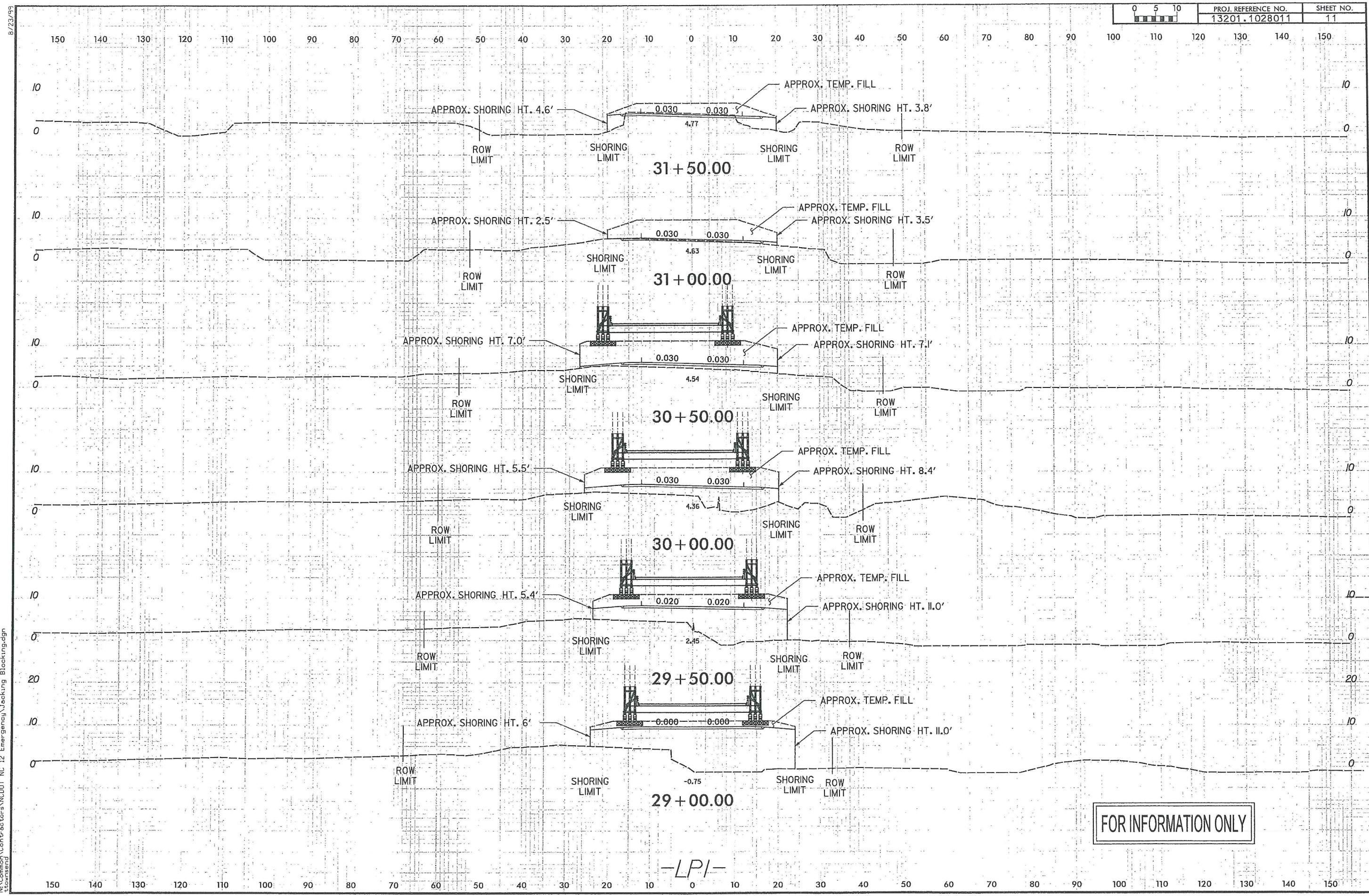
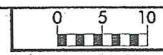
PROJECT NO. 13201.1028011
DARE COUNTY
STATION: 25+65.00 -LPI-
SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

**INTERIOR BENTS 2 & 3
ANCHOR BOLT LAYOUT**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	10
1			3			TOTAL SHEETS
2			4			11

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