

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

July 29, 2014

Addendum No. 2

Contract No.: DA00198 TIP No.: BD-5101N WBS No.: 45347.3.FD15

Replacement of Bridge #18 Over Charles Creek on SR 1269 (South Road Street).

To Whom It May Concern:

Reference is made to the proposal and plans previously furnished for this project.

The following revision has been made to the proposal and plans:

"Proposal Cover" has been revised to show the new Bid Opening Date of August 6, 2014. Please void the existing "Proposal Cover" and staple the revised "Proposal Cover" thereto.

Page No. iv, "Instruction to Bidders" has been revised to show the new Bid Opening Date of August 6, 2014. Please void the existing "Instruction to Bidders" and staple the revised "Instruction to Bidders" thereto.

The attached Structure Plan Sheets have been revised to illustrate the changes in the retaining wall construction and show a section modulus of 30.2 in\*3/ft. Please void existing Structure Plan Sheets and staple the revised Structure Plan Sheets thereto.

Sincerely By:

W. B. Hobbs, PE

**Division Project Manager** 

WBH Attachment

cc: S. D. Baker, PE

C. S. Mebane, PE

R. W. Midgett, PE

J. S. Abel, Jr.

DA00198 FEDERAL

**REVISED 7/29/14** 

### STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 1

## **PROPOSAL**

DATE AND TIME OF BID OPENING: AUGUST 6, 2014 AT 2:00 PM

**CONTRACT ID: DA00198** 

**WBS ELEMENT NO.: 45347.3.FD15** 

FEDERAL AID NO.: BRSTP-1269(2)

COUNTY: PASQUOTANK

TIP NO.: BD-5101N

MILES: 0.069 MILES

ROUTE NO.: SR 1269

LOCATION: BRIDGE #18 OVER CHARLES CREEK ON SR 1269

TYPE OF WORK: BRIDGE REPLACEMENT

#### **NOTICE:**

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

THIS IS A DIVISION LET PROJECT.

BID BOND NOT REQUIRED.

NAME OF BIDDER

DA00198 FEDERAL

#### **INSTRUCTIONS TO BIDDERS**

**REVISED 7/29/14** 

# PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements, except that bids may be prepared by electronic means as described elsewhere in the proposal. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

- 1. The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner. **DO NOT SEPARATE THE BID FORM FROM THE PROPOSAL! RETURN ENTIRE PROPOSAL.**
- 2. All entries on the bid sheet, including signatures, shall be written in ink.
- 3. The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures. \*\*\*Unit Prices shall be rounded off by the bidder to contain no more than FOUR decimal places.\*\*\*
- 4. An amount bid shall be entered on the bid sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the sheet.
- 5. The total amount bid shall be written in figures in the proper place on the bid sheet. The total amount shall be determined by adding the amounts bid for each item.
- **6.** Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink.
- 7. The bid shall be properly executed. All bids shall show the following information:
  - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
  - b. Name and signature of individual or representative submitting bid and position or title.
  - c. Name, signature, and position or title of witness.
  - d. Federal Identification Number (or Social Security Number of Individual)
  - e. Contractor's License Number (if Applicable)
- **8.** Bids submitted by corporations shall bear the seal of the corporation.
- 9. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- **10.** The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 11. THE PROPOSAL WITH THE BID FORM STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE NCDOT DIV. ONE OFFICE, 113 AIRPORT DRIVE, SUITE 100, EDENTON, NC 27932 LOCATED APPROXIMATELY 5 MILES SOUTHEAST OF EDENTON, JUST OFF NC 94 ON AIRPORT DRIVE IN THE NORTHEASTERN REGIONAL AIRPORT BUILDING, BY 2:00 P.M. ON, WEDNESDAY, AUGUST 6, 2014.
- 12. The sealed bid must display the following statement on the front of the sealed envelope:

QUOTATION FOR DA00198 – REPLACEMENT OF BRIDGE #18 OVER CHARLES CREEK ON SR 1269 (SOUTH ROAD STREET), TO BE OPENED AT 2:00 P.M. ON WEDNESDAY, AUGUST 6, 2014

**13.** If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

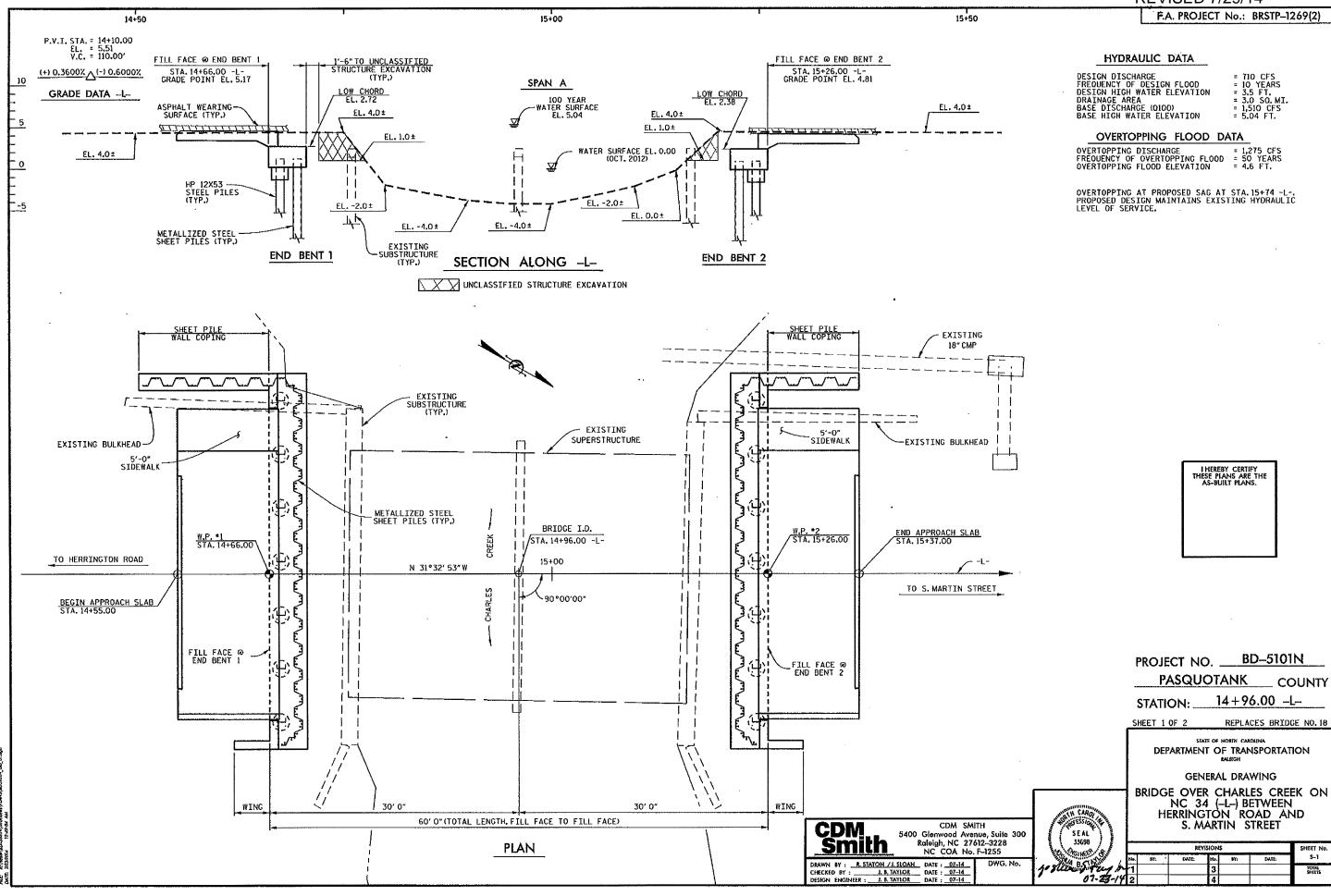
#### N. C. DEPARTMENT OF TRANSPORTATION

Attn: Barry Hobbs, PE 113 Airport Drive, Suite 100 Edenton, NC 27932

#### AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102, (excluding section 102-10) of the <u>2012 Standard Specifications for Roads and Structures</u>. The lowest responsible Bidder will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject all bids.

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				ТС	TAL BILI	L OF MA	rer	IAL ·							_	
	REMOVAL OF EXISTING STRUCTURE @ STA. 14+96.00 -L-	PDA TESTING		CLASS AA CONCRETE	ADDDOACH	EPOXY COATED REINFORCING STEEL	nr.	12 × 53 EL PILES	PILE REDRIVES		TALL <b>IZEO</b> STEEL ET PILES	1'-3"× 2'-6" CONCRETE PARAPET	2 BAR METAL RAIL	ELASTOMERIC BEARINGS	PRE	D"× 1'-9" STRESSED INCRETE ED SLABS
	LUMP SUM	EACH	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	No.	LIN. FT.	EACH	No.	SO.FT.	LIN. FT.	LIN. FT.	LUMP SUM	No.	LIN. FT.
SUPERSTRUCTURE	-	-	-	8.8	LUMP SUM	376	-	-	u.	•	1	115.5	100.5	LUMP SUM	13	750.75
END BENT 1	-	-	LUMP SUM	22.6	-	2991	7	665	-	43	3147	-	-	-	-	-
END BENT 2	-		· LUMP SUM	22.2	-	2961	7	665	-	40	2885	-	-	-	-	-
TOTAL	LUMP SUM	1	LUMP SUM	53.6	LUMP SUM	6328	14	1330	1	83	6032	115.5	100.5	LUMP SUM	13	750.75

#### FOUNDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT NOS.1 AND 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 85 TONS PER PILE.

DRIVE PILES AT END BENT NOS. 1 AND 2 TO A REQUIRED DRIVING RESISTANCE OF 142 TONS PER PILE.

INSTALL PILES AT END BENT NOS.1 AND 2 TO A TIP ELEVATION NO HIGHER THAN -70 FT.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 40,000 TO 45,000 FT-LBS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT END BENT NOS. I AND

THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DUILUMENT IN ACCORDANCE WITH SUBARTICLE 450-3(D)(2) OF THE STANDARD SPECIFICATIONS.

TESTING THE FIRST PRODUCTION PILE AT AN END BENT WITH THE PDA DURING DRIVING IS REQUIRED FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS AND FOR PILE DRIVING CRITERIA, SEE PILE DRIVING CRITERIA PROVISION.

THE SCOUR CRITICAL ELEVATION FOR END BENT 1 AND END BENT 2 IS ELEVATION -9.0 FEET. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE

THE DESIGN SCOUR ELEVATION FOR THE STEEL SHEET PILES EMBEDDED IN THE END BENT CAP AT END BENT 1 AND END BENT 2 IS ELEVATION

THE CORED SLAB UNIT SUPERSTRUCTURE ACTS AS A BRACE BETWEEN THE SHEET PILE WALLS PARALLEL TO AND EMBEDDED IN THE END BENT CAP AT END BENT ND. I AND END BENT NO. 2. AT THE DESIGN SCOUR ELEVATION BELOW THE BRIDGE (-9.0 FEET), THE AASHTO LRFD STRENGTH 1 LIMIT STATE BRACE LOAD IS 9.6 KIPS / FDOT OF WALL.

THE DESIGN SCOUR ELEVATION FOR STEEL SHEET PILES SERVING AS WINGWALLS AND INSTALLED PARALLEL TO THE ROADWAY IS ELEVATION

STEEL SHEET PILES AT END BENT NO. 1 AND END BENT NO. 2 SHALL HAVE A MINIMUM SECTION MODULUS OF 30.2 IN3/FT.

STEEL SHEET PILES AT END BENT NO.1 AND END BENT NO.2 SHALL BE INSTALLED TO A SHEETING TIP ELEVATION OF -49.0 FEET.

#### GENERAL NOTES

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

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

FOR FROSTON CONTROL MEASURES SEE EROSTON CONTROL PLANS.

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

THE EXISTING 2 SPAN STRUCTURE (2 @ 20'-0") WITH 6 LINES OF STEEL I-BEAMS AT 5'-0" SPACES SUPPORTING REINFORCED CONCRETE DECK WITH 30'-0" CLEAR ROADWAY WIDTH ON TIMBER CAP AND TIMBER PILES SHALL BE REMOYED. IN ADDITION, BULKHEADS AND BULKHEAD SUPPORT PILES SHALL BE REMOYED AND INCLUDED IN THE LUMP SUM PAY ITEM FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 14+96.00 -L-".

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 3.0 FT. BEYOND EACH SIDE OF THE PROPOSED STRUCTURE WIDTH AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE, SINCE THIS INFORMATION IS SHOWN FOR THE CONTRACTOR, THE CONTRACTOR THE THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY DUANTITY ON ROADWAY PLANS.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH 'HEC 18 EVALUATING SCOUR AT BRIDGES".

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED, THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS, ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 14+96.00 -L-.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR METALLIZED STEEL SHEET PILES, SEE SPECIAL PROVISIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

ALL METALLIZED SURFACES SHALL RECEIVE A SEAL COATING AS SPECIFIED IN THE SPECIAL PROVISION FOR THERMAL SPRAYED COATINGS (METALLIZATION).

CLASS AA CONCRETE SHALL BE USED IN ALL CAST-IN-PLACE BENT CAPS AND SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR, FOR CALCIUM NITRITE CORROSION INHIBITOR, SEE SPECIAL PROVISIONS.

ALL BAR SUPPORTS USED IN THE PARAPET, SIDEWALK, AND BENT CAPS AND ALL INCIDENTAL REINFORCING STEEL SHALL BE EPOXY COATED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

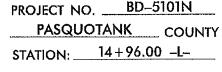
THE CONCRETE IN THE END BENT CAPS OF END BENTS NO.1 & 2 SHALL CONTAIN SILICA FUME. SILICA FUME SHALL BE SUBSTITUTED FOR 5% OF THE PORTLAND CEMENT BY WEIGHT. IF THE OPTION OF ARTICLE 1024-1 OF THE STANDARD SPECIFICATIONS TO PARTIALLY SUBSTITUTE CLASS F FLY ASH FOR PORTLAND CEMENT IS EXERCISED, THEN THE RATE OF FLY ASH SUBSTITUTION SHALL BE REDUCED TO 1.0 LB OF FLY ASH PER 1.0 LB. NO PAYMENT WILL BE MADE FOR THIS SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE VARIOUS PAY ITEMS.

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SHEET 2 OF 2

STATE OF NORTH CAROLIN DEPARTMENT OF TRANSPORTATION

GENERAL DRAWING

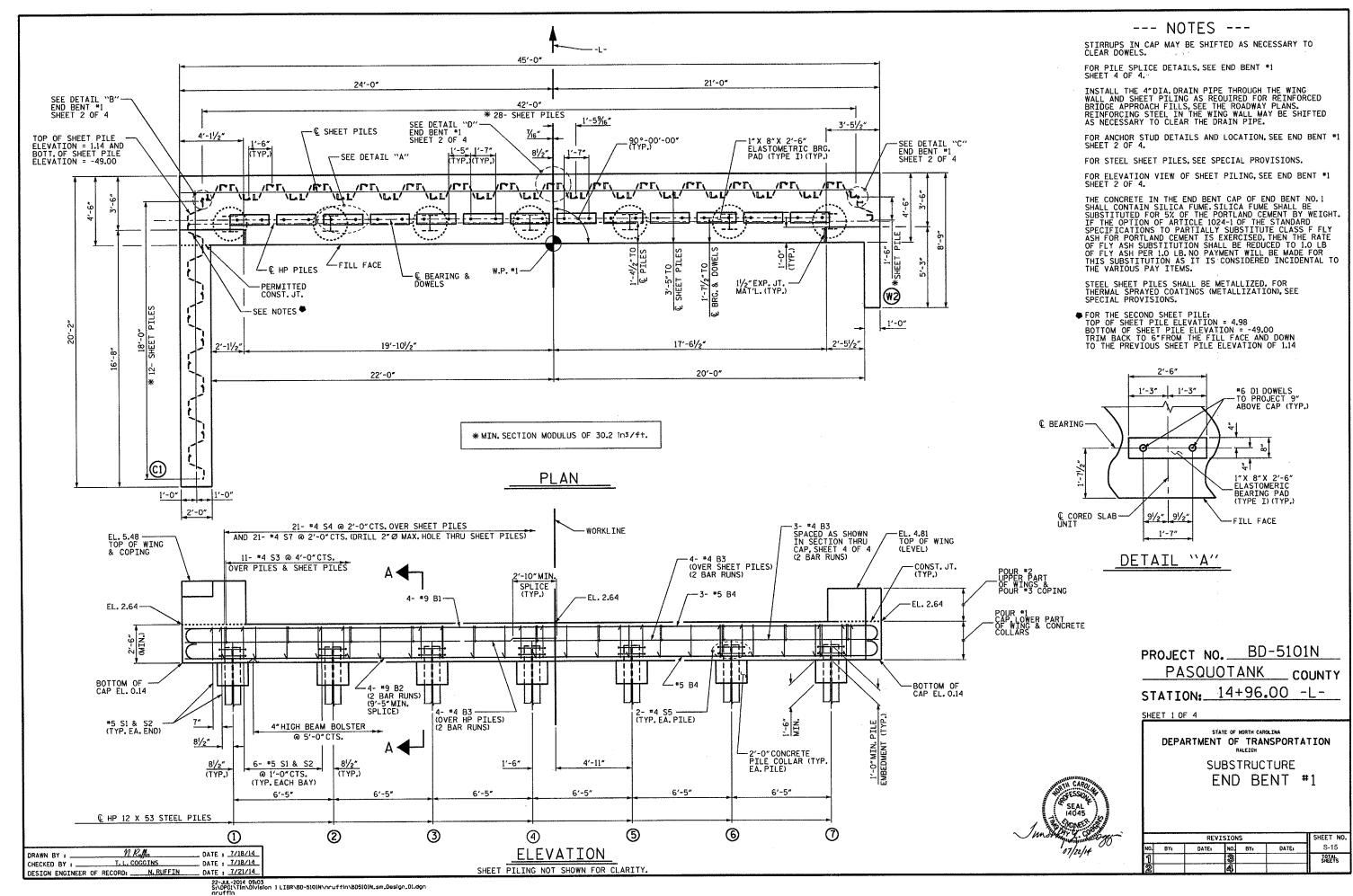
BRIDGE OVER CHARLES CREEK ON NC 34 (-L-) BETWEEN HERRINGTON ROAD AND S. MARTIN STREET

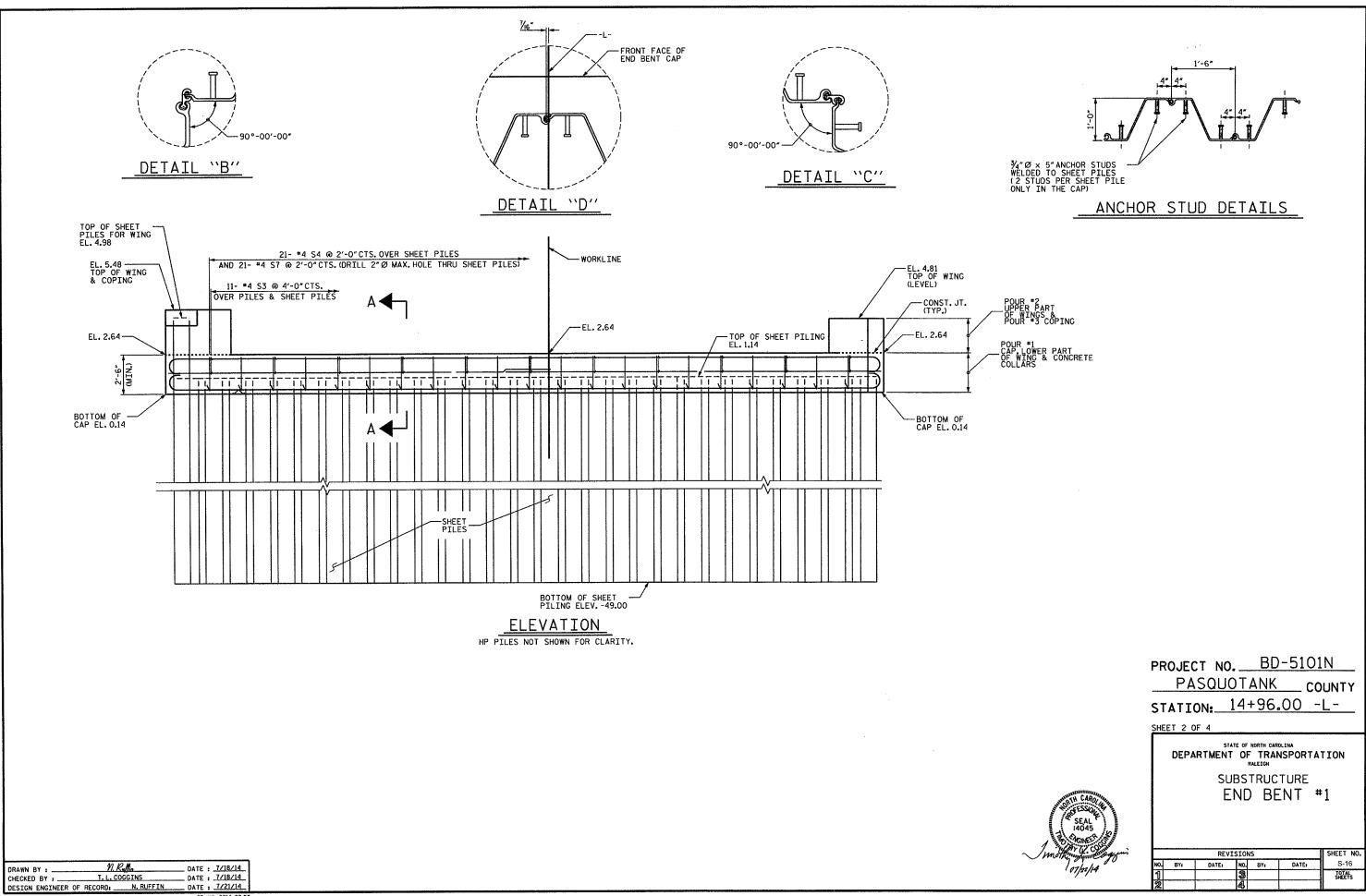


5400 Glenwood Avenue, Suite 300 Raleigh, NC 27612-3228 NC COA No. F-1255

RAWN BY : R. STATON / J. SLOAN DATE : CHECKED BY: J.B. TAYLOR DATE: 07-14
DESIGN ENGINEER: J.B. TAYLOR DATE: 07-14

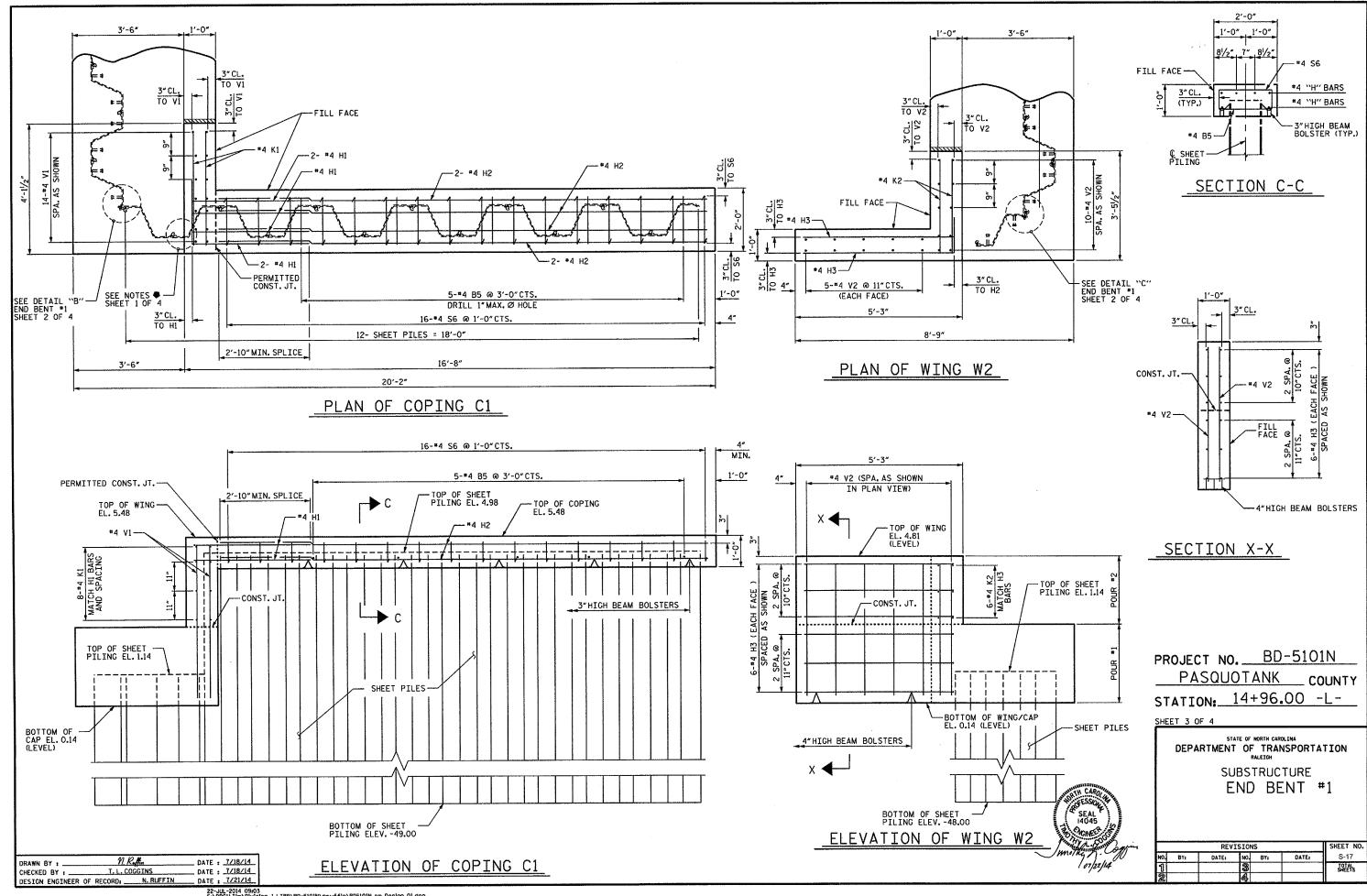
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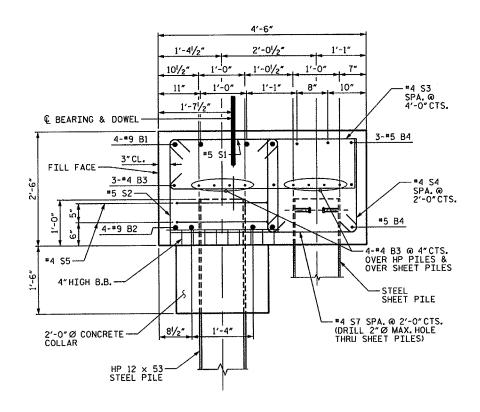
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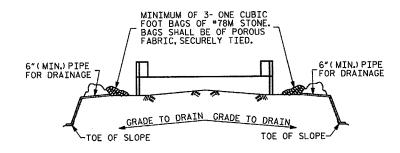


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# SECTION A-A THRU CAP



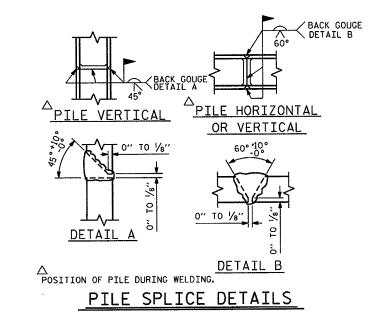
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION, PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

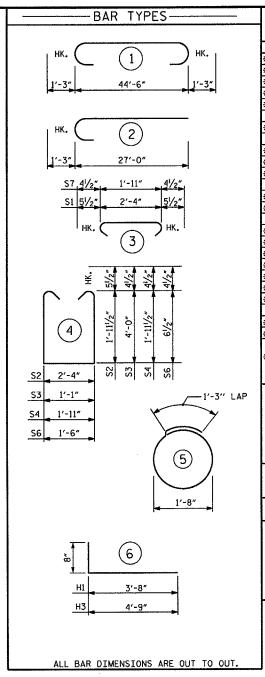
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR EFFECTIVENESS.

NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

# TEMPORARY DRAINAGE AT END BENT

DRAWN BY : _	N. Ruffin	DATE	7/18/14
CHECKED BY : .	T. L. COGGINS	DATE	7/18/14
DESTON ENGINE		DATE	7/21/14

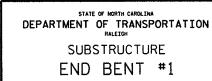


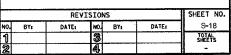


U		-		ERIA	L		
END BENT #1							
BAR	NO	SIZE	TYPE	LENGTH			
<b>∗</b> B1	4	9	1	47'-0''	639		
<b>∗</b> B2	8	9	2	28'-3"	768		
<b>∗</b> B3	22	4	STR	23'-8''	348		
* B4	4	5	STR	44'-6''	186		
* B5	4	4	STR	1'-6"	4		
* D1	26	6	STR	1′-6′′	59		
* H1	6	4	6	4'-4''	17		
* H2	6	4	STR	15'-4"	61		
* H3	12	4	6	5′-5"	43		
* K1	8	4	STR	3′-8′′	20		
* K2	6	4	STR	2'-11''	12		
				71 711	170		
* S1	40	5	3	3′-3"	136		
* S2	40	5	4	7'-2"	299		
* S3	11	4	4	9'-10"	72		
* S4	21	4	4	6'-7"	92		
* S5	14	4	5	6'-6"	61		
* S6	16	4	4	3'-4"	36		
* S7	21	4	3	2'-8"	37		
* V1	14	4	STR	4'-10"	45		
* V2	20	4	STR	4'-2"	56		
*EXOPY COATED REINFORCING STEEL LBS. 2,991  CLASS "AA" CONCRETE BREAKDOWN POUR *1 CAP & LOWER PART OF WINGS & COLLARS POUR *2 UPPER PART OF WINGS 1.1 C.Y. POUR *3 COPING 1.2 C.Y. TOTAL 22.6 C.Y.							
HP 12 x 53 STEEL PILES No. = 7 LIN. FEET. 665							
PILE REDRIVES <u>EA. 1</u>							
STEEL SHEET PILES							
NO. 90° = 2 NO. PILES = 41							
TOTAL	NO.	= 4	43	S0. F	T <u>. 3147</u>		

PROJECT NO. BD-5101N
PASQUOTANK COUNTY
STATION: 14+96.00 -L-

SHEET 4 OF 4

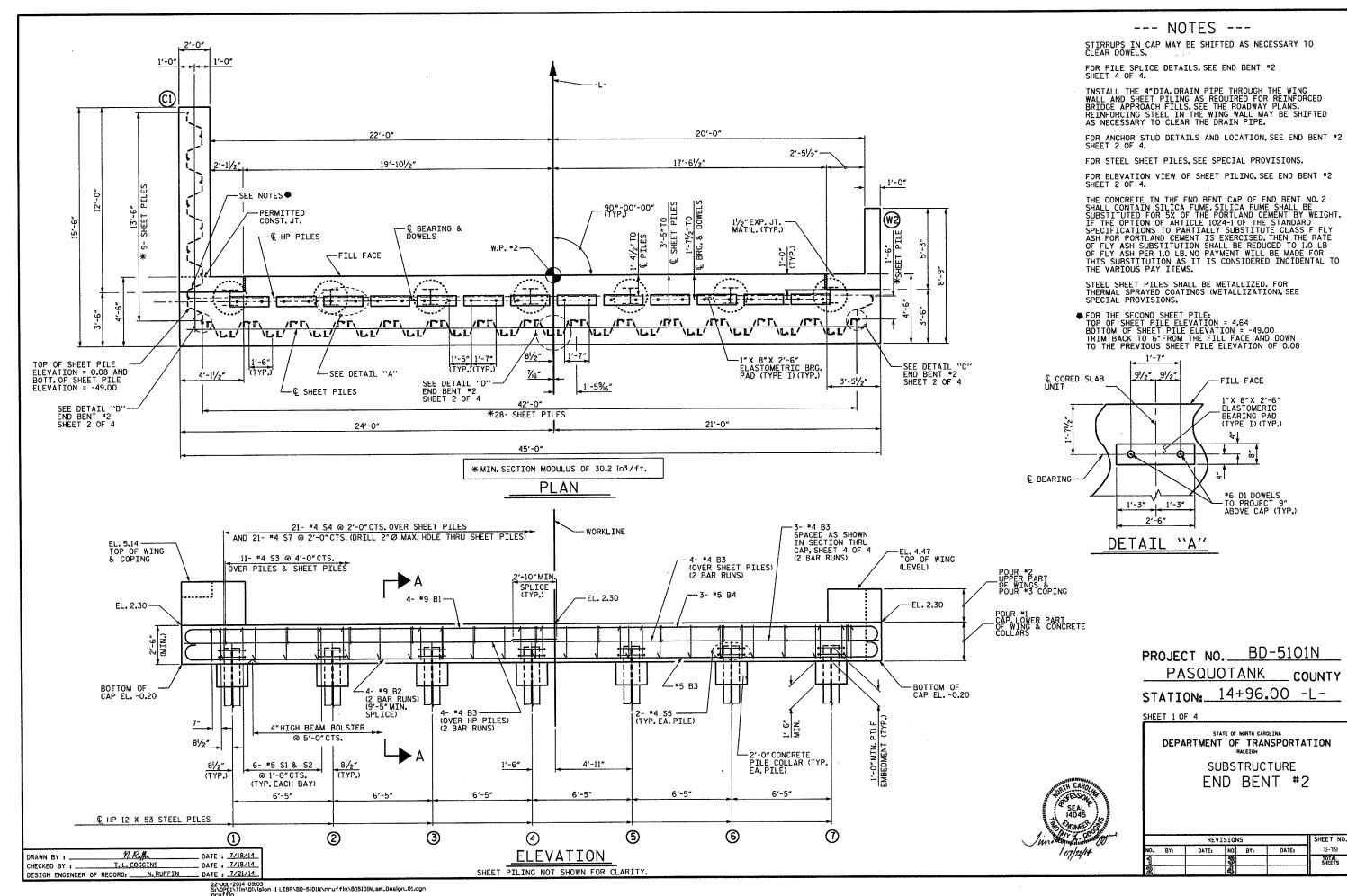


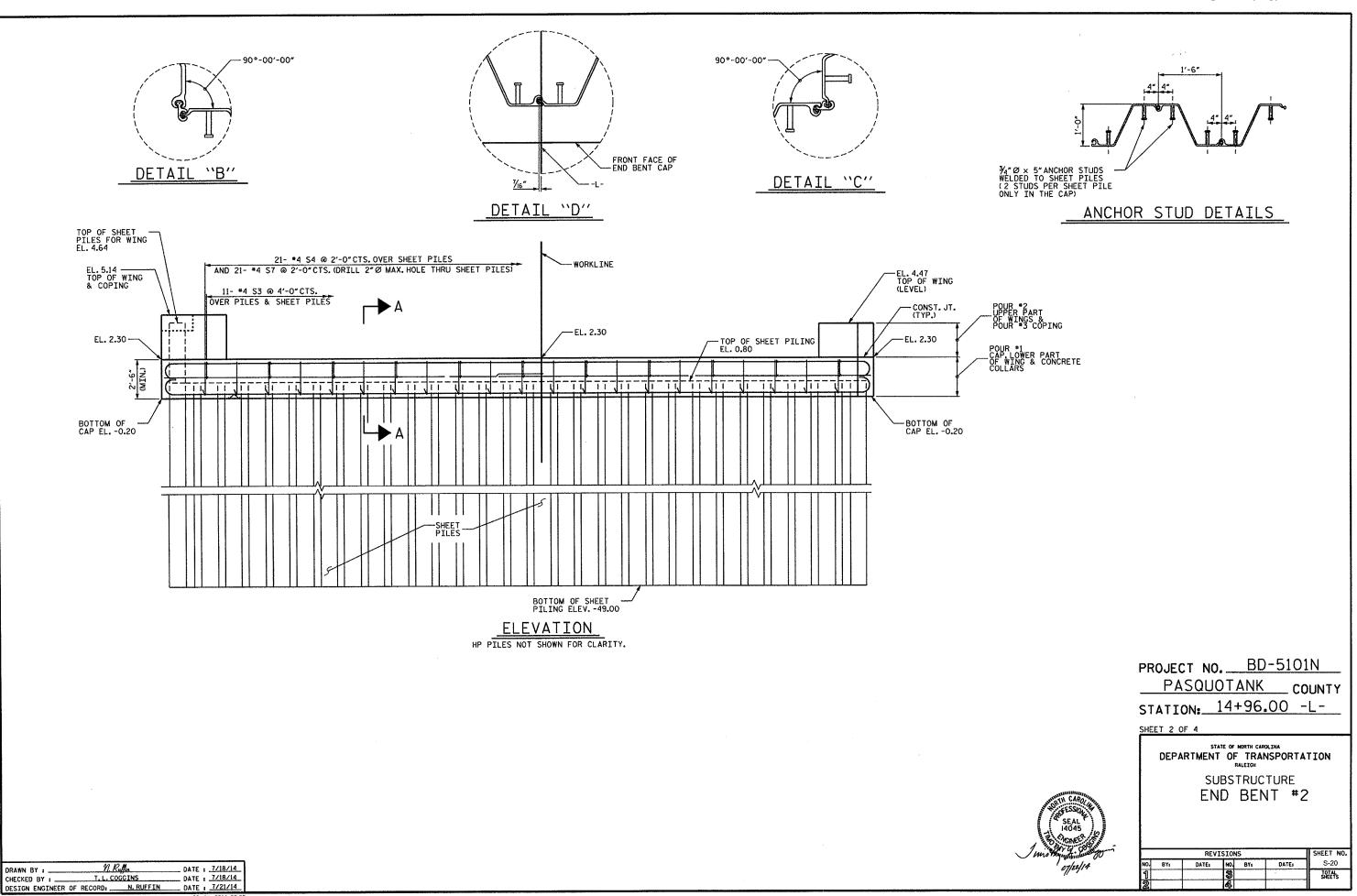


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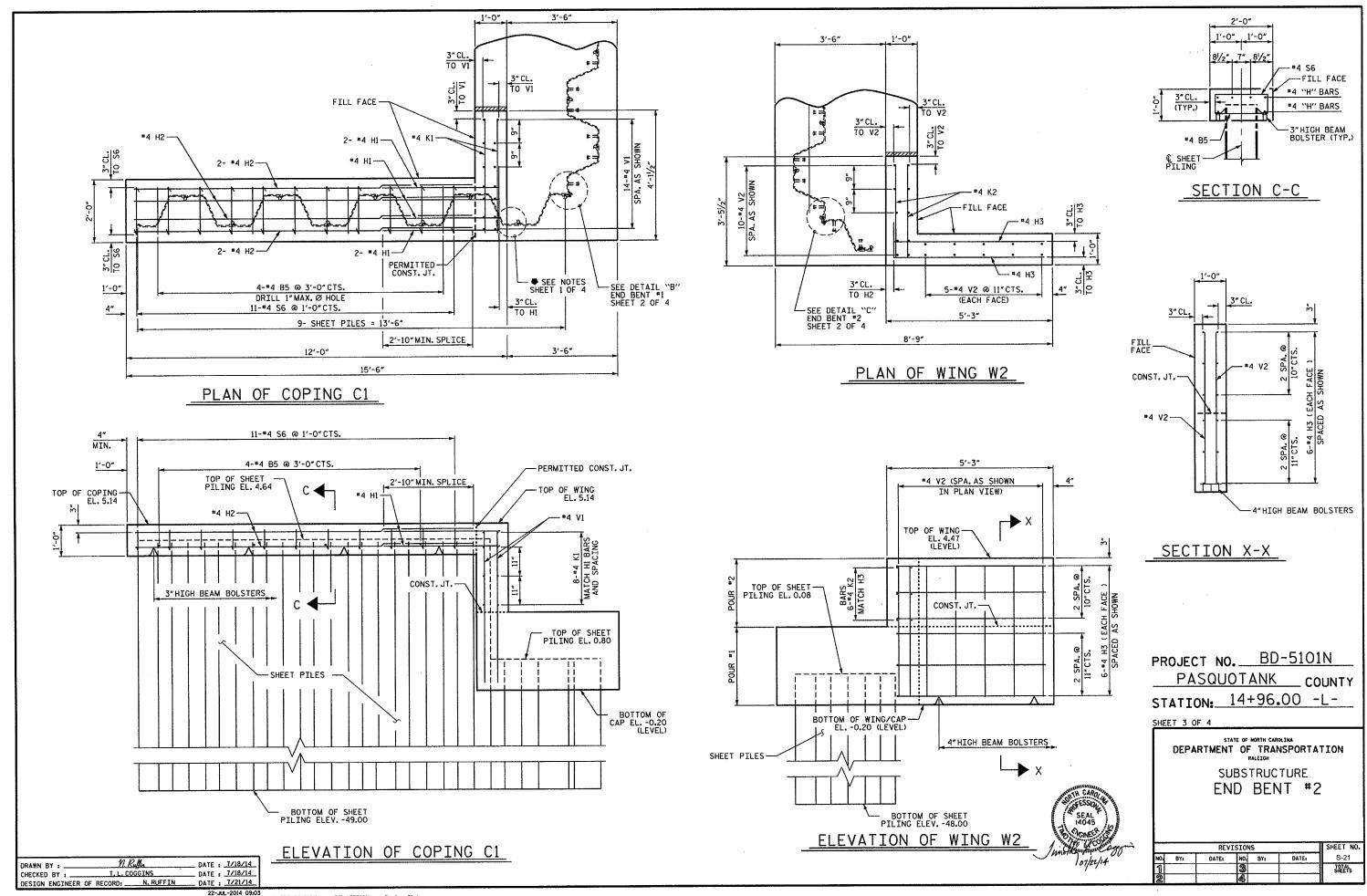
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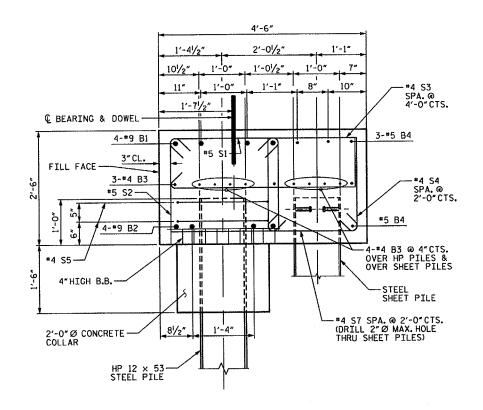
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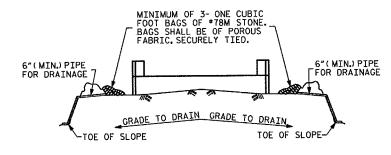


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# SECTION A-A THRU CAP



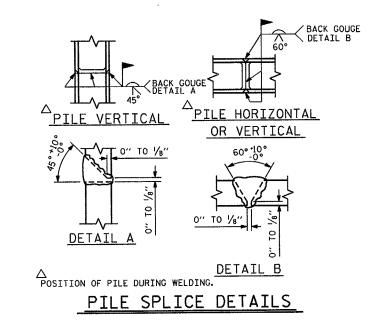
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

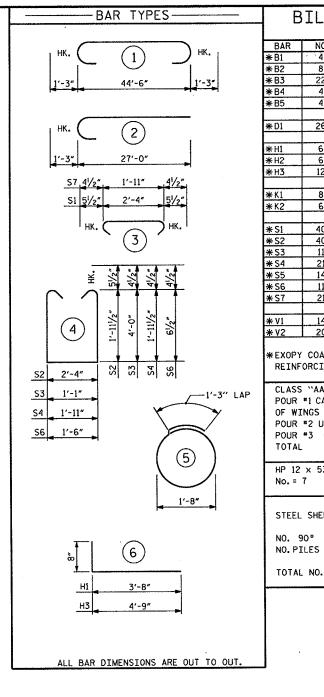
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NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

# TEMPORARY DRAINAGE AT END BENT

DRAWN BY :	N. Ruffin	DATE	7/18/14
CHECKED BY :	T. L. COGGINS	DATE :	7/18/14
DESIGN ENGINEER C	F RECORD: N. RUFFIN	DATE :	7/21/14





_	BILL OF MATERIAL							
	END BENT #2							
BAR	NO	SIZE	TYPE	LENGTH	WEIGHT			
<b>∗</b> B1	′ 4	9	1	47'-0"	639			
*B2	8	9	2	28′-3′′	768			
<b>∗</b> B3	22	4	STR	23'-8''	348			
<b>∗</b> B4	4	5	STR	44'-6"	186			
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*H2	6	4	STR	10'-8''	43			
* H3	12	4	6	5′-5″	43			
<b>*</b> K1	8	4	STR	3′-8′′	20			
*K2	6	4	STR	2'-11"	12			
* S1	40	5	3	3′-3′′	136			
<b>*</b> S2	40	5	4	7'-2"	299			
<b>*</b> \$3	11	4	4	9'-10"	72			
<b>*</b> S4	21	4	4	6'-7"	92			
* S5	14	4	5	6'-6"	61			
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<b>*</b> S7	21	4	3	2'-8"	37			
* V1	14	4	STR	4'-10"	45			
* V2	20	4	STR	4'-2"	56			
REIN	Y COATED	STEEL		OWN	2,961			
POUR	CLASS "AA" CONCRETE BREAKDOWN POUR *1 CAP & LOWER PART OF WINGS & COLLARS 20.3 C.Y.							
POUR	#2 UPPE	R PART	OF WING	GS	1.1 C.Y.			
POUR	#3 COP	ING		_	0.8 C.Y			
TOTA	TOTAL 22.2 C.Y.							
	HP 12 x 53 STEEL PILES No. = 7 LIN. FEET. 665							
	STEEL SHEET PILES							
NU.	NO. 90° = 2							

PROJECT NO. BD-5101N
PASQUOTANK COUNTY
STATION: 14+96.00 -L-

= 38

= 40

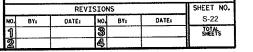
SO. FT. 2885

SHEET 4 OF 4

DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE

END BENT #2



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