REPAIR SEQUENCE FOR PILE JACKETS:

1.) DETERMINE FIBERGLASS INTEGRAL FORM LENGTH. FORM SHALL EXTEND A MINIMUM OF 3' BEYOND PILE CUTOFF ELEVATIONS.

2.) REMOVE ALL LOOSE OR DELAMINATED CONCRETE, OIL, GREASE, LAITANCE AND OTHER CONTAMINANTS. PREPARE SURFACE USING MECHANICAL TOOLS AND WATER BLASTING AS REQUIRED TO OBTAIN CLEAN, SOUND AND ROUGH SURFACES.

3.) DRILL 5/8" DIA. HOLES AND INSTALL #4 DOWELS WITH EPOXY ADHESIVE GROUT.

4.) CLEAN EXPOSED REINFORCING STEEL OF RUST.

5.) INSTALL REBAR CAGE IN ACCORDANCE WITH PROJECT DETAILS.

6.) USE FORM SPACERS TO PROVIDE ADEQUATE CONCRETE COVER FOR THE LENGTH OF THE JACKET.

7.) INSTALL THE LEAVE-IN PLACE FIBERGLASS FORM (ALSO CALLED JACKET OR COLLAR). THE DIAMETER OF THE JACKET SHALL BE LARGE ENOUGH TO PROVIDE A MINIMUM OF 5" OF TOTAL CLEARANCE WITH 2" CLEARANCE FROM REBAR TO PILE SURFACE AND REBAR TO FORM SURFACE. SEE JACKET SIZING CHART FOR MINIMUM FORM DIAMETERS.

8.) FOR ABOVE WATER JACKETS PLACE CONCRETE WITH TREMIE WHILE PUMPING OUT AND CONTAINING ANY DISPLACED WATER. FOR BELOW WATER JACKETS UTILIZE PUMPED CONCRETE MEHODS TO PLACE CONCRETE. FOR PUMPED APPLICATIONS INSTALL PUMP PORTS WITH INTEGRAL CHECK VALVE TO CONTROL BACKFLOW OF CONCRETE. FOR CONCRETE PLACEMENTS GREATER THAN 5' USE MULTIPLE PORTS SPACED 3' VERTICALLY AND ALTERNATING 180 DEG. FROM THE PRVIOUS PORT. A MINIMUM OF 2' OF CONCRETE HEAD IS REQUIRED ABOVE THE PORT PRIOR TO CHANGING PORTS.

9.) DO NOT REMOVE FORM SUPPORTS AND FALSEWORK UNTIL CONCRETE STRENGTH ACHIEVES 3000 PSI.

JACKET NOTES:

CONCRETE AND BAR REINFORCEMENT SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE STANDARD SPECIFICATION SECTIONS.

ALL REINFORCING BARS SHALL BE ASTM GRADE 60.

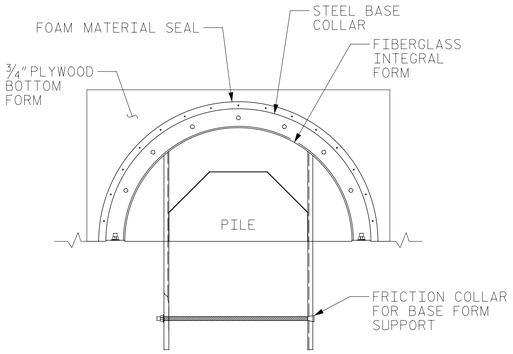
CONCRETE SHALL BE CLASS A WITH ANTI-WASHOUT ADMIXTURE.

SURFACES OF PILES TO ENCASED IN CONCRETE SHALL BE CLEANED AS DESCRIBED IN SPECIAL PROVISIONS. CLEANING TO BE DONE IMMEDIATELY BEFORE FORMS ARE INSTALLED.

SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL, SHOWING ALL FASTENING DETAILS, STANDOFFS, FORMS, AND ANY OTHER DEVICES NECESSARY TO SECURE THE FORMS SO THAT CONCRETE MAY BE PLACED IN A CONTINUOUS OPERATION COMPLETELY ENCAPSULATING THE PILES.

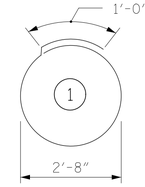
FORMS FOR JACKET SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED SHOP DRAWINGS. BOTTOM SEAL SHALL BE MORTAR TIGHT.

JACKET LENGTH TABLE	
BENT 114	15 L.F.
BENT 119	5 L.F.



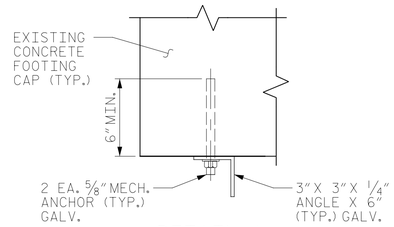
PLATFORM DETAIL

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

REINFORCING STEEL AND CLASS A CONCRETE ARE PAID FOR IN THE PAY ITEM - PILE JACKETS



DETAIL A

SUMMARY OF QUANTITIES

BENT 114, PILE #1

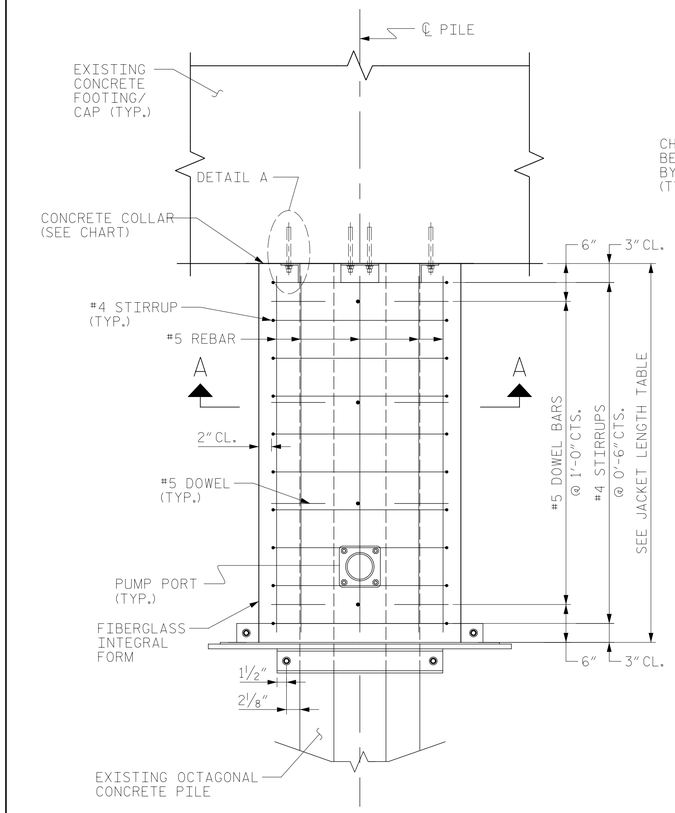
REINFORCING STEEL

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
V1	8	#5	STR	14'-8"	123 LBS
S1	30	#4	1	7'-4"	147 LBS
S2	60	#5	STR	0'-9"	47 LBS
REINFORCING STEEL TOTAL =					317 LBS
CLASS A					2.5 C.Y.

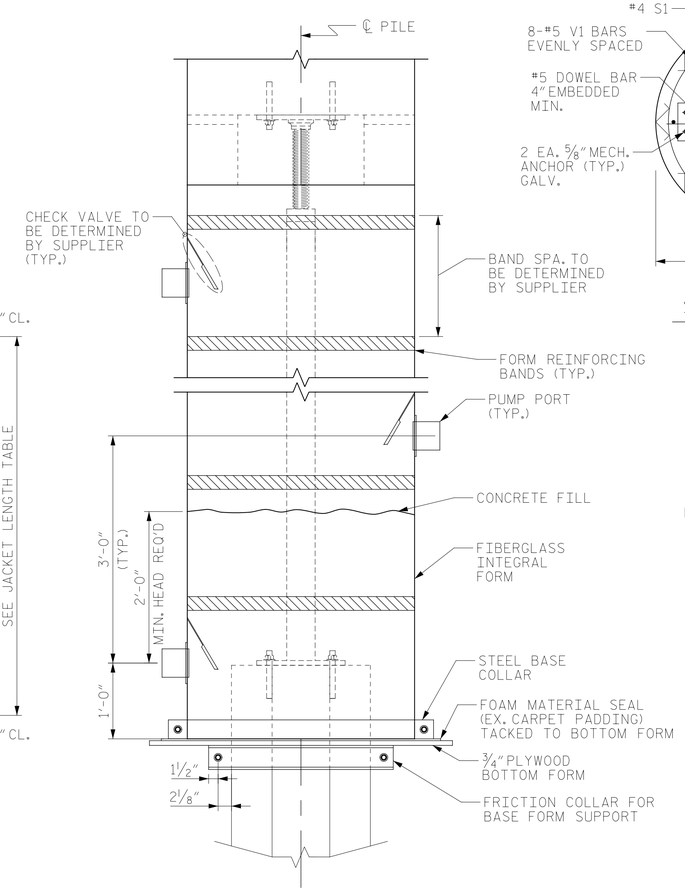
BENT 119, PILE #2

REINFORCING STEEL

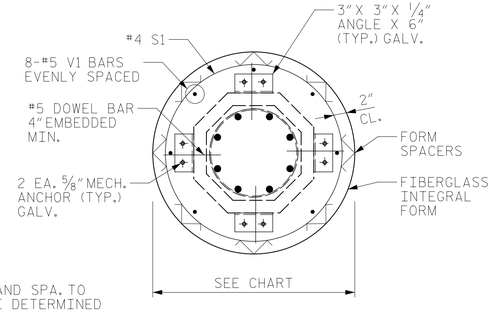
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
V1	8	#5	STR	4'-8"	39 LBS
S1	10	#4	1	7'-4"	49 LBS
S2	20	#5	STR	0'-9"	16 LBS
REINFORCING STEEL TOTAL =					104 LBS
CLASS A					0.6 C.Y.



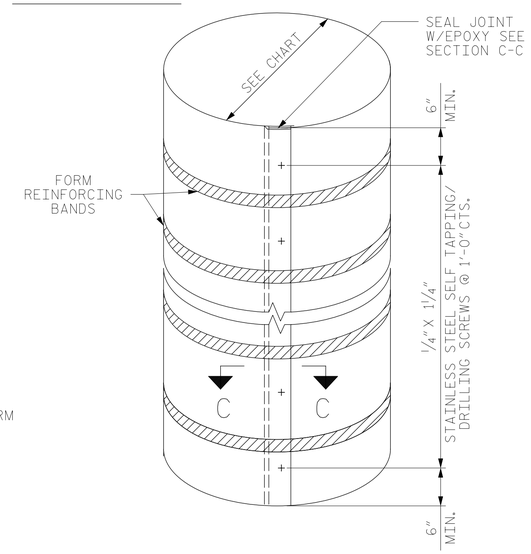
PILE JACKET REINFORCING LAYOUT



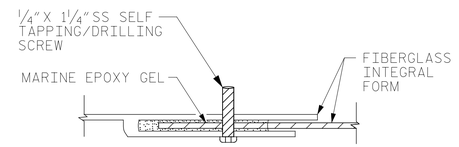
TYPICAL PILE JACKET ELEVATION



SECTION A-A



FIBERGLASS INTEGRAL FORM



SECTION C-C

JACKET SIZING CHART	
PILE TYPE	MIN. JACKET SIZE
20" OCTAGONAL	32" Ø
22" OCTAGONAL	34" Ø

PROJECT NO. HB-0017

DARE COUNTY

BRIDGE NO. 270009

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PILE SPLICE & JACKET REPAIR

JACKET DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 020208 ENGINEER ERIC B. NELSON JR.

DocuSigned by: Eric B Nelson Jr. 7/14/2022
ACB80821190740D...

DRAWN BY : M.A.LEE DATE : 4/2019
CHECKED BY : R. NELSON DATE : 4/2019

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-333
1			3			TOTAL SHEETS
2			4			355