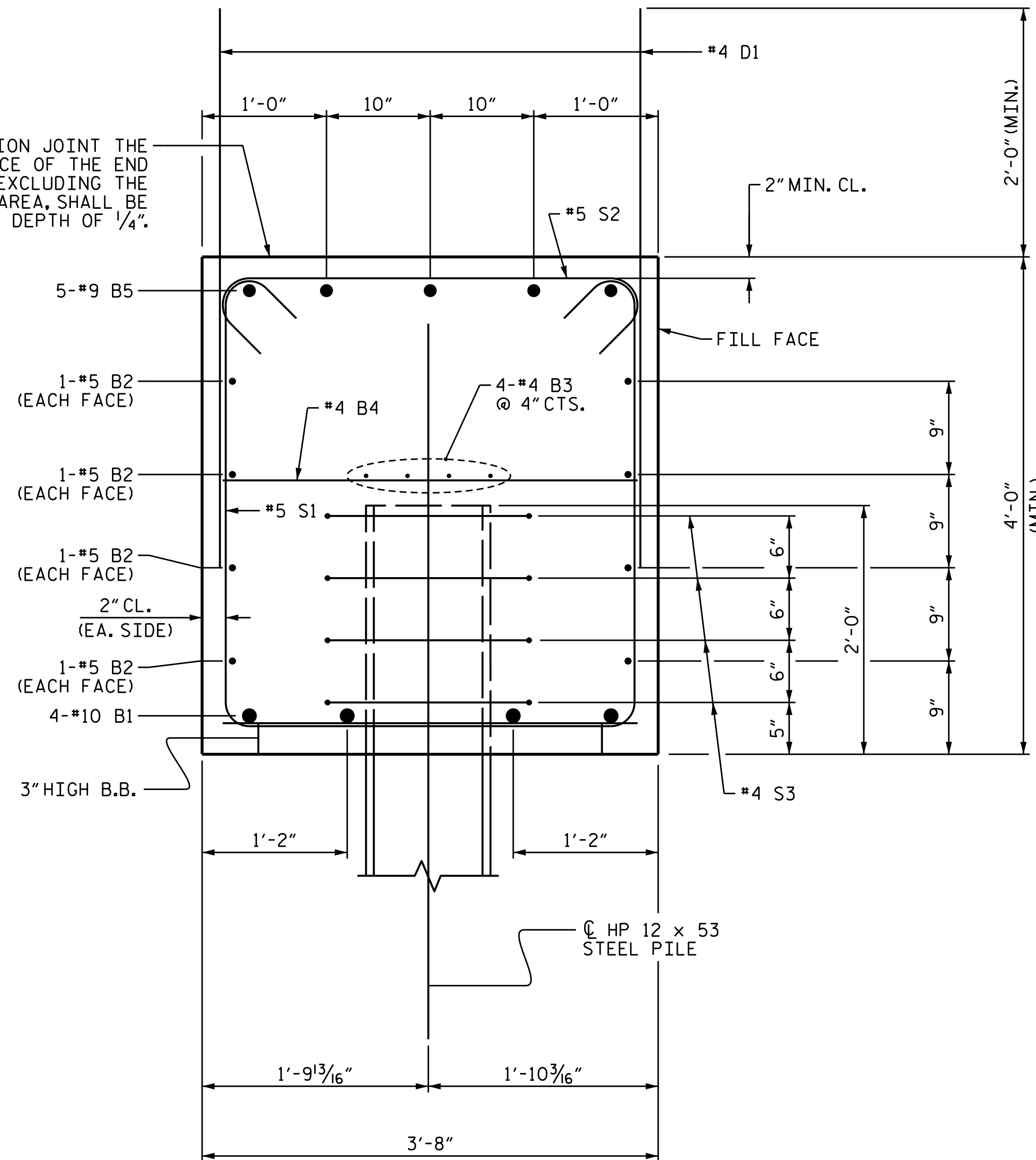
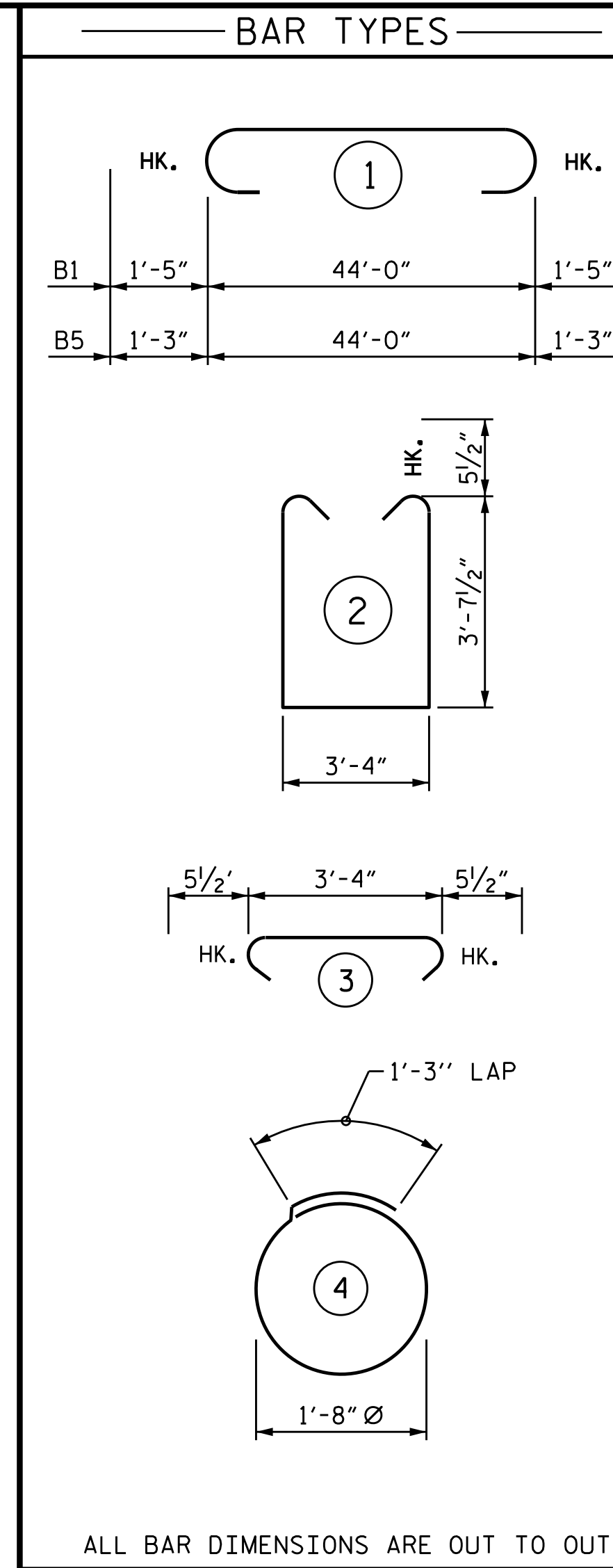


**PILE SPLICE DETAILS**

CONSTRUCTION JOINT THE TOP SURFACE OF THE END BENT CAP, EXCLUDING THE BEARING AREA, SHALL BE RAKED TO A DEPTH OF 1/4".



**SECTION A-A**



**BILL OF MATERIAL**

**INTEGRAL END BENT 1**

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	4	#10	1	46'-10"	806
B2	8	#5	STR	44'-2"	369
B3	8	#4	STR	23'-5"	125
B4	11	#4	STR	3'-4"	24
B5	5	#9	1	46'-6"	791
D1	80	#4	STR	4'-6"	240
S1	56	#5	2	11'-6"	672
S2	42	#5	3	4'-3"	186
S3	28	#4	4	6'-6"	122

REINFORCING STEEL LBS. 3,335

CLASS "A" CONCRETE

POUR #1 CAP CU. YDS. 24.7

TOTAL = CU. YDS. 24.7

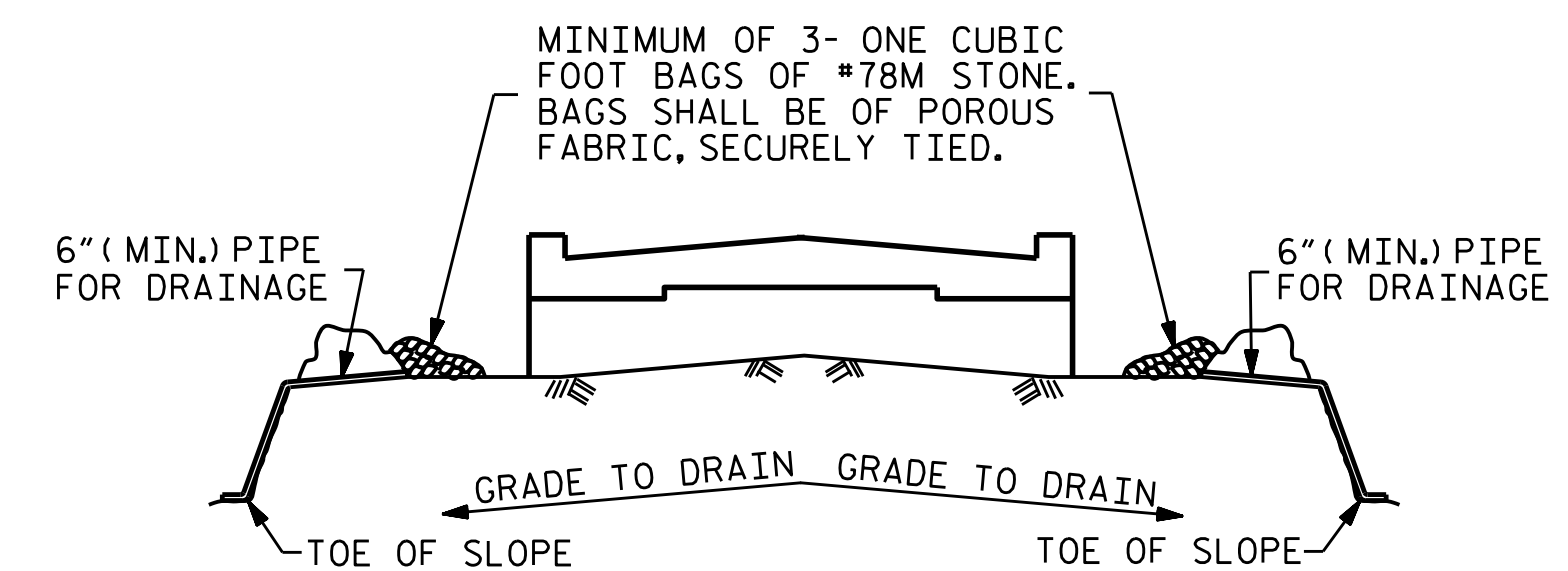
PILE DRIVING EQUIPMENT SET UP FOR HP 12X53 STEEL PILES

7 EACH

HP 12 X 53 STEEL PILE

NO. = 7 LIN. FT. 525

PILE REDRIVES EACH 4

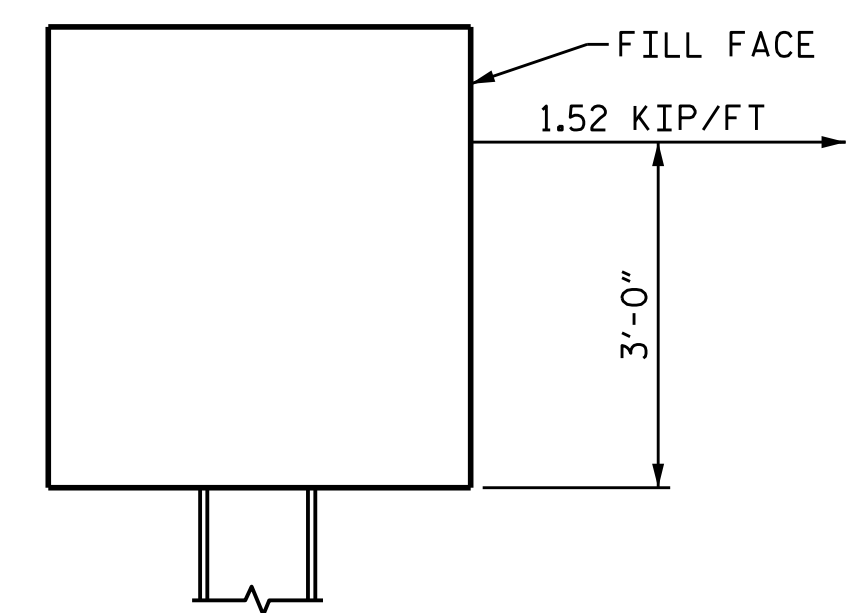


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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**



**MSE REINFORCING STRAP LOAD DETAIL**

DESIGN REINFORCEMENT CONNECTED TO INTEGRAL END BENT CAPS FOR THE LOADING SHOWN AND CAST THE REINFORCEMENT CONNECTION HARDWARE INTO THE INTEGRAL END BENT. MAINTAIN A CLEARANCE OF 3" BETWEEN THE HARDWARE AND REINFORCING STEEL IN THE CAP.

PROJECT NO. B-4616

ROBESON COUNTY

STATION: 31+55.47 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

SUBSTRUCTURE  
INTEGRAL END BENT 1

REVISIONS

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

SHEET NO. S1-21

TOTAL SHEETS 25

**WSP**  
**PARSONS BRINCKERHOFF**

434 FAYETTEVILLE STREET  
SUITE 1500  
RALEIGH, NC 27601  
LICENSE NO. F-0165

4/13/2017

STATE OF NORTH CAROLINA  
MICHAEL ASH  
REGISTERED PROFESSIONAL ENGINEER  
ESTABLISHED 1934  
SEAL  
0317479

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

DESIGNED BY: J.B. BORUTA DATE: 04/2016

DRAWN BY: M.J. OSTRISHKO DATE: 04/2016

CHECKED BY: E. ULLMER DATE: 05/2016

DESIGN ENGINEER OF RECORD: N.A. PIERCE DATE: 06/2016