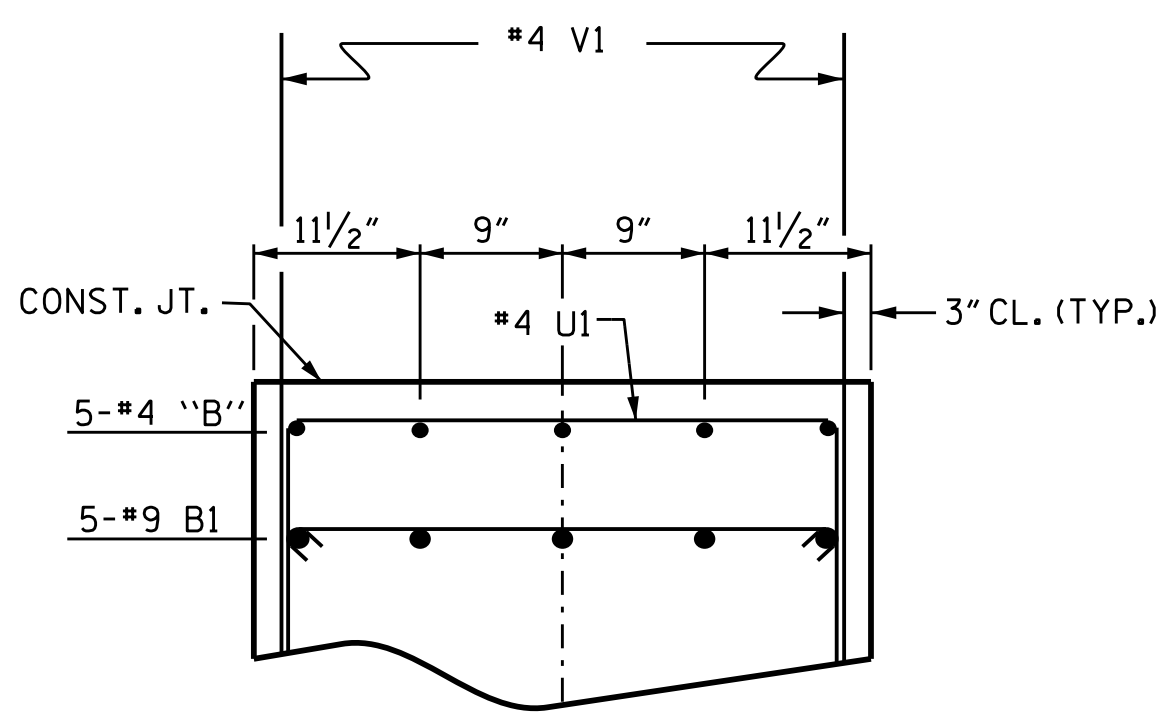
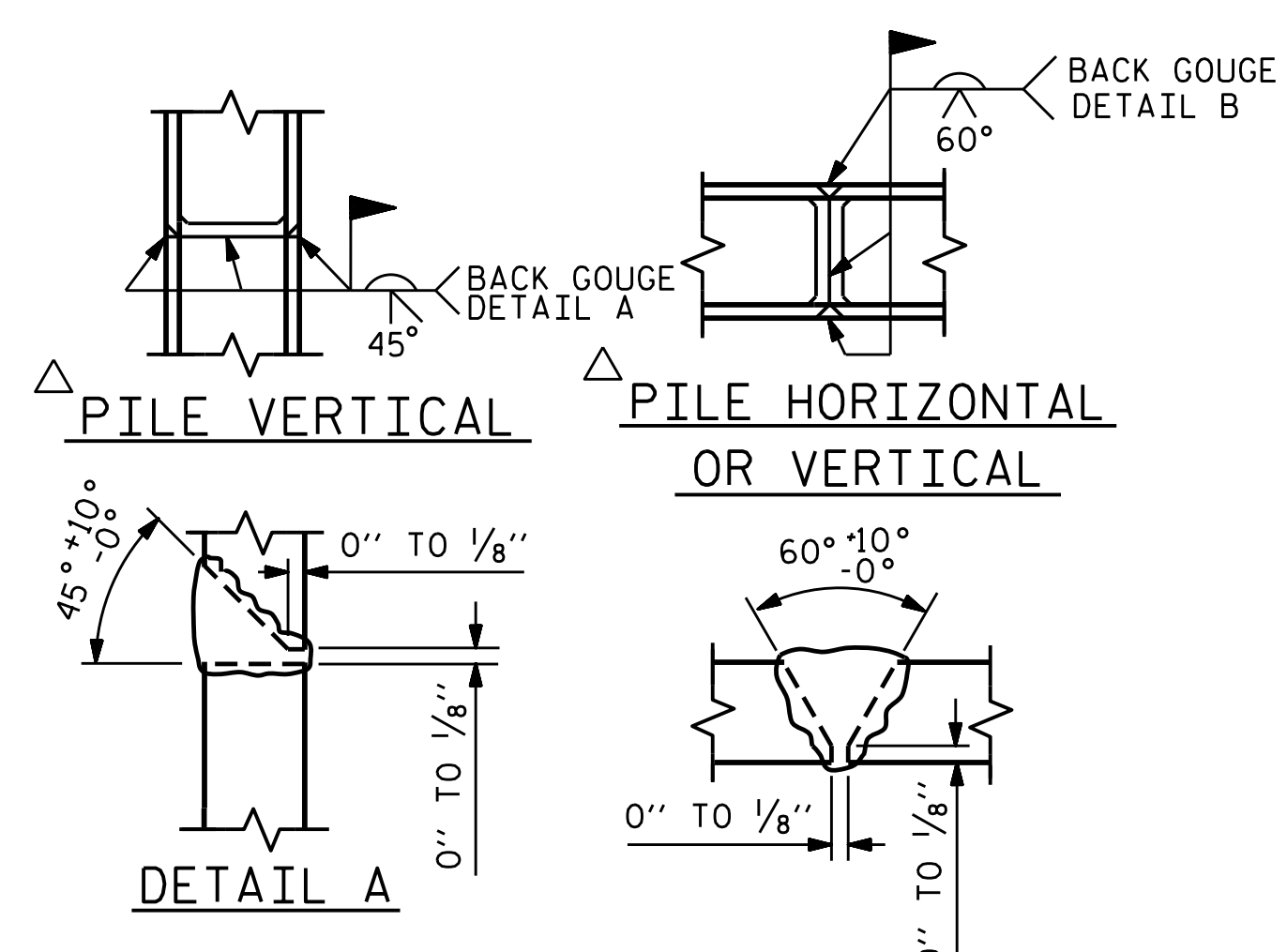


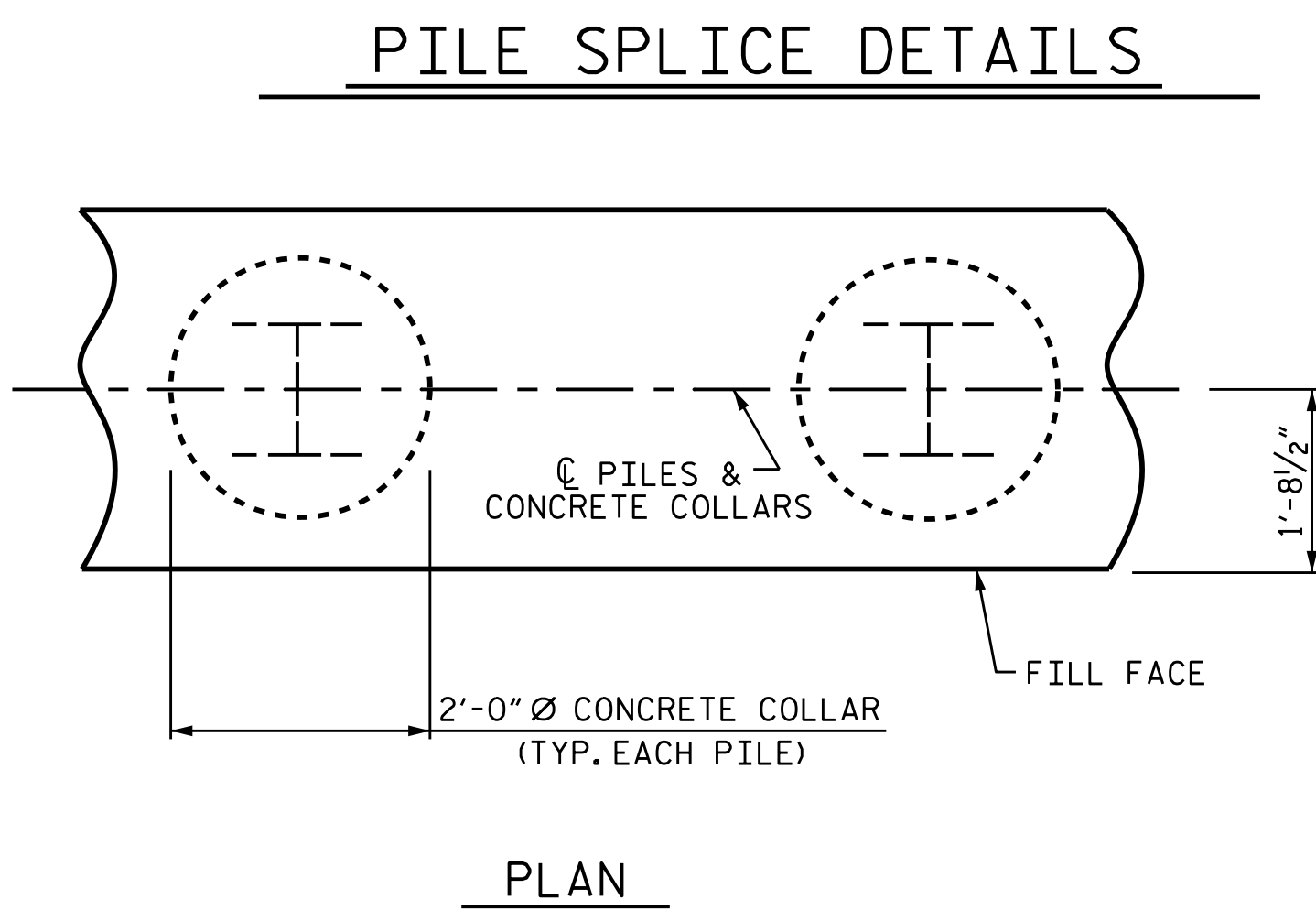
SECTION A-A



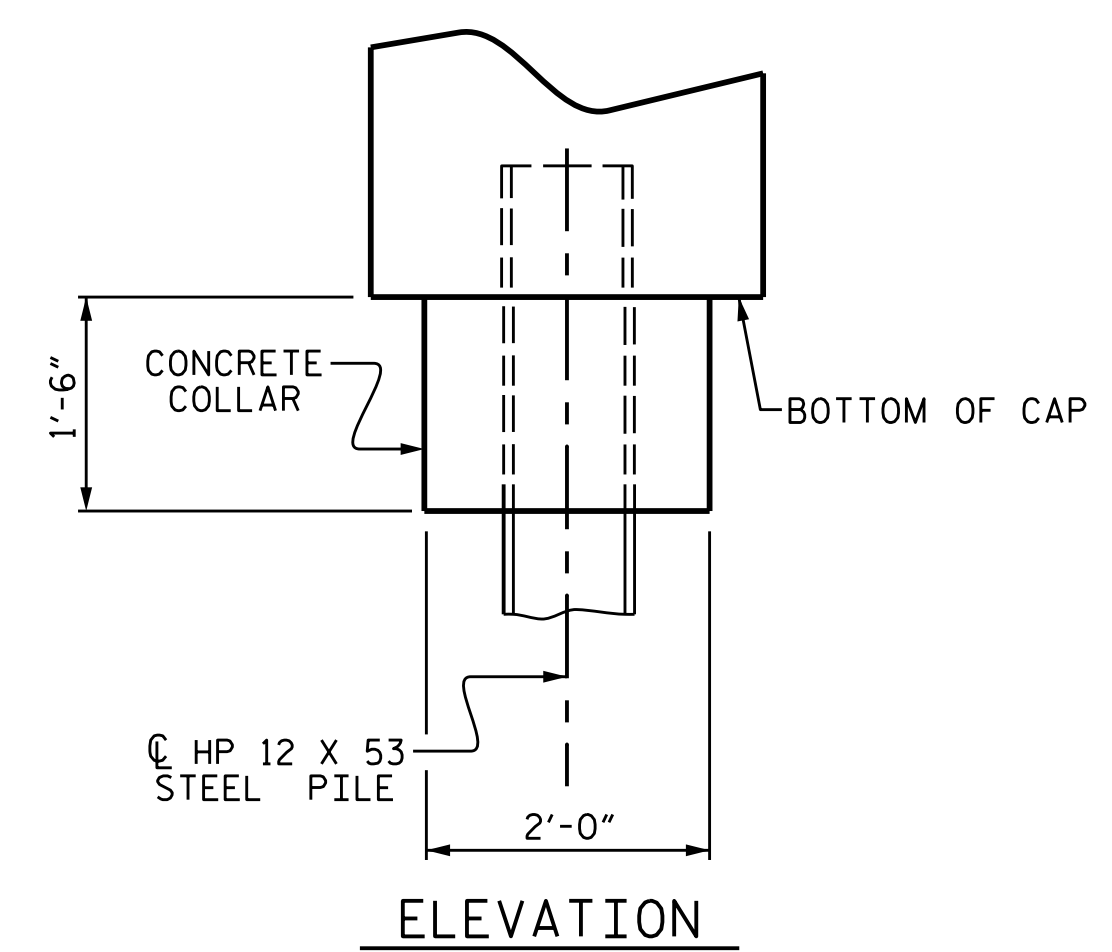
PARTIAL SECTION B-B



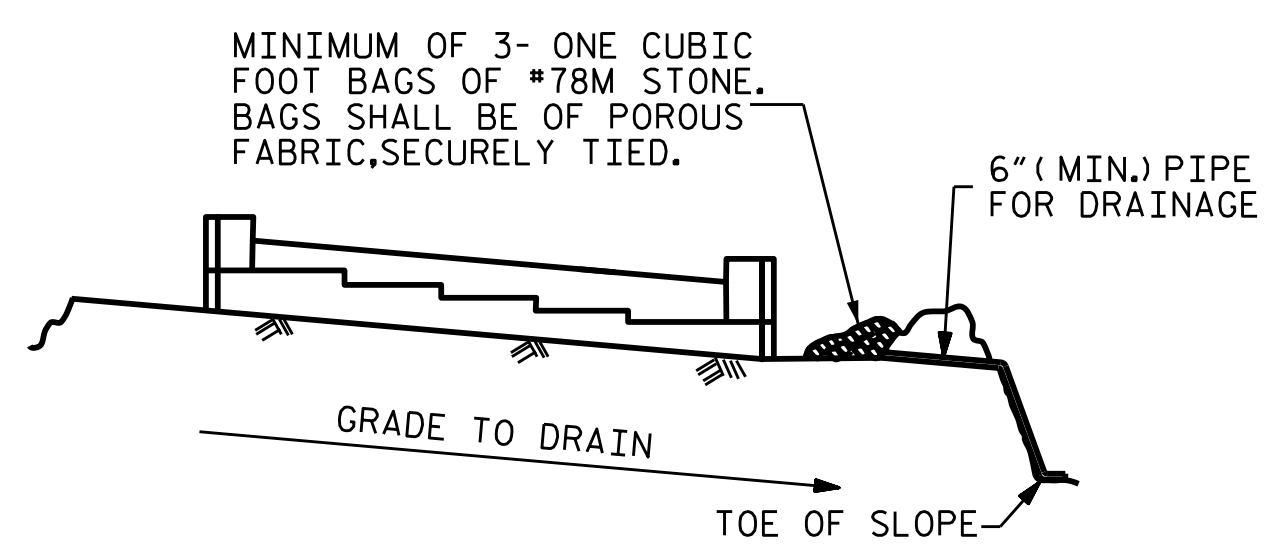
PILE SPLICE DETAILS



CORROSION PROTECTION FOR STEEL PILES DETAIL



ELEVATION



MINIMUM OF 3- ONE CUBIC FOOT BAGS OF #78M STONE. BAGS SHALL BE OF POROUS FABRIC, SECURELY TIED.

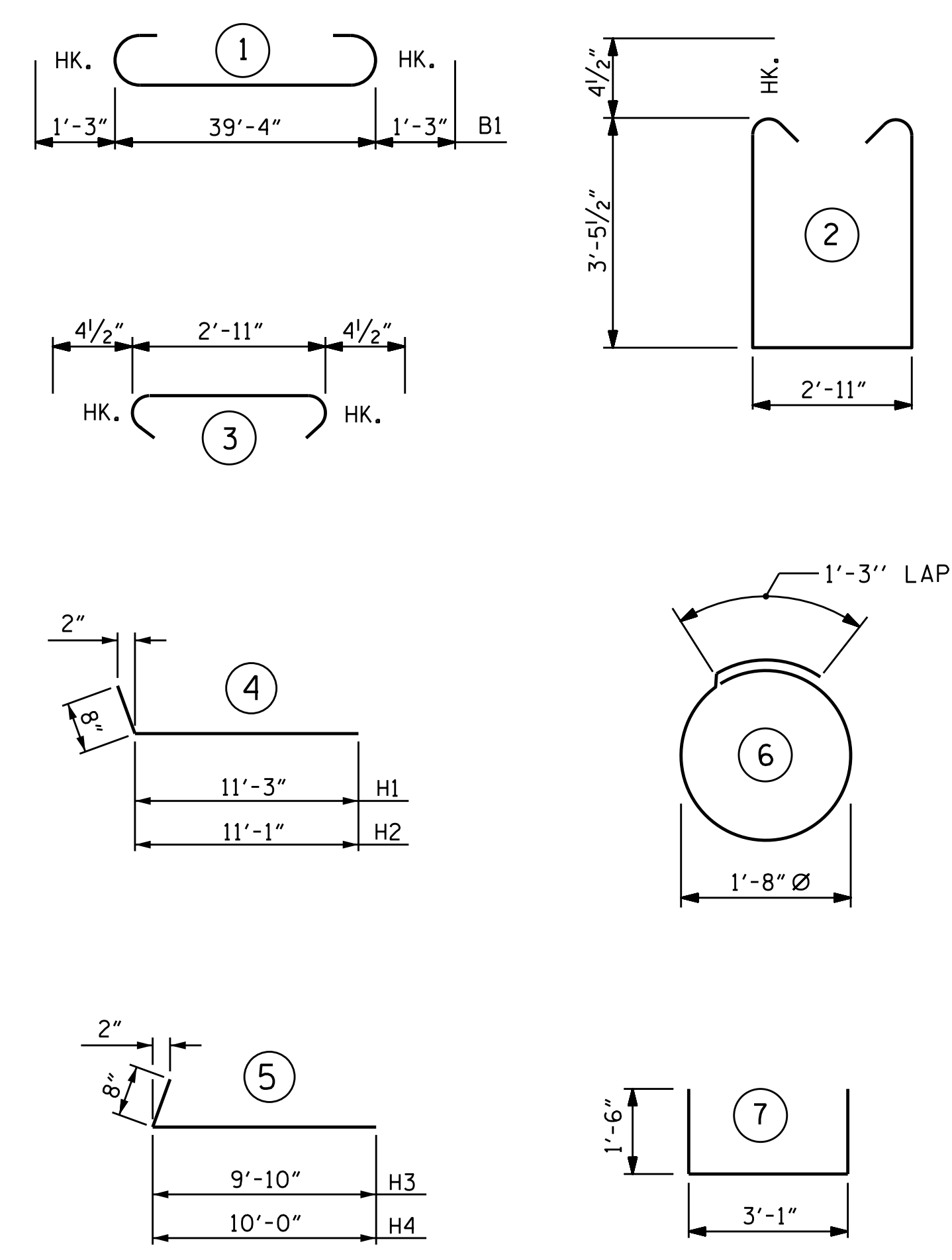
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

| BAR | NO. | SIZE | TYPE | LENGTH | WEIGHT |
|-----|-----|------|------|---------|--------|
| *B1 | 9 | #9 | 1 | 41'-7" | 1272 |
| *B2 | 4 | #9 | STR | 8'-9" | 119 |
| *B3 | 6 | #5 | STR | 39'-5" | 247 |
| *B4 | 10 | #4 | STR | 2'-11" | 19 |
| *B5 | 8 | #4 | STR | 21'-1" | 113 |
| *B6 | 10 | #4 | STR | 6'-6" | 43 |
| *B7 | 5 | #4 | STR | 7'-0" | 23 |
| *H1 | 13 | #5 | 4 | 11'-11" | 162 |
| *H2 | 13 | #5 | 4 | 11'-9" | 159 |
| *H3 | 12 | #5 | 5 | 10'-6" | 131 |
| *H4 | 12 | #5 | 5 | 10'-8" | 134 |
| *K1 | 24 | #4 | STR | 3'-4" | 53 |
| *S1 | 42 | #4 | 2 | 10'-7" | 297 |
| *S2 | 42 | #4 | 3 | 3'-8" | 103 |
| *S3 | 20 | #4 | 6 | 6'-6" | 87 |
| *U1 | 15 | #4 | 7 | 6'-1" | 61 |
| *V1 | 58 | #4 | STR | 5'-0" | 194 |
| *V2 | 32 | #4 | STR | 8'-2" | 175 |
| *V3 | 30 | #4 | STR | 7'-5" | 149 |

* EPOXY COATED REINFORCING STEEL = 3541 LBS

CLASS AA CONCRETE

POUR #1 (CAP, CONC, COLLARS, & LOWER PART OF WINGS) = 25.8 C.Y.

POUR #2 (UPPER PART OF WINGS) = 4.0 C.Y.

TOTAL = 29.8 C.Y.

HP 12 X 53 STEEL PILES
No. 5 _____ LIN FT. 325

PILE REDRIVES _____ EA. 5

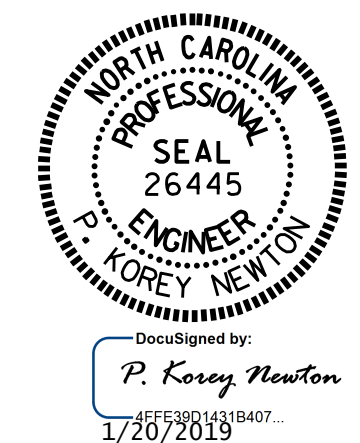
STEEL PILE POINTS _____ NO. 5

PROJECT NO. R-5021
BRUNSWICK COUNTY
STATION: 369+42.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
INTEGRAL
END BENT 2
(WBL)



| REVISIONS | | | | | | SHEET NO. | |
|-----------|-----|-------|-----|-----|-------|--------------|--|
| NO. | BY: | DATE: | NO. | BY: | DATE: | SI-35 | |
| 1 | | | 3 | | | TOTAL SHEETS | |
| 2 | | | 4 | | | 38 | |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY: O. T. NGUYEN DATE: 5/2/18
CHECKED BY: M. K. BEARD DATE: 8/18
DESIGN ENGINEER OF RECORD: A. K. PATEL DATE: 1/10/19