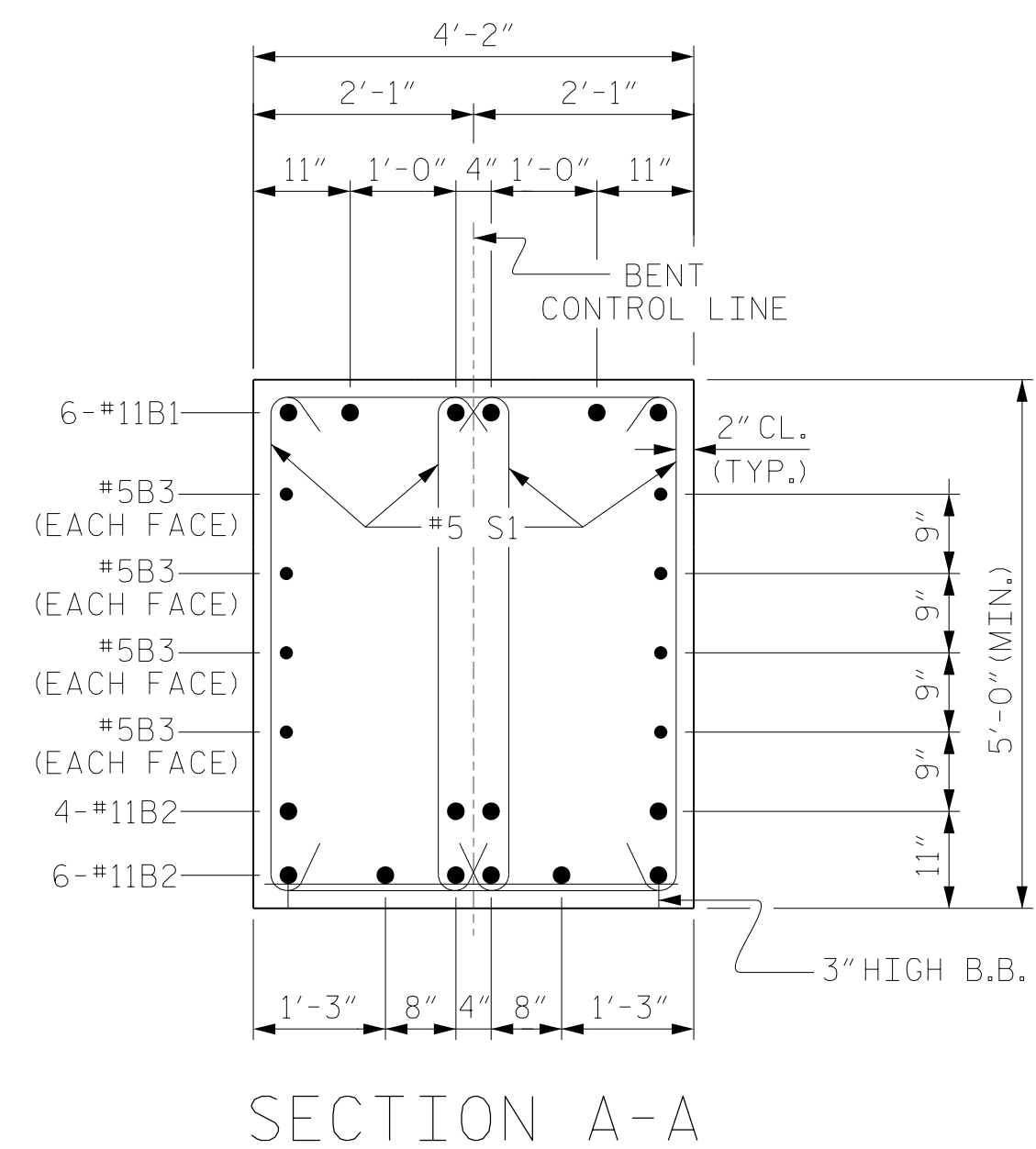
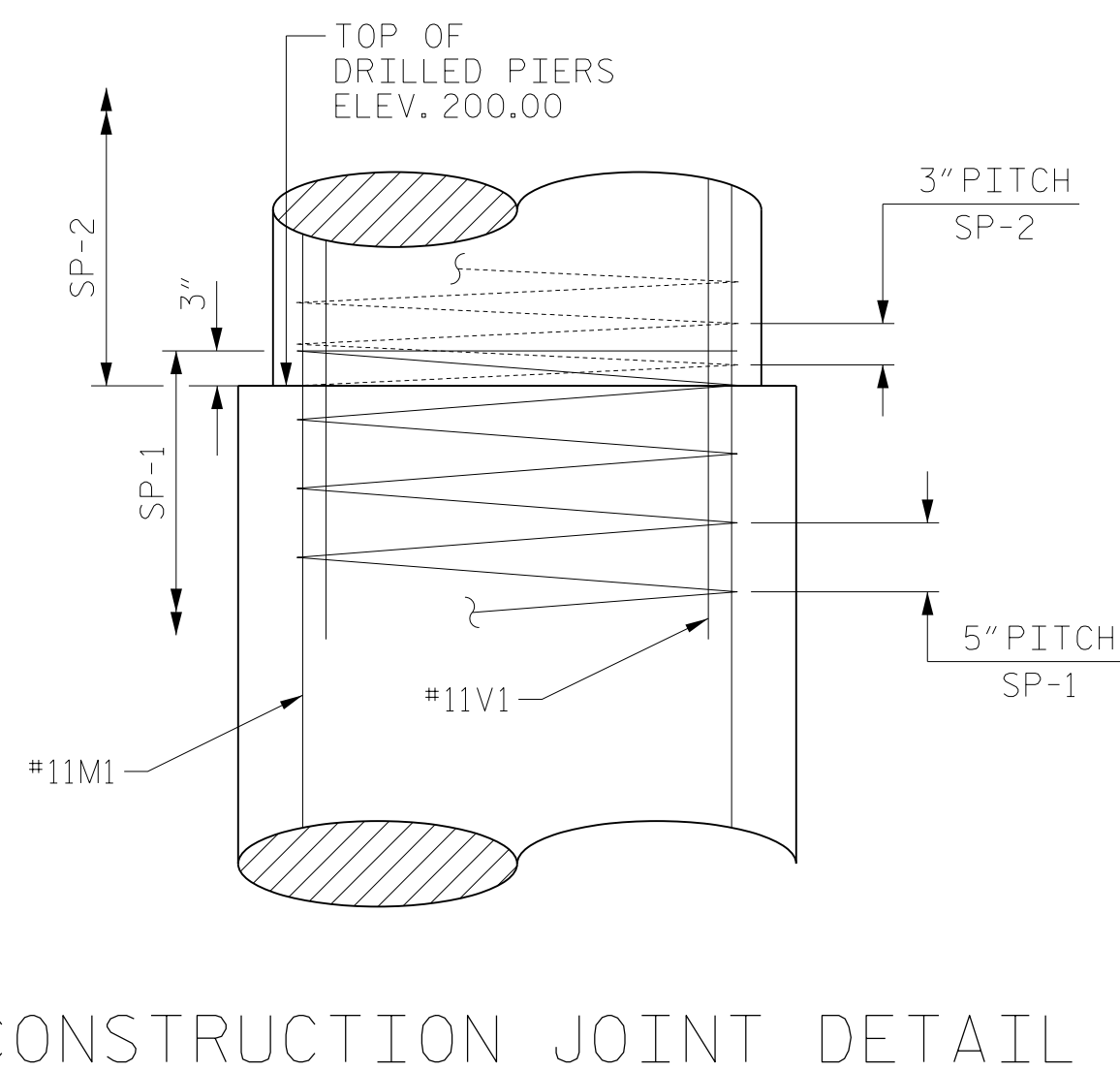


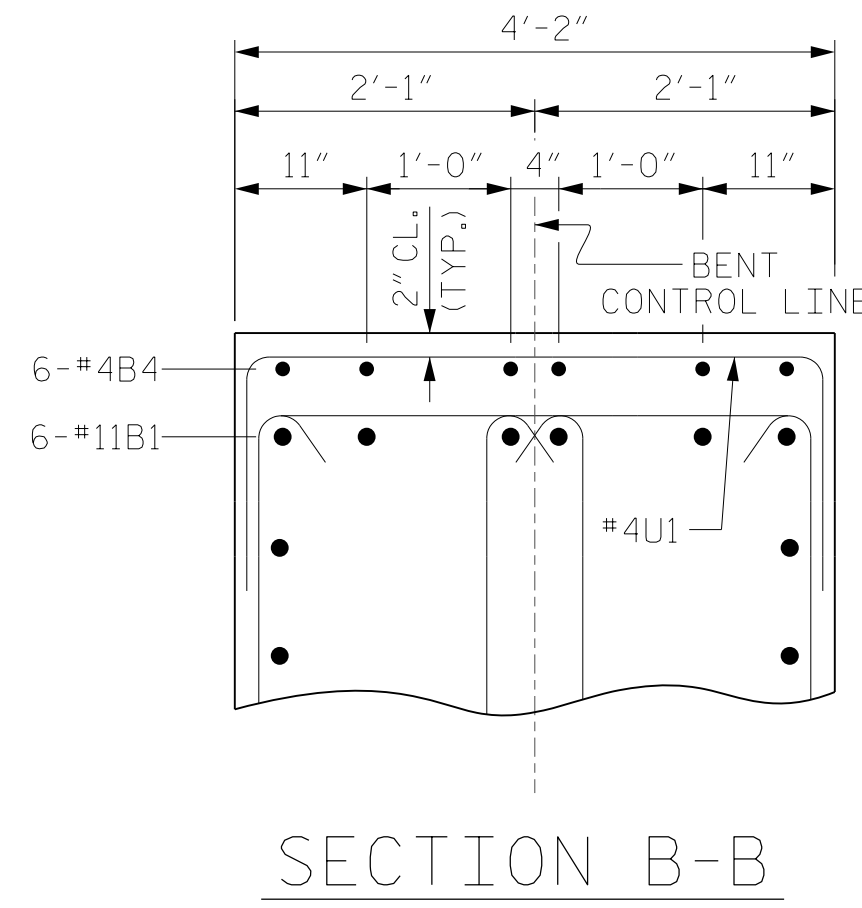
END VIEW



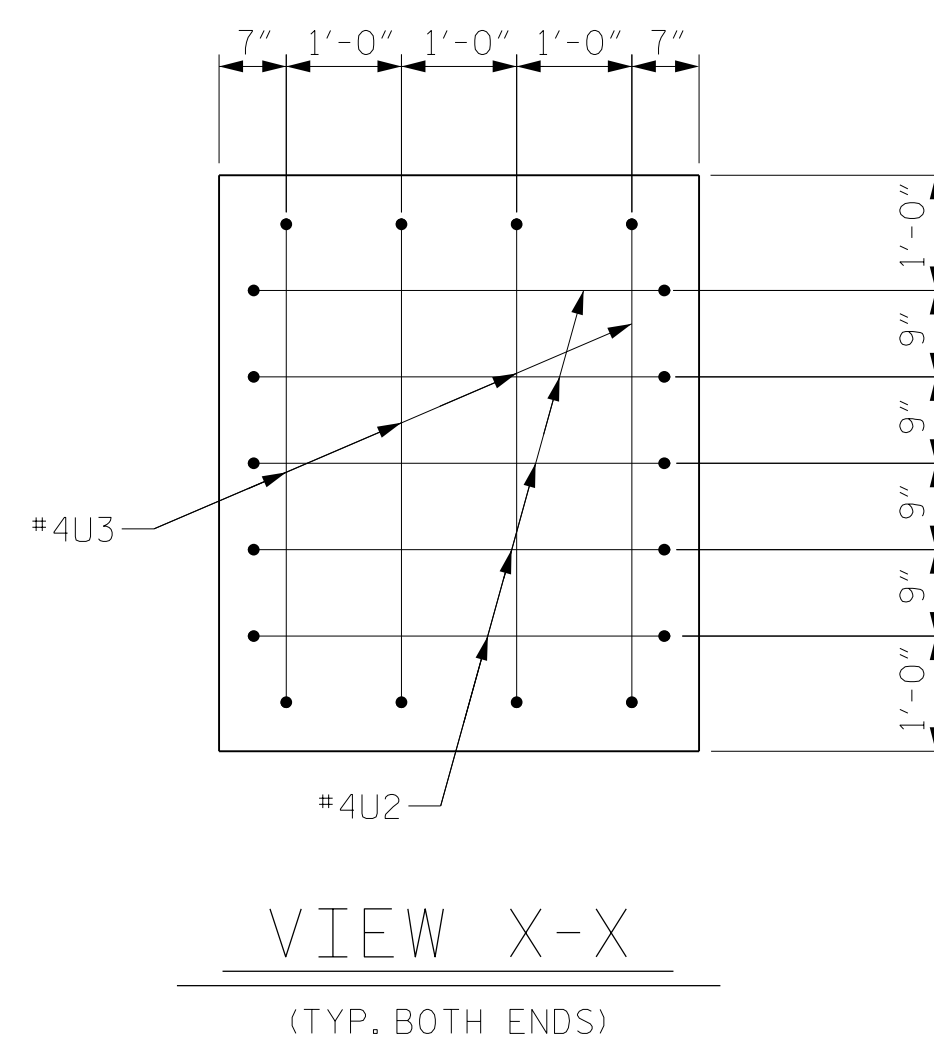
SECTION A-A



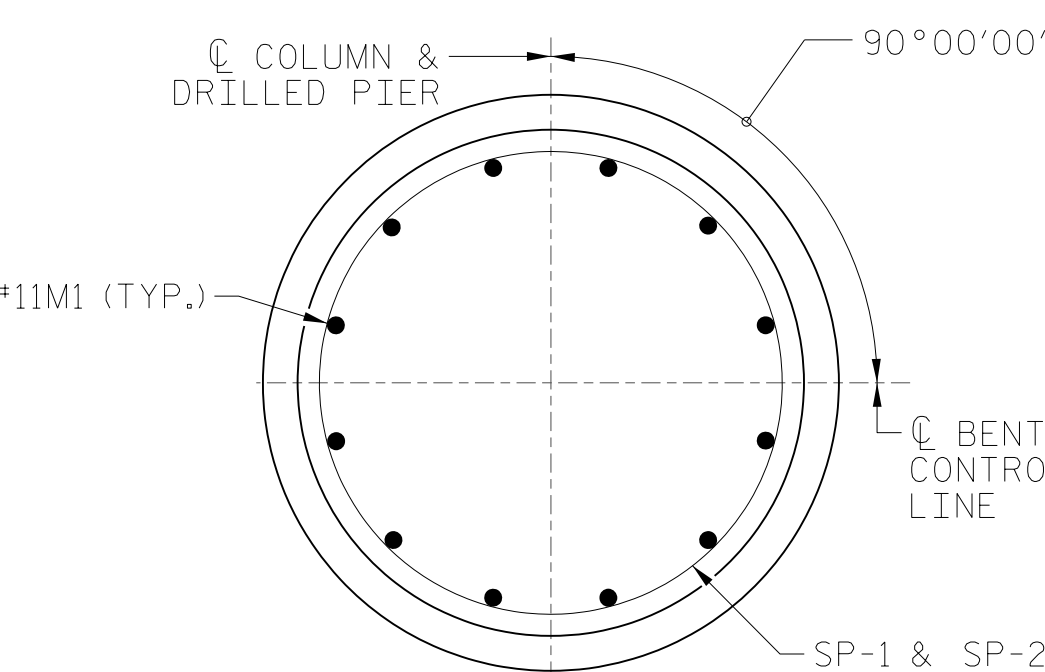
CONSTRUCTION JOINT DETAIL



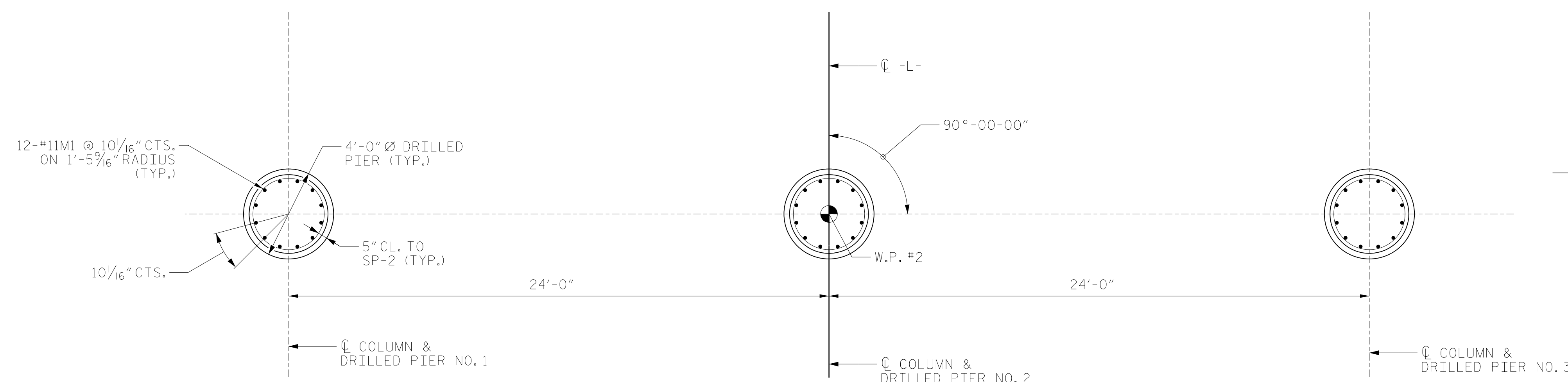
SECTION B-B



VIEW X-X  
(TYP. BOTH ENDS)

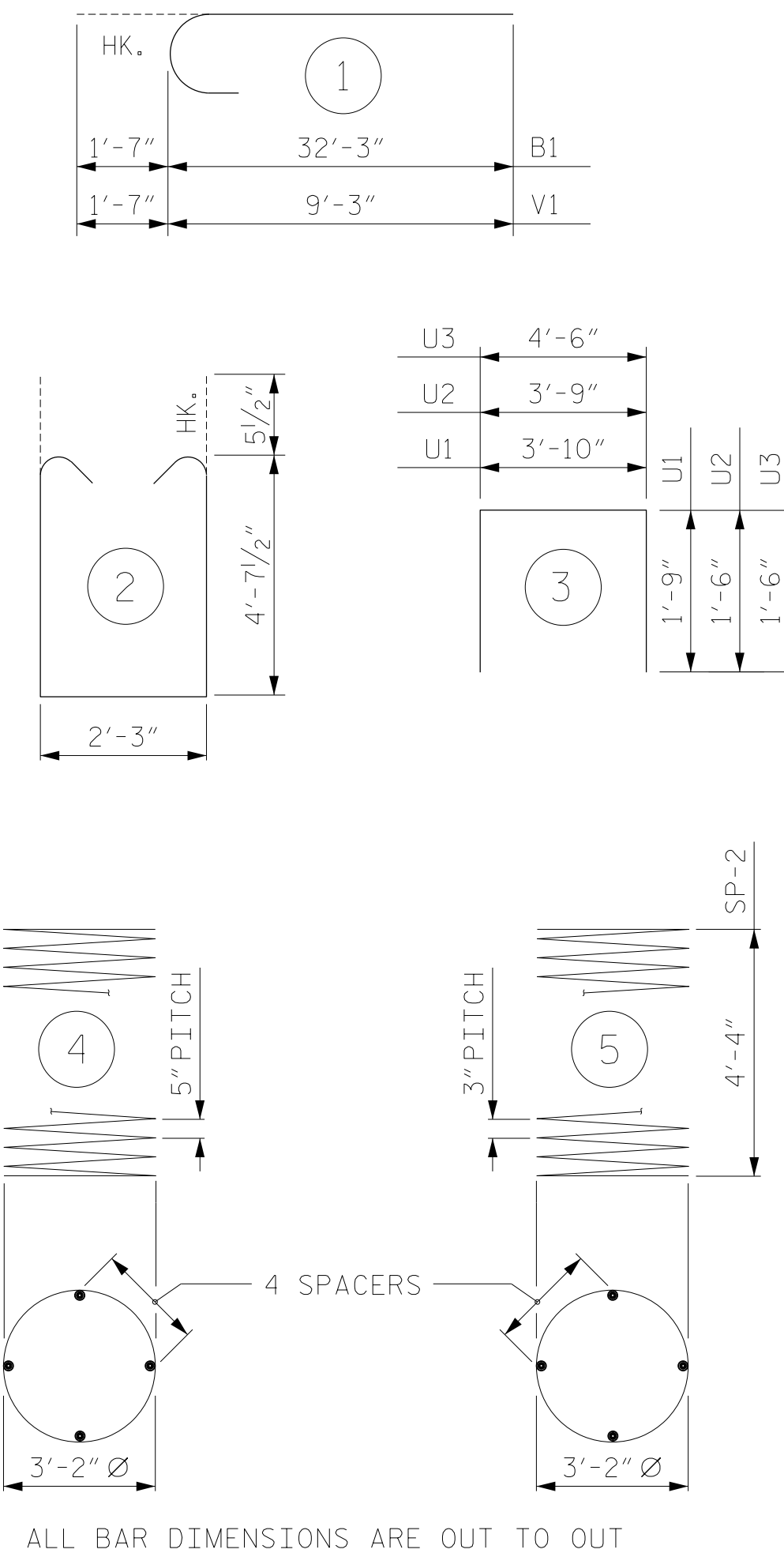


COLUMN & DRILLED PIER DETAIL



PLAN OF COLUMNS AND DRILLED SHAFTS

BAR TYPES



BILL OF MATERIAL

BENT 1

| BAR | NO. | SIZE | TYPE | LENGTH  | WEIGHT |
|-----|-----|------|------|---------|--------|
| B1  | 12  | #11  | 1    | 33'-10" | 2,157  |
| B2  | 10  | #11  | STR  | 57'-10" | 2,860  |
| B3  | 16  | #5   | STR  | 30'-5"  | 508    |
| B4  | 6   | #4   | STR  | 14'-10" | 59     |
| M1  | 36  | #11  | STR  | 60'-0"  | 11,476 |
| S1  | 136 | #5   | 2    | 12'-5"  | 1,761  |
| U1  | 48  | #4   | 3    | 7'-4"   | 235    |
| U2  | 10  | #4   | 3    | 6'-9"   | 45     |
| U3  | 8   | #4   | 3    | 7'-6"   | 40     |
| V1  | 36  | #11  | 1    | 10'-10" | 2,072  |

REINFORCING STEEL 21,213 LBS.

|      |   |     |   |          |       |
|------|---|-----|---|----------|-------|
| SP-1 | 3 | **  | 4 | 1290'-6" | 4,038 |
| SP-2 | 3 | *** | 5 | 203'-6"  | 408   |

SPIRAL COLUMN REINFORCING STEEL 4,446 LBS.

\*\* THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.  
\*\*\* THE SP-2 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR.

CLASS A CONCRETE BREAKDOWN

|                   |           |
|-------------------|-----------|
| POUR #2 (COLUMNS) | 4.4 C.Y.  |
| POUR #3 (CAP)     | 46.6 C.Y. |

TOTAL CLASS A CONCRETE 51.0 C.Y.

DRILLED PIER QUANTITIES

|                                   |            |
|-----------------------------------|------------|
| POUR #1 (DRILLED PIER)            | 76.8 C.Y.  |
| 4'-0" Ø DRILLED PIERS IN SOIL     | 144.0 L.F. |
| 4'-0" Ø DRILLED PIERS NOT IN SOIL | 21.0 L.F.  |
| CSL TUBES                         | 678.0 L.F. |

PROJECT NO. B-5318

WAKE COUNTY

STATION: 19+73.00 -L-

SHEET 2 OF 2 REPLACES BRIDGE NO. 126

**Dewberry**  
2610 WYCLIFF ROAD  
SUITE 410  
RALEIGH, NC 27607  
PHONE: 919.881.9939  
NC COA NO. F-0929

NORTH CAROLINA PROFESSIONAL ENGINEER  
**Zachary Brown**  
43 888888888888888888  
ENGINEER  
ZACHARY BROWN  
9/16/2022

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

SUBSTRUCTURE

BENT 1

REVISIONS

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

SHEET NO.  
S-33

TOTAL SHEETS  
41

DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL  
SIGNATURES COMPLETED

DRAWN BY: E. JONES DATE: JUNE 21  
CHECKED BY: Z. BROWN DATE: OCT. 21  
DESIGN ENGINEER OF RECORD: Z. BROWN DATE: JUNE 21