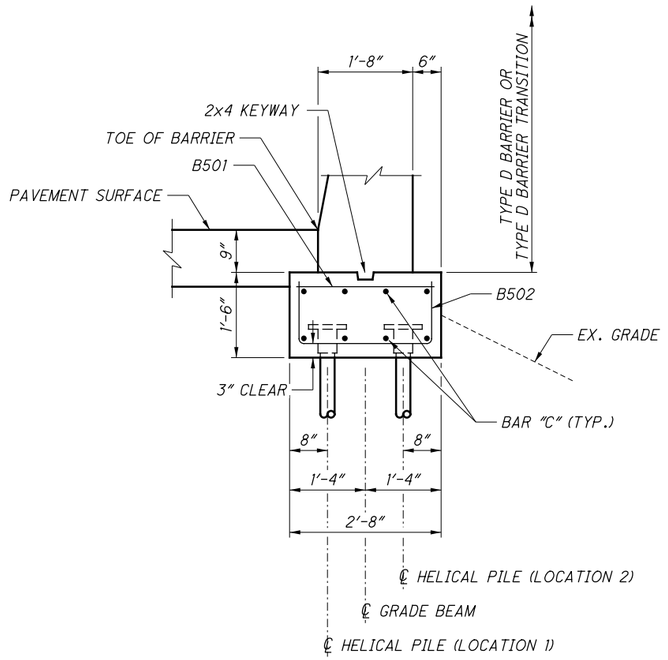
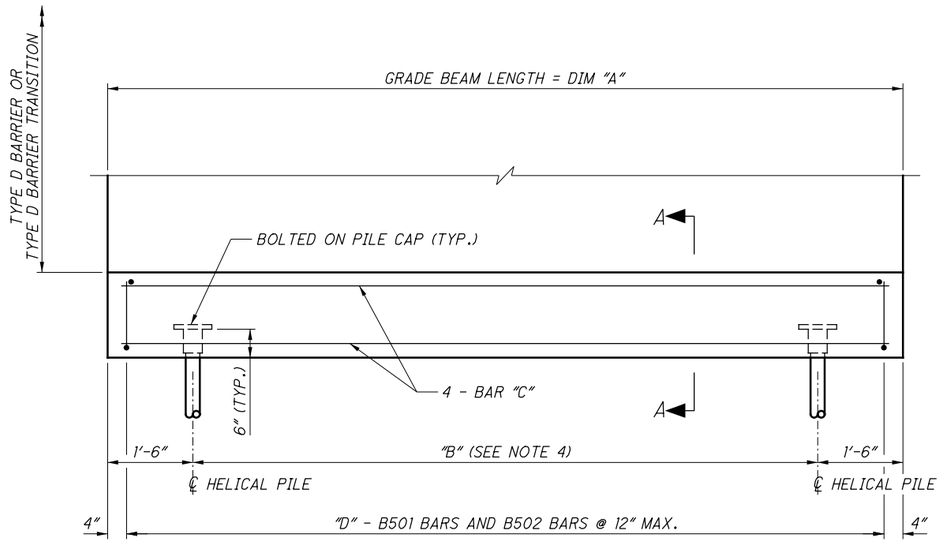


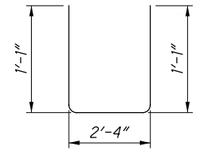

SECTION A-A



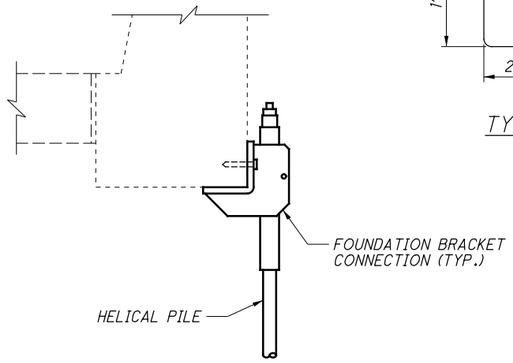

GRADE BEAM ELEVATION

| LOCATION | DIM "A" | "B" | BAR "C" | "D" |
|---|---|---|---|---|
| B7-A | 14'-0" | 3 PILES @ 5'-6" = 11'-0" | B503 | 15 |
| B7-C | 10'-2"± | 3 PILES @ 3'-7"± = 7'-2"± | B504 | 11 |
| B8-A | 14'-0" | 3 PILES @ 5'-6" = 11'-0" | B503 | 15 |
| B8-C | 11'-7"± | 3 PILES @ 4'-4" MAX. = 8'-7"± | B505 | 12 |
| B9-A + B9-B | 23'-2" | 4 PILES @ 6'-9" MAX. = 20'-2" | B506 | 24 |
| B10-A + B10-B | 24'-2" | 4 PILES @ 7'-1" MAX. = 21'-2" | B507 | 25 |
| B11-A | 14'-0" | * 3 PILES @ 5'-6" = 11'-0" | | |
| B11-C | 10'-9"± | 3 PILES @ 3'-11" MAX. = 7'-9"± | B508 | 12 |
| B12-A | 14'-0" | * 3 PILES @ 5'-6" = 11'-0" | | |
| B12-C | 12'-1"± | 3 PILES @ 4'-7" MAX. = 9'-1"± | B509 | 13 |
| B13-A | 14'-0" | * 3 PILES @ 5'-6" = 11'-0" | | |
| B13-C | 10'-11"± | 3 PILES @ 4'-0" MAX. = 7'-11"± | B510 | 12 |
| B14-A | 14'-0" | * 3 PILES @ 5'-6" = 11'-0" | | |
| B14-C | 10'-7"± | 3 PILES @ 3'-10" MAX. = 7'-7"± | B511 | 11 |
| B15-A | 14'-0" | * 3 PILES @ 5'-6" = 11'-0" | | |
| B15-B | 3'-3" | * 1 PILE CENTERED | | |
| B15-C | 15'-0"± | 3 PILES @ 6'-0"± = 12'-0"± | B512 | 16 |
| B16-A + B16-B | 21'-8" | 3 PILES @ 9'-4" = 18'-8" | B513 | 22 |
| B17-A | 14'-0" | * 3 PILES @ 5'-6" = 11'-0" | | |
| B17-C | 13'-4"± | 3 PILES @ 5'-2"± = 10'-4"± | B514 | 14 |
| B18-A | 14'-0" | * 3 PILES @ 6'-6" = 11'-0" | | |
| B18-C | 26'-10"± | 4 PILES @ 8'-0" MAX. = 23'-10"± | B515 | 28 |

* DENOTES UNDERPINNING WITH HELICAL PILE AND FOUNDATION BRACKET SYSTEM ONLY. NO GRADE BEAM REQUIRED.

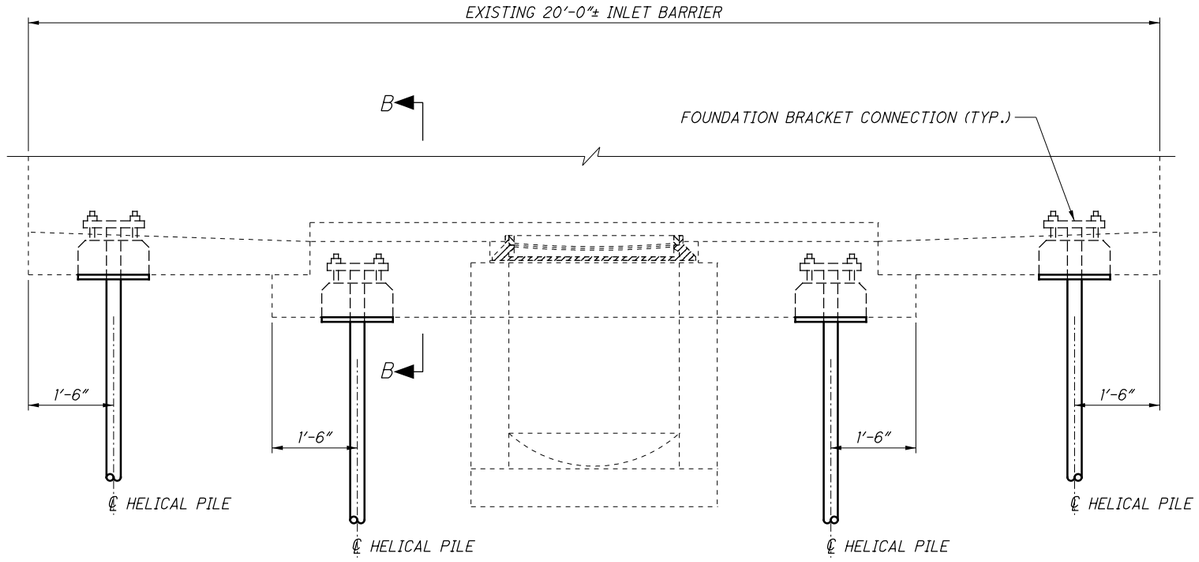



TYPE-2




SECTION B-B

| MARK | NUMBER TOTAL | LENGTH | WEIGHT | TYPE |
|---|---|---|---|---|
| GRADE BEAM REINFORCING | | | | |
| B501 | 230 | 2'-4" | 560 | STR |
| B502 | 230 | 4'-3" | 1020 | 2 |
| B503 | 16 | 13'-6" | 225 | STR |
| B504 | 8 | 9'-8" | 81 | STR |
| B505 | 8 | 11'-1" | 93 | STR |
| B506 | 8 | 22'-8" | 189 | STR |
| B507 | 8 | 23'-8" | 198 | STR |
| B508 | 8 | 10'-3" | 86 | STR |
| B509 | 8 | 11'-7" | 97 | STR |
| B510 | 8 | 10'-5" | 87 | STR |
| B511 | 8 | 10'-1" | 84 | STR |
| B512 | 8 | 14'-6" | 121 | STR |
| B513 | 8 | 21'-2" | 177 | STR |
| B514 | 8 | 12'-10" | 107 | STR |
| B515 | 8 | 26'-4" | 220 | STR |
| | | | | |
| | | TOTAL | 3,345 | |




INLET BARRIER ELEVATION

(LOCATIONS B7-B, B8-B, B11-B, B12-B, B13-B, B14-B, B17-B, B18-B)

## NOTES:

1. THE DESIGN LOAD TO BE SUPPORTED BY EACH HELICAL PILE IS 15 KIPS.
2. THE HELICAL PILES SHALL BE INSTALLED TO AN ULTIMATE CAPACITY OF 37.5 KIPS TO PROVIDE A FACTOR OF SAFETY OF 2.5 WITH RESPECT TO THE DESIGN LOAD.
3. THE HELICAL PILES SHALL HAVE A MINIMUM DIA. OF 2-⅞" AND A MINIMUM WALL THICKNESS OF ¼". PILES, FOUNDATION BRACKET CONNECTIONS, AND ALL ATTACHMENTS SHALL BE GALVANIZED PER CMS 711.02. ALL PILES SHALL EXTEND A MINIMUM OF 10'-0" BELOW THE BOTTOM OF GRADE BEAM OR EXISTING FOUNDATION ELEVATION. THE CONTRACTOR SHALL PROVIDE LARGER PILE SHAFT DIAMETER AND WALL THICKNESS AS NECESSARY TO INSTALL THE HELICAL PILES TO THE MINIMUM DEPTH SPECIFIED AND TO THE REQUIRED ULTIMATE CAPACITIES.
4. STAGER HELICAL PILES AS FOLLOWS :
   WHERE 4 PILES ARE REQUIRED - PLACE THE TWO END PILES AT LOCATION 2 AND THE TWO CENTER PILES AT LOCATION 1.
   WHERE 3 PILES ARE REQUIRED - PLACE THE TWO END PILES AT LOCATION 2 AND THE ONE CENTER PILE AT LOCATION 1.
5. CONTRACTOR'S PILE DESIGN PROFESSIONAL IS RESPONSIBLE FOR THE DESIGN OF THE HELICAL PILES, BRACKETS AND PILE CAPS. SEE HELICAL PILE SPECIAL PROVISION.
6. ALL MATERIAL AND LABOR REQUIRED FOR PILE INSTALLATION, INCLUDING PILE CAPS AND FOUNDATION BRACKET CONNECTIONS, SHALL BE INCLUDED WITH ITEM 507 - PILING, MISC.: HELICAL PILE WITH ATTACHMENTS.
7. ALL REINFORCING STEEL TO BE EPOXY COATED.
8. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE NUMBERS ARE USED INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE A B501 IS A NUMBER 5 BAR. BAR DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE INDICATED.

HORIZONTAL SCALE IN FEET
0 0 0 0

CALCULATED JDG CHECKED BCS

# BARRIER FOUNDATION DETAILS

CLE-32-0135, CLE-32-1057 AND CLE-75-1055

CLE-275/32-10.57/1.35

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