EXTENSION
(EX: SCEXT-550476[L]-8-3)
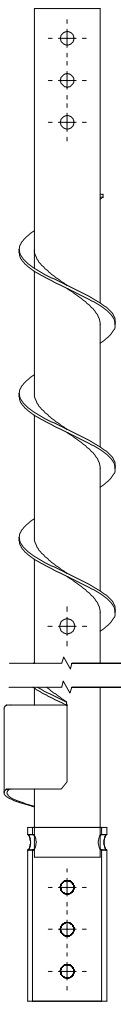
DISPLACEMENT EXTENSION
(EX: SC1600EXT-550476[L]-8-[Q]D3)

8" O.D. REVERSE GROUT AUGER

GROUT PORT
(SPACED MAX. 5')

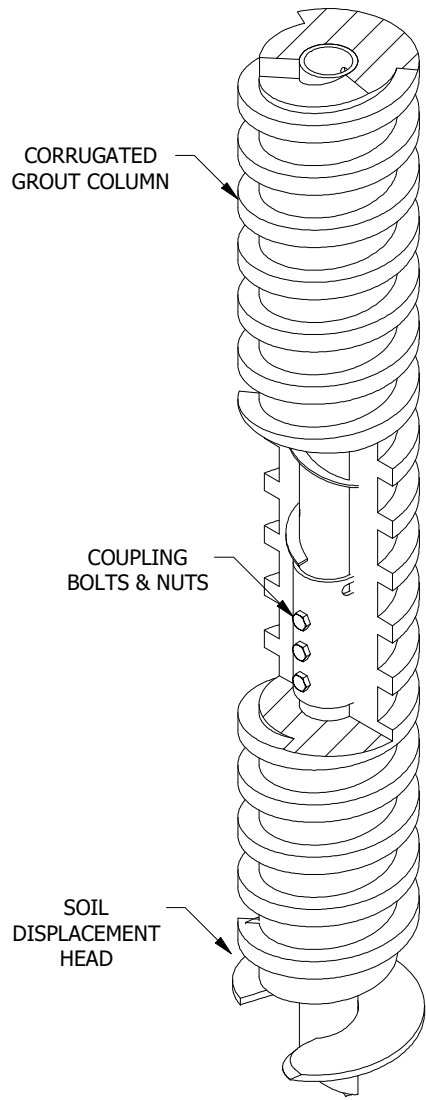SOIL DISPLACEMENT HEAD W/ DRIVE PLATE
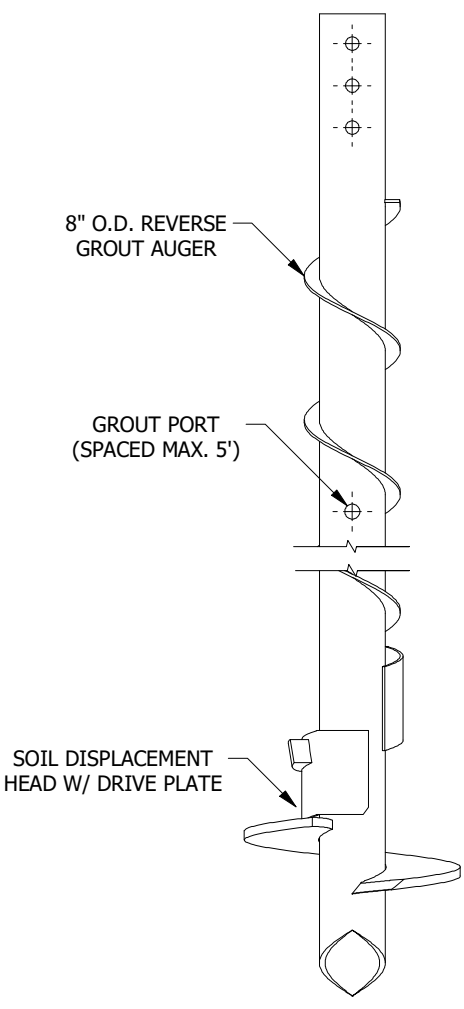
STANDARD LEAD
(EX: SC1600-550476[L]-181613-8-D3)
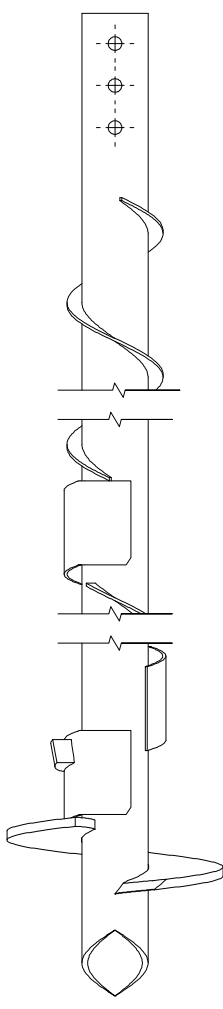
MULTIPLE DISPLACEMENT LEAD
(EX: SC1600-550476[L]-181613-8-[Q]D3)
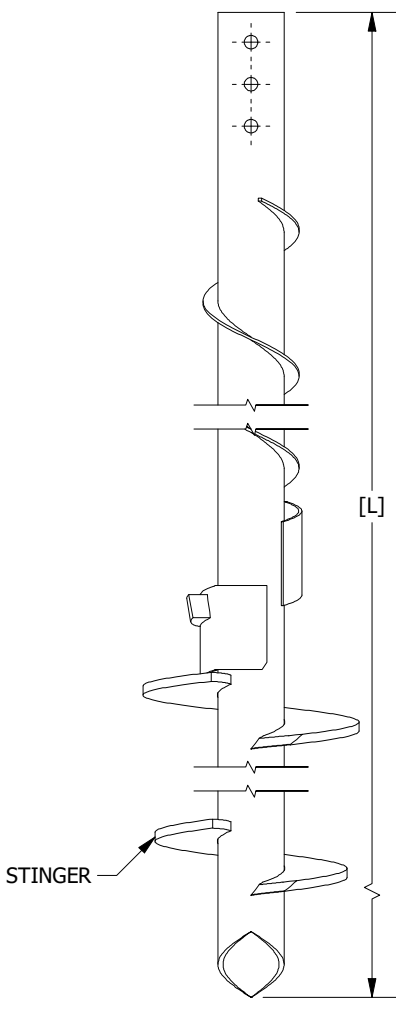
STINGER

STINGER LEAD
(EX: SC1600-550476[L]-181613-8-[Q]D3S16)

CORRUGATED GROUT COLUMN
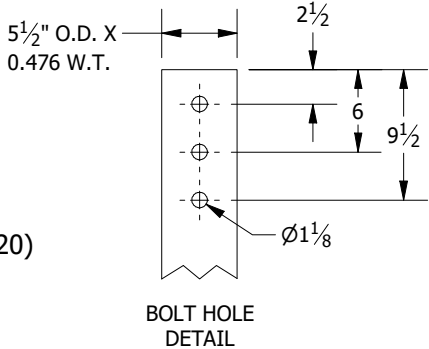
COUPLING BOLTS & NUTS

SOIL DISPLACEMENT HEAD
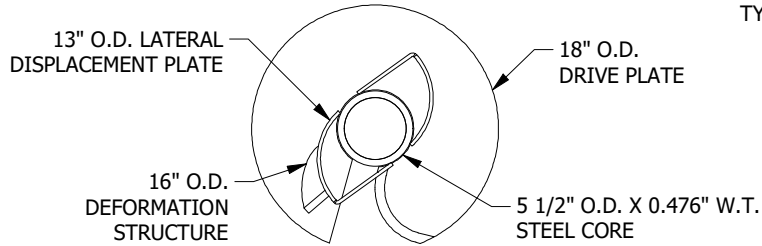
TYPICAL PILE ASSEMBLY
ELEVATION VIEW

NOTES:
1. DISPLACEMENT DRILLED, FULL LENGTH STEEL CORE WITH SOLID GROUT FILL AND UNCASED OUTER GROUT COLUMN.
2. GROUT COLUMN DEFORMATION SHALL HAVE A NOMINAL DIAMETER OF 16".
3. STEEL CORE SHALL BE 5 1/2" O.D. X 0.476" W.T. 80 KSI MIN. YLD. AND SHALL HAVE DIRECT CONTACT (SHAFT-TO-SHAFT) AT EACH SPLICE.
4. LATERAL DISPLACEMENT DRILL HEAD SHALL BE FABRICATED OF ASTM A572 GR. 50 PARTS. DRIVE PLATE & STINGER PLATE (IF REQUIRED) TO BE 3/4" THICK WITH A 6" PITCH.
5. ALL WELDING TO BE PERFORMED BY SHOP QUALIFIED WELDORS TO AWS D1.1 STRUCTURAL WELDING CODE - STEEL.
6. BARE STEEL.
7. (3) 1" DIAMETER X 8 1/2" LONG PLAIN FINISH HEAVY HEX BOLT GRADE 8 AND (3) 1" PLAIN FINISH HEAVY HEX NUT ASTM A194 (GRADE 8).
8. MAXIMUM TORQUE NOT TO EXCEED 60,000 FT*LBS.
9. ONE OR MORE OF THE FOLLOWING PATENTS MAY APPLY: US 8,926,228 B2 & US 10,480,144 B2; OTHER PATENTS PENDING.

STELCOR PART # ABREVIATIONS:
SC = STELCOR
1600 = 16" NOMINAL GROUT DIAMETER
EXT = EXTENSION
550 = 5 1/2" O.D. STEEL CORE
476 = .476" STEEL CORE WALL THICKNESS
[L] = SHAFT LENGTH IN FEET (EXAMPLE: 20' = 20)
18 = 18" O.D. DRIVE PLATE
16 = 16" O.D. DEFORMATION STRUCTURE
13 = 13" O.D. DISPLACEMENT PLATE
8 = 8" O.D. REVERSE GROUT AUGER
[Q] = DISPLACEMENT PLATE QUANTITY
D = ADDITIONAL 13" O.D. DISPLACEMENT PLATE
3 = BOLT QUANTITY
S = STINGER PLATE
16 = 16" O.D. STINGER PLATE DIAMETER

$5\frac{1}{2}$" O.D. X 0.476 W.T.

$2\frac{1}{2}$

6

$9\frac{1}{2}$

$\varnothing 1\frac{1}{8}$

BOLT HOLE
DETAIL

13" O.D. LATERAL DISPLACEMENT PLATE

18" O.D. DRIVE PLATE

16" O.D. DEFORMATION STRUCTURE

5 1/2" O.D. X 0.476" W.T. STEEL CORE

STANDARD SOIL DISPLACEMENT HEAD PLAN VIEW
*REVERSE AUGER AND GROUT COLUMN NOT SHOWN FOR CLARITY

DRAWN
AP   4/14/2020
CHECKED
LRS   4/15/2020
IDEAL MANUFACTURING, INC.
999 PICTURE PARKWAY
WEBSTER, NY 14580
800-789-4810 | WWW.IDL-GRP.COM

IDEAL Group

NOT TO SCALE
ALL UNITS IN INCHES U.N.O.

SIZE
B

DWG NO
SC1600-550476-3

REV
0

SHEET 1 OF 1