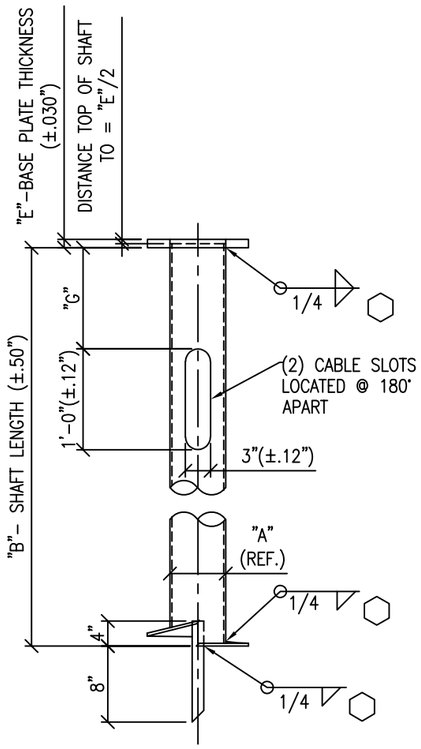
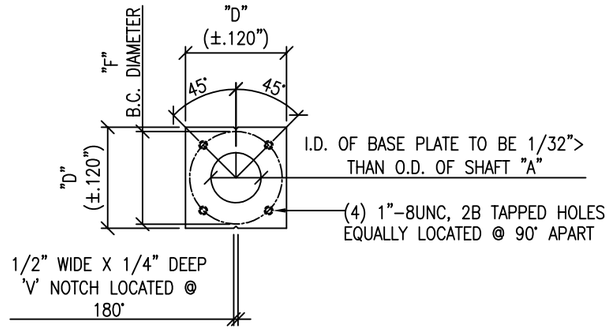
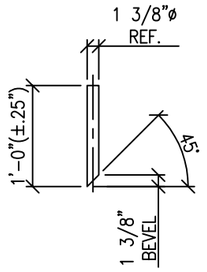
TYPE	POLE TYPE	MAXIMUM TORQUE RATING (lbs/ ft)	A SHAFT DIAMETER	B SHAFT LENGTH	C HELIX DIAMETER	D BASE PLATE SIZE	E PLATE THICKNESS	F BOLT CIRCLE	G SLOT LOCATION
R	OP14	15,000	6"	48"	12"	10"	3/4"	9-1/2"	12"
T1	OP301, OP302, OP303	15,000	6"	60"	12"	12"	1"	11"	18"
F1	OP401, OP402	20,000	8"	60"	14"	12"	1"	11-1/2"	18"
F2	OP403	20,000	8"	60"	14"	15"	1-1/4"	14-1/2"	18"
SP1	SP	15,000	6"	48"	12"	11"	1"	12-3/8"	18"



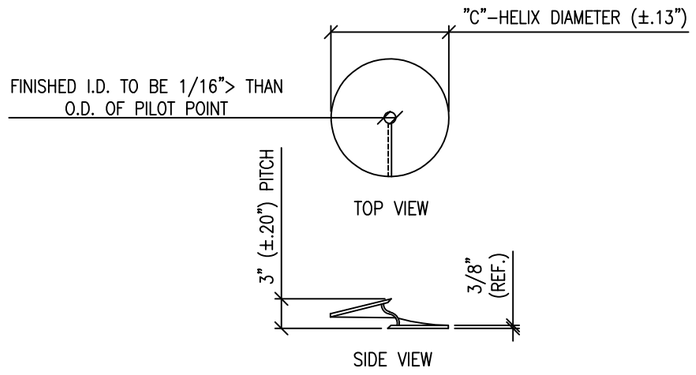
SCREW IN FOUNDATION ANCHOR
(ELEVATION)



BASE PLATE DETAIL



(1 3/8"ø x 12")
PILOT POINT DETAIL



HELIX PLATE DETAIL

NOTE:
HELIX TO BE FORMED BY MATCHING METAL DIE

⬡ = DENOTES WELDING PROCEDURE

NOTES:

1) FINISH: ALL STEEL COMPONENTS TO BE HOT DIP GALVANIZED PER ASTM– A123 AND AASHTO M111 (LATEST REVISIONS)
   ALL HARDWARE TO BE HOT DIP GALVANIZED PER ASTM A153 CLASS C
2) BASEPLATE TO BE PERMANENTLY NOTCHED TO INDICATE CABLE SLOT LOCATIONS
3) BASEPLATE TO BE PERPENDICULAR TO SHAFT AXIS (+/– ONE DEGREE) AND CONCENTRIC TO SHAFT AXIS (+/– 0.188")
4) BASEPLATE TO BE PERMANENTLY STAMPED WITH MANUFACTURER'S TYPE AND CERTIFICATION: "JHB" IN 1/2" LETTERS AND DATE CODE IN 1/2" LETTERS.
5) PILOT POINT AND SHAFT AXIS TO BE CONCENTRIC (+/– 0.125) AND INLINE (+/– 3 DEGREES)
6) PREHEAT (ROOM TEMPERATURE 70 DEGREES F.), TUMBLE BLAST, HAND GRIND, AND CLEAN BASEPLATE, HELIX AND CORE ON ALL WELDED AREAS.
7) FLAME CUT IRREGULARITIES PERMISSIBLE.
   (1) VALLEYS NOT TO EXCEED 3/32" BELOW NOMINAL SURFACE LEVEL.
   (2) PEAKS OR POSITIVE IRREGULARITIES NOT TO EXCEED 1/32" ABOVE NOMINAL SURFACE LEVEL OR INTERSECTIONS OF NOMINAL SURFACES.
8) MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
9) TAP 1"–8UNC DIAMETER HOLES IN THE SPECIFIED BOLT CIRCLE PERPENDICULAR TO THE BASEPLATE. CLEAN AND CHASE THE THREADS AFTER HOT DIP GALVANIZING SO THAT A BOLT MAY BE HAND INSTALLED.
10) ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:

BASEPLATE: ASTM A36– (LATEST REVISION) HOT ROLLED STEEL PLATE

SHAFT: STEEL PIPE PILES. SEAMLESS OR STRAIGHT WELDED, GRADE 2 PER ASTM A252–2 OR STEEL PIPE PER ASTM A500 GRADE B

HELIX: ASTM A36– (LATEST VERSION) HOT ROLLED STEEL PLATE

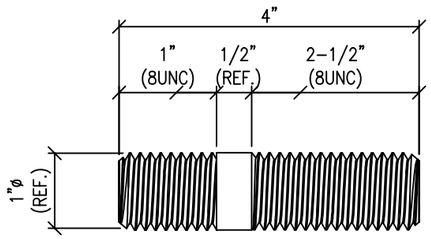
PILOT POINT– ASTM A36– (LATEST VERSION) HOT ROLLED STEEL

STUD: ASTM 1554 GRADE 105 SPECIAL 1" DIAMETER HOT DIP GALVANIZED STUD, THREADED AT BOTH ENDS. (4) REQ'D ONLY IF USING BREAKAWAY COUPLINGS.

BOLT: ASTM A325 OR GRADE 5 SAE J429. (4) 1" ø X 2–1/2" HOT DIP GALVANIZED HEX HEAD BOLT FOR TYPE R & TYPE SP1 SCREW–IN FOUNDATIONS ONLY. EACH BOLT SHALL INCLUDE ONE EACH, HOT DIP GALVANIZED LOCK WASHER AND HOT DIP GALVANIZED FLAT WASHER FOR THE TYPE R & TYPE SP1 SCREW–IN FOUNDATIONS ONLY.

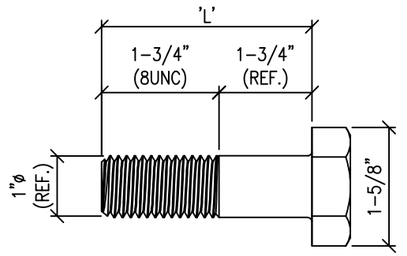
ASTM A325 OR GRADE 5 SAE J429. (4) 1" ø X 3" HOT DIP GALVANIZED HEX HEAD BOLT FOR TYPE T1, F1, & TYPE F2 SCREW–IN FOUNDATIONS ONLY IF SUPPLYING FOR FRANGIBLE BREAKAWAY BASES. EACH BOLT SHALL INCLUDE A HOT DIP GALVANIZED LOCK WASHER FOR TYPE T1, F1 & TYPE F2 SCREW–IN FOUNDATIONS ONLY.

MATERIAL TO BE 100% MELTED & MANUFACTURED IN THE U.S.A.



THREADED STUD DETAIL
(USE ONLY W/ BREAKAWAY COUPLINGS)

INSERT "A" FOR "X" IN DWG #



HEX HEAD BOLT DETAIL
(L = 2–1/2" TO BE USED W/ TYPE R & TYPE SP1 FOUNDATION ANCHORS ONLY)
(L = 3" TO BE USED W/ TYPE T1, F1 & TYPE F2 FOUNDATION ANCHORS ONLY)

INSERT "B" FOR "X" IN DWG #

CITY OF OVERLAND PARK, KS

REV #	DESCRIPTION	DATE	BY
	REVISIONS		

SCREW IN FOUNDATION ANCHOR DETAILS (STEEL HELIX)		
REVISION: A	P.O. COMPANY: LEMAC	DRAWN BY: RCS
DATE: 11–11–19	P.O. NUMBER:	CHECKED BY:
CONTRACTOR:		
J. H. Botts LLC BRIDGE & HWY. METAL PRODUCTS 253 E. BRUCE JOLIET, IL 60432		DWG. NO. JHBOPK-1-X 1 of 1