

NOTES: (UNLESS OTHERWISE SPECIFIED)

- 4. DIMENSIONS ARE SHOWN IN FEET AND INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS.
- 5. A TOLERANCE OF $\pm 1/8"$ [3] APPLIES TO ALL ANCHOR BOLT LAYOUT DIMENSIONS.

6 FOUNDATION NOTES:

- A) THIS FOUNDATION IS A TYPICAL DESIGN ONLY. CERTIFICATION OF ITS SUITABILITY FOR A PARTICULAR INSTALLATION BY A PROFESSIONAL ENGINEER IS REQUIRED PRIOR TO ITS USE FOR ACTUAL FABRICATION.
- B) CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS LOCATING EXISTING CONSTRUCTION BEFORE FABRICATION OF NEW CONSTRUCTION BEGINS.
- C) CONCRETE AND RELATED WORK SHALL BE MIXED, PLACED AND CURED IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 318-89 (REV.88) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE" ACI 301-84 (REV.88) PUBLICATION SP-15 (88).
- D) CONCRETE FOR FOUNDATIONS SHALL DEVELOP A COMPRESSIVE STRENGTH OF AT LEAST 3000 psi [211 kgf/cm²] IN 28 DAYS WITH A MAXIMUM SLUMP OF 3" [76] AT TIME OF PLACING.
- E) REINFORCING BARS SHALL CONFORM TO ASTM A 615 [S1] GRADE 60 DEFORMED TYPE $F_y = 60000$ psi [4219 kgf/cm²].
- F) UNLESS OTHERWISE NOTED, CONCRETE COVER OF REINFORCING BARS SHALL CONFORM TO MINIMUM REQUIREMENTS OF ACI 318-89 (REV.88).
- G) FABRICATION OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES" ACI 315-80 (REV.86).
- H) PROVIDE 3/4" x 45' [19 x 45'] CHAMFER ON ALL EXPOSED CONCRETE EDGES.
- J) FOUNDATIONS HAVE BEEN DESIGNED TO REST ON UNDISTURBED SOIL (PER EIA-411-A AND RS-222-D) WITH A MINIMUM ALLOWABLE NET VERTICAL BEARING CAPACITY OF 2000 psf [9770 kgf/m²]. IF UNDESIRABLE SOIL CONDITIONS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED.
- K) BACKFILLS SHALL BE SUITABLE EXCAVATED MATERIAL OR OTHER SUITABLE MATERIAL COMPACTED IN 6" LIFTS TO 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.
- L) IF THIS FOUNDATION IS TO BE LOCATED IN AN AREA WHERE ANNUAL FROST PENETRATION DEPTH EXCEEDS 15" [381], THE LOCAL BUILDING CODE SPECIFYING A MINIMUM REQUIRED FOUNDATION DEPTH SHOULD BE CONSULTED.

7 GROUNDING ELECTRODE SYSTEM NOTES:

- THE GROUNDING SYSTEM SHOWN REPRESENTS THE MINIMUM REQUIREMENTS TO ACHIEVE SATISFACTORY GROUNDING. ACTUAL SITE CONDITIONS AND SOIL RESISTIVITY LEVELS WILL DETERMINE FINAL GROUNDING SYSTEM DESIGN TO COMPLY WITH THE FOLLOWING:
- A) ALL GROUND RING, GROUND ROD AND ANTENNA STRUCTURE CONNECTIONS TO BE ERICO PRODUCTS, INC. CALWELD EXOTHERMIC TYPE WELDED ELECTRICAL CONNECTIONS OR EQUIVALENT.
 - B) GROUND RODS SHALL BE DRIVEN TO A DEPTH BELOW PERMANENT MOISTURE LEVEL (MINIMUM DEPTH SHOWN) AS DICTATED BY GEOGRAPHICAL LOCATION.
 - C) THE ANTENNA STRUCTURE SHALL BE CONNECTED TO A GROUNDING ELECTRODE SYSTEM CONSISTING OF A NUMBER OF INTERCONNECTED GROUND RODS. THE SYSTEM SHALL MEET THE REQUIREMENTS OF THE UNDERWRITERS' LABORATORIES PUBLICATION NO. UL96A FOR LIGHTNING PROTECTION.

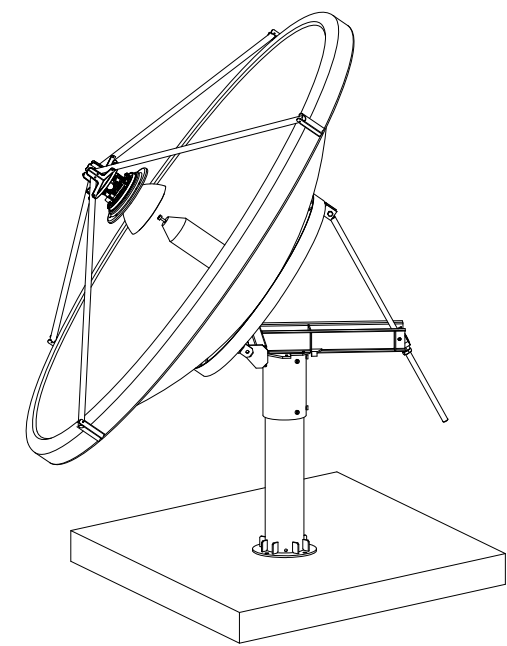
- D) THE GROUNDING ELECTRODE SYSTEM TO EARTH RESISTANCE SHALL NOT EXCEED 10 OHMS, MEASURED WITH A BIDDLE 3 TERMINAL DEVICE OR EQUIVALENT. THE GROUNDED CONDUCTOR (NEUTRAL) SUPPLIED TO ALL AC EQUIPMENT ON THE ANTENNA STRUCTURE SHOULD BE DISCONNECTED BEFORE TAKING MEASUREMENT.

- E) ACTUAL SITE CONDITIONS MAY REQUIRE LONGER GROUND RODS, ADDITIONAL GROUND RODS AND/OR LAND FILL ADDITIVES TO REDUCE SOIL RESISTIVITY LEVELS.
- F) AVOID SHARP BENDS WHEN ROUTING GROUNDING WIRE. GROUNDING WIRES TO ANTENNA STRUCTURE TO BE RUN AS SHORT AND STRAIGHT AS POSSIBLE.
- G) FINAL GRADE DIRECTLY ABOVE GROUNDING ELECTRODE SYSTEM TO BE WATER PERMEABLE.

8 POWER/IFL CONDUIT NOTES:

- A) ELECTRICAL POWER - DRAWING DEPICTS SUGGESTED LOCATION FOR ELECTRICAL POWER CONDUIT TO ANTENNA. SIZE, TYPE AND DEPTH TO BURY CONDUIT TO BE DETERMINED BY CUSTOMER IN COMPLIANCE WITH LOCAL CODES. DIRECTION TO ROUTE CONDUIT TO BE DETERMINED BY THE RELATIVE LOCATION OF COMMUNICATIONS BUILDING/SHELTER. POWER CONDUIT TO EXTEND 6" (MINIMUM) ABOVE SURFACE OF FOUNDATION SLAB. OPEN ENDS OF CONDUIT TO BE SEALED TO PREVENT MOISTURE AND FOREIGN PARTICLE CONTAMINATION.
- CUSTOMER TO PROVIDE MAIN LOAD CENTER ASSEMBLY AND OVER-CURRENT PROTECTION DEVICES FOR ELECTRICAL EQUIPMENT. MOUNTING LOCATION OF LOAD CENTER TO BE DETERMINED BY CUSTOMER IN ACCORDANCE WITH LOCAL CODES.
- B) FOR ROUTING IFL CABLES, 4" SIZE CONDUIT RECOMMENDED. TYPE AND DEPTH TO BURY CONDUIT TO BE DETERMINED BY CUSTOMER, IN COMPLIANCE WITH LOCAL CODES. LOCATION OF CONDUIT ON FOUNDATION AND DIRECTION TO ROUTE CONDUIT TO BE DETERMINED BY LOCATION OF COMMUNICATIONS BUILDING/SHELTER. CONDUIT TO EXTEND 36" (MIN.) ABOVE SURFACE OF FOUNDATION SLAB. ALL BENDS TO BE LARGE RADIUS, MAXIMUM OF TWO BENDS PER RUN. OPEN ENDS OF CONDUIT TO BE SEALED TO PREVENT MOISTURE AND FOREIGN PARTICAL CONTAMINATION.

REVISIONS					
MF	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	RELEASE TO PRODUCTION	26JUL02	EJE
		B	CHG PER 5084416	26OCT12	JR
		C	CHG PER 5084749	03AUG13	JR
		D	CHG PER 5088307	JUNE20	
		E	CHG PER 5089012	28JUL21	OK



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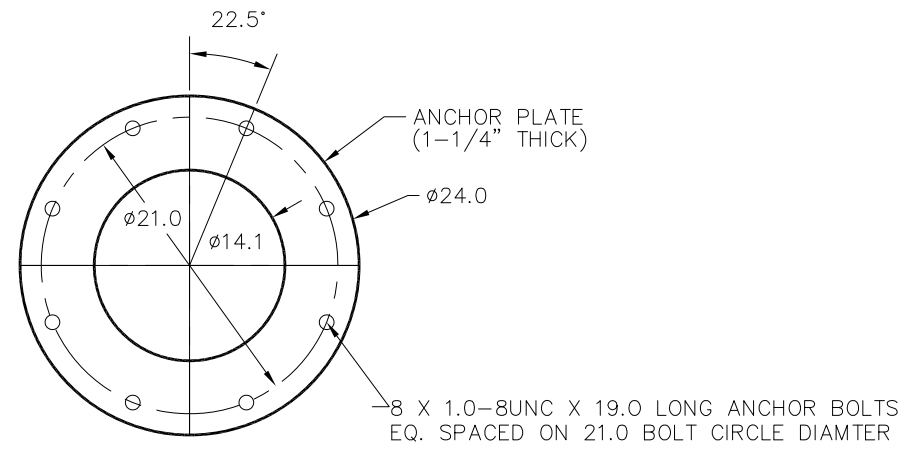
QTY	ITEM NO.	U OF M	Kratos	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	REF. DESIGNATOR	NOTES
PARTS LIST							
					www.KratosDefense.com		
					FOUNDATION LAYOUT, 3.5M AT-GRADE SLAB		
					SIZE FSCM NO. DWG. NO.		
					D 4ZTA9 240350		
					SCALE 1:20 240350.1.E SHEET 1 OF 2		
					PROD. GR. 050		
					DISTR. P		

NOMINAL POINTING DIRECTION

CADWELD® TYPE GT
WELDED ELEC. CONNECTION
TYP. 4 PLCS.
(WIRE TO GROUND ROD) 7A

3/4" [19] DIA. x 8'-0" [2438]
LG. MIN. COPPERWELD GROUND ROD
TYP. 4 PLCS. 7E

POWER CONDUIT - OPTIONAL
(SUGGESTED LOCATION) 8A

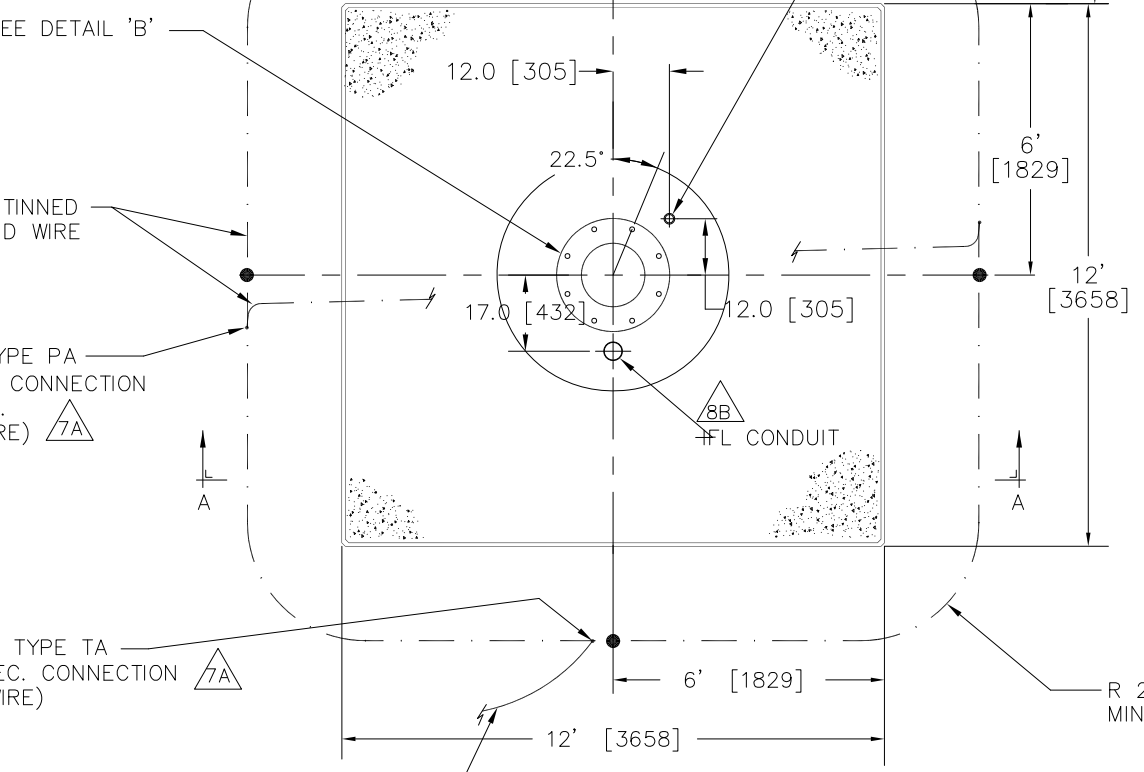


DETAIL 'B'
ANCHOR BOLT PATTERN DETAIL
NOT TO SCALE

#2 AWG SOLID TINNED
COPPER GROUND WIRE
TYPICAL

CADWELD® TYPE PA
WELDED ELEC. CONNECTION
TYP. 2 PLCS.
(WIRE TO WIRE) 7A

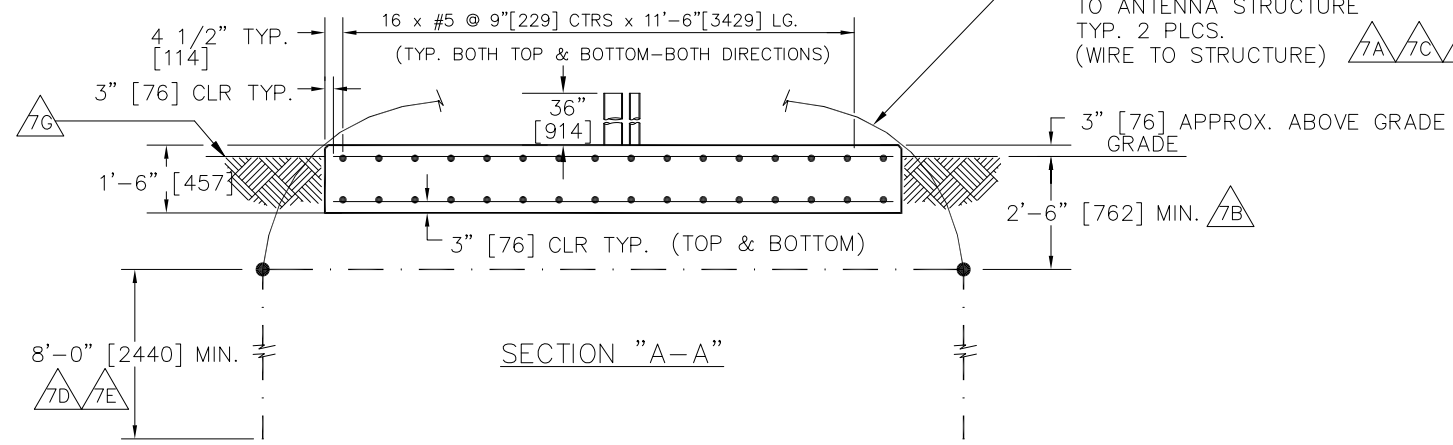
CADWELD® TYPE TA
WELDED ELEC. CONNECTION
(WIRE TO WIRE) 7A



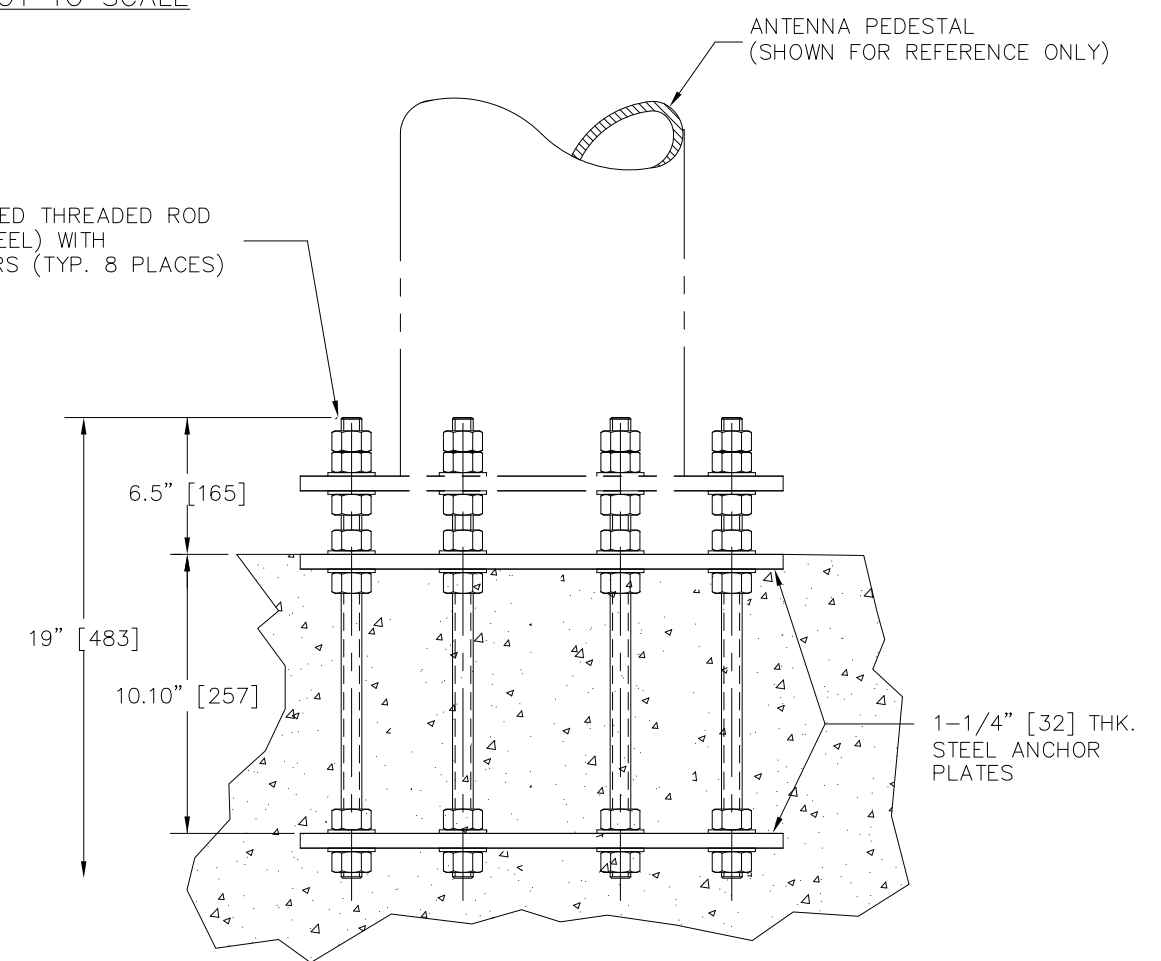
TOP VIEW

TO EXTERNAL GROUND SYSTEM
(WHERE APPLICABLE)

CADWELD® TYPE HF
WELDED ELEC. CONNECTION
TO ANTENNA STRUCTURE
TYP. 2 PLCS.
(WIRE TO STRUCTURE) 7A, 7C, 7F



SECTION "A-A"



ANCHOR BOLT DETAIL (NOT TO SCALE)
ANCHOR BOLT KIT, P/N 302689

VOLUME OF CONCRETE	8.0 CUBIC YARDS (6.1 CUBIC METERS)
WEIGHT OF REINFORCING	821 LBS. (372 KILOGRAMS)

PREP. EJE	26JUL02	SIZE D	FSCM NO. 4ZTA9	DWG. NO. 240350	REV. E
CHK.		SCALE 1:20		240350.2	SHEET 2 OF 2