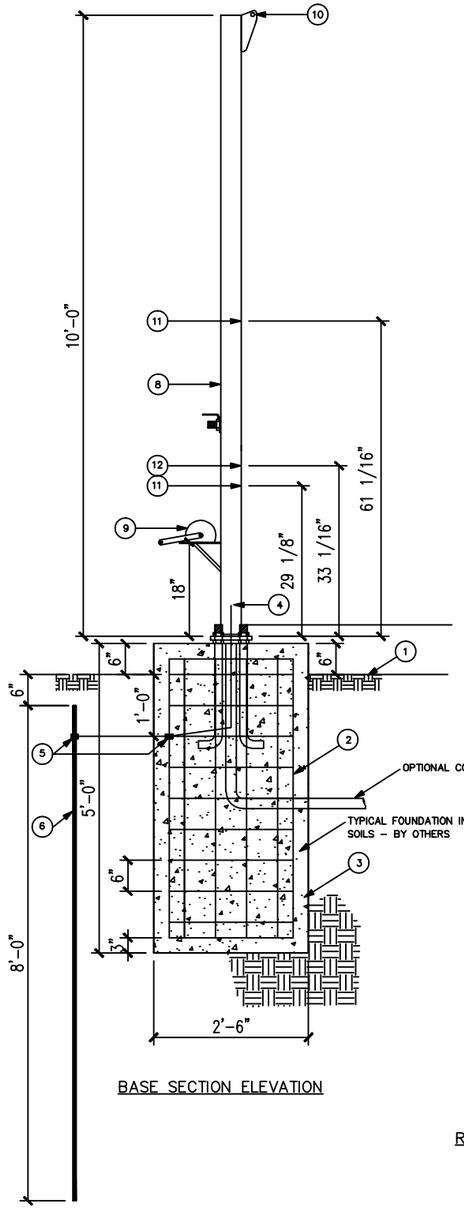
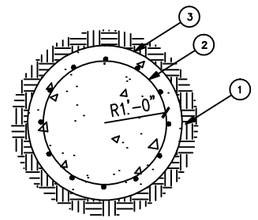


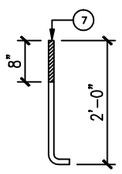
BASE SECTION ELEVATION

NOTES	SPECIFICATIONS
(1) SOIL:	THE CONCRETE FOUNDATION DESIGN IS BASED ON "NORMAL", DRY, NON-FROZEN, EXCAVATABLE 4,000 PSF SOIL. THE FOUNDATION DEPTH MUST BE DEEPER THAN THE LOCAL FROST DEPTH CONDITIONS. UNDISTURBED SOIL. NO BACKFILL OF COMPACTED SOIL.
(2) CAGE:	#6 VERT. BARS EQUALLY SPACED. STIRRUPS AT 4" O.C. OF THE TOP 12" AND AT 12" O.C. THEREAFTER. ALL REBAR INTERSECTIONS SHALL BE WIRE TIED. SUPPLIED AND INSTALLED BY OTHERS.
(3) CONCRETE	AIR-ENTRAINED CONCRETE (REDI-MIX) WITH A MINIMUM OF 4,000 PSI BREAK STRENGTH IN 28 DAYS. APPROX. 1.0 CU. YDS REQUIRED FOR ROUND FOUNDATION. SUPPLIED AND INSTALLED BY OTHERS.
(4) GROUNDING CONDUCTOR:	THE GROUND ELECTRODE CONDUCTOR SHALL BE ONE CONTINUOUS LENGTH OF #2/0 BARE STRANDED COPPER. THE GROUND ELECTRODE CONDUCTOR SHALL RUN THROUGH THE CENTER OF THE CONCRETE PILLAR AND SHALL EXIT THE CONCRETE PILLAR AT TWO LOCATIONS. ONE EXIT SHALL BE IN THE CENTER AT THE TOP OF CONCRETE PILLAR AND SHALL BE ATTACHED TO POLE GROUNDING HOLE PROVIDED. THE SECOND EXIT SHALL BE HORIZONTAL AND EXIT THE CONCRETE PILLAR 1 FOOT BELOW THE FINISH GRADE AND SHALL BE EXOTHERMICALLY WELDED IN 3 POINTS. THE GROUND ELECTRODE CONDUCTOR SHALL AVOID SHARP BENDS. SUPPLIED AND INSTALLED BY OTHERS.
(5) EXOTHERMIC WELDING:	THE CONTINUOUS GROUND ELECTRODE CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE ELECTRODE, SPIRAL CAGE, AND ANCHOR BOLT. SUPPLIED AND INSTALLED BY OTHERS.
(6) GROUNDING ROD:	THE ELECTRODE SHALL BE INSTALLED VERTICALLY, 6 INCHES BELOW FINISH GRADE. THE ELECTRODE SHALL BE VERTICALLY DRIVE IN THE SOIL. THE ELECTRODE ROD SHALL BE A MINIMUM OF ⅝ INCHES IN DIAMETER MADE OF IRON OR STEEL. SUPPLIED AND INSTALLED BY OTHERS.
(7) ANCHOR BOLTS:	FOUR ¾" X 24" LONG 50 KSI HOT DIPPED GALVANIZED ANCHOR BOLTS CENTERED IN THE FOUNDATION WITH A 6" SQUARE HOLE PATTERN WITH 5" OF EXPOSED THREADS. 3 NUTS PER BOLT.
(8) STEEL BASE POLE	4" SQUARE TUBE, HIGH YIELD STRENGTH STEEL
(9) HAND CRANK WINCH	2000 LB. RATED, HAND CRANK WINCH WITH 2-WAY BRAKE. MOUNTED ON STEEL SHELF WITH FOUR (4) ⅜" ST ST BOLTS WITH NYLON LOCKING CASTLE NUTS. ⅜" AIRCRAFT QUALITY STEEL CABLE.
(10) HINGE BOLT	7" HINGE BOLT
(11) 5/8" NUT	⅝" COARSE THREAD BUT WELDED INTO STEEL POLE
(12) ACCESS HOLE	1-1/2" DIAMETER ACCESS HOLE

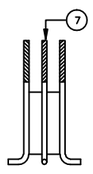
NOTE: FOUNDATION CAN BE ROUND OR A 2'-6" X 2'-6" X 5' DEEP SQUARE FOUNDATION. ROUND FOUNDATION IS ILLUSTRATED. ALL ILLUSTRATIONS FOR FOUNDATION ASSUMES A MINIMUM OF 4,000 PSF SOILS.



PLAN VIEW
REBAR CAGE FOR FOUNDATION

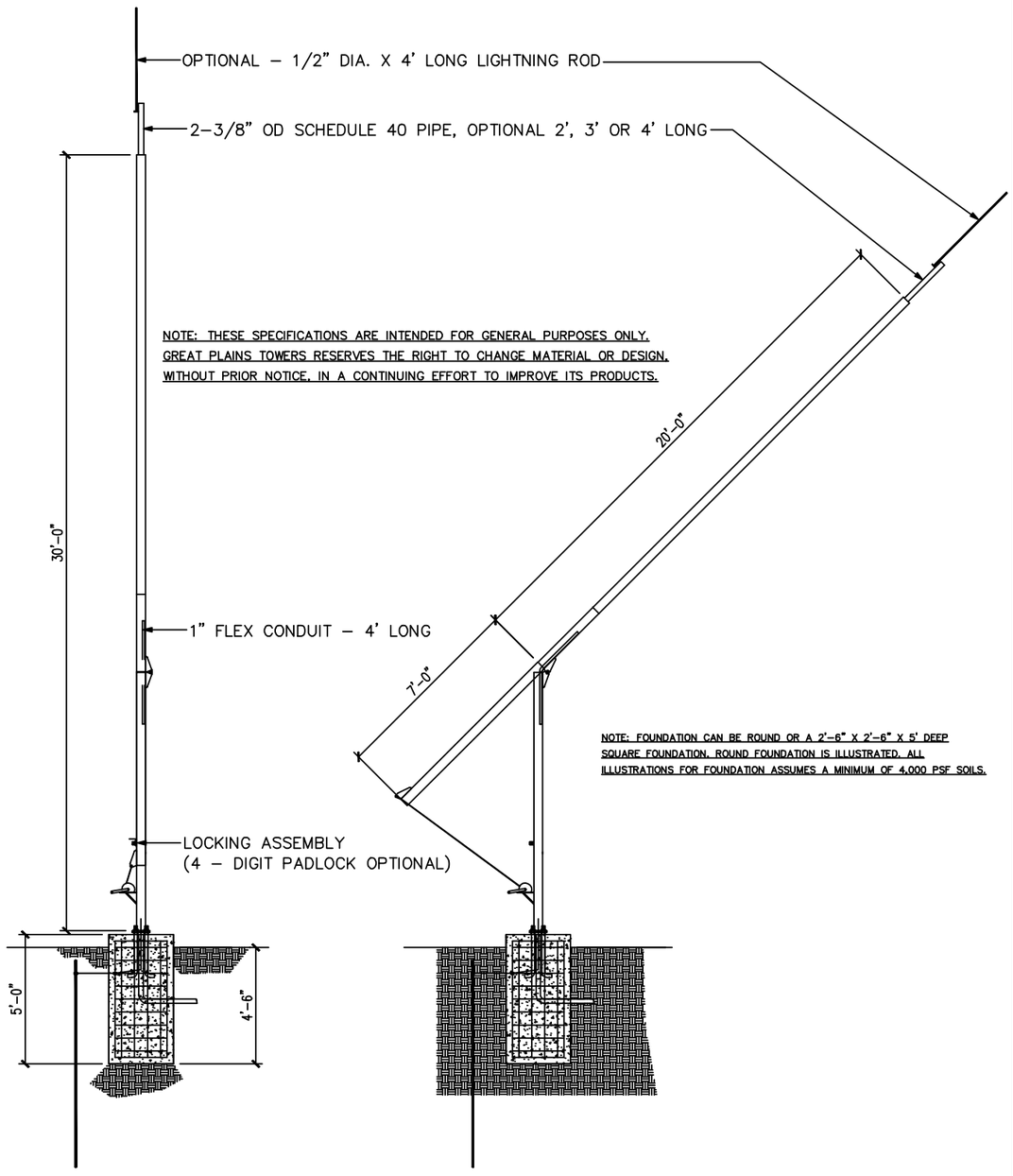


ANCHOR BOLT



WELDED ANCHOR BOLT CLUSTER (4 ANCHOR BOLTS)

NOTE: THESE SPECIFICATIONS ARE INTENDED FOR GENERAL PURPOSES ONLY. GREAT PLAINS TOWERS RESERVES THE RIGHT TO CHANGE MATERIAL OR DESIGN, WITHOUT PRIOR NOTICE, IN A CONTINUING EFFORT TO IMPROVE ITS PRODUCTS.



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NOTE: FOUNDATION CAN BE ROUND OR A 2'-6" X 2'-6" X 5' DEEP SQUARE FOUNDATION. ROUND FOUNDATION IS ILLUSTRATED. ALL ILLUSTRATIONS FOR FOUNDATION ASSUMES A MINIMUM OF 4,000 PSF SOILS.

Revisions

By	Date	Description

APPROVAL

	INITIAL	DATE
OWNER:		
CONSTRUCTION:		
OPERATIONS:		
REAL ESTATE DEPARTMENT:		
RF ENGINEERING:		

Scale: NTS
Drawn by Date 10/20/11
Ck'd by Date

30' FOLD-DOWN POLE

Tower Foundation
Rebar, Grounding & Manpower Tower Erection
Foundation, Installation & Civil Work
Antenna & Line Installation
Tower & Site Inspection
Tower Light Retrofitting
80'/90' & 140' Tower Fabrication
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