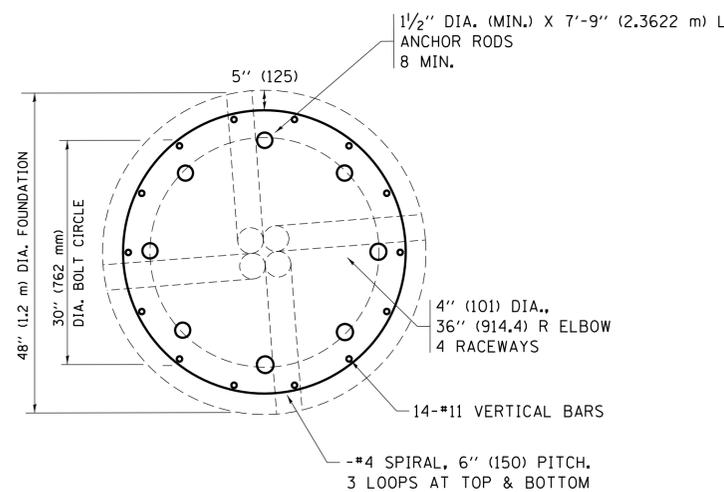
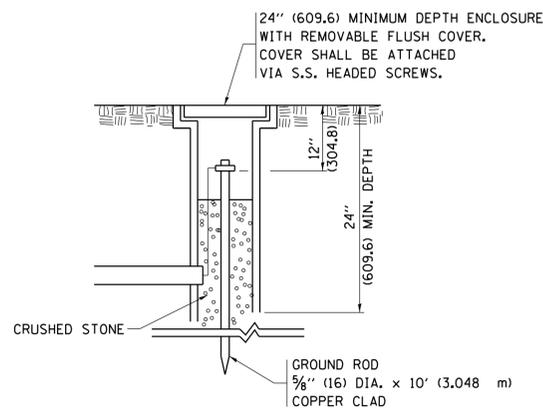


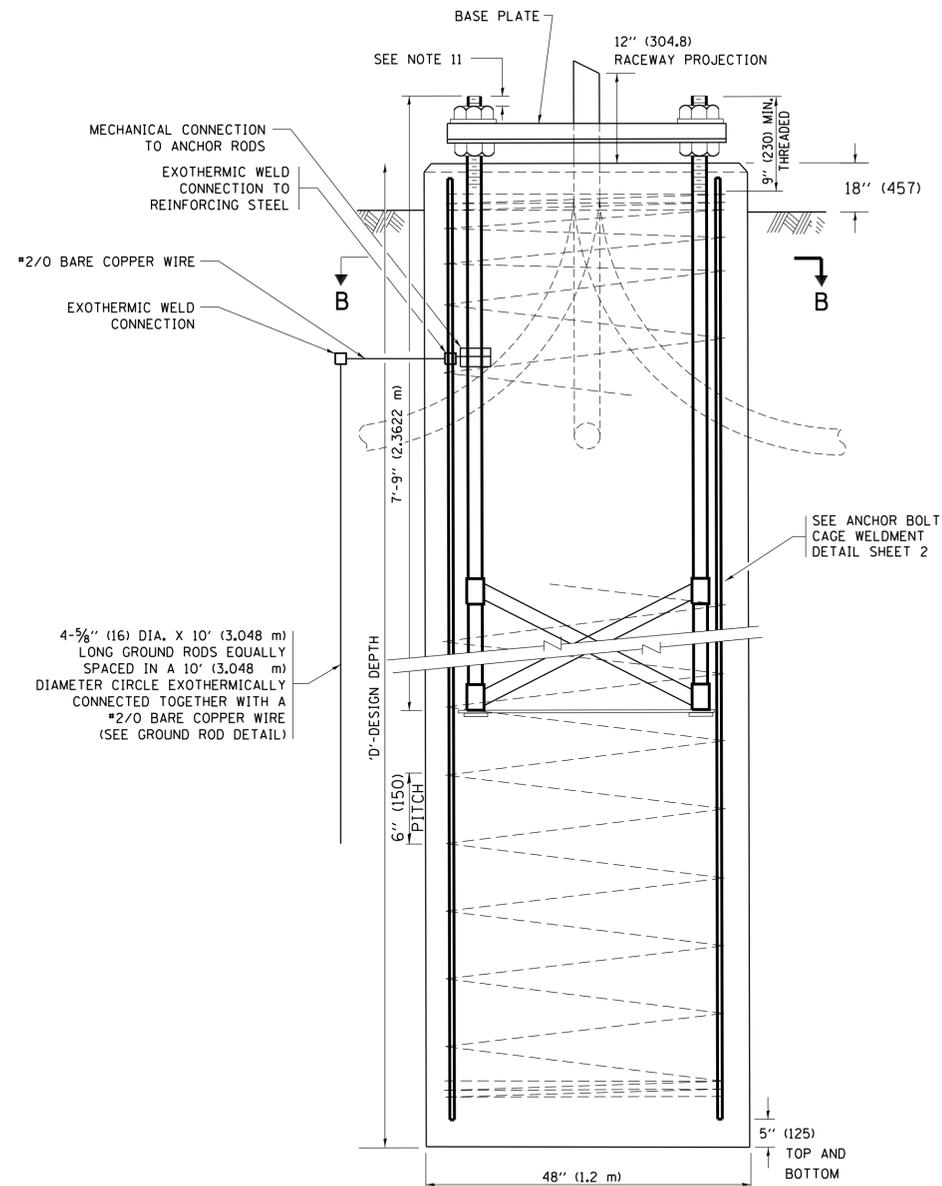
SOIL CONSISTENCY		SHAFT LENGTH (D) TABLE		
		AVERAGE STRENGTH	LIGHT TOWER MOUNTING HEIGHT	
COHESIVE	SOFT	Qu In tsf (Qu In kPa)	100 FT. (30 m)	110 FT. (34 m)
	MEDIUM	<0.5 (<50)	22'-6" (6.9 m)	24'-0" (7.2 m)
	STIFF	0.5 TO 1 (50 TO 100)	18'-6" (6.9 m)	19'-0" (5.8 m)
	VERY STIFF	1 TO 2 (100 TO 200)	15'-6" (4.7 m)	16'-0" (5.5 m)
	HARD	2 TO 4 (200 TO 400)	13'-6" (4.1 m)	14'-0" (4.2 m)
GRANULAR		N in BLOWS/FT. (N in BLOWS/0.3m)		
	VERY LOOSE	<5 (<5)	18'-0" (5.4 m)	18'-6" (5.6 m)
	LOOSE	5 TO 10 (5 TO 10)	16'-6" (4.9 m)	17'-0" (5.1 m)
	MEDIUM	10 TO 25 (10 TO 25)	15'-6" (5.2 m)	16'-0" (5.9 m)
	DENSE	25 TO 50 (25 TO 50)	15'-0" (4.5 m)	15'-6" (4.6 m)
	VERY DENSE	>50 (>50)	14'-0" (4.2 m)	14'-6" (4.4 m)



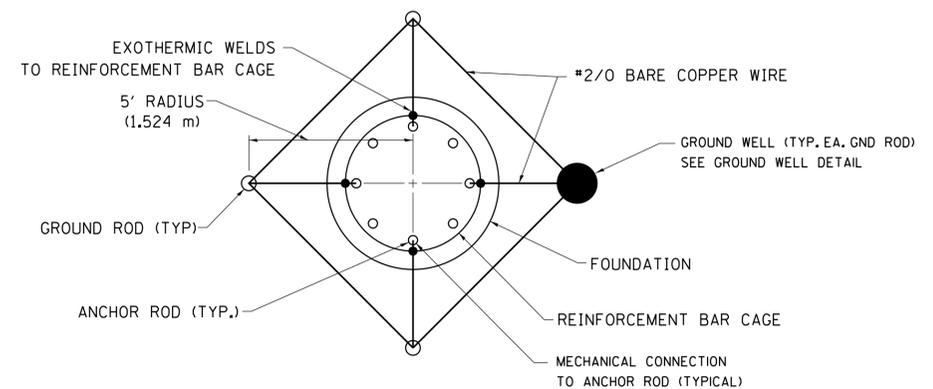
SECTION-B-B



GROUND WELL DETAIL



FOUNDATION ELEVATION



GROUND ROD DETAIL

- ### DESIGN NOTES
- ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
 - THE ANCHOR RODS SHALL BE VERTICAL NO ADJUSTMENT SHALL BE ALLOWED AFTER THE FOUNDATION IS PLACED.
 - THE GAP BETWEEN THE FOUNDATION AND THE BASE PLATE SHALL BE ENCLOSED WITH A STAINLESS STEEL SCREEN FASTENED WITH A STAINLESS STEEL BAND.
 - THE TOP OF THE FOUNDATION TO 18" (457) BELOW GRADE SHALL BE FORMED.
 - SURFACE WATER WILL NOT BE PERMITTED TO ENTER THE HOLE AND ALL WATER WHICH MAY HAVE INFILTRATED INTO THE HOLE SHALL BE REMOVED BEFORE PLACING CONCRETE.
 - THE LIGHT TOWER SHALL NOT BE ERECTED UNTIL AFTER THE CONCRETE HAS BEEN CURED ACCORDING TO ARTICLE 1020.13.
 - ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO ASTM F1554, GRADE 725 (GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.9.
 - ANCHOR ROD INFORMATION SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE FULLY COORDINATED FOR APPROVAL WITH TOWER MANUFACTURER REQUIREMENTS.
 - REINFORCEMENT BARS SHALL BE ACCORDING TO ARTICLE 1006.10
 - TWO ANCHOR RODS OPPOSITE EACH OTHER SHALL HAVE THE ANCHOR ROD THREADS PEENED AFTER NUTS ARE INSTALLED.
 - A MINIMUM OF THREE FULL THREADS SHALL REMAIN EXPOSED AFTER LIGHT TOWER IS INSTALLED.
 - ALL GROUNDING INDICATED IN THE PLANS SHALL BE INCLUDED IN THE COST OF THE LIGHT TOWER FOUNDATION AND SHALL NOT BE PAID FOR SEPARATELY.
 - CUT NUTS, OR JAM NUTS, ARE NOT ALLOWED
 - ANCHOR ROD QUANTITY, DIAMETER, AND LENGTH SHALL BE DETERMINED BY THE TOWER MANUFACTURER AND APPROVED BY THE ENGINEER. EACH FOUNDATION SHALL HAVE A MINIMUM OF 8 ANCHOR RODS.
 - COORDINATE THE ROD CIRCLE DIAMETER OF THE TOWER WITH THE DIAMETER OF THE ANCHOR ROD CAGE.
 - THE FOUNDATION SHALL BE POURED MONOLITHICALLY AND SHALL HAVE NO CONSTRUCTION JOINTS.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - R. TOMSONS 09-02-10
pw:\IL084EBIDINTEG.111nois.gov\PIWDDT\Documents\IDOT Offices\District 1\Projects\Dist...DRAWN\CADData\CADsheets\be501.dgn		CHECKED -	REVISED - R. TOMSONS 02-27-13
Default	PLOT SCALE = 50.000' / in.	DATE -	REVISED - R. TOMSONS 04-29-16
	PLOT DATE = 7/27/2016		REVISED - R. TOMSONS 07-27-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HIGH MAST LIGHT TOWER
100 FT TO 110 FT (30 m TO 34 m) FOUNDATION DETAIL**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-501			
ILLINOIS FED. AID PROJECT		CONTRACT NO.		