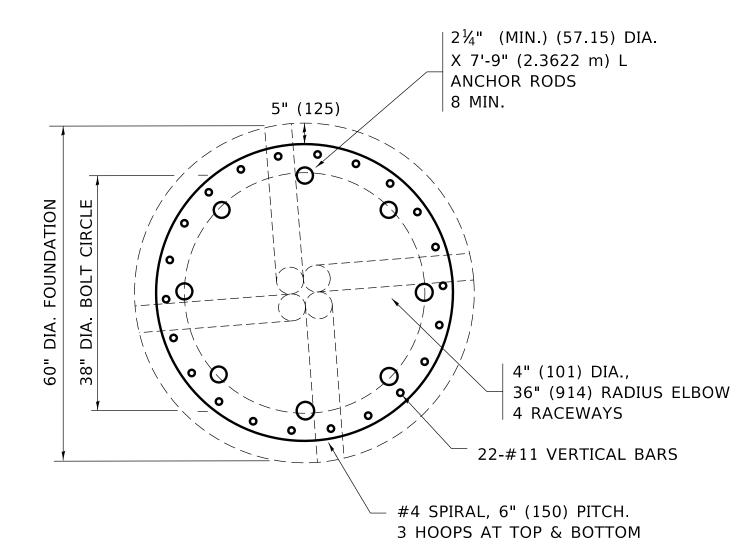
SHAFT LENGTH (D) TABLE					
SOIL CONSISTENCY		AVERAGE STRENGTH	LIGHT TOWER	MOUNTING HEIGHT	
		Qu In tsf (Qu In kPa)	150 FT. (46 m)	160 FT. (48.8 m)	
	SOFT	<0.5 (<50)	28'-6" (8.7 m)	30'-0" (9.1 m)	
	MEDIUM	0.5 TO 1 (50 to 100)	23'-6" (7.0 m)	24'-0" (7.3 m)	
COHESIVE	STIFF	1 TO 2 (100 TO 200)	19'-6" (5.9 m)	20'-0" (6.1 m)	
	VERY STIFF	2 TO 4 (200 TO 400)	17'-0" (5.1 m)	17'-6" (5.2 m)	
	HARD	>4 (>400)	15'-6" (4.5 m)	15'-6" (4.5 m)	
		N in BLOWS/FT. (N in BLOWS/0.3m)			
	VERY LOOSE	<5 (<5)	21'-0" (6.3 m)	21'-6" (6.5 m)	
	LOOSE	5 TO 10 (5 TO 10)	19'-0" (5.7 m)	19'-6" (5.9 m)	
GRANULAR	MEDIUM	10 TO 25 (10 TO 25)	18'-0" (5.5 m)	18'-6" (5.6 m)	
	DENSE	25 TO 50 (25 TO 50)	17'-0" (5.2 m)	17'-6" (5.3 m)	
	VERY DENSE	>50 (>50)	16'-6" (4.9 m)	17'-0" (5.1 m)	

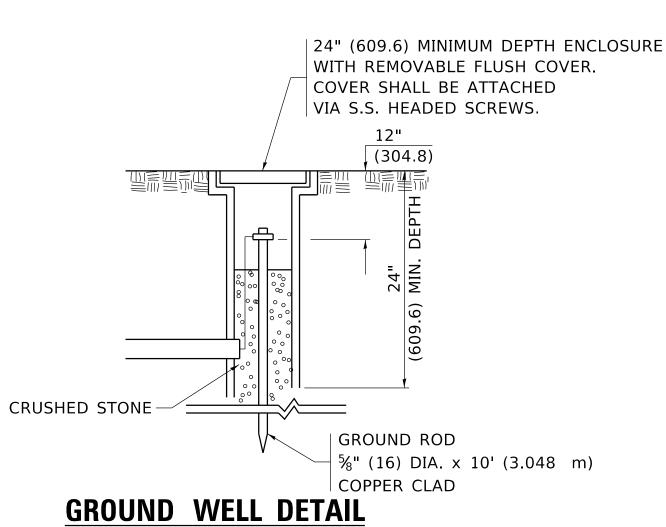


## SECTION-B-B

USER NAME = leysa

PLOT SCALE = 50.0000 ' / in.

PLOT DATE = 3/2/2020



## **DESIGN NOTES**

- 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
- 2. THE ANCHOR RODS SHALL BE VERTICAL NO ADJUSTMENT SHALL BE ALLOWED AFTER THE FOUNDATION IS PLACED.
- 3. THE GAP BETWEEN THE FOUNDATION AND THE BASE PLATE SHALL BE ENCLOSED WITH A STAINLESS STEEL SCREEN FASTENED WITH A STAINLESS STEEL BAND.
- 4. THE TOP OF THE FOUNDATION TO 18" (450) BELOW GRADE SHALL BE FORMED.
- 5. 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.
- 6. THE LIGHT TOWER SHALL NOT BE ERECTED UNTIL AFTER THE CONCRETE HAS BEEN CURED ACCORDING TO ARTICLE 1020.13.
- 7. ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO ASTM F1554, GRADE 725 (GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.9.
- 8. ANCHOR ROD INFORMATION SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE FULLY COORDINATED FOR APPROVAL WITH TOWER MANUFACTURER REQUIREMENTS.
- 9. REINFORCEMENT BARS SHALL BE ACCORDING TO ARTICLE 1006.10
- 10. TWO ANCHOR RODS OPPOSITE EACH OTHER SHALL HAVE THE ANCHOR ROD THREADS PEENED AFTER NUTS ARE INSTALLED.
- 11. A MINIMUM OF THREE FULL THREADS SHALL REMAIN EXPOSED AFTER LIGHT TOWER IN INSTALLED.
- 12. ALL GROUNDING INDICATED IN THE PLANS SHALL BE INCLUDED IN THE COST OF THE LIGHT TOWER FOUNDATION AND SHALL NOT BE PAID FOR SEPARATELY.
- 13. CUT NUTS, OR JAM NUTS, ARE NOT ALLOWED
- 14. 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.
- 15. COORDINATE THE ROD CIRCLE DIAMETER OF THE TOWER WITH THE DIAMETER OF THE ANCHOR ROD CAGE.
- 16. THE FOUNDATION SHALL BE POURED MONOLITHICALLY AND SHALL HAVE NO CONSTRUCTION JOINTS.

**FOUNDATION ELEVATION** 

SCALE: NONE

60"

BASE PLATE —

SEE NOTE 11 —

(2.3622

'D'-DESI 6" (150) PITCH

MECHANICAL CONNECTION

EXOTHERMIC WELD CONNECTION

#2/0 BARE COPPER WIRE -

EXOTHERMIC WELD

CONNECTION

4-\%" (16) DIA. X 10' (3.048 m)

LONG GROUND RODS EQUALLY

CONNECTED TOGETHER WITH A

DIAMETER CIRCLE EXOTHERMICALLY

SPACED IN A 12' (3.658 m)

#2/0 BARE COPPER WIRE

(SEE GROUND ROD DETAIL)

TO ANCHOR RODS

TO REINFORCING STEEL

- 12" (304.8)

RACEWAY PROJECTION

−9" (230) MIN.

THREADED

18" (457)

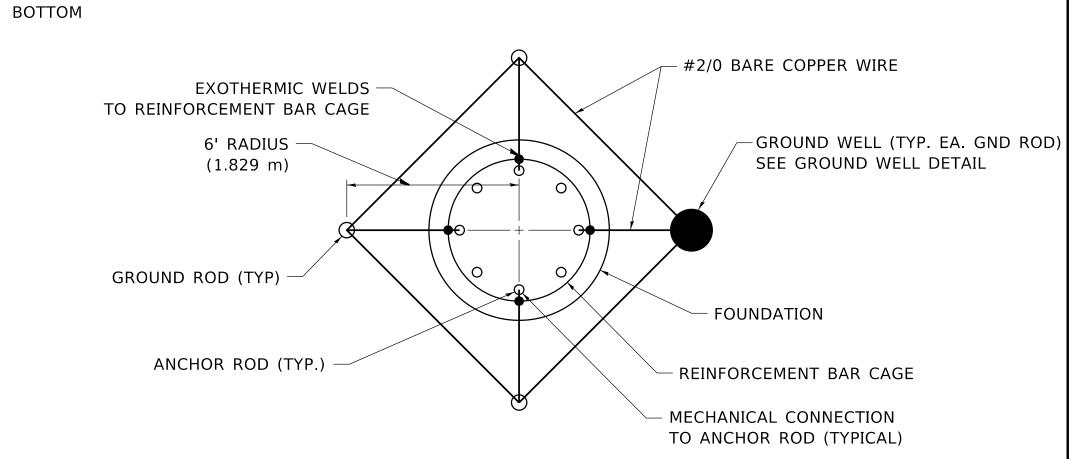
|SEE ANCHOR BOLT

CAGE WELDMENT

DETAIL SHEET 2

5" (125)

**TOP AND** 



**GROUND ROD DETAIL** 

TO STA.

DESIGNED - ·	REVISED - R. TOMSONS 02-27-13
DRAWN -	REVISED - R. TOMSONS 04-29-16
CHECKED -	REVISED -
DATE - ·	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

HIGH MAST LIGHT TOWER 150 FT TO 160 FT FOUNDATION DETAIL

OF 2 SHEETS STA.

TOTAL SHEET SHEET NO. SECTION COUNTY BE-511 CONTRACT NO. ILLINOIS FED. AID PROJECT