## LIGHT POLE FOUNDATION DEPTH TABLE 9.144M (30 FT.) TO 10.668M (35 FT.) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY	3.35	3.85M
Qu = 0.375 TON/SQ. FT.	(11'-0")	(12'-8")
MEDIUM CLAY	2.74M	4.52M
Qu = 0.75 TON/SQ.FT	(9'-0'')	(14′-10′′)
STIFF CLAY	2,29M	2.61M
Qu = 1.50 TON/SQ. FT.	(7'-6'')	(8′-7″)
LOOSE SAND	2.90M	3,22M
Ø = 34°	(9'-6'')	(10′-7′′)
MEDIUM SAND	2,74M	2.99M
Ø = 37.5°	(9'-0'')	(9'-10'')
DENSE SAND	2.51M	2.91M
Ø = 40°	(8′-3′′)	(9'-7")

609.6 Did. (24")

292 (111/2")

BOLT CIRCLE

CONTRACTOR SHALL COORDIN
WITH BOLT CIRCLE OF EXIS

CENTER RACEWAYS
IN FOUNDATION

ANCHOR ROD

4-25.4 Dia. X 1.524m (4-1" Dia. X 5'-0")

20 (¾4") CHAMFER

EXOTHERMIC WELD CONNECTION TO REINFORCING STEEL

#2/0 BARE COPPER

#3 SPIRAL

- GROUND CLAMP UL LISTED

8-#6 VERTICAL BARS

-3 LOOPS MIN. AT TOP & BOTTOM

NOTE: CONTRACTOR SHALL COORDINATE BOLT CIRCLE WITH BOLT CIRCLE OF EXISTING LIGHTING UNIT F.A.U. SECTION COUNTY TOTAL SHEETS NO. 2832 00-00218-00-FP COOK 108 52

STA. TO STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 83773

## NOTES

- 1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- 5. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 1.5M (60 IN.) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- 4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 20MM (3/4-IN).
- 6. THE CONCRETE SHALL BE CLASS SI, CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13

  REFORE LIGHT POLES ARE INSTALLED.
- 7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F-436.
- 9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- 10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 150 MM (6 INCHES) WITH A MINIMUM OF 75 MM (3 INCHES) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- 11. ANCHOR RODS SHALL PROJECT 69.9MM (2¾4") ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- 12. THE CONTRACTOR SHALL USE A \*3 SPIRAL AT 152,4MM (6") PITCH OR MAY SUBSTITUTE \*3 TIES AT 304,8MM (12") O.C. WITH THE APPROVAL OF THE ENGINEER.
- 13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 14. THE RACEWAYS SHALL PROJECT 25.4MM (1") ABOVE THE TOP OF THE FOUNDATION.

TOP VIEW

RACEWAYS PARALLEL

609 (24")

76.2 (3")

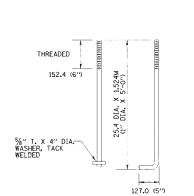
\*2/0 BARE COPPER

CONNECTION TO GND ROD.

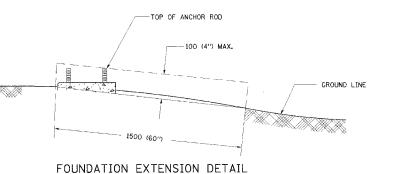
GROUND ROD (WHEN SPECIFIED) 15.875 Dia, X 3.048m (5/8 " Dia, X 10")

88.9 Dia. X 914.4 RADIUS

(3½" X 36") PVC RACEWAY (2 MIN.) TO EDGE OF PAVEMENT



ANCHOR BOLT DETAIL



3" 18" 3" 4 SPIRAL

609.6 Dia. (24")

FOUNDATION DETAIL

SECTION A-A

E-300

REVISIONS		TILINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	ILLINOIS DEFARTMENT OF TRANSFORTATION
O. SIMON	4/93	
D. DREW	06/15/95	LIGHT POLE FOUNDATION
		9.144M (30') TO 10.668M (35') M.H.
		292mm (11 1/2) BOLT CIRCLE
		SCALE: VERT. DRAWN BY

SCALE: VERT.
HORIZ.
DATE 9/03/04

DRAWN BY CHECKED BY