

SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

**CABLE SLACK** 

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD)		
(L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

## **VERTICAL CABLE LENGTH**

	Greater than or 65' (19.8 m) an 75' (22.9							
NOTES:								
1.	These foundation d the length of the s This strength shall							

4'-0'' (1.2m)

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FILE NAME =	USER NAME = plascenciai	DESIGNED - DAG	REVISED - DAG 1-1-14		DISTRICT ONE		F.A RTF	SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\plascenciai\d0381174\D	122314-sht-ts.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS				2014-008TS	СООК 81 17
	PLOT SCALE = 100.0000 ' / in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS05	CONTRACT NO. 60X83
	PLOT DATE = 5/15/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS STA. TO STA.	FED. ROAD D	IST. NO. 1 ILLINOIS FED. 4	

TYPE D - CONTROLLER

SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE

**DEPTH OF FOUNDATION** 

ength	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
′ (9 <b>.</b> 1 m)	10'-0'' (3.0 m)	30'' (750mm)	24'' (600mm)	8	6(19)
r equal to less than m)	13'-6" (4.1 m)	30'' (750mm)	24'' (600mm)	8	6(19)
	11'-0'' (3.4 m)	36'' (900mm)	30'' (750mm)	12	7(22)
r equal to less than m)	13'-0'' (4.0 m)	36'' (900mm)	30" (750mm)	12	7(22)
r equal to nd up to m)	15'-0'' (4.6 m)	36'' (900mm)	30" (750mm)	12	7(22)
r equal to less than m)	21'-0'' (6.4 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
r equal to nd up to m)	25'-0'' (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)

These foundation depths are for sites which have cohesive soils (clayey slit, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (OU) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.

2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.

Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations

4. For mast arm assemblies with dual arms refer to state standard 878001..

## DEPTH OF MAST ARM FOUNDATIONS, TYPE E