

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**

	NOTES:
4'-0'' (1.2m)	Greater than or 65' (19.8 m) an 75' (22.9
4'-0'' (1.2m)	65' (19.8
4'-0'' (1.2m)	Greater than or 56' (16.8 m) and
4'-0'' (1.2m)	55′ (16.8
DEPTH	Greater than or 50' (15.2 m) an

## **DEPTH OF FOUNDATION**

TYPE D - CONTROLLER SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE

## DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = hardnettbr	DESIGNED - DAG	REVISED - DAG 1-1-14			DISTRICT ONE	F.A.F	SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\hardnettbr\d0337694\[	stStd.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS	STANDARD TRAFFIC SIGNAL DESIGN DETAILS		330	(1&1Y)RS-3	LAKE 60 57
	PLOT SCALE = 100.0000 ' / in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.60V03
	PLOT DATE = 7/16/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS STA. TO STA.	FED.		ID PROJECT

st Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
s than 30′ (9 <b>.</b> 1 m)	10'-0'' (3.0 m)	30'' (750mm)	24'' (600mm)	8	6(19)
r than or equal to	13'-6" (4.1 m)	30'' (750mm)	24'' (600mm)	8	6(19)
1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36'' (900mm)	30" (750mm)	12	7(22)
r than or equal to .2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36'' (900mm)	30" (750mm)	12	7(22)
r than or equal to 15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36'' (900mm)	30" (750mm)	12	7(22)
r than or equal to .8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
r than or equal to 19.8 m) and up to 75' (22.9 m)	25'-0'' (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)

Insect foundation depths are for sites which have cohesive soils (clayey silt, 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.