



**CONTROLLER CABINETS** 

	(1651mm)	.	
SEE NOTE 5	49" (SEE NOTE 3) (1245mm)	-	
5. 2."	44''	16"	
(5]	\(\sigma^{1110\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	406mm)	
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	\$21/2" EXE		
31.″ (787mm) 660mm)	2½" (64mm) "I" "1"	lik iN'	\
<u>8.8</u>	(25mm)		\ \ <u>\</u>
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2", (SImm)			2" × 6" (51mm × 152mm)
(517)			WOOD FRAMING (TYP.)
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TRAFFIC SIGNAL ── CONTROLLER CABINET	-  []		
CONTROLLER CABINET		li	
			— UPS
			CABINET
3/." (19mm) TREATED			
3∕4" (19mm) TREATED PHYWOOD DECK			
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2" × 6" (51mm × 152mm) TREATED WOOD		il•il ii	
TREATED WOOD	<u> </u>		
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[M] [M]			
2" MIN 305mm)			_
	1/2/XI		
عَادُ ` إِ		1 , 1	
48" MIN (1219mm)		<b>┴</b> ,/┴	
\$\frac{1}{2}\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		<del>.</del>	
4 2 1	'	1'1	
<u> </u>			
6" x 6" (152mm x 152mm)	L_j		
NOTES: TREATED WOOD POSTS			
. BASED ON CONTROLLER CABINET TYPE IV WITH E ADJUST PLATFORM SIZE TO FIT CABINET BASE D	ASE DIMENSIONS OF 26"	× 44" (660m	nm × 1118mm).
ADJUST PLATFORM SIZE TO FIT CABINET BASE D	IMENSIONS BEING SUPPLIE	ED	
DACED ON UNIVERDINATION F DOWER CURDLY CAR	NET WITH DACE DIMENSIO	NC OF 164	25// (400 635)

65" (SEE NOTE 4)

- 2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

## TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
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

VERTICAL	CARIE	LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0'' (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SOUARE	4'-0'' (1.2m)

### **DEPTH OF FOUNDATION**

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36" (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

### NOTES:

- These 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 (0u) > 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.
- 3. 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 most arm assemblies with dual arms refer to state standard 878001..

# **DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

FILE NAME =	USER NAME = plascencial	DESIGNED - DAG	REVISED - DAG 1-1-14	•	DISTRICT ONE	F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\plascenciai\d0370834\F	F114412-TS.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS		372 0303S-TS	COOK 87 47
	PLOT SCALE = 100.0000 ' / in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	TS-05	CONTRACT NO. 60X08
	PLOT DATE = 3/28/2014	DATE - 10-28-09	REVISED -		SCALE: NONE SHEET NO. 5 OF 7 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED	J. AID PROJECT