







2.0 4.0 0.6

4.0

0.5

0.5

1.6

2.0 0.6 1.5 0.5

6.5 13.0

13.0

1.5

1.5

5.0

GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)

CABLE SLACK

GROUND CABLE (BETWEEN FRAME AND COVER)

NET ABINET	FOR GRO CONTROL	LER C	PE C JND MOUNTED LER CABINET ATTERY CABINET		
VERTICAL CABLE LENGTH		FEET	METER	FO	
MAST ARM POLE (MAST ARM MOUN' (L = MAST ARM LENGTH - DISTANCE BRACKET MOUNTED (MAST ARM POLE PEDESTRIAN PUSH BUTTON SERVICE INSTALLATION POLE MOUN' SERVICE INSTALLATION POLE MOUN' SERVICE INSTALLATION GROUND MOUNTED	20.0+L 13.0 6.0 13.5 13.5 6.0	6.0+L 4.0 2.0 4.1 4.1 2.0	TY TY TY SE GR TY		
FOUNDATION (SIGNAL POST, MAST A	RM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT	3.0	1.0		
VE	RTICAL CABLE 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 - SQUARE	4'-0'' (1.2m)	

4" (100mm) CONDUIT W/ THREADED CAP

_2" (50 mm) CONDUIT SERVICE INSTALLATION

0:

GROUND_ ROD

O 2"TYP.

GROUNDING BUSHING

1" (25mm)

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)

49" (SEE NOTE 3)

 $\frac{2^{\prime\prime} \times 6^{\prime\prime}}{\text{(51mm} \times 152mm)}$ WOOD FRAMING (TYP.

UPS-CABINET

3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.

SEE NOTE 5

---TRAFFIC SIGNAL CONTROLLER CABINET

¾4" (19mm) TREATED PHYWOOD DECK

2" × 6" (51mm × 152mm) TREATED WOOD

6" × 6" (152mm × 152mm) TREATED WOOD POSTS

- 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 (Qu) > 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.

BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm).
 ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.

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

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.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FILE NAME =	USER NAME = _USER_	DESIGNED -	REVISED		DISTRICT ONE	F.A. SECTION	COUNTY TOTAL SHEET
\f1n_dwg\690_5_s1gdet05.dgn		DRAWN BAH	REVISED -	STATE OF ILLINOIS	STANDARD TRAFFIC SIGNALS	08-00270-00-TL	KANE 44 8
	PLOT SCALE = \$SCALE\$	CHECKED APS	REVISED -	DEPARTMENT OF TRANSPORTATION	DESIGN DETAILS	08-00210-00-12	CONTRACT NO. 63300
	PLOT DATE = 12/17/2009	DATE -	REVISED ~	Sci	SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. A)	ID PROJECT