





- 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.
- 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

| /ERTICAL CABLE LENGTH | FEET | METER |
|--|--|-------|
| MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) | of all transactions for the all the al | |
| 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 | | |
| 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 |
| OUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT) | 3.0 | 1.0 |

VERTICAL CABLE LENGTH

| / UPS | 4'-0" | (1.2m |
|-------|--------|--------|
| | 4'-0" | (1.2m |
| | 4'-0'' | (1,2m |
| | | |
| | / UPS | 4'-0'' |

FOUNDATION TYPE A - Signal Post

DEPTH OF FOUNDATION

| Mast Arm Length | 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) |

4'-0" (1.2m)

4'-0" (1.2m)

- 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.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

| COPYRIGHT | © 2012 ENGINEERING ENTERPRISES | S, INC. | | | | |
|-----------|---|-----------------------------|------------|----------|-----------|--|
| _ | Engineering Enterprises, Inc. | USER NAME = bauerdl | DESIGNED - | DAG | REVISED - | |
| 64. | CONSULTING ENGINEERS | dgn | DRAWN | BCK | REVISED - | |
| 44 | 52 Wheeler Road Sugar Grove, Illinois 60554 630.466.6700 / www.eelweb.com PLOT SCALE = 500.00000 '/ IN. PLOT DATE = 11/4/2009 | PLOT SCALE = 50.0000 '/ IN. | CHECKED - | DAD | REVISED - | |
| - (| | PLOT DATE = 11/4/2009 | DATE - | 10-28-09 | REVISED - | |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

| DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS | | | | | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|-------|-----|---|----------------|--------|-----------------|--------------|
| | | | | | 10-00023-00-ES | KANE | 70 | 45 |
| 1 | | TS-05 | | CONTRACT NO.63700 | | | | |
| | SCALE: NONE SHEET NO. 5 OF 6 SHEETS STA. N/A TO | STA. | N/A | FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | | |