





85% (SEE\_NOTE\_4) (1651mm)

-SEE NOTE 5

- 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<br>(SIGNAL POST, MAST ARM, CABINET)  | 1.5  | 0.5   |
| GROUND CABLE<br>(BETWEEN FRAME AND COVER)         | 5.0  | 1.6   |

| 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) |      |       |  |  |
| 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

| 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,<br>GROUND MOUNT,<br>TYPE A - SQUARE | 4°-0" (1.2m) |

### DEPTH OF FOUNDATION

| Mast Arm Length  | ① Foundation<br>Depth | Foundation<br>Diameter | Spiral<br>Diameter | Quantity of<br>Rebars | Size of<br>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<br>40° (12.2 m)                              | 11'~0" (3.4 m)        | 36" (900mm)            | 30" (750mm)        | 12                    | 7(22)             |
| Greater than or equal to<br>40' (12.2 m) and less than<br>50' (15.2 m) | 13'-0" (4.0 m)        | 36" (900mm)            | 30° (750mm)        | 12                    | 7(22)             |
| Greater than or equal to<br>50′ (15.2 m) and up to<br>55′ (16.8 m)     | 15'-0" (4.6 m)        | 36** (900mm)           | 30" (750mm)        | 12                    | 7(22)             |
| Greater than or equal to<br>56' (16.8 m) and less than<br>65' (19.8 m) | 21'-0" (6.4 m)        | 42" (106.0mm)          | 36" (900mm)        | 16                    | 8(25)             |
| Greater than or equal to<br>65' (19,8 m) and up to<br>75' (22,9 m)     | 25'-0" (7.6 m)        | 42" (1060mm)           | 36" (900mm)        | 16                    | 8(25)             |

- These foundation depths are for sites which have cohesive soils (clayey sit, 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 most 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 : bowerd!         | DESIGNED - | DAG      | REVISED: " |                              |  | DISTRICT ONE |      |        | F.   | A<br>RTE. | SECTION | COUNTY         | TOTAL SHEE<br>SHEETS NO.  |             |       |
|--|-----------------------------|------------|----------|------------|------------------------------|--|--------------|------|--------|------|-----------|---------|----------------|---------------------------|-------------|-------|
| GINDW_WORKNEWNDOTNBALIEROL\ddlD8315\ts05 | dgn                         | DRAWN -    | BCK      | REVISED -  | STATE OF ILLINOIS            |  |              |      |        |      | Outries . |         | 04-00092-00-BR | KANE                      | 440 208     |       |
|  | PLOT SCALE = 50/0000 '/ IN. | CHECKED    | DAD      | REVISED -  | DEPARTMENT OF TRANSPORTATION | STANDARD TRAFFIC SIGNAL DESIGN DETAILS |              |      |        |      |           |         |                | TS-05                     | CONTRAC     | T NO. |
|  | PLGT DATE = 11/4/2009       | DATE. ~    | 10-28-09 | REVISED: ~ |                              | SCALE: NONE                            | SHEET NO. 5  | OF 6 | SHEETS | STA. | TO STA.   | F       | FED. ROAD      | DIST. NO. 1 ILLINOIS FED. | AID PROJECT |       |

CABLE SLACK