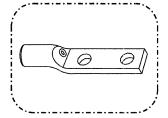


THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.), GROUND ROD SHALL BE 3/4" DIA. \times 10'-0" (20mm \times 3.0m) LONG, COPPER CLAD, ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS. THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC. ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT

2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.

- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

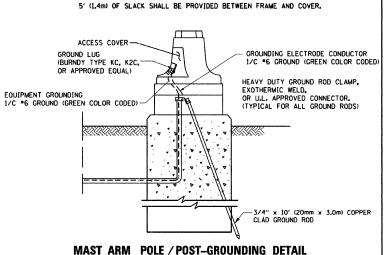


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

 ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.



ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE BUREAU OF TRAFFIC STANDARD TRAFFIC SIGNAL DESIGN DETAILS

(NOT TO SCALE)

GROUNDING SYSTEM

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508. INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL. 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED. TRAFFIC SIGNAL CAST CORNER FRAME WEB CONTROLLER CABINET ANTI-CORROSION COMPOUND -SHALL BE APPLIED ON ALL
BOLT/ CONNECTION ASSEMBLIES. -STAINLESS STEEL NUT AND 2 STAINLESS

ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)

0

DISCONNEC

-15A. MAIN

-PRESSURE

CONNECTOR, TYP.

-STANDOFF

PANELBOARD

-FUSE, KLKR 1/4 A

NOTES:

PADLOCK, FURNISHED BY

-1 1/4" (30mm) DIA, COUPLING

SECONDARY ELECTRICAL

-1/C GROUND (GREEN COLOR CODED)

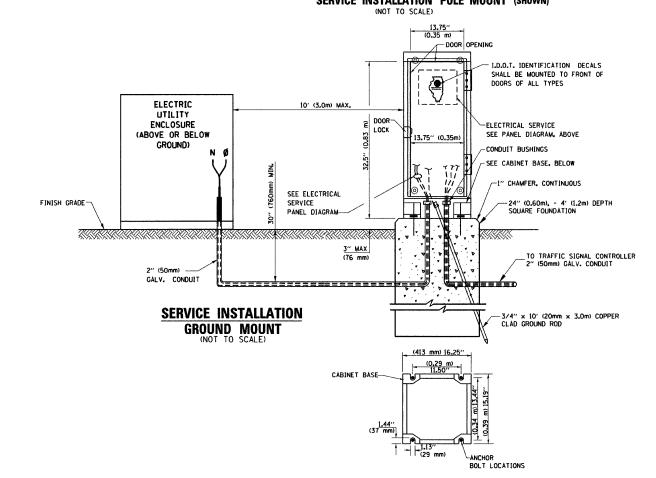
SERVICE BY UTILITY CO.

-STRAIN RELIEF COUPLING

-2/C (NEUTRAL-WHITE, PHASE-BLACK)

CONTRACTOR, KEYED TO DISTRICT 1 REQUIREMENTS

-COMPRESSION LATCH, TYP. (2 MIN. REO'D)



0

TO GROUND ROD-

3/4" (20mm) GALY, CONDUIT

(SEE ALL CABLE PLAN, FOR ALL CABLE SIZES)

ELECTRICAL SERVICE TO

TRAFFIC SIGNAL CONTROLLER

TOP & BOTTOM AS PER-

CABINET, SHEET ALUMINUM -

CONTINUOUS PIÁNO HINGE-

POLE MOUNTED SERVICE

POWER INDICATOR LIGHT -INTERNALLY MOUNTED FOR-

GROUND MOUNTED SERVICE

DIMENSIONS L 6" × W 12" × H 14" L (150mm) × W (300mm) × H (355mm)

CABINET OUTSIDE

MANUFACTURER

FABRICATION

(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL) HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL. (TYPICAL) - EXISTING HANDHOLE - GROUNDING CABLE (PAID FOR SEPARATELY) FRAME AND COVER

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

CABINET - BASE BOLT PATTERN

RECESSED COVER

UL LISTED GROUND COMPRESSION CONNECTOR — WITH STAINLESS STEEL NUT

SEE DETAIL "A"

- HÁNDHOLE COVER

DETAIL "A"

DETAIL "B"

--- U.L. LISTED

SPLICE KIT

SEE DETAIL "B"

-HANDHOLE COVER HANDLE

UL LISTED GROUND COMPRESSION CONNECTOR

CARLE HOOKS REQUIRED, ALL HANDHOLES GROUND CARLES TO CONTROLLER
DOUBLE HANDHOLE TO POLE OR POST AS REO'D. (GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

(NOT TO SCALE)

DATE NAME SCALE NAME

SCALE: NONE