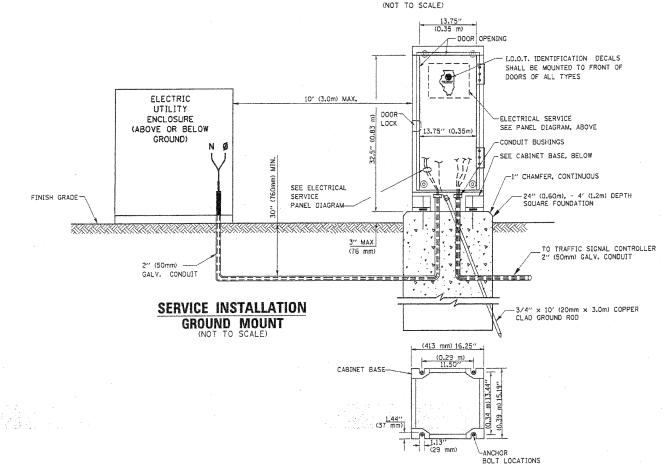


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)



CABINET - BASE BOLT PATTERN (NOT TO SCALE)

NOTES:

HANDHOLE COVER

DETAIL "A"

-HANDHOLE COVER HANDLE

DETAIL "B"

- RECESSED COVER

DIRECT BURIAL

GROUND CABLES

TO CONTROLLER DOUBLE HANDHOLE

- TO POLE OR

POST AS REQ'D.

- SEE DETAIL "B"

CAST CORNER FRAME WEB -

ANTI-CORROSION COMPOUND -SHALL BE APPLIED ON ALL

BOLT/ CONNECTION ASSEMBLIES.

-STAINLESS STEEL NUT AND 2 STAINLESS

SEE DETAIL "A"

CABLE HOOKS

REQUIRED, ALL HANDHOLES UL LISTED GROUND COMPRESSION CONNECTOR

UL LISTED GROUND COMPRESSION CONNECTOR

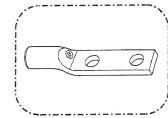
WITH STAINLESS STEEL NU

GROUNDING SYSTEM

1. 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. x 10'-0" (20mm x 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
(847) 705-4139.

 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.

- 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.



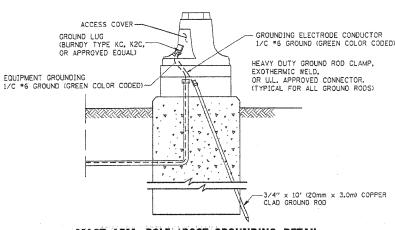
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

NOTES:

• 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.
5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST-GROUNDING DETAIL

REVISIONS	ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME DATE	ILLINOID BLI ANTINCINI	JI THANST GITTATION
	DISTRIC	T 1
	STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
	DESIGN BETAILS	
	SCALE: VERT. NONE HORIZ. DATE 1-01-02	DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ SHEET 3 OF 4
 <u> </u>		TSOS

(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)

- 1/C #6

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL. (TYPICAL)

EXISTING HANDHOLE GROUNDING CABLE (PAID FOR SEPARATELY)

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

T50