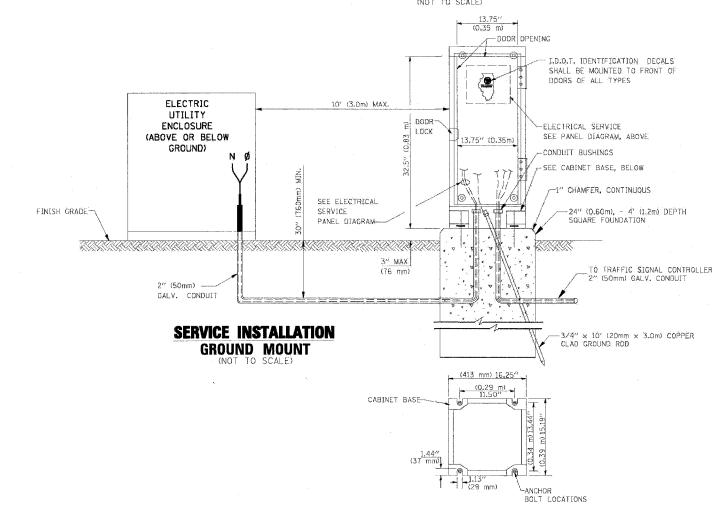
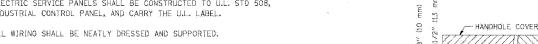


## ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)



**CABINET - BASE BOLT PATTERN** 

(NOT TO SCALE).



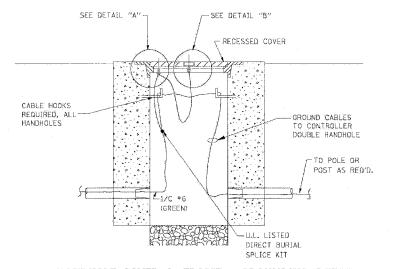
CAST CORNER FRAME WEB-LL LISTED GROUND COMPRESSION CONNECTOR

ANTI-CORROSION COMPOUND SHALL BE APPLIED ON ALL BOLT/ CONNECTION ASSEMBLIES. -STAINLESS STEEL NUT AND 2 STAINLESS STEEL WASHERS

HANDHOLE COVER HANDLE UL LISTED GROUND COMPRESSION CONNECTOR WITH STAINLESS STEEL NU

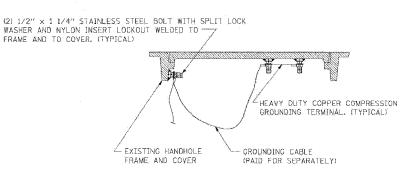
## **DETAIL "B"**

**DETAIL "A"** 



## HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)



## **EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL**

(NOT TO SCALE)

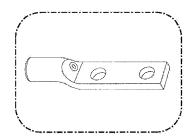
NOTES:

HANDHOLE FRAME

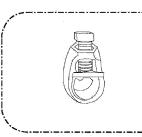
#### COUNTY KANE TRAFFIC SIGNAL F.H.W.A. REG.5 | ILLINOIS | PROJECT CMM-

#### GROUNDING SYSTEM

- 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 CHANDHOLE, 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.
- 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 CONDUCTOR'S 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.



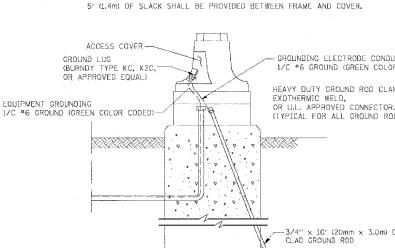
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



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

### NOTES:

• ALL CLAMPS SHALL BE BRONZE OR COPPER, LL 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.



# MAST ARM POLE / POST-GROUNDING DETAIL

REVISIONS		ILLINOIS DEPARTMENT OF
NAME	DATE	TEETINOTS DEL ALVINIENT OF
CADD	5/30/00	
CADD	3/15/01	DISTRICT
UREAU OF TRAFFIC	1/01/02	DIGINIOI
		STANDARD TRAFF
		DESIGN DET
		SCALE, VERT. MONE

TRANSPORTATIO

FIC SIGNAL

SCALE: HORIZ. NONE DATE 10/18/2002