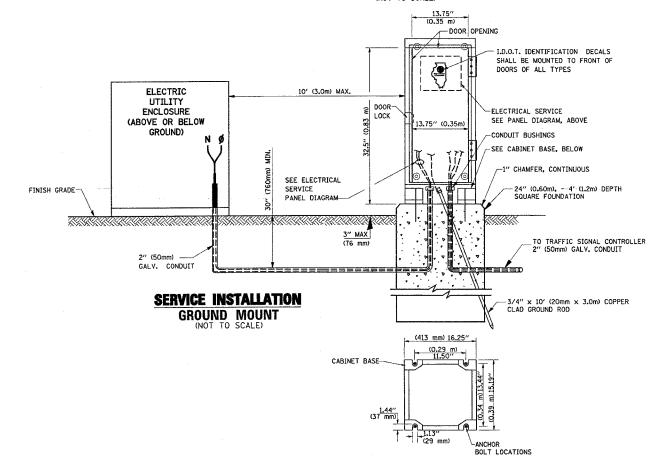


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

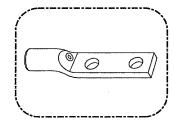


CABINET - BASE BOLT PATTERN

NOTES:

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. × 10'-0" (20mm × 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) TOS-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.



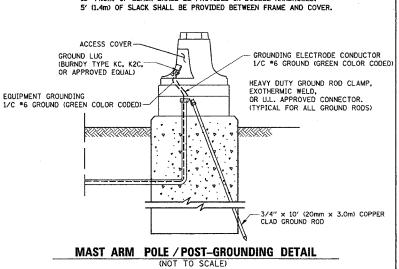
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



¾" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

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.



REVISIONS
NAME DATE

DISTRICT 1

STANDARD TRAFFIC SIGNAL

DESIGN DETAILS

SCALE: VERT. NONE DESIGNED BY: DAD
CHECKED BY: DAD
CHECKED BY: DAD
DATE 1-01-02 SHEET 3 0F 4

ANDHOLE FRAME

-STAINLESS STEEL NUT AND 2 STAINLESS
STEEL WASHERS

HANDHOLE COVER HANDLE

UL LISTED GROUND COMPRESSION CONNECTOR — WITH STAINLESS STEEL NUT

CAST CORNER FRAME WEB-

ANTI-CORROSION COMPOUND

SHALL BE APPLIED ON ALL BOLT/ CONNECTION ASSEMBLIES

COMPRESSION CONNECTOR

UL LISTED GROUND

- HANDHOLE COVER

DETAIL "A"

DETAIL "B"

CABLE HOOKS
RECUIRED, ALL
HANDHOLES

TO CONTROLLER
DOUBLE HANDHOLE

TO POLE OR
POST AS REO'D.

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

(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
FRAME AND COVER (PAID FOR SEPARATELY)

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

6/23/2006 c:@projects@traffic@t050014@1164@ridgeland.dgr