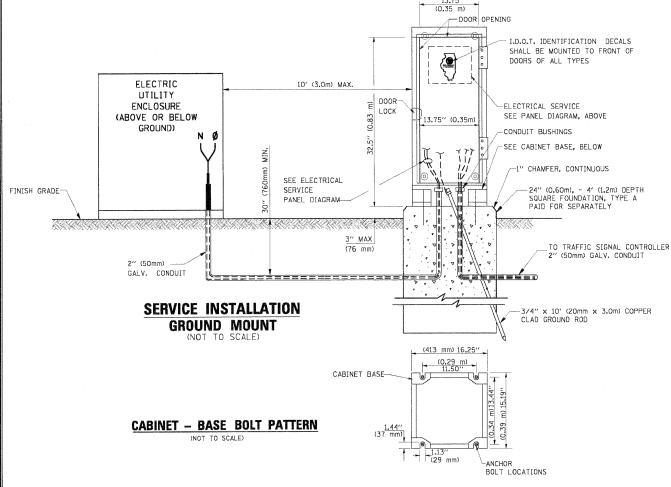


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)



- 1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508.

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

SEE DETAIL "A"

CAST CORNER FRAME WEB-

UL LISTED GROUND -

- HANDHOLE COVER HANDLE UL LISTED GROUND COMPRESSION TERMINAL

HANDHOLE COVER

DETAIL "A"

HANDHOLE FRAME

WITH STAINLESS STEEL NUT
ANTI-CORROSION COMPOUND
SHALL BE APPLIED TO THE ASSEMBLY. DETAIL "B"

- SEE DETAIL "B"

RECESSED COVER CABLE HOOKS REQUIRED, ALL GROUND CABLES TO CONTROLLER TO POLE OR POST AS REQ'D. EQUIPMENT GROUNDING 1/C #6 GROUND (GREEN COLOR CODED) -U.L. LISTED DIRECT BURIAL SPLICE KIT

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

(2) 1/2" \times 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER, (TYPICAL) ANTI-CORROSION COMPOUND SHALL BE APPLIED TO EACH ASSEMBLY. EQUIPMENT GROUNDING HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL, (TYPICAL) GROUNDING CABLE
(PAID FOR SEPARATELY) EXISTING HANDHOLE FRAME AND COVER

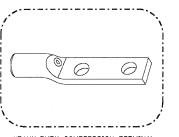
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

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. 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
- 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
- 3. ALL EQUIPMENT CROUNDING 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.

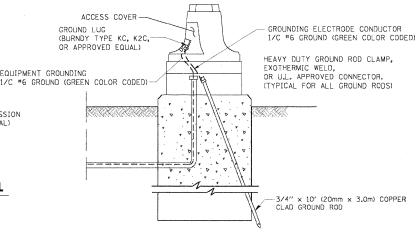




HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

⅓4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

- 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

DESIGNED JDH REVISED FILE NAME = \projects\11020\designcad\sheet files\i122rwaDET03.dgr DRAWN REVISED JDH PLOT SCALE = \$SCALE\$ CHECKED -D₩ REVISED PLOT DATE = 4/13/2011 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

IL ROUTE 22 (HALF DAY RD) AT WESTMINSTER WAY / HEWITT RD DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS SCALE: N.T.S. SHEET NO. 3 OF 6 SHEETS STA.

SECTION TOTAL SHEE COUNTY LAKE 18 CONTRACT NO. 60L19 ILLINOIS FED. AID PROJECT