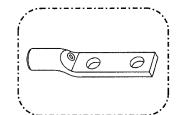


- 1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS, THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, 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.
- 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.

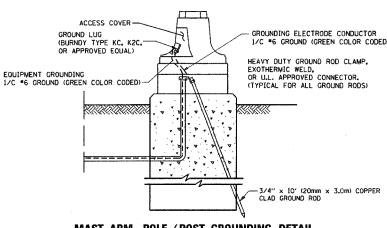


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

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

NOTES:

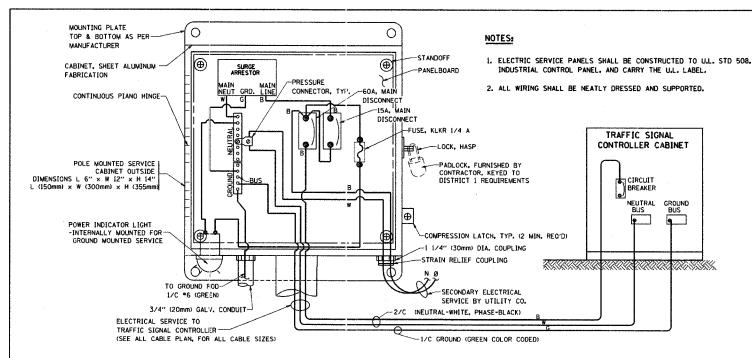
 ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. . GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4,0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



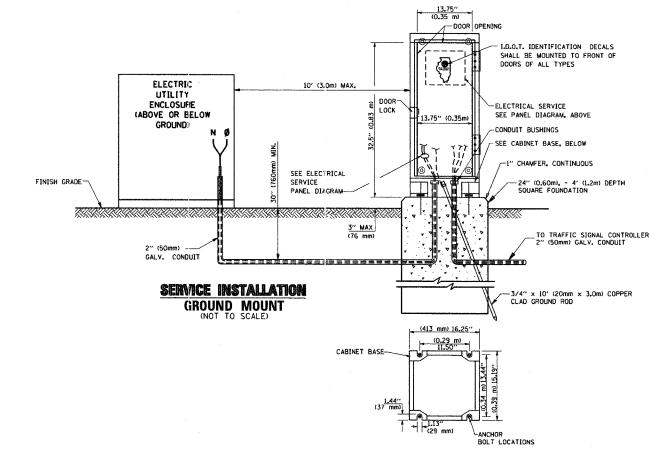
MAST ARM POLE / POST-GROUNDING DETAIL

REVISIONS		THE THOIS DEPARTME	NT OF TRANSPORTATION
NAME	DATE	ILLINOIS DEL WLIME	INT OF TRANSPORTATION
CADD	5/30/00		
CADD	3/15/01	DISTRICT ONE	
BUREAU OF TRAFFIC	1/01/02		
		STANDARD T	RAFFIC SIGNAL
		DESIGN DETAILS	
		DESIGN	DETAILS
		SCALE: NONE	DRAWN BY: RWP DESIGNED BY: DA CHECKED BY: DAZ
		DATE OVE MOOF	CHECKED BY DAZ

NONE DATE: 2/15/2006

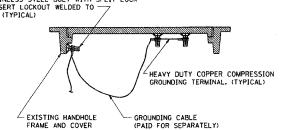


ELECTRICAL SERVICE - FANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE) SERVICE INSTALLATION POLE MOUNT (SHOWN)



CABINET - BASE BOLT PATTERN (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)



- HANDHOLE COVER

DETAIL "A"

DETAIL "B"

RECESSED COVER

-U.L. LISTED

DOUBLE HANDHOLE

TO POLE OR

POST AS REQ'D.

SEE DETAIL "B"

- HANDHOLE COVER HANDLE

CAST CORNER FRAME WEB —

UL LISTED GROUND

COMPRESSION CONNECTOR

UL LISTED GROUND

COMPRESSION CONNECTOR --WITH STAINLESS STEEL NUT

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

ANTI-CORROSION COMPOUND
SHALL BE APPLIED ON ALL
BOLTY CONNECTION ASSEMBLIES,
-STAINLESS STEEL NUT AND 2 STAINLESS

SEE DETAIL "A"

STEEL WASHERS

CABLE HOOKS

HANDHOLES

REQUIRED. ALL

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

DATE = 2/15/2886 NAME = #3/distatd/ta SCALE = 50.0000 // I NAME = gaglianobt

TS05 REVISION DATE: 01/01/02