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

-1/C GROUND (GREEN COLOR CODED)

(0.35 m) - DOOR OPENING I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF DOORS OF ALL TYPES ELECTRIC 10' (3.0m) MAX UTILITY DOOR-**ENCLOSURE** -ELECTRICAL SERVICE LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE 13.75" (0.35m) GROUND) CONDUIT BUSHINGS -SEE CABINET BASE, BELOW CHAMFER, CONTINUOUS SEE ELECTRICAL FINISH GRADE-SERVICE -24" (0.60m), - 4" (1.2m) DEPTH SQUARE FOUNDATION PANEL DIAGRAM 3" MAX TO TRAFFIC SIGNAL CONTROLLER 2" (50mm) GALV. CONDUIT (76 mm) 2" (50mm) GALV. CONDUIT ___________ **SERVICE INSTALLATION** -3/4" x 10' (20mm x 3.0m) COPPER CLAD GROUND ROD **GROUND MOUNT** (413 mm) 16.25" CABINET BASE-(29 mm) -ANCHOR BOLT LOCATIONS

CABINET – BASE BOLT PATTERN (NOT TO SCALE)

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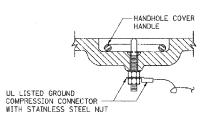
10/18/2002 c:\projects\diststd\ts05.dgn VI-TS05 TRAFFIC SIGNAL CONTROLLER

(SEE ALL CABLE PLAN, FOR ALL CABLE SIZES)

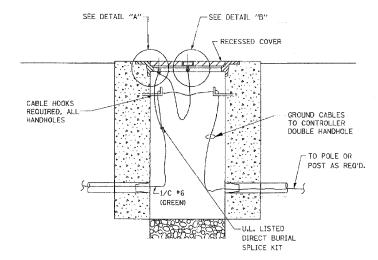
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508,

- HANDHOLE COVER CAST CORNER FRAME WEB UL LISTED GROUND -COMPRESSION CONNECTOR ANTI-CORROSION COMPOUND -SHALL BE APPLIED ON ALL BOLTZ CONNECTION ASSEMBLIES DETAIL "A"

-STAINLESS STEEL NUT AND 2 STAINLESS STEEL WASHERS

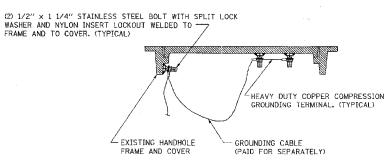


DETAIL "B"



HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

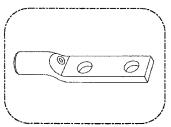
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NOTES:

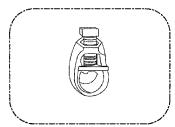
FAU RTF SECTION COLIMITY 2736 03-00227-00-RS LAKE 122 CONTRACT NO. 83829

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.
- 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.

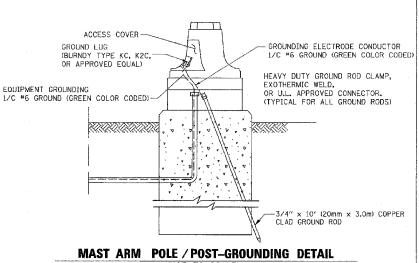


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED FOLIAL)



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

- 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.



ILLINOIS DEPARTMENT OF TRANSPORTATION NAME 5/30/00

BUREAU OF TRAFFIC 1/01/0

DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: VERT. NONE DATE 10/18/2002