

CONTROLLER CABINET

CIRCUIT

BREAKER

BUS

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.

-STAINLESS STEEL NUT AND 2 STAINLESS

UL LISTED GROUND COMPRESSION CONNECTOR

## DETAIL "B"

DETAIL "A"

## CABLE HOOKS REQUIRED, ALL HANDHOLES TO CONTROLLER DOUBLE HANDHOLE TO POLE OR POST AS REO'D. LIC \*6 (GREEN) U.L. LISTED DIRECT BURIAL SPLICE KIT

## 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)

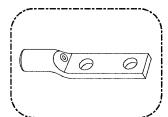
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

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) 705-4139.

 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.

- 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.

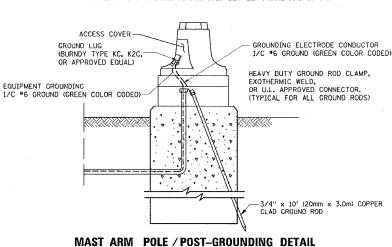


HEAVY-DUTY COMPRESSION TERMINAL
(BURNDY TYPE YGHA OR APPROVED EQUAL)
(BURNDY TYPE GRC OR APPROVED EQUAL)



## ...\_\_

• 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.



REVISIONS
NAME DATE
CADD 5/30/00
CADD 3/15/01
REAU OF TRAFFIC 1/01/02

STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: NONE

REVISIONS

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

DRAWN BY: RWP
DESIGNED BY: DAY
CHECKED BY: D

TSOS

DOOR OPENING <del>a</del>/+ I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF DOORS OF ALL TYPES ELECTRIC 10' (3.0m) MAX UTILITY ENCLOSURE -ELECTRICAL SERVICE LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE 13.75" (0.35m GROUND) CONDUIT BUSHINGS SEE CABINET BASE, BELOW -1" CHAMFER, CONTINUOUS SEE ELECTRICAL FINISH GRADE-SERVICE PANEL DIAGRAM SQUARE FOUNDATION TO TRAFFIC SIGNAL CONTROLLER 2" (50mm) GALV, CONDUIT 2" (50mm) GALV. CONDUIT **SERVICE INSTALLATION** 3/4" x 10' (20mm x 3.0m) COPPER CLAD GROUND ROD **GROUND MOUNT** (413 mm) 16.25" 1.44" (37 mm) -ANCHOR **BOLT LOCATIONS** 

CABINET - BASE BOLT PATTERN

-PADLOCK, FURNISHED BY

CONTRACTOR, KEYED TO

-1 1/4" (30mm) DIA, COUPLING

-SECONDARY ELECTRICAL

-1/C GROUND (GREEN COLOR CODED)

13.75" (0.35 m)

SERVICE BY UTILITY CO.

-STRAIN RELIEF COUPLING

2/C (NEUTRAL-WHITE, PHASE-BLACK)

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

SERVICE INSTALLATION POLE MOUNT (SHOWN)

DISTRICT 1 REQUIREMENTS

-COMPRESSION LATCH, TYP. (2 MIN. REQ'D)

OT TO SCALE)

DATE = 7/23/2007 NAME = Wi\diststd\ts05.dgn SCALE = 50.0000 '/ IN. POLE MOUNTED SERVICE

POWER INDICATOR LIGHT

-INTERNALLY MOUNTED FOR-

GROUND MOUNTED SERVICE

TO GROUND ROD-

1/C #6 (GREEN)

ELECTRICAL SERVICE TO

TRAFFIC SIGNAL CONTROLLER

3/4" (20mm) GALV, CONDUIT

(SEE ALL CABLE PLAN, FOR ALL CABLE SIZES)

DIMENSIONS L 6" x W 12" x H 14"

CABINET OUTSIDE

PLOT DA FILE NO PLOT SO USER NA

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