

#6 BARE, SOLID COPPER COUNTERPOISE (NO SPLICE) BETWEEN GROUND RODS. COST SHALL BE INCIDENTAL TO PAY ITEM 108.

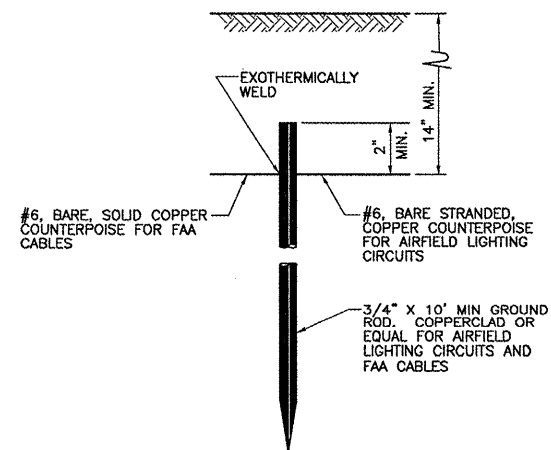
1/C, #8, ITEM 824 TYPE C CABLE IN 2" CONDUIT W/ #6 XHHW GROUND.

NOTES:

1. INSTALL 3/4" x 10' LONG COPPER CLAD GROUND RODS ALONG COUNTERPOISE SYSTEM AT 300' INTERVALS. CONNECTIONS OF GROUND RODS TO COUNTERPOISE CABLE SHALL BE EXOTHERMIC TYPE (COPPERWELD OR EQUAL)
2. DO NOT CONNECT COUNTERPOISE WIRING TO EDGE LIGHT BASES.
3. THE RESISTANCE TO GROUND OF THE COUNTERPOISE GROUNDING SYSTEM SHALL NOT EXCEED 25 OHMS.
4. COST OF THE GROUND RODS IS INCIDENTAL TO THE ASSOCIATED ITEMS REQUIRING GROUNDING UNLESS OTHERWISE SPECIFIED.

COUNTERPOISE (ALONG PAVEMENT) INSTALLATION DETAIL

N.T.S.

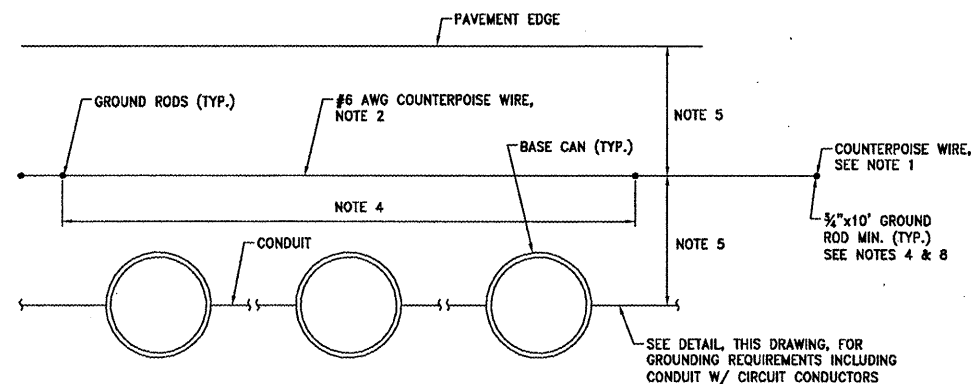


NOTES:

1. THE RESISTANCE TO GROUND OF ANY GROUNDING SYSTEM SHALL NOT EXCEED 10 OHMS.
2. COST OF GROUND RODS AND CONNECTIONS TO COUNTERPOISE IS INCIDENTAL TO ASSOCIATED ITEMS OF WORK REQUIRING GROUNDING AND NO SEPARATE PAYMENT WILL BE MADE.
3. MAXIMUM SPACING OF GROUND RODS FOR EDGE LIGHTING SYSTEMS SHALL NOT EXCEED 200 FEET.
4. ALL GROUND RODS ARE INSTALLED VERTICALLY.
5. EACH ROD TO BE TESTED INDIVIDUALLY TO ENSURE RESISTANCE TO GROUND OF 25 OHMS OR LESS. ADD ADDITIONAL SECTIONS UNTIL THIS REQUIREMENT IS MET.

GROUND ROD DETAIL

NTS



NOTES:

1. CONNECTIONS TO GROUND RODS SHALL BE MADE USING EXOTHERMIC WELDS.
2. COUNTERPOISE WIRE SHALL BE #6 AWG, BARE SOLID COPPER.
3. NOT USED.
4. GROUND RODS FOR AUTHORITY LIGHTING CABLES SHALL BE PROVIDED AT A MAXIMUM SPACING OF 100 FEET. ADDITIONALLY, THE RESISTANCE TO GROUND OF THE COUNTERPOISE SYSTEM SHALL NOT EXCEED 10 OHMS.
5. SEE COUNTERPOISE WIRE INSTALLATION DETAIL FOR COUNTERPOISE WIRE LOCATION, GROUND RODS SHALL BE COPPERCLAD OR EQUAL.
6. WHERE DUCTS CROSS, THE COUNTERPOISE SHALL BE TERMINATED AT GROUND RODS ON EACH SIDE OF A DUCT CROSSING.
7. ALL COUNTERPOISE CONNECTIONS SHALL BE UL LISTED FOR DIRECT EARTH BURIAL AND/OR INSTALLATION IN CONCRETE AS APPLICABLE.
8. PROVIDE GROUND ROD WHERE NEW LIGHTING DUCTS CONNECT TO EXISTING DUCTS, HANDHOLES, MANHOLES, AND/OR LIGHT CANS.
9. COST OF GROUND RODS AND CONNECTIONS TO GROUNDING CONDUCTORS IS INCIDENTAL TO ASSOCIATED ITEMS OF WORK REQUIRING GROUNDING AND NO SEPARATE PAYMENT WILL BE MADE.

PLAN - COUNTERPOISE WIRE FOR PROPOSED EDGE LIGHTS

NTS

PE087

RS&H
IMPROVING YOUR WORLD

850 East Diehl Road
Suite 120
Naperville, Illinois 60563
630-505-1991 FAX 630-505-1977
www.rsandh.com



PEORIA, ILLINOIS

TERMINAL
APRON
EXPANSION

SUBCONSULTANTS

PSA Dewberry

STS | AECOM

IL PROJECT: PIA-3812
AIP PROJECT: 3-17-0080-46

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 06/27/08

REVIEWED BY: PCB

DRAWN BY: JFC

DESIGNED BY: NDO

AEP PROJECT NUMBER

213-6945-000

© 2008 REYNOLDS, SMITH AND HILLS INC.

SHEET TITLE

ELECTRICAL
GROUNDING
DETAILS

SHEET NUMBER

34 OF 43

ISSUED FOR
BID DOCUMENTS