

Indianapolis Power & Light Company

Electric Service and Meter Manual

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If a correction is needed,
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**Page 18 is replaced with
Page 18A and 18B**

Section 220A, cont.

- f. Where the Company's service cable passes through communications company equipment to a meter fitting, the portion of the run that is inside the communication equipment shall be rigid metal conduit or intermediate metal conduit. In addition, the conduit run shall be continuous from the meter fitting to a point that is clear of the equipment pad by at least two feet.

- B. Underground Installation To Single Family Dwelling Units: In areas where the Company's underground distribution system exists, Customer Service shall be contacted for all residential underground service at (317) 261-8222. Where underground distribution does not exist at the present, call the Distribution Engineering Division (See map GB0-100 in front of this book for jurisdiction).

- C. Underground Service - Cost to the Customer: Normally new underground services will be installed by the Company at no cost to the customer, providing the total estimated cost of the installation does not exceed the estimated revenue for the first 2½ years. If the estimated cost of the installation exceeds the estimated revenue, the Customer shall pay the difference of such costs in advance of construction. The Company is not required to make any underground installation, if in the judgment of the Company it is not technically or economically justified as specified by the City Ordinance and/or the Indiana Utility Regulatory Commission. Call the Distribution Engineering Division (see map GB0-100 in front of this book for jurisdiction) for new projects.

- D. Underground Service to Mobile Home Park: Due to the unique nature of the mobile home park, the customer shall contact the Distribution Engineering Division (see map GB0-100) before any preliminary work begins.

- E. New Underground Temporary Services: New underground temporary services that are CT metered and those that need PTs shall be built the same as permanent services. Underground temporary services will be billed by using Full Cost Customer Billing procedures.

225 COVERING, ENCLOSING AND PAINTING OF PAD MOUNTED EQUIPMENT

Pad mounted equipment (transformers, switchgear, metering, etc.) shall not be covered or enclosed with any material unless permission is specifically given in writing by the Indianapolis Power & Light Company Standards, Code Compliance & Quality Control Department. Fencing may be installed if sufficient clearance is provided around the equipment for switching with the use of "hot sticks". This requires 10 feet of clearance on the sides where switching is performed. Additionally, 3 feet of clearance is required on the remaining sides and back for ventilation and personnel access (for clearance to building walls, see drawings GB7-020, GB7-030, and GB7-040). The top of the enclosure shall remain open for adequate ventilation. These requirements prohibit the installation of hollow decorative "rocks" or other enclosures that prohibit the free flow of air around the equipment. Any enclosure or fencing shall not have a locked gate nor be over 6 feet in height. Painting of the equipment is permitted if a solid color is used and the decals are not painted over; however, black or essentially black paint is not permitted due to excessive equipment heating.

230 METERING ENCLOSURE GROUNDING BEHIND SERVICE DISCONNECTING MEANS

Metering enclosures and fittings shall be grounded in accordance with Article 250 of the Indiana Electrical Code.

Where Indiana Electrical Code Section 250.142(B) Exception 2 is not permitted or used, a grounding conductor shall be run from the service grounding electrode conductor and grounded service conductor at the service equipment to the meter fitting or meter cabinet. This grounding conductor shall be copper and sized and installed in accordance with the Indiana Electrical Code requirements for grounding electrode conductors.

235 480 V COLD SEQUENCE METER

An individual lockable main service disconnecting means with overcurrent protection shall be installed ahead of and within five feet of each 480 volt meter. No tap shall be permitted on the line side of the main service. This applies to all 480 volt services, 225 ampere and smaller, and metered feeders.

517 METER CENTERS IN THE DOWNTOWN UNDERGROUND NETWORKED SERVICE AREA

- A. Customers who wish to have meter facilities that are located inside must have prior approval of the Company Meter Department. Provisions shall be made for the use of a company key for access, keyless entry is not acceptable. Additionally, a 3/4" conduit sleeve shall be provided to the outside of the building for the installation of an outside antenna for remote metering. This conduit sleeve shall be sealed against the weather by the customer. See Section 520 and 560R for more information.
- B. Residential meter centers, 120/208, 3-wire, single phase fed from commercial three phase 120/208 volt, four wire, wye source shall have ring-less covers with a bypass bar. A 5th jaw shall be installed, at the 9:00 position and connected to the neutral by the customer. Individual meters shall be balanced across the three phases and neutral with a maximum of 200 amps per position. 120/240 volt single phase meter centers shall not be permitted to connect to 120/208 volt three phase services.
- C. Three phase meter centers 120/208 or 120/240 volt shall have ring-less covers and bypass levers with a maximum rating of 225 amps per position.
- D. Single phase or three phase meter centers shall have a disconnecting means for the entire meter center and additionally a disconnecting means shall be located on the line side of each meter position.

A clear and level working space of at least 4 feet shall be maintained in front of the face of the meters. Safe and ready access to this area shall be provided.

- E. All initial connections in a meter center shall be made by the customer.
- F. Single phase and/or three phase meter centers and service equipment (commonly known as a meter/main) are permitted if provided, installed, and maintained by the customer. Unmetered service cable shall be separated from the customer's service equipment or overcurrent devices by a factory installed barrier.
- G. Each individual meter fitting in all multiple meter installations shall be correctly identified by a permanent form of metal tag (or the equivalent thereof) which indicates the building address and type of service to be served by each meter. Markings with pencil, crayon, paper tags, etc. will not be acceptable. Insofar as practical, it is preferable in multi-family dwellings that the numbering arrangement be in an orderly sequence in each group. Multi-meter installations not identified will not be connected. The Company will install and bill meters in multiple installations according to markings supplied by the electrical contractor and under no circumstances assumes responsibility for errors which are the result of incorrectly identified meter fittings.

555 MAINTAINING METER SECURITY

- A. It is unlawful to break seals on Company meters or to disconnect meters from service without notifying the Service Connection Division on telephone number 261-8133.

Cooperation will be extended at the request of the customer for normal maintenance or under emergency conditions. Request shall be made to the Service Connection Division for these cases.

- B. Electricity used on construction services must be metered. Services that have been disconnected by the Company are to be restored only by the Company. Unmetered circuits and jumpered meter fittings will be disconnected and an energy diversion charge and pro-rated billing will be assessed.

557 INSTALLATION OF TRANSIENT VOLTAGE SURGE SUPPRESSOR AND OTHER DEVICES AT METER SOCKETS

The installation of any meter adapter surge suppressor or any similar interface devices between the meter and meter socket is not acceptable and prohibited. If any surge suppressor or other similar interface device such as a generator connection, is found installed between the meter and meter fitting, Company field personnel will remove the device.

560 GENERAL REQUIREMENTS

- A. A signed sketch shall be provided for all current transformer rated metering installations by customer's electrical contractor. The sketch shall include location of metering and all distances from windows, doors, gas meters, stairways, corners of buildings and posts if required.
- B. *This sub-section has been removed with no substitution.*
- C. To provide adequate clearance for testing and maintenance, a conduit nipple (a minimum of 4 inches long) shall be provided between the meter fitting and any other electrical equipment.
- D. Facilities to accommodate socket type meters installed at any location served by two phases and a neutral of the three phase, four wire 120/208 volt, wye system, shall be equipped with a neutral terminal block. Neutral terminal block (fifth terminal) shall be furnished by the Company and installed on the left side of fitting by the electrical contractor. (See Drawing GB1-060.)
- E. A maximum of 4 conductors may be connected to the line or load side of the current transformer.

715 APPLICATION FOR TRAFFIC SIGNAL SERVICE

Application for a metered traffic signal service shall be made on the "Meter Installation Request" form provided by the Company. The engineer in charge of the customer's construction shall take responsibility for the correctness of the electrical service by filling out and signing the "Letter in Lieu of Electrical Inspection" provided by the Company unless the service equipment has been inspected and tagged.

720 SPECIAL REQUIREMENT

Service equipment, sized for the maximum load, shall be installed by the customer at the point of service for all lighting equipment to be billed under [Rate MU-1](#) (a flat rate service with no metering equipment).

725 SPECIAL UNDERGROUND REQUIREMENTS

For the installation of Company owned street lighting and/or protective lighting, the customer may be required to install gray 4" rigid PVC conduit with a pull string in a 24" deep trench at locations specified by the Company. These locations may include roads, sidewalks, landscaping or any area that may prove to be inaccessible.

730 CUSTOMER SUPPLIED CONCRETE COLUMN BASES

Depending on the installation and application, the customer may be required to install poured concrete bases for the installation of Company street light columns. Contact the lighting representative shown on GB0-170 for verification. The detailed drawings for the construction of concrete bases are shown on GB8-100 and GB8-110 if the customer is responsible for their construction and installation.

735 PROTECTIVE POSTS

For the protection of various Company facilities, protective posts may be required in accordance with Section 220A2h.



100/200 ampere, 600 Volt

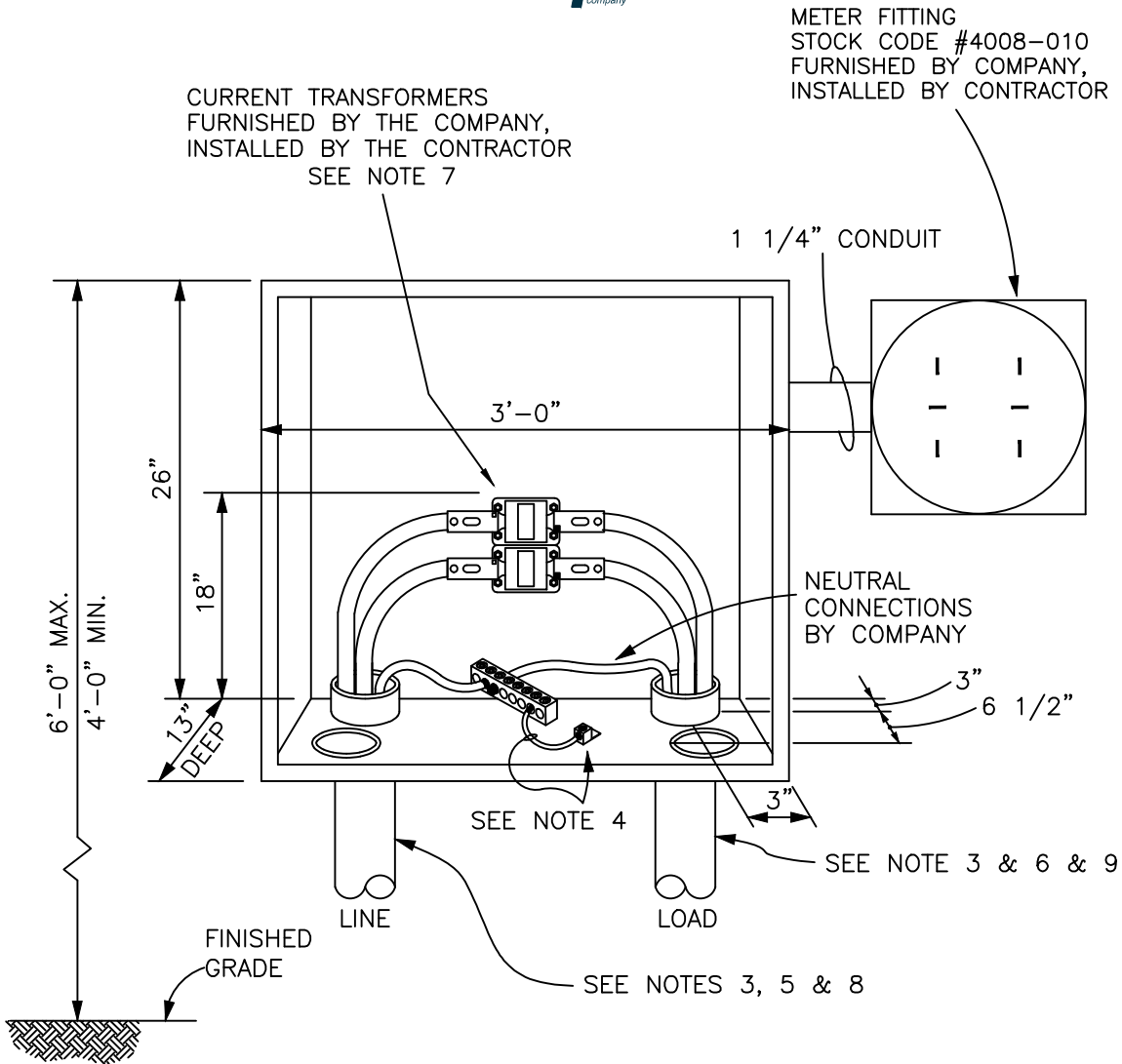
(100A for up to 125 ampere service and 200A for up to 225 ampere service)

- Meter fittings shall be designed for use with standard socket type watt-hour meters.
- Meter fittings shall be in a NEMA 3R enclosure even if installed inside.
- Meter fittings shall be of the ringless type.
- Meter fittings shall have a swing style latch, which will accept padlock or wire style seals.
- Meter fittings shall be UL listed. (Listings with other Nationally Recognized Testing Laboratories are acceptable)
- Meter fittings shall be provided with a horn by-pass.
- Meter fittings shall be provided with concentric knockouts in the back, sides and bottom.
- Meter fittings shall be clearly marked with the manufacturer's name, catalog number and electrical ratings.
- Meter fittings shall have provisions for a 5th terminal.
- 100 ampere meter fittings shall have tin-plated jaws and line side connectors suitable for the minimum range of 6 through 2/0 AWG CU/AL conductors. 100 ampere meter fittings shall be used for overhead services only.
- 200 ampere meter fittings shall have tin-plated jaws and line side connectors suitable for the minimum range of 6 AWG through 350 KCMIL CU/AL conductors.
- Meter fittings with a lever by-pass shall not be permitted for these size meter fittings.

320 ampere, 600 Volt

(320A meter fitting is for up to 400 amperes of service)

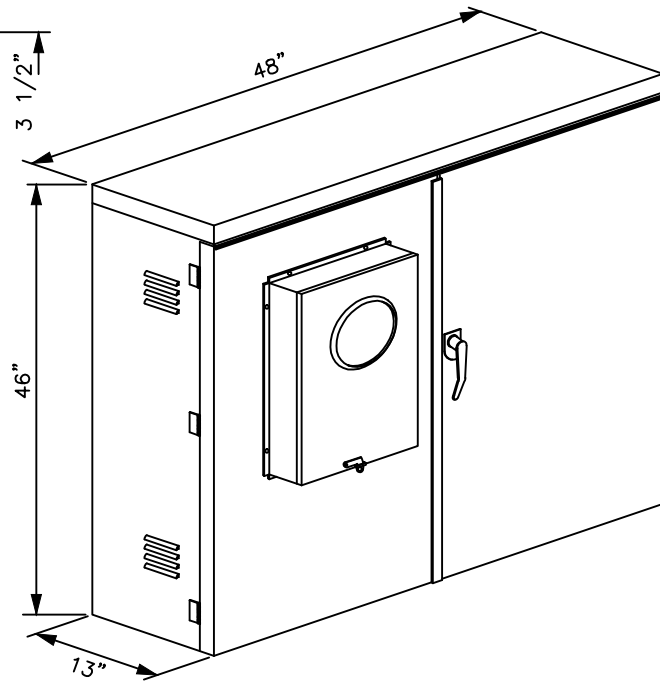
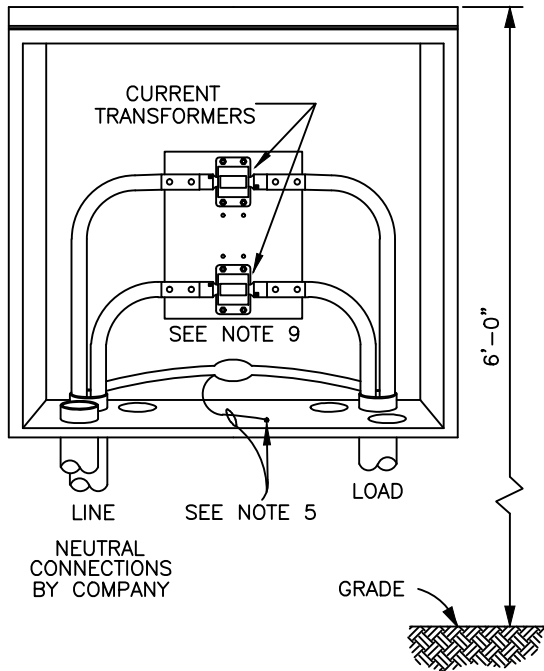
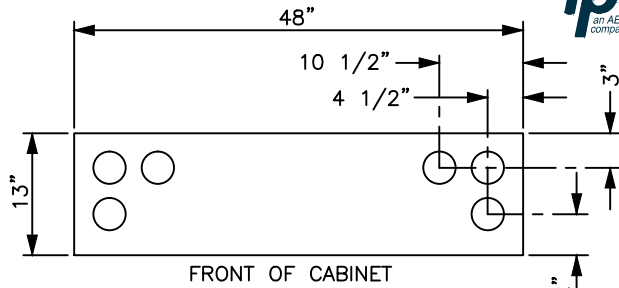
- Meter fittings shall be designed for use with standard socket type watt-hour meters.
- Meter fittings shall be in a NEMA 3R enclosure even if installed inside.
- Meter fittings shall be of the ringless type
- Meter fittings shall have a swing style latch, which will accept padlock or wire style seals.
- Meter fittings shall be UL listed. (Listings with other Nationally Recognized Testing Laboratories are acceptable)
- Meter fittings shall be provided with a jaw release lever by-pass.
- Meter fittings shall be provided with concentric knockouts in the back, sides and bottom.
- Meter fittings shall be clearly marked with the manufacturer's name, catalog number and electrical ratings.
- Meter fittings shall be rated at a minimum of 320 amps.
- Meter fittings shall have line side 3/8" diameter studs or tin-plated jaws and connectors suitable for the minimum range of 2/0 AWG - 600 kcmil CU/AL for terminating cable.



NOTES:

1. METER CABINET (STOCK #4008-138), METERING TRANSFORMERS AND CODED CABLE FURNISHED BY COMPANY, INSTALLED BY CONTRACTOR.
2. 1 1/4" CONDUIT FOR REMOTE METER, FURNISHED AND INSTALLED BY CONTRACTOR.
3. LINE AND LOAD CONDUITS MAY BE REVERSED TO SUIT CONDITIONS.
- ▶ 4. BONDING LUG AND 18 INCHES OF INSULATED 2/0 AWG MINIMUM COPPER CONDUCTOR SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
5. MINIMUM 4" RIGID METALLIC CONDUIT OR GRAY SCHEDULE 80 PVC INSTALLED BY CONTRACTOR.
6. ALL CONDUIT SHALL HAVE A BUSHING FOR COMPANY CABLE, IF METALLIC CONDUIT, THE INSULATED GROUNDING BUSHING SHALL BE U.L. LISTED AND BOND WIRE INSULATED.
7. THE CURRENT TRANSFORMER MOUNTING BRACKETS SHALL BE BUTTED AGAINST EACH OTHER. TOP C.T. SHALL BE AT 18".
8. 2-4" LINE CONDUITS LOCATED "FRONT TO BACK" ARE REQUIRED FOR SERVICES OF 600A AND ABOVE. CONDUIT SHALL NOT ENTER BACK OF CABINET.
9. MAXIMUM OF 4 CONNECTIONS TO COMPANY CT'S.

**RESIDENTIAL OUTDOOR METERING
(SINGLE FAMILY DWELLING ONLY)
UNDERGROUND INSTALLATION
120/240 VOLT, 1 PHASE, 3 WIRE
450A TO 800A SERVICE**

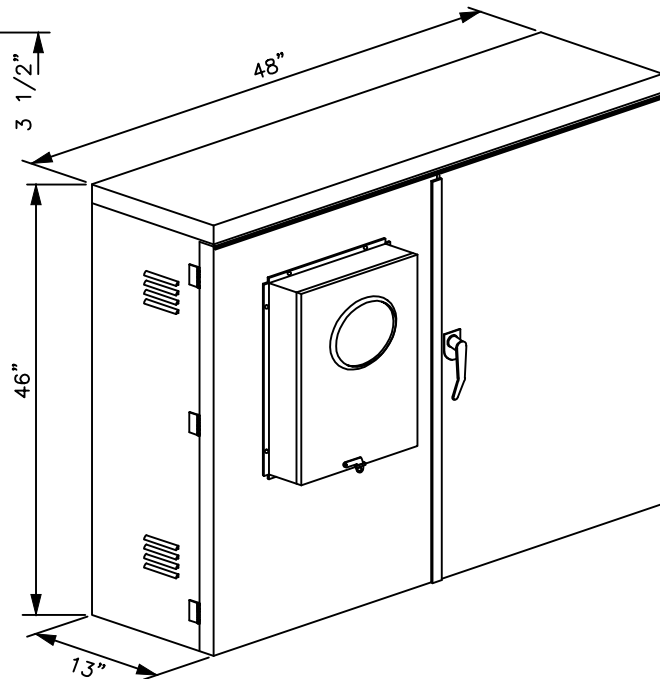
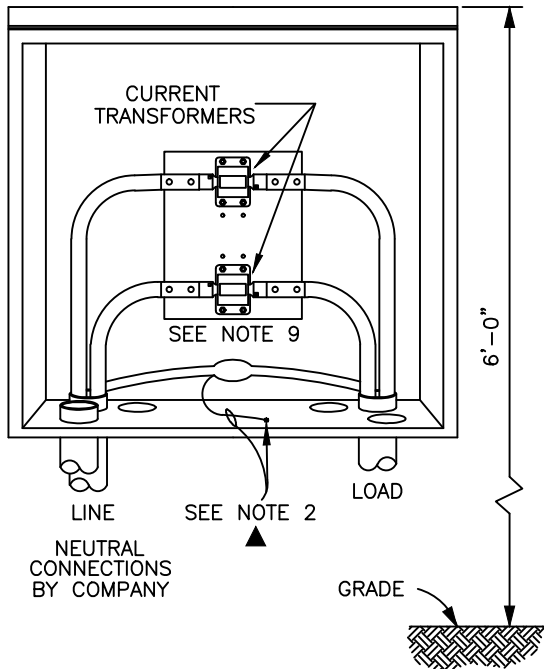
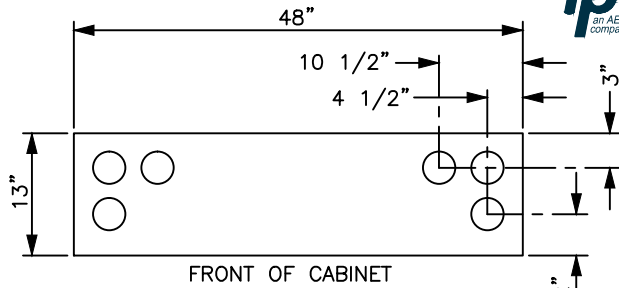


METER CABINET WITH FITTING STOCK #4008-131 FURNISHED BY THE COMPANY AND INSTALLED BY THE CONTRACTOR.

NOTES:

1. LINE AND LOAD CONDUITS MAY BE REVERSED TO SUIT CONDITIONS.
2. CONDUITS SHALL NOT ENTER BACK OF METER CABINET. USE KNOCKOUT IN BOTTOM OF METER CABINET ADJACENT TO SIDES. LOAD CONDUITS MAY EXIT FROM THE LOAD SIDE IN LOWER 24" OF THE METER CABINET IF APPROVED BY THE COMPANY.
3. 2-4" LINE CONDUITS ARE REQUIRED FOR SERVICES OF 600A AND ABOVE.
4. METERING TRANSFORMERS FURNISHED BY COMPANY, INSTALLED BY CONTRACTOR.
- ▶ 5. BONDING LUG AND 18 INCHES OF INSULATED 2/0 AWG MINIMUM COPPER CONDUCTOR SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
6. CUSTOMER TO FURNISH AND INSTALL PROTECTIVE POSTS, AS APPROVED BY COMPANY, WHEN EXPOSED TO VEHICULAR TRAFFIC.
7. MINIMUM 4" RIGID METALLIC CONDUIT OR GRAY SCHEDULE 80 PVC INSTALLED BY CONTRACTOR.
8. ALL CONDUIT SHALL HAVE A BUSHING FOR COMPANY CABLE, IF METALLIC CONDUIT, THE INSULATED GROUNDING BUSHING SHALL BE U.L. LISTED AND BOND WIRE INSULATED.
9. MOUNT THE TWO (2) CURRENT TRANSFORMERS ON THE TOP AND BOTTOM MOUNTING STUDS, LEAVING THE MIDDLE MOUNTING OPEN.
10. METER CABINET SHALL BE TRUCK ACCESSIBLE. IF EXPOSED TO VEHICULAR TRAFFIC CUSTOMER SHALL PROVIDE AND INSTALL PROTECTIVE POSTS, AS APPROVED BY THE COMPANY.

**COMMERCIAL OUTDOOR METERING
UNDERGROUND INSTALLATION
120/240 VOLT, 1 PHASE, 3 WIRE
450A TO 800A SERVICE**



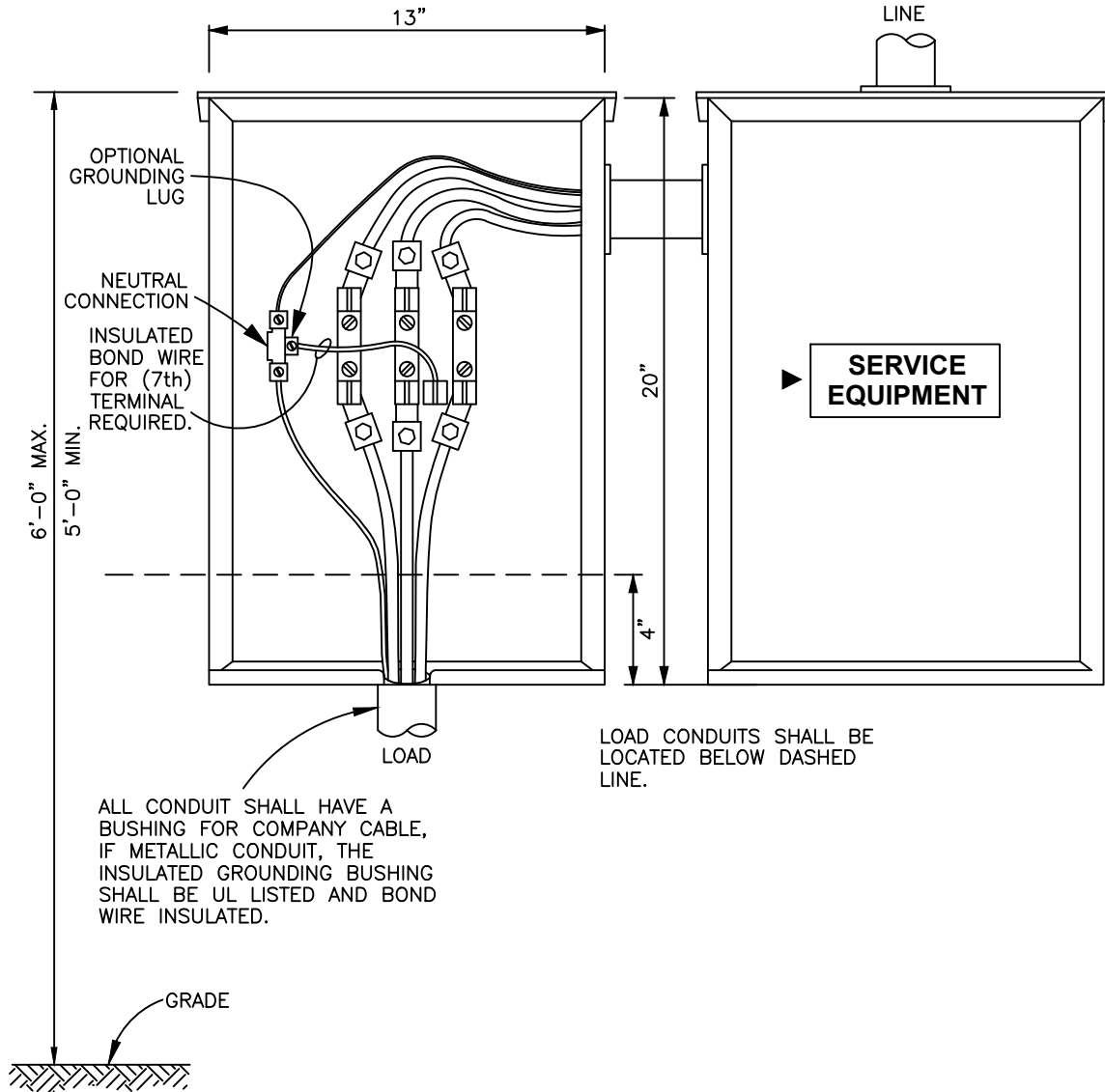
METER CABINET WITH FITTING STOCK #4008-131 FURNISHED BY THE COMPANY AND INSTALLED BY THE CONTRACTOR.

NOTES:

1. LINE AND LOAD CONDUITS MAY BE REVERSED TO SUIT CONDITIONS.
- ▶ 2. BONDING LUG AND 18 INCHES OF INSULATED 300 KCMIL MINIMUM COPPER CONDUCTOR SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
3. MINIMUM 4" RIGID METALLIC CONDUIT OR GRAY SCHEDULE 80 PVC INSTALLED BY CONTRACTOR.
4. IF METALLIC CONDUIT, INSULATED GROUNDING BUSHING SHALL BE U.L. LISTED AND BOND WIRE INSULATED.
5. MOUNT THE TWO (2) CURRENT TRANSFORMERS ON THE TOP AND BOTTOM MOUNTING STUDS, LEAVING THE MIDDLE MOUNTING OPEN.
6. MAXIMUM OF FOUR (4) CONDUCTORS MAY BE CONNECTED TO LINE OR LOAD SIDE OF CURRENT TRANSFORMER.
7. 2-4" LINE CONDUITS ARE REQUIRED FOR SERVICES OF 850A TO 1200A.
3-4" LINE CONDUITS ARE REQUIRED FOR SERVICES OF 1250A TO 1600A.

**RESIDENTIAL OUTDOOR METERING
(SINGLE FAMILY DWELLING ONLY)
UNDERGROUND INSTALLATION
120/240 VOLT, 1 PHASE, 3 WIRE
850A TO 1600A SERVICE**

METER FITTING STOCK
 CODE #4008-035
 FURNISHED BY COMPANY,
 INSTALLED BY CONTRACTOR.
 (IF METER FITTING IS PROVIDED BY THE
 CUSTOMER, IT MAY BE REJECTED IF IT
 DOES NOT MEET THE COMPANY STANDARDS)



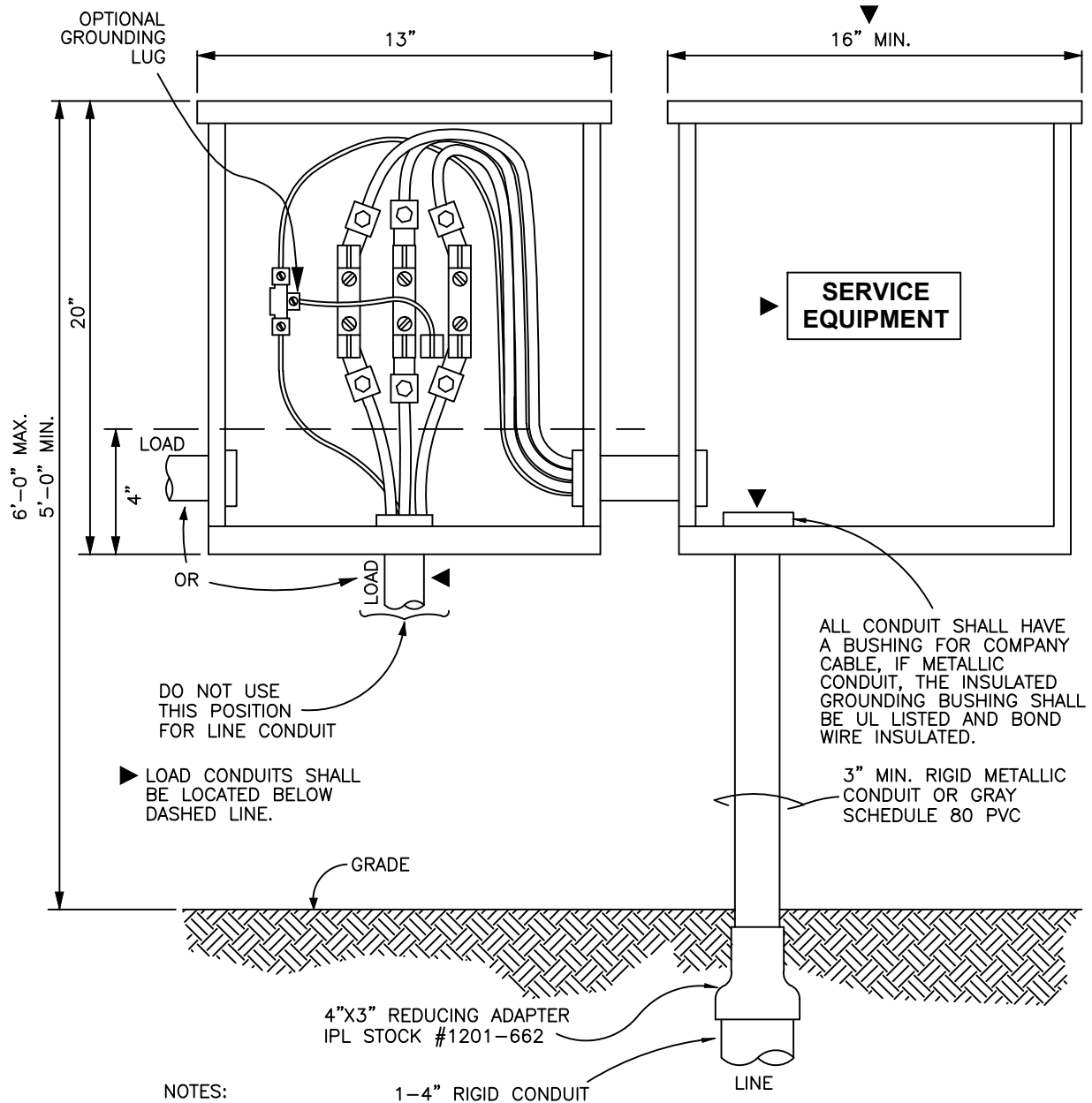
ALL CONDUIT SHALL HAVE A BUSHING FOR COMPANY CABLE, IF METALLIC CONDUIT, THE INSULATED GROUNDING BUSHING SHALL BE UL LISTED AND BOND WIRE INSULATED.

NOTES:

- ▶ 1. CUSTOMER SHALL MAKE THE FINAL CONNECTIONS IN THE SERVICE DISCONNECT AND IN THE METER FITTING.
- ▶ 2. THE SERVICE EQUIPMENT SHALL BE PERMANENTLY LABELED BY THE CUSTOMER, "SERVICE EQUIPMENT".
- ▶ 3. ALL 277/480 VOLT METER FITTINGS SHALL BE IN COLD SEQUENCE, SEE SECTION 550A7 FOR THE DEFINITION, AND THE SERVICE DISCONNECT SHALL BE IN A LOCKABLE ENCLOSURE.

**200 A METER FITTING
 OVERHEAD INSTALLATION
 277/480 VOLT 3 PHASE 4 WIRE
 225 A MAXIMUM SERVICE**

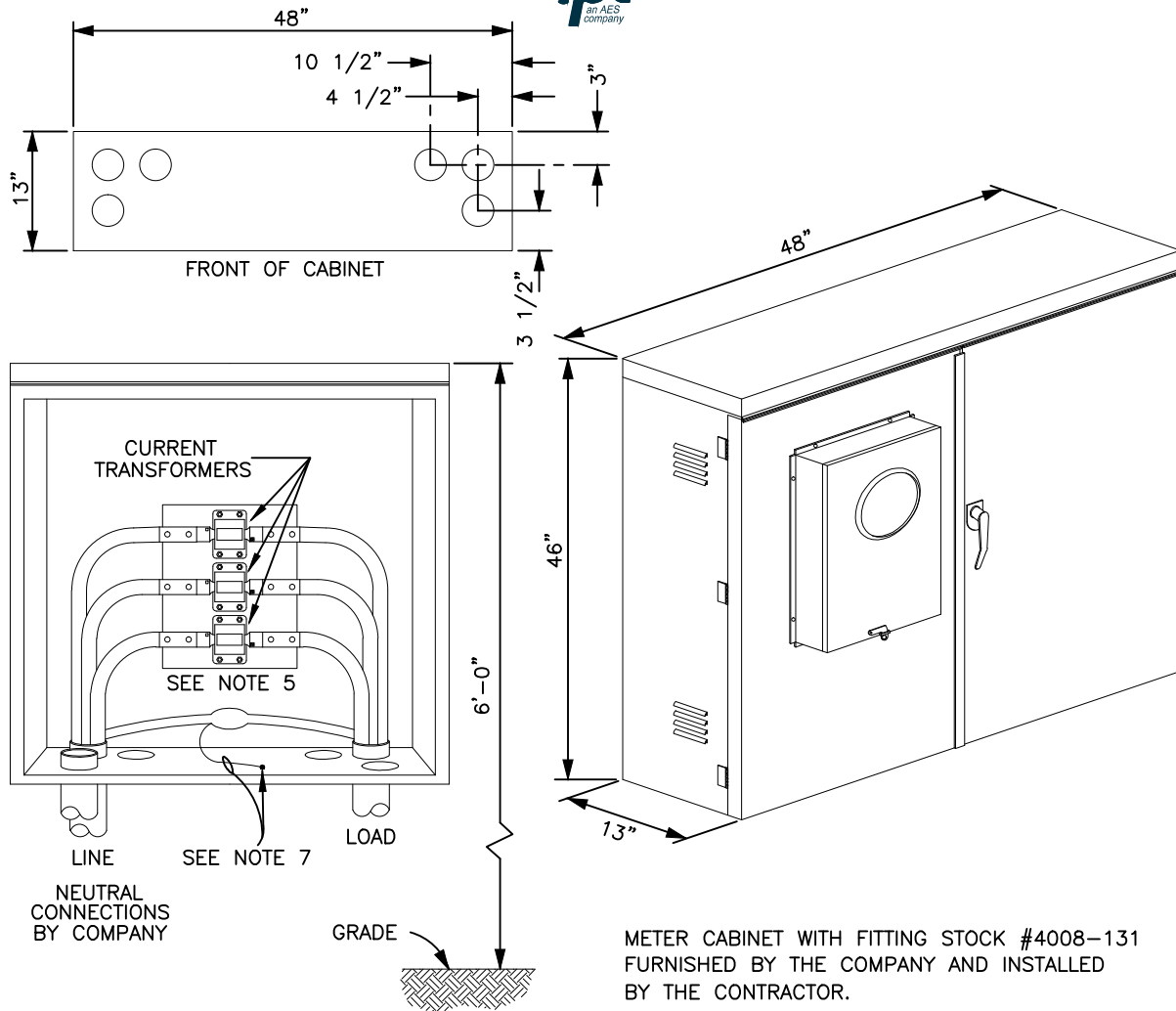
METER FITTING CODE # 4008-035
 FURNISHED BY THE COMPANY,
 INSTALLED BY CONTRACTOR.
 (IF METER FITTING IS PROVIDED BY THE
 CUSTOMER, IT MAY BE REJECTED IF IT
 DOES NOT MEET THE COMPANY STANDARDS)



NOTES:

- ▶ 1. CUSTOMER SHALL MAKE THE FINAL CONNECTIONS IN THE SERVICE DISCONNECT AND IN THE METER FITTING.
- ▶ 2. THE SERVICE EQUIPMENT SHALL BE PERMANENTLY LABELED BY THE CUSTOMER, "SERVICE EQUIPMENT".
- ▶ 3. ALL 277/480 VOLT METER FITTINGS SHALL BE IN COLD SEQUENCE, SEE SECTION 550A7 FOR THE DEFINITION, AND THE SERVICE DISCONNECT SHALL BE IN A LOCKABLE ENCLOSURE.

**200 A METER FITTING
 UNDERGROUND INSTALLATION
 277/480 VOLT, 3 PHASE, 4 WIRE
 225 A MAXIMUM SERVICE**



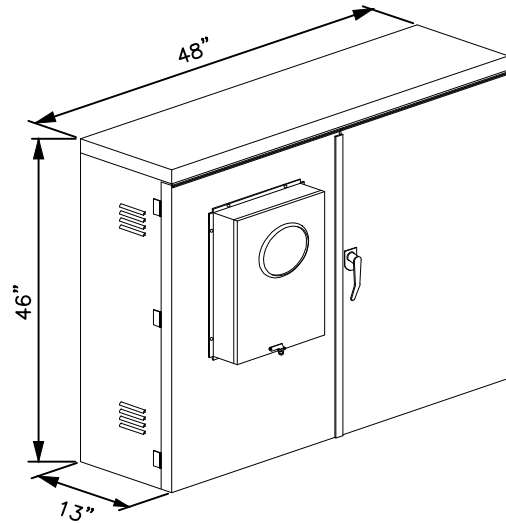
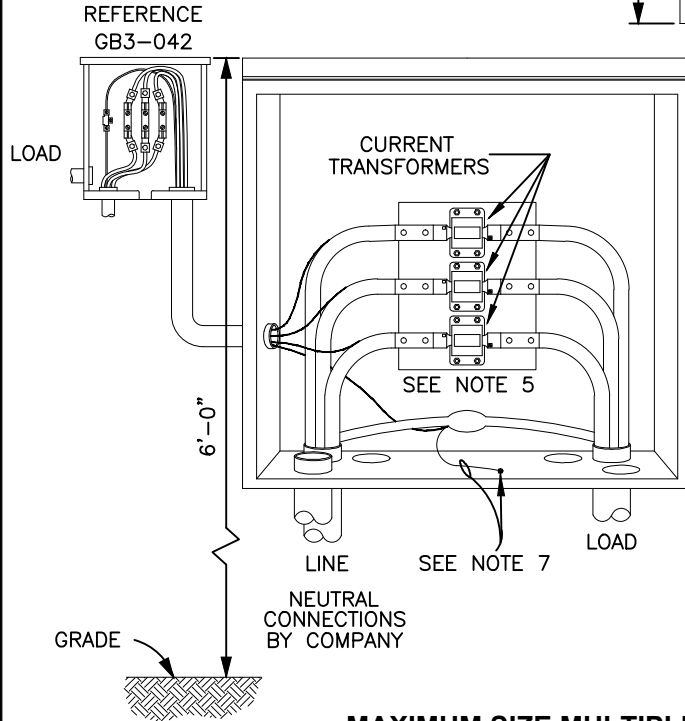
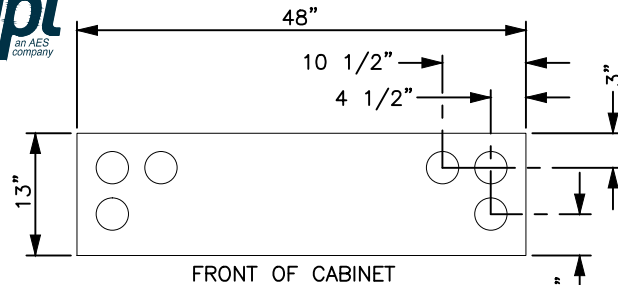
NOTES:

1. CONDUIT FROM SELF-CONTAINED METER FITTING MUST ENTER THE BOTTOM 24" OF THE METER CABINET AND BE FED FROM THE LINE SIDE OF THE CT's.
2. LINE AND LOAD CONDUITS MAY BE REVERSED TO SUIT CONDITIONS.
3. CONDUIT SHALL NOT ENTER BACK OF CABINET. USE KNOCKOUTS IN BOTTOM OF METER CABINET ADJACENT TO SIDES.
4. CONTRACTOR SHALL FURNISH AND INSTALL THE SERVICE CABLES AND CONDUIT FROM SELF-CONTAINED METER FITTING TO THE METER CABINET. LINE SIDE CURRENT TRANSFORMER CONNECTIONS AND ALL NEUTRAL CONNECTIONS SHALL BE MADE BY THE COMPANY.
5. CONTRACTOR SHALL PERMANENTLY IDENTIFY HIGH PHASE FOR FOUR WIRE DELTA SERVICE IN ACCORDANCE WITH SECTION 560 . HIGH PHASE SHALL BE CONNECTED TO BOTTOM CURRENT TRANSFORMER AND RIGHT PHASE IN SELF-CONTAINED METER FITTING.
6. METERING TRANSFORMERS FURNISHED BY THE COMPANY, INSTALLED BY THE CONTRACTOR.
- ▶ 7. BONDING LUG AND 18 INCHES OF INSULATED 2/0 AWG MINIMUM COPPER CONDUCTOR SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
8. METER CABINET SHALL BE TRUCK ACCESSIBLE. IF EXPOSED TO VEHICULAR TRAFFIC, CUSTOMER SHALL PROVIDE AND INSTALL PROTECTIVE POSTS, AS APPROVED BY THE COMPANY.
9. ALL CONDUIT SHALL HAVE A BUSHING FOR COMPANY CABLE, IF METALLIC CONDUIT, THE INSULATED GROUNDING BUSHING SHALL BE U.L. LISTED AND BOND WIRE INSULATED.

**OUTDOOR METERING
UNDERGROUND INSTALLATION
120/208, or 120/240 VOLT, 3 PHASE, 4 WIRE
500 A TO 1200 A SERVICE**



METER CABINET STOCK #4008-131 AND METER FITTING #4008-035=200A FURNISHED BY THE COMPANY AND INSTALLED BY THE CONTRACTOR.



MAXIMUM SIZE MULTIPLE SERVICES

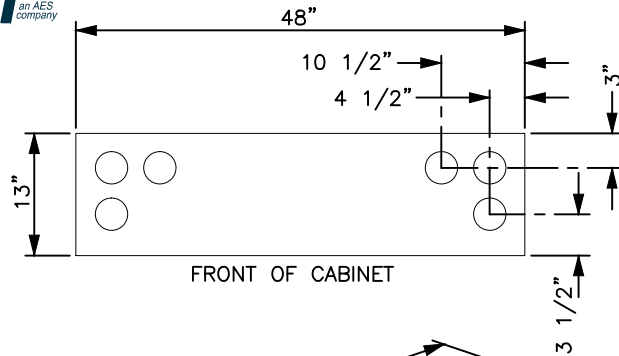
120/208 OR 120/240 V

- | | |
|----------------------|----------------------|
| 1-100 A AND 1-800 A | 1-200 A AND 1-800 A |
| 1-100 A AND 1-1000 A | 1-200 A AND 1-1000 A |

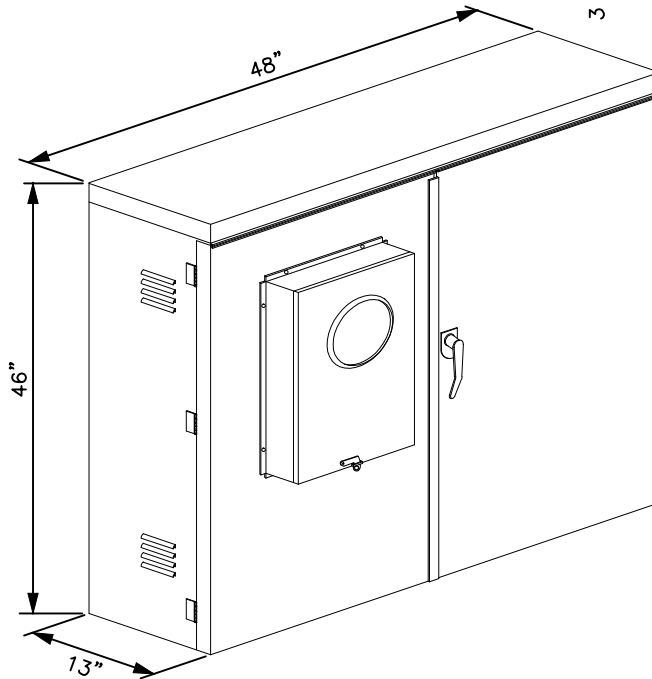
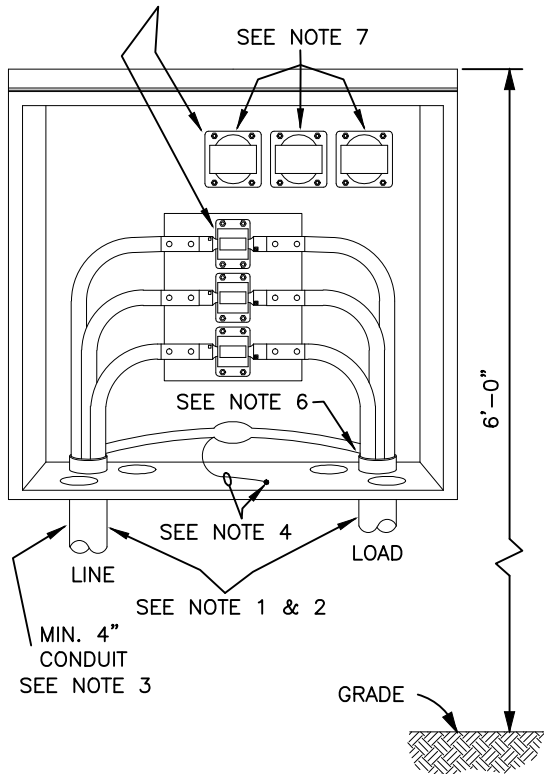
NOTES:

1. CONDUIT FROM SELF-CONTAINED METER FITTING MUST ENTER THE BOTTOM 24" OF THE METER CABINET AND BE FED FROM THE LINE SIDE OF THE CT's.
2. LINE AND LOAD CONDUITS MAY BE REVERSED TO SUIT CONDITIONS.
3. CONDUIT SHALL NOT ENTER BACK OF CABINET. USE KNOCKOUTS IN BOTTOM OF METER CABINET ADJACENT TO SIDES.
4. CONTRACTOR SHALL FURNISH AND INSTALL THE SERVICE CABLES AND CONDUIT FROM SELF-CONTAINED METER FITTING TO THE METER CABINET. LINE SIDE CURRENT TRANSFORMER CONNECTIONS AND ALL NEUTRAL CONNECTIONS SHALL BE MADE BY THE COMPANY.
5. CONTRACTOR SHALL PERMANENTLY IDENTIFY HIGH PHASE FOR FOUR WIRE DELTA SERVICE. HIGH PHASE SHALL BE CONNECTED TO BOTTOM CURRENT TRANSFORMER AND RIGHT PHASE IN SELF-CONTAINED METER FITTING.
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8. METER CABINET SHALL BE TRUCK ACCESSIBLE. IF EXPOSED TO VEHICULAR TRAFFIC, CUSTOMER SHALL PROVIDE AND INSTALL PROTECTIVE POSTS, AS APPROVED BY THE COMPANY.
9. THE CURRENT TRANSFORMER MOUNTING BRACKETS SHALL BE BUTTED AGAINST EACH OTHER. TOP C.T. SHALL BE AT 30".
10. ALL CONDUIT SHALL HAVE A BUSHING FOR COMPANY CABLE, IF METALLIC CONDUIT, THE INSULATED GROUNDING BUSHING SHALL BE U.L. LISTED AND BOND WIRE INSULATED.

**OUTDOOR METERING,
UNDERGROUND INSTALLATION
120/208 or 120/240 VOLT, 3 PHASE, 4 WIRE
500 A TO 1200 A SERVICE**



CURRENT TRANSFORMERS AND
POTENTIAL TRANSFORMERS
FURNISHED BY THE COMPANY,
INSTALLED BY THE CONTRACTOR



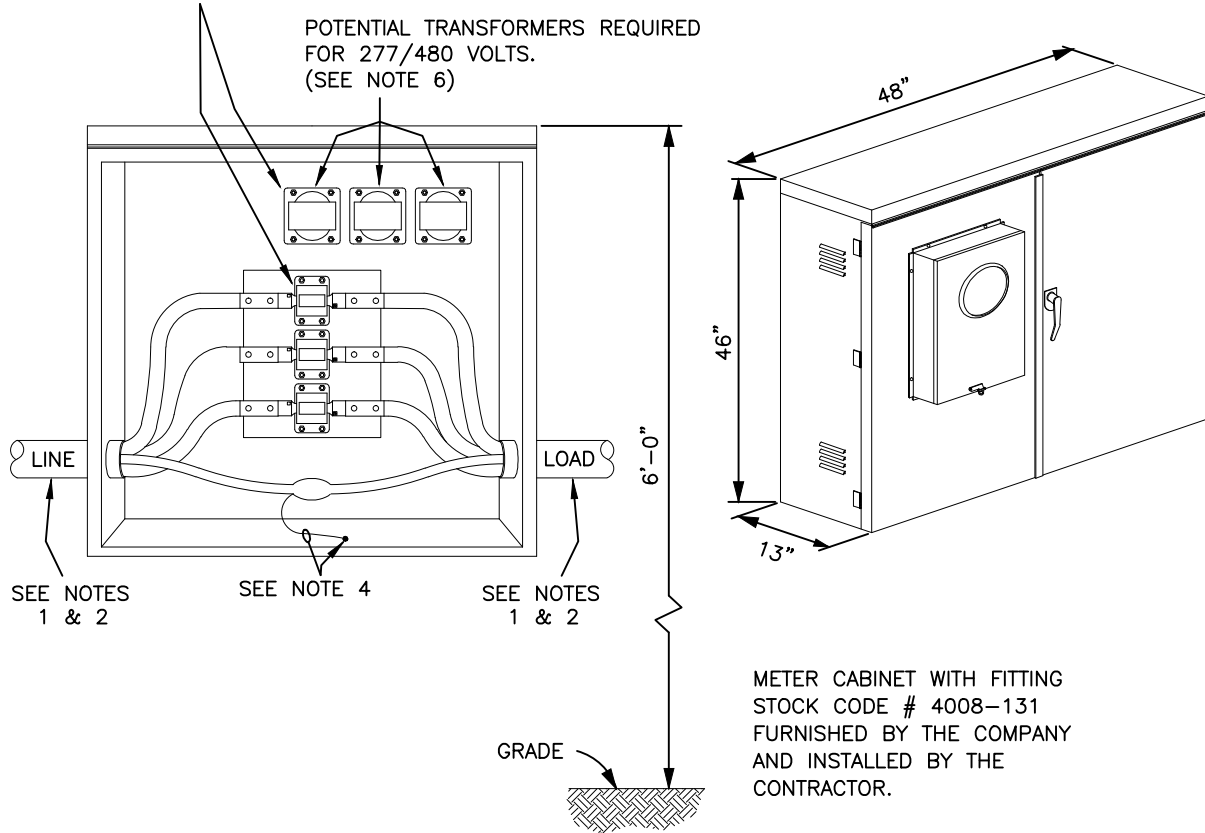
METER CABINET WITH FITTING
STOCK CODE # 4008-131
FURNISHED BY THE COMPANY
AND INSTALLED BY THE
CONTRACTOR.

NOTES:

1. LINE AND LOAD CONDUITS MAY BE REVERSED TO SUIT CONDITIONS.
2. CONDUITS SHALL NOT ENTER BACK OF METER CABINET. USE KNOCKOUT IN BOTTOM OF METER CABINET ADJACENT TO SIDES.
3. 1-4" LINE CONDUIT REQUIRED FOR SERVICES FROM 250 A TO 400 A.
2-4" LINE CONDUITS REQUIRED FOR SERVICES FROM 450 A TO 800 A.
3-4" LINE CONDUITS REQUIRED FOR SERVICES FROM 900 A TO 1200 A.
- ▶ 4. BONDING LUG AND 18 INCHES OF INSULATED 2/0 AWG MINIMUM COPPER CONDUCTOR SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
5. METER CABINET SHALL BE TRUCK ACCESSIBLE. IF EXPOSED TO VEHICULAR TRAFFIC, CUSTOMER SHALL PROVIDE AND INSTALL PROTECTIVE POSTS, AS APPROVED BY THE COMPANY.
6. ALL CONDUIT SHALL HAVE A BUSHING FOR COMPANY CABLE, IF METALLIC CONDUIT, THE INSULATED GROUNDING BUSHING SHALL BE U.L. LISTED AND BOND WIRE INSULATED.
7. INSTALL POTENTIAL TRANSFORMERS WITH PRIMARY ON BOTTOM (H1,H2) AND SECONDARY ON TOP (X1, X2).

**OUTDOOR METERING,
UNDERGROUND INSTALLATION
277/480 VOLT 3 PHASE, 4 WIRE
250 A TO 1200 A SERVICE**

CURRENT TRANSFORMERS AND
POTENTIAL TRANSFORMERS
FURNISHED BY THE COMPANY,
INSTALLED BY THE CONTRACTOR

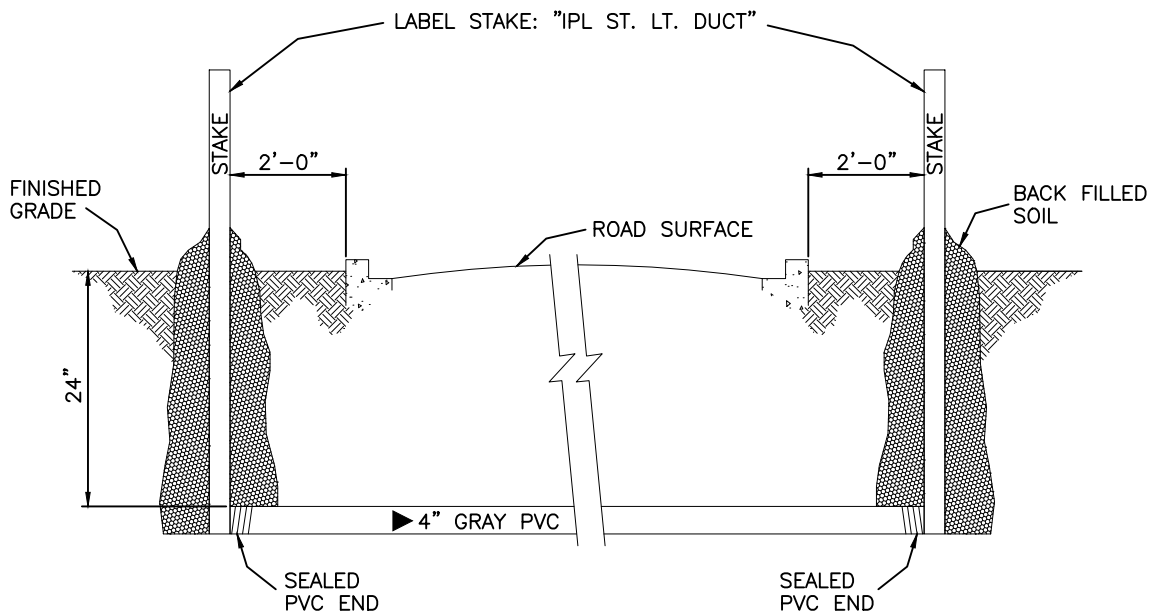
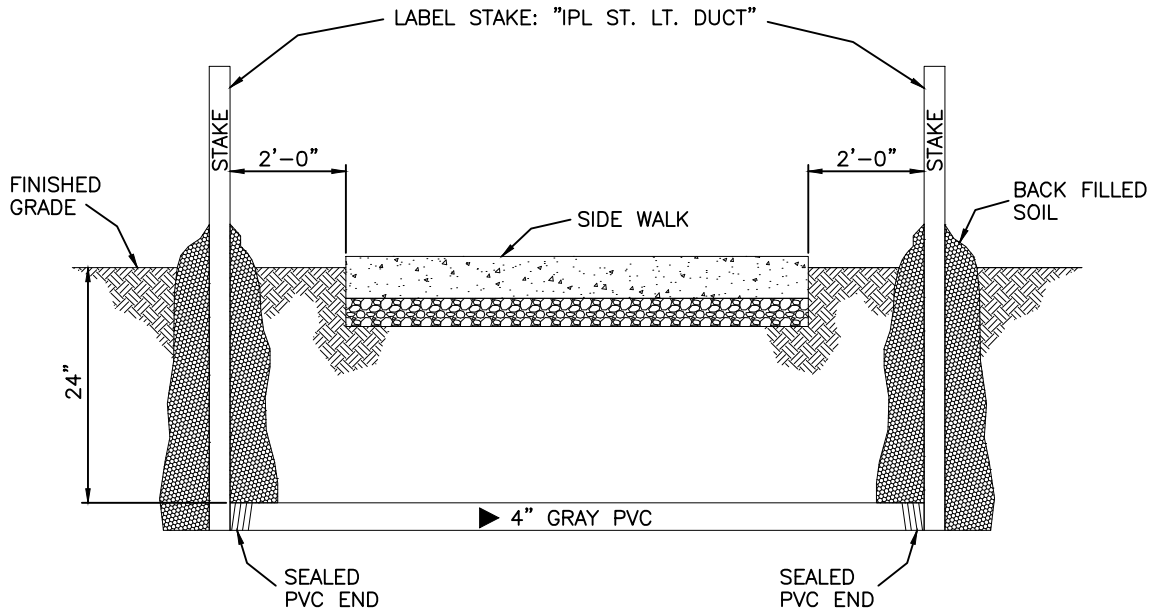


NOTES:

1. LINE AND LOAD CONDUITS MAY BE REVERSED TO SUIT CONDITIONS.
2. CONDUITS SHALL NOT ENTER BACK OF METER CABINET. CONDUITS MAY BE INSTALLED ON THE SIDES BETWEEN THE VENTS. KNOCKOUTS IN BOTTOM OF METER CABINET ADJACENT TO SIDE MAY ALSO BE USED.
3. CONTRACTOR SHALL PERMANENTLY IDENTIFY HIGH PHASE FOR FOUR WIRE DELTA SERVICE IN ACCORDANCE WITH SECTION 560I, HIGH PHASE SHALL BE CONNECTED TO BOTTOM CURRENT TRANSFORMER.
- ▶ 4. BONDING LUG AND 18 INCHES OF INSULATED 2/0 AWG MINIMUM COPPER CONDUCTOR SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
5. CUSTOMER SHALL FURNISH AND INSTALL PROTECTIVE POSTS, AS APPROVED BY THE COMPANY, WHERE SUBJECT TO DAMAGE.
6. INSTALL POTENTIAL TRANSFORMERS WITH PRIMARY ON BOTTOM (H1,H2) AND SECONDARY ON TOP (X1, X2).

INDOOR METERING
120/208 OR 120/240 VOLT, 3 PHASE, 4 WIRE
277/480 VOLT, 3 PHASE, 4 WIRE
250 A TO 1200 A SERVICE

THE CONDUITS SHALL BE 4 INCH GRAY PVC BURIED AT A MINIMUM OF 24 INCHES, UNLESS A CONFLICT WITH OTHER UNDERGROUND FACILITIES FORCE IT TO A MINIMUM OF 18 INCHES. SEAL THE ENDS OF THE CONDUIT TO KEEP DIRT OUT. THE CONDUIT SHALL EXTEND 1 FOOT BEYOND THE EDGE OF THE OBSTRUCTING SURFACE AT EACH END. ALSO, MARK EACH END OF THE CONDUITS WITH A STAKE LABELED "IPL ST. LT. DUCT". (SEE EXAMPLES PICTURED BELOW)



STREET LIGHT DUCTS INSTALLED FOR IPL USE