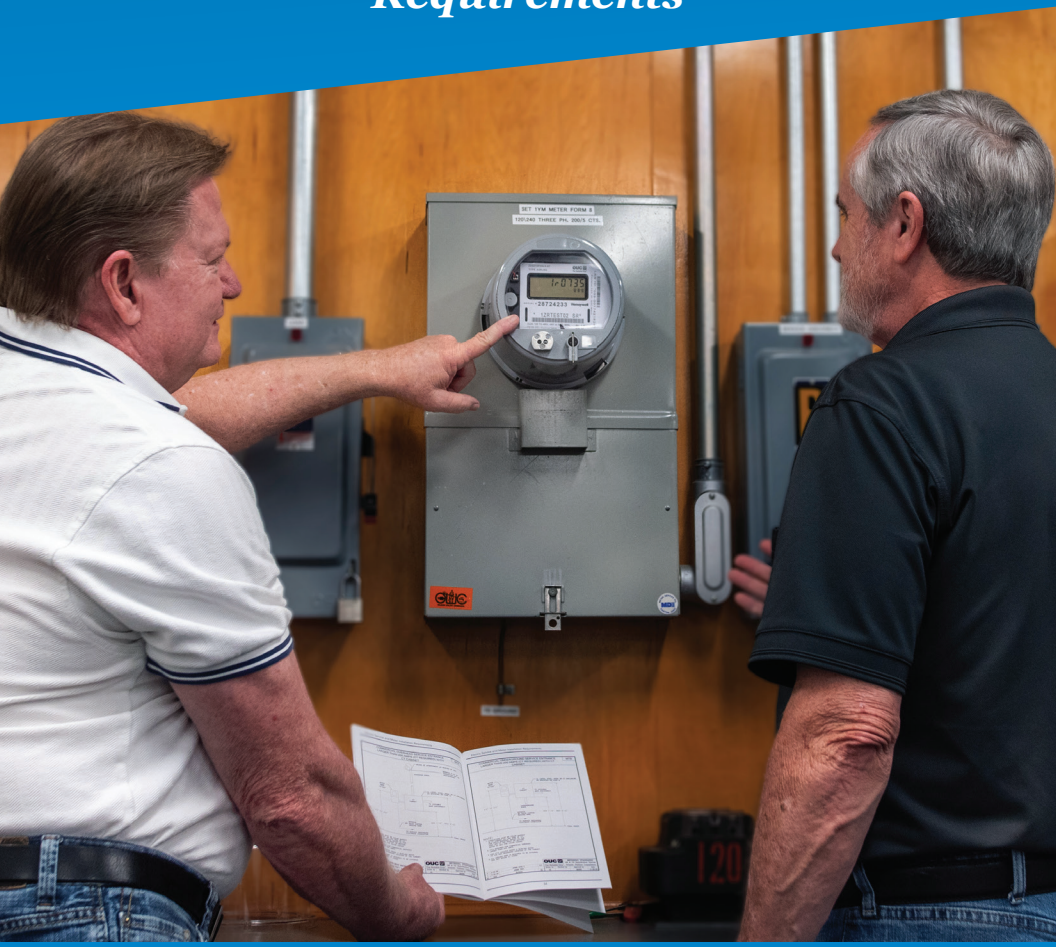
ELECTRIC SERVICE AND DIGITAL METER INSTALLATION

Requirements



OUC The *Reliable* One®

2025

REVISIONS FROM PREVIOUS YEAR.

PAGE 1 – INSTALLATION OF UNAUTHORIZED CUSTOMER EQUIPMENT

- Added "Meter collars are prohibited without an approved interconnection agreement with OUC"

PAGE 3– INITIAL CONTACTS AND COMMUNICATION

- Added note 7 "Removal of a meter base seal without OUC's authorization will result in an additional charge of $100 as set forth in OUC's Administrative Policy Manual"

PAGE 5 NOTE 1– METER BASE REQUIREMENTS

- Replaced "or" with "and" in statement "…provision to accept an OUC lock and seal.."

PAGE 5 NOTE 10 – METER BASE

- Removed "For multiple meter bases and commercial services, (all services except single family under one roof"…"
- Added "For all services…"
- Replaced "or" with "and" in statement "…apartment, room and building served…"

PAGE 14 – DRAWING EE014

- Replaced Minimum per NEC with 36'' minimum

PAGE 17 – DRAWING EE011

- In the image of the junction box, replaced "preferred" with "acceptable"
- Added note 7 – "All conduit required to be on one side of the junction box in acceptable location shown"

PAGE 33 – DRAWING M7A

- Added note 5 "clearly mark source and load pipes"

PAGE 34 - DRAWING M7B

- Added note 5 "clearly mark source and load pipes"

PAGE 39 NOTE 5 – DRAWING S2

- Added "or tapcons"

PAGE 40 NOTE 7 – DRAWING S5

- Added "or tapcons"

For Your Information

Please send revision suggestions to:

OUC–The *Reliable* One
P. O. Box 3193
Orlando, FL 32802
Attn: MTRS
Email: ElectricMeterShop@ouc.com

Send all plans and drawings to:

OUC–The *Reliable* One
P. O. Box 3193
Orlando, FL 32802
Attn: Development Services

Table of Contents

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Introduction

This handbook is provided by OUC–The *Reliable* One as a guide for use by customers, electrical contractors, engineers, architects and local inspecting authorities. The specifications and procedures in this handbook are subject to change without notice. Therefore, communication between the user and OUC is essential in all circumstances. Page 4 provides the user with contacts within OUC.

If items in this handbook fall short of the most recent National Electrical Code (NEC) or local inspecting authority standards, the NEC and/or local standards will prevail. However, OUC reserves the right to exceed the NEC and local authority standards on installations that it serves.

Under no circumstances is compliance with the information contained within this handbook to relieve the user of his/her responsibility for compliance with all applicable codes or safety standards.

Electric service will not be energized until:

1. Specifications and requirements are met.
2. A contract for electric service has been made.
   (Call OUC Customer Service at 407.423.9018)
3. The electric service has passed local authority inspection and OUC has been notified by customer/contractor.

If OUC turns down the service (does not install meter), OUC will leave a door hanger onsite indicating the reason why a meter was not installed. The Owner/Contractor is required to fix installation issues, and contact OUC Customer Service.

Installation of Unauthorized Customer Equipment

OUC does not permit the installation of any equipment at or near the electric service meter which, in OUC's opinion, may jeopardize the reliability or operations of the OUC electric transmission or distribution system. OUC may remove any such equipment installed between the transformer to the meter and may require the Customer, as a condition of continued service, to remove any such equipment that is installed after the meter on the customer's system.

Meter collars are prohibited without an approved interconnection agreement with OUC.

Initial Contacts and Communication

1. At the onset of any new project, contact OUC Development Services, 407.236.9651. A site plan showing the proposed project layout, a landscaping plan, stormwater retention and the electric service requirements (E-plans which include load calculations, power and voltage requirements, size of service, riser diagram, etc.) is required. Additionally, for multi-tenant buildings, the building addresses and unit numbers are needed as early as possible. It is important that the addresses used for permits match the addresses for which the orders for service are placed. OUC's Electric Engineering, 407.434.4427, will review the site plan and service requirements to assess the availability and location of service. Contact them for any changes to an existing electric service. If necessary, the Owner/Contractor/ Developer may be required to pay in advance if any extension of existing facilities is required. The costs will be determined as set forth in OUC's Administrative Policy Manual. As your project proceeds you can contact OUC's Development Service Representatives for any additional information you may require.
2. Temporary electric service (2 years or less) may be required during the construction of your project. The Owner/Contractor/Developer is required to have a temporary pole installed on site and have a UL approved meter base properly attached to the pole (see page 6). For concrete block, residential, detached homes our Temporary Underground Service (TUG) program is available. It is the responsibility of the Owner/Contractor/ Developer to request an electrical inspection from the City/County. Call OUC's Commercial Service Representatives, 407.423.9018, to place an application for the meter installation and account application. When the inspection clearance and application have been received, OUC will attempt to install a meter(s) within ten (10) to twelve (12) business days. (Note: three phase or CT service may require additional time for scheduling.) Temporary line extension costs, deposits and/or connection fees are required to be paid prior to scheduling.
3. Permanent electric service is the final electric service required to bring the building to completion for occupancy. Call OUC's Commercial Service Representatives, 407.423.9018, to establish the amount of security deposit required to be paid for the application of the permanent electric meter installation. It is the responsibility of the Owner/Contractor/Developer to request a final electrical inspection from the City/County. If OUC has not received an inspection clearance, services will not be energized and meters will not be set.

The City/County must be contacted to pursue the reason why a clearance was not received. When the final inspection clearance and application have been received, OUC will attempt to install a meter(s) within ten (10) to twelve (12) business days. (Note: three phase service may require additional time for scheduling.)

4. To schedule transformer stand-by to: install any conduit, pull wire, or land wire (Not CT'ed); contact OUC Electric Distribution, 407.434.4111 or email standbyrequest@ouc.com
5. For changes of service involving current transformers (CTs) within a CT cabinet, contact OUC Electric Operations, 407.434.2136.
6. For a service change which requires OUC personnel after hours, additional overtime charges may apply. Authorization Form must be signed.
7. Removal of a meter base seal without OUC's authorization will result in an additional charge of $100 as set forth in OUC's Administrative Policy Manual.
8. **Special Notice:** OUC offers 400 amp services for single-phase residential services (320 amp MEG socket meter base w/bypass handle, no "K" base). For services 400 amps and less, OUC requires contractors in residential subdivisions to install the conduit from the transformer or junction box to the meter base.
9. Conduit shall be used with the appropriate type ells and shall be buried a minimum of 36". Warning tape shall be installed above all buried conduits. Ten (10) to twelve (12) days notice is necessary for OUC to run the permanent service to the house. Grey electrical grade schedule 40 or 80 pvc conduit (5° chamfered edges) is the approved pipe for underground residential installations unless the electrical engineer indicates otherwise. Minimum 200 lb. test pulling string shall be installed throughout all conduit runs. Heating the pvc pipe is not allowed for bending. All installation questions should be directed to your OUC engineer.

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Initial Contact Telephone Directory

Development Services
- Plan review and project coordination 407.236.9651

Customer/Commercial Services
- Deposit, connection and service applications 407.423.9018

Electric Engineering
- New services & changes to existing electric service(s) 407.434.4427

Electric Distribution
- Schedule stand-by or de-energize transformer 407.434.4111

Electric Operations
- Changes of service involving current transformers (CTs) . 407.434.2136

Service Order Technicians
- Schedule unlocking meters in multi-tenant buildings. 407.423.9018 (at IVR prompt; respond "not a customer", and "electric")

Special Electric Requests
- For contractors to check installation status and schedule requests . . . . . 407.423.9018 (at IVR prompt; respond "not a customer","no", and then respond with one of the options)

OUConvenient Lighting
- Street and private lighting 407.434.4427

OUC Renewables
- Photovoltaic system information/questions 407.434.2263

Inspection Authorities
- City of Orlando 407.246.2271
- Orange County 407.836.5550
- City of St. Cloud 407.957.7386
- Osceola County. 407.343.2225

Sunshine State One-call 800.432.4770

Meter Base Requirements

1. Meter bases are provided by the Customer/Contractor and shall be electrical grade, steel, UL listed and stickered, NEMA 3R, and have a maximum rating of 320 amps (residential)/200amps (commercial). Meter bases must have a provision to accept an OUC lock and seal. Additionally, 320 amp meter bases must be on the Meter Equipment Group (MEG) approved list. A short list is shown on page 33.
2. Commercial services shall have a lockable main disconnect that will accept an OUC padlock.
3. OUC must have 24/7 access to metering equipment (CT cabinet, meters) and main disconnect. A lock box can be provided if necessary.
4. For all commercial services, contact Electric Engineering first.
5. For services over 200 AMPS, contact Electric Engineering first.
6. Meter bases are provided for transformer-rated (CT) services. Electric Metering must receive information from Electric Engineering (see above) to issue any equipment. Instrument transformer cabinets must be provided by the Customer/Contractor. See specific requirements for these services.
7. Meter bases for **commercial services** 200 AMPS or less and **320 single-phase** residential services shall be provided with **lever bypass handles**.
8. Meter bases shall include a neutral conductor (except multi-gang).
9. Each address must be unique or have a unique address identifier i.e. suite 1, suite 2 etc.
10. For all services meter bases must be clearly and permanently marked with element resistant labeling indicating the floor, suite, apartment, room and building served by the meter. Each building must also be clearly and permanently labeled with the respective address number. Permanent numbers must be located on or adjacent to unit doors. This marking is required before the service connection is made by OUC. Final unit number/address verification will be made when meters are set. The Owner/Contractor must be on site to assist with this task. **If at any time the meter base label is not visible and/or legible, service may be terminated**. The following methods meet the requirement for clear and permanent marking and are acceptable.
    * Metal plates, riveted or screwed to meter base, with engraved or stamped lettering.
    * Plastic plates, riveted or screwed to meter base, with engraved or stamped lettering.

Paper decals or any non-permanent labels shall not be accepted. Do not use paint or marking pens to label meter bases or plates attached to meter bases. The inside of the meter base shall be labeled with the address or unit number with a permanent marker. **If at any time the meter base label is not visible and/or legible, service may be terminated**.

11. Meter bases shall be surface mounted (do not recess) using the following approved fasteners:
    * Tap Conns
    * Lead Anchors
    * Toggle Bolts
    * 1/4" Nylon Nail-ins
    * ZINK Mushroom Head 1/4" Pin Drives
    * Screws (wood construction only)
    * Nylon Togglers (drywall construction only)
12. Nails, shoot-in-nails, or plastic anchors are unacceptable and not approved.
13. Meter bases must be attached to the structure in a quality fashion using good workmanship as to prevent binding or inoperability of the unit. Poor quality and workmanship can result in refusal of electric service.
14. A clear space of 3 feet is required in front and to the side of all meters at all times. Please consult with OUC to avoid conflict with landscaping projects.
15. Do not wire through the back of the meter socket.
16. Use the provided conduit knockouts only.
17. A grounding electrode shall not be installed within the same chase as the line conductors.
18. No meter base shall be located downstream of a photocell or similar control device, nor a customer owned transformer.

Additional Requirements

The Customer/Contractor must provide OUC with a suitable point of attachment for the electric service cable as required by the NEC. This point of attachment must be sufficient to allow proper cable clearance as stipulated by NEC/NESC as well as proper strength to support the cable weight. Shoot-in fasteners or plastic anchors should not be used. Insufficient points of attachment must be relocated and/or replaced at Customer/Contractor expense.

Service Entrance Specifications for Commercial Services Over 200 AMPS and Single Phase Residential Services Over 400 AMPS (CT Required)

1. Contact your OUC project engineer prior to construction for approval of the location of the meter base, current transformers (CTs), CT cabinet and conduit size/routing; and allowable conductor size. The OUC Project Engineer will need information to fill out a Service & Metering Information form. This form will be sent to Development Services so that CT equipment may be picked up by the customer/contractor. See page 5 for further meter base requirements.

2. All material shall be electrical grade, steel, NEMA 3R, and UL listed and must conform to National Electrical Code (NEC), local requirements and OUC specifications.

3. The meter base and CTs will be supplied by OUC and installed by Customer/Contractor. Meter base must be grounded with minimum #4 solid copper to the service grounding electrode conductor, except where restricted by NEC code. Ground must be externally visible (do not place in service or metering conduit or raceway). Meter ground wire shall be secured sufficiently with straps and lag screws.

4. Meter base to be surface mounted (do not recess). Use the provided knockouts only. Do not mount meter base with shoot-in fasteners or plastic anchors.

5. CT cabinet to be supplied and installed by customer/contractor. Cabinet size must conform to current NEC requirements. CT cabinet shall be Hoffman number A242411CT, A303011CT, A363611CT, or equal. Equivalents shall be approved by Electric Metering. CT Cabinets are for service entrance conductors ONLY and shall include a neutral conductor. All ground wire should be external and not within CT chase. For outside installations, a sealing type lock nut shall be used for conduits entering the top or sides of CT cabinet. No other circuits of any kind will be allowed.

6. Hinged doors are required for CT cabinets larger than 36x36 and approved by Electric Metering. The maximum height of a CT Cabinet shall be 6 foot at the top. The minimum bottom height shall be 1 foot off the ground.

7. Customer/contractor to supply and install a minimum of 1" conduit from CTs to meter base. Meter conduit shall be IMC rigid metallic or schedule 80 or better above ground and PVC underground. Conduit shall be strapped sufficiently with 2 hole straps and lag screws. Conduit to enter the side or bottom of meter base. Use the provided knockouts only.

8. No junction boxes are allowed in the conduit run nor splicing in the CT cabinet. A maximum fo 40' of conduit is to be used from CT's to the meter with no more than 4 bends allowed in conduit run. Exceptions must be approved by OUC project engineer and electric metering.

9. CT polarity mark (dot or Hl) shall face towards line feeding service (towards OUC). See additional drawing for wiring CT for single phase service. For 3 phase delta services, mount "high leg" CT at furthest right or bottom position. No exceptions.

10. On transformers with bushing CTs, Customer/Contractor shall not land secondaries until CTs have been installed. Coordinate with your OUC project engineer.

11. Customer/Contractor shall supply and install service entrance conductors from main panel through CT and/or weatherhead. Length of conductors out of weatherhead or CT to be a minimum of 6ft. Conductors must be color marked on the line side of the CT.

12. Mount lightning arresters no more than 8" from weatherhead.

13. Commercial/Multi-tenant services shall have a lockable main disconnect that will accept an OUC padlock. OUC must have 24/7 access to all metering equipment (CT cabinet, meters) and main disconnect.

14. CTs located inside a building must comply with all NEC rules regarding location of the cabinet.

15. All commercial services shall be properly labeled as explained on page 5.

16. If installation does not conform to OUC specifications, the Customer/ Contractor will be required to relocate or renumber as necessary at their expense.

Electric Service Will Not Be Energized Until:

- Specifications and requirements are met.
- A contract for electric service has been made. (Call Customer Service.)
- The electric service has passed local authority inspection and OUC has been notified by customer/contractor.

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Multi-Tenant Electric Meter Installation Requirements and Procedures

Definition: OUC defines multi-tenant as all premises except single-family homes under one roof.

These requirements are for contractors requesting single phase self-contained metering in gang type bases involving multiple family residential, or commercial projects of a similar nature.

1. Contact OUC Development Services (407-236-9651) to advise them of the proposed project layout. This will include: a site plan, a power riser diagram, and a landscaping plan showing storm water retention. Landscaping must be designed to ensure adequate accessibility for OUC personnel for all equipment maintenance purposes. IMPORTANT: Building addresses and unit numbers for tenant spaces are needed as soon as possible. The addresses used to pull permits MUST match the addresses under which orders for electric service are placed, and match those permanently marked on the meter bases as specified in this handbook. (Page 5-6)

2. Contact OUC Commercial Services (407-423-9018) to place an order for new electric service. Please specify "multi-tenant".

3. When building(s) have been cleared for power (final inspection received) by the inspection authority, if in the City of Orlando or Orange County upload the inspection clearance at **ouc.com/inspections**. For all other inspection authority inspections OUC Service Planning is notified. If OUC has not received an inspection clearance, secondaries will not be energized and meters will not be set. Contact the inspection authority to pursue the reason why a clearance was not received. (Contacts page 4)

4. After all the above items are satisfied, contact OUC Electric Distribution to schedule secondaries to be energized. (407-434-4111)

5. Contractor is responsible to schedule stand-by to install secondary conductor and perform "bolt up".

6. House main to have a lockable main.

OUC will attempt to install meter(s) within five (5) business days after the secondaries have been energized provided the contractor has met all requirements. Inclement weather, emergency calls, exposed wiring, or other conditions beyond OUC's control may cause delays. A representative for the Owner/Contractor/Developer must be on site to assist the OUC representative in verifying unit numbers and addresses.

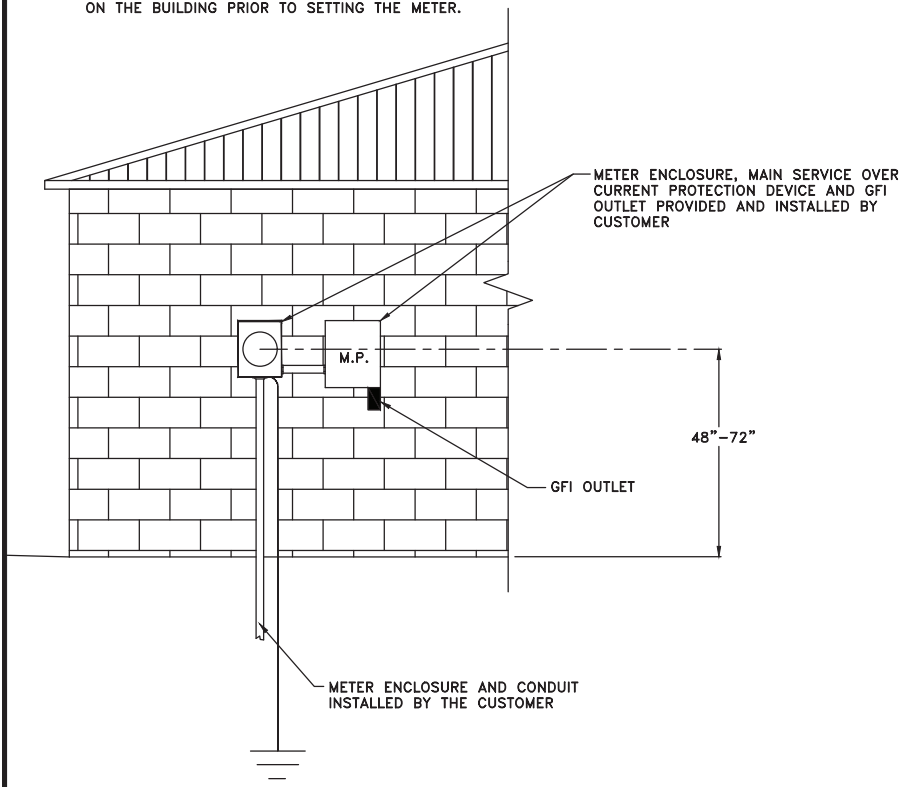
Note: It is imperative that the meter bases are permanently marked to OUC specifications. (Pages 5-6) If at any time the meter base label is not visible and/or legible, service may be terminated. In addition, permanent numbers must be located on or adjacent to unit doors so that OUC cross checks can be made with the project electrician or designated representative. Each building must also be clearly and permanently labeled with the respective address number. If meter bases and/or units are not permanently labeled, meters will not be set. Additional trips to multi-tenant buildings will result in additional charges as set forth in OUC's Administrative Policy Manual.

TEMPORARY UNDERGROUND (1–PHASE) RESIDENTAL SERVICE (T.U.G.)

EE006

NOTE:

1. MUST BE SURFACE MOUNTED ON CONCRETE BLOCK WALL ONLY
2. DO NOT RECESS INTO STUCCO FINISHES.
3. CONTACT OUC ENGINEERING FOR SERVICES GREATER THAN 200 AMPERES.
4. SINGLE FAMILY DETACHED HOMES ONLY.
5. SINGLE PHASE ONLY, NO THREE PHASE.
6. NO CURRENT TRANSFORMER (C.T.) INSTALLATION.
7. THE PERMANENT ADDRESS MUST BE MARKED ON THE BUILDING PRIOR TO SETTING THE METER.



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CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

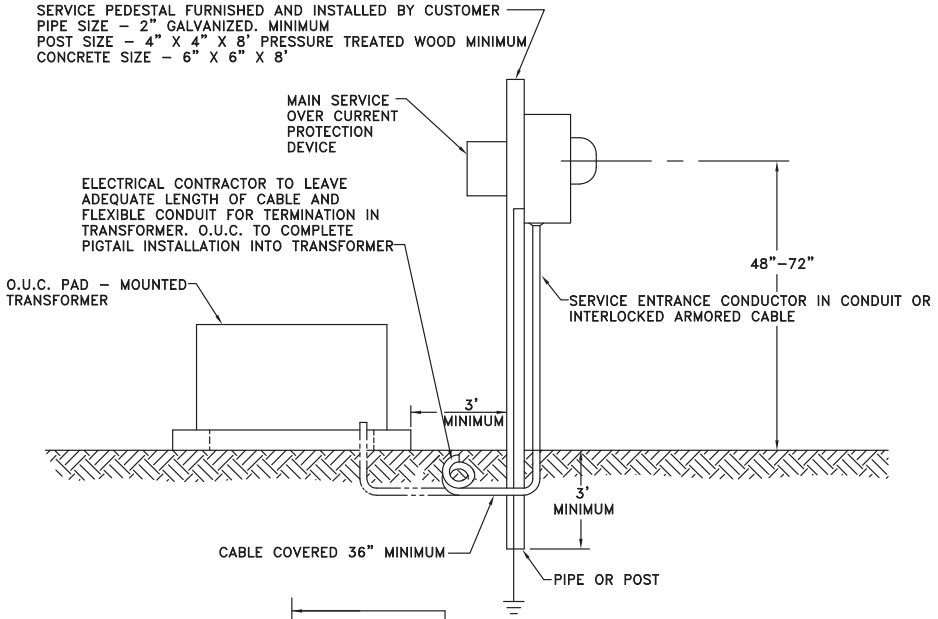
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
1	5.23.19	Added note 7	JD.	JORDAN		BRAMLETT	09-19-06

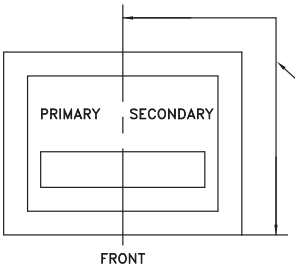
RESIDENTIAL TEMPORARY CONSTRUCTION SERVICE FROM PADMOUNTEDTRANSFORMER, SECONDARY JUNCTION BOX (200 AMP OR LESS)

EE009

NOTE:

1. CUSTOMER MUST PROVIDE ADEQUATE GROUNDING OF FACILITIES IN ACCORDANCE. WITH THE N.E.C. OR LOCAL CODES.
2. METER BASE PROVIDED AND INSTALLED BY CUSTOMER PER O.U.C. REQUIREMENTS.





OUC SINGLE PHASE TRANSFORMER PAD
SMALL PAD 40"x40"
LARGE PAD 48"x60"

TOP VIEW

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CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

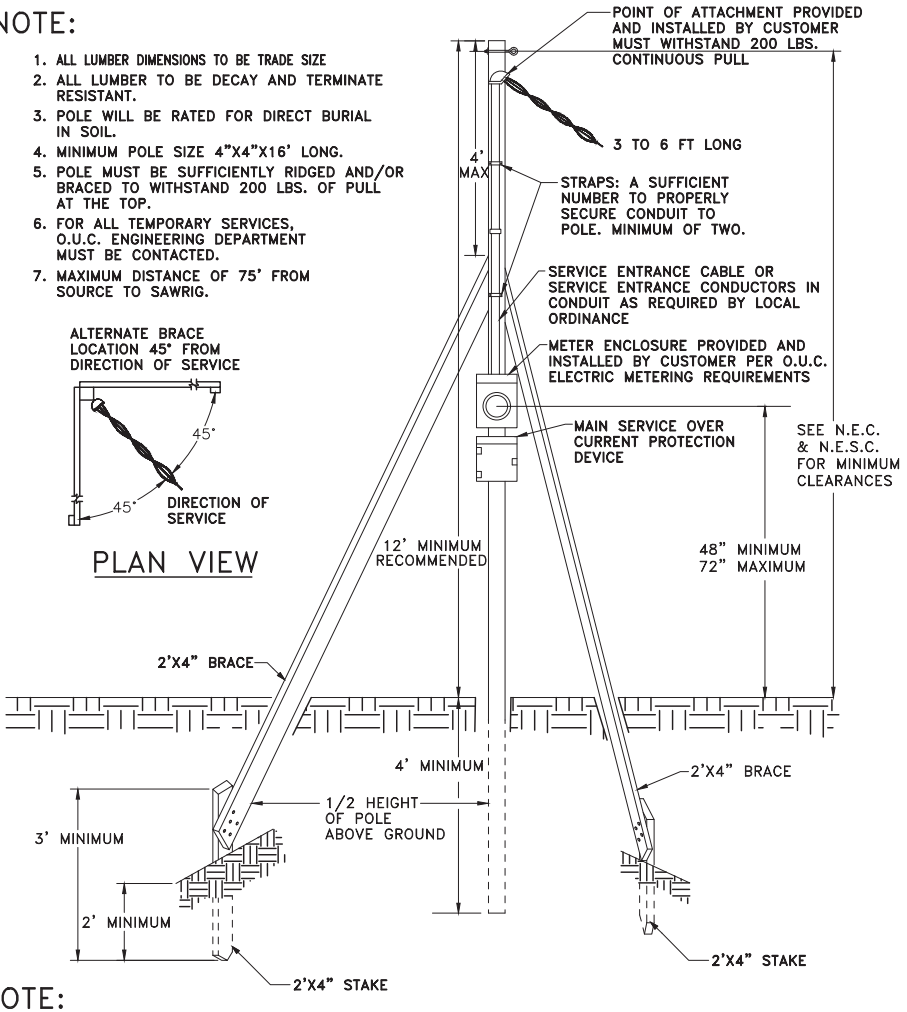
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				JORDAN		BRAMLETT	09-19-06

TYPICAL TEMPORARY CONSTUCTION SERVICE POLE

EE010

NOTE:

1. ALL LUMBER DIMENSIONS TO BE TRADE SIZE
2. ALL LUMBER TO BE DECAY AND TERMINATE RESISTANT.
3. POLE WILL BE RATED FOR DIRECT BURIAL IN SOIL.
4. MINIMUM POLE SIZE 4"X4"X16' LONG.
5. POLE MUST BE SUFFICIENTLY RIDGED AND/OR BRACED TO WITHSTAND 200 LBS. OF PULL AT THE TOP.
6. FOR ALL TEMPORARY SERVICES, O.U.C. ENGINEERING DEPARTMENT MUST BE CONTACTED.
7. MAXIMUM DISTANCE OF 75' FROM SOURCE TO SAWRIG.



ALTERNATE BRACE LOCATION 45° FROM DIRECTION OF SERVICE

PLAN VIEW

NOTE:

TYPICAL LAYOUT SITE CONDITION, LENGTH OF SPAN MAY AFFECT DESIGN CONTACT OUC ENGINEER FOR SPECIFIC DESIGN CRITERIA

THIS IS NOT A DESIGN DRAWING BUT SIMPLY TO ILLUSTRATE A TYPICAL OVERHEAD TEMP. SERVICE FOR A SAWRIG

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CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

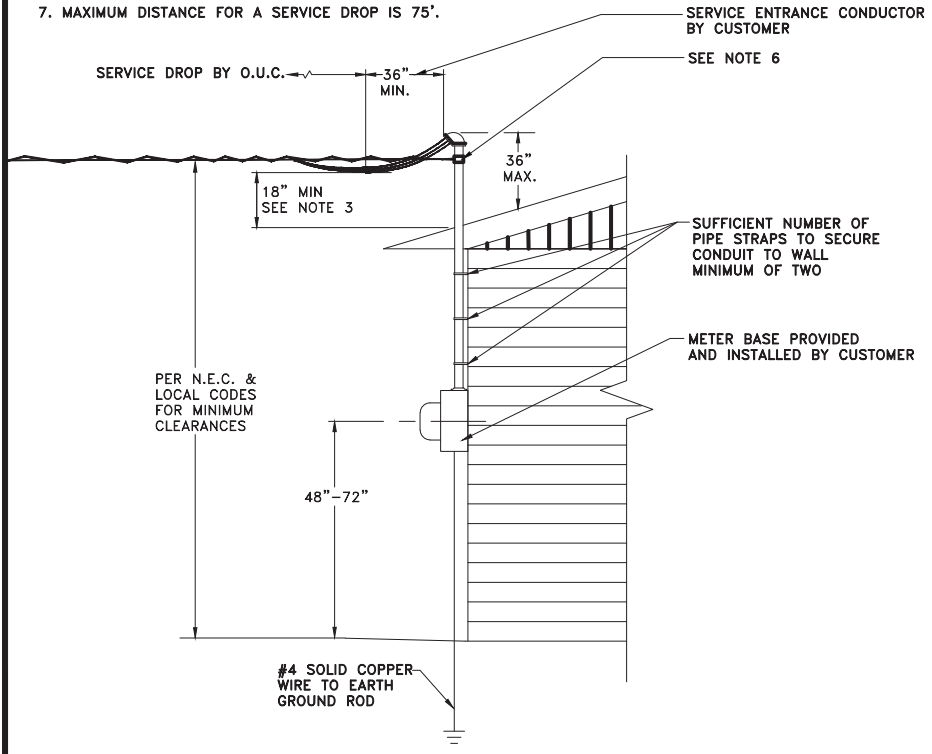
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				CG		BROWN	12-15-22

TYPICAL OVERHEAD RESIDENTIAL SERVICE INSTALLATION 400A OR LESS (SELF–CONTAINED METER BASE)

EE008

NOTE:

1. CATV OR TELEPHONE CABLE SHALL NOT BE ATTACHED TO THE SERVICE MAST.
2. FOR SPECIFIC HEIGHT REQUIREMENTS & CLEARANCE, REFER TO N.E.C. AND LOCAL CODES.
3. METER BASE PROVIDED AND INSTALLED BY CUSTOMER PER O.U.C. APPROVED METERING INSTALLATION REQUIREMENTS.
4. SERVICE RISER SHALL BE 2"MINIMUM RIGID METAL CONDUIT PROVIDED AND INSTALLED BY CUSTOMER. SERVICE RISER MUST WITHSTAND 200 LBS. OF CONTINUOUS PULL.
5. MAXIMUM CONDUIT HEIGHT ABOVE THE ROOF IS 36".
6. MEANS OF ATTACHMENT AS REQUIRED BY THE NEC.
7. MAXIMUM DISTANCE FOR A SERVICE DROP IS 75'.



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CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

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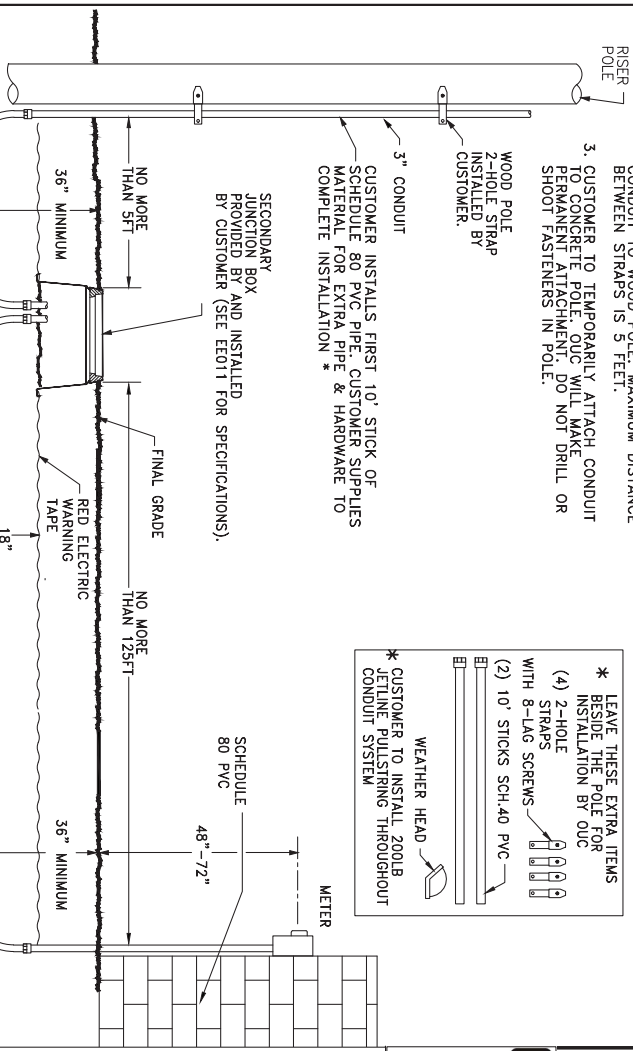
SINGLE PHASE RESIDENTIAL UNDERGROUND SELF CONTAINED SERVICE (400 AMP OR LESS)

EE014

CONTACT ELECTRIC ENGINEERING DEPARTMENT BEFORE STARTING WORK TO VERIFY DETAILS & TO INSURE THAT THE MOST CURRENT SPECIFICATIONS ARE USED.

NOTE:

1. TYPICAL LAYOUT. SITE CONDITIONS, AND LENGTH OF SPAN MAY AFFECT DESIGN. CONTACT OUC ENGINEER FOR SPECIFIC DESIGN CRITERIA (i.e. SPECIFIC CONDUIT SIZE, PVC VS. GALVANIZED SWEEPS, AND RISER LOCATION ON POLE, ETC.). HEATING OF PVC SHALL NOT BE ALLOWED.
2. CUSTOMER TO PERMANENTLY ATTACH CONDUIT TO WOOD POLE. MAXIMUM DISTANCE BETWEEN STRAPS IS 5 FEET.
3. CUSTOMER TO TEMPORARILY ATTACH CONDUIT TO CONCRETE POLE. OUC WILL MAKE PERMANENT ATTACHMENT. DO NOT DRILL OR SHOOT FASTENERS IN POLE.



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CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

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1				C.G.		BROWN	11-28-23

EE003

SINGLE PHASE RESIDENTIAL UNDERGROUND SELF CONTAINED SERVICE (400 AMP OR LESS)

CONTACT ELECTRIC ENGINEERING DEPARTMENT BEFORE STARTING WORK TO VERIFY DETAILS & TO INSURE THAT THE MOST CURRENT SPECIFICATIONS ARE USED.

NOTE:

1. TYPICAL LAYOUT. SITE CONDITIONS, AND LENGTH OF SPAN MAY AFFECT DESIGN. CONTACT OUC ENGINEER FOR SPECIFIC DESIGN CRITERIA (i.e. SPECIFIC CONDUIT SIZE, PVC VS. GALVANIZED SWEEPS.)
2. CONTACT: OUC STANDBY (MINIMUM 72 HOUR NOTICE) TO OPEN TRANSFORMER (407) 434-4111
3. HEATING OF PVC SHALL NOT BE PERMITTED. CUSTOMER TO INSTALL 200LB JETLINE PULL STRING THROUGHOUT THE CONDUIT SYSTEM.

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CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

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1	5-21-19	Added note 3	JD	JORDAN		BRAMLETT	09-19-06

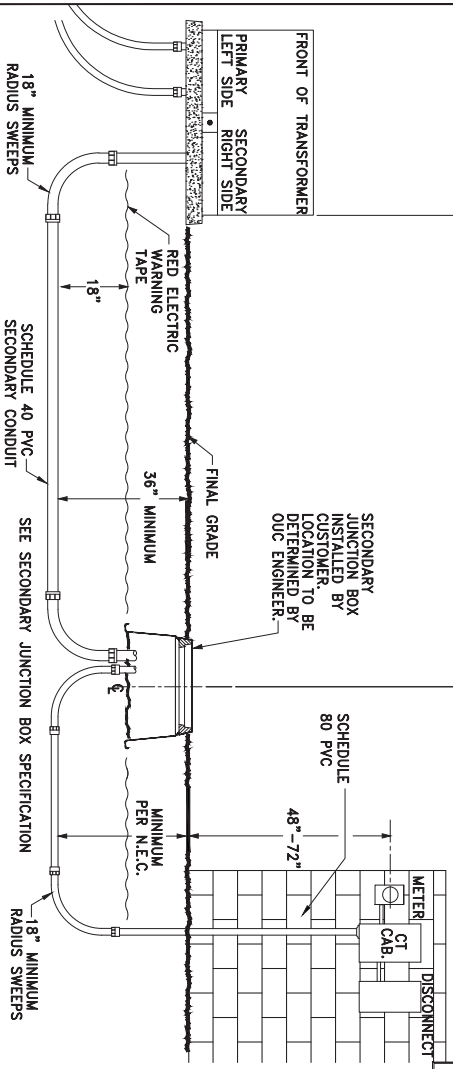
EE004

SINGLE PHASE RESIDENTIAL UNDERGROUND SERVICE WITH CURRENT TRANSFORMER (CT'S)

CONTACT ELECTRIC ENGINEERING DEPARTMENT BEFORE STARTING WORK TO VERIFY DETAILS & TO INSURE THAT THE MOST CURRENT SPECIFICATIONS ARE USED.

NOTE:

1. TYPICAL LAYOUT: SITE CONDITIONS, AND LENGTH OF SPAN MAY AFFECT DESIGN. CONTACT OUC ENGINEER FOR SPECIFIC DESIGN CRITERIA (i.e. SPECIFIC CONDUIT SIZE, PVC VS. GALVANIZED SWEEPS).
2. CONTACT: OUC STANDBY (MINIMUM 48 HOUR NOTICE) TO OPEN TRANSFORMER (407)384-4011.



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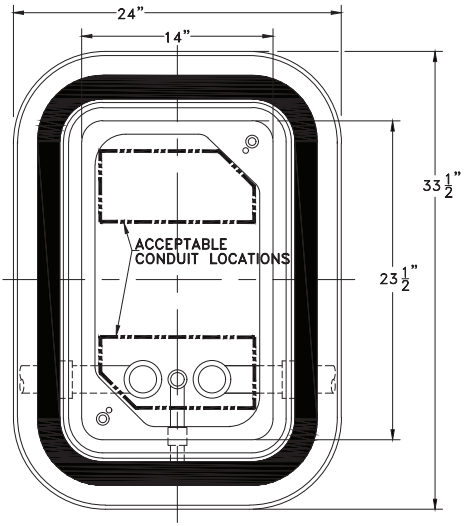
CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
1	4-22-08	DELETED EE011 FROM NOTE SEE SEC JUNC. BOX	RT	C.G.		BROWN	11-28-23

SECONDARY JUNCTION BOX 13x24x18

EE011

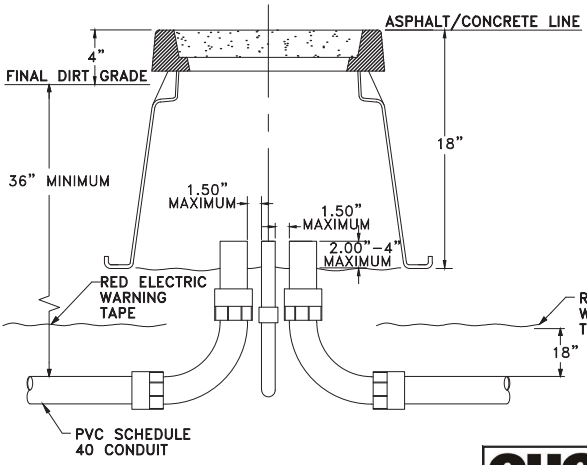


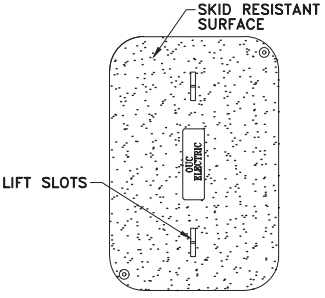
TOP VIEW

NOTES:

1. BOX AND COVER TO BE OUC STOCK NO. 046-08000
2. TOP SURFACE OF JUNCTION BOX TO BE 4" ABOVE FINAL GRADE.
3. ALL CONDUITS SHALL EXTEND 2" VERTICALLY ABOVE GROUND.
4. CONTACT OUC ENGINEER TO DETERMINE IF SWEEPS ARE TO BE PVC OR GALVANIZED.
5. USE 3/4" PENTA HEAD LOCK DOWN BOLTS.
6. FOR CONCRETE INSTALLATIONS TOP SURFACE OF JUNCTION BOX TO FLUSH WITH FINAL GRADE.
7. ALL CONDUIT REQUIRED TO BE ON ONE SIDE OF THE JUNCTION BOX IN ACCEPTABLE LOCATION SHOWN.

* (ENGINEERING TO VERIFY SIZE OF BOLTS)





COVER
N.T.S.

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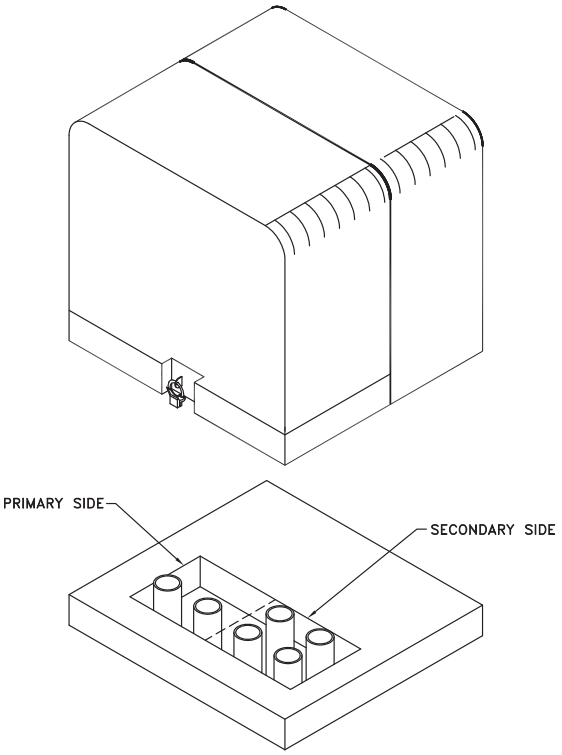
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				CG		BROWN	10-24-24

EE007

UNDERGROUND REQUIREMENTS FOR SINGLE-PHASE PAD-MOUNT TRANSFORMER INSTALLATIONS

NOTE:

1. THE LOCATION OF THE CONCRETE PAD & CONDUITS WILL BE SPECIFIED BY O.U.C..
2. PAD-MOUNT TRANSFORMERS MUST MEET THE LOCATION REQUIREMENTS FOR OIL FILLED EQUIPMENT.
3. ALL SECONDARY CONDUITS SHALL BE INSTALLED FLUSH WITH THE TOP OF THE CONCRETE PAD.



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No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				JORDAN		BRAMLETT	09-19-06

EE005

REQUIREMENTS FOR THREE-PHASE & SINGLE PHASE UG PAD-MOUNT TRANSFORMER INSTALLATIONS

NOTE:

1. CONCRETE PAD AND CONDUIT LOCATIONS TO BE DETERMINED BY OUC ENGINEER.
2. THE CLEARANCE AREA SHALL HAVE NO LANDSCAPING, EQUIPMENT, STRUCTURE OR OBSTACLES THAT MAY IMPEDE ACCESSIBILITY TO O.U.C. TRANSFORMERS. CONTACT OUC ENGINEER FOR APPROVED LAYOUT.
3. 12 FOOT CLEARANCE REQUIRED ON DOOR SIDE (FRONT) OF TRANSFORMER.
4. CONTACT O.U.C ENGINEER FOR SPECIFIC PAD SPECIFICATION.

THREE PHASE INSTALLATIONS

SECONDARY VOLTAGE AVAILABLE	KVA	MAXIMUM ALLOWED CABLES PER PHASE	APPROVED CONDUCTOR TYPE	APPROVED CONDUCTOR CABLE SIZE
120/208Y 120/240V	75	*8	COPPER	1/0
	150	*8		2/0
	300	8		350 KCM
	500	10		500 KCM
	750	12		600 KCM
	1000	14		750 KCM
	1500	16	ALUMINUM	1/0
277/480Y	150	*8		2/0
	300	8		3/0
	500	8		4/0
	750	10		250 KCM
	1000	10		350 KCM
	1500	10		500 KCM
	2000	12		600 KCM
	2500	14		750 KCM

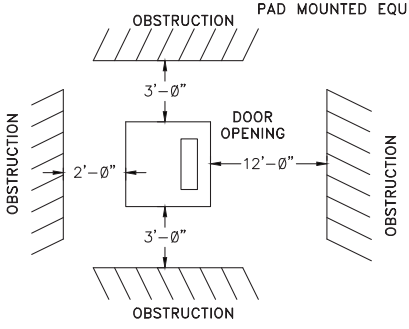
*A MULTI-PORT LUG OR SPADE EXTENSION MAY BE REQUIRED FOR MORE THAN 4 CONDUCTORS PER PHASE CONTACT O.U.C. ENGINEER.

SINGLE PHASE INSTALLATIONS

SECONDARY VOLTAGE AVAILABLE	MAXIMUM ALLOWED CABLES PER PHASE	APPROVED CONDUCTOR TYPE	APPROVED CONDUCTOR CABLE SIZE
25 KVA 120/240V 240/480V	6	COPPER ALUMINUM	# 6 TO 500 MCM
50 KVA 120/240V 240/480V	6	COPPER ALUMINUM	# 6 TO 500 MCM
100 KVA 120/240V 240/480V	6	COPPER ALUMINUM	# 6 TO 500 MCM
167 KVA 120/240V 240/480V	6	COPPER ALUMINUM	# 6 TO 500 MCM

*ANY EXCEPTIONS MUST BE APPROVED BY O.U.C ELECTRIC ENGINEERING

PAD MOUNTED EQUIPMENT CLEARANCE AREAS



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				JORDAN		BRAMLETT	09-19-06

EE013

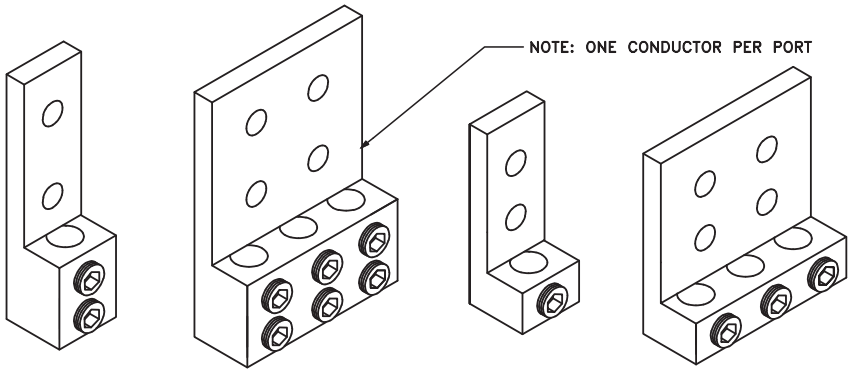
SPADE LUGS

CONDUCTOR TERMINAL LUG:

TERMINAL LUG (ONLY NEMA APPROVED LUGS ARE ACCEPTABLE) SHALL HAVE AN AMPACITY RATING EQUAL TO OR GREATER THAN THE CONDUCTOR(S) CONNECTED TO IT. TERMINAL LUG SHALL BE CAPABLE OF ACCEPTING EITHER ALUMINUM OR COPPER CONDUCTORS AND PRE FILLED BY MANUFACTURER WITH AN OXIDE INHIBITOR.

TERMINAL LUG SHALL HAVE AT LEAST TWO CIRCULAR MOUNTING HOLES FOR SINGLE CONDUCTORS OR FOUR CIRCULAR MOUNTING HOLES FOR MULTI-CONDUCTORS, 0.562 (9/16) INCHES IN DIAMETER AND SPACED 1.750 (1 3/4) INCHES CENTER TO CENTER (STANDARD NEMA SPACING FOR MOUNTING HOLES.) USE ONLY LUGS WHICH WILL NOT CONFLICT WITH OTHER LUGS, SPADES OR CURRENT TRANSFORMERS.

TERMINAL LUG CONNECTOR SHALL BE COMPRESSION TYPE OR SET SCREW TYPE. SET SCREW TYPE CONNECTORS MUST HAVE TWO (2) SET SCREWS PER CONDUCTOR FOR ALL CONDUCTORS OVER 4/0 IN SIZE. (SEE DRAWING BELOW.) SPADE LUGS CAN TYPICALLY BE FOUND IN 1, 2, 3, 4, 6, AND 8 PORT CONFIGURATIONS.



TWO SET SCREWS FOR CONDUCTORS ABOVE 4/0

ONE SET SCREW FOR CONDUCTORS 4/0 AND BELOW

MOUNTING HARDWARE

BOLT: 1/2"- 13 THDS/INCH - GRADE 5 WITH ZINC FINISH - HEX HEAD (3/4" ACROSS FLATS)
NUT: 1/2"- 13 THDS/INCH - GRADE 5 WITH ZINC FINISH - HEX HEAD (3/4" ACROSS FLATS)
WASHERS: TWO - 1/2" FLAT USS (1 3/8" OUTER DIAMETER) - GRADE 5 WITH ZINC FINISH
ONE - 1/2" LOCK WASHER WITH ZINC FINISH

FINAL HARDWARE ASSEMBLY SHOULD HAVE A MINIMUM 1/4" THREAD BEYOND NUT.

TIGHTENING BOLT AND NUT: USE TWO WRENCHES TO GAIN EQUAL OPPOSITION WHICH REDUCES THE CHANCE OF BUSHING LEAKAGE OR BREAKAGE. TORQUE TO 57 LB-FT.

CUSTOMER'S CONTRACTOR/ELECTRICIAN IS RESPONSIBLE FOR LANDING SECONDARIES.
3Ø PADMOUNT TRANSFORMER : EIGHT (8) CONDUCTORS PER PHASE TYPICAL

No.	Date	Revision	Ck.
4	02-08-18	ADD NOTES	C.G.
3	1-13-95	ADDED NOTE (CURRENT TRANS.)	
2	9-03-92	ADDED NOTE	

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Drawn by	Checked by	Approved by	Date
OLIVER		HOOVER	02-08-18

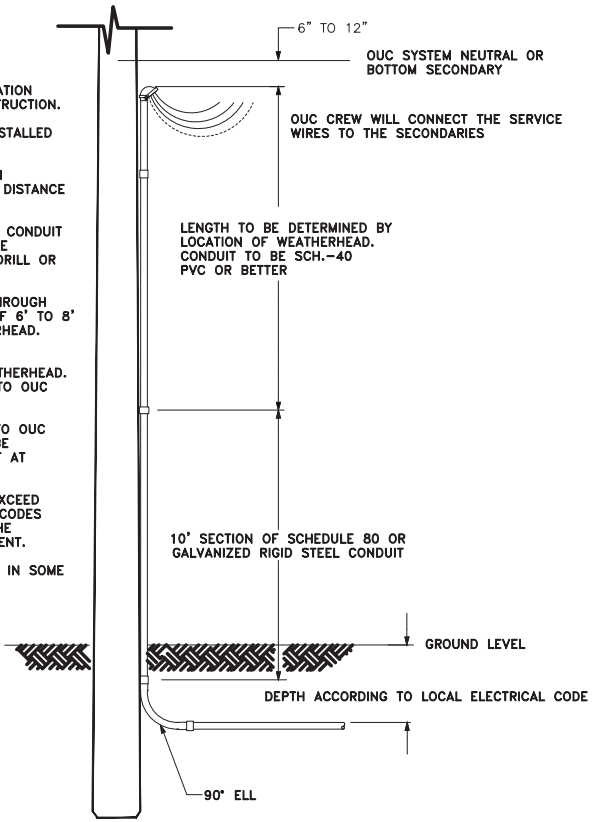
COMMERCIAL/MULTI-TENANT UNDERGROUND SECONDARY RISER

S1

NOTES:

1. CONTACT OUC ENGINEER FOR THE LOCATION OF CONDUIT ON POLE PRIOR TO CONSTRUCTION.
2. ALL MATERIAL TO BE SUPPLIED AND INSTALLED BY CUSTOMER.
3. a) CUSTOMER TO PERMANENTLY ATTACH CONDUIT TO WOOD POLE. MAXIMUM DISTANCE BETWEEN STRAPS IS 5 FEET.
   b) CUSTOMER TO TEMPORARILY ATTACH CONDUIT TO CONCRETE POLE. OUC WILL MAKE PERMANENT ATTACHMENT. DO NOT DRILL OR SHOOT FASTENERS IN POLE.
4. CUSTOMER TO INSTALL CONDUCTORS THROUGH THE WEATHERHEAD, WITH A MINIMUM OF 6' TO 8' OF CONDUCTORS OUT OF THE WEATHERHEAD.
5. CUSTOMER TO CONNECT THE LIGHTNING ARRESTER LEADS 6" TO 8" FROM WEATHERHEAD. DO NOT ATTACH LIGHTNING ARRESTER TO OUC EQUIPMENT.
6. IF INSTALLATION DOES NOT CONFORM TO OUC SPECIFICATIONS, THE CUSTOMER WILL BE REQUIRED TO RELOCATE OR REPLACE IT AT HIS OR HER EXPENSE.
7. ENTIRE INSTALLATION MUST MEET OR EXCEED ALL LOCAL AND NATIONAL ELECTRICAL CODES AND WILL REMAIN A COMPONENT OF THE OWNER / CUSTOMERS SERVICE EQUIPMENT.

* GALVANIZED RIGID STEEL MAY BE REQUIRED IN SOME LOCATIONS. CONTACT O.U.C ENGINEER AND THE LOCAL ELECTRICAL INSPECTOR.



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No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				CG		BROWN	12-15-22

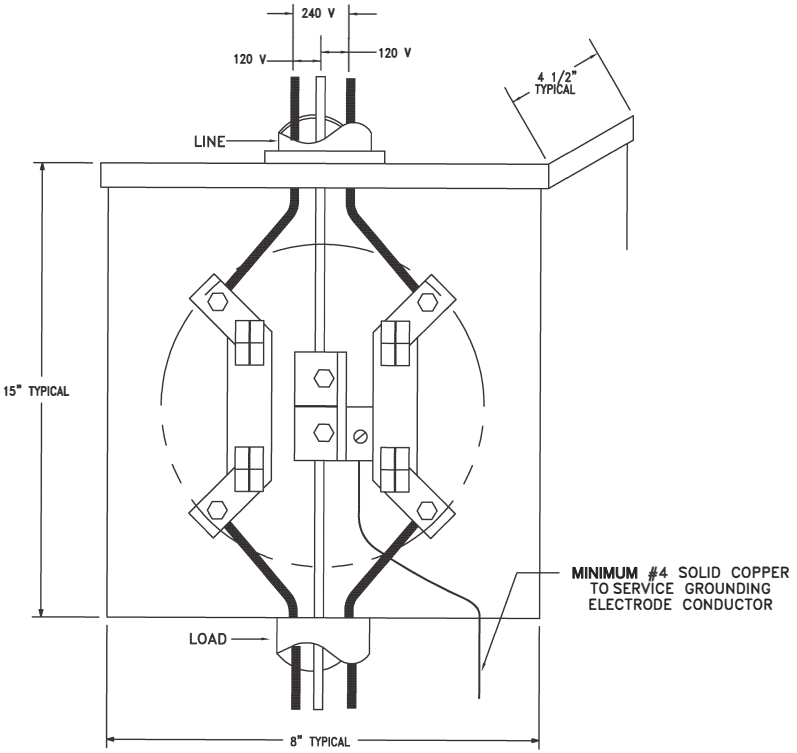
INDEX FOR METER BASE INSTALLATIONS

Service Size	*Phases*	Installation Type	OUC Digital Meter	Drawing
All	1	2 Wire 480v	Go to 3 Wire	N/A
≤*200A*	1	3 Wire 120/240v (Comm. w/bypass)	5CD/6CD/7CD	M3, 4
	1	3 Wire 120/208v Network*	*5XD*	M5
	1	3 Wire 240/480	5CM (node)	M12
	1	3 Wire 277/480	Go to 3 Phase	N/A
≤200A	3	4 Wire 120/208v Y	5ZR	M6
	3	4 Wire 120/240v Delta		M6
	3	4 Wire 277/480v		M13
	3	4 Wire 240/480v Delta		M13
>200A	1	3 Wire 120/240v Commercial	1JR	M11
	1	3 Wire 120/208v	Go to 3 Phase	—
	1	3 Wire 240/480v	1JR w/PT	M11
	1	3 Wire 277/480v	N/A	N/A
400A	1	3 Wire 120/240v Residential	5CE	M15
>200A	3	4 Wire 120/208v Y	**1ZR**	**M7**
	3	4 Wire 120/240v Delta		
	3	4 Wire 277/480v		
	3	4 Wire 240/480v Delta		

*** Contractor must install 5th terminal in meter base**
NOTE FOR OUC:
5CR & 5XR meters are identical to 5CD & 5XD except without an internal disconnect.
2PD meters are identical to 5CR meters except configured for bi-directional PV services.

TYPICAL OVERHEAD RESIDENTIAL 120/240V SINGLE PHASE, 3 WIRE METER SOCKET FOR 200 AMPS OR LESS SERVICE

M3A



* DO NOT INSTALL #4 COPPER GROUNDING ELECTRODE WITHIN THE LINE CHASE/COMPARTMENT

* DO NOT WIRE THRU BACK OF SOCKET
USE PROVIDED KNOCKOUTS ONLY
DO NOT RECESS

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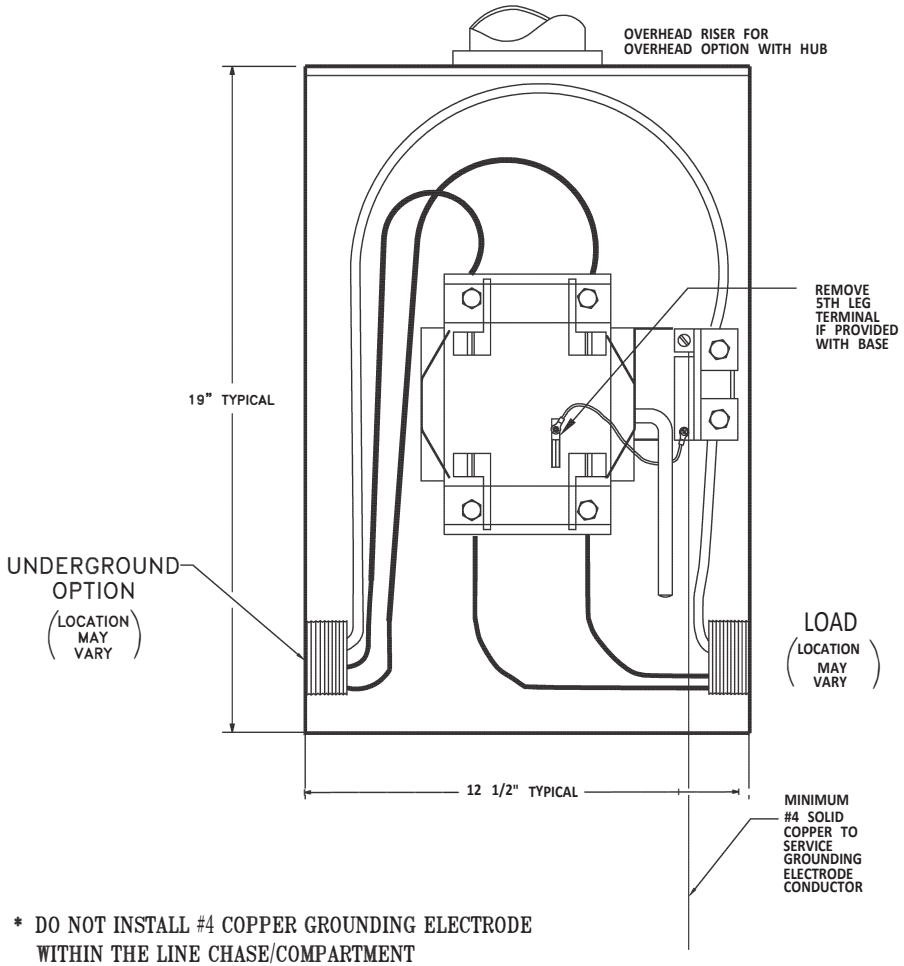
Orlando Utilities Commission

No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
1	09-11-97	Changed Text Size, Added Note	RLF	JORDAN			8-26-92

M3B

TYPICAL COMMERCIAL 120/240V SINGLE PHASE, 3 WIRE METER SOCKET FOR 200 AMPS OR LESS SERVICE



* DO NOT INSTALL #4 COPPER GROUNDING ELECTRODE WITHIN THE LINE CHASE/COMPARTMENT

* DO NOT WIRE THRU BACK OF SOCKET
USE PROVIDED KNOCKOUTS ONLY
DO NOT RECESS

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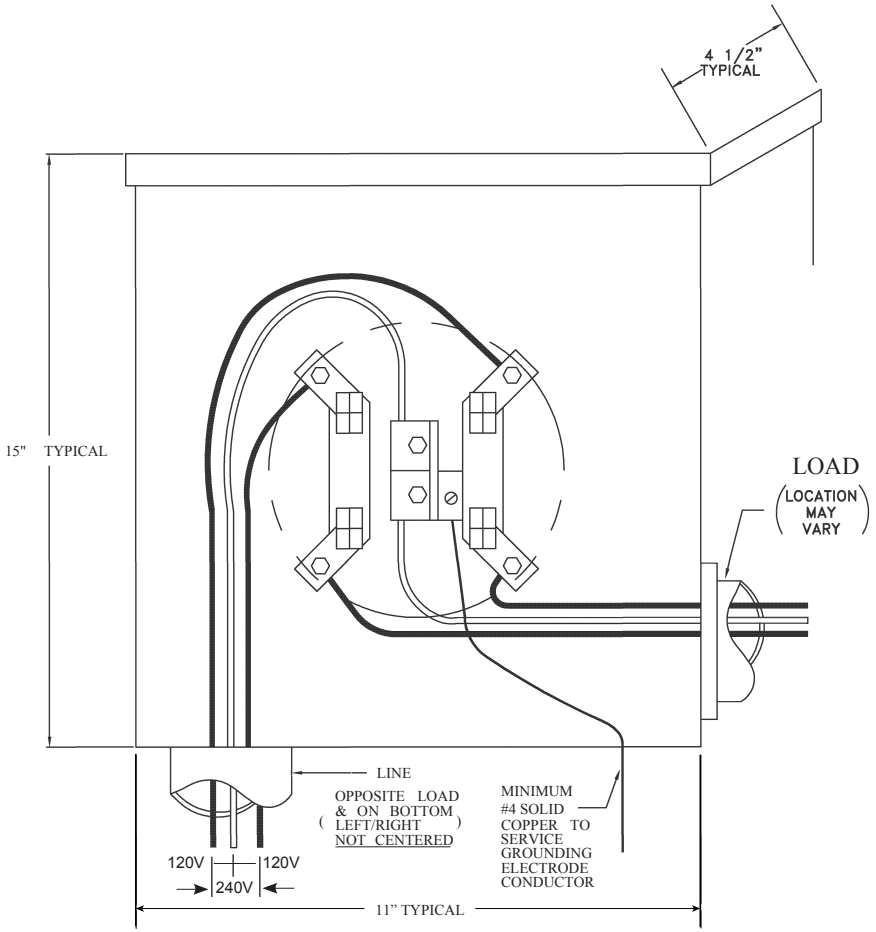
				Drawn by	Checked by	Approved by	Date
No.	Date	Revision	Ck.	JORDAN			09-12-97

M4

TYPICAL UNDERGROUND RESIDENTIAL 120/240V, 1Ø 3 WIRE, METER SOCKET FOR 200 AMPS OR LESS SERVICE



* DO NOT INSTALL #4 COPPER GROUNDING ELECTRODE WITHIN THE LINE CHASE/COMPARTMENT

* DO NOT WIRE THRU BACK OF SOCKET
  USE PROVIDED KNOCKOUTS ONLY
  DO NOT RECESS

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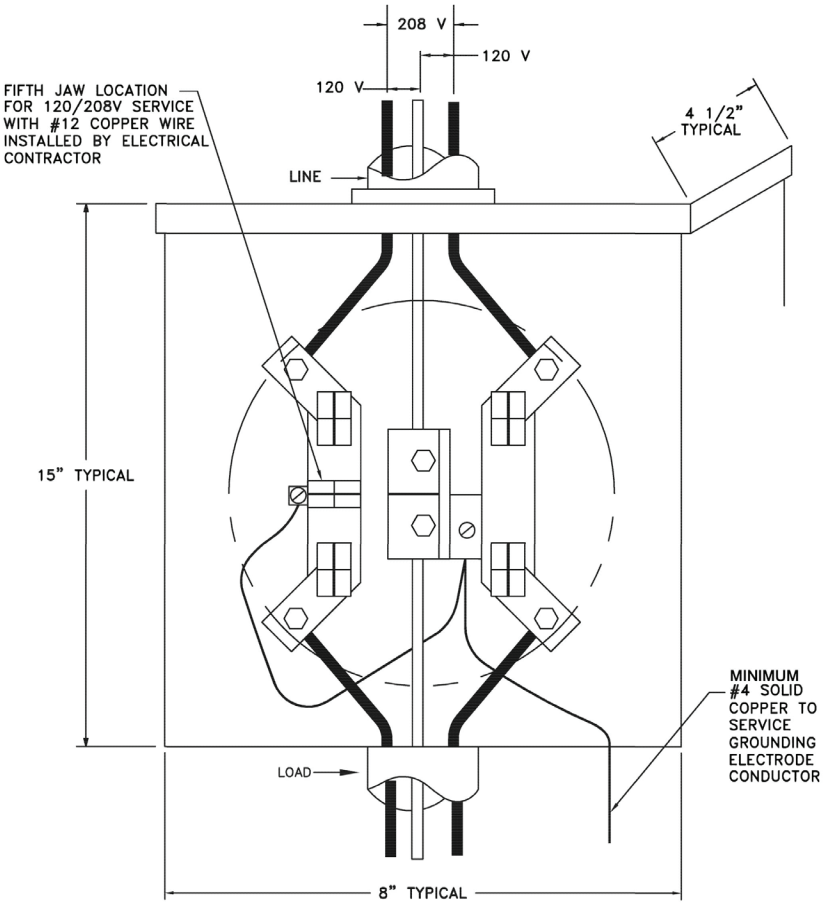
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
2	9-11-97	Changed Text Size, Added Notes	RLF	JORDAN			8-26-92
1	3-20-96	Move Line Location					

M5A

TYPICAL RESIDENTIAL NETWORK 120/208V, 1Ø
3 WIRE, METER SOCKET FOR OVERHEAD SERVICE 200 AMPS OR LESS



* DO NOT INSTALL #4 COPPER GROUNDING ELECTRODE WITHIN THE LINE CHASE/COMPARTMENT

* DO NOT WIRE THRU BACK OF SOCKET
USE PROVIDED KNOCKOUTS ONLY
DO NOT RECESS

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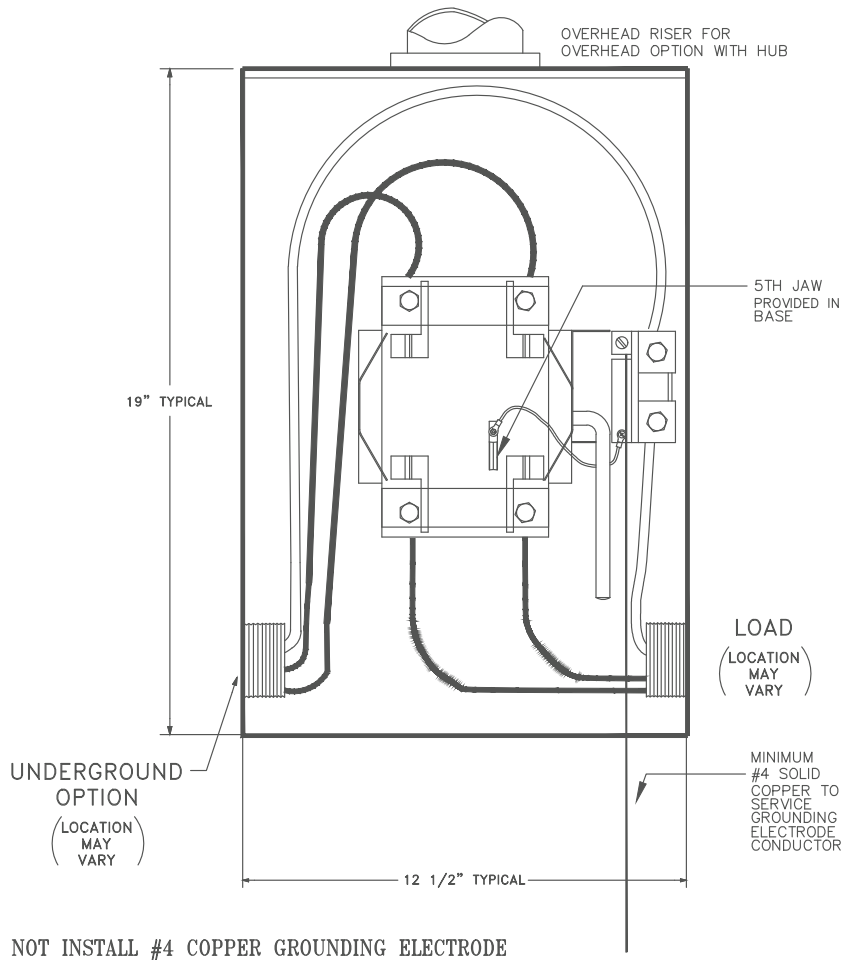
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
1	09-11-97	Changed Title, Various Text Sizes	RLF	JORDAN			8-26-92

M5B

TYPICAL COMMERCIAL NETWORK 120/208V, 1Ø
3 WIRE, METER SOCKET FOR 200 AMPS OR LESS SERVICE



* DO NOT INSTALL #4 COPPER GROUNDING ELECTRODE WITHIN THE LINE CHASE/COMPARTMENT

* DO NOT WIRE THRU BACK OF SOCKET
USE PROVIDED KNOCKOUTS ONLY
DO NOT RECESS

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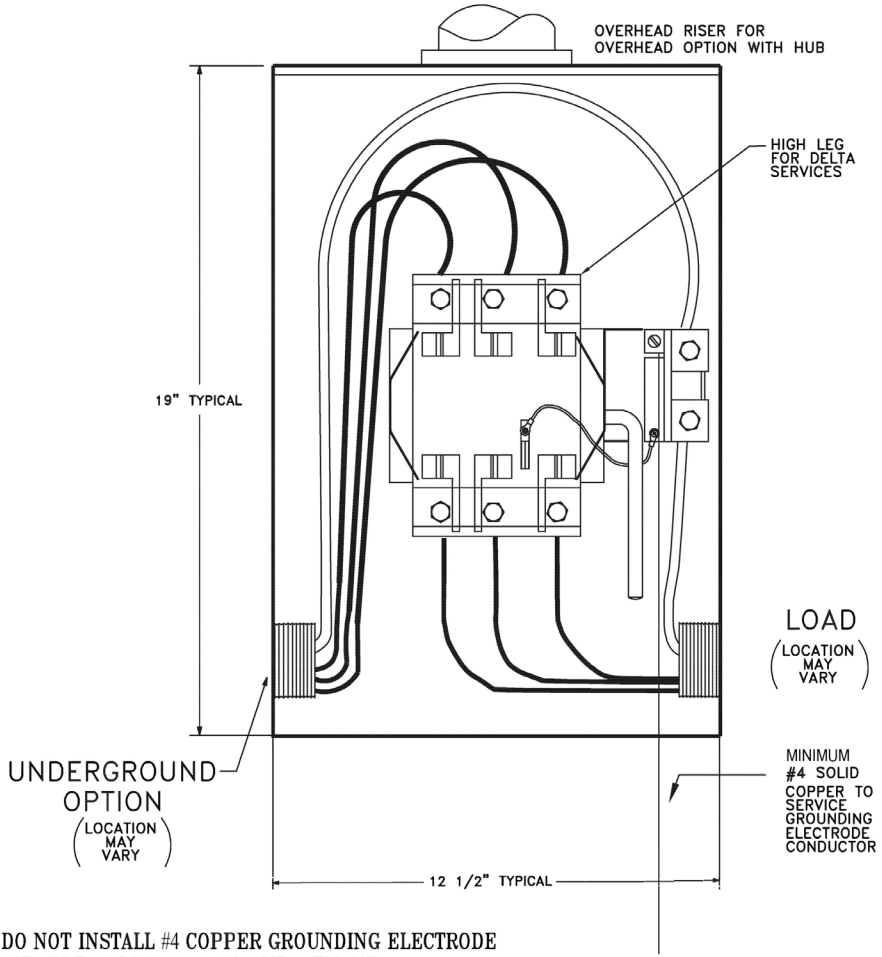
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				CG		BROWN	12-15-22

M6

TYPICAL 3 PHASE WYE OR DELTA, 4 WIRE, METER SOCKET FOR 200 AMPS OR LESS SERVICE



* DO NOT INSTALL #4 COPPER GROUNDING ELECTRODE WITHIN THE LINE CHASE/COMPARTMENT

* DO NOT WIRE THRU BACK OF SOCKET USE PROVIDED KNOCKOUTS ONLY DO NOT RECESS

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No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				JORDAN			9-3-92

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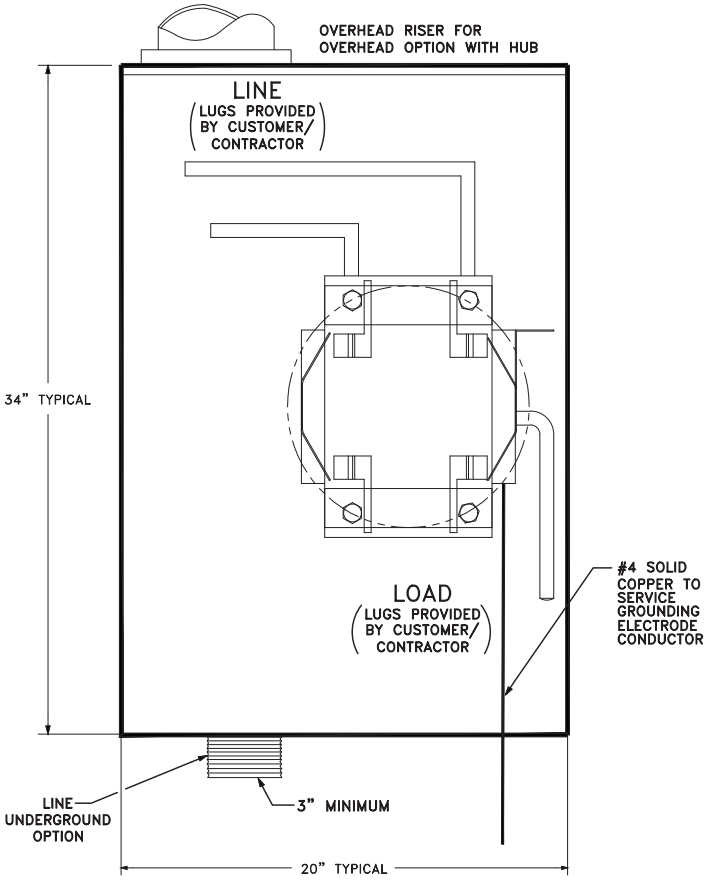
TYPICAL RESIDENTIAL 120/240V SINGLE PHASE, 3 WIRE SOCKET FOR 400 AMP MAXIMUM SERVICE (320 AMP SOCKET METER)

M15



NOTES:

1. NO "K" BASES
2. REFERENCE METER EQUIPMENT GROUP(MEG) LIST STEEL ONLY (NO ALUMINUM) LIST (STEEL ONLY)
3. SURGE PROTECTION COLLARS/SLEEVES ARE NOT PERMITTED

* DO NOT INSTALL #4 COPPER GROUNDING ELECTRODE WITHIN THE LINE CHASE/COMPARTMENT

* DO NOT WIRE THRU BACK OF SOCKET USE PROVIDED KNOCKOUTS ONLY
DO NOT RECESS

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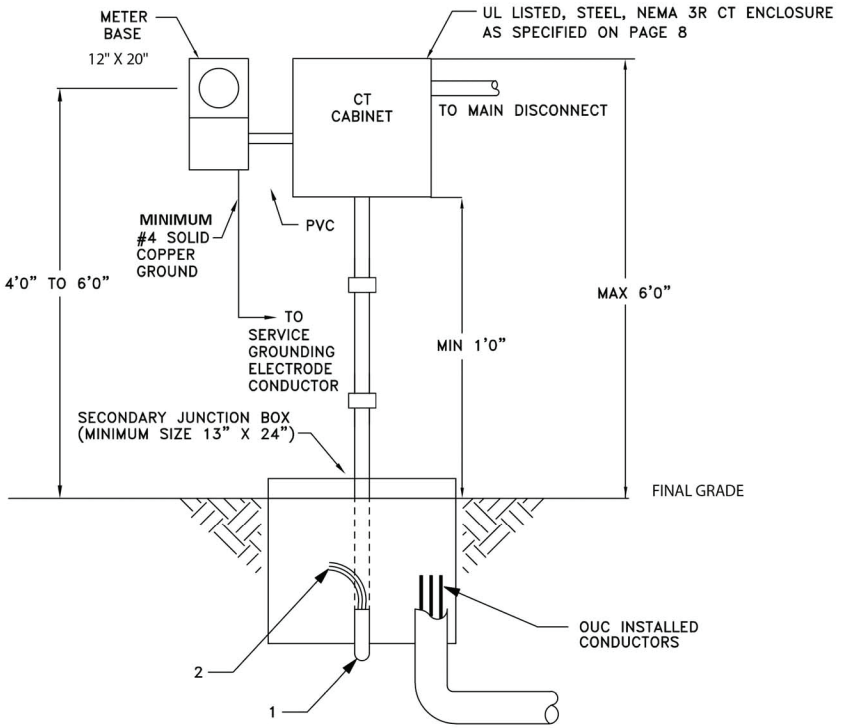
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				CG		BROWN	12-15-22

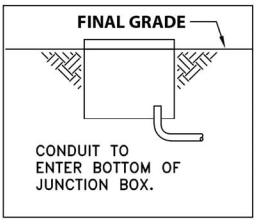
METER EQUIPMENT GROUP APPROVED 320AMP BASES

Manufacturer	Amp Rating	Catalog Number	Phase	Over/Under	Bypass Handle
Cutler Hammer	320	1008836CH	1	O/U	Y
Cutler Hammer	320	UT-H4300T-FLCH	1	O	Y
Cutler Hammer	320	UT-H5300T-FLCH	1	O	Y
Cutler Hammer	320	UT-H5330U-FLCH	1	O/U	Y
Cutler Hammer	400	CG1212P400BSL	1	U	Y
Durham	320	1008836	1	O/U	Y
Durham	320	UT-H4300T-FL	1	O	Y
Durham	320	UT-H5300T-FL	1	O	Y
Durham	320	UT-H5330U-FL	1	O/U	Y
Landis & Gyr	320	47705-02FL	1	O/U	Y
Landis & Gyr	320	49005-02FL	1	O/U	Y
Midwest	320	1008836MEP	1	O/U	Y
Midwest	320	UT-H4300T-FLMEP	1	O	Y
Midwest	320	UT-H5300T-FLMEP	1	O	Y
Midwest	320	UT-H5330U-FLMEP	1	O/U	Y
Milbank	400	U3313-X-HSP	1	O/U	Y
Murray	320	DL143W5	1	O/U	Y
Siemens	320	MC0816B1350RLTM	1	O/U	Y
Square D	320	1008836SQD	1	O/U	Y
Square D	320	UT-H4300T-FLSQD	1	O	Y
Square D	320	UT-H5300T-FLSQD	1	O	Y
Square D	320	UT-H5330U-FLSQD	1	O/U	Y
Square D	400	QU816D400SLxxx	1	U	Y
Square D	400	QU12L400SLxxx	1	U	Y

M10

UNDERGROUND 1Ø RESIDENTIAL SERVICE ENTRANCE LARGER THAN 400 AMP. (CT REQUIRED)





DETAIL

NOTES:

1. CUSTOMER/CONTRACTOR TO SUPPLY AND INSTALL CONDUIT PER NEC REQUIREMENTS.
2. CUSTOMER/CONTRACTOR TO SUPPLY AND INSTALL SERVICE ENTRANCE CONDUCTORS FROM MAIN PANEL THROUGH TO O.U.C. SECONDARY JUNCTION BOX. ALLOW A MINIMUM OF 4' (FEET) OF CONDUCTOR IN SECONDARY BOX FOR MAKEUP BY O.U.C. PER NEC REQUIREMENTS.

No.	Date	Last Revision	Ck.
3	12-6-17	ADDED HEIGHT REQUIREMENTS	J.D.
2	09-11-97	Added & Changed Note	RLF
1	1/27/93	Revised to restrict application	

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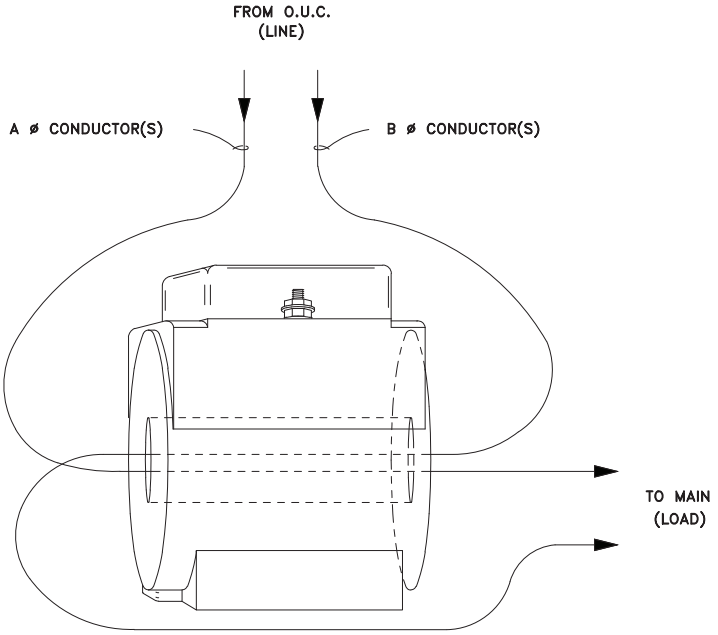
JORDAN			

M11

SINGLE PHASE CT WIRING DIAGRAM



NOTE: ALL LIKE PHASE CONDUCTORS SHOULD GO THROUGH THE CT IN THE SAME DIRECTION

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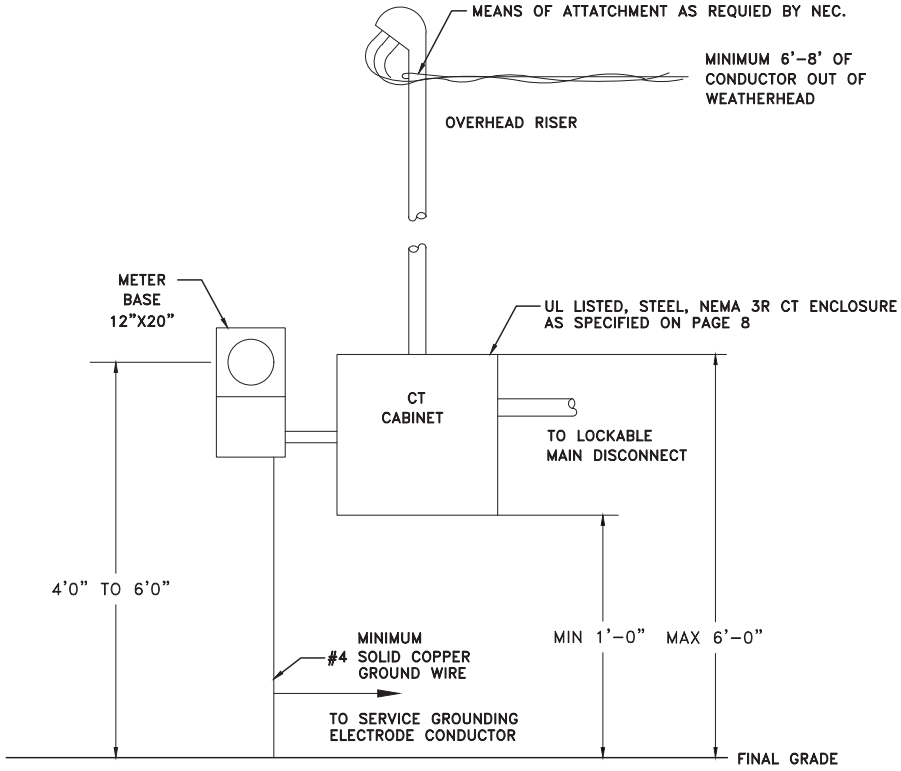
				CG		BROWN	12-15-22

COMMERCIAL OVERHEAD SERVICE ENTRANCE LARGER THAN 200 AMPS (CT REQUIRED) WITH CT CABINET

M7A



NOTE:

1. CONDUCTORS MUST BE COLOR MARKED IN CT CABINET ON LINE SIDE OF CT. FOR DELTA SERVICES, MOUNT CT FOR HIGH LEG TO THE RIGHT OR BOTTOM. REFER TO NEC FOR COLOR CODING
2. CT'S REQUIRED FOR COMMERCIAL SERVICES LARGER THAN 200 AMPS.
3. FOR CT'S LOCATED INSIDE A BUIDLING REFER TO THE NEC REGARDING LOCATION OF THE CABINET.
4. ALL GROUND WIRE IS REQUIRED TO BE EXTERNAL AND NOT WITHIN CT CHASE.
5. CLEARLY MARK SOURCE AND LOAD PIPES.

No.	Date	Revision	Ck.
1	12-06-17	ADDED HEIGHT REQUIREMENTS	CF
1	4-22-08	ADDED NOTE 3 & NEC NOTE	RT

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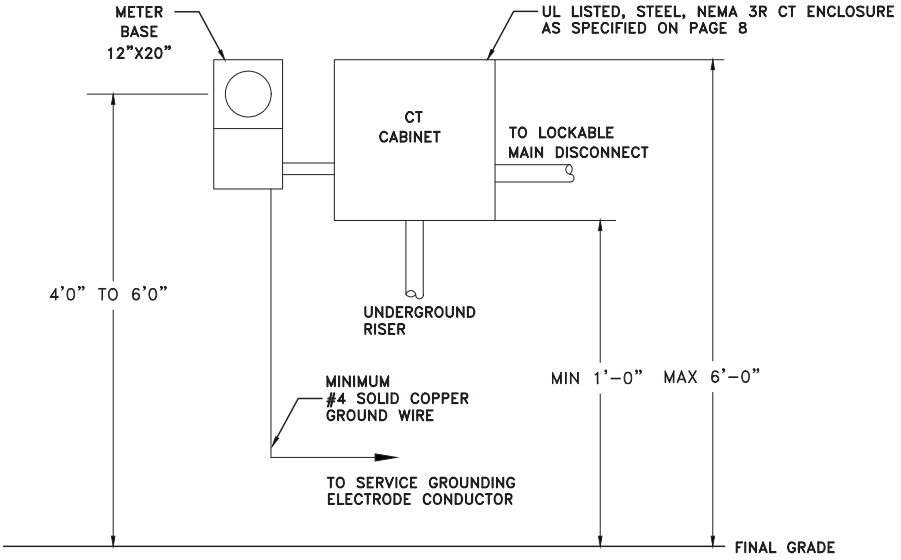
Drawn by	Checked by	Approved by	Date
CG		BROWN	10-24-24

COMMERCIAL UNDERGROUND SERVICE ENTRANCE LARGER THAN 200 AMPS (CT REQUIRED) WITH CT CABINET

M7B



NOTE:

1. CONDUCTORS MUST BE COLOR MARKED IN CT CABINET ON LINE SIDE OF CT. FOR DELTA SERVICES, MOUNT CT FOR HIGH LEG TO THE RIGHT OR BOTTOM. REFER TO NEC FOR COLOR CODING
2. CT'S REQUIRED FOR COMMERCIAL SERVICES LARGER THAN 200 AMPS.
3. FOR CT'S LOCATED INSIDE A BUIDLING REFER TO THE NEC REGARDING LOCATION OF THE CABINET.
4. ALL GROUND WIRE IS REQUIRED TO BE EXTERNAL AND NOT WITHIN CT CHASE.
5. CLEARLY MARK SOURCE AND LOAD PIPES

No.	Date	Revision	Ck.
2	4-22-08	ADDED NOTE 3	R.T.
1	3-25-96	ADDED TEXT	

OUC The Reliable One

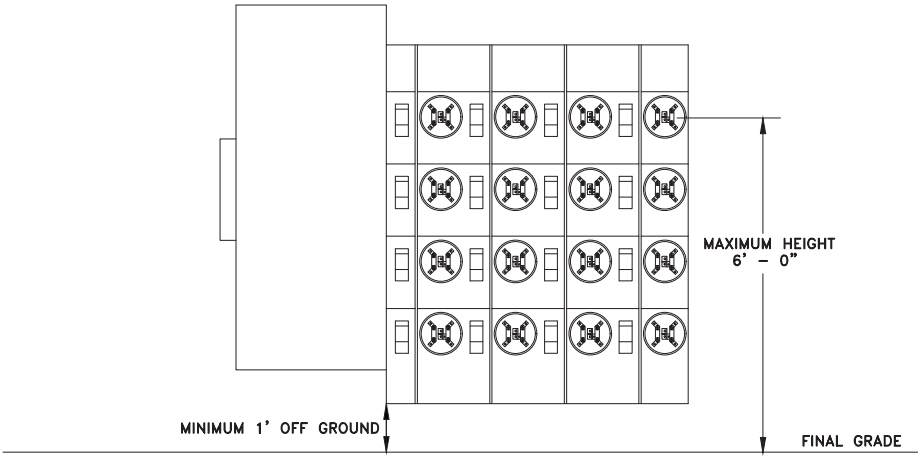
METERING STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

Drawn by	Checked by	Approved by	Date
CG		BROWN	10-24-24

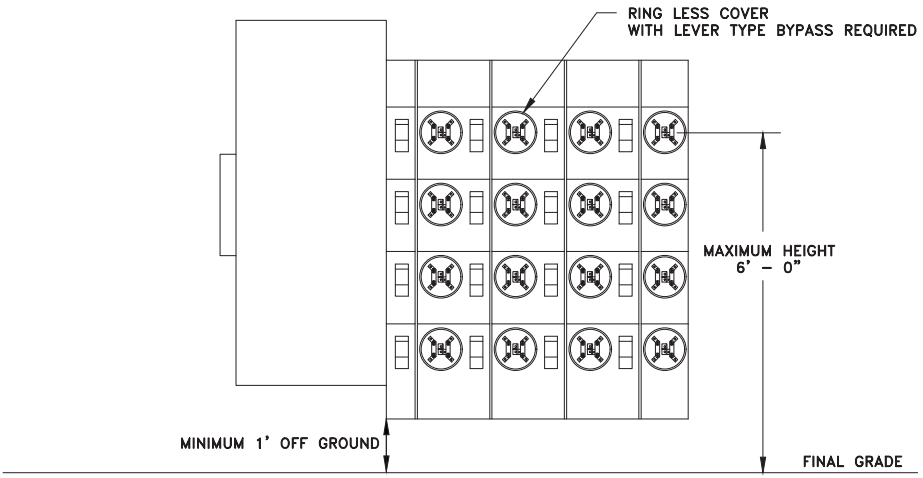
M14

MULTIPLE POSITION (GANGED) METER CENTERS

RESIDENTIAL/APARTMENT/TOWN HOME



COMMERCIAL



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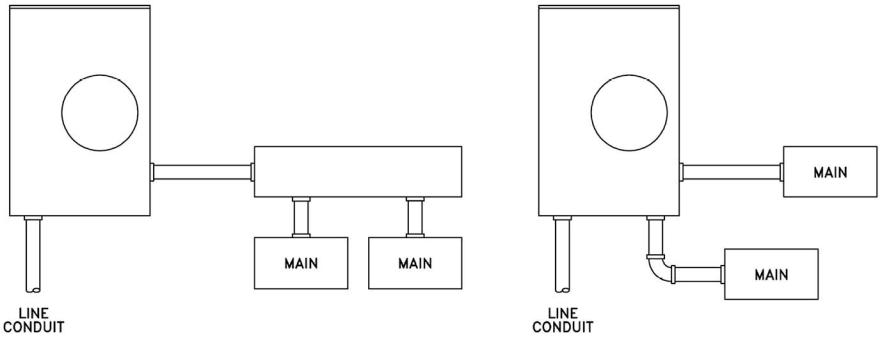
METERING STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

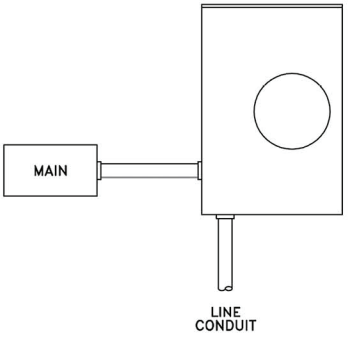
No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				CG		BROWN	12-15-22

OUC METER BASE CONFIGURATION

M16



ACCEPTABLE CONFIGURATION



UNACCEPTABLE CONFIGURATION

NOTES:

1. THE LOWER LEFT PORTION OF THE METER SOCKET IS RESERVED FOR USE BY THE COMPANY ON UNDERGROUND SERVICES.

* DO NOT WIRE THRU BACK OF SOCKET
USE PROVIDED KNOCKOUTS ONLY
DO NOT RECESS

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OH & UG Distribution System
Orlando Utilities Commission

No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				JORDAN			07-23-08

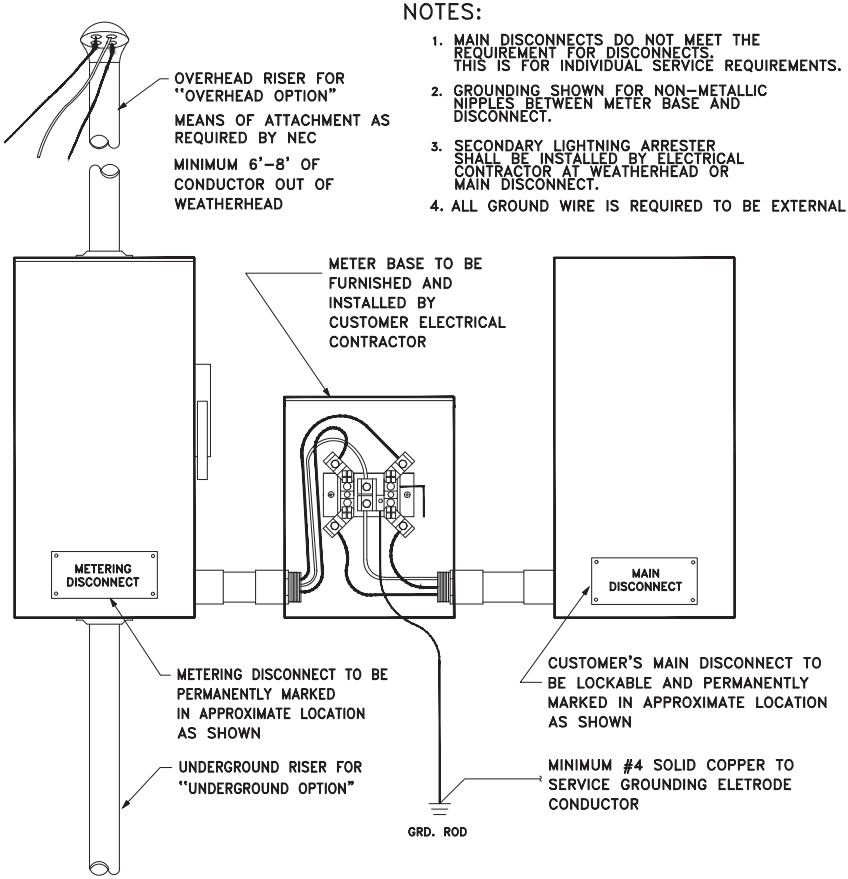
M12

DETAIL FOR SINGLE-PHASE 240/480V SERVICES 200A OR LESS, (SELF-CONTAINED METERING)

CAD #

NOTES:

1. MAIN DISCONNECTS DO NOT MEET THE REQUIREMENT FOR DISCONNECTS. THIS IS FOR INDIVIDUAL SERVICE REQUIREMENTS.
2. GROUNDING SHOWN FOR NON-METALLIC NIPPLES BETWEEN METER BASE AND DISCONNECT.
3. SECONDARY LIGHTNING ARRESTER SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR AT WEATHERHEAD OR MAIN DISCONNECT.
4. ALL GROUND WIRE IS REQUIRED TO BE EXTERNAL



* COMMERCIAL SERVICE SHALL HAVE LEVER BYPASS
DO NOT WIRE THRU BACK OF SOCKET
USE PROVIDED KNOCKOUTS ONLY
DO NOT RECESS

No.	Date	Revision	Ck.
3	04-22-08	ADDED NEC NOTE	R.T.
2	09-11-97	Added & Changed Note	RLF
1	8-6-92	CHANGED 480V TO 240/480V	

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METERING STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

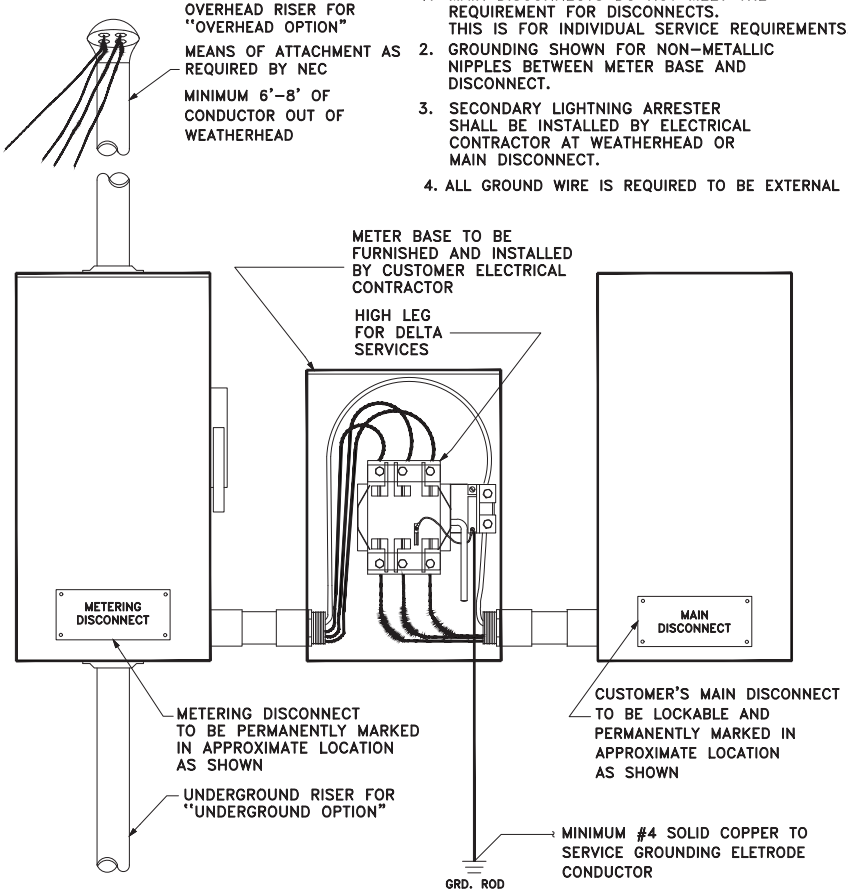
Drawn by	Checked by	Approved by	Date
CG		BROWN	11-28-23

M13

DETAIL FOR THREE-PHASE 480V SERVICES 200A OR LESS, (SELF-CONTAINED METERING)

NOTES:

1. MAIN DISCONNECTS DO NOT MEET THE REQUIREMENT FOR DISCONNECTS. THIS IS FOR INDIVIDUAL SERVICE REQUIREMENTS.
2. GROUNDING SHOWN FOR NON-METALLIC NIPPLES BETWEEN METER BASE AND DISCONNECT.
3. SECONDARY LIGHTNING ARRESTER SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR AT WEATHERHEAD OR MAIN DISCONNECT.
4. ALL GROUND WIRE IS REQUIRED TO BE EXTERNAL



* COMMERCIAL SERVICES SHALL HAVE LEVER BYPASS
DO NOT WIRE THRU BACK OF SOCKET
USE PROVIDED KNOCKOUTS ONLY
DO NOT RECESS

No.	Date	Revision	Ck.
2	04-22-08	ADDED NOTE NEC	R.T.
1	09-11-97	Added & Changed Notes	RLF

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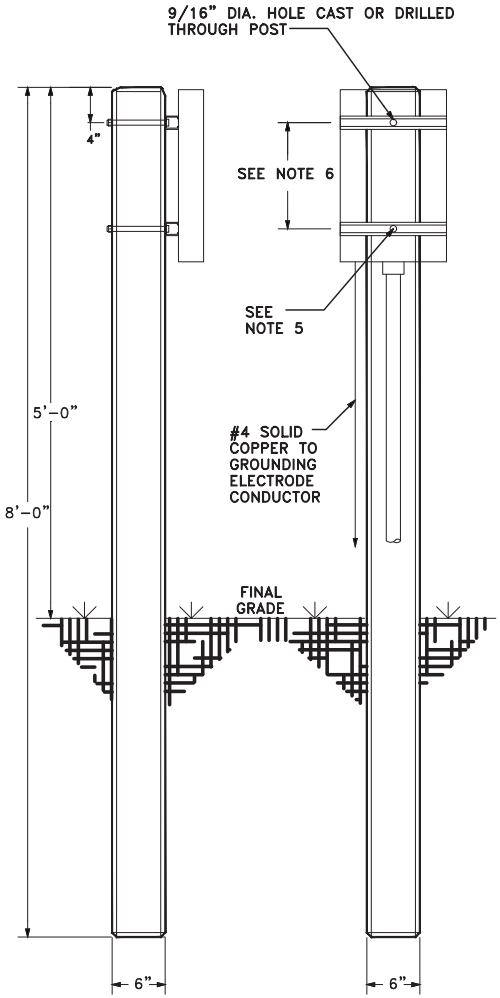
METERING STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

Drawn by	Checked by	Approved by	Date
CG		BROWN	11-28-23

S2

CONCRETE METER POST
6" X 6" X 8'



NOTES:

1. USE MIN. 4500 P.S.I. CONCRETE REINFORCED WITH FOUR (4) #4 REBARS SPACED IN A 4" X 4" SQUARE CENTERED IN THE POST.
2. ALL EDGES TO HAVE 1/2" CHAMFER.
3. TOP HOLE WILL BE 7/16" CAST OR DRILLED THROUGH POST 4" FROM END.
4. MOUNT METER BASE ON 1" X 1/2" KINDORF CHANNEL OR EQUAL. DO NOT DRILL OR PUNCH HOLES IN METER BASE. USE PROVIDED KNOCKOUTS.
5. MOUNT KINDORF CHANNEL USING ONLY 1/2" BOLT THROUGH POST OR LEAD ANCHOR AND BOLT. DO NOT USE POWER GUN TO SHOOT FASTENERS INTO POST. DO NOT USE PLASTIC ANCHORS OR TAPCONS.
6. DIMENSION TO MATCH MOUNTING BOLTS IN METER BASE.
7. KINDORF CHANNEL IS NOT TO EXTEND PAST SIDED OF METER BASE.

No.	Date	Revision	Ck.
2	09-12-97	Add Meter Base	RLF
1	3-09-94	CHANGED TITLE AND ADDED NOTE 8	

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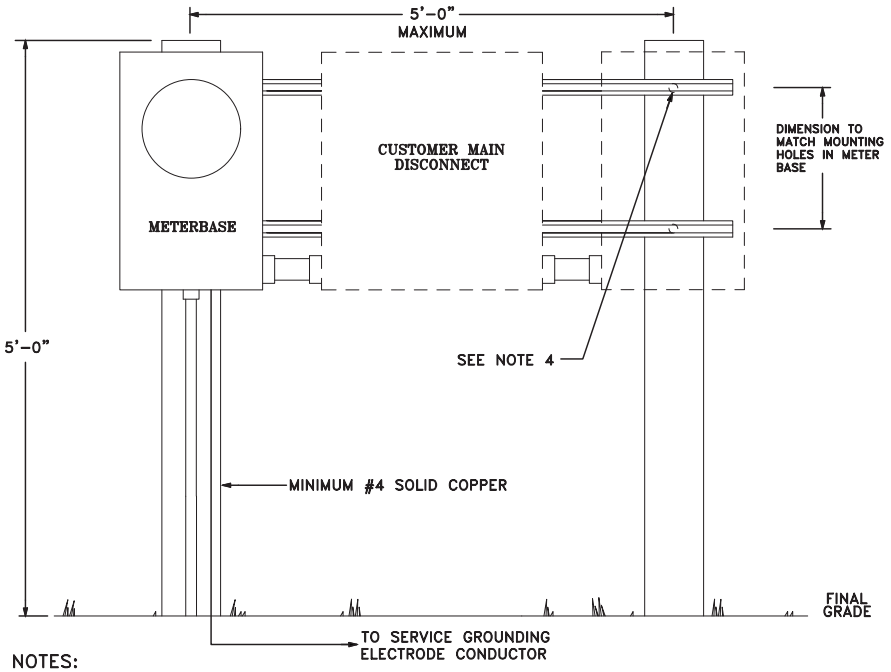
CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

Drawn by	Checked by	Approved by	Date
CG		BROWN	10-24-24

S5

METER POST RACK INSTALLATION



NOTES:

1. TWO 6"X6"X8' CONCRETE METER POSTS
2. USE MIN. 4500 P.S.I. CONCRETE REINFORCED WITH FOUR (4) #4 REBARS SPACED IN A 4"X4" SQUARE CENTERED IN THE POST.
3. ALL EDGES TO HAVE ½" CHAMFER.
4. TOP HOLE WILL BE 9/16" CAST OR DRILLED THROUGH POST 4" FROM END.
5. KINDORF CHANNEL IS NOT TO EXTEND PAST SIDES OF METER BASE.
6. MOUNT METER BASE ON 1"X 1/2" KINDORF CHNNEL OR EQUAL. DO NOT DRILL OR PUNCH HOLES IN METER BASE. USE PROVIDED KNOCKOUTS.
7. MOUNT KINDORF CHANNEL USING ONLY 1/2" BOLT THROUGH POST OR LEAD ANCHOR AND BOLT. DO NOT USE POWER GUN TO SHOOT FASTENERS INTO POST. DO NOT USE PLASTIC ANCHORS OR TAPCONS.

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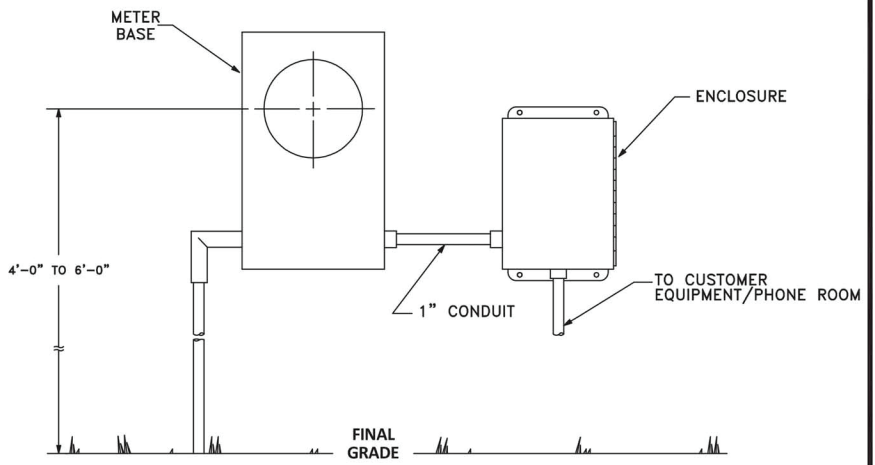
CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
				CG		BROWN	10-24-24

S4

PULSE METER APPLICATION



NOTES:

1. 8" x 8" x 6" ENCLOSURE (EQUIVALENT TO HOFFMAN A–8R86HCLO) SHALL BE SUPPLIED AND INSTALLED BY CONTRACTOR.

2. ALL METERING CONDUITS SUPPLIED AND INSTALLED BY CONTRACTOR.

3. IF THE CUSTOMER PLANS ON HAVING AN ENERGY MANAGEMENT SYSTEM WHICH UTILIZES METER OUTPUT PULSES, THEY MUST REQUEST PULSE METER(S) FROM O.U.C.

   TO APPLY FOR SPECIAL METERING EQUIPMENT AND INFORMATION ON ASSOCIATED CHARGES CONTACT:

Electric Meter Shop
OUC—The *Reliable* One
P.O. Box 3193
Orlando, FL 32802
Email: ElectricMeterShop@ouc.com

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CONSTRUCTION STANDARDS
OH & UG Distribution System
Orlando Utilities Commission

No.	Date	Revision	Ck.	Drawn by	Checked by	Approved by	Date
1	09–12–97	Changed Various Text Sizes	RLF	JORDAN			2–14–94

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OUC 3-Φ PADMOUNT TRANSFORMER DATA

15 KV CLASS							
KVA	KV-Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
75	12.47	120 / 208 Y	2.46%	8,473	208	027-03607	2717
150	12.47	120 / 208 Y	2.24%	18,579	416	027-03615	3304
300	12.47	120 / 208 Y	1.66%	50,285	833	027-03630	4291
500	12.47	120 / 208 Y	1.74%	79,900	1,388	027-03650	5371
750	12.47	120 / 208 Y	4.85%	42,915	2,082	027-03675	7148
1000	12.47	120 / 208 Y	5.11%	54,298	2,776	027-03690	8929
1500	12.47	120 / 208 Y	5.17%	80,596	4,164	027-03695	14617
75	12.47	277 / 480 Y	1.94%	4,640	90	027-04607	2648
150	12.47	277 / 480 Y	1.86%	9,684	180	027-04615	3168
300	12.47	277 / 480 Y	1.92%	18,823	361	027-04630	4164
500	12.47	277 / 480 Y	1.73%	34,804	601	027-04650	5207
750	12.47	277 / 480 Y	5.18%	17,402	902	027-04675	6984
1000	12.47	277 / 480 Y	5.13%	23,447	1,203	027-04690	8584
1500	12.47	277 / 480 Y	5.10%	35,356	1,804	027-04695	11128
2000	12.47	277 / 480 Y	5.14%	46,811	2,406	027-04696	14531
2500	12.47	277 / 480 Y	5.03%	59,770	3,007	027-04698	16259
75	12.47	120 / 240 (D)	2.77%	6,509	180	027-01607	2904
150	12.47	120 / 240 (D)	1.60%	22,525	361	027-01615	3614
300	12.47	120 / 240 (D)	3.20%	22,588	722	027-01630	5654
500	12.47	120 / 240 (D)	1.96%	61,305	1203	027-01650	5879
750	12.47	120 / 240 (D)	5.18%	34,804	1804	027-01675	8174
75	12.47	240 / 480 (D)	1.08%	8,353	90	027-02607	2897
150	12.47	240 / 480 (D)	2.46%	7,343	180	027-02615	3393
750	12.47	360 / 600 Y	5.02%	14,371	722	027-06675	6984

NOTE: (D) - Indicates delta connected windings

25 KV CLASS							
KVA	KV-Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
75	24.95	120 / 208 Y	1.94%	10,709	208	027-53607	2746
150	24.95	120 / 208 Y	1.80%	23,131	416	027-53615	3328
300	24.95	120 / 208 Y	2.01%	41,491	833	027-53630	4816
500	24.95	120 / 208 Y	2.12%	65,620	1,388	027-56350	5839
750	24.95	120 / 208 Y	5.18%	40,158	2,082	027-53675	8152
1000	24.95	120 / 208 Y	5.17%	53,731	2,776	027-53690	9533
75	24.95	277 / 480 Y	1.85%	4,866	90	027-54607	2983
150	24.95	277 / 480 Y	1.76%	10,280	180	027-54615	3366
300	24.95	277 / 480 Y	1.94%	18,562	361	027-54630	4364
500	24.95	277 / 480 Y	1.81%	33,245	601	027-54650	5353
750	24.95	277 / 480 Y	5.17%	17,462	902	027-54675	7146
1000	24.95	277 / 480 Y	5.18%	23,202	1,203	027-54690	8751
1500	24.95	277 / 480 Y	5.20%	34,683	1,804	027-54695	11324

35 KV CLASS (Dual Voltage)							
KVA	KV-Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
75	34.5 x 12.47	120 / 208 Y	1.83%	11,395	208	035-03607	4873
150	34.5 x 12.47	120 / 208 Y	1.65%	25,280	416	035-03615	5800
300	34.5 x 12.47	120 / 208 Y	1.65%	50,560	833	035-03630	6123
500	34.5 x 12.47	120 / 208 Y	1.95%	71,063	1,388	035-03650	8145
750	34.5 x 12.47	120 / 208 Y	4.95%	42,056	2,082	035-03675	11156
1000	34.5 x 12.47	120 / 208 Y	5.63%	49,346	2,776	035-03690	12526
1500	34.5 x 12.47	120 / 208 Y	5.07%	82,171	4,164	035-03695	13896
75	34.5 x 12.47	277 / 480 Y	1.36%	6,638	90	035-04607	4990
150	34.5 x 12.47	277 / 480 Y	1.60%	11,262	180	035-04615	5345
300	34.5 x 12.47	277 / 480 Y	1.80%	20,047	361	035-04630	6342
500	34.5 x 12.47	277 / 480 Y	1.67%	36,121	601	035-04650	7491
750	34.5 x 12.47	277 / 480 Y	4.90%	18,425	902	035-04675	9581
1000	34.5 x 12.47	277 / 480 Y	4.68%	25,701	1,203	035-04690	13813
1500	34.5 x 12.47	277 / 480 Y	5.11%	35,294	1,804	035-04695	16852
2500	34.5 x 12.47	277 / 480 Y	5.17%	58,208	3,007	035-04696	20222

Transformer impedences calculated from lowest value found either in data or yard stock; additional 10% deducted from impedence per industry practice. 1/3/2018

OUC 1-Φ PADMOUNT TRANSFORMER DATA

15 KV CLASS

KVA	KV/Φ - Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
25	7.2	120 / 240 V	1.51%	13,779	208	026-01x02	801
50	7.2	120 / 240 V	1.82%	22,919	417	026-01x05	971
100	7.2	120 / 240 V	1.49%	55,779	833	026-01x10	1468
167	7.2	120 / 240 V	2.05%	67,820	1,392	026-01x16	1776
25	7.2	240 / 480 V	1.68%	6,189	104	026-02802	963

25 KV CLASS

KVA	KV/Φ - Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
25	14.4	120 / 240 V	1.85%	11,292	208	026-51x02	875
50	14.4	120 / 240 V	1.74%	23,988	417	026-51x05	1032
100	14.4	120 / 240 V	1.54%	54,148	833	026-51x10	1421
167	14.4	120 / 240 V	1.66%	84,038	1,392	026-51x16	1973
25	14.4	240 / 480 V	1.94%	5,383	104	026-52x02	881

35 KV CLASS (Dual Voltage)

KVA	KV/Φ - Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
25	19.9 x 7.2	120 / 240 V	1.49%	14,029	208	033-01x02	1257
50	19.9 x 7.2	120 / 240 V	1.86%	22,401	417	033-01x05	1489
100	19.9 x 7.2	120 / 240 V	1.45%	57,511	833	033-01x10	2741
167	19.9 x 7.2	120 / 240 V	3.83%	36,298	1,392	033-01x16	3065
50	19.9 x 7.2	240 / 480 V	1.84%	11,347	208	033-02805	1547
167	19.9 x 7.2	240 / 480 V	1.51%	46,082	696	033-02816	2500

NOTE: "x" in the sixth digit-place of stock number represents material variance - no change in fault currents

OUC 1-Φ POLE-MOUNT TRANSFORMER DATA

15 KV CLASS

KVA	KV/Φ - Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
15	7.2	120 / 240 V	2.16%	5,787	125	025-11001	235
25	7.2	120 / 240 V	2.61%	7,982	208	025-11002	296
50	7.2	120 / 240 V	1.62%	25,720	417	025-11005	573
100	7.2	120 / 240 V	2.07%	40,258	833	025-11010	1078
167	7.2	120 / 240 V	2.34%	59,473	1,392	025-11016	1500
25	7.2	240 / 480 V	1.89%	5,511	104	025-12002	353
50	7.2	240 / 480 V	1.44%	14,468	208	025-12005	364
100	7.2	240 / 480 V	2.07%	20,129	417	025-12010	1007
250	7.2	240 / 480 V	1.80%	57,870	1,042	025-12025	1814
25	7.2	277 V	2.07%	4,360	90	025-14002	339
100	7.2	277 V	2.34%	15,428	361	025-14010	972
167	7.2	277 V	1.80%	33,494	603	025-14016	1153
250	7.2	277 V	2.43%	37,141	903	025-14025	1845

25 KV CLASS

KVA	KV/Φ - Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
15	14.4	120 / 240 V	1.26%	9,921	125	025-51001	280
25	14.4	120 / 240 V	2.61%	7,982	208	025-51002	327
50	14.4	120 / 240 V	1.98%	21,044	417	025-51005	590
100	14.4	120 / 240 V	1.71%	48,733	833	025-51010	1046
15	14.4	240 / 480 V	1.35%	4,630	63	025-52001	250
100	14.4	240 / 480 V	1.90%	21,930	417	025-52010	1160
25	14.4	277 V	2.20%	4,102	90	025-54002	380
50	14.4	277 V	2.16%	8,357	181	025-54005	618
100	14.4	277 V	1.71%	21,112	361	025-54010	1154

35 KV CLASS (Dual Voltage)

KVA	KV/Φ - Pri.	Volt - Sec.	Impedence (Max Fault)	Fault Current (Max Amps)	Full-Load Current	Stock #	Approx. Weight (lbs)
25	19.9 X 7.2	120 / 240 V	1.62%	14,289	208	031-11002	617
50	19.9 X 7.2	120 / 240 V	1.53%	27,233	417	031-11005	762
100	19.9 X 7.2	120 / 240 V	1.98%	46,764	833	031-11010	1272
167	19.9 X 7.2	120 / 240 V	2.16%	71,588	1,392	031-11016	2362
50	19.9 X 7.2	277 V	1.89%	10,612	181	031-14005	609
100	19.9 X 7.2	277 V	1.62%	22,285	361	031-14010	1357
167	19.9 X 7.2	277 V	2.34%	28,627	603	031-14016	1509

Transformer impedences calculated from lowest value found either in data or yard stock; additional 10% deducted from impedence per industry practice. 1/3/2018

Scan QR and link to:
Electric Service & Digital Meter Installation
Requirements handbook

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Orlando, FL 32801

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