KISSIMMEE UTILITY AUTHORITY
Engineering and Operations Department

	GUIDELINES & PROCEDURES	Date 8/20/2015
Typical Electric Service with Drawings		

General: The purpose of this section is to provide an overview of a typical electric service. The drawings herein show various scenarios that may arise within the field for overhead and underground applications. Each type of combination that may arise under a typical electric service are hereby defined below. For more detail information regarding electric connections, refer to the section titled "Facility Connection Requirements" and "Metering Requirements."

Temporary Electric Service: When requesting a temporary electric service, it is best that you contact KUA Engineering Department before proceeding with such set up as there are some cases in which field conditions will restrict a particular application. Installations requiring special service, meter, or other work for construction purposes, exhibits for short durations, etc., shall be made at the expense of the customer.

Temporary installation for service entrance, other wiring and meters shall be made and inspected in the same manner as permanent installations. The temporary service drop or temporary construction wires shall not be tied to the customer's permanent panel except for testing purposes.

Temporary service for construction purposes may be either overhead or underground depending on the available service needs. All temporary saw poles or underground pedestals must have a driven ground. All overhead temporary poles must be 16 feet long and be at least a 4"x6" thickness. The disconnect panel must be mounted next to the temporary meter can.

Refer to the Customer Service Department fee schedule for applicable fees and deposits that may be associated with the setting up of a temporary service.

TUG Procedure: Temporary underground service (TUG) is available for residential service where the permanent meter enclosure, meter and riser pipe are configured in a manner that they can be used for temporary service. Due to the fact that TUG is utilized to provide temporary service; as well as, permanent, and at the time of installation the building may not be ready to disply a permanent address, the address shall be identified on the meter enclosure.

Upon receipt of the application for TUG service and approval inspection, KUA will install the permanent underground service to the meter enclosure. This service can be used for construction purposes only until the Certificate of Occupancy has been obtained. The builder/developer is responsible for having the service converted and put into the name of the homeowner.

When an electric panel is configured for a TUG, the main line switch and breakers are mounted in the panel with receptacles mounted below the panel. Upon receipt of the customer's contribution for the

various fees and final inspection approval from the respective governmental entity, KUA will install the permanent underground service and meter.

Contact either the City or County building departments for the applicable TUG form that you as a developer will need to fill out before contacting KUA.

Permanent Power: Permanent power is defined as the final electric service required to bring the facility to completion for occupancy. When the developer wants such service type, it is his responsibility to contact the applicable inspection agency and to establish an electric account with KUA. When the final inspection clearance and application has been received, KUA will proceed with scheduling the meter to be set.

Within subdivisions in both the City of Kissimmee and Osceola County, an underground service is required. For services 200 amps or less, a 2" gray sch-40 conduit will need to be installed from the transformer or junction box to the meter base. For services 201 amps to 400 amps, a 3" gray sch-40 conduit will need to be installed from the transformer or junction box to the meter base.The meter base height must be within a range of 48 inches to 66 inches. The depth of this conduit must be at least two (2) feet from top of conduit to final grade.

For the limited number of locations that overhead services may be required, the customer shall install a minimum of five (5) feet of service cable beyond the protective weatherhead in order that the required connections can be properly made by KUA. Before guessing whether an overhead service is acceptable, pleast contact KUA's Engineering Department first.

Additional requirements may be required for your permanent meter service depending on your application, first contact KUA's Engineering Department before proceeding with any work. Other applicable documents associated with permanent electric service are the "Underground Standard Requirements" and the "Facility Connection Requirements". Refer to the Customer Service Department fee schedule for applicable fees and deposits that may be associated with the setting up of a permanent electric service.

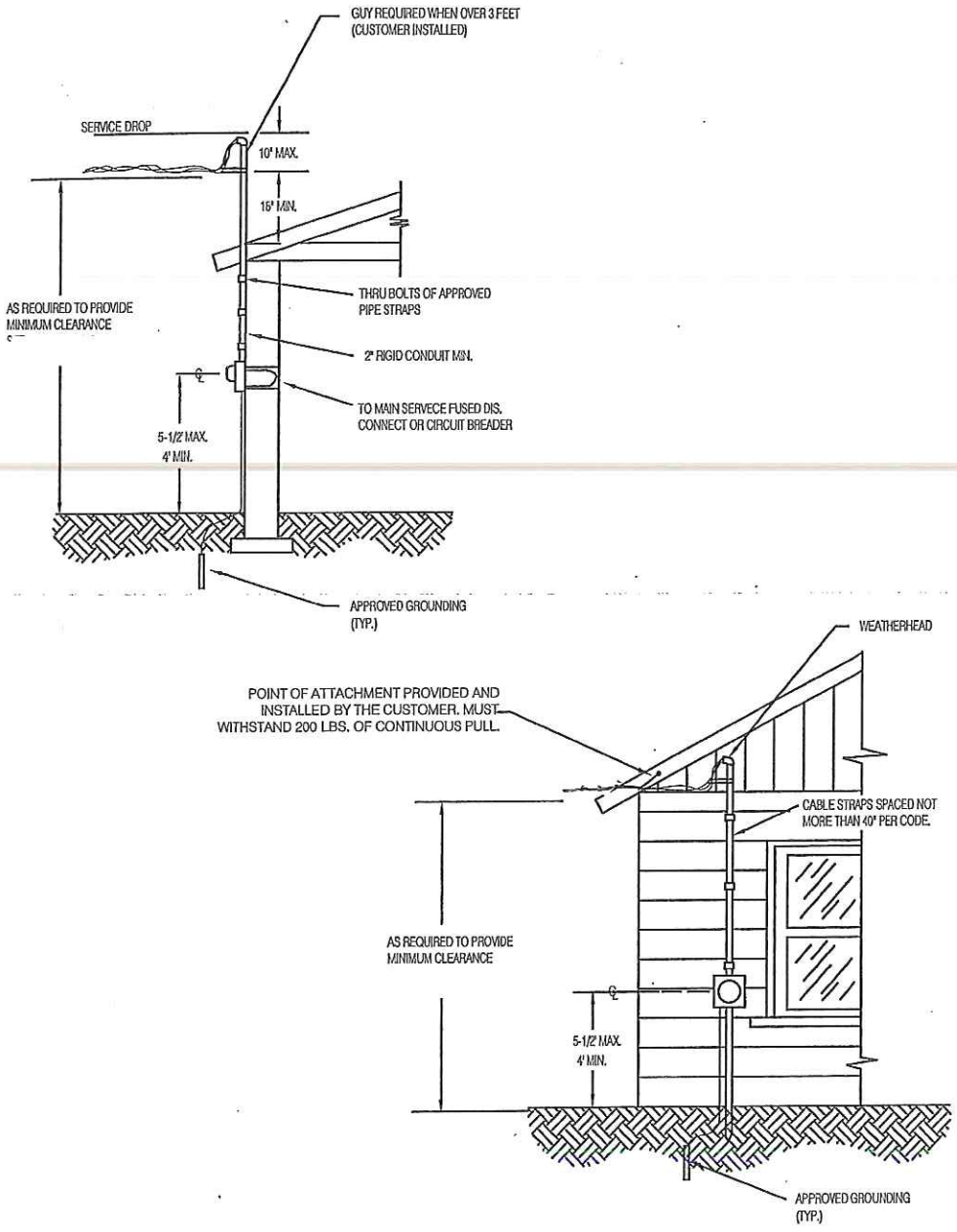
Permanent Electric Meter Location – Residential: Meters for single family residential homes shall always be located outdoors and shall normally be on the front half of a side wall, and shall not be enclosed by a fence. Refer to KUA's conduit layout plan for the specific subdivision to determine which side of the house that the meter service is to be located. Meters shall not be located in areas such as carports, open porches, swimming pools, etc which are susceptible to subsequent enclosures by walls or screens. In the event a meter area is later enclosed or otherwise made inaccessible or unsafe, the customer shall, at his expense, have the meter facilities moved to a readily accessible outside location.

Permanent Electric Meter Location – Commercial: Commercial metering shall normally be installed outdoors. Meters shall be located on a building in a place where they shall be protected from mechanical damage. The location should not be affected by a kitchen discharge fan or other vents, or the drain from a roof gutter or air conditioner and should be free from vibration. The customer is responsible for providing this protection. On new construction, the center of the meter shall

not be more than 5.5 feet maximum or less than 4 feet minimum from the final grade or floor. A clear space of at least 48 inches from the front of all meter enclosures shall be maintained from grade to 6 ft. 7 inches height or top of equipment, whichever is greater, minimum of 36 inches wide (18" on each side of center line of meter enclosure) to allow easy and safe access for reading and testing.

KUA Kissimmee Utility Authority	Distribution Construction Standards	Date 8/20/2015

Typical Overhead Secondary Service Installations



TYPICAL OVERHEAD SERVICE INSTALLATIONS

N.T.S.

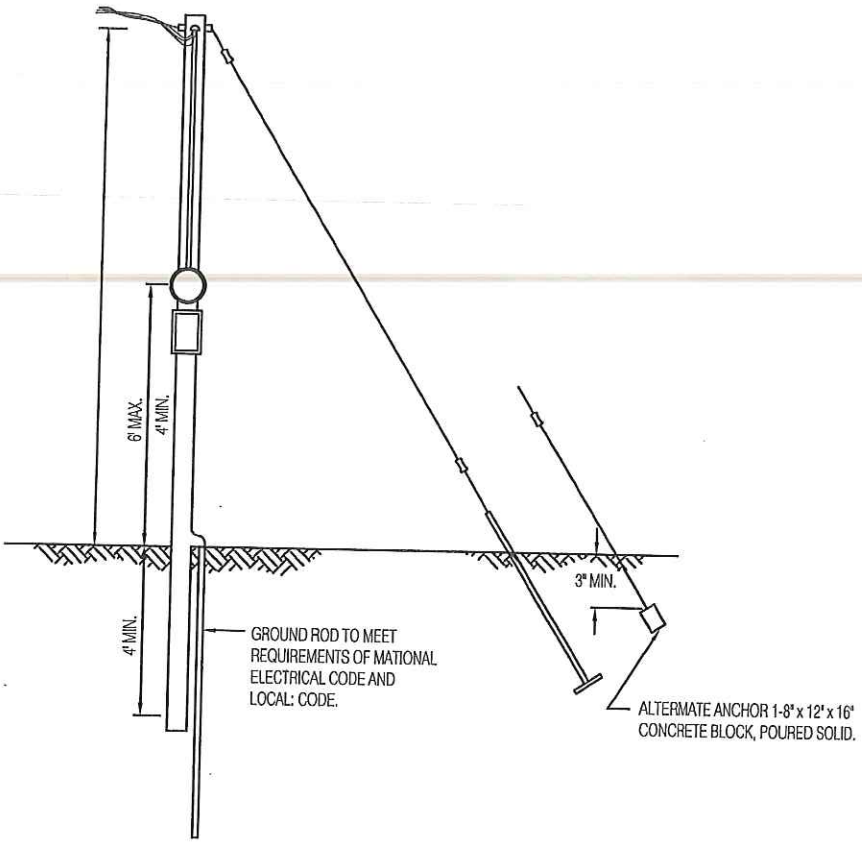
NOTES:

1. CUSTOMER MUST PROVIDE ADEQUATE GROUNDING OF FACILITIES IN ACCORDANCE WITH THE N.E.C. AND LOCAL CODES.
2. CATV OR TELEPHONE CABLE SHALL NOT BE ATTACHED TO THE SERVICE MAST.
3. METER ENCLOSURE PROVIDED AND INSTALLED BY CUSTOMER PER U.C. APPROVED METER ENCLOSURE LIST.

KUA Kissimmee Utility Authority	Distribution Construction Standards	Date 8/20/2015
Typical Temporary Construction Pole		

Notes: The service must be in 3/4" (minimum) raceway, thin wall or rigid. The service wire must be 3 #8 Minimum. A weatherproof fuse box with Type "S" fuses and grounding type receptacles must be used.

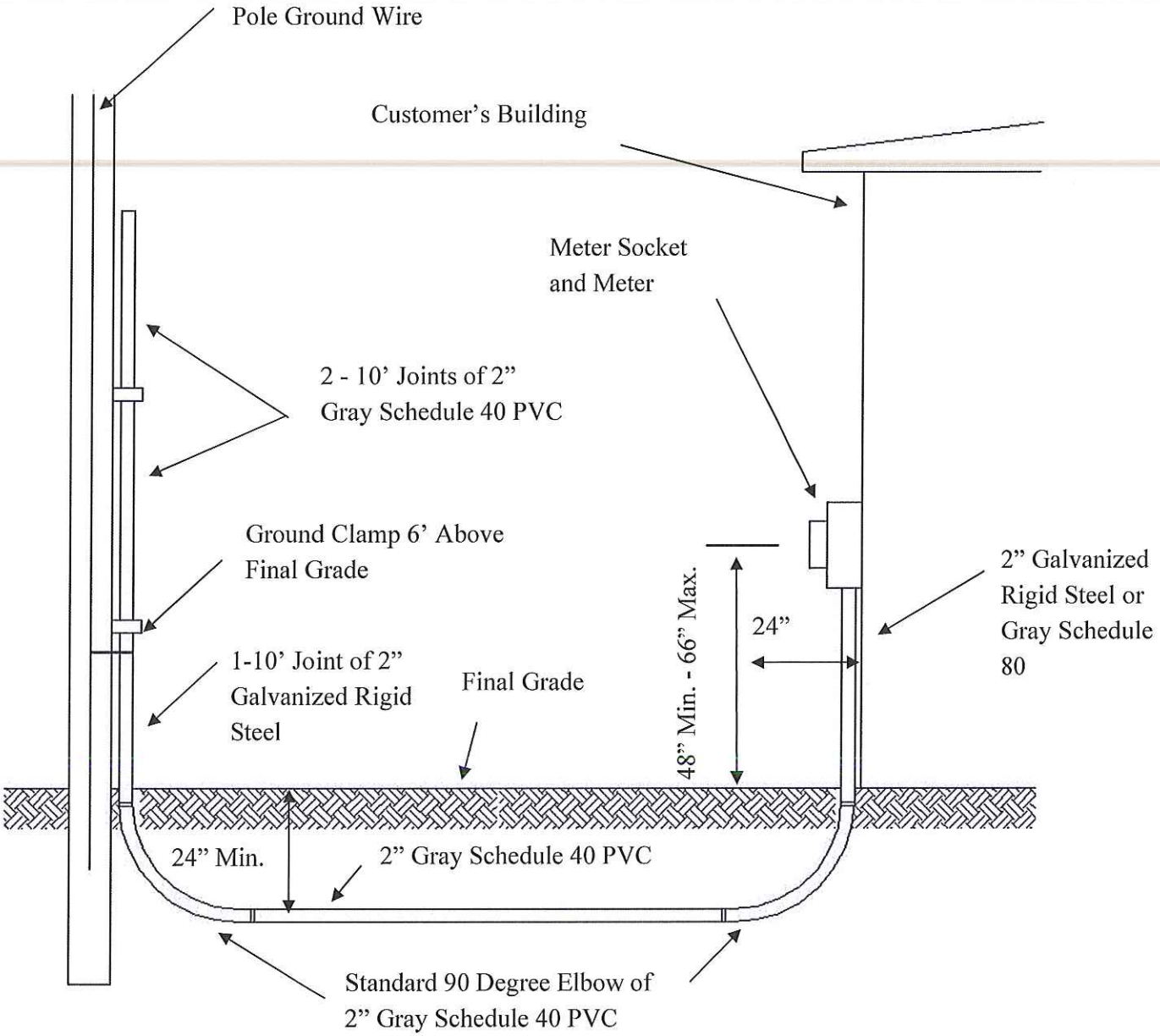
If the service pole is less than 50 feet from KUA's pole, an anchor guy may not be required unless the service crosses a road and/or drive able surface



1. All lumber dimensions must be trade size. All lumber to be decay & termite resistant
2. Pole must be rated for direct burial in the soil. The minimum pole size shall be 4"x4"x16 ft. long. Pole must be sufficiently rigid and/or braced to withstand 200 lbs. of pull at the top.
3. Customer must provide adequate grounding of facilities in accordance with NEC and local codes.
4. Pole with 100 amp, single phase service may have a maximum service drop of 90 feet length; 101-200 amp, single phase service may have a maximum service drop of 70 feet length.
5. For 120/208v single phase services, a fifth lug in the 9 o'clock position is required.

KUA KISSIMMEE UTILITY AUTHORITY	Riser Conduit Detail for Residential Service (200 Amps)	Revised 8/7/2014
	Distribution Construction Standards	

Note: The owner/developer shall install the bottom joint of conduit and KUA will install the top two (2) joints. The additional riser pole conduit supplied by the owner/developer must be on the job site. The bottom joint of conduit and 90 degree elbow shall be installed by the developer after KUA installs the riser pole. The galvanized joint must be 12" in the ground before connecting to the 90 degree elbow. The developer must also supply six (6) two hole rigid steel straps (2 straps per 10 foot joint). Ground clamp will be provided and installed by KUA.



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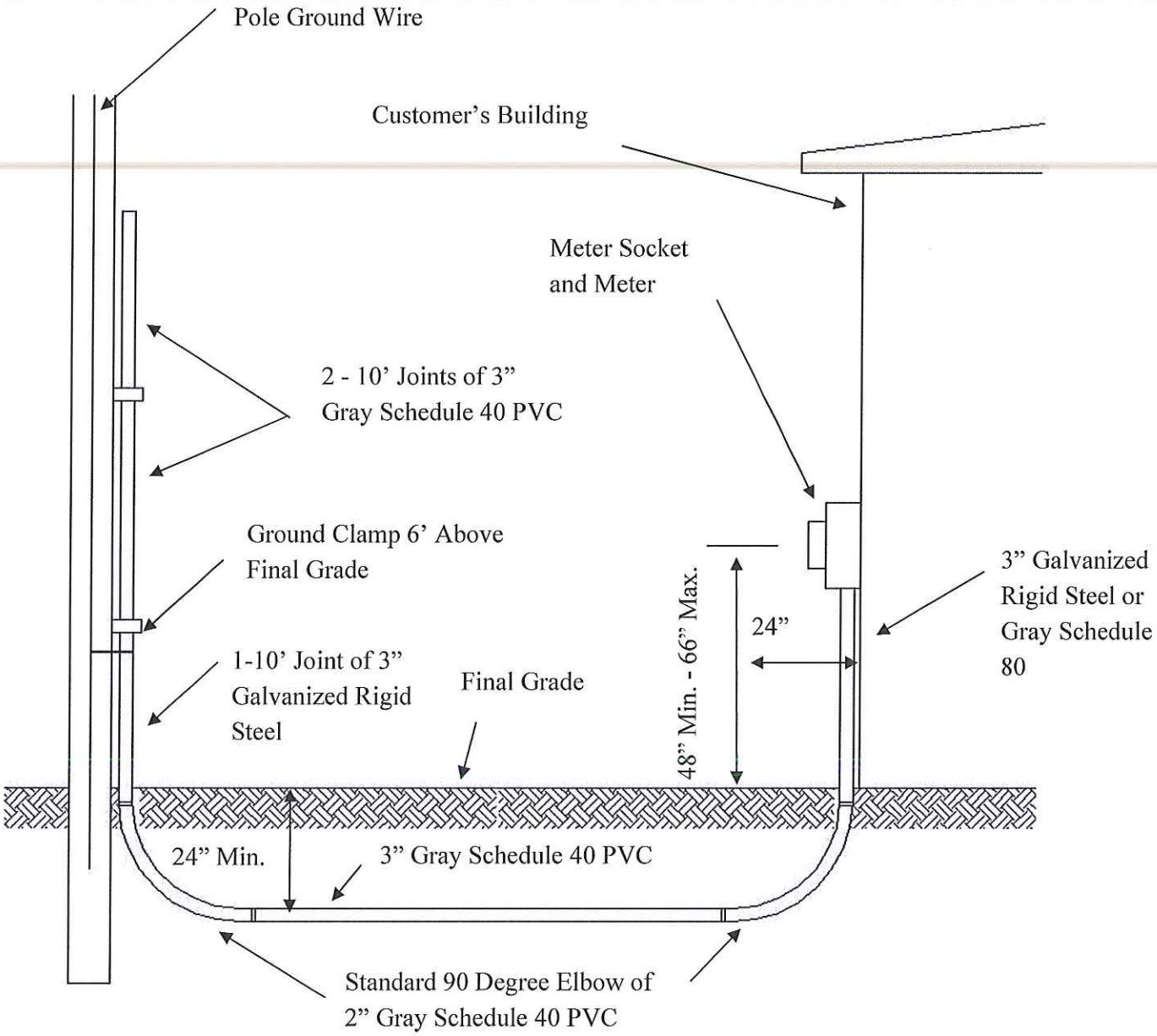
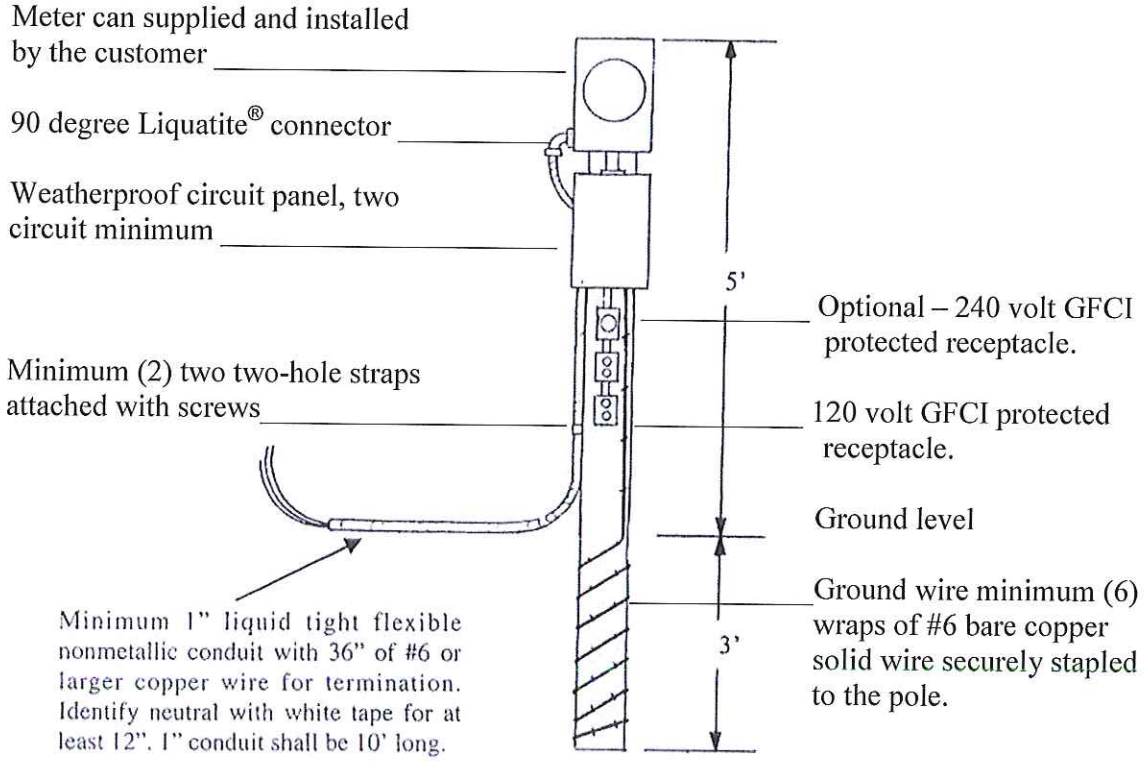


KUA Kissimmee Utility Authority	Distribution Construction Standards	Date 8/20/2015
	Typical Underground Meter Post	

Below is an example of a finished installation for temporary service, using a meter post. The service will be underground from KUA to a secondary junction box, or pad mount transformer. Conductors placed in the trench bring the power to the base of the post.

The temporary pole is to be install within 5 feet of the right front side of the pad mount transformer or within 5 feet of an underground secondary junction box. Prior to setting an electric meter, KUA will inspect all installations for conformity.



KUA Kissimmee Utility Authority	Distribution Construction Standards	Date 8/20/2015
Typical Free-Standing Underground Meter Can Rack		

Note 1: Posts may be either (minimum) 4" square treated, 4" round treated or 2" galvanized pipe.

Note 2: Brackets may be 1" unistrut or 1" angle iron capable of bolting meter can and main panel/breaker. Rack shall be plumb and level with no nails used in construction.

Note 3: Ground wire shall be minimum 6" copper securely attached to the post and connected with an approved ground rod clamp to a 5/8' x 8 ft. ground rod with 6" of the rod exposed above the ground level.

Note 4: Three Phase 480 volt self-contained meter racks must be constructed with a non-fused disconnect switch that is capable of being locked in the "on" position located on the line side of the meter.