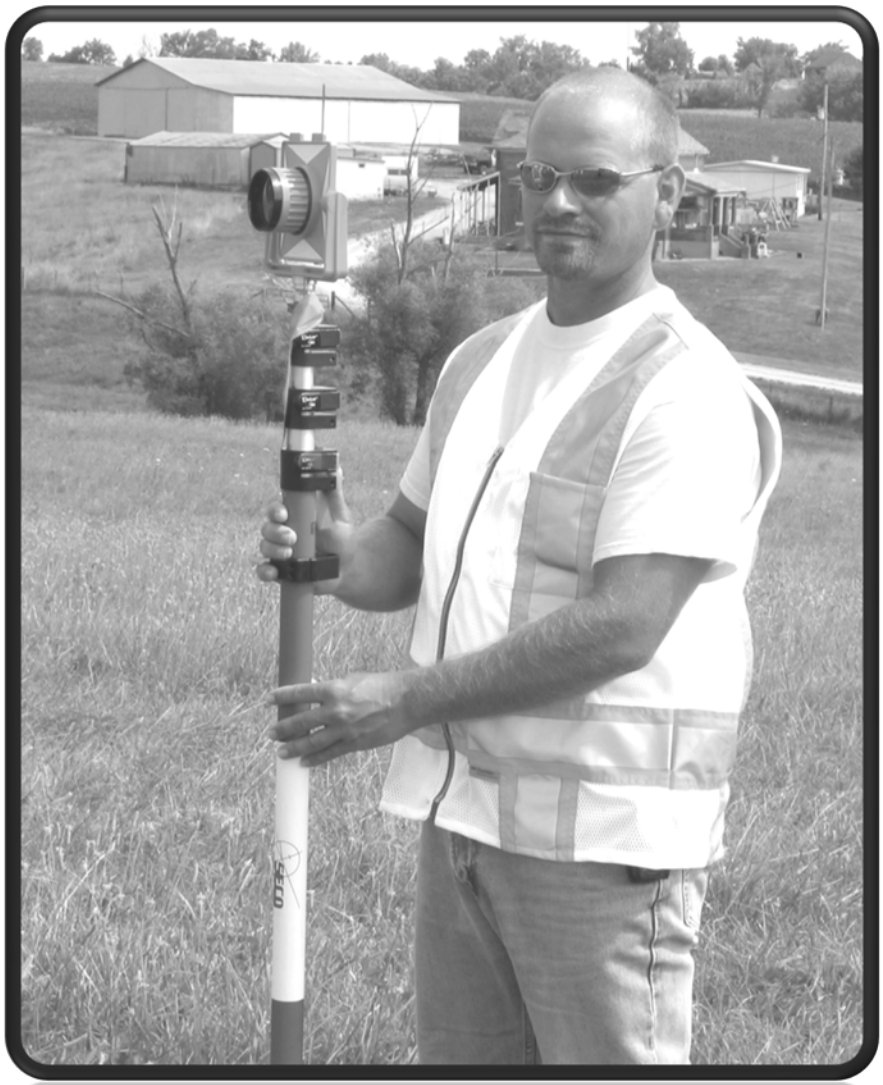
Citizens Electric Corporation

A Touchstone Energy® Cooperative

2015
Electric Service Guidelines



North-Ste. Genevieve

Central-Perryville

South-Fruitland/Jackson

Citizens Electric Corporation
Electric Service Guidelines

Instructions to landowner or developer when planning facilities on their property.

1. **Always Look Up!** When locating a site for a home, mobile home, cabin, garage, grain bin, or any type of building structure, "Always look up". Safety to your life and property requires sufficient spacing from existing power lines to your new structure. This distance is provided for in the right-of-way easement agreement.
When there is a conflict or question pertaining to electric lines, contact Citizens Electric Corporation. A response and review of your conditions should be performed prior to construction.

   The following easement widths are dimensions that are to be observed in planning your facilities. The electric pole line is located in the center of the easement. Buildings shall not be located on the easement strip.

Type of Electric Line	Easement Width
Transmission (cross country long span)	100 feet
Transmission (urban short span)	50 feet
Distribution Overhead (single phase or three phase)	30 feet
Distribution Underground (single phase or three phase)	15 feet

2. Trees on and near the right of way – these trees endanger the electrical circuit and cause outages. These trees are removed or trimmed on a cycle basis.

3. Service to a new facility: A **qualified electrician** should provide equipment recommendation on size of panel and wire size required and also performs the installation of the service panel, meter socket, conduit, wire and weather head, ground rod and clamp, etc.

   A. Home (see attached guides)
      1. Meter on home, mast type.
      2. Meter on home, attachment onto building.
      3. Meter on home, underground type.
      4. Meter on C.E.C. pole
      5. Metering Pedestal, underground service.

   B. RV, or any other temp. in nature connection
      1. Meter on C.E.C. pole

4. Underground Lines:

   A. When digging or excavating, call MO 1-Call to verify location of any Citizens Electric owned underground electric lines. **1-800-Dig-Rite (1-800-344-7483) or 811. Citizens Electric Corporation does not locate and is not liable for privately owned underground facilities**.

   B. On new installations, if customer requests underground electric, there is an additional charge. Contact the District Superintendent for prices and specifications.

Thank you for your cooperation and help in addressing safety precautions for your electric service and preventing electrical contact accidents.

Revised 1/28/2015 - 2/17/14 - 2/24/12 - 2/22/11 - 1/22/10 - 3/17/09 - 2/27/06 – 1/26/04 – 1/08/98 – 6/30/94

Service To New Facility – A qualified electrician should provide equipment recommendation on size of panel and wire size required and also perform the installation of the service panel, meter socket, conduit, wire and weather head, ground rod and clamp etc.

See the attached guides for examples of:

Home
- 3.A.1. Meter on home, mast type.
- 3.A.2. Meter on home, attachment on the building
- 3.A.3 Meter on home, underground type.
- 3.A.4 Meter on home, with a slab
- 3.A.5 Meter on pole
- 3.A.6 Meter on pole, for temporary in nature connection (RV)
- 3.A.7 Meter Pedestal, underground service

A. Individual Overhead Service and Secondary Conductors

1. In the event that only overhead service and/or secondary facilities are required, the Corporation shall construct all overhead service and secondary facilities to a point on Customer's permanent facility as designated by the Corporation, utilizing generally accepted utility practices, at no charge to Customer. When said Customer requests the service conductors to extend past a point on the permanent facility as designated by the Corporation, Customer shall pay in advance of construction an additional charge equal to the Corporation's then-current average standard construction cost of single phase overhead extension.

   Average standard construction cost of single phase primary overhead; Maximum conductor size - #2 ACSR - $11.50/ft.

B. Individual Underground Service and Secondary Conductors

1. Residential structures located in areas served by an overhead primary distribution system:

   Customer requesting underground service conductors shall pay the Corporation in advance of construction an amount equal to the Corporation's then-current average standard construction cost of single phase underground extension less the average standard construction cost of single phase overhead extension, for installation of such service from the transformer or lift pole to a point on the Customer's permanent facility as designated by the Corporation.

   Upon completion of construction, Customer shall pay the Corporation for any unforeseen costs not included in the Corporation's original cost for an individual service or secondary extension such as trenching through rock, special material used for backfilling, drilling under roads, driveways and sidewalks, right-of-way clearing, etc.

   Average standard construction cost of single phase underground less the average standard construction cost of overhead;
   Maximum conductor size - 350 MCM - $11.25/Ft.

2. Residential structures located in a subdivision served by an underground distribution system:

At the request of Customer, the Corporation will install underground service conductors from a transformer or pedestal (located on or within the property line of said residential structure) to a point on the permanent facility as designated by the Corporation. When the length of such service conductors exceed 125 linear feet, or when said Customer requests the service conductors to extend past a point on the permanent facility as designated by the Corporation, Customer shall pay the Corporation in advance of construction an additional charge equal to the Corporation's then-current average standard construction cost of single phase underground service applicable to the additional length.

Customer shall pay the Corporation for any unforeseen costs not included in the Corporation's estimate for an individual underground service or secondary extension such as trenching through rock, special material used for backfilling, drilling under roads, driveways and sidewalks, right-of-way clearing, etc.

Average standard construction cost of single phase underground secondary or service;
Maximum conductor size - 350 MCM - $31.25/Ft

3. When Customer agrees to furnish such trench and/or conduit meeting the Corporation's specifications, the Corporation shall deduct from Customer's required advance payment the Corporation's then-current average standard construction cost of trenching and/or installing conduit from the total cost of the line extension as outlined in Section B.1 and B.2 above.

Average standard construction cost of single phase primary underground; $20.75/ft

Average standard construction cost of;
Trenching - $4.00/Ft (utilizing CEC trencher)
Conduit - $2.50/Ft

4. Service to a RV, or other temporary, in nature connection:

A qualified electrician shall provide the necessary equipment and labor to connect to C.E.C. owned breaker type disconnect.

See attached guide 3.A.6 for an example.

March 1, 2012 – Connection fee - $550.00.

Thank you for your cooperation and help in addressing safety precautions for your electric service and preventing electrical contact accidents.

Revised 1/28/2015 - 2/17/14 - 2/24/12 - 2/22/11 - 1/22/10 - 3/17/09 - 2/27/06 – 1/26/04 – 1/08/98 – 6/30/94

Rural Missouri

10-Foot Rule – It's the Law!

It's just common sense for anyone who must work near an energized electric transmission line to check with the utility that owns the line to make sure all safety precautions are taken. Well, it's also the law in the state of Missouri.

In 1991 the Missouri General Assembly passed the Overhead Power Line Safety Act, also called the 10-foot rule. The law requires that anyone who must work within 10 foot of a power line must first notify the utility that owns the line so safety precautions can be taken to help avoid tragedy.

Precautions may mean simply having a utility employee check the work area for safe clearances or it may involve disconnecting the line to avoid possible electrocution.

Under the law any person who comes into contact with a power line and didn't contact the utility that owns the line will be presumed negligent. This means that if a contractor's employee comes into contact with a line and the contactor didn't notify the utility before work began, then the contractor bears the responsibility for the accident.

If work must be done within 10 foot of the power line, play it safe and call the utility first. It could save a life.

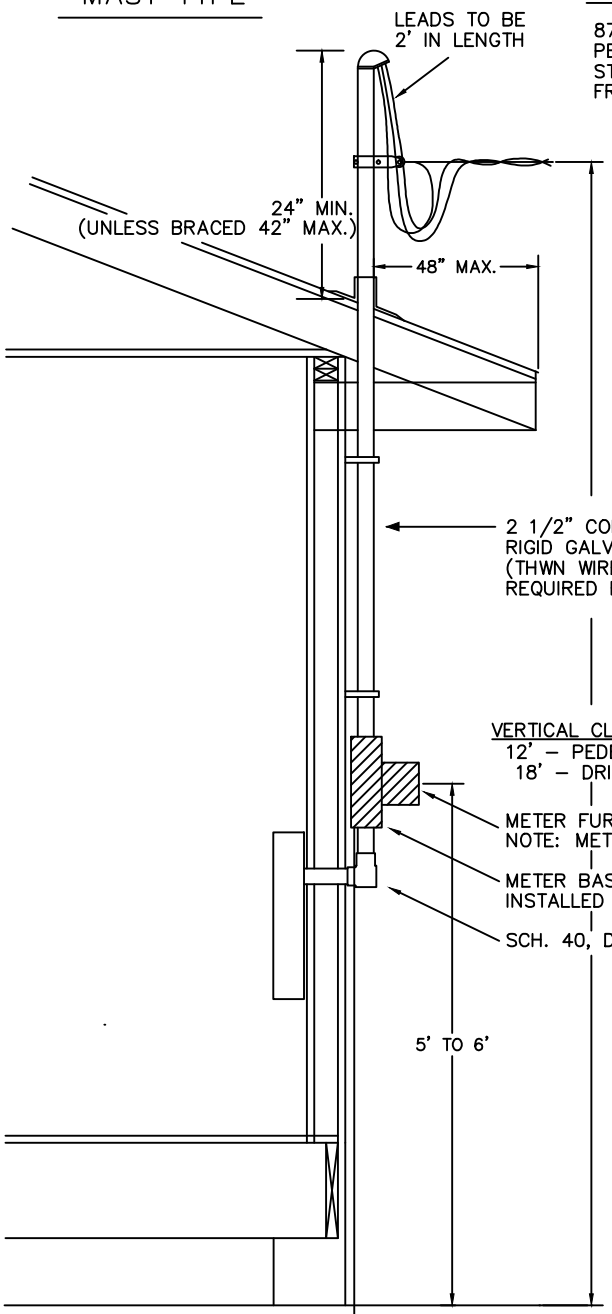
Revised 1/28/2015 - 2/17/14 - 2/24/12 - 2/22/11 - 1/22/10 - 3/17/09 - 2/27/06 – 1/26/04 – 1/08/98 – 6/30/94

CITIZENS ELECTRIC CORPORATION
GUIDE FOR SERVICE ENTRANCE (MAST TYPE)
WITH METER ON HOME

MAST TYPE

CITIZENS ELECTRIC CORPORATION

877–876–3511
PERRYVILLE
STE. GENEVIEVE
FRUITLAND/JACKSON



NO.6 AWG COPPER GROUNDING CONDUCTOR
ATTACHED TO A 8'x1/2" DRIVEN GROUND ROD.
(APPROVED FOR THE PURPOSE)
COPPER GROUNDING CONDUCTOR SHALL CONNECT
TO THE METER BASE AND CONTINUE TO THE
MAIN PANEL'S GROUNDING BAR.

NOTE:

1. INHIBITOR MUST BE USED
WITH ALUMINUM CONDUCTOR

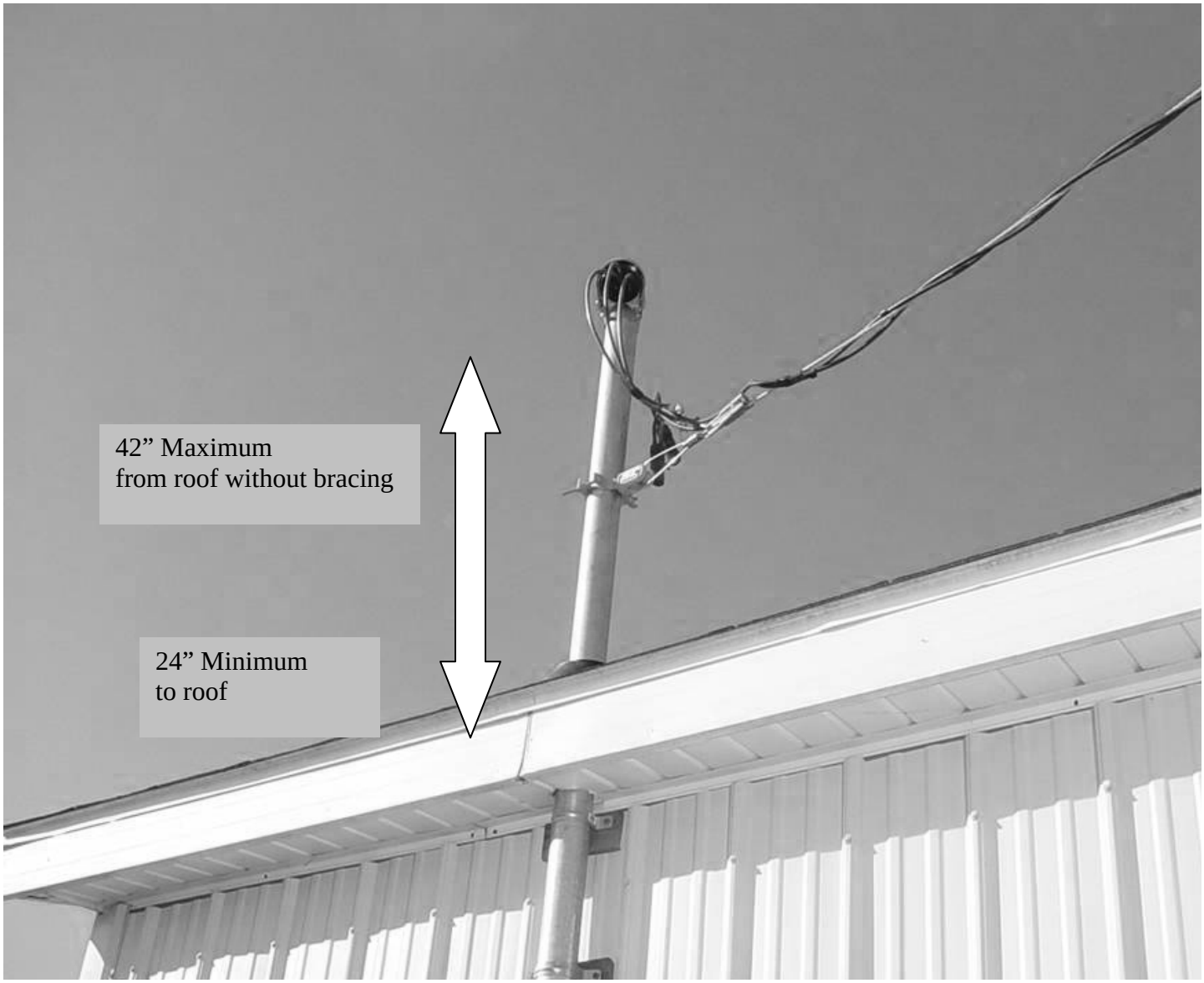
2. FOR MECHANICAL STRENGTH. FOR MAST TYPE INSTALLATION.
(FROM METERBASE TO WEATHEHEAD ONLY)

CUSTOMER SHALL SUPPLY:	PANEL SIZE: 200 AMP		100 AMP		60 AMP	
	CU.	AL.	CU.	AL.	CU.	AL.
PHASE WIRE	2/0	4/0	#4	#2	#6	N/A
NEUTRAL	1/0	2/0	#6	#4	#8	N/A
GROUND WIRE	#6	N/A	#6	N/A	#6	N/A
CONDUIT (GALV. RIGID)	2 1/2"		2 1/2"		2 1/2"	

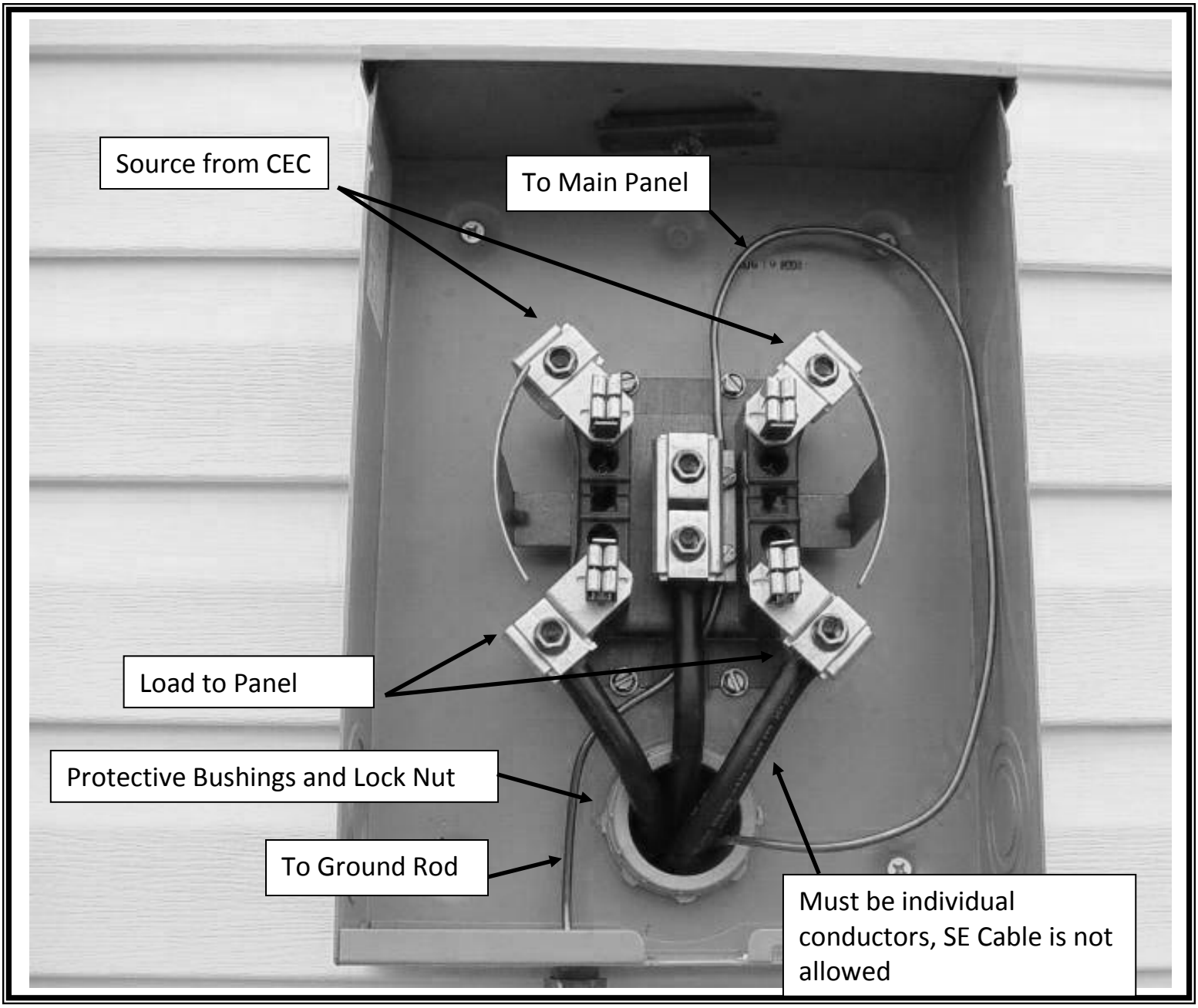
METER TO BE 5' TO 6' ABOVE GROUND

- **Home:**

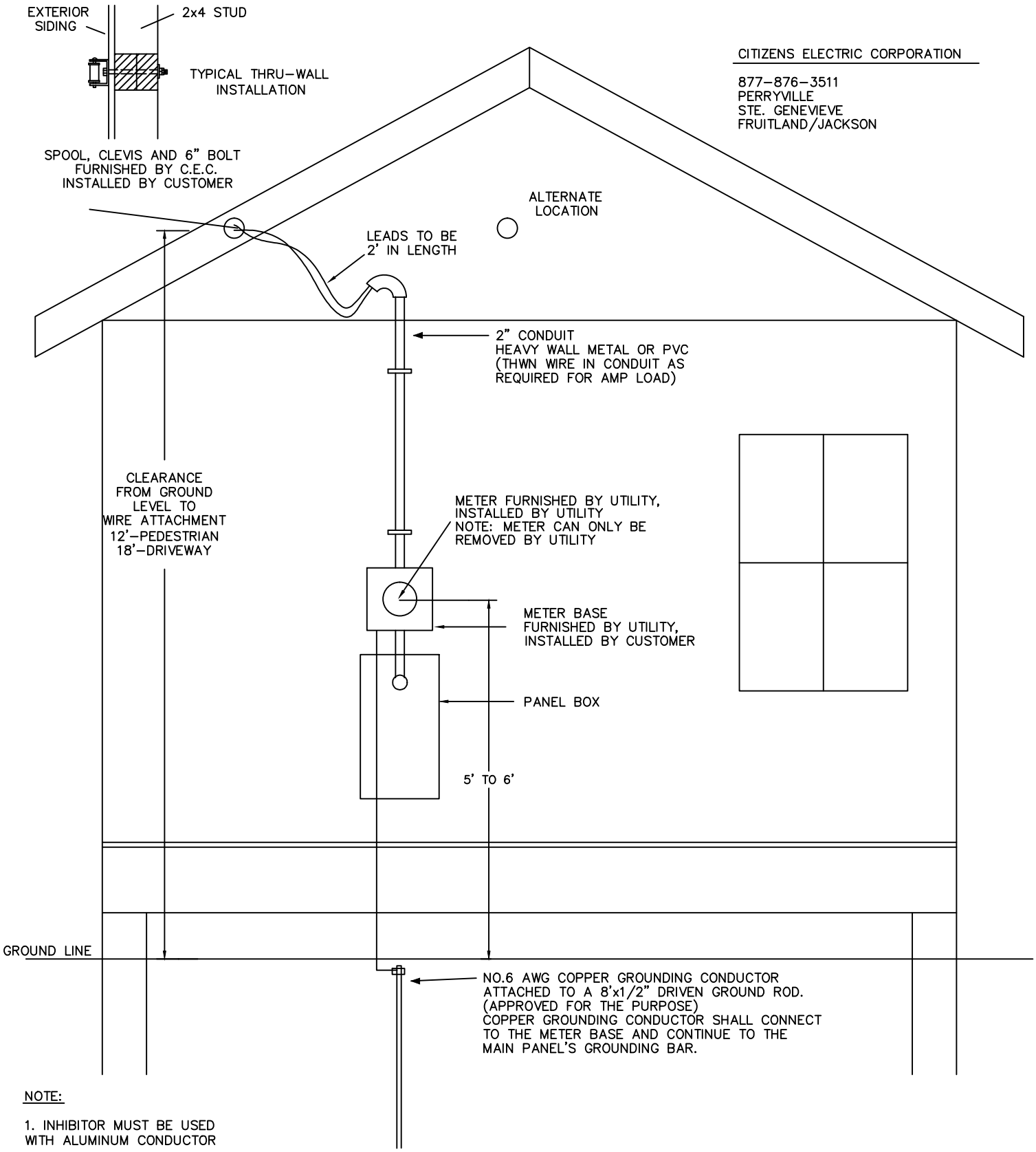
Mast Type - 2 ½ inch Rigid Galvanized Conduit



Required Grounding Methods



CITIZENS ELECTRIC CORPORATION
GUIDE FOR SERVICE ENTRANCE (ATTACHMENT ONTO BUILDING) WITH METER ON HOME



NOTE:

1. INHIBITOR MUST BE USED WITH ALUMINUM CONDUCTOR

CUSTOMER SHALL SUPPLY:

PANEL SIZE:	200 AMP		100 AMP		60 AMP	
	CU.	AL.	CU.	AL.	CU.	AL.
PHASE WIRE	2/0	4/0	#4	#2	#6	N/A
NEUTRAL	1/0	2/0	#6	#4	#8	N/A
GROUND WIRE	#6	N/A	#6	N/A	#6	N/A
CONDUIT (GALV. RIGID OR PVC)	2"		1 1/2"		1 1/2"	

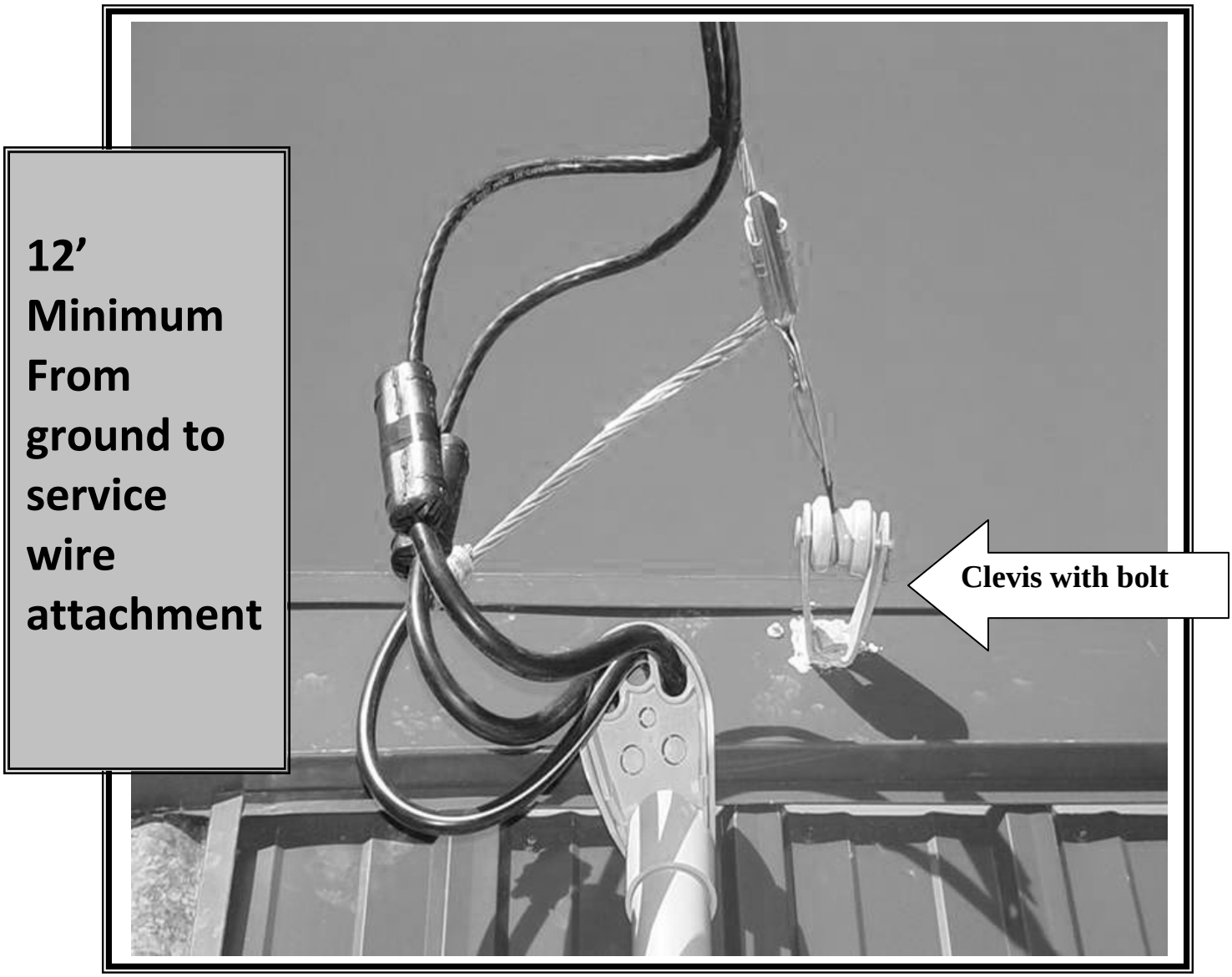
METER TO BE 5' TO 6' ABOVE GROUND

3.A.2

01-28-15

• Home:

Attachment onto building with Service Clevis

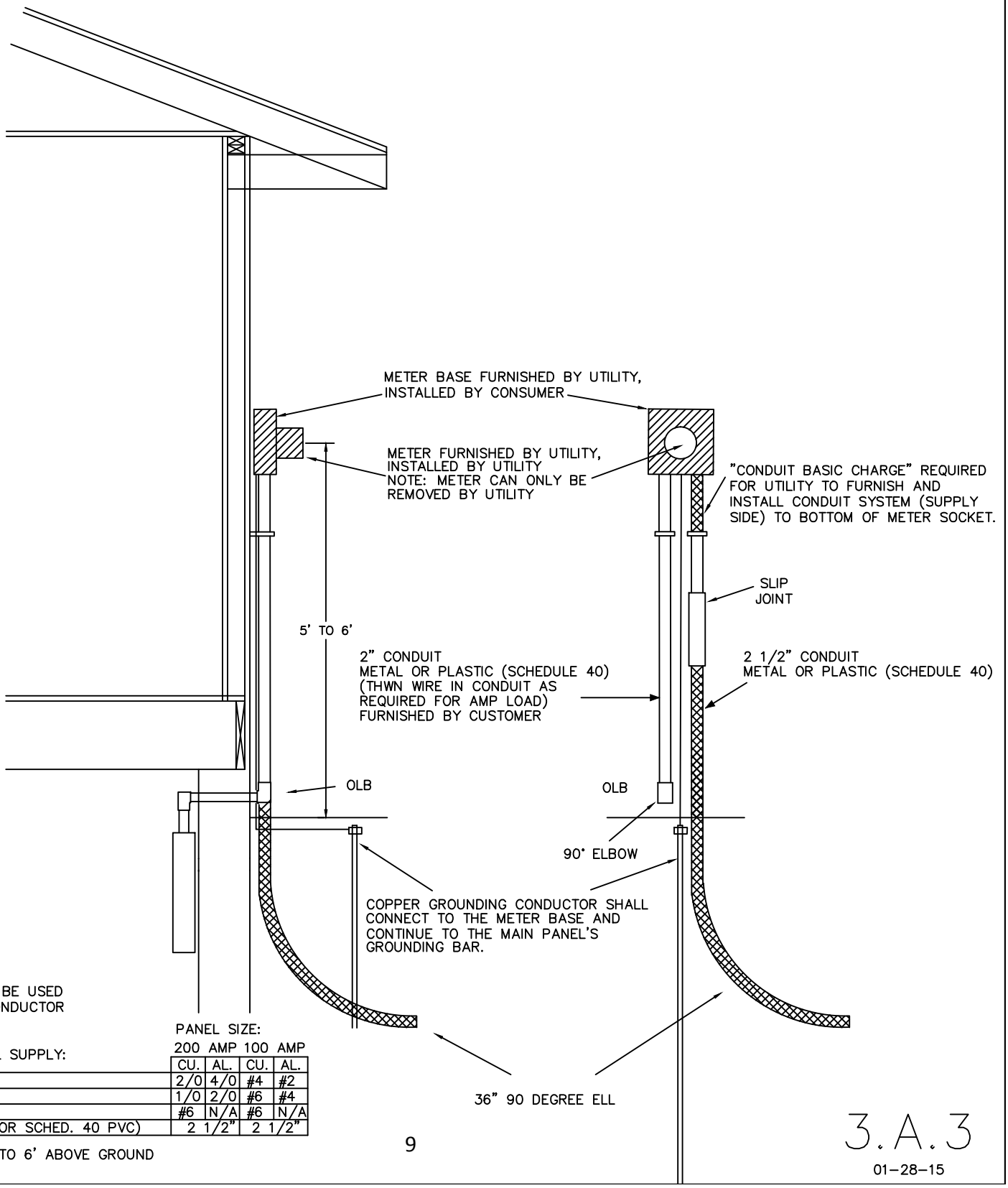


CITIZENS ELECTRIC CORPORATION
GUIDE FOR SERVICE ENTRANCE (UNDERGROUND TYPE) WITH METER ON HOME

UNDERGROUND TYPE

CITIZENS ELECTRIC CORPORATION

877-876-3511
PERRYVILLE
STE. GENEVIEVE
FRUITLAND/JACKSON



NOTE:

1. INHIBITOR MUST BE USED WITH ALUMINUM CONDUCTOR

CUSTOMER SHALL SUPPLY:

	PANEL SIZE: 200 AMP		100 AMP	
	CU.	AL.	CU.	AL.
PHASE WIRE	2/0	4/0	#4	#2
NEUTRAL	1/0	2/0	#6	#4
GROUND WIRE	#6	N/A	#6	N/A
CONDUIT (GALV. OR SCHED. 40 PVC)	2 1/2"		2 1/2"	

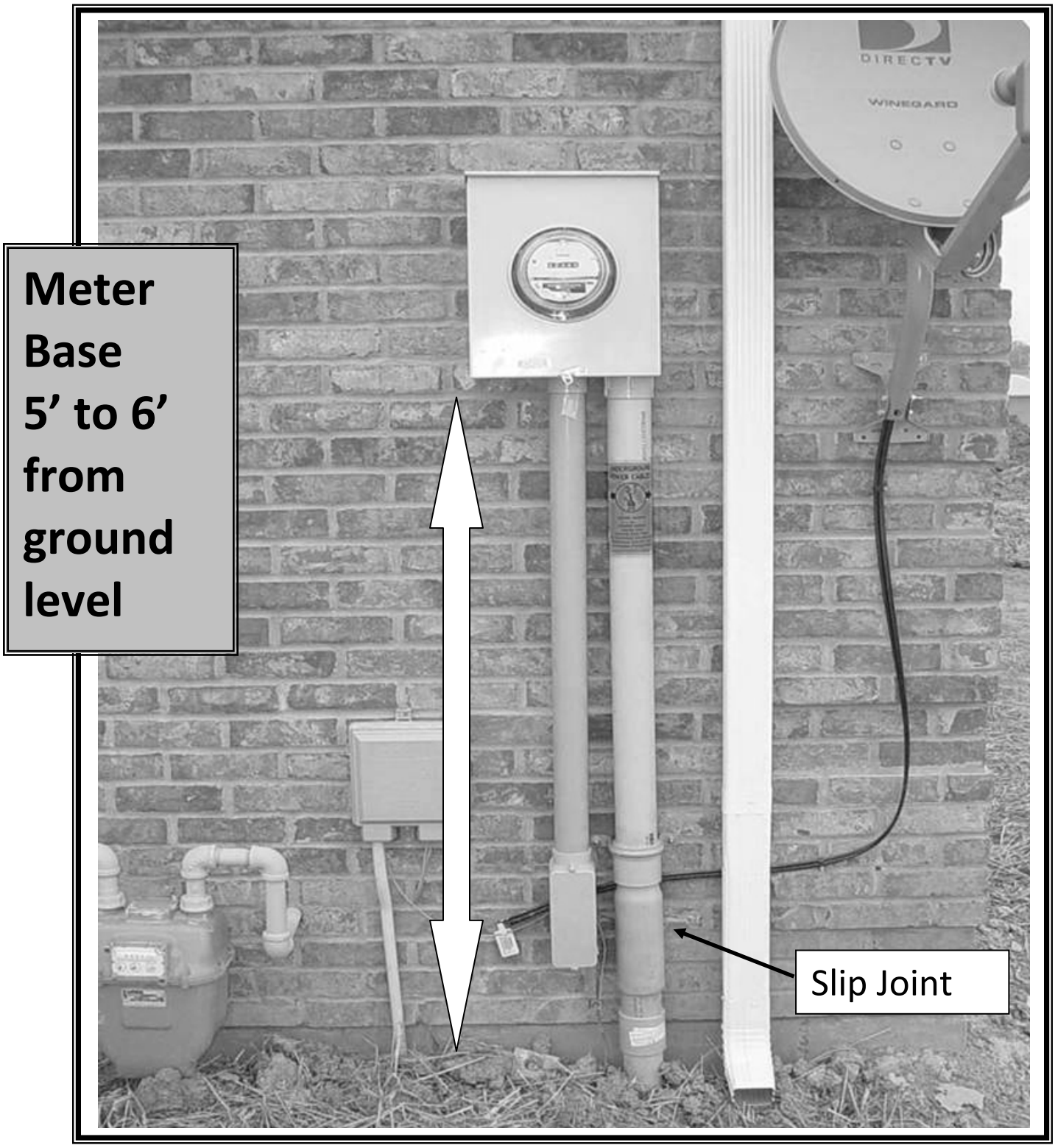
METER TO BE 5' TO 6' ABOVE GROUND

3.A.3

01-28-15

- **Home:**

Underground type.



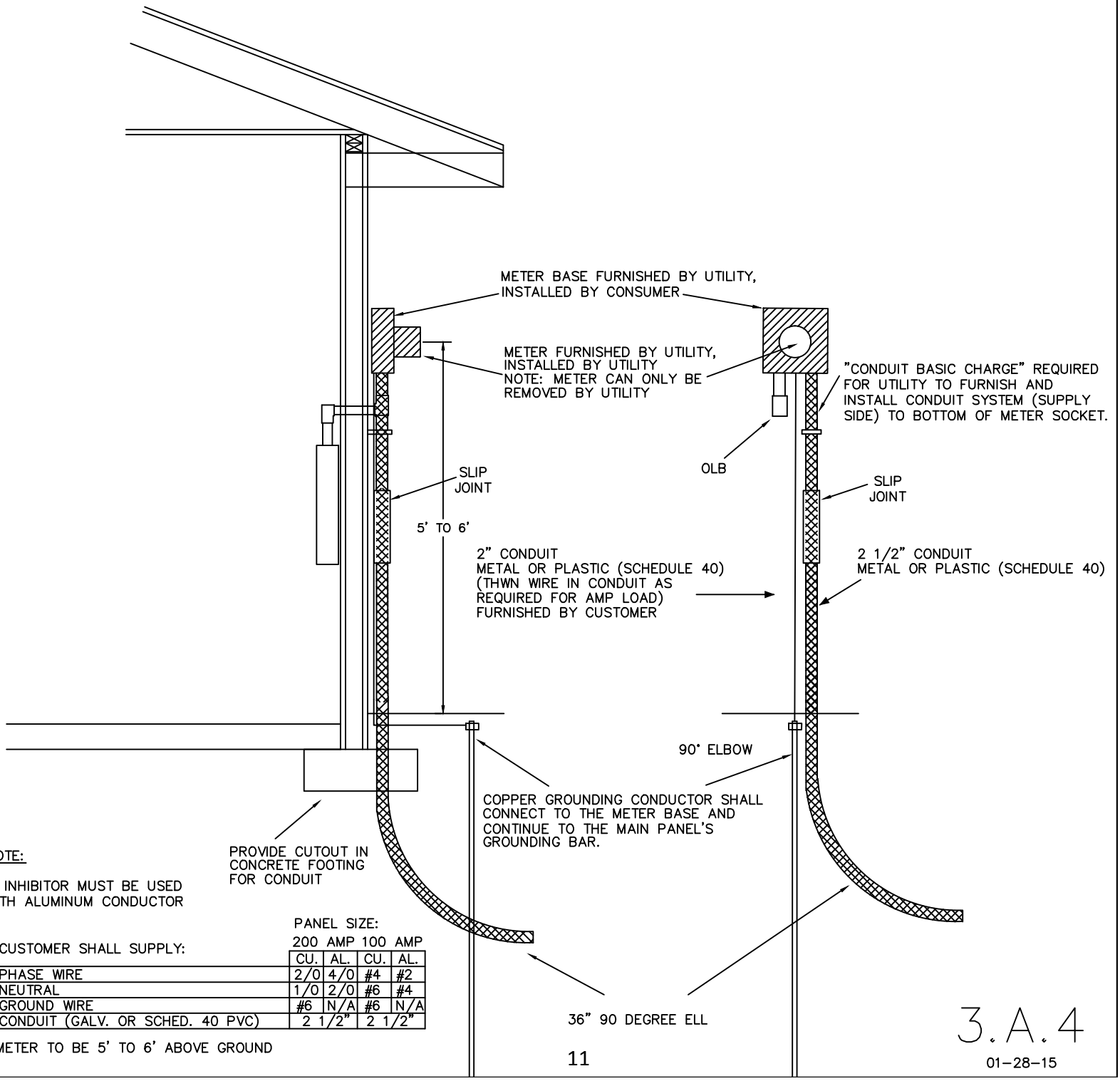
CITIZENS ELECTRIC CORPORATION
GUIDE FOR SERVICE ENTRANCE (UNDERGROUND TYPE) WITH METER ON HOME WITH A SLAB.

UNDERGROUND TYPE

HOME WITH A SLAB

CITIZENS ELECTRIC CORPORATION

877-876-3511
PERRYVILLE
STE. GENEVIEVE
FRUITLAND/JACKSON



NOTE:

1. INHIBITOR MUST BE USED WITH ALUMINUM CONDUCTOR

CUSTOMER SHALL SUPPLY:

	PANEL SIZE: 200 AMP		100 AMP	
	CU.	AL.	CU.	AL.
PHASE WIRE	2/0	4/0	#4	#2
NEUTRAL	1/0	2/0	#6	#4
GROUND WIRE	#6	N/A	#6	N/A
CONDUIT (GALV. OR SCHED. 40 PVC)	2 1/2"		2 1/2"	

METER TO BE 5' TO 6' ABOVE GROUND

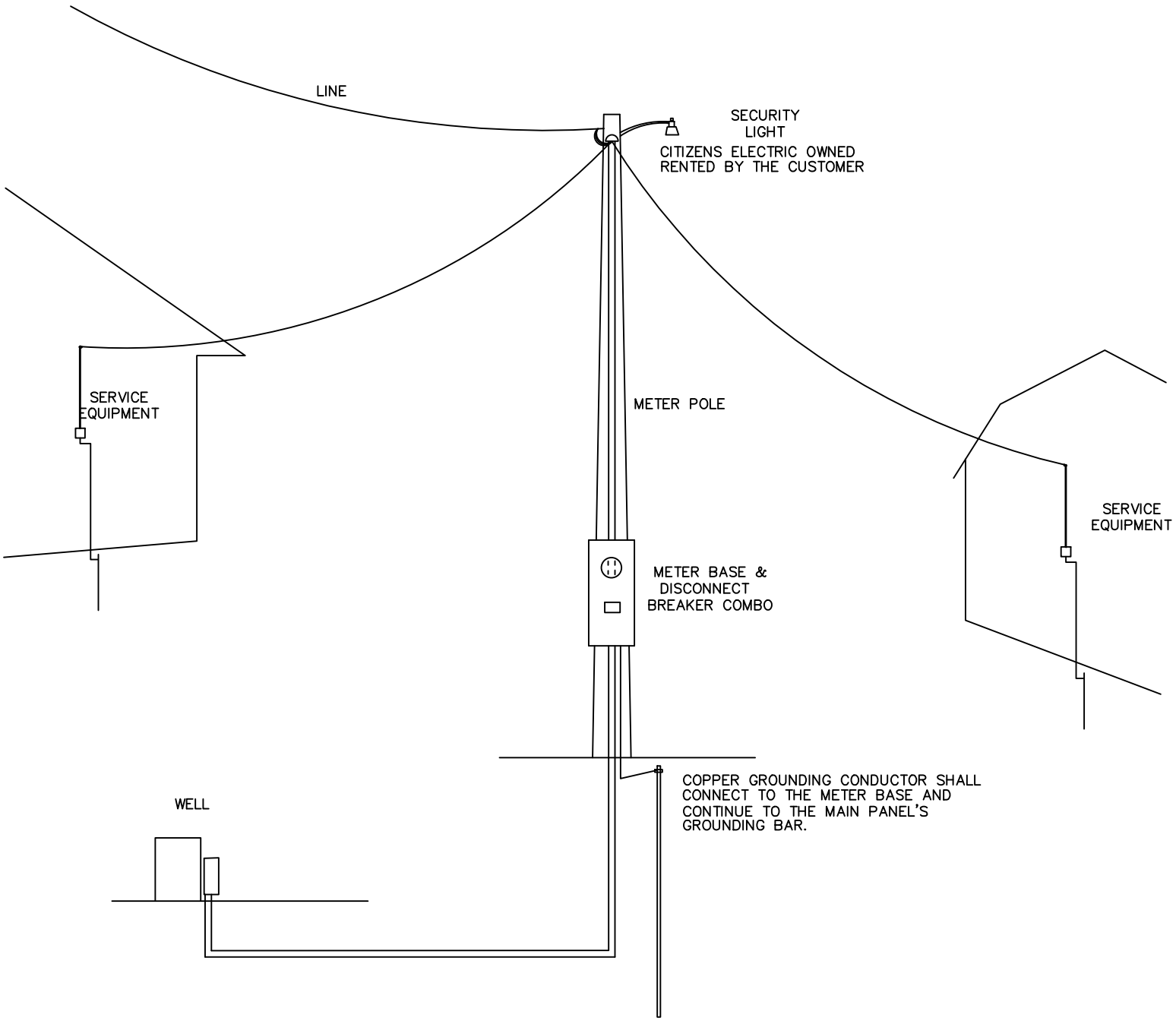
3.A.4

01-28-15

CITIZENS ELECTRIC CORPORATION
METER ON POLE SCHEMATIC OF RESIDENTIAL SERVICE ENTRANCES (YARD POLE)

CITIZENS ELECTRIC CORPORATION

877-876-3511
PERRYVILLE
STE. GENEVIEVE
FRUITLAND/JACKSON



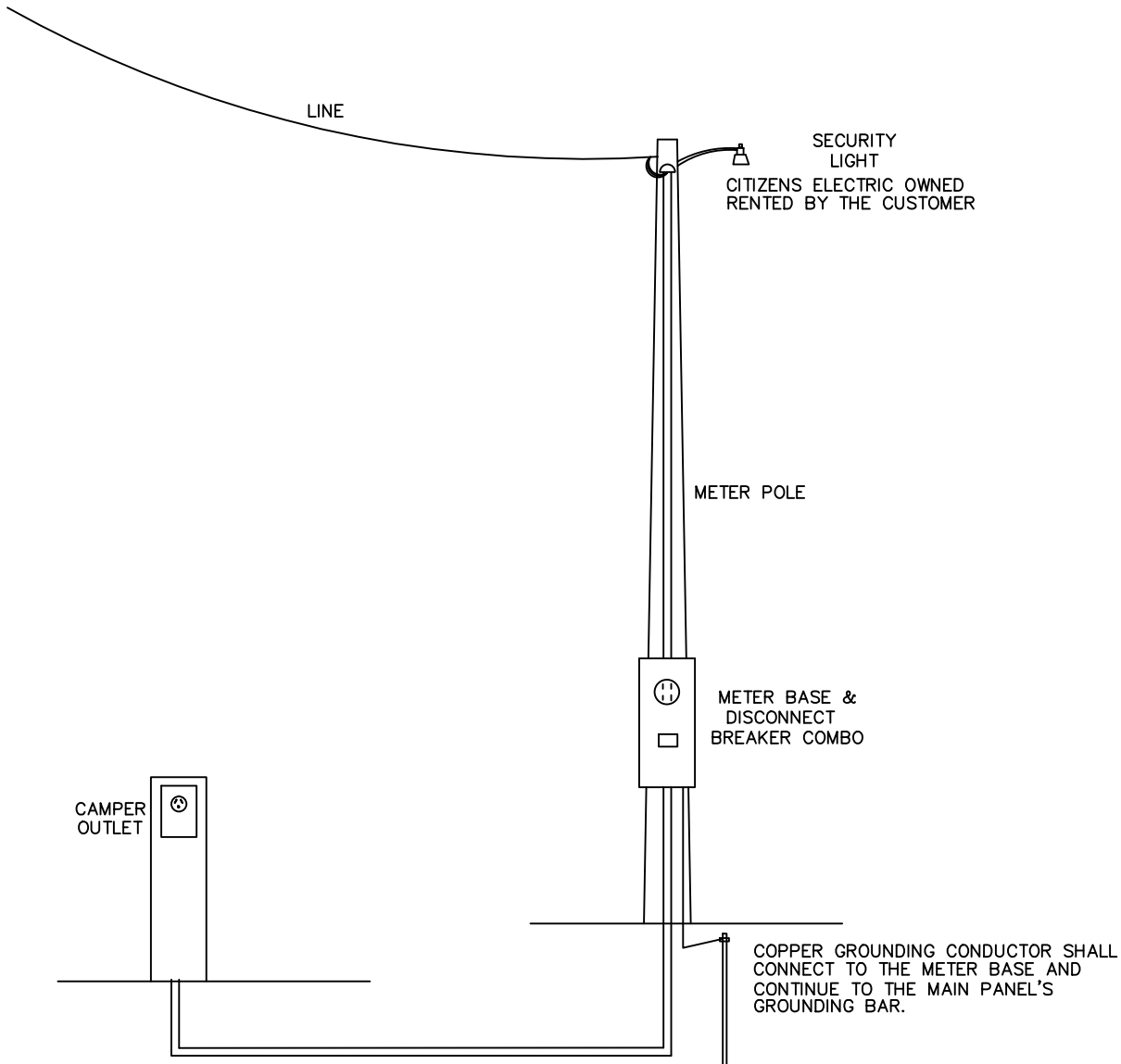
3.A.5

01-28-15

CITIZENS ELECTRIC CORPORATION
METER ON POLE SCHEMATIC OF RV OR OTHER TEMPORARY IN NATURE CONNECTION

CITIZENS ELECTRIC CORPORATION

877-876-3511
PERRYVILLE
STE. GENEVIEVE
FRUITLAND/JACKSON



MAIN PANEL BREAKER

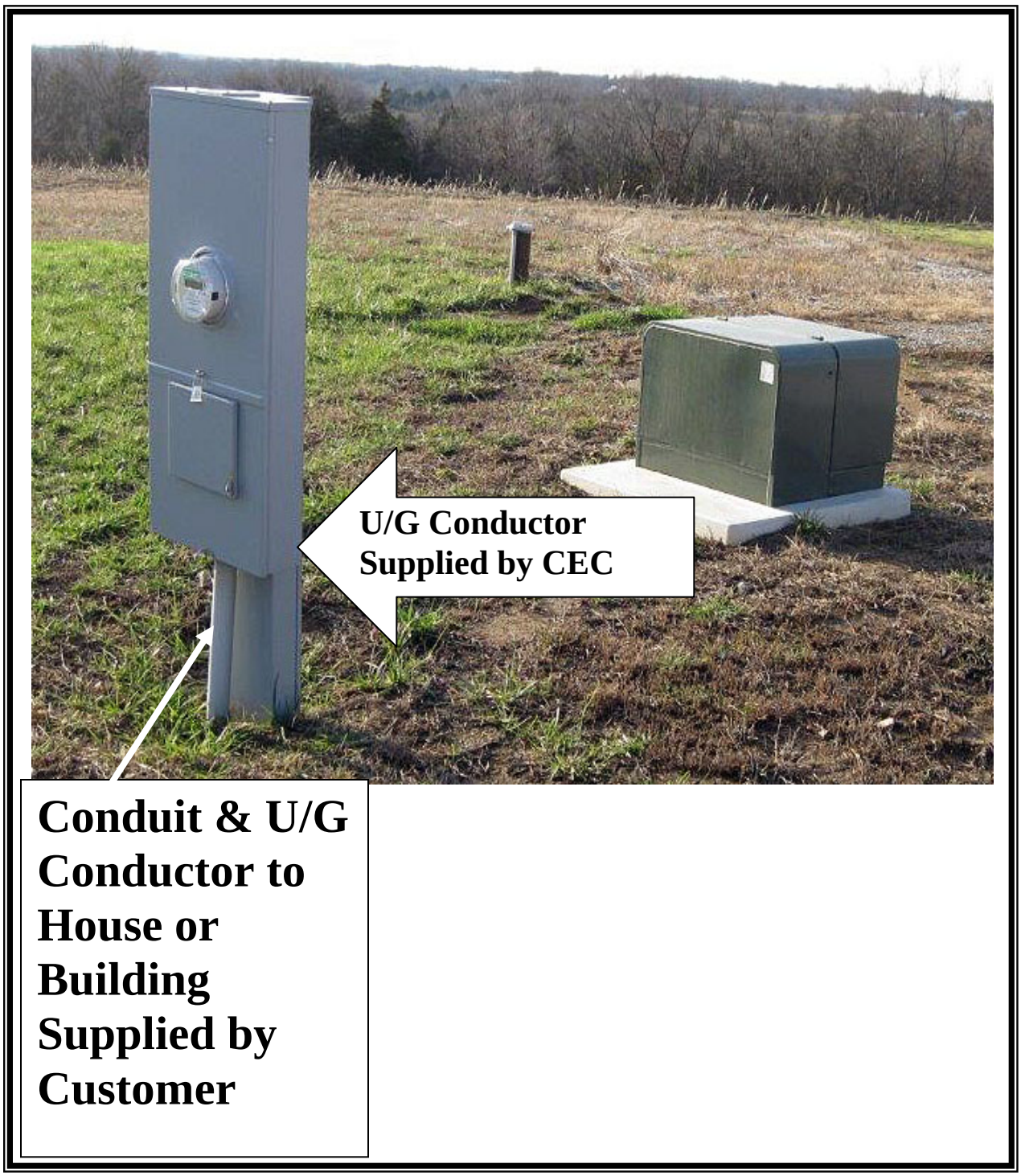
	320 AMP	200 AMP
PHASE WIRE	2-1/0 CU.	3/0 CU.
NEUTRAL	4/0 CU.	2/0 CU.
GROUND WIRE	#6 CU.	#6 CU.
CONDUIT (ALU.,GALV. OR SCHED.40 PVC)	2 1/2"	2 1/2"

THHN COPPER CONDUCTOR FROM LOAD SIDE OF BREAKER

	200 AMP	100 AMP	60 AMP	30 AMP	20 AMP
PHASE WIRE	2/0 CU.	#4 CU.	#6 CU.	#10 CU.	#12 CU.
NEUTRAL (IF APPLICABLE)	1/0 CU.	#4 CU.	#6 CU.	#10 CU.	#12 CU.
GROUND WIRE (IF APPLICABLE)	#6 CU.	#6 CU.	#6 CU.	#10 CU.	#12 CU.

- **Metering Pedestal:**

Underground Service from Padmount Tranformer.

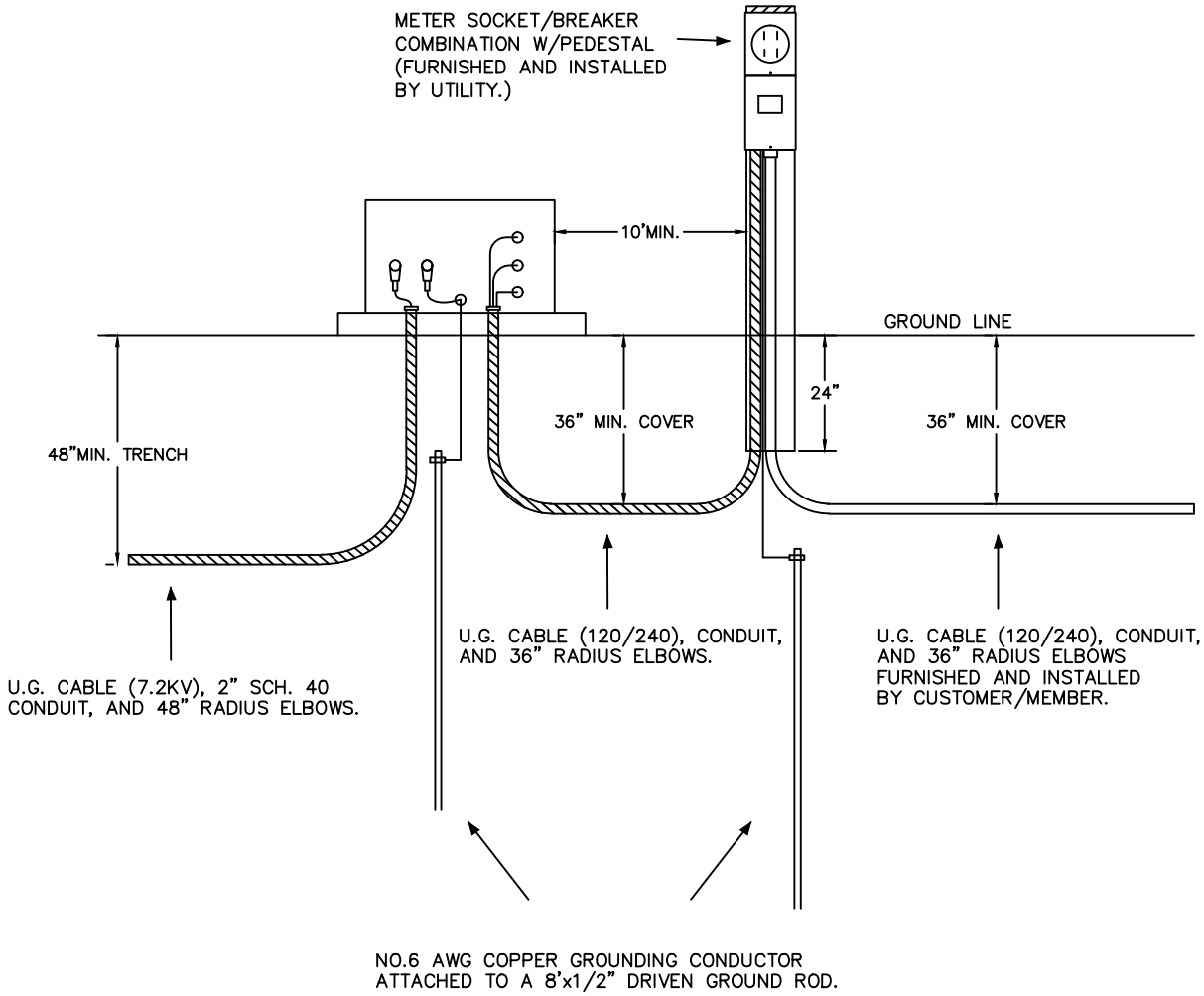


CITIZENS ELECTRIC CORPORATION
UNDERGROUND ELECTRIC SERVICE (METER PEDESTAL)

CITIZENS ELECTRIC CORPORATION

877–876–3511
PERRYVILLE
STE. GENEVIEVE
FRUITLAND/JACKSON

UNDERGROUND SOURCE



NOTE:

1. INHIBITOR MUST BE USED WITH ALUMINUM CONDUCTOR

CUSTOMER SHALL SUPPLY:	PANEL SIZE: 200 AMP		100 AMP	
	CU.	AL.	CU.	AL.
PHASE WIRE	2/0	4/0	#4	#2
NEUTRAL	1/0	2/0	#6	#4
GROUND WIRE	#6	N/A	#6	N/A
CONDUIT (SCHED. 40 PVC)	2 1/2"		2 1/2"	

3.A.7

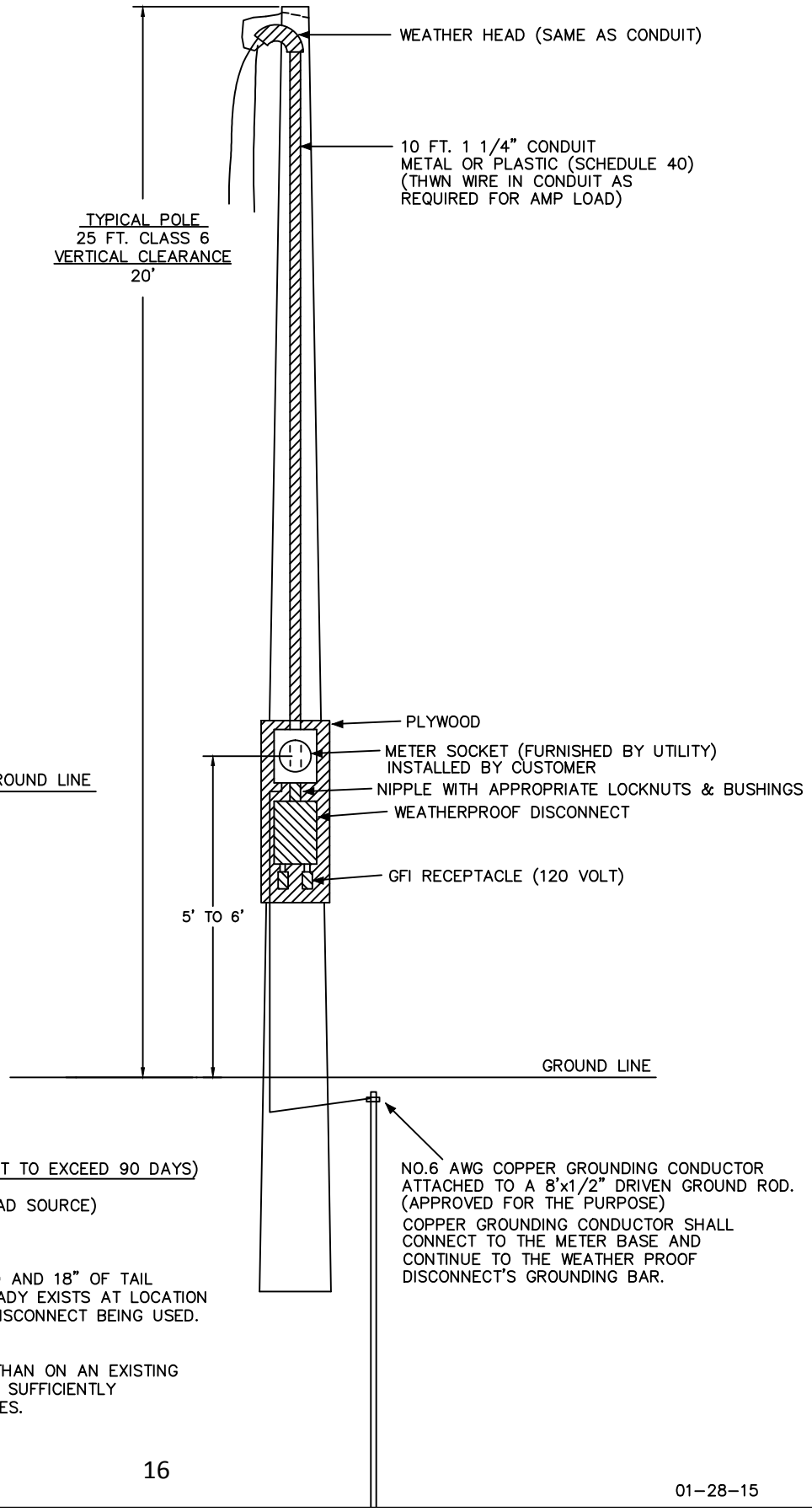
01–28–15

CITIZENS ELECTRIC CORPORATION
TEMPORARY ELECTRIC SERVICE (CONSTRUCTION POWER)

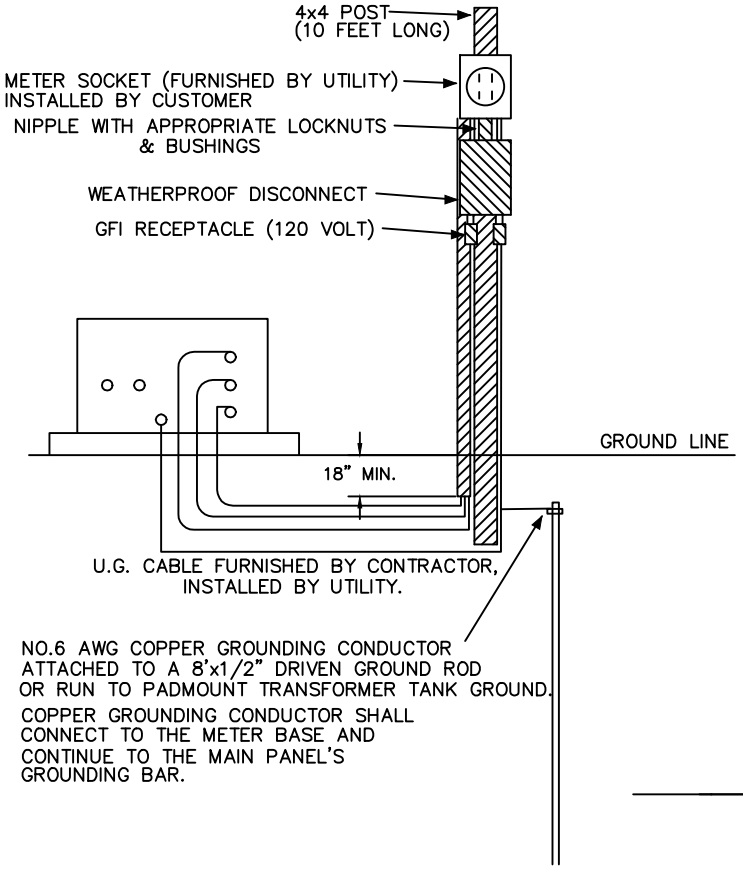
CITIZENS ELECTRIC CORPORATION

877-876-3511
PERRYVILLE
STE. GENEVIEVE
FRUITLAND/JACKSON

OVERHEAD SOURCE



UNDERGROUND SOURCE



1.) TEMPORARY ELECTRIC SERVICE (CONSTRUCTION POWER NOT TO EXCEED 90 DAYS)

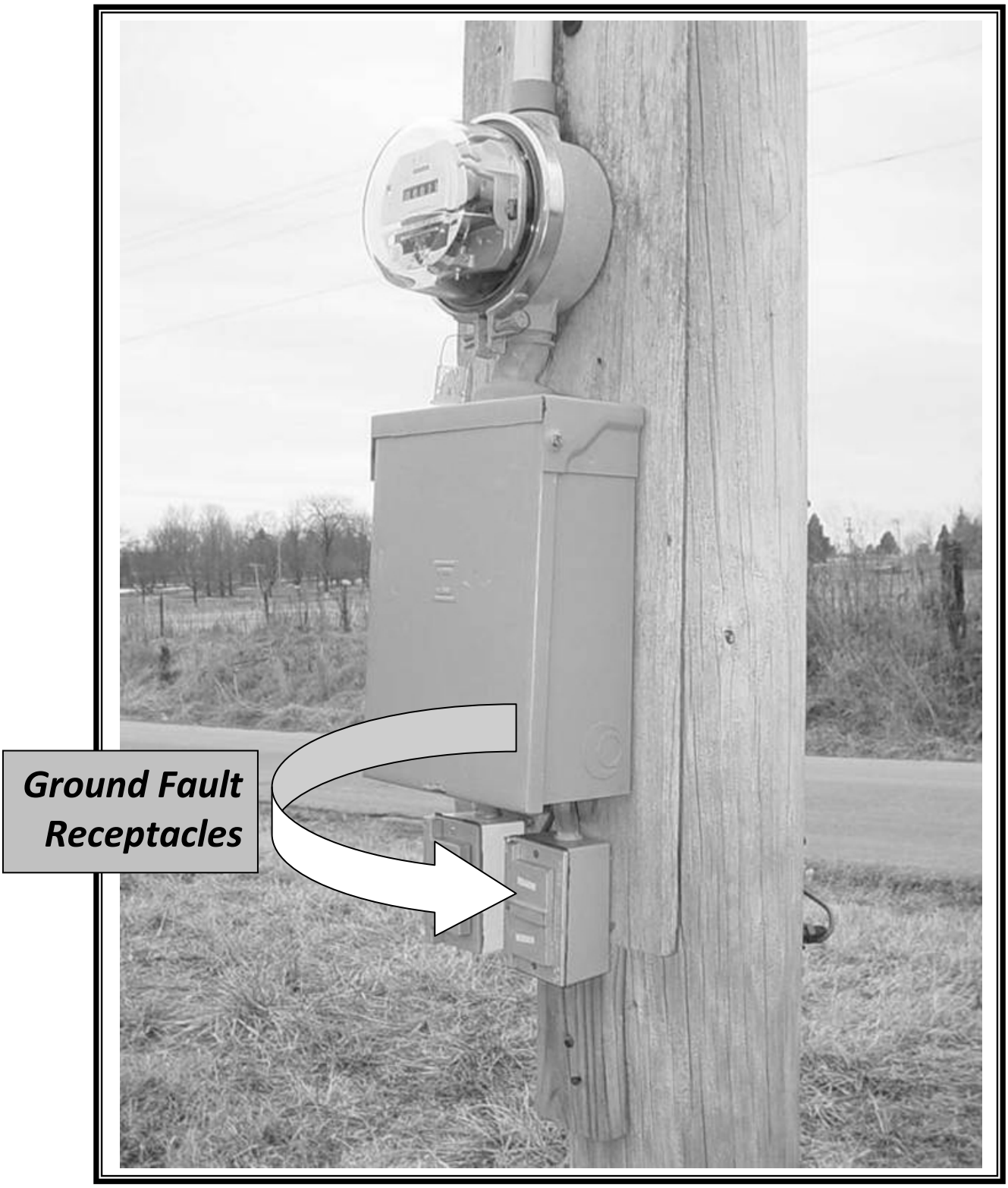
A.) CONTRACTOR SUPPLIES ELECTRIC LOOP (FOR OVERHEAD SOURCE) WHICH IS REQUIRED TO INCLUDE:
- a.) WEATHERPROOF DISCONNECT
- b.) GFI RECEPTACLE (120 VOLT)
- c.) 10 FOOT SECTION OF CONDUIT WITH WEATHERHEAD AND 18" OF TAIL
- d.) GROUND ROD AND CONNECTOR UNLESS ONE ALREADY EXISTS AT LOCATION
- e.) WIRE SIZE SHOULD BE SELECTED ACCORDING TO DISCONNECT BEING USED. MINIMUM CONDUCTOR SIZE IS #8 COPPER.

B.) IF LOCATION REQUESTED BY CONTRACTOR IS OTHER THAN ON AN EXISTING UTILITY POLE, THEN CONTRACTOR SUPPLIES A POLE SUFFICIENTLY BRACED FOR UTILITIES' OVERHEAD ATTACHMENT WIRES.

C.) C.E.C. EFFECTIVE DATE: JANUARY 1, 1995

01-28-15

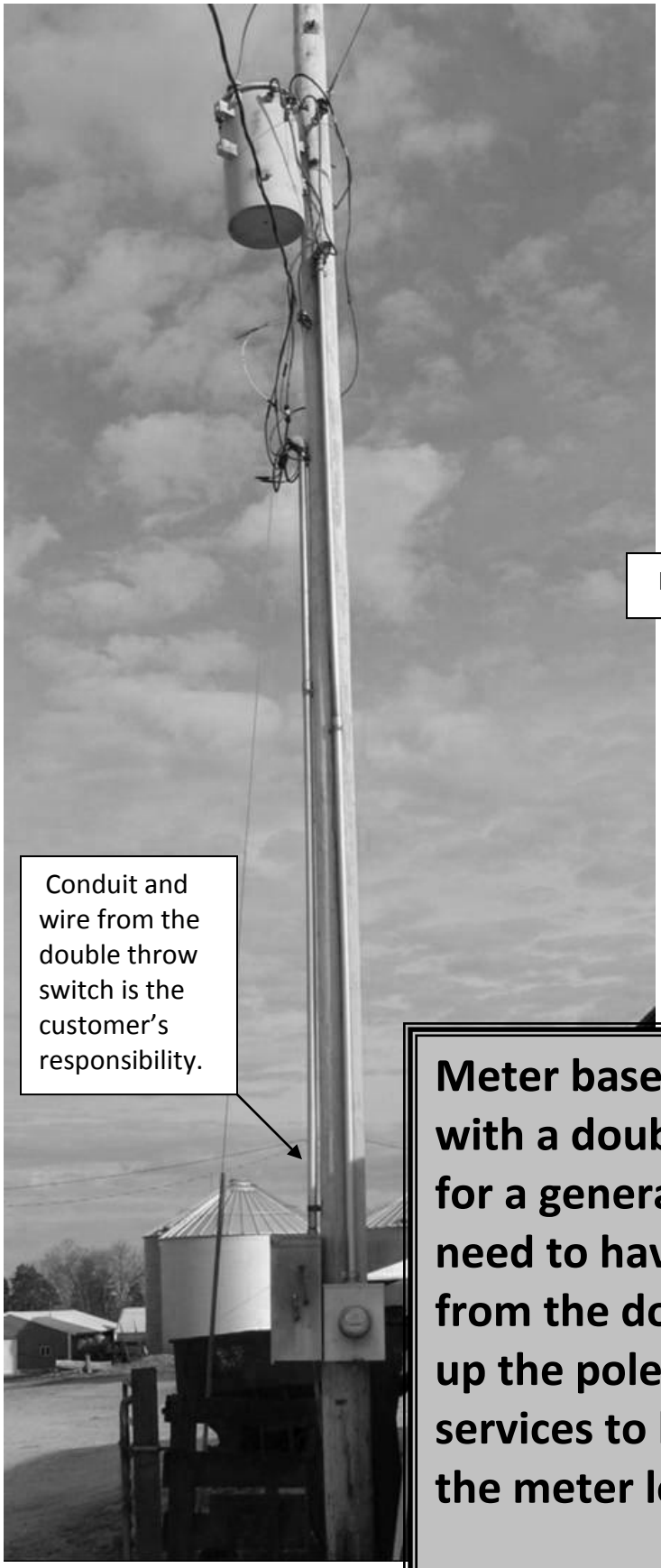
- **Temporary Construction Electric Service**
- **Overhead Construction**

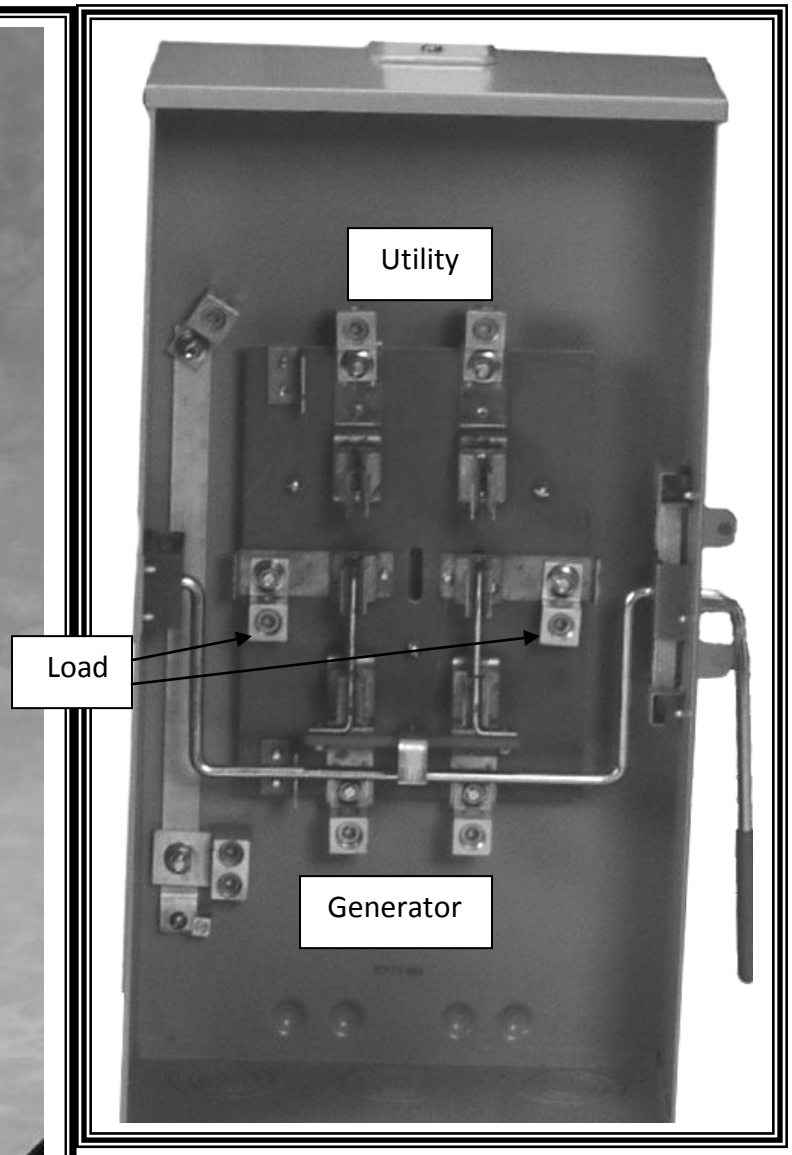


- **Temporary Construction Electric Service**

- **Underground Source**

Meter Loop with Double-Throw





Meter base on a CEC pole with a double-throw device for a generator hookup will need to have conduit going from the double-throw back up the pole for any overhead services to be connected to the meter loop.