

# GENERAL NOTES

1. Residential and commercial meter loops are typically used when constructing facilities for permanent service. All guidelines outlined in this document shall be followed by your contractor or electrician. PEC shall provide and install a service wire drop to the member's meter loop.
2. The member shall be in compliance with the National Electrical Code (NEC) and all applicable codes and ordinances as legally required by any local authorities having jurisdiction. PEC is in compliance with the National Electrical Safety Code (NESC).
3. For your protection, PEC urges you or your electrician to use only NEC-approved procedures and materials. All meter loops must be sized according to the load to be served and NEC guidelines.
4. PEC will refuse service where a known hazardous condition exists and/or if connections do not meet the specifications outlined in this document. PEC urges the member to use a qualified electrician to prevent safety hazards, additional costs, and delays. PEC requires that all construction meet or exceed these specifications prior to service connection. While PEC makes all reasonable efforts to ensure good electrical practice on the member's side, the Cooperative is not responsible for validating additional criteria that may be applicable to the member's premises beyond the scope of this document.
5. The member will be responsible for providing, installing, replacement, and repair of the meter loop, including the meter socket, panels, conduit, underground cable, poles, racks, weatherhead, etc. The member shall own the meter rack and shall be solely responsible for the related construction, installation, and maintenance of all electrical and structural components. Splicing is not permitted within meter sockets. The underground cable used shall be an approved type for underground installation (USE type or UF type). Conductor size will be based on member load, location of meter socket, and NEC for size of conduit. No member-owned facilities shall be mounted on PEC-owned poles.
6. Member-owned poles shall be installed a minimum of 10' and a maximum of 40' from transformer. Never install member-owned poles and/or PEC poles under overhead electric lines. Weatherhead shall not extend above pole top. Steel poles must be capped to prevent water ingress and may be more than one piece if the final product is appropriately coupled and meets all other requirements. Pole shall be buried 10% of pole height + 2', be of sufficient height above grade to meet NESC clearances (NESC Table 232-1), and meet the following criteria:
  - 5" minimum diameter, at the narrowest point, for creosote-treated or commercially pressure-treated wood poles.
  - 4.5" outside diameter and minimum 0.237" thickness for round steel poles.
  - 4" square and minimum 0.25" thickness for square steel poles.
7. Clearances from ground level to service attachment point shall follow the requirements of NESC Table 232-1 and associated footnotes and NESC Rule 234C3d for residential decks. Clearances from ground level to service attachment shall be a minimum of 16' for service to a non-residential building or for residential services crossing potential traffic exceeding 8' in height. 12' clearance is permissible for a residential driveway accessible to pedestrians and for horseback riders less than 8' in height. 10' clearance is permitted for areas only accessible to pedestrians. This is to include all pole-mounted services and weatherheads mounted to the side of a structure and above the roof line of a structure.



*Michelle Galloway*

**09/08/2023**

REV | F | DATE | 09/08/2023 | REVISION | REM. GALVANIZED ALL PGS. RE-WORDED NOTE 7 | BY | RWC | CHK | SSS | APR | MMG



**PEDERNALES ELECTRIC  
COOPERATIVE, INC.**

**RESIDENTIAL AND COMMERCIAL  
320-AMP METER LOOP SPECIFICATIONS**

drawn:	approved:	date:	
RWC	MMG	09/08/2023	<b>PAGE 1 OF 14</b>

# GENERAL NOTES

CONTINUED

8. Neutral conductor must be electrically continuous through the meter socket to the main panel and must be attached to the meter socket. Electric contractor has the option of terminating the neutral at the meter socket lug. Main panels will be terminated at the meter socket lugs. Neutral conductor size shall meet or exceed NEC or local ordinance requirements. It is the responsibility of the member or their electrician to make this determination.
9. For more information on higher amperages, refer to the NEC.
10. The exterior of the service area shall have a weatherproof main disconnect panel fused or breaker-protected regardless of the number of branch circuit breakers.
11. Ground cables shall be #2 copper minimum or larger per NEC Table 250.66. Ground rods shall be 5/8" x 8' copper-clad with clamp and driven at or below grade per NEC. Service areas not bound by permits or codes are required to install a 5/8" x 8' copper-clad ground rod. If the electric service is installed under an electrical permit, other grounding methods may be used in accordance with NEC.
12. Bypass levers shall be equipped on all single-phase meter installations 320 amps and above, and on all three-phase meter installations regardless of amperage.
13. For commercial/industrial/multi-family residential underground services where the meter or a bank of meters is to be located on the building or adjacent to the load, the service (cable, conduit, and trench) from the transformer to the load will be provided by the member/developer.
14. Service from transformer to meter shall not exceed 150' unless prior written approval is obtained from PEC.
15. Members and/or contractors will have a 30-day grace period to become fully compliant when new PEC specifications are posted. Any project started prior to the release of new specifications can be completed using the previous specifications.
16. Please contact your PEC district office at 1-888-554-4732 prior to construction.



*Michelle Galloway*

02/11/2025

REV | F | DATE | 02/11/2025 | REVISION | ADDED NOTE 14 | BY | AMJ | CHK | SSS | APR | MMG



PEDERNALES ELECTRIC  
COOPERATIVE, INC.

RESIDENTIAL AND COMMERCIAL  
320-AMP METER LOOP SPECIFICATIONS

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# INSTALLATION NOTES

## ORIENTATION:

The meter loop shall be mounted on the side of the pedestal facing the member's lot. Weatherproof fused or breaker-protected main disconnect panel will have a main disconnect on the outside of the building regardless of the number of circuit breakers.

## RACK:

1. Racks built off of existing meter pedestals shall be self-supporting with a minimum of 2" rigid or IMC pipes and caps, cut to the required length, with 10% of the total length + 2' of the pipe set in the ground in concrete.
2. Shall be stood away from the pedestal a minimum of 18" and not more than 24" with a 3" rigid pipe nipple of required length.
3. The cross supports for the meter socket, panel, or panels shall be a minimum of 3/4" x 1-1/2" unistrut of the required length, shall not extend more than 2" past the rigid pipe supports, and shall be bolted firmly to the rigid or IMC pipe.

## WIRE SIZE:

Shall be a minimum of 350 MCM copper or equivalent aluminum with equal size or one standard size smaller neutral. Parallel conductors of 2/0 copper and 4/0 aluminum for residences may be used.

## INSTALLATION OF WIRE:

The wire shall run from the line side of the meter socket into the pedestal allowing 36" of tail to connect to the pedestal connectors, and the same size wire or equivalent parallel conductors shall run from the load side of the meter socket to the panel or panels.

## PIPE NIPPLE CONNECTIONS:

1. 3" Schedule 40, rigid, or IMC nipples shall be used between the meter socket and 400A panel or gutter when used. 3" Schedule 40, rigid, or IMC nipples shall be used when two 200A or 125A panels are on one side of the meter socket.
2. 2" Schedule 40, rigid, or IMC nipples shall be used between the meter socket and 200A or 125A panels or between 200A or 125A panels and the gutter.
3. Schedule 40 PVC only allowed if ground wire is installed continuously between the panel(s) and the meter socket as shown on Page 8.

## GROUNDING:

Electric services, including but not limited to, service equipment, raceways, service distribution enclosures, junction boxes, wireways, enclosures, and any service conductor to be grounded/bonded, shall be grounded/bonded in accordance with the latest edition of the NEC. See Page 8 for grounding and bonding detail.



*Michelle Galloway*

09/08/2023

REV	F	DATE	09/08/2023	REVISION	REMOVE DOUBLE BARREL LUG NOTES	BY	RWC	CHK	SSS	APR	MMG
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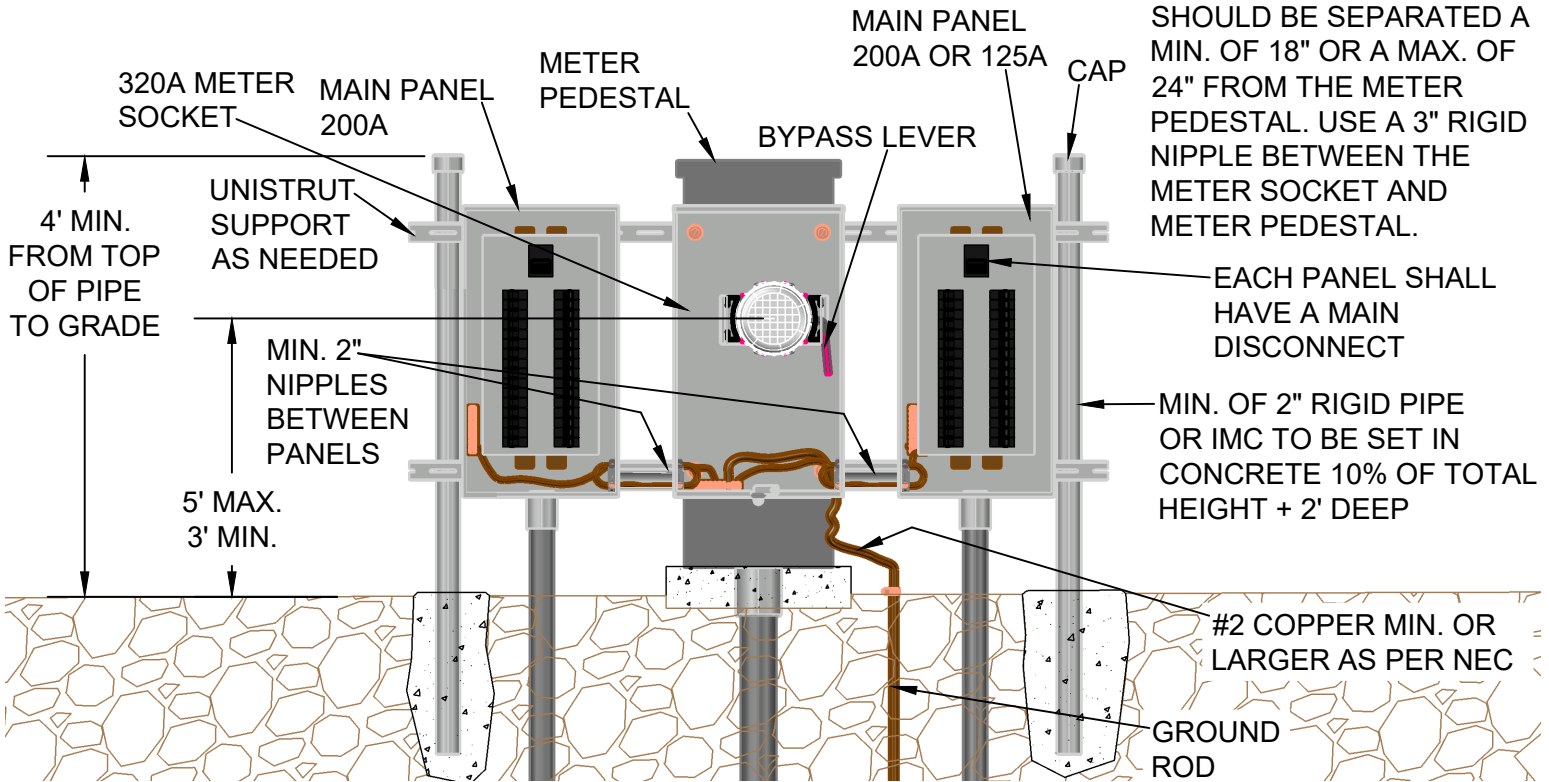
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320-AMP METER LOOP SPECIFICATIONS

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# SIDE-BY-SIDE MOUNT AND SIDE-MOUNT COMBINATION

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES

## SIDE-BY-SIDE MOUNT



IF ADDING TO AN EXISTING PEDESTAL, THE RACK SHOULD BE SEPARATED A MIN. OF 18" OR A MAX. OF 24" FROM THE METER PEDESTAL. USE A 3" RIGID NIPPLE BETWEEN THE METER SOCKET AND METER PEDESTAL.

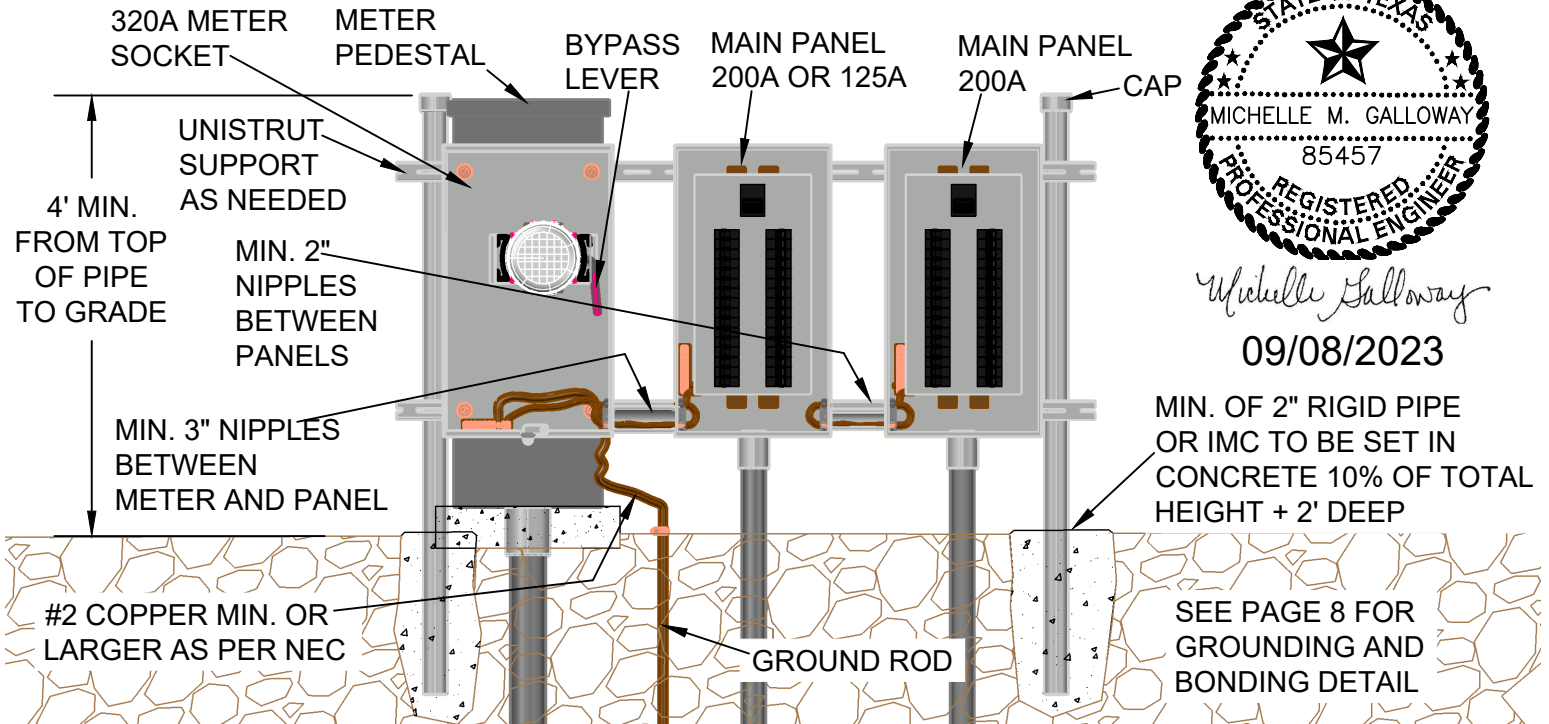
EACH PANEL SHALL HAVE A MAIN DISCONNECT

MIN. OF 2" RIGID PIPE OR IMC TO BE SET IN CONCRETE 10% OF TOTAL HEIGHT + 2' DEEP

#2 COPPER MIN. OR LARGER AS PER NEC

GROUND ROD

## SIDE-MOUNT COMBINATION



*Michelle Galloway*

09/08/2023

MIN. OF 2" RIGID PIPE OR IMC TO BE SET IN CONCRETE 10% OF TOTAL HEIGHT + 2' DEEP

#2 COPPER MIN. OR LARGER AS PER NEC

GROUND ROD

SEE PAGE 8 FOR GROUNDING AND BONDING DETAIL

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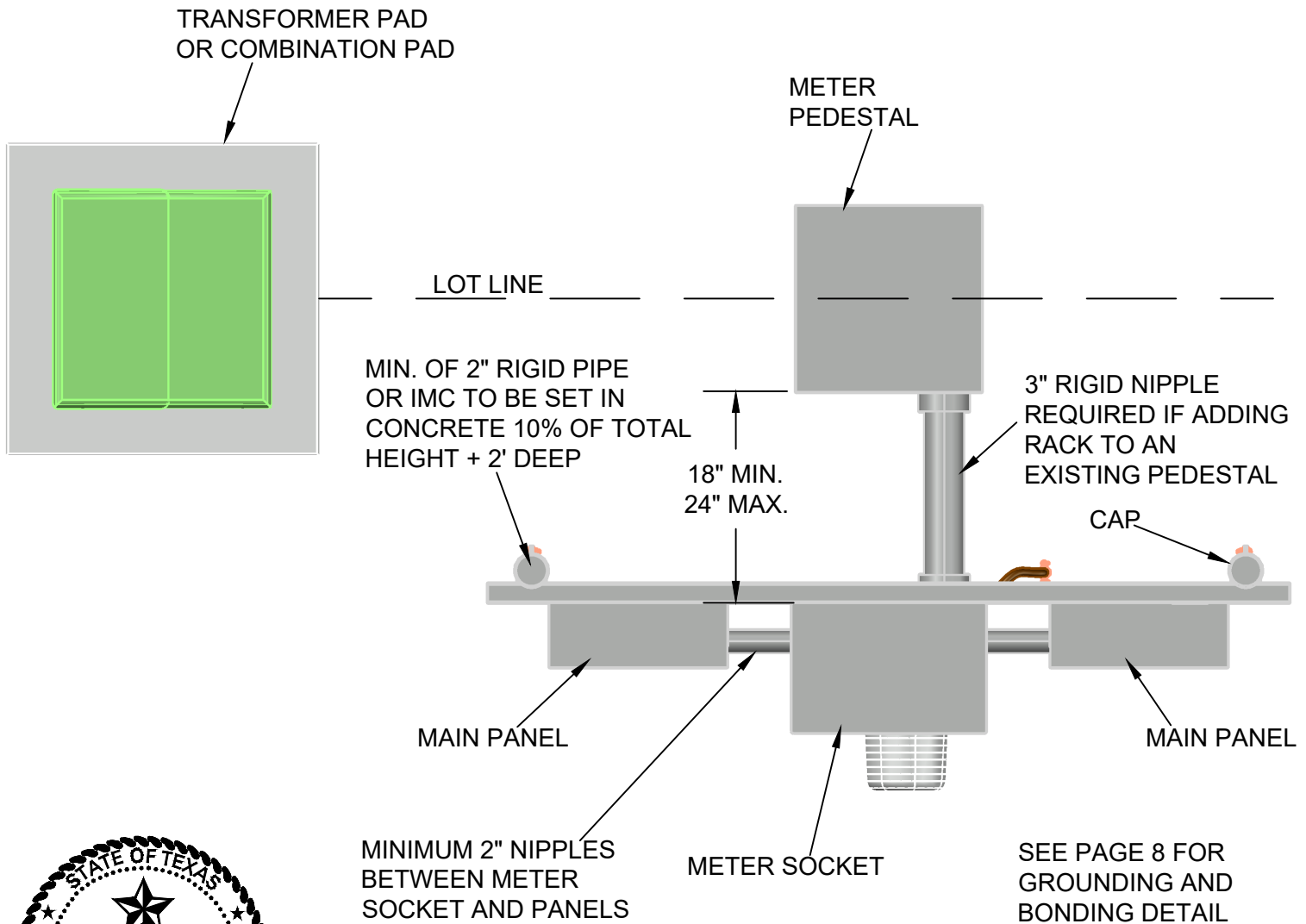
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320-AMP METER LOOP SPECIFICATIONS

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RWC	MMG	09/08/2023	

# PLAN VIEW OF 320A URD METER LOOP OFF A METER PEDESTAL

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES

NOT TO SCALE



MINIMUM 2" NIPPLES BETWEEN METER SOCKET AND PANELS

METER SOCKET

SEE PAGE 8 FOR GROUNDING AND BONDING DETAIL

**320A METER LOOP RACK MUST FACE TOWARD THE LOT TO BE SERVED**



*Michelle Galloway*

09/08/2023

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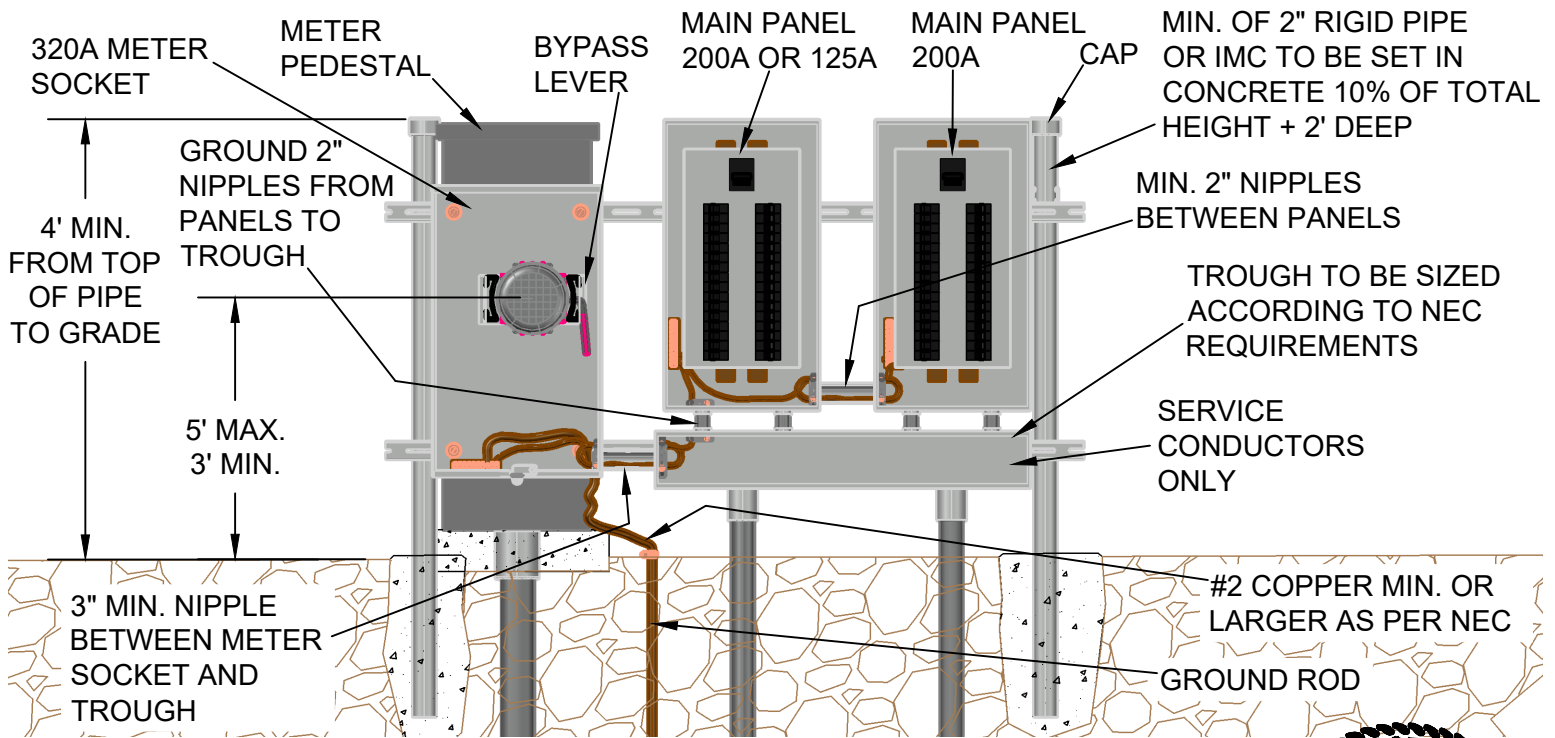
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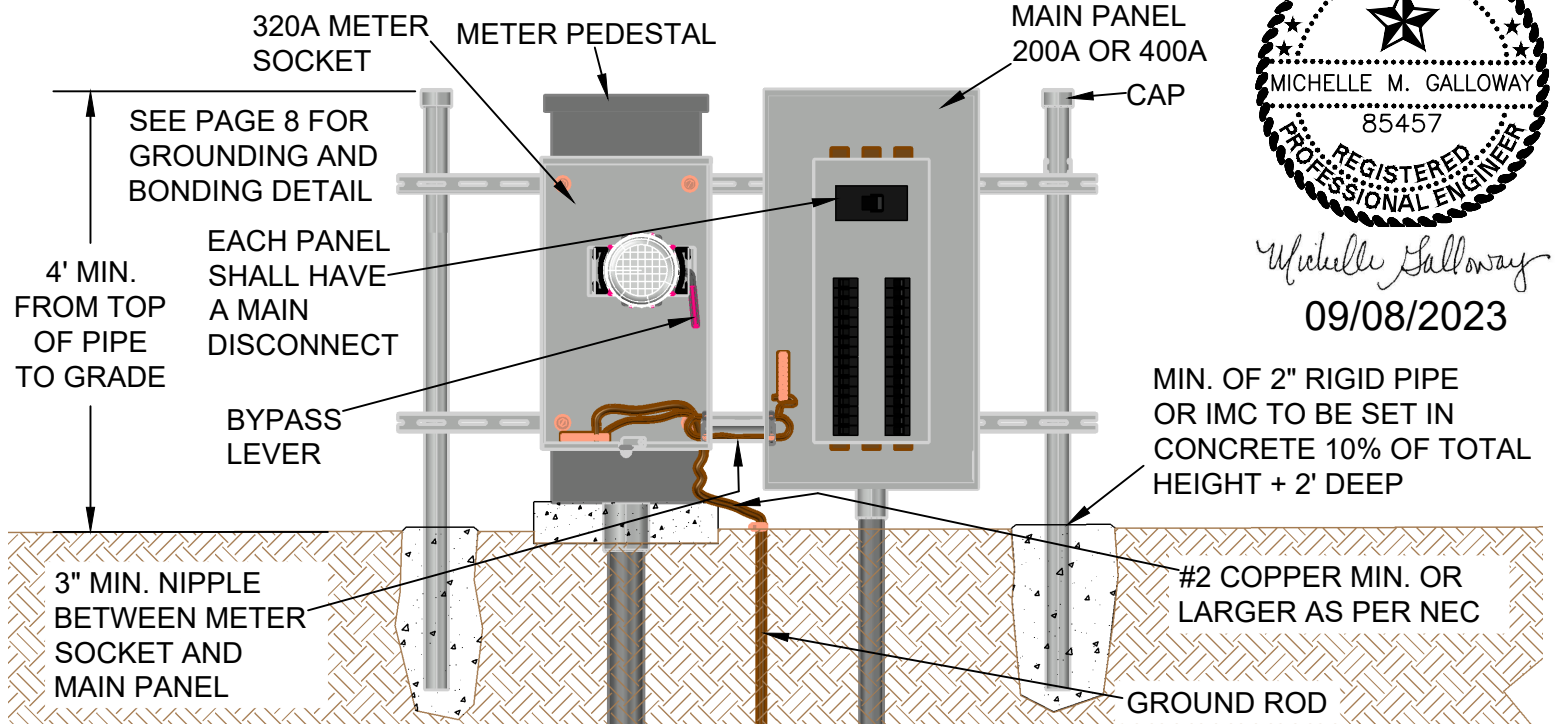
# SIDE MOUNT WITH TROUGH COMBINATION AND 250A TO 400A MAIN PANEL

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES

## SIDE-MOUNT WITH TROUGH COMBINATION



## 250A TO 400A MAIN PANEL



*Michelle Galloway*  
09/08/2023

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# TYPICAL URD 320A LOOP ON THE SIDE OF A HOUSE

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES

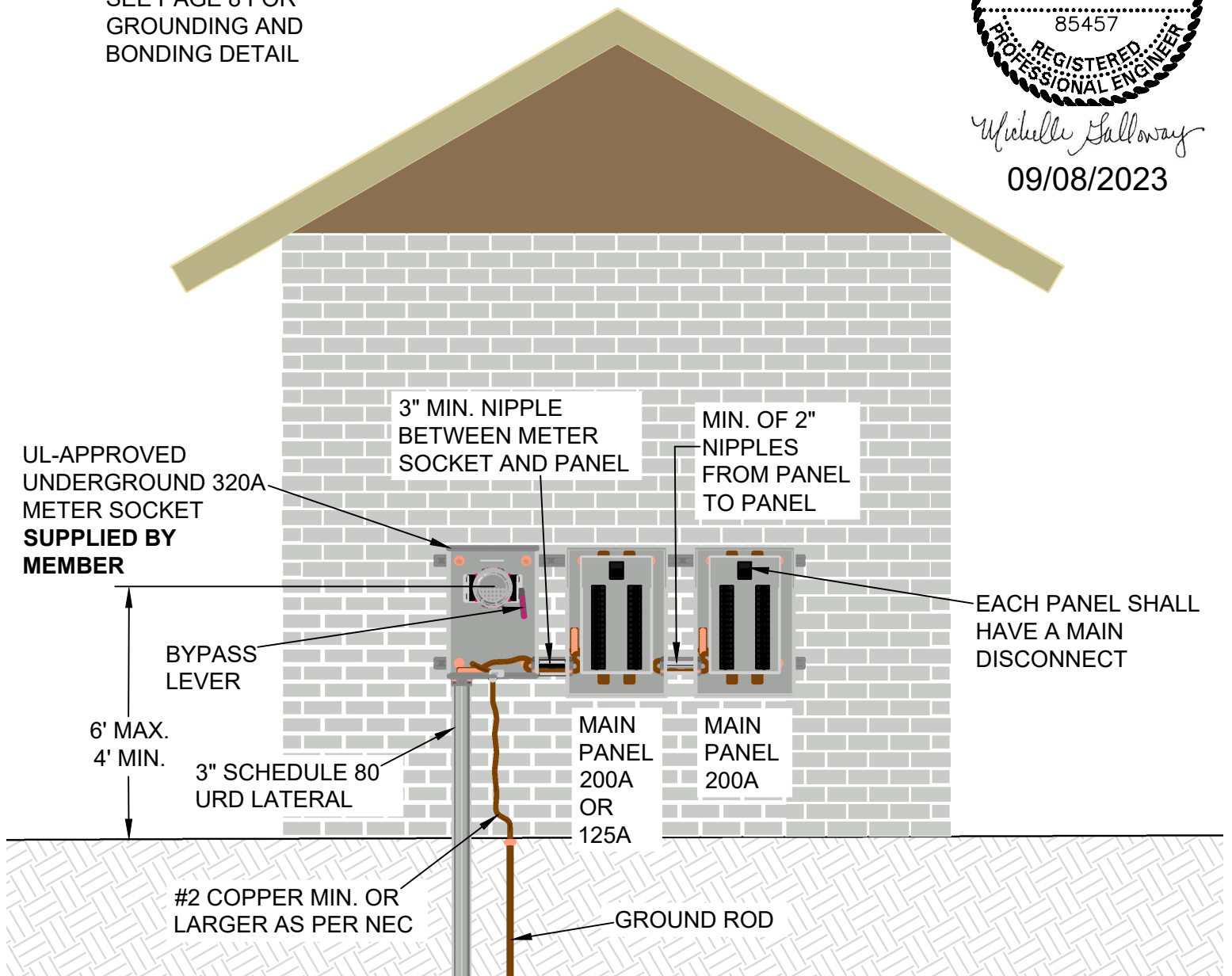
**NOTES:**

1. ANY LOOP CONFIGURATION CAN BE USED.
2. THE URD LATERAL FROM THE PAD-MOUNTED TRANSFORMER MUST BE INSPECTED BY THE UNDERGROUND INSPECTOR IN ACCORDANCE WITH EXISTING REQUIREMENTS.
3. THE INCOMING CONDUIT MUST ATTACH TO THE SIDE OF THE METER SOCKET OPPOSITE FROM THE MAIN PANELS.

SEE PAGE 8 FOR  
GROUNDING AND  
BONDING DETAIL



*Michelle Galloway*  
09/08/2023



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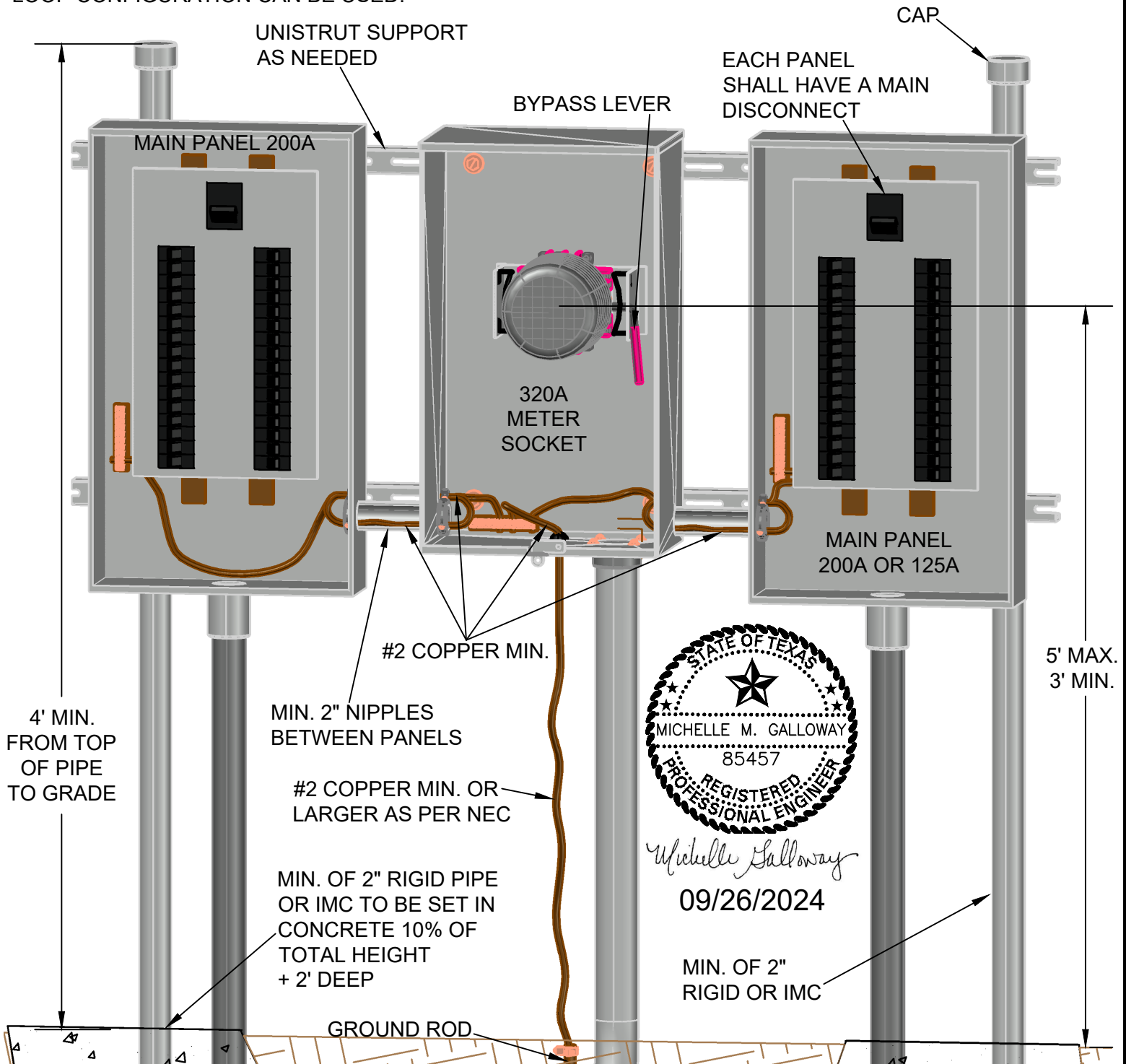
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# TYPICAL URD 320A FREE-STANDING RACK

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES

MEMBER WILL BE RESPONSIBLE FOR THE INSTALLATION OF UNDERGROUND CABLE FROM THE BREAKER TO THE LOAD SIDE OF THE METER SOCKET. THE UNDERGROUND CABLE USED SHALL BE AN APPROVED TYPE FOR UNDERGROUND INSTALLATION (USE TYPE OR UF TYPE). CONDUCTOR SIZE WILL BE BASED ON MEMBER LOAD, LOCATION OF METER, AND NATIONAL ELECTRICAL CODE FOR SIZE OF CONDUIT. ANY LOOP CONFIGURATION CAN BE USED.



REV	E	DATE	09/26/2024	REVISION	REVISED GROUND WIRE FROM #6 TO #2	BY	AMJ	CHK	SSS	APR	MMG
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320-AMP METER LOOP SPECIFICATIONS

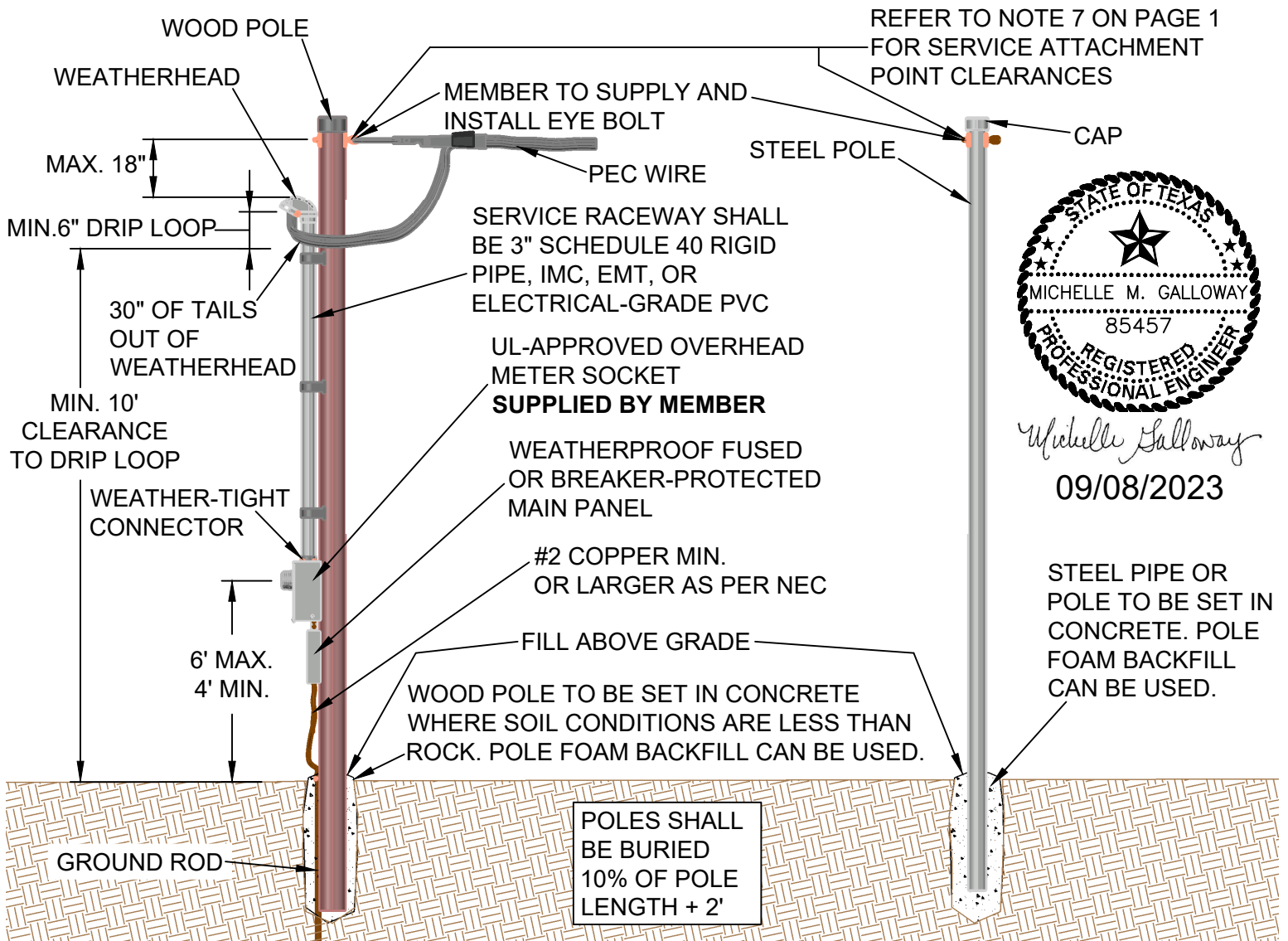
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AMJ	MMG	09/26/2024	



# CONSTRUCTION OF MEMBER-OWNED METER POLES

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES

1. Member to purchase and install pole. Member-owned facilities are not permitted on PEC poles.
2. There shall be no more than two loops on any one pole. Weatherhead shall not extend above pole top.
3. Member-owned poles shall be set at a minimum depth of 10% of pole length plus 2', be of sufficient height above grade to meet NESC clearances (NESC Table 232-1), and meet the following criteria:
  - 5" minimum diameter, at the narrowest point, for creosote-treated or commercially pressure-treated wood poles.
  - 4.5" outside diameter and minimum 0.237" thickness for round steel poles.
  - 4" square and minimum 0.25" thickness for square steel poles.
4. Member-owned steel poles must be capped to prevent water ingress and may be more than one piece if the final product is appropriately coupled and meets all other requirements.
5. Member-owned pole may be installed no closer than 10' and no further than 40' from the transformer and/or PEC pole. NEVER install member-owned poles under overhead electric lines.
6. Installations must comply with NEC and NESC specifications.



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# TYPICAL 320A SINGLE-PHASE LOOP ON A METER POLE WITH SIDE-BY-SIDE MOUNT

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES.  
**MEMBER TO PURCHASE AND INSTALL POLE. METER POLE NOTES ARE ON PAGE 9.**

REFER TO NOTE 7  
ON PAGE 1

MIN. OF 350 MCM COPPER OR EQUIVALENT ALUMINUM WITH 30" OF TAILS OUT OF THE WEATHERHEAD AND MIN. 6" OF DRIP LOOP. NEUTRAL CONDUCTOR MUST BE ELECTRICALLY CONTINUOUS THROUGH THE METER SOCKET TO THE MAIN PANEL AND MUST BE ATTACHED TO THE METER SOCKET.

SERVICE RACEWAY SHALL BE 3" SCHEDULE 40 RIGID PIPE, IMC, EMT, OR ELECTRICAL-GRADE PVC

MAX. 18"

3" X 3" TWO-HOLE STRAPS FOR THE TYPE OF CONDUIT BEING USED

SEE PAGE 8 FOR GROUNDING AND BONDING DETAIL

MIN. 2" NIPPLES BETWEEN PANELS

MIN. OF 2" RIGID PIPE OR IMC TO BE SET IN CONCRETE 10% OF TOTAL HEIGHT + 2' DEEP

EACH PANEL SHALL HAVE A MAIN DISCONNECT

WEATHER-TIGHT CONNECTOR

UNISTRUT MIN. 3/4" X 1 1/2" OF REQUIRED LENGTH

200A MAIN PANEL

BYPASS LEVER

200A OR 125A MAIN PANEL

CAP

MIN. 10' CLEARANCE TO DRIP LOOP



*Michelle Galloway*  
09/08/2023

UL-APPROVED OVERHEAD METER SOCKET SUPPLIED BY MEMBER

6' MAX. 4' MIN.

#2 COPPER MIN.

#2 COPPER MIN. OR LARGER AS PER NEC

2" MAX. EXTENSION

GROUND ROD

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RESIDENTIAL AND COMMERCIAL 320-AMP METER LOOP SPECIFICATIONS

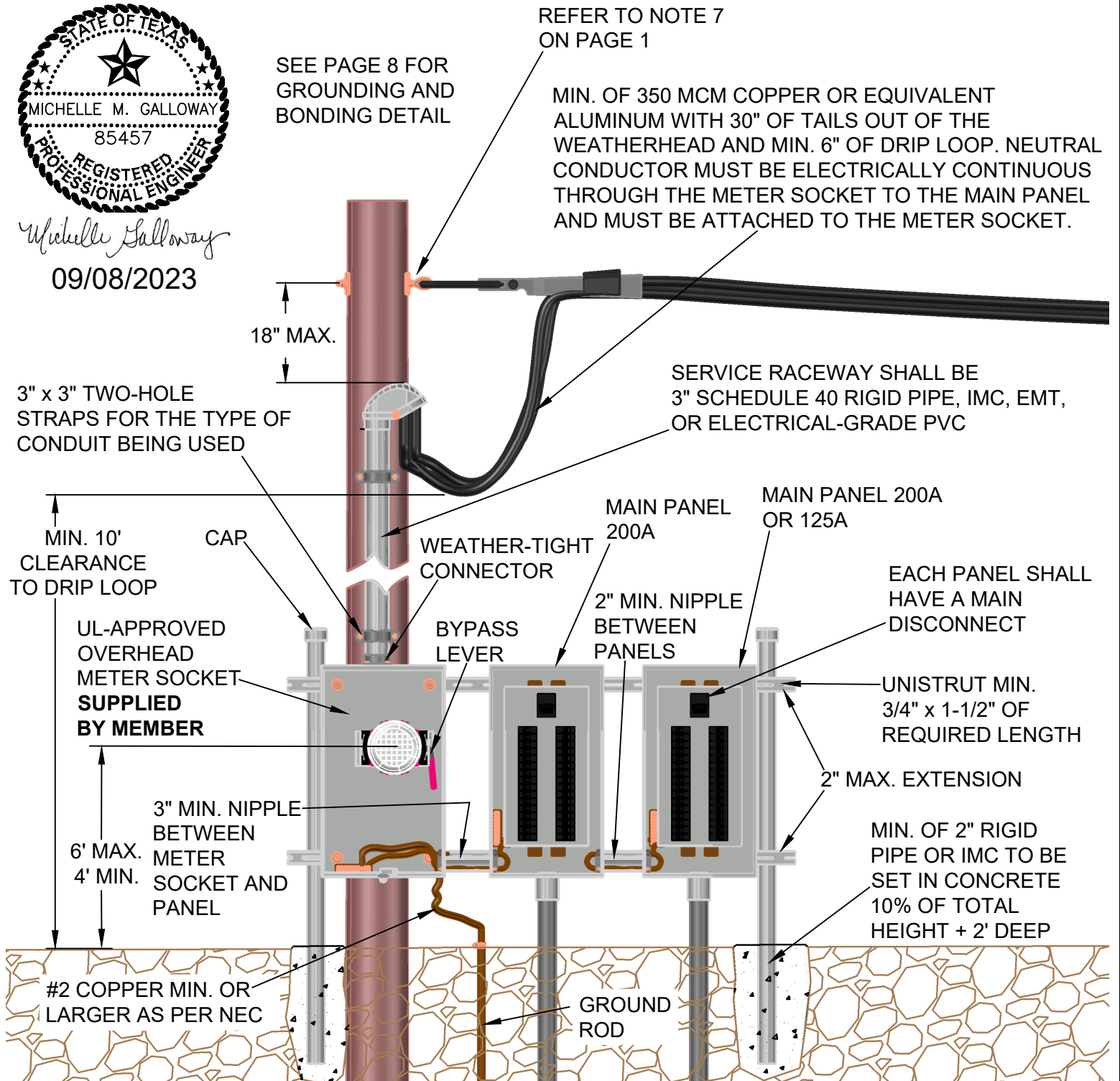
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# TYPICAL 320A SINGLE-PHASE LOOP ON A METER POLE WITH SIDE-MOUNT PANELS

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES.  
**MEMBER TO PURCHASE AND INSTALL POLE. METER POLE NOTES ARE ON PAGE 9.**



*Michelle Galloway*  
 09/08/2023



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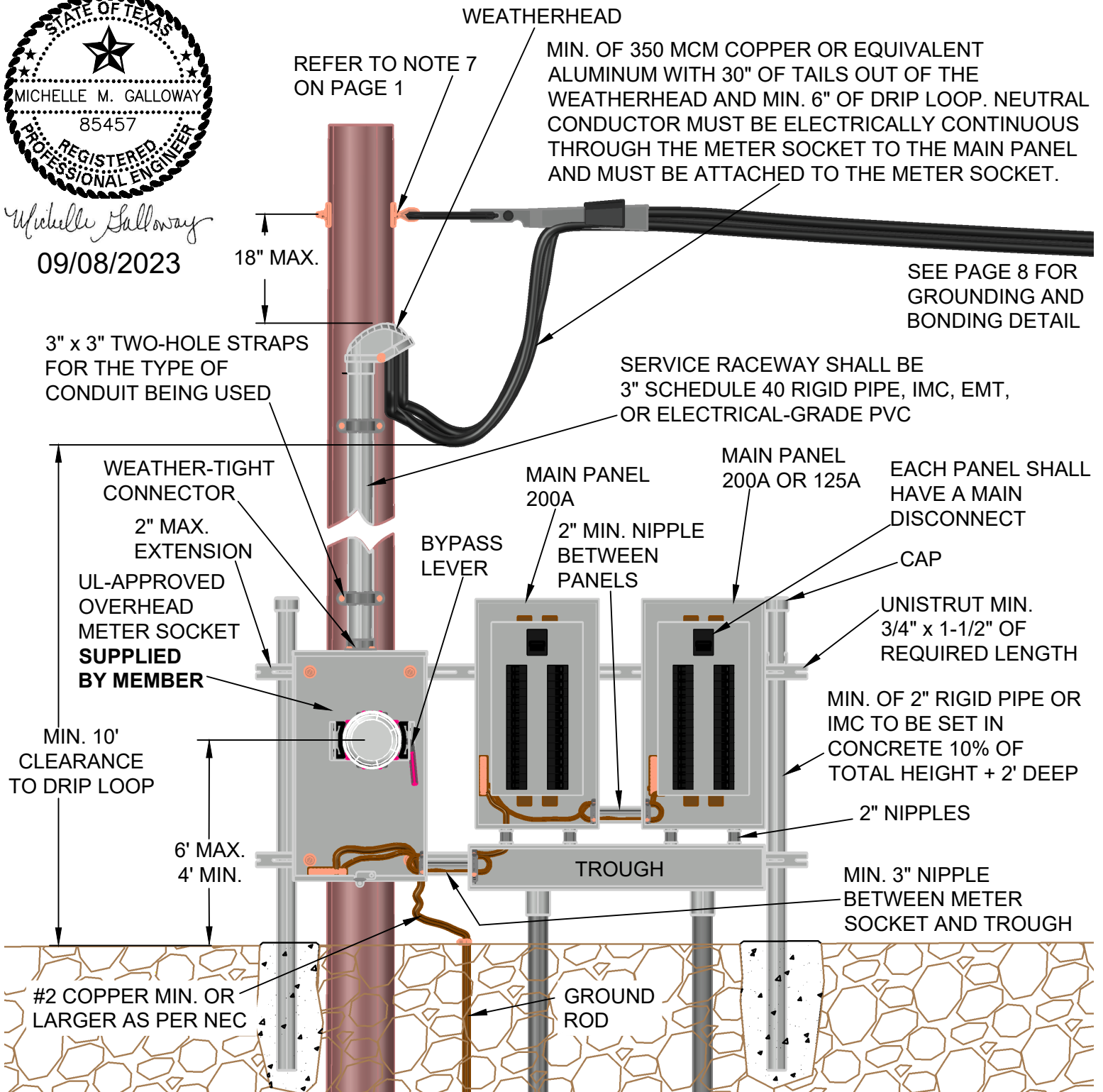
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# TYPICAL 320A SINGLE-PHASE LOOP (RACK TYPE) WITH SIDE-MOUNT PANELS

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES.  
MEMBER TO PURCHASE AND INSTALL POLE. METER POLE NOTES ARE ON PAGE 9.



*Michelle Galloway*  
09/08/2023



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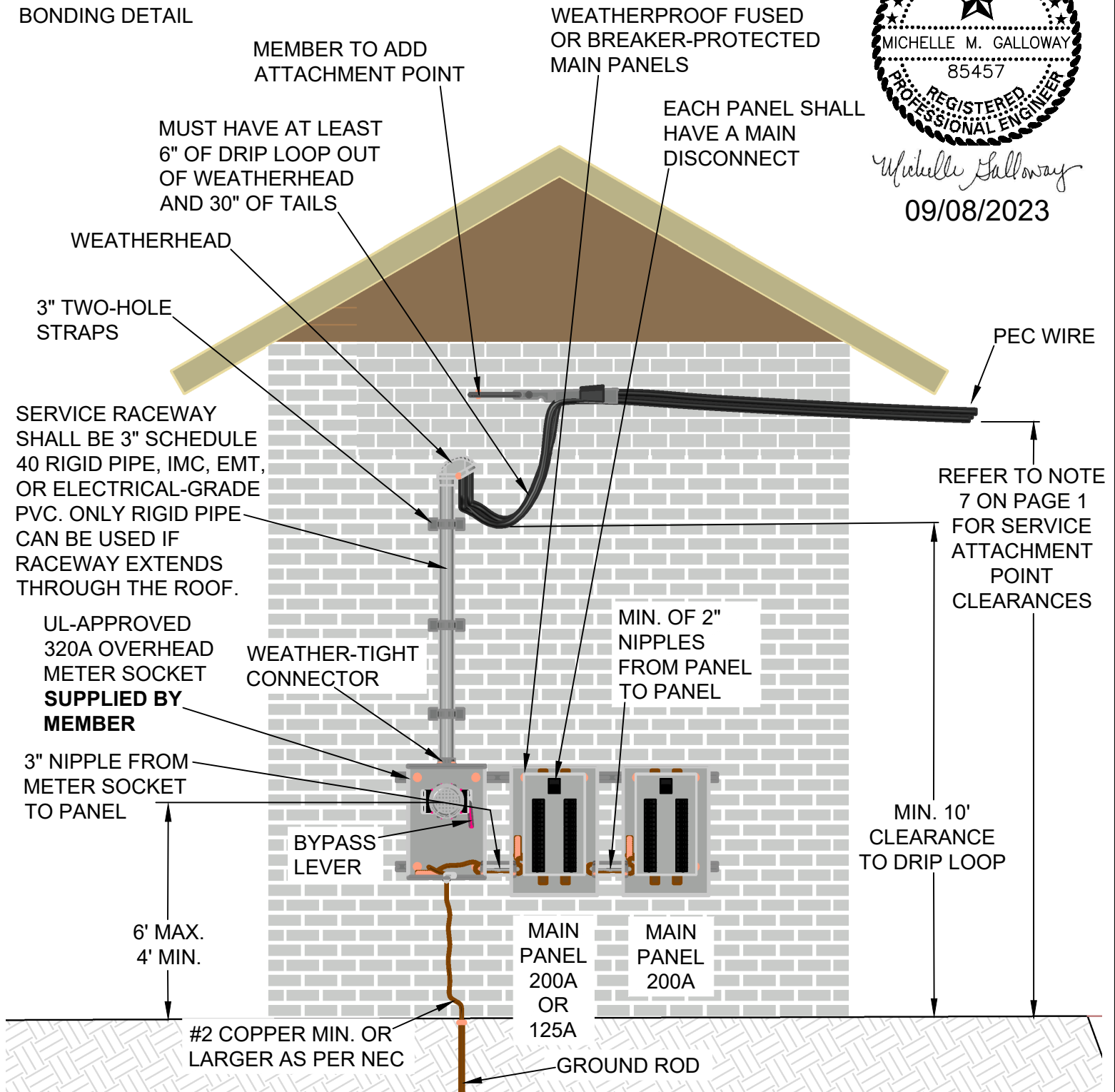
# TYPICAL 320A LOOP ON A RESIDENCE

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES

SEE PAGE 8 FOR  
GROUNDING AND  
BONDING DETAIL



*Michelle Galloway*  
09/08/2023



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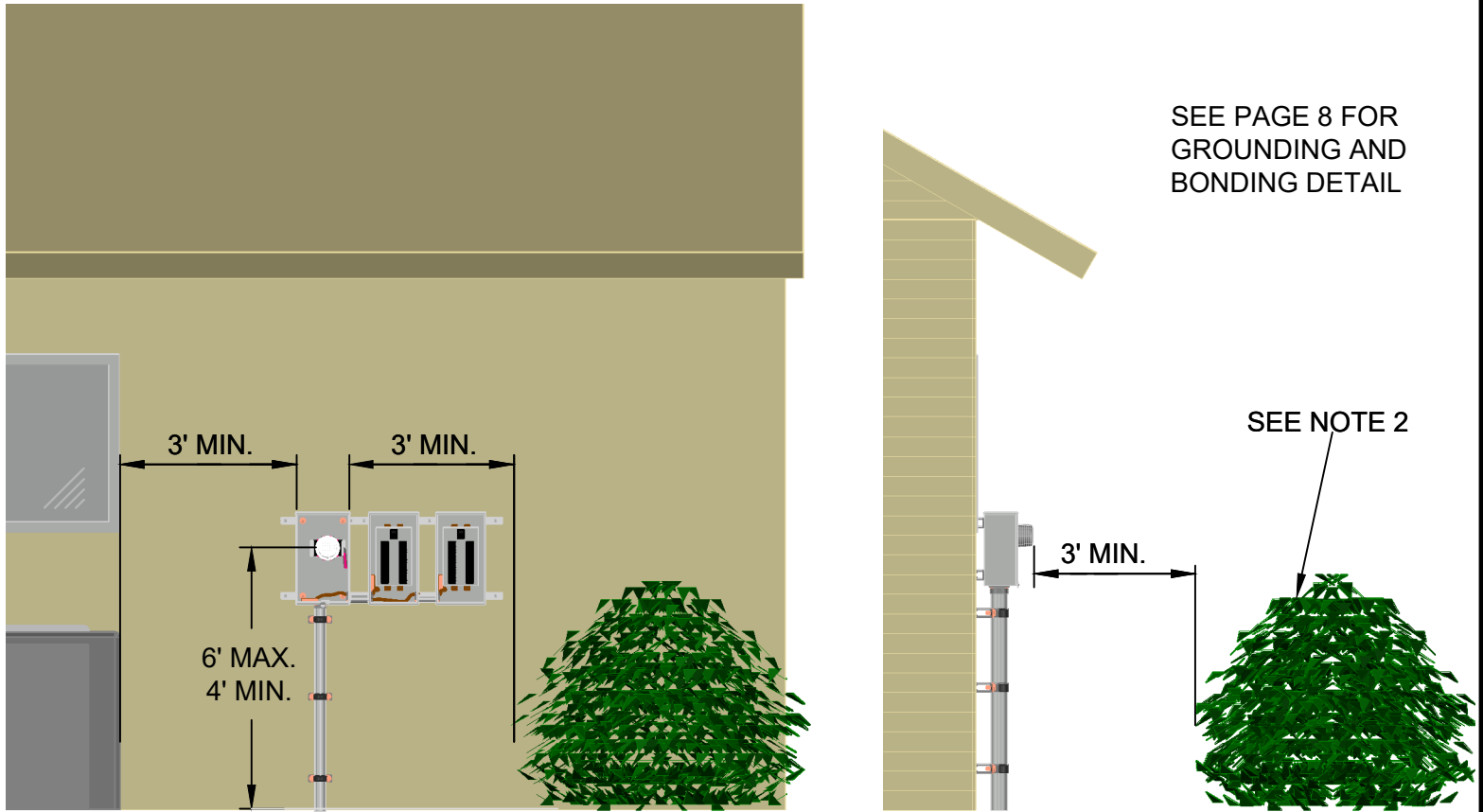
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# METER SOCKET VEGETATION AND EQUIPMENT CLEARANCES

SEE PAGES 1, 2, AND 3 FOR GENERAL NOTES AND INSTALLATION GUIDELINES



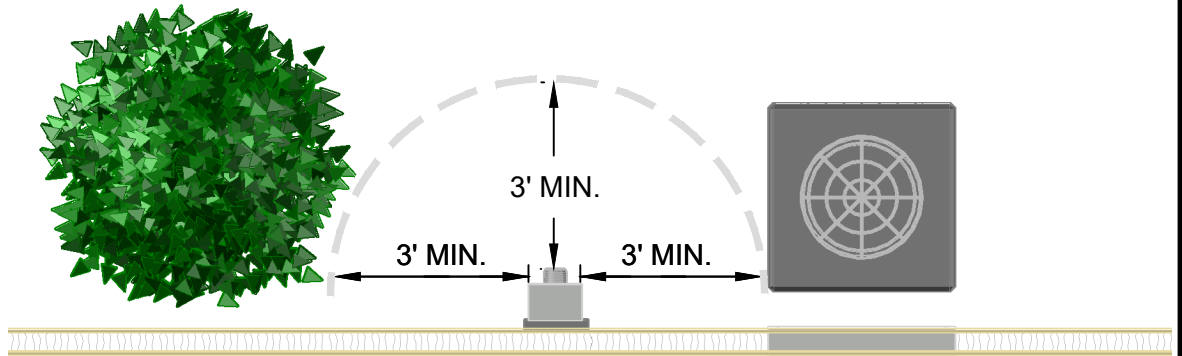
SEE PAGE 8 FOR GROUNDING AND BONDING DETAIL

SEE NOTE 2



*Michelle Galloway*

09/08/2023



**NOTES:**

1. PERMANENT AND/OR TEMPORARY OBSTRUCTIONS ARE NOT PERMITTED WITHIN 3' IN ANY DIRECTION OF AN ELECTRIC METER.
2. OBSTRUCTIONS INCLUDE BUT ARE NOT LIMITED TO TREES, SHRUBS, HVAC UNITS, GENERATORS, WALLS, FENCES, GAS METERS, WINDOWS, AND/OR BUILDINGS.

REV B DATE 09/08/2023 REVISION NUMEROUS REVISIONS, HEIGHT TO METER 6' MAX. 4' MIN. BY RWC CHK SSS APR MMG



PEDERNALES ELECTRIC COOPERATIVE, INC.

RESIDENTIAL AND COMMERCIAL 320-AMP METER LOOP SPECIFICATIONS

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