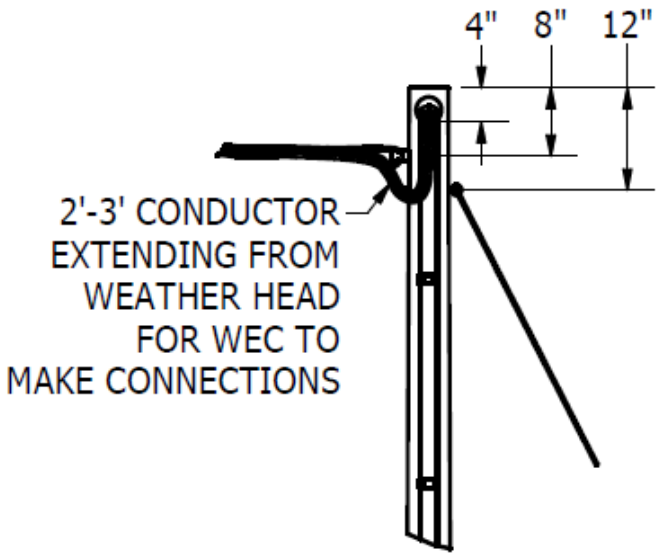
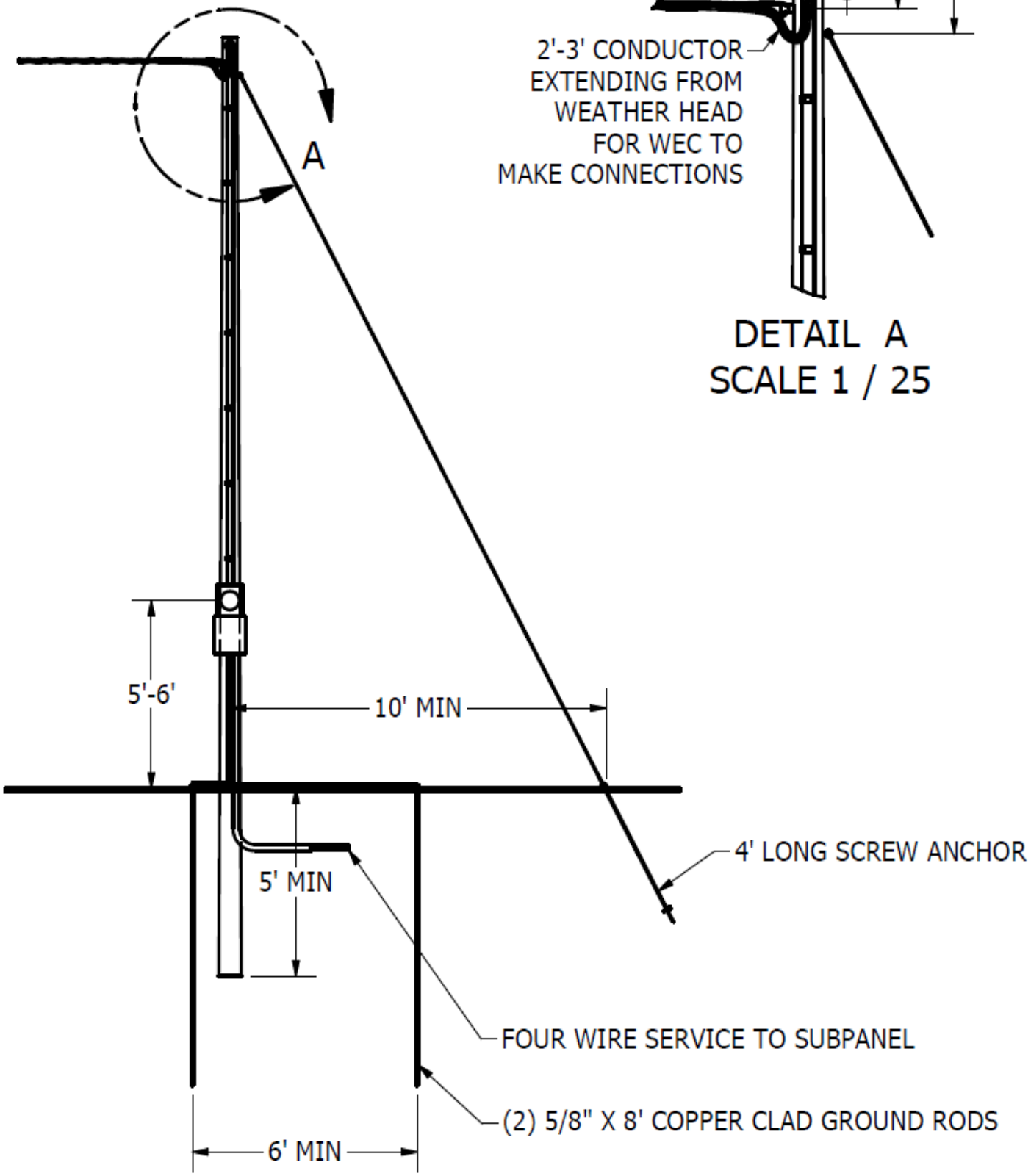
KNOW WHAT'S BELOW... DIAL 8-1-1 FOR PA ONE CALL



DETAIL A
SCALE 1 / 25



Warren Electric Cooperative Youngsville, PA 800-364-8640	DWG No.: WEC-SVC-POLE	Effective Date: 11/1/2025
	120/240 VOLT SINGLE PHASE METER POLE UP TO 320 AMP SERVICE DIAGRAM	

LOCATION

- A WEC Staking Engineer will determine the location and any additional requirements during an on-site meeting with the member during the design process.
- Services are not permitted within the WEC easement and must be at least 30 feet away from any WEC Poles, Wires, and Anchors.
- *Service may not cross over propane takes, oil wells, swimming pools or any other obstacles because of safety code requirements.*
- Pole may not be closer than 15 feet from structure for access and guying purposes.
- *Manufactured hosing unites shall refer to NEC 550 for additional requirements.*

PRESSURE TREATED METER POLE

- Pole shall be set in the ground a minimum of 5 feet. No concrete in hole to prevent rapid decay.
- Pole shall be guyed to support WEC service wires and promote clearances.
- In general, Poles requiring a road crossing shall be a minimum 30' Class 6. Poles not requiring a road crossing have be a minimum 25' Class 7. Clearance issues and prevailing conditions will dictate additional pole height requirements.

GUYING AND ANCHORING

- Anchor rod shall be a minimum of UL approved, 4' screw-type installed no closer than 10 feet from meter pole.

Guy wire shall be a minimum of ¼ inch and located in-line of service drop on opposite side of pole, 12 inches from the pole top.

METER BASE

- Meter base shall be located between 5ft and 6ft from ground level.
- Meter base shall be a single position, four terminal, and ring-less with a horn or other approved type bypass.
- Meter bases equipped with grounding lugs shall be grounded in accordance to NEC or local inspection authority.
- WEC Recommends using an anti-oxidation grease inside the meter base if using aluminum conductors.

MINIMUM SERVICE AND GROUND CONDUCTOR REQUIREMENTS				
RATING (AMPS)	CONDUIT SIZE MIN	WIRE MATERIAL	LINE/NEUTRAL SIZE	GROUND SIZE
320	3"	COPPER (CU)	250 MCM	#2 AWG CU
320	3"	ALUMINUM (AL)	350 MCM	#2 AWG CU
200	2"	COPPER (CU)	2/0 AWG	#4 AWG CU
200	2"	ALUMINUM (AL)	4/0 AWG	#4 AWG CU
100	2"	COPPER (CU)	#4 AWG	#6 AWG CU
100	2"	ALUMINUM (AL)	#2 AWG	#6 AWG CU

All service conductors shall have insulation suitable for the applied voltage but, in any case, not less than 600 volts and sized to rated load of meter base.

WEATHER HEAD

- 3 wire rain-tight weather head properly sized and rated will be installed on top of conduit.
- Service clevis properly sized and rated shall be installed 8 inches from pole top.
- Member/Contractor shall leave 2 to 3 feet of wire from weather head for WEC to make connections.

CONDUIT

- Galvanized rigid metal conduit or equivalent per current NEC code.
- Conduit shall extend from weatherhead to meter base, meter base to disconnect, and from disconnect to 24 inches below grade.

DISCONNECT OPTIONS AND OTHER SERVICE EQUIPMENT REQUIREMENTS (NEC 230)

- All meter poles served by WEC shall have a service disconnecting means under the meter base.
- Disconnect shall be appropriately sized (main breaker or K1 fuses rated for 10,000 Amperes)
- Weather-Tight connectors and fittings shall be used between equipment and components.
- All equipment (meter base, disconnect, etc) shall have all knock-outs, doors, and covers in place to limit access to energized parts and shall be in good physical and working condition.

GROUNDING RODS, WIRE, AND CONNECTORS (NEC 250)

- Meter socket shall be grounded in accordance to NEC and local inspection authority requirements
- Any service connected to WEC shall have two (2) 5/8 in. x 8ft. copper clad ground rods or equivalent per current NEC code, located 6ft. apart
- Ground rod clamps shall be suitable for direct burial and/or exothermic welding.
- Ground wires shall extend unbroken or uncut from grounding lug of disconnect to each rod.
- Ground wires shall be secured to pole and/or protected from damage with ½ inch electrical conduit.

Warren Electric Cooperative Youngsville, PA 800-364-8640	DWG No.: WEC-SVC-MAST	Effective Date: 11/1/2025
	120/240 VOLT SINGLE PHASE METER POLE UP TO 320 AMP DETAILED SPECIFICATIONS	