Utilities District of Western Indiana REMC

Services Pamphlet v4.0



UDWI REMC

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Notes:

Wire Size Charts

100A Service Wire:

| | Line | Neutral | Ground |
|----------|-----------|-----------|--------|
| | Conductor | Conductor | Wire |
| Aluminum | 2 | 4 | 6 S.D. |
| | | | Copper |
| Copper | 2 | 4 | 6 S.D. |
| | | | Copper |

200A Service Wire:

| | Line Conductor | Neutral Conductor | Ground Wire |
|----------|-------------------|----------------------|----------------|
| Aluminum | 4/0 | 2/0 | 4 S.D. |
| | | | Copper |
| Copper | 3/0 | 1/0 | 4 S.D. |
| | | | Copper |

320A-400A Service Wire:

| | Line | Neutral | Ground |
|----------|-----------|-----------|--------|
| | Conductor | Conductor | Wire |
| Aluminum | (2) 4/0 | (2) 2/0 | 4 S.D. |
| Aluminum | 350 MCM | 4/0 | Copper |
| Copper | (2) 3/0 | (2) 1/0 | 4 S.D. |
| 250 MCM | 250 MCM | 3/0 | Copper |

Construction Checklist

| To Do | Clearing / Clearances | Done |
|-------|---|------|
| | Right-of-Way cleared (see Overhead or Underground for distances) | |
| | Locate Equipment within 21' of a solid surface (gravel, concrete, pavement) for service vehicles access | |
| | All Private/Member owned utilities need to be flagged/painted/exposed | |

| To Do | Meter Base/ Wire Installation | Done |
|-------|---|------|
| | Received or bought required meter base. Ringless meter base required. | |
| | Installed meter base correctly (meets NEC, UDWI REMC requirements) | |
| | Enough wire left at base of pole (35') or pad mounted transformer (15') | |
| | Members in Owen, Putnam, and Vigo Counties must have <u>temporary</u> and <u>permanent</u> meter bases inspected before connecting (Phone numbers are listed below) | |
| | Members in Monroe County must have <u>permanent</u> meter base inspected only, before connecting (phone numbers are listed below) | |

Owen: 812-829-5017 Monroe: 812-349-2580 Putnam: 765-301-9108 Vigo: 812-462-3365

| To Do | Overhead | Done |
|-------|--|------|
| | Right-of-Way cleared to 40', ground to sky, for primary wire | |
| | Right-of-Way cleared for service wire | |

| To Do | Underground | Done |
|-------|--|------|
| | Secondary/Service wire must be a minimum of 24" deep after final grade | |
| | Conduit is required where gravel, pavement, concrete or rocky soil areas are present | |
| | Right-of-Way cleared to 12' if UDWI REMC is installing wire | |

| To Do | Payments/Easements | Done |
|-------|--|------|
| | Contribution-in-aid of Construction paid | |
| | Membership fee paid | |
| | Deposit for Service paid (if applicable) | |
| | Right-of-Way Easement recorded at respectful county courthouse and original copy returned to UDWI REMC | |

Once you have completed all above required requirements, please contact the Operations
Department at (812) 384-4446 and report that your site is ready for service.

Work Order #: Your UDWI REMC Representative:

New Construction Procedures

UDWI REMC reserves the exclusive right to determine the route, design, and method of construction as it deems appropriate and necessary. This Booklet is subject to change at any time without notice.

Prior To Staking:

- 1) Schedule a **staking appointment** by calling the Operations Department at UDWI REMC.
- 2) Member shall know heating/cooling, appliances, square footage, and location of new home.

During Staking:

- 1) Address <u>overhead</u> vs. <u>underground</u>
- 2) Provide <u>right-of-way easement</u> form to member.
- 3) Advise member on **products available** for purchase. All quotes on meter loops, wire, and meter bases will be **valid for 30 days**.
- 4) Advise the member of <u>Contribution in Aid of Construction</u>. All estimates are <u>valid for 90</u> days.
- 5) Review this pamphlet and **complete the pre-construction checklist**.

After Construction:

- 1) UDWI's underground contractor will not seed, straw, or re-grade trench path. Nor will they seed, straw, and regrade area's where boring or other underground work was completed.
- 2) Member will be responsible for repair, re-seed, and re-grading of all urd facilities on all affected properties for the new service.

Note: UDWI REMC will not be liable for damages to the member's crops, trees, shrubs, fences, sidewalks, driveways, or other obstructions incident to the installation, maintenance, or repair of facilities, if such damage was not caused by its own negligence.

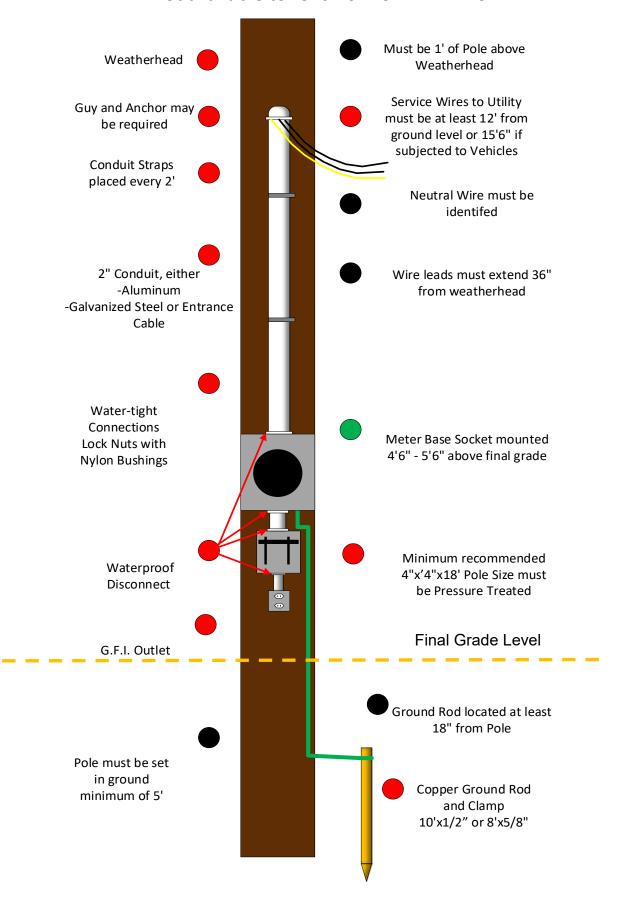
Note: Member is responsible for obtaining all easements for right-of-way, having the forms recorded at the appropriate courthouse, and returned to the UDWI REMC office.

Right-of-way easement ensures our ability to perform maintenance and upgrades on these power lines and facilities.

Overhead Temp. Service

Note: No more than 50' from UDWI REMC Pole

**Not available to rent from UDWI REMC



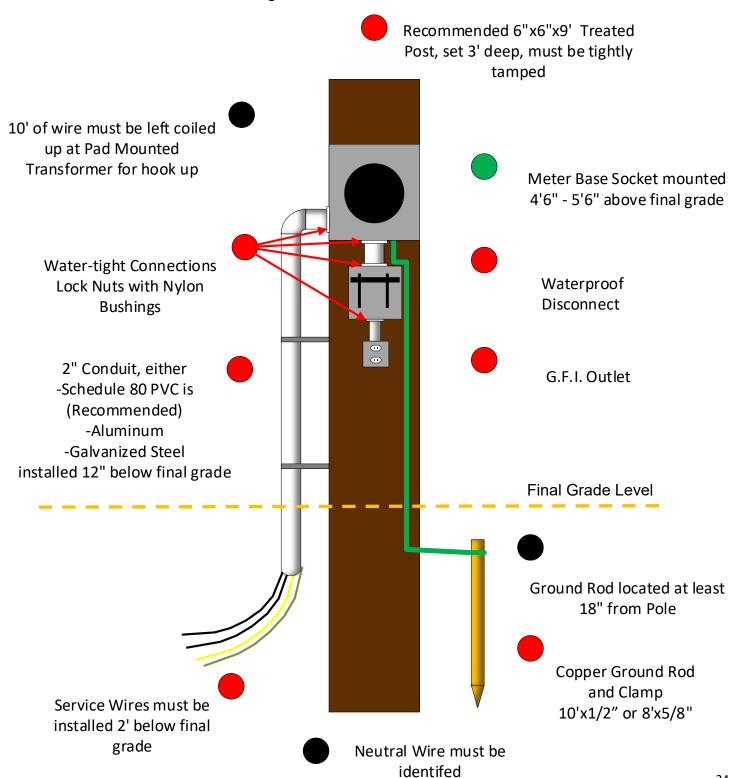
Temporary Installation Diagrams

Underground Temp. Service

Note: Only available near Underground Facilities

Available to rent from UDWI REMC **for up to 1 year.

*Build to the Right Side of the Pad Mounted Transformer



Contribution In Aid of Construction

The cost to the member is based on the cost of the construction, less an allowance*.

For new, full time residences, this allowance is \$2,000.00.

For outbuildings or part time residences, this allowance is \$500.00.

Temporary installations will require 100% of the cost of installation and removal.

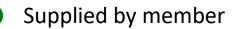
This cost is charged to the member to prevent the cost of a single member's installation being absorbed by all the other members of UDWI REMC.

Payment is due prior to construction.

*This allowance is based on each member's allocated portion of the utility plant.

Meter Base Installation

Supplied by UDWI REMC Supplied by member



Installation notes



General Notes and Guidelines:

- Disconnect (s) are required immediately adjacent to the meter base (within 10' wire).
- Mobile Homes are required to have a disconnect on a Pedestal or Meter Loop. Disconnects shall be installed a minimum of 24" above final grade.
- Overhead Service on buildings are only available on buildings with a permanent foundation.
- Ground Rods shall be installed 18" from building's foundation, with top of Ground Rods below final grade.
- Ground Rod size shall be 5/8" x 8' or 1/2" x 10'.
- Ground Wires to be installed outside of conduit.
- Pedestals for Meter Base and Disconnect (s) shall be constructed by the member.
- Pedestals shall be made from treated materials and must be suitable in size for the Meter Base and Disconnect (s) being installed.
- Temporary Services are to be used only during construction and for a maximum of 12 months.

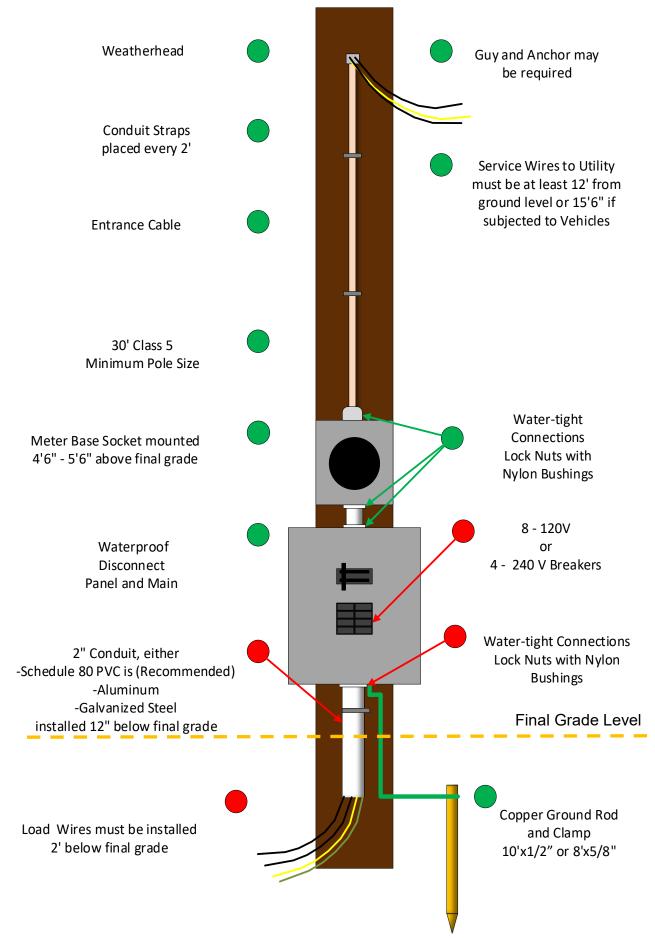
Utility Pole Notes and Guidelines:

- Pole and/or Pad Mounted Transformer location must be within 21' of a paved or gravel drive and must be approved by staking technician.
- Pad Mounted Transformers must be located a minimum of 10' from a building.
- Any pole for permanent or temporary service, installed by member, must be properly guyed and anchored.
- Make sure that the riser has sufficient height so that the wires connected to it will always remain at least 12' above ground level or 15'6" where subjected to vehicles.
- No equipment, other than that shown on the diagrams in this pamphlet, is allowed to be installed on any UDWI REMC pole.
- Meter Sockets must be accessible to UDWI REMC Personnel at all times.
- 200A and 320A Meter bases must be Ringless.
- ◆ 320A Meter base require bypass handle.

Meter Loop: Sold by UDWI REMC

Special Disconnect (200A only)

Meter Loop poles are owned and maintained by UDWI REMC.



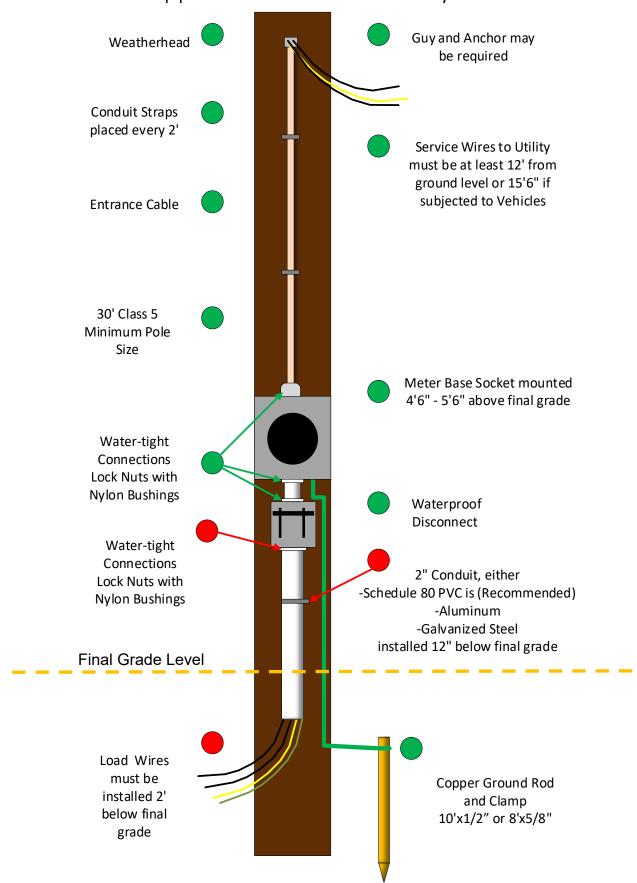
Meter Loop Installation Diagrams

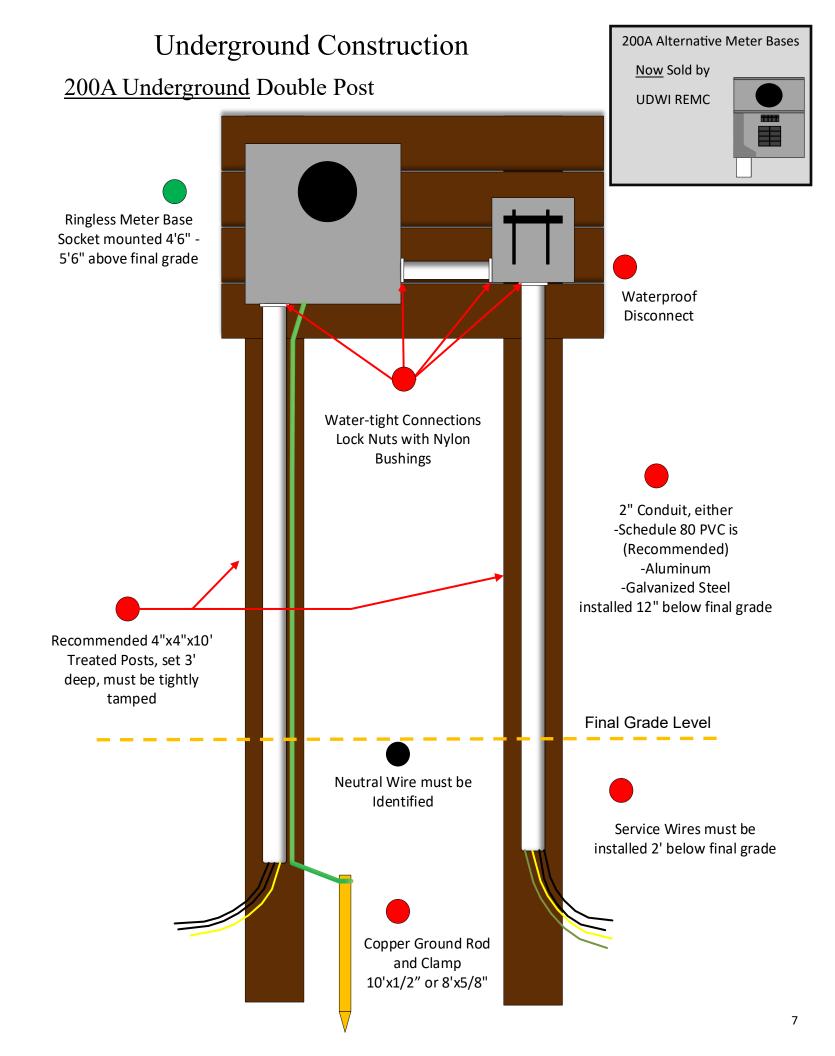
Meter Loop: Sold by UDWI REMC

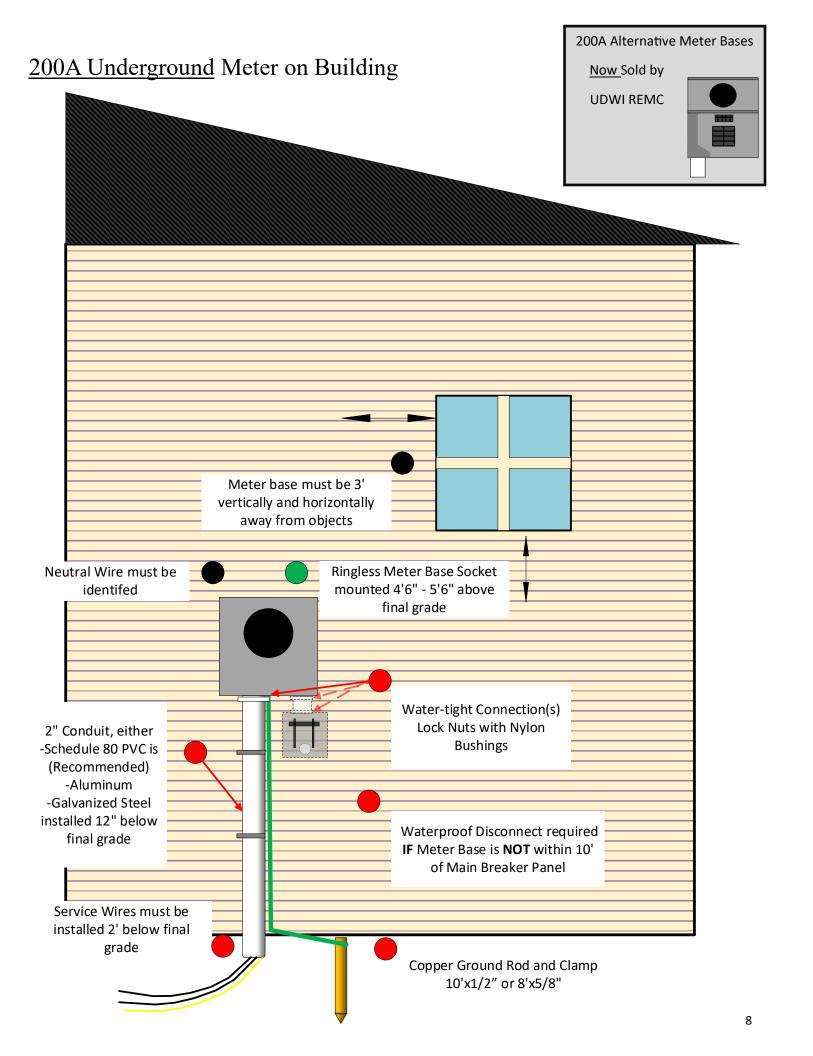
Standard Disconnect

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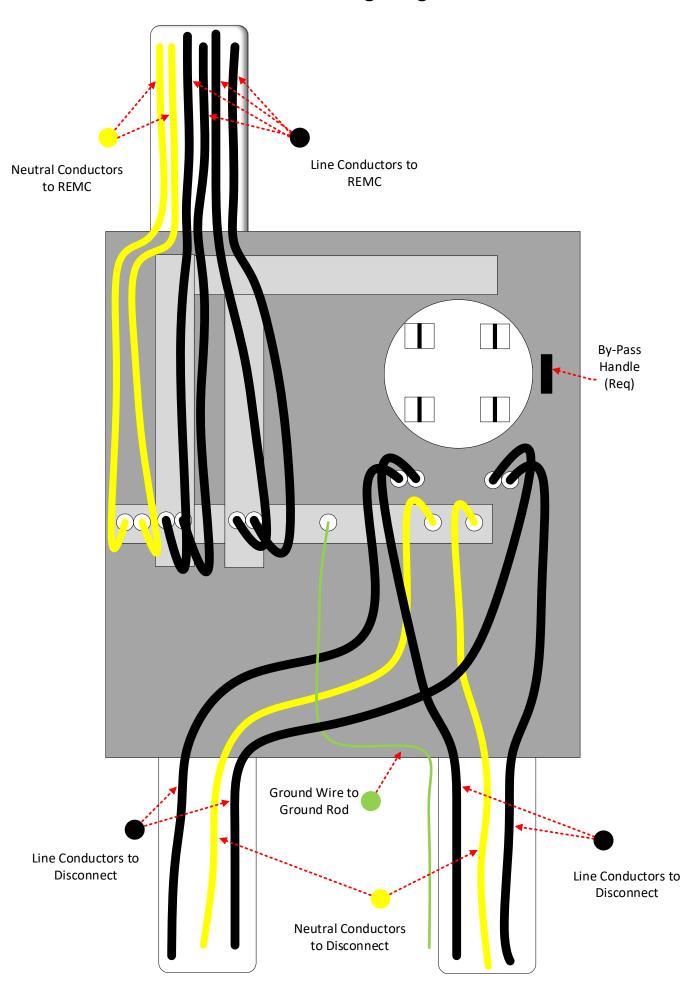
Meter Loop poles are owned and maintained by UDWI REMC.







Wiring Diagram



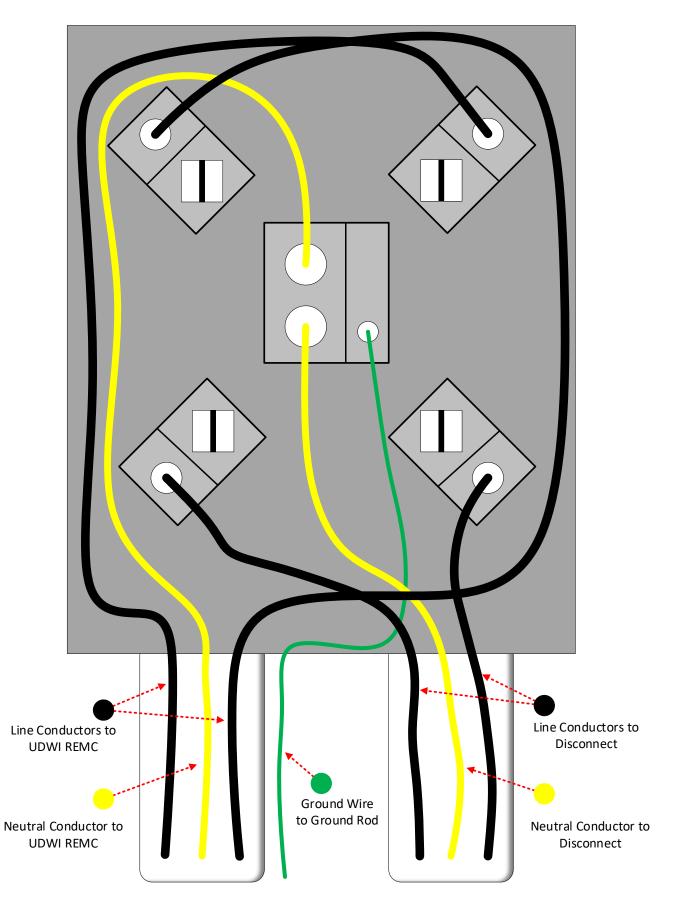
320A Alternative Meter Bases Meter on Building 320A Overhead Now Sold by Pairs to transformer must be **UDWI REMC** Wire leads must extend 36" identified from Weatherhead Neutral Wire must be Weatherhead identifed Proper Brace required if riser Service Wires to Utility must be at least is more than 30" above roof 12' from ground level or 15'6" if subjected to Vehicles Meter base must be 3' vertically and horizontally away from objects 3" or 4" Conduit, either -Aluminum -Galvanized Steel or Entrance Cable Conduit Straps placed every 2' Ringless Meter Base Socket, w/By-pass handle, mounted Water-tight 4'6" - 5'6" above final grade Connection(s) Lock Nuts with Nylon Bushings 2 - Waterproof Disconnects required IF Meter Base is NOT within 10' of Main Breaker Panel Ground Rod located at least Copper Ground Rod and Clamp

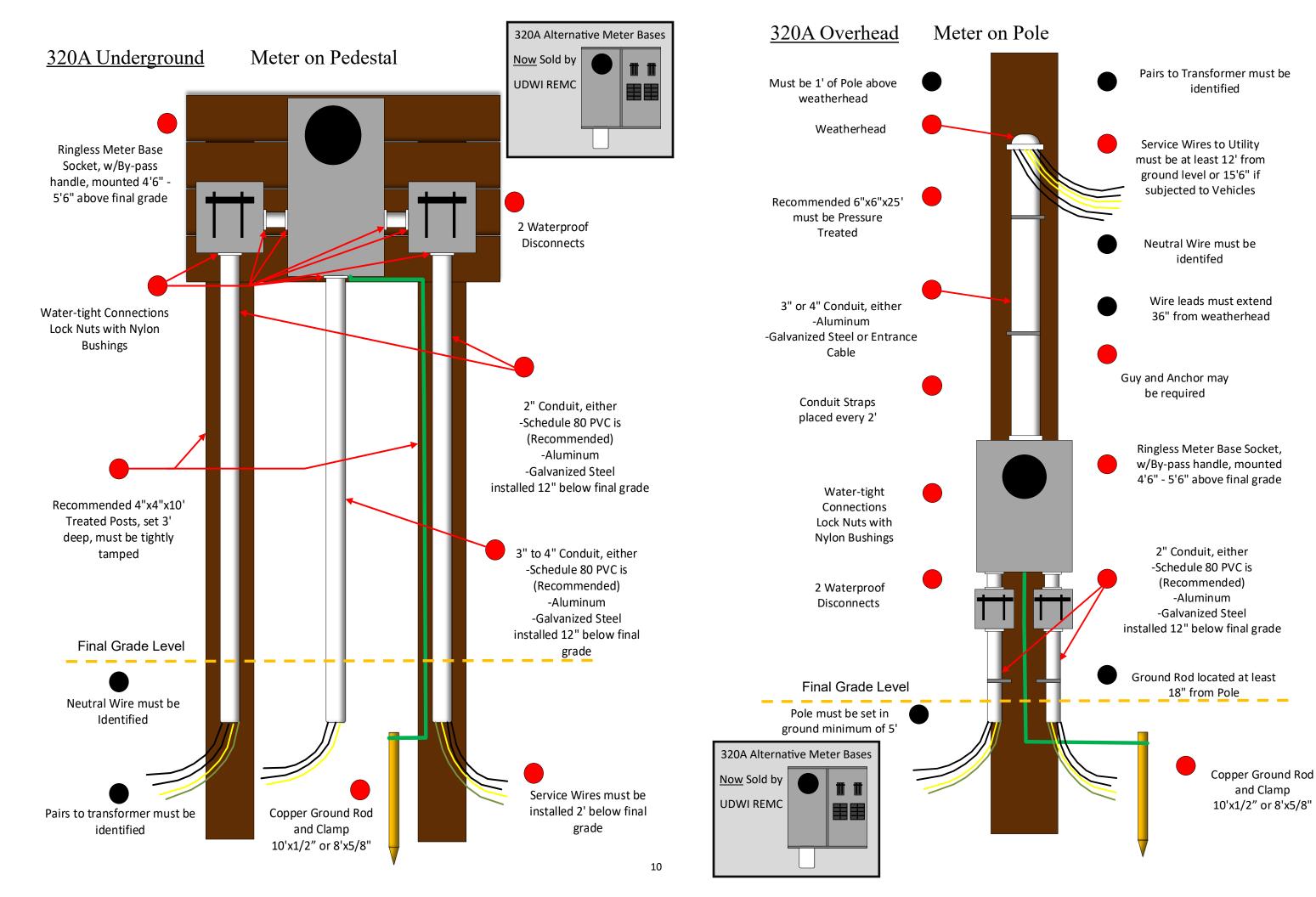
10'x1/2" or 8'x5/8"

18" from Foundation

Wiring Diagram

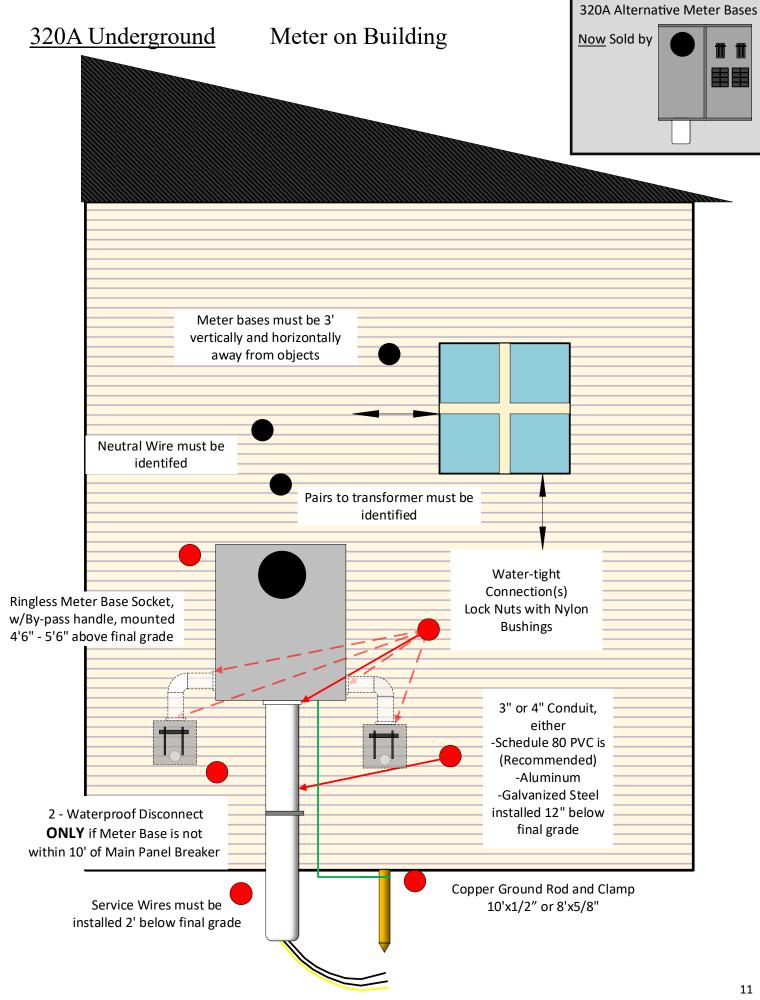
Example: 200A Underground





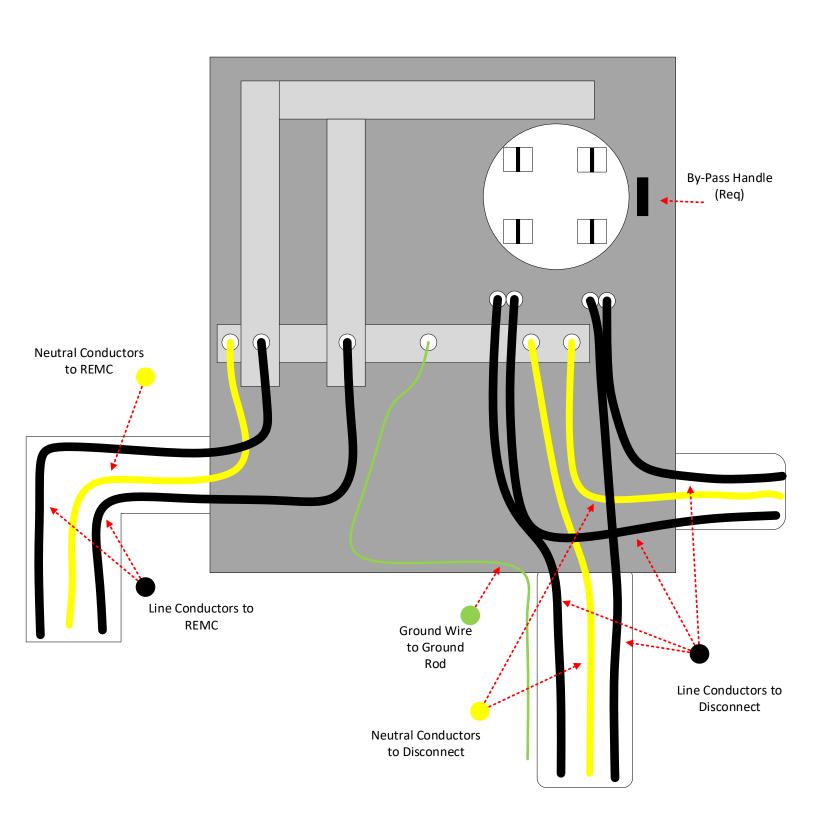
and Clamp

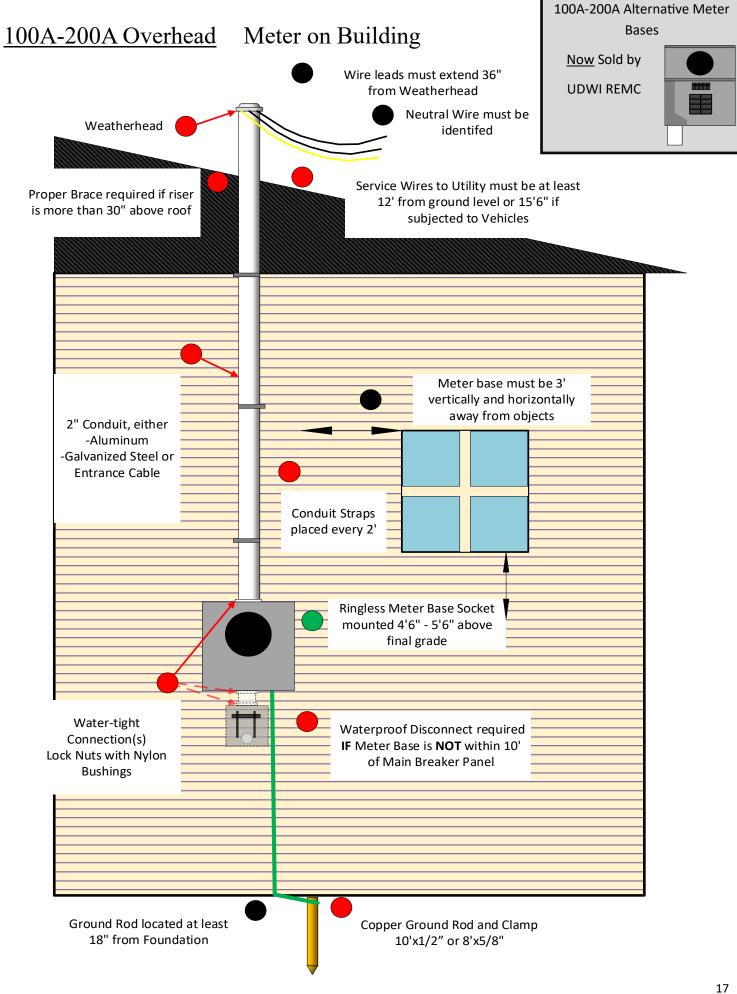
Wiring Diagram Example: 100A-200A Overhead Line Conductors to **UDWI REMC** Neutral Conductor to **UDWI REMC** Ground Wire to Ground Rod Line Conductors to Disconnect **Neutral Conductor to** Disconnect

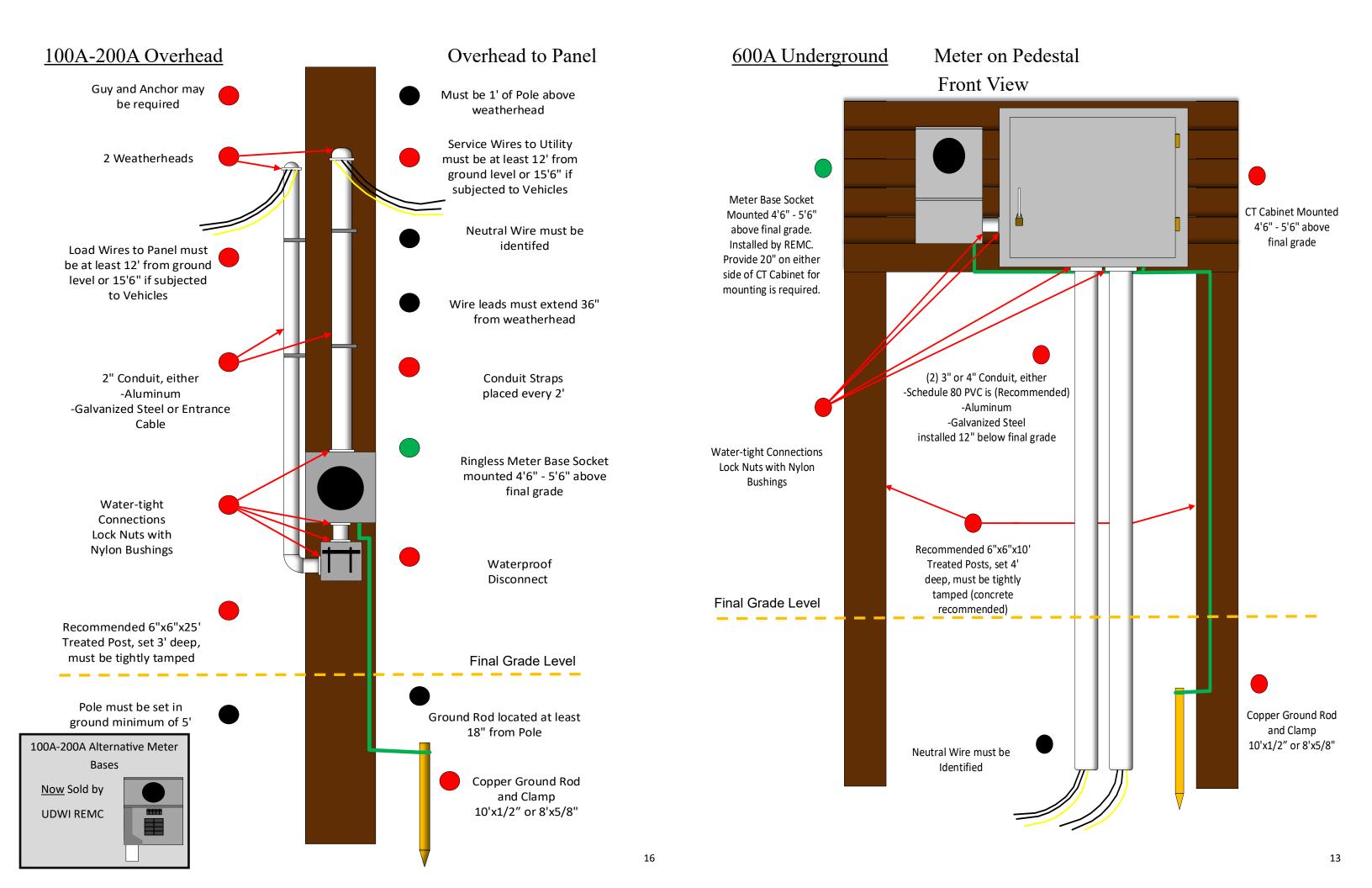


Wiring Diagram

Example: 320A Underground







600A Underground Meter on Pedestal 100A-200A Overhead Back View Weatherhead Guy and Anchor may be required **Conduit Straps** placed every 2' 2" Conduit, either -Aluminum -Galvanized Steel or Entrance 3 Waterproof Cable Disconnects Water-tight Connections Lock Nuts with **Nylon Bushings** 2" Conduit, either -Schedule 80 PVC is (Recommended) Water-tight Connections -Aluminum Lock Nuts with Nylon Waterproof -Galvanized Steel Bushings Disconnect installed 12" below final grade Final Grade Level Pole must be set in ground minimum of 5' Service Wires must be installed 2' below final grade 100A-200A Alternative Meter Bases Now Sold by Service Wires must be **UDWI REMC** installed 2' below final grade 14

Overhead Construction

