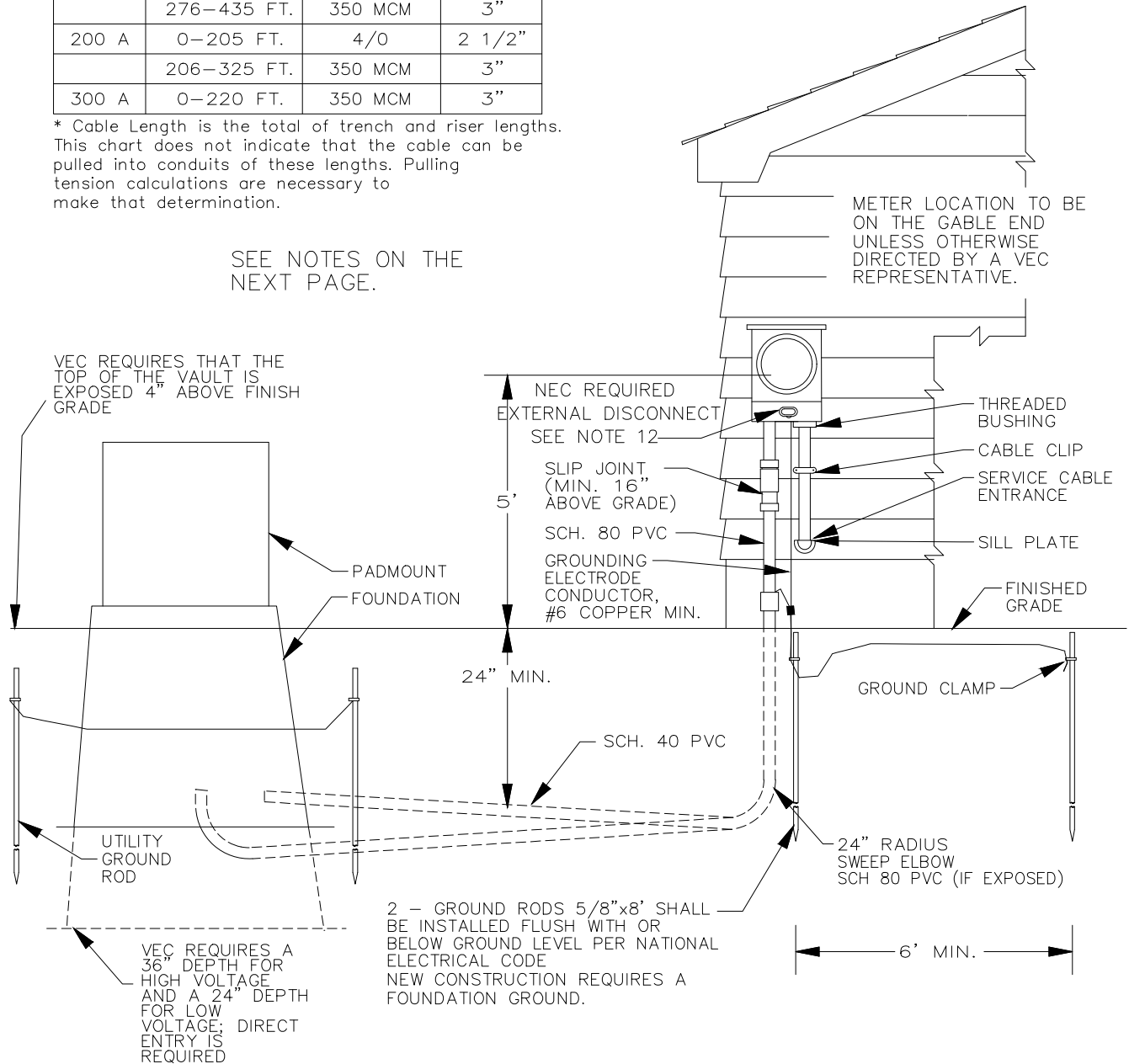


UNDERGROUND SERVICE

RESIDENTIAL SERVICES ONLY			
RATING	CABLE LENGTH*	TRIPLEX SIZE	CONDUIT
100 A	0-210 FT.	1/0	2 1/2"
	211-410 FT.	4/0	2 1/2"
	411-650 FT.	350 MCM	3"
150 A	0-275 FT.	4/0	2 1/2"
	276-435 FT.	350 MCM	3"
200 A	0-205 FT.	4/0	2 1/2"
	206-325 FT.	350 MCM	3"
300 A	0-220 FT.	350 MCM	3"

* Cable Length is the total of trench and riser lengths. This chart does not indicate that the cable can be pulled into conduits of these lengths. Pulling tension calculations are necessary to make that determination.

SEE NOTES ON THE NEXT PAGE.



REV	DATE	REVISION DESCRIPTION	DRN	CKD

VERMONT ELECTRIC COOPERATIVE INC.

DES: DRN: CB

CKD: SCALE: NONE

DATE: 07/10/2017

VERMONT ELECTRIC COOPERATIVE INC.

JOHNSON, VT

UNDERGROUND SERVICE

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REV 1

UNDERGROUND SERVICE

Notes:

1. All wiring and materials shall conform to the requirements of the National Electric Code (NEC) and to any applicable local codes. Where conflict exists the more stringent code will apply. For member owned equipment, any requirements in excess of code specified minimums, are recommended not required.
2. This specification covers residential services. Commercial service equipment is under the jurisdiction of the electrical inspector. The cable sizes shown in the chart may not apply to commercial services.
3. The location of the conduit risers and the meter socket will be designated by a VEC representative. Any relocation shall be approved by a VEC representative.
4. Locate the riser conduit on the quarter of the pole away from normal traffic.
5. All meter sockets on service requiring large capacity (200amp or greater) shall have a manual bypass with a locking jaw device. The meter socket shall have a separate grounding electrode conductor connector. The connector shall be appropriately connected to the service neutral bus. The grounding electrode connection will normally be made in the meter socket. The service neutral, and not the grounding electrode conductor, shall extend from the meter socket to the main disconnect.
6. The grounding electrode conductor, to a driven ground, shall be a minimum of #6 copper. The conductor shall be adequately protected. The driven grounds shown shall be a minimum of 5/8" in diameter and 8' long.
7. Any steel conduit within 18" of the surface shall be bonded. Steel conduit is not required.
8. Any construction, at the pole, above ground level, shall be done by VEC. Exception: The member may install that portion of their equipment that can be reached while standing on the ground. Any trench near the base of the pole shall be immediately backfilled and properly tamped.
9. For primary depths shallower than 36" may be allowed where obstructions such as ledge are encountered. Any portion of conduit shallower than 24" shall be covered by a minimum 6" concrete cap. Contact VEC for additional requirements for conduit buried near underground facilities, under driveways or roadways, or, for depths shallower than 12".
10. For secondary, depths shall be a minimum of 24"
11. All gas valves shall be a minimum of 10 ft from electric meter equipment. For clearances less than 10 ft see NFPA 58.
12. The Service Disconnecting Means for one and two family dwelling units per the NEC section 230.85 must be located in a readily accessible outdoor location and be marked per the NEC requirements
13. The chart shows the acceptable total cable length for given service amp ratings and conductors. The chart is based on a maximum 3% voltage drop in an aluminum underground service cable for a 120/240 volt service. For other voltages, cables or multiple cables consult an electrician.
14. A marker tape shall be installed, above the conduit, 12 inches below grade. Type USE cable shall be marked or listed sunlight resistant.
15. A side bus bar meter socket is required if 350MCM cable is used.
16. URD Service Risers, from a pole-mounted three-phase transformer bank, shall be limited to an 800 amp rating. Larger services shall be supplied by a padmounted transformer.
17. Member must provide sufficient cable to reach the transformer or secondary cable and to make connections.
18. Pad mounted equipment shall be a minimum of 25 feet from a building per NFPA

Directional Boring

1. If directional boring is utilized the conduit utilized shall be of consistent width and schedule from riser to vault or vault to vault.
2. A bore log will be requested and reviewed by a VEC representative to ensure proper burial depth.
3. To avoid confusion only black, red, or black with red continuous stripe conduit will be permitted.
4. Couplings shall be rated for electrical systems, provide an adequate mechanical connection and provide a smooth inside transition.
5. A vault shall be required where there is a change in internal diameter of the conduit or if specified by a VEC representative.