

Installation Guidelines for Underground Electric Conduits Coastal Electric Cooperative

Underground Secondary Services:

The conduit shall be installed in a straight run between the meter base and the secondary pedestal provided for the service. The conduit shall be buried 30 inches below final grade. Two sweeping elbows will be permitted. The elbow nearest the secondary pedestal shall be inserted beneath the pedestal. The length of the conduit, including the vertical and above-grade sections shall not exceed 250 feet in length. The conduit shall be schedule 40 PVC and of the size indicated below.

| Service Size & Type | Conduit Size |
|---------------------|------------------|
| 200/320 amp | 3 inch |
| 400/600 amp | 4 inch |
| Other | to be determined |

Prior to the closure of the trench, Coastal Electric Cooperative will be provided an opportunity to inspect the installation. Providing a request for an inspection is made by 8:00 a.m., the inspection will typically be conducted on the afternoon of this same day. After passing the inspection, the trench shall be backfilled and tamped by the installer. While backfilling, warning tape will be installed 12 inches below final grade.

Underground Primary Distribution:

The conduit systems required for underground facilities within subdivisions and commercial developments are dictated by their unique needs and will be specified on a case-by-case basis. Coastal Electric Cooperative will work closely with the developer to determine the most efficient design possible. Once determined, the Developer will be provided with a conduit plan that outlines the specific requirements of the conduit system necessary to provide underground service. The developer will be expected to install this conduit system in accordance with the design requirements provided.

In general, underground primary distribution will require 2 ½ inch schedule 40 PVC conduit. The conduit will be installed 42 inches below final grade. Single phase lines will require one conduit while three phase lines will require three conduits. Conduits will typically be stubbed up within a fiberglass ground sleeve upon which the transformer will be placed. Coastal Electric Cooperative will furnish these ground sleeves for the developer to install. Ground sleeves will be set upon six inches of gravel.

The developer will also set the secondary pedestals and install the conduits between them and the designated transformer. As with the transformer ground sleeves, Coastal Electric Cooperative will furnish the necessary secondary pedestals. The developer will install them.

During the course of installation, Coastal Electric Cooperative will periodically inspect the conduit installation. These inspections are aimed at resolving problems prior to the installation of the cable. These inspections will be conducted within the same time frame as those for secondary conduits.

Underground Primary Express Feeders:

Depending upon the scale of the development and the load to be served, some developments may require primary express feeders. The underground cables used for these feeders are much larger than those used for underground primary distribution. As such, they are much more expensive than their overhead equivalent and, therefore, require special consideration.

When an express feeder is required, developers will have the option of overhead or underground construction. Overhead express feeders will be provided at no cost and the routing of these facilities will be negotiated with the developer. The aim will be to provide the necessary electrical infrastructure while minimizing the impact on the development. When an underground express feeder is requested for a subdivision, a contribution will be required. In general, the amount of the contribution will equal the incremental cost of providing the requested underground express feeder in lieu of the proposed overhead equivalent. The developer will furnish the required conduit system.

Underground express feeders will typically require two 6-inch schedule 40 PVC conduits per circuit. These conduits will be buried 42 inches below final grade. The developer will install the necessary vaults and ground sleeves required for the express feeder. These vaults and ground sleeves will be furnished by Coastal Electric Cooperative.