



**Specifications for
Customer-Installed
or Provided
Underground
Conduit to Premises**



Waitsfield Champlain Valley Telecom (WCVT) is CVFiber's operator for our broadband network. WCVT has developed specifications for underground connections to customers' premises. CVFiber's policy is to comply with the National Electric and Safety Codes, as well as the specifications of the manufacturers of cable, equipment, and systems within the telecommunications industry.

In general, WCVT's construction is overhead, placed on jointly used power poles. This type of installation does not require any special action. The following specifications are for customer-installed or provided conduit.

Customer Installed or Provided Conduit Specifications:

1. Conduit should go from the utility pole to your house where the utilities boxes are located and follow the route of other underground utilities.
2. A minimum 1.5" schedule-40, PVC electrical conduit must be placed for distances under 300 ft from the utility pole to the customer's demarcation point at the house. Any overall distances longer than 300 ft require 2-inch diameter conduit.
3. Any conduit over 400 ft requires intermediate pull boxes or pedestals.
4. Conduit must be 4 ft above final grade at utility pole location (plumb and tight to utility pole and secured). Conduit at the pole side must come up in the same quadrant (same side of the pole) as existing services.
5. For long sweeps, no 90-degree elbows or "L" shaped angles are permitted. Fiber cannot be bent at harsh angles as it will cause poor light level and could break, causing future issues.
6. Conduit must be 2 feet above final grade at the outside of house or structure and must be secured. Conduit on the house side **MUST** come up on the outside of the house.
7. Conduit to a mobile home:
 - a. Preferred method: conduit will be tight to the trailer on the outside of skirting.
 - b. Optional method: Conduit run will be a maximum of 2 feet from structure on the outside of skirting to a pressure-treated 4 x 4 post or "H" frame. The pressure-treated post or "H" frame will be a minimum of 4 feet above final grade. A conduit is still required from the H-fixture to the trailer where the fiber will be terminated.

8. Owner must install tracer wire (12-16 gauge, coated) on top of the conduit for Dig Safe and future location.
9. All conduits must have a 210-250 lb. tensile-strength pull string installed continuous through the conduit with no knots and no splices. The pull string should extend at least 2 ft beyond the ends of the conduit. Tie the pull string around the outside of the conduit and place an unglued cap over the ends of the conduit to prevent water from entering.
10. Do not use weather heads. There is too high a risk for fiber to break and interrupt service. Installing temporary (unglued) caps or plastic bags on ends is helpful to keep water out prior to installation. After fiber is installed, we will use a specialized putty to plug the conduit.
11. Fiber conduit can be placed in the same trench as the power conduit as long as a minimum 24" depth is maintained. It is advisable to separate the power and telephone conduits by the width of the ditch.

An improper conduit installation will delay your fiber connection for a premises service hook-up.

V1.0 (Adopted 10-15-2022)