

# Residential Customer Equipment Guide



# Transformers

The location of each padmount transformer is ultimately determined by the electric load calculations and the route of the underground lines.



Single-phase transformers supply power for residential lighting, receptacles, air-conditioning and heating. Average transformer size: 40" wide x 36" deep x 34" high.

Underground lines come up to meet the ground-level pad mounted transformer, where connections are kept safely inside and out of view.



# Pedestals

Pedestals are installed to better utilize the capacity of a single transformer. When a pedestal is used, a cable runs from the transformer to the pedestal and acts as a splitting device, converting the single incoming line into multiple outgoing service lines.



The location of each pedestal is ultimately determined by the electric load calculations and the route of the underground lines.



Average size: 23" wide x 15" deep x 18" high.



Another example of a typical pedestal installation.

## Poles and Guying



In some cases, a transformer that is mounted on a pole may be the best option to supply electric service.



A down guy maybe needed to help support the load on a pole. Down guys typically anchor in the ground a minimum of 15 feet from the pole.

# Outdoor Lighting

Dominion Energy offers a wide variety of outdoor lighting options. For more information on lens and pole styles, please visit [www.DominionEnergy.com/home-and-small-business/outdoor-lighting](http://www.DominionEnergy.com/home-and-small-business/outdoor-lighting).



A Suburban Colonial fixture on a Smooth Round Tapered Black Composite pole



A Traditional Colonial fixture on a Decorative Round Tapered Composite pole



An Open Vertical fixture on a wood pole



An Enclosed Drop Lens fixture on a wood pole

# Meterbases

The meterbase is a metal enclosure that provides a location to bring the customer conductors and company conductors together. It also provides a location to set the company's meter which records the usage of electricity.



This is a 200 amp meterbase. It is approximately 17" high, 8" wide, and 4" deep.



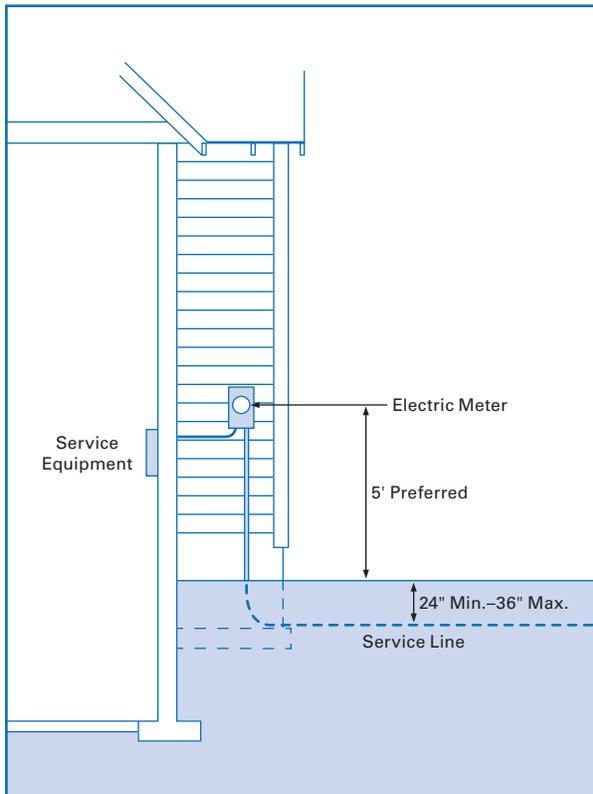
This is a 320 amp meterbase. It is approximately 34" high, 15" wide, and 6" deep.

# Meterbases

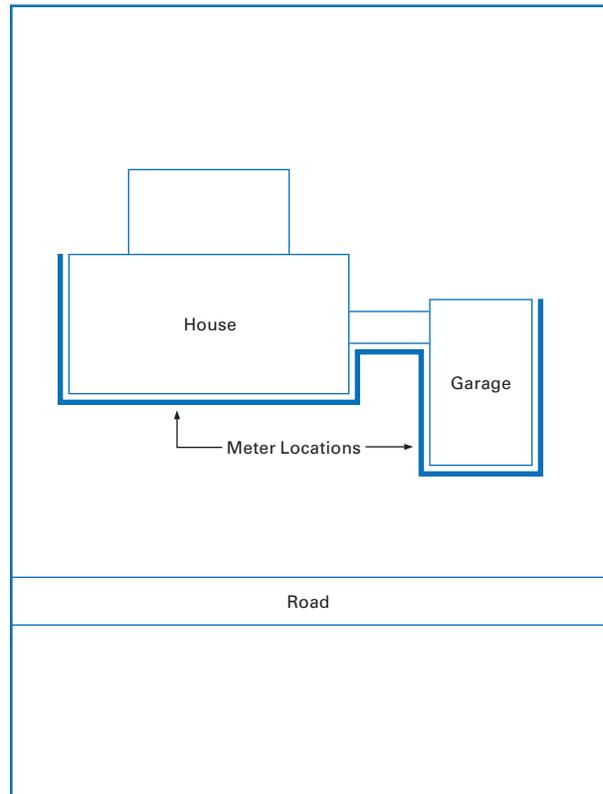


For some larger homes, a CT Cabinet may be used. It is approximately 48" high, 36" wide, and 14" deep.

## Meter Locations



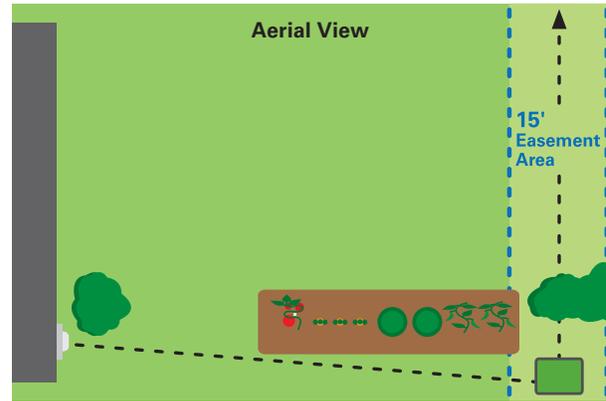
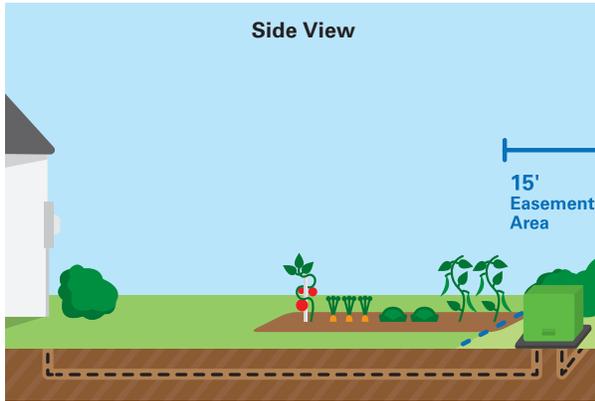
Side view



Aerial view

# Underground Easements

## Illustration of Underground Installation



Conceptual example only—actual details of installation will be customized to your property which is dependent on terrain, the possible presence of phone or cable service lines, and other factors.

### What is an easement?

An easement is a signed document that provides legal permission to install equipment and perform work on another person's land. Easements enable utility companies to access public or private land for specific purposes such as constructing, maintaining, repairing, and/or replacing lines and equipment. The property owner still owns the land subject to the rights granted to the utility company.

### Why am I being asked to sign an easement form?

Dominion Energy must obtain authorization from property owners before any work is performed on their property. The Underground Distribution Easement Agreement, that Dominion Energy asks property owner(s) to sign, grants permission to do this work.

### Will I have to sign more than one easement?

When Dominion Energy partners with telephone and cable companies to place lines underground, there may be occasions where property owners need to sign more than one easement. Whenever possible, we will incorporate a joint electric and cable/telecommunications underground easement into a single document.

### Will I be compensated for granting an easement?

We are not offering financial compensation for easements.

### How much easement area is required?

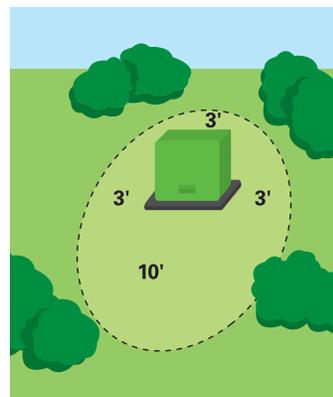
The standard underground distribution easement area is fifteen (15) feet wide. This width provides adequate space for the installation and maintenance of

underground electric equipment. A sketch depicting the proposed easement area, often referred to as a "plat," will accompany the easement agreement.

### What does it mean if my property has an underground easement?

An underground easement simply gives the utility permission to perform work on your property and maintain its equipment. The property owner still retains ownership of the land. We ask you to ensure that the easement area is accessible to our equipment if repairs need to be performed.

### Minimum Planting and Obstruction Distance



Landscaping around our equipment is permissible, within guidelines. Plantings, fences and other obstructions must be at least 3' from the back and sides of the equipment and 10' from the front.

If there are underground lines on the property, remember to call 811 before you dig.

## Right of Way

A right of way may need to be cleared to provide electric service. Dominion Energy requires 30 feet for overhead lines and 15 feet for underground.



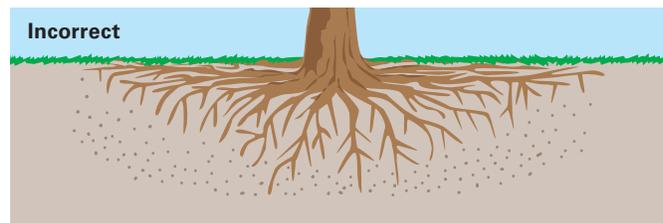
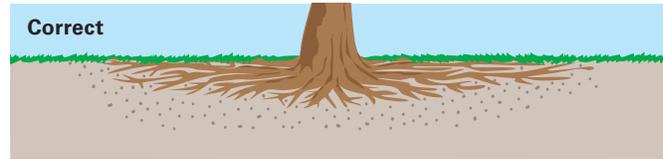
30 feet is required for overhead lines.



15 feet is required for underground lines.

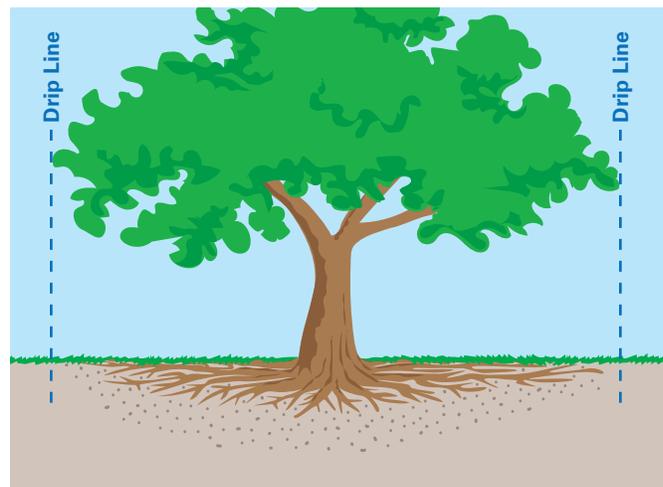
# Tree Roots and Drip Lines

Dominion Energy is committed to ensuring the health and beauty of our natural landscape.



## Tree Roots

- It is a misconception that tree roots grow straight down. Tree roots lie within the top 6"-18" of the soil.
- Tree vitality largely depends on the health of a tree's root structure and the soil condition.



## Drip Lines

- The drip line of a tree is made up from the outer circumference of the branches, where water drips to the ground.
- While some roots extend beyond the drip line, the vast majority of roots are within the drip line.

# Trenching

Below are before and after pictures of a secondary trench to the meterbase on a house. Secondary conductors must have a minimum 24" of cover. Primary conductors must be deeper at 30" of cover. In some instances, 36" of cover for both primary and secondary conductors may be required. The lot must be to final grade and clear of any obstructions. Access to the backyard may also be required and sections of fencing may need to be removed.



Before



After

A mini excavator is the most common piece of equipment used to dig secondary trenches. Depending on the area, larger equipment may be required for trenching.

