

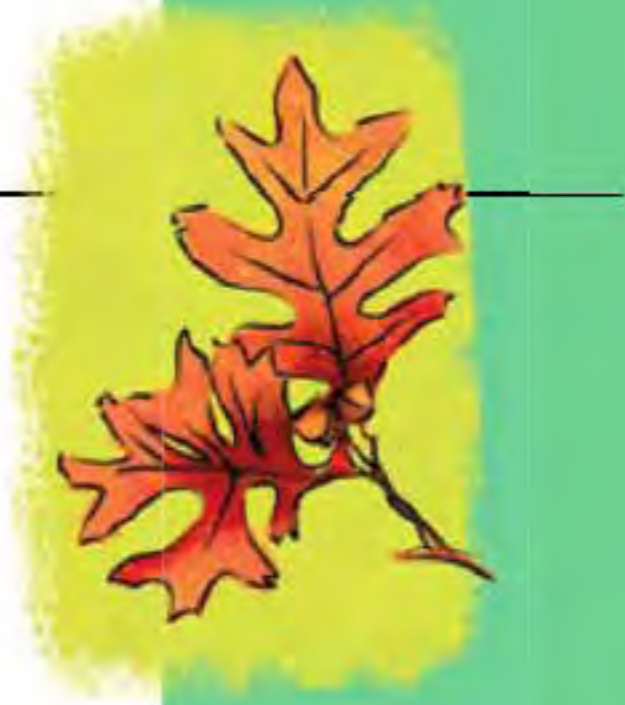
# Guidelines

for Planting  
near Power Lines




**Dominion**<sup>®</sup>





*This guidebook is designed to help property owners, landscape architects and designers choose, plant, and care for suitable plant material near power lines. It also illustrates the company's pruning methods in proximity to power lines.*



As a company with a strong commitment to the environment, we work in partnership with nature. That means we're a strong advocate of healthy trees, shrubs and plants.

Dominion is dedicated to the conservation of energy and the environment. We support the vital need for healthy trees, and at the same time, we respect the dangers when trees are not planted a safe distance from the power lines.

**Our mission** is ensuring safe, reliable electric service to our customers. This means we have the continual challenge of preventing potential conflicts and dangerous situations from developing when trees grow too close to power lines.



**Fact:** Trees benefit the environment, people, and places.



## A Naturally Flourishing Relationship

As a corporate citizen sensitive to the concerns of customers, we appreciate the tremendous value of healthy trees and shrubs. Around homes, they may increase residential property values by 15% or more. Around offices and industrial property, a wooded setting is a valuable asset, commanding higher prices or rent.

Through shape, form, texture, color and fragrance, flora and fauna add aesthetic beauty and natural character. Contributing to wildlife and plant diversity, plants enhance our communities and our sense of well being.

Cities and towns with tree planting codes often require a certain amount of tree cover to cool our work places and neighborhoods.

In fact, where trees and other shrubs are located makes all the difference in the world.

Trees encroaching on power lines or with overhanging branches can be knocked into the lines by extreme storms, high winds, ice or snow. Widespread power outages can result.

The real problem is that any plant material in contact with live wires makes an excellent conductor of electricity. This creates a twofold hazard: a dangerous situation for anyone coming in contact with a tree, and a possible power outage.

With over 40,000 miles of overhead transmission and distribution lines, trimming trees is an inevitable part of our responsibility in maintaining a safe and reliable system.



**Fact:** Trees are the most frequent cause of power outages.





Natural lateral trimming for clearance under conductor area.



Well-planned placement.

We adhere to the tree trimming guidelines issued by the SCC (State Corporation Commission). Natural lateral trimming leaves no stubs, encouraging new limbs to grow away from power lines. By giving trees adequate clearance from the lines initially, they require trimming less frequently. This saves expense for you and us.

## Successful Strategies To Grow With

It's best to go by the adage—"look before you leaf." By choosing the right plant for your planting environment, you can make sure the variety you select will thrive.

Decide on placement prior to selection. Consider all existing conditions: adjacent structures, surrounding vegetation, easements and overall design. Then you can determine the size, shape and form of tree best suited to the space available.

Your lawn zone, considered within 50 feet of your home, should accommodate trees that grow no taller than 40 feet to decorate or frame—not hide—your house. Large trees of 60 feet in height or more need to be planted 50 feet or more from your home (and your neighbor's).



To be on the safe side, plant low growing shrubs under or near power lines. This zone extends 15 feet away from electric utility wires.

Working with the environment, our concept is to keep plantings and power lines in cooperation. This philosophy seeks to prevent them from having an unfavorable impact on each other. A model for this ideal is Bayscaping, an environmental education initiative developed by the Alliance for the Chesapeake Bay, Inc., to promote sound landscape management practices to benefit the homeowner and the health of the Bay and other bodies of water.



**Note:** Any planting plans within a high-voltage transmission line easement should be submitted to the company as an encroachment request. This puts your plantings on file with us and may prevent damage during routine line maintenance. For more information on encroachment requests, contact Dominion at: **1-866-DOM-HELP**



**Ideal Shrubs:** for screening or planting under or within 15 feet of power lines

<i>Abelia grandiflora</i> .....	Glossy abelia
<i>Berberis julianae</i> .....	Wintergreen barberry
<i>Berberis thunbergii</i> .....	Japanese barberry
<i>Buddleia Davidii</i> .....	Butterfly bush
<i>Chaenomeles speciosa</i> .....	Flowering quince
<i>Cornus sericea</i> .....	Redtwig osier dogwood
<i>Euonymus alatus 'compacta'</i> .....	Dwarf winged euonymous
<i>Forsythia X intermedia</i> .....	Forsythia
<i>Ilex crenata</i> .....	Japanese holly
<i>Ilex glabra</i> .....	Inkberry holly
<i>Juniperus chinensis 'pfitzeriana'</i> .....	Pfitzer juniper
<i>Mahonia bealei</i> .....	Leatherleaf mahonia
<i>Nandina domestica</i> .....	Nandina
<i>Pinus mugo var. mugo</i> .....	Dwarf mugo pine
<i>Spiraea prunifolia</i> .....	Bridalwreath spirea
<i>Spiraea X vanhouttei</i> .....	Vanhoutte spirea
<i>Viburnum X burkwoodii</i> .....	Burkwood viburnum
<i>Viburnum carlesii</i> .....	Korean spicebush
<i>Wiegela florida</i> .....	Old fashioned weigela



*Abelia grandiflora*



*Mahonia bealei*



*Viburnum X burkwoodii*



*Forsythia X intermedia*

You can plant a "green screen" to shield pad mount transformers in and around your neighborhood, and still allow for access. Plant the screening material a minimum of 6 feet away on three sides, and 12 feet from the door. These plantings should be Green Zone compatible (page 7), and at maturity, must be a minimum of 3 feet away on three sides, and 10 feet from the door. This will allow for workers to safely maintain the equipment.

**Minimum Planting Distances**



This will allow for workers to safely maintain the equipment.



## Planting the Seeds of Energy Conservation

Well-placed shrubs and trees can offer energy savings comparable to other home improvements such as insulation and weather-tight windows. For example, the best way to reduce cooling needs is to shade your air conditioner.

Planning for five-year's growth, place plant material to shade your air conditioner and immediate area. Also help cool down the sunny sides of your home, planting trees to shade the west, east and south walls of your house to reduce peak period energy consumption.

Plant evergreen trees to the north and west walls of your home to reduce energy loss and shield against winter winds. For best results, plant windbreaks between 30 to 120 feet from your foundation.

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[www.projectplantit.com](http://www.projectplantit.com)



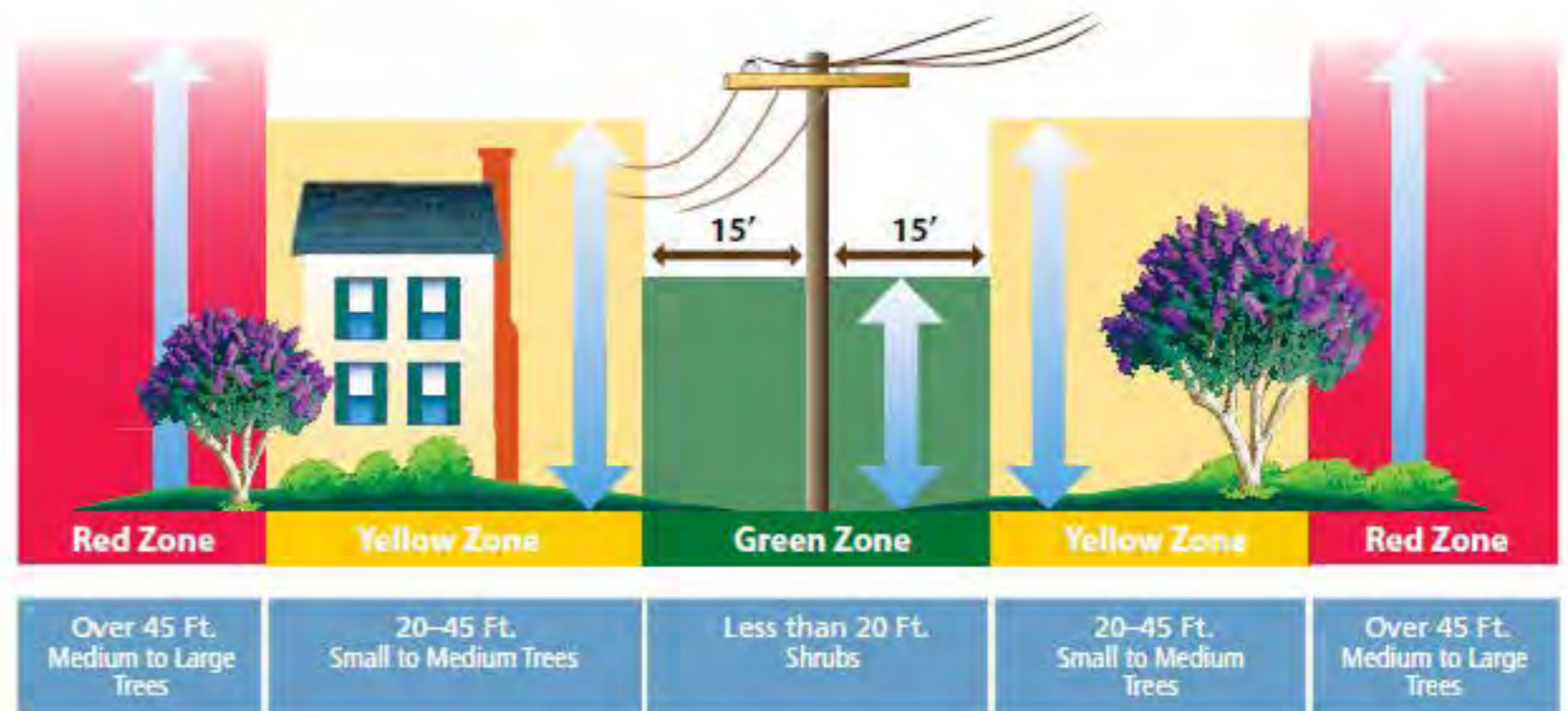


## Partnerships Coming to Fruition

From trees to utilities—we're concerned with all of our customers' needs. So we strive to serve you with the best resources and professionals. On staff, we have trained forestry coordinators; and on contract, professional tree care companies with technical experience in methods and regulations pertaining to utility line maintenance.

Our professional affiliations include memberships in American Forestry Association (AFA), International Society of Arboriculture (ISA), Virginia Urban Forest Council (VUFC), Virginia Nurserymen's Association (VNA), Virginia Society of Landscape Designers (VSLD), Society of American Foresters, Look Up Virginia, and Utility Arborist Association (UAA).

Professional tree-care companies who trim trees within our service terri-



### Red Zone:

For trees that grow more than 45 feet tall.  
*Do not plant near power lines.*

### Yellow Zone:

For trees that grow 20 to 45 feet tall.  
*Do not plant these trees under power lines.*

### Green Zone:

For shrubs that grow less than 20 feet tall.  
*These plants are appropriate for planting near power lines.*

*When planting a tree or shrub, allow for its mature height, width, and root system.*

tory share our commitment to advances in technology and training in utility and forestry related topics.

Vigilant ongoing care of healthy trees is integral to our vegetation management program. In cooperation with our environment, we're working to achieve a world of energy savings.



# From Proper Planting Methods Springs The Future Success of Any Tree

## 1. Dig the dimensions.

A good planting hole—as deep as the root ball and twice as wide—is essential. Roots will establish well and tree will take hold.

**Caution:** Locate underground utilities prior to digging. Contact **Miss Utility:** Dial 811

## 2. Prune slightly.

Prune only broken branches, leaving branch collar—the knob where one branch meets another—intact. Remove crushed roots. Do corrective pruning and shaping after a full season of growth.



## 3. Prepare soil.

Good native soil placed back in the hole is usually all you need. High-content nitrogen fertilizer may burn tender roots at planting. Fertilize after plant is established.

## 4. Place tree at proper height.

Set too deep, roots suffocate; too high, and they dry out. To set in place, lift trees and shrubs by the root ball, never the trunk. Add soil in hole to bring tree to its original growing level. Look for the dark stain on the trunk marking the difference between root and trunk bark.

## 5. Fill the hole with care.

Cut the string and remove all accessible burlap. For plantable baskets, perforate sides and break top off rim.



Fill the hole gently firming the earth around the tree to hold it in place. Eliminate air pockets. Do not tramp down with feet.

#### **6. Stake tree only if needed.**

In cases involving tall trees or species which have a tendency to weep over until established, stake to avoid shifting during rains and high winds. Drive 2 or 3 stakes an equal distance apart into the ground just outside the perimeter of the planting site. To secure tree with stakes, use padded wire or soft strapping material. Remove stakes within a year, when tree is firmly rooted.



#### **Branching out in your research?**

Get expert answers on your questions on selection, placement or planting. Visit a local nursery or garden center, and ask a certified nurseryman or arborist.

*You may also contact your county extension agent.*

#### **7. Mulch the tree base.**

Apply organic matter such as leaf litter, pine straw, shredded bark and twigs, peat moss and wood chips to the area around the tree. A 2-4" layer conserves moisture, discourages weeds, and protects roots from hot and cold.

#### **8. Water regularly.**

New plantings require watering weekly for the first 12 months if sufficient rainfall (approximately 1 inch) does not occur. This is vital to aid the development of a strong root system.



## Guidelines When Planting Near Power Lines

**If Your Site is:**  
0–15 feet from power line...  
*Plant Shrubs*

**If Your Site is:**  
15–35 feet from power line...  
*Plant Small Trees*

**If Your Site is:**  
35–45 feet from power line...  
*Plant Medium to Large Trees*

**Note:** Any planting plans within a high-voltage transmission line easement should be submitted to the company as an encroachment request.

Before you plant a tree or shrub, call **Miss Utility**, a free service that helps you avoid dangerous or costly accidents with underground wires or pipes.



Know what's below.  
**Call before you dig.**

## Recommended Choices of Trees and Your Selection Process

Choosing an appropriate planting based on space and use is a big factor in the overall health and environmental well-being of the plant. Review the chart on the left for ideal plantings in our area.

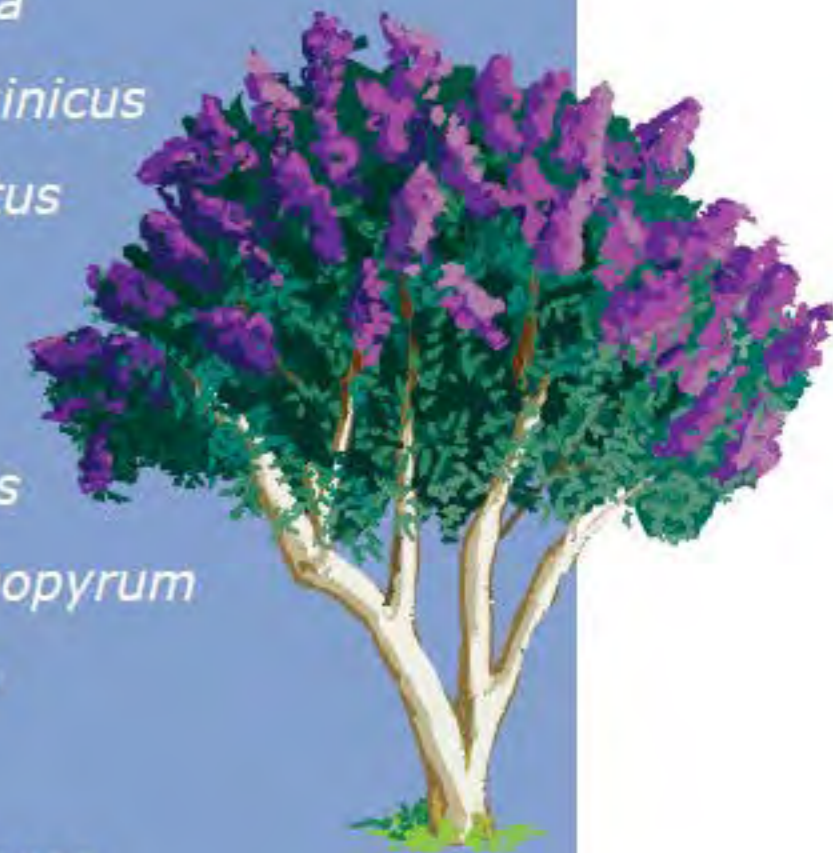
Small and medium trees should be planted a minimum of 20 to 40 feet from power lines; larger trees, a minimum of 45 to 60 feet and more. Some small species with ornamental characteristics that are suitable for planting in our area are listed below. Check with a nursery or arboretum to learn more before selecting the tree.

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For a complete listing of tree choices, please visit [www.dom.com](http://www.dom.com). Search: Trees



Amur Maple .....	<i>Acer Ginnala</i>
Japanese Maple .....	<i>Acer Palmatum</i>
Doublefile Viburnum/Japanese Snowball .....	<i>Viburnum plicatum var. tomentosum</i>
Crepe Myrtle .....	<i>Lagerstroemia indica</i>
Purpleleaf Plum .....	<i>Prunus cerasifera</i>
Smoketree .....	<i>Cotinus coggygia</i>
Fringe Tree .....	<i>Chionanthus virginicus</i>
Chaste Tree .....	<i>Vitex agnus-castus</i>
Kousa Dogwood .....	<i>Cornus kousa</i>
Flowering Dogwood .....	<i>Cornus florida</i>
Redbud .....	<i>Cercis canadensis</i>
Washington Hawthorn .....	<i>Crataegus phaenopyrum</i>
Star Magnolia .....	<i>Magnolia stellata</i>
Crabapple.....	<i>Malus sp.</i>
Downy Serviceberry, Shadblow.....	<i>Amelanchier arborea</i>



*Lagerstroemia indica*