Land Development Code

City of Hickory, NC

allow for the provision of interior landscaping. Under circumstances where the application of these requirements is infeasible or unworkable, the applicant may submit an alternative landscape plan, as outlined in Section 9.14.8.

9.14.8 Alternative Methods of Compliance

A. The Planning Commission, by means of a Special Use Permit in accordance with Sec. 2.4, shall have the authority to waive or reduce the requirements of Sec. 9.14, Landscaping and Screening provided that the alternative landscape plan meets or exceeds the objectives of this Land Development Code.

B. Perimeter buffer requirements between properties may be reduced or eliminated by a legal agreement between the property owners and the City of Hickory provided that the agreement runs with the land and is recorded with the appropriate county's Register of Deeds.

9.14.9 Plant Specifications

A. Plant Species

Plants shall be chosen from the recommended plant species lists in the Manual of Practice. Plants which are not on the list may be used if approved by the Planning Director upon a showing that the proposed plants will likely achieve the objectives of this section as well as or better than plants listed in the Manual of Practice. Invasive, exotic plant species (see chart in Manual of Practice) shall not be used to meet the landscape requirements of this Land Development Code.

B. For the purpose of measuring required canopy trees for this section, the caliper of a tree is the diameter measured six (6) inches above the ground, if that measurement does not exceed four (4) inches. If the measurement does exceed four (4) inches, the measurement is taken twelve (12) inches above the ground.

C. Minimum Plant Size Requirements

(1) Canopy trees shall be two and one half (2.5) inches in caliper and a minimum of eight (8) feet in height at time of planting.

(2) Understory trees shall be at six (6) feet in height at time of planting. Understory trees may be single or multi-stemmed.

(3) Only certain understory trees shall be planted under overhead utility lines. An approved plant list is in the Manual of Practice. When overhead utility lines are present, two (2) understory trees shall be planted for every one (1) canopy tree required.

(4) Evergreen trees shall be a minimum of five (5) feet in height at planting.

(5) Shrubs (evergreen or deciduous) required for parking areas shall be a minimum of a three (3) gallon container with a height of at least twenty-four (24) inches at time of planting.

(6) Shrubs required as part of a ten (10) foot or greater buffer shall be a minimum of a five (5) gallon container with a height of at least thirty-six (36) inches at time of planting.

D. Ground Cover

All ground surfaces, not otherwise required to be paved, shall be maintained with ground cover such as grass or mulch.

E. Plant materials shall conform to the requirements described in the latest edition of American Standard for Nursery Stock, published by the American Association of Nurseryman. Plants must be healthy, well-formed, and free of disease and insects.

9.14.10 Maintenance and Pruning

A. It shall be the responsibility of the property owner, or in the event of a property transfer, the subsequent property owner to maintain and ensure the survival of the plant material in perpetuity. Plants and trees that do not survive planting or for some reason perish due to injury, disease and/or insect infestation must be replaced during the first planting season following the death of the plant(s) in accordance with the specifications of this Land Development Code.

B. Tree topping shall be prohibited on all trees that are required by the provisions of this Land Development Code, including perimeter buffer trees and parking lot landscaping. Topping is the severe cutting back of limbs larger than three (3") inches in diameter to stubs within the tree's crown so as to remove the normal canopy and disfigure the tree. Trees severely damaged by storms or other causes, or certain trees that interfere with or are imminent threats to utility wires or other obstructions where other pruning practices are impractical may be exempted from this ordinance at the determination of the Planning Director. All trees and shrubs shall be pruned in accordance with American National Standards Institution (ANSI) Standards. For more information about tree topping, refer to the City of Hickory Manual of Practice.

C. If plants or other screening materials are removed to repair underground utilities they must be replaced at the next appropriate growing season at the owners' expense.

9.14.11 Performance Guarantee

A. Landscape and tree planting requirements may be deferred to an appropriate planting season with the approval of the Planning Director. This provision is meant to allow for seasonal extremes in weather and soil conditions that may be incompatible to landscaping. It is not, however, meant to be used in any way to circumvent the intent and purpose of the Land Development Code.

B. No Certificate of Occupancy shall be approved by the Planning and Development Department until:

(1) The required landscaping is completed in accordance with the approved plan; or

(2) A bond or certified check, payable to the City of Hickory, in the amount of 125% of the estimated cost to assure installation of the required landscaping.

C. An irrevocable letter of credit issued by a bank in the form approved by the City Attorney may be accepted in lieu of bond under the terms and conditions applicable to bonds in Subsection (b) above.

D. No surety or portion thereof, as provided for in this section shall be released by the City until all landscaping has been installed, inspected and approved.

E. Upon completion of the required landscaping, the surety shall be returned to the applicant.

9.14.12 Permit Required for Pruning, Planting and Removal of Trees on Public Property

A. Maintenance

(1) No person shall cut, prune (including the root system), spray or treat any tree or shrub having its trunk in or upon any public property or contract with another

City of Hickory
Landscape Ordinance
And Tree Preservation
Handbook

Canopy Trees

CANOPY TREES (Large deciduous trees)					
Scientific Name	**Common Name**	**H2O Wise**	**Height**	**Requirements**	**Cultivars/Notes**
Acer rubrum	Red Maple	Yes	40-60	Sun/Part Shade	Autumn Blaze', 'Oct. Brill.'
Acer saccharum	Sugar Maple	No	60-75	Sun/Part Shade	Commemoration'; 'Legacy'
Betula nigra	River Birch	No	40-70	Sun/Part Shade	Heritage; 'Duraheat'
Carpinus betulus	European Hornbeam	Yes	40-60	Sun	Fastigiata'
Carpinus caroliniana	American Hornbeam	Yes	20-30	Sun/Part Shade	
Celtis laevigata	Hackberry	Yes	60-80	Sun	
Cercidiphyllum japonicum	Katsuratree	No	40-60	Sun	
Cladrastis kentukea	American Yellowwood	Yes	30-50	Sun	
Fagus grandifolia	American Beech	No	50-80	Sun/Part Shade	
Ginkgo biloba	Ginkgo	Yes	50-80	Sun	Plant male trees only
Gynmocladus dioicus	Kentucky Coffeetree	Yes	60-75	Sun	
Liquidambar s. rotundiloba	Fruitless Sweetgum	Yes	60-75	Sun/Part Shade	
Metasequoia glyptostroboides	Dawn Redwood	Yes	50-90	Sun	
Nyssa sylvatica	Black Gum	No	40-60	Sun/Part Shade	
Quercus alba	White Oak	Yes	60-100	Sun	
Quercus bicolor	Swamp White Oak	Yes	50-60	Sun/Part Shade	
Quercus coccinia	Scarlet Oak	Yes	50-80	Sun	
Quercus falcata	Southern Red Oak	Yes	70-90	Sun	
Quercus lyrata	Overcup Oak	Yes	35-45	Sun	
Quercus nuttallii	Nuttall Oak	Yes	40-60	Sun	
Quercus shumardii	Shumard Oak	Yes	40-60	Sun	
Sassafras albidum	Sassafras	Yes	30-60	Sun/Part Shade	
Sophora japonica	Japanese Pagoda/Scholar Tree	Yes	50-75	Sun	Regent'
Taxodium distichum	Bald Cypress	Yes	50-100	Sun	
Tilia americana	American Linden	Yes	60-100	Sun	
Tilia cordata	Littleleaf Linden	Yes	30-70	Sun	
Ulmus americana	American Elm	Yes	75-125	Sun/Part Shade	Liberty'; 'Valley Forge'
Ulmus parvifolia	Lacebark Elm	Yes	40-50	Sun	
Zelkova serrata	Japanese Zelkova	Yes	50-80	Sun/Part Shade	Village Green'

Understory Trees

UNDERSTORY TREES (Small Deciduous Trees)					
Scientific Name	**Common Name**	**H^20 Wise**	**Height**	**Exposure**	**Cultivars/ Notes**
Acer buergeranum	Trident Maple	Yes	25-35'	Sun	
Acer campestre	Hedge Maple	Yes	25-35'	Sun/Lt. Shade	
Acer griseum	Paperbark Maple	No	20-30'	Sun/Part Shade	Specimen Tree
Acer palmatum	Japanese Maple	No	15-25'	Sun/Part Shade	Specimen Tree
Amelanchier alnifolia	Serviceberry	No	15-25'	Sun/Part Shade	Grown as small tree or large shrub
Amelanchier canadensis* **	Shadblow Serviceberry	No	6-15'	Sun/Part Shade	Grown as small tree or large shrub
Amelanchier x grandiflora	Apple Serviceberry	No	20-25'	Sun/Part Shade	Autumn Brilliance'
Cercis canadensis	Eastern Redbud	Yes	20-30'	Sun/Part Shade	
Chionanthus retusus	Chinese Fringe Tree	Yes	15-25'	Sun/Part Shade	
Cornus florida	Flowering Dowgood	No	15-20'	Part Shade	
Cornus kousa	Kousa Dogwood	No	20-30'	Sun/Part Shade	
Cornus mas	Cornelian Ch. Dogwood	Yes	20-25'	Part Shade	
Cotinus coggygria* **	Smoketree	Yes	13-15'	Sun	
Crategus phaenopyrum	Washington Hawthorne	Yes	25-30'	Sun	
Halesia carolina	Carolina Silverbell	No	20-40'	Sun/Part Shade	
Koelreuteria paniculata	Golden Raintree	Yes	20-40'	Sun	
Lagerstroemia indica* **	Crape Myrtle	Yes	18-30'	Sun	Under power lines choose cultivars that do not exceed 15': Acoma, Apalachee, Caddo, Comanche, Hopi, Lipan, Osage, Pecos, Sioux, Tonto, Yuma, Zuni
Magnolia stellata	Star Magnolia	No	13-20'	Sun	
Magnolia soulangeana	Saucer Magnolia	No	15-25'	Sun/Part Shade	
Malus hybrid	Flowering Crabapple	Yes	15-25'	Sun	
Ostrya virginiana	American Hophornbeam	Yes	25-40'	Sun/Part Shade	
Oxydendrum arboreum	Sourwood	Yes	20-30'	Sun/Part Shade	
Parrotia persica	Persian Ironwood	No	20-40'	Sun/Light Shade	
Pistachia chinensis	Chinese Pistache	Yes	25-40'	Sun	
Prunus species	Flowering Cherry	No	15-30'	Sun	
Prunus 'Hally Jolivette'* **	Hally Jolivette Cherry	Yes	10-15'	Sun/Part Shade	
Stewartia pseudocamellia	Japanese Stewartia	No	20-40'	Sun/Part Shade	
Styrax japonica	Japanese Snowbell	No	20-30'	Sun/Part Shade	
Viburnum prunifolium* **	Blackhaw Viburnum	Yes	12-20'	Sun/Part Shade	
**** These trees have been approved by Duke for planting under utility lines.**					

Evergreen Trees

EVERGREEN TREES RECOMMENDED FOR SCREENING (Also see shrub list)						
Scientific Name	**Common Name**	**H2O Wise**	**Height**	**Exposure**	**Cultivars/Notes**	
Large Evergreen Trees						
Cedrus deodara	Deodar Cedar	Yes	40-70'	S/PS		
Cryptomeria japonica	Japanese Cedar	Yes	50-60'	S		
X Cupressocyparis leylandii	Leyland Cypress	Yes	50-60'	S/PS	Over-used, give other plants a try	
Ilex opaca	American Holly	Yes	20-40'			
Juniperus virginiana	Eastern Red Juniper	Yes	30-50'	S/PS	Tough, tolerates drought	
Magnolia grandiflora	Southern Magnolia	Yes	40-80'	S/PS	Little Gem'; 'Margaret Davis'	
Pinus taeda	Loblolly Pine	Yes	30-40'	S/PS		
Pinus virginianna	Virginia Pine	Yes	40-60'	S		
Tsuga canadensis	Canadian Hemlock	No	30-80'	S/PS	problem with adelgids	
Medium Evergreen Trees						
Ilex x attenuata 'fosteri'	Fosters Holly	Yes	20-30'	S/PS		
Magnolia virginiana	Sweetbay Magnolia	No	20-30'	S/PS		
Small Evergreen Trees						
Illicium parviflorum	Anise	Yes	10-15'	S/SH	Grown as shrub or small tree	
Ilex x 'Nellie R. Stevens'	Nellie Stevens Holly	Yes	15-25'	S/PS		
Ilex vomitoria	Yaupon Holly	Yes	10-20"	S/PS		
Thuja species	Arborvitae	Yes	15-25'	S	Many species available; can be grown as small tree or large shrub; bagworms can be a problem	

Shrubs

SHRUB LIST					
Scientific Name	Common Name	H20 Wise	Height	Site Requirements	Cultivars/Notes
DECIDUOUS					
Abelia grandiflora	Glossy Abelia	Yes	3-6'	Sun	Many cultivars available; deciduous & evergreen
Callicarpa dictoma	Beautyberry	Yes	3-5'	Sun/Part Shade	
Carypoteris x clandonesis	Blue Spirea	Yes	2-3'	Sun	
Clethra alnifolia	Summersweet Clethra	Yes	3-8'	Sun/Shade	
Forsythia x hybrids	Forsythia	Yes	Varies	Sun/Part Shade	Many cultivars available
Hamamelis species	Witch hazel	Yes	Varies	Sun/Part Shade	Many cultivars available
Hydrangea species	Hydrangea	Yes	4-6'	Sun/Part Shade	Many cultivars available
Itea virginica	Virginia Sweetspire	Yes	3-15'	Sun/Part Shade	
Viburnum acerfolium	Mapleleaf Viburnum	Yes	4-6'	Shade	
EVERGREEN (These shrubs are recommended for screening; also see Evergreen Tree List)					
Aucuba japonica	Aucuba	Yes	6-10'	Part Shade/Shade	
Camellia japonica	Camellia	Yes	6-15'	Part Shade/Shade	Many cultivars available
Camellia sasanqua	Camellia	Yes	5-10'	Sun/Part Shade	Many cultivars available
Cephalotaxus harringtonia	Japanese Plum Yew	Yes	5-10'	Part Shade	
Chamaecyparis pisifera	Japanese False Cypress	Yes	4-15'	Sun	Many cultivars available
Ilex species	Hollies	Yes	Varies	Sun	Many cultivars available
Ilex cornuta 'burfordi'***	Compact Burford Holly	Yes	10-15'	Sun/Part Shade	
Illicium parvifolium	Anise	Yes	8-15'	Sun/Part Shade	
Juniperus species	Juniper	Yes	Varies	Sun	Many cultivars available
Loropetalum species	Loropetalum	Yes	4-12'	Sun/Part Shade	
Mahonia species	Mahonia	Yes	3'+	Part Shade	
Osmanthus x fortunei	Osmanthus	Yes	15-20'	Sun/Shade	
Picea species	Dwarf Spruce	Yes	Varies	Sun	
Prunus laurocerasus	English Laurel	Yes	3-6'	Sun/Shade	
Rhaphiolepis hybrids	Hawthorn	Yes	3-6'	Sun	Gulfgreen'
Rhapiolepis x delacourii	Indian Hawthorn	Yes	3-4'	Sun/Part Shade	
Spirea species	Spirea	Yes	2-8'	Sun/Part Shade	Many cultivars available
Taxus canadensis	American yew	Yes	3-6'	Sun/Part Shade	
Thuja occidentalis	Arborvitae, White-cedar	Yes	varies	Sun/Part Shade	Many cultivars available; sizes vary widely
Viburnum species	Viburnum	Yes	Varies	Sun/Part Shade	Many species available; choose natives
***** This large shrub is approved by Duke to plant under powerlines**					

Plant Species Not Recommended for Planting

Plant Species Not Recommended For Planting		
Scientific Name	**Common Name**	**Problems**
Acer ginnala	Amur Maple	Non-native invasive
Acer negundo	Box Elder	Weak wood, weedy
Acer platanoides	Norway Maple	Invasive
Acer saccharinum	Silver Maple	Weak wood, shallow roots
Ailanthus altissima	Tree of Heaven	Weak wood, weedy, invasive
Eleagnus angustifolia	Russian Olive	Diseases, invasive
Eleagnus umbellata	Autumn Olive	Invasive
Fraxinus pennsylvanica	Green Ash	Anthracnose, borers
Gleditisia species	Honeylocust	Too hot for this species
Hedra helix	English Ivy	Invasive
Lespedeza species	Lespedeza	Invasive
Ligustrum japonicum	Japanese Privet	Invasive, seeds spread to natural areas and form thickets.
Ligustrum sinense	Chinese Privet	"
Ligustrum obtusifolium	Border Privet	"
Ligustrum vulgare	Common Privet	"
Lonicera japonica	Japanese Honeysuckle	Invasive
Lonicera maakii	Amur Bush Honeysuckle	Invasive
Morus species	Mulberry	Messy fruit, shallow roots
Paulownia tomentosa	Paulownia	Weak wood, weedy
Pyrus calleryana 'Bradford'	Bradford Pear	Poor form, splits
Spirea japonica	Japanese spirea	Invasive
Ulmus pumila	Siberian Elm	Weak wood
Viburnum dentatum	Arrowwood Viburnum	Non-native invasive, but many good native viburnums exist
Viburnum lantana	Wayfaring Tree	Non-native invasive, but many good natives exist

Invasive Exotic Plants - Many introduced plants have become naturalized in North Carolina and some are replacing our native plant species. Not all exotic species are considered harmful. Invasive plants are usually characterized by fast growth rates, high fruit production, rapid vegetation spread and efficient seed disperal and germination. Not being native to NC, they lack the natural predators and diseases which would naturally control them in their native habitats. The rapid growth and reproduction of invasive plants allows them to overwhelm and displace existing vegetation and, in some cases, form dense one-species stands. Invasive species are especially problematic in areas that have been disturbed by human activities such as road building, residential development, forest clearing, logging, grazing, mining, ditching, mowing, erosion control and fire control activities. For more information see www.ncwildflower.org/invasives or www.se-eppc.org/weeds.cfm.