

Zoning Standards Department of Development Services

§ 14-213. Landscaping and screening.

- (1) Purpose and necessity.
 - (a) Purpose. Mission of the landscaping and screening ordinance:
 - (i) To accommodate growth while providing protection to established neighborhoods and property owners;
 - (ii) To encourage quality development by ensuring attractive and complementary landscaping; and
 - (iii) To enhance the scenic beauty of Maryville.
 - (b) Because of projected rapid growth in the city and planning region, a landscaping and screening ordinance is necessary for the following reasons:
 - (i) To lessen the impact of high intensity land uses that adjoin lower intensity land uses. Commercial development sometimes encroaches on residential neighborhoods. This ordinance is a law requiring that a strip of trees, bushes, and/or fences act as a buffer between high intensity land uses (such as a shopping center or convenience store) and low intensity land uses (such as residential housing). This helps ensure that development can occur around established areas with minimal impacts.
 - (ii) To create adequate screening within residential zones to protect existing residential properties. Sometimes new developments have the potential to decrease privacy for existing residential areas, especially when new 'activity centers' (a parking lot, playground, swimming pool, driveways, sports fields, club houses, etc.) are built near existing property boundaries. Screening of activity centers increases privacy for residents while accommodating development.
 - (iii) To protect existing residential properties from glare associated with outdoor lighting. Excessive glare and light trespass on existing properties is a growing concern for many Maryville residents. This ordinance minimizes the amount of light that can shine across property lines.
 - (iv) To ensure that Maryville's "best foot forward" will be presented to potential residents, businesses and tourists. At the junction of several major approaches to the Great Smoky Mountains, Maryville has the opportunity to leave a favorable impression on millions of travelers. As a National Arbor Day Foundation"Tree City, USA," this ordinance satisfies an important criterion for maintaining this designation.
- (2) <u>Definitions</u>. As used in this article, the following words and phrases shall have the following meanings:
 - (a) "Activity center" refers to any new land use that causes significant noise, glare, and/or loss of privacy for an existing residential property. Screening is only required for activity

centers in developments that must submit a site plan, including planned residential developments and planned unit developments. Examples of activity centers include, but are not limited to: swimming pools, parking lots, driveways, outdoor sports fields, playgrounds, club houses, etc.

- (b) "Caliper" refers to the diameter of the tree/shrub trunk.
- (c) "Canopy spread" refers to the diameter of vegetative cover.
- (d) "Foot-candle" is the measure of light per square foot.
- (e) "Hardship" refers to lots that are less than one half (½) acre in area, extraordinarily configured (as determined by the board of zoning appeals), and not exceeding one hundred fifty (150) feet in depth.
- (f) "High intensity use." For purposes of this ordinance, any use other than single family or two family residential.
- (g) "Incompatible land use" refers to high intensity land uses (industrial, office, commercial, etc.) when they adjoin low intensity land uses (one and two family residential).
- (h) "Lamp" is the component of a luminaire that produces the actual light.
- (i) "Landscaping" means beautification of a tract of land by decorative planting.
- (j) "Low intensity use," for purposes of this ordinance, means single family residential or two family residential uses.
- (k) "Luminaire" is a complete lighting system which includes a lamp(s) and a fixture.
- (I) "Lumen" is a unit of luminous flux. One foot-candle is one lumen per square foot. For purposes of this ordinance, the lumen-output values shall be the initial lumen output ratings of a lamp.
- (m) "Opaque." Visually impenetrable.
- (n) "Point- by-point foot-candle diagram." A simple plat or photometric drawing that displays the foot-candle reading at certain points on a property.
- (o) "Public view(s)" refers to the prevailing view(s) that is (are) directly in sight of the general public.
- (p) "Screen" is a partition (such as a wall or fence) and/or vegetation (such as screening trees, screening shrubs, and shade trees in a row) used to protect established neighborhoods, existing properties, and the public view.
- (q) "Screening shrubs" will grow to at least eight feet (8) and have a mature canopy spread of at least five feet (5).
- (r) "Screening trees" are used exclusively for screening incompatible property uses because of their density and opacity. Minimum height at installation and maturity are eight feet (8) and eight feet (8) respectively.
- (s) "Shade trees" are used in addition to screening trees to provide additional opacity and shade. Minimum height at installation: twelve feet (12) and two (2) inches caliper. Minimum height at maturity: thirty five feet (35) and canopy spread of twenty feet (20).
- (t) "Variance." A grant of permission by the Maryville Board of Zoning Appeals or the regional board of zoning appeals that authorizes the recipient to do that which, according to the strict letter of this ordinance, he/she could not otherwise legally do.
- (3) Applicability. The article shall apply to any non-residential development that abuts residential

property.

- (4) <u>Landscape plan submittal</u>. A landscape plan for each development must be submitted to the department of planning. The approval process for the landscape plan shall take place during weekly site plan review meetings. In addition to the "minimum site plan requirements" found on page 4 of The City of Maryville Site Plan Approval Process booklet (copies are available at the planning department), all landscape plan submittals will be reviewed for the following three general categories and sub-elements:
 - (a) Existing vegetation inventory: General location, type, and quality of existing vegetation; existing significant trees and/or vegetation to be saved (a variance can be requested to save historic, old and/or large trees. Setback requirements can be modified to save existing trees. Contact the planning department for more details); and methods and details for protecting significant vegetation during construction.
 - (b) Planting proposal: General location and labels for all proposed plants; plant lists or schedules with the botanical and common name, quantity, and spacing of all proposed landscape material at the time of planting; and planting and installation details as necessary to ensure conformance with all required standards.
 - (c) Built features list: Light poles/structures; a point-by- point foot-candle plat (see outdoor lighting requirements); and, general location and description of other landscape improvements, such as earth berms, walls, fences, screens, sculptures, fountains, street furniture, lights, and courts or paved areas;
- (5) Landscaping and screening types.
 - (a) In order to provide the greatest possible flexibility, several landscaping and screening types are available to accommodate a variety of different physical land features in the Maryville area. Screening Types A, B, and C, are in place to screen new development from incompatible land uses or activity centers. Any form of Screening Types A, B, or C may be chosen depending on each site's topography and situation.
 - The successful location of a landscape buffer to adequately screen a new development from an existing residential use is dependent on several variables. For most projects, particularly for projects that are on level topography with adjacent residential uses, the landscape buffer will likely be proposed and approved along the outer perimeter of the property line. However, when existing and proposed topography varies between proposed development and adjacent residential use, the landscape buffer must be more closely evaluated. The zoning administrator has authority to require relocation of proposed landscape buffer locations if he determines a more effective buffer location would maximize the short- and long-term visual effectiveness and survivability of the landscape buffer. Review of proposed landscape buffers will be based on the following attributes: existing and proposed topography between the new development and adjacent residential use; location of utilities; elevation of building pads; location of buildings; desirable views to protect; and height of walls.

Type A: <u>Existing natural screen</u>. For those properties that have significant vegetation that exists along property lines and may be appropriate for screening, the Type A option should be

chosen. The width of the natural screen shall be at least twenty-five feet (25). If a substantial screen of less than 25' exists, a written request can be sent to the administrator for review. To ensure that all existing natural screens are consistent in opacity and depth, a site visit by the planning department will be necessary to determine if the natural screen is in the spirit of the type A option. For those properties that have little or no existing vegetation, type B or C should be used.

Type B: <u>Dense screen</u>*. Any of the following variations may be chosen for the type B option:

- (i) Type B (1): Screen width of fifteen (15) feet and above. Screening trees** spaced at a maximum of ten (10) feet as measured trunk to trunk; and shade trees** spaced at a maximum of twenty (20) feet apart.
- (ii) Type B (2): Screen width of ten (10) feet to fifteen (15) feet. Screening trees** spaced at a maximum of ten (10) feet as measured trunk to trunk; shade trees** spaced at a maximum of twenty (20) feet apart; and screening shrubs** spaced at a maximum of 5' apart.
 - *Trees and shrubs already in place should be implemented into the landscaping pattern.
 - **All plantings shall meet the installation and planting size requirements specified in the plant installation specifications section.

Type C: <u>Combination screen</u>*. Any of the following variations may be chosen for the type C option:

- (i) Type C(1): Screen width of fifteen (15) feet and above. Screening trees** spaced at a maximum of fifteen (15) feet' as measured trunk to trunk or two staggered rows of screening shrubs** spaced at a maximum of ten (10) feet' apart. The plantings shall face the existing property; and an opaque fence or masonry wall of at least six (6) feet in height which shall face the new development.
- (ii) Type C(2): Screen width of ten (10) feet to fifteen (15) feet. Screening Trees** spaced at a maximum of 10' as measured trunk to trunk or two staggered rows of screening shrubs** spaced at a maximum of seven (7) feet apart. The plantings shall face the existing property; and an opaque fence or masonry wall of at least 6' in height which shall face the new development.
 - *Trees and shrubs already in place should be implemented into the landscaping pattern.
 - **All plantings shall meet the installation and planting size requirements specified in the plant installation specifications section.
- (b) If a proposed high intensity development is bordered by existing lower intensity development across a street, type D, 'street buffer' is required.

Type D: <u>Street screening</u>*. Where a proposed commercial, office, or high-intensity residential development (more than 2 family residential) borders any

residential development on the opposite side of a street, alley, or other public or private way, Type D screening is required. Choose from the following:

Minimum 10' screen width: An opaque fence or masonry wall of at least six (6) feet in height with a series of screening trees** spaced at a maximum of fifteen (15) feet from trunk to trunk on alternating sides of the fence/wall AND screening shrubs** shall alternate between the trees on the street side of the fence/wall. Screening must be planted on the property at a minimum distance of ten (10) feet from the street right-of-way to observe utility easements). Plantings must not impair vision or line of sight of ingress and egress.***

- *Trees and shrubs already in place should be implemented into the landscaping pattern.
- **All plantings shall meet the installation and planting size requirements specified in the plant installation specification section.
- ***The engineering department will review the site plan to make sure that sight distance is adequate before landscaping can begin.

The planning department staff is authorized to consider proposed alternatives to the street screening, type D, as long as the proposed buffer or screen meets or exceeds the opacity requirements of this section. Proposed alternative landscaping plans may eliminate the required fencing if approved by the planning department. A landscape plan will still be required for any alternative to the type D requirements proposed by the applicant.

Refer to the matrix below to determine how new developments are required to provide appropriate screening according to their relationship with surrounding land uses. Screening types are described in their entirety in the following pages.

Land Use-Screening Matrix:

	E X I	S	T I	N G
P R O P O S E D	1 and 2 Family Residential		Other Residential	Commercial, Industrial and Office
	1 and 2 family residential	NA*	NA ¹	NA ¹
	Other Residential	A B, or C	NA	NA
	Commercial, industrial, and office	A B or C	A B or C	NA ²
	Any land use with an Activity Center ³	A B or C	A B or C	NA
	Street screening (new high-intensity uses)	NA	D	D
	Outdoor lighting requirements	NA	Е	Е

NA = "Not Applicable"

- 1. No landscaping is required unless a residential activity center if built.
- 2. If a property is zoned business/transportation or office but the current use of existing property is residential, then screening is required.
- 3. Landscaping must screen the length of the activity center along the property line plus an additional ten (10) feet on either side.
- (6) Outdoor lighting requirements. This section involves the measurement and regulation of light along property lines to protect the privacy, comfort, and character of existing residential neighborhoods. Outdoor lighting is important for night visibility, safety, and security. Outdoor lighting can, however, also invade privacy and cause nuisance if excessive glare and direct light trespasses on established residential properties. These requirements ensure that new development minimizes the amount of light that may shine on abutting properties. The following is required when installing lights:
 - (a) A lighting plan may be required (as determined by the planning department);
 - (b) A light "point by point" foot-candle diagram must be shown on the site plan with a 10 x 10 foot maximum grid. The diagram should cover the at least ten feet on either side of property lines that border residential zones or uses;
 - (c) Lighting must not exceed one foot-candle at or beyond the property line zoned or used for residential purposes;
 - (d) Any luminaire with a lamp(s) rated at a total of more than 1800 lumens, and all flood or spot luminaries with a lamp(s) rated at a total of more than nine hundred (900) lumens shall not

- emit any direct light above a horizontal plane through the lowest direct light emitting part of the luminaire;
- (e) Laser source lights or any similar high intensity light for outdoor advertising or entertainment is prohibited; and
- (f) The operation of searchlights for advertising purposes is prohibited.
- (7) <u>Plant installation specifications</u>. All landscaping materials shall be installed in a professional manner, and according to accepted planting procedures specified in the Arboricultural Specifications Manual or the Tennessee Department of Agriculture, University of Tennessee Extension Services Horticultural Guidelines. All landscaping plants are to be nursery grown and purchased from a state licensed plant and nursery dealer, and must be hardy to zone 6B.
 - (a) Shade trees: All shade trees shall be installed at a minimum of 2"caliper and not less than 12' as measured from grade level to the top of the tree crown. Planted trees shall also have a minimum expected maturity height of 35' and a minimum canopy spread of 20'. Evergreen trees can be treated as shade trees provided they meet the minimum maturity height and canopy spread criteria.

Recommended Species:

<u>Common Name</u>	Scientific Name		
American Beech	Fagus Grandiflora American		
Sycamore	Platanus Occidentalis Ash		
	Fraxinus		
Bald Cypress	Taxodium Distichum		
Blackgum	Nyssa Sylvatica		
Chestnut	Aesculus		
Chinese Elm	Ulmus Parvifolia		
Dawn Redwood	Metasequoia Glyptostroboides Ginkgo		
(male only)	Ginkgo Biloba		
Honey Locust	Gleditsia Triacanthos Japanese		
Zelkova	Zelkova Serrata Kentucky		
Coffeetree	Gymnocladus Dioicus Linden		
	Tilia	London	
Planetree	Plantanus Acerifolia Maple		
(Except Silver)	Acer	Oak	
	Quercus (any sub-species)	
Ohio Buckeye	Aesculus Glabia		
River Birch	Betula Nigra		
Sweet Bay Magnolia	Magnolia Virginiana Sweetgum		
	Liquidambar Styraciflua		
Thornless Common			
Honeylocust	Gleditsia Triacanthos Var. Inermis		

Tulip Poplar Liriodendron Tulipfera

Willow Salix Sp.

(b) Screening trees: All screening trees shall be installed at minimum height of eight (8) feet and have a minimum expected mature canopy spread of eight (8) feet. Screening trees shall be semi-sheared and not natural cut.

Recommended Species:

<u>Common Name</u> <u>Scientific Name</u>

American Holly Ilex Opaca

Atlas Cedar Cedrus Atlantica

Canadian Hemlock Tsunga Caroliniana Deodar
Cedar Cedrus Deodara Eastern Red
Cedar Juniperus Virginianan Foster

Holly Illex Cassine

Leyland Cypress Xcupressocyparis Leylandii Nellie Sevens Holly Ilex X "Nellie Stevens" White

Pine Pinus Strobus

Savannah Holly Ilex Attenuata Southern Magnolia Magnolia Grandiflora

(c) Screening shrubs: All screening shrubs shall be installed at a minimum size of three (3) gallons and have an expected maturity height of at least eight (8) feet and a mature canopy spread of at least five (5) feet.

Recommended Species:

<u>Common Name</u> <u>Scientific Name</u>

Buford Holly Ilex Cornuta "Burfordi" Chinese Juniper Jniper Chinensis Sp.

Dahoon Holly Ilex Cassine

Leatherleaf Viburnum Viburnum Rhytidophyllum

Lusterleaf Holly Ilex Latifolia

Savannah Holly Ilex X Attenuata "Savannah" Wax

Myrtle Myrica Cerifera
Cherrylaurel Prunus Caroliniana
English Laurel Prunus Laurocerasus
Frunchet's Cotoneaster Cotoneaster Franchetii
Parney's Cotoneaster Cotoneaster Lacteus

- (d) Landscaping shrubs: To be used if desired in addition to landscaping requirements. All landscaping shrubs shall be installed at a minimum size of three (3) gallons
- (e) In addition: Earth berms, other shrubs, ground cover, and plant materials may be used to supplement landscaping/screening requirements.
- (f) Prohibited plants: The following plants are prohibited from being used to meet these requirements due to problems with hardiness, maintenance or nuisance:

Autumn Olive Mimosa Shrub Honeysuckle **Common Privet** Mulberry Siberian Elm Japanese Honeysuckle Multiflora Rose Silver Maple Garlic Mustard Paulownia Silver Poplar Kudzu Vine Purple Loostrife Tree of Heaven Poison Ivy/Oak/Sumac Lespedeza

- (g) Prohibited landscaping materials: No rip-rap shall be used except along the edges of basins, ponds, or lakes, or at the end of culverts. All other areas should have culverts installed and covered with soil, flagstone, and/or have fast growing ground covers planted (e.g. Liriope, Junipers, Vinca).
- (h) Utility easement policy: Any tree or shrub used to meet the requirements of this Section shall not be located within proposed or existing utility easements or inside street rights of way. The applicant is responsible for identifying existing and proposed easements.
- (8) Maintenance and enforcement. Maintenance of landscaped areas is the ongoing responsibility of the property owner and/or the lessee of the development. Required landscaping must be continuously maintained in a healthy manner. Plants that die must be replaced in kind. Written proof that all specifications of this section have been met provided one year after the planting is completed. The property owner or lessee must provide this documentation to the building inspector.
 - Enforcement of this landscape ordinance is the responsibility of the Maryville Codes Enforcement Department.
- (9) Hardships. Hardships: The landscaping/screening ordinance does not intend to create undue hardship on affected properties. The following administrative remedies are available when applicable:
 - (a) Anautomatic fifty percent (50%) reduction in landscape yard depth requirements for screening;
 - (b) A twenty-five percent (25%) reduction in planting requirements (for all sections except for the required screening trees) applies for lots with:
 - Depths of 150' or less; (i)
 - (ii) Extraordinary configurations (as determined by the Maryville Board of Zoning Appeals); and/or

- (iii) Areas of less than one half acre (21,780 square feet or less).
- (10) <u>Conflict with other ordinances</u>. Conflict with other articles in the Maryville Land Development regulations: Where any requirement of the Landscaping/Screening Ordinance conflicts with the requirement of another article in the Maryville Land Development Regulations, the most stringent requirement shall prevail. (as added by Ord. #2006-32, June 2006, and amended by Ord. #2009-01, Jan. 2009)

This information is provided as a summary only. For specific requirements for a particular property, please contact the Development Services offices.

Department of Development Services City of Maryville (865) 273-3500