ARTICLE XIII
Landscaping and Design Standards

Section 13.01 Introduction

Oak Ridge's environment is an important asset in seeking to attract residents, businesses and employment opportunities. Its natural environment sets a demanding standard; the lakes and rolling hillsides provide an unparalleled setting for places to live, shop and work. The purpose of this article is to communicate a set of design standards for new development or the redevelopment of existing properties in the City aimed at ensuring that Oak Ridge lives up to its residents' aspirations.

(a) Basis for the Standards

1. To promote qualities in the environment that sustain the community's economic well-being;
2. To foster the community's attractiveness and functional utility as a place to live and work;
3. To preserve the community's heritage by maintaining the integrity of areas enjoying discernable character contributing to this heritage;
4. To safeguard public investment in the community; and
5. To establish a level of community expectations.

The standards which follow translate these purposes into criteria for design. This article also outlines the process which applicants must follow to seek approval of their projects by the Oak Ridge Municipal Planning Commission (Planning Commission) and city staff.

(b) Actions Subject To Design Review

Development, which includes any buildings, structures or physical improvements or changes to land, is subject to design review if:

1. Site plan approval is required under Article XVI, Section 16.11 for the following
non-residential uses or residential uses with more than four (4) attached housing units:

a. Sites which are currently vacant and the site is considered new construction on a legal lot of record or a lease area

b. Any addition attached to an existing structure totaling 50% of the ground floor area.

(Ord. No. 17-09 Revised Effective 10/22/09)

c. Any modification where the estimated cost of the improvement exceeds 75% of the total assessed value of the structure(s) as set forth in the most current Anderson or Roane County tax records. However, IND-1, IND-2, and IND-3 are exempt from this subsection.

(Ord. No. 17-09 Revised Effective 10/22/09)

d. Any newly-constructed detached building on an existing legal lot of record with existing building(s). If the new building totals 50% or more of the ground floor area of the existing largest building, then the entire site shall be brought into compliance with the current regulations. If the new building total is less than 50% of the ground floor area of the existing largest building, then only the new building and all its associated performance criteria shall meet the requirements as specified. However, IND-1, IND-2, and IND-3 are exempt from this subsection.

(Ord. No. 17-09 Revised Effective 10/22/09)

e. Change or expansion in the off-street parking layout of an existing building on legal lot(s) of record. If the change or expansion results in a twenty-five percent (25%) or more increase in spaces then the entire parking lot shall be brought into compliance with the current regulations.

(Ord. No. 20-10 Revised Effective 12/23/10)

2. The development is a public building or improvement to a public building which the City may regulate. (Any other government entity is strongly encouraged to comply.)

(c) Purpose Of This Article

This Article explains the goals and standards which the Planning Commission and city staff will apply in reviewing proposals. It does not reproduce all of the specific requirements stated in the Zoning Ordinance, Subdivision Regulations, or other applicable development standards and regulations. Applicants are advised to consult all such documents prior to preparing plans.
The Article also is not intended to discourage applicants from submitting plans which are in the spirit of the standards, but not their letter, particularly if departures hold merit for a particular site or circumstance. In such instances, the Planning Commission may decide to make exceptions from its standards as referenced in Section 13.03. The burden of demonstrating that the plan is appropriate falls upon the applicant. Consideration will also be given to using material of existing and historical buildings.

Design review will occur in parallel with other reviews of a project mandated by current requirements, with consistent materials used for all reviews. The Design Review Process is described step by step in Section 13.04 of this Article.

(d) Goals For Community Appearance And Character

These provide the basis for the specific standards included in this Article.

1. **Natural Character**

   Oak Ridge’s natural character should be preserved and enhanced with new development. Especially important are retaining mature trees and vegetation, maintaining topography, preserving important scenic views to the lakes and mountains and other natural features, and ensuring that new buildings sit within a generously landscaped setting.

2. **Compatibility**

   New buildings should be compatible with their neighbors, assuming that the neighboring structures are a credit to the community. That does not imply uniformity of architectural style; rather a sympathetic response to the height, scale, materials, color, site location and other aspects of nearby structures.

3. **Orderly Public Realm**

   The city’s character is largely formed by the appearance of its important streets. How public and private elements of the streetscape relate to each other provides a sense of order -- public roadways, shoulders and medians, utility lines, and traffic signage in relationship to private landscaping, parking areas, building facades and signage. Scrutiny of what can be seen from public ways should be most intense, while less visible private areas of sites should be more at the property owner’s discretion.

4. **Signage**

   Private signage and advertising should not detract from the sense of continuous
landscape. The principal purpose of on-site signage is to identify establishments, and to direct those seeking to visit them safely and efficiently to their destination.

5. **Residential Privacy**

The sense of privacy of residential areas should be protected, especially from nuisances created by adjacent uses, such as noise, traffic, high lighting levels, and uncontrolled access. Within residential areas, there should be privacy of individual units.

6. **History**

References to Oak Ridge's past -- both its natural and developmental history -- should be preserved wherever possible.

7. **Utilitarian Elements**

Utilitarian elements should be masked or located out of public view. These include mechanical equipment on buildings, transformers, meters, refuse stations, electric wiring and service areas.

Section 13.02 Design Review Standards

(a) **Site Layout**

1. **Site Coverage**

   Sites should not be covered completely with impermeable surfaces, which prevent percolation of water back into the soil and can cause erosion, street flooding, or overloading of storm sewer systems. A minimum of twenty percent (20%) of the site shall be devoted to permeable surfaces, such as landscaped areas. This will also ensure that buildings are set in a strong landscape.

2. **Entries and Curb Cuts**

   Entries to sites from public streets should be clear, controlled and safe. Continuous curb cuts confuse circulation of automobiles as well as destroying the pedestrian environment, and reduce opportunities for landscaping. The Oak Ridge Zoning Ordinance establishes specific standards for the location and design of curb cuts and site entries.

   The number and width of curb cuts along a property should be the minimum necessary for effective on and off-site traffic circulation. Combined or shared
entries between properties are encouraged. If two (2) or more entries are needed, a one-way system should be considered to reduce curb cut area and maximize parking area.

Greater detail pertaining to the design of ingress/egress points is contained in Article XI of the Oak Ridge Zoning Ordinance.

3. Traffic Circulation

Interior vehicular traffic circulation within individual large lots should be well-defined, utilizing landscaped areas. Areas defined for internal vehicular traffic circulation should, where possible, be separated from defined pedestrian ways.

(b) Grading, Drainage, And Topsoil Preservation

1. Overland Drainage and Detention

The rate of post-development runoff at site boundaries shall not exceed pre-development rates of runoff. This information is further detailed in the Erosion Control and Storm Water Management Ordinance.

Landscaped retention/detention areas should be created, where possible, to collect runoff from paved areas. Such areas should be treated as visual amenities for the site, and not as utilitarian or unkempt areas. If retention is chosen, then the area will be considered an amenity and is not required to meet the Nuisance Screening Requirements. If detention is chosen, then the areas will be considered a service area and shall be landscaped according to Nuisance Screening requirements.

2. Topsoil Stabilization

Topsoil should be saved during construction and then placed over landscaped areas to ensure survival of plantings.

(c) Preservation Of Existing Trees And Site Features

In an effort to retain existing natural surroundings, mature trees and natural vegetation should be retained where possible.

1. Protection of Vegetation Surroundings Specified for Retention

Mature trees and vegetation, which are to be retained, should not have the ground elevation altered, and disturbance of ground surface should be minimized within the drip line of mature trees. A protection barrier shall be constructed which
denies access of construction activities under the drip line of the trees/vegetation.

2. Retention of Site Features

A natural setting is one of Oak Ridge's attractive qualities. Streams, wetlands, large rock outcrops, stands of native vegetation, rock walls, cemeteries and other notable natural features must be located on the site plan and preserved wherever possible.

Bands of trees, when present along side and rear lot lines, shall be maintained as an effective screen and wind buffer, provided drainage swales and utility easements are not present.

Existing significant vegetation may be considered to meet the planting and screening requirements provided that it meets the minimum performance standards set forth in this article.

(Ord. No.6-10 Revised Effective 5/13/10)

(d) Architectural Character

1. Compatibility With Surroundings

Building forms should be tailored to fit within the existing topography and site features as much as possible. In most cases, buildings are not viewed in isolation, but rather in the context of other buildings. While architectural style may vary, buildings of a proposed development should be compatible with surrounding buildings with regard to massing, scale, proportion of openings, roof types, types of windows or fenestration, and degree of detail.

The use of materials and colors compatible with buildings adjacent to a site is encouraged where adjacent buildings conform to this ordinance.

The uses of certain materials as the primary exterior building material are prohibited in all commercial, office, and multifamily residential (residential with more than four (4) attached housing units) zones. These materials include: vinyl siding (vinyl siding not less than 40 mil is allowed), metal siding, and standard concrete block. Neon lights used as accents are also prohibited. Standing seam metal roofs may be allowed. Consideration will be given to prohibited building materials when being placed on additions to existing structures to maintain continuity. (Note: Consideration will also be given to additional buildings on the same lot and not just building additions.) Full chroma colors shall not be used, except as accents.

(Ord. No. 17-09 Revised Effective 10/22/09)

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Along the major arterial roads, such as Oak Ridge Turnpike and Illinois Avenue, certain façade materials are encouraged to create a unified appearance, particularly brick, stone, and EIFS (Exterior Insulation and Finished Systems).

2. Adapting Prototypical Designs

National "standard" designs should be adapted to reflect the Oak Ridge context, by careful siting, use of compatible materials, colors and landscaping of the site so that it blends with its surroundings.

3. Relationship to Streets

Buildings should be oriented such that their main entrances are visible from streets.

Façades along streets should be treated in a manner which enhances interest. Displays or windows with active interior uses are encouraged; blank or undifferentiated facades are discouraged.

"Stage-set" façades on the street are discouraged. Acceptable materials and colors of the street face shall continue on the sides and rear of structures, when visible from a street. This shall include parapet walls. For example, if a building has a parapet wall on the front façade then it shall continue on the sides and rear of the building.

(Ord. No.6-10 Revised Effective 5/13/10)

Building service areas or loading areas within commercial, office, industrial, and multifamily residential (residential with more than four (4) attached housing units) zoning districts shall not be visible from streets; they shall be located away from streets and/or adequately screened. Screening shall meet criteria identified in Section 13.02 (g) 3 b. of this Article.

(Ord. No 6-10 Revised Effective 5/13/10)

Mechanical equipment on roofs or sides of buildings shall not be visible from streets. Adequate screening shall be provided.

Landscaping with generous planting should define the street edge and entries of a development, as well as building entries.

4. Underground Power

All utility service to individual structures should be underground in accordance
with the City of Oak Ridge Electric Department regulations.

(e) Parking Configurations

1. Efficiency of Parking Areas

To allow space for landscaping and site improvements without significantly reducing the potential number of parking spaces on a site, efficient configuration of entries, circulation, and layout is encouraged.

2. Reduction in Apparent Size and Visibility of Parking Areas

Site arrangements which minimize the amount of parking between the street and buildings are encouraged. To the extent possible, parking areas should be split between the front and back of a lot, or along the side of a building to reduce the paving at the street face.

Where possible, parking areas should be set two (2) to three (3) feet below streets or surrounding areas, or be partially hidden by landscaped berms, which are encouraged, to reduce the visibility of parked cars.

To mitigate the visual impacts of parking areas, a minimum of ten percent (10%) of the paved area within a site shall be landscaped within and immediately adjacent to the paved parking area. This is the Required Landscaped Area.

Lines of parking spaces should have a limited run: there shall be no more than fifteen (15) contiguous parking spaces between landscaped islands within all commercial zones. The Planning Commission may consider alternative plans for large commercial parking areas provided the following issues are addressed:

• A detailed landscaping plan is presented which meets the permeable surface requirement, square footage requirements and site tree requirement.

• Alternative proposal requests must be clearly stated in written form.

• Spirit and intent of requirement must be met.

Retention of existing trees located in parking areas is strongly encouraged. Tree wells may be used, if necessary, to allow for changes in grade while protecting the tree.

All required landscape areas within parking areas shall be protected by curbs. There shall be curbs or bumper stops provided so as to prevent any vehicle from

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blocking or overhanging walkways, or damaging plant material in adjacent
landscape areas.  

(Ord. No.6-10 Revised Effective 5/13/10)

The minimum width of a landscaped zone is five (5) feet, excluding curb
dimensions. Such islands have raised concrete curbs six (6) inches high, shall
extend across the end of the aisle, and be shaped to accommodate vehicular
turning movements. As an alternative to distributing landscaping throughout
parking areas, pooling of landscaped areas to create more significant landscape
zones may be considered, provided that these zones break up the appearance of
pavement effectively. Additionally, 80% of all islands shall have at least one (1)
tree planted.

(Ord. No.6-10 Revised Effective 5/13/10)

The minimum area of a landscaped zone is 75 square feet.

For every 200 square feet of required landscape area, one (1) tree shall be
planted.

In no instance shall pavement on any site be closer than five (5) feet from a side
or rear lot line, with the exception of a joint access easement.

3. Design of Parking Configuration Within IND-1, IND-2, and IND-3 Districts

Within Industrial Districts, parking areas shall have no more than twenty (20)
contiguous parking spaces without an intervening landscape island. Service/delivery areas are to be exempted from the parking configuration
requirements. The ratio of Required Landscaped Area per square foot of paved
area is eight percent (8%). Basic plantings around the foundation of the building
are strongly encouraged and at all entrances into the site. For every 200 square
feet of landscaped area, one (1) tree must be planted.

4. Fitting Parking Areas to Site Topography

On sloping sites, lines of parking spaces should run parallel to contours with
planted medians taking up excessive slope. Paved areas should not exceed a five
percent (5%) slope.

Detention of runoff within parking areas or in adjacent landscaped areas is
encouraged. Runoff from parking areas should not sheet onto public streets or
sidewalks.

5. Compliance of Existing Sites
An alternative proposal may be presented in the event an existing site crosses the threshold for compliance of Design Review as referenced in Section 13.01 (b): “Actions Subject to Design Review”. Meeting the minimum requirements of these provisions may be difficult due to site limitations, loss of necessary parking spaces, limitations due to the size of lot or configuration of building design. In these instances, an alternative proposal may be presented to the Planning Commission by the applicant, which meets the requirements of Section 13.01 (c) of this Article. However, continuous compliance of the entire site once the initial site review process is completed is mandatory.

(Ord. No. 20-10 Revised Effective 12/23/10)

6. Pedestrian Circulation

For parking lots with parking spaces in excess of 100 spaces, pedestrian entrances into the structure shall be clearly marked. A sidewalk with a minimum width of 10 feet or scale suitable to size of the structure should be provided for adequate pedestrian protection (this area should be reasonably clear for pedestrian traffic). Pedestrian crosswalks protected by traffic calming devices shall be installed across travel lanes immediately adjacent to the entrance of commercial structures to ensure safe access into established entrances. If a pedestrian sidewalk is present at an adjacent public/private street then connectivity from the entrance to the sidewalk should be provided.

(f) Landscape

1. Landscape Areas

Landscape beds, which meet the ten percent (10%) Required Landscaped Area as referenced in section 13.02 (e) 2, should be located along the public boundaries of the site, within parking areas, and around buildings, and at building entries to create a sense of the buildings set in natural surroundings. Such landscape areas shall be comprised of grass and/or a combination of grass with mulch or decorative landscape elements; however, the landscape areas shall not be more than fifty percent (50%) mulch or decorative landscape elements. All sides of a building visible from streets shall have foundation plantings. Planting beds should be consolidated into areas large enough to give a natural character to a site, rather than distributed in thin ribbons. These areas shall be clearly delineated on the site plan with square footages provided.

Areas with natural vegetation should be preserved along property boundaries.

(Ord. No. 20-10 Revised Effective 12/23/10)

2. Streetscape
A consistent landscape treatment along streets enhances the appearance of the public domain, and provides an attractive unified setting for variations among individual developments. Landscaped areas should dominate the frontage of any site, where entries are the only interruptions.

A streetscape area shall be ten (10) feet in depth behind property lines adjacent to the full boundary of all lot lines adjacent to a public or private street. Street trees shall be located within the streetscape areas.

If trees are planted in sidewalk zones, a protective grate or planted zone must be provided to allow water to reach the roots, with minimum dimensions of five (5) feet by five (5) feet.

Trees shall be planted along streets at least 40 feet on center with relatively even spacing. If frontages exceed a multiple of 40 feet, an additional tree should be planted along the street, for example, a frontage of 50 feet should contain two trees, a frontage of 130 feet should have four trees. Areas for curb cuts shall not be included in the street frontage for purposes of this paragraph.

(Ord. No. 17-09 Revised Effective 10/22/09)

All streetscape trees located in Industrial (IND-1, IND-2, IND-3) Districts shall be 60 feet on center. Areas for curb cuts shall not be included in the street frontage for purposes of this paragraph.

(Ord. No. 17-09 Revised Effective 10/22/09)

In the event there is no interference with utility lines then the street tree needs to be a canopy tree. To provide a consistent effect along other streets, examples of desirable street tree species are Sugar Maple, Willow Oak, and Red Maple. If power lines or other utilities are present city staff will consider alternative species. All invasive non-native species and invasive exotic pest plants as identified by the Tennessee Exotic Pest Plant Council should be avoided. In additional, such plantings shall not obstruct the view of the flow of traffic.

(Ord. No. 6-10 Revised Effective 5/13/10)

In an effort to minimize the visual impact of parking areas in commercial, office, and multifamily residential (residential with more than four (4) attached housing units) zoning districts, shrub rows shall be planted within the Streetscape area at a minimum height of three (3) feet high along the boundaries of any parking area visible from public streets. Species used shall be evergreen or have dense branching qualities, which provide an effective visual screen in all seasons.

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1 See the Tennessee Invasive Exotic Plant List, the List of Ecologically Desirable Trees and Shrubs Suitable for Landscaping in Oak Ridge prepared by the Environmental Quality Advisory Board of the City of Oak Ridge, and the current edition of Architectural Graphic Standards.
Consideration may be given to shrubs with 30-inch height in certain locations, based on species.

(Ord. No.6-10 Revised Effective 5/13/10)

3. Plant Materials

Oak Ridge displays a robust ecosystem, with a variety of native plant materials. The use of these hardy and attractive native species in developments is encouraged.

Plant materials should be installed at a reasonable size, to provide a sense of presence and to mitigate microclimate impacts caused by development.

Street trees need to be large enough when installed to have some presence while allowing views to sites and branching above pedestrians walking along the sidewalk. Trees along public/private streets shall be a minimum of two (2) - two and one-half (2½)-inch caliper.

Within a site, deciduous canopy trees shall be two (2) - two and one-half (2½) inch caliper; evergreen trees shall be five (5) feet – six (6) feet in height and heavy sheared; deciduous ornamental trees shall have a minimum caliper of at least one (1) inch. No more than 50% of site trees may be comprised of ornamental trees.

Consideration will be given on a site-by-site basis for various species to be used for street trees in areas where there are height limitations, such as power lines, electric poles, etc. which act as deterrents to growth.

Upright shrubs should be at least three (3) feet high. Consideration will be given to shrubs with 30-inch heights in certain locations, based on species. Spreading shrubs should have a minimum spread of 18 inches.

Grass areas shall be of sod or established lawn at the time of issuance of a Certificate of Occupancy permit. Sod is encouraged on steep slopes and areas visible from the street or public parking areas.

(Ord. No.6-10 Revised Effective 5/13/10)

All landscape zones and plantings installed by the developer shall be in compliance with all planting notes. Size and species identified in the planting list shall be as specified unless otherwise approved by Planning staff prior to installation.

All species and size of species shall be in conformance with the American Standard for Nursery Stock developed by the American Association of
Nurserymen, Inc.

All materials specified within the approved plan shall be planted prior to the issuance of a Certificate of Occupancy permit; however, the City Manager or the City Manager’s designee may authorize an extension of such plantings for a period not to exceed nine (9) months to permit plantings during a season with more favorable weather conditions to ensure long term, healthy plant life.

(Ord. No.6-10 Revised Effective 5/13/10)

4. Maintenance

a. Following the construction or modification of any development the design of which is approved pursuant to this Article, the development shall be maintained in accordance with the following standards:

(1) Building and appurtenances, including signs, shall be cleaned and painted or repaired so as to maintain an attractive appearance.

(2) Illuminated elements of buildings and signs shall be replaced as required to maintain the effect for which designed.

(3) Landscape or plant materials which are dead or deteriorated shall be replaced to the same specifications on the originally approved site plan. Plantings shall be kept watered, fed, cultivated, and pruned to give a healthy appearance during all seasons. Excessive pruning of site and street trees is strictly prohibited (No Topping). Plant materials or existing significant vegetation shall be kept trimmed so as not to obstruct any sidewalk, pedestrian way, vehicular aisle, and/or safe line of sight at the access, adjacent property line or overhead public utility. Maintenance shall include, but may not be limited to, mowing, removal of litter, weeding, replacement of dead plant material and necessary pruning.

(Ord. No.6-10 Revised Effective 5/13/10)

(4) In all O-1 and O-2 Office Districts and B-2, UB-2 and B-3 Commercial Districts, either a permanent irrigation system shall be installed or a maintenance bond shall be posted for the first year from the date of the issuance of the Certificate of Occupancy or all lots on which impervious surfaces, excluding structures, exceeds 7,500 square feet, the irrigation system shall be designed to provide total water coverage to all required planting beds. A plumbing permit must be obtained prior to
beginning any installation. In the event a moratorium on water usage is declared this requirement will be suspended for the length of the moratorium.

(5) Parking areas shall be kept in an orderly state, properly marked, and clear of litter and debris.

b. Failure to comply with the requirements of this article after a notice of noncompliance has been issued by the City Manager or the City Manager’s designee with a stated time frame for compliance shall be deemed a violation of the Oak Ridge Zoning Ordinance and shall be subject to the sanctions set forth in Article XVI, as well as to the revocation of any permit, license, certificate or other approval initially issued by the City as a basis for construction and/or occupancy of the development on which the violation has occurred.

(g) Screening

1. Conditions for Screening

Screening requirements vary by their purpose. Two (2) types of screening conditions are distinguished:

Required transitions between zone districts and associated land uses such as Residential and Commercial or Industrial; Nuisance screening for service and loading areas, dumpsters, materials storage areas, utility boxes, detention ponds, etc.

2. Performance Criteria

Screens are intended to provide visual and physical separation of conflicting uses, and should be designed to fit within their surroundings, not dominate the view. The width of the screen and amount of landscaping material required are designed to minimize or eliminate the adverse effects of noise, odor and safety issues, as well as nuisances such as dirt, litter, glare from lights, signs, buildings and parking areas.

Screens should not block access to any above ground pad mounted transformer, and should provide 15 feet of clear access to the transformer doors.

Screens should not impede or divert the flow of water in any drainage way.

The maximum height for fences is six (6) feet, except for tennis courts, which may be taller, and screening of service areas shall be at least six (6) feet and no
more than eight (8) feet. (For any other fence greater than six (6) feet in height the applicant shall seek approval by the Oak Ridge Board of Zoning Appeals.)

It is the intent of this requirement to allow flexibility through the manipulation of distance, plant material type and density of plantings. This criteria allows great latitude while simultaneously providing substantial protection against conflicts with adjacent uses.

3. Design Standards

Design standards vary according to the function of the screen, as follows:

a. Transitional Screening

Transitional screening is required, for example, where commercial, office or industrial zone districts and associated land uses abut residential zoning districts, where multi-family residential zoning districts adjoin single family residential zoning districts; or within Planned Unit Developments with similar disparities.

(Ord. No.6-10 Revised Effective 5/13/10)

To determine the type of transitional screen required, the following procedure shall be followed:

Identify the existing zoning designation.

Identify the zoning of all adjoining uses.

Determine the transitional screen requirement for the side and rear lot lines of the subject parcels by referring to Figure 13.04 (a-b). The screen requirement is found by locating the existing zoning in the left-hand column. Each adjacent zone district is identified across the top of the figure. Where the row for the zone district intersects the column for an adjacent zone the letter identifying the required screen is given.

Each transitional screen (A through F) is illustrated in Sections 13.04(c)-1a through 13.04(c)-1f. Each screen has a minimum amount of landscaping required which is based on plantings per 100 linear feet of land. The developer may meet the transitional screen requirement by providing any one of the screens shown under a specified type (A, B, etc.). The numbers in the multiplier column are used to adjust the number of plants required when the amount of land is either increased or decreased.
Where areas adjoining residential zones are likely to be used for truck loading, storage or driveways, the transitional zone shall provide protection through use of earth berms or solid masonry materials.

Where lighted parking areas are located adjacent to residential zones, lighting should be designed to minimize illumination across the boundary, and the transitional buffer must screen headlights.

b. Buffers – Opposite Residential Zoning Districts

A buffer strip shall be required around the entire outer perimeter of the off-street parking lot when such parking lot abuts any residentially zoned property or is located across the street from a residentially zoned property. Such buffer strips, at initial installation, shall provide a visual barrier of the parking lot from the abutting residentially zoned property. Screening materials to provide the visual barrier may include a wall, fence, landscaped earthen berm, planted vegetation or any appropriate combination of these elements. Consideration may be given to non-residential properties across the street from residentially zoned properties when a major arterial street separates the properties. In this instance, the minimum buffer width may be reduced to ten (10) feet, which is equivalent to the minimum width of the required streetscape area. Such instances could include lack of visibility of parking lot area from residentially zoned properties and/or large rights-of-way widths associated with major arterial streets.

(Ord. No. 6-10 Revised Effective 5/13/10)

c. Nuisance Screening

Nuisance screening is required where certain land uses have been deemed to represent a nuisance or annoyance to neighboring property owners or the general public. Common characteristics of site nuisances include unsightliness, strong odor, and/or disturbing sounds. Nuisance screening shall apply to any property or portion thereof to be used for the functions identified below.

To reinforce the sense of natural surroundings and a consistent streetscape, all auto service functions such as areas to store cars while they are being repaired, auto or truck outdoor work areas, truck loading docks, and garage door areas in commercial or retail areas shall be screened from public view. Garage doors facing public streets are expressly prohibited in commercial or retail areas.

Garbage collection areas shall be enclosed by a fence of wood and/or
masonry construction on all four (4) sides, with doors to remove containers. Dumpster enclosures are encouraged to match the building material of the associated structure. Chain link fence shall not be used as a dumpster screen. Where dumpsters are enclosed, the screening shall be at least two (2) feet taller than the dumpster. Where topography may expose interiors of garbage collection areas to view, screening shall be correspondingly taller. Landscape plantings are required around three sides of all dumpster screens to soften the wood or masonry fence. Garbage collection areas shall have a concrete apron.

Water meters, gas meters, electric meters, and ground-mounted air conditioning or mechanical units should be hidden from public view by screening.

In the event a large service area is proposed which is visible from a street with a mixture of nuisance issues, a single screen may be created which prevents the public’s view from the site as opposed to individual screens per nuisance.

Screening requirements may be relaxed where areas are located so they are not visible from public streets or adjacent properties.

Existing plant material which meets the requirements of this Ordinance, may be counted as contributing to the total screening requirements. This would include existing fence rows and hedges.

d. Suggested Plant Materials for Screening

Evergreen plants are recommended for effective year-round screening. Suggested evergreen trees and shrubs include: Arborvitae, Hetzi Juniper, White Pine, and Yew. Suggested broadleaf evergreen shrubs include: Red-Tipped Photinia, Leatherleaf Viburnum (Semi-Evergreen), and Holly (Notably Foster Holly).

Ornamental shrubs and trees may also be used for screening, preferably in combination with evergreen plantings or fencing. Suggested ornamental shrubs include: Red-Tipped Photinia, Willowood Viburnum, upright Hollies, and large flowering shrubs. Suggested ornamental tree species include: Flowering Crab, Dogwood, Magnolia, and Purple Leaf Plum.

All invasive non-native species and invasive exotic pest plants as identified by the Tennessee Exotic Pest Plant Council should be avoided.²

² See the Tennessee Invasive Exotic Plant List, the List of Ecologically Desirable Trees and Shrubs Suitable for Landscaping in Oak Ridge prepared by the Environmental Quality Advisory Board of the City of Oak Ridge, and the current edition of Architectural Graphic Standards.
e. Minimum Plant Size

- Canopy Tree: 2-2½ inch caliper
- Deciduous Ornamental Trees: 1-inch caliper
- Evergreen Trees: 5 – 6 feet (height), heavy sheared,
- Deciduous Shrubs: 24 inches (height)
- Evergreen Shrubs: 18 inches (height)

f. Landscaping Requirements for Towers

All fences and/or other related equipment located at the base of the tower shall be screened by either a ten (10)-foot-deep landscape yard with evergreen trees spaced a maximum of ten (10) feet on-center or two (2) staggered rows of shrubs spaced a maximum of eight (8) feet apart. Such trees used to meet the buffer requirement shall be installed at a minimum height of eight (8) feet and have a minimum expected mature spread of eight (8) feet. Such shrubs shall be fast growing, shall be a minimum of four and one-half (4½) feet high at the time of planting and shall be capable of reaching a height of at least eight (8) feet at maturity. Towers not visible from the view of the public are exempt from this provision.

(h) Lighting

It is the intent of this subsection to establish outdoor lighting requirements that reduce the negative effects of lighting, but at the same time address the need for adequate lighting for safety and visibility concerns. The intent is also to prevent any light shine or glare so as to create a traffic safety hazard or nuisances on any adjacent properties, rights-of-way, access easements or driveways. For the purpose of this subsection, glare shall be defined as any brightness within the field of vision of such a character as to cause annoyance, discomfort, interference with vision, or loss in visual performance and visibility. All lighting shall comply with the International Dark Sky Association (IDA) standards to prevent light pollution.

(Ord. No.6-10 Revised Effective 5/13/10)

1. Design Criteria

To reduce adverse impacts on adjacent sites, lighting should be carefully located and its intensity should be the minimum necessary for safety. Lighting should efficiently illuminate only its target area.

Lighting levels should be as even as possible.

Lighting should focus downward and/or otherwise be shielded to prevent upward
light distribution.

Warm lighting colors are preferred; blue-white color is discouraged.

Lighting should be scaled in proportion to its associated building or activity.

Unless specified elsewhere in this ordinance, all wall lights shall be directed toward the ground. No portion of the bulb or the globe/glass/plastic surrounding the bulb shall protrude from the light box/housing. Dark Sky Certified Lighting is required; however, a different lighting style could be used if it can be shown that a different lighting style would be equivalent to, or better than, these requirements. For the purpose of this subsection, Dark Sky Lighting is defined as energy efficient and fully shielded lighting that directs the light downward rather than upward, to prevent sky glow and other forms of light pollution. All Dark Sky Lighting shall have a Fixture Seal of Approval (FSA). The FSA provides assurance that the lighting is an IDA approved dark sky friendly product.

Lights located under canopies, such as gasoline service stations, bank automatic teller machines, and other such similar canopies shall be recessed into the structure ceiling and shall use light shields so as to prevent glare. No portion of the bulb or the glass/plastic surrounding the bulb shall protrude from the structure ceiling unless it can be shown that a different style would be equivalent to or better than these requirements.

All electrical lines servicing all lights shall be underground.

(Ord. No.6-10 Revised Effective 5/13/10)

2. Site and Parking Area Lighting

Site or parking area lighting shall not cast light beyond property boundaries. Where necessary, cut-off devices shall be used to avoid illuminating adjacent sites. Lighting that would otherwise cast a glare or cause a nuisance to adjacent residential properties, rights-of-way, access easements, or driveways shall be obscured in some acceptable manner.

In office zone districts and multifamily residential uses (residential with more than four (4) attached housing units), the maximum lighting height shall be 24 feet. In all commercial zone districts the maximum lighting height shall be 30 feet. Lighting fixtures should be compatible in style with associated buildings. For non-residential uses in residential districts the maximum height shall be 24 feet.

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All pole lights shall be directed toward the ground. No portion of the bulb or the globe/glass/plastic surrounding the bulb shall protrude from the light box/housing. Dark Sky Certified Lighting is required; however, a different lighting style could be used if it can be shown that a different lighting style would be equivalent to, or better than, these requirements.

Building mounted lighting for outdoor parking facilities shall be expressly prohibited.

(Ord. No.6-10 Revised Effective 5/13/10)

(i) Signage

The overall objective of the sign standards is to ensure that signage does not detract from the sense that the Oak Ridge environment is a continuous landscape. The emphasis is on using signage for identification purposes, not predominately for advertising.

Article XIV of the Oak Ridge Zoning Ordinance sets down in detail the signs that are permitted in each zone and those that are not permitted. It covers both temporary and permanent signs, and should be consulted for specific requirements. The information pertains to permanent on-site signs that are accessory to uses located on a site, and which therefore will be reviewed as part of the Design Review Process.

Section 13.03 Alternative Procedures.

Alternatives to the provisions established within this Article may be granted only by the Planning Commission subject to the following procedures, conditions, and stipulations:

1. No alternative may be granted from any provision unless a specific finding is made that the resulting condition will meet the original intent of the provision for which the variance is being sought.

2. No alternative may be granted from any provision unless the applicant presents specific and detailed information as to the nature of the relief being requested and the alternative means proposed whereby the original intent of the particular provision will be accomplished.

3. Any alternative from any provision of these regulations shall be noted in the minutes of the meeting where such action is taken along with detailed findings that such alternative:
   a. Is necessitated by conditions unique to the site in question.
   b. Provides equal or greater protection of the public interest than the original requirement or standard from which variance is requested.
c. Meets or exceeds the intent of the original provision contained within these regulations.

4. An alternative may be granted by the Planning Commission if the applicant demonstrates an inability to assure growth of trees on site due to unique soils, topography, excessive amounts of rock or limitations due to size of lot or configuration of building design. The Planning Commission may allow the applicant to provide the required number of site and/or street trees in a public area. If permitted by seasonal timing the developer may choose to plant off-site. The species and location must be approved by the City Manager or the City Manager’s designee, covered by the bonding procedure and insured. If weather does not permit planting, or if the applicant requests and approval is granted by the Planning Commission during the site plan review process, a payment in lieu of planting may be made at the time of issuance of a building permit.

This money will be placed in a Tree Bank fund, which is limited to the cost of landscaping and planting improvements on public property and public right-of-way. A cost of $50 per caliper inch will be required. Annual planting programs will be carried out by the mutual agreement of the Oak Ridge Parks and Recreation Director, the Director of Public Works and the Community Development Director.

This provision is not designed to allow the applicant to avoid the minimum site requirements, but rather is an effort to provide an alternative measure to insure the growth and vitality of all plantings.

Section 13.04 A Design Review Checklist

The checklist indicates items which must be addressed in the application for design approval. The items may be dealt with in drawings and exhibits which accompany the application, and note how the design standards have been met.

(a) Site Layout

1. Include all necessary information in the site plan.

2. Submit photographs of adjacent buildings and show their location on the site plan.

3. Calculate percentage of site devoted to permeable surfaces.

4. Note distances between curb cuts and their width.
Grading, Drainage and Topsoil Preservation

1. Show existing and proposed topography at two (2)-foot intervals.
2. Estimate the amounts of material to be exported or imported to and from the site.
3. Calculate runoff and plan detention.

Preservation of Existing Trees and Site Features

1. Note existing trees and vegetation areas.
2. Note special site features, with plan for their protection.
3. Show important views across the site to lakes or landmarks.

Architectural Character

1. Show building elevation with materials noted and colors referenced.
2. For prototype designs, indicate how they have been adapted to Oak Ridge setting.
3. Note location of building service areas, with screening provided.
4. Note location of exterior mechanical equipment, with plans for screening.

Parking Configurations

1. Note capacity of parking areas, lane and bay widths on plans.
2. Show directions of movement.
3. Show runoff locations and detention areas.
4. Make and note computation of landscaped areas within parking areas.

Landscape

1. Note location, size and species of all planting on plans.
2. Note conformance of plans to minimum landscape standards.

Screening
1. Show location of all screening on plans, along with designs for screening and materials.

2. Note how screening plans conform to design standards.

(h) Pedestrian Circulation

1. Indicate location of sidewalks along street and pedestrian connections to sidewalks.

2. Locate pedestrian areas on adjacent sites and indicate how connections have been made to them.

(i) Lighting

1. Locate lighting sources and illustrate design of standards.

2. Calculate lighting levels and evenness ratio.

3. Indicate any special provisions to shield light from adjacent properties.

(j) Signage

1. Locate any project identification signs, major accessory business signs, directional signs or project directory signs on plans.

Section 13.05 References


