

General Provisions

- (c) The surface of roof or ground mounted antennae greater than three (3) feet in diameter shall be open mesh and painted black so as not to reflect glare from sunlight, and shall not be used as any sign or message board. All installations shall be placed and constructed to blend with the surroundings.

SECTION 15.22 - DEVELOPMENT WITHIN FLOOD HAZARD AREAS

Development within flood hazard areas, as defined in Article II herein, shall comply fully with the adopted Flood Hazard Zoning Ordinance, Ordinance No. 211 of 1982, as amended.

SECTION 15.23 - LANDSCAPE REQUIREMENTS

Landscaping, greenbelts, and screening are necessary for the continued protection and enhancement of all land uses. Landscaping and greenbelts are capable of enhancing the visual image of the City, preserving natural features, improving property values, and alleviating the impact of noise, traffic, and visual distraction associated with certain uses. Screening is important to protect less-intensive uses from the impacts of more intensive non-residential uses. Accordingly, the provisions set forth herein are intended to set minimum standards for the design and use of landscaping, greenbelts, and screening, and for the protection and enhancement of the City's environment.

(a) Scope of Application

The requirements set forth herein shall apply to all uses which are developed, expanded, or changed, and to all lots, sites, and parcels which are developed or expanded upon following the effective date of this Ordinance. No site plan shall be approved unless said site plan shows landscaping consistent with the requirements of this section. Where landscaping is required, a building permit shall not be issued unless provisions set forth in this section have been met or a performance guarantee has been posted in accordance with Section 15.19.

(b) Minimum Requirements

The requirements set forth herein are minimum requirements, and nothing herein shall preclude the developer and the City from agreeing to more extensive landscaping.

(c) Design Creativity

Creativity in landscape design is encouraged. Accordingly, required trees and shrubs may be planted at uniform intervals, at random, or in groupings, depending on the designer's desired visual effect and, equally important, the intent of the City to coordinate landscaping on adjoining properties.

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(d) Landscaping Requirements:

1. General Requirements

All developed portions of the site shall conform to the following general landscaping standards, except where specific landscape elements, such as a greenbelt, berms, or screening are required:

- a. All unpaved portions of the site shall be planted with grass, ground cover, shrubbery, or other suitable live plant material.
- b. A mixture of evergreen and deciduous trees shall be planted at the rate of one (1) tree per 3,000 square feet or portion thereof of unpaved open area. Required trees may be planted at uniform intervals, at random, or in groupings.
- c. All required landscaping shall be served by an in-ground sprinkling system.
- d. Landscaped areas which adjoin paved parking or driveways shall be protected with curbs from encroachment of vehicles.

2. Landscaping Adjacent to Roads

All front, side and rear yards adjacent to roads in commercial, office and industrial districts shall be landscaped in accordance with the following standards:

A minimum of one (1) deciduous or evergreen tree shall be planted for each forty (40) lineal feet or portion thereof of road frontage, PLUS, a minimum of one (1) ornamental tree shall be planted for each one hundred (100) lineal feet or portion thereof of road frontage, PLUS, a minimum of eight (8) shrubs shall be planted for each forty (40) lineal feet or portion thereof of road frontage. For the purposes of computing length of road frontage, openings for driveways and sidewalks shall not be counted. Trees and shrubs may be planted at uniform intervals, at random, or in groupings.

3. Greenbelts

Where required, greenbelts and greenbelt buffers shall conform to the following standards:

- a. A required greenbelt may be interrupted only to provide for pedestrian or vehicular access.
- b. Grass, ground cover, or other suitable live plant material shall be planted over the entire greenbelt area, except where paved walkways are used.
- c. A minimum of one (1) deciduous or evergreen tree shall be planted for each thirty (30) lineal feet or portion thereof of required greenbelt length, or alternatively, eight (8) shrubs may be substituted for each required tree. Trees may be planted at uniform intervals, at random, or in groupings.
- d. Plant materials shall not be placed closer than four (4) feet to the property line or right-of-way line when a greenbelt abuts a public sidewalk.

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- e. For the purposes of calculating required plant material, greenbelt length shall be measured along the exterior edge of the greenbelt.

4. Berms

Where required or proposed, berms shall conform to the following standards:

- a. Berms shall be constructed with slopes no steeper than one (1) foot vertical for each three (3) feet horizontal (33 percent slope), with at least a two (2) foot flat area on the top.
- b. The planting requirements for greenbelts, above, shall also apply to berms.

5. Parking Lot Landscaping

In addition to required screening, all off-street parking areas shall provide landscaping as follows:

- a. Landscaping Ratio. Off-street parking areas containing greater than fifteen (15) spaces shall be provided with at least fifteen (15) square feet of interior landscaping per parking space. Whenever possible, parking lot landscaping shall be designed to improve the safety of pedestrian and vehicular traffic, guide traffic movement, and improve the appearance of parking areas.
- b. Minimum Area. Landscaping areas in parking lots shall be no less than five (5) feet in any single dimension, and no less than one hundred fifty (150) feet in area. Landscaped areas in or adjacent to parking lots shall be protected with curbing or other means to prevent encroachment of vehicles.
- c. Other Landscaping. Required landscaping elsewhere on the parcel shall not be counted in meeting the parking lot landscaping requirements.
- d. Required Plantings. Requirements for plant material shall be based on the location, size, and shape of the parking lot landscaped area. A minimum of one (1) tree shall be planted per three hundred (300) square feet or fraction thereof of interior landscaped area. The landscape plan shall indicate the types, sizes, and quantities of plant material proposed for such area.

6. Evergreen or Landscaped Screening

Wherever an evergreen or landscaped screen is required or proposed, evergreen screening shall consist of closely-spaced plantings which form a complete visual barrier that is at least six (6) feet above ground level within five (5) years of planting.

7. Landscaping of Rights-of-Way

Public rights-of-way located adjacent to required landscaping areas and greenbelts shall be planted with grass or other suitable live ground cover, and shall be maintained as if the rights-of-way were part of the required landscaped areas or greenbelt.

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8. Maintenance of Unobstructed Visibility for Drivers

Landscaping located at an intersection of two streets shall comply with the requirements in Section 15.03 so as to maintain unobstructed cross-visibility for drivers.

(e) Standards for Landscape Materials

Unless otherwise specified, all landscape materials shall comply with the following standards:

1. Plant Quality

Plant materials used in compliance with the provisions of this Ordinance shall be nursery grown, free of pests and diseases, hardy in Oakland County, in conformance with the standards of the American Association of Nurserymen, and shall have passed inspections required under state regulations.

2. Non-Living Plant Material

Plastic and other non-living plant materials shall not be considered acceptable to meet the landscaping requirements of this Ordinance.

3. Plant Material Specifications

The following specifications shall apply to all plant material proposed in accordance with the landscaping requirements in this Ordinance:

- a. Deciduous shade trees shall be a minimum of two (2) inches in caliper measured twelve (12) inches above grade with the first branch a minimum of four (4) feet above grade when planted.
- b. Deciduous ornamental trees shall be a minimum of one and one-half (1 1/2) inches in caliper measured six (6) inches above grade with a minimum height of four (4) feet above grade when planted.
- c. Evergreen trees shall be a minimum of five (5) feet in height when planted, except that juniper, yew and arborvitae species shall be a minimum of three (3) feet in height when planted. Furthermore, evergreen trees shall have a minimum spread of three (3) feet, and the size of the burlapped root ball shall be at least ten (10) times the caliper measured six (6) inches above grade.
- d. Shrubs shall be a minimum of two (2) feet in height when planted. Low growing shrubs shall have a minimum spread of fifteen (15) inches when planted.
- e. Hedges shall be planted and maintained so as to form a continuous, unbroken, visual screen within two (2) years after planting.
- f. Vines shall have a minimum of three (3) runners, six (6) inches to eight (8) inches long when installed, and be a minimum of thirty (30) inches in length after one growing season.

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- g. Ground cover used in lieu of turf grasses shall be planted in such a manner as to present a finished appearance and reasonably complete coverage after one (1) complete growing season.
- h. Grass area shall be planted using species normally grown as permanent lawns in Oakland County. Grass, sod, and seed shall be clean and free of weeds, noxious pests, and diseases. Straw or other mulch shall be used to protect newly seeded areas.
- i. Mulch used around trees, shrubs, and vines shall be a minimum of three (3) inches deep, and installed in a manner as to present a finished appearance.
- j. Use of the following plant materials or their clones (or cultivars) is not encouraged because of susceptibility to storm damage, disease, and other undesirable characteristics:

Box Elder	Poplar
American Elm	Willow
Tree of Heaven	Horse Chestnut
European Barberry	Silver Maple
Northern Catalpa	

(f) Installation and Maintenance

The following standards shall be observed where installation and maintenance of landscape materials are required:

1. Installation

Landscaping shall be installed in a sound, workmanlike manner to ensure the continued growth of healthy plant material. Trees, shrubs, hedges, and vines shall be generously mulched at the time of planting.

2. Protection from Vehicles

Landscaping shall be protected from vehicles through the use of curbs. Landscape areas shall be elevated above the pavement to a height adequate to protect the plants from snow removal, salt and other hazards.

3. Off-Season Planting Requirements

If development is completed during the off-season when plants cannot be installed, the owner shall provide a performance guarantee to ensure installation of required landscaping in the next planting season.

4. Maintenance

Landscaping required by this Ordinance shall be maintained in a healthy, neat, and orderly appearance, free from refuse and debris. All unhealthy and dead plant material shall be replaced immediately upon notice from the Building Official, unless the season is not appropriate for planting, in which case plant material shall be replaced at the beginning of the next planting season.

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All landscaped areas shall be provided with a readily available and acceptable supply of water. Trees, shrubs, and other plantings and lawn areas shall be watered regularly throughout the growing season.

All constructed or manufactured landscape elements, such as but not limited to benches, retaining walls, edging, and so forth, shall be maintained in good condition and neat appearance. Rotted, deteriorated, or damaged landscape elements shall be repaired, replaced, or removed.

(g) Modifications to Landscape Regulations

In consideration of the overall design and impact of a specific landscape plan, and in consideration of the amount of existing plant materials to be retained on the site, the Planning Commission may modify the specific requirements outlined herein, provided that any such adjustment is in keeping with the intent of this Section. In determining whether a modification is appropriate, the Planning Commission shall consider whether the following conditions exist:

1. Topographic features or other unique features of the site create conditions such that strict application of the landscape regulations would result in a less effective screen than an alternative landscape design.
2. Parking, vehicular circulation, or land use are such that required landscaping would not enhance the site or result in the desired screening effect.
3. The public benefit intended by the landscape regulations could be better achieved with a plan that varies from the strict requirements of the Ordinance.

SECTION 15.24 - SCREENING OF ROOF TOP EQUIPMENT

Elevators, stairways, tanks, heating and air conditioning equipment and other similar apparatus shall be screened from view by a structure equal in height to the height of the equipment being screened and constructed of the same type of building material used in the principal structure.

SECTION 15.25 - SIDEWALKS AND BIKEWAYS

For all developments requiring site plan approval, either a new public sidewalk or bikeway, or the reconstruction of existing sidewalks or bikeways, shall be required to be constructed to City standards for the perimeter of the lot which abuts a major, intermediate or collector street as defined in the City's Master Plan. New or reconstructed sidewalks or bikeways shall be aligned with existing or proposed sidewalks or bikeways. All multiple family residential projects require interior sidewalks. Other residential and non-residential projects may require interior sidewalks to facilitate pedestrian traffic safety, organization and convenience.

SECTION 15.26 - SITE GRADING

(a) Intent