ARTICLE X – LANDSCAPING STANDARDS

Sec. 27-250  **Purpose.** The purpose of this article is to provide regulations for: the installation, maintenance, protection and conservation of landscaping and landscaped open space and trees; to utilize landscaping, landscaped open space and trees as an effective means of conserving energy; to preserve open space; and to maintain and improve the aesthetic quality of the City of Plantation, thereby promoting the health and general welfare of the citizenry. In addition, it is the policy of the City Council that every effort shall be made to preserve and maintain natural vegetation within the City of Plantation, as identified in the City's Comprehensive Plan and these LDRs.

(a)  **Applicability.** The terms and provisions of this article shall apply to real property as follows:

   (1) All vacant and undeveloped property.

   (2) All property in all zoning classifications that is intended to be redeveloped.

   (3) The yard areas of all developed property.

Sec. 27-251.  **Landscape Definitions.** In construing the provisions of this Article, the clarifications of terms used in this Article shall be as follows:

*Accessway* means an area, excluded from the perimeter bufferyard required to be landscaped, which provides ingress or egress for vehicular and/or pedestrian traffic to a parcel, excluding single-family and dual-family driveways.

*Bond* means security in a form acceptable to and payable to the City of Plantation in an amount equal to the fair market value of the replacement tree(s) to be relocated or whose dripline may be encroached upon, and given by the applicant as guarantee of replacement for a period of the community development department each year and based upon published trade wholesale price lists with the appropriate multiplier representing maintenance, installation, warranty and other costs factored in.

*Bufferyard* means an area of landscaping and open space around the perimeter of a development parcel or an area adjacent to a parking lot which is used to screen and separate differing land uses from each other.

*Buildable area* means the portion of a site within the required yard areas on which a structure or improvements may be erected.

*Building footprint* means the portion of the lot, parcel or plot upon which buildings are to be placed.
Building pad means the building footprint plus the five-foot distance from each of its sides.

Caliper means the diameter measurement of nursery-size tree trunks. Trunk caliper is measured at the height as follows: six inches above the ground on trees up to four inches in diameter; 12 inches above the ground for trees larger than four inches.

Clear trunk means the point above the root ball along the vertical trunk or trunks of a tree at which lateral branching or fronds begin.

Common area means the area under common ownership of a subdivision (e.g. recreation area, open space), excluding rights-of-way.

Conifer means a cone-bearing seed plant.

Crown thinning means the thinning of mature shade tree crowns for the purpose of improving light infiltration or the reduction of wind resistance. Not more than one quarter of the crown may be removed in any given year (ANSI A-300, 5.3.1.4), and one-half of the foliage shall remain evenly distributed in the lower two-thirds of the crown (ANSI A-300, 5.3.1.5).

Diameter at breast height (DBH) means the diameter of the tree trunk(s) measured at four and one-half (4½) feet above grade. For multi-trunk trees, it shall be the sum of the diameter of the individual trunks measured four and one-half feet above ground level.

Designated for conservation means trees which have been determined for conservation by resolution of the City Council of Plantation as shown on the approved tree permit or areas within Plantation which have been determined by Broward County or the City of Plantation as subject to conservation and as stated specifically within the tree permit as defined herein.

Dicotyledonous (Dicot) tree means a tree having a woody stem and branches and leaves with net venation and having a separate, distinct outer bark which can be peeled from the tree.

Drip irrigation (also known as trickle irrigation) means a method of irrigation that involves a controlled delivery of water to plants through a system of pipes, valves, tubing, and emitters where the water is delivered from a source directly to the root zone of individual plants or to the surface of the soil and water drips constantly onto plants to keep them well-watered.

Dripline means the natural outside end of the branches of a tree projected vertically to the ground.

Dripline encroachment means any activity that has the effect of causing soil compaction, injury to lower limbs, grade change, contamination of soil, or damage to the root system. Specifically, this definition shall include acts such as parking of vehicles, use of heavy earth moving or grading equipment, placement of construction materials, excavation and filling, trenching and the exposure of paints, oils or chemicals within a tree's dripline. Specifically excluded from this definition are routine maintenance activities such as mowing or walking within the tree's dripline.
Dripline encroachment plan means a plan presented as part of the tree permit and shall be required for all trees whose dripline is planned to be encroached upon by any construction, excavation, fill or other activities associated with the development of the site. It shall include: (i) designation of each tree subject to any dripline encroachment, (ii) the reasons for the encroachment, (iii) detailed description of the proposed efforts to protect the tree from damage due to the encroachment, and (iv) a plan to ensure it survivability per Builder's Manual of Department of Agriculture.

Equivalent replacement means the replacement of a removed or damaged tree to compensate for that tree's removal or its damage either with one tree of the same diameter or a combination of smaller trees that will equal that removed tree's DBH as defined herein. The minimums established in the landscape code of the City of Plantation for tree planting may not count toward the equivalent replacement amount established here. The replacement species shall be trees of similar species to those removed as approved by the Public Works Department.

Equivalent value means an amount of money, which reflects the fair market value of the required replacement trees. The current market price of replacement trees shall be established by the Public Works Department annually.

Excessive lifting/overlifting means the removal of the majority of the inner lateral branches and foliage thereby displacing weight and mass to the ends of branches. The alteration of the tree's live crown ratio may be considered as evidence of overlifting.

Facer plant means a low shrub or groundcover used in front of a hedge or taller plant grouping.

Gray wood (clear wood) means the portion of the palm trunk which is mature, hard wood measured from the top of the rootball to the base of the new, green, soft, terminal growth or fronds.

Groundcover means plant material that grows close to the ground which normally reaches a maximum height of not more than 18 inches.

Hedge means an evenly-spaced planting of shrubs to form a compact, dense, visually-opaque living barrier or screen. Plantings designated or required as "hedges" must consist of plants spaced so that they will be tip-to-tip within six months of the time of planting.

Historic tree means a tree which has been determined to be of notable historic interest because of its age, type, size or historic association and has been so designated as part of the official records of the city.

Irrigation means the supply of water to landscaped areas by an automatic sprinkler system.

Land clearing means the indiscriminate removal of trees, shrubs and/or undergrowth by stripping or any other process, with the intention of preparing real property for non-agricultural development purposes. This definition shall not include: the selective removal of non-native tree and shrub species when the soil is left relatively undisturbed; removal of dead or nuisance trees; or normal mowing operations.
**Landscape island** means a pervious area set aside for landscaping, located at the end of a parking row where it abuts an aisle or driveway, and also intermittently located within parking rows for the purpose of accommodating a shade tree to ameliorate the temperature in the parking lot. Islands created to accommodate fire hydrants or related utilities may not be counted towards the landscape island requirement unless they are at least 16-foot in width and include a shade tree.

**Landscaping material** means any of the following or a combination thereof such as, but not limited to: grass, ground cover, shrubs, vines, hedges, trees or palms; other materials are permitted, such as mulch, rocks, pebbles, pavers that allow for drainage, to a limited extent, but not including paving. Artificial turf is not considered to be landscape material.

**Large shrub** means a shrub that exhibits a mature height of ten feet or more, or a small tree with too many stems to qualify as a small tree as defined in this code.

**Map of environmentally sensitive lands** means a map that identifies areas of native vegetation within the City of Plantation.

**Monocotyledonous (Monocot) tree** means a tree having fronds with parallel venation and no true woody bark.

**Mulch** means an organic material that does not contain arsenic products, such as wood chips, pine straw or bark placed on the soil to reduce evaporation, prevent erosion, control weeds, enrich the soil and lower soil temperature.

**Native tree** means a tree of a species approved by the Public Works Department or identified as native to this area by the Association of Florida Native Nurseries, as may be amended from time to time, and incorporated herein by reference.

**Natural area** means an area identified on an approved site plan containing natural vegetation which will remain undisturbed when the property is fully developed.

**Nuisance plants** means certain non-native trees, often termed exotic, specifically *Schinus terebinthifolius* (Brazilian Pepper and Florida Holly), *Metopium toxiferum* (Poison Wood), *Melaleuca quinquenervia* (Punk Tree, Cajeput or Paper Bark), *Casuarina spp.* (Australian Pine, all specie), *Brassaia actinophylla* (Schefflera), *Acacia auriculaeformis* (Earleaf Acacia), *Bischofia javanica* (Bishopwood), and *Ricinus communis* (Castor Bean), and others as amended from time to time.

**Ornamental tree** See "Small tree."

**Optional cash payment:** means a fee equal to the fair market value of the required replacement tree(s) which may be paid by the applicant after determination from the Public Works Department that replacement of trees on-site or off-site is not feasible.

**Palm** means a monocot tree which normally attains an overall height of at least 20 feet.
Pedestrian landscape zone means the area between the building and the adjacent parking spaces where foundation plantings are established in order to enhance the building's appearance and provide a pedestrian-friendly, shaded environment for people as they walk to and from their cars.

Plant means an organism of the vegetable kingdom having cellulose cell walls, growing by synthesis of inorganic substances, and lacking the power of locomotion.

Planting soil means planting soil defined as 50 percent sand and 50 percent organic material with a pH between 6.5 and 7.0.

Protected tree means a tree which has been determined to be of high value because of its type, size or other criteria and which has been so designated.

Prune means the removal of dead, dying, diseased, weak or objectionable branches in a manner consistent with the International Society of Arboriculture standards as incorporated herein, and as may be amended from time to time.

Quality of plants means plants installed pursuant to this chapter shall conform with or exceed the minimum standards for Florida #1 as provided in the current edition of "Grades and Standards for Nursery Plants" prepared by the State of Florida Department of Agricultural and Consumer Services.

Retention area means an area designed and used for the temporary or permanent storage of stormwater runoff, which may be either dry or wet retention.

Rootball means the earthen ball encompassing the root system of a tree or plant.

Setback and yard areas means the front, side and rear areas or yards as established and required under this section and within the applicable zoning district requirements.

Shade tree means a single-trunked dicot or conifer tree, usually with one vertical stem or main trunk, which naturally develops a more or less distinct and elevated crown and provides at maturity a minimum shade crown of 30 feet in diameter.

Shaping or shearing means the illegal practice of routinely making pruning end cuts on tree branches of one-inch diameter or less for the purpose of controlling the size or shape of the tree canopy.

Shrub means a bushy, woody plant, usually with several permanent stems, and usually not over ten feet in height at its maturity.

Small tree means any self-supporting wood perennial plant, which, at maturity, normally attains an overall height between ten (10) to 25 feet. Trees with a multiple trunk growth characteristic shall have no more than three main trunks. These trees, along with tall shrubs, shall provide the mid-level landscaping within the specified height range.
Specimen tree means any dicot tree which has a diameter at breast height (DBH) of 18 inches or greater, and any monocot tree which has a DBH of 18 inches or greater and is also 35 feet or greater in height. Specimen trees must be well-shaped and in good health, as verified through inspection by a certified forester or the City of Plantation's landscape inspector provided however that the following trees are not considered specimen trees:

1. Fruit trees that are cultivated for the specific purpose of producing edible fruit, including, but not limited to: mangos, avocados, or species of citrus.

2. *Ficus* species, except *F. aurea, F. rubiginosa, F. jacquinifolia,* and *F. religiosa.*


Street tree means shade trees defined as acceptable to the City for street tree usage, and which are located in swale areas of rights-of-way.

Swale means all unpaved portions of a right-of-way located between the edge of pavement and the property line or an open space easement located on property adjacent to the right-of-way line.

Top soil means a medium composed of naturally occurring mineral particles and 30 percent organic matter which provides physical, chemical and biological properties necessary for plant growth.

Tree means any living, self-supporting woody perennial plant which at maturity attains a trunk diameter of at least three inches or more when measured at a point four and one-half feet above ground level and which normally attains an overall height of at least 10 feet, usually with one main stem or trunk and many branches.

Tree abuse means any pruning or other maintenance operations that are not in conformance with standards found in American National Standards Institute's documents A-300 and A-133. Tree abuse includes, but is not limited to, the following:

1. Improper pruning that reduces the height or spread of a tree that has not attained a height or spread of 30 feet, by altering the dominant stem(s) within the tree crown to such a degree as to remove the natural canopy of the tree; or

2. Improper pruning that leaves stubs (hat-racking) or results in a flush cut; or splitting of limb ends; or

3. Peeling or stripping of bark; or the removal of bark to the extent that, if a line is drawn at any height around the circumference of the tree, over one-third of the length of the line falls on portions of the tree where bark no longer remains; or

4. Using nails, climbing spikes, or hooks, except for purposes of total tree removal; or
(5) Destroying the natural habit of growth which causes irreparable damage and permanent disfigurement to a tree such that, even with re-growth, the tree will never regain the original characteristics of its tree species, or is a danger to the public, wildlife, or property; or

(6) Improper pruning that results in flat-cutting the top or sides of a tree, to sever the leader or leaders or to prune a tree by stubbing off mature wood (not at a growth node), or

(7) Exception: The removal of diseased or dead portions of a tree (such as palm fronds), the removal of an interfering, obstructing or weak branch shall not constitute tree abuse under this section. Interference with or obstruction of street lights, stop signs or traffic signals is an example of pruning which, if accomplished by ANSI A-300 and A-133, is not a violation of this section.

(8) Nuisance trees including the following are not exempt from tree abuse regulation: Schefflera, Melaleuca, Brazilian Pepper (Florida Holly). Australian Pine and Norfolk Island Pine may be topped provided that the upper branches are progressively tipped so as to duplicate the natural form.

Tree credit means the utilization of native dicotyledons measured at inches of caliper or native palm trees of equal size for off-site replacement trees for sites being developed. This credit only applies for a five-year period from date of planting of trees to be utilized for tree credit. This credit is for the inches at planting and is available only for off-site replacement.

Tree permit means the application and all necessary information relating to existing trees on site and proposed installation, relocation, removal, dripline encroachment and barricading. Except for nuisance species, this permit shall not be approved prior to city approval of the underlying project.

Tree relocation means to transplant a tree from one location to another either horizontally or vertically.

Tree removal means to permanently remove the trunk and/or root system of a tree.

Tree survey means a sealed survey prepared by a Florida licensed landscape architect or land surveyor which shows, in addition to all boundary information, the exact location, size, botanical and common name, and diameter of all trees at least three inches in diameter measured four and one-half feet above ground level within the area affected by the development except that groups of nuisance trees as defined herein may be designated as "clumps," with the predominant type shown. The tree species noted on the tree survey shall be certified by a landscape architect. The expense of the survey shall be borne by the applicant.

Tree-for-tree replacement means replacing a removed tree with a tree or trees with a minimum of three inches in trunk diameter at breast height and a minimum of 12 feet in height so as to equal the diameter at breast height of the removed tree(s).
**Trim** means to reduce, shorten or diminish gradually a plant or parts of a plant without altering the natural shape.

**Understory** means the plant life existing under a tree canopy including ferns, bushes and groundcovers.

**Undeveloped land** means land which is unimproved, in that no principal building or structure has been constructed upon it.

**Vines** means plants which normally require support to reach mature form.

**Visual foil** means a physical obstruction used to separate two areas or uses which is at least 60 percent opaque. Visual foils shall be living plant material, natural or manmade construction material or any combination thereof.

**Visual screen** means a physical obstruction used to separate two areas or uses which is at least 90 percent opaque. Visual screens shall be living plant material, natural or manmade construction material or any combination thereof.

**Xeriscape** means a type of landscaping utilizing native plants and ground cover which minimizes the use of water, and which is detailed in the South Florida Water Management District publication, Xeriscape, Plant Guide II, incorporated herein by reference.

**Sec. 27-252. Landscape Plan Requirements.** For all site plan submittals (refer to Section 27-50), the applicable planting plans, landscape data tables, tree disposition plans and/or tree survey, irrigation plans, etc., shall be provided on the landscape plans. Plans shall be drawn and signed and sealed by a registered landscape architect, licensed in the State of Florida.

**Sec. 27-253. Issuance of Certificate of Occupancy.**

(a) A landscape permit is required for all landscape installations including new single-family homes that are not part of a planned community.

(b) The developers of all planned residential development (PRD) communities must obtain a landscape permit for plant material on the individual lots, and a separate landscape permit for the common areas, including the street trees.

(c) The city has the right to inspect all properties to ensure that landscape has been installed, maintained, and irrigated in accordance with the landscape plan approved by the city and the provisions of this article and require the property owner to make all appropriate corrections.
(d) The landscape architect of record shall provide a certification letter to the city certifying that the landscaping was installed in accordance with the plans and specifications before the landscape inspector makes the final inspection for all non-residential and planned residential community projects.

(e) With respect to landscape material for a newly developed or redeveloped site undergoing construction, a final certificate of occupancy (CO) shall be issued by the Building Official once all landscape material has been planted to the satisfaction of the city, in accordance with the approved landscaping plans and certified by the Landscape Architect-of-Record.

Sec. 27-254. Implementation Standards

(a) Plant Material Design and Installation standards

(1) All areas not covered by main and accessory structures, walks and vehicular use areas shall be fully landscaped with living plant material. Non-living landscape material shall not be considered as substitution for living plant material unless specifically approved on the landscape plan.

(2) Landscape material shall extend to any abutting street pavement edge and to the mean water line of any abutting canal, lake or waterway.

(3) Landscaped areas shall be constructed with no more than ten percent (10%) of the total area of gravel, stone, concrete, asphalt, artificial turf, or other similar material, excepting necessary walks and vehicular use areas.

(4) Trees or other plant material may not be planted in public rights-of-way (swale areas) without a permit from the city. Shrub species with a mature height of up to thirty (30) inches may be planted on the property edge but not within the swale area.

(5) It shall be the duty of a property owner that all plant material and non-living durable landscaping material shall be installed and perpetually maintained in a manner consistent with proper horticultural practices found in the most recent editions of the following:

   a. Grades and Standards for Nursery Plants from the Florida Department of Agriculture Division of Plant Industry;

   b. Florida Friendly Best Management Practices for Protection of Water Resources by the Green Industries from the Florida Department of Environmental Protection;

   c. Selecting and Planting Trees for the South Florida Urban Forest from the Florida Urban Council;
d. *The Right Tree in the Right Place* brochure from Florida Power and Light;

e. American National Standards Institute A-300 and Z-133; and


(6) All plants installed shall conform to, or exceed, the minimum standards for Florida Number 1 as provided in the most current edition of "Grades and Standards for Nursery Plants," prepared by the State of Florida Department of Agriculture and Consumer Services.

(7) All guys and staking material should be removed when the tree is stable and established, but in no case more than one year after initial planting of the tree. Stabilization shall be in accordance with ANSI A-300 and Z-133. Trees shall be re-staked in the event of blow over or other failures of the staking and guyling.

(8) For non-residential properties, trees staked with an at-grade root ball securing system is encouraged. The system shall securely anchor the root ball while allowing the trunk and crown to move naturally. The system shall not use materials and methods that penetrate or damage the root ball.

(9) Growth of plant material at maturity shall be considered prior to planting, where future conflicts such as views, signs, overhead, above-ground and underground utilities, security lighting, fire access, drainage easements and traffic circulation, might arise. All shade trees must be located a minimum of fifteen (15) feet from street lights, and palms and small trees must be located a minimum of seven and one-half feet (7'-6").

(10) All shade trees installed within six (6) feet of public infrastructure shall utilize a root barrier system, as approved by the city.
(11) The Public Works Department may grant written permission to allow the planting of trees or shrubs less than the required sizes outlined in this Article upon written request from the Landscape Architect-of-Record. Written permission may be granted if the following is met:

a. Quality plants, such as Florida Department of Agriculture "Florida Fancy" grade, are used; or

b. A greater number of plants than the minimum number required by the ordinance are planted; however, the increased number of trees that may be required shall not exceed 25 percent of those otherwise required by this article.

(12) All property other than the required landscaped strip lying between the right-of-way and off-street parking area or other vehicular use area shall be landscaped with at least grass or ground cover.

(13) Turfgrass installation shall be completed by sodding and shall supply 100% coverage immediately upon installation.

(14) Wherein sod installation is impractical, the Public Works Department may allow seeding or sprigging with prior written approval. Grass seed shall be clean and at least 90% weed free and free of noxious pests or diseases. The grass seed bags shall have Florida Department of Agriculture tags indicating compliance with the state's quality control program.

(15) The eradication of invasive and nuisance vegetation existing on site is required prior to the issuance of a certificate of occupancy. *Ficus* hedges may not be planted within utility easements.

(16) Ground cover may be used in lieu of sod and shall provide a minimum of 75 percent coverage immediately upon planting and 100 percent coverage within one growing season after planting.

(17) Vines shall be a minimum of thirty (30) inches in supported height immediately after planting and may be used in conjunction with fences, visual screens or walls.

(18) Shrubs shall be installed with a minimum height of 24 inches and spread of 18 inches immediately upon planting.

(19) Hedges, where required for screening purposes, shall be planted so as to be tip-to-tip within six months of planting and maintained so as to create a continuous visual screen with no visual spaces between plants at that time. Plant spacing may be adjusted according to plant sizes so long as the preceding is achieved.
(20) Small/ornamental trees shall be of eight feet overall planting height at time of installation. Trees with a multiple trunk growth characteristic shall have no more than three main trunks. All small trees shall have a minimum of 30 inches of clear trunk at the time of planting.

(21) Shade trees shall be a minimum of 12 feet overall planting height at time of installation. Only those shade trees specifically indicated as street trees on the City's preferred species list are permitted for street tree use.

(22) Hurricane-pruned *Sabal* palms are prohibited.

(23) All palms that have significant gray wood characteristics at maturity shall have a minimum of eight (8) feet of gray wood. All other palms must have an installed height of 16 feet overall.

(24) 50% of the trees required shall be water-conserving, native plant material indigenous to Southern Florida. 50% of shrubs required shall be installed as native plant material.

(25) Trees in excess of five shall have no more than 30% of a single species.

(26) Utility equipment, utility structures, and garbage and refuse areas shall be screened with landscape material so areas are not visible from adjacent property or right-of-way.

(27) All elements of landscaping shall be installed to meet all other applicable City Code requirements and ordinances.

(b) *Non-living Landscape Material and Installation Standards*

(1) A minimum of three-inch depth of approved organic mulch shall be installed around all trees and planting beds surrounding groundcover, shrubs, and hedges.

(2) Each tree shall have a ring of organic mulch at the perimeter of the root ball. No mulch shall be installed on top of the root ball.

(3) Cypress mulch shall not be allowed for installation. The use of mulch obtained from *Melaleuca*, *Eucalyptus*, or other invasive plant species, is encouraged to preserve native plant communities and reduce the impact on the environment.

(4) Topsoil shall be clean and free of construction debris, weeds, rocks, noxious pests, and diseases, and exhibit a pH of 6.5 to 7.0. The topsoil for planting areas shall be amended with horticulturally acceptable organic material. All soils used shall be suitable for the intended plant material. The source of the topsoil shall be known to the applicant and shall be acceptable to the city.
(5) The minimum planting soil depth shall be six (6) inches for ground covers, flowers, shrubs and hedges.

(6) Trees shall receive 12 inches of planting soil around the root ball.

(7) Native topsoil on the site shall be retained on-site and used when there is sufficient quantity to cover at least some of the on-site landscaped areas.

(8) Clean sand shall be used to backfill arid climate palms.

(9) If berms are utilized, they shall meet the following standards:

   a. Berms without hedges shall be a minimum of two feet in height and have a minimum slope of three-to-one (3:1).

   b. Berms shall be smooth, transitional, without awkward grade changes, and shall be both undulating and meandering.

   c. The height of a berm shall be measured from the grade of the adjacent paving on the public side (i.e., sidewalk, or road crown).

(c) Irrigation

(1) All landscaped areas, including adjacent rights-of-way and street medians where they exist, shall be provided with an automatically operating underground irrigation system. The irrigation system must be designed to have a minimum of 100 percent coverage, with 50 percent minimum overlap.

(2) Irrigation systems shall be maintained to eliminate water loss due to damaged, missing or improperly operating sprinkler heads, emitters, pipes and all other portions of the irrigation system and shall not be installed or operated to overspray onto roads or pedestrian walkways.

(3) All irrigation systems shall install rain sensors which must be maintained in operable condition.

(4) All irrigation shall utilize non-potable water and shall include a treatment system to prevent rust stains/rust inhibitor. Irrigation heads near building facades and freestanding walls shall have sprinkler shields installed.

(5) Exemptions: Properties planned and maintained as a Xeriscape landscape may be exempt from providing an automatically operating irrigation system with a waiver from the Public Works Department. As part of any such request, the applicant shall provide a 1-year temporary watering plan in a manner acceptable to the City and subject to quarterly inspections for 1 year.
Sec. 27-255. Minimum Requirements - All properties

(a) Street Trees. Street trees are required in addition to all other landscaping requirements and shall be planted at a minimum of 12 feet overall height with a spread of six (6) feet and a minimum of four and one-half (4-1/2) feet clear trunk immediately after installation.

(1) One tree shall be required for every 40 feet of street frontage less driveway openings and shall be a shade tree.

(2) The spacing of trees from electric utility lines must follow those guidelines established by the latest edition of the Florida Power and Light publication "Right Tree, Right Place." Trees shall be planted no further apart than 60-foot intervals and no closer than 15 feet apart.

(3) All street trees are to be placed in a location in accordance with the requirements of the City Engineer, Public Works Director and Utilities Director in order to accommodate location of utilities and street widening and will require the use of root barriers to protect the sidewalk(s) and utilities from root damage or whenever trees are located within six feet from a paving edge. The root barriers shall be installed per manufacturer's recommendations.

(4) If insufficient rights-of-way exist or insufficient clear recovery zones exist for street tree installation, these requirements may be handled with an application from the Public Works Department.

As part of any such request, the applicant shall provide an alternative consisting of one or more of the following:

a. Donate an equivalent dollar value for the trees not planted to the city's tree trust fund for the landscaping of public property in the City of Plantation, which equivalent value shall include the cost of the trees and installation. This value is established at $450.00 for two and a half-inch caliper as amended from time to time.

b. Donate an equivalent number of trees to be installed on public property in the city of Plantation, which equivalent value shall include the trees and cost of installation and irrigation.

(b) Perimeter Landscaping

(1) All properties shall comply with perimeter buffer yard width requirements provided in Table 255-1. Exceptions may apply to development within the M-PM, Plantation Midtown zoning district, as designated in this article.
(2) All properties shall provide perimeter landscaping to consist of three trees (one shade, 2 ornamental) for every 40 lineal feet.

(3) Distinct "view windows" may be created within the perimeter landscaping where significant public view is present. View windows are not to exceed 60' maximum spacing and shall not be within 100 feet of another view window. The remainder of the perimeter landscaping is to be planted at regular intervals to create a continuous streetscape pattern incorporating the view windows.

(4) A hedge, wall, or other durable landscape barrier shall be placed along the perimeter of the property planted a minimum of 3 feet in height where abutting an adjacent property and a minimum of 2 feet in height adjacent to rights-of-way. The remainder of the perimeter landscaping shall be covered with grass, ground cover, or other living landscape material.

(5) If the durable landscape barrier is of nonliving material, such as a wall or fence, then a hedge, vine or other living material shall screen the street side of the barrier.

(6) Perimeter landscape buffering requirements shall not apply to single-family and duplex lots.

(7) Such perimeter buffers may not be counted toward interior landscape requirements.
Table 255-1: Perimeter Bufferyard width requirements

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<th>Industrial</th>
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<tr>
<td>Office</td>
<td>20'</td>
<td>5'</td>
<td>5'</td>
<td>10'</td>
<td>20'</td>
<td>10'</td>
<td>50'</td>
<td>20'</td>
<td>10'</td>
</tr>
<tr>
<td>Industrial</td>
<td>30'</td>
<td>10'</td>
<td>10'</td>
<td>5'</td>
<td>30'</td>
<td>30'</td>
<td>5'</td>
<td>30'</td>
<td>10'</td>
</tr>
<tr>
<td>Community Facility</td>
<td>10'</td>
<td>10'</td>
<td>20'</td>
<td>30'</td>
<td>10'</td>
<td>10'</td>
<td>5'</td>
<td>20'</td>
<td>10'</td>
</tr>
<tr>
<td>Park/Open Space</td>
<td>10'</td>
<td>10'</td>
<td>10'</td>
<td>30'</td>
<td>10'</td>
<td>10'</td>
<td>5'</td>
<td>10'</td>
<td>20'</td>
</tr>
</tbody>
</table>

¹ Exception may apply to development within the Plantation Midtown, M-PM district, as noted below.

(c) **Parking lots and Vehicular Use Areas.** Parking lot landscaping shall be installed in landscaped areas designed and arranged for the purposes of controlling traffic, providing shade, screening unnecessary views into and within the vehicular use areas, and separating the parking circulation and service areas.

(1) Landscape islands shall be as specified below and located at the ends of all parking rows and interspersed within the rows as required. Landscape islands shall not be located more than ten parking spaces apart but may vary if the average spacing for the entire parking lot of the property is ten parking spaces. Landscape islands shall measure a minimum of 10 feet wide from inside of curb to inside of curb. Additionally, islands are not required in truck yards.
a. Each landscape island shall contain at least one shade tree in the outer half of
the landscape island. Islands created to accommodate utilities and fire safety
equipment such as fire hydrants, Siamese connections, fire department
connections and six-inch or larger double check valves must be at least 16
feet wide measured from back-of-curb to back-of-curb, and the water line to
the appurtenance must be routed immediately behind the curb to
accommodate the tree planting.

b. Islands shall be excavated to 36 inches and filled with clean fill and topsoil at
least to the top of the curb.

c. A minimum of 75 percent of trees installed in parking islands or landscaped
parking bay dividers shall be shade trees.

d. Required shade trees in parking lots must be planted in landscape islands
which are a minimum of 12 feet wide, and 16 feet in depth as measured from
back of curb to back of curb, except where they are located contiguous with
a perimeter buffer or landscaped parking bay divider, in which case they may
be ten feet in width as measured from inside curb to inside curb.

e. Landscaped areas abutting front-end parking and landscape islands shall be
protected by continuous curbing type "D" or "F." Wheel stops may be used at
perimeter parking at least two feet from the edge of such landscaped areas but
are not required if the bumper overhangs of vehicles do not obstruct
vegetation or pedestrian traffic within a 2-foot zone.

(2) Fifteen percent (15%) of the total paved vehicular use area, not including truck yards
or entry/exit drives or driveway openings, must be landscaped green space. Credit
may be granted for landscaped green space located adjacent to the parking lot and not
counted towards the minimum requirement for plot or perimeter bufferyards for the
interior parking lot landscaped area requirement for small parking lots consisting of
one double-loaded drive aisle or less.

(3) Ten-foot wide landscaped parking bay dividers are required for every third bay for
all parking lots containing 300 or more cars and may be provided to help meet the 15
percent interior parking lot green space requirement for smaller parking lots.
However, if trees are planted in the divider to meet the tree requirement, the bottom
of the landscape divider shall be not less than six (6) inches below the adjacent paving
edge.

(4) No landscaped area shall have any dimension less than five (5) feet with the exception
of trees planted in paved areas with the use of a suspended pavement system.
(5) All vehicular use areas shall be screened from the adjacent property with a continuous hedge except at points of vehicular and pedestrian ingress and egress. All landscaping shall be kept in a healthy growing condition at all times.

(6) Other vehicular use areas shall conform to the minimum landscaping requirements herein provided, including areas used for parking or other vehicular uses and parking areas serving residential dwellings.

(7) Temporary real estate sales structures and related parking area(s) requirements. The plot area(s) to be landscaped shall be the area of the sales structure and associated parking area plus the following:

   a. Fifteen (15) feet on the sides, rear, and front of the proposed sales location, as measured from the side of the building or perimeter of the parking lot

   b. Minimum plot size shall be 5,000 square feet

   c. Three (3) trees and ten (10) shrubs shall be planted for every 1,000 square feet of plot area or fraction thereof.

(d) Pedestrian Landscape Zones.

   (1) Principal buildings shall contain a pedestrian landscape zone along the full length of each building facade that fronts parking, drive aisles or other vehicular use areas (excluding truck courts/loading areas, and drive-thru and escape lanes).

   (2) The minimum required pedestrian landscape zone width is 10 feet and the maximum required width is 25 feet. Zone widths exclude any sidewalks parallel to the building.

   (3) Reserved.

   (4) The width of a pedestrian landscape zone, except for uses as indicated in Table 255-2, shall be 50 percent of the height of the building, or 10 feet, whichever is greater. Height for this purpose shall be measured to the top of a parapet wall or one-half of the roof height for a pitched roof.

   (5) Pedestrian landscape zones are not required within Single-Family Residential or Utility zoning districts, as defined in Section 27-71.
### Table 255-2

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Use</th>
<th>Minimum Width (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-CP/S-GC</td>
<td>Recreational</td>
<td>10</td>
</tr>
<tr>
<td>I-LP</td>
<td>Industrial / Warehouse</td>
<td>10</td>
</tr>
<tr>
<td>RD-6L, RM-10N, RM-10Y, RM-25U, RM-13R</td>
<td>Multi-Family</td>
<td>10 or alternative methods 1</td>
</tr>
<tr>
<td>M-PM</td>
<td>Mixed-Use Buildings / Multi-Family Residential</td>
<td>10 or alternative methods 1</td>
</tr>
</tbody>
</table>

1 Use of green walls, suspended pavement system, or alternative method may be used to meet the intent of the pedestrian landscape zone with approval from the Public Works Department

(6) One shade tree (or group of three palms, or one palm tree that qualifies for 1:1 usage), 15 shrubs, and 40 groundcover plants are required for every 60 lineal feet of the pedestrian zone.

(7) Installed minimum amounts and sizes of trees and shrubs shall relate to the building height as per Table 255-3.

### Table 255-3

<table>
<thead>
<tr>
<th>Building Height</th>
<th>Palms1 to extend above roofline</th>
<th>Tree Height</th>
<th>Distance from building</th>
<th>Sidewalk Width 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 25’</td>
<td>50%</td>
<td>12’</td>
<td>5’</td>
<td>6’</td>
</tr>
<tr>
<td>26’ – 35</td>
<td>30%</td>
<td>14’</td>
<td>5’</td>
<td>6’</td>
</tr>
<tr>
<td>Over 35’</td>
<td>20%</td>
<td>16’</td>
<td>8’6”</td>
<td>8’</td>
</tr>
</tbody>
</table>

1 One shade tree (or group of three palms, or one palm tree that qualifies for 1:1 usage) is required along the frontage and sides that abut public parking. These trees can be grouped where appropriate.

2 Unless there is an arcade or colonnade adjacent to the building façade.
(e) **Common Areas.**

(1) Common areas within residential zoning districts, such as amenity centers, project entries, and miscellaneous open spaces, including, but not limited to, tot lots and recreational areas, shall have a minimum of one shade tree and 20 shrubs for each 2,000 square feet of site area or portion thereof, not utilized for structures or vehicular use areas.

(2) Active recreation play courts must be screened on all sides visible from adjacent property with a contiguous hedge at least two feet in height at the time of planting. Such plantings shall be outside the fence enclosure (where one exists) or a minimum of six feet off the court outside edge.

(3) All ground-mounted equipment, including, but not limited to, electrical/mechanical equipment, storage areas, walls, fences, and common trash receptacles shall be screened from view using trees, shrubs, and/or hedges in addition to the common area requirement noted above.

(4) Perimeter landscaping, street trees, irrigation, and sod, at a minimum, is required for all demolition projects in the city. All unbuilt parcels and outparcels must be treated with such landscaping prior to issuance of the first certificate of occupancy (C.O.) on the site or within 30 days of a completed demolition on land cleared for retail or office development. Retail and office outparcels which are not anticipated to be developed within one year may be sodded with Bahia sod without irrigation.

**Sec. 27-256. Minimum Requirements - Non-residential properties.**

(a) **Accessway landscaping.** The intent of this section is to provide an enriched landscape at the public entrances to non-residential projects including industrial, office, and retail projects. The street tree requirement may be combined with the accessway planting requirements in the entryways to provide well-integrated design solutions. The following requirements are in lieu of the perimeter bufferyard requirement of three trees per 40 lineal feet with at least one being a shade tree, and a continuous hedge.

(1) **Accessway zone.** The accessway zone extends from the paving edge of the entry drive (not radius) for a distance equal to half the right-of-way width of the roadway on both sides of the entry. The zone also extends perpendicularly 25 feet from the right-of-way of the adjacent roadway along the entry drive and includes medians where provided. A minimum zone length of 40 feet per side is required for rights-of-way of less than 80 feet wide.

(2) **Accessways affected.** All accessways designed for public entry are included. Service drives used exclusively for service access are exempted from this regulation.
(3) **Planting requirements.** The accessway zone requires two shade trees and four small trees per 40-foot section of the zone. The use of premium (1:1) palms is encouraged. Large shrubs may be substituted for the small tree requirement in the accessway zones. Entryway medians require three trees, as well shrubs or groundcovers which cover the entire zone. A minimum ten-foot wide planting bed containing low shrubs and/or ground cover must also be provided fronting the taller plantings in the accessway zone and must extend a minimum of five feet beyond the small tree/large shrub mass. Alternate design schemes that meet the intent of this section may be approved at the discretion of the Public Works Director.

**Sec. 27-257. Minimum Requirements – Residential properties.**

(a) **Single family Residential Properties.** Shade trees are required per single family residential lot in addition to all other landscaping requirements and shall be a minimum of 12 feet overall height with a spread of six feet and a minimum of four and one-half feet clear trunk immediately after installation. The following requirements shall apply.

1. A cluster of 3 palm trees may be used to equal 1 shade tree. No more than 50% of required trees shall be palm trees to meet minimum shade tree requirements.

2. Minimum number of planting shall be determined by Table 257-1.

3. Fruit trees reaching a mature canopy spread of 30 ft. or greater may be used to meet minimum shade tree requirements with written permission from the Public Works Department.

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Amount of Plantings Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS-1EP</td>
<td>6 trees (min. 2 in front half). 20 shrubs front half; 10 shrubs rear half of property</td>
</tr>
</tbody>
</table>

**Additional Requirements**

<table>
<thead>
<tr>
<th>Corner Lot</th>
<th>1 tree and 10 shrubs on streetside</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Single Family (lots over 12,000 square feet)</td>
<td>1 tree and 10 shrubs per 2,000 square feet</td>
</tr>
</tbody>
</table>
(b) *Multi-family Residential Properties.* Shade trees are required in accordance with the pedestrian landscape zone requirements and Table 255-3. In addition, within play lots and passive recreational areas, 1 shade tree shall be planted per 250 square feet.

**Sec. 27-258.  Minimum Requirements - Mixed-Use properties**

(a) MPM. Landscaping in a MPM district is intended to reinforce community identity, minimize visual blight and noise, maintain building and property values, prevent soil erosion, reduce stormwater runoff, reduce air pollution, increase ground water recharge, create shade and reduce solar overheating. Landscaping requirements shall adhere to the requirements of this Article unless otherwise specified below.

1. A cohesive planting theme should emanate throughout the MPM District. Plantings layout and style should not conflict within the MPM.

2. Shade trees are required in the planting areas along all streets, particularly in the absence of colonnades or awnings that provide shade directly over a sidewalk. It is desirable for street trees opposite each other to have their branches grow into each other to create a canopy effect over the street.

3. Bufferyards shall not be required adjacent to areas that would offer a natural extension of the MPM District or that are compatible with the MPM District as determined by the Public Works Director. This is meant to facilitate the interconnectedness of compatible uses.

(b) Reserved.

**Sec. 27-259.  Minimum Requirements - Monument Signs.**

All monument signs shall be sufficiently landscaped to conceal the base and enhance the aesthetic value of the sign, not to obstruct its visibility or readability. Applicants are encouraged to exceed the minimum monument sign landscaping requirements required in Table 259-1. The following requirements shall apply.

(a) A minimum of one tree or three palms shall be provided per monument sign.

(b) A combination of shrubs, ground cover, and/or annuals shall be used to enhance the design.
Table 259-1

<table>
<thead>
<tr>
<th>Monument Sign Square Footage 1</th>
<th>Height (ft.)</th>
<th>Landscape material required</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 45</td>
<td>2 – 4</td>
<td>A combination of shrubs, ground cover, and/or annuals</td>
</tr>
<tr>
<td></td>
<td>4+</td>
<td>2 trees and a minimum of 2 tier combination of shrubs, ground cover, and/or annuals</td>
</tr>
<tr>
<td>46 to 72</td>
<td>4 – 6</td>
<td>2 trees and a minimum of 2 tier combination of shrubs, ground cover, and/or annuals</td>
</tr>
<tr>
<td></td>
<td>6+</td>
<td>3 trees and a minimum of 3 tier combination of shrubs, ground cover, and/or annuals</td>
</tr>
</tbody>
</table>

1. For each additional 20 square feet, add one tree

Sec. 27-260. *Tree Care and Maintenance Standards - All Properties*

(a) All landowners, or their agents, shall be responsible for the maintenance of all landscaping including abutting rights-of-way, swales, lakes and canal banks. It shall be the responsibility of the adjacent property owner to maintain the swale area. Landscaping shall be maintained in accordance with the following standards:

(1) Landscaping shall be free of debris and maintained in a good condition so as to present a healthy, neat and orderly appearance at least equal to the original installation and shall be mowed or trimmed in a manner and at a frequency so as not to detract from the appearance of the general area.

(2) Landscaping shall be maintained to minimize property damage and public safety hazards, including removal of living, dead or decaying plant material, removal of low hanging branches and those obstructing street lighting and maintenance of clear sight distance standards.

(3) Landscaping shall be kept free of visible signs of insects and disease and appropriately irrigated and fertilized to enable landscaping to be in a healthy condition.

(4) Landscaping shall be maintained free of invasive and nuisance species. Privately owned natural areas shall be included in this requirement.
(5) Grass and/or weeds cut no higher than six inches and all roadways, curbs, and sidewalks shall be edged to prevent encroachment from the adjacent turfed areas. Line trimmers shall not be used to trim turf abutting trees or other plant material.

(6) In no case shall grass clippings, vegetative material, and/or vegetative debris be washed, swept, or blown off into stormwater drains, ditches, conveyances, water bodies, wetlands, or sidewalks or roadways. Any material that is accidentally so deposited shall be immediately removed to the maximum extent practicable.

(7) Shrubs shall be kept trimmed to a height not to exceed three feet and provide unrestricted visibility at driveways and street intersections.

(8) All developers, developer agents or contractors or their agents, and homeowners, must prune trees in accordance with standards set forth in American National Standards Institute (ANSI) A-300, and Z-133, current edition. If the pruning is tree abuse and causes tree removal, a permit for tree removal shall be required from the city and may be subject to fines as noted in Section 27-267.

(9) Tree root barriers shall be installed at the sidewalk edge in those circumstances where tree roots are causing or potentially causing a trip hazard because of lifting of some portions of a public sidewalk.

(10) Removal of root systems which show evidence of destroying public or private property is required. Root barriers of appropriate depth shall be utilized in lieu of removal where upheavals do not create safety problems or structural damage to buildings.

(11) It shall be the duty of the property owner to maintain the current approved landscape plan for the property including, but not limited to, replacing dead and poorly performing plant and other landscape material. Preserved vegetation which dies following the issuance of the certificate of occupancy shall be replaced with equivalent living material or trees. The city has the right to inspect all properties to ensure that landscaping has been properly installed, maintained, and irrigated in accordance with the approved landscape plan and require the property owner to make all appropriate corrections. Nuisance tree species are not required to be replaced.

(12) The property owner has 90 days to replace all substandard and missing landscaping to ensure compliance with this section upon notice from the city. If unable to achieve scope of work within a 90-day period, an extension may be granted based on significant progress and communication with city landscape personnel.
Sec. 27-261. Improper Maintenance and Tree Abuse - All properties

(a) Any pruning performed without conformance to ANSI A-300 and Z-133 Standards shall be subject to enforcement by the city. Live palm fronds initiating above the horizontal plane, as defined in the above noted reference, shall not be removed. All tree pruners which provide services in Plantation shall hold a valid tree trimmer's license from Broward County, and a certified arborist must be onsite at all times.

(b) The city may request that Broward County revoke a local business tax receipt (LBTR) in the event standards set forth this Article are not met by the tree maintenance provider within the City of Plantation.

(c) The removal of diseased or dead portions (such as palm fronds) of a tree or the removal of an interfering, obstructing or weak branch of a tree which is a threat to public safety or to adjacent property is allowed. Pruning to reduce or eliminate interference with or obstruction of street lights, stop signs or traffic signals is an example of an allowed pruning activity, provided tree abuse does not occur.

(d) Lifting may be performed to eliminate a hazard to pedestrians or to protect the tree from vehicular damage only, not for visibility to signage in lieu of crown thinning. What is regarded as excessive is species dependent, however under no circumstances may the middle one-third of the overall height of the tree contain less than 50 percent of the foliage.

(e) Failure to remove or properly prune a tree damaged by a natural disaster within 30 days shall be a violation.

(f) The developer shall have trees damaged by construction repaired by a professional arborist in a manner acceptable to the city. The monetary value of the tree(s) before the damage and after the damage will be determined using the methodology established by the Council of Tree and Landscape Appraisers "Guide for Plant Appraisal," current edition. An additional fine equal to the difference in valuation between the before and after condition using the above noted methodology will be assessed in addition to the standard violation fine which does not exceed $500.00.

(1) **Immediate notification of city.** The Public Works Department must be notified immediately after any damage to any tree damaged by construction operations.

(2) **Prompt repair.** Such repairs as necessary shall be made promptly after damage occurs to prevent progressive deteriorations of damaged trees.

(3) **Removal and replacement of damaged trees.** The developer shall remove trees which are determined by the public Works Department to be incapable of restoration to normal growth pattern. Such trees shall be subject to replacement under the provisions of this code.
Any tree designated for preservation which is damaged by development activities in violation of this code (not including bonded trees in a dripline encroachment plan) and which dies as a result of this damage shall be subject to the tree replacement or removal requirements contained herein.

Sec. 27-262. Tree Removal - All properties

(a) Owing to the many benefits provided by trees, it is the intent of the City to protect this valuable resource through permitting for land clearing and tree removal. While the destruction of one tree may not have a significant environmental impact, there can be a significant deterioration of the quality of life with the removal of trees. In the evaluation of a tree removal permit, priority shall be given to protected trees for the preservation or relocation, replacement, and/or payment into the tree trust fund.

(b) A tree removal/relocation permit (TRP) shall be required prior to any person, natural or corporate, cutting down, destroying, removing, relocating, destructively damaging, or causing any tree to be encroached upon (within the tree's dripline) for any tree two inches or larger in caliper, regardless of location. In the event that any tree shall be determined to be in a hazardous or dangerous condition so as to endanger the public health, welfare or safety, and requires immediate removal without delay, written authorization by email may be given by the Public Works Department and the tree removed prior to obtaining an issued permit as herein required.

(c) Prior to the removal of any protected tree or any land clearing activity (to include potential wetlands area as designated on the City's "Floodplains and Wetlands" map of the Comprehensive Plan), a property owner or their designated agent shall obtain a permit from the Public Works Department subject to the conditions of this Code and shall be responsible for obtaining the necessary permits from all jurisdictional agencies in addition to the permit required by this Code. Protected vegetation includes street trees, perimeter vegetation, vegetation in parking and vehicular use areas, historical trees, any tree in a city area of particular concern, any special status category tree, and any specimen tree.

(d) Application for a TRP or land clearing permit shall be made to the city and shall include a legal description of the property and a map showing the size and location of the site where the tree removal or land clearing activities are to be conducted. A tree survey designating all trees over three inches in caliper which are proposed to be preserved, relocated, or removed shall be required.

(e) A TRP shall not be issued for land clearing or tree removal unless one of the following conditions exists:

(1) A site plan submitted by the applicant shows that a proposed structure, permissible under all applicable laws and regulations, can be situated on the subject parcel only if specific trees are removed or relocated; or
(2) The tree is in such proximity to existing or proposed structures that the utility or structural integrity of such structures is materially impaired; or

(3) The tree materially interferes with the location, servicing or functioning of public utility lines or service; or

(4) The tree obstructs views of oncoming traffic or otherwise creates a substantial traffic hazard; or

(5) The tree is diseased, injured, or in danger of falling; or

(6) Any law or regulation requires removal of the tree.

(f) Approved TRPs shall be granted for a maximum of 90 days, with an extension granted based on significant progress and communication with city landscape personnel.

(g) The city has adopted a fee schedule that establishes the permit fees associated with the implementation of this section.

(h) Exemptions: in accordance with State law, a permit shall not be required for the removal of a tree on residential property if and only if the property owner obtains documentation from an arborist certified by the International Society of Arboriculture or a Florida-licensed landscape architect that the tree presents a danger to persons or property and shall be exempt from replacement trees in accordance with this chapter.

Sec. 27-263. Mitigation/Replacement All Properties

(a) Credit for Existing Landscaping Materials. Existing trees may be credited as provided below in Table 263-1 toward required landscaping provided that they are designated for preservation on the final site plan and approved by the city. In no case shall trees located within areas required to be preserved by law be credited toward required landscaping.

(b) Replacement Trees. A removed tree shall be replaced with its equivalent diameter inches at breast height (DBH). The replacement tree(s) shall be a species that has shade potential and other positive values at least equal to that of the tree being removed, and a native tree species must be replaced with a native tree species. Replacement trees shall be a minimum of 12 feet in height and two and one-half inches in caliper when planted. The value of specimen trees shall be established by the methodology contained in The Council of Tree and Landscape Appraisers "Guide for Plant Appraisal," current edition.
Table 263-1

<table>
<thead>
<tr>
<th>Canopy Spread of Tree</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20 feet</td>
<td>Credit for 0.5 required tree</td>
</tr>
<tr>
<td>20 to 30 feet</td>
<td>Credit for 1 required tree</td>
</tr>
<tr>
<td>Over 30 feet</td>
<td>Credit for 3 required trees</td>
</tr>
</tbody>
</table>

(c) On lots to be developed, trees within the building pad including areas reserved for driveways, shall be replaced on a caliper-for-caliper basis.

(d) *Optional Cash Payment.* An optional cash payment equal to the fair market value of the required replacement tree(s) paid by the applicant after approval from the Public Works Department staff that replacement of trees on-site pursuant to this subsection is not feasible.

(e) If the trees are to be removed to facilitate construction or development activities, said relocation or replacement must be completed prior to the issuance of certificate of occupancy on the construction, development site or phase of development, as applicable. The trees to be relocated or replaced on-site or off-site on private property must be maintained in a healthy growing condition and guaranteed for a period of at least one year. Trees to be relocated or replaced on public property must be guaranteed. The guarantee period shall end one year from the date of acceptance by city staff.

Sec. 27-264. *Tree Trust Fund*

(a) *Establishment.* A tree trust line item (hereinafter referred to as the Plantation Tree Preservation Trust Fund or the "trust") is hereby established as a depository for tree removal fees and penalty money. Such money shall be utilized solely for the purpose of funding tree replacement on public property within the City of Plantation.

(b) *Term of Existence.* The Plantation Tree Preservation Trust Fund shall be self-perpetuating from year-to-year, unless specifically terminated by the City Council.

(c) *Trust Assets.* All money received pursuant to the provisions of this section from public or private concerns shall be placed in trust for the use and benefit of the City of Plantation and its successors and assigns in interest.
(d) **Trust Administration.** Tree Trust funds shall be expended, utilized and disbursed only for the purpose designated by the budget of the City of Plantation to administer the tree preservation program pursuant to this code.

(e) **Disbursal of Assets.** Tree Trust funds shall be used to obtain trees, landscaping, sprinkler systems and any other items or materials necessary and proper for the preservation, maintenance, relocation or restoration of tree ecosystems, on any public land in the City of Plantation. This money may also be utilized to engage support elements, such as landscape architects and may also be used to cover the expense of relocation of trees in the City of Plantation.

(f) **Exceptions.** Disbursement of Plantation Tree Preservation Trust Account funds may be used for the preservation, maintenance, or restoration of tree ecosystems on owner-occupied, single-family residential properties and right-of-way within the City of Plantation that meet criteria for the City's tree trimming program. The purpose of the tree trimming program is to assist residents with maintaining potentially hazardous trees and roots encroaching on existing infrastructure, power lines, homes or pavement.

**Sec. 27-265. Standards for Tree Protection During Development.** The following are minimum standards necessary to protect trees designated for preservation from damage during development activities after the tree permit has been approved.

(a) **Protection of Existing Trees.** Prior to any clearing of improved, vacant or unimproved land, unless specifically exempted from this section (including land designated for conservation by Broward County and/or the City of Plantation), existing trees shall have barriers constructed around them by the developer to prevent physical damage from heavy equipment and other activities incidental to development. Required barriers shall be subject to inspection by the city as a condition of permit approval and prior to any such clearing. The barriers or barricades shall be:

1. Large enough to include the entire area inside the outer edge or the dripline of the tree; and
2. Conspicuous and high enough to be seen easily by operators of trucks and other equipment; and
3. Constructed of sturdy, orange, plastic barricading as approved by the Public Works Director based on professional judgment that the intent of this provision will be met.
4. Constructed as a condition of the issuance of any land clearing, building or other development permit and prior to any construction or other development activities and required to remain in place throughout the construction period. Barriers or barricades shall be completely removed from the site at the end of the construction period (immediately prior to the issuance of a certificate of occupancy by the city), unless otherwise stipulated in the approved tree preservation plan.
(b) *Clearing Trees and Vegetation.*

(1) Within the dripline of trees designated for preservation, only clearing by hand is permissible, unless otherwise stipulated in the approved tree permit.

(2) Trees and vegetation cleared during construction or other development activities shall be stored in an area designated by the city with such area noted on the clearing and grubbing permit application.

(3) All trees and vegetation cleared and stored pursuant to this section shall be removed within two weeks after completion of the clearing.

(c) *Other Required Protection of Trees and Understory.* The developer shall protect the trees and understory plants designated for preservation in the approved tree permit from chemical poisoning, excavation and grade changes to at least the following minimum standards:

(1) Utility line trenches shall be routed away from trees to an area outside the dripline to the maximum extent possible.

(2) Retaining walls and dry wells shall be utilized, where needed, to protect trees from severe grade changes. For shallow fills, the fill material shall be gently sloped down to the level of the tree roots leaving the tree in a depression larger than the spread of its crown.

(3) Parking, vehicle maintenance, storage of construction materials or debris, or cleaning of equipment shall not take place within areas marked for preservation specifically including, but not limited to, within the dripline of any individual trees. The developer or contractor shall establish regular parking and storage areas under the supervision of the city to facilitate compliance with the above standard.

(4) Encroachment into any barricaded area is prohibited, with the exception of activities specifically permitted by the approved tree permit, including a dripline encroachment plan as established herein.

(d) The developer shall be permitted to cut, or prune branches and roots of trees designated for preservation only under the supervision of a certified arborist in accordance with the standards for pruning, as established by the American National Standards Institute (Publication ANSI A-300 and Z-133).

(e) *Root System Protection.* The root systems of trees shall be protected as follows:

(1) *Excavation within the Dripline:* the Public Works Department may approve a dripline encroachment plan (a request to excavate within the dripline of a tree) when included as part of a tree permit.
(2) **Standards for Root Protection:** the city may establish additional standards for root protection consistent with this code. If roots are exposed, the developer shall provide temporary earth cover mixed with peat moss and wrapped with burlap to prevent exposed roots from drying out before permanent backfill is placed. The developer shall also water, maintain in moist condition, and otherwise temporarily support and protect the tree or root from damage until the tree or root is permanently covered with earth.

(3) **Protection of the Tree Root System:** the developer shall protect tree root systems from damage due to noxious materials in solution caused by runoff, or spillage during mixing and placement of construction materials, or drainage from stored materials. The developer shall also protect root systems from flooding, erosion or excessive wetting resulting from dewatering operations.

(f) **Trees Damaged During Construction:** The developer shall have trees damaged by construction repaired by a professional arborist in a manner acceptable to the city. The standard violation fine not to exceed $500.00 will be assessed for each tree damaged on site.

1. The Public Works Department must be notified immediately after any damage to any tree damaged by construction operations.

2. Such repairs as necessary shall be made promptly after damage occurs to prevent progressive deteriorations of damaged trees.

3. **Removal and Replacement:** the developer shall remove trees which are determined by the city to be incapable of restoration to normal growth pattern. Such trees shall be subject to replacement under the provisions of this code.

4. Any tree designated for preservation which is damaged by development activities in violation of this code (not including bonded trees in a dripline encroachment plan) and which dies as a result of this damage shall be subject to the tree replacement or removal requirements contained herein.

(g) **Exemptions:**

1. Licensed plant and/or tree nurseries shall be exempt from the terms and provisions of this article only in relation to those trees planted and growing on site for wholesale and/or retail sale purposes in the ordinary course of said licensee's business.

2. All governmental and private nurseries, with respect to trees which have been planted and are growing for future relocation, are exempt from this section.

3. During emergency conditions caused by a hurricane or other natural disaster, or to protect the public safety, the provisions of this section may be suspended by direction of the Mayor.
(4) Nuisance trees, as defined herein, are exempt from the provisions of this section except for pruning standards and the requirement to obtain a permit prior to their removal. However, no fee shall be assessed for this removal permit.

(5) Trees destructively damaged or destroyed by an act of God or an act of war as well as small trees which are less than three inches in caliper are exempt from this section.

(6) Trees already planted on vacant residential property may be relocated but not subjected to dripline encroachment. A TRP is required for relocation of all trees with a DBH of 3 inches or larger. All tree removal shall require a permit pursuant to this section.

**Sec. 27-266. Appeals and Variances**

(a) **Appeals.** Appeals from the decision of the Public Works Director regarding compliance with any landscaping provisions, other than those in Sections 27-255, 27-256 or 27-258 shall be filed in accordance with procedures established in subsection 27-52(l)(2) – (4).

(b) **Variances.** Variances from provisions in Sections 27-255, 27-256 or 27-258 shall be filed in accordance with procedures established in subsection 27-52(a) – (i), unless the request may be resolved by mitigation methods through the DRC process or addressed through an administrative variance procedure in subsection 27-52(g).

**Sec. 27-267. Fines**

(a) **Permits.** Landscape permits are required for all landscaping done in the City of Plantation with the exception of existing single-family homes that are not part of a planned community on individual lots. All planned residential developments must obtain a landscape permit for the individual lots, and a separate landscape permit for the common areas including the street trees.

(b) **Enforcement.** City staff enforces the terms of this Article by making necessary inspections. This includes promptly stopping any work attempted to be done without, or contrary to, any development approval required under this code, and ensuring that any work not performed in accordance with a development approval is corrected to comply.

(c) **Violations and Penalties.** Each violation of this code, or any of its subsections, is deemed a separate and distinct infraction of the Land Development Regulations. Each violation of this code shall be punishable by a fine of $500.00 plus the cost of replacement of the trees removed from the site, the costs associated with investigation and prosecution, together with the cost of replacement tree(s) as established in Section 27-255. The removal, relocation or destruction, including dripline encroachment, of each tree in violation of this code shall constitute a separate offense under this code. Each tree to be protected may be the subject of individual enforcement. The owner of any property where a tree or trees have been cut down,
destroyed, removed, relocated or destructively damaged shall be held strictly liable for a violation of this code unless it can be proven that the damage was caused by:

1. An act of God;
2. An act of war;
3. Development activities on the property pursuant to an approved tree permit; or
4. The owner alleges that the damage was caused by vandals or trespassers and the owner of the property has filed a police report for the incident and had taken reasonable security measures to prevent unauthorized access to the property.

(d) **Stop-work Order.** The city reserves the right to issue an order to cease and desist any work being performed in violation of this Article or any permit conditions established under this code. Upon notice of such violation, no further work shall take place until appropriate remedial action is instituted, as determined by the city.

(e) **Withholding or Revocation of City Permits.** Failure of any party to follow the procedures as required by this code shall constitute grounds for withholding or revoking development approval(s), building permits, occupancy permits or any other city approvals necessary to continue development. Such extraordinary sanctions, however, shall be instituted immediately upon the direction of the Mayor and with the approval of the city council at its next regular or special meeting. This approval shall be considered a public hearing and be subject to the applicable procedural requirements. All interested parties shall have notice and an opportunity to be heard and to be represented by legal counsel.