



Memorandum

Memorandum No: 22-067

Date: June 1, 2022

To: Honorable Mayor and Commissioners

From: Chris Lagerbloom, ICMA-CM, City Manager

Re: Public Release of Proposed Ordinance Amending the City of Fort Lauderdale Unified Land Development Regulations Sec. 47-21, Relating to Landscaping and Tree Preservation Requirements

On February 15, 2022, the City Commission approved on First Reading an ordinance amending the City of Fort Lauderdale Unified Land Development Regulations Sec. 47-21, relating to Landscaping and Tree Preservation Requirements. At that meeting, Commission received public input on concerns from multiple stakeholders. Staff were directed to hold a stakeholder workshop facilitated by Vice Mayor Sorenson to discuss outstanding concerns prior to Second Reading. Subsequently, workshops were held on March 18 and April 21.

The proposed ordinance (attached) includes the revisions discussed during the stakeholder meetings. While the Second Reading is scheduled to come before the Commission at the June 7, 2022, the proposed ordinance is being shared with the Commission to allow greater time for review of the 100+ page ordinance by stakeholders, a commitment made by V.M. Sorensen at the April 21, 2022, stakeholder meeting.

The following changes have been incorporated into the proposed ordinance between first and second reading:

- Modify landscaping selection requirements to allow for a broader plant palette;
- Increase allowances to substitute palms for large or medium trees in landscaping requirements;
- Clarify language for modular pavement systems and structural soil to allow greater flexibility and reduce instances where it is required;
- Modify planting area and soil volume requirements to reduce amounts required and allow more flexibility;
- Increase flexibility in percentage requirements for large trees and medium trees;
- Increase flexibility for where trees are located for single and duplex family homes;

- Remove palms as a category of specimen tree;
- Remove specification of contents of Urban Forestry Master Plan;
- Delete allowances for fruiting trees in some instances;
- Delete prohibition on putting greens in the front yard and allowed broader use of synthetic turf for recreational activities and clarified cap on usage of synthetic turf;
- Amend references to Section 163.045 of the Florida Statutes to be consistent with recently adopted changes in that statute; and
- Change the effective date to July 1, 2022.

Any questions should be directed to Glen Hadwen at (954)828-6138 or ghadwen@fortlauderdale.gov.

Attachment

Ordinance

c: Tarlesha W. Smith, Esq., Assistant City Manager
Greg Chavarria, Assistant City Manager
Alain E. Boileau, City Attorney
David R. Solomon, City Clerk
Patrick Reilly, Interim City Auditor
Department Directors
CMO Managers

ORDINANCE NO. C-22-07

AN ORDINANCE OF THE CITY OF FORT LAUDERDALE, FLORIDA, AMENDING SECTION 47-21, LANDSCAPING AND TREE PRESERVATION REQUIREMENTS, OF THE CITY OF FORT LAUDERDALE, FLORIDA UNIFIED LAND DEVELOPMENT REGULATIONS; PROVIDING FOR SEVERABILITY; REPEAL OF CONFLICTING ORDINANCE PROVISIONS; CODIFICATION AND CORRECTION OF SCRIVENER'S ERRORS; AND FOR AN EFFECTIVE DATE.

WHEREAS, the Florida Legislature finds that Florida-Friendly Landscaping™, as the term is defined in Section 373.185(1)(b), Florida Statutes (2019), contributes to the conservation, protection, and restoration of water and that in an effort to meet the water needs of this state in a manner that will supply adequate and dependable supplies of water where needed, intends Florida-Friendly Landscaping™ be an essential part of water conservation and water quality protection and restoration planning; and

WHEREAS, the Florida Legislature finds that the use of Florida-Friendly Landscaping™ and other water use and pollution prevention measures to conserve or protect the state's water resources serves a compelling public interest and that the participation of homeowners' associations and local governments is essential to the state's efforts in water conservation and water quality protection and restoration; and

WHEREAS, the Florida Legislature requires the governing body of each municipality to consider enacting ordinances, consistent with Section 373.185, Florida Statutes, requiring the use of Florida-Friendly Landscaping™ as a water conservation or water quality protection or restoration measure; and

WHEREAS, the Broward County Board of County Commissioners finds that in order to protect and preserve the quality of air, water, soil, wildlife habitats and other natural resources of Broward County, as well as the health, safety and welfare of its citizens, and declares that the preservation of trees is integral to the prevention of air and water pollution and must be regulated; and

WHEREAS, the Broward County Board of County Commissioners enacted Article XIV. – Tree Preservation and Abuse Ordinance to regulate tree protection and preservation within Broward County; and

WHEREAS, the Broward County Board of County Commissioners recognizes that other municipal and county agencies have adopted rules for the regulation or management of landscape design and materials which may include trees and has implemented a municipal certification program that permits a municipality to apply for and certification from Broward County of municipal tree preservation regulations that are at least as stringent as the tree preservation regulations enforced by Broward County pursuant to Chapter 27, Article XIV of the Broward County Code of Ordinances; and

WHEREAS, Broward County shall relinquish its authority to enforce Article XIV only within those municipalities which have valid municipal certification, as provided for in Chapter 27, Article XIV, Section 407 of the Broward County Code of Ordinances; and

WHEREAS, the Fort Lauderdale City Commission finds that landscaping and trees are vital parts of the City of Fort Lauderdale's environment and infrastructure, providing numerous environmental, economic, and social benefits through the provision of natural processes for managing water and creating healthier urban environments that create habitat, provide flood protection, cleaner air, and cleaner water; and

WHEREAS, Sustainable landscape and trees improve air quality, save energy by reducing air conditioning costs, ameliorate high urban temperatures, reduce stormwater runoff, increase property values, improve productivity, reduce stress and crime, and beautify residential and commercial neighborhoods; and

WHEREAS, Sustainable landscape and trees decrease urban noise, encourage tourism and economic growth, preserve community character and identity, provide habitat for wildlife, and shade pedestrian walkways; and

WHEREAS, the Planning and Zoning Board, acting as the local planning agency, at its meetings of March 30, 2021, November 17, 2021, and December 15, 2021, (PZ Case UDP-T21011) found that the proposed text amendments for Sections 47-25.2 and 47-38C of the ULDR are consistent with the City's Comprehensive Plan and the Planning and Zoning Board did recommended approval of said proposed text amendments to the City Commission; and

WHEREAS, notice was provided to the public that this ordinance would be considered at the City Commission meeting to be held on Tuesday, February 15, 2022, and Tuesday, March 1, 2022, at 6:00 o'clock P.M., in the City Commission Room, City Hall, Fort Lauderdale, Florida; and

WHEREAS, at the public hearing scheduled for March 1, 2022, the City Commission announced that the public hearing noticed on this matter would be deferred to May 3, 2022; and

WHEREAS, at the public hearing scheduled for May 3, 2022, the City Commission announced that the public hearing noticed on this matter would be deferred to May 17, 2022; and

WHEREAS, at the public hearing scheduled for May 17, 2022, the City Commission announced that the public hearing noticed on this matter would be deferred to June 7, 2022;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That Section 47-21.1, Intent and purpose, of the City of Fort Lauderdale, Florida Unified Land Development Regulations (hereinafter referred to as "ULDR"), is hereby amended as follows:

Sec. 47-21.1. - Intent and purpose.

- A. The intent of these regulations is to protect, preserve and enhance the natural environment and beauty of the City and promote better quality of life by creating, preserving, and protecting a safe, healthy, and sustainable landscape that helps to conserve, protect, and restore the City's water resources. These regulations are also intended to be as stringent as the tree preservation regulations enforced by Broward County pursuant to Chapter 27, Article XIV of the Broward County Code of Ordinances. This will be achieved by reducing the use of fertilizers and pesticides through the use of Florida-Friendly Landscaping™ principles in landscaped areas containing trees, nectar-producing plants for wildlife pollinators, and other plants and arranging them by irrigation needs in a pleasing manner in relation to paved areas and structures. These regulations are to establish minimum standards for the development,

~~installation, and maintenance of Florida-Friendly Landscaping™ without inhibiting creative landscape design, construction, and management.~~

~~B. These objectives are defined in general terms and their realization can only be attained by proper design.~~

B. The purpose of this section to enact regulations that establish standards that:

1. Promote the establishment and maintenance of tree canopy cover on public and private lands; and
2. Minimize the removal or loss of trees and palms; and
3. Ensure that trees and palms within the City of Fort Lauderdale are maintained in a healthy and non-hazardous condition through implementation of landscape and arboriculture industry Best Management Practices; and encourage the planting of landscape species that are sustainable and appropriate for existing site conditions and available growing space in order to minimize maintenance costs and damage to sidewalks, streets, and other infrastructure by; and
4. Establish and maintain diversity in landscape and tree species and age classes to provide a stable and sustainable urban forest; and
5. Reduce the use of fertilizers and pesticides through the use of Florida-Friendly Landscaping™ principles; and
6. Preserve the community's character and quality of life well into the future through the appropriate use of landscaping; and
7. These regulations are to establish minimum standards for the development, installation, and maintenance of Florida-Friendly Landscaping™ without inhibiting creative landscape design, construction, and management.

C. Documents Incorporated by Reference. The following documents are adopted as standards and are incorporated in this section by reference: American Association of State Highway and Transportation Officials (AASHTO), *Standard Specifications for Highway Bridges, 17th Edition, 2002*; American Forests, *National Registry of*

Champion Trees, 2020; Betrock Information Systems, Inc. Plant Finder, 2021; Council of Tree and Landscape Appraisers, Guide for Plant Appraisal, Tenth Edition, 2020; Dr. George K. Rogers, Landscape Plants for South Florida: A Manual For Gardeners, Landscapers & Homeowners, 1st Edition, 2009; Fast Forward Fort Lauderdale Design and Construction Manual for a Sustainable and Resilient Community and Cohesive Public Realm (DCM), 2019; Florida Department of Agriculture, Division of Plant Industry, Grades and Standards for Nursery Plants, 2021; Florida Exotic Pest Plant Council List of Invasive Species, 2021; Florida Power and Light Plant the Right Tree in the Right Place brochure, 2021; Gary W. Watson and E.B. Himelick, Principles and Practices of Planting Trees and Shrubs, 1997; Gary Watson, Dan Neely, The Landscape Below Ground I & II, 1994; Gary Watson, Dan Neely, Trees & Building Sites, 1995; Gary Watson, Best Management Practices – Tree Planting, Second Edition, 2014; Nelda Matheny and Jim Clark, Trees and Development: A Technical Guide to Preservation of Trees During Land Development, 1998; Richard Harris, James Clark, Nelda Matheny, Arboriculture: Integrated Management of Landscape Trees, Shrubs and Vines, Fourth Edition, 2004; Susan Day, Susan Dickinsen, Managing Stormwater for Urban Sustainability using Trees and Structural Soils, 2008; The American National Standards Institute (ANSI) A-300 all parts and Z-133, 2017; Timothy K. Broschat & Alan W. Meerow, Betrock's Reference Guide to Florida Landscape Plants, Third Printing, 1994; University of Arkansas, Community Design Center, Low Impact Development, A Design Manual for Urban Areas, 2010; University of Florida, Institute of Food and Agricultural Sciences (UF/IFAS), The Florida Friendly Landscape™ Landscaping™ Guide to Plant Selection & Landscape Design, 2015; UF/IFAS Florida Yards & Neighborhoods Handbook, 2015; UF/IFAS Florida-Friendly Landscaping™ Pattern Book Zones 10a, 10b, and 11, 2020; UF/IFAS GI-BMP Manual, 2020. In the event of a conflict in the standards required in the above reference material, the more restrictive standards shall take precedence over directly conflicting and less restrictive standards.

SECTION 2. That Section 47-21.2, Definitions of the City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.2. - Definitions.

- A. For the purpose of this section, the following terms and words shall have the meanings herein prescribed unless the context clearly requires otherwise:

1. Arborist. An individual who is a specialist in the care and maintenance of trees and is a certified arborist by the International Society of Arboriculture (ISA).
2. Arborist report. The formal written opinion of an Arborist on a tree, or trees, which includes, at minimum, the species, size, and condition rating or risk assessment for each tree, and the disposition of each tree on a property, including reasons for the removal or relocation of any trees, as provided in Sec. 47-21.6. A.2. i.
3. Arbor Street. A street designated, at the request of adjacent property owners, by the City as suitable for extensive planting of street trees.
- 4.1. Berm. A mound of earth configured in a manner which supports landscaping.
- 5.2. Biological control. A component of an integrated pest management strategy. It is defined as the reduction of pest populations by natural enemies and typically involves an active human role.
- 6.3. Bioretention. An engineered process to manage stormwater runoff using the chemical, biological, and/or physical properties found in natural, terrestrial-based communities of plants, microbes, and soils.
7. Broward County Licensed Tree Trimmer. A sole proprietor, business organization, or governmental agency which has obtained a Class A or Class B Tree Trimmer License from Broward County, pursuant to Broward County, Florida Code of Ordinances, Chapter 9, Article XI, Regulation of Tree Trimmers. The term, 'tree trimmer', for the purposes of this specific definition, shall mean a sole proprietor, business organization, or governmental agency which performs the removal of branches more than one inch in diameter from a tree or the removal of live palm fronds from any type of palm tree with six feet or more of clear trunk, or cutting down, digging up, destroying, effectively destroying, removing, or relocating any tree.
- 8.4. Bufferyard. An area or areas located on nonresidential property which extend extends the full length of the property lines abutting residential property which meet the requirements for a bufferyard as provided in Sec. 47-25.3

9.5. Caliper. The straight-line distance of the diameter of a tree measured horizontally from outside of the bark, from one side of the tree trunk to the opposite side, taken at a height of six (6) inches above ground for trees less than and including four (4) inches in diameter, or at a height of twelve (12) inches above the ground for trees with a diameter greater than four (4) inches but smaller than seven (7) inches in diameter, used in specifying nursery stock for new landscape installations. Diameter measurement of nursery size tree trunks. Trunk caliper is measured six (6) inches from the ground on trees up to and including four (4) inches in diameter, and twelve (12) inches above the ground for trees that are larger than four (4) inches but smaller than seven (7) inches. As part of this ordinance, trees with diameters of seven (7) inches or greater is measured at four and one-half (4 ½) feet above grade. See Diameter definition for Diameter at Breast Height for measuring trees with diameters greater than or equal to seven (7) inches.

10.6. Canopy. The upper portion of a tree consisting of limbs, branches, and leaves.

11. City Commission Protected Tree(s). A tree(s) or palm(s) which due to its size, shape, character, age, aesthetic value, species, historical value or any combination thereof, declared by the City Commission by resolution, to be a locally unique example of the species.

12.7. Clear trunk. A measurement from the top of the root ball to a point where the lowest untrimmed leaf base emerges from the trunk. The distance between the top of the root ball along the vertical trunk or trunks of a tree to the point at which lateral branching or fronds begin.

13. Clear wood, gray wood: A measurement from the top of root ball to the highest point on the trunk free of persistent leaf bases.

14. Condition rating. A term, that can be expressed qualitatively, on a scale of numbers, and in percentages, that incorporates plant health, structure, and form needed for analyzing plant depreciation.

15.8. Conifer. Cone-bearing seed plant.

- 16.9. *Conspicuous flowering.* A plant which exhibits a contrasting display of reproductive parts of size, quantity and duration.
17. *Critical Root Zone (CRZ).* The area of soil extending from the tree trunk where roots required for future tree health and survival are located.
18. *Crownshaft.* A conspicuous neck-like structure formed by tubular leaf bases on some palms with pinnately compound leaves.
19. *Desirable tree or palm.* A tree or palm that is adapted to the cultural and physical conditions at the planting site considering plant function and shape, aesthetics, form, longevity, ornamental traits, rarity, and other desirable attributes, that does not meet the ~~condition threshold criteria~~ for specimen trees that may require additional protection and considerations as provided within these regulations. Desirable trees and palms may be referenced elsewhere, not within this code, as 'heritage', 'champion', 'distinction', 'memorial', 'historic', 'old growth', 'ancient', 'veteran' and similar, as defined by the American Forests *National Registry of Champion Trees*.
- 20.10. *Diameter at Breast Height (DBH).* The straight-line distance measured horizontally on a tree trunk, outside of the bark, from one side of the tree trunk to the opposite side, measured at breast-height (4.5 ft. above ground-line), used in specifying all existing trees, or newly installed trees equal to, or greater than, seven (7) inches in diameter. See 'Caliper' definition for Caliper for measuring new trees less than seven (7) inches in diameter. ~~The diameter of a dicot or conifer tree trunk seven (7) inches or greater in diameter, is measured at four and one half (4 ½) feet above grade or ground level. The diameter of a monocot is the diameter of the tree trunk measured one (1) foot above grade or ground level.~~
- 21.14. *Dripline.* The natural outside end of the branches of a tree, palm, or shrub projected vertically to the ground.
22. *Effectively destroy.* To cause, suffer, allow or permit any act which will cause a tree to die or go into a period of unnatural decline within a period of one (1) year from the date of the act. Acts which may effectively destroy a tree include, but are not limited to, damage inflicted upon the root system by heavy machinery, excessive trimming, changing the natural grade above the root system or around the trunk, damage inflicted on the tree permitting infection or pest infestation, application of herbicides

or other chemical agents or intentional fire damage to the tree permitting infection or pest infestation, the infliction of a trunk wound that is fifty (50) percent or greater of the circumference of the trunk, or the removal of sufficient canopy to cause the unnatural decline of the tree.

23.12. Equivalent replacement. A tree or palm installed to be equal in species and size to the tree or palm removed. ~~A tree (or trees) which due to its classification (based on the table of tree evaluation of the department) in the case of dicot or conifer, condition, size and location, is determined by the department to be the equivalent to the tree (or trees) which it replaces. In making this determination, the department shall be guided by the standards established by the International Society of Arboriculture.~~

24.13. Equivalent value. A monetary value that reflects the calculated cost of the equivalent replacement of a tree or palm, as provided in Sec. 47-21.15.G. ~~An amount of money, which reflects the cost of replacing a dicot or conifer tree, determined by multiplying the cross-sectional surface area measured at four and one-half (4 ½) feet above grade commonly known as "diameter at breast height (DBH)" of the tree (measured in square inches) by the following values (based on the cost of obtaining an equivalent replacement according to classification of the tree as listed in the table of tree evaluation of the department):~~

- ~~a. Class A—Twenty five dollars (\$25.00) per square inch.~~
- ~~b. Class B—Twenty dollars (\$20.00) per square inch.~~
- ~~c. Class C—Fifteen dollars (\$15.00) per square inch.~~
- ~~d. Class D—Ten dollars (\$10.00) per square inch.~~
- ~~e. Class E—Five dollars (\$5.00) per square inch.~~
- ~~f. Class F—Zero dollars per square inch.~~
- ~~g. Equivalent value of a monocot is determined by multiplying the number of trunk feet to the terminal bud by thirty dollars (\$30.00) per foot.~~

25.14. Excavation. To make a hole, unearth, scrape, or dig out for the purpose of construction, demolition, or removal in relation to ~~with specific relation to~~ a tree or palm drip line, critical root zone, and root system.

26.15. Florida-Friendly Landscaping™ (FFL). Quality landscapes that conserve water, protect the environment, are appropriate for local conditions, and are drought, wind,

and/or salt tolerant. Principles of Florida-Friendly Landscaping™ include planting the right plant in the right place, efficiently watering, appropriate fertilization, mulching, attraction of wildlife, responsible management of yard pests, recycling yard waste, reduction of stormwater runoff, and waterfront protection. Additional components of Florida-Friendly Landscaping™ include planning and design, soil analysis, use of solid waste compost, practical use of turf, and proper maintenance.

~~27.16- *Ground cover.* A planting of low growing plants that covers the ground in place of grass/lawn/turf. Within the dripline of a tree, two (2) to three (3) inches of mulch may be used instead of plants.~~

28. *Hardscape.* The non-living elements of a landscape design that help to define form, shape, space, and order in the landscape including but not limited to a patio, driveway, pool deck, sidewalk and boardwalk.

29.17- *Hattracking.* To flat-cut the top of a tree, severing the leader or leaders; or pruning a tree by stubbing off mature wood; or reducing the total circumference or canopy spread not in conformance with the American National Standards Institute, A-300 standards or other accepted standards as published.

30.18- *Hedge.* A row of evenly spaced shrubs or other vegetation planted to form a dense, continuous, unbroken visual screen.

31.19- *Hydrozone.* A distinct grouping of plants with similar water needs and climatic requirements. Also referred to as water use zone.

32.20- *Interior landscape area.* ~~That~~ The landscape area located within a vehicular use area further than twenty-eight (28) feet from the perimeter landscape area and not attached to the perimeter landscape area.

33.21- *Integrated pest management.* A pest management strategy that focuses on long-term prevention or suppression of pest problems through a combination of techniques such as encouraging biological control, use of resistant plant varieties, and adoption of alternate cultural practices to make the habitat less conducive to pest development. Pesticides are used only when careful monitoring indicates they are needed, or to prevent pests from significantly interfering with the purposes for which plants are being grown.

34.22. *Interior parking.* Parking spaces not contiguous to, nor directly abutting a perimeter.

35.23. *Irrigation system.* A constructed watering system designed to transport and distribute water to plants.

36.24. *Irrigation zone.* A grouping of soakers, sprinkler heads, bubblers, or micro-irrigation emitters operated simultaneously by the control of one (1) valve.

37.25. *Landscape or landscaping.* Any combination of living plants (such as grass, groundcover, shrubs, vines, hedges, palms, or trees) and non-living landscape material (such as rocks, pebbles, sand, or mulch), ~~walls, fences, or decorative paving materials~~ installed for functional or aesthetic reasons at ground level and open to the sky.

38. *Landscape architecture.* Professional services, including, but not limited to, the following:

- a. Consultation, investigation, research, planning, design, preparation of drawings, specifications, contract documents and reports, responsible construction supervision, or landscape management in connection with the planning and development of land and incidental water areas, including the use of Florida-Friendly Landscaping as defined in s. 373.185, where, and to the extent that, the dominant purpose of such services or creative works is the preservation, conservation, enhancement, or determination of proper land uses, natural land features, ground cover and plantings, or naturalistic and aesthetic values;
- b. The determination of settings, grounds, and approaches for and the siting of buildings and structures, outdoor areas, or other improvements;
- c. The setting of grades, shaping and contouring of land and water forms, determination of drainage, and provision for storm drainage and irrigation systems where such systems are necessary to the purposes outlined in s. 481.301 – 329, Florida Statutes; and

d. The design of such tangible objects and features as are necessary to the purpose outlined in s. 481.301 – 329, Florida Statutes.

39.26. Landscape area. An area where living plants, or any combination of living plants and non-living landscape materials (such as rocks, pebbles, sand, or mulch), has been or shall be installed for functional or aesthetic reasons at ground level and open to the sky. Such landscape areas shall be directly permeable to the sub-grade through a natural drainage system unless otherwise specifically permitted by the ULDR. An area where landscaping has been or shall be installed.

40. Landscape design. Consultation for and preparation of planting plans drawn for compensation, including specifications and installation details for plant materials, soil amendments, mulches, edging, gravel, and other similar materials. Such plans may include only recommendations for the conceptual placement of tangible objects for landscape design projects. Construction documents, details, and specifications for tangible objects and irrigation systems shall be designed or approved by licensed professionals as required by s. 481.301 – 329, Florida Statutes.

~~27. Landscape area, required. Landscape areas that are directly permeable to the subgrade through a natural drainage system unless otherwise specifically permitted by the ULDR.~~

41. Landscape and Tree Document Packet. Documents used to communicate technical information necessary to obtain bids for construction, see the project through the building permitting process, and guide construction to produce the standards of quality expected in the construction of the improvements and the procedures to be used throughout the construction process. This packet may be required at the time of permitting (especially if specimen or desirable trees or palms are present on the site) and may include, but not be limited to: Existing Tree and Palm Survey, Arborist Report, Landscape Plan, Irrigation Plan, showing tree and palm survey Computer-Aided Design and Drafting (herein "CADD") layers and tree protection zones, Site Lighting and Electrical Plan, showing tree and palm survey CADD layers and tree protection zones, Soil Analysis, Tree and Palm Protection Zone plan, Tree and Palm Protection specifications, Tree and Palm Barricade details and signage, Tree and Palm Barricade specification with Listed Activities included in tree protection zone, and Root Cutting illustrations and specifications, as provided in Sec. 47-21.6.

- ~~42. 28.~~ Lawn/turf/sod, or sod area. A pervious area created with grass seed, sod, or synthetic turf materials, An area of land planted with grasses or (rarely) other durable plants, which ~~are~~ is maintained at a short height, ~~and used for aesthetic and recreational purposes.~~
- ~~43. 29.~~ Low Impact site design practices (LID). An ecologically based stormwater management approach favoring natural drainage design to manage rainfall on site through a vegetated treatment network with the goal being to sustain a site's pre-development hydrologic regime by using techniques that infiltrate, filter, store, and evaporate stormwater runoff close to its source. Low impact design remediates polluted runoff through a network of distributed landscapes used for treatment. Practices that minimize changes to the site's soil levels and composition by preserving existing landscape, shrubs and/or trees and other natural features.
- ~~44.~~ Modular suspended pavement system. Technology, products, and systems designed to support the weight of walks, pavement and hardscape and create a subsurface space that can be filled with un-compacted soil for proper root growth, and aid in enhanced stormwater management practices.
- ~~45. 30.~~ Monocotyledonous (monocot) tree. A tree having fronds with parallel venation and an indistinct, tightly held trunk surface (a palm).
- ~~46. 31.~~ Mulch. An organic soil additive or topping such as compost, wood chips, wood shavings, seasoned sawdust, bark, leaves or straw, used to reduce evaporation, prevent erosion, control weeds, enrich the soil and lower soil temperature.
- ~~47. 32.~~ Native vegetation. Any plant species with a geographic distribution indigenous to all, or part, of the state of Florida as identified in the *Guide to the Vascular Plants of Florida*, 3rd edition, R. P. Wunderlin & B. F. Hanson, 2011, 1998, University Press of Florida, Gainesville.
- ~~48.~~ Natural Forest Communities. A vegetated area generally comprised of a canopy, subcanopy and groundcover, and which meets the criteria for the classification of an area as a Natural Forest Community under Chapter 27, Article XIV, Section 411 of the Broward County Code of Ordinances.

- ~~49.33~~ *Nectar-producing plant*. A plant that serves as a food source by producing nectar within their flowers for mainly nectar-consuming pollinators such as butterflies, moths, bees, hummingbirds and bats.
- ~~50.34~~. *Net lot area*. The total square footage of a parcel of land after subtracting the square footage area of any vehicular use area including the VUA required landscaping, building footprint, walls, curbs, walks and swimming pools or any other impervious area.
- ~~51.35~~. *One-family residence*. A building and its surrounding lot intended to be occupied by one (1) family.
- ~~52~~. *Nuisance tree*. Any tree and palm, dead tree or stump upon any parcel of land within the city which threatens or endangers the public health, safety or welfare, or which could foreseeably cause the spread of disease or infestation to surrounding plant life.
- ~~53.36~~. *Ornamental plant. shrub*. A plant incorporated into landscape for decorative purposes. A multi-stemmed woody plant with several permanent stems used for ornamental purposes.
- ~~54~~. *Overall height*. Highest point in the canopy on a tree or palm measured from grade the soil line to the natural position of the last fully expanded leaf.
- ~~55~~. *Overlift*. The removal of the majority of the inner lateral branches and foliage of a tree thereby displacing weight and mass to the ends of the branches.
- ~~56. 37~~. *Palm*. A plant belonging to the monocot order of the family Palmae, distinguished by having unbranched single or multi-trunks crowned by large, compound pinnate, or palmate leaves/fronds.
- ~~38~~. *Parking garage*. A building or structure consisting of more than one (1) level and used to park vehicles.
- ~~57.39~~. *Peninsular or island landscape area*. 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.

- ~~40. *Perimeter*. The boundary line separating one (1) parcel of land from another or a parcel of land from a right-of-way. If the property is on a waterway, the perimeter shall be the bulkhead line.~~
- ~~58.41. *Perimeter landscape area*. The landscape area directly abutting the perimeter of a VUA. and within twenty-eight (28) feet of the property line.~~
- ~~42. *Perimeter parking*. Parking spaces contiguous to or directly abutting a perimeter landscape area.~~
- ~~59.43. *Pervious area*. That~~ The non-compacted land located at ground level, open to the sky, allowing passage of air and water to the subsurface used or set aside for landscaping.
60. *Pervious landscape area*. That portion of a pervious area required for landscaping.
- ~~61.44. *Pervious paving materials*. A porous asphaltic, concrete, or other surface having a high-void aggregate base which allows for rapid infiltration. and temporary storage of rain on, or runoff delivered to paved surfaces~~
62. *Plant*. A living organism of the kind exemplified by trees, shrubs, herbs, grasses, ferns, and mosses, typically growing in a permanent site, absorbing water and inorganic substances through its roots, and synthesizing nutrients in its leaves by photosynthesis using the green pigment chlorophyll.
- ~~63.45. *Plant bed*. A grouping of trees, shrubs, groundcover, perennials, or annuals growing together in a defined area devoid of turfgrass, not including any lawn/turf or sod area, normally using mulch around the plants.~~
- ~~64.46. *Plant communities*. An association of native plants that are dominated by one (1) or more prominent species or a characteristic physical attribute.~~
- ~~65.47. *Plant palette*. A list of site appropriate plant species of various colors, textures, and mature sizes chosen to be used in the landscape design.~~

- ~~66.48. *Planting plan.* A scaled drawing graphically representing proposed landscape which is labeled and keyed to illustrate the size, species, and location of plant materials, Specifications, and installation details for plants, soil amendments, mulch, edging, gravel, staking materials, and other similar materials.~~
- ~~49. *Point of connection ("POC").* The location where an irrigation system is connected to a water supply.~~
- ~~50. *Protected tree.* A tree which due to its size, shape, character, age, aesthetic value, species, historical value or any combination thereof declared by the city commission to be a locally unique example of the species.~~
- ~~51. *Protective barrier.* Fences or like structures at least four (4) feet in height that are conspicuously colored and are erected to prevent or obstruct passage.~~
- ~~67. *Protection barricade.* A fence or similar structure that encloses the critical root zone of existing trees, palms, and vegetation, and is designed to protect the roots and prevent the disturbance and compaction of the soil within the dripline of a tree, as provided in Sec. 47-21.15.A.3.~~
- ~~68.52. *Prune.* The selective removal of plant parts to meet specific goals and objectives. To remove, cut off, or cut back parts of a tree or plant which will alter the natural shape.~~
- ~~69. *Registered landscape architect.* A person who holds a license to practice landscape architecture in Florida s. 481.301 – 329, Florida Statutes.~~
- ~~53. *Right-of-way.* Land provided by dedication, deed or easement which is devoted to, required for or intended for the use by the public as a means of public traverse.~~
- ~~70.54. *Runoff.* The water that results from and occurs following a rain event, or following an irrigation event, because the water is not absorbed by the soil or landscape and flows off from the area.~~
- ~~55. *Shock.* A state of irregular retarded plant growth or degeneration of the vital processes resulting from, but not limited to, transplant, root damage, wounds, impact, partial or total girdling, or improper cutting.~~

~~71.56. Shade tree. A single-trunked dicot or conifer tree species primarily grown and installed to provide shade, having an average mature crown spread of greater than twenty (20) feet and a maintained clear trunk height of eight (8) feet and listed as either a Large Tree or a Medium Trees Tree in the City's Tree Classification List as maintained by the Department. A single-trunked dicot or conifer tree which by virtue of its natural shape provides at maturity a minimum shade canopy thirty (30) feet in diameter as listed in the table of tree evaluation.~~

~~72.57. Shrub. A multi-stemmed woody plant with several permanent stems growing from the base usually maturing at less than fifteen (15) feet in height.~~

~~58. Site appropriate plant. A plant that, after establishment, will thrive within the environmental conditions that are normal for a specific location without artificial inputs or supplements such as irrigation.~~

~~73. Sod. Grass which is cultivated, mowed, and cut into strips or squares attached to one (1) to two (2) inches of soil beneath, and held together by roots. Grass shall be species such as, but not limited to, Bahia, Bermuda, Centipede, Paspalum, Saint Augustine, and Zoysia.~~

~~74. Sod area. A pervious area created with sod, which is maintained at a short height.~~

~~75. Soil amendments. Materials added to soil to improve its physical or chemical properties.~~

~~59. Specimen tree. Any tree which has a diameter of eighteen (18) inches or greater and is well shaped and in good health. Exceptions are the following trees which are not specimen trees:~~

- ~~a. Fruit trees that are capable of producing potentially edible fruit, including, but not limited to: mangos, avocados, or species of citrus;~~
- ~~b. Species of the genus Ficus except F. aurea (strangler fig), F. citrifolia (short leaf fig), F. lyrata (fiddle leaf fig), F. rubiginosa (patio fig or rustyleaf fig);~~

- e. ~~Acoelorrhaphe wrightii (paurotis palm) and Phoenix reclinata (Senegal date palm) which have less than eight (8) feet of wood height;~~
- d. ~~All other multi-trunked palms not mentioned above;~~
- e. ~~Australian pine, Brazilian pepper, melaleuca, pencil tree and poison wood, carrotwood, schefflera; and~~
- f. ~~Trees which are "Class D" or lower.~~

76. Specimen tree. Any species of tree or palm which meets all of the following criteria:

- a. Specifically listed in the City's Tree Classification List as maintained by the Department;
- b. Having a condition rating of 60%, or greater, as calculated using the CTLA Guide for Plant Appraisal, 10th edition;
- c. Has a diameter at breast height (DBH) or clear trunk in accordance with the following:
 - i. ~~A tree with a trunk diameter at breast height (DBH) as follows: Eighteen (18) inches or greater for Large Trees,~~
 - ii. Thirteen (13) inches or greater for Medium Trees, and or
 - iii. Eight (8) inches or greater for Small Trees; or and
 - ii. ~~A palm with a clear trunk height as follows: fifteen (15) feet or greater for Large Palms or eight (8) feet or greater for Small Palms; and~~
- d. Does not fall into any of the categories below which are not specimen trees:
 - i. Fruit trees that are grown for the purpose of commercial production;

- ii. Trees and palms which have been planted and are being grown in a state-certified plant nursery or botanical garden for sale to the general public;
- iii. Trees and palms classified as invasive pursuant to the Department of Agriculture and Consumer Services, Chapter 5B-57, Florida Administrative Code (FAC), as amended, and the Florida Exotic Pest Plant Council (FLEPPC) Invasive Plant Species List, Category 1, as amended;
- iv. Trees which are Class D and lower, as listed in the City's Tree Classification List as maintained by the Department;
- v. City Commission Protected Trees and Palms; or
- vi. Desirable Trees and Palms.

~~77.60.~~ *Standard.* A woody perennial plant with a number of stout stems, all but one (1) of which has been removed. The remaining stem then has been trained into an upright, small, tree-like form having a rounded crown usually supported by a stake.

~~78.62.~~ *Street tree.* Trees planted along a street, in the area located between the roadway and the property line. A tree which is located within twelve (12) feet of the edge of pavement or curb of a street or such other distance as determined by the department in accordance with this section.

~~79.~~ *Sub-grade soil medium.* A subsurface material, usually a mixture of crushed stone and soil, that can be compacted to meet surface pavement design and installation requirements while allowing for subsurface root growth; often referred to as structural soils or engineered soils.

~~80.63.~~ *Table of tree classification evaluation.* A table prepared by the Department city and amended from time to time listing tree and palm species and corresponding information relevant pertinent to each such species, on file with the Department.

~~81.64.~~ *Tree.* A woody perennial plant, possibly shrubby when young, with one (1) main stem or trunk which naturally develops diameter and height characteristics of a particular species.

~~82.65.~~ *Tree abuse.* Any action or inaction which does not follow acceptable ~~trimming~~ practices as established by the American National Standards Institute, A-300 standards, or as prescribed in the regulations, herein. ~~or other accepted standards as published.~~ Abuse also includes, but is not limited to, ~~damage inflicted upon the roots by machinery, changing the natural grade within the drip line, destruction of the natural shape or any action which causes infection, infestation or decay.~~

83. *Tree and Palm Survey.* A document prepared by, signed, and sealed by a Florida registered land surveyor which must provide, at a minimum: the location, plotted by accurate techniques, of all existing trees and palms; a numbering system designating each tree and palm location on the survey; a corresponding list providing the tree and palm number; identification of each tree and palm; the trunk diameter of each tree; and the overall height of each palm.

~~84.66.~~ *Tree Canopy Trust Fund.* The fund maintained by the City to which funds received by the City for the equivalent value of trees removed shall be deposited. ~~Money from the fund shall be used to enhance tree canopy coverage. Trust funds shall be expended, utilized and disbursed for the planting of trees and any other ancillary costs associated with the planting of trees on public lands. Ancillary costs shall not exceed twenty percent (20%) of the cost of the particular tree planting project, and may include landscape design services, irrigation, mulch, tree grates, porous surfacing, or other materials necessary for the proper installation and maintenance of tree planting projects. These monies may also be used for the relocation of trees to public lands and for periodically distributing saplings to the public to increase tree canopy coverage.~~

85. *Tree inventory.* A document, prepared by an ISA Certified Arborist or a Florida Registered Landscape Architect, that references the tree survey locations and provides a corresponding list of existing trees and palms by number, common and botanical name, the trunk diameter at breast height (DBH) of each tree, the overall and clear trunk height of each palm, the condition rating of each tree and palm as calculated using the CTLA Guide for Plant Appraisal, 10th edition, and the status (to remain and protect in place, to be relocated, to be removed) of each existing tree and palm on site.

86. *Tree protection zone (TPZ)*. An area where construction activities are prohibited or restricted to prevent injury to preserved trees and palms, and can include the dripline and the critical root zone.
87. *Tree protection*. Activities designed to preserve and protect tree health by avoiding damage to a tree's roots, trunk, and branches.
88. *Tree relocation*. To change the location of a tree or palm.
- ~~89.67. *Tree service/arborist*. A sole proprietor, a qualified individual for a business organization, or a governmental agency performing the removal of branches more than one inch in diameter from a tree or the removal of live palm fronds from any type of palm tree with six feet or more of clear trunk, or cutting down, digging up, destroying, effectively destroying, removing, relocating, or grinding roots of any tree; See Broward County Licensed Tree Trimmer. Any person, company, corporation or service which does regularly, for compensation or fee, transplant, remove, prune, trim, repair, inject, or perform surgery upon a tree.~~
- ~~90.68. *Tree removal*. Any act to eliminate a tree or palm. To change the location of a tree, or to cause damage to or destruction of a tree or root system so as to cause a tree to die.~~
69. *Trim*. To reduce, shorten or gradually diminish the size of a plant by removal of parts of a plant without altering the natural shape.
91. *Understory*. The underlying, vegetative layer of trees and shrubs between the urban forest canopy and the ground cover.
92. *Unnatural decline*. Deterioration of plant health due to non-natural factors.
93. *Urban forest*. A collection of trees that grow within a city.
94. *Urban forestry*. The sustained planning, planting, protection, maintenance, and care of trees, forests, greenspace and related resources in and around the city for economic, environmental, social, and public health benefits for people.

95. Urban heat island effect. The phenomenon where temperatures in a city and areas covered by impervious surfaces are consistently higher than those observed in surrounding rural areas that have more vegetation and natural land cover.

96.70. Vehicular use area (also referred to as "VUA"). Any area used by vehicles including, but not limited to, areas for parking, display, storage or traverse of any and all types of motor vehicles, bicycles, watercraft, trailers, airplanes or construction equipment, but shall not include areas used exclusively as an airport ramp or apron.

97.74. Vine. A plant whose natural growth characteristic produces climbing stems.

SECTION 3. That Section 47-21.3 - General provisions and design standards of the City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.3. - General provisions and design standards.

- A. Low impact site design practices, such as preserving existing native trees and vegetation, shall be used to the extent feasible. Irrigation shall not be required in area where established native vegetation is incorporated into the landscape design.
- B. The plant palette and irrigation system shall be site appropriate, based on current acceptable industry standards, for site conditions, taking into account that, in some cases, soil improvement can enhance water use efficiency.
- C. Plants shall be grouped together by irrigation demand. The percentage of landscaped area in irrigated high-water use hydrozones shall be minimized.
- D. All landscapes must be designed and planted in accordance with Florida-Friendly Landscaping™ principles. The percentage of landscaped area, excluding turfgrass lawn/turf or sod areas, in irrigated high-water use hydrozones shall be no more than twenty percent (20%) of the total ~~non~~-landscaped area.
- E. When designing landscapes, fruit-bearing trees and plants should be considered as part of a sustainable and edible landscape.

- F. When designing landscapes to support wildlife, nectar-producing native plants, shrubs, and understory trees should be incorporated as much as possible to provide food-sources for nectar-consuming pollinators such as butterflies, moths, bees, hummingbirds and bats.
- G. Site designs and landscape plans shall be prepared in accordance with the requirements of all applicable Florida and local laws, rules, regulations, and ordinances. All landscape and irrigation system designs shall be consistent with the standards developed pursuant to Section 373.228, Florida Statutes, as amended.
- H. The landscape plan shall consider natural drainage features to minimize runoff. The use of pervious surfaces and areas is preferred; ~~therefore, impervious surfaces and materials within the landscaped area shall be limited to borders, sidewalks, step stones, parking lots, and other similar materials, and shall not exceed ten percent (10%) of the landscaped area. Use of pervious paving materials, where appropriate, is encouraged.~~
- I. The landscape plan should consider the soil requirements for trees based on their size at maturity and their distance from any adjacent paved/hardscape areas and utility infrastructure. Larger soil volumes lead to greater tree size, better tree health, longer tree life, greater environmental benefits, and fewer costs, such as those associated with tree replacement and damage by roots to property improvements and infrastructure. Where the required soil volumes at grade or separation from adjacent paved/hardscape areas and utility infrastructure cannot be provided for trees, then the use of modular suspended pavement systems or sub-grade soil mediums may be required as provided in the regulations, herein.
- J. Unless otherwise authorized by this article, no person shall cause, suffer, permit or allow:
1. The removal of any City Commission Protected Tree or Palm without first obtaining approval from the City Commission to conduct the removal; and
 2. The removal of any Desirable Tree or Palm without first obtaining a Tree Permit from the Department is herein provided; and
 3. The removal of any tree or palm without first obtaining a Tree Permit from Department as herein provided; and.

4. Tree abuse; and
5. Any encroachments, excavations, or change of the natural grade within the drip line of a tree unless it can be demonstrated to the Department prior to the commencement of said activity, that the activity will not negatively impact any tree; and
6. Land clearing or the operation of heavy equipment in the vicinity of a tree without placing and maintaining a protective barrier around the drip line of the tree. The protective barrier shall be conspicuous enough and high enough to be seen easily by operators of trucks and other equipment; and
7. The storage or use of materials or equipment within the drip line of any tree, or attachments, other than those of a protective and non-damaging nature, to any tree; and
8. Land clearing, including the removal of understory, in an area designated as a Natural Forest Community without first obtaining a letter of authorization from Broward County or a Tree Permit from Department as herein provided.

K. General exemptions.

1. During emergency conditions caused by a hurricane or other natural disaster, some provisions of this article may be suspended by the direction of the City Manager.
2. Nuisance Trees. Nuisance trees are exempt from the prohibitions set forth in section 47-21.16 provided that no condition is created which poses an imminent threat to public safety or property. In such cases, the nuisance tree shall be removed to alleviate any threat. Failure to remove said tree after warning from City shall constitute a violation of this article.
3. Pursuant to Section 163.045, Florida Statutes, as amended, pruning, trimming, removal, or replanting of, or mitigation for impacts to, a tree on a residential property is exempt from any notice, application, approval, permit, fee, or mitigation requirements of this article 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~~ poses an unacceptable risk to persons or property and provides such documentation to the Department for review and conformance to the Statute. This exemption does not apply to the exercise of specifically delegated authority for mangrove protection pursuant to Sections 403.9321 through 403.9333, Florida Statutes, as amended.

4. Vegetation maintenance and tree pruning or trimming within an established or constructed right-of-way for any electric transmission or distribution line is exempt from the provisions of this chapter pursuant to Section 163.3209, Florida Statutes. This section does not supersede local government ordinances or regulations governing planting, pruning, trimming, or removal of specimen trees or historical trees, as defined in a local government's ordinances or regulations, or trees within designated canopied protection areas.

SECTION 4. That Section 47-21.5 - Permit required of the City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.5. – Landscaping Permit required.

A Landscaping Permit shall be required for the installation, removal, relocation, or replacement of any landscaping in accordance with the provisions of this section.

SECTION 5. That Section 47-21.6 - Landscape plan required of the City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.6. - Landscape ~~and Tree plan~~ Document Packet required.

- A. Prior to the issuance of a Landscape Permit, a ~~landscape plan~~ Landscape and Tree Document Packet shall be submitted to the Ddepartment. The ~~landscape plan~~ Landscape and Tree Document Packet shall include, but not be limited to, the following:
 1. Tree and Palm Survey. A document signed, sealed, and prepared by a Florida registered land surveyor which must provide, at a minimum:
 - a. the location, plotted by accurate techniques, of all existing trees and palms; ~~and~~

- b. a numbering system designating each existing tree and palm location on the survey; ~~and~~
 - c. a corresponding list providing the existing tree and palm number and a basic name of each tree and palm; ~~and~~
 - d. the trunk diameter at breast height (DBH) of each existing tree; ~~and~~
 - e. the overall height of each existing palm; and
 - f. be prepared at a maximum of thirty (30) scale, and include property boundaries, north arrow, graphic scale, and date.
2. Tree and Palm Inventory. A document, prepared by an ISA Certified Arborist or a Florida Registered Landscape Architect, that contains at a minimum:
- a. the existing tree and palm survey;
 - b. a corresponding list of existing trees and palms numbered to match the existing tree and palm survey;
 - c. a graphic representation of all existing trees and palms inclusive of the canopy dripline;
 - d. the common and botanical name of each existing tree and palm;
 - e. the trunk diameter at breast height (DBH) of each existing tree;
 - f. the overall height and clear trunk of each existing palm;
 - g. be prepared at a maximum of thirty (30) scale, and include the property boundaries, north arrow, graphic scale, and date;
 - h. the signature, contact information, and certification number of ISA Certified Arborist or seal of Florida Registered Landscape Architect; ~~and~~

- i. An Arborist Report for all existing specimen trees and desirable trees or palms. The Arborist report shall be prepared by an ISA Certified Arborist and provided on ISA Certified Arborist business letterhead with contact information and ISA Certification number clearly stated, prepared within six (6) months of date being submitted, and original signature by same ISA Certified Arborist. If there is a named tropical storm or hurricane that impacts the City after the report has been submitted but prior to permit issuance, then the ISA Certified Arborist must update the report and resubmit it to the Department. This report shall include a tree survey with numbered trees and palms, a corresponding table which includes tree/palm number, botanical name and common name, trunk diameter at breast height (DBH) for trees in inches, clear trunk height for palms in feet, condition rating stated as a percentage using a whole number, the disposition of the tree, and a written assessment of the existing tree's characteristics explaining how and why the above information was reached. This report may also provide descriptive information on recommendations for prescriptive pruning applications.
3. The landscape plan prepared by a Florida landscape designer or a Florida landscape architect as required by s. 481.301 – 481.329, Florida Statutes. The landscape plans shall be designed so that landscaping shall not be adversely affected by factors such as salt exposure, prevailing winds, tidal occurrence, overhead obstructions, poor sun exposure, unusual soil conditions, etc. At a minimum, such plan shall include the following:
 - a. Prepared at a scale no smaller than one (1) inch equals thirty (30) feet. An overall project plan may be provided at a smaller scale when using it to reference section sheets provided;
 - b. Title block including name and address of project, RLA contact information, RLA seal and dated signature, original and sequential revision delta with revision date and narrative, north indicator;
 - c. Plans orientated to correctly correspond with survey and site plan;
 - d. Tree protection zones, including the critical root zone, illustrated, and labeled;

- e. Site information and landscape information, in tabular form, sorting required vs. provided calculations;
- f. Property boundaries and dimensions, depth of landscape islands and perimeters and buffers, property easements, adjacent right-of-way with street tree planting and parallel parking if applicable, existing and proposed structures, vehicular use areas, location of site amenities, dumpster, structural overhangs, walls and fencing, location of plantings, adjacent hardscape, curbing, walks, etc.;
- g. All existing and proposed underground and overhead utilities, ground mounted signs, billboards, transformers, generators, fire hydrants, Siamese connections, adjacent or existing photovoltaic systems for photovoltaic systems, etc. Plus, all existing and proposed site light poles and fixture locations, including any landscape lighting fixtures, and illustrate the required light pole set back (by radius, in feet) from all trees and palms located adjacent to light poles; location;
- h. Site and right of way grading, including swales, retention areas, berms, bio swales, rain gardens, etc., illustrated and labeled;
- i. Sub-grade soil medium, modular suspended pavement systems, or similar, illustrated and labeled;
- j. Required clear sight distance areas at intersections, as provided in Sec. 47-35, cross-sectional detail of street tree planting showing pedestrian clearance, underground soil structure, and overhead obstructions, etc.;
- k. Landscape material schedule listing all plants and material in table format including key, botanical name, common name, quantity, overall height and canopy spread for trees, hardwood, and clear trunk height for palms, plant spacing, native indicator, required vs. proposed plant material calculations, etc.;
- l. Mitigation schedule indicating equivalent replacement and equivalent value requirements for trees and palms proposed for removal;
- m. Hydrozone plantings illustrated and labeled;

- d. Include existing and proposed lighting equipment, fixture locations, and poles, with sizes and mounting heights; and
 - e. Lighting equipment details and specifications.
6. The tree and palm protection requirements as specified in 47-21.15 including, but not limited to, specifications, barricade detail, signage, activities allowed within tree protection zone, root and tree cutting pruning allowances. The tree and palm protection zones, as prescribed by the Department, as shaded areas that are accurately drawn to scale and labeled as such.
 7. The tree and palm protection zones shall be illustrated on all drawings that include any underground utility installations, including, but not limited to, irrigation, plumbing, electrical, telecommunication or streetlight lines. The tree and palm protection zones shall be shown on all drawings that include structural installations that will require excavation(s), and for above-ground installations that may include, but not limited to, walkways, streetlights, overhead wires or other types of infrastructure.
 8. Should the review of any items submitted as part of the Landscape and Tree Document Packet result in modifications to the tree and palm protection zones, then the revised tree and palm protection plans shall be re-submitted to the Department for final approval prior to permit issuance.
- ~~1. Name, address and telephone number of the person who has prepared the landscape plan. Landscape plans submitted for approval must be prepared by a registered landscape architect, dated, signed and stamped with his or her seal. A property owner may prepare plans or drawings for their own property. A nurseryman or nursery stock dealer may also prepare plans or drawings but only as an adjunct to merchandising his products.~~
 - ~~2. A landscape plan drawn at a scale no less than one (1) inch equal to thirty (30) feet showing the location, size, description and specifications of materials, grade of plantings, mulch specifications, protective structures such as curbs, the number of interior parking spaces and the square foot area of the VUA, and perimeter and interior landscape area. New trees shown shall be spaced so as not to conflict with normal canopy development. An existing desirable tree proposed to be retained on~~

~~site shall be left with a root pervious area surrounding it sufficient to support the species and canopy.~~

~~3. The landscape plan shall:~~

~~a. Be designed so that landscaping shall not be adversely affected by factors such as salt exposure, prevailing winds, overhead obstructions, utility services, deep shadows, unusual soil conditions and shall identify and show location of existing trees on and adjacent to the development site, and;~~

~~b. Take into consideration existing solar access for photovoltaic solar systems when determining appropriate areas on the development site for proposed tree locations.~~

~~4. A site plan drawn at a scale of not less than one (1) inch equal to thirty (30) feet showing the property boundaries and dimensions, existing and proposed structures, pools, walks, walls, patios, VUA's, lot orientation, utility services, light poles, pad mounted transformer locations, fire hydrants, Siamese connections, existing and proposed elevations and any other factor affecting the proposed use of the property, including the use and zoning of adjacent property.~~

~~5. A current survey when construction or alteration to a structure, or change of use or construction related to a VUA is proposed. The survey shall depict site utilization and improvements thereon and may be submitted in place of the landscape plan and site plan described in this section when the survey provides sufficient information to determine compliance with the requirements of this section.~~

~~6. The location of all underground and overhead utilities.~~

~~7. A landscape material schedule listing all plants being used with their botanical, common, and, where applicable, cultivar names; spacing; quantities; size of each type of plant by container size, mature height, and spread; degree of drought tolerance (as determined by the most recent edition of the South Florida Water Management District's guide Waterwise: South Florida Landscapes); and indication of whether native to Florida that will thrive in South Florida consistent with Florida-Friendly Landscaping™ principles.~~

- ~~8. The hydrozones, as determined by the most recent edition of the South Florida Water Management District's guide *Waterwise: South Florida Landscapes*, shall be shown on irrigation and planting plans, as required.~~
- ~~9. A table showing the total square footage(s) of the various landscape hydrozones on the plan. If more than one (1) water meter serves the site, the total hydrozone square footages of the various hydrozones must be identified with each POC and meter providing water service.~~
- ~~10. A layer of organic mulch three (3) inches deep is required and shall be noted on plans in plant beds, except annual beds, and individual trees in turfgrass areas. Mulch rings should extend at least three (3) feet around freestanding trees and shrubs. Mulch should be at least six (6) inches away from any portion of a building or structure, or the trunks of trees, and at least three (3) inches away from the base of shrubs.~~
- ~~11. If an irrigation plan is required it must include:
 - ~~a. A minimum scale of one (1) inch equals thirty (30) feet;~~
 - ~~b. The location of existing trees, vegetation, and ecological communities to remain, if applicable;~~
 - ~~c. The location of existing buildings, paving, and site improvements to remain;~~
 - ~~d. The location of proposed trees, vegetation, and ecological communities;~~
 - ~~e. The location of proposed buildings, paving, site improvements, and water bodies;~~
 - ~~f. The irrigation POCs and design capacity;~~
 - ~~g. The water service pressure at irrigation POCs;~~
 - ~~h. The water meter location and size;~~~~

- ~~i. The major components and location of the irrigation system, including all pumps, filters, valves, and pipe sizes and lengths;~~
- ~~j. Reduced-pressure-principle backflow-prevention devices for each irrigation POC on potable water systems and specifications;~~
- ~~k. The locations and specifications of controllers of rain shut-off devices and soil moisture sensors;~~
- ~~l. An irrigation legend with the following elements:
 - ~~i. Separate symbols for all irrigation equipment with different spray patterns and precipitation rates and pressure compensating devices;~~
 - ~~ii. General description of equipment; manufacturer's name and model number for all specified equipment;~~
 - ~~iii. Recommended operating pressure per nozzle and bubbler and low-flow emitter;~~
 - ~~iv. Manufacturer's recommended overhead and bubbler irrigation nozzle rating in gallons per minute or gallons per hour for low flow point applicators;~~
 - ~~v. Minimum (no less than seventy-five percent (75%) of maximum spray radius) and maximum spray radius per nozzle; and~~
 - ~~vi. Manufacturer's rated precipitation rate per nozzle at specified pounds per square inch ("psi"); and~~~~
- ~~m. Zone layout plan (minimum scale of one (1) inch equals twenty (20) feet):
 - ~~i. Indicating headtype, specifications, and spacing; and~~
 - ~~ii. Indicating methods used to achieve compliance with landscape irrigation design standards as required by Section 373.228, Florida Statutes, as amended.~~~~

SECTION 6. That Section 47-21.7. – Soils, of the City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.7. - Soils.

- ~~A. Where landscape plans are required, applicants shall, as determined by Zoning Administrator or designee, seek a soil test and analysis performed by a reputable soil testing lab to determine soil texture, percentage of organic matter, measurement of pH, total soluble salts, and estimated soil infiltration rate.~~
- A. For all properties other than Single Family Attached, Single Family Detached, and Duplex residential, a soil analysis is required to ensure the proper selection of proposed plants and soil amendments necessary for plant establishment. Soil analysis shall be performed by a soil testing lab as reviewed and approved by the Department or University of Florida/IFAS Cooperative Extension facility, or by a Geo-technical Engineer. Soil analysis shall contain, at a minimum, the following information:
1. Determination of soil texture;
 2. Percent of organic matter;
 3. Measurement of pH; and
 4. Total soluble salts; and
- ~~B. The Department may require the submission of an An infiltration test performed by a Geo-technical Engineer to determine calculating the estimated infiltration rate of the existing soil on a site when on which the installation of a modular suspended pavement system or a sub-grade soil medium, also known as (e.g., structural soil), has been is proposed in the landscape plan; and for which there is evidence that site has been severely compacted or that the existing soil is poorly draining.~~
- C. B. Original, existing, uppermost organic and topsoil layers Existing horticulturally-suitable topsoil shall be stockpiled and used for installation and/or re-spread during final site grading.

D. ~~C.~~ Any new soil required shall be similar to the existing soil in pH, texture, permeability, and other characteristics, unless demonstrated to the City Department that a different type of soil amendment approach is justified.

E. ~~D.~~ The use of solid waste compost as a soil amendment is encouraged where it is appropriate.

F. ~~E.~~ Florida-Friendly Landscaping™ may include the use of soil amendments to increase the water holding capacity of sandy soils or improve the drainage of heavy soils, or other applicable principles or techniques.

SECTION 7. That Section 47-21.8. - Appropriate plant, sod, and tree selection, location, and arrangement, of the City of Fort Lauderdale, Florida ULDR, is hereby amended as follows:

Sec. 47-21.8. - Appropriate tree, palm, plant, lawn/turf, or sod selection, location, and arrangement.

A. Plant selection should be based on the plant's adaptability to the existing conditions present at the landscaped area and native plant communities, particularly considering appropriate hardiness zone, soil type and moisture conditions, light, mature plant size, desired effect, color, and texture. Plant species that are tolerant to drought, wind, and/or salt are preferred. ~~Determinations of prohibited and controlled plant species shall be pursuant to the Department of Agriculture and Consumer Services, Chapter 5B-57, Florida Administrative Code ("F.A.C."), as amended, and the Florida Exotic Pest Plant Council ("FLEPPC") Invasive Plant Species list. Plant species identified as prohibited and controlled according to Chapter 5B-57, F.A.C., and the FLEPPC Invasive Plant Species list may not be used, except as specifically allowed therein.~~

B. Determinations of prohibited and controlled plant species shall be pursuant to the Department of Agriculture and Consumer Services, Chapter 5B-57, Florida Administrative Code ("F.A.C."), as amended, and the Florida Exotic Pest Plant Council ("FLEPPC") Invasive Plant Species list. Plant species identified as prohibited and controlled according to Chapter 5B-57, F.A.C., and the FLEPPC Invasive Plant Species list (Category 1) may not be used, except as specifically allowed therein.

- C. ~~B.~~ Plants shall be grouped in accordance with their respective water and maintenance needs. Plants with similar water and cultural (soil, climate, sun, and light) requirements shall be grouped together. Consideration should be given to plantings that require minimal or no use of gasoline-powered maintenance equipment. Where natural conditions are such that irrigation is not required, the presence of site appropriate plants shall not be considered a high-water use hydrozone.
- D. ~~C.~~ The combined area size of all high-water use hydrozones, other than living turfgrass lawn/turf or sod areas, shall be limited to twenty percent (20%) of the total landscaped area. ~~In landscapes irrigated with reclaimed water, the allowable size of all high-water use zones shall not be limited.~~ These high-water use limits do not apply to landscaped areas requiring large amounts of grass, lawn/turf or sod for their primary functions.
- E. ~~D.~~ Plants used in accordance with this article shall conform to the standards for Florida Grade ~~#1 One~~, or better, as provided for in the most current edition of Grades and Standards for Nursery Plants, by the Division of Plant Industry, Department of Agriculture and Consumer Affairs, State of Florida. ~~Sod shall be clean and visibly free of weeds, noxious pests, and diseases.~~
- F. Sod shall be clean and visibly free of weeds, noxious pests, and diseases.
- G. ~~E.~~ Fifty percent (50%) of all plants, vegetation, excluding living lawn/turf or sod all turfgrass, required to be installed planted by this section shall be vegetation native to Florida or that are suitable for the South Region and Cold Hardiness Zone 10b, as specified in that will thrive in South Florida, consistent with Florida-Friendly Landscaping™ Guide to Plant Selection & Landscape Design, 2015 principles.
- H. ~~F.~~ ~~For the purposes of this Section, Sshade~~ Shade trees shall be of a species having an average mature crown spread of greater than twenty (20) feet and shall have trunks that can be maintained with over eight (8) six (6) feet of clear trunk, ~~and listed as~~ The Department shall maintain a list of Large Trees or and Medium Trees in the City's Tree Classification List as maintained by the Department. The term shade tree as used in the ULDR shall apply to Large Trees and Medium Trees that meet the following criteria:
1. Large trees shall be of a species having an average mature crown spread of greater than thirty (30) feet and shall have trunks that can be maintained with over eight (8)

feet of clear trunk and listed as Large Trees in the City's Tree Classification List as maintained by the Department.

2. Medium trees shall be of a species having an average mature crown spread of greater than twenty (20) feet and shall have trunks that can be maintained with over eight (8) feet of clear trunk and listed as Medium Trees in the City's Tree Classification List as maintained by the Department.~~Trees or palms having an average mature crown spread of less than twenty (20) feet may be substituted by grouping the same so as to create the equivalent of a twenty (20) foot crown spread in areas where shade trees cannot be planted, such as under overhead utilities. Such a grouping shall count as one (1) tree towards meeting tree requirements for any provision herein. If palms are used, they shall constitute no more than twenty percent (20%) of the total tree requirements for any provision herein, and shall have a minimum of six (6) feet of clear trunk/gray wood at installation. On projects requiring six (6) to ten (10) trees, a minimum of two (2) species shall be utilized; for eleven (11) to twenty (20) trees required, a minimum of three (3) species shall be utilized; for twenty one (21) to fifty (50) trees required, a minimum of four (4) species shall be utilized; and for fifty one (51) or more trees required, a minimum of five (5) species shall be utilized.~~
- I. Small Trees shall be of a species having with an average mature canopy spread that is less than twenty (20) feet, and listed as Small Trees in the City's Tree Classification List as maintained by the Department.~~Small Trees may be grouped with other Small Trees in a manner that creates a combined tree canopy equivalent to a thirty (30) foot canopy spread. Such a combination of Small Trees shall only be permitted in areas where a single Large Tree or Medium Tree with the requisite mature canopy spread cannot be planted. Such a grouping shall consist of a minimum of three (3) Small Trees and shall be planted a maximum of ten (10) feet distance on center from another Small Tree and may count as one (1) tree towards meeting the tree requirements for Large Trees or Medium Trees as provided for any provision herein.~~
- J. Palms shall have a minimum of eight (8) feet of clear trunk when installed, except Coccothrinax, Thrinax, and Leucothrinax spp., and Phoenix roebelinii palms which shall have a minimum of three (3) feet of wood clear trunk when planted. Palms listed as Large Palms in the City's Tree Classification List can count as one (1) required Large Tree or Medium Tree towards meeting the tree requirements as provided for any

provision herein. Palms listed as Small Palms in the City's Tree Classification List may be grouped together such that three (3) individual Small Palms planted a maximum of eight (8) feet distance on center from another Small Palm and shall may count for one (1) required Large Tree or Medium Tree towards meeting the tree requirements as provided for any provision herein.

K.G. Sites with lots under three thousand square feet (3,000 ft²) square feet and or with inadequate planting space for required trees less than five (5) feet of planting space for required buffers may use tree species listed as Small Trees in the City's Tree Classification List as maintained by the Department canopy trees with a mature height of twelve (12) to fifteen (15) feet, with a canopy spread characteristic of the species at such height.

L.H. Trees used in the required landscaping adjacent to a public street or swale are subject to approval by the Department City so that the sustainable character, biological diversity of tree species, and safety of the public street can be maintained, and the reduction of the urban heat island effect shall be encouraged, and "walkable" walkable communities shall be promoted. All large trees installed within six (6) feet of public infrastructure shall utilize a root barrier system, as approved by the City. Tree root barriers shall be installed at the sidewalk edge in those circumstances where tree roots are causing, or may potentially cause, a trip hazard because of lifting of some portions of a public sidewalk.

M. The Fast Forward Fort Lauderdale *Design and Construction Manual for a Sustainable and Resilient Community and Cohesive Public Realm* (DCM) (December 2019) shall be referenced for guidelines and principles for the development of a sustainable, resilient and cohesive public realm within the City of Fort Lauderdale.

N. Where planting new trees adjacent to existing public infrastructure, ~~all~~ Any tree listed as a Large Tree or Medium ~~Trees~~ Tree in the City's Tree Classification List installed within six (6) feet of an existing public sidewalk, public hardscape, or public infrastructure, such as water, sewer, or drainage pipes, shall utilize a root barrier system, as approved by the Department.

O. Where planting new trees adjacent to proposed public infrastructure, any tree listed as a Large Tree or Medium ~~Trees~~ Tree in the City's Tree Classification List that are ~~to be~~

~~planted~~ installed within six (6) feet of any proposed location of a public sidewalk, public hardscape, or ~~utility~~ a public plaza area, shall require the following:

1. The installation of ~~then~~ a modular suspended pavement system ~~shall be installed (in conjunction with root barriers when adjacent to utilities, if needed)~~ under the paved area which has a H-20 or HS-20 loading rating in accordance ~~from~~ with the AASHTO *Standard Specifications for Highway Bridges*.
2. The installation of root barriers in conjunction with the modular suspended pavement system when the large tree or medium tree referenced in this section is installed within six (6) feet of any existing, or proposed public infrastructure, such as water, sewer, or drainage pipes.
3. A sub-grade soil medium (~~or e.g.,~~ structural soil) may be installed in lieu of a modular suspended pavement system under any of the following conditions:
 - a. ~~when~~ On single family or duplex lots for applications that facilitate the connection of ~~to connect~~ open soil space areas, ~~(such as underneath a public sidewalk to connect connecting a swale and turf landscape area to allow for future tree root growth), or~~
 - b. ~~in~~ At locations where site conditions are not conducive to the use of a modular suspended ~~soil~~ pavement system ~~is not feasible~~, such as ~~when~~ locations where a high water table is present or other site conditions as determined by the Department. ~~or~~ Cost considerations shall not be the only factor considered by the Department when permitting the use of a sub-grade soil medium (e.g. structural soil) in lieu of a modular suspended pavement system in any application or location. ~~a sufficient sole reason for use of structural soils.~~
- I. Tree and plant species on the Florida Exotic Pest Plant Council, ("FLEPPC") Invasive Plant Species list, as amended, shall not be planted as required or optional landscaping, and invasive plant species listed therein shall be removed from construction sites. Any tree not listed as an invasive tree shall require a Tree Removal Permit prior to removal. Any tree not listed as an invasive tree shall require a Tree Removal Permit prior to removal.

- P.J. Tree species shall have a minimum height of ten (10) feet at time of installation. Street trees shall have a minimum height of twelve (12) feet and provide minimum pedestrian vertical clearance. Minimum canopy spread shall be characteristic of the species at such height. Credit for existing native and non-invasive trees preserved on a site shall be granted toward meeting the tree requirements of any landscaping provisions of this article. No credit shall be granted for preserved trees which are in poor (less than forty percent [40%] condition rating) condition ~~or declining health~~.
- ~~K. Sites with lots under three thousand (3,000) square feet or with less than five (5) feet of non-vehicular planting space for required buffers may use canopy trees with a twelve (12) to fifteen (15) foot maturity, with canopy characteristic of the species used at such height.~~
- Q.L. Shrubs used as hedges shall be a minimum height of two (2) feet at installation, full to the base, and planted two (2) feet on center when measured immediately after planting. When shrubs are used as a screen around vehicular use area, said shrubs shall be a minimum of two (2) feet in height at installation above the vehicular use area that directly abuts the shrubs at time of planting. All shrubs should be placed a minimum of two and one-half (2½) feet on center from structures.
- R.M. Required buffer hedges shall be planted and maintained so as to form a continuous, unbroken solid visual screen, with a minimum height of three (3) feet, to be attained within one (1) year after planting.
- S.N. ~~Native and non-invasive vines~~ 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, and shall be planted at five (5) ~~ten (10)~~ foot intervals to meet landscape buffer requirements.
- T.O. Groundcover, excluding living lawn/turf or sod, shall be planted with a minimum of fifty percent (50%) coverage, with one hundred percent (100%) coverage occurring within twelve (12) ~~six (6)~~ months of installation.
- U.P. Planting soil ~~Topsoil~~ shall be clear and free of construction debris, weeds, rocks, noxious pests, and diseases. ~~The topsoil for all planting areas shall be composed of a minimum of fifty percent (50%) muck or horticulturally acceptable organic material.~~

~~V.Q. All living lawn/turf or sod turfgrass areas shall be planted sodded using species suitable as permanent lawns in Broward County. Where appropriate, turf species that require minimum irrigation are encouraged. The type and location of turf areas shall be selected in the same manner as with all the other plantings. Irrigated turf areas, as opposed to non-irrigated turf areas, are considered to be a high water use hydrozone. Irrigated turf shall not be treated as a fill-in material but rather as a planned element of the landscape. Turf shall be placed so that it can be irrigated using separate zones.~~

~~R. Irrigated turfgrass areas shall be consolidated as per Florida-Friendly Landscaping™ principles and as required by Zoning Administrator or designee. Turfgrass areas shall be identified on the landscape plan and be subject to the following requirements:~~

- ~~1. No more than sixty percent (60%) of the landscaped area for single-family and duplex dwellings may be in turfgrass;~~
- ~~2. No more than fifty percent (50%) of the landscaped area for multifamily dwellings may be in turfgrass; and~~
- ~~3. No more than fifty percent (50%) of the landscaped area for other development uses may be in turfgrass.~~

W. Irrigated lawn/turf or sod areas:

1. Shall be considered a high water-use hydrozone;
2. Shall not be treated as a fill-in material but as a planned element of the landscape;
3. Shall be consolidated as per Florida-Friendly Landscaping™ principles and as required by Zoning Administrator or designee;
4. Shall be placed so it can be irrigated using separate zones; and
5. Lawn/turf or sod areas shall be identified on the landscape plan and be subject to the following requirements:

- a. No more than sixty percent (60%) of the landscaped area for all uses may be in living lawn/turf or sod; and
- b. Dry detention ponds planted with Bahia grass (Pastpalum notatum) are exempt from automatic irrigation requirements and are therefore exempt from the lawn/turf or sod area calculations above.
- c. Synthetic turf, when installed in accordance with the specifications herein as provided in Sec. 47-21.9.Q, may be used as an integral part of the landscape design for a site and contribute to ~~reduce~~ reducing water use for irrigation and are therefore exempt from the grass/lawn/turf area calculations above.
~~No more than 60% of the landscaped area shall be synthetic turf.~~

~~S. Native and drought-tolerant landscaping shall be identified on the landscape plan and be subject to the following requirements:~~

- ~~1. A minimum of fifty percent (50%) of the non-turfgrass landscaped area of single-family and duplex dwellings must be in native or drought-tolerant landscaping; and~~
- ~~2. A minimum of fifty percent (50%) of the landscaped area of all other development uses must be in native or drought-tolerant landscaping.~~

SECTION 8. That Section 47-21.9. – Installation, of City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.9. - Installation.

- A. All landscaping shall be installed in accordance with the requirements of this section ~~within ninety (90) days of issuance of the landscape permit in accordance with the landscape plan approved by the department and the requirements of this section and~~ prior to the issuance of a certificate of occupancy, certificate of completion, or final use approval.

- ~~B. All landscape material shall be installed in accordance with sound landscaping practices ANSI A-300 Best Management Practices, all parts, following all applicable Florida-Friendly Landscaping™ principles. All landscape materials shall be graded at least Florida Number One. Florida-Friendly Landscaping™ may include the use of soil amendments to increase the water holding capacity of sandy soils or improve the drainage of heavy soils, or other applicable principles or techniques. The use of turf that does not need supplemental irrigation, such as Bahia, is encouraged. Alternatives to the use of turf are also encouraged, such as drought resistant shrubs and ground cover. Codominant (V-croched) trees are not acceptable.~~
- C. All installed landscape materials shall conform to the standards for Florida grade #1 or better according to the Florida Grades and Standards for Nursery Plants, 2021, by the Division of Plant Industry, Department of Agriculture and Consumer Services, State of Florida.
- ~~D. C. Unless stated otherwise, required tress trees shall be a species designated Class "C" or higher, as defined in the Table of Tree Classification maintained table of tree evaluation compiled by the Ddepartment. Existing trees which are healthy, well maintained and are in class "C" or higher may be used to meet tree planting requirements and no approval shall be given for trees in poor or damaged condition regardless of classification.~~
- ~~E. D. New trees required to be installed shall be planted so normal growth and aesthetic appearance will not be impaired, and so uppermost structural roots are visible and level with grade. nor shall potentially large trees be planted under utility lines or lighting, too close to structures or in an area where they will obstruct emergency vehicle access.~~
- ~~E. Except as otherwise required for VUA's, dicot trees shall have a minimum of ten (10) feet of height. Monocots shall have a minimum of eight (8) feet of wood, except Coconut, Thrinax, Phoenix robellini, Sago, and Livingstonia palms which shall have a minimum of three (3) feet of wood when planted.~~
- ~~F. Trees shall be installed as follows:~~
- ~~1. Shade trees shall be located a minimum of fifteen (15) feet away from structures.~~

- ~~2. Nonshade trees and palms shall be located a minimum of seven and one-half (7½) feet away from structures. Palms may be planted closer to each other to form multiples or clusters.~~
 - ~~3. No large trees shall be located closer than twelve (12) feet to street lights. No palms may be closer than seven (7) feet from street lights. The spacing of trees from electric utility lines must follow "Right Tree, Right Place" guidelines as established by Florida Power and Light.~~
 - ~~4. Where a conflict in spacing or canopy spread occurs between required trees and existing offsite or onsite trees, the requirements of this section may be modified as determined by the director.~~
- ~~G. Each tree shall have pervious area surrounding it sufficient to support the species, as determined by the department. The minimum planting area shall be for:~~
- ~~1. Shade species with a minimum caliper of three (3) inches, two hundred twenty-five (225) square feet with fifteen (15) feet being the smallest dimension.~~
 - ~~2. Shade species with a minimum caliper of two (2) inches, ninety (90) square feet with eight (8) feet being the smallest dimension.~~
 - ~~3. Other dicot tree species, sixty-four (64) square feet with eight (8) feet being the smallest dimension.~~
 - ~~4. Palm types, twenty-five (25) square feet with five (5) feet being the smallest dimension, except Areca, Carpentaria, Cocothrinax, Phychosperma, Rhapsis, and Sabal, sixteen (16) square feet with four (4) feet being the smallest dimension.~~
- F. All plant material that matures at a height greater than fourteen (14) feet shall not be installed in an established electric utility right-of-way or intrude from the side closer than the clearance distance specified in Table 2 of ANSI Z 133.1-2000 for lines affected by the North American Electric Reliability Council Standards, FAC 003.1 requirement R1.2., in accordance with Section 163.3209, Florida Statutes.

- G. Large Trees, Medium Trees, and Large Palms are not to be located closer than fifteen (15) feet from any light pole locations. Small Trees and Small Palms are not to be located closer than seven and one-half (7-1/2) feet from any light pole locations.
- ~~H. Trees when braced shall be braced in such a fashion as to not girdle, scar, perforate or otherwise inflict damage to the tree.~~
- H. Large Trees and Large Palms shall be located a minimum of twenty (20) feet away from structures; Medium Trees shall be located a minimum of fifteen (15) feet away from structures; Small Trees shall be located a minimum of ten (10) feet away from structures; and Small Palms shall be located a minimum of five (5) feet away from structures to avoid conflicts with branches. This distance may be measured from the building wall, or from the roof overhang, depending on the profile of the structure and the species of the tree or palm. This distance may also be adjusted based on root barriers being used that redirect tree roots away from structures.
- ~~I. Shrubbery, when installed to screen a VUA, shall be a minimum of twenty-four (24) inches high at time of installation, be full to base, and be spaced a maximum of thirty (30) inches on center. Shrubbery shall be permitted to grow and shall be maintained at a minimum height of thirty (30) inches. Vines used in conjunction with wire fences to screen a VUA shall be a minimum of thirty (30) inches in height immediately after planting, have a minimum of three (3) runners with plants spaced a maximum of six (6) feet on center.~~
- ~~J. All plant beds shall be excavated to a minimum depth of twenty-four (24) inches and back-filled with a suitable soil consisting of fifty percent (50%) composted organic matter, well-mixed with native soil. Backfill material shall be free from rock, construction debris, or other extraneous material. Planting beds shall be free from construction debris and planted with ground cover or lawn or when not otherwise provided in these regulations, mulched with an appropriate organic material to a minimum depth of two (2) inches.~~
- ~~K. Decorative stone or gravel may be utilized up to a maximum of ten percent (10%) of the total landscape area where the stone or gravel is to be used for decorative or other approved purpose as an adjunct to planting beds.~~

- ~~L. Finished grade of landscape areas shall be at or below the grade of adjacent VUA or public sidewalks, except for mounding or other surface aesthetics. Grade shall be designed to receive roof and surface runoff and to assist Florida-Friendly Landscaping™ plantings and then any overflow routed as necessary underground. Mounding or other surface aesthetics shall not inhibit or defeat intended rainwater capture, retention or percolation from a VUA.~~
- ~~M. All undeveloped portions of a parcel of land shall be left undisturbed or planted with ground cover or lawn so as to leave no exposed soil in order to prevent dust or soil erosion.~~
- I. Minimum Tree Spacing Requirements. Newly planted trees and palms shall meet the following: Large Trees and Large Palms shall be spaced a minimum of twenty-five (205) feet from another Large Tree or Large Palm; Medium Trees shall be spaced a minimum of twenty-five (2015) feet from another Medium Tree or palm; and Small Trees and Small Palms shall be spaced a minimum of fifteen-ten (150) feet from another Small Tree or palm. When two (2) trees or palms of different size categories are planted near each other, the smaller of the minimum spacing distances shall take precedence. Exceptions to the minimum spacing requirements shall require Department approval.
- J. Where a conflict in spacing or canopy spread occurs between required trees and existing offsite or onsite trees, or offsite structures, and the minimum tree spacing requirements of this section cannot be met, the spacing or size of required trees may be adjusted by the Department in accordance with good horticultural practices/industry best standards such as *Best Management Practices – Tree Planting, Second Edition*, or *ANSI A-300 (Part 6)* to minimize conflicts.
- K. Cutouts in a non-pervious surface should be sized to minimize damage to that surface as the tree trunk grows in diameter. This cutout size does not represent the soil volume requirement for root growth which still needs to be provided as required in Sec. 47-21.9. ~~ML~~ and can be amended by the Department. Minimum dimensions for cutouts in non-pervious surfaces to accommodate tree trunk growth shall be:

1. Eight (8) feet (~~8'~~) by eight (8) feet (~~8'~~) for trees having an average mature canopy spread of greater than thirty (30) feet= and listed as Large Trees on the City's Tree Classification List.
 2. Six (6) feet (~~6'~~) by six (6) feet (~~6'~~) for trees having an average mature canopy spread between twenty (20) feet and thirty (30) feet= and listed as Medium Trees on the City's Tree Classification List.
 3. Five (5) feet (~~5'~~) by five (5) feet (~~5'~~) for trees having an average mature canopy spread less than twenty (20) feet (~~20'~~) and listed as Small Trees on the City's Tree Classification List, and for palms listed as Large Palms on the City's Tree Classification List.
 4. Three (3) feet (~~3'~~) by three (3) feet (~~3'~~) for palms listed as Small Palms in the City's Tree Classification List.
 5. ~~Exemptions~~ Exceptions to minimum cutout size ~~can~~ may be approved by the Department for ~~Special Districts~~ Regional Activity Center (RAC) Districts which may have consistent with ~~different~~ requirements specific to those districts, or for the application of a cold applied, poured in place tree surround system that is designed to bind a selection of decorative aggregates, which has been determined by the Department to provide a bonded, walkable, attractive, and porous surface, ~~as determined by the Department.~~
- L. Minimum soil volume requirements for trees ~~shall be~~ may be achieved by either providing the appropriate planting area for the size classification of the tree to be planted, or by utilizing modular suspended pavement systems or sub-grade soil medium structural soils adjacent to the tree to provide the minimum soil volume for the tree's root system. Minimum planting areas and soil volume requirements are as follows:
1. ~~Twelve~~ ~~Nine-hundred and seventy-two~~ cubic feet (~~1,200~~972 ft³) with a ~~minimum~~ maximum of three (3) feet (~~3'~~) depth from the surrounding grade for tree species listed as Large Trees in the City's Tree Classification List.

2. ~~Six~~ Four-hundred and eighty-six cubic feet (600486 ft³) with a ~~minimum~~-maximum of three (3) feet (~~3'~~) depth from the surrounding grade for tree species listed as Medium Trees in the City's Tree Classification List.
3. ~~Three~~ Two-hundred and seventy cubic feet (300270 ft³) with a ~~minimum~~-maximum depth of three (3) feet (~~3'~~) from the surrounding grade for tree species listed as Small Trees in the City's Tree Classification List.
4. For palms listed as Large Palms on the City's Tree Classification List, the ~~minimum~~ soil volume shall be seventy-five cubic feet (75 ft³) ~~will be calculated by multiplying the square feet (ft²) of mature canopy diameter by the minimum~~ with a maximum depth of three (3) feet from surrounding grade, ~~as determined by the Department.~~ For palms listed as Small Palms on the City's Tree Classification List, the ~~minimum~~ soil volume shall be twenty-seven cubic feet (27 ft³) with a maximum depth of three (3) feet from surrounding grade.
5. Where the minimum required planting area or soil volume cannot be provided within the landscape area at grade for a particular size classification of tree, then the following shall be required:
 - a. a modular suspended pavement system shall be installed under the paved area adjacent to ~~the~~ that tree to supplement the soil volume being provided by the proposed planting area to achieve the minimum required soil volume for that particular size classification of tree as required in this section. The modular system must have a H-20 or HS-20 loading rating in accordance ~~from~~ with the AASHTO Standard Specifications for Highway Bridges.
 - b. A sub-grade soil medium or structural soil may be installed in lieu of a modular suspended pavement system under any of the following conditions:
 - i. On single family or duplex lots for applications that facilitate the connection of open soil space areas, such as underneath a public sidewalk connecting a swale and landscape area to allow for future tree root growth, or
 - ii. At locations where site conditions are not conducive to the use of a modular suspended pavement system, such as when a high-water table is present or

other site conditions as determined by the Department. Cost shall not be the only factor considered by the Department when permitting the use of a sub-grade soil medium or structural soil in lieu of a modular suspended pavement system in any application or location. A sub-grade soil medium (or structural soil) may be installed to connect open soil space areas (such as underneath a sidewalk connecting a swale and turf area to allow for future tree root growth) or in locations where use of a suspended soil system is not feasible, such as when a high water table is present. Cost considerations shall not be considered a sufficient sole reason for use of structural soils.

- M. All trees shall be properly guyed and staked at the time of planting until establishment. Biodegradable guying and staking materials are recommended. The use of nails, wire, conduit, synthetic rope, or any other guying or staking method which damages the tree or palm, is prohibited.
- N. All landscaping areas that do not contain original uppermost organic and topsoil layers shall be excavated to a minimum depth of twenty-four (24) inches, measured from grade, to remove rock, construction debris, compacted limerock material, or other material so as not to restrict root growth, limit soil percolation, or reduce the efficiency of the irrigation system. Backfill will be a suitable soil mixture having a proper pH range of 5.5 to 6.5. Suitable existing site soil may be amended to improve its pH, water and nutrient-holding capabilities. A soil analysis may be required, as provided in ULDR 47-21.7, to ensure the provision of soil amendments necessary for plant establishment.
- O. Landscaping areas shall be mulched with an appropriate organic material to a minimum depth of two (2) inches, with the mulch not being placed against the trunk of the plant.
- P. Decorative non-living groundcover (other than rocks, stone, or gravel used as mulch within a planting bed) may be used for decorative, or other approved purpose, as an adjunct to landscaping areas, but shall not count towards the required landscape area being provided. The use of synthetic turf, when installed in accordance with the specifications herein, shall be permitted and shall count towards the required landscaping area being provided, as determined by the Department.
- Q. Synthetic turf shall comply with all the following design standards and shall:

1. Simulate the appearance of live turf, organic turf, grass, sod, or lawn, and shall have a minimum eight-year "no fade" warranty.
2. Be of a type known as "cut pile with infill" with pile fibers of a minimum height of one and three-quarters (1.75) inches and a maximum height of two and one-half (2.5) inches. Synthetic turf installed solely for the purpose of recreational use only ~~only a putting green and not located in the front yard area~~ shall be exempt from this requirement.
3. Have a minimum face weight of seventy-five (75) ounces per square yard. Synthetic turf installed solely for the purpose of recreational use only ~~only a putting green and not located in the front yard area~~ shall be exempt from this requirement.
4. Be manufactured from a polyethylene monofilament, dual yarn system.
5. Have a backing material that is permeable.
6. Be lead free and flame retardant.
7. Be installed in a manner prescribed by the manufacturer and in compliance with ULDR Section 47-20.13 when installed in the right-of-way.
8. Be installed over a subgrade prepared to provide positive drainage and an evenly graded, porous crushed rock aggregate material that is a minimum of three (3) inches in depth.
9. Be anchored at all edges and seams consistent with the manufacturer's specifications.
10. Not have visible seams between multiple panels.
11. Have seams that are joined in a tight and secure manner.
12. Have an infill medium consisting of clean silica sand, or other mixture, pursuant to the manufacturer's specifications that shall:

- a. Be brushed into the fibers to ensure that the fibers remain in an upright position;
- b. Provide ballast that will help hold the turf in place; and
- c. Provide a cushioning effect.

13. Synthetic turf shall also comply with all the following additional standards:

- a. Have areas of living plant material installed and/or maintained in conjunction with the installation of synthetic turf. Living plant material shall be provided per the minimum code requirements as provided in any provision ~~this Section~~, herein. No more than 60% of the landscape area shall be synthetic turf and the remaining 40% of the landscaped area shall be in living plant material.
- b. Shall be separated from planter areas and tree wells by a concrete mow strip, bender board, or other barrier/edging material to prevent the intrusion of living plant material into the synthetic turf.
- c. Any irrigation systems proximate to the synthetic turf shall be directed so that no irrigation adversely affects the synthetic turf.
- d. Be maintained in an attractive and clean condition, and shall not contain holes, tears, stains, discoloration, seam separations, uplifted surfaces or edges, heat degradation, or excessive wear.
- e. Be maintained in a green fadeless condition and free of weeds, debris, and impressions.
- f. Shall comply with the requirements of Section 47-20.13 when installed in the swale area.
- g. Shall not be installed in any drainage features required to meet minimum standards of Section 47-20.13.D.

14. All uses of synthetic turf shall require a permit. The permit application shall include, at a minimum, all the following information:

- a. A complete landscape plan showing the area of synthetic turf, area of living plant material, and area and method of separation between these areas.
- b. Details regarding existing or proposed irrigation proximate to the synthetic turf.
- c. Brand and type of synthetic turf, including all manufacturer specifications and warranties.
- d. A scaled cross section and details of the proposed materials and installation, including but not limited to subgrade, drainage, base or leveling layer, and infill.
- e. A survey of the property with a signed affidavit from the property owner that no changes have occurred since the date of the survey.

15. Continuous Maintenance of Installed Synthetic Turf. If, at any time, the Department determines that the synthetic turf which has been installed on a property is no longer in compliance with this section, then it shall constitute a violation of the Code and the property owner shall be required to immediately rectify the items that are considered to be in non-compliance.

R. Finished grade of landscape areas shall be designed to receive roof and surface runoff to assist Florida-Friendly Landscaping™ plantings. Mounding or other surface aesthetics shall not inhibit, or defeat, intended rainwater capture, retention, or percolation.

S. All undeveloped portions of a parcel of land shall be left undisturbed or planted with living ground cover, lawn/turf or sod so as to leave no exposed soil in order to control dust and prevent erosion.

SECTION 10. That Section 47-21.11 - Maintenance, of City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.11. - Maintenance.

A. The owner, tenant, and their agent, if any, shall be jointly and severally responsible for the proper maintenance and protection of landscaping and irrigation systems existing or

hereafter installed within private property and in adjacent right-of-way areas. Maintenance shall include watering, weeding, mowing, fertilizing, treating, mulching, trimming, tree pruning, palm pruning, removal or replacement of dead or diseased plants and removal of refuse and debris on a regular basis so as to continue a healthy growing condition and present a safe, neat, and well-kept appearance at all times. Application and use of fertilizers shall be as provided in Section 28-4.

- B. Large Shade Trees listed as Large Trees in the City's Tree Classification List shall be maintained at an average a minimum mature crown spread minimum canopy diameter of thirty (30) feet and a clear trunk maintained at a minimum of eight (8) feet, consistent with natural mature form based on tree species, and be maintained in accordance with the American National Standards Institute, A-300 standards. or similar accepted standards as published.
- C. Any plant material located within a A landscaped sight triangle, shall be provided and visibility maintained that does not meet the requirements as provided in Section 47-2.2, must be removed or maintained by the property owner to provide clear visibility of oncoming traffic. Plant materials which block visibility of oncoming traffic beyond the sight triangle shall be removed by the property owner or maintained so as to allow clear visibility.
- D. Plant materials which block visibility shall be removed by the property owner or maintained so as to allow clear visibility of oncoming traffic.
- D.E. Landscaping shall be inspected periodically by the dDepartment to insure proper maintenance. The owner, tenant or their agent shall be notified in writing, of any areas which are not being properly maintained and shall provide corrective action within thirty (30) calendar days from the time of notification.
- E. All landscaping and irrigation shall be maintained in accordance with the approved landscape plan on file with the Department, including approved specifications for plant size, quantity, location, and type of landscaping material and irrigation system. This includes landscaping and irrigation installed on property and in adjacent right-of-way areas.
- F. Stormwater and water body shoreline considerations.

1. The Fast Forward Fort Lauderdale *Design and Construction Manual for a Sustainable and Resilient Community and Cohesive Public Realm* (DCM) (December 2019) shall be referenced for additional guidelines and principles for the development of a sustainable, resilient, and low impact design for stormwater management systems within the City of Fort Lauderdale.
2. Grading and design of property adjacent to bodies of water shall conform to federal, state, and local regulations which may include, but are not limited to, the use of berms or swales to intercept surface runoff of water and debris that may contain fertilizers or pesticides.
3. When mowing occurs near the shoreline, the chute shall be directed away from the water body. Riparian or littoral zone plants that do not require mowing or fertilization should be planted in the low maintenance zone. Where water levels vary considerably, care must be taken in the selection of these plants.
4. Mangrove trimming shall be performed only in accordance with Chapter 373, Part IV, Florida Statutes, Chapter 403, Florida Statutes, and Chapter 27, Article XI, of the Broward County Code.
5. In no case shall grass clippings, vegetative material, or vegetative debris be washed, swept, or blown off into stormwater drains, ditches, conveyances, water bodies, wetlands, sidewalks, or roadways, either intentionally or accidentally.
6. Yard waste shall not be disposed of or stored by shorelines, ditches, swales, or the vicinity of storm drains. Yard waste and compost sites must be hidden from street view, maintained to prevent odor, and be free of weeds.

SECTION 11. That Section 47-21.12. - Landscape requirements for vehicular use areas, of the City of Fort Lauderdale, Florida, ULDR is hereby amended as follows:

Sec. 47-21.12. - Landscape requirements for vehicular use areas (VUAs).

- A. VUA Intent. In order to improve the appearance of VUA's and to protect and preserve the appearance, character and value of the surrounding neighborhoods, promote better air quality, offset the urban heat island effect, and thereby promote the general welfare

by providing for installation and maintenance of landscaping, screening and aesthetic qualities, the following minimum VUA landscape requirements are established. This section is not applicable to underground or building enclosed VUA's. ~~A Landscape Permit shall be issued before or in conjunction with a paving or resurfacing permit but shall not include the application of a liquid coating for the purpose of preserving the existing pavement.~~

1. A Landscape Permit shall be issued before or in conjunction with a paving or resurfacing permit but shall not include the application of a liquid coating for the purpose of preserving the existing pavement.

2.4. Vehicular use areas. On the site of a building or structure or on an open lot providing a VUA, landscaping shall be provided in a square footage area equal to a minimum of twenty percent (20%) of the gross VUA. This square footage shall abut and extend no further than ten (10) feet away from a VUA. The landscape area required from a VUA shall consist of perimeter, peninsular and interior landscape areas as follows:;

- a. For VUA areas requiring the installation of five (5) or more trees, species diversity shall be considered using a combination of ~~Large shade Trees, Medium Trees, and Small Trees, and flowering trees, and/or fruiting tree species.~~
- b. ~~Where the minimum required planting area or soil volume cannot be provided within the landscape area at grade for a particular size classification of tree, then a modular suspended pavement system shall be installed under the paved area adjacent to that tree to supplement the soil volume being provided by the proposed planting area to achieve the minimum required soil volume for that particular size classification of tree as required in this section. Where the minimum required soil volume cannot be provided within the landscape area at grade for a VUA tree, then a modular suspended pavement system shall be installed under the paved area adjacent to the tree to achieve the minimum required soil volume, unless otherwise determined by the Department. The modular suspended pavement system must have a H-20 or HS-20 loading rating in accordance from with the AASHTO Standard Specifications for Highway Bridges.~~

- c. A sub-grade soil medium or structural soil may be installed in lieu of modular suspended pavement system in locations where site conditions are not conducive to the use of modular suspended pavement system, such as when a high-water table is present or other site conditions as determined by the Department. Cost shall not be the only factor considered by the Department when permitting the use of a sub-grade soil medium or structural soil in lieu of a modular suspended pavement system in any application or location. ~~Where the minimum required soil volume cannot be provided within the landscape area at grade for a VUA tree, then a sub-grade soil medium (or structural soil) may be installed to connect open soil space areas in single family residential property (such as underneath a sidewalk connecting a swale and turf area to allow for future tree root growth) or in locations where use of a suspended soil system is not feasible such as a when a high water table is present. Cost considerations shall not be considered a sufficient sole reason for use of structural soils.~~

3.2. Perimeter landscape area.

- a. Along the perimeter of a parcel of land when a vehicular use area, abuts a street, exclusive of vehicular access points, a perimeter landscape area shall be provided. The depth of the perimeter landscape area shall be a minimum of five (5) feet, a maximum of twenty-eight (28) feet, and an average of ten (10) feet. The ten (10) feet of perimeter landscape area closest to the VUA may be counted as part of the twenty percent (20%) minimum VUA landscape requirement.
- b. Along the perimeter of a parcel of land when a vehicular use area does not abut a street, exclusive of vehicular access points, a perimeter landscape area shall be provided. The minimum depth of the landscape area shall be a minimum of five (5) two and one-half (2½) feet, except for parcels of land which are less than fifty (50) feet in lot width where the minimum depth shall be two and one-half (2½) feet, as determined by the Department. Parcels of land with less than one-hundred feet (100) feet front-in lot width may provide a perimeter masonry wall at least thirty (30) inches in height between the VUA and the abutting property in lieu of the perimeter landscape area.

- c. When a perimeter landscape area is required pursuant to other provisions of this Code or as a condition of plat, site plan or other development approval, the greatest depth required shall prevail.
- d. Where a business uses a VUA as display area, the first twenty-five percent (25%) of the width of the VUA along the major street may be considered as display area. Large Trees or Medium Trees-shade trees are not required to be placed in the perimeter landscape area adjacent to this first twenty-five percent (25%), but if not planted in this first twenty-five percent (25%) of the perimeter of the VUA along the major street, these trees shall be redistributed to the other seventy-five percent (75%) of the perimeter of the VUA along the major street. Notwithstanding the above, the requirements for street trees, as prescribed herein, still apply.

4.3. Interior landscape area.

- a. At least thirty square feet (30 ft²) ~~square feet~~ of interior landscape area shall be provided for every interior parking and loading space and shall not be part of any perimeter landscape area.
- b. When portions of a VUA are utilized for storage, loading dock, tractor/trailer truck maneuvering, or aircraft maneuvering, and when it is shown that relocation of required landscaping does not defeat the purpose of the VUA landscape and parking requirements, the Department may allow the relocation of interior landscape areas to a location in public view adjacent to the internal buildings. When there are no buildings, the relocated landscape area shall be added to the minimum depth of the perimeter landscape area.

5.4. Peninsular and island landscape areas.

- a. Peninsular and island landscape areas shall be located at the end of a row of more than two (2) consecutive parking spaces where the row terminates at an aisle or driveway and either:

- i. Intermittently at least every ten (10) parking spaces in a row providing a minimum width and length equal to the adjacent parking stall in landscaped area containing one Large Tree or Medium Tree; or
- ii. Intermittently at no more than a maximum of every twenty (20) parking spaces in a row ~~when a minimum width of eight (8) feet plus one (1) foot for every extra parking space over ten (10) is added to one or both of the adjacent islands in the row.~~ and providing the following:
 - 1)e. A minimum width and length equal to the adjacent parking stall plus one (1) foot in width for each parking stall over ten (10) is added to one of the adjacent islands in a row; and
 - 2)b. A minimum of one (1) foot is added to the minimum required height of the required Large Tree or Medium Tree in the adjacent enlarged island for each parking stall over ten (10) added to the parking row.
 - 3)e. Small Trees or Large Palms may be used in peninsular and islands only if it is not feasible to plant a Large Tree or Medium Tree species in the island, as provided herein and at the discretion of the Department.
 - 4)e. It is recommended that the placement of the peninsular and island landscape areas within the interior of the VUA be staggered, if possible, so as not to have the islands aligned in a row across the VUA and more evenly distribute the shade being provided within the paved area and offset the urban heat island effect.
- b. When a row of parking spaces is located in a manner where motor vehicles back out directly onto a public right-of-way or alley as allowed by Section 47-20, Parking and Loading Requirements, backout parking spaces for residential uses and motels and hotels shall have one (1) peninsular landscape area for every two (2) spaces. For all other uses there shall be one (1) peninsular landscape area for every four (4) spaces.
- c. Peninsular and island landscape areas shall be at a minimum the same length and width of the adjacent parking space and no less than a minimum of three-

quarters ($\frac{3}{4}$) the length of the adjacent parking space by a minimum of eight (8) feet in width.

- d. All peninsular and island landscape areas shall be planted with at least one (1) Large Tree or Medium Tree. The Department may permit the installation of Small Trees or Large Palms in peninsular islands when it is determined that site conditions prevent the installation of a Large Tree or Medium Tree in the island. However, small trees or palms may be used only if it is not feasible to plant a Large or Medium Tree species in the island, and at the discretion of the Department.
 - e. ~~Peninsular and island landscape areas placed intermittently every ten (10) parking spaces are not necessary when the landscape area adjacent to the front of the parking spaces is fifteen (15) feet or more in depth.~~
5. e. ~~Storage and loading areas.~~ When portions of a VUA are utilized for storage, loading dock, tractor/trailer truck maneuvering, or aircraft maneuvering, and when it is shown that relocation of required landscaping does not defeat the purpose of the VUA landscape and parking requirements, the Department may allow permit the relocation of peninsular and island landscape areas ~~and other interior landscape areas~~ to a location in public view adjacent to the internal buildings. When there are no buildings, the relocated landscape area shall be added to the minimum depth of the perimeter landscape area.
6. Driveways facing the public right-of-way shall be subject to the following:
- a. Driveways shall have a minimum separation of eight (8) feet from the adjacent public right-of-way which shall provide a pervious landscape area with a minimum of one (1) Large Tree or Medium Tree per forty (40) feet and continuous shrub planting.
 - b. Driveways shall have a minimum separation of eight (8) feet from an adjacent driveway within the same development for the entire length of the driveway which shall provide a landscaped pervious landscape area with a minimum of one (1) Large Tree or Medium Tree per forty (40) feet and continuous shrub planting.

- c. The Department may permit the installation of Small Trees or Large and Small Palms in the landscaped pervious area adjacent to driveways if it is determined by the Department that installation of a Large Tree or Medium Tree is prevented due to overhead obstructions such as utilities. ~~Small Trees or palms may be used only if it is not feasible to plant a Large or Medium Tree species in the landscaped pervious area, and at the discretion of the Department.~~
- d. The minimum tree spacing requirements shall be as follows: Large Trees and Large Palms shall be spaced a minimum of ~~twenty-five (250)~~ feet from another Large Tree or Large Palm; Medium Trees shall be spaced a minimum of ~~twenty fifteen (2015)~~ feet from another Medium Tree or palm; and Small Trees and ~~Small Palms~~ shall be spaced a minimum of ~~fifteen ten (150)~~ feet from another Small Tree or palm; and individual Small Palms shall be spaced a maximum of eight (8) feet distance on center from another Small Palm with no minimum spacing distance required. When two (2) trees or palms of different size categories are planted near each other, the smaller of the minimum spacing distances shall take precedence. Exceptions to the minimum spacing requirements shall require Department approval.
- e. The separation of driveways can be reduced to a minimum of four (4) feet in width with the installation of a modular suspended pavement system or other mitigating alternative to allow space for root development of required trees, as determined by the Department.

B. *VUA criteria.*

1. VUAs shall be visually separated from streets, waterways and abutting properties. A continuous visual barrier feature maintained at a minimum of ~~twenty-four (24)~~ ~~thirty (30)~~ inches in height is required to visually separate VUA from streets, waterways and abutting properties. Continuous ~~v~~visual barrier features may consist of any of the following or combination thereof: a masonry wall, mounding, berm, and hedge. ~~groupings of shrub plants.~~ This continuous feature shall address safety principles included in Crime Prevention Through Environmental Design (CPTED).

2. When a cross-easement agreement to operate abutting properties as essentially one (1) contiguous VUA is in force, the screening requirements between the two (2) properties shall be waived until the agreement is terminated. However, other minimum perimeter and interior landscape requirements of all parcels of land involved shall be provided.
3. Utilities and site amenities such as walkways, flagpoles, transformers, fire hydrants, sewer and water supply lines, trash enclosures, and similar items located on the site shall not be placed in or under required tree planting areas. ~~Lighting fixtures with an overall height of more than ten (10) feet shall be located a minimum of fifteen (15) feet away from shade trees.~~
4. Lighting fixtures with an overall height of more than ten (10) feet shall be located a minimum of fifteen (15) feet away from Large Trees and Medium Trees, and Large Palms, and seven and a half (7.5) feet away from Small Trees or Small Palms.
- ~~5.4.~~ All landscape areas shall be protected from vehicle encroachment, including the nose of peninsular and island landscape areas.
- ~~6.5.~~ Vehicle overhangs do not count toward minimum landscape area requirements and shall not be located within the required landscape area.
- ~~7.6.~~ Every effort shall be made to design around existing, ~~large desirable trees.~~ Parking spaces which are lost because of saved trees and supporting root system pervious area may be counted as spaces installed by the director, up to ten percent (10%) of the required parking count. A maximum of twenty percent (20%) of required parking adjacent to existing trees may be waived by the Department to accommodate existing tree preservation and protection requirements.
- ~~8.7.~~ Parts or all of the requirements of this section may be waived by the ~~D~~department if the VUA is only periodically or intermittently used for vehicular parking such as parking lots at houses of worship or recreational facilities.

C. *VUA planting requirements.*

1. One (1) tree and six (6) shrubs shall be required for every one thousand square feet (1,000 ~~ft²~~ ~~square feet~~, or fraction thereof, of VUA.
 - ~~a. The first twenty-five percent (25%), or fraction thereof, of the required trees shall be shade species with a three and one-half (3 ½) inch minimum trunk caliper, and shall be evenly distributed between interior and perimeter landscape areas.~~
 - a. The first ~~fifty~~ twenty-five percent (50~~25~~%) of the required trees shall be tree species, listed as Large Trees in the City's Tree Classification List evenly distributed in the interior and perimeter landscape areas. Large ~~trees~~ Trees shall be installed at a minimum height of twelve (12) feet and maintained for maximum canopy spread to offset the urban heat island effect.
 - b. ~~Twenty-five~~ Fifty percent (25~~50~~%) of the required trees shall be tree species listed as Large Trees or Medium Trees in the City's Tree Classification List, shall be shade species with a two and one-half (2 ½) inch minimum trunk caliper. Medium trees shall be installed at a minimum height of twelve (12) feet and maintained for maximum canopy spread to offset the urban heat island effect.
 - c. Twenty-five percent (25%) of the required trees ~~may~~ shall be a combination of ~~tree species listed as Small Trees, Large Palms, or Small Palms, as listed in the City's Tree Classification List. or palm species.~~ Small Trees shall be installed at a minimum height of ten (10) feet and ~~Palm trees shall be installed with a minimum clear trunk of eight (8) feet~~ and maintained for maximum canopy spread to offset the urban heat island effect.
 - d. A Large Palm may be installed in lieu of a Large Tree or Medium Tree when space is insufficient for the planting of a Large Tree or a Medium Tree. The number of Palms installed may not exceed thirty-five percent (35%) of the total number of trees required in the VUA.

~~e.d.c.~~ Shrubs, when installed to screen a VUA, shall be a minimum of twenty-four (24) inches high at time of installation and be spaced a maximum of thirty (30) inches on center. Shrubbery shall be permitted to grow and shall be maintained at a maximum height of thirty (30) inches. Shrub plantings shall address safety principles included in Crime Prevention Through Environmental Design (CPTED). Twenty percent (20%) of the required trees shall be conspicuously flowering species.

~~f.e.d.~~ Vines used in conjunction with wire fences to screen a VUA shall be a minimum of thirty (30) inches in height immediately after planting, have a minimum of three (3) runners with plants spaced a maximum of six (6) feet on center. Twenty percent (20%) of the required trees shall be palm species.

~~e.~~ Ten percent (10%) of the required trees shall be optional species.

- ~~2.~~ The types of trees and the percentage requirements provided in this subsection ~~a~~1 C may be varied by the department if it is found that installation of a different type of tree would to create a more compatible design image with trees located on adjacent sites, as determined by the Department.
- ~~3.~~ The minimum tree spacing requirements in perimeter landscape areas shall be as follows: Large Trees and Large Palms shall be spaced a minimum of ~~twenty-five (25)~~ twenty (20) feet ~~apart~~ from another Large Tree or Large Palm; Medium Trees shall be spaced a minimum of ~~twenty fifteen (2015)~~ twenty (20) feet ~~apart~~ from another Medium Tree or palm; and Small Trees and Small Palms shall be spaced a minimum of ~~fifteen ten (15-10)~~ ten (10) feet from another Small Tree or palm; and Small Palms shall be spaced a maximum of eight (8) feet distance on center from another Small Palm. When two (2) trees or palms of different size categories are planted near each other, the ~~larger~~ smaller of the minimum spacing distances shall take precedence. Exceptions to the minimum spacing requirements shall require Department approval.
- ~~3.~~ Where a business uses a VUA as display area, the first twenty-five percent (25%) of the width of the VUA along the major street may be considered as display area. Shade trees are not required to be placed in this first twenty-five percent (25%), but if not planted in the first twenty-five percent (25%) these trees shall be redistributed to the other seventy-five percent (75%) of the site.

~~D. *Failure to install.* It shall be unlawful to occupy or use, or cause to be occupied or used, any VUA unless the required landscaping has been installed and approval has been obtained for the use of such VUA. Approval for use of a VUA shall be by certificate of occupancy or use approval by the director. When a VUA is used without first having obtained approval, the director shall notify the owner or occupier of the land, in writing, to stop the use. If this notice is not complied with by the owner or occupier of the land, the VUA shall be barricaded and remain unoccupied and barricaded until the required landscaping is installed and use approval issued.~~

~~E. *Exceptions.* The board of adjustment may approve VUA's which do not comply with the provisions of this section for a specified length of time, not to exceed one (1) year, when the board finds that such approval is necessary to relieve hardship and would not violate the intent and purpose of these regulations. Prior to the expiration of the approved time period, the board may approve an extension of the time not to exceed one (1) year.~~

D.F. *Existing vehicular use areas.* Existing VUA's shall be considered as new and brought into conformity with the minimum requirements of this section upon the occurrence of any one (1) of the following conditions:

1. When a vehicular use area is expanded or enlarged by a cross easement agreement or by additional paving resulting in an increase of twenty-five percent (25%) or more of the existing vehicular use area square footage.
2. When there is an addition which increases the total ground floor area of all existing buildings on the property more than twenty-five percent (25%).
3. When a building or use has lost its nonconforming status in accordance with Section 47-3, Nonconforming Uses, Structures and Lots.
4. When there has been a denial of a change of use, pursuant to Section 47-3.5, and the change of use will result in the use, structure, or both being required to meet the ULDR requirements.

E.G. *Retroactive VUA landscaping.* Any parcel of land upon which there is located a VUA which existed prior to July 7, 1977 shall meet at least fifty percent (50%) of the

landscaping requirements for VUAs. If a VUA cannot be redesigned without reducing the number of required parking spaces or reducing the number of parking spaces provided for use of the parcel which would be required if based on the minimum off-street parking requirements for such use in effect on March 6, 1990, landscape requirements for VUAs shall be provided to comply to the maximum extent possible without reducing the number of required parking spaces.

- ~~1. Any owner of a parcel of land upon which there is located a vehicular use area which existed prior to July 7, 1977 shall meet at least fifty percent (50%) of the requirements of new vehicular use areas. If a vehicular use area cannot be redesigned and the owner is unable to meet this fifty percent (50%) requirement without reducing the number of required parking spaces or reducing the number of parking spaces provided for use of the parcel which would be required if based on the minimum off-street parking requirements for such use in effect on March 6, 1990, the owner shall comply to the maximum extent possible without reducing the number of required parking spaces.~~
- ~~2. The department shall be authorized to inspect each VUA and provide, as necessary, written notification to the owner, tenant or agent, if any, of the terms and provisions of these regulations. The owner shall submit a landscape plan to the department and obtain any required permits within thirty (30) days from receipt of notification. Installation shall be completed within ninety (90) days from receipt of the initial notification.~~

SECTION 12. That Section 47-21.13, Landscape requirements for all zoning districts, of the City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.13. – Landscape requirements for all zoned districts.

A. The following is a chart which provides the landscape requirements for each zoning district:

Zoning District	Landscape Requirements (the below numbers correspond with text in subsection 47-21.13.B)
RS-4.4, RS-8	1, 10, <u>14</u> , <u>16</u>
RC-15, RD-15	1, 2, 10, <u>14</u> , <u>15</u> , <u>16</u> , <u>17</u>
RM-15, RML-25, RMM-25, RMH-25, RMH-60, MHP	1, 2, 3, 10, 15, <u>16</u> , <u>17</u>
R-O, R-O-C	1, 2, 3, 4, 10, <u>16</u> , <u>17</u>
R-O-A	1, 2, 5, 10, <u>16</u> , <u>17</u>
CB, X-Use	1, 2, 7, 8, 10, <u>16</u> , <u>17</u>
B-1, B-2, B-3, I, CF, CF-H, CF-S, CF-HS, P, T, U, I	1, 2, 6, 7, 8, 10, <u>16</u> , <u>17</u>
AIP, CC	1, 2, 7, 8, <u>10</u> , <u>13</u> , 40 , <u>16</u> , <u>17</u>
GAA	1, 2, 8, 9, <u>10</u> , <u>13</u> , 40 , <u>16</u> , <u>17</u>
H-1	1, 2, 7, 8, 10, <u>16</u> , <u>17</u>
PEDD	1, 2, 7, 8, <u>10</u> , 11, 12, 40 , <u>16</u> , <u>17</u>
PRD, ABA, IOA, NBRA, SBMHA, SLA	1, 2, <u>10</u> , 14, 40 , <u>16</u> , <u>17</u>
Special Uses and Districts (RAC, etc.) (see Section 47-21.11.)	(see Section 47-21.14.)

B. Landscape requirements.

1. ~~Yards and other P~~portions of a parcel of land not utilized for structures, required walks, vehicular use area including VUA required landscaping, decking, pool and other impervious areas, ~~shall be covered with a lawn or ground cover and shall comply with the following:~~

- a. ~~There shall be at least one (1) tree for each one thousand (1,000) square feet of net lot area or portion thereof. This tree planting requirement is in addition to the VUA landscaping requirements. Twenty (20) percent of the trees shall be shade trees.~~
- a. For other than a single family dwelling as defined in Section 47-35:
- i. One (1) tree is required for each one thousand square feet (1,000 ft²) square feet of net lot area or portion thereof. This tree planting requirement is in addition to the VUA landscaping requirements; and
 - ii. Twenty-five ~~Fifty~~ percent (~~50~~25%) of the trees shall be Large Trees, ~~twenty-five~~ fifty percent (~~25~~50%) of the trees shall be Large Trees or Medium Trees, and twenty-five percent 25% of the trees shall be a combination of Small Trees, Large Palms, ~~or~~ Small Palms, flowering trees, and fruit trees. Where space is limited for the planting of Large Trees or Medium Trees, one (1) Large Palm may equal one (1) Large Tree or Medium Tree. In addition, a grouping of three (3) Small Palms, may equal one (1) Large Tree or Medium Tree. For such groupings, individual Small Palms shall be planted a minimum of three (3) feet and a maximum of six eight (68) feet distance on center from another Small Palm, may equal one (1) required Large Tree or Medium Tree. Clustering, or multi-stem species of palms, may be considered as counting towards one (1) required tree, as determined by the Department. However, the maximum percentage of palms provided to meet this requirement shall not exceed fifty percent (50%) of the total number of trees required in the net lot area.
 - iii. The remaining portions shall be planted with appropriate landscape materials.
- b. ~~For a one-family residence a minimum of four (4) trees are required. At least three (3) of the four (4) required trees shall be located in the front yard, one (1) of which must be a shade tree. At least one (1) tree shall be located in the back yard. If palms are used to meet this requirement, a cluster of three (3) palms, one of which must have at least eight-foot of trunk wood height, shall equal one (1) required tree.~~
- b. For a single family dwelling as defined in Section 47-35:

i. Four (4) trees are required and shall be installed such that:

1) One (1) ~~Three (3)~~ trees shall be located in the front yard with one (1) being a Large or Medium Tree; and

2) One (1) tree shall be located in the back yard in a portion of the lot that is not in the front yard, such as the side yard or rear yard; and

3) One (1) tree shall be either a Large or Medium Tree as listed in the City's Tree Classification List; and

~~A group of three (3) individual Small Palms, planted a minimum of three (3) feet and a maximum of six (6) feet apart, may equal one (1) required tree. Clustering, or multi-stem, species of palms may be considered as counting towards one (1) required tree, as determined by the Department~~

4) A group of three (3) individual Small Palms, planted a maximum of eight (8) feet distance on center, may equal one (1) required tree. However, the maximum percentage of palms provided to meet this requirement shall not exceed fifty percent (50%) of the total number of trees required.

ii. The remaining portions shall be planted with appropriate landscape materials.

~~c. The director may revise the shade tree requirement provided in subsection a. and the requirements of subsection b. if it is found that the applicant is unable to meet the planting requirements for reasons such as constraints of the planting area, inconsistency with existing desirable trees, building design, existing utilities that would be compromised, safety considerations or other factors exist that support a modification of the requirements because it would further the overall purpose of the landscape regulations.~~

c. Exceptions. The Department may revise the Large and Medium Tree requirement provided herein if it is found that the parcel is unable to meet the planting requirements for reasons such as constraints of the planting area, inconsistency with existing desirable trees, building design, existing utilities that would be compromised, safety considerations or other factors exist that support

a modification of the requirements because it would further the overall purpose of the landscape regulations.

2. When the parcel of land includes offstreet parking for other than a ~~one~~ single family dwelling, VUA landscaping shall be required in accordance with this section.
- ~~3. A minimum of thirty-five percent (35%) of the gross lot square footage shall be in landscaping, maintained by an irrigation system. The minimum twenty percent (20%) VUA landscaping may be used toward fulfilling the gross thirty-five percent (35%) minimum. Sandy beach on oceanfront parcels of land may be included in the gross minimum, but need not be planted nor maintained by an irrigation system.~~
3. A minimum of thirty-five percent (35%) of the gross lot square footage shall be in landscaping, maintained by an irrigation system with the following allowances:
 - a. The minimum twenty percent (20%) VUA landscaping may be used toward fulfilling the gross thirty-five percent (35%) minimum-; and
 - b. Sandy beach included within oceanfront parcels of land under private ownership may be calculated in the gross minimum and shall comply with Chapter 62.B of the Florida Administrative Code but need not be planted nor maintained by an irrigation system.
4. When no parking areas or circle driveways are between the front property line and front building setback line, the minimum gross lot landscape requirement may be reduced to twenty-five percent (25%) of the parcel of land.
5. A minimum of forty percent (40%) of the gross lot square footage shall be in landscaping, maintained by an irrigation system. The minimum twenty percent (20%) VUA landscaping may be used toward fulfilling the gross forty percent (40%) minimum. Sandy beach on oceanfront parcels of land under private ownership shall be included in the gross minimum; and shall comply with Chapter 62.B of the Florida Administrative Code, but need not be planted nor maintained by an irrigation system. When no fences, walls or planter boxes having an overall height of more than thirty-six (36) inches, walks wider than five (5) feet, or parking areas or circle driveways are between the front property line and the front building set back line,

the minimum gross lot landscape requirement may be reduced to thirty percent (30%) of the total square footage of the parcel of land.

6. The first twenty (20) feet of the yard fronting on those streets subject to the Interdistrict corridor requirements as provided in Section 47-23.9 shall be in landscaping. No paving, parking, or walkway shall be allowed in said twenty-foot area, other than necessary access from a right-of-way, unless otherwise specifically permitted in Section 47-23.9, Interdistrict corridor requirements.
7. For parcels on a waterway, the first twenty (20) feet of the yard fronting on the waterway shall be landscaping. Measurement shall be from the existing bulkhead line. When the parcel is used for marina or yacht club purposes or for other businesses which are established primarily to repair or service watercraft, the waterway landscape area setback is not required, unless otherwise specifically permitted in Section 47-23.8, Waterway Use.
8. When a parcel of land is used for residential purposes, a minimum amount of open space and landscaping shall be provided as required by Section 47-18.21.H.2, Mixed Use Development. When the minimum twenty percent (20%) VUA landscaping is provided, such landscape area may be used toward fulfilling the minimum requirement. Sandy beach on oceanfront parcels of land under private ownership may be included in the gross minimum and shall comply with Chapter 62.B of the Florida Administrative Code, but need not be planted nor maintained by an irrigation system.
9. Location of landscaping on G-A-A zoned parcels shall be subject to restrictions of the Federal Aviation Administration.
- ~~10. To reduce exposure to epidemic tree loss and maximize genetic diversity, a wide variety of trees should be planted in the urban forest. Variety also minimizes the number of trees having the same growth speed and ultimate mature age. This diversity or tree mix is based on the overall number of trees required with not more than one-half (½) of the required tree count being in one (1) genus. At least forty percent (40%) of all required trees shall consist of native species. In nonresidential zoning districts lying east of the Intracoastal Waterway, if any portion of a development site is across a right-of-way from a development site with residential zoning or a residential use, shade trees shall be required along the right-of-way~~

~~abutting the side of the development site across from the residential zoned or used site. The location and number of the shade trees shall be determined by the department based on the height, bulk, mass and design of the structures on the site and the proposed development's compatibility to surrounding properties. The requirement for shade trees, as provided herein, may be located within the public right-of-way as approved by the entity with jurisdiction over the abutting right-of-way. This requirement may be varied as approved by the department based on existing or proposed physical conditions which may prevent the ability to comply with the requirements of this subsection. This requirement shall be in addition to the requirements provided in Section 47-25.2., Adequacy Requirements.~~

10. Species diversity shall be considered using a combination of Large Trees, and Medium Trees, Small Trees, flowering trees, and fruiting trees, as well as Large Palms and Small Palms species, and tree/palm species diversity shall be provided in accordance with the following:
 - a. For the installation of up to six (6) trees, a minimum of two (2) species shall be utilized;
 - b. For the installation of up to twelve (12) trees, a minimum of three (3) species shall be utilized;
 - c. For the installation of up to eighteen (18) trees, a minimum of four (4) species shall be utilized;
 - d. For the installation of up to twenty-four (24) trees, a minimum of five (5) species shall be utilized;
 - e. For the installation of up to fifty (50) trees, a minimum of six (6) species shall be utilized;
 - f. For the installation of up to seventy-five (75) trees, a minimum of seven (7) species shall be utilized;
 - g. For the installation of up to one hundred (100) trees, a minimum of eight (8) species shall be utilized;

- h. For the installation of one-hundred and one (101) trees and more, a minimum of nine (9) species shall be utilized:
 - i. Large Palm and Small Palm species shall constitute no more than twenty percent (20%) of the total trees species provided and must have a minimum of eight (8) feet of clear trunk at installation; and
 - j. In nonresidential zoning districts lying east of the Intracoastal Waterway, if any portion of a development site is across a right-of-way from a development site with residential zoning or a residential use, Large Trees shall be required along the right-of-way abutting the side of the development site across from the residential zoned or used site. This requirement shall be in addition to the requirements provided in Section 47-25.2., Adequacy Requirements.
11. In the PEDD zoning district, when a fence or wall is located adjacent to a street, the setback area between the property line and the fence or wall shall be landscaped with one (1) vine, shrub, standard, or flowering tree placed at least every nine (9) running feet or portion thereof along such fence or wall a continuous planting consisting of a combination of groundcover, vines, shrubs and ornamental trees.
12. The requirements for PEDD may be modified by Section 47-15, Port Everglades Development District.
13. The first one-half ($\frac{1}{2}$) of the required setback abutting the street shall be in landscaping and permanently maintained by the owner or occupant in such a manner as to provide a park-like setting for the industrial buildings. No paving, parking or walkways shall be allowed in said area other than necessary access from a right-of-way.
14. A minimum of twenty-five percent (25%) ~~landscaped~~ pervious area is required for single and multiple family development.
15. ~~Provide For multi-family, townhouse or cluster development, there shall be at least twelve (12) ornamental shrubs for each one thousand (1,000) square feet~~ there shall be at least twelve (12) ornamental shrubs for each one thousand (1,000) square feet (1,000 ft²) of net lot area or portion thereof. Shrub planting requirements are in addition to the VUA requirements. At least forty (40) percent of all required shrubs shall consist of native species.

~~16. *Street trees.* In order to provide for adequate landscaping along streets within the city, street trees shall be required along the length of the property abutting a street. Required street trees shall be planted in an area located between the roadway and the property line. Where such a planting strip does not exist or is impractical to provide, street trees may be located in a perimeter planting area where this perimeter landscaping area adjoins the street right-of-way.~~

~~A minimum of fifty percent (50%) of the required street trees shall be shade trees, and the remaining street trees may be provided as flowering or palm trees. Street trees shall be provided at a ratio of one street tree per forty (40) feet of street frontage, or greater fraction thereof, not subtracting ingress and egress dimensions. Where overhead utilities exist, required street trees may be small trees provided at a ratio of one street tree per twenty (20) feet of street frontage.~~

~~The street trees shall be planted at a minimum height and size in accordance with the requirements of Section 47-21, Landscape and Tree Preservation Requirements, except in the downtown RAC districts the requirements of Sec. 47-13.20.H.8 shall apply. The requirements for street trees, as provided herein, may be located within the public right-of-way as approved by the entity with jurisdiction over the abutting right-of-way.~~

~~The use of structural soil is required in paved sites to provide adequate soil volumes for tree roots under pavements.~~

16. Street trees shall be required along the length of a parcel the property abutting a street as follows:

a. Required street trees shall be planted adjacent to a street in the area located between the street and the property line, within twelve (12) feet of the edge of pavement or curb of a street or such other distance as determined by the Department in accordance with this section. Where such a planting area does not exist or is unfeasible to provide, street trees may be located in a perimeter planting area adjacent to the street, as determined by the Department.

b. A minimum of seventy-five percent (75%) of the required street trees shall be trees listed as Large Trees or Medium Trees in the City's Tree Classification List, and the remaining twenty-five percent (25%) of the required street trees may be

a combination of Small Trees, Large Palms, Small Palms, and flowering trees, fruiting trees, and/or Large palm species. One (1) Large Palm or grouping of three (3) individual Small Palms may be installed in lieu of a Large Tree or a medium tree when space is insufficient for the installation of a Large Tree or a Medium Tree. For such groupings, each Small Palm shall be planted a maximum of eight (8) feet distance on center from another Small Palm. The maximum percentage of palms provided to meet this requirement shall not exceed fifty percent (50%) of the total number of street trees required.

- c. Street trees shall be provided at a ratio of one (1) street tree per forty (40) feet of street frontage, or greater fraction thereof, not subtracting ingress and egress dimensions. Where overhead utilities exist, required street trees may be Small Trees provided at one (1) street tree per twenty (20) feet of street frontage.
- d. Street trees shall be provided at a minimum height of twelve (12) feet for Large Trees and Medium Trees, at a minimum height of ten (10) feet for Small Trees, and palms shall be provided with at a minimum of eight (8) feet of clear trunk for Large Palms.
- e. Street trees shall be maintained for maximum canopy spread to offset the urban heat island effect.
- f. Where the minimum required planting area or soil volume cannot be provided within the proposed landscape area at grade between the street and the sidewalk for a Large Tree or Medium Tree, then a modular suspended pavement system shall be installed under the sidewalk or paved area adjacent to the tree to supplement the soil volume being provided by the proposed planting area to achieve the minimum required soil volume for that particular size classification of tree as required in this section, unless otherwise determined by the Department. The modular system must have a H-20 or HS-20 loading rating in accordance from with the AASHTO Standard Specifications for Highway Bridges.
- g. Where the minimum required soil volume cannot be provided within the proposed landscape area at grade between the street and the sidewalk for a Large Tree or Medium Tree or as provided in 47-21.13.B.16.f, then a sub-grade

soil medium (or e.g. structural soil) may shall be installed under the following conditions:

- i. On single family or duplex lots for applications that facilitate the connection of ~~to connect~~ open soil space areas (such as underneath a public sidewalk connecting a swale and landscape area to allow for future tree root growth); or
- ii. At ~~in~~ locations where ~~use of a suspended soil system is not feasible~~ site conditions are not conducive to the use of a modular suspended pavement system such as when a high water table is present or other site conditions as determined by Department. Cost shall not be the only factor considered by the Department when permitting the use of a sub-grade soil medium (e.g. structural soil) in lieu of a modular suspended pavement system in any application or location. ~~Cost considerations shall not be considered a sufficient sole reason for use of structural soils.~~
- h. All ~~street trees~~ listed as Large Trees or Medium Trees in the City's Tree Classification List installed within six (6) feet of an existing public sidewalk, public hardscape, or public infrastructure, such as water, sewer, and drainage pipes, shall utilize a root barrier system, as approved by the Department.
- i. The minimum tree spacing requirements for required street trees and palms shall be as follows: Large Trees and Large Palms shall be spaced a minimum of ~~twenty-five (250)~~ feet from another Large Tree or Large Palm; Medium Trees shall be spaced a minimum of ~~twenty-five (2015)~~ feet from another Medium Tree; ~~or palm;~~ and Small Trees shall be spaced a minimum of ~~fifteen~~ ten (150) feet from another Small Tree ~~or palm;~~ and Small Palms shall be spaced a maximum of eight (8) feet distance on center from another Small Palm with no minimum spacing distance required. When two (2) trees or palms of different size categories are planted near each other, the smaller of the minimum spacing distance shall take precedence. Exceptions to the minimum spacing requirements shall require Department approval.
- i. The types of trees and the percentage requirements provided in this subsection b. may be varied to create a more compatible design with trees located on adjacent sites, as determined by the Department.

17. In addition to the landscape requirements of this section, additional landscape requirements may be found in other relevant sections of the ULDR.

SECTION 13. That Section 47-21.14, Additional landscape requirements for special uses and districts, of the City of Fort Lauderdale, Florida ULDR, is hereby amended as follows:

Sec. 47-21.14. - Additional landscape requirements for ~~special~~ specific ~~uses, and districts.~~

A. In addition to the requirements for land zoned in certain districts, additional landscaping shall be required for ~~certain special districts and~~ specific uses as follows:

1. *Downtown Regional Activity Center (RAC).*

a. Within the RAC districts newly planted street trees shall be limited to the following species unless otherwise approved by the Department:

RAC Street	Tree Species*
Broward Boulevard	Royal Palm (<i>Roystonea elata</i>)
Andrews Avenue	Sabal Palm (<i>Sabal palmetto</i>) Carpentaria Palm (<i>Carpentaria acuminata</i>)
Federal Highway	Sabal Palm (<i>Sabal palmetto</i>) Gumbo Limbo (<i>Bursera simarouba</i>) Live Oak (<i>Quercus virginiana</i>) Weeping Willow Tamarind (<i>Lysiloma sabicu</i>)
East 8th Avenue	No designated tree
East 3rd Avenue	Royal Palm (<i>Roystonea elata</i>) Live Oak (<i>Quercus virginiana</i>) Carpentaria Palm (<i>Carpentaria acuminata</i>)
East 1st Avenue	Gumbo Limbo (<i>Bursera simarouba</i>)
West 1st Avenue	No designated tree
West 3rd Avenue	No designated tree
Flagler	Live Oak (<i>Quercus virginiana</i>)

West 2nd Avenue	Little Leaf Calophyllum (<i>Calophyllum antillanum</i>)
West 4th Avenue	Live Oak (<i>Quercus virginiana</i>)
West 5th Avenue	Live Oak (<i>Quercus virginiana</i>)
South 7th Street	No designated tree
East South 6th Street	Royal Palm (<i>Roystonea elata</i>)
West South 6th Street	No designated tree
South 5 Street	No designated tree
S.E. 5th Court	Gumbo Limbo (<i>Bursera simarouba</i>) Maypan Palm (<i>Cocos nucifera</i> var. <i>Maypan</i>)
S.E. 4th Street	Weeping Wild Tamarind (<i>Lysiloma sabicu</i>)
Las Olas Boulevard	Sabal Palm (<i>Sabal palmetto</i>) Live Oak (<i>Quercus virginiana</i>) Maypan Palm (<i>Cocos nucifera</i> var. <i>Maypan</i>) Carpentaria Palm (<i>Carpentaria acuminata</i>)
South 2nd Street, east of city parking garage	Royal Poinciana (<i>Delonix regia</i>) Live Oak (<i>Quercus virginiana</i>)
South 2nd Street, west of city parking garage	Weeping Wild Tamarind (<i>Lysiloma sabicu</i>) Sabal Palm (<i>Sabal palmetto</i>)
South 1st Street	No designated tree
North 1st Street	No designated tree
North 2nd Street	Live Oak (<i>Quercus virginiana</i>) Washington Palm (<i>Washingtonia robusta</i>)
North 3rd Street	Weeping Wild Tamarind (<i>Lysiloma sabicu</i>)
North 4th Street	Gumbo Limbo (<i>Bursera simarouba</i>)
North 5th Street	No designated tree

~~*Black Olive (*Bucida buceras*) trees existing as street trees prior to March 26, 1999 are legal and their existence shall not cause a development to be nonconforming,~~

and shall be considered to meet the street tree requirements for any redevelopment or reconstruction of existing structures adjacent to or in front of said Black Olive trees, but such trees shall not be permitted to be planted or replaced with Black Olive subsequent to this date.

- b. ~~When planted in non-pervious areas, dicot street trees shall be accompanied by expandable tree grates or porous aggregate system which are at least five (5) feet square, with three-eighths (3/8) inch slot openings. Area must meet current ADA standards.~~
- b. Cutouts in a non-pervious surface should be sized to minimize damage to that surface as the tree trunk grows in diameter. This cutout does not represent the soil volume requirement for root growth required in Sec. 47-21.9. L. and can be amended by the Department. Minimum dimensions for cutouts in non-pervious surfaces to accommodate tree trunk growth shall be:
 - i. Eight (8) feet (8') by eight (8) feet (8') for Large Trees having an average mature canopy spread of greater than thirty (30) feet.
 - ii. Six (6) feet (6') by six (6) feet (6') for Medium Trees having an average mature canopy spread between twenty (20) feet and thirty (30) feet.
 - iii. Five (5) feet (5') by five (5) feet (5') for Small Trees having an average mature canopy spread less than twenty (20) feet (20'), and Large Palms.
 - iv. Three (3) feet (3') by three (3) feet (3') for Small Palms trees.
 - v. Exemptions—Exceptions to minimum cutout size can be made for the application of a cold applied, poured in place tree grate system that is designed to bind a selection of decorative aggregates, which provide a bonded, walkable, attractive, and porous surface, as determined by the Department.
- c. ~~All newly planted dicot street trees shall have a minimum caliper of two and one half (2½) inches. Minimum soil volume requirements for trees may shall be:~~
achieved by either providing the appropriate planting area for the size classification of tree to be planted, or by utilizing modular suspended pavement

systems or sub-grade soil medium (e.g., structural soils) adjacent to the tree to provide the minimum soil volume for the tree's root system. Minimum planting areas and soil volume requirements shall be are as follows:

- ~~h. Nine-hundred and seventy-two cubic feet (972 ft³) with a maximum of three (3) feet depth from the surrounding grade for tree species listed as Large Trees in the City's Tree Classification List.~~
 - ~~i. Twelve hundred cubic feet (1,200 ft³) with a minimum of three feet (3') depth from the grade for Large Trees;~~
 - ~~h. Four hundred and eighty-six cubic feet (486 ft³) with a maximum of three (3) feet depth from the surrounding grade for tree species listed as Medium Trees in the City's Tree Classification List.~~
 - ~~ii. Six hundred cubic feet (600 ft³) with a minimum of three feet (3') depth from the grade for Medium Trees;~~
 - iii. Two hundred and seventy cubic feet (270 ft³) with a maximum depth of three (3) feet from the surrounding grade for tree species listed as Small Trees in the City's Tree Classification List. ~~Three hundred cubic feet (300 ft³) with a minimum depth of three feet (3') from the grade for Small Trees; and~~
 - iv. For palms listed as Large Palms on the City's Tree Classification List, the minimum soil volume shall be seventy-five cubic feet (75 ft³) with a maximum depth of three (3) feet from surrounding grade. For palms listed as Small Palms on the City's Tree Classification List, the minimum soil volume shall be twenty-seven cubic feet (27ft³) with a maximum depth of three (3) feet from surrounding grade. ~~Large and Small Palms, the soil volume (ft³) will be calculated by multiplying the square foot (ft²) of mature canopy diameter by the minimum depth of three feet (3') from grade, as determined by the Department.~~
- d. ~~All newly planted monocot street trees shall have a minimum overall height of twelve (12) feet.~~
- d. Minimum trees sizes for required trees shall be:

- i. Large Trees and Medium Trees shall have a minimum height of sixteen (16) feet at time of installation. Small Trees shall have a minimum height of twelve (12) feet at time of installation.
 - ii. Street trees shall have a minimum height of sixteen (16) feet at time of installation.
 - iii. Palms ~~trees~~ shall have a minimum clear trunk of eight (8) feet at time of installation unless specifically excluded herein.
 - e. ~~Planting plans shall obtain the approval of the department. The necessity for installation of an irrigation system for street trees and the type and kind to be used shall be determined by the city based on tree species requirements. A Landscaping Permit shall be required for the installation, removal, relocation, or replacement of any landscaping in the RAC. Prior to the issuance of a Landscape Permit, a Landscape and Tree Document Packet shall be submitted to the Department.~~
 - f. The RAC requirements may be appealed by written request to the Ddepartment. Such appeal shall be accompanied by a plan which shows the location, size, description and species of landscape improvements proposed. The Ddepartment may find that the applicant is unable to observe planting requirements for reasons such as the lack of available plant material, constraints of the planting area or inconsistency with existing street trees or building design. At ~~h~~ the Ddepartment's discretion, when the appeal provides landscaping which is harmonious with adjacent landscaping and uses and is otherwise consistent with the intent and purpose of this subsection, they may approve modifications to Code requirements.
2. Signs. The landscape area required by the sign regulations of this chapter shall be planted with landscaping in compliance with Section 47-22 – Sign Requirements of the ULDR SECTION 47-22. – Sign Requirements. ~~Asphalt and rock shall be removed and the area refilled with clean, fertile soil, as necessary, before planting. The area shall be protected from vehicle encroachment by a barrier placed around the outside edge of the required landscape area.~~

3. *Townhouse developments/zero-lot-line homes/cluster dwellings.* Townhouse developments/zero-lot-line homes/cluster dwellings shall be subject to the same open space and planting requirements as the district in which it is located subject to the following:
 - a. The development area ~~of the~~ calculated in the lot coverage measurement shall be exempt from the calculation of the required landscape area.
 - b. Individual lots owned in fee simple within a townhouse development, zero-lot-line development or cluster development are exempt from the requirements to provide landscaping in the rear yards except for those areas subject to common easements.
4. *Parking garages.*
 - ~~a. Structures which enclose parking shall provide a landscape area between the street and that portion of structure enclosing the parking utilizing trees and ground cover. The minimum square footage of the landscape area to be provided shall be determined by multiplying by five (5) the lineal street frontage of the parcel of land upon which the parking garage is located, and adding four hundred (400) square feet for each corner of the parcels adjacent to a street.~~
 - a. Structures which enclose parking shall provide a landscape area between the street and that portion of structure enclosing the parking as follows:
 - i. Landscape area square footage shall be determined by multiplying the lineal street frontage of the parking garage structure by five (5);
 - ii. When parking garage is located at an intersection of streets, an additional four hundred square feet (400 ft²) ~~square feet~~ of landscape area shall be provided ~~at the~~ at each corner of the intersection; and
 - iii. Landscape area shall contain a combination of continuous trees, shrubs, and ground cover.
 - ~~b. Parking garages constructed in residentially-zoned districts shall meet the landscape requirement of the district in which the garage is located. No paving~~

~~or walkways shall be allowed in the yard fronting on the principal street other than necessary access from that right-of-way.~~

b. Parking garages constructed in residentially-zoned districts shall meet the landscape requirement of the district in which the garage is located, in addition to Sec. 47-21.14 A. 4. a.

c. No paving or walkways shall be allowed in the yard fronting on the principal street other than necessary access from that right-of-way.

5. *House of worship.* The landscaping requirements for a house of worship shall be the same as the zoning district in which the house of worship is located. ~~VUA landscaping shall be required. A landscaping irrigation system shall be installed.~~

~~6. *Backout parking.* Except when used for a single family dwelling, when a parcel of land has a VUA designed to permit motor vehicles to back directly out onto a public right-of-way, including an alley, a landscape area at the front of the parking spaces unobstructed by a fence or wall shall be provided. The landscape area shall be a minimum of five (5) feet in width and shall contain not less than ten (10) square feet for each linear foot of VUA fronting on the street. The landscaping for this area shall consist of hedges and trees. There shall be no more than two (2) parking spaces in a row without a tree island when the parking serves a residential or hotel/motel use, and no more than four (4) parking spaces in a row without a tree island when the parking serves any other use. A poured six (6) inch high concrete curb shall be placed across the nose of tree islands.~~

6. *Backout parking.*

a. For residential uses, motels, and hotels, when a row of parking spaces is located such that vehicles back out directly onto a public right-of-way, excluding alleys, backout parking spaces shall have one (1) peninsular landscape area for every two (2) spaces.

b. All other uses shall have one (1) peninsular landscape area for every four (4) spaces.

c. Peninsular and island landscape areas shall be a minimum of eight (8) feet wide

(inside of curb to inside of curb) and the length of the adjacent parking space and shall contain one (1) Large Tree or Medium Tree installed at twelve (12) feet tall and landscaping in the remainder of the area.

- d. Peninsular and island landscape areas shall have a poured six (6) inch tall concrete curb installed across the nose.
- e. Except for a single-family dwelling, when a row of parking spaces is located such that vehicles back out directly onto a public right-of-way, excluding alleys, an unobstructed landscaped area at the front of each parking space shall be provided. The landscape area shall be the same width of the parking space, a minimum of five (5) feet in depth and shall contain a continuous hedge installed at twenty-four (24) inches tall and one Small Tree or ornamental tree installed at eight (8) feet tall.

7. *Noncontiguous parking lots.*

- a. Freestanding, noncontiguous, or remote VUAs shall be landscaped according to minimum VUA requirements and maintained by an irrigation system.
- b. The parcel shall contain no dumpster or structures other than fences, walls, or lights poles. If a dumpster or structure is located on the property, the requirements of the zoning district where the VUA is located shall apply.

8. *Fences and walls.* On a parcel of land in a non-residential district, when a fence or wall is located adjacent to a street, it shall be subject to the requirements of Section 47-19.5.

9. ~~*Bufferyard requirement.* The landscape area required by bufferyard requirement as provided in Section 47-25.3, Neighborhood Compatibility Requirements, is intended to provide a heavily vegetated view from the residential parcel. The tree requirements for the bufferyard are in addition to trees required to be installed to comply with general tree planting requirements and trees required for a VUA and include a minimum of one (1) tree for every three hundred (300) square feet or fraction thereof of bufferyard area. Trees shall be dicot types obtaining a fifteen-foot minimum height at maturity as listed in the table of tree evaluation and~~

~~monocots obtaining a twelve-foot minimum height at maturity. The species mix shall be at least two-thirds ($\frac{2}{3}$) dicots.~~

9. Bufferyard requirement. The landscape area required by bufferyard requirement as provided in Section 47-25.3, Neighborhood Compatibility Requirements, is intended to provide a heavily vegetated view from the residential parcel. The tree requirements for the bufferyard are as follows:
- a. Trees are in addition to those required to be installed to comply with general tree planting and VUA requirements; ~~and~~
 - b. Trees shall be provided at a minimum of one (1) tree for every three hundred square feet (300 ft²) ~~square feet~~ or fraction thereof of bufferyard area;
 - c. Trees are to be Large Trees, Medium Trees, or Small Trees reaching a minimum mature height of fifteen (15) feet, or Large Palms or Small Palms reaching a minimum mature height of twelve (12) feet;
 - d. A minimum of seventy-five (75) percent of required trees shall be Large Trees or Medium Trees. The remaining twenty-five (25) percent of required trees shall be a combination of Small Trees, Large Palms, Small Palms, or flowering trees as determined by the Department. Where space is limited for the planting of Large Trees or Medium Trees, one (1) Large Palm may equal one (1) Large Tree or Medium Tree. In addition, a grouping of three (3) individual Small Palms, may equal one (1) required Large Tree or Medium Tree. For such groupings, each Small Palm shall be planted a maximum of eight (8) feet distance on center from another Small Palm. The maximum percentage of palms provided to meet this requirement shall not exceed thirty-five percent (35%) of the total number of trees required in the bufferyard; ~~may be either Small Trees or palm species, as determined by the Department.~~
 - e. The minimum tree spacing requirements for required bufferyard trees and palms shall be as follows: Large Trees and Large Palms shall be spaced a minimum of ~~twenty-five (250)~~ feet from another Large Tree or Large Palm; Medium Trees shall be spaced a minimum of ~~twenty-five (2015)~~ feet from another Medium Tree or palm; ~~and~~ Small Trees shall be spaced a minimum of ~~fifteen ten (150)~~ feet from another Small Tree or palm. When two (2) trees or palms of different

size categories are planted near each other, the smaller of the minimum spacing distances shall take precedence. Exceptions to the minimum spacing requirements shall require Department approval; and

- f. The types of trees and the percentage requirements provided in this subsection 9 may be varied to create a more compatible design with trees located on adjacent sites, as determined by the Department.

10. *Self storage/mini warehouse facility.* The twenty-foot yard required as provided in Section 47-18.29 shall be in landscaping. A vehicular use area may also be located between the structure and street and may divide the landscape area as long as there is a total of twenty (20) feet in landscape area. This twenty (20) feet landscape area may be used to meet the landscape area required pursuant to Section 47-18.29.

SECTION 14. That Section 47-21.15, Tree preservation, of the City of Fort Lauderdale, Florida, is hereby amended as follows:

Sec. 47-21.15. – Regulations for the preservation of trees and palms ~~Tree preservation~~

~~A. Tree removal:~~

- ~~1. It shall be unlawful to remove a tree described as follows without first obtaining a tree removal permit:~~
- ~~a. A dicot or conifer tree having a diameter of three (3) inches or more or a monocot having eight (8) feet or more of wood, on other than a developed one family residential lot;~~
- ~~b. On a developed one family residential lot, if:~~
- ~~i. The tree is to be removed in anticipation of redevelopment and it is a dicot or conifer tree having a diameter of three (3) inches or more or a monocot having eight (8) feet or more of wood;~~
- ~~ii. No redevelopment is anticipated and the tree to be removed is a dicot or conifer having a diameter of eight (8) inches or more measured four and one half (4½) feet above grade; or~~

- ~~iii. A palm in the genus of Cocos, Roystonea and Phoenix (except roebellini) with eight (8) feet or more of wood.~~

~~For the purposes of this section, redevelopment is defined as a change of use, an added use such as an additional living unit or an office, or remodeling or demolition of more than fifty (50) percent of the existing interior. Room additions to a structure, which will continue as a one family use do not constitute redevelopment. An application for a building permit to redevelop a one family property within twelve (12) months of previously unpermitted tree removal shall be construed as anticipation of redevelopment and will require tree removal permits and equivalent replacement.~~

- ~~2. Application for a tree removal permit shall be made to the department. Upon receipt of an application for tree removal, the department shall determine the equivalent replacement or equivalent value of each tree to be removed. No permit nor replacements shall be required for removal of Schinus spp. (Pepper Trees, Florida Holly), Metopium toxiferum (Poison Wood), Casuarinas spp. (Australian Pine, Beefwood), Melaleuca spp. quinquinervia and M. leucadendron (Paper Bark Trees), Euphorbia tirucalli (Pencil Tree), Bischofia javanica (Bischofia, Bishopwood), Acacia auriculaeformis (Earleaf Acacia), Araucaria excelsia (Norfolk Island Pine), Cupaniopsis anacardioides (Carrotwood) or Brassia actinophylla (Schefflera).~~
- ~~3. Effort shall be made to design around existing, large, desirable trees. If, as determined by the department, there are large desirable existing tree(s) and the proposed placement of the site plan elements will not save such tree(s) and sufficient root system to support the tree(s), and such tree(s) are capable of being protected by a reasonable modification of said plan, then a tree removal permit may be denied by the department. In addition, if a permit is sought to remove an existing, large, desirable tree because its root system is causing damage to the associated sidewalks, paved areas, or septic systems, or if falling tree debris is staining nearby surface area, then the tree removal permit may be denied by the department if alternatives such as sidewalk bridging, canopy reduction, or trimming have not been considered or attempted, and such action would address the problem while preserving the tree. An alternative or redesigned site plan shall then be submitted.~~
- ~~4. The department shall issue a tree removal permit when the applicant for such permit has agreed to fulfill one (1) of the following requirements:~~

- a. ~~That the tree, if transplanted, will be moved by the applicant following the American National Standards Institute A-300 standards or similar accepted standards as published, to another location within the city and guaranteed by the permit holder for one (1) year for trees of less than or equal to six (6) inches in caliper and for two (2) years for trees greater than six (6) inches in caliper.~~
 - b. ~~That the tree, if destroyed, will be replaced by trees of equivalent replacement, as determined by the department, planted on the site from which the tree was removed. Sufficient room shall remain on the site to allow replacements to establish a mature canopy spread, based on usual growth characteristics of the species. A replacement planting plan may be required.~~
 - c. ~~That the tree, if destroyed, will be replaced by new trees of equivalent replacement upon public lands and guaranteed by the donor for three hundred sixty-five (365) days. The replacement species, size and planting location shall be determined by the department.~~
 - d. ~~That a tree, if destroyed, will be replaced by a container grown tree or trees of equivalent replacement delivered to the city nursery or other location. The delivery location, as well as the replacement species and size, shall be determined by the department.~~
 - e. ~~That the tree, if destroyed, will be replaced by the applicant by providing the equivalent value to the city's tree canopy trust fund.~~
 - f. ~~That a specimen tree having a caliper measurement of eighteen (18) inches or more shall be limited to the option of providing equivalent value by cash only deposited to the tree canopy trust fund at the time the removal permit is issued.~~
5. ~~Any tree removed without a permit having first been issued by the department shall be replaced by equivalent replacement or equivalent value. If the tree removed was a tree required by ordinance, the equivalent replacement shall be made by planting the largest tree reasonably available upon the site. Any remainder of equivalent replacement shall be planted on public property by the violator, at a location determined by the department and guaranteed for three hundred sixty-five (365) days. If the tree removed was a nonrequired tree, equivalent replacement or value shall be provided in accordance with subsection A.4.~~

- ~~6. In the event that insufficient trunk remains of the removed tree so that equivalency cannot be determined thereby, size and equivalency shall be estimated based upon trees of the same species existing in the vicinity, considering, among other things, aerial photographic records and other available data relative to the area.~~
- ~~7. Failure of an applicant to replace a removed tree within sixty (60) days after being notified by the department shall be a violation of this section. Removals necessitated by permitted construction may be replaced after the sixty-day limit, but prior to the issuance of a certificate of occupancy or final use approval.~~
- ~~8. Trees which have been planted and are being grown in a state-certified plant nursery or botanical garden for sale to the general public and are being transplanted in order to be utilized as landscape material do not require tree removal permits.~~
- ~~9. A monetary guarantee may be required to insure compliance with requirements. This bond, cash, letter of credit, or certificate of deposit in favor of the city shall be computed based upon the equivalent value of the tree or trees in question. The subsequent deposit of this monetary guarantee into the tree canopy trust fund shall immediately fulfill tree replacement requirements. Otherwise, when tree planting is used to fulfill the tree replacement conditions, the security shall be held by the city and the guarantee period shall extend at least three hundred sixty five (365) days past the replacement planting date. The monetary guarantee shall be in addition to any bond required by any other governmental entity.~~
- ~~10. In the event of storms, accidents or other acts of God of an emergency nature by reason of which life, limb or property is in immediate jeopardy, or for trees which have died due to lightning, disease, storm damage, or other natural causes, part or all of the terms and provisions of this section may be waived by the department.~~

~~B. *Tree services and arborists.*~~

- ~~1. All tree services working within Fort Lauderdale shall have a current Broward Tree Trimmer License and comply with all applicable Broward Tree Trimmer license regulations.~~

- ~~2. Vehicles used by a tree service/arborist operating within the city shall be clearly marked with the name of the tree service/arborist. Certified arborists shall display the certified logo and registration number, if any.~~
- ~~3. A photocopy of the current business tax receipt shall be available for inspection at each job site.~~
- ~~4. Standards for cutting on or repair to dicotyledonous species shall be in accordance with the American National Standards Institute A-300 standards or similar accepted standards as published.~~
- ~~5. Persons engaged in business as a tree service in the city shall adhere to the American National Standards Institute, A-300 standards or similar accepted standards as published on all tree species within the City of Fort Lauderdale.~~

~~C. *Tree protection.*~~

- ~~1. Trees retained on a site shall be protectively barricaded before and during construction activities as approved by the department. A monetary performance assurance instead of or in addition to a protective barricade may be required to ensure protection of a tree or trees or to guarantee restoration of an equivalency. The amount of said assurance shall be based upon the equivalent value of the tree or trees specifically covered. Any assurance required for a "protected tree" shall be four (4) times the equivalent value for that tree.~~
- ~~2. Underground utility lines shall be routed around existing trees to the outside of the dripline. If this is not possible, as determined by the department, a tunnel made by a power-driven soil auger may be used under the tree.~~
- ~~3. Installation of fences and walls shall take into consideration the root systems of existing trees. Post holes and trenches located close to trees shall be dug by hand and adjusted as necessary to avoid damage to major roots. Continuous footers for masonry walls shall be ended at locations where larger roots are encountered and the roots bridged.~~
- ~~4. Any tree which has been declared by resolution of the city commission to be a "protected tree" shall not be removed unless such removal has been approved by resolution of the city commission. When a protected tree is on or adjacent to a site to be developed or~~

~~redeveloped, the owner, developer or contractor shall take all reasonable measures to prevent damage to the tree and root system out to the natural dripline. The extent of the dripline will be based on diameter and species without respect to previous pruning activities.~~

- ~~5. Any owner, tenant, contractor or agent thereof who fails to provide tree protection as stated herein shall be guilty of tree abuse.~~

~~D. Tree abuse.~~

- ~~1. Tree abuse is prohibited. Abused trees may not be counted toward fulfilling landscape requirements. Tree abuse shall include:
 - ~~a. Damage inflicted upon any part of a tree, including the root system, by machinery, storage of materials, soil compaction, excavation, vehicle accidents, chemical application or change to the natural grade.~~
 - ~~b. Damage inflicted to or cutting upon a tree which permits infection or pest infestation.~~
 - ~~c. Cutting upon any tree which permanently reduces the function of the tree or causes it to go into shock;~~
 - ~~d. Cutting upon a tree which alters the natural shape.~~
 - ~~e. Hatracking.~~
 - ~~f. Bark removal of more than one third (1/3) of the tree diameter.~~
 - ~~g. Tears and splitting of limb ends or peeling and stripping of bark.~~
 - ~~h. Use of climbing spikes on any species of tree for any purpose other than total tree removal.~~
 - ~~i. Severe neglect of tree nutrition or adequate irrigation necessary for continued growth.~~
 - ~~j. Pruning of live palm fronds, which initiate above the horizontal plane.~~~~

~~2. Trees shall be cut in the following manner:~~

- ~~a. All cuts shall be clean and at junctions, laterals or crotches. Tunneling or drop crotch trimming for overhead utility lines shall be followed.~~
- ~~b. Removal of dead wood, crossing branches, weak or insignificant branches, and suckers shall be accomplished simultaneously with any reduction in crown.~~

~~3. An owner of a parcel of land upon which tree abuse has occurred may be required to replant an equivalent replacement upon such parcel, or at a different location selected by the department, within sixty (60) days after being notified by the department.~~

A. *Tree and Palm Protection Requirements.*

1. *General.* Effort shall be made to prevent the destruction or damaging of trees and palms for which no Tree Permit has been issued on private or public property. Any owner, tenant, contractor or agent thereof who fails to provide tree and palm protection, as set forth herein, shall be subject to enforcement as provided in 47-21.15.J. Trees and palms destroyed or incurring irreparable damage must be replaced by trees and palms of equivalent value, as specified herein, prior to the issuance of the certificate of occupancy or certificate of use, unless removal of the trees and palms has been authorized pursuant to a Tree Permit. Tree and palm protection zones must be established for all trees and palms that remain in place on-site and for any trees and palms relocated within or to the site. When proposed development activities may damage the root systems or canopies of trees and palms to be retained or relocated on-site, alternatives to the proposed activities, or effective protective measures, shall be identified and used.
2. *Landscape and Tree Document Packet.* Landscape and tree documents shall be provided as required in 47-21.6.
3. *Tree and Palm Protection Specifications.* The following tree and palm protection specifications shall be adhered to, in general, and as a condition of approval of the site plan for any project. The Department may require supplemental protection measures to ensure the protection of trees and palms. The Department shall have the authority to enter the subject property to ensure compliance with required tree and palm protection measures.

a. Protection Barricades.

- i. Protection barricades shall be placed at the drip line of each existing and relocated tree and palm, cluster of trees and palms, and preservation areas. The placement is to include the critical root zone having a minimum radius of one (1) foot for every one (1) inch in trunk DBH.
- ii. Utilize retaining walls and drywells to protect any tree and palm to be preserved from severe grade changes.
- iii. All protection barricades shall be installed prior to the start of any construction or site development, including tree and palm removal, demolition and land-clearing activities, and shall remain in place until development is completed and shall not be removed until the Department inspects the site and authorizes their removal.
- iv. Protection barricades shall:
 - 1) Have a minimum height of four (4) feet; and
 - 2) Be constructed of either a continuous sturdy chain link fence with minimum two (2) inch diameter metal posts installed in the ground at five (5) foot spacing, or two-by-four (2x4) inch wood posts installed in the ground at eight (8) foot spacing with three (3) equally spaced two-by-four (2x4) inch wood rails. Posts may be shifted to avoid roots; and
 - 3) Be sturdy with vertical posts driven firmly into the ground; and
 - 4) Have a conspicuously colored material enclosing the barricade structure; and
 - 5) Display signage on all sides the protection barricade to indicate that the area within the protection barricade is a tree protection zone. A minimum of ~~four~~ two (42) signs shall be posted and signs shall be between one hundred and ninety-six (196) and four hundred eighty (480) square inches.

- b. Activities within tree and palm protection zones enclosed by protection barricades.
- i. No oil, fill, equipment, building materials, building debris, or any other material shall be placed within the areas surrounded by protective barriers.
 - ii. No disposal of any waste material such as paints, oils, solvents, asphalt, concrete, mortar, or any other material shall occur within the areas surrounded by protective barriers.
 - iii. Natural grade shall be maintained on areas surrounded by protective barriers. In the event that the natural grade of the site is changed as a result of site development such that the safety of the tree and palm may be endangered, tree wells or retaining walls are required.
 - iv. Only hand digging and grading activities shall be permitted within the tree and palm protection zone. All surrounding areas must be graded to a point that meets the outside of the tree protection zone.
 - v. Underground utility lines, including, but not limited to, irrigation, plumbing, electrical, infrastructure, or telecommunication lines, shall be placed outside the areas enclosed by protective barriers. If such placement is not possible, techniques such as tunneling, hand digging, excavation with an air spade, or other option determined by the Department shall be used to limit soil disturbance and avoid root damage.
 - vi. No vehicles or equipment shall be permitted within areas surrounded by protective barriers.
 - vii. Promptly repair any tree and/or palm designated for preservation, at the direction of the Department, which is damaged during construction by:
 - 1) Corrective canopy and root pruning for damage to tree and/or palm;
 - 2) Irrigation, fertilization, soil amendments, and other treatment to support recovery.

4. Fences, walkways and walls shall be constructed to avoid disturbance to any tree and palm to remain in place onsite in the vicinity of construction activities. Post holes and trenches located close to trees and palms shall be dug by hand and adjusted as necessary, using techniques to avoid damage to major roots system.
5. No attachments, signs, chains, ropes, or wires other than those of a protective or non-damaging nature shall be attached to any trees or palms on any property, in general, or at any time.
6. Any tree and palm which has been declared by resolution of the City Commission to be a City Commission Protected Tree shall not be removed or relocated, unless such action has been approved by resolution of the City Commission. When a protected tree and palm is on or adjacent to a site to be developed or redeveloped, the owner or agent, developer or contractor shall take all reasonable measures to prevent damage to the tree and palm and root system to the extent of the natural dripline.

B. Root Cutting Requirements. The cutting of roots with a diameter of two (2) inches or larger is prohibited, unless there is no feasible alternative, as determined by the Department. Construction activities, such as trench lines and walkway construction, shall be redirected away from tree and palm critical root zones. Root cutting shall be done according to approved techniques as outlined herein:

1. Trees and palms shall be evaluated by the Department, in accordance with ANSI A-300 and companion BMP publications to determine whether the root cutting will destabilize the tree and palm or cause unacceptable damage to the tree and palm.
2. Root cuts shall be made, at minimum, a distance from the trunk equivalent to five (5) times the tree's trunk DBH.
3. Roots shall be cleanly severed with sharp hand tools or power root saws. Roots shall not be torn off with power equipment, and cut roots shall not be left with ripped, ragged or shredded ends.
4. When tunneling or otherwise avoiding roots is not possible, a trench shall be carefully excavated by hand or machine and, when a root with a diameter of two (2) inches or greater is encountered, a final clean cut shall be made with a saw. The cut shall be

made flush with the side of the trench closest to the tree. The root pruning trench shall be backfilled with soil.

5. When adjacent to new curbing, uncurbed paved areas, or areas of grade changes, roots shall be cut no more than eighteen (18) inches towards the tree from the back of the curb, the edge of the pavement, or the point of intersection of old and new grades, respectively. After root pruning, no excavation for the installation of forms or for any other reason may be performed any closer than six (6) inches outside of the root pruning cut. The root pruning trench shall be backfilled with soil and root barriers installed as appropriate.

C. Tree and Palm Relocation Requirements.

1. The issuance of a Tree Permit application for tree and palm relocation is required for trees and/or palms.
2. Any tree or palm shall be relocated on site unless it is demonstrated that relocation on site is not a viable alternative for the particular tree or palm.
3. Relocated trees or palms shall be transplanted to a location within the City, unless otherwise pre-approved by the Department. If any tree or palm is relocated outside of city limits, then it shall be considered a tree removal, and all required equivalent replacements and/or equivalent value requirements shall apply. Furthermore, for any tree or palm that is relocated outside of city limits (even if it is within the jurisdiction of Broward County or the State of Florida) all requirements for the removal/relocation of that tree or palm may pertain to the jurisdiction of which the tree or palm originates.
4. Tree and/or palm relocation activities shall not unnecessarily damage any other tree and/or palm to remain on the property.
5. Any tree and/or palm being relocated shall not be unnecessarily damaged during its removal, transport, or replanting.
6. Irrigation must be present and applied effectively for two (2) to four (4) weeks prior to root pruning, through the period of root pruning, and after root pruning and transplantation until the tree and palm has been completely reestablished at the new planting space. Irrigation shall be operated automatically with water being applied

directly to and just outside of the remaining intact root system. Watering frequency shall be such so as to ensure that free water is available to the root system at all times. Any temporary disruption in automatic operation shall be supplemented by hand watering.

7. Before transplanting, a relocated tree and/or palm shall be root pruned in accordance with ANSI A-300 and companion BMP publications.
8. A tree or palm on public property shall be relocated to another public property upon demonstration that the property on which the trees and palms are located lacks available space for its relocation. If relocated to another public property, written authorization from the owner of the public property is required.
9. The tree and/or palm, when relocated, will be transplanted by the applicant following the American National Standards Institute A-300 and Best Management Practices companion publications. This requirement includes all procedures, techniques, standards for minimum root ball size, and any other standards included in ANSI A-300 Standards.
10. The relocated tree and/or palm will be guaranteed by the permit holder for one (1) year from relocation date for trees of less than or equal to six (6) inches in DBH; two (2) years from the relocation date for trees greater than six (6) inches in DBH; one (1) year from the relocation date for palms.
11. A monetary guarantee may be required by the Department to ensure compliance with requirements. This monetary guarantee in favor of the City of Fort Lauderdale shall be computed based upon the equivalent value of the tree and/or palm in question. The monetary guarantee shall be held by the City one (1) year from relocation date for trees of less than or equal to six (6) inches in DBH; two (2) years from the relocation date for trees greater than six (6) inches in DBH; one (1) year from the relocation date for palms. The monetary guarantee shall be in addition to any bond required by any other governmental entity.
12. Release of monetary guarantee will occur upon successful completion of guarantee date and tree or palm has a sixty (~~60~~)-percent (60%) condition rating or better. If the tree or palm is determined to have a thirty-nine (~~39~~)-percent (39%) condition rating or less, and no maintenance efforts have been made to complete a successful relocation, and no

replacements have been proposed, the monetary guarantee will be deposited into the Tree Canopy Trust Fund.

13. Replace, within sixty (60) days, a relocated tree or palm that dies within one (1) year of being relocated. The one (1) year maintenance period shall begin again whenever a tree or palm is replaced. The replacement trees or palms are to be determined from the equivalent value given for each at time of permitting or by the Department.

D. Tree and Palm Pruning Requirements.

1. Tree pruning is to be performed in accordance with American National Standards Institute A-300 and Best Management Practices companion publications. Tree abuse is prohibited. The Department may require that construction activities minimize negative impacts to tree and palm canopy.

2. Trees and palms shall be pruned in the following manner:

a. All cuts shall always be made to the outside of the branch bark ridge and angled away from trunk. Cuts shall be made as close as possible to the trunk or parent limb, without cutting into the branch bark ridge, branch collar or leaving a protruding stub. Tree limb reduction cuts shall be the preferred option with tree limb removal cuts preformed only as a last resort.

b. Removal of dead wood, cross branches, branches with poor angles of attachment and thinning of suckers shall be accomplished simultaneously without any reduction in crown.

c. Pruning of lateral branches that results in the removal of more than one-third (1/3) of all branches on one (1) side of a tree shall not be permissible.

d. Lifting of lower branches or tree thinning shall be designed to distribute over half of the tree mass in the lower two-thirds (2/3) of the tree.

e. No more than twenty-five ~~(25)~~ percent (25%) of a tree's living canopy shall be removed within a one (1) year period.

3. Tree pruning shall only be performed by a Broward County Licensed Tree Trimmer, in accordance with Chapter 9, Article XI of the Broward County Code of Ordinances.
4. Tree canopy removal of greater than twenty-five ~~(25)~~ percent (25%) may only be considered by the Department under the following criteria as outlined herein:
 - a. The tree is located in the proposed building footprint area or yard area where a structure or improvement shall be placed. If tree and palm pruning is required to facilitate a construction project, the Department may require that the property owner provide a written report from an ISA certified arborist before making any determinations in conjunction with this section. The Department may also require monitoring by an ISA certified arborist during construction to assure proper tree and palm pruning practices are implemented. Written authorization from the Department to remove more than twenty-five ~~(25)~~ percent (25%) of a tree's canopy, including right-of-way trees, must be received prior to issuance of any permit.
 - b. Trees on the public right-of-way shall not be considered for removal of more than twenty-five ~~(25)~~ percent (25%) of a tree's canopy as a result of restriction to or from ingress or egress to the garages or parking on the site, provided however, that there is no other reasonable access to and from the structure or to the property from the public right-of-way as determined by the Department.
 - c. The tree and palm are diseased or damaged, creates hazardous conditions, interferes with overhead electrical utility service, creates unsafe vision clearance, or materially impairs the structural integrity of an existing structure.
5. Exceptions to the requirements of subsections (1) and/or (2) and/or (3) of this section shall be approved only when the property owner receives specific written authorization from the Department. The Department shall not issue written approval, unless it determines that the affected trees and palms can be adequately protected and maintained without meeting the requirements of these subsections, or that, due to exceptional circumstances, it is not practical or reasonable to meet the requirements of this section.

E. Tree Removal, Permitting, Licensing, Preservation and Mitigation Requirements for a Natural Forest Community:

1. Any person conducting tree removal activities shall only remove a tree or trees from a site as approved for removal in a Broward County ~~Environmental Protection and Growth Management Department ("EPGMD")~~ Resilient Environmental Department (BCRED) tree removal license. Damage to any other tree or trees on the site shall constitute a violation of this section.
2. Removal of trees in areas designated as a Natural Forest Community shall be pursuant to the Broward County preservation requirements to the extent determined to be practicable by ~~EPGMD~~ BCRED.
3. Any proposed development activity which would negatively impact the Natural Forest Community must be mitigated through a resource management plan, approved by ~~EPGMD~~ BCRED, which significantly improves the viability of the remainder of the resource.
4. In an area designated as a Natural Forest Community where preservation is required, a conservation easement shall be granted by the applicant to Broward County.

F. Tree Permit Requirements.

1. A site permit application for new development and redevelopment must be submitted prior to issuance of a ~~tree permit~~ Tree Permit for the project.
2. A Tree Permit will not be issued for vacant property.
3. A Tree Permit is required for demolition and land clearing activities.
4. A Tree Permit application for any tree and palm is required prior to the removal of:
 - a. A dicot or conifer tree having a DBH of three (3) inches or more; and
 - b. A monocot having eight (8) feet or more of clear trunk; and
 - c. Desirable trees and palms; and
 - d. City Commission protected trees and palms; and

e. Specimen trees and palms.

5. Application for a Tree Permit for removal shall be made to the Department. Upon receipt of an application for tree or palm removal, the Department shall determine the equivalent replacement or equivalent value of each tree and palm to be removed and may request such calculations to be provided by applicant.
6. No permit nor replacements shall be required for removal of a plant species identified as prohibited and controlled pursuant to the Department of Agriculture and Consumer Services, Chapter 5B-57, Florida Administrative Code (FAC), as amended, and the Florida Exotic Pest Plant Council (FLEPPC) Category I Invasive Plant Species List, as amended, and ~~Aurcaria~~ Araucaria heterophylla (Norfolk Island Pine).
7. No permit will be required for the removal of a dead tree or palm on any developed property. Any dead tree or palm on developed property shall result in the complete removal including the stump and roots. If a dead tree or palm fulfilled a requirement, a replacement tree and/or palm is required to be installed to meet that requirement.
8. The Department shall approve a Tree Permit for removal when making one or more of the following findings:
 - a. That the tree and/or palm removal is necessary to accommodate a proposed development after the proposed development has provided evidence that the tree and/or palm cannot remain and/or be relocated on site, despite every reasonable effort having been made to incorporate the tree and/or palm proposed to be removed into the development and to minimize the number of trees removed.
 - b. That the tree and/or palm proposed to be removed is abused, diseased, injured, or otherwise of poor condition not greater than forty ~~(40)~~ percent (40%).
 - c. That the tree and/or palm proposed to be removed is obstructing safe vehicular cross visibility.

by two and one half [wholesale x 2.5] from the equivalent value of the specimen tree. The remainder of the equivalent value shall be provided by cash deposited to the Tree Canopy Trust Fund prior to Tree Permit issuance. The minimum height of replacement tree shall be twelve (12) feet overall.

10. Activities associated with authorized tree and/or palm removal shall not cut down, destroy, remove, relocate, or damage any other tree on the site unless a Tree Permit authorizing such action is first obtained.
11. Any tree and palm removed without a permit having first been issued by the Department shall be replaced by equivalent replacement and/or equivalent value. The equivalent replacement(s) shall be made by planting the largest tree(s) and palm reasonably available upon the site.
12. In the event that insufficient trunk remains of the removed tree and palm so that equivalency cannot be determined thereby, size and equivalency shall be estimated based upon trees and palms of the same species existing near the location of the removed tree, considering, among other things, aerial photographic records and other available data relative to the area.
13. Failure of an applicant to replace a removed tree and palm within sixty (60) days after being notified by the Department shall be a violation of this section. Removals necessitated by permitted construction may be replaced after the sixty (60) day limit, but prior to the issuance of a certificate of occupancy, certificate of completion, or final use approval.
14. Trees and palms which have been planted and are being grown in a state-certified plant nursery or botanical garden for sale to the general public and are being transplanted in order to be utilized as landscape material do not require Tree Permits.
15. A monetary guarantee may be required to ensure compliance with requirements. This monetary guarantee in favor of the City of Fort Lauderdale shall be computed based upon the equivalent value of the tree or trees and palms in question and shall be held by the City and the guarantee period shall extend at least three hundred sixty-five (365) days past the replacement planting date. The monetary guarantee shall be in addition to any bond required by any other governmental entity.

16. In the event of storms, accidents, or other acts of nature of an emergency status by reason of which life, limb or property is in immediate jeopardy, or for trees and palms which have died due to lightning, disease, storm damage, or other natural causes, part or all of the terms and provisions of this section may be waived by the Department.

G. Tree and Palm Mitigation Calculation Requirements.

1. The equivalent replacement for non-specimen trees is determined by multiplying the existing trunk diameter at breast height (DBH) in inches, by the tree condition rating, by the percentage assigned below according to the species classification (based on the Classification List on file with the Department) percentage as follows. The product of this calculation indicates the total caliper inches of trees to be provided as equivalent replacement.

a. Class A – 100%

b. Class B – 80%

c. Class C – 60%

d. Class D – 40%

e. Class E – 20%

f. Class F- 0%

2. The equivalent replacement for a palm with a clear trunk greater than eight (8) feet shall be a palm with a minimum eight (8) foot clear trunk. Desirable Palms and Palms with less than eight (8) feet of clear trunk are exempt from the requirement of this subsection 47-21.15.G.2. is determined by the clear trunk measurement of the palm to be removed. This measurement indicates the total clear trunk of replacement palms to be provided.

3. The equivalent replacement for Desirable Trees and Palms is determined by using a method outlined in the Council of Tree & Landscape Appraisers *Guide for Plant Appraisal*, 10th edition.
4. The equivalent replacement for City Commission Protected Trees and Palms is determined by using a method outlined in the Council of Tree & Landscape Appraisers *Guide for Plant Appraisal*, 10th edition.
5. The equivalent value for non-specimen trees is determined by multiplying the diameter at breast height (DBH) in inches, by the tree condition rating, by the retail cost of trees (wholesale cost multiplied by two and one half [wholesale cost x 2.5] to be not less than two hundred and fifty dollars [\$250.00] per inch) expressed in dollars per inch, and by the percentage assigned below according to the species classification (based on the Classification List on file with the Department). The product of this calculation indicates the dollar amount to be deposited into the Tree Canopy Trust Fund.
 - a. Class A— 100%.
 - b. Class B— 80%.
 - c. Class C— 60%.
 - d. Class D— 40%.
 - e. Class E— 20%.
 - f. Class F— 0%.
6. The equivalent value of a palm, which is not protected under Desirable Palm status by the Department and has a minimum of eight (8) feet clear trunk, is determined by multiplying the clear trunk measurement of the palm to be removed by the retail cost per clear trunk foot (wholesale cost per clear trunk foot multiplied by two and one half [wholesale cost x 2.5] to be not less than twenty-five dollars [\$25.00] per foot) expressed in dollars per clear trunk foot. The product of this calculation indicates the dollar amount to be deposited into the Tree Canopy Trust Fund. ~~is~~

~~determined by using a method outlined in the Council of Tree & Landscape Appraisers *Guide for Plant Appraisal*, 10th edition.~~

7. Equivalent value of a Desirable Tree and Palm is determined by using a method outlined in the Council of Tree & Landscape Appraisers *Guide for Plant Appraisal*, 10th edition, and conducted by an ISA Board Master Arborist or ASCA Registered Consulting Arborist.
8. The equivalent value for City Commission Protected Trees and Palms is determined by using a method outlined in the Council of Tree & Landscape Appraisers *Guide for Plant Appraisal*, 10th edition, and conducted by an ISA Board Master Arborist or ASCA Registered Consulting Arborist.
9. Money from the Tree Canopy Trust Fund shall be expended, utilized, and disbursed for:
 - a. Enhancing tree canopy coverage through the means below.
 - i. Planting of trees on public land and ~~right-of-ways~~ rights-of-way;
 - ii. Relocating trees to public land; and
 - iii. Distributing trees to the public; and
 - iv. Replacement of hazardous trees on City projects or from within City property or rights of way as defined by Section 27-408(a)(3)(b) of the Broward County Code of Ordinances.
 - b. Funding ancillary costs associated with the planting of trees on public lands and with enhancing the City's urban tree canopy through the means listed below. Cumulatively, the ancillary cost expenditures shall not exceed twenty-five percent (25%) of the Fund's balance in any given fiscal year.
 - i. Services and materials directly in support of tree planting, approved by the Department, which may include landscape design services, irrigation, soil amendments, or other materials necessary for the proper and successful installation and maintenance of tree planting project; and

- ii. Development, publishing, and updates for an Urban Forestry Master Plan to protect, preserve, and enhance the City's urban tree canopy. Cumulatively, the cost expenditures for this item shall not exceed fifteen percent (15%) of the Fund's balance in any given fiscal year. The cumulative expenditures from subsection i. and ii. shall not exceed twenty-five percent (25%) of the total fund balance in any fiscal year.

10. The Urban Forestry Master Plan (UFMP) is a strategic and long-term investment in the City's urban tree canopy. Funding from the Tree Canopy Trust Fund shall be allocated to publish and regularly update the UFMP. ~~At a minimum, this plan will:~~

- ~~a. provide a framework to design and implement public tree and palm plantings; and~~
- ~~b. outline minimum standards to enhance the City's public tree and palm canopy; and~~
- ~~c. support a diverse, resilient, and robust urban forest canopy; and~~
- ~~d. provide goals using a blueprint for the engagement and purposeful action of community leaders, neighbors, and organizations to sustain the City's tree and palm canopy; and~~
- ~~e. provide a current record of resources being managed and its value; and~~
- ~~f. assist in scheduling maintenance and developing budgets; and~~
- ~~g. garner public support for the forestry program; and~~
- ~~h. provide long-term assessment and monitoring of the tree and palm.~~

H. Tree Services and Arborist Requirements.

- 1. All tree services working within the City of Fort Lauderdale shall have a current Broward County Tree Trimmer License and comply with all applicable Broward County Tree Trimmer license regulations, as applicable.

2. Vehicles used by a tree service/arborist operating within the City shall be clearly marked with the name of the tree service/arborist. ISA Certified arborists shall display the certified logo and registration number, if any.
3. A photocopy of the current business tax receipt shall be available for inspection at each job site.
4. Standards for cutting on or repair to tree and palm species shall be in accordance with the American National Standards Institute A-300 standards as published.
5. Persons engaged in business as a tree service in the City shall adhere to the American National Standards Institute, A-300 standards ~~or~~ on all tree species within the City of Fort Lauderdale.

I. Tree Abuse.

1. Tree abuse of any species of trees and palms for any purpose is prohibited. Abused trees may not be counted toward fulfilling landscape requirements. Tree abuse shall include:
 - a. All actions not in conformance with American National Standards Institute A-300 and Z-133 - 2017; and
 - b. Any action which effectively destroys a tree or palm, which permanently reduces the function of the tree, or causes unnatural decline; and
 - c. Unpermitted removal and relocation of a tree or palm; and
 - d. Damage inflicted upon any part of a tree within the dripline, including the root system, by machinery, storage of materials, soil compaction, excavation, vehicle accidents, chemical application, change to the natural grade, or other; and
 - e. Damage inflicted to or cutting upon a tree which permits infection or pest infestation; and

- f. Damage caused by nailing or screwing to the trunk of any tree or palm to attach lights, signs, flags, ornaments, birdhouses, etc.; and
 - g. Damage caused by using inappropriate equipment, including but not solely limited to, inappropriate tool for cuts being made, inadequate tool for size cuts being made, dull cutting tool, and anvil-type pruners; and
 - h. Damage inflicted to trunk tissue caused by string trimmers; and
 - i. Unapproved cutting upon a tree which permanently alters the natural shape; and
 - j. Hatracking; and
 - k. Overlifting; and
 - l. Bark removal of more than one-third (1/3) of the DBH; and
 - m. Tearing and splitting of tree parts; and
 - n. Use of climbing spikes other than for total tree removal; and
 - o. Intentional neglect of tree nutrition; and
 - p. Inadequate irrigation necessary for establishment and continued growth; and
 - q. Damage caused from improper installation of and failure to remove guying and staking materials; and
 - r. Pruning of live palm fronds initiating at or above the horizontal plane.
2. Any owner of a parcel of land upon which tree abuse has occurred may be required to remove an abused tree or palm and replant an equivalent replacement upon such parcel, or at a different location selected by the Department, or, be required to make a payment into the Tree Canopy Trust Fund in the amount determined by the Department, within sixty (60) days after being notified by the Department. Additional corrective actions may also be required as determined by the ~~department~~ Department which may include, but not be limited to, corrective structural pruning,

installation and maintenance of tree protection barriers, corrective root pruning, and/or obtaining a written tree evaluation from an ISA certified arborist.

J. Enforcement/Civil Remedies.

1. Enforcement and penalties for not obtaining a Tree Permit.

a. Civil fine for violators. The following civil fines shall be imposed for a violation of any parts of this section for those violations incurred for not obtaining a Tree Permit:

i. First offense committed within a twelve (12)-month period: \$1,000.00, per tree plus a monetary payment made to the Tree Canopy Trust Fund for the equivalent value of the tree or palm;

ii. Repeat offense within a twelve (12)-month period: \$2,000.00, per tree plus a monetary payment made to the Tree Canopy Trust Fund for twice the equivalent value of the tree or palm;

b. Enforcement procedures shall be governed by the City of Fort Lauderdale Code of Ordinances Chapter 11 Article III.

SECTION 15. That Section 47-21.16. - Removal of trees and dead trees constituting a public nuisance, of the City of Fort Lauderdale, Florida ULDR is hereby amended as follows:

Sec. 47-21.16. - Removal of Nuisance Trees and Palms ~~dead trees constituting a public nuisance.~~

- A. The existence of any tree, palm, dead tree or stump upon any parcel of land within the city which threatens or endangers the public health, safety or welfare, or which could foreseeably cause the spread of disease or infestation to surrounding plant life, is hereby prohibited and declared to be a public nuisance.
- B. The Department shall give notice to the owner upon whose parcel of land such nuisance is located, advising the owner of the same.
- C. Such notice shall be served by personal service or certified mail. In the event that the address of the owner is unknown, or such certified mail is returned unclaimed or

refused, such notice may be served by posting the same in a conspicuous place on the premises upon which the nuisance is located.

- D. Such notice shall command the owner to forthwith remove such tree, dead tree or stump no later than thirty (30) days after receipt or posting of the aforementioned notice, whichever is applicable. In the event that such nuisance is not removed by the owner, the City may remove the same or have the same removed and the cost thereof shall constitute a charge and lien against the owner's property to the same extent and character as the lien now granted by law for special assessments for the cost of local improvements.
- E. Liens shall be forthwith due and payable, unless the time for payment thereof shall be extended by the City Commission, and there shall be applicable thereto the same penalties and rights for sale and forfeiture as may be provided by law for special assessments for the cost of local improvements.
- F. Each day any such violation exists shall constitute a separate offense.

SECTION 16. That Section 47-21.17 - Street Tree Planting, of the City of Fort Lauderdale, Florida ULDR, is hereby amended as follows:

Sec. 47-21.17. – Public Street Tree Planting Projects.

- A. There are many reasons to plant street trees. Depending on canopy density, trees reduce temperatures. They provide shade and visual interest by leaf and bloom color, bark texture, profile, and scaffold architecture. They also provide protection and security to the ever-increasing pedestrian traffic.
- A.1. Sidewalk and swale tree planting. These are usually individual trees planted at or near the street curb line for aesthetic, environmental and security reasons. ~~Many sidewalk trees are planted and/or maintained by adjacent property owners. It is their voluntary contribution to the city tree canopy.~~
- B.2. Median tree planting. Street medians form a special area of public park land. Proximity and speed of vehicular traffic influence the tree size category and placement. Tree species classification and size selection is in inverse correlation with proximity and speed of roadway traffic. As speed of traffic increases and median width narrows, size

of tree selected should decrease or be moved farther into the center of the median. Median tree plantings serve to provide:

- 1.a. Security to pedestrians crossings wide streets.
- 2.b. A screen for drivers from headlight glare of oncoming traffic.
- 3.e. Blockage of direct sun into the eyes of drivers, especially commuters traveling east and west. An indication of the course of the roadway in the distance.
- 4.d. A protective barricade to head-on collisions with out-of-control vehicles which cross into the median.

C.3. ~~Arbor Streets.~~ The majority of the property owners abutting any street may request establishment designation of an ~~arbor street~~ Arbor Street. ~~An arbor street is one (1) determined by the City to be suitable for extensive planting of trees.~~ The designation identifies the street for the planting of street trees that build urban forest canopy, capture storm water runoff, define a hierarchy of roadways, and create a sense of place because of their visual and physical impacts on the quality of urban life. Requests shall be in writing and submitted to the Department. The request shall:

- 1.a. Be on a standard application form obtainable from the ~~city~~ Department;
- 2.b. Designate areas to be improved by tree planting;
- 3.e. Contain names of all property owners wishing trees to be planted adjacent to or upon their properties;
- 4.d. Provide evidence of a commitment from adjacent property owners to contribute to the cost of and provide subsequent care, feeding and maintenance of such plantings; and
- 5.e. Contain a survey of the area and a proposed planting plan.

6. The Department shall coordinate with and obtain recommendations from other appropriate departments reviewing the ~~arbor street~~ Arbor Street application. Review shall take into consideration the general safety and welfare of the public, the interests of affected property owners, utilities, and municipal services, present and future and shall include but not be limited to onsite inspections of the proposed planting area.
 7. When the Arbor Street request has been reviewed by all departments concerned, the representative of the Department shall:
 - a. Provide written notification to applicant of approval;
 - b. Provide written objections and amendments to the applicant; or
 - c. Provide written denial to the applicant.
 8. The application shall constitute an agreement between the City and the applicants. The City Commission must approve the application by resolution. The Arbor Street project shall be implemented in accordance with provisions of the approved plan, and as city resources may permit.
 9. Trimming of Arbor Street plantings by adjacent property owners is required and all such work shall adhere to the American National Standards Institute A-300 and Best Management Practices companion publication.
 10. Existing trees within an area designated in an Arbor Street agreement shall not be removed without a Tree Permit.
- ~~B. The department shall coordinate with and obtain recommendations from the appropriate city departments reviewing the arbor street application. Review shall take into consideration the general safety and welfare of the public, the interests of affected property owners, utilities, and municipal services, present and future and shall include but not be limited to onsite inspections of the proposed planting area.~~

- ~~C. When the arbor street request has been reviewed by all departments concerned, the representative of the city shall submit any objections and amendments to the applicants. Should the area be determined by the city to be unsuitable for arbor street purposes, the applicants will be notified of the unsuitability.~~
- ~~D. The application shall constitute an agreement between the city and the applicants. The city commission must approve the application by resolution. The arbor street project shall be implemented in accordance with provisions of the approved plan, and as city resources may permit. The applicants shall supply the planting labor, the city shall supply the trees, or vice versa as the approved plan provides.~~
- ~~E. Trimming of arbor street plantings by adjacent property owners is permitted and all such work shall adhere to the American National Standards Institute, A-300 standards or similar accepted standards as published. Trees existing within an area designated in an arbor street agreement are not to be removed without permit.~~

SECTION 17. That Section 47-21.18. - Prohibited landscaping, of the City of Fort Lauderdale, Florida ULDR, is hereby amended as follows:

Sec. 47-21.18. - Prohibited landscaping.

It shall be unlawful to retain, install or relocate plant species identified as prohibited and controlled pursuant to the Department of Agriculture and Consumer Services, Chapter 5B-57, Florida Administrative Code (FAC), as amended, and the Florida Exotic Pest Plant Council (FLEPPC) Invasive Plant Species List, Category 1, as amended, and *Araucaria heterophylla* (Norfolk Island Pine). spp. (Pepper Trees, Florida Holly), *Araucaria heterophyllum* *Metopium toxiferum* (Poison Wood), *Casuarinas* spp. (Australian Pine, Beefwood), *Melaleuca quinquinervia* and *M. leucadendron* (Paper Bark Trees), *Euphorbia tirucalli* (Pencil Tree), *Bischofia javanica* (Bischofia, Bishopwood), *Acacia auriculaeformis* (Earleaf Acacia), *Araucaria excelsia* (Norfolk Island Pine), *Cupaniopsis anacardioides* (Carrotwood) or *Brassia actinophylla* (Schefflera).

SECTION 18. CODIFICATION AND SCRIVENER'S ERRORS. The City intends that this Ordinance will be made part of the Code of Ordinance; that sections of this Ordinance can be re-numbered or re-lettered to accomplish codification and, regardless of whether this Ordinance is ever codified, the Ordinance can be re-numbered or re-lettered, and typographical errors that

do not affect the intent can be corrected with the authorization of the City Manager, or his designee, without the need for a public hearing.

SECTION 19. That if any clause, section, or other part of this Ordinance shall be held invalid or unconstitutional by any court of competent jurisdiction, the remainder of this Ordinance shall not be affected thereby, but shall remain in full force and effect.

SECTION 20. That all ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 21. That this Ordinance shall be in full force and effect on July 1, 2022.

PASSED FIRST READING this 15th day of February, 2022.

PASSED SECOND READING this _____ day of _____, 2022.

Mayor
DEAN J. TRANTALIS

ATTEST:

City Clerk
DAVID R. SOLOMAN