

Draft Landscape Ordinance Outline
To be discussed and reviewed –
8.25.2011 @ 6:30 PM City Council Chambers
(Highlighted areas below may require additional attention/review)

Florida Friendly Landscape Regulations

- Purpose
- Definitions
- Applicability
- General Provisions
- Landscape Plan and Irrigation Plan Requirements
- Landscape design standards
- Landscape design standards cont'
 - Installation
 - Standards for preservation and clearing of vegetation (x2)
- Appropriate plant selection, location, and arrangement
- Plant material and installation
- Landscape Maintenance
- Violations enforcement and penalty
- Exemptions
- Volunteer plants
- Buffers for Multifamily Development, Commercial and other nonresidential
- Development landscape requirements
- Parking areas for multifamily and nonresidential developments
- Turf areas
- Efficient irrigation
- Soils
- Yard waste management, composting and use of mulches
- Fertilizer and pesticide management
- Shoreline considerations
- Maintenance of Landscapes
- Hardship Relief
- Informational Material
- Conflicts and relationships to other laws

Environmental and Vegetation Preservation

- Definitions.
- Purpose and intent.
- Exemptions.
- Violations and penalties.
- Administrative remedies.
- Preapplication conference.
- Vegetation removal permit required
- Application requirements for vegetation removal permit
- Permits and certificates of occupancy and use
- Application fees

- Conditions for issuance of permit
- ***Insert preservation requirement here??
- Supplemental tree protection requirements
- Designation of historic or specimen trees
- Protection of listed species
- Mangrove protection
- Prohibited vegetation
- Master plan and site plan requirements
-

Vegetation Removal Requirements

- Application of division.
- Display of permit.
- Identification of species to be removed, saved.
- Protective barriers.
- Protection of buffer zones, drip lines.
- Request for field inspection.
- Protection against stormwater run-off.
- Seeding, mulching of property.
- Donation of vegetation.

Also think about:

Inspections
Notice of violation
Tree lists, protected, prohibited
LEED Certification Bonus or Similar? Parking/landscaping
Green roof / deck calculations
No overall net loss of urban tree canopy desired.
Community Parks
Wild flower areas

Section 1. Chapter 31, Article VIII, "Landscape Regulations", is hereby repealed in its entirety and a new Article VIII is adopted to read as follows:

ARTICLE VIII. FLORIDA FRIENDLY LANDSCAPE REGULATIONS

Purpose.

- (a) The provisions of this section shall be known as the "Riviera Beach Landscape Code" and "landscape code." The provisions of this Article shall be a minimum standard for landscape requirements within the municipal limits. The following items encompass the purpose of this Article:
- (1) To establish minimum standards for the development, installation, and maintenance of landscaping that incorporate Florida Friendly landscape principles within the City limits without inhibiting creative landscape design, construction and management.
 - (2) To provide minimum standards for landscaping new development or redevelopment.
 - (3) To promote the establishment and maintenance of diverse, functional and sustainable landscapes that maximize the storage of sequestered carbon, aide in stormwater management, improve air quality, and conserve energy while reducing greenhouse gasses and the amount of water needed to sustain landscapes.

- (4) To protect and enhance local aesthetic character while increasing biodiversity.
- (5) To provide economic and social benefits by incorporating plant material as a function of sustainability and as an integral part of urban development within the City.
- (6) To promote water conservation, water quality improvement, and vegetation protection objectives by providing for:
 - (a) The implementation of Florida-Friendly Landscaping™ principles as identified by the Florida Yards and Neighborhoods program operated by the University of Florida's Institute of Food and Agricultural Services Extension ("UF/IFAS Extension") and Best Management Practices ("BMPs") identified in the *Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries* (2008), and as provided by law.
 - (b) The use and proper placement of site-appropriate plant materials.
 - (c) The preservation of existing native plant communities.
 - (d) The reestablishment of native plant communities.
 - (e) The use of guidelines to minimize negative secondary and cumulative environmental effects associated with the misuse of fertilizers and pesticides.

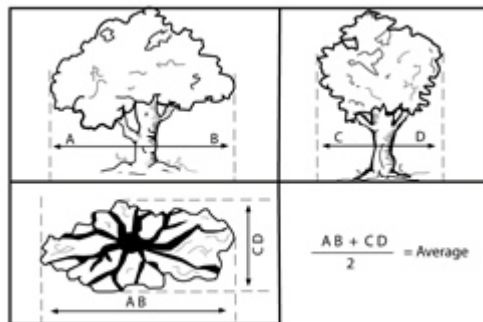
Definitions

For the purpose of this ordinance, the following words and phrases shall have the meanings respectively ascribed to them by this section.

All words used in the present tense include the future; all words in the singular number include the plural and the plural the singular; the word "building" includes the word "structure"; the word "shall" is mandatory and the word "person" includes a firm, corporation, county, municipal corporation, or natural person. The term "Council" shall mean City Council of the City of Riviera Beach, and the word "City" shall mean the City of Riviera Beach. The word "used" shall be deemed to include the words "arranged", "designed", or "intended to be used", and the word "occupied" shall be deemed to include the words "arranged", "designed", or "intended to be occupied". Any word or term not interpreted or defined by this section shall be used with a common dictionary meaning of common or standard utilization.

- (1) *Appeal* means any request for a review of a decision of an administrative determination of the community development director to the zoning board of adjustment.
- (2) *Aquascape* means the planting of aquatic and wetland plants in the enhancement, restoration, or creation of freshwater, estuarine, or marine systems.
- (3) *Automatic Controller* means a mechanical or electronic device, capable of automated operation of valve stations to set the time, duration and frequency of a water application
- (4) *Best Management Practices (BMPs)* means a practice or combination of practices based on research, field-testing, and expert review, determined to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality, conserving water supplies and protecting natural resources.
- (5) *Bioretention* means an engineered process to manage stormwater runoff, using the chemical, biological and/or physical properties found in a natural, terrestrial-based community of plants, microbes and soils.
- (6) *Buffer* means a landscape area that may include walls, fences, berms, trees, shrubs, hedges, ground cover and other plant materials.

- (7) *Buffer screen* means a portion of a buffer which includes a six foot high, opaque vegetative landscape screen designed and maintained to visually screen a development or portion thereof from adjacent property within one year of construction and planting.
- (8) *Canopy* means the upper portion of a tree consisting of limbs, branches and leaves.
- (9) *Champion tree* means the largest tree of a species which has been designated by the State Department of Agricultural and Consumer Services, Division of Forestry.
- (10) *Clear trunk* means the distance between the top of the root ball along the vertical trunk(s) of a tree to the point at which lateral branching or fronds begin.
- (11) *Constant Pressure/Flow Control* means a device that maintains a constant flow, or pressure, or both.
- (12) *Crown (see canopy)*
- (13) *Crown Spread, Average* is determined by taking the widest horizontal distance (spread) of the crown and averaging it with a crown spread measurement taken at right angles to the widest measurement.



a.

- (14) *Developed landscape area* means that portion of the property where pre-development vegetation is to be removed.
- (15) *Diameter at breast height (DBH) circumference or caliper* means the trunk diameter of a tree measured at 4½ feet above ground level from the base of the tree. If the tree trunk forks below 4½ feet above ground level, the city shall consider each trunk to be a tree.
- (16) *Drip line* means a vertical line extending from the outermost branches of a tree to the ground, provided that the same shall not be less than a ten-foot diameter circle, drawn through the center of the trunk of a tree.
- (17) *Ecosystem* means a characteristic assemblage of plant and animal life within a specific physical environment, and all interactions among and between species and their environment.
- (18) *Endangered species, threatened or rare species, and species of special concern* means a species listed as endangered, threatened or of concern by one or more of the following agencies: U.S. Fish and Wildlife Service; Florida Game and Fresh Water Fish Commission; Florida Department of Agricultural and Consumer Services; Florida Committee on Rare and Endangered Plants and Animals.
- (19) *Emitter* means the device used to control the applications of irrigation water. This term is used to refer to the low flow rate devices used in micro-irrigation systems.
- (20) *Environmentally sensitive land* means land which has unique ecological characteristics and/or functions, rare or limited combinations of geological formations, and/or features of rare or limited nature constituting habitat suitable for fish, plants or wildlife.

(21) *Exempt trees* means the trees in appendix A are exempt from the tree protection requirements of this article.

(22) *Evergreen* means those trees, including broad-leafed and conifer evergreens, that maintain their leaves year round.

(23) *Excessive lifting or lion-tailing* means improperly pruning a tree in a manner that removes or thins all or most of the tree's lower and interior branches resulting in a clump of terminal foliage at the ends of branches. This results in a top-heavy tree, disfigures the tree's natural form and increases the chance for branch breakage and the likelihood of a tree to fall during a storm event.

(24) *Filter* means a device in irrigation distribution systems that separates sediment or other foreign matter.

(25) *Florida Friendly* means practices, materials, or actions that help to preserve Florida's natural resources and protect the environment.

(26) *Florida Friendly Landscape*. See "Xeriscape" for statutory definition; A landscape that incorporates the BMPs and philosophies promoted by programs such as Florida Yards and Neighborhoods/Environmental Landscape Management.

(27) *Groundcover* means low growing plant species other than turf grass, used to cover the soil, that forms a continuous, low mass of foliage, normally reaching an average maximum height of 24 inches at maturity. Ground cover must present a finished appearance and reasonably complete coverage at time of planting if used in lieu of grass.

(28) *Grubbing* means the removal of vegetation from land by means of digging, raking, dragging or otherwise disturbing the roots of vegetation in soil in which such roots are located.

(29) *Hardscape* means areas such as patios, decks, driveways, paths and sidewalks that do not require irrigation.

(30) *Hatracking or tree topping* means to improperly prune a tree in order to permanently maintain growth at a reduced height. It also means to flat-cut a tree, severing the leader or leaders. Hatracking involves pruning a tree by stubbing off mature wood larger than one inch in diameter; or reducing the total circumference or canopy spread not in conformance with National Arborists Society standards.

(31) *Hedge* means a row of closely and evenly spaced shrubs or other vegetation planted to form a dense, continuous, unbroken visual screen.

(32) *High Water Use Plants* means plants that require irrigation to provide supplemental water on a regular basis in addition to natural rainfall, or are so identified by a regulatory agency having jurisdiction. When placed in a naturally high water table area appropriate to the plant such that irrigation is not required, such plants shall not be considered high water use for the purposes of this ordinance.

(33) *Hydrozone* means a distinct grouping of plants with similar water needs and climatic requirements.

(34) *Impervious area* means a surface not allowing the passage of air and water to the root system of trees and other vegetation. Runoff is water applied to the soil or landscape that is not absorbed and flows from the area. A pervious area is a permeable surface area allowing passage of surface water and air to the root system of a tree. A pervious area shall be free of significant amounts of clay, shell, marl, limestone or other road-base material unless expressly permitted in the context thereof but the owner may surface it with turf blocks or similar nontoxic products.

(35) *Infiltration Rate* means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hour).

(36) *Installation and maintenance guarantee* means a document which binds the developer or property owner of a development to guarantee the amount, installation, and maintenance of required landscape and irrigation materials. The agreement shall include a listing of the required landscape and irrigation materials and shall guarantee the

installation of irrigation devices and the survival of 100 percent of the living materials from two years of planting. The agreement shall specifically provide that if not all of the required landscaping remains in a healthy, growing condition after two years of planting, the owner shall replace and thereafter maintain such landscaping in a healthy, growing condition. Security, for 110 percent of the plant materials and irrigation components shall be submitted to the city with the agreement. Such security shall be retained (or used to fund needed improvements) for not more than two years.

- (37) *Irrigated landscape area* means all outdoor areas that require a permanent irrigation system.
- (38) *Irrigation System* means an artificial watering system designed to transport and distribute water to plants.
- (39) *Irrigation Zone* means a grouping of soakers, sprinkler heads, bubblers or microirrigation emitters operated simultaneously by the control of one valve.
- (40) *Land clearing* means any development or other activity that alters the land it is located on, except for normal sodding and placement of signs.
- (41) *Landscape* means any combination of living plants (such as grass, ground cover, shrubs, vines, hedges, palms or trees) and non-living landscape material (such as rocks, pebbles, sand, mulch, walls, fences), but excluding paving. Decorative statues or sculptures are permissible but shall not substitute for any requirement.
- (42) *Landscape Construction Documents or Landscape Plan* may include a planting plan, a landscape layout plan, an irrigation plan, a grading and drainage plan, detail sheets and written specifications. Plans shall be numbered, dated, North arrow indicated, scaled, and sealed by an appropriately licensed professional where required by Florida Statutes Chapter 481, Part II.
- (43) *Landscape Design* means 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 placement of tangible objects and irrigation systems shall be designed or approved by licensed professionals as required by law.
- (44) *Landscape Layout Plan* means plans and drawings showing the location of buildings, structures, pedestrian, transportation, or environmental systems, and the detail for placement of site amenities, accessibility components, plantings and other tangible objects. Plans shall be numbered, dated, North arrow indicated, scaled, and sealed by an appropriately licensed professional where required by Florida Statutes Chapter 481, Part II.
- (45) *Landscape strip* means a strip containing trees, barriers, ground cover or other plant material as required by this Article.
- (46) *Landscaped Area* means the entire parcel; less the building footprint, driveways, hardscapes such as decks and patios, and non-porous areas. Water features are included in the calculation of the landscaped area. This landscaped area includes **Xeriscape** as defined in Chapter 373.185(1)(b), F.S.
- (47) *Lawn grass* shall include all species normally grown as permanent lawns in the county. Grass may be sodded, plugged, sprigged or seeded, except that solid sod shall be used in areas subject to erosion. In areas where other than solid sod or grass is used, nurse grass seed shall be sown for immediate effect and protection until coverage is otherwise achieved. Grass sod shall be clean and reasonably free of weeds and noxious pests or diseases.
- (48) *Light pollution* means any adverse effect of artificial light including skyglow, glare, light trespass, and light clutter, resulting in energy waste.
- (49) *Low-flow Point Applicators* means irrigation applicators with output less than 60 gallons per hour (gph).
- (50) *Low Maintenance Area (AKA No-Mow-Zone)* means a designated area within a landscape that is planted and managed in order to minimize or eliminate the need for mowing, watering and fertilization.

- (51) *Low Maintenance Riparian Zone* means an area that is at least ten feet wide adjacent to a water body which is planted and managed in order to minimize the need for maintenance such as mowing, watering, fertilizing, etc.
- (52) *Low Water Use Plants* means plants that do not need supplemental water beyond natural rainfall, or are so identified by a regulatory agency having jurisdiction.
- (53) *Microclimate* means the climate of a specific area in the landscape that has substantially differing sun exposure, temperature, or wind, than surrounding areas or the area as a whole.
- (54) *Microirrigation (low volume)* means the application of small quantities of water directly on or below the soil surface, usually as discrete drops, tiny streams, or miniature sprays through emitters placed along the water delivery pipes (laterals). Microirrigation encompasses a number of methods or concepts including drip, subsurface, bubbler, and spray irrigation, previously referred to as trickle irrigation, low volume, or low flow irrigation, that deliver water directly to plant root zones with a high degree of efficiency, no runoff, and little to no evaporation.
- (55) *Moderate Water Use Plants*. Plants that need supplemental water during seasonal dry periods.
- (56) *Moisture Sensing Device or Soil Moisture Sensor*. A device to indicate soil moisture in the root zone for the purpose of controlling an irrigation system based on the actual needs of the plant.
- (57) *Mulch* means non-living, organic, materials used in landscape design to impede erosion, retain moisture, control weeds, enrich the soil and reduce soil temperature.
- (58) *Native Vegetation* means any plant species with a geographic distribution indigenous to Palm Beach County as in Appendix B all, or part, of the State of Florida as identified in: Wunderlin, R. P. 1998. Guide to the Vascular Plants of Florida. University Press of Florida, Gainesville. New development means the construction of a building or structure on unimproved real property.
- (59) *Nuisance species* means an exotic invasive species recognized as such by the Florida Exotic Pest Plant Council, or similar, which include but are not limited to Australian Pine (*Casuarina equisetifolia*), Brazilian Pepper (*Schinus terebinthifolius*), and Punk Tree/Maleleuca (*Maleleuca quinquenervia*).
- (60) *No-Mow Zone* see definition for *Low-Maintenance Area*.
- (61) *Palm* means 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.
- (62) *Parking area* means all property used for off-street parking, vehicular aisles and access ways, loading zones, interior and perimeter landscaping, and other outdoor vehicular use areas.
- (63) *Pervious Paving Materials* means a porous asphaltic, concrete or other surface and a highvoid aggregate base which allows for rapid infiltration and temporary storage of rain on, or runoff delivered to, paved surfaces.
- (64) *Plant Bed* means a grouping of trees, shrubs, ground covers, perennials or annuals growing together in a defined area devoid of turfgrass, normally using mulch around the plants.
- (65) *Plant Communities* means an association of native plants that are dominated by one or more prominent species, or a characteristic physical attribute.
- (66) *Point of Connection (POC)* means the location where an irrigation system is connected to a water supply.
- (67) *Planting Plan* means specifications and installation details for plant materials, soil amendments, mulches, edging, gravel, and other similar materials.

- (68) *Pop-up Sprays* means spray heads that pop up with water pressure and provide a continuous spray pattern throughout a given arc of operation.
- (69) *Pressure Tank* means a pressurized holding tank for irrigation water coming from wells to minimize cycling of the water pump.
- (70) *Pruning* means the proper cutting or trimming of tree limbs or palm fronds in accordance with national arborists standards or American National Standards Institute (ANSI) A300 Standard for tree care operations. Proper pruning results in improved tree health and appearance. Improper pruning can result in branch and trunk decay and also leave the tree more susceptible to disease and insects (see hatracking).
- (71) *Pruning, directional* means a pruning technique that reduces the crown of a tree without topping or hat tacking branches. This technique utilizes proper cuts, does not leave a stub, and does not disturb the branch collar and the branch bark ridge. This technique is most often used when a tree is or has the potential to interfere with a utility line or other obstruction.



- (72) *Pump Cycling* means an irrigation pump coming on and shutting off frequently during operation of irrigation systems.
- (73) *Rain Sensor Device*. A low voltage electrical or mechanical component placed in the circuitry of an automatic irrigation system that is designed to turn off a sprinkler controller when precipitation has reached a pre-set quantity.
- (74) *Remove or removal* means actual or effective removal through killing, damaging, or destroying of any trees that are not exempt trees.
- (75) *Renovation development* means a development that includes:
- a. Additions to existing buildings or structures totaling 25 percent or more of the total gross floor area of all existing buildings or structures on the site inclusive of any additions made during the previous three years; or
 - b. Improvements to existing buildings and site improvements consisting of any combination of repairs, reconstruction and alteration to a building or site the cumulative costs of which, according to most current edition of the Southern Building Code valuation (updated annually), equal or exceed \$25,000.00.
- (76) *Replacement tree* means a tree from the list of native vegetation contained in this landscape code deemed acceptable by the community development director as a replacement tree(s) for any tree(s) removed.
- (77) *Restoration plan* means a landscape plan required to address violations of this landscape code and prepared in accordance with the requirements outlined herein.

- (78) *Runoff* means water that is not absorbed by the soil or landscape and flows from the area following irrigation or a storm event.
- (79) *Shade tree* means a hardwood tree that locally reaches a minimum height of 25 feet at maturity, and provides relief from direct sunlight for at least six months of the year.
- (80) *Shrub* means any woody perennial plant of low height, characterized by multiple stems and branches continuous from the base. Shrubs shall be a minimum of 24 inches in height and have a minimum 12-inch spread or be a 3-gallon container size at planting.
- (81) *Site Appropriate Plant* means a plant that after establishment, will thrive within the environmental conditions that are normal for a specific location without artificial supplements such as irrigation.
- (82) *Skyglow* means the illumination of the night sky or parts of it, most commonly created by artificial light sources. See *Light pollution*.
- (83) *Soil Moisture Sensor*. See *Moisture Sensing Device*.
- (84) *Soil Texture* means the classification of soil based on the percentage of sand, silt, and clay in the soil.
- (85) *Spread* means...refer to crown.
- (86) *Tree* means a self-supporting, woody, perennial plant, growing locally to a 15 feet or greater height with a minimum mature crown spread of 15 feet or greater. It also has a trunk the owner can maintain with over six feet of clear wood. No provision relating to trees in this landscape code shall include exempt trees. (height @ planting? 10feet+)
- (87) Tree abuse means??? Do we want this defined (refer to CS)
- (88) *Turf and/or Turfgrass* means a mat layer of monocotyledonous plants such as Bahia, Bermuda, Centipede, Paspalum, St. Augustine, and Zoysia.
- (89) *Vacant development* means a building or buildings comprising a single development and having remained unoccupied for not less than 180 days.
- (90) *Valve* means a device used to control the flow of water in the irrigation system.
- (91) *Vine* means any plant with a long slender stem that trails or creeps on the ground or climbs by winding or attaching itself on a support such as walls, poles, trees, etc.. They shall be a minimum of 36 inches in height at planting and may be used in conjunction with fences, screens or walls to meet physical barrier requirements.
- (92) *Visibility triangle* means the area of land described as either of the following:
- a. The triangular area of property on each side of a driveway formed by the intersection of the driveway and the public right-of-way line with two sides of each triangle being ten feet in length from the point of intersection and the third side being a line connecting the ends of the two other sides; or
 - b. The triangular area of property located at a corner formed by the intersection of two or more public rights-of-way. Two sides being 25 feet in length along the abutting public right-of-way lines and pavement edges, measured from their point of intersection, and the third side being a line connecting the ends of the two other sides. Refer to the landscaping exhibit A for a visual representation of a visibility triangle.
- (93) *Volunteer plant* means a plant that has been deposited and has naturally germinated which was not intentionally planted or contemplated as part of a landscape plan.

(94) *Water Use Zone*. See “Hydrozone”.

(95) *“Xeriscape” or “Florida-friendly landscape”* means quality landscapes that both conserve water and protect the environment, are adaptable to local conditions and which are drought tolerant. The principles of Xeriscape include planning and design, appropriate choice of plants, soil analysis which may include the use of solid waste compost, efficient irrigation, practical use of turf, appropriate use of mulches, and proper maintenance. (Ref. 373.185 F.S.)

Applicability

- (a) This chapter shall apply to any new residential and nonresidential development or to the expansion of existing development. Individual single family dwellings and duplexes shall be exempt from all provisions of this chapter with the following exceptions:
- (1) Swales, visibility at intersections, pruning of trees, turf and weed heights, edging of curbs, sidewalks and roadways, exempt or prohibited species, tree canopy clearance, vegetation removal as it applies to street trees and/or trees required as part of a site and/or landscape plan approval or required to satisfy minimum landscaping requirements. (refer to all applicable Sec.)
- (b) The provisions of this Article shall apply to the development, redevelopment, rehabilitation, and maintenance of all property within present or future incorporated areas of the City, which are subject to the City’s Land Development Regulations and Code of Ordinances. All buildings, structures and changes of use requiring approval via the Site Plan Review Process shall require a submittal of a landscape plan. Landscape plans shall be prepared by a registered landscape architect , or other person authorized pursuant to Sections 481.301 through 481.329, F.S., as amended. Landscape plans for single-family and duplex dwellings may be prepared by the owner of the property.
- (c) No permit shall be issued for building, paving, or tree removal unless the construction documents comply with the provisions hereof. No Certificate of Occupancy or Certificate of Use shall be issued until the requirements herein are met.
- (d) All City facilities shall be managed in accordance with these principles within one year of the Effective Date of this Article. All City landscape service contractors will adhere to these practices. All new bid specifications and contracts will reflect this requirement beginning one year after the Effective Date of this Article.
- (e) All new and renovated City facility landscapes will be designed in accordance with these principles and be constructed and installed using Florida Friendly landscape methods and materials.
- (f) If the provisions of this Article conflict with other Ordinances or Regulations, the more stringent limitation or requirement shall govern or prevail to the extent of the conflict.
- (g) Specific application of the provisions of this Article shall include, but not be limited to:
- (1) All new, redeveloped, or rehabilitated landscapes for public projects and private development projects, including, but not limited to, industrial, commercial, residential, and recreation projects, including new single-family and two-family homes;
 - (2) Developer-installed landscapes at entrances into and common areas of single-family and multi-family projects; and
 - (3) Any development approved prior to the Effective Date of this Article if the approved site plan is amended.
- (h) The following activities or uses are explicitly exempted from the provisions (development standards contained within?) of this Article:
- (1) Bonafide agricultural activities, as defined by Florida Statute;

- (2) Golf courses and specialized athletic fields;
- (3) Any development that is governed by an approval, final site development plan or a valid building permit issued prior to the Effective Date of this Article is exempted from retrofitting or meeting the specific provisions related to efficient irrigation. Existing development is not exempted from those provisions affecting management or maintenance.
- (4) Rights-of-way for public utilities, including electrical transmission and distribution lines, and natural gas pipelines.
- (5) Turfgrass in stormwater management areas;
- (6) Community recreation and play areas;
- (7) Cemeteries; and
- (8) Environmental restoration projects.

(i) No department shall issue a permit provided for herein in violation of this chapter. Compliance with this chapter will be confirmed via permit application/landscape plan. The standards and requirements contained in this chapter are continuing and do not expire upon issuance of the final certificate of occupancy or certificate of completion.

General Provisions.

- (1) Low impact site design practices, such as preserving existing native trees and vegetation, shall be used if feasible. Where established native vegetation is incorporated into the landscape design, irrigation of those areas shall not be required. **Vegetation preserved in this manner can be counted towards the total number of required plants needed for site plan approval.**
- (2) The plant palette and irrigation system shall be appropriate for site conditions, taking into account that, in some cases, soil improvement can enhance water use efficiency.
- (3) Plants shall be grouped together by irrigation demand. The percentage of landscaped area in irrigated high water use hydrozones should be minimized.
- (4) All landscapes must be designed and planted in accordance with Florida-Friendly Landscaping principles. The percentage of landscaped area, excluding turfgrass areas, in irrigation high water use hydrozones shall be minimized to no more than twenty (20) percent of the total non-turfgrass landscaped area.
- (5) High water use hydrozones and turfgrass areas should be located away from impervious surfaces such as parking areas and sidewalks when possible to avoid water runoff and wastage.
- (6) 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 required by Section 373.228, F.S., as amended.
- (7) The landscape plan shall consider natural drainage features that minimize runoff and maximize infiltration. 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, and other similar materials, and shall not exceed 10% of the landscaped area. Use of pervious paving materials, where appropriate, is encouraged.
- (8) 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.

- (9) Reclaimed or non-potable water should be used for irrigation if an acceptable source is determined to be available by the water provider.

Landscape plan and irrigation plan requirements.

- (a) Prior to any lot clearing, or the development or redevelopment of any open space, vehicular use area, multifamily or nonresidential development, a permit from the Department of Community Developments' Building Division shall be required. A landscape plan shall be submitted and must be approved as part of the site plan review process, before the issuance of a building permit. All landscape plans shall be prepared in accordance with the requirements set forth in this landscape code.
- (b) The following information is required on all landscape plans:
 - (1) Plans shall be signed and sealed as per Florida Statutes, Chapter 481.321 'Seals; display of certificate number.', which states "All final plans, specifications, or reports prepared or issued by the registered landscape architect and filed for public record shall be signed by the registered landscape architect, dated, and stamped or sealed electronically with his or her seal. The signature, date and seal constitute evidence of the authenticity of that to which they are affixed". Additionally, the parcel control number and address of the property location as well as the name, address, and telephone number of the applicant, and the Florida Registered Landscape Architect, Architect, Engineer or other applicable professional shall appear on the plan.
 - (2) The plan shall be drawn to scale, indicating property boundaries, lot orientation, easements, location and size of existing and proposed buildings and structures, which includes the following or similar: pools, walkways, patios, utility lines and services, light fixtures and light poles, overhead lines, any pad-mounted items (transformers, generators, pool pumps, etc.), fire hydrants, benches, walls, fences, freestanding signs, curbs, planters, green roof area, existing and proposed elevations, and any other factors affecting the proposed use of the property (including the land use and zoning of adjacent properties).
 - (3)
 - (4) Plans must clearly delineate the location and number of existing and/or proposed parking spaces, other vehicular use areas, service areas, driveways and cross-lot driving corridors.
 - (5) Include the location and specifications of inanimate landscape materials to be used, such as mulch, rocks and gravel.
 - (6) Include the location and dimensions of landscaping required for any freestanding signs, if applicable.
 - (7) The plan shall clearly delineate and code the location, quantity, size, description, and specifications of landscaping, grade of plantings, landscape area structures (e.g., curbs and planters), and perimeter and interior landscape area. This information shall be provided in table form within the landscape plan.
 - (8) Any other tables / graphs/ info. Biodiversity / Gray vs. Green / wind tolerance / drought resistance, ecological importance???
- (c) For all lot clearing, development and redevelopment, excluding individual single-family and duplex lots:
 - (1) The owner shall submit a vegetative analysis describing the vegetative cover existing on site, along with a tree survey identifying all native and protected trees with a caliper equal to or greater than one and one half inches DBH. Additionally, all native and protected palms with more than five feet of clear trunk shall be noted on the tree survey. Finally, any rare or unique vegetation, rock structures, natural formations or plant communities shall be incorporated into the tree survey and vegetative analysis.

- 1) Landscape plans shall meet the following standards:
 - a) A minimum scale of one (1) inch equals fifty (50) feet;
 - b) Location of all trees, vegetation, or ecological communities to be preserved, and tree survey if applicable;
 - c) Location of all landscape material to be used with identification coding;
 - d) Landscape material schedule/table listing all plants being used with their botanical and common name and where applicable, cultivar name; spacing of plants, quantities and container size of each type of plant, size of plant material at time of planting, and typical mature height and spread of landscape material.
 - e) Indicate if plant material is native to South Florida, list the degree of drought tolerance, wind and salt resistance and ecological importance (recognized as an important or unique food or shelter source for animals and/or insects) and include source of information.
 - f) Typical planting illustration/details for trees, palms, shrubs, groundcover and sod.
 - g) Location of existing and proposed water bodies and retention areas.
 - h) Location and outline of existing buildings and site improvements to remain in addition to any proposed buildings and site improvements, including structures such as sheds, pools, fountains, fences and retaining walls;
 - i) Location of existing and proposed hardscape features such as driveways and sidewalks;
 - j) Location of all underground and overhead utilities;

- 2) Irrigation plans shall meet the following standards;
 - a) A minimum scale of one (1) inch equals fifty (50) feet;
 - b) Location of existing trees, vegetation and ecological communities to remain, if applicable;
 - c) Location of existing buildings, paving and site improvements to remain or proposed;
 - d) Irrigation points of connection (POC) and design capacity;
 - e) Water service pressure at irrigation POCs;
 - f) Water meter size;
 - g) Major components and location of the irrigation system, including all pumps, filters, valves, and pipe sizes and lengths;
 - h) Reduced-pressure-principle backflow-prevention devices for each irrigation POC on potable water systems and specifications;
 - i) Controller locations and specifications, with location of rain shut-off devices or soil moisture sensors;
 - j) The irrigation legend will have the following elements: Separate symbols for all irrigation equipment with different spray patterns and precipitation rates and pressure compensating devices; general description of equipment; manufacturer's name and model number for all specified equipment; recommended operating pressure per nozzle and bubbler and low-flow emitter; manufacturer's recommended overhead and bubbler irrigation nozzle rating in gallons per minute or gallons per hour for low flow applicators; minimum (no less than 75% of maximum spray radius) and maximum spray radius per nozzle; and manufacturer's rated precipitation rate per nozzle at specified psi; and
 - k) Zone layout plan (minimum scale 1" = 20') which indicates the following;
 - i) Head type, specifications and spacing;
 - ii) Methods used to achieve compliance with landscape irrigation design standards and required irrigation zones as required by this Article and Section 373.228, F.S., as amended.

Landscape design standards.

- (1) Landscaped areas shall be located on a site in such manner as to maximize preservation of existing trees with priority given to specimen trees.
- (2) Not less than 50 percent of the required landscaping for a multifamily residential development and for all other nonresidential development shall be interior landscaping, where applicable (i.e., parking areas).
- (3) The property owner shall not place impervious areas within five feet of the base of an existing tree.
- (4) The property owner shall install mulch within all planting areas and around all trees to a depth of three inches. The type of mulch shall be specified on the landscape plan.

- (5) Not less than 75 percent of a required shoreline buffer shall consist of native vegetation.
- (6) An opaque, minimum six-foot high masonry wall or wood fence shall screen the location of all trash receptacles, including dumpsters. A hedge shall be installed around the perimeter of this screen. Dumpsters shall be sited so as not to be visible from the public right-of-way. Metal gates or similar, shall be used to screen trash receptacles from view from the public right-of-way. All dumpsters must be screened (to greatest extent possible) within one year of adoption of code.
- (7) The owner shall exhibit all lighting details on or included with all landscape plan submittals. Efforts shall be made to reduce light pollution, which includes light trespass, and skyglow through the use of shielding and proper lightning elements. Proposed elements that will mitigate light pollution shall be described and noted on the plan. Lightning details shall be reviewed for public safety concerns by the Director of Community Development or designee, in accordance with site plan review procedures. Standards for coastal lightning as described in Palm Beach County's Unified Land Development Code, Environmental Standards (currently Article 14) shall also be incorporated when applicable.
- (8) So long as the parking area remains screened from the public right-of-way and adjacent private property, landscape materials may be clustered, and hedges may be replaced or interrupted in areas, which provides for decorative wall and berms and other creative landscape features. This allows for flexibility and creativity in design standards. The Director of Community Development or designee, must approve of such modification in accordance with site plan review procedures, and it must be consistent with the intent of this landscape code.
- (9) The required landscaping (not less than 20 percent of the total gross area) shall be increased by ten (10) square feet for each additional parking space exceeding the minimum number of parking spaces required by the City of Riviera Beach Land Development Code and the Director of Community Development or designee,. The additional landscaping shall be designed in accordance with the standards of these regulations. For each additional 100 square feet of impervious areas or fraction thereof, the owner shall provide one shade tree in addition to shrubs, ground cover, grass and mulch. Add additional fee?
- (10) The base of each permitted freestanding sign shall be surrounded by a three foot landscape area around the perimeter of the sign. This three foot area shall be planted with low-growing plant material in a manner that will present a full and finished appearance within a six month period from planting. Completion of this requirement is mandatory prior to the final inspection and approval of any new freestanding sign or sign face change.
- (11) The maximum percentage of gravel or decorative rocks used at landscape elements shall be a maximum of 25% of the required landscape area.

Landscape Design Standards Cont'

- (a) *Plant material standards.*
 - (1) At least 65 percent of all required landscaping in the form of trees, shrubs, ground cover, and grass shall collectively consist of native vegetation. The owner may select the native vegetation from **appendix B. Native vegetation plant list**. This list may be amended, as necessary, from time to time.
 - (2) At least 65 percent of all required trees shall consist of a native, shade tree species. Not more than 20 percent of all required trees shall be of a palm species. When palm species are used, they shall have a minimum of six feet of clear wood at time of planting.
 - (3) At least 20 percent of all required landscaping shall consist of plant material that is recognized as being ecologically significant (plants providing significant food sources or habitat for desirable animals, birds and/or insects).

- (4) All required trees shall meet the following requirements immediately after planting:
 - (a) Minimum trunk diameter of 1½ inches DBH.
 - (b) Minimum height of ten feet.
 - (c) Minimum of five feet clear trunk space.
 - (d) Minimum average crown spread of five feet.

If any newly installed plant material fails to meet the above mentioned criteria, it will not be considered a tree and will not count towards the required number of trees during landscape inspection. If this should occur, the material shall either be replaced or, at the discretion of the Director of Community Development, additional plant material may be installed on site to mitigate any lack of plant material.

- (5) Trees shall be properly installed and braced according to best management practices.
- (6) To increase landscape biodiversity and to minimize potential impacts of species-specific diseases or insects, it is important to have multiple species planted on a site. If more than 5 shade trees are required, at no time shall more than 50% of all required shade trees onsite be comprised of the same species. This tree diversity requirement can be satisfied by following the guidelines within the table below:

| Required Number of Shade Trees | Minimum Number of Shade Tree Species |
|--------------------------------|--------------------------------------|
| 1-5 | 1 |
| 6-15 | 2 |
| 16-30 | 3 |
| 31-50 | 4 |
| 51-75 | 5 |
| Over 75 | 6 |

- - Trees
 - (7) Plant materials used in accordance with this article shall conform to the standards for Florida Grade 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 and noxious pests or diseases. Grass seed shall be delivered to the job site in bags with Florida Department of Agriculture tags attached indicating the quality control program.
 - (8) The owner shall not plant closer than 12 feet thereto tree species identified by the community development director as likely to cause damage to public roadways, public facilities or building foundations. The owner may only plant them if the tree root system is completely contained within a container or barrier five feet square and five feet deep. The construction requirements shall be four inch thick concrete reinforced with #6 road mesh (six X six X six) or equivalent.
 - (9) Trees of species whose canopy could be damaged by or could cause damage to overhead power lines shall not be planted closer than a horizontal distance of 15 feet from such overhead power lines. Right tree right place guidelines, which have been demonstrated by the Arbor Day Foundation and others, shall be used as guidelines for ensuring proper tree placement.
 - (10) Vines shall be a minimum of 30 inches in height at planting. The owner may use them in conjunction with fences, screens, or walls to meet physical barrier requirements.
 - (11) If the owner uses ground cover , he or she shall plant it to present a coverage of 50% and reasonably complete coverage within six months of installation.
 - (12) The owner shall plant turf areas with species locally grown as permanent lawns. The owner may sod, plug, sprig, or seed grass areas, provided he or she uses solid sod in swales or other areas subject to erosion. In areas

where solid sod or grass seed is not used, nurse grass seed shall be sown for immediate effect and protection until coverage is otherwise achieved.

- (13) Landscaped areas shall be protected from vehicular encroachment by curbing and wheel stops where appropriate.

(b) Installation.

- (1) All required landscaping installed pursuant to this landscape code shall be installed according to accepted good planting practices and best management practices identified by the International Society of Arboriculture (ISA) or similar. All plants shall be installed so that the top of the root ball remains even with the soil grade. All trees, palms and shrubs shall be hosed in with water at the time of installation to eliminate any air pockets. Trees and palms shall be properly braced or staked at the time of planting. Stakes and braces shall remain for a minimum of 12 months.
- (2) Barricades shall be established and remain around protected areas until final landscape inspection approval. Protected existing trees and landscape areas shall remain free of construction debris and vehicles, stored material and chemicals or similar.
- (3) For multifamily residential development and for all other nonresidential development, the owner must install all required landscaping according to the landscape plan and the requirements of this landscape code. The city will not issue a certificate of occupancy, certificate of use or similar authorization until the community development director has certified the required landscaping has been properly installed.

(c) Standards for preservation and clearing of vegetation.

- (1) The owner shall retain all native vegetation not located in areas requiring their removal as part of the development plan, in an undisturbed state. At minimum, 20 percent of the total gross area of the development site shall be landscaped and the landscaped areas shall be located in such manner as to maximize preservation of existing trees. Such areas of native vegetation shall be screened using a protective barrier during construction. The type of screening shall be approved by the community development director before a permit to clear the property will be issued. The fee shall be the minimum charged by the city for permits.
- (2) For all developments of five acres or more permitted after the effective date of this ordinance
- (3) Vegetation that is set aside for preservation shall be protected from all on-site construction. Protective barriers shall be installed along the perimeter of all preserve areas and constructed at such intervals to prevent machinery from passing between them. No equipment or materials shall be permitted within set-aside areas, and dumping of excess soil, liquids, or other construction debris into preserved areas is prohibited. Removal or re-grading of soils within preservation areas is prohibited. Any damaged vegetation within the set-aside areas shall be replaced with vegetation equivalent to the vegetation that was destroyed. Protective barriers shall be established and remain around all preserve areas and trees until final landscape inspection approval.
- (4) The owner shall eradicate and remove all exotic nuisance vegetation species as part of the site preparation process before a certificate of occupancy or certificate of completeness shall be issued.
- (5) Existing healthy trees which have a caliper of one and one half inch DBH, or larger, and which are not prohibited trees, may be credited toward meeting the minimum number of required trees. However all parking areas are required to comply with the parking area landscape requirements.
- (6) A tree removal permit or land clearing permit must be obtained from the city before removing any tree of three inches DBH or greater, unless the tree has been determined to be an invasive or noxious species which can be removed without a permit.

- (7) Please refer to Sec. 30-37 Natural features preservation, for additional preservation requirements for subdivisions.

Standards for land clearing and preservation of native vegetation

- (a) This section shall apply to all development permitted upon approval of this regulation. Parcels or lots independent of larger developments that are less than five (5) acres in size shall not be subject to these set-aside requirements. Individual single-family lots are exempt from this requirement; however, single family and planned unit developments are not exempt. Tree preservation ordinances and all other landscape requirements shall remain applicable to all development as described in the tree preservation and landscape ordinances.
- (b) This ordinance mandates a total of 10% percent of a site planned for development be set aside for preservation. When clearing, 10% of the native vegetation on the site shall be preserved. If vegetation is not present on site, established open space zoning and landscape ordinance criteria shall be followed.
- (c) Vegetation that is set aside for preservation shall be protected from all on-site construction. Protective barriers shall be installed along the perimeter of all preserve areas. Protective barriers shall be constructed at such intervals to prevent machinery from passing between them. No equipment or materials shall be permitted to be stored within the set-aside areas, and dumping of excess soil, liquids, or any other construction debris within the preservation areas is prohibited. Removal or re-grading of soils within preservation areas is prohibited. Any damaged vegetation within the set-aside areas shall be replaced with vegetation equivalent to the vegetation destroyed before any certificates of occupancy or other approvals may be issued. Utilities, stormwater easements and right-of-ways are exempt but should avoid preserved areas. Although not specifically required, creative alternatives to common practice in these areas may be eligible for incentives.
- (d) Areas that are considered to be of high ecological importance should be given highest priority for protection. These areas include, but are not limited to, areas that have occurrences of federal and state listed species of flora and fauna, areas of high biological diversity, and areas that are in aquifer recharge zones.
- (e) If more than one native terrestrial plant community is present on the site, areas representing all existing plant communities shall be preserved onsite unless preserving more of one particular community is more ecologically beneficial.
- (f) High-quality areas placed in preservation shall be retained in entirety, in their current or improved natural state, and protected into perpetuity regardless of ownership. This requirement may be negotiated to create contiguous preservation among plant communities. The developer shall prove to the reviewer, through exhibits provided during the site approval process, that the highest ecologically valued land is being retained first in order to satisfy the set-aside requirement. If the preservation of the highest ecologically valued land produces undue burden on the development of the property, it is also the developer's responsibility to prove such hardship and provide an acceptable alternative for approval.
- (g) Areas set aside for preservation should be contiguous parcels of land that are interconnected and considered viable habitat for wildlife to the extent practical. Small fragmented areas of preservation should be avoided when possible.
- (h) Rights-of-way and areas determined to be future rights-of-way in the comprehensive plan, and utility or drainage easements shall not be allowed as designated set-aside areas.

Appropriate plant 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 drought, wind and/or salt tolerant with some

cold tolerance are preferred. Additionally, plants that have a high ecological value, (plants providing important or unique food sources or habitat for animals and/or insects) shall be incorporated into plant selection strategy.

- (b) For purposes of determining prohibited and controlled plant species refer to the Department of Agriculture and Consumer Services rule, Chapter 5B-57 Florida Administrative Code. Plants named in this rule may not be used except as allowed in Chapter 5B-57. Additionally, the Florida Exotic Pest Plant Council's (FLEPPC) list of invasive species shall be used to determine the invasive status of any plant species. Customarily, FLEPPC's list is available online and is updated every two years.
- (c) 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. The water use zones (hydrozones) shall be shown on the irrigation, layout, and planting plans (where required). 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) The combined size of all high water use hydrozones shall be limited to 20% of the total landscaped area. In landscapes irrigated with recycled water, the allowable size of all high water-use zones shall be limited to 75% of the total landscaped area. These high water-use limits do not apply to landscaped areas requiring large amounts of turf for their primary functions, e.g., ballfields and playgrounds (refer to ???).

Plant material and installation.

- (a) No more than 25 percent of all trees required or proposed to be planted in perimeter landscape buffers may be palms (all species). When palms are chosen as satisfying buffer requirements, the clustering of three palms shall be required and equal to one canopy tree, pursuant to buffer area requirements. No more than 50 percent of the total trees required or proposed on-site may be palms (all species). Fifty percent or more shall be native plant material as recognized by the Xeriscape Plant Material Guide I or II, published by the South Florida Water Management District.
- (b) All heights, as specified with this chapter, are minimum height at time of installation.
- (c) Ground cover shall be placed or planted on all portions of exposed ground or earth not occupied by other landscape materials. Ground cover consists of low level plant material, grass or other permeable organic material capable of absorbing run-off. Ground cover may include wood chips, pine straw, bark and mulch, and similar approved materials only when used in conjunction with living ground cover. Native ground cover is encouraged where possible.
- (d) Berming or earth mounds shall be physical barriers which block or screen the view similar to a hedge, fence or wall. Such berms shall be constructed not to exceed a three to one slope and adequate ground cover and plant material shall be installed to prevent erosion.
- (e) All new vegetation shall be located so as to provide unrestricted flow or access to drainage swales or utility easements or areas where frequent pruning is required to avoid interference with overhead power lines.
- (f) All new landscaping shall meet the minimum acceptable standards of Florida Number One or better represented by the Florida Department of Agriculture and Consumer Services.
- (g) Shrub planting, when required to be planted by ordinance, shall be spaced accordingly to plant size and type of hedge material used. Hedges, where required, shall form a solid continuous visual screen one year after planting.
- (h) Tree planting, pursuant to the requirements, may be grouped upon meeting the overall intent of this chapter to provide visual buffers, breaking of monotony and positive influence on microclimate of area. The use of walls, berming, and fencing may be utilized in conjunction with grouping trees. Grouping of trees shall be subject to the Department of Community Development review and approval.
- (i) All plant materials of each type and quantity, including trees, shrubs and ground cover, shall at least be 50 percent native. Native material shall consist of natural plant material listed with the Xeriscape Plant Guide I or II, published by South Florida Water Management District.

(j) Substitutions of an approved plant material may be approved by the Director of Community Development or designee; however, such substitution shall only incorporate additional native material in excess of the 50 percent native materials as required.

(k) Staking of all trees shall be required to ensure healthy, stabilized plant and root growth occurs. The staking shall be as follows: guy and stake tree three directions with black guying system or two strands of 14 gauge twisted galvanized wire and turnbuckle through flexible hose chafing guards, with wooden stake anchors immediately after planting. The staking shall remain until the plant is established. The staking may be required to remain until the end of an upcoming hurricane season, if it is determined to be appropriate by the Director. Staking shall be replaced or removed prior to causing girdling or damage to the plant at the discretion of the Director.

Landscape maintenance.

(a) The owner, tenant and their agent, if any, shall be jointly and severally responsible for the continued regular maintenance of all landscaping materials and shall keep them in healthy, neat, and orderly appearance, free from disease, pests, weeds, refuse and debris at all times. Property maintenance shall include:

(1) Periodic watering to maintain healthy flora, more drought tolerant material, minimize fungus growth and stimulate deep root growth;

(2) Pruning shall be in accordance with good horticultural standards as defined in the ANSI A300 Standards (or most current standards) as set forth by the Tree Care industry Association (f.k.a. the National Arborists Association) and approved by the American National Standards Institute (with the exception of Section 2.3.1 of the ANSI A300 Standards, which requires that pruning be performed only by arborists or arborist trainees). A copy of the ANSI A300 Standards shall be maintained by the Department of Community Development and shall be available during regular business hours. Trees and shrubs shall not be severely pruned, hat raked, "hacked" or "headed back". A maximum of one-fourth of a tree canopy may be removed from a tree within a one year period, provided that the removal conforms to the standards of crown cleaning, crown thinning, crown raising, vista pruning, and crown restoration techniques. At the discretion of the Department and based on the severity of the violation, a tree which is pruned in excess of these requirements shall either be replaced in accordance with section 26-96 of the Town Code or shall be subject to corrective pruning by a certified arborist. Nuisance and exotic species as identified in section 26-100 shall be exempt from the pruning requirements of this Chapter.

(3) Turf and weeds shall be mowed as required and shall not exceed six inches in height for developed nonresidential areas and eight inches in height in developed residential areas. Grasses and weeds shall not exceed 12 inches in height on vacant undeveloped properties;

(4) All roadways, curbs and sidewalks shall be edged by the party responsible for installing and maintaining the grass adjacent to the roadway, curb and/or sidewalk when necessary to prevent encroachment of grasses;

(5) All lawns and planted areas shall be fertilized periodically to ensure continued healthy growth;

(6) Replacement of dead plant material under the provision of this chapter;

(7) Removal of unprotected, prohibited, harmful and illegal plant species shall occur as outlined in Chapter 26; and

(8) All tree canopies that are planted on private property and overhang onto a public and/or private right-of-way shall remain clear from the ground level up to a height of seven feet over sidewalks or drainage areas, and to a height of eight feet over public alleys, streets or highways.

(b) Landscaping shall be inspected on a periodic basis by the Department of Community Development to determine compliance with landscape installation standards. If the owner, tenant or their agent do not maintain the property in conformance with the above provisions, the above individuals shall be notified in writing via

certified mail indicating noncompliance and the owner, tenant or their agent shall within 30 calendar days from receipt of the notice rectify the deficiency. If the owner, tenant or their agent fail to progress or comply within the 30 day time frame, the Department of Community Development shall initiate under the provisions of the Code enforcement citation system appropriate action.

(c) Landscaping may be inspected as needed, of which the standards established above are maintained. Such inspections shall be enforceable through the issuance of the Town's business tax receipt. The owner, tenant or their agent shall be notified in writing via certified mail by the Town of any areas which are not being properly maintained and shall, within 15 calendar days from time of notification, address and rectify the deficiency.

(d) Trees on single family lots unless pruned by a commercial tree service business, landscape company, lawn service business or other related businesses shall be exempt from this section.

(e) Any commercial tree service business, landscape company, lawn service business or other similar or related businesses violating the provisions of this section shall be subject to penalty as provided by section 1-15, or other such remedies as are available by law.

VIOLATIONS, ENFORCEMENT and Penalty

The community development director or designee shall issue a stop work order to any person found in the act of cutting down, destroying, damaging, or removing vegetation or landscaping in violation of this landscape code. The steps involved are listed:

- (1) A stop work order is issued by the city;
- (2) The city imposes applicable fines;
- (3) The city requires a restoration plan or the correction of the violation(s), per the discretion of the community development department director, in accordance with this landscape code;
- (4) The community development director or designee accepts a restoration plan and/or the violation correction(s);
- (5) Work resumes, and permits can be issued.

(f) *Violations for damaging, destroying or improperly pruning trees.*

- (1) Fines will be assessed for all violations of this landscape code, as provided below.
 If a protected tree, with a DBH greater than three inches is removed without permit, a fine of \$100 for each inch of tree trunk measured at DBH will be assessed to the property owner.

(f) *Violations for removal of trees without a permit.*

- (2) Fines will be assessed if a protected tree, or tree required by a landscape plan, with a DBH greater than three inches is removed without permit, a fine of \$100 for each inch of tree trunk measured at DBH will be assessed to the property owner.
- (3) Fines will be assessed if any protected palm or palm tree required by a landscape plan is removed without a permit. A fine of \$25 will be assessed for each foot of clear trunk that a palm had, will be assessed to the property owner.
- (4)

| DBH of Existing Tree | Fine |
|----------------------|------------|
| 36 inches or greater | \$2,000.00 |
| 30—35 inches | \$1,800.00 |

| | |
|-------------------------------|-----------------------|
| 26—29 inches | \$1,600.00 |
| 20—25 inches | \$1,400.00 |
| 13—19 inches | \$1,200.00 |
| 8—12 inches | \$1,000.00 |
| Less than 8 inches | \$800.00 |
| | |

- a. If the community development director is unable to determine the number of protected trees removed, the owner shall correct the violation by paying a civil fine of up to \$5,000.00 per acre, or fraction thereof, of the land cleared. The community development director shall assess this fine. No work shall proceed on the property until the restoration plan has been approved and the fine has been collected.
 - b. A person aggrieved by an administrative order, determination or decision of the community development director regarding the provisions of this section may appeal the order, determination or decision to the city manager. The aggrieved person must notify the city manager, in writing, within five days of the order, decision, or determination.
 - c. The city shall deem a separate offense to have been committed for each tree removed, damaged, or destroyed contrary to the provisions of this section.
 - d. In addition to other remedies and notwithstanding the existence of an adequate remedy at law, the City of Riviera Beach may seek injunctive relief in the circuit court to enforce the provisions of this section. The city shall be entitled to reasonable attorney's fees and costs, including applicable fees and costs in action where the city is successful in obtaining affirmative relief.
- (5) A restoration plan is required. All violations of this landscape code involving the unauthorized removal of trees and vegetation shall require the landowner to file a restoration plan as provided for below. The primary consideration of the restoration plan shall be to return the affected portion of the site to its natural state. If this is impossible, it shall mitigate the negative effects of the violation over the entire site to the greatest extent possible. The community development director shall inspect the implementation of the plan, which may require any guarantees deemed necessary to insure the maintenance and survival of the implemented restoration plan.
- (6) A stop work order shall be issued for all sites in violation, upon which construction has been authorized. The City of Riviera Beach shall issue no further city permits for the subject property or project, or attendant inspections completed, until the owner corrects such violations, or the community development director has accepted a restoration plan. This shall include the certificate of occupancy for the attendant structure.
- (7) This landscaping code outlines criteria for the restoration plan. When the unauthorized removal of landscaping has occurred, the owner or developer shall submit a restoration plan within 30 days after the city has cited him or her for such violation. In evaluating a proposed restoration plan, the community development director shall consider the following:
- a. The cross-sectional area of trees removed, at DBH;
 - b. The specific aesthetic character of the materials removed;
 - c. The amount of native vegetation the owner has removed without the authorization of the community development director;

- d. Any special function of the material carried out as a screen or buffer; and
- e. The amount of other natural materials preserved on the site and the opportunities for planting additional landscaping.

Any person found in violation of any of the provisions of this article shall be punished as prescribed in section 1-11, and further may be subject to revocation of building permit.

Exemptions.

- (e) The following are exempt from the permitting and review process of this landscape code:
 - (1) Pruning or removal of damaged trees after a natural disaster or act of nature such as a hurricane shall be done according to current best management practices (ANSI A300 or similar). If a damaged tree maintains the necessary structural stability, it is not to automatically be removed, as it may recover and obtain a desirable form with future maintenance and supervision. If the vital structural elements of a tree have been compromised, the tree shall be removed and replaced.
 - (2) The removal of trees or other landscape element damaged by fire, windstorm, lightning, or other acts of nature, which pose imminent danger to life or property;
 - (3) The removal of landscaping specifically grown as landscape material for resale, including all licensed nurseries and botanical gardens;
 - (4) The removal of exempt trees, as defined in this landscape code;
 - (5) The removal of damaged or hazardous trees in conjunction with a declared emergency.

Volunteer plants.

Any identified noninvasive plant, growing in a suitable location, without interfering or potentially interfering with utilities, lines-of-sight, or structures, shall be allowed to grow. A volunteer plant meeting the aforementioned description shall be maintained according to this Article. Volunteer plants are part of a natural succession found within plant communities and help to provide shade, clean air and water management benefits. A common example of a volunteer plant would be a sable palm growing within a hedge.

Buffers for multifamily development, commercial and other nonresidential.

- (a) *Generally.*
 - (1) In order to reduce visual, light, and noise impacts, a required buffer shall be located along the length of adjacent private property.
 - (2) The owner shall provide buffers for all developments seeking site plan approval as required by this landscape code.
- (b) *Buffer width requirements.* Except where the side or rear yards are smaller than the outlined buffer width requirements, the buffer width requirements for one-story developments are:

Abutting single-family or two-family zoning district.

| Type of Use | Side Yard (Ft.) | Rear Yard (Ft.) |
|-------------|-----------------|-----------------|
|-------------|-----------------|-----------------|

| | | |
|---|----|----|
| Multifamily, 0.5 acre or less | 15 | 20 |
| Multifamily > 0.5 acres | 25 | 25 |
| Commercial and other nonresidential (other than industrial) | 25 | 25 |
| Industrial | 30 | 30 |

Where the side or rear yards are smaller than the outlined buffer width requirements:

- (1) Multifamily residential uses shall have buffers consisting of 40 percent of each of the side and rear yard widths;
- (2) Commercial and other nonresidential uses (other than industrial) shall have buffers consisting of 75 percent of each of the side and rear yard widths; and
- (3) Industrial uses shall have buffers consisting of 90 percent of each of the side and rear yard widths.

For multi-story developments, the buffer width is an additional ten feet for each additional or upper story, where applicable.

(c) *Buffer landscaping.*

- (a) A buffer shall consist of landscaping to include a buffer screen.
- (b) The width of a buffer screen shall be 25 percent of the width of the required buffer.
- (c) A fence or wall included in a buffer shall be constructed to present a finished appearance to neighboring uses looking onto the site.
- (d) The owner may provide an opening through a buffer area to facilitate pedestrian or vehicular traffic between developments subject to the approval of the community development director.
- (e) Excluding the buffer screen area, a dry retention area may be located in a buffer. Existing plant material within a dry retention area shall not be credited toward meeting the landscape requirements of this landscape code.

Development landscaping requirements.

(a) *Single-family and two-family development.* Single-family and two-family development, newly constructed, shall include, at a minimum, one existing or planted tree for every 2,500 square feet of lot area or fraction thereof. A minimum of six shrubs and at least one shade tree in the front yard and at least one tree in the rear yard shall be located on the property. The owner shall show trees on a site plan submitted for building permit approval.

(b) *Multifamily residential development.*

- (1) Multifamily development shall provide a landscaped strip of land not less than ten feet wide between building walls and parking areas. Landscape materials shall be provided as follows:
 - a. The greater of one tree for every 20 linear feet of required landscape perimeter area, or one tree for every 200 square feet of planting area or a major portion thereof. Not less than 50 percent of trees, located between the building walls and parking areas shall be shade trees; and
 - b. A hedge or other durable landscape barrier not less than 24 inches in height at installation placed in a continuous manner along the building walls.
- (2) A landscaped strip of land, not less than ten feet in depth, shall be located between the abutting right-of-way and parking areas. Landscape materials shall be provided as follows:

- a. The greater of one tree for every 20 linear feet of required landscape perimeter area, or one tree for every 250 square feet of planting area or major portion thereof. No less than 75 percent of the trees, located between the abutting right-of-way and parking area shall be shade trees;
 - b. A hedge, wall, berm or other durable landscape barrier not less than three feet in height at installation placed in a continuous manner along the building walls; and
 - c. A combination of grass, ground cover, or other landscape treatment excluding paving shall cover the remainder of the landscaped strip.
- (3) The owner shall landscape all property, excluding the required landscape strip lying between the building and parking area, and the right-of-way and parking area, with grass or other ground cover.
 - (4) Multifamily residential development shall provide not less than one tree for each 1,500 square feet or fraction thereof, of development site.
 - (5) The owner shall landscape not less than 20 percent of the development site.
 - (6) The city will credit existing native vegetation and trees toward landscaping requirements.

Refer to landscaping exhibit D, example of multifamily development.

- (c) *Commercial and other nonresidential development.* A commercial or other nonresidential development being new development, renovation development or vacant development shall include one existing or planted tree for every 1,500 square feet, or fraction thereof, of development site. The owner shall landscape not less than 20 percent of the developed site.

Parking areas for multifamily and all nonresidential developments.

- (a) *Parking area landscaping adjacent to streets.* The owner shall install landscaping on the site of a multifamily or nonresidential development including a parking area not entirely screened visually by an intervening building from abutting streets, as follows:
 - (1) A landscaped strip of land not less than 10 feet in width shall be located between the parking area and the abutting street.
 - (2) The landscaping provided within the landscaped strip shall include:
 - a. One tree for every 20 linear feet of required landscape strip planted singly or in clusters, not be more than 50 feet apart, located between the common lot line and the parking area;
 - b. A hedge, wall, berm or other durable landscape barrier of not less than 24 inches or three gallon containers at installation placed along the outside perimeter of the landscaped strip;
 - c. Other landscaping, such as shrubs or vines, planted five feet on-center along the street side of a wall; and
 - d. Grass, ground cover, or other landscape treatment.
 - (3) The owner shall plant shrubs comprising a hedge in the landscaped strip at 24 to 30 inches on-center.
 - (4) Not less than 25 percent of the strip shall be ground cover.

- (5) At a minimum, the owner shall also landscape property located between the strip and parking area with grass or other ground cover.

Refer to landscaping exhibit C, example of commercial development.

(b) *Parking area landscaping adjacent to private property.* On the site of multifamily or a nonresidential development including a parking area not entirely screened visually by an intervening building from abutting private property, the owner shall install landscaping as follows:

- (1) A landscaped strip of land not less than five (5) feet in width shall be located between the parking area and the abutting private property.
- (2) The landscaping provided within the landscaped strip shall include:
 - a. One tree for every 20 linear feet of required landscape strip planted singly or in clusters, not be more than 50 feet apart, located between the common lot line and the abutting private property;
 - b. A hedge, wall, berm or other durable landscape barrier of not less than 24 inches or 3 gallon containers at installation placed along the outside perimeter of the strip;
 - c. Other landscaping, such as shrubs or vines, planted five feet on-center along the street side of a wall; and
 - d. Grass, ground cover, or other landscape treatment.
- (3) The owner shall plant shrubs comprising a hedge in the landscaped strip at 24 to 30 inches on-center.
- (4) Not less than 25 percent of the strip shall be ground cover.
- (5) At a minimum, the owner shall also landscape property located between the strip and parking area with grass or other ground cover.

(c) *Parking area interior landscaping.*

- (1) For multifamily residential and all other nonresidential development, not less than 50 percent of the required landscaping shall be interior landscaping exclusive of required buffers. Interior landscaping shall be located around the periphery of structures and interspersed throughout parking areas.
- (2) The owner shall provide a landscaped area not less than five feet wide, consisting primarily of shrubbery, along the sides of the building which abut a parking area. A landscaped area not less than two feet in width shall be provided along the sides and rear of a building where abutting an on-site service or access driveway. The landscaping located along the sides and rear of buildings, which abut a parking area or driveway(s), shall include a hedge, one tree for every 20 linear feet, and ground cover. The owner may cluster this landscaping to allow for creativity and flexibility in design, with the approval of the community development director.
- (3) Interior landscaping shall include not less than one tree for every 50 square feet or fraction thereof of interior landscaped area. Interior landscaped areas shall be located in such a manner as to divide and break up the expanse of paving.
- (4) Vehicles may not encroach into any interior landscaped area.
- (5) The owner shall provide interior landscaped islands between every ten parking spaces. Each interior island shall be not less than six feet in width. Each interior island shall contain not less than one shade tree and a combination of shrubs, ground cover, grass, and mulch.

- (6) The owner shall provide terminal landscaped islands at the end of each parking row. Terminal landscaped islands shall be not less than ten feet in width and one parking space in length. Each terminal island shall contain not less than one shade tree and a combination of shrubs, ground cover, grass and mulch.
- (7) The owner shall provide interior landscaped medians not less than six feet in width between every interior row of parking spaces. The owner shall landscape interior medians with not less than one shade tree every 20 linear feet thereof planted singly or in clusters. No trees shall be located more than 50 feet apart and a combination of shrubs, ground cover, grass and mulch.
- (8) Not less than 50 percent of trees used in parking area interior landscaping shall be shade trees.
- (9) The owner shall not use interior and terminal landscaped islands and medians for surface water storage. All interior and terminal landscaped islands and medians must be filled or crowned, and curbed.
- (10) Underground parking structures and multi-level parking structures shall have a landscaped buffer 20 feet in width on the front lot line. The owner shall measure the landscaped buffer at right angles to the property line unless parts of the district regulations specify a wider area.

Refer to landscaping exhibit C, example of commercial development.

- (d) *Visibility triangles.* All landscaping within a visibility triangle shall provide unobstructed cross-visibility at a level between 2½ feet and six feet. It shall comply with the most current edition of the Florida Department of Transportation Roadway and Traffic Design Standards, Index 546, regarding visibility triangles. The city shall allow trees or palms having limbs and foliage trimmed so no limbs or foliage extends into the cross-visibility area provided the location does not itself create a traffic hazard. The owner shall not locate landscaping, except grass or ground cover closer than three feet from the edge of any driveway pavement. Refer to landscape exhibit A, visibility triangle.

Turf Areas

- (a) Irrigated turf shall not be treated as fill-in material but rather a planned element of the landscape. All turf areas shall utilize grass species suitable as permanent lawns in South East Florida. Turf shall be placed so that it can be irrigated using separate zones. While turf areas provide many practical benefits in a landscape, how and where it is used can result in a significant reduction in water use.
- (b) Turf grass areas are excluded from the high water use hydrozone designation (a maximum of 20% of the total landscaped area may be installed with a high water use designation), however, turf areas shall be identified on the landscape plan and shall meet the maximum coverage percentages required below:
 - a. Single-family and duplex dwellings are allowed to incorporate a maximum of sixty (60) percent total landscape coverage consisting of turfgrass.
 - b. Multiple family dwellings are allowed to incorporate a maximum of fifty (50) percent total landscape coverage consisting of turfgrass.
 - c. Commercial, retail and office developments are allowed to incorporate a maximum of forty-five (45) percent total landscape coverage consisting of turfgrass.
 - d. Industrial development are allowed to incorporate a maximum of fifty (40) percent total landscape coverage consisting of turfgrass.
 - e. Other uses are allowed to incorporate a maximum of fifty (45) percent total landscape coverage consisting of turfgrass.
- (c)
- (d) Irrigated turfgrass areas shall be consolidated and limited to those areas on the site that receive pedestrian traffic, provide for recreation use, provide cover for septic tank drainfields and required drainfield reserve areas, or provide soil

erosion control such as on slopes or in swales; and where turfgrass is used as a design unifier, or other similar practical use. No turfgrass that requires mowing shall be allowed on slopes greater than 4:1 or within 6 feet of the waters edge, except where adjacent to seawalls and bulkheads or needed to control erosion.

- (e) One of the most common reasons for turf failure is over-irrigation. Irrigation systems shall be designed in accordance to this Article and operated in accordance with Sec. 20-124 Water use restrictions.

Efficient Irrigation (also refer to Sec 20-???)

- (a) If an irrigation system is desired, water can be conserved through the use of a properly designed and managed irrigation system. Irrigation scheduling information, with instructions for seasonal timer and sensor changes, shall be provided to the owner at the time of installation. An irrigation valve site map detailing valve locations, gallons per minute demands, precipitation rates, plant types within valve circuits, and operating pressure requirements for each valve shall be developed. This map shall be attached inside each irrigation controller or be kept in another readily available location if it is not practical to insert it in a small controller.
- (b) The irrigation system shall be designed to correlate to the organization of plants into zones as described in **Section** . The water use zones shall be shown on the Irrigation Plan (where plan is required). All plants (including turf) require watering during establishment. Temporary facilities may be installed to facilitate establishment.
- (c) Irrigation must also be conducted in accordance with South Florida Water Management District restrictions.
- (d) Moisture sensing and/or rain shut-off switch equipment shall be required on automatic irrigation systems to avoid irrigation during periods of sufficient soil moisture. Said equipment shall consist of an automatic mechanical or electronic sensing device or switch that will override the irrigation cycle of the sprinkler system when adequate rainfall has occurred.
- (e) The installation of tracer wire along main lines and laterals is strongly encouraged to permit easy location and prevent inadvertent cutting of pipes.
- (f) If the water supply for the irrigation system is from a well, a constant pressure flow control device or pressure tank with adequate capacity shall be required to minimize pump "cycling".
- (g) Check valves must be installed at irrigation heads as needed to prevent low head drainage and puddling.
- (h) Nozzle precipitation rates for all heads within each valve circuit must be matched to within 20% of one another.
- (i) No water spray from irrigation systems shall be applied under roof overhangs.
- (j) Irrigated areas shall not be less than 4 feet wide, except when next to contiguous property or using micro or drip irrigation.
- (k) A pressure-regulating valve shall be installed and maintained if static service pressure exceeds 80 pounds per square inch. The pressure-regulating valve shall be located between the meter and the first point of water use, or first point of division in the pipe, and set at not more than 50 pounds per square inch when measured at the most elevated fixture in the structure served. This requirement may be waived if satisfactory evidence is provided that high pressure is necessary in the design and that no water will be wasted as a result of high-pressure operation.

Soils.

- 1) Where landscape plans are required, applicants are encouraged to seek a soil analysis performed by a reputable soil testing lab to determine the soil texture, indicating the percentage of organic matter; measurement of pH, and total soluble salts; and estimated soil infiltration rate.

- 2) Existing horticulturally suitable topsoil shall be stockpiled and re-spread during final site grading.
- 3) Any new soil required shall be similar to the existing soil in Ph, texture, permeability, and other characteristics, unless evidence is provided that a different type of soil amendment approach is justified.
- 4) The use of solid waste compost as a soil amendment is encouraged when and where deemed appropriate.

Yard Waste Management, Composting and Use of Mulches

- (a) Yard wastes, and vegetative debris shall not be intentionally or accidentally washed, swept, blown, disposed of or stored by wetlands, shorelines, into ditches or swales, near stormwater drains, or onto sidewalks or roadways.
- (b) Shredded yard clippings and leaves should be used for mulch or be composted for use as fertilizer. However, diseased plant material should not be mulched and should be properly disposed of to avoid spreading disease.
- (c) Composting of yard wastes provides many benefits and is strongly encouraged. The resulting materials are excellent soil amendments and conditioners. Other recycled solid waste products are also available and should be used when appropriate.
- (d) Grass clippings are a benefit to lawns, replacing nutrients drawn from the soil and as mulch that helps retain moisture, lessening the need to irrigate. Grass clippings should be left on your lawn. Mulching mowers are recommended, because the grass clippings are chopped very finely by special blade and shroud configurations. If a conventional mower equipped with a side discharge chute is used, the following practices should be employed: When mowing near the shoreline, direct the chute away from the waterbody. When mowing upland areas, direct the chute back onto the yard, not onto the road or driveway.
- (e) Mulches applied and maintained at appropriate depths in planting beds assist soils in retaining moisture, reducing weed growth, and preventing erosion. Mulch can also be used in places where conditions aren't adequate for or conducive to growing quality turf or ground covers. Mulches are typically wood bark chips, wood grindings, pine straws, nut shells, and shredded landscape clippings.
- (f) A layer of organic mulch 3" deep shall be specified on the landscape plans in plant beds and around individual trees in turfgrass areas. Use of byproduct or recycled mulch is recommended. Mulch is not required in annual beds. Mulch rings should extend to at least 3 feet around freestanding trees and shrubs. All mulch should be renewed periodically as needed to maintain a depth of 3". Mulches should be kept at least 6 inches away from any portion of a building or structure, or the trunks of trees. Plastic sheeting or other impervious materials shall not be used under mulched areas.
- (g) No compost bin or pile shall be established within 5 feet of any property line or easement.

Fertilizer and Pesticide management:

The provisions of this section shall apply to all fertilizer applications within the City of Riviera Beach with the following exceptions:

- (1) Bona fide farm operations as defined in the Florida Right to Farm Act, Section 823.14, F.S., as amended, provided that fertilizers are applied in accordance with the appropriate best management practices manual adopted by the Florida Department of Agriculture and Consumer Services, Office of Agricultural Water Policy for the crop in question; and
- (2) Fertilizer applications for golf courses, parks, and athletic fields shall follow the provisions as indicated in Rule 5E-1.003(2)(d), F.A.C, as amended.

a) Fertilizer Management

- (1) All applications of fertilizer, other than by private homeowners on their own property, should be made in accordance with the most current version of the *Florida Green Industries Best Management Practices for Protection of Water Resources in Florida* and recommendations of the University of Florida Cooperative Extension Service.
- (2) Private homeowners are encouraged to utilize the recommendations of the University of Florida IFAS *Florida Yards and Neighborhoods* program and the University of Florida IFAS Fact Sheet ENH-860.
- (3) Fertilizers applied to turf and/or landscape plants shall be formulated and applied in accordance with requirements and directions as provided on the fertilizer bag and by Rule 5E-1003(2), F.A.C. Nitrogen or phosphorus fertilizer shall only be applied to turf or landscape plants during growth periods, not during dormant periods. These fertilizers shall not be applied except as provided for by the directions on the fertilizer bag unless a soil or plant tissue deficiency has been verified by UF/IFAS Extension or another accredited laboratory or test.
- (4) No applicator shall apply fertilizers containing nitrogen and/or phosphorus to turf and/or landscape plants during times which a flood, tropical storm, or hurricane watch or warning issued by the National Weather Service is in effect for any portion of Broward County.
- (5) Fertilizer shall not be applied within ten feet, or three feet if a deflector shield or drop spreader is used, of any pond, stream, watercourse, lake, canal, or wetland or from the top of a seawall. Newly planted turf and/or landscape plants may be fertilized in this zone only for the first sixty day establishment period, but caution
- (6) shall be used to prevent direct deposition of nutrients into the water.
- (7) A voluntary ten (10) foot low maintenance zone is strongly recommended, but not mandated, from any pond, stream, water course, lake, wetland or from the top of a seawall. A swale/berm system is recommended for installation at the landward edge of this low maintenance zone to capture and filter runoff. No mowed or
- (8) cut vegetative material should be deposited or left remaining in this zone or deposited in the water. Care should be taken to prevent the over-spray of aquatic weed products in this zone.
- (9) Spreader deflector shields are required when fertilizing via rotary (broadcast) spreaders. Deflectors must be positioned such that fertilizer granules are deflected away from all impervious surfaces, fertilizer-free zones and water bodies, including wetlands.
- (10) Fertilizer shall not be applied, spilled, or otherwise deposited on any impervious surfaces.
- (11) Any fertilizer applied, spilled, or deposited, either intentionally or accidentally, on any impervious surface shall be immediately and completely removed to the greatest extent practicable. Fertilizer released on an impervious surface must be immediately contained and either legally applied to turf or any other legal site, or returned to the original or other appropriate container.

b) Pesticide Management

- (8) All landscape applications of pesticides for hire should be made in accordance with State and Federal Law and with the most current version of the *Florida Green Industries Best Management Practices for Protection of Water Resources in Florida*.
- (9) Property owners and managers are encouraged to use an Integrated Pest Management Strategy as currently recommended by the University of Florida Cooperative Extension Service publications.
- (10) When utilizing pesticides, all label instructions are state and federal law and must be adhered to. The Florida Department of Agriculture and Consumer Services is responsible for enforcement of pesticide laws.

Shoreline Considerations

Grading and design of property adjacent to bodies of water shall conform to Federal, State and Local regulations which may include but is not limited to the use of berms or retention ditches to intercept surface runoff of water and debris that may contain fertilizers or pesticides.

No grasses that require mowing shall be allowed within 6 feet of the water's edge, except where seawalls and bulkheads exist or where needed for erosion control. When mowing near the shoreline, direct the chute away from the water body. Riparian or littoral zone plants that do not require mowing or fertilization should be planted in these areas. See the Florida Waterfront Property Owners Guide or the Department of Environmental Protection's Bureau of Invasive Plant Management for more information. Where water levels vary considerably, care must be taken in the selection of these plants.

Maintenance of Landscapes.

(a) General.

- (1) A regular irrigation maintenance schedule shall include but not be limited to checking, adjusting, and repairing irrigation equipment; and resetting the automatic controller according to the season to reduce water and energy wastage.
- (2) To maintain the original performance and design integrity of the irrigation system, repair of the equipment shall be done with the originally specified materials or their equivalents.
- (3) Landscape maintenance for hire should be performed in accordance with recommendations in the *Florida Green Industries Best Management Practices for Protection of Water Resources in Florida*.
- (4) Landscape maintenance by homeowners should be performed in accordance with recommendations of the University of Florida Cooperative Extension Service and Florida Yards & Neighborhoods publications.
- (5) The owner or lawful occupant of real property landscaped as new development, renovation development, or vacant development pursuant to this landscape code are responsible for the maintenance of required landscaping in a healthy, growing condition.
- (6) The owner or the lawful occupant of real property landscaped prior to the effective date of this landscape code are each responsible for the maintenance of all installed landscaping in a healthy, growing condition.
- (7) The owner or lawful occupant shall maintain in a neat and orderly appearance, and keep free from refuse and debris all landscaped areas. All walls and fences shall be maintained in good condition so as to present a neat and orderly appearance and shall be kept free from graffiti.
- (8) The owner or lawful occupant of real property shall prune trees only as necessary to promote healthy growth or to avoid buildings, power lines or other structures. The owner shall not severely prune or "hatrack" trees to permanently maintain growth at a reduced height. Pruning shall be accomplished in accordance with current best management practices in accordance with the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations, or similar. Directional pruning is currently recognized as a best management practice for avoidance of overhead power lines.
- (9) All required landscaping relocated or replaced, or existing landscaping, within the terms of this landscape code shall be replaced in the event said landscaping expires. If the new development, renovation development, or vacant development otherwise contains landscaping which meets the minimum requirements of this landscape code, the community development director may waive the replacement tree requirements.

Maintenance of sidewalk areas as public right-of-way:

- a. It shall be the responsibility of all property owners to maintain turf and landscaping which existing in street right-of-way swales and easements adjoining their properties. Turfgrass in such areas shall not be allowed to exceed five inches in height. If another form of groundcover is utilized it shall meet the requirements of this Article.
- b. Sidewalk areas shall be maintained by adjoining property owners and kept free of grass and weeds and shall be cleaned frequently enough to prevent accumulation of sand, dirt and trash.

Installation and maintenance guarantee.

The owner or lawful occupant shall provide an installation and maintenance guarantee and security at 110 percent of the cost of the landscape and irrigation, in a form acceptable to the community development director, typically in the form of a landscape bond for a period of two years. The owner shall do this before the city performs a final landscape inspection or issues a certificate of occupancy for any portion of a landscaped development. This is to guarantee the installation and maintenance of the required landscaping and the irrigation system in accordance with this landscape code and other applicable ordinances of the city. This guarantee shall list all required landscape materials and describe the irrigation system to which it pertains. Security (110 percent of the cost of the plant materials and irrigation components), acceptable to the city, shall be submitted with the agreement. If the owner does not maintain the landscaping for two years, the city shall use the security deposit to maintain or replace unacceptable plant materials and irrigation components. After a two year period has passed from the date of the final landscape inspection and approval of the owner maintaining the plant material in a healthy, growing condition, the city will return any remaining security to the owner.

Hardship relief.

An administrative waiver may be granted by the Director of Community Development, or his or her designee, for specific uses in addition to those listed above if the applicant can demonstrate particular hardships and acceptable reasons for the requested waiver.

An administrative waiver in accordance with Sec. 20-127 of the City's Code of Ordinances may be granted by the utility district director , or or her designee, for individual water use requests if the applicant can demonstrate particular hardships and acceptable reasons for the requested waiver.

Where a landowner is unduly burdened by the strict application of this landscape code, said landowner may apply to the Director of Community Development for hardship relief.

- 1. Hardship.** The design and development of a renovation development, a vacant development, or any other parcel exhibiting a hardship may preclude a literal compliance with all the landscape design, installation and irrigation requirements of this Article.
- 2. Reduction in Landscaping Permitted.** The Director may allow a reduction in required landscaping that may reasonably and economically accommodate a particular hardship.
- 3. Criteria for Reduction.** A reduction in required landscaping may be allowed, subject to one or more the following criteria being applicable to a property or development:
 - (A) that existing property improvements, including buildings, parking or similar items, preclude complete compliance with required landscaping; or
 - (B) the reduction in required landscaping represents the smallest reduction possible; or
 - (C) the site, when vacant, possesses irregular boundaries, restrictive easements or similar circumstances that restrict the ability to install landscaping; or
 - (D) the site has been adversely affected by prior governmental action, such as expansion of public road right-of-way; or
 - (E) the hardship is not caused by the action of the property owner; or
 - (F) the reduction in landscaping is not based solely or principally on economic reasons.

Informational material.

From time to time, staff shall prepare and distribute informational material which is designed to educate the general public of the requirements set forth in this Article.

Conflicts and relationships to other laws.

- a. Whenever regulations or restrictions imposed by this ordinance conflict with other ordinances or regulations, or are either more or less restrictive than regulations or restrictions imposed by any governmental authority through legislation, rule or regulation, the regulations, rules or restrictions which are more restrictive or which impose the highest standards or requirements shall govern. Regardless of any other provision of this ordinance, no land shall be used and no structure erected or maintained in violation of any state, local, or federal pollution control or environmental protection law or regulation.

- b. A deed restriction or covenant imposed by a homeowner's association may not prohibit or be enforced so as to prohibit any property owner from implementing Florida-Friendly Landscaping™ on his or her land or create any requirement or limitation in conflict with any provision in Part II of Chapter 373, F.S., as amended, or a water shortage order, other order, consumptive use permit, or rule adopted or issued pursuant to Part II of Chapter 373, F.S., as amended.

Section 2. Under Chapter 31, Zoning, Article XII, entitled “Environmental and Vegetation Preservation” is adopted to read as follows:

ARTICLE VIII. FLORIDA FRIENDLY LANDSCAPE REGULATIONS

ENVIRONMENTAL AND VEGETATION PRESERVATION

Definitions.

Purpose and intent.

Exemptions.

Violations and penalties.

Administrative remedies.

Preapplication conference.

Definitions.

(a)

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Alteration shall mean the result of human activity which modifies, transforms, or otherwise changes the environment, including, but not limited to, the placement of vehicles, structures, debris or any other material objects thereon, introduction or injection of water or other substance, and removal, displacement or disturbance

of plant or animal species, soil, rock, minerals or water. Prescribed burning for management of native state plant communities shall not be considered as an alteration under these regulations.

Beach dune vegetation shall mean that vegetative dune growth or beach dune vegetation consisting of any natural vegetative cover which binds the sand on the beach and along the shore for erosion and provides organic nutrients to the dune system, including, but not limited to, any of the grass commonly known as sea oats (*Uniola paniculata*) and sea grapes (*Coccolobis uvifera*).

Buffer, perimeter landscape, shall mean a continuous area of land which is required to be set aside along the perimeter of a lot in which landscaping is used to provide a transition between and to reduce the environmental, aesthetic and other impacts of one type of land use upon another.

Buildable area shall mean that central portion of any lot lying between required yards and/or setback lines or any part thereof.

Caliper shall mean quantity in inches of the diameter of supplemental and replacement trees measured at the height of 4½ feet above the ground.

Canopy shall mean the upper portions of trees consisting of limbs, branches and leaves, which comprise the upper layer of a forested community.

Champion tree shall mean the largest tree of a species which has been designated by the State Department of Agriculture and Consumer Services, Division of Forestry.

Department shall mean the Department of Community Development of the City or other applicable City Department.

Development shall mean any proposed material change in the use or character of the land, including, but not limited to, land clearing or the placement of any structure or site improvement on the land.

Diameter at breast height (D.B.H.) shall mean the diameter in inches of a tree measured at 4½ feet above the existing grade.

Drip line shall mean a vertical line extending from the outermost branches of a tree to the ground, provided, however, that the same shall be not less than a ten-foot diameter circle which is drawn through the center of the trunk of a tree.

Ecosystem shall mean a characteristic assemblage of plant and animal life within a specific physical environment, and all interactions among species and between species and their environment.

Endangered species, threatened or rare species, and species of special concern shall mean species listed as endangered species, threatened or rare species, or species of special concern by one or more of the following agencies:

- (1) U.S. Fish and Wildlife Service.
- (2) Florida Game and Fresh Water Fish Commission.
- (3) Florida Department of Agriculture and Consumer Services.
- (4) Florida Committee on Rare and Endangered Plants and Animals.

Environmentally sensitive lands shall mean land which has unique ecological characteristics and functions, rare or limited combinations of geological formations, or features of rare or limited nature constituting habitat suitable for fish, plants or wildlife.

Ground cover shall mean plants, other than turf grass, normally reaching an average maximum height of not more than 24 inches at maturity.

Grubbing shall mean the removal of vegetation from land by means of digging, raking, dragging or otherwise disturbing the roots of vegetation in soil in which such roots are located.

Historic tree shall mean a tree that has been designated by the City Council as of notable historical interest and value to the City because of its location or historical association with the community.

Incompatibility of land uses shall mean issues arising from the proximity or direct association of contradictory, unsuited or discordant land uses or activities, including the impacts of noise, vibration, smoke, odors, toxic matter and similar environmental conditions.

Indigenous shall mean having originated in and being produced, growing, living or occurring naturally within a particular region or environment.

Listed species shall mean species listed as endangered species, threatened or rare species or species of special concern.

Management plan shall mean a plan that will provide for the perpetual viability of a designated preserve area, including the ongoing control of prohibited plant species.

Mangrove shall mean rooted trees and seedlings of the following plant species: White (*Laguncularia racemosa*), Red (*Rhizophora mangle*), Black (*Avicennia germinans*) and Buttonwood (*Conocarpus erectus*).

Mitigation shall mean an action or series of actions that will offset the proposed adverse impacts to native upland ecosystems that cause a project to not be permissible.

Mulch shall mean nonliving organic and synthetic materials customarily used in landscape design to retard erosion and retain moisture.

Native plant material shall mean that material recognized in the South Florida Water Management District Xeriscape Plant Guide.

Native upland vegetation shall mean the plant component of a native state upland community (a characteristic assemblage of native plants and animals which are interrelated and occupy predominately upland terrain), which includes intact canopy, understory, ground cover and soils. Communities consisting of native upland vegetation include, but are not limited to, Florida Scrub, Pine Flatwoods, Scrubby Flatwoods, Coastal Dune and Strand, Hammocks (natural, tropical, mesic and hydric), Dry Prairies and drained cypress heads.

Plant community shall mean a natural association of plants that are dominated by one or more dominant species, or a characteristic physical attribute.

Plant species, controlled, shall mean those plant species which tend to become nuisances because of their undesirable growth habits, but which, if properly cultivated, may be useful or functional as elements of landscape design.

Prescribed burning shall mean the process of periodically and deliberately burning a pineland or scrub community in a controlled manner under specified weather and understory moisture conditions for the purpose of maintaining the pineland or scrub community in a natural condition and for promotion of pine regeneration and wildlife habitat enhancement; required to be permitted through the County Fire Department.

Preserves or preserve areas shall mean that portion of native upland vegetation which is required to be set aside from development or other alteration activities, protected from the removal of any native tree or understory species, managed to maintain viability for wildlife habitat, and maintained free of prohibited plant species.

Prohibited plant species shall mean those plant species which are defined as Category I invasive plant species by the Florida Exotic Pest Plant Council and which are listed in subsection 26-100(a). In addition, those species listed in subsection 26-100(b) shall also be prohibited.

Region shall mean the four-county area, including the County, that is under the jurisdiction of the Treasure Coast Regional Planning Council.

Removal shall mean the physical removal of vegetation and/or trees. Also includes any intentional or negligent act which will cause a tree to decline or die within a period of three years; including, but not limited to, such damage inflicted upon the tree itself; damage to the root system of a tree by the operation of heavy machinery; damage from the change of natural absorption of the root system of a tree or around the trunk of a tree; and damages from injury or from fire inflicted on a tree which results in or permits infections or pest infestations.

Shrub shall mean a self-supporting woody perennial plant of low to medium height characterized by multiple stems and branches continuous from the base.

Site shall mean that parcel of land for which a vegetation removal permit is sought.

Site development plan or site plan bona fide shall mean a valid building permit or an approved site development plan or a valid land development permit. Subdivision of land shall not be considered a bona fide site plan approval.

Specimen tree shall mean a tree that substantially contributes to the aesthetics of an area and which is protected through the permitting process, or which attains 50 percent or greater of the champion tree diameter at breast height (dbh). A specimen tree may be native or nonnative and must be in good health.

Tree shall mean any living, self-supporting woody or fibrous plant which is a conifer, evergreen, deciduous or ornamental.

Understory shall mean assemblages of natural low-level woody, herbaceous and ground cover species which exist in the area below the canopy of the trees or one story in height.

Vegetation inventory shall mean a professionally-prepared document which delineates the location and the common and scientific name of vegetation upon a parcel of land, including trees greater than four inches at diameter at breast height or palm trees with an overall height of more than eight feet. If necessary, a specific survey, certified as appropriate, may be required as part of the vegetation inventory to specifically identify sites or vegetation to be preserved.

Vegetation, native, shall mean any plant species with a geographic distribution indigenous to all or part of the State. Plant species which have been introduced by human activity are not native vegetation.

Vegetation, protected, shall mean all vegetation other than prohibited plant species or vegetation excluded from protection under the exemption provisions of these regulations.

Viable shall mean capable of sustaining its own life processes, unaided by man, for a reasonable period of time.

Wildlife corridors shall mean a widespread, continuous or near-continuous system of wildlife habitat that is established by linking preserve areas, wildlife sanctuaries or refuges, parks or open-space areas to provide a pathway for wildlife movement.

Purpose and intent.

It is the intent of the City to establish regulations governing the protection of native vegetation, including, but not limited to trees, shrubs, beach dune cover, mangroves, and all environmentally sensitive lands within the municipal limits of the City. The purpose and intent of the regulations in this chapter include the following:

(1) To encourage the preservation and protection of native vegetation within the City in recognition of its invaluable environmental, economic, social, educational, scientific and aesthetic functions including:

- a. Absorption of carbon dioxide and production of oxygen through the process of photosynthesis;
- b. Reduction or reversal of air, noise, heat and water pollution through the biological filtering capacity of living vegetation;
- c. Promotion of energy conservation through the creation of shade thereby reducing heat gain in and around buildings and paved areas;
- d. Reduction of erosion by stabilizing soils and beaches;
- e. Providing habitat for wildlife;
- f. Serving as educational, aesthetic, historic and cultural resources;
- g. Buffering and providing a transition between otherwise incompatible uses and various types of development;
- h. Providing direct and increasingly important psychological and physical benefits to humans by reducing noise and glare, breaking up monotony, and softening the harsh aspects of urban development;
- i. Providing habitat for protected or desirable birds or animal species; and
- j. Protecting biological diversity.

(2) To preserve land values through incorporation of the purpose and intent of these regulations through the use of innovative site design. Vegetation increases the economic value of land through inherent aesthetic and environmental characteristics.

(3) Complements and enhances the requirements in **chapter ??** and the comprehensive plan; namely, the conservation element and the coastal management element, recognizing the significance of all native vegetation, forest ecosystems, wildlife habitat, other natural resources such as soil, water and air quality.

(4) To prevent destructive land development practices such as speculative clearcutting or grubbing properties when no bona fide site development plan has been prepared.

- (5) To encourage land and forest management practices through economically feasible, environmentally sound land development practices, in conjunction with vegetation protection techniques developed by the Division of Forestry of the State Department of Agriculture and Consumer Services.
- (6) Encourage creative site development concepts to promote water conservation by providing for:
- a. Preservation of existing plant communities;
 - b. Reestablishment of native plant communities;
 - c. Increased green space or permeable non-turf ground cover area to enhance water infiltration;
 - d. The use of Florida Friendly and other drought-resistant plant species;
 - e. The use of shade trees to reduce transpiration rates of lower story plant materials;
 - f. Site development that retains stormwater runoff on site;
 - g. The use of pervious paving materials; and
 - h. Recognition of environmentally sensitive site development concepts.
- (7) To provide a level of protection for individual trees not protected through these regulations as environmentally sensitive lands.

Exemptions.

Exemptions from the regulations in this chapter include:

- (1) *Emergencies.* Exemption for emergencies (i.e., hurricanes, tornadoes, flooding or any other acts of nature), may be granted by the City Manager when removal of vegetative material is in the interest of maintaining the health, safety and welfare of the general public. The City Manager may require on or off-site mitigation measures to insure the purpose and intent of these regulations are maintained.
- (2) *Utilities and utility services.* Utility services or companies recognized by the State shall be exempt from these regulations when working within existing or permitted utility easements. So that the purpose of environmental preservation can be maintained, utility providers shall notify the Director of the Department of Community Development of any vegetation removal prior to clearing or trimming within such easements.
- (3) *Single-family homes and duplexes.* Except for the requirements listed below, all single-family and duplex parcels are exempt from these environmental preservation regulations:
- a. Historic or specimen trees shall be protected in accordance with these regulations;
 - b. Protection or mitigation for all listed species shall be provided in accordance with these regulations;
 - c. Unprotected or prohibited vegetation shall be removed in accordance with these regulations; and
 - d. The trimming or removal of mangroves shall be governed by the Florida Department of Environmental Protection (DEP) or the appropriate jurisdictional agency;
 - e. Vegetation removal as it applies to street trees and/or trees and landscaping required as part of a site and/or landscape plan approval for all residential development in minor developments, major developments, planned unit developments, developments of regional impact, and modifications of existing development orders as set forth in section 31-56 ; and

f. Any specific requirement of a site plan approval for all residential development in minor developments, major developments, planned unit developments, developments of regional impact, and modifications of existing development orders as set forth in section 31-56.

The exemption for single-family parcels shall not eliminate, reduce, or otherwise change the requirements of protection of upland and environmentally sensitive vegetation or species that may have been required pursuant to an overall residential development approval granted by the City Council.

(4) *Surveyors.* All State-licensed surveyors, in the performance of their duties, shall be exempt from these environmental preservation regulations, provided any alteration is limited to a hand-cleared swath of minimal width in order to perform their duties. The use of any heavy equipment to remove vegetation to perform such duties shall require a vegetation removal permit from the City.

(5) *Commercial nurseries.* All existing commercial nurseries, botanical gardens, tree farms and grove operations shall be exempt from the tree preservation requirements of these environmental preservation regulations, but only as to those trees which are planted for silvicultural or agricultural purposes or for sale or intended sale in the ordinary course of business.

(6) *Vested development rights.*

a. An exemption from these regulations for vested development rights is available for any project which, upon the effective date hereof:

1. A building permit has been issued for the construction of a principal structure;
2. A site plan has been approved by the Director of the Department of Community Development or the City Council, as appropriate;
3. A valid development order for a development of regional impact has been adopted by the City Council.

Any revision to a previously approved development plan may be subject to the new regulations adopted herein.

Violations and penalties.

(a) For any and every violation of the provisions of the regulations in this chapter, and for each and every day that such violation continues, such violation shall be punishable as provided in section 1-11. Each tree or protected vegetation removed or destroyed in violation of these regulations represents a separate offense and each tree so removed shall be replaced (per Table II, Tree Credit/Replacement) with a new tree. Such trees shall meet or exceed the Town's minimum landscaping requirements. Failure to replace any illegally-removed trees shall subject any commercial properties to revocation of their Certificate of Use and Business Tax Receipt.

(b) Persons charged with violations of this chapter may include:

- (1) The owner, agent, lessor, lessee, contractor or any other person using the land, building or premises where such violation exists.
- (2) Any person who knowingly commits, takes part or assists in such violation.
- (3) Any person who maintains any land, building or premises upon which a violation exists.

(c) All of the fines received as penalties for violating these regulations shall be deposited into a separate City fund and used by the City solely for such environmental purposes as it deems appropriate.

Administrative remedies.

The City shall have the authority to issue cease and desist orders in the form of written official notices given to the owner of the subject building, property or premises, or to his agent, lessee, tenant, contractor or to any person using the land, building or premises where such violation has been committed or shall exist.

Preapplication conference.

Following or in conjunction with the submission of an application for a building permit, vegetation removal permit, or for any development application, applicants shall meet with the Director of the Department of Community Development or his designee for a preliminary review and determination of environmentally sensitive lands. The potential impacts and initial concerns of land alteration upon environmentally sensitive lands shall be discussed. If environmentally sensitive lands are determined to possibly exist on a subject property, an environmental assessment report, as described in these regulations, shall be submitted as part of the formal application, prior to the commencement of the formal review of the application. If tree preservation is required on the subject site, a tree survey, as described in these regulations, may be required prior to the commencement of the formal review of the application. In the event that a tree survey is not required, the applicant shall permit the Director of the Department of Community Development (or the Director's designee) to access the subject property for the purpose of identifying the trees to be preserved, either on site or off, in accordance with these regulations.

Vegetation removal permit required.

(a) The terms and provisions of this section shall apply to real property as follows:

- (1) All real property upon which any designated specimen or historic vegetation is located.
- (2) All vacant and undeveloped property and property containing no permanent buildings.
- (3) All property containing permanent structures or redeveloped property.

(b) It shall be unlawful, unless otherwise provided within this section, for any person, without first obtaining a vegetation removal permit from the Department of Community Development, to remove trees or vegetation or otherwise clear off any land within the City by stripping off, destroying or removing the natural foliage there by use of tractors, bulldozers, drag lines, scrapers or other heavy earth-moving equipment, or by any other means.

(c) It shall be unlawful for any licensed arborist, tree surgeon, service company, landscape contractor, or general contractor to remove or clear any vegetation covered by the terms and provisions of this section without first having in its possession a proper permit authorizing removal of vegetation thereof. Upon violation of the terms and provisions of these regulations by any licensed, above-mentioned individual or entity, the City Council may, after investigation by staff and recommendation by the City Manager, revoke or suspend the Town business tax receipt of such entity or individual.

(d) In the event that any tree shall be determined to be hazardous or in a condition so as to endanger the health, safety and welfare of the general public, verbal authorization may be given by the Department of Community Development for removal of such vegetation without obtaining a written permit as hereinbefore required. Such authorization shall be followed with the issuance of a vegetation removal permit within 24 hours.

Application requirements for vegetation removal permit.

Any person wishing to obtain a permit for the removal or clearing of vegetation shall file an appropriate application with the Department of Community Development on the forms provided by that Department. The application requirements include the submission of the following:

- (1) A completed application for a vegetation removal permit. All applications shall indicate the exact method of vegetation removal which is least damaging to the native vegetation that is to remain on the site.
- (2) A recent (within one year of application), signed and sealed, property survey prepared by a State registered surveyor.
- (3) An approved, development-scaled site plan including, as a minimum, the following information:
 - a. Locations, shape and size of all existing buildings or other structures, walls or hard-surface improvements that are to be destroyed, relocated or replaced.
 - b. Location of all existing and proposed sidewalks, roadways, driveways, pedestrian paths, parking areas, rights-of-way and easements.
 - c. All impervious surfaces.
 - d. Location of all existing and proposed underground and overhead utility service locations (including height of all aboveground utility lines).
 - e. Front, rear and side setbacks.
 - f. Identification of uses on adjacent properties (i.e., land uses, environmentally sensitive areas).
 - g. Existing and proposed exterior elevations.
 - h. Landscape areas including buffers and open space.

The requirement for an approved site plan may be waived by the Director of the Department of Community Development or designee if the need for an approved site plan is determined to be inappropriate for purposes of vegetation removal.

- (4) A professionally-prepared vegetation inventory, written assessment, and a vegetation removal plan. At the discretion of the Director of the Department of Community Development, a specific survey, certified as appropriate, may also be required as part of the vegetation inventory to specifically identify sites or vegetation to be preserved. The preparation of this information may include a combination of disciplines; however, as a minimum, a landscape architect and land surveyor, registered in the State, shall certify the requested information. The following shall be delineated on the vegetation removal plan:
 - a. Existing trees proposed to be destroyed, relocated or replaced.
 - b. Those trees to be preserved at their present location (delineated with an "P").
 - c. Trees to be removed (delineated with an "X").
 - d. All trees shall be identified by type, species, approximate caliper and height.
 - e. The vegetation inventory shall designate all diseased trees and trees endangering roadways, buildings, structures, or existing or proposed utility service lines.
 - f. Location of invasive, exotic or unprotected trees.
 - g. Location of environmentally sensitive areas or water bodies.
 - h. Photographs of the site from north, south, east and west sides demonstrating the character of the site. Photographs shall be graphically keyed to the vegetation inventory.
 - i. Written assessment indicating the approximate number of trees by species, rare and endangered species, and general quality of vegetation.
- (5) At the discretion of the Director of the Department of Community Development, relative to the environmental sensitivity of the site, the following may be required prior to vegetation removal or clearing of sites contiguous to or containing environmentally sensitive areas or lands:

- a. Appropriate written sign-offs, permits, or consents from the agencies listed below which have jurisdiction. The applicant shall obtain this information and submit the agency's written verification to the Town.
1. Army Corps of Engineers (ACOE).
 2. United States Department of the Interior, Fish and Wildlife Service (FWS) or (USFWS).
 3. Florida Department of Environmental Protection (FDEP).
 4. Florida Exotic Pest Plant Council (EPPC).
 5. Florida Fish and Wildlife Conservation Commission (FFWCC).
 6. Florida Department of Community Affairs (DCA).
 7. Florida Department of Agriculture and Consumer Affairs (FDA).
 8. Florida Committee on Rare and Endangered Plants and Animals (FCREPA).
 9. South Florida Water Management District (SFWMD).
 10. Treasure Coast Regional Planning Council (TCRPC).
 11. Palm Beach County Department of Environmental Resources Management (ERM)..
 12. Any other applicable governmental agencies extending jurisdictional controls over the site.
- b. Submission of an environmental assessment report prepared by a qualified ecologist or biologist, including:
1. An on-site inventory of existing vegetation and wildlife referenced and exhibited on a field survey.
 2. An identification of wildlife or vegetation listed as endangered, threatened or species of special concern.
 3. A written assessment of the land identifying the location of all environmentally sensitive habitat or vegetation and containing a mitigation plan to protect the resource.
 4. An analysis of the functional viability and quality of the various habitats.
 5. A discussion of the environmental impacts, both positive and adverse, on the resources.
 6. A discussion of how the proposed development plan will adversely impact the environment.
 7. A discussion concerning whether there are any irreplaceable, irretrievable resources or irreversible environmental damage.
 8. A mitigation plan that describes actions to be taken that replace those functions and values of the ecological community or communities lost as a result of developing the adjacent or proposed land development, or utilization.
 9. The designation of environmentally sensitive areas on the site plan as natural preserve areas, and maintenance thereof to insure no further intrusion of exotic or nuisance plant species.
 10. Identification of those environmentally sensitive areas as worthy of protection and preservation, or those areas that may possibly require transfer of existing density rights to more suitable areas or other lands for development.
 11. Identification of those trees to be preserved and a management and maintenance program to ensure the health of the preserved trees.

(6) Time limitation.

a. Vegetation removal permits shall expire and become null and void if work authorized by such permit is not commenced within 90 days from the date of issuance, or if such work has begun and is suspended or abandoned at any time for a period of 90 days. If work has begun and the permit becomes null and void, or expires because of lack of progress or abandonment, the applicant shall secure a new permit covering the removal activity prior to proceeding with the work. This requirement shall not be applicable in the case of civil commotion, emergency situations, or legal actions by the Town against the applicant.

b. The Director of the Department of Community Development shall have the authority to extend the permit in 30-day intervals.

(7) Other permits. Vegetation removal is subject to all other permitting authorities.

Permits and certificates of occupancy and use.

(a) Issuance. No building permit, vegetation removal permit or certificate of occupancy and use shall be issued by the City for any purpose except in compliance with the provisions of these regulations and other applicable ordinances and laws.

(b) Revocation. The City may revoke a building permit, vegetation removal permit, certificate of occupancy or certificate of use, in those cases where determination has been duly made that false statements or misrepresentations existed as to material facts in the application or plans upon which the permit or certificate was based.

(c) Suspension. The City may suspend a building permit, vegetation removal permit or certificate of occupancy and use in those cases where determination has been duly made that an error or omission on either the part of the permit applicant or government agency existed in the issuance of the permit or certificate. A valid permit or certificate shall be issued in place of the incorrect permit or certificate and official written notice provided to the permit applicant. Any decision may be appealed to the City Council as outlined in subsection (e) of this section.

(d) Written notice. All decisions, either by City staff or City Council, concerning the issuance, revocation or suspension of a building permit, vegetation removal permit or certificate of occupancy and use shall be stated in official written notice to the permit applicant.

(e) Appeal process. An applicant may appeal any decision made by the City staff pursuant to these regulations in accordance with the City's Code of Ordinances.

Application fees.

(a) Application fees for vegetation removal permits shall be paid at the time of application in accordance with the fee schedule of the Building Department .

(b) There shall be no fee charged for selective and complete removal of vegetation or trees identified as category 1 invasive, prohibited or noxious by the Florida Exotic Plant Pest Council.

(c) The City shall have the right to hire a qualified specialist, at the applicant's expense, to assist the Town in applying, interpreting or enforcing these regulations. If required, the applicant shall provide a deposit to the Town of up to \$1,500 to be placed in an escrow account for the Town's retention of an appropriate consultant to review the assessment report and to make recommendation to the Department of Community Development. Upon completion of the review of the application, the Town will return all remaining funds in the escrow account to the applicant.

Conditions for issuance of permit.

Upon completion of application requirements, the Department of Community Development staff shall review the application in reference to the intent and purpose of these regulations and evaluate the application justifying issuance under the following criteria:

- (1) The vegetation, due to natural circumstances irreparably impacted and nonfunctioning, is in danger of falling, is too close to existing structures so as to endanger such structures, interferes with utility services, creates unsafe vision clearance or constitutes a health hazard, as determined during the process of site plan review.
- (2) The vegetation is located in the buildable area or yard area where a structure or improvements are to be placed, and it unreasonably restricts the permitted use of the property, and such vegetation cannot be relocated on the site because of its condition, age, type or size.
 - a. For the purpose of these regulations, building improvements shall include, but not be limited to, roadways, lakes, parks, golf courses and drainage facilities.
 - b. Relocation or replacement of vegetation is established by the Department of Community Development, subject to **Table II entitled Tree Credit/Replacement.**
- (3) The tree or vegetation is not designated historic or protected in conformance with other federal, State and County regulations.
- (4) The Director of Community Development or designee's decision for removal will be in the public interest.
- (5) The issuance of the permit will not result in the needless, wasteful, or purposeless destruction of vegetation, including the vegetation which does not enjoy a protective status under these regulations. Just cause for tree removal must be demonstrated by the applicant.
- (6) A vegetation removal permit which proposes the removal of native vegetation on an undeveloped parcel or undeveloped area of a parcel that has a permanent structure, shall not be issued by the City unless development or use of the subject property is expected to begin within 90 days, as indicated by:
 - a. A complete application for a building permit has been accepted by the Town; or
 - b. Other related evidence that, in the opinion of Town staff, clearly indicates the intent of the property owner to initiate development or use of the property within 90 days.Applicants for such permits shall be able to appeal any administrative decisions to not issue a permit to the City Council.
- (7) Town staff shall retain the right to submit any application for a vegetation removal permit to the City Council for a determination of whether the application should be approved or denied.
- (8) A stormwater pollution prevention plan approved by the City's Engineering Division, for parcels of five acres or larger. Parcels of less than five acres may be required to submit a pollution protection plan at the discretion of the Director of the Department of Community Development.

Preservation Requirements ?????.

Upon submittal of site plan and landscape plan...

- (1) Do we want to preserve a specific % of land area per development?

Supplemental tree protection requirements.

For parcels of land determined not to be environmentally sensitive lands the following regulations shall apply.

(a) Prior to the submission of an application, a prospective applicant shall attend a pre-application meeting with the Department to assess and evaluate the quantity, type and quality of trees on any site which is to be the subject of an application.

(b) All applicants shall submit a tree survey, signed and sealed by a State licensed surveyor, at the time of application for all administrative development approvals, special exceptions, planned unit developments and site plan reviews. The survey shall indicate the location and diameter at breast height (DBH) of all native trees.

(c) All native trees with a caliper or trunk diameter of **two inches** or greater, as measured 4½ feet above existing grade, shall be preserved.

(d) Existing native trees identified in the pre-application meeting as warranting preservation to meet the intent of this section, shall be preserved in place and shall be incorporated into the site plan and protected during construction. Emphasis shall be given to the preservation of significant groupings of native trees, trees adjacent to public rights-of-way and/or specimen trees. Existing trees that cannot practicably be preserved in place on the site shall, with the approval of the Director of the Department of Community Development, be relocated to one of the following areas, listed in order of the City's preference: buffer(s), other green space areas, or interior landscaping areas. As determined by the City, all suitable coniferous trees two inches and under and all suitable non-coniferous trees shall be relocated on site and incorporated into the landscape plan, to the greatest extent practicable. All relocated trees shall be planted in accordance with best management practices. One hundred percent of the relocated or installed material shall remain alive. Vegetation which expires as a result of relocation or of construction activities on site shall be replaced with the same or similar species with additional City approval, within 30 days of their expiration. Based on availability, replacement material for expired vegetation shall be of the same size subject to the approval of the Director of the Department of Community Development or designee.

(e) Should it be determined by the Director of the Department of Community Development that successful on-site preservation or relocation of a specific tree(s) cannot practicably be accomplished, on-site mitigation **shall be allowed determined by an even ratio of caliper of tree removed to caliper of tree replaced.** For example, if a tree with a caliper of 10 inches is removed, it can be replaced with two trees of the same species with a caliper of 5 inches at DBH; or by four trees with a caliper of 2.5 inches at DBH.

(1) To the greatest extent possible, mitigation shall be like species for like species, i.e., when a slash pine tree is removed, a slash pine tree shall be replaced. In the event that replacement of like trees for like trees is not feasible, the Director of the Department of Community Development shall have the authority to approve alternative species.

(2) Existing trees preserved on site or relocated within the site shall be given credit **(as provided in the tree credit/replacement table)** towards the tree requirements of chapter ??, except that tree credits shall not be used to eliminate trees required in a landscape buffer located along a road right-of-way or waterway, nor to eliminate trees required in a screening buffer adjacent to a residential use or zone.

(3) The Director of Community Development, or his designee, shall make a determination as to the quality of each tree required to be preserved, relocated or mitigated in accordance with these regulations. Any tree determined to be alive but severely damaged, diseased or malformed such that it cannot fulfill the functions and values typically expected of that species, shall be mitigated at half the number of credits required in Table II.

(f) All native trees/vegetation located within ten feet of any mangrove species shall be preserved.

(g) In the event the Director of Community Development determines that native tree(s) cannot be preserved on-site, relocated within the site, or mitigated with replacement trees, an applicant shall contribute the sum of

two hundred fifty dollars (\$250.00) for each replacement tree required as mitigation for a tree the Director of Community Development has determined cannot be preserved on-site. These funds shall be placed into a separate Town account designated for planting trees on public lands, rights-of-way, or other areas within the Town which are part of an adopted neighborhood strategic plan. With the approval of the Director of Community Development, an applicant may also donate the native vegetation for incorporation into the Town's parks, preservation areas, or other areas within the Town which are part of an adopted neighborhood strategic plan, which would satisfy all or a portion of the mitigation requirements provided for in Table II entitled "Tree Credit/Replacement." However, all costs associated with the proper removal, transportation, and replanting of any donated vegetation shall be the responsibility of the person making the donation.

(h) All replacement trees shall be at least 12-14 feet in height and 2.5 inches diameter at breast height (DBH). All plant materials shall meet the minimum standards of Florida Number One or better as represented in, "Grades and Standards for Nursery Plants", published by the Florida Department of Agriculture and Consumer Services, on file with the City.

Designation of historic or specimen trees.

(a) A historic tree is one that has been designated by the Town Council, based upon a recommendation by the Historic Resources Board, as of notable historical interest and value to the Town because of its location or historical association with the community. Public hearings shall be conducted by the Historic Resources Board and the Town Council regarding any such designation, with due notice to the owner of the tree. Such public hearings may be held in conjunction with review of a development application for the subject property.

(b) A specimen tree is one that has been designated by the Town Council, following a recommendation from the Planning and Zoning Commission, to be of high value based on the definition of specimen trees in these regulations and because of its type, size, age, or other relevant criteria. Public hearings shall be conducted by the Planning and Zoning Board and the City Council regarding any such designation, with due notice to the owner of the tree. Such public hearings may be held in conjunction with review of a development application for the subject property.

(c) No historic or specimen tree shall be removed without a finding by the City Council that the tree is a hazard or that it is not economically or practically feasible to develop a parcel without removing the tree, and without first obtaining a vegetation removal permit from the City. All requests to remove such trees shall be submitted in writing to the Department of Community Development, explaining in detail why the tree is hazard or why it is not economically or practically feasible to develop a site without removing a historic or specimen tree. The Director of the Department of Community Development shall recommend to the City Council as to whether or not the request to remove the tree should be approved or denied. A decision regarding the request shall be made by the City Council, at the conclusion of a public hearing, within 30 days of the date the written request was received by the Department.

Protection of listed species.

(a) Native habitats actively used by or supporting State-listed threatened species of special concern may be designated as environmentally sensitive lands if they contain populations critical to the listed species' survival within the four-county region under the jurisdiction of the Treasure Coast Regional Planning Council. An exemplary list of endangered, threatened, and rare species, and species of special concern that are likely to exist in the area of the Town is included in the definitions section of these regulations, under "Endangered Species," and in Table V-5 of the conservation element in the Town's comprehensive plan.

(b) The following procedure shall be followed if during the application review process for a vegetation removal permit or during the review of any development activity it is determined that a listed species is resident on or otherwise is significantly dependent upon the corresponding property:

(1) A vegetation removal permit shall not be issued and all development activities which might adversely affect the listed species shall immediately cease.

(2) Notification of the presence or dependence of the listed species on the property shall be provided by the developer to the State Game and Fresh Water Fish Commission, the United States Fish and Wildlife service and the Town.

(3) Proper protection of the listed species shall be provided by the applicant prior to the issuance of a vegetation removal permit or commencement of any development activity, as appropriate.

(4) Written confirmation of the acceptance of the method of protection or mitigation shall be provided to the Town by the applicant prior to issuance of a vegetation removal permit or commencement of development as appropriate.

Mangrove protection.

All mangrove species shall be considered native and a protected plant species under this code. All trimming or removal of mangroves shall conform to the procedures and regulations established by the Florida Department of Environmental Protection (DEP) or the appropriate jurisdictional agency. Town staff shall have the authority to issue a stop work order if it appears that the DEP's regulations are being violated.

Prohibited vegetation.

(a) Those plant species defined as Category 1 nuisance and invasive exotic vegetation by the Florida Exotic Pest Plant Council, shall not be planted, maintained or permitted to remain on sites receiving site plan approval. The removal of prohibited plant species shall be in conjunction with proposed land clearing contingent upon site plan approval, unless the Director of the Department of Community Development determines that the removal of the prohibited plant species meets the purpose and intent of these regulations. Clearing of species within protected preservation or environmentally sensitive areas shall follow the procedures as outlined in section ? . The sale of category 1 invasive species plant species is not permitted within the City.

(b) In addition to those species listed in subsection (a) above, due to cold tolerance problems, intrusiveness into water/sewer lines, invasive growth habits and/or the lack of ability to withstand significant winds, the following species shall also be prohibited:

(1) Ficus (all species except Ficus aurea, Ficus citrifolia, Ficus repens, Ficus rubiginosa, Ficus pumila and Ficus macrophylla). Ficus benjamina is permitted only in single family residential areas if maintained as a hedge with a maximum height of six feet.

(2) Norfolk Island pine (Araucaria heterophylla).

(3) Silk oak (Grevillea robusta).

(4) Black olive (Bucida buceras).

(5) Eucalyptus (all species).

Master plan and site plan requirements.

The following environmental preservation requirements shall apply to all proposed master plans and site plans:

(1) All proposed master plans or site plans submitted for Town approval shall:

- a. Indicate the preservation areas required by these environmental preservation regulations;
- b. Utilize the existing native vegetation on site for buffers in perimeter areas and in areas that are visible to the public or adjacent to residential areas; and
- c. Be designed to maintain the character of the surrounding natural environment.

(2) All small-scale development shall submit a landscape plan with the proposed master plan or site plan for each project indicating the location of the required native vegetation utilized in landscape areas.

(3) Except for necessary roadway crossings and other access purposes, all preserve areas shall be:

- a. Compact in nature, avoiding strip or noncontiguous patterns;
- b. Arranged in a continuous fashion where possible; and
- c. Adjacent to lakes, wetlands, natural water bodies and other preserved habitats located on or off-site, recognizing the future development or preservation potential of adjacent properties. The use of preservation areas as long, narrow buffers between lots is discouraged.

(4) Land to be set aside as a preserve area may be included in open space calculations for purposes of meeting the Town's open space requirements if the canopy, understory, and ground cover vegetation of the preserve area are left intact.

VEGETATION REMOVAL REQUIREMENTS

Application of division.

Display of permit.

Identification of species to be removed, saved.

Protective barriers.

Protection of buffer zones, drip lines.

Request for field inspection.

Protection against stormwater run-off.

Seeding, mulching of property.

Donation of vegetation.

Application of division.

The minimum standards in this division shall apply to all vegetation removal operations including minimum standards for the protection of vegetation. Upon issuance of a vegetation removal permit, the applicant shall adhere to the provisions of this division.

Display of permit.

Each vegetation permit issued under this article shall be posted for the duration of clearing or removal in an area weatherproof and visible to public rights-of-way for inspection purposes. Such posting shall not be on any living vegetation.

Identification of species to be removed, saved.

A permittee under this article shall mark or delineate those plant species (trees or shrubs) or preservation areas to be saved and removed referenced on the vegetation inventory required for the permit, utilizing the following uniform colored ribbon system:

(1)Blue for trees, shrubs or areas to be saved.

(2)Red for trees, shrubs or areas to be removed or cleared.

Protective barriers.

(a)

Prior to any land alteration, clearing or construction activities, protective barriers shall be provided around the perimeter of all preserve areas or buffers for environmentally sensitive land, existing water bodies, preserved vegetation and reservation areas. The type of barriers required include:

(1)Environmentally sensitive land, existing water bodies or preservation areas shall provide for the placement of two inches by two inches by three feet (visible above ground) wood or metal stakes or other suitable material a maximum of 20 feet apart with horizontal rails from stake to stake. An alternative shall be sand fencing with posts 20 feet apart.

(2)Individual trees or shrubs shall require the same barriers described in subsection (a)(1) of this section, a distance of six feet or two-thirds of the dripline, whichever is greater.

(b)

These barriers shall remain in place until all land alteration and construction work is completed.

Protection of buffer zones, drip lines.

No cleaning of equipment, storage of materials, debris, liquids, excess soil or additional fill shall be placed within buffer areas or the drip line of any preserve area that is required to be preserved in its present location unless otherwise authorized by the vegetation removal permit. No soil shall be removed or filled within the buffer areas or the drip line of any tree that is to remain in its original location.

Sec. 26-131. - Request for field inspection.

Upon completion of the foregoing provisions of this division, the applicant shall notify the Department of Community Development at least 48 hours prior to requesting a field inspection. In addition, a finalized and approved site development plan and vegetation inventory shall be available on-site for the duration of construction.

Sec. 26-132. - Protection against stormwater run-off.

Protection measures shall be incorporated on-site during and after clearing to insure no off-site stormwater run-off occurs. Such measures may include siltation fencing, hay bails, vegetative preservation areas or vegetation storage or nursery areas.

Seeding, mulching of property.

The applicant for a vegetation removal permit shall be required to seed or appropriately mulch the property or provide another appropriate means to minimize the travel of off-site particular matter if construction does not occur within 30 days after the finalization of land clearing and alteration.

Donation of vegetation.

If the recipient of a vegetation removal permit decides not to relocate native vegetation on site, they may request approval from the City to donate it for incorporation into the City's public lands.