BONITA SPRINGS CITY COUNCIL

GREEN SHEET:

15-11-0360

AGENDA ITEM SUMMARY

REQUESTED MOTION:

Permission to advertise an ordinance amending the City's Landscape Code, to adopt Appendix F, Irrigation Standards of the Plumbing Portion of the Florida Building Code; to require smart irrigation and landscape practices; updating the code to require smart irrigation and Florida Friendly Design Standards. If Council authorizes to go forward, the Ordinance will be scheduled on December 2, 2015 for a first reading and December 16, 2015 for the final Council public hearing. The Local Planning Agency will review the ordinance at its December 10, 2015 meeting for consistency with the comprehensive plan.

MEETING DATE: November 18, 2015

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AC	AGENDA:		QUIREMENT/PURPOSE: (Specify)	REQUESTOR OF INFORMATION:
	PRESENTATIONS		STATUTE	T
	CONSENT	Х	ORDINANCE	Jennifer Hagen, Planner – LEED-AP
	PUBLIC HEARING		ADMIN. CODE	Jennifer Hagen, Planner – LEED-AP Sean Gibbons
	APPEALS		OTHER	Community Development
	MAYOR AND COUNCIL MEMBER'S REPORTS			And Audrey E. Vance,
Х	CITY ATTORNEY			City Attorney
	CITY MANAGER			only random by

BACKGROUND:

On March 26, 2014 City Council directed staff to prepare an application for the City's participation in the Florida Green Building Coalition's "Green Local Government Standards" program. To maximize the total credits achievable to meet the standards outlined in the program, on August 5, 2015 City Council authorized staff to prepare certain ordinances.

This ordinance amends the Landscape Development Code to incorporate requirements already required by Florida Statutes, to update statutory requirements with smart irrigation and Florida Friendly Design Standards. Other changes are to require better explanation of maintenance practices, including reconciliation between light fixtures and canopy trees in landscape islands, efficient irrigation design and maintenance standards, and making sure the "right plant, right place" is met. A new section, 4-428, was created to ensure better enforcement of installation and certification of landscaping and irrigation.

Attachment: Proposed Ordinance

IS THIS RELATED TO A STRATEGIC PLAN OBJECTIVE? X YES NO IF YES, WHICH STRATEGIC OBJECTIVE? Priority #1 Maintain and Enhance the Quality of Life STAFF RECOMMENDATIONS:

Move to public hearings

word to public floarings.	
REVIEWED BY:	(A)
City Manager:	(90
City Attorney:	10 1
City Clerk:	Colly Than
Department Director:	a
COUNCIL ACTION:	

APPROVED DENIED

> DEFERRED **OTHER**

ORDINANCE NO. 15-

AN ORDINANCE TO AMEND SECTIONS 3-415-3-419 AND 3-423 OF THE CITY OF BONITA SPRINGS LAND DEVELOPMENT CODE RELATED TO THE LANDSCAPE CODE, CREATING SECTION 4-428, ENFORCEMENT OF INSTALLATION AND CERTIFICATION; TO UPDATE THE CODE TO REQUIRE SMART IRRIGATION AND FLORIDA FRIENDLY DESIGN STANDARDS; PROVIDING FOR CONFLICTS OF LAW, SEVERABILITY, CODIFICATION, INCLUSION IN THE CODE, SCRIVENER'S ERRORS, AND AN EFFECTIVE DATE

WHEREAS, the City Council is the governing body in and for the City of Bonita Springs, a municipal corporation of the State of Florida; and

WHEREAS, Florida Statutes §166.021 authorizes the City of Bonita Springs to establish, coordinate, and enforce laws that are necessary for the protection of the public; and

WHEREAS, the City of Bonita Springs is pursuing steps toward becoming a Florida Green Local Government using the Green Local Government Standard developed by the Florida Green Building Coalition; and

WHEREAS, Florida Statutes §373 established proper landscape design and irrigation standards to create attractive landscape and help save significant time and money, as well as protection of our natural resources; and

WHEREAS, the City of Bonita Springs City Council finds it is in the best interest of the public to update the City of Bonita Springs Landscape Code.

NOW, THEREFORE, THE CITY OF BONITA SPRINGS HEREBY ORDAINS:

SECTION ONE: AMENDMENTS TO THE CITY OF BONITA SPRINGS LANDSCAPE CODE

Sections 3-415 - 3-419, 3-423 and 3-428 of the City of Bonita Springs Landscape Code, within the City of Bonita Springs Land Development Code, are hereby amended to read as follows, with underline identifying additional language:

Sec. 3-415. - Purpose and intent.

The purpose and intent of this division is to:

- (1) Promote the health, safety, and welfare of residents of the city by establishing minimum uniform standards for the installation and maintenance of landscaping;
- (2) Improve the aesthetic appearance of commercial, industrial, and residential developments through the requirement of minimum open space and landscaping in ways that complement the natural and built environment;
- (3) Promote preservation and planting of native plants and native plant communities;

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- (4) Provide benefits to persons through open space and landscaping by reducing noise and glare;
- (5) Screen and buffer the harsher visual aspects of urban development;
- (6) Improve environmental quality by reducing and reversing air, noise, heat, and chemical pollution through the preservation of native vegetation, relocation of native trees, and installation of landscaping; and
- (7) Promote water conservation through efficient landscape irrigation and xeriscape Florida-Friendly Design Standards. principals by establishing minimum standards for the use of native plants, organic mulch, reduction of turf areas, and appropriate irrigation.
- (8) Adopt the standards set forth in Florida Statutes §373.185 and §373.228, the Florida Department of Environmental Protection's 2006 Landscape Irrigation & Florida-Friendly Design Standards, by reference, as amended,
- (9) Adopt by reference, as amended, Florida Building Code, Plumbing Volume, Appendix F.

(Ord. No. 05-03, § 1(3-412), 1-19-2005; Ord. No. 11-05, 3-16-2011)

Sec. 3-416. - Submittal requirements.

- (a) Landscape plan required. Prior to the approval of a development order, an applicant whose development is covered by the requirements of this section must submit a landscape plan to be reviewed by staff and the tree advisory board. The landscape plan must be prepared by and bear the seal of a landscape architect registered in the state. The plan must include the narrative and calculations to ensure that the proposed landscaping will be in compliance with requirements of this LDC. However, small projects may qualify for a hardship waiver if the cost of compliance with the landscape architect requirement is disproportionate to the cost of the entire project. This waiver is subject to the sole discretion of the city manager or designee. The landscape plan must be drawn at an appropriate size for review and include, at a minimum, the following items where applicable:
 - (1) Title of project including project owner's name.
 - (2) Preparer's name.
 - (3) Dimensions and North arrow.
 - (4) All open space.
 - (5) Indigenous open space.
 - (6) All landscape areas.
 - (7) Identify all code required landscaping.
 - (8) Vehicle use areas parking, aisles, driveways.
 - (9) Roadways and access points.
 - (10) Plant spacing and native status.
 - (11) Overhead and underground utilities.
 - (12) All easements.
 - (13) A tree and/or vegetative survey.
 - (14) Preserved trees.
 - (15) Trees to be relocated.
 - (16) Construction vegetation protection barricades.
 - (17) Tree and palm staking detail.
 - (18) Mulch details.
 - (19) Reference chart that includes:

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- a. Graphic plant symbols.
- b. Plants botanical and common name.
- c. Plant quantity, height and spread.
- (b) Irrigation plan required. Prior to the approval of a development order, an applicant whose development is covered by the requirements of this section must submit an irrigation plan. This requirement can be met by the addition of notes or drawings on the landscape plan sheet of the development order. The irrigation plan requirement does not apply to single-family residential lots created by a development order. The conceptual irrigation plan must, at a minimum, indicate:
 - (1) The type of irrigation system proposed.
 - (2) All landscape areas, including parking lot islands, will be adequately sleeved for irrigation. This requirement must be included on the grading/paving plan sheet.
 - (3) Consistent with the provisions of F.S. §373.62, as may be amended, <u>a rain shut off device and soil</u> moisture (rain) sensor <u>will-shall</u> be included in the irrigation system and located on the site. so that it will receive direct rainfall, not impeded by other objects.
 - (4) The irrigation system will be designed to eliminate the application of water to impervious areas, including roads, drives and other vehicle use areas.
 - (5) The irrigation system will be designed to avoid impacts on existing native vegetation that will be retained on the development site.
 - (6) The irrigation system shall provide for 100 percent overlap of spray areas.
 - (7) "Xeriscape" or "Florida-friendly landscape" irrigation plans may have deviations approved to the irrigation plan, depending on the water conservation measures utilized, and to the extent the irrigation plan conforms with the Florida Yards and Neighborhoods Program, as administered by the University of Florida Institute of Food and Agricultural Sciences. In addition to such water saving devices, deviations may be approved for temporary irrigation measures to establish an initial "watering-in stage," prior to the removal of such temporary irrigation measures.

(Ord. No. 05-03, § 1(3-414), 1-19-2005; Ord. No. 08-22, 11-5-2008; Ord. No. 11-05)

Sec. 3-417. - Open space.

(a) Open space calculations. All development must contain the minimum percentage of open space as outlined in the following table below:

Open Space Requirement

Type of Development	Required Open Space as a % of Development Area
Residential, non-planned development: Type of dwelling units as defined in chapter 9 located in conventional zoning districts	
Single-family residence	Open space/pervious standards. See chapter 4.
Duplex on a single lot with a minimum lot size of 7,500 sq. ft.	None
Two-family attached each on an individual lot with a minimum lot size of 3,750 sq. ft. per unit	None
All other residential other than planned developments	35%
Residential planned development	40%

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Industrial	10%	
Other: All other uses including, but not limited to commercial, places of worship, recreational vehicle parks, community facilities, schools (excluding Lee County School District), etc.	20%	

(b) Indigenous native vegetation.

(1) Preservation.

- a. Large developments, with existing indigenous native vegetation, must provide 50 percent of their open space percentage requirement through the on-site preservation of existing indigenous native vegetation. Refer to section 3-523. A minimum setback of 30 feet is required from any habitable structure.
- b. If the development area does not contain existing indigenous native vegetation communities, but does contain existing indigenous native trees, then 50 percent of their open space percentage requirement must be met through the on-site preservation of existing native trees consistent with subsections (b)(1)b.1 through 4 of this section. Refer to Appendix A of this chapter.
 - Preservation of indigenous tree clusters is preferred over individual tree protection. Reasonable efforts
 to retain individual trees must be made. It is recognized that site design requirements (e.g., fill) may limit
 the ability to retain some individual trees, and in that case the city will allow the removal of those trees.
 - 2. Sabal palms may be relocated in a horticulturally correct manner and clustered within open space areas.
 - 3. Native trees (four-inch caliper dbh or greater) may be relocated to open space areas when proper horticultural methods (e.g., root pruning; use of anti-transpirants) are utilized to ensure the survivability of the trees.
 - 4. Effort must be made to preserve heritage trees (live oak, South Florida slash pine, or longleaf pine with minimum 20-inch caliper dbh). If a heritage tree must be removed from a site then a replacement tree with a minimum 20-foot height must be planted within an appropriate open space area.

(2) Tree advisory board review.

- a. The tree advisory board may make recommendations to applicants and staff, concurrent with the zoning process and prior to the issuance of the development order, who may suggest modifications to the master concept plan. The tree advisory board's final recommendation may not take longer than 60 days from the date the matter is placed on their agenda, unless agreed to by the applicant.
- b. If the review is required as a zoning condition prior to the issuance of the development order, staff may approve administrative deviations to the parking plan or site layout upon input from the tree advisory board. Alternatively, if the staff believes the deviation exceeds the staff's designated authority, the staff may request the city council's concurrence that an administrative deviation is the best practice to promote the preservation of a heritage tree. Any request for city council concurrence will be considered at a regular city council meeting, with regular notice of the agenda (no special advertisement or public notice to parties of record). If city council determines the deviation warrants a public hearing resulting from changes in the parking plan or site layout, the applicant shall file for an amendment to their planned development through chapter 4.

(3) Salvaging existing native plants.

- Open space areas must be designed to incorporate as many of the existing large native trees and sabal palms as possible.
- b. Native trees and sabal palms. Healthy native trees and sabal palms with a caliper of four inches or greater at 4½ feet above the ground (dbh) may be relocated onsite for credit toward code required landscaping when the trees have been properly prepared for relocation through root pruning or other horticulturally correct methods approved by the city manager or designee.
- (4) Credits.

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a. As an incentive to preserve indigenous native upland plant communities in large tracts, a scaled open space credit for single preserve areas will be granted as follows:

Indigenous Vegetation Credit

Credit provided	Minimum size	Minimum width
110%	½ acre	50 feet
125%	1 acre	100 feet
150%	3 acres	200 feet

- b. An additional, maximum ten percent credit will be granted if any of the following vegetation areas are included:
 - 1. Rare and unique uplands as defined by the city comprehensive plan.
 - 2. Connection to offsite public or private environmental conservation or preserve areas.
 - 3. Upland buffers to natural waterbodies
- (5) Consistent with the provisions of section 3-81, the city manager or designee may permit administrative deviations to reduce the minimum 50 percent indigenous native vegetation requirement within this subsection to a lower percentage, if the applicant demonstrates that the proposed landscape plan will result in a better overall product than what would have been produced under these standards. Existing approved indigenous preserve areas within planned developments are not eligible for administrative deviations. The administrative deviation request must include the unique conditions or circumstances that make the property unusable and unreasonably burdensome. The applicant must provide details of other actions that will be taken to offset the reduction. Offsets to this requirement can only be made through enhancements to the landscape material being planted according to the landscape plan.

(6) Setbacks.

a. A minimum 30-foot setback from all preserve (wildland) areas is required for buildings and accessory structures for the purposes of fire protection. Buildings and accessory structures located closer than 30 feet from a preserve (wildland) area shall require special mitigation measures as determined by the Bonita Springs Fire Control and Rescue District, in accordance with the National Fire Protection Association ("NFPA"), Standard 1144, "Standard for Protection of Life and Property from Wildfire."

(c) Minimum dimensions.

- (1) The minimum average width of open space areas must be five feet in commercial areas and ten feet in all other areas.
- (2) The minimum area of open space must be 180 square feet.
- (3) Indigenous open space areas must have a minimum average width of 20 feet and minimum area of 400 square feet.
- (d) Use of open space.
 - (1) Open space areas must be landscaped in accordance with this division.
 - (2) The following uses may contribute to the open space requirements; provided the minimum dimensions are met:
 - a. Buffers and landscaped areas in off-street parking areas, except for areas reserved for future parking spaces pursuant to section 4-1729(d).
 - b. Dry detention areas.
 - c. Existing or proposed bodies of water, including stormwater management areas, and areas subject to saltwater inundation, which may be used to offset up to a maximum of 25 percent of the required open space area.

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- d. Active and passive recreation areas such as playgrounds, golf courses, beach frontage, native trails, bikeways, pedestrian ways, tennis courts, swimming pools, and other similar open spaces, as long as not more than 20 percent of the recreational area credited as open space consists of impervious surface.
- e. Outdoor active and passive public use areas such as plazas, atriums, courtyards, and other similar public spaces may be used to offset up to a maximum of 20 percent of the required open space.
- f. Archaeological sites or zones that are designated as significant historic resources pursuant to chapter 5 may also be used in open space calculations.
- (e) Indigenous preserve management plan. A long-term management plan must be submitted that details land management activities to be taken to ecologically manage the indigenous preservation area. This document must be recorded on the deed to ensure future property owners associations, and future owners or assigns are provided clear notice of these long-term land management requirements and commitments. The management plan must provide details of maintaining the biological health of the system. The management plan must include, but is not limited to: native plant maintenance, exotic pest plant control, protected species habitat maintenance, schedule of maintenance activities and allowable uses, and wildfire risk mitigation (which will take into account the flammability of such vegetation). The requirements for this plan are outlined below:

(1) Introduction.

- a. Plan must be prepared by an environmental consultant, section 3-79
- b. Plan shall state the names of the individuals that prepared the plan, designate a preserve manager and provide contact information.
- Plan shall state the STRAP number of the parcel preserved.
- d. Plan shall include a map of the preserve area at a legible scale.
- e. Plan shall state the development order or permit number.
- f. Plan shall state if other state or federal agencies require maintenance of the preserve area and this plan shall be compatible with any other plans.
- g. Plan does not necessarily have to follow this format but must address all the items in this outline.
- h. Plan shall describe the communities or habitats including the FLUCFCS codes.
- i. Plan shall state the goal or future of the preserve, i.e., preserving gopher tortoise habitat, preserving wetland storage functions, preserving heritage trees, etc.
- j. The plan shall state that the conditions and recommendations of the indigenous preserve management plan are required, except for subsection (e) (4) of this section (exotic animal management), and subsection (e) (8) of this section. (Recommendations for corrective measures or future activities that are clearly above the core requirements of this management plan.)
- (2) Method and frequency of native vegetation management.
 - a. What time of year will maintenance be performed, spring, summer, etc.
 - b. Frequency of maintenance, monthly, yearly, etc.
 - c. Method of maintenance activity, herbicide, trimming, burning, raking, etc.
 - d. Describe the details of maintenance activity, i.e., what chemicals used, tracer dyes, will vegetation be removed from site, how much raking will occur, etc.
 - e. <u>Vacant and disturbed areas within preserves shall be planted and restored. Plantings and spacing shall be approved as part of the preserve area management plan.</u>
- (3) Method and frequency of exotic vegetation management.
 - a. What time of year will maintenance be performed, spring, summer, etc.
 - b. Frequency of maintenance, monthly, yearly, etc.

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- c. Specify that all Category I <u>and Category II</u> exotic plants according to the exotic pest plant council shall be removed and maintained at a level of five percent or less coverage in perpetuity.
- d. Method of maintenance activity, herbicide, trimming, burning, raking, etc.
- e. Describe the details of maintenance activity, i.e., what chemicals used, tracer dyes, will vegetation be removed from site, how much raking will occur, etc.
- (4) Method of exotic animal management.
 - a. Plan shall state the threats from exotic animals, feral cats and dogs, iguanas, pythons, etc.
 - b. Plan shall state any methods used to dissuade or control exotic animals, signage notifying residents to keep pets on leashes, surveys for exotic animal infestation, or physical removal of exotic animals, etc.

Note: Exotic animal management is not mandated by ordinance as of this writing, but is recommended for the health of the system.

- (5) Wildland fire hazard mitigation plan.
 - a. Incorporate the wildland fire hazard mitigation plan into the indigenous preserve management plan.
 - b. State the criteria used to maintain the preserve for fire hazards, raking of mulch every two to three years, trimming palmettos every two to three years, frequency of burns, removing dead vegetation, etc.
- (6) Protected species management plan conditions (if applicable).
 - a. Aerial map with a scale of one inch equals 200 feet or the same scale of the DO with FLUCFCS codes.
 - b. Habitat descriptions for the FLUCFCS codes present.
 - c. Location of individuals, nest sites, burrows, etc., as appropriate.
 - d. Areas to be preserved and managed for protected species management.
 - e. List any specific management activities, annual surveys, monitoring, plantings, etc.
 - f. Plan shall state if other state or federal agencies require maintenance of the preserve area and this plan shall be compatible with any other plans.
- (7) Activities allowed or disallowed in preserve areas.
 - a. List any activities allowed in preserve areas, boardwalks, mulched paths, chickee huts, etc.
 - List any activities not allowed in preserve areas.
- (8) Monitoring reports.
 - a. Perform a baseline monitoring report.
 - b. Document initial conditions including photos.
 - Document the status of the restoration activities and any progress or decline.
 - d. Document the death or decline or increase of preserve vegetation.
 - e. Document any protected species activities or observations.
 - f. Provide professional observations and a summary of the overall health of the preserve.
 - g. Provide recommendations for corrective measures and/or future activities.
 - h. Monitoring reports are required for a period of five consecutive years from the issue date of the development order and shall be submitted to the city community development.

(Ord. No. 05-03, § 1(3-415), 1-19-2005; Ord. No. 06-03, 3-15-2006; Ord. No. 08-07, 3-5-2008; Ord. No. 08-22, 11-5-2008; Ord. No. 11-05, 3-16-2011)

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Sec. 3-418. - Landscape standards.

- (a) General. Landscaping for all new developments, except community parks, as defined in the city comprehensive plan and roads constructed by a government entity other than CDD Districts, must include, at a minimum, the following number of trees, in addition to the landscaping required for parking and vehicle use areas and buffers. General tree requirements may be reduced through the utilization of larger trees as specified in section 3-422(c)(1)), or through use of an alternative landscape betterment plan (see section 3-421). Existing waterbodies within the development area will not be included in the calculation for general tree requirements. Artificial turf is not an appropriate landscape material.
 - (1) Single-family residence developments that are constructed on individual (single) lots. One tree must be provided per 3,000 square feet of development area, which must include a minimum of two trees per single-family lot installed, as well as removal of all Category I Exotic plants, prior to issuance of the certificate of occupancy.
 - (2) All other residential developments. All other residential developments must provide one tree per 3,000 square feet of development area.
 - (3) Recreational vehicle developments. One tree must be provided per 3,000 square feet of development area.
 - (4) All other developments. One tree must be provided per each 3,500 square feet of development area. No more than 50 percent of the required trees may be located in the area between the rear lot line and a line created by extending the rear wall of the principal structure (defined as the wall closest to, and running roughly parallel to, the rear lot line) to the side lot lines for lots fronting on a single street. Where lots front on two streets, no more than 50 percent of the required trees may be located in the area between the rear lot line and the line created by extending the rear wall of the principal structure to the side lot line and the street right-of-way line.
- (b) Building perimeter plantings. All new development in commercial zoning districts and commercial components of planned development districts and DRIs must provide building perimeter plantings equal to ten percent of the proposed building gross ground level floor area. These planting areas must be located abutting all sides of the building, (not including the loading area), except when the side of the building directly abuts a preserve or landscape buffer. The perimeter planting areas must consist of landscape areas, raised planters or planter boxes that are a minimum of five feet wide. These landscape areas must include shrubs and ground cover plants with a minimum of 50 percent coverage of the landscape area at the time of planting. Turfgrass is discouraged and is not to exceed ten percent of the landscape area. Water management areas may not be a part of this five-foot planting area. Pedestrian access ways may cross, and loading areas may be placed in the perimeter planting area but may not be used to meet minimum planting area or open space requirements.
 - (1) An enlarged perimeter landscape area is required in the front of shopping centers and freestanding retail uses development. An area that is at least five percent of the size of the vehicular use area must be developed as green space within the front of shopping centers and retail establishments and be an enlargement to the front building perimeter planting area. However, it is not a requirement that this area directly abut the front of the building. The enlarged perimeter planting areas must consist of landscape areas, raised planters or planter boxes that are a minimum of five feet wide. These enlarged perimeter planting areas must include trees, shrubs and ground cover plants with a minimum of 50 percent coverage of the landscape area at the time of planting. Turfgrass is discouraged and is not to exceed ten percent of the landscape area. Water management areas may not be a part of this enlarged planting area.
 - (2) This five percent green space area may be used to meet open space requirements if they are in compliance with section 3-417(c), but may not be used to reduce the perimeter planting areas on the sides and rear of the building. These areas must be designed for scenic, noncommercial recreation purposes, and be pedestrian-friendly and aesthetically appealing. They may include the following: limited mulch, not to exceed ten percent of the area, decorative plantings, landscaped walkways within the interior of the green space area not used for shopping, fountains, manmade watercourses (but not water retention areas), park benches, site lighting, sculptures, gazebos, and any other similar items.
- (c) Landscaping of parking and vehicle use areas. The provisions of this section apply to all new off-street parking or other vehicular use areas. Existing landscaping that does not comply with the provisions of this LDC must be brought into conformity, to the maximum extent possible, when: the vehicular use area is altered or expanded except for re-striping or seal-coating of lots/drives, the building square footage is changed, or the structure has been vacant for a period of one year or more and a request for an occupational license to resume business is made. Consistent with the provisions

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of section 3-81, the city manager or designee may permit administrative deviations where a conflict exists between the application of this division and the requirements for the number of off-street parking spaces or area of off-street loading facilities.

- (1) Vehicular overhang of landscape areas. The front of a vehicle may overhang any landscaped area a maximum of two feet; provided the landscaped area is protected by motor vehicle wheel stops or curbing. Two feet of such landscaped area or walkway may be part of the required depth of each abutting parking space. Walkways must be designed with a minimum of five feet width that is clear of any vehicle overhang.
- (2) Internal landscaping. All parking areas must be internally landscaped to provide visual relief and cooling effects and to channelize and define logical areas for pedestrian and vehicular circulation, as follows:
 - a. Trees must be planted or retained in parking areas, including landscaped areas reserved for future parking spaces, to provide for canopy coverage when the trees mature. Trees in parking areas must have an average mature spread of 30 feet or more. At least one tree must be planted or retained for every 250 square feet of required internal planting area, and no parking space may be more than 65 feet from a tree planted in a permeable island, peninsula, or median of ten-foot minimum width.
 - b. Landscaped areas on the parking area perimeter or internal islands must equal or exceed a minimum of ten percent of the total paved surface area. Landscaped areas reserved for future parking spaces pursuant to section 4-1729(d) may not be included in this calculation.
 - c. The minimum average dimension of any required internal landscaped area must be five feet.
 - d. No more than an average of ten parking spaces must occur in an uninterrupted row unless divider medians, as specified in subsection (c)(2)f of this section, are used. Where existing trees are retained in a landscape island the amount of parking spaces in that row may be increased to 15; provided that the 65-foot minimum distance from a shade tree is maintained.
 - e. Each row of parking spaces must be terminated by landscaped islands that measure not less than five feet in width, and not less than 18 feet in length. Curbing is strongly encouraged. If terminal islands are used for required canopy trees, they must be a minimum of ten feet in width.
 - f. Optional divider medians may be used to meet interior landscape requirements. If divider medians are used, they must form a landscaped strip between abutting rows of parking spaces. The minimum width of a divider median must be five feet. One tree must be planted for each 40 linear feet of divider or fraction thereof. Trees in a divider median may be planted singly or in the case of palm trees in clusters. The maximum spacing of trees must be 60 feet.
 - g. All interior landscaped areas not dedicated to trees or to preservation of existing vegetation must be landscaped with grass, ground cover, shrubs, or other approved landscaping materials, and this must be so noted on the landscape plans. Sand, gravel, rock, shell, artificial turf, or pavement are not appropriate landscape materials.
 - h. Light poles must be located outside of all parking islands that contain required trees. Light poles and associated utility boxes (fixtures) may be placed in oversized landscape islands with the landscaping required in this Code, however, in the event of a conflict between the required landscaping and the utility fixtures, the utility fixtures shall be altered instead of canopy trees being trimmed and / or removed other than what is permitted within this Code.
- (d) Buffering adjacent property. Buffering and screening applies to all new development, with the exception of roads constructed by a government entity other than a CDD. Existing landscapes that do not comply with the provisions of this section must be brought into conformity to the maximum extent possible when: the vehicular use area is altered or expanded, except for re-striping or seal-coating of lots/drives, the building square footage is increased, or there has been a discontinuance of use for a period of one year or more and a request for an occupational license to resume business is made.
 - (1) General. A buffering area is required along the entire perimeter of the proposed development whenever the proposed development abuts a different use. Ingress and egress will be subtracted from the buffer length requirement so that trees are properly proportioned. The existing use or, where vacant, the permitted use, of the abutting property will determine the type of buffering area required for the proposed development. Buffer areas

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- may not be located on any portion of an existing or dedicated street right-of-way or roadway easement, except that buffers may be located within slope easements as long as appropriate planting soil is provided in the slope.
- (2) Use categories. In interpreting and applying the provisions of this section, development is classified into the following use categories:

Uses

SF-R	Single-family, duplex or two-family attached situated on individual lots
MF-R	Residential structures containing three or more dwelling units on a single parcel
СОМ	Commercial uses, public facilities, schools (other than Lee County School District), and recreational vehicle parks
WOR	Places of worship (df)
IND	Industrial use
STP	Sewer treatment plant or water treatment plant
ROW	Public street right-of-way or roadway easement

(3) Buffer requirements. The following table provides the required buffer type when a proposed use is abutting an existing use or, in the absence of an existing use, the existing zoning.

Buffer Requirements Permitted or Existing Uses

Proposed Uses	Permitted or Existing Uses								
	SF-R	MF-R	COM	IND	STP	ROW	WOR		
SF-R		_	-	-	_	_			
MF-R		-	-	-	-	D			
COM	В	_	Α	-	-	D	Α		
WOR	C/F	C/F	Α	-	_	D	Α		
IND	E/F	E/F	В	-	-	D	В		
STP	E	Е	E	C/F	-	С	Е		

(4) Buffer types. The following table provides six different buffer types. Each type buffer, identified by a letter, provides the minimum number of trees and shrubs per 100 linear foot segment and indicates whether or not a wall or hedge is required. A dash (-) indicates no buffer is required.

Buffer Types (Per 100 Linear Feet)

Buffer types	A	В	С	D	E	F
Minimum width in feet	5	15	15	15	25	25
Minimum # of trees	4	5	5	5(3)	5	5
Minimum # shrubs	-	Hedge ⁽²⁾	18	Hedge ⁽²⁾	30	Hedge ⁽²

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Wall required (1)	No	No	Yes	No	Yes	No
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Notes for Buffer Types Table:

- (1) A solid wall, berm or wall and berm combination, not less than eight feet in height. All trees and shrubs required in the buffer must be placed on the outside of any wall proposed or required. The height of the wall must be measured from the average elevation of the street or streets abutting the property as measured along the centerline of the streets, at the points of intersection of the streets with the side lot lines (as extended) and the midpoint of the lot frontage (see section 4-2172). Walls must be constructed to ensure that historic flow patterns are accommodated and all stormwater from the site is directed to on-site detention/retention areas in accordance with the SFWMD requirements.
- (2) Hedges must be planted in double staggered rows and be maintained so as to form a 36-inch high (F type buffers must be 48 inches at installation and be maintained at 60 inches high) continuous visual screen within one year after time of planting as indicated by the date of the completion of the development order or phase thereof."
- (3) Trees within the ROW buffer must be appropriately selected so that in mature form conflicts with site visibility, overhead utilities, lighting and signs are avoided. The clustering of trees and use of palms within the ROW buffer will add design flexibility and reduce conflicts. Palms are limited to 30 percent of the total number of required trees.
- (5) Public and quasi-public facilities, including, but not limited to, places of worship, parks, utility facilities, government offices, neighborhood recreational facilities, and private schools must provide a type C buffer unless it can be shown that the proposed development will not have an adverse impact on adjacent existing residential uses.
- (6) If roads, drives, or parking areas are located less than 125 feet from an existing residential subdivision or residential lots, a solid wall or combination berm and solid wall not less than eight feet in height must be constructed not less than 25 feet from the abutting property and landscaped (between the wall and the abutting property) with a minimum of five trees and 18 shrubs per 100 lineal feet. Where residences will be constructed between the road, drive, or parking area and the existing residential subdivision or lots, the wall or wall and berm combination are not required. Uses or activities that generate noise, dust, odor, heat, glare, or other similar impacts, must provide a type C or F buffer unless it can be shown the proposed development will not have a significantly adverse impact on adjacent property. Walls, berms, and buffer plantings must not be placed so they violate the vehicle visibility requirements of section 4-2251
- (7) All freestanding parking areas, whether commercial, public, or private, not associated with other development must provide a D type buffer for the right-of-way and C type buffer if they abut single-family residential or multiple-family residential uses or zoning.
- (8) Use of buffer areas. Required buffers may be used for passive recreation such as pedestrian, bike, or equestrian trails; provided that:
 - a. No required trees or shrubs are eliminated;
 - b. Not more than 20 percent of the width of the buffer is impervious surface;
 - c. The total width of the buffer area is maintained; and
 - d. All other requirements of this chapter are met.

(Ord. No. 05-03, § 1(3-416), 1-19-2005; Ord. No. 08-07, 3-5-2008; Ord. No. 11-05; Ord. No. 12-11, § 1(3-416), 8-1-2012)

Sec. 3-419. – Efficient Irrigation design and maintenance standards.

(a) To improve the survivability of required landscaping, cultivated landscape areas must be provided with an automatic irrigation system. The system provided will have 100 percent overlap to ensure total coverage. All required irrigation

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- systems must be designed to eliminate the application of water to impervious areas, including roads, drives and other vehicle areas. Required irrigation must also be designed to avoid impacts on existing native vegetation.
- (b) All new developments that have required landscaping must be irrigated by the use of an automatic irrigation system with controller set to conserve water. Rain sensors must be installed in all automatic sprinkler systems to override the sprinkler activation mechanism during periods of increased rainfall. Where existing irrigation systems are modified requiring the acquisition of a permit, automatic activation systems and overriding rain sensors must be installed.
- (c) The provisions of this section may not apply to landscape designs, or portions thereof, that conserve water through the use of xeriscape or Florida-friendly landscape pursuant to F.S. § 166.048(1)(a) and (b).
 - (a) Irrigation systems shall use a smart system using a hydro-zone design, to simulate natural rain fall, matching precipitation rates avoiding overwatering and providing efficient (low volume) water usage.
 - (b) Sprinkler and routers for turf areas shall be installed so as to minimize over spray onto paved surfaces, structures, and non-vegetated areas; minimize runoff of irrigation water; and operate at their designed overlap pattern to ensure 100 percent coverage.
 - (c) All required irrigation systems must be designed to eliminate the application of water to impervious areas, including roads, drives and other vehicle areas. Required irrigation must also be designed to avoid impacts on existing native vegetation.
 - (d) All new developments that have required landscaping must be irrigated by the use of an automatic irrigation system with smart controllers set to conserve water. Rain and soil moisture sensors must be installed in all automatic sprinkler systems to override the sprinkler activation mechanism during periods of increased rainfall. Where existing irrigation systems are modified requiring the acquisition of a permit, automatic activation systems and overriding rain and soil moisture sensors must be installed.
 - (e) Maintenance of irrigation system. The developer/owner is responsible for maintenance of the required irrigation consistent with the development order, the provisions of this section and F.S. §373.62, as may be amended.
 - a. An irrigation professional responsible for installing or substantially modifying an irrigation system shall provide the city and property owner with a maintenance checklist and recommended schedule, proper irrigation system settings according to the seasons, recommendations for checking technology that inhibits or interrupts operation of the system during periods of insufficient moisture, filter cleaning recommendations, if applicable, and information on the current water restrictions.

(Ord. No. 05-03, § 1(3-417), 1-19-2005; Ord. No. 11-05)

Sec. 3-423. - Plant installation and maintenance standards.

- (a) Installation.
 - (1) Plant materials must be installed in soil conditions that are conducive to the proper growth of the plant material. Limerock located within planting areas must be removed and replaced with native or growing quality soil before planting.
 - (2) A plant's growth habit must be considered in advance of conflicts that might be created (e.g., views, signage, overhead power lines, lighting, circulation). Trees may not be placed where they interfere with site drainage, subsurface utilities, or overhead utility lines, or where they will require frequent pruning in order to avoid interference with overhead power lines. Landscape designers must consult FP&L's guidelines for planting in and around power lines.
 - (3) All landscape materials must be installed in a recognized horticulturally correct manner. At a minimum, the following installation requirements must be met:
 - <u>A minimum of 75% of plantings must utilize Florida Friendly Design Standards 'right plant right place'</u> <u>practices.</u>
 - b. All landscape areas must be mulched unless vegetative cover is already established.

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- <u>c.</u> Trees and shrubs used in buffers must be planted in a minimum width area equal to one-half the required width of the buffer. However, in no case may the planting area be less than five feet in width.
- <u>d.</u> All landscaped areas must be provided protection from encroachment by any type of vehicle.
- <u>e.</u> All required plants used in buffers and landscaping must be installed using xeriscape principles. Xeriscape principles include water conservation through drought-tolerant landscaping, the use of appropriate plant material, mulching, and the reduction of turf areas.
- f. Utility, power, or drainage easements may overlap required buffers; however, no required trees or shrubs may be located in any utility, power, or street easement or right-of-way. To avoid conflicts with overhead utility lines, only small trees, less than 20 feet in height at maturity, may be used directly adjacent to an overhead line.
- g. Safe sight distance triangles at intersections and vehicle connections. Where an access way intersects a right-of-way or when a property abuts the intersection of two or more rights-of-way, a minimum safe sight distance triangular area must be established. Within this area, vegetation must be planted and maintained in a way that provides unobstructed visibility at a level between 30 inches and eight feet above the crown of the adjacent roadway. Landscaping must be located in accordance with the roadside recovery area provisions of the state department of transportation's Manual of Uniform Minimum Standards for Design, Construction, and Maintenance of Streets and Highways (FDOT Green Book) where appropriate.
- (b) Maintenance of landscaping. The owner is responsible for maintaining the required landscaping consistent with the provisions in the approved development order, in a healthy and vigorous condition at all times. Tree and palm staking must be removed within 12 months after installation. All landscapes must be kept free of refuse, debris, disease, pests, and weeds. Ongoing maintenance to prohibit the establishment of prohibited invasive exotic species is required. As a condition of permitting, Community Development will re-inspect the required landscaping is required after 12 months from the date the permit is finalized. Canopy trees are required to grow and form a 30 ft. diameter or greater spread. Canopy trees are expected to grow three or more feet in diameter per year. Canopy trees that do not form the required 30 ft. or greater spread within eight years of installation may be require to be replaced if the tree(s) are in neglect, demonstrate poor form, a lack of adequate irrigation, are of poor soil quality, or show signs fertilize decencies. As a condition of maintenance, any unpermitted removal of mature landscape trees will require tree replacement on an inchper-inch basis (dbh) measured at 4.5 feet above grade.
- (c) Pruning. Vegetation required by this Code may only be pruned to promote healthy, uniform, natural growth of the vegetation (except where necessary to promote health, safety, and welfare) and be in accordance with "Pruning Standards" (as revised_1988)" of the National Arborist Association. Trees must not be severely pruned to permanently maintain growth at a reduced height or spread. Pruning must not interfere with the design intent of the original installation. Severely pruned trees must be replaced by the property owner. A plant's growth habit must be considered in advance of conflicts which might arise (i.e., views, signage, overhead power lines, lighting, circulation, sidewalks, buildings, and similar conflicts).

(Ord. No. 05-03, § 1(3-421), 1-19-2005)

Sec. 3-428 Enforcement of Installation and Certification

- (a) An Approved Plan or As-Built Drawing of the Landscape Plans & Irrigation System shall be provided to the City prior to obtaining a Certificate of Completion. The landscape professional shall also provide a copy to their client, to make sure that compliance is achieved by the client after the landscape professional completes the project.
- (b) Certification. The landscape architect, engineer or irrigation contractor licensed, registered, or certified by the State of Florida shall conduct a final field inspection for all required landscaping and irrigation. A licensed irrigation or landscape professional shall complete the certification process by submitting a completed and endorsed checklist as provide by the City.
- (c) If the landscaping and irrigation is installed by the property owner, the owner may act as a certifying agent.

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(d) Inspections. New or substantially modified irrigation systems shall be inspected and self-certified prior to the issuance of a Certificate of Completion. The City may review a subset of self-certified sites to evaluate compliance rates and to determine if licensed irrigation professionals will be permitted to continue to self-inspect systems. The City may revoke an irrigation professional authorization to certify for failure to comply with this code, material misstatement or misrepresentation.

SECTION TWO: CONFLICTS OF LAW

Whenever the requirements or provisions of this Ordinance are in conflict with the requirements or provisions of any other lawfully adopted City of Bonita Springs Ordinance or Florida Statutes, the more restrictive shall apply.

SECTION THREE: SEVERABILITY

If any part, section, subsection, or other portion of this ordinance or any application thereof to any person or circumstance is declared void, unconstitutional or invalid for any reasons, such part, section, subsection, or other portion or the prescribed application thereof, shall be severable, and the remaining provisions of this ordinance, and all applications thereof not having been declared void, unconstitutional or invalid, shall remain in full force and effect. The City declares that no invalid or prescribed provision or application was an inducement to the enactment of this ordinance, and that it would have enacted this ordinance regardless of the invalid or prescribed provision or application.

SECTION FOUR: CODIFICATION, INCLUSION IN CODE, AND SCRIVENER'S ERRORS

It is the intention of the City Council for the City of Bonita Springs that the provisions of this Ordinance shall become and be made a part of the Bonita Springs Land Development Code; and that sections of this Ordinance may be renumbered or re-lettered and that the word "Ordinance" may be changed to "section", "article", or such other appropriate word or phrase in order to accomplish such intention; and regardless of whether such inclusion in the code is accomplished, sections of this Ordinance may be renumbered or re-lettered and typographical errors which do not affect the intent may be authorized by the City Manager, or the City Manager's designee, without need of public hearing, by filing a corrected or re-codified copy of same with the City Clerk.

SECTION FIVE: EFFECTIVE DATE

The effective date of this Ordinance shall be thirty (30) days from its adoption date.

DULY PASSED AND ENACTED by the Ci this day of, 2015.	ty Council of the City of Bonita Springs, Lee County, Florida
AUTHENTICATION:	
Mayor	City Clerk

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APPROVED AS TO FORM:	City Atto	rney
Vote: Nelson McIntosh Martin Slachta	Simmons Gibson Lonkart	
Date filed with City Clerk:		