Article 6

Division 8 Tree Protection and Replacement

Sec. 6.8.1 Purpose and intent.

- A. The purpose of this division is to regulate the protection, removal, replacement, and maintenance of trees from or in public and private property. Tree protection and replacement shall work cooperatively with landscaping requirements to preserve and enhance the aesthetic quality of Marion County, complementing the natural and built environments, while providing shade and habitat through:
 - (1) Preservation of existing trees and native plant communities;
 - (2) Replacement of trees that are removed;
 - (3) Maintenance of trees and
 - (4) Prevention of tree abuse; and
 - (5) Enforcement.
- **Sec. 6.8.2** The preservation and replacement of trees and protected plant species shall apply to all development with the following exceptions:
 - A. The removal of trees for purposes of conducting bona fide agricultural uses such as field crops, landscape nursery, citrus nursery, forest crops, animal husbandry, greenhouses, aquaculture, silviculture and the like, on lands with an agricultural zoning classification.
 - B. Property used for bona fide agricultural use, as listed above, zoned other than agriculture and possessing an agriculture classification from the County Property Appraiser per FS 193.461. Lands with an urban land use designation may not use this exemption.
 - C. On lands where either of the two exemptions above has enabled tree removal without a permit, no applications for any land use changes shall be made within one year of the tree removal date unless:
 - (1) The applicant provides tree replacement at 100 inches DBH of native trees per acre, or lower based on the pre-clearing density of existing trees, or
 - (2) The applicant/owner provides payment into a Tree Mitigation fund in the equivalent amount of planting 100 inches DBH of native trees per acre or lower, based on the preclearing density of existing trees.
 - D. The removal of trees which have a DBH of less than 10 inches, except those trees which have been designated replacement and conservation trees pursuant to Sec. 6.8.10 F.
 - E. The removal of trees on an individual parcel of record used or to be used for single-family dwellings.
 - F. The removal of trees associated with the County's construction, rehabilitation, or routine maintenance of roads and drainage systems within public rights-of-way or easements.
 - G. Tree removal or trimming for the construction of firebreaks, firelines, and surveying.
 - H. The removal of trees which pose an immediate and direct threat to persons or property, and the removal of trees that are dead or dying due to natural causes.
 - I. Transplanting of any size tree.
 - J. Removal of trees required by a development plan which has been fully approved by the

County.

K. Removal of exotic tree or nuisance tree species as listed by the <u>UF/IFAS Assessment of Non-native Plants</u>, "Prohibited" or "Invasive – Not Recommended" tables, as updated.

Sec. 6.8.3 Tree protection.

- A. Design for the protection of trees.
 - (1) Every reasonable effort should be made to minimize tree removal. Tree preservation shall be an integral part of the site planning or subdivision design process. Tree preservation shall be conceived in a total pattern throughout the site, integrating the various elements of site design, preserving and enhancing the particular identity of the site.
 - (2) The preservation of existing trees and vegetation for use as perimeter land use buffers shall be considered during the site design process and implemented to preserve habitat while lowering the cost of development.
 - (3) In all cases, a post-development ratio of shade trees to the area of the site as required in Sec. 6.8.4.
 - (4) All trees with a DBH of 10 inches or larger shall be considered protected trees unless listed by the <u>UF/IFAS Assessment of Non-native Plants</u>, Prohibited or Invasive Not Recommended tables, as updated.
 - (5) A proper evaluation shall be made to determine if existing trees, or groups of trees, are good candidates for preservation before final site plans are developed. The evaluation shall be used to guide decisions about tree preservation, tree protection, and tree removal and shall include:
 - (a) Determination of species of tree(s);
 - (b) Assessment of the health and age of the tree(s);
 - (c) Determination of the condition of the tree(s) based on the species, health, and age and whether the tree(s) will provide a lasting value to the finished project (trees with fast growth habits and have a shorter life span may not be desirable);
 - (d) Assessment of the size (DBH and canopy) of the tree(s);
 - (e) Assessment of the rarity, uniqueness, and character of the tree(s);
 - (f) Assessment of the historic value, status as a specimen tree, or other outstanding quality;
 - (g) An general overview of the site and whether the tree(s) will provide a lasting and positive contribution to the site and general surroundings, and
 - (h) Determination if any minor alternations to the site topography will impact the long-term viability of preserving existing trees.
- B. Tree protection zones are as follows:
 - (1) Tree Protection Zone (TPZ) is a defined area surrounding the trunk of a tree (or group of trees) to be preserved, intended to protect roots and soil within and beyond the Critical Root Zone (CRZ) to ensure future tree health and stability.
 - (a) All tree measurements for tree protection and preservation shall be made at 4.5 feet above grade to establish the correct diameter at breast-height (DBH).
 - (b) The TPZ shall be located at the dripline of the tree (or group of trees) to be preserved. For tree protection requirements, the dripline shall be indicated on a plan as required in Sec. 6.8.6 and determined by either of the following methods:

- 1. Field location by either a Surveyor and Mapper, a Landscape Architect, or a Certified Arborist, or
- 2. Utilizing a "desktop canopy" rule generally understood as using one foot for every inch of DBH. For example, a 30 inch tree would have a 30 foot radius dripline.
- (2) The CRZ is the area of soil around a tree trunk where roots are located that provide stability and uptake of water and minerals required for tree survival.
 - (a) No excavation, filling, trenching, or other intense disruption of the root zone is allowed within the CRZ.
 - (b) The CRZ is established on a tree-by-tree basis through on-site review and assessment by either a Landscape Architect or a Certified Arborist prior to construction.
 - (c) Damage to roots in this area, removing a protected tree without authorization, may result in penalties or fines.
- (3) The County's Landscape Architect, or designee, may reduce the limits of the TPZ to allow authorized construction to occur.
- (4) No reduction of the TPZ or removal of barricades may occur without prior written authorization from the County's Landscape Architect.
- (5) The TPZ may be temporarily reduced in size and/or barricades may be temporarily removed to allow for minor construction or maintenance within the TPZ. Barricades shall be reinstalled as soon as work within the TPZ is completed.
- (6) The TPZ shall not be reduced to any point within the CRZ.

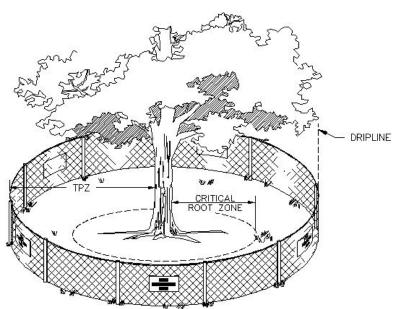


Figure 6.8-1 Tree Protection Zones

- C. Tree protection barricades shall be:
 - (1) No less than four feet in height.
 - (2) Constructed of rigid material capable of surviving for the duration of the construction.
 - (3) Include highly visible signs shall be placed on the tree protection barricades at each quadrant of single protected trees and along driplines of groups of trees being protected

at 50 foot intervals or less. Signs shall include the words "Tree Protection Zone."

- D. Pre-construction tree protection.
 - (1) The owner, developer, contractor, and permittee shall be responsible for insuring that all possible measures are taken to avoid damage to trees not approved for removal.
 - (2) Prior to any clearing, grubbing, or any construction, the responsible party shall erect tree protection barricades around all trees, or groups of trees, within the construction area which are to be preserved.
 - (3) The owner, developer, contractor, and permittee shall be responsible for providing instructions to all employees and subcontractors regarding the tree protection requirements and potential penalties associated with damaging or removing protected trees.
- E. Tree protection shall continue during the course of development. The following requirements shall be conditions of tree removal permits, all permits for construction in public rights-of-way, and all development permits issued under and pursuant to this Code:
 - (1) The cleaning of construction equipment or material or the disposal of waste materials including but not limited to, paint, oil, solvents, asphalt, concrete, and mortar within the TPZ of any tree which is being protected is not allowed.
 - (2) The movement of equipment or the storage of equipment, materials, debris, or fill within the TPZ of any tree which is being protected is not allowed.
 - (3) The contractor shall inspect all tree protection barricades and signs on a weekly basis during the course of construction. Any barricade or sign which has been damaged or is missing shall be replaced immediately.
 - (4) If any tree which has not been approved to be removed is destroyed, or receives major damage during construction, with the exception of natural events, so as to place its long term survival in question, then such tree must be replaced by the owner with a comparable type of tree or trees having a total (combined) DBH, at a minimum, equal to the DBH of the tree so destroyed or damaged (inch-to-inch). The County reserves the right to establish a replacement value for such trees and payment into the Tree Mitigation Fund may be authorized by the County's Landscape Architect.

Sec. 6.8.4 Shade tree requirements.

- A. The post-development ratio of shade trees to the area of the site shall be a minimum of one shade tree per 3,000 square feet.
- B. Shade trees may include:
 - Protected and preserved trees which have a favorable assessment, and/or
 - (2) Trees as required for buffers, parking areas, vehicle use areas, and building areas.
- C. When mature trees with a full canopy of 30 foot radius or larger, with a favorable assessment, are preserved on the project site, a credit of two shade trees may be used towards the overall shade tree requirement.
- D. Required shade trees shall meet the minimum size requirements in Sec. 6.9.11.

Sec. 6.8.5 Tree Removal Permit.

A. For tree removals not associated with any development as outlined in this division, refer to Sec. 2.X.X – Stand Alone Permits. For all other tree removal applications, the approved development plans shall serve as the Tree Removal Permit.

- B. A tree removal permit shall be required for the removal of any tree with a DBH of 10 inches or larger, except for exempt activities as outlined in Sec. 6.8.2. A tree removal permit shall be obtained from the County's Landscape Architect, or designee, prior to any site clearing, grading, or for any construction which requires a permit from the Marion County Building Department. The failure to obtain any such permit when required shall be a violation of this Code, subject to penalties provided herein.
- C. A tree removal permit shall be obtained by any public utility undertaking construction activities that require tree trimming or tree removal, unless the public utility has been granted an exemption by the Board. The Board may grant an exemption after reviewing policies submitted by a public utility which govern their tree trimming or tree removal practices and finding that such policies are consistent with the intent of the Code. Such exemptions will be valid for a period of three years from the date granted unless revoked by the Board for good cause at a public hearing. The Board shall provide 30 days notice to a public utility of intent to revoke any such exemptions.
- D. Tree removal permits shall expire within one year or upon expiration of the building permit, whichever comes first. Trees authorized to be removed may not be removed after the permit expires unless a new permit is obtained pursuant to this division.
- **Sec. 6.8.6** Submittal Requirements. The following requirements shall apply to the application for tree removal permits and are in addition to the Minimum Plan Requirements:
 - A. Depending on the density of existing trees, the applicant may provide a separate "Tree Removal and Preservation Plan". For development sites with lower density of trees, such information may be indicated on the Site Plan or the Landscape Plan. Either method used shall indicate the location of all trees, with a DBH of 10 inches and larger, to be removed and trees to be preserved. Preserved trees and replacement trees shall be indicated on the Landscape Plan to demonstrate the final appearance of the site.
 - B. Tree calculations shall include:
 - (1) The total numbers of existing trees within the site and the respective DBH of each tree;
 - (2) The pre-development ratio of native tree inches-per-acre;
 - (3) The total DBH inches of native trees to be removed; and
 - (4) The total DBH inches of native trees to be preserved.
 - C. A tree protection detail which graphically indicates the requirements of tree protection as required by this division.
 - D. List general prohibitions on the plan as stated in Sec. 6.7.3.
 - E. Indication of all TPZ on the site plan, grading plan and on which ever plan is used to demonstrate tree preservation and replacement.
 - F. Fees required for review and issuance of tree removal permits, inspections, and restoration plans shall be established by the Board, by resolution. Tree removal permit application fees for projects associated with any development (excluding stand alone permits) shall be included in the overall plan review and application fees available at the Office of the County Engineer.
- **Sec. 6.8.7** Review and approval procedures.
 - A. During review of tree preservation submittals, the County's Landscape Architect, or designee, may determine that modifications of the proposed plans or calculations are necessary. Conditions that may require changes include, but are not limited to, the following:

- (1) Preserving any tree due to their age, size, rarity, uniqueness, historic value, status as a specimen tree, or other outstanding quality.
- (2) Proposed grading or clearing activities do not follow the requirements of this division.
- (3) Proposed habitat destruction which conflicts with the requirements in Div. 7.
- B. The applicant will be asked to revise and update the tree preservation information according to review comments.
- C. After approval, the County's Landscape Architect, or designee, shall issue a tree removal permit if such tree removal is in accordance with all provisions of this Code. The approved development plans shall serve as the Tree Removal Permit.
- **Sec. 6.8.8** Tree replacement requirements. For those trees permitted for removal, trees shall be replaced in accordance with the minimum standards set forth below:
 - A. A minimum of 100 inches DBH per acre of the existing trees with a DBH of 10 inches or greater shall be preserved on site regardless of the assessment as required herein. If the predevelopment number of inches is less than 100 inches DBH per acre on the average, the property owner shall replace the total DBH of trees permitted for removal. Replacement as described below:
 - (1) Existing trees measuring 10 inches DBH to 19 inches DBH which are permitted for removal shall be replaced with a ratio of 1 inch replacement per two inches removed and the minimum replacement tree size is 3.5 inch caliper.
 - (2) Existing trees measuring 20 inches DBH to 29 inches DBH which are permitted for removal shall be replaced with a ratio of 1.5 inches replacement per two inches removed and the minimum replacement tree size is 3.5 inch caliper.
 - (3) All trees with a 30 inches DBH or greater, which receive a favorable assessment, and are permitted for removal, under A. above, shall be replaced inch-for-inch and the minimum replacement tree size is four inch caliper. These trees may be approved for removal by the County's Landscape Architect, or designee, under the following circumstances:
 - (a) The tree materially interferes with the proposed location, servicing or functioning of the utility lines or services, or rights-of-way, and
 - (b) The tree cannot be preserved through re-design of the infrastructure.
 - (4) All trees with a 30 inches DBH or greater, which receive an unfavorable assessment, and are permitted for removal shall be replaced with a ratio of 1.5 inches replacement per two inches removed and the minimum replacement tree size is 3.5 inch caliper.
 - B. Trees removed pursuant to a permit for construction in rights-of-way, approved by the County, State or Federal authority, shall not be required to replace the DBH of trees removed if such authority demonstrates that such trees conflict with proposed utilities, drainage, or roadway construction.

Sec. 6.8.9 Replacement trees.

- A. Replacement trees are a part of the comprehensive tree program and shall work in combination with required shade trees, buffer trees, and any other required landscaping.
- B. All trees and/or palms used for tree replacement purposes shall be nursery grown and Florida No. 1 quality or better, as established by *Grades and Standards for Nursery Plants*, Department of Agriculture, State of Florida, included latest updates, as amended.
- C. Replacement trees shall meet the minimum tree requirements established in Sec. 6.8.8.

- D. Replacement trees shall be Florida native species compatible to the site.
- E. Palms may only be used to replace palms that are permitted for removal. Replacement palms shall have a clear trunk height of 10 foot minimum. The use of palms shall work with the required palm ratio as required in Sec. 6.9.10.
- F. For trees removed pursuant to a tree removal permit, required replacement trees shall be located within the parcel boundaries shown on the site plan. If space constraints are such that the replacement trees cannot be located within the parcel boundaries using sound horticultural and design principles, then the replacement trees may be located on public property at the County's discretion. The public property location shall be specifically designated by the County and such replacement trees shall be donated to the County. The County will be responsible for maintenance of donated trees on public property.
- G. As an alternative to replacement, the property owner may comply with the requirement of Sec. 6.8.8 above by designating existing trees on site which are native tree species and less than 10 inches DBH as conservation trees, provided that the property owner takes steps to designate and protect such conservation trees.
 - A property owner designating conservation trees shall record in the public records of Marion County, a notice to subsequent property owners that the site contains conservation trees, subject to maintenance requirements, with reference to the development plan on file with the County designating such trees. A copy of such recorded notice on a form provided by the County shall be supplied to the Zoning Manager, or designee, prior to the issuance of a Certificate of Occupancy.

Sec. 6.8.10 Tree Mitigation Fund.

- A. The Tree Mitigation Fund has been created in the general trust fund of Marion County for the purpose of accepting and disbursing the contributions made to the Board as part of the tree replacement monies deposited for tree replacement purposes. This fund shall be used to enhance tree replacement in Marion County.
- B. An application to pay in lieu of installing any required replacement trees is made through the County's Landscape Architect. The "pay in lieu" option shall only be used for replacement trees and for no other landscape or tree planting requirement as stated in this Code.
- C. At the County's discretion, in lieu of installing replacement trees, a permittee may pay a fee into the Tree Mitigation Fund at a per-tree cost. The amount of such fee shall be determined on a case by case basis through the public solicitation for bids and the amount shall be based on:
 - (1) The wholesale cost of material
 - (2) Cost of labor for installation
 - (3) Cost of irrigation for establishment
 - (4) Cost of maintenance for two years
- D. Payment into the Tree Mitigation Fund shall be recommended by the County's Landscape Architect and approved by the Board prior to issuance of the tree removal permit.
- E. Tree mitigation funds shall be used by the County for the installation, establishment, and maintenance of trees on public property within Marion County.

Sec. 6.8.11 Tree maintenance and management.

A. Unless otherwise permitted by this division, no person shall cause or authorize:

- (1) The removal of any protected tree without first obtaining a tree removal permit as required by this Code.
- (2) Tree abuse which includes:
 - (a) Hatracking a tree; or
 - (b) Destroying the natural habit of tree growth; or
 - (c) Pruning which leaves stubs or results in a flush cut; or splitting of limb ends; or
 - (d) Removing tree bark to the extent that if a line is drawn at any height around the circumference of the tree, over 1/3 of the length of the line falls on portions of the tree where bark no longer remains; or
 - (e) Using climbing spikes, nails, or hooks, except for purposes of total tree removal or as specifically permitted by standards set by the ANSI, as updated; or
 - (f) Pruning that does not conform to standards or recommendations set by the ANSI, as updated; or
 - (g) Pruning of live palm fronds which initiate above the horizontal plane; or
 - (h) Overlifting a tree; or
 - (i) Shaping a tree.
- (3) Any encroachments, excavations, or change the natural grade within the Tree Protection Zone (TPZ), as defined herein, of a tree unless it can be demonstrated to the County's Landscape Architect prior to commencement of said activity, that the activity will not negatively impact any tree.
- (4) Land clearing or the operation of heavy equipment in the vicinity of a protected tree without placing and maintaining a protective barrier around the drip line of the tree.
- (5) The storage or use of materials or equipment within the TPZ of any protected tree, or attachments, other than those of a protective and non-damaging nature, to any tree.
- (6) Land clearing, including the removal of understory, without first obtaining authorization as herein provided.
- B. The following requirements shall be conditions of any tree removal permit which includes a requirement for replacement trees:
 - (1) Replacement trees required in conjunction with a commercial or industrial development or subdivision approval shall be considered required improvements and shall be subject to certification of satisfactory completion contained in this Code.
 - (2) All replacement trees shall be maintained in a living, healthy condition for a period of two years following final inspection and approval, or else be replaced, by the permittee, his successor or assignee. No replacement shall be required beyond such two-year period. After the two-year period, the owner of record shall be responsible for maintaining the replacement trees in a healthy condition.
 - (3) The permittee or the property owner shall record in the public records of Marion County, appropriate notice to subsequent owners of the maintenance period or replacement requirement for replacement trees with reference to the development plans on file with the County identifying such trees. A copy of such recorded notice shall be supplied to the Zoning Manager, or his designee, prior to the issuance of a Certificate of Occupancy.
 - (4) For residential and mixed use developments where tree preservation and replacement requirements are approved with any application, the developer shall require future property owners of lots where protected trees have been preserved to continue to

protect and preserve such trees. Such requirements shall run with the parcel until removal of the tree(s) is required due to age, declining health, or for the protection of public safety.

- **Sec. 6.8.12**Tree inspections. The following tree preservation and/or replacement inspections shall be required to ensure compliance with this division and with the requirements of permits issued hereunder. No Certificate of Occupancy or Certificate of Completion, as appropriate, may be issued for any development involving the removal of trees requiring a permit until all of the following inspections have been completed and approval is granted:
 - A. A preliminary inspection shall be conducted by the County's Landscape Architect, or designee, to confirm that the permittee has marked trees permitted to be removed and has installed tree protection barricades around trees, or groups of trees, to be preserved prior to any clearing, grubbing, or construction. Any deficiencies noted during this inspection shall be cause to withhold approval until they are corrected by the permittee and reinspected.

 Approval, after preliminary inspection, shall be noted by the County's Landscape Architect, or designee, on the permit and shall constitute notice to proceed with tree removal.
 - B. A final inspection shall be conducted by the County's Landscape Architect, or designee, after completion of tree removal and replacement in accordance with the approved plans. Approval, after final inspection, shall be noted by the County's Landscape Architect, or designee, on the permit and shall constitute notice of commencement of the required maintenance period of replacement trees if replacement is required.
- Sec. 6.8.13 Violation and Enforcement. It shall be a violation of this Code to fail to obtain a tree removal permit when required, to fail to comply with any condition of any tree removal permit issued, or to violate any provision of this division. When such violations occur, the following sanctions apply:
 - A. If unauthorized tree removal or site grading occurs, the County's Landscape Architect, or designee may issue a stop work order for the affected project area of such unauthorized tree removal and all related site work will cease until a restoration plan is prepared by the owner, developer, contractor, or agent, and then submitted to, and approved by the County's Landscape Architect, or designee.
 - B. If a restoration plan is not presented within 30 days, the owner, developer, contractor, or agent will be cited by the County's Landscape Architect, or designee, and referred to the Code Enforcement Board.
 - C. A Certificate of Occupancy will not be granted until all trees and vegetation shown upon the approved restoration plan have been installed and all site grades restored.
 - D. All trees and vegetation shown upon the approved site restoration plan must be installed on the property and the site grade restored even if project termination occurs before completion of the project. Failure to complete the approved restoration plan is a violation of this Code and the owner, developer, contractor, or agent will be cited by the County's Landscape Architect, or designee, and referred to the Code Enforcement Board.
 - E. In addition to all other remedies provided herein, the Landscape Architect may seek injunctive relief or the imposition of fines and penalties for any violation of this division.

Division 9 Landscaping

Sec. 6.9.1 Purpose and intent.

The purpose and intent of this division is to provide landscaping guidelines establishing minimum standards and criteria for the design, installation, and maintenance of landscaping which enhances the aesthetic appearance of Marion County, complimenting the natural and built environments, reducing noise and glare, improving air and water quality, providing shade and habitat, and buffering the aspects of development.

- **Sec. 6.9.2** A landscape plan which indicates the following is required for all development except for individual single-family homes and duplexes:
 - A. All existing landscaping, indigenous open space, and natural features;
 - B. Locations of existing protected trees, labeled and with sizes provided, groups of trees, landscaping and other vegetation to be preserved;
 - C. Vegetation and tree protection barricades;
 - D. All replacement trees as required per Div. 6.8;
 - E. All proposed landscape areas, labeled and with sizes provided;
 - F. Construction details as applicable, including but not limited to:
 - (1) Tree protection;
 - (2) Tree, palm, and shrub installation;
 - (3) Details for specialized installations;
 - (4) Elevation drawings of walls proposed for buffers and/or screening; and
 - (5) Cross section of proposed walls/berms/combination for buffers.
 - G. Plant schedule:
 - (1) A key matching the plants being specified (may be plant symbols or written)
 - (2) Quantities of plants being specified
 - (3) Common plant names
 - (4) Scientific plant names
 - (5) Plant specifications including height, spread, and spacing
 - (6) Native status
 - H. Calculations for required landscaping:
 - (1) Tree preservation and replacement
 - (2) Shade tree requirements
 - (3) Buffers
 - (4) Parking areas
 - (5) Vehicle use areas
 - I. Notes including installation instructions and special requirements related to licensing, tree watering, maintenance, fertilizer use, and watering.
 - J. Notes regarding recognised on and inspections as outlined in Sec. 6.8.3 and 6.8.12 and shall also be provided on the site and grading plan sheets.

Sec. 6.9.3 Landscape design standards.

- A. All new landscapes in Marion County shall be designed to protect the County's unique natural resources by conserving water, protecting the quality of groundwater, reducing waste and pollution, creating wildlife habitat, and preventing erosion by implementation of Florida-Friendly Landscaping (FFL) by UF/IFAS and FDEP, including but not limited to:
 - (1) Right plant, right place;
 - (2) Water efficiently;
 - (3) Fertilize appropriately;
 - (4) Mulch;
 - (5) Attract wildlife;
 - (6) Manage yard pests responsibly;
 - (7) Recycle yard waste;
 - (8) Reduce stormwater runoff; and
 - (9) Protect the waterfront.
- B. All plant species listed as "Prohibited" in the UF/IFAS Assessment of Non-native Plants (Central Zone) shall be removed from proposed development sites. Plant species listed as "Invasive Not Recommended" shall be removed from all proposed development sites outside of the Urban Growth Boundary (UGB); they may remain within the UGB with authorization from the County Landscape Architect.
- C. Landscaping within rights-of-way shall require approval by the County Engineer, or designee.
- D. Trees shall not be located in areas that will cause conflict with overhead or underground utilities. Large trees shall not be located within 30 feet of powerlines. Alternative design strategies may be approved by the County's Landscape Architect when conflicts with existing utilities cannot be avoided.
- **Sec. 6.9.4** For non-residential development, at least 20 percent of the land to be developed shall be landscaped.
 - A. When a project area is less than the size of the overall parcel to be developed, the required landscape area calculation may be reduced to apply to the project area as authorized by the County Landscape Architect. All other requirements directed by the Board, DRC, or included in this division shall apply.
 - B. Landscape areas shall include:
 - (1) Buffers;
 - (2) Landscaping required for parking and vehicular use areas;
 - (3) Building landscaping; and
 - (4) Service and equipment area screening.
 - C. Landscape areas may also include the following:
 - (1) Planted stormwater management areas excluding the onsite, ultimate storage facility and other stormwater management facilities with a depth greater than four feet;
 - (2) Marion Friendly Landscape Areas.
 - (3) Groundwater Recharge Preservation Areas.
 - D. Credit towards the landscape area requirements may be allowed for all or part of preserved native habitat if the applicant demonstrates that it includes one or more of the following:

- (1) Tree clusters including native vegetative communities are protected from development impact.
- (2) Vegetative areas with native understory flora are protected from development impact. Constitutes a perimeter buffer along any roadway, vehicular use area, or adjacent property.
- **Sec. 6.9.5** For new residential developments and mixed use developments, landscape plans shall demonstrate the following:
 - A. The landscape design standards in Sec. 6.9.2 shall be provided for any proposed landscaping in the following areas:
 - (1) Development entry areas.
 - (2) Medians and/or boulevards.
 - (3) Community buildings.
 - (4) Recreation and common areas.
 - B. New residential and mixed use developments shall create Marion Friendly Landscape Areas (MFLA) to minimize impacts to the quality and quantity of natural groundwater recharge.
 - (1) Non-residential components of mixed use development shall adhere to the landscape requirements as in accordance with Sec. 6.9.4.
 - (2) MFLA shall not be located on residential lots.
 - (3) The MFLA requirements for the residential components are as follows:
 - (a) When MFLA are indicated on the Master Plan or Preliminary Plat:
 - 1. Within the Primary SPZ, 30 percent of the developable area shall be MFLA.
 - 2. Outside of the Primary SPZ, 20 percent of the developable area shall be MFLA.
 - (b) When MFLA are not indicated on the Master Plan or Preliminary Plat and are deferred to a later application:
 - 1. Within the Primary SPZ, 40 percent of the developable area shall be MFLA.
 - 2. Outside of the Primary SPZ, 30 percent of the developable area shall be MFLA.
 - (4) The area limitations under subsection (3), above, may be exceeded in accordance with a mitigation strategy approved by the County that complies with the requirements set forth under Sec. 6.9.6.
 - C. The developer shall inform future owners within residential developments that all permit applications for construction shall include a landscape plan which meets the requirements of this division.
 - D. In new residential developments with more than 50 lots, the developer shall also promote the practices and principles of FFL as described in the <u>Florida Yards and Neighborhoods Handbook</u>, as amended. A program which promotes these principles shall be incorporated into and made part of the restrictive covenants and shall include:
 - (1) Information about the applicable landscaping requirements under this division and under Art. 6.9;
 - (2) Procedures for future owners to follow when implementing FFL on individual lots, and
 - (3) Water conservation and FFL educational materials to all new homeowners; and
 - (4) Information regarding landscape irrigation scheduling as stipulated in Div. 6.10.X.
- **Sec. 6.9.6** Groundwater Recharge Preservation Area.

In order for the MFLA requirements set forth in Sec. 6.9.5 to be exceeded within new residential subdivisions, a mitigation strategy approved by the County shall preserve the reduced MFLA as Groundwater Recharge Preservation Areas (GRPA) in accordance with this Section.

- (1) Only the following areas within the residential subdivision may be included in the GRPA, subject to the conditions and restrictions included herein:
 - (a) Public or common open spaces as established by instruments recorded in the Marion County public records, and/or privately owned areas protected through a recorded Approved Conservation Easement, that consist of passive recreation areas, preserved wetlands, flood plains, and preserved or restored natural areas;
 - (b) Portions of county-approved stormwater management facilities that are in common or public ownership and not in the right-of-way of a publicly-owned road, including vegetative swales, bioretention facilities, and retention areas having a design depth of three feet or less:
 - (c) Utility, drainage and conservation easements in public or common ownership, except vehicle access easements that are surfaced or normally used more than once per month; and
 - (d) Golf course natural areas that are:
 - 1. Identified in the approved Natural Resource Management Plan, and
 - Maintained in their natural state without the use of any irrigation or fertilizers;
 and
 - (e) Lands within a GRPA shall be managed in conformance with the following conditions and restrictions:
 - The use of lawn chemical, including fertilizers and pesticides, is prohibited, except for limited use of chemical spot treatments as may be necessary to control insect infestations.
 - The storage and/or release of petroleum and other hazardous materials is prohibited.
 - 3. The use of high volume irrigation is prohibited.
 - 4. Accessory structures in access of 300 square feet shall not be allowed in the GRPA except by Special Use Permit (SUP).
- (2) The boundaries of the GRPA and text descriptions of the conditions and restrictions that apply therein shall be included and dimensioned on all Master Plans, Preliminary Plats, or Improvement Plans submitted to the County, as applicable.
- The GRPA boundaries shall be shown and dimensioned on the Final Plat, and described in the recorded CCRs, or equivalent, for the development. The requirement of this subsection may be met by use of a separate included page. The CCRs shall, in addition, establish and provide for reasonable enforcement mechanisms that the HOA, CDD, or their equivalent, shall implement to ensure compliance with the applicable conditions and restrictions. The CCRs shall also provide the County with the means and authority to inspect the GRPA for compliance with this Section and to take reasonable enforcement action where necessary and appropriate in the event that the HOA, CDD, or equivalent fails to enforce noncompliance. CCR provisions which pertain to compliance with this Section shall not be subject to removal or alteration by any action of the HOA or CDD, or

- equivalent. In addition, the HOA, CDD, or equivalent shall be required to rerecord, in accordance with FS 712, all CCRs before the expiration of their last date of recording.
- (4) Maintenance of the GRPA in accordance with this Section shall be the responsibility of the HOA, CDD, or equivalent. Violations not corrected by the HOA, CDD, or equivalent, shall be subject to Code Enforcement action by the County.

Sec. 6.9.7 Buffers.

- A. It is the intent of this section to eliminate or reduce the negative impacts of the adjacent uses upon each other such that the long term continuance of either use is not threatened by such impacts and the uses may be considered compatible.
- B. Buffers shall provide a year-round screen and provide an aesthetic quality, especially along public rights-of-way, which enhance travel corridors and screen unsightly areas from public view.
- C. Plant species shall be mixed to provide diversity and appeal.
- D. Buffers may consist of landscaping, buffer walls, fencing, berms, or combinations thereof which work cohesively to achieve the intent of buffering.
- E. Every development, with the exception of the construction of an individual single-family residence or duplexes on an individual parcel of record, shall provide sufficient buffering when topographical or other barriers do not provide reasonable screening.
- F. If buffers are required, the length shall be measured along each property line, and shall exclude driveways and other access points.
- G. No buildings, structures (other than buffer walls or buffer fences), storage of materials, or parking shall be permitted within the buffer area.
- H. Buffers shall not be located on any portion of an existing or dedicated right-of-way.
- Arrangement of plantings in buffers shall provide maximum protection to adjacent properties, avoid damage to existing trees and plant material, and take mature growing sizes into consideration regarding shade, root damage, and interference with nearby utilities.
- J. Required buffer types between land uses.
 - (1) Specialized Commerce Districts include a mix of both commercial and industrial land uses, therefore, buffer requirements shall apply only to lots on the perimeter of the district
 - (2) Buffer installation and maintenance shall be provided concurrently with the development of the more intense land use, with the following deviations:
 - (a) When a new but less intense land use is developed adjoining a pre-existing developed site with a higher intensity use, the new use is subject to providing the required land use buffer.
 - (b) When a new but less intense land use is responsible for providing the required land use buffer, the developer may reduce the required buffer by one buffer type with acknowledgement of the buffer reduction clearly noted on the development plan.
 - (c) The development of an individual single family residence or duplex is exempt from providing the required buffer.
 - (3) In interpreting and applying the provisions of buffers, development is classified into categories shown in Table 6.9-1.
 - (4) Table 6.9-2 provides the type of buffer required between a proposed use and an existing use, or in the absence of an existing use

TABLE 6.9-1. Land Use Categories for Buffers

AG	Agriculture, Rural Lands, Natural Reservation						
SFR	Single family, duplex residential						
MF	Multi-family residential						
СОМ	Commercial, RV parks, Commercial Recreation						
<mark>I</mark> ND	Industrial uses						
PUB	Public Use, Government, Institutional, Professional Office						
ROW	Arterial or Collector Right-of-Way or Road Easement						

TABLE 6.9-2. Buffer Type Requirements

		Permitted or Existing Use							
roposed Use		AG	SFR	MF	СОМ	IND	PUB	ROW	
	AG	1	-	1	1	-	-	-	
	SFR	E	-	С	Α	В	С	С	
	MF	E	Α	-	Α	В	С	С	
	СОМ	D	В	В	ı	В	С	C	
	IND	В	В	В	В	-	В	D1	
	PUB	E	В	С	С	С	-	C	
	ROW	-	F	F		-	-	-	

- K. Description of buffer classifications. The content and composition of each buffer type is described in the following items. The design professional shall use these requirements to design buffers that are thoughtfully designed and enhance perimeter of the development site. Visual screening shall be achieved through the use of proper plant material, arrangement, and layering.
 - (1) A-Type buffer shall consist of a 30 foot wide landscape strip without a buffer wall. The buffer shall contain at least three shade trees and five accent/ornamental trees for every 100 lineal feet or fractional part thereof. Shrubs and groundcovers, excluding turfgrass, shall comprise at least 50 percent of the required buffer area and shall form a layered landscape screen with a minimum height of three feet achieved within one year of planting.
 - (2) B-Type buffer shall consist of a 20 foot wide landscape strip with a buffer wall. The buffer shall contain at least two shade trees and three accent/ornamental trees for every 100 lineal feet or fractional part thereof. Shrubs and groundcovers, excluding turfgrass, shall comprise at least 50 percent of the required buffer.
 - (3) C-Type buffer shall consist of a 15 foot wide landscape strip without a buffer wall. The buffer shall contain at least two shade trees and three accent/ornamental trees for every 100 lineal feet or fractional part thereof. Shrubs and groundcovers, excluding turfgrass, shall comprise at least 50 percent of the required buffer and form a layered landscape screen with a minimum height of three feet achieved within one year.
 - (4) D-Type buffer shall consist of a 15 foot wide landscape strip with a buffer wall. The buffer shall contain at least two shade trees and three accent/ornamental trees for every 100 lineal feet or fractional part thereof. Shrubs and groundcovers, excluding turfgrass, shall comprise at least 25 percent of the required buffer.
 - (5) E-Type buffer shall consist of a five foot wide landscape strip without a buffer wall. The

- buffer shall contain at least four shade trees for every 100 lineal feet or fractional part thereof. Shrubs shall be planted in a double-staggered row and be capable of reaching a maintained height of six feet within three years. Groundcovers and/or turfgrass shall not be used in this buffer.
- (6) F-Type buffer shall consist of a buffer wall with a height of six foot constructed at the right-of-way line when existing habitable structures are within 25 feet from the newly established right-of-way.

L. Buffer walls, buffer fences, and berms.

- (1) Where buffer walls are required by this Article, a combination of buffer walls and berms may be used to meet the intent of buffering. Buffer fences may be used to as a substitute for buffer walls with approval of the DRC. The buffer walls, buffer fences, and berms shall:
 - (a) Not be constructed or installed in a manner which creates a threat to public safety or interferes with vehicular circulation;
 - (b) Be designed to be compatible with existing and proposed site architecture and the character of the surrounding and adjacent settings including the style and selection of materials; and
 - (c) Be situated so that the wall or fence components are within the buffer limits and any required landscaping shall be installed on the public view side of the wall.
- (2) When a buffer wall is required, the buffer wall may be used in conjunction with a berm to achieve a minimum final elevation of six feet in height. When buffer walls, berms and/or combinations of each are used, they shall be constructed to:
 - (a) Ensure that historic and/or proposed water flow patterns are accommodated;
 - (b) Not interfere with or obstruct any stormwater facilities; and
 - (c) Provide sufficient ingress/egress for bicycle traffic and pedestrians access with proper arrangement to limit visibility into the proposed development.
- (3) If planted berms are used, the top of the berm shall have a four foot wide flat maintainable area. The maximum side slope for a berm planted with shrubs and woody groundcovers shall be 3:1. The maximum side slope for a berm planted with turfgrass shall be 3.5:1. Planting trees or shrubs on the very top of a berm is discouraged.
- M. Buffer plantings shall be irrigated appropriately for the specific plant species and characteristics of the site to promote healthy growth.
- N. Buffer areas shall be continually maintained and kept free of all trash and debris.

Sec. 6.9.8 Parking areas and vehicular use areas.

- A. A minimum five foot wide landscape area consisting of shrubs and groundcovers, excluding turfgrass, shall be provided around the perimeter of parking areas to form a landscape screen with a minimum height of three feet achieved within one year of planting. A land use buffer that abuts a parking area may satisfy this requirement.
- B. Landscaping adjacent to parking areas and vehicular use areas shall be protected from being damaged. Landscaping at the end of parking stalls shall be offset away from the parking stall to allow for vehicle overhang. The area between the landscape screening and the end of the parking stall shall be mulched and contain no vertical irrigation components.
- C. A landscaped parking lot island shall be located every ten parking spaces and shall be 200 square feet in size, or sufficiently sized to accommodated the root growth of the required parking area trees, whichever is greater. For paved parking areas within a Primary SPZ,

including those with permeable or porous surfaces, parking lot islands shall be completely planted with shrubs or groundcovers; the use of turfgrass is prohibited.

- D. Trees within parking areas.
 - (1) All trees required for parking areas and vehicular use areas shall be shade trees, unless required otherwise by provisions in this section.
 - (2) All parking lot islands, including terminal parking lot islands, shall contain one shade tree unless site lighting fixtures are proposed in said island. Double parking lot islands (where double-loaded parking bays are proposed) shall contain two shade trees.
 - (3) In parking lot islands with site lighting fixtures, an arrangement of one or two accent/ornamental trees shall be installed depending on the size and configuration of the island.
 - (4) Parking lot islands with control signage may contain other tree (or palm) species, in lieu of shade trees, which will not conflict with the visibility of such signage.
- E. Each row of parking spaces shall be terminated by a landscaped island.
- F. Divider medians may be used to meet parking area landscape requirements.
 - (1) The minimum width of a divider median shall be eight feet.
 - (2) One shade tree shall be provided per 50 lineal feet of divider median.
- G. To offset heat gain from paved surfaces, shade trees as required in Sec. 6.8.4 should be located to provide as much shade as possible on such surfaces. In all uses other than residential or industrial uses, an area or combination of areas equal to 10 percent of the collective area of the vehicular use areas, exclusive of parking areas, shall be devoted to internal landscaping consisting of a mixture of trees, shrubs, and groundcovers. Vehicular use areas include, but are not limited to:
 - (1) Ancillary drive aisles
 - (2) Access drives
 - (3) Loading and services areas
- H. Landscaping required within or around any proposed parking area is exclusive of other landscaping requirements. Shade trees as required in Sec. 6.8.4 may be integrated into the parking area and/or vehicular use area landscaping.
- I. All landscaping in parking areas, vehicle use areas, and on the street frontage shall be placed so that it will not obstruct any sight triangle.

Sec. 6.9.9 Building landscaping.

- A. Landscape plantings shall be provided along the public view sides of all proposed structures to reduce the monotony of large blank walls, reduce heat gain and glare, and enhance the aesthetic appearance of the building.
- B. Landscape areas shall be provided adjacent to or within 25 feet from the building walls and shall extend along 60 percent of the total length of the wall, excluding those areas required for access to the building.
- C. Landscape areas shall be a minimum of five feet wide allowing for a minimum distance of two feet from the façade to the innermost plants.
- D. Large trees shall not be located within 20 feet of a building. Accent/ornamental trees shall be located sufficiently to allow for healthy growth and to minimize the need for pruning.

Sec. 6.9.10 Service and equipment areas.

- A. Utility areas and loading/unloading areas shall be screened as follows:
 - (1) A planting area a minimum of three feet wide and shall form a continuous three foot high landscape screen, or
 - (2) Buffer fencing with a minimum height of three feet.
- B. Garbage collection areas (dumpster pad) shall be screen with a wall, buffer fencing, or a landscape screen capable of reaching a minimum height of six feet within three years.
- C. Landscaping shall be provided around irrigation backflow prevention devices to provide screening from public view.
- D. Trees and shrubs shall remain eight feet from any fire service connection.
- E. Exterior air conditioning components shall be screened by locating the equipment away from public view or through the use of a landscape screen with a minimum height of three feet.

Sec. 6.9.11 General planting requirements.

- A. All trees, palms, shrubs, and groundcovers shall be nursery grown and Florida No. 1 quality or better, as established by *Grades and Standards for Nursery Plants*, Department of Agriculture, State of Florida, including latest updates, as amended.
- B. Plant palettes shall be appropriate for the development site and provide the highest level of diversity as practicable.
- C. Planting specifications are listed as follows:
 - (1) Native plant requirements:
 - (a) Within the UGB, a minimum of 25 percent of all proposed plant quantities, excluding turfgrass, shall be Florida native species suitable for use in Marion County.
 - (b) Outside of the UGB a minimum of 35 percent of all proposed plant quantities, excluding turfgrass, shall be Florida native species suitable for use in Marion County.
 - (c) A minimum of 50 percent of the required shade trees shall be Florida native species.
 - (d) To promote biological diversity, no more than 50 percent of the required shade trees for a development shall be of one species.
 - (2) The use of invasive plant species is based on the <u>UF/IFAS Assessment of Non-native Plants</u> (Central Zone) as updated.

Plant species listed as "Prohibited" are not permitted for use in any proposed development.

Plant species listed as "Invasive – Not Recommended" are not permitted for use in any development outside of the UGB. This group of plants may be used within the UGB with subject to approval by the County Landscape Architect.

Plant species listed as "Caution" may be used provided specific management strategies and monitoring are included in the project's BMP manual.

- (3) Trees
 - (a) Shade trees shall have a caliper of 3.5 inches.
 - (b) Accent or ornamental (understory) trees shall have a minimum overall height of six feet and a minimum spread of 42 inches upon installation.
- (4) Palms
 - (a) Not more than 25 percent of all required trees shall be palm trees unless a higher percentage is authorized as stated in Div. 6.8.13.

- (b) Additional palms may be provided in excess of the 25 percent threshold when three palms are used to substitute one required tree. Where specimen palms are specified, substitution may be a one-to-one ratio.
- (c) Palm trees shall not be substituted for required shade trees.
- (d) Palms shall have a clear trunk height of 10 feet minimum.
- (5) Shrubs shall be a minimum height of 18 inches spaced appropriately for the species and the required screening and maintenance height.
- (6) Groundcovers shall be those species of plants with a mature growing height of 24 inches maximum and spaced up to 2' 3' on-center.
- (7) Vining groundcovers shall have a minimum of three runners per plant. Vines may be spaced accordingly for the proposed use.
- (8) Turgrass may be of any variety which is adapted and suitable for use in Marion County. The use of rolled turf is prohibited on property with public access unless the supportive netting is removed and the integrity of the turf is not jeopardized during installation.
- D. Mulch types shall be of a renewable resource or a recycled product. The use of cypress mulch is discouraged.

Sec. 6.9.12 Landscape Installation.

- A. Any person providing landscape installation services for hire shall meet the licensing and certification requirements under Sec. 6.9.16.
- B. All plantings shall be installed according to current best management practices.
- C. Trees and palms shall be properly planted and guyed or staked.
- D. All plantings shall be properly watered during installation and through the establishment period for healthy growth as recommended by UF/IFAS.
- E. Installation shall mean survival in perpetuity, and replacement if necessary, of all materials. Dead and/or dying plant material shall be replaced by the owner within 30 days of notification by the County.

Sec. 6.9.13 Landscape completion inspection requirements

- A. Upon completion of the installation, the contractor shall request an inspection by the design professional. A <u>Landscape and Irrigation As-Built Certification</u> shall be signed and sealed by the design professional and submitted to the County Landscape Architect prior to the issuance of a Certificate of Occupancy.
- B. One year after the Certificate of Occupancy is issued, a follow-up inspection shall be conducted by the County to verify that all required landscaping is established, healthy, and properly maintained.

Sec. 6.9.14 Landscape Maintenance

- A. All landscape areas shall be maintained in accordance with the <u>Florida-Friendly Best</u>

 <u>Management Practices for Protection of Water Resources by the Green Industries</u>, UF/IFAS and FDEP.
- B. Trees or palms shall not be severely pruned or shaped. The natural growth habit of a tree or palm shall be considered during the design phase to avoid maintenance conflicts.
- C. Trees or palms which are guyed or braced shall have such guying or bracing removed once sufficient root growth has enable the tree or palm to support itself. Damaging trees with

- guying devices shall be considered a violation of this Code. Damaged trees shall be replaced at the expense of the owner.
- D. The alteration of any required and approved landscape area without obtaining prior written approval from the County is prohibited. The expansion of drought tolerant landscaping, excluding the replacement of planted areas with turfgrass, or replacing dying or diseased plants with similar plant material is excluded.
- E. Buffers and screening plantings shall provide healthy appearance year round and be maintained at the required minimum heights.

Sec. 6.9.15 Fertilizers and other landscape chemicals.

A. Applicability.

- (1) This section shall be applicable to and shall regulate any and all applicators of fertilizer and areas of application of fertilizer within the unincorporated area of Marion County, unless such applicator is specifically exempted by the terms of this Section from the regulatory provisions of this Code. This section shall be prospective only, and shall not impair any existing contracts.
- (2) This section requires the use of BMPs which provide specific management guidelines to minimize negative secondary and cumulative environmental effects associated with the misuse of fertilizers. These secondary and cumulative effects have been observed in and on Marion County's natural and constructed stormwater and drainage conveyances, rivers, creeks, canals, springs, lakes, estuaries and other water bodies. Collectively, these water bodies are an asset critical to the environmental, recreational, cultural and economic well-being of Marion County residents and the health of the public. Overgrowth of algae and vegetation hinder the effectiveness of flood attenuation provided by natural and constructed stormwater and drainage conveyances. Regulation of nutrients, including both phosphorus and nitrogen contained in Fertilizer, will help improve and maintain water and habitat quality.

B. Exemptions.

The provisions set forth above in this Section shall not apply to:

- (1) Bona fide farm operations as defined in the Florida Right to Farm Act, FS Sec. 823.14, 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.
- (2) Any lands used for bona fide scientific research, including, but not limited to, research on the effects of fertilizer use on urban stormwater, water quality, agronomics, or horticulture.
- C. Fertilizer content and application rates.
 - (1) Fertilizers Applied to Turf and/or Landscape Plants within Marion County shall be applied in accordance with directions provided by FAC Rule 5E-1.003(2), Labeling Requirements for Urban Turf Fertilizers.
 - (2) Fertilizer containing nitrogen or phosphorus shall not be applied before seeding or sodding a site, and shall not be applied for the first 30 days after seeding or sodding, except when hydro-seeding for temporary or permanent erosion control in an emergency situation (wildfire, etc.), or in accordance with the Stormwater Pollution Prevention Plan for that site.

(3) Fertilizers should be applied to turf and/or landscape plants at the lowest rate necessary. Nitrogen shall not be applied at an application rate greater than 0.7 lbs of readily available nitrogen per 1,000 square feet at any one time based on the soluble fraction of formulated fertilizer, with no more than 1 pound total nitrogen per 1,000 square feet applied at any one time, and not to exceed the nitrogen recommendations set forth below on an annual basis:

TABLE 6.9-3. Fertilizer application rates

Grass Species	Maximum N Application Rate (Lbs/1,0000sf ² /year						
Bahia	3						
Bermuda	4						
Centipede	2						
St. Augustine	3						
Zoysia	4						

- (4) No phosphorus fertilizer shall be applied to existing turf and/or landscape Plants within the County at application rates which exceed 0.25 pounds phosphorus per 1,000 square feet per application nor exceed 0.50 pounds phosphorus per 1,000 square feet per year.
- (5) Nitrogen or phosphorus fertilizer shall not be applied to turf or landscape plants except as provided in (a) above for turf, or in UF/IFAS recommendations for landscape plants, vegetable gardens, and fruit trees and shrubs, unless a soil or tissue deficiency has been verified by an approved test.
- D. Timing of fertilizer application.

No applicator shall apply fertilizers containing nitrogen and/or phosphorus to turf and/or landscape plants to saturated soils.

- E. Fertilizer-free zones.
 - (1) Fertilizer shall not be applied to turf or landscape plants within 30 feet of any natural pond, stream, watercourse, lake, canal or wetland as defined by the FDEP (FAC Ch. 62-340) or from the top of a seawall, unless a deflector shield, drop spreader, or liquid applicator with a visible and sharply defined edge, is used, in which case a minimum of 3' shall be maintained. The use of macro-tab slow release fertilizer tablets for landscape plants which are installed within the plant pits during plant installation is allowed.
 - (2) Fertilizer shall not be applied to turf grass within the following areas:
 - (a) Seventy five feet of the OHWL as defined by the FDEP (FAC Ch. 62-340) of any spring, pond, stream, watercourse, lake, wetland or sinkhole or other karst feature that has an opening at the surface.
 - (b) Fifteen feet from the top of the bank of any drainage retention area, canal, or from the top of a seawall, unless a deflector shield, drop spreader, or liquid applicator with a visible and sharply defined edge, is used, in which case a minimum of 3' shall be maintained.
 - (3) In the event an area is included in one or more of the areas described in paragraph (2) above, the more restrictive provision (i.e., the larger distance) shall apply.
 - (4) Newly planted turf and/or landscape plants may be fertilized in this zone only for a 60 day period beginning 30 days after planting if need to allow the plants to become well established. Caution shall be used to prevent direct deposition of nutrients into the water.

F. Low maintenance zones.

A voluntary 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. If more stringent County regulations apply, this provision does not relieve the requirement to adhere to the more stringent regulations. No mowed or cut vegetative material shall 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.

G. Impervious surfaces.

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. Fertilizer shall not be applied, spilled, or otherwise deposited on any impervious surfaces. 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. In no case shall fertilizer be washed, swept, or blown off impervious surfaces into stormwater drains, ditches, conveyances, or water bodies.

H. Management of grass clippings and vegetative matter.

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

- I. Training for fertilizer applicators.
 - (1) All commercial and institutional applicators of fertilizer within the unincorporated area of Marion County, shall abide by and successfully complete the six-hour training program in the Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries offered by the FDEP through the University of Florida Extension Florida-Friendly Landscapes program, or an approved equivalent program, prior to obtaining a (MUNICIPALITY / COUNTY) Marion County Local Business Tax Certificate for any category of occupation which may apply any fertilizer to turf and/or landscape plants. Commercial fertilizer applicators shall provide proof of completion of the program to the (MUNICIPALITY / COUNTY) Marion County Tax Collector's office.
 - (2) New employees who will apply fertilizer shall obtain training by the date of the next available approved training course. Persons who apply fertilizer to lawns or specialized turf for hire will obtain a Certificate of Completion upon successful completion of the course. Certification is good for four years and must be taken again at the conclusion of the fourth year from issuance. As an alternative to taking such training course, a person may meet the educational requirement by providing proof that a minimum of four Continuing Education Credits (CEU's) were received from an approved training organization in principles of Florida-Friendly Landscape Management within the previous 24 months. The County shall maintain a list of approved training organizations.
 - (3) No person for hire shall apply fertilizer to any lawn or specialized turf unless such person is registered with the County as having met compliance with the training requirements under paragraph (2) above. It is a violation of this Code for any commercial fertilizer

- applicator to fertilize any lawn without having been first duly registered. A person employed by a commercial fertilizer applicator must register for and attend the first available training course after the hiring date, not to exceed six months.
- (4) All businesses applying fertilizer to turf and/or landscape plants (including but not limited to residential lawns, golf courses, sports fields, commercial properties, and multi-family and condominium properties) must ensure that at least one employee has a Florida-friendly Best Management Practices for Protection of Water Resources by the Green Industries training certificate GI-BMP card prior to the business owner obtaining a Local Business Tax Certificate. Owners for any category of occupation which may apply any fertilizer to turf and/or landscape plants shall provide proof of completion of the program to the (Municipality/ County) Marion County Tax Collector's Office.
- (5) Commercial fertilizer applicators shall maintain adequate records that demonstrate compliance with the fertilization limits in this Section. Invoices and account histories may be required for inspection by the County upon request and shall be made available at the place of business during normal working hours.
- (6) Private homeowners are required to follow the recommendations of the Florida Yards and Neighborhoods Handbook by FDEP and UF/IFAS, as amended, the Florida friendly Best Management Practices for Protection of Water Resource, as amended, except to the extent this Code provides more stringent requirements.

J. Enforcement.

- (1) Every code enforcement officer shall, in connection with all other duties imposed by law, be authorized to enforce the provisions of this section. In addition, the County Administrator may also delegate enforcement responsibility for this section to agencies and departments of Marion County government, in accordance with state and local law.
- (2) Funds generated by penalties imposed under this section shall be used by (Municipality/County) the County for the administration and enforcement of section FS 403.9337, and the corresponding sections of this Code, and to further water conservation and nonpoint pollution prevention activities.

K. Penalties.

- (1) Violation of any provision of this ordinance shall be subject to the following penalties:
 - (a) First violation: Written Notification and Education.
 - (b) Second violation: Written Notification and Education.
 - (c) Third violation: Fifty dollars (\$50).
 - (d) Forth and subsequent violation(s): One Hundred dollars (\$100).
- (2) Each day in violation of this Ordinance within a 365-day period, beginning the date of the first violation, shall constitute a separate offense. The Board may take any other appropriate legal action, including but not limited to emergency injunctive action, to enforce the provisions of this Ordinance.

Sec. 6.9.16 Landscape installation and maintenance licensing and certification.

- A. Landscape installation professionals performing work for hire within the unincorporated areas of Marion County shall be landscape contractors licensed by the Marion County Building Department, unless otherwise licensed by the State of Florida.
 - (1) Unless subject by Florida Statutes to certain continuing education requirements, contractors licensed under this section are required to complete a minimum of eight

Professional Development Hours or Continuing Education Units in Florida Friendly
Landscaping Practices from a continuing education organization approved by the County
before each succeeding license renewal or bi-annually, whichever is shortest. Compliance
with this requirement will be confirmed at the time of license renewal, or by an approved
audit procedure.

- (2) A list of required and approved courses or certifications for paragraph (1) above will be maintained by the Marion County Licensing Board.
- (3) A course or certification may be added to or withdrawn from the approved list using an approved petition procedure.
- B. Landscape maintenance professionals performing work for hire within the unincorporated areas of Marion County shall possess current Florida GI-BMP certification.
- C. Any person providing services for hire regarding any aspect of landscape maintenance that includes the application of fertilizer or pesticide shall meet the applicable state and County licensing and certification requirements included herein.

Division 10 Irrigation

Sec. 6.10.1 Purpose and intent.

The purpose and intent of this division is to provide guidelines establishing minimum standards and criteria for the design, permitting, installation, and maintenance of irrigation systems to prevent the wasteful uses of water.

Sec. 6.10.2 Submittal requirements.

- A. An irrigation plan shall be provided prior to issuance of a development order or building permit.
- B. All irrigation systems, including temporary shall comply with the design standards included herein and shall be monitored for leaks and the adequate delivery of water.
- C. An irrigation plan which includes the following items shall be submitted:
 - Signature and seal of the authorized design professional is required, excluding those plans prepared by the owner of an owner occupied single-family residence or owner occupied duplex;
 - (2) Limits of areas to be irrigated;
 - (3) Table or chart which includes all components used within the system:
 - (a) Symbol legend
 - (b) Type of component, including brand and model
 - (c) Application rate of each emitter type
 - (d) Precipitation rate of each emitter type
 - (4) System performance table:
 - (a) Design pressure
 - (b) Operating pressures
 - (c) GPM of each zone
 - (5) Location of rain sensor and/or soil moisture sensor;
 - (6) Location of controller;

- (7) Location of point-of-connection or well;
- (8) Location of backflow prevention device;
- (9) Location of all valves, mainlines, lateral lines, and emitters;
- (10) Construction details as applicable to the design;
- (11) Notes including installation instructions and County's contractor licensing requirements when a contractor is used;
- (12) Notes regarding the close out and completion requirements.
- (13) Notes regarding maintenance, post-construction adjustments, and watering restriction.

Sec. 6.10.3 Irrigation Design Standards.

- A. Irrigation systems shall be designed for the efficient application of water based on sound design principles and the use of available irrigation technology to apply only the amount of water necessary to meet landscape needs.
- B. Irrigation design standards shall apply to the installation and use of new landscape irrigation systems, except for the following:
 - (1) Irrigation systems associated with bona fide agricultural operations.
 - (2) Irrigation systems at intensive recreational areas, excluding common areas and open areas at such facilities.
- C. Water application limits for irrigation systems are as follows:
 - (1) The use of high volume irrigation is limited to:
 - (a) Turfgrass areas.
 - (b) Groundcovers that have a mature or maintained height no greater than one foot.
 - (c) Trees and shrubs that occurs incidental to turf irrigation, subject to approval by the County's Landscape Architect.
 - (2) A low volume irrigation area may be used in any landscape area.
 - (3) Efficient and water saving heads (rotating stream nozzles) may be used in any landscape area.
- D. Irrigation systems shall use the following principles:
 - (1) Only apply the adequate irrigation for the proposed plant palette and soil conditions;
 - (2) Avoid the application of water to impervious areas;
 - (3) Minimize the application of water to established landscapes;
 - (4) Separate turf and landscaping zones;
 - (5) Use heads/emitters with matched precipitation rates within each zone;
 - (6) Properly space irrigation heads based on site and climate conditions;
 - (7) Use pressure regulating devices (at control valves or at each head/emitter);
 - (8) Use in-line or in-head check valves to prevent low head runoff where final site topography dictates the need of such devices;
 - (9) Use automatic irrigation controllers that have program flexibility with non-volatile memory with the capacity to preserve programs;
 - (10) Properly install, maintain, and operate technology that inhibits or interrupts operation of the system during periods of sufficient moisture per FS 373.62.

Sec. 6.10.4 Irrigation system permit.

- A. An irrigation system permit is required for all new in-ground irrigation systems and for major modifications to existing in-ground irrigation systems. Major modifications include:
 - (1) Any modification that results in an increase in the area, or
 - (2) Increasing flow capacity of the existing system by more than 25 percent.
- B. Repairs and minor modifications shall not require a permit.
- C. Irrigation permits for portions of irrigation systems which are generally installed with major site developments such as subdivisions and golf courses may be issued separately.
- D. No part of this division mandates the installation of a permanent irrigation system however all landscaping required by this Code must be maintained in a living and healthy condition, and meet the intent of Div. 9.
- E. Permit approval.
 - (1) A valid permit must be properly displayed at the job site prior to commencement of work.
 - (2) A permit is valid for a period of six months from date of its issuance. The County may at its discretion extend this time limit for any reasonable period of time. not to exceed an additional six months.
- F. A permit may be suspended or revoked by the County if any irrigation system installation is found in violation of the permit, Florida Statutes, FAC, this Code, any applicable County ordinance, or any of the following:
 - (1) Material misstatement or misrepresentation in the application for a permit;
 - (2) Failure to comply with the conditions set forth in the permit; and/or
 - (3) Failure to pay the required permit fee.

Sec. 6.10.5 Irrigation system installation.

- A. Irrigation systems shall only be installed by installation professionals meeting the licensing requirements under Sec. 6.10.9., except those being installed by property owners on their own single-family residence or owner/occupied duplex.
- B. Irrigation systems shall be constructed in accordance with the Florida Irrigation Society's (FIS) <u>Standards and Specifications for Turf and Landscape Irrigation Systems</u> as updated.

Sec. 6.10.6 Completion inspection requirements.

- A. Irrigation installation professionals shall be accountable for the proper installation and compliance with the conditions of the irrigation permit and approved plans.
- B. Upon completion of the installation, the contractor or owner shall request an inspection by the irrigation design professional. Prior to the inspection, the irrigation installation professional shall produce a clear and legible as-built diagram which accurately represents the irrigation system was installed. The diagram shall be presented and reviewed during the final inspection. The diagram may be a marked-up copy of the approved irrigation plan and shall include at a minimum:
 - (1) Locations of all mainlines and mainline valves;
 - (2) Locations of all remote control valves;
 - (3) Water demand per zone in GPM, and
 - (4) Total water demand per operating cycle.

- C. The irrigation installation professional shall also provide to the Owner:
 - (1) Irrigation system scheduling information;
 - (2) A copy of the irrigation controller owner's manual;
 - (3) Irrigation system maintenance schedule, which includes:
 - (a) Instructions for seasonal adjustments of controller and sensors.
 - (b) Instructions covering how and when to check for leaks.
 - (c) A schedule for checking for proper irrigation distribution coverage.
- D. Within 60 days after installation the irrigation controller shall be adjusted to be set in accordance with the applicable irrigation schedule set forth in this Code (Marion County Ordinance 09-13 regulating water conservation for landscape irrigation).
- E. Upon completion of the irrigation system installation and the acceptance of the as-built diagram and operational information, a <u>Final Inspection and Landscape/Irrigation Release</u> shall be signed and sealed by the irrigation design professional and submitted to the County's Landscape Architect.
- **Sec. 6.10.7** Certificate of Occupancy. When the irrigation system installation is part of a construction project, no certificate of occupancy shall be issued until:
 - A. A complete, self-certification checklist, as well as a clear and accurate as-built sketch, have been submitted and accepted by the County; and
 - B. The <u>Final Inspection and Landscape/Irrigation Release</u> has been received or the County has conducted and certified a final inspection.

Sec. 6.10.8 Irrigation system operation and maintenance.

- A. An irrigation installation professional who installs or performs work on an automatic landscape irrigation system must test for the correct operation of each inhibiting or interrupting device or switch on that system. If such devices or switches are not installed in the system or are not in proper operating condition, the contractor must install new ones or repair the existing ones and confirm that each device or switch is in proper operating condition before completing other work on the system (FS 373.62 Water conservation).
- B. All irrigation systems should be operated and maintained in accordance with the *Florida-Friendly Best Management Practices for Protection of Water Resources* by the Green Industries or the Florida Yards and Neighborhood program.
- C. To maintain the original performance and design integrity of the irrigation system, repair of the equipment shall minimally be done with the originally specified materials or their equivalents.
- D. Irrigation systems, including automatic rain sensor shutoff device, should be certified by an irrigation system installation professional to be operating properly and in good repair at such time as the property may be resold.

Sec. 6.10.9 Landscape irrigation schedule.

A. The provisions of this section shall apply to each parcel within the unincorporated areas of Marion County, except that unincorporated area lying within The Villages of Marion, FQD. Landscape irrigation within the Villages of Marion, FQD shall comply with the landscape irrigation rules and water shortage rules of the SWFWMD, pursuant to the interagency agreement between the SJRWMD and SWFWMD, dated May 19, 2009.

- B. When Daylight Savings Time is in effect, landscape irrigation shall occur only in accordance with the following irrigation schedule:
 - (1) Residential landscape irrigation at odd numbered addresses may only occur on Wednesday and Saturday and must not occur between 10:00 a.m. and 4:00 p.m. daily.
 - (2) Residential landscape irrigation at even numbered addresses or no address may only occur on Thursday and Sunday and must not occur between 10:00 a.m. and 4:00 p.m. daily.
 - (3) Nonresidential landscape irrigation may occur only on Tuesday and Friday and shall not occur between 10:00 a.m. and 4:00 p.m.; and
 - (4) No more than 0.75 inches of water may be applied per irrigation zone on each day that irrigation occurs, and in no event shall irrigation occur for more than one hour per irrigation zone on each day that irrigation occurs.
- C. When Eastern Standard Time is in effect, landscape irrigation shall occur only in accordance with the following irrigation schedule:
 - (1) Residential landscape irrigation at odd numbered addresses or no address may occur only on Saturday and shall not occur between 10:00 a.m. and 4:00 p.m.; and
 - (2) Residential landscape irrigation at even numbered addresses may occur only on Sunday and shall not occur between 10:00 a.m. and 4:00 p.m.; and
 - (3) Nonresidential landscape irrigation may occur only on Tuesday and shall not occur between 10:00 a.m. and 4:00 p.m.; and
 - (4) No more than ¾ inches inch of water may be applied per irrigation zone on each day that irrigation occurs, and in no event shall irrigation occur for more than one hour per irrigation zone on each day that irrigation occurs.
- D. Exceptions to landscape irrigation schedules listed above include:
 - (1) Irrigation using a micro-spray, micro-jet, drip or bubbler irrigation system is allowed anytime.
 - (2) Irrigation of new landscape is allowed at any time of day on any day for the initial 30 days and every other day for the next 30 days for a total of one 60 day period, provided that the irrigation is limited to the minimum amount necessary for such landscape establishment.
 - (3) Watering in of chemicals, including insecticides, pesticides, fertilizers, fungicides, and herbicides when required by law, the manufacturer, or best management practices is allowed anytime within 24 hours of application. Watering in of chemicals shall not exceed ¼ inches of water per application except as otherwise required by law, the manufacturer, or best management practices.
 - (4) Irrigation systems may be operated anytime for maintenance and repair purposes not to exceed 20 minutes per hour per zone.
 - (5) Irrigation using a hand-held hose equipped with an automatic shut-off nozzle is allowed anytime. The use of a hose-end sprinkler is not considered hand watering.
 - (6) Discharge of water from a water-to-air air-conditioning unit or other water-dependent cooling system is not limited.
 - (7) The use of water from a reclaimed water system is allowed anytime. For the purpose of this paragraph, a reclaimed water system includes systems in which the primary source is reclaimed water, which may or may not be supplemented from another source during

- peak demand periods.
- (8) The use of recycled water from wet detention treatment ponds for irrigation is allowed anytime provided the ponds are not augmented from any ground or off-site surface water, or public supply sources.

Sec. 6.10.10 Licensing and Certification.

A. Irrigation Professionals

- (1) Irrigation Design Professionals shall be design professional as licensed by the State of Florida to provide such professional services.
- (2) Irrigation Installation and Maintenance Professionals shall include Plumbing Contractors and Irrigation Specialty Contractors licensed by the State of Florida, and Irrigation Contractors licensed by Marion County.
- (3) Irrigation Installation and Maintenance Professionals, as defined by this section, shall be exempt from the separate licensing requirements for Irrigation Design Professionals when designing irrigation systems, or portions of irrigation systems, as part of a inchesdesign/build inches contract to install or maintain the same system, if that system complies with all applicable requirements of this ordinance and is permitted by Marion County.

B. Training.

- (1) Unless otherwise subject by Florida Statutes to certain continuing education requirements, contractors licensed to perform work under this Section shall annually complete a minimum of four professional development hours (PDH) in Florida-Friendly Landscaping and Irrigation practices from a continuing education organization designated by the Marion County Licensing Board.
- (2) Marion County shall confirm compliance with these PDH requirements at the time of license renewal, or by an approved audit procedure.