

ORDINANCE 2017-_____

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA AMENDING ARTICLE 37 OF THE LAND DEVELOPMENT CODE, NATURAL RESOURCE PROTECTION; SPECIFICALLY RESCINDING THE CURRENT SECTION 37.02, NATIVE CANOPY TREE PROTECTION, AND ADDING A NEW SECTION 37.02, AMELIA ISLAND TREE PROTECTION AND REPLACEMENT; AMENDING ARTICLE 32 OF THE LAND DEVELOPMENT CODE, DEFINITIONS; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Nassau County adopted the Natural Resources Protection Ordinance, 2008-01, which included ~~Article~~Section 37.02 of the Land Development Code (Native Canopy Tree Protection); and

WHEREAS, Nassau County adopted revisions to Section 37.02 LDC primarily focused on tree protection and preservation in 2013 via Ordinance 2013-06; and

WHEREAS, Understanding the importance of analyzing the applicable effectiveness of Ordinance 2013-06, the Planning and Zoning Board finds that additional ~~amendments changes need to be made~~ to Section 37.02 LDC are necessary to adequately fulfill the intent of the regulations therein of the Land Development Code; and

WHEREAS, Amelia Island is a barrier island on the east coast of Florida that contains a maritime forest - one of the rarest coastal biological communities; and

WHEREAS, Of the east coast barrier islands those islands within the Georgia Embayment, Amelia Island being one, have among the most vigorous maritime forest; and

WHEREAS, The Amelia Island maritime forest provides communal benefits that are integral to the health, safety and general wellbeing of the Island and the inhabitants thereon; and

WHEREAS, Those communal benefits that preserve the health, safety and general wellbeing of the inhabitants of Amelia Island include, among others, storm protection, stormwater storage and treatment, soil stabilization and strengthening, and serve to counter heat island effect; and

WHEREAS, The communal benefits provided by a mature maritime forest cannot be replicated through new plantings in a reasonable timeframe; and

WHEREAS, The Planning and Zoning Board further recognizes that effective tree protection requires the coordination of other design standards such as landscaping, utility infrastructure placement, stormwater management and vehicle parking and thus amendments to other portions of the Land Development Code are necessary; and

WHEREAS, The Planning and Zoning Board created a working group with a directive to conduct fact finding to present information to the Nassau County Planning and Zoning Board; and

WHEREAS, The working group presented the Planning Zoning Board with the results of the fact finding endeavors at a public workshop~~s~~ on November 15, 2016; December 06, 2016 and _____, and

WHEREAS, The working group has recommended certain amendments to Section 37.02 (Native Canopy Tree Protection), and Article 32 (Definitions) of the Land Development Code to the Planning and Zoning Board; and

WHEREAS, The Nassau County Comprehensive Plan, Policy CS.02.01, states that the “County shall maintain or expand regulations in the Land Development Code (LDC) that provide for tree protection standards on Amelia Island.”; and

WHEREAS, the Planning and Zoning Board conducted a public hearing on this Ordinance on _____, 2017 and voted to recommend approval and legal notice of this Ordinance has been provided in accordance with Sec. 125.66, F.S.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA:

SECTION 1. FINDINGS

This Ordinance is consistent with the Nassau County Comprehensive Plan, in particular Policy CS.02.01

SECTION 2. AMENDMENT

37.02-B Amelia Island ~~Resort Overlay District~~ Tree Protection and Replacement

A. Purpose and Intent:

The purpose of this section is to provide standards and regulations to ensure a minimum number of trees on any lot or parcel, protect and preserve native tree species, protect and preserve the natural landscape, foster and encourage maintenance of natural vegetation, and minimize loss of trees to development within the unincorporated areas of Amelia Island. ~~located within the Resort Overlay District and any land subject to a tree protection plan approved by the Development Review Committee of Nassau County pursuant to Section 37.02 A LDC between the dates of April 22, 2013 and _____ (insert effective date).~~ It is the intent of Nassau County that:

1. A balanced, equitable and practical approach to preserving the Amelia Island tree canopy and fostering the establishment of new trees on Amelia Island be implemented;
2. Preservation of the Amelia Island’s existing tree canopy is achieved by managing the impact of development and preventing unreasonable or unnecessary damage to the community’s existing native tree canopy and vegetative understory;
3. The diversity of tree species indigenous to Amelia Island shall be maintained;
4. Existing mature growth native trees important to Amelia Island’s tree canopy are protected and maintained to the fullest extent possible;

5. Structures and all impervious surfaces will be placed in such a way as to protect the survivability and substantial growth of the healthiest canopy trees on the property;
6. The natural environment is preserved, enhanced, and restored through the protection and establishment of native trees and existing natural systems for the enjoyment of present and future populations;
7. Achieving greater energy conservation by maximizing the shading and cooling effects of existing native, healthy trees and native replacement trees;
8. The unique aesthetic character of Amelia Island is preserved, enhanced, or restored.
- ~~8.9.~~ The communal benefits of a mature maritime forest and natural areas are preserved as a means to protect the public health, safety and general welfare of inhabitants of Amelia Island.

B. Applicability:

1. The terms and conditions of Section 37.02-B LDC shall apply to all lands in the unincorporated areas of Amelia Island except as expressly stated herein.
- ~~4.2.~~ This Article shall apply to those lands located within the Resort Overlay District and any land subject to a tree protection plan approved by the Development Review Committee of Nassau County pursuant to Section 37.02-A LDC between the dates of April 22, 2013 and _____ (insert effective date). The regulations herein shall also apply to lands located within the Resort Overlay District developed under previously approved development orders.
3. One and two family residential building sites/Lots, whether a structure is present or not, existing as of _____ (insert effective date) and located outside the Resort Overlay District are exempt from the tree preservation and replacement standards of this Article. However, nothing herein shall exempt said building sites/Lots from meeting all landscape and buffer requirements as defined in the Nassau County Code of Laws and Ordinances.
4. Notwithstanding Sec. 37.02(B)(3) LDC, any land subject to a tree protection plan approved by the Development Review Committee of Nassau County pursuant to Section 37.02 LDC between the dates of April 22, 2013 and _____ (insert effective date), regardless if located within the Resort Overlay District or not, shall be subject to all aspects of this Article including the tree preservation and replacement standards for individual one and two family residential building sites/Lots.
- ~~2.5.~~ Nothing herein shall exempt from or waive any landscaping, minimum tree planting, open space or buffer requirement described in Sections 37.03, 37.05 and/or 37.06 LDC unless explicitly expressed herein.

C. Regulatory Function:

The regulations set forth herein are intended to be enforcement based. This Article establishes the following:

- Definition of a protected tree
- The permissible means by which a protected tree may be removed
- A penalty for violation of this Article

There are two means of removing a protected tree.

- (1) A tree meeting the qualifications of being exempt, as defined herein, may be removed without a permit or specific approval by Nassau County except as otherwise described in this Article. It is the property owner's responsibility to obtain the required documentation set forth herein demonstrating the subject tree meets the qualifications for being deemed

exempt prior to tree removal. See Section 37.02-B LDC. It is also the property owner's responsibility to maintain all required documentation for a period of not less than twelve (12) months in the event of an investigation by the Nassau County Code Enforcement Department.

(2) Tree removal related to and part of New Development as defined in this Article. See Section 37.02-B LDC.

D. Protected Trees:

Protected Trees are any existing, healthy tree having a five (5) inch Diameter at Breast Height (DBH), or greater and not identified on the most recent Florida Exotic Pest Plant Council Invasive Plant list (Category I or II).

E. Tree Removal:

The removal of a tree not meeting the following standards/procedures will be subject to the penalty defined in Section 37.02-B LDC, it is the property owner's responsibility to obtain and keep the required documentation for a period of not less than twelve (12) months in the event of an investigation by the Nassau County Code Enforcement Department.

1. Trees Exempt from Protection: No mitigation shall be required for trees removed pursuant to this section. However, in the event the removal of a tree(s) in accordance with this section causes the property to fall beneath the minimum required number of trees per Section 37.05 and/or 37.06 LDC additional trees shall be planted in accordance with the minimum tree planting standards defined in the referenced sections of the Land Development Code.

- a. Exempt Classification 1: The following scenarios require documentation less than a letter by an arborist certified by the International Society of Arboriculture (ISA certified arborist). This may include, but not limited to, pictures, letter from individual performing the work, and/or an owner's affidavit. No permit is required however an applicant shall maintain the required documentation for a period of not less than twelve (12) months and be prepared for an audit by the Nassau County Code Enforcement Department. See Section 37.02-B LDC
 - i. Trees and landscaping specifically grown as landscape material for resale by duly approved and licensed plant nurseries and botanical gardens.
 - ii. Damaged or hazardous trees during and for a ~~six (6)~~ ~~three (3)~~ month period following a declared disaster. Declared disaster shall include all State, Federal and Local declarations that include Amelia Island.
 - iii. Minor maintenance activities such as removal of sucker growth, water sprouts, and overhanging branches on mature trees. All work shall be performed in compliance with the current ISA Arborist standards and best practices.
 - iv. Trimming or removal of a tree deemed to represent a clear and immediate threat to the health and wellbeing of the general public as determined by the Public Works Director.
 - v. The removal of underbrush and removal of trees which are less than five (5) inches Diameter at Breast Height (DBH).; and
 - vi. Major and minor maintenance of trees located adjacent to utility lines when performed by the utility provider.

vii. Trees located in a public or private right-of-way that obstruct public infrastructure development projects.

vii-viii. Fallen trees.

b. Exempt Classification 2: The following require documentation in the form of a letter by an ISA certified arborist (or professional forester as applicable) at the property owner's expense. No permit is required however an applicant shall maintain the required documentation for a period of not less than twelve (12) months -and be prepared for an audit by the Nassau County Code Enforcement Department. See Section 37.02-B LDC

i. Trees damaged by disease, fire, windstorm, lightning, insect infestation or other acts of nature, which pose an imminent danger to life, property or other protected trees

ii. Removal of trees (thinning) within a forested area in order to reduce overcrowding and competition and to promote the health, growth, and resistance to stress may be permitted. A letter by a professional forester may provide the required documentation (letter) in this case.

iii. Removal of trees by Nassau County within Nassau County rights of way except as exempted in Section 37.02.E.1.a.iv LDC.

~~iv. The tree prevents access to a lot and no feasible alternative access point exists.~~

v. A tree is removed for emergency purposes outside the provision found in Section 37.02.C.1.a.ii LDC wherein the tree poses an imminent threat to the health, safety and welfare of persons or public or private property is at stake.

2. Protected Trees Removed as Part of New Development:

The term *Construction Zone*, as used in this Article, shall have the following meaning: The impervious and semi-impervious area of development and the lands within five(5) feet thereof.

The term *New Development*, as used in this Article shall have the following meaning: Any new construction or site work whether residential, non-residential or mixed-use, any modification, expansion, or alteration to an existing structure, alteration to any site including borrow pit construction, site grading, driveways or other similar activity, any new or expanded accessory use or structure – shed, pool, parking area, means of ingress/egress, drainage facility, pond, etc., and/or any other aspect of site or structural development or modification that may adversely impact existing trees.

As part of new development a protected tree may be removed subject to the following:

a. For individual one- and two-family residential Lots/building sites:

Eighty percent (80%) of the total DBH of the protected trees located within the Construction Zone shall be exempt from replacement. Replacement of twenty percent (20%) of the total DBH of the protected trees located within the Construction Zone shall be required. It is the intent of this section that no protected trees located outside the

Construction Zone are to be removed. No exemption for replacement inches shall be given for the removal of protected trees located outside Construction Zone. No credit is given towards replacement inches for maintaining protected trees outside the Construction Zone. See example below.

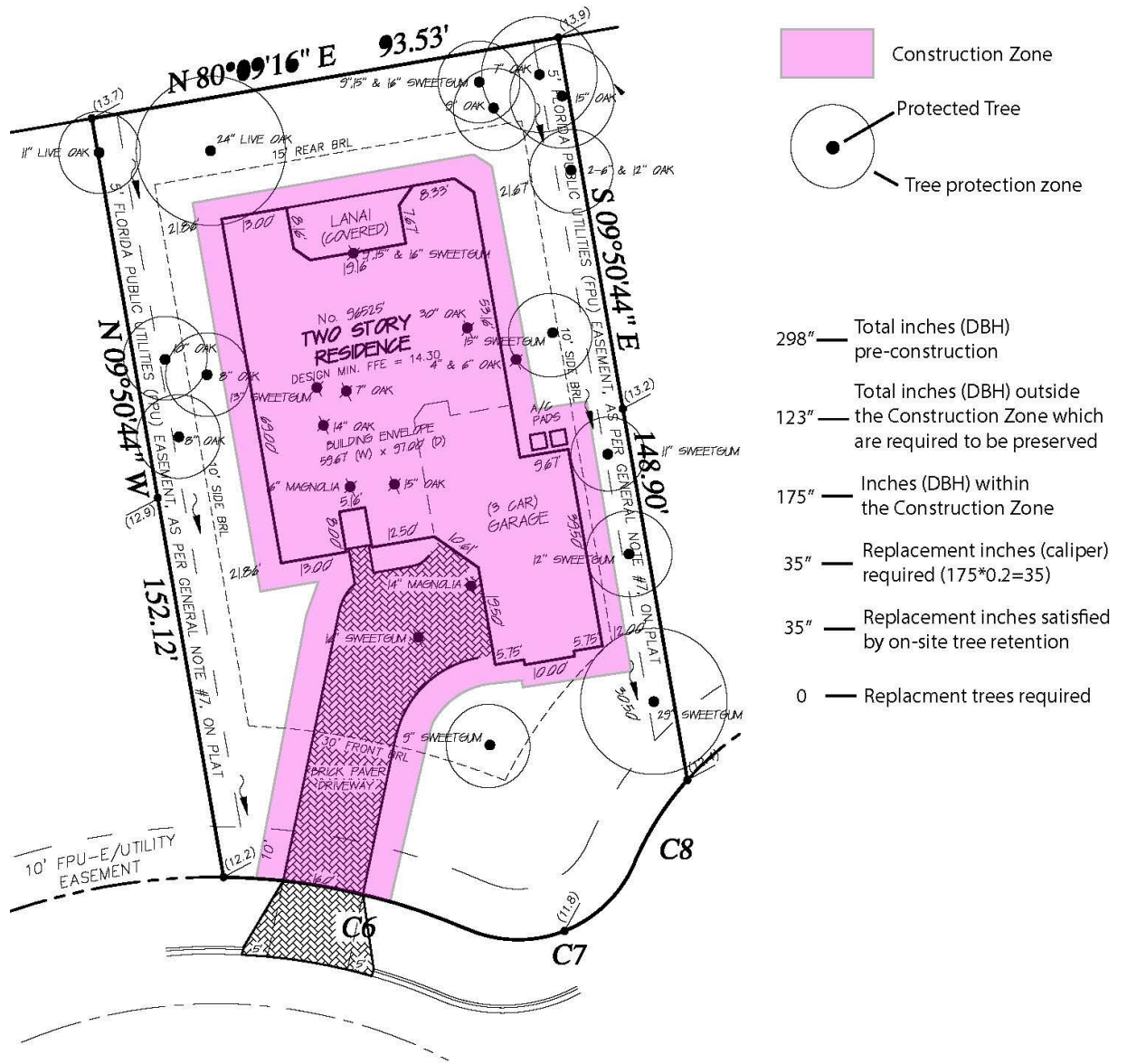


Figure _____

b. As it relates to new residential subdivisions, a partial exemption shall apply as follows:
Eighty percent (80%) of the total DBH of protected trees located within the Construction Zone of proposed new rights-of-ways/streets/alleys, club houses or amenity centers or, within any active recreation areas, utility areas, golf courses, storm water management

facilities or other similar components of development outside individual lots shall be exempt from replacement. Replacement of twenty percent (20%) of the total DBH of protected trees located within the boundary of any of the above referenced improvements shall be required. It is the intent of this section that no protected trees located outside the boundary of any of the above referenced improvements are to be removed. No exemption for replacement inches shall be given for the removal of ~~nor credit is given towards replacement inches for maintaining~~ protected trees located outside of the above referenced improvements, in commonly held open space, or passive recreation areas. As cited in **Section 37.02-B LDC** individual lots will be reviewed independently at time of permit request impacting the individual Lot.

c. For non-residential and mixed use or multi-family residential properties:

Seventy-five percent (75%) of the total DBH of the protected trees located within the Construction Zone and utility area shall be exempt from replacement. Replacement of twenty-five percent (25%) of the total DBH of protected trees located within the Construction Zone and utility areas shall be required. It is the intent of this section that no protected trees located outside the Construction Zone or utility areas are to be removed. No exemption for replacement inches shall be given for the removal of ~~nor credit is given towards replacement inches for maintaining~~ protected trees located outside of the above referenced improvements, in commonly held open space, or passive recreation areas.

3-6. No protected tree located within a required perimeter landscape area, as defined in **Section 37.05.D LDC**, adjacent to a public or private right-of-way or street shall be removed except to provide site access where no other viable option exists. Any tree meeting this requirements shall be located as part of the tree protection and replacement plan and be assessed for health by a certified arborist. It is encouraged that as part of the development program the naturally occurring groundcover and understory be maintained.

4-7. Credit shall not be given for the preservation of protected trees located in jurisdictional wetlands.

~~Credit shall not be given for trees preserved on-site outside the Construction Zone.~~

5-8. When, based on the determination of an ISA certified arborist, a parcel of land cannot support the number of trees required as part of the replacement standards as defined herein, a property owner, at their expense, may plant the requisite trees on other lands ~~within the Resort Overlay District on Amelia Island~~ subject to approval by the County Manager or designee. The property owner (donator) and receiving entity shall be jointly responsible for the tree(s) survival. If any replacement tree does not survive it shall be the joint responsibility of the donator(property owner) and receiving entity to replace the tree(s). At the discretion of the County Manager or designee the parties involved in the action may be required to enter into a written agreement recorded with the Clerk of the Circuit Court of Nassau County memorializing each party's commitments.

F. Required Documentation for Tree Removal Related to New Development:

1. New Development Not Requiring DRC Approval:

- a. When considering a request to facilitate New Development that does not require review by the Development Review Committee(DRC), the tree protection and replacement plan shall be submitted at the time the request is made. As an example, the addition of a pool to an existing single family home does not require approval by the DRC however, the improvement meets the definition of New Development per this Article and thus requires a tree protection and replacement plan. The Department of Planning and Economic Opportunity will review said protection and replacement plan and either approve, approve with conditions or deny for-cause the submitted plan. The Planning and Economic Opportunity Department will have no more than thirty (30) days from the time the Department of Planning and Economic Opportunity receives the plan submittal to provide a written assessment of the plan notifying the applicant of the review findings. No development permit (this includes building permits, site work permits, borrow pit permits, driveway permits, or any similar permit) will be issued until the tree protection and replacement plan is approved by Nassau County. A fee will be set by separate Resolution of the Board of County Commissioners.

2. New Development Requiring DRC Approval:

- a. When reviewing a project requiring a Preliminary Binding Site Plan, Site Plan, or Subdivision Plan reviewed by the Development Review Committee, the tree protection and replacement plan shall be required as part of the review.
- b. When reviewing a project requiring a Site Engineering Plan (SEP) reviewed by the Development Review Committee, but not any of the items listed in 'a' above, the tree protection and replacement plan shall be required as part of the review.
- c. When reviewing a project requiring a Preliminary Development Plan (PDP) (new or modified) the tree protection and replacement plan shall be required as part of the review.
- d. When reviewing a project requiring a Final Development Plan (FDP) that has a previously approved Preliminary Development Plan the tree protection and replacement plan shall be required as part of the review.

3. The following information is required for all tree protection and replacement plans:

- a. A completed tree inventory. This includes a graphical representation and worksheet in the format provided by Nassau County.
- b. A tree survey/inventory. When the request involves a one or two-family home and the request is for the removal of three (3) or fewer trees, the survey does not need to be certified by an ISA certified arborist, but must contain all requisite information defined in this Article. When the application is for any other development proposal or the request involves a one or two-family home requesting the removal of four (4) or more trees, the inventory/survey shall be certified by an ISA certified arborist.
- c. In all cases, the tree survey/inventory shall be drawn to scale and include the following:

- i. Location of all trees, identifying their species, size at DBH and ~~conceptual approximate~~ drip-line and ~~conceptual tree protection zones~~;
- ii. Location, including footprint, of all proposed and existing structures and other existing and planned improvements;
- iii. All existing and proposed impervious and semi-impervious surfaces;
- iv. Property boundaries and any abutting streets identified by name;
- v. Location of all points of ingress and egress, existing and planned utilities including private well and onsite sewage treatment and disposal systems (septic tank and drain field). If overhead utilities are located adjacent to the subject property the location of said utilities must be shown;
- vi. Indication of trees to be retained, trees to be removed, diseased trees, trees endangered by motor vehicle ingress and egress, and the ~~approximate~~ location of protective barriers as provided in Section 37.02.H LDC;
- vii. Proposed grade changes that might adversely affect or endanger the trees.
- viii. Jurisdictional wetlands and related upland buffers.
- ix. Supporting documentation from ISA certified arborist related to encroachments into the tree protection zone as referenced in **Section 37.02-B.K.3.e LDC.**
- x. Any other information deemed necessary by the Director of Planning and Economic Opportunity to adequately review the request.

4. Nassau County reserves the right to have a third party arborist review a request for tree removal. The cost of the review will be covered by the applicant.

4.5. A tree replacement plan shall be submitted, showing the location and specification of all replacement trees pursuant to and consistent with the tree replacement and relocation standards in **Section 37.02. LDC.**

G. Supplemental Parking Standards For the Unincorporated Areas of Amelia Island:

Supplemental parking standards for Amelia Island were adopted in conjunction with this Article to promote tree preservation. See Section 31.14 of the Land Development Code of Nassau County: Supplemental Parking Standards for the Unincorporated Areas Amelia Island.

H. Tree Survey or Inventory:

All protected trees shall be shown on a tree survey or tree inventory when submitted with an application for new development as set forth in **Section 37.02 LDC.** No survey or tree inventory shall be more than two(2) years old.

I. Replacement Trees Requirements:

1. When authorization has been granted to remove protected trees, replacement trees shall be planted as applicable. The combined ~~DBH-caliper inches~~ of replacement trees shall equal or exceed the combined DBH of trees authorized for removal subject to any applicable partial exemption defined in **Section 37.02-B LDC.**
2. Replacement trees shall be a ~~native noninvasive shade tree canopy tree~~ and meet the standards set forth in **Section 37.05.B LDC,** and shall measure three(3) caliper inches or more at the time of planting, be balled and/or burlapped or container-grown. Palm trees may be utilized as replacement trees but at an increased ratio of 3/1 replacement and shall be a minimum of twelve feet(12) tall at the time of planting. In other words, where one three(3) caliper inch ~~shade tree canopy tree~~ is required for replacement three(3) twelve(12) foot tall palm trees must be planted.

In order to prevent a monoculture, replacement trees shall not include more than ~~fortyfifty (450)~~ percent of any one genus or ~~twenty-five (205)~~ percent of any one species.

3. Replacement trees shall be maintained and warranted to survive for a period of one (1) year from installation. Trees which do not survive one (1) year must be replaced with new trees of the same size at the property owner's expense. Replacement trees shall comply with the same maintenance and replacement warranty as the original replacement tree(s) and the warranty period will restart at the date of planting.
4. Protected trees authorized for removal may be relocated to locations compliant with the specifications set forth in **Section 37.02 LDC** and approved by the Director of Planning and Economic Opportunity or designee. All relocations shall be performed under the guidance of a certified arborist.
5. All replacement trees shall be properly irrigated to ensure establishment. ~~Unless otherwise provided for in a planting plan created by a certified arborist, permanent irrigation shall be provided to all replacement trees.~~

J. Preservation Credits:

1. New Development is encouraged to be designed to provide required open space in such a manner that it maximizes the preservation of protected trees and swaths of native landscapes.
2. On-site retention of native, healthy trees shall receive benefit of tree preservation credits to reduce the overall tree replacement requirements as follows:
 - Trees equaling 8" – 13" (DBH) shall receive a 1.5x credit
 - Trees equaling 14" – 24" (DBH) shall receive a 2x credit
 - Trees equaling 24" or greater (DBH) shall receive a 3x credit
 - a. In order to qualify for on-site tree preservation credits, each tree proposed for retention must be evaluated by a certified arborist to ensure that the tree is healthy and compatible with the proposed development of the site.
 - b. These credits shall only be applied towards tree replacement requirements created by the removal of protected trees as set forth in **Section 37.02 LDC**. These credits may be transferred only on unified multiple lot developments pursuant to **Sections 37.02 and 37.02 LDC**.
 - c. Preservation credits for the total DBH of protected trees retained on the site will be applied during the review of the tree protection and replacement plan.
3. Existing Trees located within easements may be eligible to receive preservation credits provided the improvements within the easement do not adversely impact the protected trees. For example, a tree located in an electrical utility easement that contains or will contain overhead electrical lines will not be eligible to receive credits if hat-racking of the tree(s) is likely. In the alternative, where a tree is located in an electrical easement where the electrical lines will be installed via directional bore (installed underground) under the consultation of an ISA certified arborist then preservation credits are appropriate.

J-K. Tree Bank Exchange Area:

Within the boundary of a development under a unified development program a Tree Bank Exchange Area (TBEA) may be established in order to meet minimum replacement requirements related to New Development. The purpose of the bank is to prevent over planting on individual lots/tracts, to establish new shade trees in proximity to the removal location, and to provide flexibility and incentive for open space preservation. A Tree Bank Exchange Area (TBEA) is an area or several areas of land

located internal to a development under unified development program which are dedicated as open space for purposes new tree plantings. The use of a Tree Bank Exchange Area (TBEA) allows for trees to be planted within the identified area to satisfy required replacement inches necessitated by the removal of trees for New Development. The TBEA cannot be used to fulfill minimum landscape requirements for an individual site as defined in Section 37.05 and 37.06 LDC. A Tree Bank Exchange Area may be established at the same time as consideration of a preliminary binding site plan/subdivision plan, site engineering plan, preliminary development plan or by the Development Review Committee thereafter.

A Tree Bank Exchange Area must meet the following minimum standards and limitations:

1. Be designated on the Site Engineering Plan and Plat or other similar means approved by the Development Review Committee;
2. Provide a note in the adoption and dedication block on the plat defining to whom the bank is dedicated and the intended purpose, or in the alternative, provide adequate documentation to the DRC to meet the same intent;
3. Be described in the covenants and restriction of the community/development and define maintenance responsibility;
4. May only serve to receive trees from lands within the same development which is subject to a unified development program;
5. Replacement trees shall only be allowed to be transferred to the TBEA. Replacement trees cannot be transferred from individual lot to another individual lot unless otherwise approved by the Planning and Zoning Board.

K.L. Protection of Trees During Development Activities:

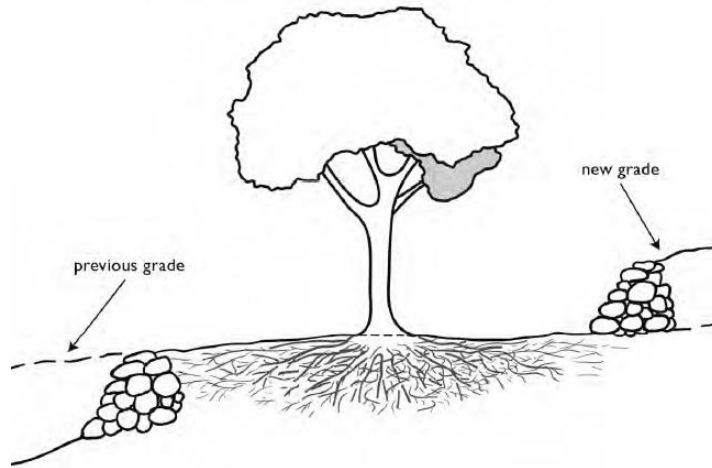
1. Protective measures are required during site development in order to assure the health and survival of protected trees. Storage of construction materials or fill dirt is expressly prohibited within the tree protection area.

Protective measures are required to avoid:

- a. Mechanical injuries to roots, trunk, and branches;
- b. Injuries by chemical poisoning;
- c. Injuries by grade changes;
- d. Injuries by excavations; and
- e. Injuries by paving.

2. ~~2.~~—It is the intent of this article to encourage the utilization of Low Impact Development principles. Significant grade changes should be avoided to the maximum extent possible. Stem-wall construction is strongly encouraged. **When grade change is unavoidable, techniques shall be used to avoid placement of fill over the tree protection zone to the extent possible.**

GRADE CHANGE GUIDELINES



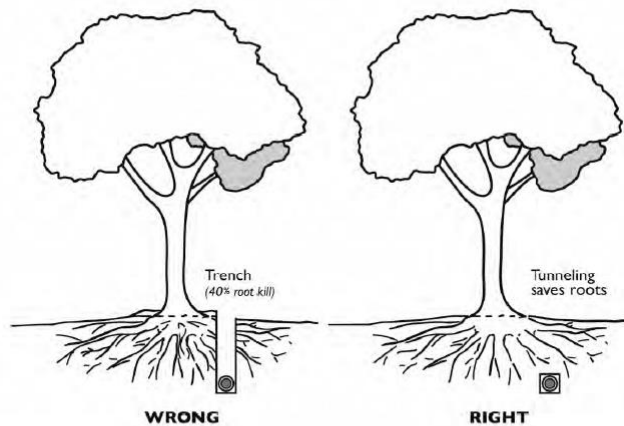
MAINTAIN EXISTING GRADE AROUND TREE

Protect tree roots by creating terraces with retaining walls. This will allow the original grade around the root zone to be maintained. Cutting or shaving roots or piling soil on top of roots to create a continuous new grade will slowly kill the tree. Look out for drainage changes that could mean a tree gets too much water or not enough.

Figure _____

3. The extension of utilities shall, to the extent possible, be underground, utilize directional boring (tunneling) and avoid protected trees.

TUNNELING UNDER ROOT ZONE

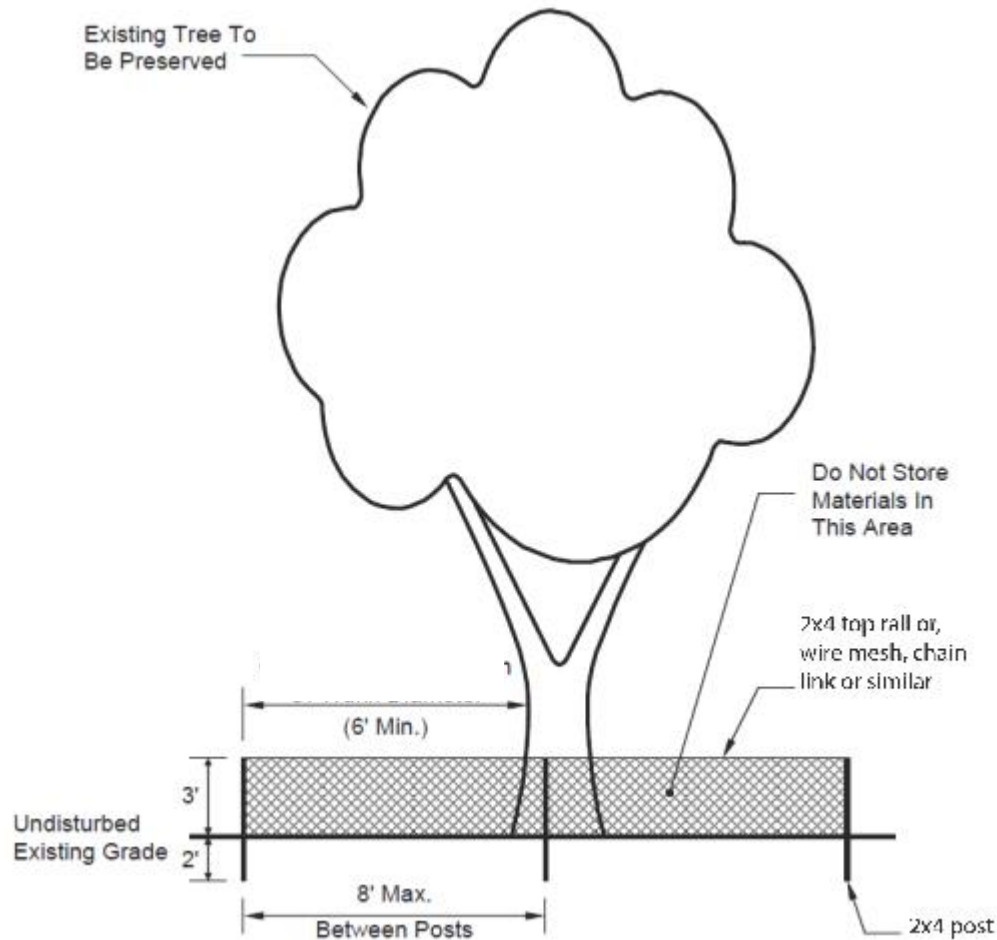


AVOID SEVERING ROOTS

Install utility lines *around* tree roots or tunnel *under* the root zone. Trenching *kills* all the roots outside the trench line. Posts and supporting beams can be substituted for footing and walls where proposed foundations conflict with tree roots.

Figure _____

3. A tree protection zone shall be established around each protected tree(s) as follows:
- a. If the drip line is less than six (6) feet from the trunk of the tree, the zone shall be that area within a radius of six (6) feet around the tree.
 - b. If the drip line is more than six (6) feet from the trunk of the tree, but less than twenty (20) feet, the zone shall be that area within a radius of the full drip line around the tree.
 - c. If the drip line is twenty (20) feet or more from the trunk of the tree, the zone shall be that area within a radius of twenty (20) feet around the tree.
 - d. Prior to commencement of construction, the tree protection zone shall be enclosed and installed as required in the detail provided and described herein. The tree protection barricade shall be at least three (3) feet tall. The barrier shall consist of either a wood fence with 2x4 posts placed at a maximum of eight (8) feet apart, with a 2x4 minimum top rail, or a temporary wire mesh fence supported by 2x4 post spaced at no more than eight (8) feet, chain link or other similar barrier which limits access to the protected area. The material utilized for the barricade may be altered by the Planning and Zoning Board. The fence must remain in place through the duration of construction activities.
 - d-e. Trenching or excavation close-within the tree protection zone to a protected of a tree intended for preservation must be done by hand or air spading only. Directional boring/tunneling is the preferred method when applicable.
 - f. An exception shall be granted if the strict application of this rule prohibits required protection zone prohibits access to the site and will result in the unnecessary destruction of protected trees. Consultation with an ISA certified arborist is required to determine proper measures to ensure protection of the tree during construction activities. The plan shall be prepared by a certified arborist and include sufficient detail to clearly define the process and protective measures proposed. This plan shall be submitted to Nassau County as part of the request to commence New Development. The County reserves the right to impose upon the applicant the minimum fee necessary to cover the expense of having a third party certified arborist review the submittal.
 - g. An exemption shall be granted if the strict application of this rule or will result in the unnecessary destruction of protected trees which can otherwise be preserved through application of Best Management Practices. Consultation with a certified arborist is required to determine proper measures to ensure protection of the tree during construction activities. The plan shall be prepared by a certified arborist and include sufficient detail to clearly define the process and protective measures proposed. This plan shall be submitted to Nassau County as part of the request to commence New Development. The County reserves the right to impose upon the applicant the minimum fee necessary to cover the expense of having a third party certified arborist review the submittal.
 - e-h. If upon inspection by the Nassau County Code Enforcement Department, it is determined that a tree barricade has not been properly maintained a stop work order may be issued. The stop work order may not be lifted until all barricades have been re-established in accordance with this ordinance and any resulting corrective action has been completed.
 - f-i. During construction it shall be the responsibility of the developer to monitor the water needs of protected trees. -trees preserved for the purpose of receiving preservation credits.



Example:

3. All development activities, except those specifically permitted by **Section 37.02 LDC**, shall be prohibited within the tree protection zone, including any construction of buildings, structures, paving surfaces, stormwater retention or detention ponds, and temporary construction activities, including all digging, storage of construction material, mechanical clearing of underbrush and/or parking of construction vehicles.
4. Permitted activities within the tree protection zone:
 - a. Excavating or trenching by utilities service providers for installation of underground utilities, only when directional boring is not applicable. in accordance with **Section 37.02. LDC.** Underground utilities shall be placed away from the base of the tree to the maximum extent possible. Trenching or excavation within the tree protection zone of a tree intended for preservation must be done by hand or air spading only. Directional boring/tunneling is the appropriate method when applicable.
 - a-b. Placement of sod or other ground covers, and the non-mechanical preparation of the ground surface for such covers.
 - b-c. Hand trimming of underbrush.
5. The root systems of protected trees shall be preserved when installing fences and walls. Postholes and trenches located close to trees shall be dug and adjusted as necessary to avoid damage to major roots. Continuous footers for masonry walls shall be ended at the point larger roots are encountered and the roots bridged.

6. No person shall attach any signs to a protected tree, nor shall any person cause any substance harmful to protected trees to come in contact with them, or prevent water or oxygen from reaching their roots by excessive cut and fill activities.

M. Abused Trees:

Abused trees shall not be counted toward fulfilling tree replacement or preservation requirements. Nassau County may require the abused trees to be replaced and are subject to penalties provided for in Section 37.02. LDC. A tree shall be considered abused if one (1) or more the following actions have taken place:

1. Significant damage has been inflicted upon any part of a tree, including the root system by machinery, storage of materials, soil compaction, excavation, vehicle accidents, chemical application, or change to the natural grade;
2. Damage inflicted to or cutting upon a tree which causes infection or pest infestation;
3. Pruning any tree to permanently reduce the function of the tree or cause it to go into shock;
4. Hat-racking;/Topping
5. Pruning more than 30% of the canopy of a shade tree
6. Removal of bark which is detrimental to the tree;
7. Tears and splitting of limb ends or peeling and stripping of bark;
8. Use of climbing spikes, or cutting into the tree for the purposes of climbing on any species of tree for any purpose other than total removal, except as the same may be required to comply with federal, state or local laws and regulations, including, but not limited to, the Occupational Safety and Health Act; and
9. Girdling a tree with the use of wires (e.g., use of weed eater, mower damage, or improper cabling around branches);

N. Appeals.

1. It is the intent of this article that all questions of interpretation and enforcement shall be first presented to the eCounty in accordance with Ssection 3.03 and aArticle 4 of the Nassau County Land Development Code.
2. An application for appeal of said decisions shall be presented in accordance with Section 3.04(B)(7) of the Nassau County Land Development Code on matters of interpretation and to the Code Enforcement Board on matters of enforcement.
3. The Planning and Zoning Board may consider unique development scenarios that result in the preservation of swaths of natural areas and present a clear attempt to view tree protection in a holistic manner.

OK. Administration and eEnforcement. The Department of Planning and Economic Opportunity department shall administer the provisions of these regulations. The code enforcement department shall enforce the provisions of these regulations. Any violation of the provisions set forth herein shall be brought to the property owner's attention and the contractor/persons who removed the protected tree(s), by a certified letter from the code enforcement department. A violation of this article shall, in addition to other appropriate sanctions up to and including revocation of building permits, be enforced in accordance with the code enforcement board procedures as set out under Cchapter 1, Aarticle 3 of the County Code of Laws and Ordinances and the provisions of F.S. ch. 162. Building permits may be reinstated after tree protection measures are brought into conformance

with approved site plans/restoration plans and any fines and code enforcement penalties (if applicable) are addressed.

LP. Penalties. Penalties shall be in accordance with the requirements set forth in Chapter 1, Article 3 of the County Code of Laws and Ordinances and the Specific Penalties for Violation of Tree Permit protection measures Requirements defined in Section 37.02-B. _____ of the Land Development Code.

Q. Irreparable or Irreversible Harm:

1. Nassau County has found that mature maritime forest, old growth trees and related understory/ground cover provide communal benefits that cannot be replicated by the planting of new trees in a reasonable timeframe and thus the destruction of mature maritime forest, old growth trees and related understory/groundcover constitute irreparable or irreversible harm when done so in violation of this Article. These communal benefits are integral to the health, safety and general wellbeing of the Island and the inhabitants thereon. A mature maritime forest, old growth trees and related understory/groundcover provide communal benefits such as;

- a. Storm protection/wind protection
- b. Stormwater treatment and storage
- c. Counteract heat island effect/provide shade and reduce surface temperatures
- d. Maintains the physical strength of soil and stabilizes the Island (soil stabilization)
- e. Visual screening/aesthetic relief

2. Based on these findings, the Code Enforcement Board of Nassau County may assess a fine of up to \$15,000 per tree removed when, based on competent and substantial evidence, the Board determines that irreparable or irreversible harm has been caused by the removal of a tree(s). The Code Enforcement Board shall use the following criteria to determine if the action is irreparable or irreversible. A finding that the removal of a tree(s) meets any one of the following criteria shall be sufficient to constitute a finding of irreparable or irreversible harm.

- a. The individual/entity subject to enforcement action cannot demonstrate that a restoration plan can replicate the communal benefits of the tree(s) removed in a reasonable timeframe. Including but not limited to:
 - i. Mitigate the collective strength of the greater canopy and root structure to withstand storm impacts
 - ii. Mitigate for a degradation of soil strength and stabilization
 - iii. Mitigate the loss of capacity to store and treat stormwater
 - iv. Mitigate the adverse impacts of the heat island effect
 - v. Visual screening/aesthetic impact
- b. The individual/entity subject to enforcement action cannot demonstrate that the location of the removed tree(s) and/or function performed by the removed tree(s) can be replicated in a reasonable timeframe by replacement plantings.
- c. The individual/entity subject to enforcement action cannot, based on location and environmental stressors, demonstrate that available replacement material has

been subjected to the essential adaptation process critical for plant material to reach maturity in the coastal environment of a barrier island. This includes but is not limited to influence of aerosols (salt spray), higher salt content, inundation, deposition, wind load, dune migration, soil types, and erosion.

d. Aesthetic impact cannot be replicated by replacement trees in a reasonable timeframe.

MR. Specific Penalties for Violation of tree protection measures: ~~defined in Section 37.02-B LDC:~~

1. When, after an investigation by the Code Enforcement Department of Nassau County, evidence of a violation to this ordinance has taken place, a stop work order ~~may shall~~ be issued. The stop work order may not be lifted until all fines (as applicable) have been paid, the restoration plan approved (as applicable) and any required bond (as applicable) has been secured and approved to form by the County Attorney
2. The property owner and contractor or person(s) who performed the tree removal will be held jointly liable.
3. When The Nassau County Code Enforcement Department has determined the removal of a protected tree(s) has taken place in violation of ~~Sections 37.02 and 37.02 LDC~~ a civil fine ~~shall may~~ be assessed equivalent to the cost of replacing the removed trees on an inch-for-inch basis (one (1) caliper inch for every inch of DBH removed) ~~up to and not exceeding \$15,000 per tree removed when determined to be irreparable or irreversible harm pursuant to Section 37.02 LDC. When not found to constitute irreparable or irreversible harm, the Code Enforcement Board may assess a penalty of up to \$5,000 per tree removed.~~
4. The replacement cost shall be determined by ~~a~~ survey of at least three nurseries located in Nassau County for the retail cost of a four(4) caliper inch Live Oak. The cost shall include the tree, installation, ~~and a~~ one year warranty of survival. Nassau County shall conduct a survey from time to time to ensure costs are accurate.
5. In addition to the above referenced fine, a restoration plan shall be prepared by an ISA certified arborist or certified landscape architect and submitted to the Nassau County Code Enforcement Department within thirty (30) days after being cited for the violation. At a minimum, the owner and/or developer shall replace, inch-for-inch (one (1) caliper inch for every inch of DBH removed), any and all trees that are removed without authorization. No preservation credits shall be applicable for the unauthorized removal of trees. Failure to submit a complete restoration plan within thirty (30) days shall result in a fine of \$100 per day for each day thereafter a complete restoration plan is not submitted.
6. The determination of inches (DBH) removed shall be based on measuring the diameter of the remaining stump. If the remaining portion of the stump is less than four and on-half feet tall the measurement shall be based on the diameter of the remaining portion of the stump.
7. In the event that an insufficient trunk of the removed tree exists to determine replacement requirements these facts shall be determined by the Code Enforcement Board based upon any available information, including photographs or a survey of trees of the same species existing ~~within the County in the general vicinity of the removed tree the same proximity~~ or trees found in the same natural community on Amelia Island. In making such determinations, the opinion of the Code Enforcement Board shall control. If the Code Enforcement Board cannot determine with

reasonable certainty the number or inches (DBH) of protected trees removed, the violation shall be corrected by paying a civil fine of up to three dollars (\$3.00) per square foot, as determined by the Code Enforcement Board, of gross area of the property in question. However, the total fine shall not exceed \$15,000 when determined to be irreparable or irreversible harm pursuant to Section 37.02 LDC. When not found to constitute irreparable or irreversible harm, the Code Enforcement Board may assess a penalty of up to \$5,000.

8. The owner/developer shall pay the expense of a third party arborist or landscape architect to review the restoration plan if determined necessary by Nassau County.
9. In evaluating a proposed restoration plan, the County may consider the following:
 - a. The cross-sectional area of trunk(s) removed;
 - b. The specific aesthetic character of the tree/understory/groundcover removed;
 - c. Any special function the tree carried out as a screen or buffer;
 - d. Amount of other trees preserved on the site, and the opportunities for planting additional trees;
 - ~~d.e.~~ The ability to plant trees or restore natural areas on other property on Amelia Island
 - e-f. Any short-term or long-term negative environmental impacts from the unauthorized tree removal, including, but not limited to, erosion, siltation, impacts on listed plant and/or animal species, water circulation patterns, water quality standards, and floodplain capacity or conveyance (including, but not limited to, swales or overland sheet flow, where pertinent).
10. The County Manager or designee shall review the proposed restoration plan. The County Manager or designee may require any bonding or other guarantees deemed necessary to insure the performance and completion of the restoration plan, and/or the maintenance and survival of the implemented restoration plan. If a bond is required, the bond amount shall be three dollar (\$3.00) for every square foot of gross area of the property in violation of this section, or up to the replacement cost as determined by the formula described in this Article.
11. The County Manager or designee shall, within 30 days of submission of a restoration plan, either:
 - a. Approve the restoration plan after rendering a finding that implementation of the restoration plan, will ensure restoration of the quality and screening functions previously provided on site, according to the criteria set forth herein by the removed or otherwise destroyed trees; or
 - b. Deny the restoration plan and levy appropriate fines based on a finding that said restoration plan, upon implementation, cannot restore the quality and screening functions previously provided by the removed or otherwise destroyed trees; or
 - c. Deny said plan and inform the owner or developer of what the County requires in order to approve said restoration plan. Such plans shall be resubmitted within thirty (30) days of the denial. Failure to resubmit or appeal within this time period shall subject the property owner to a fine of \$100.00 per day.
 - d. Request a third party review of the restoration plan by a certified arborist or landscape architect. The owner/developer shall be responsible for the cost associated with the third party review.

12. No further County permits for the subject property ~~or development project, including building permits on other Lots/residential building sites under the same ownership,~~ shall be issued or inspections provided until all violations of this article are corrected or a restoration plan has been approved by the County Manager or designee. No certificate of occupancy shall be granted unless and until the restoration plan is implemented or a performance bond satisfactory to the County and its attorney is submitted and approved by the County.

NS. Conflict. In the event that any section of these regulations is found to be in conflict with any other county code, ordinances or regulation, the more restrictive shall apply.

Article 32 - Definitions

Diameter at Breast Height (DBH) – DBH (Diameter Breast Height) means the trunk diameter of an existing tree measured four and one-half feet above the average ground level at the tree base. If the tree forks between four and one-half and two feet above ground level, DBH is measured below the swell resulting from the fork. Trunks that fork below two feet, shall be considered multi-trunk trees. DBH for multi-trunk trees shall be determined by measuring each trunk immediately above the fork and adding the total diameters of the four largest trunks. (See also and compare definition for caliper in this Section.). Diameter (d) = Circumference (C) / Pi (π) or, $d=C/\pi$

Exceptional Specimen Tree - Any healthy protected tree measuring twenty-four (24) inches or greater (DBH).

Caliper Inches – Caliper means the trunk diameter of planted trees. Caliper shall be measured six inches above the ground for trees up to and including four inches in caliper, and measured 12 inches above the ground for trees exceeding four inches in caliper. If the tree has an enlarged irregular base, then the caliper measurement shall be taken up where the trunk has a more regular circumference, but in no case higher than four and one-half feet above the ground. If the tree forks between ground level and one foot above ground level, then the tree shall be considered a multi-trunked tree. Caliper for multi-trunked trees shall be determined by measuring each trunk immediately above the fork and adding the total caliper of the four largest trunks. (See also and compare definition of DBH in this Section.)

Protected tree – any existing, healthy tree as determined by a ISA certified arborist having a five (5) inch DBH, or greater and not identified on the most recent Florida Exotic Pest Plant Council Invasive Plant list (Category I or II).

Street Trees - Trees planted near the street curb line or within swales near the curb line of streets are called street trees. Trees planted in a median between traffic lanes are also called street trees.

Understory Tree – Those trees listed in Table 37-04(A) of Section 37.05 LDC as amended from time to time.

Canopy Tree – Those trees listed in Table 37-1 of Section 37.05 LDC as amended from time to time.

Construction Zone – The Construction Zone is identified as the impervious and semi-impervious area of development and the lands within five(5) feet thereof.

Unified Multi-lot Development – This term references residential, non-residential and mixed-use projects which, within their project/development boundary, create multiple development tracts of land for conveyance. This would include residential subdivisions, master planned retail centers with outparcels, master planned mixed-use projects which create multiple tracts for development, and similar development programs.

Shade Tree – Any native, self-supporting woody plant of a species that is generally well-shaped, well-branched, and well-foliated which normally grows to an overall height of thirty-five (35) feet with a minimum average mature crown spread of thirty(30) feet, and which is commonly accepted by the local horticultural and arboricultural professionals as a species which can be expected to survive for at least fifteen (15) years in a healthy and vigorous growing condition over a wide range of environmental conditions.

Hat-rack/Topping – To severely prune a tree in order to permanently maintain ~~a~~ growth at a reduced height or to flat-cut a tree, severing the leader or leaders, or pruning a tree by stubbing off mature wood larger than three (3) inches in diameter; or reducing the total circumference or canopy spread not in conformance with National Arborists’ Society standards.

Utility Area - The land area(s) utilized to facilitate the placement of infrastructure necessary to provide commonly expected utilities. This includes the infrastructure necessary to provide electricity, natural gas, water, sewage, stormwater collection and conveyance and telephone/cable/internet(fiber optics).

New Development, as used in this Article shall have the following meaning: Any new construction or site work whether residential, non-residential or mixed-use, any modification, expansion, or alteration to an existing structure, alteration to any site including borrow pit construction, site grading, driveways or other similar activity, any new or expanded accessory use or structure – shed, pool, parking area, means of ingress/egress, drainage facility, pond, etc., and/or any other aspect of site or structural development or modification that may adversely impact existing trees.

~~Open-space: Landscaped or undeveloped lands suitable for passive recreation or conservation uses. The term open space shall not include lands utilized for excavations such as ponds, borrow pits, stormwater management facilities or other similar development activity. An area open to the sky, which may be on the same lot with a building. The area may include, along with the natural environmental features, swimming pools, tennis courts, or any other recreational facilities. Streets, structures for habitation and the like shall not be included.~~

~~Tree Protection Barricade: A protective barrier signifying the boundary of the tree protection zone. The tree protection barricade shall be at least three (3) feet tall. The barrier shall consist of either a wood fence with 2x4 posts placed at a maximum of eight (8) feet apart, with a 2x4 minimum top rail, or a~~

temporary wire mesh fence supported by 2x4 post spaced at no more than eight (8) feet, chain link or other similar barrier which limits access to the protected area. The material utilized for the barricade may be altered by the Planning and Zoning Board.

Barricades (as differentiated from Tree Protection Barricades): A post and rail configuration used for the protection of trees during construction activity. The upright posts shall be a minimum of a two (2) by two (2) inch (common industry standard) wooden stake, four (4) feet long. A minimum of a one (1) by four (4) inch (common industry standard) wooden board shall be used to connect the upright posts. High-visibility heavy-gauge tape may be substituted for the one (1) by four (4) inch connecting boards. The barricade tape must be a minimum of three (3) inches wide, and of seven (7) mil-thick polyethylene construction, and be a high-visibility color. See Tree Protection Barricades

SECTION 4. CODIFICATION

It is the intent of the Board of County Commissioners that the provisions of this Ordinance shall be included and incorporated into the Land Development Code (LDC) of Nassau County, Florida. The codifier may re-letter or renumber sections to conform to the uniform numbering and style of the LDC.

SECTION 5. SEVERABILITY

It is the intent of the Board of County Commissioners of Nassau County, Florida, and is hereby provided, that if any section, subsection, sentence, clause, phrase, or provision of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, such invalidity or unconstitutionality shall not be so construed as to render invalid or unconstitutional the remaining provisions of this Ordinance.

SECTION 6. EFFECTIVE DATE

This ordinance shall take effect upon filing with the Secretary of State as provided in Section 125.66, Florida Statutes.

ADOPTED THIS _____ DAY OF _____, 2016~~7~~ BY THE BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA.

BOARD OF COUNTY COMMISSIONERS
NASSAU COUNTY, FLORIDA

Its: Chairman

ATTEST as to Chairman's Signature:

JOHN A. CRAWFORD
Its: Ex-Officio Clerk

Approved as to form

Michael S. Mullin,
County Attorney