ORDINANCE 2020 -09

AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA, AMENDING ARTICLE 5 OF THE LAND DEVELOPMENT CODE, PROCEDURES; SPECIFICALLY SECTION 5.07, SITE DEVELOPMENT PLAN REVIEW; AMENDING ARTICLE 31 OF THE LAND DEVELOPMENT CODE, REQUIRED OFF-STREET PARKING AND OFF-STREET LOADING, SPECIFICALLY SECTION 31.12, OFF STREET PARKINGS SPACES: NUMBER REQUIRED; AMENDING ARTICLE 37 OF THE LAND DEVELOPMENT CODE, NATURAL RESOURCE PROTECTION; SPECIFICALLY SECTION 37.05, LANDSCAPING; AND SECTION 37.06 BUFFERS BETWEEN CERTAIN USES; PROVIDING FOR FINDINGS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Policy FL.10.05 of the Nassau County Comprehensive Plan requires the County to review existing regulations in the Land Development Code and revise as necessary in order to implement the Future Land Use Plan; and

WHEREAS, the Board of County Commissioners has found it in the best interest of the citizens of Nassau County to amend the Code of Ordinances; and

WHEREAS, the Planning and Zoning Board conducted a public hearing on this Ordinance on January 21, 2020 and voted to recommend approval.

WHEREAS, the Board of County Commissioners of Nassau County, Florida conducted a public hearing on this ordinance on February 10, 2020.

NOW, THEREFORE, BE IT ORDAINED by the Board of County Commissioners of Nassau County, Florida:

SECTION 1. FINDINGS

This Ordinance is consistent with the goals, objectives and policies of the Nassau County Comprehensive Plan, in particular, Policies FL.01.01, FL.10.05 and FL.11.01.

SECTION 2. AMENDMENTS

- A. Article 5, Section 5.07 of the Land Development Code, Site Development Plan Review, is amended as set forth in Exhibit "A" attached hereto and made a part hereof.
- B. Article 31, Section 31.12 of the Land Development Code, Off-Street Parking Spaces; Number Required, is amended as set forth in Exhibit "B" attached hereto and made a part hereof.
- C. Article 37, Section 37.05, Landscaping, and Section 37.06, Buffers Between Certain Uses are amended as set forth in Exhibit "C" attached hereto and made a part hereof.

SECTION 3. 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 4. EFFECTIVE DATE

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

PASSED and ADOPTED this

10th day of

, 2020.

BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA

February

DANIEL B. L

Its: Chairman

ATTEST as to Chairman's Signature:

JOHN A. CRAWFORD Uts: Ex-Officio Clerk

Approved as to form and legality by the Nassau County Attorney:

MICHAEL S. MULLIN County Attorney

Section 5.07. - Site development plan review.

- A. Purpose and applicability.
 - 1. The purpose of this section is:
 - a. To provide guidelines and procedures to ensure that site development plans contain essential information and data necessary for the county to reach fair, equitable and timely decisions.
 - b. To provide applicants with preliminary approval that ensures expeditious review of site engineering construction plans based upon the preliminary binding site plan approval and established standards.
 - 2. Site development plans subject to review and approval are hereby classified as follows for the purpose of the procedures and standards contained in this section:
 - a. Class I:
 - i. Single-family dwellings, duplexes, mobile home placement or replacement on existing lots or record or lot splits exempt from subdivision requirements, excluding beach front construction.
 - ii. Residential accessory structures.
 - iii. General repairs.
 - iv. Any modifications to existing non-residential buildings or sites in which:
 - (a) The building area of the site is not increased by more than four thousand nine hundred ninety-nine (4,999) square feet; or
 - (b) The site's impervious area is not increased more than three thousand nine hundred ninety-nine (3,999) square feet; and
 - (c) The use and occupancy classification (as defined by the Florida Building Code) of the facility is not changed. The Development Review Committee has the ability to determine if a proposed project is required to go through full DRC review, subject to Sec. 5.07(B)(5)(f).
 - v. Temporary sales and construction related to an approved site engineering plan for a period not to exceed three (3) years.
 - b. Class II:
 - i. All sites which exceed the limitations of Class I as stated above or are not specified as Class III herein.
 - ii. Expansions of existing non-residential development generating an increase of more than four hundred (400) gross average daily vehicular trip ends per day.
 - iii. Multi-family development containing an aggregate of three (3) dwelling units or more.
 - iv. New commercial construction on a vacant site.
 - v. New beach front construction seaward of the coastal construction control line or building restriction line.

- c. Class III:
 - i. Final development plan in a planned unit development (PUD).
- d. Class IV:
 - Development proposals certified by the Florida Department of Economic i. qualifying under F.S. § 288.065, (rural Opportunity (DEO) as loan/infrastructure/economic development); F.S. § 288.1045, (defense contractor); F.S. § 288.106, (qualified targeted industries); or F.S. § 288.108, (high-impact business). In order to receive such certification, the applicant must prepare and submit a general project overview on forms provided by and submitted to the Nassau County Economic Development Board. In advance of DEO certification, if the Nassau County Economic Development Board and the county commissioner in whose district an application is located concur that the application is eligible for Class IV status then such development will be subject to Class IV review.
 - ii. Affordable/workforce housing development proposals wherein twenty (20) percent of the units (minimum of three (3)) are provided for a period of at least five (5) years at monthly mortgage payments (including taxes and insurance), or monthly rents (including utilities), that do not exceed thirty (30) percent of the median adjusted gross annual income, adjusted for household size, as provided by the U.S. Department of Housing and Urban Development for Nassau County (Jacksonville MSA). Also included in this classification are residential developments meeting the standards of section 7-162, Code of Ordinances.
- 3. Site plan approval required. No building permit for a Class II, III, or IV development, as defined herein, shall be issued unless site engineering plans for construction, based upon a preliminary binding site plan, are approved in accordance with the procedures and standards of this section.
- 4. All applications are to be made on forms provided by Nassau County. Persons authorized to file for site plan approval include:
 - a. Owners of a property that is subject to site plan application; or
 - b. Lessees or contract vendees of property subject to the site plan approval application, with the notarized written permission of the property owner(s); or
 - c. Agents of a property owner, lessee or contract vendee with notarized written permission of the property owner.
- 5. The building department shall accept a complete building permit application for Class IV developments simultaneously with submittal of a complete site engineering plan application. This is an accelerated process undertaken at the applicant's request and whereupon the applicant assumes all risk associated with time and expense of changes necessitated as a result of the final site engineering plan approval.
- B. Development review committee. The development review committee (DRC) is hereby established.
 - 1. Membership and chair. The directors of planning and economic opportunity, engineering services, fire/rescue, building, and health department and 911 addressing and mapping (as determined by the planning and economic opportunity director) shall each designate

a DRC regular member and an alternate member from their respective departments. The director of planning and economic opportunity or his/her designee shall serve as chair. Designees shall exercise the responsibility and authority of the regular member.

- 2. The planning and economic opportunity department shall be responsible for intake, agenda preparation, public notice, distribution of plans and specifications, collection of fees, preparation of minutes, audio recording of meetings and preparation of development orders.
- Public notice of DRC meetings shall be posted on the county website and placed in public notice boxes. The general public is invited to observe all meetings and review all documents.
- 4. Meetings shall be held on a weekly basis commencing at 9:00 a.m. as established by the DRC. Special meetings may be called from time to time by the planning and economic opportunity director. Minutes of the meetings shall be prepared as well as recorded (audibly) and available to the public upon request. An agenda for the DRC shall be posted on the county website, at least seventy-two (72) hours prior to a scheduled meeting.
- 5. Powers and duties. The development review committee has the following powers and duties:
 - a. To conduct pre-application conferences and provide information about applicable development procedures and standards.
 - b. Preliminary binding site plans:
 - i. Approve Class II and IV preliminary binding site plans;
 - ii. To review and make a recommendation regarding Class III preliminary binding site plans.
 - c. Site engineering drawings—To approve site engineering plans for the commencement of horizontal and/or above ground site construction based upon compliance with applicable codes, other regulatory agencies having jurisdiction and the valid preliminary binding site plan.
 - d. Approve minor deviations in site engineering plan drawings from an approved preliminary binding site plan which, by way of illustration but not limitation, include the following:
 - i. Where there is no increase in the total number of dwelling units, a change in the types of units not exceeding five (5) percent of the total, e.g., cumulative change from single-family to town home of twenty (20) units in a residential development of four hundred twenty-five (425) units is acceptable.
 - ii. An increase or decrease of parking spaces where the proposed number remains in excess of minimum code requirements e.g., anchor tenant wants one hundred twenty (120) parking spaces where one hundred seventeen (117) are required by the LDC.
 - iii. Change in location of a driveway connection up to one hundred fifty (150) feet centerline measurement on the same road segment required pursuant to an F.D.O.T. permit.
 - iv. Decrease in jurisdictional wetlands not exceeding ten (10) percent made pursuant to a final environmental resources permit issued by the SJRWMD.

Example, the water management district permits compensatory mitigation reducing two (2) acres of jurisdictional wetlands on a preliminary binding site plan indicating twenty-one (21) acres of preserved jurisdictional wetlands.

- Increase or decrease of stormwater management areas not exceeding fifteen (15) percent of the stormwater area on the approved preliminary binding site plan based on final design and permitting through the SJRWMD.
- e. Review and approve preliminary plats.
- f. As determined by the DRC at a pre-application meeting, the DRC may waive the requirement for the project to go through DRC review under Section 5.07(A)(2).
 - i. <u>Project criteria that may be utilized to determine waiver of DRC review</u> includes, but is not limited to:
 - 1. <u>The impervious surface within the development does not increase by more</u> than three thousand nine hundred and ninety-nine (3,999) square feet; or
 - 2. <u>The building area of the site is not increased by more than four thousand</u> nine hundred and ninety-nine (4,999) square feet; or
 - 3. There is no increase in traffic volume; or
 - 4. There number of parking spaces does not increase by more than 10%; or
 - 5. There is no reduction in required landscaping or buffering areas.
 - ii. Where it is determined that DRC review is not required, building permits of any proposed changes to the site shall be reviewed and approved by the committee members or their designee prior to a building permit being issued for the property. All changes to the site shall comply with the Nassau County Code of Laws and Ordinances.
- C. Submission requirements.
 - 1. Class II, III and IV preliminary binding site plan informational requirements include:
 - a. Boundary survey meeting the minimum technical standards set forth by the Florida Board of Professional Surveyors and Mappers in Rule 61G17-6 F.A.C.
 - Twenty (20) Eight (8) sets of plans in 11" × 17" or 24" × 36" format including name of responsible designer, date, north arrow and graphic scale of not more than one (1) inch equals fifty (50) feet and providing the information applicable to the site development specified in the following subsections.
 - c. Tabulations—Gross site acreage; total building area; total parking area and parking ratio; total surface area of stormwater retention facilities at top of bank; jurisdictional wetlands and wetland buffer width; submerged areas; total landscaped areas; and buffers. Provide calculations of floor area ratio; impervious surface ratio and landscape open spaces.
 - d. Proposed use(s)—Residential dwelling units by unit type for residential uses and lot sizes. Gross floor area of all non-residential uses and identification of the use.
 - e. On-site: Property dimensions and existing and proposed easements and rights-ofway; exterior dimensions of all principal structures (except single-family detached), their height, finished floor elevation and number of stories; setbacks; distances between structures; fire hydrants or dry wells; stormwater ponds, easements and major stormwater conveyance systems; wetlands preserved, impacted and mitigated; floodways, floodplains and flood hazard areas; driveway location and dimensions including return radii and pavement material; drive aisle width; number

and dimension of parking spaces; cross-access locations and dimensions; off-street loading areas for passengers or freight; drive-through locations including stacking and escape lanes; landscape area dimensions; sidewalks; bicycle lanes and racks.

- f. Off-site: Width and length of turn lanes; conceptual water supply and sewage disposal facilities including points of connection; main extensions and laterals; lift stations; fire hydrants; proposed traffic signalization phasing and sequencing.
- g. Ancillary items—Phase lines; accessory uses and structures including exterior sales, service or storage areas; exterior lighting including height of poles and notes on shielding of luminaires; fences and walls; dumpsters and enclosures; sign location(s) and height; rights-of-way and all other lands or improvements proposed for dedication to the public.
- All preliminary binding site plans over ten (10) acres in size shall conduct an h. environmental assessment. The assessment may employ aerial photographs; land use and cover classifications per Florida Land Use Classification Codes (FNAI.org/gisdata.cfm); wetlands identified by the National Wetlands Inventory, SJRWMD (SJRWMD.com/gisdevelopment) or ground truthing; wildlife corridors and strategic habitat conservation areas identified by the Florida Fish and Wildlife Conservation Commission's Florida Natural Areas Inventory and Florida Department of Environmental Protection supplemented, as appropriate, by field surveys. Planning for proposed development should consider natural systems and developers are encouraged to use conservation design techniques such as clustering, density transfers, stem wall foundations, tree wells, and other techniques to produce marketable projects while protecting natural and historic resources. Site development plans impacting areas identified as potential habitat for endangered. threatened or species of special concern, as listed in Rule 68A-27, F.A.C., shall provide evidence of submittal to the Florida Fish and Wildlife Conservation Commission (FWCC) prior to receiving conceptual approval. Archaeological and historic resources shall be identified by reference to the Florida Master Site File.
- 2. Site engineering plan informational requirements.
 - a. Eight (8) sets with a minimum of three (3) sets on 24" × 36" sheets. The balance may be on 11" × 17" sheets, all to be signed and sealed by the engineer of record together with a digital file in a format usable by Nassau County.
 - b. The preliminary binding site plan approved in accordance with the preceding section, including all necessary changes or corrections to comply with any conditions of approval. If another agency having jurisdiction over the development specifically requires, as a condition precedent for that agency's approval, modifications to the county-approved preliminary binding site plan, they shall be so noted and evidence of the agency's specific direction provided. Such changes shall be considered in accordance with subsection B.5.d., above.
 - c. Engineer or engineering company identified on each sheet of the site engineering plans together with executed certificate of completeness (signed and sealed statement by the engineer of record that the design complies with the requirements of the Nassau County Code). Improvements shall be designed in accordance with requirements of the utility company and approved by the county engineer or his/her designee.

- d. Paving and grading plans showing plan views, profiles and detail sheets in accordance with Ordinance 99-17 as amended and the engineering services' technical review checklist.
- e. Drainage and geotechnical reports meeting the criteria of Ordinance 99-17 as amended and engineering services' technical review checklist.
- f. Sediment and erosion control measures.
- g. Lighting plan conforming to Ordinance 2005-53, as same may be amended from time to time.
- h. Water and wastewater plans and profiles as applicable to the franchised utility provider and FDEP.
- i. Copies of SJRWMD permit or compliance letter; FDOT permit or notice of intent letter, and any other state and federal permits. An applicant may elect to defer all permits to the preconstruction meeting at the applicant's own risk. Should any permit(s) require any changes to the approved plans, the applicant shall have to get the plans re-approved through the site engineering plan approval process. No construction shall be allowed to commence until all permits have been obtained, and no preconstruction meeting shall occur prior to all necessary permits being obtained.
- j. Complete landscape plan and materials list pursuant to article 37, LDC, as same may be amended from time to time.
- k. School impact analysis and subsequent school concurrency reservation letter (residential projects).

Section 31.12. - Off-street parking spaces; number required.

Off-street parking spaces shall be provided and maintained in all districts as follows:

- (A) Residential uses:
 - Dwellings up to four (4) units located on an individual lot: Two (2) spaces for each dwelling unit.
 - (2) Multifamily dwellings in excess of four (4) units: Two (2) spaces for each dwelling unit, plus one (1) space for owner or operator and one (1) space for each two (2) employees.
 - (3) Mobile home park: Two (2) spaces for each mobile home lot.
 - (4) Mobile home subdivision or mobile home on individual lot: Two (2) spaces per mobile home.
 - (5) Housing for elderly: One (1) space for each two (2) dwelling units.
 - (6) Nurses home, convent, monasteries: One (1) space for each four (4) lodging units.
 - (7) Fraternity and sorority houses: One (1) space for each two (2) residents.
 - (8) Hotels and motels: One (1) space for each sleeping room plus spaces required for accessory uses such as restaurant, etc.
- (B) Institutional uses:
 - Sanitariums, rest homes, nursing home, convalescent homes, homes for the aged: One
 space for each four (4) beds plus one (1) space for each employee.
 - (2) Hospitals: One and one-half (1½) spaces for each bed.
 - (3) Churches and funeral homes: One (1) space for each four (4) seats in sanctuary or chapel area.
 - (4) Art gallery, library, museum: One (1) space for every six hundred (600) square feet of gross floor area.
 - (5) Orphan's home: One (1) space for each employee, plus one (1) space for each six (6) beds.
- (C) Schools and educational uses:
 - Elementary and junior high schools: Two (2) spaces for each classroom, office room and kitchen.
 - (2) Senior high schools: Six (6) spaces for each classroom, office room, kitchen, gymnasium and auditorium.
 - (3) Day nursery and kindergarten: Two (2) spaces for each employee plus adequate provision for the loading and unloading of children.
 - (4) Dance, art and music studios: One (1) space for every three hundred (300) square feet of gross floor area.
 - (5) Vocational, trace and business school: One (1) space for every three (3) seats of seating capacity.
- (D) Assembly: Recreational and similar uses:

- (1) Private clubs: One (1) space for each four (4) seats, or one (1) space for each two hundred (200) square feet of gross floor area, whichever is greater.
- (2) Restaurant, night club, bar or tavern: One (1) space for each four (4) seats in public rooms plus one (1) space for each two (2) employees.
- (3) Theaters: One (1) space for every four (4) seats.
- (4) Bowling alleys: Two (2) spaces per alley.
- (5) Stadiums and arenas: One (1) space for each four (4) seats.
- (6) Community center, recreational facility: One (1) space for each two hundred (200) square feet of gross floor area or one (1) space for each three (3) seats, whichever is greater.
- (7) Billiard parlor: Two (2) spaces for each three (3) tables.
- (8) Public, private and commercial parks, campgrounds and recreational areas: One (1) space for each campsite or picnic area.
- (E) Business and professional uses:
 - (1) Medical and dental office or clinic: One (1) space for each doctor; plus one (1) space for each two (2) employees, plus one and one-half (1½) spaces for each consultation room or examining room, provided the maximum number of required spaces for each doctor shall not exceed seven (7).
 - (2) Research laboratory: One (1) space for each two (2) employees plus one (1) space for each company vehicle plus two (2) spaces for patron parking.
 - (3) Professional and business offices (other than medical or dental): One (1) space for each three hundred (300) square feet of gross floor space, plus one (1) space for every two (2) occupants or employees.
 - (4) Radio or television broadcasting office or studio: One (1) space for every five hundred (500) square feet of gross floor area.
- (F) Commercial uses:
 - (1) Business, commercial, or personal service establishments (not otherwise listed): One (1) space for each three hundred (300) square feet of gross floor area, plus, where applicable, one (1) space for every one thousand (1,000) square feet of lot or ground area outside the buildings used for any type of sales or display.
 - (2) Marinas: One (1) space for each boat berth plus one (1) space for each two (2) employees.
 - (3) Bus, railroad or other transportation terminals: One (1) space for each five hundred (500) square feet of gross floor area plus one (1) space for each two (2) employees.
 - (4) Wholesale, warehouse or storage use: One (1) space for every two (2) employees on peak shifts, plus one (1) space for each vehicle based at the facility.
 - (5) Commercial shopping centers: One (1) space for each one hundred fifty (150) square feet of non-storage floor area.
- (G) Industrial and similar uses: All uses in industrial districts not otherwise listed: One (1) space for every two (2) employees on peak shifts, plus one (1) space for every company vehicle operating from the premises.

- (H) Handicap parking space requirements:
 - (1) Handicap parking spaces shall be reserved and posted in all commercial and professional districts and in any other district which has a principal, accessory or conditional use of a building or structure open to the public.
 - (2) Handicap parking spaces shall be conveniently located with respect to main and secondary entrances, and ramps to sidewalks shall be provided and conveniently located in relationship to the handicap spaces.
 - (3) The required number of handicap parking spaces shall be:
 - (a) Zero (0) to twenty (20) required spaces: One (1) handicap space.
 - (b) Twenty-one (21) to Fifty (50) required spaces: Two (2) handicap spaces.
 - (c) Required parking which exceeds fifty (50) spaces shall include a minimum of four
 (4) percent of those spaces as handicap spaces.
- (I) Reduced Minimum Parking Standards:
 - (1) A reduction of up to 50% of the minimum required parking stalls may be approved administratively, at the discretion of the Development Review Committee, on a caseby-case basis. When a reduction in parking is requested, the applicant shall demonstrate that the project does not need the minimum number of parking stalls to operate. The study must demonstration that the proposed reduction in parking will be adequate to meet parking demand. A reduction in parking shall be evaluated based on the following criteria:
 - (a) Preservation of existing native canopy trees, or
 - (b) Reduction in impervious surface ratio and run-off, or
 - (c) Increase in open space and landscaping, or
 - (d) Utilization of a drop-off zone (for projects where a majority of the parking needs are drop-off/pick-up such as schools and day cares), or
 - (e) Use of Low Impact Development (LID) principles, as approved by the County Engineer.
- (J) Shared Parking Provisions
 - (1) <u>The Development Review Committee may consider a shared parking agreement between two non-residential projects or mixed-use projects provided the projects/uses are complimentary (have peak hours of operation at different times of day). To be considered, a shared parking agreement must address the following:</u>
 - (a) The agreement is valid only as long as the conditions described in the request for shared parking exist.
 - (b) The amount of parking in consideration and to whom the parking is designated.

(c) An exhibit depicting the shared parking in relation to the project site.

- (d) The County is not bound to honor the shared parking agreement if the conditions described in the request are determined to have changed or result in a health safety issue as determined by the County Engineer.
- (2) The shared parking is subject to an agreement that addresses the following:
 - (a) <u>The agreement is valid only as long as the conditions described in the application for</u> the shared parking exist, the County must be a party identified in the agreement requiring a signature from the County Manager, and the agreement must be in a form acceptable to the County Attorney recorded with the Nassau County Clerk of Courts.
 - (b) <u>A copy of the recorded agreement shall be submitted to the County Attorney, County</u> <u>Manager, and Department of Planning within ten (10) days of its recording.</u>
- (3) There shall be connections between the shared parking and the structure it serves.
 - (a) There shall be safe pedestrian connections between the projects. The connections shall have dark sky lighting.
 - (b) The parking area must be located within 600 feet walking distance of the structure it serves.

Section 37.05. - Landscaping.

A. Applicability.

- 1. The standards established in this section are to be considered the minimum requirements for the design, plant selection, installation and maintenance of landscape elements and site improvements and shall apply to all new development.
- 2. Developments constructed under previously effective landscaping requirements are not required to comply with this section. However, the requirements of this section shall also apply to the redevelopment, reconfiguration, expansion or change of use of a previously developed site, unless such change falls below the following threshold:
 - a. The existing developed impervious area is seven thousand five hundred (7,500) square feet or less, and the proposed expansion of impervious surface is seven hundred fifty (750) square feet or less.
 - b. The existing developed impervious area is greater than seven thousand five hundred (7,500) square feet, and the proposed expansion of impervious surface is less than two thousand (2,000) square feet, and also less than ten (10) percent of the existing impervious area on the parcel or lot.
- 3. Partial exemption. Developments that have received site plan approval or construction plan approval prior to the effective date of this ordinance are subject only to the minimum tree planting by use, section 37.05(C) LDC.
- B. Plant material. All installed trees, shrubs and groundcovers shall conform to the standards for Florida Grade #1 or better according to the current edition of "Grades and Standards for Nursery plants" published by the Florida Department of Agriculture and Consumer Services, Division of Plant Industry. Synthetic or artificial trees, shrubs, groundcovers or vines are not acceptable substitutes. In choosing plant materials, consideration should be given to the amount of sun or shade, the wetness or dryness of the soil, the effects of salt spray (where applicable), the amount of irrigation required and the mature size and spatial needs of plants chosen.
 - 1. The minimum number of trees required by this section shall be either qualifying existing trees preserved on-site or more than one species listed in Tables 37-1 or 37-2. Trees planted in addition to these minimum requirements of this section may be any species of canopy tree or palm except for the prohibited species listed herein. In order to prevent a monoculture, new landscaping should not include more than fifty (50) percent of any one genus or twenty-five (25) percent of any one species. All trees shall be planted in a minimum dimension of ten (10) feet. This minimum planting area must be free of all pavement and vehicle overhang in order to prevent possible tree damage. All trees shall have a minimum trunk diameter, measured six (6) inches above ground level, in accordance with Table 37-3.
 - 2. Shrubs shall have a minimum height of eighteen (18) inches when planted. When planted as a hedge, the maximum spacing is 30 inches on center. All shrubs used for visual screening shall be of a plant species that is capable of reaching a height of four (4) feet within twenty-four (24) months under normal growing conditions. Shrubs used as accent ground cover and vines may vary in size depending on the type of plant material and the desired effect.

3. Groundcovers shall be planted in such manner as to present a finished appearance and complete coverage within one (1) year after planting.

Name	nty Native Canopy Trees	Mature Height (ft.)	Rate of Growth	Salt Tolerance	Drought Tolerance
Acer rubrum	Red Maple	35—50	Fast	Low	Med
Betula nigra	River Birch	4565	Fast	Low	Low
Bumelia spp	Buckthorn	20—40	Med	M/L	M/High
Carpinus caroliniana	American hornbeam	25—35	Slow	Low	Low
Carya glabra	Pignut hickory	80—120	Fast	Low	High
Cercis canadensis	Redbud	20—30	Med	Low	High
Cornus florida	Flowering dogwood	2030	Med	Low	High
Diospyros virginiana	Persimmon	30—60	Med	Low	Med
Fagus grandifolia	American Beech	50—100	Slow	Med	Med
Ilex attenuata	East Palatka Holly	3045	Med	Med	High
llex cassine	Dahoon Holly	2540	Med	Med	Med
llex opaca	American Holly	3045	Slow	Med	Med
Juniperus silicicola	Southern Red Cedar	25—30	Med	High	High
Juniperus virginiana	Eastern Red Cedar	10-40	Slow	Med	Med
Liquidambar styraciflua	Sweetgum	60—100	Fast	Med	High
Liriodendron tulipfera	Tulip Tree/Yellow Poplar	80—100	Fast	Low	Low
Magnolia grandiflora	Southern Magnolia	60—100	Med	High	High
Magnolia virginiana	Magnolia/Sweetbay	40—60	Med	Low	Low
Nyssa slyvatica	Black Tupelo	50—80	Med	Low	Low
Ostrya virginiana	Eastern Hophorn beam	2040	Med	Low	High
Quercus alba	White Oak	50—80	Med	High	Med
Quercus austrina	Bluff Oak	2540	Med	Low	Low
Quercus chapmanii	Chapman Oak	3045	Slow	Med	High
Quercus laurifolia	Laurel Oak	60—100	Fast	Low	High
Quercus shumardii	Shumard Oak	4060	Slow	Low	Med
Quercus myrtifolia	Myrtle Oak	10—25	Slow	Med	High
Quercus virginiana	Live Oak	5060	Med	High	High
Taxodium distichum	Bald Cypress	60—100	Med	Med	High
Tilia floridana	Florida Basswood	30—60	Fast	Low	Low

Ulmus alata	Winged elm	20—40	Med	Low	High
Ulmus americana	American Elm	80—100	Fast	Low	Med

Table 37-2. Supplemental Tree	List for Landscaping		
Name	Common Name	Mature Height (ft.)	
Ulmus parvifolia	Chinese elm	4050	
Carya illinoensis	Pecan	70—100	
Quercus michauxii	Swamp chestnut oak	60—70	
llex attenuata	East Palatka holly	3045	
llex attenuata	Savannah holly	30—45	
llex cornuta	Chinese holly	20—30	
Taxodium ascendens	Pond cypress	60—100	
Quercus nuttalii	Nuttall oak	50—80	
Plantanus occidentalis	Sycamore	70—150	

Table 37-3. Minimum Tree Caliper at the Time of Planting	
Existing tree replacement	3 inches
All other plantings except below	3 inches
Individual single-family lots/homes	2 inches

Table 37-4[A] Ame	lia Island Protected Native C	anopy Trees				
Name Common Name Mature Rate of Salt Tolerance T						
Acer rubrum	Red Maple	35—50	Fast	Low	Med	
Betula nigra	River Birch	45—65	Fast	Low	Low	
Fraxinus spp.	Ash	60—80	Med	Med	Med	

Carya spp.	Hickory	80—120	Fast	Low	High
Celtis laevigata	Sugarberry/ Sugar hackberry	80—100	Fast	High	High
Diospyros virginiana	Persimmon	30—60	Med	Low	Med
Prunus spp.	Cherry	30—60	Med	Low	Med
llex opaca	American Holly	3045	Slow	Med	Med
Juniperus silicicola	Southern Red Cedar	25—30	Med	High	High
Juniperus virginiana	Eastern Red Cedar	10—40	Slow	Med	Med
Liquidambar styraciflua	Sweetgum	60—100	Fast	Med	High
Liriodendron tulipfera	Tulip Tree/Yellow Poplar	80—100	Fast	Low	Low
Magnolia grandiflora	Southern Magnolia	60100	Med	High	High
Magnolia virginiana	Magnolia/Sweetbay	4060	Med	Low	Low
Nyssa slyvatica	Black Tupelo/Black Gum	50—80	Med	Low	Low
Quercus alba	White Oak	50—80	Med	High	Med
Quercus laurifolia	Laurel Oak	60—100	Fast	Low	High
Quercus shumardii	Shumard Oak	40—60	Slow	Low	Med
Quercus virginiana	Live Oak	50—60	Med	High	High
Taxodium distichum	Bald Cypress	60—100	Med	Med	High
Ulmus americana	American Elm	80100	Fast	Low	Med

Table 37-4 Understory Trees	
Cornus florida	Flowering Dogwood
Chionanthus virginicus	White Fringetree
Magnolia x saulangeana	Saucer Magnolia
Prunus angustifolia	Chickasaw Plum
llex cassine	Dahoon Holly
llex attenuata	East Palatka Holly
Lagerstroemia spp.	Crape Myrtle
Juniperus chinensis	Chinese Juniper
Calistemon spp.	Bottlebrush
Gordonia lasianthus	Loblolly Bay

All trees planted shall be staked or guyed for a period of at least six (6) months in accordance with the following planting detail:



Planting Detail

- C. Minimum tree planting requirements by use.
 - 1. One and two-family dwellings. Each single-family and two-family lot must provide at least one (1) tree per three thousand (3,000) square feet of lot area for the first quarter acre of lot area. For lots exceeding one-quarter (¼) acre, one (1) tree for every additional one-quarter (¼) acre, or major fraction thereof, must be preserved or planted. Existing canopy trees, sabal palms and pine trees may be used to satisfy this requirement, in whole or in part, provided that they have a minimum caliper of four (4) inches DBH. When trees are planted to meet the minimum requirement they must be more than one species of tree listed in Tables 37-1 or 37-2 and meeting the material standards of this section. The foregoing represent the entire requirement applicable to individual one and two-family dwellings.
 - 2. *Multi-family, mobile home park and travel trailer parks.* In addition to the use buffer and perimeter landscaping adjacent to a right-of-way requirements found in this section, each

multi-family, mobile home park and travel trailer park must plant or preserve an additional one tree for every two (2) dwelling units. When trees are planted to meet the minimum requirement they must be more than one species of tree listed in Tables 37-1 or 37-2 and meeting the material standards of this section.

- 3. Non-residential developments. In addition to the buffer and perimeter landscaping adjacent to a right-of-way requirements found in this section, each commercial and/or industrial development must provide a minimum of ten (10) percent of the lot or parcel as pervious green space planted with one or more species of tree listed in Tables 37-1 or 37-2 for every five hundred (500) square feet of such green space.
- D. Perimeter landscaping adjacent to rights-of-way and streets: Except for individual one- and two-family dwellings, all developments located along a public or private right-of-way or street shall be required to provide the following perimeter landscaping. Perimeter landscaping adjacent to rights-of-way/streets and required screening of vehicle use areas as considered in this section and those uncomplimentary use buffers defined in section 37.06 LDC are required to be designed, through material selection and arrangement, in such a manner as to create depth in the planting area and increase visual interest through staggered heights. The illustrations provided in this article are for explanatory purposes. Natural areas which contain significant growth that serve the functional purpose of providing depth and variations in height may supplement new plantings in part or whole depending upon the quality of natural vegetation. The use of a wall or fence is permitted provided the wall or fence is located on the inner most boundary (behind the vegetation as viewed from outside the development) of the perimeter landscaping adjacent to rights-of-way/streets, required <u>uncomplimentary land use</u> buffer or other landscaped area.



1. A1A/S.R. 200, U.S. Highway 1 and U.S. 301. A strip of pervious land adjacent and parallel to the right-of-way line having an average width of twenty-five (25) feet and a minimum width of ten feet along the entire street frontage except for permitted driveways. This perimeter landscaping strip shall contain a minimum of three (3) canopy trees per one hundred (100) linear feet of property frontage and three (3) understory trees per one hundred (100) linear feet of property frontage. The canopy trees shall consist of more than one (1) species listed in Tables 37-1 or 37-2 and meeting the material standards of this section. Planted trees are not meant to be spaced evenly but rather randomly distributed by species.

If the required perimeter landscape is left undisturbed (except for authorized driveways and utilities), credit shall also be given for the preservation of pine and palm trees having a minimum eight-inch dbh. Undisturbed shall mean there is no grade change or other disturbance within ten (10) feet of a pine and five (5) feet of a palm. Understory clearing shall be by hand tools only. The area between preserved and planted trees can be supplemented with native or naturalized shrubs to provide required screening adjacent to parking areas.



2. Other arterial and collector roadways. All other arterial and collector roadways, as identified by the comprehensive plan, shall provide a strip of pervious land adjacent and parallel to the right-of-way line having an average width of fifteen (15) feet and a minimum width of seven and one-half (7½) feet along the entire street frontage except for permitted driveways. This perimeter landscaping strip shall contain a minimum of three (3) canopy trees per one hundred (100) linear feet of property frontage and three (3) understory trees per one hundred (100) linear feet of property frontage. The canopy trees shall consist of more than one species listed in Tables 37-1 or 37-2 and meeting

the material standards of this section. Planted trees are not meant to be spaced evenly but rather randomly distributed by species within the largest open spaces.



3. Local streets. A strip of pervious land adjacent and parallel to the street line having a minimum width of ten (10) feet along the entire street frontage except for permitted driveways. This perimeter landscaping strip shall contain a minimum of two (2) canopy trees per one hundred (100) linear feet of property frontage and three (3) understory trees per one hundred (100) linear feet of property frontage. The canopy trees shall consist of more than one species listed in Tables 37-1 or 37-2 and meeting the material standards of this section.



4. Sidewalks. Sidewalks or multi-use trail may be incorporated within an easement located within a perimeter landscaping strip if the average width is increased by the width of the sidewalk or trail above the minimum required width and if the sidewalk meanders around existing trees or is incorporated into the landscape design.

- 5. Required screening. Except for one- and two-family dwellings, all off-street parking areas, drive aisles, and paved storage areas lying within fifty (50) feet of, and visible from any street right-of-way, the perimeter landscaping requirement of this section shall also include shrubs planted as a hedge meeting the requirements of section 37.05.B.2 LDC.
- 6. Dumpsters and mechanical equipment (as permitted by the underlying zoning designation, mechanical equipment may include, but is not limited to, transformer pads, HVAC units, propane tanks, generators, or similiar) shall be screened through the use of a wall, which is one hundred (100) percent opaque in conjunction with landscaping. Minimum landscaping shall include one (1) shrub every two (2) feet. The shrub shall be maintained at a minimum of four (4) feet in height. One (1) canopy tree or understory tree per ten (10) linear feet of wall or fence unless said fence or wall is less than eight (8) feet in length. They shall be located at the side or rear of the building and screened from all rights-of-ways, or placed on a flat roof, screened by a parapet or similar architectural feature to shield it from the public view. Where a transformer pad is located along a public right-of-way, it shall be screened using a hedge meeting the standards of Sec. 37.05.B.2 of this Code along the sides visible from the right-of-way.
- 7. Use of understory trees (ref. Table 37-4 LDC) are permitted in lieu of native canopy trees listed in Table 37-1 and 37-2 as determined to be practical by the director of planning and economic opportunity or designee because of overhead utility lines or other overhead restrictions that cannot otherwise be mitigated through design modifications. Financial impacts related to design modifications necessary to avoid utilities will not be considered. Understory trees may be permitted at a rate of one (1) tree for every fifteen (15) feet of site/lot frontage along the right-of-way or street. Preserved or retained trees on-site located within the perimeter landscape strip defined in section 37.05.D LDC shall count towards satisfying this requirement provided the trees are healthy, as determined by an ISA certified arborist, are listed in Tables 37-1, 37-2 or 37-4, and do not interfere with existing or planned utilities. At the time of planting, Crape Myrtles shall be a minimum of eight (8) feet in height and measure three (3) caliper inches if a single trunk or an aggregate of six (6) inches if a multi-trunk.
- 8. Perimeter landscape strips required by this section shall not be encumbered by a utility easement, unless 1) the utilities are located underground; 2) will not prevent trees from reaching maturity; and, 3) approval for tree planting is granted by the utility provider in writing, on utility provider letterhead, to Nassau County. The perimeter landscape strip required by this section shall not include any portion of a stormwater management facility, borrow-pit, fishing pond or similar excavation.
- 9. For one- and two-family residential developments where all lots/building sites measure five (5) acres in area or greater and have a minimum of one hundred (100) feet of frontage on a street, the required perimeter landscape strip adjacent to a street or right-of-way may be included within the lot/building site. The installation of plant material may take place with the construction of the home on that particular lot/building site. For all other cases, the perimeter landscape strip adjacent to a street or ROW shall be in a separate tract of land under the control of the home owners association, or equivalent, and not included within a lot/building site.
- 10. Back flow preventer(s) and lift stations shall generally be to the side or rear of a building. Where they cannot be placed at the side or rear of a building, it shall be screened from public rights-of-ways through the use of shrubs planted as a hedge meeting the standards of Sec. 37.05.B.2 of this Code. Driveways to these facilities are allowed through the landscape buffer.



Figure credit: Sue Ann Alleger, Nassau County, FL Dept. of Planning and Economic Opportunity

- E. Intersection sight distance clearance:
 - 1. At the intersection of two (2) streets, all landscaping within that area defined by the Florida Department of Transportation sight triangle, as outlined in the *FDOT Design* Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System shall be installed and maintained below three (3) feet in height or above eight (8) feet in height.
 - 2. When a driveway intersects a right-of-way, clear unobstructed cross visibility shall be provided within the site triangle formed by such intersection. The sight triangle shall be measured from the point of intersection, fifteen (15) feet along the access way and then fifteen (15) feet along the right-of-way, with the third side being a line connecting the two (2) points. Cross visibility within the sight triangle shall be unobstructed between the height of three (3) feet and eight (8) feet measured from the ground line. Trees and palms

shall have their limbs and foliage trimmed in a manner that no limbs or foliage will extend in to the cross visibility area. To ensure proper visibility at the intersection of access ways with public right-of-ways, excluding properly trimmed trees as previously stated; only ground cover type plants shall be allowed within the sight triangle.

F. Interior landscaping regulations:

- Except for one- and two-family dwellings, all off-street parking areas shall contain interior landscaping islands at a ratio of one (1) island for each ten (10) parking spaces. Rows of parking spaces abutting a sidewalk adjacent to a building are exempt from required landscape islands except for terminal islands at the end of each row. Such landscaped areas are creditable to the minimum landscape requirements for multi-family, mobile home park, travel trailer park and non-residential developments.
- Each separate interior landscaped island shall contain a minimum of one hundred sixtysix (166) square feet and shall be at least ten (10) feet wide as measured from back of curb. A minimum of one (1) canopy tree shall be planted in each interior landscaping island with the remaining area adequately planted with shrubs, ground cover, or other approved landscaping materials.
- 3. All interior landscaping shall be protected from vehicle encroachment by curbing or wheel stops.
- 4. Interior landscaping shall be located in a manner, which will divide or interrupt the broad expanse of paving. Landscaped areas shall subdivide rows of parking spaces into a maximum of ten (10) consecutive spaces. Each group of ten (10) shall have terminal islands at each end. This maximum may be adjusted to provide for the preservation of existing canopy trees.

G. Landscaping Site Plan Regulations:

- For all projects subject to this to this section of the Code, landscaping site plans shall be submitted with the Preliminary Binding Site Plan (PBSP), when a PBSP is not required, it shall be submitted with the Site Engineering Plans. The landscaping site plan shall contain the following information in graphic and tabular form:
 - a. <u>Impervious lands (for the purpose of this Code, impervious lands include, but may</u> not be limited to, total area of all structures, all pavement areas, stormwater retention facilities measured at the normal high-water level, and wetlands).
 - b. Pervious strips adjacent to rights-of-ways (reference Sec. 37.05.D).
 - c. Uncomplimentary land use buffers (reference Sec. 37.06 LDC).
 - d. Interior landscaping areas (reference Sec. 37.05.F LDC).
 - e. <u>A planting schedule demonstrating consistency with this Code shall be included</u> for all landscape plans.

Example Site Plan (not to scale) provided for a commercial development:



- G.<u>H.</u> Xeriscape. Xeriscaping (waterwise) is landscaping that conserves water and protects the environment and is adaptable to local conditions and which are drought tolerant. Xeriscape techniques maximize the conservation of water use with site appropriate plants, an efficient watering system, proper planning and design, soil analysis, practical use of turf, the use of mulches (which may include the use of solid waste compost) and proper maintenance. The following water efficient principles should be applied to the landscape plan:
 - 1. All plantings shall be grouped in zones according to water requirements and shall be irrigated in zones separating high water use areas from drought tolerant zones. The zones are as follows:
 - a. *High water use zone:* A zone containing plants which are associated with moist soils and require supplemental water in addition to natural rainfall to survive. This zone includes most turf grasses.
 - b. *Moderate water use zone:* A zone containing plants which survive on natural rainfall with supplemental water during seasonal dry periods.
 - c. Low water use zone: A zone containing plants which survive on natural rainfall without supplemental water.
 - Fifty (50) percent of the plants used in all vehicular use area landscape designs should be drought tolerant and located in groupings according to zones designated by the water requirements.
 - Turf grass areas should be consolidated and limited to those areas on the site that receive pedestrian traffic, provide for recreational uses, provide soil erosion control such as berms, slopes and swales, where turf grass is used as a design unifier or other similar practical use.

- 4. All planting areas shall be mulched with approximately three (3) inches of organic mulch, such as pine bark or shredded hardwood chips.
- H. I. *Firewise.* Landscape within the wildlife/urban interface are subject to wildfire hazard and should incorporate Firewise landscaping techniques. Such techniques include:
 - 1. Creating a defensible space zone around buildings. Such zones shall provide space for fire suppression equipment in the event of an emergency and progressively limit plantings near structures to carefully spaced fire resistant species.
 - 2. Placing low growing species and groundcovers beneath canopy trees and rooflines to avoid creating a continuous fuel source from ground to tree or roof.
 - 3. Utilizing driveways, lawn areas and walkways to provide firebreaks between large areas of dense vegetation.
 - 4. Selective thinning of fire prone plant species in existing vegetation areas to reduce fuel loads. A list of fire prone species is available from the Division of Forestry.
- H.J. Prohibited trees. Any species identified on the most recent Florida Exotic Pest Plant Council Invasive Plant list (Category I or II) is expressly forbidden from being planted or used as required or supplemental landscaping material. Invasive non-native vegetation in general is a public nuisance that degrades landscaped and natural areas.
- J. K. Maintenance. The property owner is responsible for the maintenance of all landscape areas required by this section. Maintenance includes irrigating, mowing, trimming, fertilizing and carrying out those activities necessary to keep the plant material in a healthy and growing condition, maintain visual clearance and allow passage of vehicles and pedestrians on public roads and non-exclusive easements.
 - 1. Upon determination by the county that a required tree or plant is dead or severely damaged or diseased, the tree or plant shall be replaced by the owner with plant material meeting the requirements of this section.
 - 2. All buffer areas required as part of a development plan, whether in common or private ownership, shall be the responsibility of that development's property owners' association. Where there is no property owners' association, such landscaped areas shall be the responsibility of the property owner.

3. Trees on developed properties may be pruned to maintain shape and promote their shadegiving qualities. They should be pruned to remove diseased or dying portions in areas where falling limbs could be a hazard to people or property. Lower limbs may be removed to provide clearance. In addition, trees located in association with vehicular use areas shall also be pruned to allow a seven-foot clearance from ground level to avoid potential for damage or injury to pedestrians and cleared to thirteen (13) above pavement level for vehicles. However, the excessive pruning or pollarding of trees into round balls of crown or branches resulting in an unnecessary reduction of shade is prohibited and may require supplemental plantings. All pruning shall be done following the American National Standard for Tree Care Operations "Tree, Shrub and Other Woody Plant Maintenance - Standard Practices."

Section 37.06. - Buffers between certain uses.

Landscaped buffers shall be provided in accordance with this section where certain uses directly abut one another. For the purpose of this section, directly abutting means a shared property line or non-contiguous properties separated by a private roadway or waterway located within a right-of-way or easement less than sixty (60) feet in width.

- 1. General provisions.
 - a. Landscaped buffers shall be located along the property line of the property to be developed extending inward.
 - b. The minimum required landscaped buffer within a residential development may be included within an individual building lot but must be supplemental to the minimum setback and area requirements of the district in which it is located. Non-residential sites may incorporate the buffer within lots and count it toward setback and open space requirements.
 - c. Except for a pedestrian crossing, no parking, paving or structures are permitted within the required landscape buffer. This limitation does not extend to underground utilities, hydrants and valve assemblies, pedestal boxes and incidental ground signs that do not interfere with required plant material.
 - d. Landscape buffers may include portions of the stormwater management system only upon a demonstration by the applicant that the character and intent of the buffer is not compromised. As a maximum, not more than twenty (20) percent of the buffer will be available for dry retention/detention. Where a pre-existing wetland is incorporated within the buffer this limitation may be waived.
- 2. Minimum landscape buffer types required on abutting property boundaries between uses are shown in Table 37-5 below. When both properties are developed in accordance with this section, the required buffers are additive. By way of illustration, the entire buffer between a single-family subdivision and an office park will be a minimum of twenty (20) feet, with ten (10) feet on each side of the common property line. If an adjacent property is vacant, its use shall be based upon it Future Land Use Map designation. If the Future Land Use Map and existing use of the property are inconsistent, the buffer requirement will be based upon whichever use results in a more intensive buffer.

Table 37-5. Mi	nimum	Buffers by	Гуре				
Proposed Use of Subject Property		One or two-family dwelling(s)	Multi- family dwelling(s)	Institutiona l (churches, schools, etc.)	Neighborhoo d Commercial	All other Commercia I	Industria I
Timber- leased	Non e	None	None	None	None	None	None
One or two- family dwelling(s)	Non e	None	L	L	L	М	М
Multi-family dwelling(s)	Non e	М	None	М	М	М	М
Institutional (churches, schools, public buildings, etc.)	L	L	L	None	L	М	Μ
Neighborhoo d commercial, office park	L	L	L	L	None	L	L
All other Commercial	L	Н	М	Н	М	None	None
Industrial	М	H	Н	Н	М	L	None
Key to buffer ty	pes: S	See Table 37	7-6				

3. Minimum buffer width and planting specifications for required buffer types are indicated in the following table.

Table 37-6. Minimum Buffer Specifications							
Puffor Tupo From Table 27 5	Minimum Width	Plant Material pe	Sereening				
Buffer Type From Table 37-5		Canopy Trees	Shrubs	Screening			
L=Low Density	10 feet	3	67	No			
M=Medium Density	15 feet	4	67	Yes			
H=High Density	25 feet	5	90	Yes			

- 4. Buffer landscaping and screening:
 - a. Medium and fast growing canopy trees shall be chosen from Table 37-1 having a dense, evergreen crown to provide maximum visual separation between abutting properties.
 - b. Shrubs shall be spaced to provide a natural appearance and inhibit free movement of pedestrian traffic except at a mutually agreed upon pedestrian connection. Where screening is proposed consisting of a fence or wall, shrubs are not required.
 - c. Where screening is required, it shall consist of one or more of the following materials:
 - (1) A five (5) foot masonry wall stuccoed on the side facing the abutting property.
 - (2) A <u>solid</u> six (6) foot fence <u>creating at least seventy-five (75) percent opacity and</u> constructed of resistant materials such as vinyl, cypress or pressure treated wood.
 - (3) Existing dense vegetation.
 - (4) A berm three (3) feet in height located entirely within the buffer and having the requisite number of shrubs planted along the crown.