



CHAPTER 4

SITE DESIGN REQUIREMENTS

		Page
4.00.00	GENERALLY	4-3
4.00.01	Purpose and Intent	4-3
4.00.02	Applicability	4-3
4.00.03	Design Principles	4-3
4.01.00	DENSITY AND HOUSING STANDARDS	4-4
4.01.01	Density and Housing Types	4-4
4.02.00	DESIGN STANDARDS FOR BASE ZONING DISTRICTS	4-5
4.02.01	Standards for Lot Design	4-5
4.02.02	Requirements Regarding Combining Lots	4-7
4.02.03	Standards for Building and Building Placement	4-7
4.02.04	Specific Requirements for lots abutting the municipal golf course fairway in R1-G	4-10
4.02.05	Specific Requirements for Resort Rental Residential	4-10
4.02.06	Specific Standards for Townhouse Development	4-11
4.03.00	DESIGN STANDARDS FOR OVERLAY DISTRICTS	4-11
4.03.01	Standards for Planned Unit Development (PUD) Overlay	4-11
4.03.02	Standards for Development in the Airport Overlay	4-13
4.03.03	8 th Street Small Area Design Standards	4-18
4.04.00	STANDARDS FOR SUBDIVISIONS	4-20
4.04.01	Purpose	4-20
4.04.02	General Requirements	4-20
4.04.03	Standards for Lots and Blocks	4-20
4.04.04	Requirements for Infrastructure	4-21
4.05.00	LANDSCAPING, BUFFERS, AND TREE PROTECTION	4-23
4.05.01	Generally	4-23
4.05.02	Applicability	4-23
4.05.03	Landscape Materials Standards	4-24
4.05.04	Requirements for Landscape Plans	4-28
4.05.05	Minimum Requirements for Residential Development	4-28
4.05.06	Minimum Requirements for Non-Residential Development and Mixed Use	4-29
4.05.07	Parking Lot Landscape Requirements	4-31
4.05.08	Freestanding Signs Landscape Requirements	4-31
4.05.09	Mechanical Equipment Screening Plantings	4-31
4.05.10	Retention and Detention Ponds	4-31
4.05.11	Requirements for Street Trees	4-32
4.05.12	Buffer Requirements	4-32
4.05.13	Hardship Relief	4-33
4.05.14	Tree Protection Requirements	4-36
4.05.15	Heritage Trees	4-41

List of Tables		Page
Table 4.01.01	Density and Housing Types in Base Zoning Districts	4-4
Table 4.02.01 (J).	Design Standards for Lots	4-6
Table 4.02.03 (E).	Design Standards for Building Heights & Setbacks	4-8
Table 4.05.03(C).	Design Options for Xeriscape Landscaping.	4-26
Table 4.05.05(B).	Types and Plant Requirements for Buffers.	4-33
Table 4.05.05(C).	Buffer Requirements Between Zoning Districts.	4-34

4.00.00 GENERALLY

4.00.01 Purpose and Intent

The intent of this chapter is to provide design standards applicable to all development activity in the City. The purposes are to:

- A. Establish reasonable and equitable standards of design;
- B. Ensure that public facilities and utilities are available to all developments;
- C. Provide for adequate light, air, and privacy;
- D. Prevent the overcrowding of the land and undue congestion of the population; and
- E. Provide for open spaces and recreational areas through the most efficient design and layout of the land.

4.00.02 Applicability

- A. No building shall be constructed, installed, enlarged, reconstructed, or structurally altered, except in compliance with the standards and requirements of this LDC.
- B. Where an overlay district applies to a site, the standards for the overlay district shall apply in addition to the standards of the underlying zoning district.
- C. In addition to standards for all development within a zoning district, supplemental standards for specific uses are set forth in Section 6.02.00. Such supplemental standards shall apply in addition to the standards of the zoning district and overlay district, if applicable, in which the development is located.
- D. Where conflict arises between standards required in a zoning district, in an overlay district, by supplemental standards, or by other legally binding document, the following rules shall be used in the application of standards:
 1. Where a City-approved site plan, City-approved development agreement, court order, or other legally binding document which authorizes development applies to the site, the standards in the legally binding document shall apply.
 2. In all other situations, the stricter standard shall apply.

4.00.03 Design Principles

Development design shall first take into account the protection of environmental and natural resources as set forth in Chapter 3. All development shall be designed to avoid unnecessary impervious surface cover; to provide adequate access to lots and sites; and to avoid adverse effects of shadow, glare, noise, odor, traffic, drainage, and utilities on surrounding properties.

4.01.00 DENSITY AND HOUSING STANDARDS

4.01.01 Density and Housing Types

Table 4.01.01. Density and Housing Types in Base Zoning Districts.

Zoning District	Maximum Gross Density (dwelling units per acre)	Permissible Housing Types
RE	1.0	Single-family detached
R1-G	4.0	Single-family detached
R-1	4.0	Single-family detached
RLM	6.0	Single-family detached
R-2	8.0	Single-family detached Duplex structures Triplex structures Townhouses
R-3	10.0	Single-family detached Duplex structures Triplex structures Townhouses Multi-family structures with 4 or more units
OT-1	10.0	Single-family detached
OT-2	10.0	Single-family detached
MU-1	8.0	Single-family detached Duplex structures Triplex structures Townhouses Mixed Use
MU-8	18.0	Single-family detached Duplex structures Triplex structures Townhouses Multi-family structures with 4 or more units Mixed Use
C-1		Prohibited
C-2		Prohibited
C-3	34.0	Single-family detached Duplex structures Triplex structures Townhouses Multi-family structures or mixed use
I-1		Not permitted as a principal use ¹
I-2		Not permitted as a principal use ¹
I-A		Not permitted as a principal use ¹
I-W		Not permitted as a principal use ¹
W-1	2.0 with bonus potential to 4.0	Single-family within mixed use
PI-1		Not permitted as a principal use ¹
CON		Not permitted as a principal use ¹
REC		Prohibited

¹An accessory dwelling unit is permissible for caretakers or security personnel. See Section 5.01.04.

4.02.00 DESIGN STANDARDS FOR BASE ZONING DISTRICTS

4.02.01 Standards for Lot Design

- A. The following types of lots are permissible:
 - 1. Corner lot, located at the intersection of two (2) streets and abutting such streets on two (2) adjacent sides. Lots abutting a right of way that is used as a beach access shall not be considered a corner lot, if access is not provided through the beach access.
 - 2. Double-frontage lot, with frontage on two (2) opposing sides; where one (1) frontage is on an alley, the lot is not considered a double-frontage lot. A double-frontage lot may also be called a through-lot.
 - 3. Interior lot, which has street frontage on only one (1) side.
 - 4. Lots that are located in conformity with the established street pattern.
- B. Only one (1) principal residential building and its allowable accessory buildings shall hereafter be erected on any one (1) lot.
- C. Except as specifically provided in this LDC, no lot existing at the time of adoption of this LDC shall be reduced, divided, or changed so as to produce a lot or tract of land which does not comply with the minimum standards as set forth in this LDC.
- D. The impervious surface ratio is calculated by dividing the total of all impervious surfaces on the lot by the total lot area. Water bodies are impervious surfaces.
- E. Where cluster development is permissible and proposed under unified development control, the calculation of impervious surface shall apply to the entire site and shall not be applied to individual lots within the development site.
- F. The floor area ratio is calculated by dividing the total of all floor areas on the site by the total site area. Floor areas include the gross floor area on each floor or story of the principal building and the floor area of any accessory building, not including parking areas.
- G. Minimum lot area shall be consistent with the density standards set forth in Table 4.01.01. For the purpose of determining consistency of the lot area with density standards, density shall be as defined in the Comprehensive Plan.
- H. The minimum lot area for lots in the RE zoning district shall be 43,560 square feet.
- I. Lots shall be designed to comply with the standards set forth in Table 4.02.01(J).

Table 4.02.01(J). Design Standards for Lots

Zoning District	Minimum Lot Width (ft.)	Maximum Impervious Surface Ratio for Lots (%)	Maximum Floor Area Ratio for Lots (%) (Note 1)
RE	100	75	50
R1-G	75	75	50
R-1	50 or 75 Note 2	75	50
RLM	50	75	50
R-2	50 Note 4	75	50
R-3	50	75	50
OT-1	46.5	Note 7	50
OT-2	46.5	Note 7	50
MU-1	50	75	50
MU-8	25	75	200
C-1	50	75	50 Note 6
C-2	50	75	50
C-3	25	75 Note 3	200
I-1	75	75	50
I-2	75	75	50
I-A	75	75	50
I-W	75	75	75
W-1	25	75	75
PI-1	50	75 Note 5	50
CON	NA	5	NA
REC	NA	75	NA

- Notes:
1. For RE, R-1, R-2, R-3, OT-1, and OT-2, the FAR standard applies to any permissible commercial uses.
 2. The minimum lot width for lots platted prior to the effective date of this LDC is fifty (50) feet. The minimum lot width for lots platted on or after the effective date of this LDC is seventy-five (75) feet.
 3. The maximum impervious surface ratio within the "Central Business District" land use category, as depicted on the Future Land Use Map, may be 1.00 where the application is for redevelopment of a lot that is developed with 100% impervious surface. Where the application is for new development of a vacant lot, the maximum impervious surface on the lot may be 100% where stormwater facilities are available and have sufficient capacity to accept the runoff from the lot.
 4. Development is permissible on lots which were platted before the effective date of this LDC and have a minimum width of twenty-five (25) feet.
 5. Proposed development on lots within the "Recreation" land use, as depicted on the Future Land Use Map shall not exceed 0.25 impervious surface ratios.
 6. Lots located within 800 feet of the Mean High Water Mark of the Atlantic Ocean shall be permitted a maximum FAR of 1.50, as long as the FAR for all General Commercial lots in the City, combined, does not exceed an overall FAR of 0.50.
 7. Refer to Chapter 8 Section 8.01.01.02 for maximum lot coverage.

4.02.02 Requirements Regarding Combining Lots

A. Applicability

Lots or parcels that abut Ocean Avenue, North Fletcher Avenue, or South Fletcher Avenue are subject to the provisions of this section regarding combining lots.

B. Purpose

The provisions of this section are intended to ensure that development in the beach area on the streets identified in Section 4.02.02(A) above is consistent with the existing pattern of development.

C. Combining two (2) or more lots is prohibited where the resulting lot is not compatible with the surrounding neighborhood as defined by any one of the following characteristics:

1. The proposed lot has a width greater than 100 feet.
2. The proposed lot area is not consistent with the density for the zoning district, as set forth in Table 4.01.01.

4.02.03 Standards for Buildings and Building Placement

A. Encroachment

1. A yard created by the setbacks set forth in this section shall not be considered a yard for any other building.
2. Every part of a required yard shall be open and unobstructed from its lowest point to the sky, except as set forth in Section 4.02.03(A) (3), (4), (5) and (6) below.
3. Front entry steps may encroach into a minimum front yard up to forty-two (42) inches.
4. The following building features may project into a minimum yard up to twenty-four (24) inches: sills, belt courses, cornices, buttresses, ornamental features, chimneys, and eaves.
5. The following building features may project into a minimum rear yard up to forty-two (42) inches: open or enclosed fire escapes, outside stairwell, and balconies.
6. Wooden decks and porches with a finished floor level of 12" or less from natural grade or non-covered open air balconies are permissible encroachments into required yard spaces, subject to the following:
 - a. A five (5) foot minimum setback is required for all side and rear yards.
 - b. For front yards, wooden decks and non-covered open air balconies shall comply with the front yard setbacks specified for each zoning district.
 - c. For installation of a wooden deck on varying topography, the floor level may be allowed to reach a maximum of 24" from natural grade to accommodate stairs and topographical impracticalities.
7. Mechanical equipment may be located within the side or rear yard setback, but not closer than five (5) feet to side or rear yard lot lines.
8. Specific requirements for fences and signs are outlined in Sections 5.01 and 5.03.

B. On double-frontage lots, the designated front yard shall be determined by the City.

C. Standards for building height:

1. Building height shall be measured from the approved finished grade, to the highest point on the structure.
2. Calculation of maximum height shall not include appurtenances or attachments such as chimneys, elevator shafts, antennas, decorative architectural features, steeples, air conditioning equipment enclosures, cupolas, weather vanes, and other similar minor building features. All ornamental features which are exempt from the maximum height shall not be habitable.

3. The following structures shall not be subject to height limits: telecommunications towers, flagpoles, and City-owned water towers.
- D. Buildings shall comply with the standards in Table 4.02.03(E) set forth below:

Table 4.02.03(E). Standards for Building Heights and Setbacks

Zoning District	Maximum Building Height (ft.) ¹	Minimum Setback			
		Front (ft.)	Side ²	Rear (ft.)	Corner Lot (side abutting street) (ft.) ³
RE	35	25	10% of lot width	25	15
R1-G	35	25	10% of lot width	25, 50 feet for fairway lots	15
R-1	35	25	10% of lot width	25	15
RLM	35	25	10% of lot width	25	15
R-2	35	25	10% of lot width	20	15
R-3	45	25	10% of lot width	20	15
OT-1	35	See specific standards in Section 8.01.01.02.			
OT-2	35	See specific standards in Section 8.01.01.02.			
MU-1	35	None	None ⁴	10	10
MU-8	45	See specific standards in Section 4.03.03			
C-1	45	None	None ⁴	10	10
C-2	45	None	None	None	None
C-3	45	None	None	None	None
I-1	45 ⁵	None	None	None	None
I-2	45 ⁵	None	None	None	None
I-A	45	None	None	None	None
I-W	35	None	None	None	None
W-1	See specific standards in Section 8.01.02.				
PI-1	45	25	10	10	10
CON	25	None	None	None	None
REC	25	None	None	None	None

1. A building on any lot within 800 feet of the mean high water line of the Atlantic Ocean shall not exceed thirty-five (35) feet in height.
2. Each side yard setback shall be increased by one-half (1/2) foot for each one (1) foot, or fraction thereof, of building heights above twenty-five (25) feet.
3. Buildings shall not encroach into the required clear visibility triangle at intersections, as set forth in Section 7.01.08.
4. Where access is provided from an alley or public street to the rear of the principal building, no side yard setback is required. Where such access is not available, one (1) side yard shall be a minimum of ten (10) feet. Any other side yard shall have a minimum side yard setback of zero (0) feet.
5. Manufacturing and/or Assembly – Heavy uses shall be exempt from height regulations.

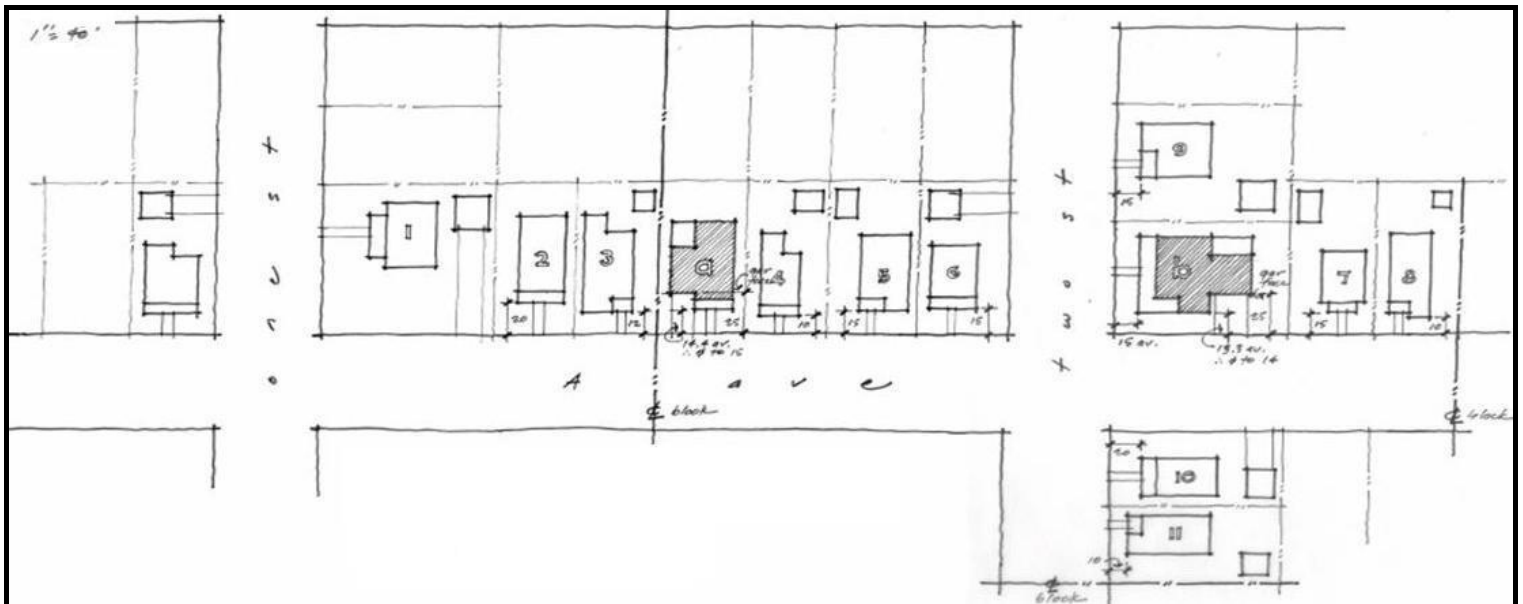
F. Context Sensitive Setback Determination

1. Authority and Limitation

The City Manager is authorized to alter setback standards in Table 4.02.03(E) of this LDC based on context sensitive review of setbacks in the vicinity of the subject property. Accessory structure setbacks are not eligible for context sensitive setback determinations. The authority to alter setback standards is limited to the following:

- a. If at least half of the lots on the same block face are occupied by principal structures and at least 50% of those principal structures do not comply with minimum front yard setbacks, property owners may elect to apply for a context sensitive front yard setback determination.
 - i. The front setback of other principal structures on the block face must be measured from the property line to the closest vertical element of the roofed portion of the principal structure, such as porch supports or the building face. Block Face shall be defined as one (1) side of a street between two (2) intersecting streets. The orientation of structures on corner lots determines the applicable block face.
 - ii. On properties seeking a context sensitive setback determination, principal structures must be set back from the front property line a distance equal to the average front setback depth of all principal structures on the same block face, using measurements obtained in 4.02.03(F)(1)(a)(i).
 - iii. Buildings that front on a different street than the subject lot or that are separated from the subject lot by a street or alley may not be used in computing the average.
 - iv. In using a context sensitive setback determination, front-loaded garages must be setback at least twenty-five (25) feet in all cases.

Figure 4.02.03(F): Contextual Setback Determination



In this example, lots 2, 3, 4, 5, and 6 represent the block face. Lot 1 is not included in the block face calculations because it fronts on a different street. If this block were classified in a R-2 district, the minimum required front setback would be 25 feet. The block face shown would qualify for use of a contextual front setback determination since more than 50% of the principal structures on the block

face do not comply with the R-2 district's 25-foot front setback requirement. When constructing on lot "a" the property owner would be allowed to use the average setback of all existing principal structures on the block face. In this example, the resulting contextual setback would be 14.4 feet—the average of front setbacks for structures on lots 2, 3, 4, 5 and 6.

Lot "b" may use the setback of lot 9, since the orientation of the structure on lot "b" will be oriented onto two streets and lot 9 is the only other structure on this block. The orientation of structures on corner lots determines the applicable block face.

2. Procedure

- a. An application and applicable fees for a context sensitive setback determination shall meet the requirements set forth in Section 11.01.03, and City policies, as amended from time to time.
- b. Measurements accompanying an application must be validated by a licensed land surveyor.
- c. The City Manager shall evaluate the application for a context sensitive setback determination for compliance with the requirements set forth in Section 4.02.03(F)(1) above.
- d. Upon approval, the City Manager shall provide a notice of intent to approve, to be posted on the subject property for a period of ten (10) days. Any appeals of this intent to approve shall follow the process provided in Section 11.07.00.
- e. Following the notice period, the City Manager issues a written order stating the approved setbacks for the subject property. A copy of such order shall be submitted with any building permit application for the property.

3. Monthly Reports Required

A monthly report shall be prepared to summarize the number and type of context sensitive setback determinations granted in the previous month.

4.02.04 Specific Requirements for Lots Abutting the Municipal Golf Course Fairway in R1-G

- A. For purposes of this subsection, the term "golf fairway residential areas" shall mean all those residential lots of land located adjacent to the municipal golf course.
- B. That portion of any golf fairway residential lot or block within 25 feet of the lot or block line bordering the golf course shall be in general conformity with the overall landscaping pattern for the golf course fairway area established by the golf course architect. All individual lot or block landscaping plans must be approved by the community development department.
- C. There is reserved to the city a golf course maintenance easement area on each lot adjacent to the fairway. This reserved easement shall permit the city at its election to go onto any fairway lot at any reasonable hour and maintain or landscape the golf course maintenance easement area. The maintenance and landscaping may include regular removal of underbrush, trees less than six inches in diameter, stumps, trash or debris, planting of grass, watering, application of fertilizer, and mowing the easement area. This golf course maintenance easement area shall be limited to the portion of those lots within 25 feet of the lot line bordering on the golf course or that lesser area as may be shown as a golf course maintenance area on the recorded plat of the lot. No fence shall be allowed on any golf course maintenance easement.

4.02.05 Specific Requirements for Resort Rental Residential

- A. Resort rental residential units shall be limited to occupancy periods per rental of thirty (30) or fewer days.

- B. Dwelling units used as resort rental residential units shall provide one (1) parking space for each two (2) occupants; occupancy shall be the number of occupants according to the fire rating.
- C. Parking shall be located in the side or rear yard, except for lots abutting the Atlantic Ocean. Parking shall be located at least ten (10) feet from the front property line where parking is permissible in the front yard. This provision is for new resort rental permits only. For new Resort Rental permits issued after October 1, 2006 parking is prohibited in the front yards of houses on the west side of Fletcher Avenue.

4.02.06 Specific Standards for Townhouse Development

- A. Townhouse development shall comply with the standards and criteria of the zoning district in which it is proposed. The additional standards set forth in this section shall apply to all townhouse development.
- B. A townhouse is a single-family attached dwelling unit. It is contiguous to adjacent units by a common wall.
- C. There shall be at least two (2) but not more than six (6) units in one (1) building.
- D. Each townhouse dwelling unit shall have a direct entrance to the outside, and shall not open to a common lobby, hallway, foyer, or other similar space.
- E. Where all lots, parcels, and dwelling units are under common ownership, there shall be a management plan to demonstrate unified control and management of common areas and facilities.
- F. Where common open space, recreation facilities, or other accessory structures or facilities are proposed, sidewalks or pedestrian paths shall be provided to connect buildings, parking lots, open space, and common areas.

4.03.00 DESIGN STANDARDS FOR OVERLAY DISTRICTS

4.03.01 Standards for Planned Unit Development (PUD) Overlay

D. Purpose

It is the purpose of the PUD overlay district to provide flexible land use and design and to allow planned diversification and integration of uses and structures, while retaining to the City the authority to establish limitations and regulations thereon for the benefit of the public health, welfare, and safety. A PUD overlay district is intended to promote economical and efficient land use, an improved level of amenities, appropriate and harmonious variety in physical development, creative design, variety of housing types, and a better urban environment.

B. A PUD overlay district shall have the following characteristics:

1. Unified control for development purposes;
2. Unified site design, planned and developed as a whole, in a single development operation or a programmed series of development operations, including lands, buildings, structures, and uses;
3. Civic spaces in residential developments which provide opportunities for resident social interaction;
4. Commercial land uses, if any, which provide convenient service, employment, and access, and yet remain separated from residential areas by the use of landscaping and natural buffers; and
5. Conservation of natural resources as set forth in Chapter 3.

C. A PUD shall provide a public benefit. At a minimum, two (2) or more of the following public benefit conditions shall result from the implementation of the proposed PUD:

1. Replacement of nonconforming development;
2. Creation of public open space, such as plazas or parks;

3. Improved waterfront protection and enhancement of views of oceanfront and riverfront areas;
 4. Preservation of designated historically significant structures;
 5. Replacement or rehabilitation of obsolete, blighted, or underutilized buildings; or
 6. Provision of bicycle paths and walkways that provide public access to public open space or water bodies.
 7. An application for a PUD shall contain comprehensive and detailed plans for development of the site, including building location, building dimensions, building elevations, location, and dimensions of accessory structures, landscaping, open space, amenities, and detailed plans for infrastructure.
- D. An application for a PUD shall contain comprehensive and detailed plans for development of the site, including building location, building dimensions, building elevations, location and dimensions of accessory structures, landscaping, open space, amenities, and detailed plans for infrastructure.
- E. An application for approval of a PUD shall include a description of the program for provision, operation, and maintenance of areas, improvements, facilities, and services intended for common use by some or all of the occupants of the PUD, but which will not be provided, operated, or maintained at general public expense.
- F. A PUD overlay district is permissible in the following zoning districts: R-1, RLM, R-2, R-3, MU-1, C-1, and C-2.
- G. A PUD overlay district is prohibited within the Coastal High Hazard Area as established in the Comprehensive Plan.
- H. The following general design standards shall be used in evaluating a PUD:
1. The preferred access to a PUD is an arterial or major collector street. A PUD shall be located and designed to minimize traffic impacts in established residential neighborhoods.
 2. The natural topography, soils, natural vegetation, and surface water shall be preserved and utilized through the careful location and design recreation areas, open space, and drainage facilities. Open space areas shall utilize wetlands, floodplains, shorelines and other natural features.
- I. The following specific design requirements apply to PUD development:
1. The minimum land area for a PUD is five (5) acres, except as set forth in Section 4.03.01(I)(2) below.
 2. Where a minimum of twenty-five (25) percent of the dwellings in a residential PUD are set aside to meet affordable housing needs, the minimum land area may be reduced to two (2) acres.
 3. A residential PUD shall include two (2) or more housing types. Permissible housing types include: single-family attached, single-family detached, townhouse, duplex, triplex, and multi-family buildings.
 4. Within a residential PUD, five (5) percent of the land area shall be designed and used for civic or recreational purposes. Water bodies and wetlands shall not be included within the calculation of land area set aside for civic or recreational purposes.
 5. Where residential uses are permissible in the underlying zoning district, the maximum residential density shall comply with the density standards set forth in Table 4.01.01.
 6. Where nonresidential uses are permissible in the underlying zoning district, the maximum floor area ratio shall not exceed 0.21.
 7. Within a mixed-use PUD, the following standards apply:
 - a. A minimum of five (5) percent of the land area shall be designed and used for civic purposes;

- b. A maximum of fifty (50) percent of the land area shall be devoted to nonresidential uses;
- c. A maximum of eighty (80) percent of the land area shall be devoted to residential uses; and
- d. Water bodies and wetlands shall not be included within the calculation of land area set aside for civic or recreational purposes.

J. The following site design standards may deviate from the standards applicable to the underlying zoning district, and, upon approval of a site plan for the PUD, shall become binding upon all development within the PUD:

1. Minimum building setbacks;
2. Maximum building height;
3. Minimum parking ratio;
4. Maximum impervious surface ratio;
5. Minimum lot width; and
6. Landscape design.

4.03.02 Standards for Development in the Airport Overlay

Construction design standards for development on the Airport have been established to apply reasonable criteria to guide the development and improvement of leaseholds at Fernandina Beach Municipal Airport. These design standards are described and depicted in the Architecture and Building Design Standards for Development on the Airport, which is adopted by reference and made a part hereof. Objectives of these design standards are:

1. Facilitate high quality development which seeks to maximize the utilization of property for new buildings and facilities and, when appropriate, renovate existing facilities.
2. Assure that all development is aesthetically attractive and presents a pleasing and reasonably consistent appearance with a reasonable economic life.
3. Promote measures that will assure that airport safety and security issues are properly addressed.
4. Promote the efficient use of land to minimize the impact on wetlands or other environmentally constrained land areas.
5. Assure compatibility of the development proposed by the various airport lessees.
6. Designate and maintain appropriate corridors for utilities, public access to various airport facilities and controlled airside access.
7. Provide adequate separation between buildings and public rights-of-way.
8. Provide ample off-street parking with appropriate landscaping to screen vehicular and equipment storage areas.
9. Maximize the availability and use of aircraft ramp areas.

The purpose of this section is to establish limitations on the height of objects and uses of land to prevent the creation of obstructions hazardous to aeronautical operations or which could increase the risk to the public's health, safety or well-being in the event of an aviation accident or which would otherwise impair the full utility and operating capacity of Fernandina Beach Municipal Airport. This section creates specific surfaces for three separate purposes providing height restrictions conforming to varying obstruction standards: land use limitations based on sensitivity to aviation generated noise; land use based on increased risk of injury; and hazard to health or property damage in the event of an aircraft accident.

1. **Obstruction Height Surfaces:** Surface sizes and height limitations established in this section conform to the standards for determining obstructions to air navigation of 14 CFR Part 77, ss77.23. For civil airports there are hereby created and established certain surfaces which

include all of the land lying beneath the primary, approach, transition horizontal and conical surfaces as they apply to a particular airport. These surfaces are described and depicted in the *Airport Layout Plan Update, 1999 Technical Report*, as may be amended, which is adopted by reference and made a part hereof. All provision shall be consistent with Section 333, Florida Statutes. An area located in more than one of the described surfaces is considered to be only in the surface with the more restrictive height limitation. The various surfaces are hereby established and defined as follows:

- A. The primary surface is an area longitudinally centered on each runway, extending 200 feet beyond each end of a paved runway. The width of the surface so specified for each runway for the most precise approach existing or planned for either end of the runway. No structure or obstruction shall be permitted within the primary surface that is not part of the landing and takeoff facilities and is of a greater height than the nearest point on the runway centerline. The width of the primary surface of a runway shall be that width for the most precise approach existing or planned for either end of that runway. Therefore for Fernandina Beach Municipal Airport the width of the primary surface for Runways 4 and 22, 8 and 26, and 13 and 31 is 500 feet for non precision instrument runways having visibility minimums greater than three-fourths ($3/4$) statute mile.
- B. The horizontal surface is the area surrounding the Fernandina Beach Municipal Airport with an outer boundary constructed by swinging arcs of specified radii from the center of each primary surface end for each airport runway then connecting adjacent arcs by tangents. The arc radii for each runway end will have the same arithmetic value and will be the highest value determined for either end of that runway. When a smaller arc is encompassed by the tangent connecting larger arcs, the smaller shall be disregarded in determining the surface boundary. No structure or obstruction will be permitted in the horizontal surface that has a height greater than 150 feet above the airport elevation. For the Runways 4 and 22, 8 and 26, and 13 and 31 the radius of each arc is 10,000 feet for runways designated or planned for other than utility, non precision instrument runway.
- C. The conical surface is the area extending outward from the periphery of the horizontal surface for a distance of 4,000 feet. No object or structure will be permitted in the conical surface that has a height greater than 150 feet above the airport elevation at its inner boundary with permitted height increasing one (1) foot vertically for every twenty (20) feet of horizontal distance measured outward from the inner boundary to a height of 200 feet above airport elevation at the outer boundary.
- D. The approach surface is an area longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface. An approach surface is designated for each runway based upon the type of approach available or planned for that runway end.
 - a. The inner edge of the approach surface is the same width as the primary surface.
 - b. The outer width of the approach surface is the most precise approach existing or planned for that runway end expanding uniformly for Runways 4 and 22, 8 and 26, and 13 and 31 to a width of 3,500 feet for that end of a non-precision instrument runway other than utility, having visibility minimums greater than three-fourths ($3/4$) of a statute mile.
 - c. The approach surface for Runways 4 and 22, 8 and 26, and 13 and 31 extends for a horizontal distance of 10,000 feet for all non precision instrument runways other than utility.
 - d. No object or structures will be permitted within an approach surface, beginning at its intersection with the end of the primary surface, having a height greater than

- the runway end elevation, the height above the runway end elevation increasing with the horizontal distance outward and for Runways 4 and 22, 8 and 26, and 13 and 31 the permitted height increases one foot vertically for every 34 feet horizontal distance for all non precision instrument runways other than utility.
- E. The transitional surface as the area extending outward from the sides of every primary surface and approach surface connecting them to the horizontal surface and an area outward 5,000 feet horizontally or until intersection with the conical surface from the side of that portion of the approach surface of a precision instrument runway extending through and beyond the conical surface. No object or structure will be permitted within the transitional surface greater in height than the primary surface or approach surface at their adjoining boundary lines increasing at a rate of one (1) foot vertically for every seven (7) feet horizontally, with the horizontal distance measured at right angles to the runway centerline and extended centerline, until the height of the slope matches the height of the horizontal surface or the height of the conical surface and for a horizontal distance of 5,000 feet from each side of that part of the approach surface for a precision instrument runway extending beyond the conical surface.
- F. In addition to the height limitations imposed in (A) through (E) above, no structure or obstruction shall be permitted within the City's jurisdiction that would cause a minimum obstruction clearance altitude, a minimum descent altitude, a minimum vectoring altitude, or a decision height to be raised. Nor impose either the establishment of restrictive minimum climb gradients or non-standard take-off weather minimums for any runway at Fernandina Beach Municipal Airport.
- G. Applications for land development or improvement will be reviewed by the Fernandina Beach Municipal Airport for their potential impact on the imaginary surfaces designated for existing and planned operating conditions at the Airport as well as those associated with existing and planned instrument approach and instrument departure procedures. The latter instrument procedures are defined by the "United States Standard for Terminal Procedures" as may be amended by the Federal Aviation Administration (FAA). Proposed land development or improvements that penetrate the imaginary surfaces or that may cause an increase to instrument approach and/or instrument departure procedures shall not be permitted.
2. Airport Noise Zones, Boundaries and Requirements
- A. No noise specific zones have been identified as part of this section. However, if the City of Fernandina Beach in the future undertakes the development of a FAA Area Equivalent Method (AEM) study and it shows noise impact areas off the airport property, then this section can be amended as needed to reflect the results of the noise impact studies. Such noise studies, consistent with FAR Part 150, or equivalent noise studies map overlay land use noise zones using AEM. The AEM is a mathematical procedure that provides the noise contour area of a specific airport given the types of aircraft and the number of operations for such aircraft. These noise zones are based on projected yearly averaged 24-hour day/night average noise level (DNL) impact projections arising from aircraft flight operations at the Fernandina Beach Municipal Airport.
- B. Where an airport authority or other governing body operating a publicly owned, public-use airport has not conducted a noise study, neither residential construction nor any educational facility as defined in Chapter 1013, with the exception of aviation school facilities, shall be permitted within an area contiguous to the airport measuring one-half the length of the longest runway on either side of and at the end of each runway centerline.

3. Public Safety and Welfare
 - A. Notwithstanding any other provision of this section, no use may be made of land or water within any surface established by this section in a manner so as to interfere with the operation of an airborne aircraft. The following special requirements shall apply to each permissible use:
 1. All lights or illumination used in conjunction with street, parking, signs, or use of land and structures shall be arranged and operated in such a manner that it is not misleading to or obscure pilots vision during critical take-off or landing stages of flight or be otherwise dangerous to aircraft occupants or flight operations at Fernandina Beach Municipal Airport or in the vicinity thereof.
 2. No operations of any type shall produce smoke, glare, or other visual obscurations hazards within three (3) statute miles of any usable runway of the Fernandina Beach Municipal Airport.
 3. No operations of any type device shall produce electronic interference with navigation signals or radio communication between the airport, aircraft or an air traffic control facility.
 4. No use of high energy beam devices is permitted where the energy transmission is not fully contained within a building or some type of absorbing or masking vessel.
 - B. Aircraft Over-flight and Accident Potential Zones (APZ) are hereby created and established of certain surfaces underlying those recurring, fixed flight paths for aircraft taking-off and landing at Fernandina Beach Municipal Airport. Of necessity, aircraft must routinely operate at low altitude and climb from or descend to the runway along these paths. The potential of an aircraft accident, should one occur, is statistically most significant in these surfaces thus the risk of injury to people or damage to property on the ground that could result from such an accident is greatest. This includes the Runway Protection Zone (RPZ). Civilian airport Aircraft Over-flight Zones include the primary surface, approach surface (limited to the inner 10,000 feet) and the adjoining transitional surface as described in the latest airport layout plan.
 - C. Incompatible land uses would generally comprise those uses, activities or construction within runway clear zones, which are incompatible with normal airport operations or endanger public health, safety, and welfare that result in congregations of people, emissions of light or smoke, attractions of birds. Such regulations shall prohibit the construction of an educational facility of a public or private school at either end of a runway within an area which extends five miles in a direct line along the centerline of the runway and which has a width measuring one-half the length of the runway.
 - D. The following uses of land shall be prohibited within the accident potential zone area: high-density residential use, schools, hospitals, storage of explosive material, assemblage of large groups of people, or any other use that could produce a major catastrophe as a result of an aircraft crash.
 - E. No non-conforming land use shall be allowed within the designated Runway Protection Zones for all runways at the Fernandina Beach Municipal Airport. The FAA considers the following to be non-conforming uses: residences and places of public gathering such as churches, schools, hospitals, office buildings and shopping centers. Additionally, fuel storage facilities are also prohibited. This list shall be updated as necessary based on guidance given in the current version of the Federal Aviation Administration's Advisory Circular 150/5300-13 as amended or other state or federal regulations.
 - F. No person shall sell, lease, or offer to sell or lease any land within the airport approach surface or horizontal surface, unless the prospective buyer or lessee has been given the following notice in writing: "Noise warning--This land lies beneath the

- aircraft approach and departure routes for Fernandina Beach Municipal Airport and is subject to noise that may be objectionable."
- G. Waste disposal and other facilities are prohibited which store, handle, or process organic material or any other material that fosters or harbors the growth of insects, rodents, amphibians, or other organisms that will result in significant bird population increases above the normal background. These types of facility operations increase the potential for aircraft bird strike resulting in damage to aircraft and injury to occupants. These uses are incompatible if located within the vicinity of any airport described in this section through the application of the following criteria:
1. Facilities located within 10,000 feet of any runway used or planned to be used by turbine powered aircraft
 2. Facilities located within 5,000 feet of any runway used only by conventional piston engine powered aircraft
 3. Any facility located so that it places the runways and/or approach and departure patterns of an airport between bird feeding, water, or roosting areas.
 4. Facilities outside the above perimeters described but still within the lateral limits of any of the surfaces as described in Sections 4.03.03 (A) through (E) will be reviewed on a case-by-case basis.
4. Permits:
- A. Height Zone Permits
1. No building or structure, located within the lateral boundaries of the Airport Height and Safety Zones shown in the most recent airport layout plan, may be constructed, erected, moved to or repaired, altered or modified resulting in an increase in height, unless a building permit has been reviewed by the City's Community Development Department and issued by the Building Official. No permit shall be issued unless the FAA has reviewed the proposed construction or alteration and issued a written Determination of the proposal's affect on navigable airspace where prior notification under CFR 14, Part 77 is required.
 2. Notification is required for any temporary or permanent building or structure, whose height is proposed to exceed (i.) 200 feet above ground level at its site; or (ii.) a slope increasing one (1) foot vertically for every one hundred (100) feet horizontally for a distance of 20,000 feet from the nearest point of the nearest runway covered by this section.
- B. Noise Zone Permit: not required at this time
- C. Aircraft Over-flight and Accident Potential Zones: Within the lateral boundaries of any Aircraft Over-flight or Accident Potential Zone shown in the latest Airport Layout Plan, no building, structure, vehicle or vessel may be moved to, parked, moored, constructed, repaired, altered or modified, either permanently or temporarily, unless a building permit has been issued by the Building Official.
- D. The owner of any structure over 200 feet above ground level shall install lighting in accordance with *Federal Aviation Administration Advisory Circular 70-7460*, and amendments thereto, on that structure. Additionally, high intensity white obstruction lights shall be installed on a structure which exceeds 749 feet above mean sea level. The high intensity white obstruction lights must be in accordance with *Federal Aviation Administration Advisory Circular 70-7460* and amendments. Any permit or variance granted under this LDC for structures exceeding 749 feet in height shall require the owner to mark and light the structure in accordance with *FAA Advisory Circular 70-7460* or subsequent revisions. The permit may be conditioned to allow the City, at its own expense, to install, operate, and maintain those markers and lights as may be

- necessary to indicate to pilots the presence of an airspace hazard if special conditions so warrant.
5. Independent Justification: The purpose of the overlay surfaces adopted through this section is to provide airspace protection and land use compatible with continuation of normal and routine operation of Fernandina Beach Municipal Airport without endangering the public health, safety and welfare. Each of the three zoning aspects requires independent justification in order to promote the public interest in health, safety and general welfare. No structure or use may be permitted in any surface unless it conforms to the specific height, noise impact sensitivity and public safety limitations at its site as set forth in paragraphs 1, 2, and 3 of this section.
 6. Future Uses: No change shall be made in the use of land, and no structure shall be altered or otherwise established in any surface created by this section except in conformance with the requirements of this section.

4.03.03 8th Street Small Area Design Standards

General Principles. The 8th Street standards are intended to encourage flexibility and variety in development through creative site and building design. All development shall contribute to making 8th Street a distinct and memorable part of the city, unique in spaces, buildings, and street character. Development shall be oriented and designed to contribute to the street environment and shall place priority on pedestrian comfort, convenience, safety, and access. Pedestrian scale elements refer to buildings and spaces whose dimensions, properties, and components correspond to human occupation and use. Access to all development shall be sited and designed to have a positive visual impact on the street with primary pedestrian access from 8th Street. Driveways and parking shall not take priority over pedestrian areas. Variety in design elements, transparency, color, texture, signs, and materials creates a visually interesting environment and contributes to the establishment of an architectural character for the corridor. Architectural compatibility is not limited to any particular style.

The design standards for the 8th Street Small Area are as follows:

1. On the portion of the property fronting 8th Street, there is a required six (6) foot pedestrian/landscaping access area to provide a continuous, unobstructed clear walkway. This is to be measured from the property line going back six (6) feet. Buildings or building components may encroach into this space starting at the second story, with necessary structural components on the first story as long as the 6 foot pedestrian access area is unobstructed, provided an open pedestrian/landscape space is maintained. Required bicycle parking is not permissible within this area.
2. The setbacks for the remaining sides of the property are zero (0) feet.
3. Building Orientation.
 - a. Primary entrances shall face 8th Street. At least one public entrance of each principal structure shall be oriented toward the front lot line or side lot line. Developments are encouraged to provide as many pedestrian connections to the street as feasible.
 - b. Commercial and Mixed Use structures that extend across the full block width from S. 8th Street to S. 9th Street and S. 7th Street shall contain a secondary façade which is designed with an architectural style, detail, trim features, and roof treatments as consistent with that of the primary façade.
 - c. On corner lots, new buildings shall be oriented toward the streets and shall consider and complement the patter of existing adjoining development, with the primary façade(s) of the principal building facing the 8th Street facing lot line. Corner locations shall be considered opportunities for distinctive architecture.

- d. Accessory structures, if any, shall be located at the rear of the principal buildings. All detached garages or carports shall be set back from the front façade of the principal building by at least 10 feet, openings shall not face 8th Street. Where feasible, detached garage and carport access shall be from the side streets.
 - e. All outdoor mechanical equipment shall be located at the rear of the principal buildings and screened. Screening may be structural or vegetative. They shall not be visible from any street. Mechanical equipment placed on the roof shall be screened from abutting streets with parapets or other types of visual screening.
 - f. Solid waste, recycling, and yard trash containers; grease containers, and loading docks shall be screened and located in parking areas or other locations remote from the sidewalk.
4. Site and Building Access. The City shall encourage shared access to reduce driveway cuts on 8th Street as redevelopment occurs and require cross access design for internal traffic. New driveway cuts which do not serve to reduce the overall number of cuts onto 8th Street shall be located on 7th ,9th Streets, east-west side streets.
- a. Whenever feasible, driveway access to a site shall be shared with adjacent properties and parking shall be located internally to the block or at the rear of the site.
 - b. Service areas associated with multi-family dwellings shall be accessed from the rear of the site, where feasible.
 - c. Building design or landscaping shall be required at a 3.5 foot tall minimum to obscure the view of vehicles from the ground level.
5. Building Design Standards. Individual building design shall defer to ensemble of buildings on the street rather than call undue attention to itself. New buildings shall contribute to the life of the street.
- a. Building Heights. Properties abutting residentially (R-1/R-2/ R-3) zoned properties shall be limited to thirty-five (35) feet, including the parapet for flat roofed structures.
 - i. Facades up to thirty-five (35) feet in height shall be recessed from the first thirty (30) feet of façade a minimum of five (5) feet. Awnings, pergolas, or covered balconies may encroach into this setback.
 - ii. Flat roofs are permitted but must provide a parapet up to 42 inches high in order to hide mechanical equipment.
 - b. Architectural articulation. A building's exterior walls shall be articulated using material, architectural elements, arrangement of openings, design of horizontal and vertical planes, and changes in height to provide substantial massing variations. Long, monotonous roof planes and uninterrupted expanses of blank wall are not allowed along street frontages. Articulated roof forms and wall opening shall be used to add visual interest and contribute to a pedestrian scale.
 - i. Where solid walls are required by building code, the wall shall be articulated and divided into distinct modules, through the use of projections and recesses (i.e. setbacks, reveals, belt courses, awnings, arcades, porches, etc.) within the building envelope or projecting from upper floors.
 - ii. Commercial buildings and buildings with ground floor commercial uses shall have a ceiling height minimum of twelve (12) feet for the ground floor.
 - c. Entryways. Doorways, windows, storefronts, and other openings in the facades of buildings shall be placed and proportioned to reflect pedestrian scale and movement and to encourage visual interest at the street level. The use of functional and decorative elements, including weather protection features (i.e. colonnades, arcades, canopies, etc.), signage, and architectural detailing, shall be used to

create human scale on a buildings principal façade. Elements shall be integral to the architecture of the building, designed so as not to appear to be “tacked on” to the building façade.

- d. Internal passageways are encouraged.
- 6. Fences. Up to 8 foot tall fences are permissible
 - a. Fence Material: Black Wrought Iron or black anodized (SP) Aluminum
 - b. Where any portion of the fence is visible from 8th Street landscape screening shall be required.
- 7. Improvement of bicycle and pedestrian paths is required in keeping with the approved streetscape plan.
- 8. Signs within the MU-8 zoning district shall follow the allowable sign standards set forth for the Historic District as contained in LDC Section 8.01.03

4.04.00 STANDARDS FOR SUBDIVISIONS

4.04.01 Purpose: Subdivisions shall consider the compatibility of the proposed development with the surrounding neighborhood.

- A. Section 4.04.00 regulates the subdivision or re-subdivision of land in order to protect and promote the health, safety, and general welfare of the citizens of Fernandina Beach. The regulations are intended to assure the harmonious, orderly, and progressive development of land by providing for proper legal description, identification, monumentation, and recording of real estate boundaries when parcels are subdivided.
- B. This section applies to the subdivision of parcels into three (3) or more lots.

4.04.02 General Requirements

- A. All development shall be on a recorded, platted lot that meets all standards set forth in this LDC.
- B. A preliminary plat is required for all subdivisions, except as set forth in Section 4.04.02(F). A preliminary plat graphically depicts the proposed development or the location of individual lots. An approved preliminary plat is a necessary prerequisite for final plat approval.
- C. A plan of proposed public improvements shall be submitted with the preliminary plat. Requirements regarding infrastructure are set forth in Chapter 7.
- D. Submittal and procedural requirements regarding preliminary plats, public improvements plans, and final plats are set forth in Chapter 11.
- E. A subdivision shall have at least two (2) vehicular access points to an improved right-of-way.
- F. Lot line adjustments are exempt from the requirement to submit a preliminary plat and improvements plan if the proposed lot line adjustment complies with Section 4.02.02 regarding combining lots and if one (1) of following conditions are met:
 - 1. The division of land into two (2) parcels consists solely of the conveyance of land or granting of easements or rights-of-way to a governmental or public agency; and
 - 2. The division is a re-plat of two (2) existing lots and is solely for the purpose of re-facing a lot or lot line adjustments without an increase in the number of lots or units otherwise allowed.

4.04.03 Standards for Lots and Blocks

The lengths, widths, and shapes of blocks shall be designed to consider the following:

- A. Lot area, width, shape, and orientation shall be suitable to the special needs of the type of use contemplated.

1. Side lot lines shall be substantially at right angles or radial to the right-of-way line.
 2. Flag lots are prohibited.
 3. Block length shall be consistent with the established street system, but shall not exceed 1,200 feet between intersecting streets.
 4. Lot area shall be consistent with the density requirements set forth in Table 4.01.01.
 5. Lot dimensions shall be consistent with the requirements set forth in Table 4.02.01(J).
 6. Lots for nonresidential purposes shall have sufficient lot area to accommodate all required site features on the lot.
- B. Layout of lots and blocks shall be appropriate for the topography.
- C. No lot shall be divided by a City boundary line.
- D. Lot and block layout shall ensure safe and convenient pedestrian and vehicle access.
1. Each lot shall have frontage on and access to an existing or proposed public street.
 2. Each lot shall have access to sidewalks and/or pedestrian paths as set forth in Chapter

4.04.04 Requirements for Infrastructure

The following basic utilities shall be provided to each lot within a subdivision:

- A. A source of electric power.
- B. A telephone service cable.
- C. Central potable water. Each lot shall have and maintain central water service meeting City standards and provided at the developer's or property owner's expense. If central potable water is not available, the property owner shall install water lines in compliance with City standards.
- D. Central sanitary sewer. Each lot shall have and maintain central sanitary sewer service meeting City standards and provided at the developer's or property owner's expense. If central sanitary sewer is not available, the property owner shall install sewer lines in compliance with City standards.
- E. Lines for delivery of reclaimed water to each lot, in compliance with City standards.
- F. Fire hydrants or fire protection shall be provided as required by the National Fire Prevention Code. Fire hydrant systems shall be installed and made usable prior to any combustibles being brought onto the construction site.
- G. Streets and sidewalks designed and constructed for public use according to the standards and requirements of Chapter 7. Street signs, markers, and traffic signs and signals to control and circulate traffic within the street pattern shall comply with the *Florida Uniform Manual of Traffic Control Devices*, published by the FDOT.
- H. Street and common area lighting meeting City standards and provided at the developer's or property owner's expense. Decorative lighting is preferred. Lighting required for safety shall be located to avoid obstruction between the light fixtures and the area to be illuminated.
 1. All street lights installed shall be in accordance with the Illuminating Engineer Society of North America recommended values based on the pavement classification.
- I. Drainage and stormwater management facilities designed and constructed according to the standards and requirements of Chapter 7.
- J. Subdivision utility placement
All lines for electricity, telephone, cable television, streetlights, and gas distribution (exclusive of transformers or enclosures containing electrical equipment, including, but not limited to, switches, meters, or capacitors) shall be placed underground within easements or dedicated public rights-of-way.

- K. Utility apparatus, such as pumps, valve boxes, switching boxes, and back-flow devices, placed above ground shall be screened according to the standards set forth in Section 4.05.00.
- L. Parks and recreation dedication, as specified below:
 - 1. Land dedicated for parks and recreation facilities shall be of suitable size, dimension, topography, and general character and shall have adequate road or other appropriate access for the proposed use.
 - 2. The area shall be shown and marked on the plat, "Dedicated for Park and/or Recreational Purposes." The area to be dedicated shall be dedicated either to a neighborhood association, approved by the City Commission, or to the City, in order to ensure maintenance of the area. The area to be dedicated shall be calculated based on the adopted level of service standard in the Comprehensive Plan.
 - 3. The land area to be dedicated should be at least two (2) acres. When the calculation of land area results in less than two (2) acres, the City may require that the recreational area be located at a suitable place on the perimeter of the subdivision so that additional land may be added at such time as the adjacent land may be subdivided or otherwise utilized.
 - 4. In those instances where a subdivision will provide recreational facilities or dedicate land for use by the public for recreational purposes, the City Commission shall grant the developer a credit against recreation impact fees in an amount equal to the appraised value of the reserved land or improvements, but the credit shall not exceed fifty (50) percent of the recreation impact fee which would otherwise be required.
 - 5. Land dedicated for recreation purposes shall be of a character and location suitable for use as a playground, playing field, or for other recreation purposes and shall be relatively level and dry.
 - 6. Developers of projects along navigable waterways will be required to provide easements for boat launching ramps and parking.
 - 7. Where appropriate, recreation sites should be established with multiple purposes to provide both recreation facilities and preservation of environmentally sensitive lands. Sidewalks, bicycle paths, or multipurpose trails shall be provided for pedestrian access to recreation sites.

4.05.00 LANDSCAPING, BUFFERS, AND TREE PROTECTION

4.05.01 GENERALLY

- A. It is the intent of the City to provide standards and regulations which: protect and preserve native tree species and the natural landscape; foster and encourage maintenance of natural vegetation; minimize loss of trees to development; reduce disturbance of native soil, improve ground and surface water quality; and promote energy and water conservation through use of native and Florida-Friendly landscaping principles.
- B. The intent of Section 4.05.00 is to provide minimum standards for landscaping, buffers, and tree protection within the City. These standards are provided to meet the following specific purposes:
 - 1. Improving the appearance of the City;
 - 2. Providing shade for the ground surfaces and reducing heat island effects;
 - 3. Buffering and protection from wind and storm damage;
 - 4. Buffering adjacent potentially incompatible land uses;
 - 5. Screening vehicular movement from pedestrian and public view;
 - 6. Providing for the protection and preservation of trees and native vegetation;
 - 7. Ensuring the local stock of native trees and vegetation is replenished;
 - 8. Improving ground and surface water quality through reduced run-off and decreased use of fertilizers and pesticides; and
 - 9. Encouraging Florida-Friendly landscaping principles into landscape design.

4.05.02 APPLICABILITY

- A. The types of development listed below shall provide a landscaped buffer between uses, provide landscaping for parking lots, submit a tree survey prepared by a licensed Florida surveyor or a tree inventory prepared by a certified arborist with an application for site plan approval, obtain a tree permit prior to receipt of a building permit, and submit a landscape plan with any application for a development order for the situations listed below. The required landscape plan shall demonstrate compliance with the standards of Section 4.05.00.
 - 1. All new construction;
 - 2. All development of regional impact;
 - 3. Any change of use which results in any increase in the required off-street parking, as determined by the standards in Section 7.01.04;
 - 4. All commercial redevelopment which results in an increased building footprint, reconfiguration of existing parking, parking lot expansions, or development of outparcels within an existing shopping center.
 - A. Clearing of any site, including root-rake clearing, shall be subject to the requirements for tree protection, submittal of a tree survey or a tree inventory prepared by a certified arborist, and obtaining a tree removal permit.
 - B. An application for a building permit for a single-family or two-family dwelling proposed on an existing platted lot shall include a tree survey or a tree inventory prepared by a certified arborist. The tree survey or a tree inventory prepared by a certified arborist shall comply with the requirements of Section 4.05.04 regarding landscaping, but shall not be required to provide a buffer or landscaping for a parking area.
- C. The following situations are exempt from the requirements of Section 4.05.00:
 - 1. Any interior construction, renovation, or remodeling which does not increase the footprint of the building.

2. Licensed plant or tree nurseries or botanical gardens with respect to those plants and trees grown for sale to the general public in the ordinary course of the licensed business or for public purposes.
3. The removal of underbrush and removal of trees which are less than four (4) inches Diameter at Breast Height (DBH).
4. The removal of prohibited invasive trees identified on the most recent Florida Exotic Pest Plant Council Invasive Plant list.
5. Heavy Industrial (I-2) zoning district is exempt from the requirements of Section 4.05.00, provided that the new construction, renovation, alteration or remodeling occurs more than 75 feet from an adjoining residentially zoned and/or used property. Within the exemption area, LDC Section 4.05.00 applies only within the project's extent occurring in the 75-foot area. The exemption exists with the intent that Heavy Industrial (I-2) zoned properties would seek to minimize an overall impact on the existing tree canopy.

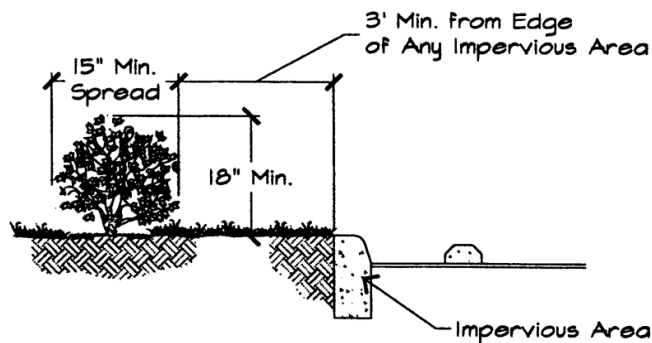
4.05.03 LANDSCAPE MATERIALS STANDARDS

A. Plant materials

1. Trees, Shrubs, and groundcovers shall be selected by using the Florida-friendly Plant Database.
2. Plants identified as "prohibited" or "noxious weeds" species on the most recent Florida Exotic Pest Plant Council Invasive Plant list shall be removed as part of the site development process. Plants identified as "invasive" may be retained on a development site, but shall not count toward meeting landscaping and buffering requirements.

B. Minimum specifications for plant materials

1. All plants used as part of any landscape plan shall be healthy, well proportioned, disease-free, pest-free, and hardy for the North Florida Region. Plant materials shall meet the standards for Florida No. 1 or better, as set out in *Grades and Standards for Nursery Plants*, Department of Agriculture, State of Florida.
2. Shrubs shall be at least eighteen (18) inches in height and have a minimum spread of at least fifteen (15) inches at the time of installation. Shrubs shall be installed at least thirty-six (36) inches apart, measured on center and may not be placed closer than three feet from the edge of any impervious area.



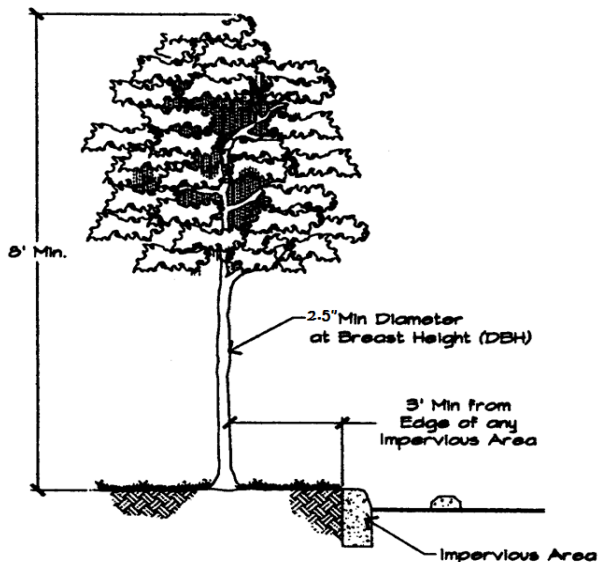
Example:

3. Hedges shall be planted to create a continuous, unbroken, solid visual screen within one (1) year of planting allowing for full mature height and spread.
4. All landscaped areas shall be sodded or covered with ground cover. Grassed areas shall be consolidated and limited to those areas on the site which receive pedestrian traffic, provide for recreational use, provide cover for required drain fields or retention areas, or provide soil erosion control such as on slopes or in swales; and where grass is used as a design unifier or other similar practical use. Grassed areas shall be planted with warm season grass species normally grown on permanent lawns in Nassau County. Special care

should be taken when selecting turf grasses for shaded sites. A soil sample should be tested specifically for pH to determine which grass species is most suitable for the site. Grassed areas may be sodded, plugged, sprigged, or seeded to provide full coverage shall be achieved within one (1) year after planting. Solid sod shall be used in swales or areas subject to erosion. Grass sod shall be clean and reasonably free of weeds and noxious pests or diseases. Grass seed shall be delivered to the job site in bags with Florida Department of Agriculture tags attached indicating the quality control program.

5. Ground cover used in lieu of grass shall be planted so as to present a finished appearance and reasonably complete coverage within three (3) months of installation.
6. Vines shall be a minimum of thirty (30) inches in height at planting and may be used in conjunction with fences, screens, or walls.
7. Natural mulch shall be designed and installed in all planting areas to a depth of three (3) inches. The type of mulch shall be specified on the landscape plan. Use of artificial mulch shall not be permissible within required planting areas. Cypress mulch is strongly discouraged. Mulches are typically wood bark chips, wood grindings, pine straw, nut shells, small gravel, and shredded landscape clippings. Mulch is not required in identified annual beds. Mulch rings should extend to at least three (3) feet around freestanding trees and shrubs. All mulch should be renewed periodically. Mulches should be kept six (6) inches away from any portion of a building or structure, or trunks of trees. Plastic sheeting and other impervious materials shall not be used under mulched areas.
8. Retention of native and drought tolerant species is preferred. At least fifty (50) percent of the required plants installed in landscaped buffers, landscaped parking areas, and for replacement shall be native species.
9. At least fifty (50) percent of the required trees installed in landscaped buffers, landscaped parking areas, and to meet tree planting requirements shall be shade trees. Existing trees, other than invasive or prohibited species, which are five (5) inches DBH or larger, and shrubs may be counted toward meeting the requirements for landscaped buffers, landscaped parking areas, and tree retention.
10. Trees shall be a minimum of two and a half (2.5) inches DBH and no less than eight (8) feet tall at the time of installation. Trees shall not be planted closer than three (3) feet from the edge of any impervious area. Planted trees must be a species with an average mature spread of at least twenty (20) feet, or they must be grouped so as to create a crown spread of at least twenty (20) feet.

Example:



11. When palm trees are used to satisfy minimum landscape requirements, three (3) palm trees shall count as one (1) shade tree. Palm trees must be a minimum of 8 feet tall at time of installation.
 12. Shade trees shall not be installed under any overhead utility line, over any buried utilities, or within a utility easement.
 13. Where utilities conflict with proposed plantings, trees shall be selected from a list provided by the City. Where underground utilities conflict with proposed plantings, tree placement shall be a minimum of ten feet from the underground utility and a root barrier of two (2) feet deep shall be installed.
- C. Specific requirements for drought tolerant or xeriscape landscape materials
1. All development for which landscaping is required by Section 4.05.00 shall comply with the xeriscape requirements set forth in Table 4.05.03(C). The selected design options listed below and the accompanying points necessary to meet the following xeriscape requirements shall be clearly tabulated on the landscape plan.
 2. A minimum of fifty (50) points shall be accumulated by choosing from the following table of design options. As used in Table 4.05.03(C), "list" means the list of drought tolerant species set forth in the SJRWMD edition of the *Xeriscape Plant Guide*.

Table 4.05.03(C). Design Options for Xeriscape Landscaping

Design Feature	Standard	Points
Irrigation	Moisture sensing controller other than rain switch	5
	Landscape plan depicts low, moderate, and high water usage zones and grouping of plants into hydrozones	5
Grass	25% to 50% of the grass areas use drought tolerant species	5
	51% or more of the grass areas use drought tolerant species	10
	Less than 75% of the landscaped area contains sod	10
	Compacted mulched planting beds at least 3" deep are used in all planting areas except ground cover	10
Shrubs	25% to 50% of the required shrubs are drought tolerant species	5
	51% or more of the required shrubs are drought tolerant species	10
Trees	25% to 50% of the required trees are drought tolerant species	5
	51% or more of the required trees are drought tolerant species	10
	25% increase over the required number of shade trees in vehicular use areas, provided the planting area is large enough to ensure that the additional trees will thrive	5
	50% increase over the required number of shade trees in vehicular use areas, provided the planting area is large enough to ensure that the additional trees will thrive	10

- D. Installation
1. All required landscaping installed pursuant to this section shall be installed according to accepted horticultural practice.
 2. Trees may not need to be staked if appropriate canopy to root ratio is achieved. However, trees shall be guyed, braced, and/or staked at the time of planting to ensure establishment of the tree and erect growth, as specified by the landscape designer or architect and compliant with the ISA staking and guying guidelines. Nail staking or other methods that cause cosmetic or biological damage to the tree are prohibited. Trees shall be re-staked within twenty-four (24) hours in the event of a failure in the staking or

guying. Stakes shall be removed not later than twelve (12) months after installation. All areas where trees are to be planted shall be excavated to the width and depth of the root ball with the upper twelve (12) inches excavated to at least three (3) times the width of the root ball prior to being backfilled with the required topsoil mix.

3. Shade trees shall be provided with at least 250 square feet of planting area per tree.
4. Understory trees shall be provided with at least 100 square feet of planting area.
5. Landscaped areas shall be protected from vehicular encroachment by car stops, curbs, or other appropriate means.
6. Trees shall be installed a minimum of three (3) feet from a paved area. A root barrier shall be required prior to installation of replacement trees.
7. Landscaped areas shall be provided with an irrigation system of sufficient capacity to maintain the landscaping in a healthy growing condition. All irrigation systems shall be designed, installed, and maintained in such a manner as not to be a nuisance to adjacent properties and uses and to the general public. Irrigation systems shall include moisture sensors.
8. Irrigation systems shall be designed to "*Standards and Specifications for Turf and Landscape Irrigation Systems*", *Fifth Edition, 2005, Florida Irrigation Society, Inc* and as subsequently amended.
9. Xeriscape areas must have a readily available water supply to provide temporary irrigation until plantings are established.
10. Natural areas and native vegetation left undisturbed by development may be excluded from the irrigation system.

E. Maintenance requirements

1. All plantings shall be continually maintained in an attractive and healthy condition. Maintenance shall include, but not be limited to, watering, tilling, fertilizing and spraying, mowing, weeding, removal of litter and dead plant material, and necessary pruning and trimming.
2. Required plants that become diseased or die shall be replaced not later than three (3) months following the loss of the plant.
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. 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. All trees may be pruned to maintain shape and promote their shade-giving qualities and to remove diseased or dying portions in areas where falling limbs could be a hazard. The property owner is responsible for the maintenance of all required landscaping in a healthy, thriving condition. Trees shall be pruned only as necessary to promote healthy growth or to avoid power lines. Trees shall not be severely pruned or "hatracked," "lionstailed," or "topped" in order to permanently maintain growth at a reduced height. Pruning shall comply with current International Society of Arboriculture (ISA) standards. No more than 20% of the crown shall be removed within a one (1)-year period.
5. Fertilizers: It shall be the goal of each landscape plan to select plant materials capable of thriving without regular fertilizer application, with exception of palms which need quarterly fertilizer to avoid nutrient deficiencies.
6. Pesticides: It shall be the goal of each landscape plan to establish an Integrated Pest Management approach and reduce or eliminate the need for pesticide application.

4.05.04 REQUIREMENTS FOR LANDSCAPE PLANS

- A. A landscaping plan shall be provided to demonstrate compliance with the standards of this section and prepared in accordance with all applicable Florida Statutes. Landscaping plans shall utilize the principles for creating a Florida Friendly landscape, utilize native drought tolerant plant materials to conserve water, avoid invasive exotic species, reduce need for fertilizers, and establish integrated pest management to reduce or eliminate pesticide use. The use of plant material, site design techniques, and planting design techniques which enhance wildlife habitat benefits is strongly encouraged. The publication "Planting a Refuge for Wildlife," available from the Florida Fish and Wildlife Conservation Commission, may be used as a guide.
- B. The landscape plan shall include the following elements:
 1. The name, address, and telephone number of the applicant, as well as the registered landscape architect or landscape designer.
 2. A plan showing the location, size, description, and specifications of landscaping, grade of plantings, mulch specifications, landscape area protection structures (e.g., curbs and planters), number of interior parking spaces, perimeter and interior landscape area plantings, existing trees and planting areas. The plan shall illustrate the proposed irrigation hydrozones. The plan shall also include property boundaries and dimensions, existing and proposed structures, pools, walks, patios, vehicular use areas, lot orientation, utility services, light poles, pad-mounted transformers, fire hydrants, existing and proposed elevations, and any other factors affecting the proposed use of the property (including the land use and zoning of adjacent properties).
 3. New landscape plans shall account for plant watering needs and group plants into "hydrozones." Hydrozones and their corresponding irrigation category shall be identified on the landscape plan.

4.05.05 MINIMUM REQUIREMENTS FOR RESIDENTIAL DEVELOPMENT

It is the intent of this section to provide minimum landscaping requirements for residential development. Existing plant materials, other than invasive species, may be counted toward meeting the landscaping requirements set forth in this section.

A. **Single-family and Two-family Residential Development**

Single-family and two-family development shall include, at a minimum, one (1) shade tree for every 2,500 square feet of lot area or fraction thereof. At least two (2) trees shall be located in the front or rear yard. Tree identification and placement shall be shown on a site plan but shall not be required to meet the requirements of 4.05.04(A) above.

B. **Multi-family Residential Development**

Multi-family residential development sites shall meet the following standards, in addition to the requirements set forth in Section 4.05.04(A) above:

1. There shall be not less than one (1) shade tree for each 1,500 square feet, or fraction thereof, of development site. There shall be a planting area not less than ten (10) feet in width between the building walls and parking areas. Landscape materials shall be provided as follows:
 - a. One (1) tree for every 200 square feet of planting area or fraction thereof;
 - b. At least fifty (50) percent of the trees shall be shade trees; and
 - c. A continuous hedge shall be placed along the building walls.
2. There shall be a planting area not less than ten (10) feet in width between an abutting right-of-way and parking areas. Landscape materials shall meet the following standards:

- a. One (1) tree shall be provided for every 250 square feet of planting area or fraction thereof;
- b. At least seventy-five (75) percent of the trees shall be shade trees;
- c. A continuous hedge or a berm with native plantings, at least three (3) feet in height, shall be provided; and
- d. The entire site, outside of the planting areas immediately surrounding the trees and shrubs, shall contain grass or ground cover.

4.05.06 MINIMUM REQUIREMENTS FOR NON-RESIDENTIAL AND MIXED USE DEVELOPMENT

A. Minimum Landscaped Area

At least twenty (20) percent of the total gross land area of a development site shall be landscaped except within the Central Business District/ C-3 zoned and the 8th street Mixed Use (MU8)/MU-8 zoning properties where a minimum of 10% of the total gross land area shall be landscaped. New construction and landscaped areas shall be located on the site in such manner as to maximize preservation of existing trees with priority given to specimen trees. Minimum landscaped area requirements may be achieved through use planters and rooftop gardens. Planting areas which fulfill landscape design strategies located within public rights-of-way shall count towards the minimum planting area, if installed and paid for by the developer or property owner.

C. Minimum Tree Planting

Nonresidential development shall provide one (1) shade tree for each 1,500 square feet of gross site area, or fraction thereof.

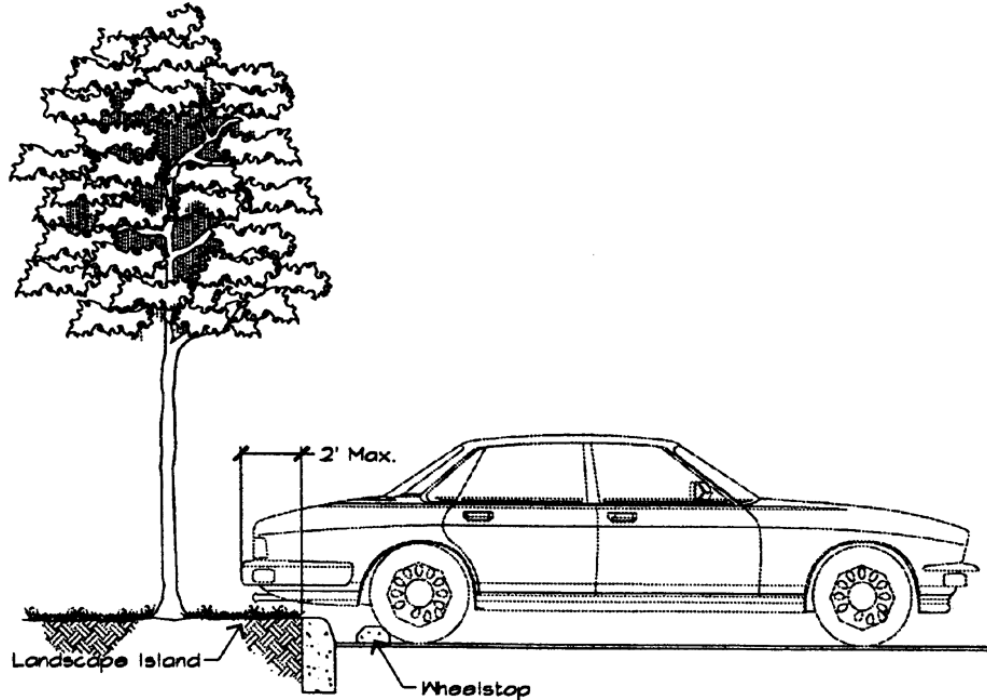
4.05.07. PARKING LOT LANDSCAPING

- A. Intent: It is the intent of this section to promote vehicular and pedestrian safety; limit physical site access to established points of ingress and egress; delineate and buffer the bounds of abutting vehicular use areas so that distractions of movement, noise and glare from one area do not adversely affect the activity in another area; break up large expanses of pavement; and to reduce heat island effect within the vehicular use areas of a site.
- B. Off-Street Parking: All off-street parking lots with six (6) or more required parking spaces and vehicular use areas (access driveways, service drives, and loading areas) are required to include landscaping. Required parking lot landscaping shall be in addition to requirements for protection of existing trees.
- C. Perimeter Landscaping:
 1. A landscaped area not less than ten (10) feet in width, exclusive of impervious area, using vertical layering of landscape materials shall be located around the perimeter of the parking lot in order to provide visual screening from the right-of-way. Perimeter landscape area requirements shall not apply to shared vehicular access areas or to the portion of the perimeter areas where physical interconnections exist.
 2. When perimeter landscape areas are required on adjacent properties, the owners of such adjacent properties may agree to the installation of only one such landscape area on the adjacent boundary, as long as such agreement is binding on both property owners and their successors in the interest and is approved as part of the site plan review process.
 3. Where the parking lot is in a side or rear yard and a buffer "C" or "D" is provided pursuant to Section 4.05.05, the buffer shall satisfy the requirement for providing landscaping between the parking lot and the abutting street.

4. Where a buffer "A" or "B" is required pursuant to Section 4.05.05, the landscaped area shall also include a continuous unbroken hedge, planted in a double-staggered row to form a solid visual screen within one (1) year of planting.
 5. An access, not exceeding four (4) feet in width, may be provided through the buffer to an adjacent sidewalk public street or sidewalk.
 6. Trees within the perimeter landscaped area shall be determined using a ratio of one (1) tree for each 20 linear feet of required landscape perimeter area, or major portion thereof, with no less than 75% of said trees being shade trees. Creative design and spacing is encouraged
 7. A visual screen is required within perimeter landscape areas, running the entire length of such areas excluding areas of ingress and egress. The visual screen may be provided using:
 - a. Shrubs or Ornamental Grasses. Shrubs or Ornamental Grasses shall be spaced a minimum of three feet to a maximum of six feet on center dependent on the inherent growth of the species. Creative design and spacing is encouraged.
 - b. Contoured berms or embankments. Contoured berms or embankments shall be a minimum of twenty-four (24) inches in height, measured from the adjacent parking surface level, at the time of planting and landscaped appropriately.
 - c. Plant material must be non-deciduous for full year round screening.
- D. Interior Parking Lot Landscaping:
1. Planting areas within parking lots and vehicular use areas shall equal not less than ten (10) percent of the gross area devoted to vehicular use. The perimeter landscaping shall not count toward meeting the required interior landscaping.
 2. Interior planting areas shall be located in tree islands, at the end of parking bays, and between rows of parking spaces. There shall be not more than ten (10) contiguous parking spaces (or twenty (20) parking spaces in a double row) between planting areas.
 - a. Planting areas may also be located within driveway medians, provided the median is a minimum of twelve (12) feet wide.
 - b. One (1) shade tree shall be installed for each 400 square feet of required planting area. Alternatively, a minimum of two, three-inch or three, two-inch, caliper shade trees together with other landscape material shall be planted within each required planting area. Spacing shall be no closer than fifteen (15) feet on center and no greater than eighteen (18) feet on center.
 3. Interior planting areas shall be located to effectively accommodate stormwater runoff, as well as to provide shade in large expanses of paved areas. Use of swales, vegetated filter strips, and bioretention areas (rain gardens) shall be incorporated into the overall stormwater plan, grading plan, and landscape strategy for the entire parking area. Plant species should be selected based on their ability to tolerate urban stresses such as expected pollutant loadings, highly variable soil moisture conditions, ponding water fluctuations, and Soil pH and texture.
 4. If stabilized grass parking is utilized, the parking spaces shall be delineated with parking stops and the required landscape islands with trees and stubs installed to break up rows of ten (10) consecutive parking spaces.
 5. The design of interior landscaped areas shall comply with the specifications set forth in Section 4.05.03 and 7.01.04(C).
 6. A continuous curb or other means of protection shall be provided to prevent injury to vegetation within the planting areas.
 - a. Curbs shall be designed to allow percolation of water to the root systems of the plants. Where existing trees are preserved, tree wells, tree islands, or a continuous

curb shall be installed to protect the trunk and root system from damage. A drainage system shall be provided within the area defined by the drip line of the tree(s).

- b. Vehicle stops or other design features shall be used to prevent parked vehicles from overhanging more than two (2) feet into any landscape area.



Example:

- E. In order to allow for flexibility and creativity in design standards, hedges may be replaced or interrupted in areas which provide for a decorative wall and berms and other creative landscape features, and landscape materials may be clustered so long as the parking area remains screened from the public right-of-way and adjacent private property, as set forth in Section 4.05.12.

4.05.08 FREESTANDING SIGN LANDSCAPING

- A. All monument signs shall have shrubbery or flowers planted around the perimeter of the sign. Signs shall be located so as to provide both adequate visibility from the public rights-of-way and to preserve protected trees.
- B. If a freestanding sign cannot be shifted to allow the required room for perimeter plantings between the sign and the parking area without obscuring visibility to the sign, then the City shall allow a five (5) foot radius from the base of the freestanding sign in which lower accent plantings are allowed in lieu of perimeter plantings.

4.05.09 MECHANICAL EQUIPMENT SCREENING PLANTINGS

Structures such as dumpster enclosures, mechanical equipment, backflow preventers, wells, pumps, tanks, buffer walls, HVAC units, transformers, lift stations, utility cabinets, electrical panels, or cable television equipment shall be fully screened with planting beds in areas visible from the public rights-of-way.

- A. The height of such screening shall be a minimum of 30 inches at the time of installation.
- B. Required access ways to these utilities are exempt from the screening provisions. Other uses which require high visibility and easy access, such as fire hydrants, public and emergency telephones, mail boxes, and school bus shelters/benches, are exempt from these provisions.

4.05.10. RETENTION AND DETENTION PONDS

Stormwater retention/detention ponds shall be naturally shaped (without geometric straight sides) and shall meet the following minimum requirements:

- A. All wet detention ponds shall incorporate a combination of aquatic and non-aquatic native plants to completely surround the perimeter to filter runoff of fertilizers, herbicides, and pesticides.
- B. Wet detention ponds shall incorporate, at a minimum, a littoral zone or a littoral zone alternative Per Chapter 40C-42, Florida Administrative Code.

4.05.11. REQUIREMENTS FOR STREET TREES

- A. 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. Street trees are intended to provide:
 1. Security to pedestrians crossing wide streets;
 2. A screen for drivers from headlight glare of oncoming traffic;
 3. Blockage of direct sun into the eyes of drivers, especially commuters traveling east and west;
 4. An indication of the course of the roadway in the distance; and
 5. A protective barricade to head-on collisions with out-of-control vehicles which cross into the median.
- B. In all subdivisions and any other developments involving the creation of new streets, street trees shall be planted in the rights-of-way or a median, unless it is determined that a conflict exists between trees and utilities located in the rights-of-way or site distances are not in compliance with sound and generally accepted engineering practices and principles. In such cases, the street trees shall be planted outside of the rights-of-way.
- C. If street trees are located to be outside of the rights-of-way, trees shall be planted no farther than five feet outside the right-of-way line, and shall be perpetually maintained. Street plantings shall be in accordance with minimum planting standards.
- D. Buffer plantings consistent with LDC Section 4.05.12 (E) – (G) shall be established to surround new residential subdivisions.
- E. Street trees planted to meet requirements of this section must be shade trees, and shall be planted at a rate of one (1) tree for every 50 feet of site/lot frontage along the right-of-way or every 30 feet on center in medians. If planted medians and/or cul-de-sac islands are provided with trees, street trees along the outside of the roadway are not required. Use of understory trees are permitted in lieu of shade trees as determined to be practical because of overhead utility lines or other infrastructure conflicts, may be permitted at a rate of one (1) tree for every 25 feet of site/lot frontage along the right-of-way. Preserved or retained trees on-site shall count towards satisfying this requirement in newly established residential subdivisions.
- F. A root barrier shall be installed for all street trees to avoid future root conflicts.
- G. A majority of the property owners abutting any street may request the establishment of an arbor street. An arbor street is one determined by the City to be suitable for extensive planting of street trees. Requests shall be in writing and submitted to the City. Required information includes:
 1. Designation of the areas proposed for street trees on a planting plan;
 2. Agreement from property owners for trees to be planted adjacent to or on their properties; and
 3. Commitment from property owners to provide care and maintenance of the street trees.

- H. Trimming of street trees by adjacent property owners is permitted, provided that all work adheres to International Society of Arboriculture (ISA) standards and no more than 20% of the tree canopy is removed within a one (1) - year period. No trees authorized pursuant to the arbor street agreement shall be removed without obtaining a tree removal permit, according to the requirements of Chapter 11.

4.05.12. BUFFER REQUIREMENTS

- A. The use of properly landscaped and maintained buffer areas can reduce the potential incompatibility of adjacent land uses, maintain open space, protect established residential neighborhoods, and enhance community identity. In order to minimize negative effects between adjacent zoning districts, this section requires a landscaped buffer area to be provided. The separation of land uses and the provision of landscaping along public rights-of-way through a buffer are designed to minimize potential nuisances, and to enhance community beautification.
- B. Four (4) types of buffers are provided, as set forth in Table 4.05.12(B).

Table 4.05.12 (B). Types and Plant Requirements for Buffers

Buffer Type	Minimum Width (ft.)	Required Plants per 100 Linear Feet of Property Line
A	10	Two (2) understory trees
B	15	Four (4) understory trees
C	15	Two (2) shade trees Four (4) understory trees Continuous unbroken hedge, planted in a double-staggered row to form a solid visual screen within one (1) year of planting
D	20	Four (4) shade trees Four (4) understory trees A continuous unbroken hedge, planted in a double-staggered row to form a solid visual screen within one (1) year of planting. Retention of native trees and vegetation which meet this requirement shall be considered as part of the buffer.

- C. A buffer shall be required between zoning districts according to the standards set forth in Table 4.05.12 (C). The existence of a road along a property boundary shall not be construed as meeting any part of the buffer requirement, nor as relieving the applicant from providing the required buffer.

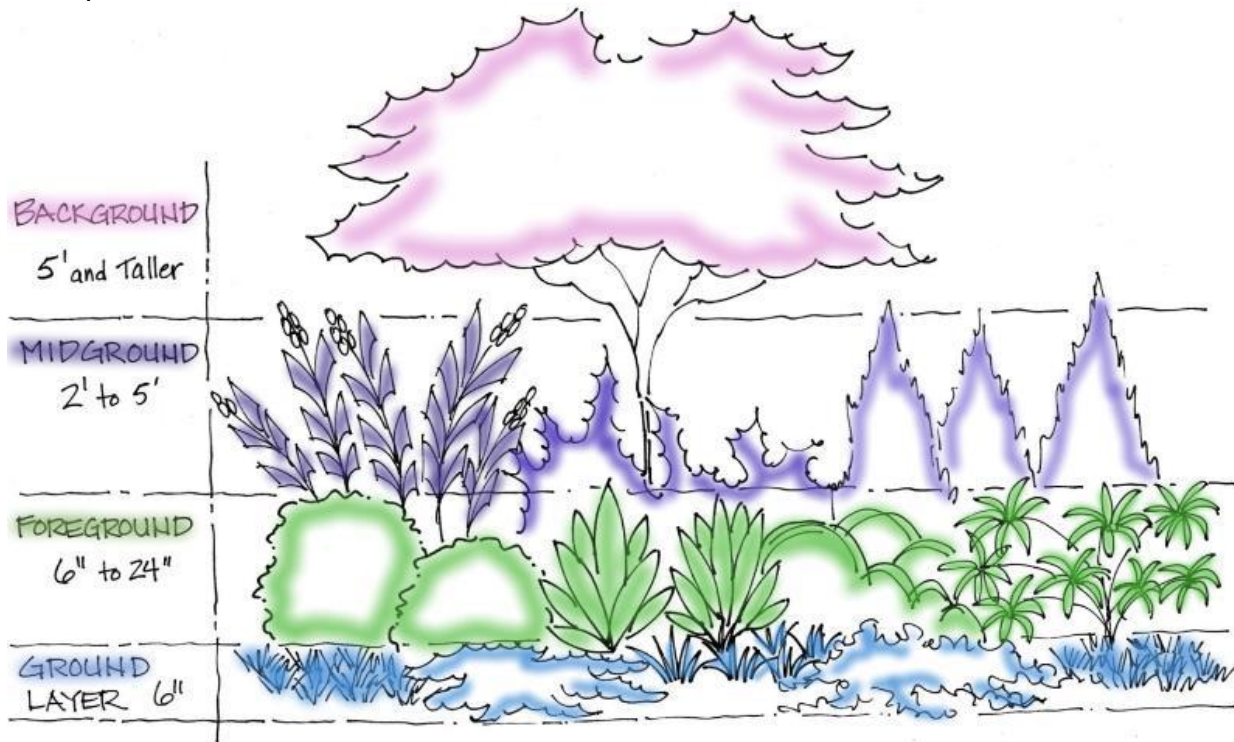
Table 4.05.12. (C). Buffer Requirements between Zoning Districts.

Zoning District of Proposed Development	ADJACENT ZONING DISTRICT																
	R-E	R1-G	R-1	R-2	R-3	OT-1	OT-2	MU-1	C-1	C-2	C-3	I-1	IA	I-W	W-1	PI-1	CON
R-E	No Buffer Required																
R1-G	No Buffer Required																
R-1	No Buffer Required																
RLM	No Buffer Required																
R-2	No Buffer Required																
R-3	A	A	A	A	N	N	N	A	N	N	N	B	B	B	B	N	N
OT-1	N	N	N	N	N	N	N	A	N	N	N	B	B	B	B	N	N
OT-2	N	N	N	N	N	N	N	A	N	N	N	B	B	B	B	N	N
MU-1	B	B	B	B	A	A	N	N	N	A	A	B	B	C	C	A	N
C-1	C	C	C	C	B	B	B	A	N	N	N	B	B	B	B	N	N
C-2	C	C	C	C	B	B	B	B	N	N	N	B	B	B	B	N	N
C-3	C	C	C	C	B	B	B	B	N	N	N	A	A	A	A	N	N
I-1 Downtown	N	N	N	A	N	N	N	A	N	A	A	N	N	N	N	N	N
I-A Airport	D	D	D	D	D	D	D	D	D	D	D	D	N	D	D	D	N
I-1 Mills	D	D	D	D	D	D	D	D	D	D	D	N	N	N	N	N	N
I-W	D	D	D	D	D	D	D	D	D	C	C	N	N	N	N	C	N
W-1	See Specific Standards in Section 8.01.02																
PI-1	C	C	C	C	B	B	B	A	N	N	N	B	B	B	B	N	N
CON	No Buffer Required																
REC	No Buffer Required																

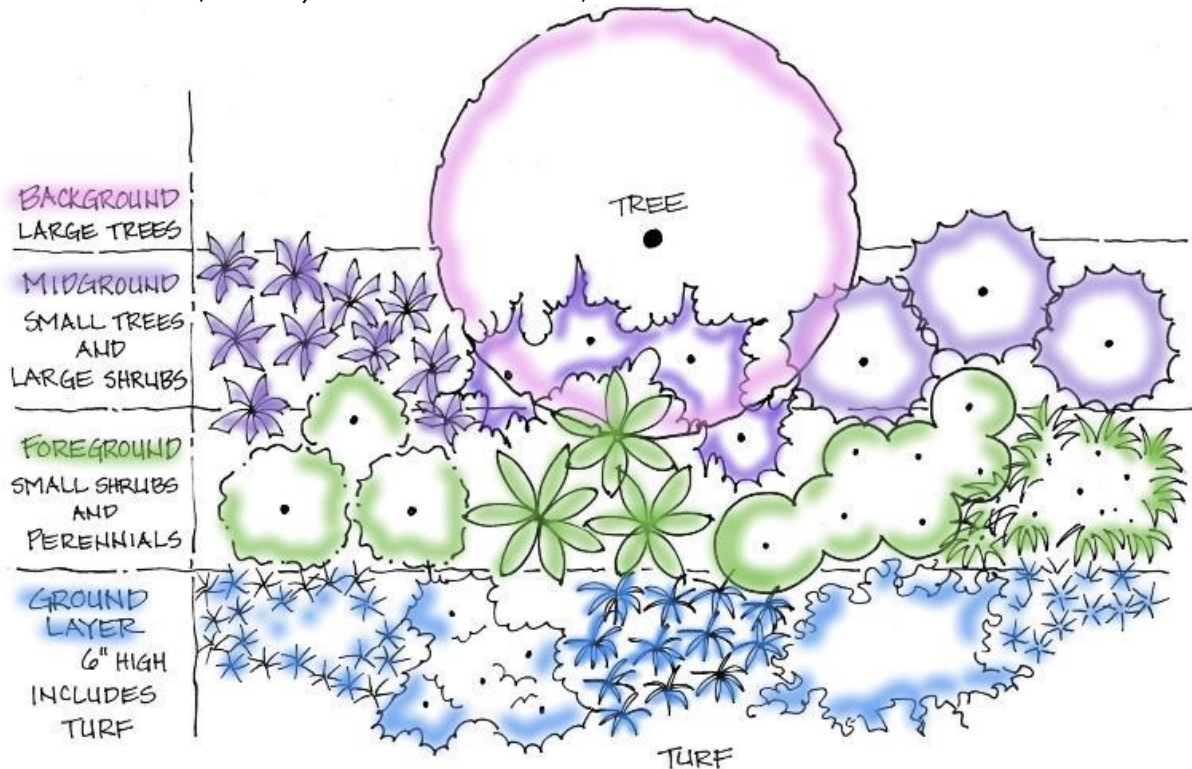
N = No buffer required

- D. Properties abutting the Amelia Island Parkway are required to maintain a 15 foot landscaped buffer. The area between preserved and planted trees can be supplemented with native or naturalized shrubs to provide screening adjacent to any parking areas.
- E. Buffer plantings are required to create vertical layers of plant material in repeating patterns. The examples provided describe vertical layering of plants in the landscape through staggered heights, with low plants in the front interconnecting plant massing layers with taller plants in the back.

Examples:



Credit: Gail Hansen, University of Florida IFAS Extension, EP449



Credit: Gail Hansen, University of Florida IFAS Extension, EP449

- F. A fence or wall included in a buffer screen shall be constructed with the side of the fence or wall with the finished appearance facing the use of lesser intensity or rights-of-way.

- G. An opening through a buffer area may be provided to facilitate pedestrian or vehicular traffic between developments.
- H. Permitted use of buffer area
 - 1. A buffer may be used for passive recreation and picnic facilities. It may contain pedestrian paths or bike trails, provided that the path or trail is not paved. These paths may cross a required continuous hedge provided that openings to allow such crossing points shall be a maximum of six (6) feet in width and shall be spaced not less than 100 feet apart.
 - 2. Except along the Amelia Island Parkway, a buffer may incorporate water resources including stormwater detention/retention facilities. However, a minimum of ten (10) feet width of the buffer shall be preserved as a planting area without stormwater facilities.
 - 3. Ingress and egress to the proposed development and utilities may cross the buffer provided they minimize the amount of buffer devoted to this use. Ingress and egress shall not be subtracted from the linear dimensions used to determine the minimum amount of landscaping required.
 - 4. The buffer area may be included as part of the calculation of any required open space or as part of the required front, side, or rear yard.
 - 5. Identification signs as specifically allowable pursuant to Section 5.03.00.
 - 6. Except along the Amelia Island Parkway, street lighting may be incorporated in to the buffer area.
- I. Prohibited use of buffer area.
A buffer area shall not be used for any building, parking, storage, or loading area.

4.05.13 HARDSHIP RELIEF

- A. Where a landowner is unduly burdened by the strict application of this chapter, said landowner may apply in writing to the community development department director for hardship relief.

4.05.14 TREE PROTECTION REQUIREMENTS

- A. Intent:
The intent 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. It is the intent of the City that:
 - 1. There shall be no net loss of canopy within the City;
 - 2. Preservation of the City's existing 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 the City'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 shade 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 health and well-being of Fernandina Beach residents and visitors is protected by providing shade and otherwise moderating potential dangerous summer temperatures; and
 9. The unique aesthetic character of the City is preserved, enhanced, or restored.
- B. Permitting Requirements:
- Protected Trees are any existing, healthy tree 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). Tree removal permits are required for the removal of any protected tree, except as set forth below. There shall be three categories of exemptions or partial exemptions, as follows:
1. *Exemption from permit, permit fee and replacement requirements:*
 - a. Trees and landscaping specifically grown as landscape material for resale by duly approved and licensed plant nurseries and botanical gardens.
 - b. Damaged or hazardous trees during and for a one (1) month period following a declared disaster.
 - c. 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.
 2. *Exemption from fee and replacement requirements.*

A permit shall be required for removal of the following trees, however, removal of these shall be exempt from the permit fee and replacement and replacement plan requirements of this article as follows unless the removal of such tree results in the property not achieving the City's minimum landscape standards as specified in LDC Sections 4.05.05:

 - a. Any tree other than a protected or heritage tree;
 - b. 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; The administrative official may require a written certification of the need to remove such a tree or trees, at the property owner's expense, from an ISA certified Arborist prior to authorizing such a removal.
 - c. 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 only when accompanied by written certification of the need to remove such tree(s) at the property owner's expense, from an ISA certified Arborist prior to authorizing such removal.
 - d. Major and minor maintenance of trees located adjacent to utility lines; and
 - e. Removal of trees by the City on City rights of way.
 - f. The tree prevents access to a lot and no feasible alternative access points exist.
 3. *Partial Exemptions from replacement requirements for site development.*

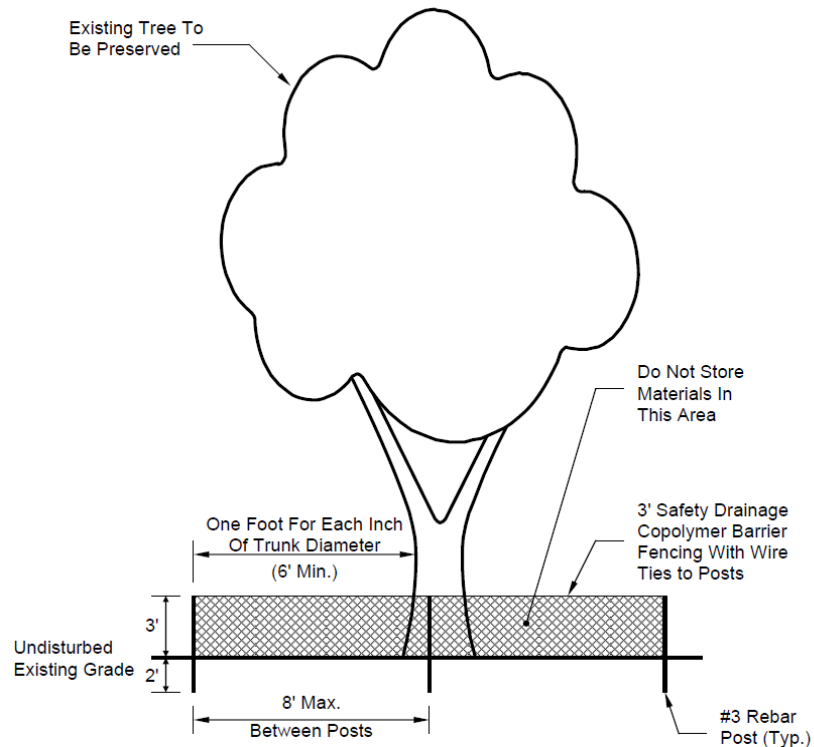
A permit and permit fee shall be required for removal of protected trees for purposes of site development provided that mitigation requirements have been met through either on-site retention of existing healthy native trees or through the planting of replacement trees required as follows:

 - a. For one- and two-family residential properties:

Eighty percent (80%) of the total DBH of the protected trees shall be exempt from replacement. Replacement of twenty percent (20%) of the total DBH of the protected trees located within the area of the building footprint, or within five (5) feet thereof, to be constructed on the property, when such improvements have been authorized by a duly approved and issued building permit shall be required.

- b. For affordable housing units, the City Manager or designee is authorized to issue an administrative waiver pursuant to the procedures set forth in Chapter 10.
 - c. For non-residential and mixed use or multi-family residential properties:
Seventy-five percent (75%) of the total DBH of the protected trees shall be exempt from replacement. Replacement of twenty-five percent (25%) of the total DBH of protected trees located within the area of the impervious improvements, or within five (5) feet thereof, to be constructed on the property, when such improvements have been authorized by a duly approved and issued building permit shall be required.
- C. Tree Survey or Inventory:
All protected trees shall be shown on a tree survey or a tree inventory prepared by a certified arborist, submitted with an application for a tree removal permit or with an application for development approval as set forth in Chapter 11.
- D. Replacement trees Requirements:
1. When authorization has been granted to remove protected trees, replacement trees shall be planted. The combined DBH of replacement trees shall equal or exceed the combined DBH of trees authorized for removal subject to any preservation credits available from the retention of protected trees on the site. Preservation credits are set forth in Section 4.05.14 (E)(5).
 2. Replacement trees shall meet the standards set forth in Section 4.05.03, and shall be balled and burlapped or container-grown.
 3. Protected trees authorized for removal may be relocated to locations compliant with the specifications set forth in Section 4.05.03 and approved by the City Manager or designee.
 4. An applicant shall be permitted to pay a fee to the City Tree Replacement Fund for up to fifty (50) percent of the cumulative DBH of protected trees removed, less the credits accumulated from preservation of trees on the site. The fee will be set by resolution of the City Commission and will be based on the average cost for the City to replace the tree with the same species, excluding invasive species, the fiscal year in which the permit is issued.
- E. Preservation Credits:
1. On-site retention of native, healthy trees shall receive benefit of tree preservation credits to reduce the overall tree replacement requirements as follows:
 - a. Trees equaling 8" – 13" shall receive a 1.5x credit
 - b. Trees equaling 14" – 20" shall receive a 2x credit
 - c. Trees equaling 20" or greater shall receive a 3x credit
 2. 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.
 3. These credits shall only be applied towards tree replacement requirements created by the removal of protected trees as set forth in 4.05.14(B) (3). These credits may be transferred only on unified multiple lot developments.
 4. Preservation credits for the total DBH of protected trees retained on the site will be applied during the review of the replacement plan.
- F. 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. 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 area 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, chain link or other similar barrier which limits access to the protected area. The fence must remain in place through the duration of construction activities. Beyond the dripline of the canopy, a 3" mulch bed shall be established to avoid compaction from heavy machinery. Trenching close to a preserved tree on-site must be done by hand or air spading only. Preserved trees that may have root impacts resulting from the surrounding development shall be handled through hand cut root pruning practices only. Root ripping equipment is not permitted.
 - e. An exception shall be granted if the required protection zone prohibits access to the site. Consultation with a certified arborist is required to determine a proper access plan and provide measures to ensure protection of the tree during construction activities.



Example:

3. All development activities, except those specifically permitted by Section 4.05.14(F)(4), 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, and 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. Underground utilities shall be no closer to the tree than ten (10) feet.
 - b. Placement of sod or other ground covers, and the preparation of the ground surface for such covers.
 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. In order to control air and water pollution from dust from traveling across the landscape, a detailed and site specific plan for dust control measures is required. Control measures may include, but are not limited to: sprinkling or irrigation, vegetative cover, mulch, wind breaks, or soil treatments.
- G. Abused Trees:
- Abused trees shall not be counted toward fulfilling tree replacement or preservation requirements. The City may require the abused trees to be replaced and are subject to penalties provided for in LDC section 11.08.04. 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. Pruning a tree to destroy its natural shape;
 5. Hatracking;
 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).

4.05.15 HERITAGE TREES

A heritage tree is a tree designated by the City as irreplaceable due to its size, age, and its historic, aesthetic, or cultural significance.

1. Designation Criteria

To be designated a heritage tree; the following criteria must be met:

- A. The tree must be indigenous to the region.
- B. The tree must be in apparently healthy growing condition
- C. The tree must have a DBH of at least 36" and;
- D. The tree must possess significance by meeting one or more of the following criteria:
 1. The tree has a documented association with a historical figure, property, or significant historical event.
 2. The tree is associated with a historic landmark or site as defined in this LDC.
 3. The tree was planted as a commemorative, memorial or tribute;
 4. The tree was planted during a particularly significant historical era.
 5. The tree is distinctive due to a functional or aesthetic relationship to a natural resource, such as trees located along stream banks or trees located along dune or ridge lines
 6. The tree is of exceptional or unique architecture.
 7. The tree is identified by the city as having significant arboricultural or horticultural value to the citizens of the city.
 8. The tree is identified as playing a significant role in the landscape or architecture of a specific location.

2. Categories

There shall be 2 categories of heritage trees: Designated Heritage Tree and Protected Heritage Tree

- A. *Designated Heritage Tree (Private Property)*: The City shall provide the following incentives to encourage private property owners (Owner) to preserve and protect Designated Heritage Trees.
 1. The City may provide to the Owner recommendations regarding the proper care and maintenance of a Designated Heritage Tree.
 2. The City shall provide aid in the evaluation of a Designated Heritage Tree every four years. The evaluation shall be conducted by City staff and an International Society of Arboriculture (ISA) Standards certified arborist for the purposes of determining health and wellness of the tree, evaluating and diagnosing potential biotic or abiotic disorders and recommending appropriate treatments. The City shall pay 25% of the reasonable costs of this evaluation and findings shall be provided to both parties.
 3. A Designated Heritage Tree may be pruned by the Owner. The Owner is encouraged to trim a Designated Heritage Tree in accordance with ISA standards so the pruning does not reduce the tree's height or crown diameter; such that it alters the tree's general appearance, increase the tree's susceptibility to insects or disease, or otherwise increase its risk of mortality. Upon request, the City or a qualified designee will consult with the Owner regarding acceptable pruning methods and techniques.
 4. If considering removal or actions which result in damage of a Designated Heritage Tree, the City will, upon request, consult with the Owner regarding possible alternatives to address the condition(s) necessitating remove or potential damage to the tree.
- B. *Protected Heritage Tree*: A Protected Heritage Tree is any Designated Heritage Tree located on public property or one located on private property where the property owner (Owner) has encumbered his/her property with an instrument provided by the City and recorded by the Owner with the County of Nassau. The purpose of the instrument is to inform future Owners that the property contains a Designated Heritage Tree. The

recorded instrument shall reference the City of Fernandina Beach Heritage Tree Program and include a statement that prior approval is required by the Owner from the City of Fernandina Beach for any act that may result in potential damage or removal of the Protected Heritage Tree. Such tree shall be classified as a Protected Heritage Tree. Said instrument cannot be revoked without consent of the Fernandina Beach City Commission. In cases where the proposed Protected Heritage Tree is located on or near the property line, the Owners of both properties must be in agreement as to the designation of the tree as a Protected Heritage Tree.

3. Incentives or Benefits

The following are incentives or benefits, in addition to those listed under Designated Heritage Tree (Private Property), above, bestowed upon the Owners of those trees designated as Protected Heritage Trees. The owner of a Protected Heritage Tree is eligible for percent matching funds from the City of Fernandina Beach Tree Trust Fund relating to proper care and maintenance of a Protected Heritage Tree. Matching funds may be applied for the following:

- A. Removing diseased or insect-infested wood, removing broken or damaged limbs and by engaging in regular maintenance pruning to promote continued vigor of the tree under advisement by an ISA certified Arborist. Pruning of a Protected Heritage Tree every five years to ISA standards. The City shall pay 25% of the reasonable costs for pruning of a Protected Heritage Tree, as determined by the City Manager or designee.
- B. Evaluation of a Protected Heritage Tree every 3-4 years or in emergency situations as deemed by the City Manager. The City shall pay 100% of the reasonable costs for an evaluation by an ISA certified Arborist for the purposes of determining health and wellness of the tree, evaluating and diagnosing potential biotic or abiotic disorders and recommending appropriate treatments.
 1. Treatment of a Protected Heritage Tree as necessary. The City shall pay 25% of the reasonable costs of applying treatments or other remedial actions necessary to maintain the health of a Protected Heritage tree, manage pests or complete other Plant Health Care (PHC) relating to the Protected Heritage Tree.
 2. A heritage tree shall not be removed except by specific authorization from the City Commission.
 3. Any person, who owns, controls, has custody or possession of any real property within the city shall maintain and preserve all heritage trees located thereon in a state of good. Failure to do so shall constitute a violation of this section.
 4. No person shall willfully damage, injure, destroy, move or remove a heritage tree except pursuant to the terms and conditions of a permit granted pursuant to this article.

4. Construction/grading activity

Any owner or person who conducts any grading or construction activity on property shall do so in such a manner as to not threaten the health or viability or cause the removal of any heritage tree. The City Manager or designee may impose conditions on any development permit to require construction fencing and/or the use of protective grading methods to assure compliance with this section. In addition to said conditions, the following shall apply:

- A. Except as otherwise provided in this section, excavation adjacent to any heritage tree shall not be permitted where material damage to the root system may result. When proposed developments encroach into the drip line of any heritage tree, special construction techniques to allow the roots to breathe and obtain water may be required as a condition(s) to the approval of any application for a building, zoning permit or removal permit.

- B. The existing ground surface within the drip line of any heritage tree shall not be cut, filled, compacted or pared except for existing, permitted encroachments such as sidewalks or as otherwise expressly approved by the City Manager or designee pursuant to an approved arborist's report. Tree wells may be used where advisable.

5. Nominations

Any citizen, property owner, or City official may nominate a tree to be designated as a heritage tree. **Nominations must be accompanied with permission from the property owner where the tree stands.** Consideration of the nomination shall follow the procedures set forth in Chapter 11.

6. Recognition

Every designated heritage tree may be permanently marked identifying it as such and advising that unauthorized removal will result in a fine as stated in Section 11.08.04. The requirement to permanently mark each designated heritage tree is advisory only and not a legislated mandate. Failure of the City to mark such tree shall not adversely impact the City in enforcing the provisions of this section.