ARTICLE VI DESIGN STANDARDS AND IMPROVEMENT REQUIREMENTS

PART 6.00.00 GENERALLY

This Article contains the minimum design standards and Improvement requirements that apply to all Development in St. Johns County. The standards or requirements in this Article may be supplemented or superseded by more stringent standards or requirements associated with specific Development criteria addressed in other Articles of this Code.

PART 6.01.00 DISTRICT PERFORMANCE AND DIMENSIONAL STANDARDS

Sec. 6.01.01 Schedule Of District Area, Height, Bulk, and Placement Regulations

Except as specifically provided elsewhere in this Code, regulations governing the Minimum Lot Width, Minimum Lot Area, Maximum Lot Coverage, Floor Area Ratio, Impervious Surface Ratio, Minimum Yard Requirements, and Maximum Height of Structures shall be established for the districts as shown in the following Table 6.01:

TABLE 6.01

SCHEDULE OF AREA, HEIGHT, BULK AND PLACEMENT STANDARDS								
Zoning Districts	Minimum Lot Widths	Minimum Lot Area	Maximum Lot Coverage by All Buildings	Floor Area Ratio	Impervious Surface Ratio	Min. Yard Req. ⊗ Front/ Side/Rear	Maximum Height of Structures ⊕	
RS-E	150 feet ☆	1 acre ☆	20%	N/A	70%	30/20/20 feet +	35 feet	
RS-1	120 feet ☆	13,200 square feet ☆	25%	N/A	70%	30/10/15 feet	35 feet	
RS-2	90 feet ☆	10,000 square feet ☆	30%	N/A	70%	25/8/10 feet	35 feet	
RS-3	75 feet ☆	7,500 square feet ☆	35%	N/A	70%	25/8/10 feet	35 feet	
RG-1 SF Dwellings	75 feet ☆	7,500 square feet ☆	25%	N/A	70%	25/8/10 feet +	35 feet	
RG-1 MF Dwellings	100 feet ☆	6,000 square feet ☆	25%	N/A	70%	20/10/20 feet +	35 feet	
RG-2 SF Dwellings	75 feet ☆	7,500 square feet ☆	35%	N/A	70%	25/8/10 feet +	35 feet	
RG-2 MF Dwellings	75 feet ☆	6,000 square feet ☆	Max. Height 35 feet - 27% 45 feet - 25% 55 feet - 23%	N/A	70%	20/10/10 feet +	35 feet ◊ #	
WH								
-Single Family	35 feet	3,500 square feet	50%	N/A	70%	F -10 feet; 20 feet to face of garage, 25 feet to edge of sidewalk/	35 feet	
-Duplex/Townhomes	14 feet	1,400 square feet	70%	N/A	70%	F 10 feet S 0 feet/10 feet to property line R 10 feet	35 feet	
-Multi-Family	14 feet; 20 feet for end units	1,400 square feet	70%	N/A	70%	F (w/sidewalk)—22 feet from sidewalk; to garage; 15 feet to building	45 feet	
RMH (Manufactured/ Mobile Home Park)	100 feet @ entrance & 200 feet @ portion used for Mobile Home stands ☆	10 acres for Mobile Home Park and 2,500 square feet for each Mobile Home stand ☆	35%	N/A	70%	25/10/10 feet	35 feet	
RMH (Manufactured/ Mobile Home Subdiv. and Mobile Home on Individual Lot)	200 feet for the Subdivision & 60 feet for individual Lots ☆	10 acres for the Subdivision & 6,000 square feet for each Mobile Home Lot ☆	35%	N/A	70%	20/8/10 feet	35 feet	
RMH-S	75 feet ☆	7,500 square feet ☆	35%	N/A	70%	25/8/10 feet	35 feet	
OP	N/A	N/A	N/A	50%	75%	15/5/10 feet	40 feet ◊ # +	
CN	N/A	N/A	N/A	50%	70%	20/5/10 feet	35 feet	
CHT	100 feet	15,000 square feet	N/A	50%	75%	15/15/15 feet	40 feet ◊ # +	
CG	N/A	N/A	N/A	50%	70%	15/5/10 feet	40 feet ◊ # +	

SCHEDULE OF AREA, HEIGHT, BULK AND PLACEMENT STANDARDS								
Zoning Districts	Minimum Lot Widths	Minimum Lot Area	Maximum Lot Coverage by All Buildings	Floor Area Ratio	Impervious Surface Ratio	Min. Yard Req. ⊗ Front/ Side/Rear	Maximum Height of Structures ⊕	
TCMU								
Bldg. Type I	N/A	N/A	N/A	80%	75%	Section 3.10.05.C. 1	40 feet@ +	
Bldg. Type II	N/A	N/A	N/A	80%	75%	Section 3.10.05. C.2	40 feet @ +	
Bldg. Type III	N/A	N/A	N/A	80%	75%	Section 3.10.05 .C.3	40 feet @ +	
CI	N/A	N/A	N/A	50%	75%	15/5/10 feet	40 feet ◊ # +	
СНІ	N/A	N/A	N/A	50%	75%	15/5/10 feet	40 feet ◊ # +	
CR	N/A	N/A	N/A	50%	70%	15/5/10 feet	40 feet ◊ # +	
CW	N/A	N/A	N/A	70%	75%	15/15/15	40 feet ◊ # +	
IW	N/A	N/A	N/A	70%	75%	15/15/15 feet	None * # +	
HI	N/A	N/A	N/A	70%	75%	15/15/15 feet	None * # +	
PS	N/A	N/A	N/A	N/A	75%	10/10/10 feet	None * # +	
OR - Single Family Dwelling or Mobile Home	100 feet ☆	1 acre ☆	35%	N/A	70%	25/10/10 feet	35 feet	
OR - All Other Uses	100 feet	1 acre	20%	N/A	75%	25/10/10 feet	None * # +	
AD	N/A	N/A	N/A	70%	70%	10/5/10 feet	None * +	

N/A = Not Applicable

- See Section 6.01.05 for Minimum Lot Area and Lot Width with use of septic tank and/or private well.
- * Maximum height of Structures within Airport Development District is regulated by Federal Aviation Regulations Part 77 and height/distance requirements in Airport Overlay District Part 3.04.00 and Height Regulation Part 6.07.00 of this Code.
- The Structure may exceed the prescribed maximum height. Five (5) feet additional setback shall be required for each five (5) feet of Structure height above the prescribed maximum height up to a maximum increase of twenty (20) feet.
- # Maximum height of Structures in the Coastal Area is limited to thirty-five (35) feet.
- + Maximum height of Structures is thirty-five (35) feet unless protected with an automatic sprinkler system designed and installed in accordance with the latest edition adopted by the Florida Fire Prevention Code and NFPA 13.

- ∀ard requirements may be modified by additional setback requirements for Lots adjacent to contiguous Wetlands contained in Section 4.01.06 of this Code.
- Maximum height of Structures measured from established grade as provided in Height Regulation Part 6.07.00 of this Code.
- Maximum Height of Structures for TCMU See Article III Part 3.10.00 Section 3.10.05.B
- Refer to Section 3.10.10 Incentives For Property Owners Who Restore and Preserve a Qualified Historic Structure
- For Lots or parcels that are platted prior to *July 29, 1999*, the minimum Yard requirements will be determined by the Building Restriction Lines, if any, shown on the plat. For said Lots or parcels not having Building Restriction Lines recorded on the applicable plat, the Yard requirements will be determined by *Article VI, Table 6.01*.

Sec. 6.01.02 Reserved

Sec. 6.01.03 Lot Width Area and Yard Requirements

A. Lots, Measurement of Width

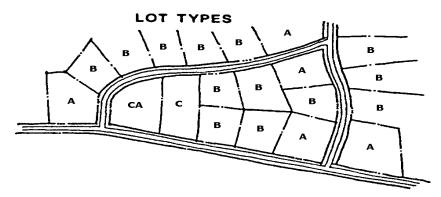
The width of a Lot shall be measured at the most direct angle across the front of the required minimum Front Yard set back line. Provided, however, the width between the side Lots at their foremost points where they intersect with the Street Line shall not be less than eighty percent (80%) of the required Lot width except when a Lot fronts on a cul-de-sac or curve, the Lot width shall be a minimum of twenty-five (25) feet.

B. Lots, Types

Figure 6.01 illustrates terminology used herein with reference to Corner, Interior, and Through Lots.

- A Corner lots
- B Interior Lots
- C Through Lots

FIGURE 6.01 LOT TYPES



C. Lot Frontage

- 1. On Interior Lots, the Front of a Lot shall be construed as the portion nearest the Street.
- 2. On Corner Lots, the frontage of a Lot shall be construed as the shortest boundary to a Street. If the Lot has equal frontage on two (2) or more Streets, frontage shall be determined by the County Administrator in accordance with the prevailing Building pattern, or the prevailing lot pattern, if a Building pattern has not been established.
- 3. On Through Lots, all portions adjacent to Streets shall be considered as a Front Yard for regulatory purposes.

D. One Dwelling Unit Per Lot

For any district in which Single Family residential Uses are allowed, only one (1) Single Family Dwelling Unit shall be permitted per platted or legally unrecorded Lot unless otherwise permitted.

E. Lot Yards; Methods of Measurement; Special Requirements

The following rules shall apply with regard to determinations of Yards on Lots:

1. Yards Adjacent to Streets

Depth of a required front Yard shall be measured at right angles to a straight line joining the foremost points of the side Lot lines. The foremost point of the side Lot line, in the case of rounded property corners at street intersections, shall be

assumed to be the point at which the side, and front Lot lines would have met without such rounding. Front and rear Yards shall be parallel.

2. Front Yards on Interior Lots

Front Yards on Interior Lots shall be construed as extending between side Lot lines across the frontage of the Lot.

3. Front Yards on Corner Lots

Front Yards on Corner Lots shall be construed as extending across the Lot from each interior side Lot line to the opposite Street Line. Corner Lots are considered to have two (2) Front Yards. The required Front Yard of the second frontage may be reduced by twenty percent (20%). In Subdivisions where non-conforming Lots exist, the second frontage may be reduced by forty percent (40%), provided the residence is constructed on one (1) Lot only.

4. Front Yards on Corner Through Lots

Front Yards on corner through Lots shall be construed as extending across the Lot from the interior side Lot line to a point at which the Front Yards meet. Corner through Lots are considered to have two (2) or more Front Yards, and one Side yard. At least one of the Front Yards must meet minimum setback requirements. The required Front Yard of one or more of the other of the frontages may be reduced by up to twenty percent (20%). In Subdivisions where non-conforming Lots exist, one or more of the other Front Yards may be reduced by forty percent (40%), provided the residence is constructed on one Lot only.

5. Interior Side Yards

Interior Side Yards shall be construed as running from the rear line of the required Front Yard to the front line of the Rear Yard, if required or, if no Rear Yard is required, to the opposite Lot line. The width of a required Side Yard shall be measured perpendicular to the side Lot line and the inner line of the required Yard shall be parallel to such outer line, at the minimum distance therefrom prescribed in district regulations.

6. Interior Side Yards on Through Lots With More Than One (1) Front Yard

Interior Side Yards on Through Lots with more than one (1) Front Yard shall be construed as running to the rear lines of the Front Yards involved, and measurements and requirements shall be as for Section 6.01.03.E.5 above.

7. Interior Side Yards on Corner Lots

On Corner Lots, the Side Yard is the Yard along any Interior Lot line which intersects with a Street Lot line. When a Corner Lot has four (4) sides, the two (2) sides not adjacent to the Streets are both Side Yards and the Lot has no Rear Yard. If the Corner Lot has more than four (4) sides, the Yards along Interior Lot lines which do not intersect with a Street Lot line shall be considered Rear Yards and must meet the district regulations for such Yards. In all cases the restrictions on maximum Lot coverage and maximum impervious area must be met.

8. Rear Yards

Rear Yards shall be construed as extending across the full width of the Lot at its rear, except as stated in Section 6.01.03.E.7. above. Required depth of Rear Yards shall be determined in the same manner as required width of interior Side Yards.

9. No Rear Yard Required on Corner Lots or Lots Providing Two (2) Front Yards

On Through Lots providing two (2) Front Yards, and on Corner Lots (except as stated in Section 6.01.03.E.7. above), there will be no required Rear Yard, and Yards other than those adjacent to Streets shall be construed as Side Yards, as provided in Section 6.01.03.E.7 above.

10. Administrative Waivers for Errors in Yard Measurements

If an error is discovered in the location of a Building or Structure relative to the minimum Yard requirements, the property Owner, or their authorized representative, may file a request for an Administrative Waiver. The review of the request and the final decision shall be made by the County Administrator, and shall be made in conformance with the following criteria:

- a. Approval of the waiver shall not allow the Structure to exceed the required Yard setback more than ten percent (10%).
- b. The corresponding opposite Yard must be larger than required by the same distance as the waiver request (to insure that the waiver is not just an attempt to place a larger Building on the Lot) or the waiver request concerns an intrusion of only a small corner of the Building (such as a house too close to the front of a cul-de-sac Lot such that it violates the Side Yard requirements at the front corner but nowhere else).
- c. Any waiver request which does not meet paragraphs a. and b. above shall be denied an Administrative Waiver and must comply with the Yard requirements or seek a Variance pursuant to Part 9.03.00.

F. Special Yards

A Special Yard, for purposes of these regulations, shall be construed as a Yard other than adjacent to a Street, required to perform the same functions as a Side or Rear Yard, but adjacent to a Lot line so placed or oriented that neither the term "Side Yard" nor the term "Rear Yard," as generally determined, defined, or applied with respect to regular Lots, fits the circumstances of the case. In such instances, the Special Yard shall be considered a Rear Yard unless the County Administrator determines that Side Yard requirements for the district shall apply because of the relationship of the portion of the Lot or Lots, with due regard to the orientation of Structures and buildable areas thereon.

G. Waterfront Yards

 Waterfront Yards shall be measured from the mean high-water line whenever a mean high-water line falls within the lot lines. For the purposes of determining the maximum lot coverage and density for lots with waterfront yards, the mean highwater line shall be substituted for lot lines wherever the mean high-water line falls within the lot lines. Provided, however, on lots with seawalls the yard shall be measured from the seawall.

- 2. Waterfront Yards shall equal Rear Yard requirements for the zoning district in which the Lot is located as provided in Section 6.01.01 of this Code.
- 3. Waterfront Yard requirements may be modified by additional buffer and setback requirements as contained in Section 4.01.06 (Environmentally Sensitive Areas Wetlands, Estuaries, and Natural Water Bodies) or Part 6.06.00 (Landscaping and Buffering Requirements), or other provisions of this Code.

H. Permitted Projections Into Required Yards

- 1. Certain architectural features, such as eaves, bay windows and projecting fireplaces, which may occupy a portion of a Building footprint, may project not more than three (3) feet into required Front and Rear Yards, three (3) feet into Side Yards which measure a minimum of eight (8) feet in width, and two and one-half (2.5) feet into Side Yards measuring seven and one-half (7.5) feet in width. No such intrusion is permitted into Side Yards less than seven and one-half (7.5) feet in width.
- 2. Mechanical equipment, such as air conditioning units, pumps, heating equipment, solar panels, and similar installations, and screening and housing for such equipment, may project into the required Side Yard(s) or Rear Yard(s) but shall not be located within five (5) feet of any Lot, and may not project into the required Front Yard(s).
- Covered Patios and Covered Pools.

Rear Yard(s)

Covered Patios, Covered Pools and similar Structures, as defined in Article XII, may project into the required Rear Yard but shall not be located within ten (10) feet of any Lot for any Zoning District requiring a Rear Yard setback twenty (20) feet or greater and shall not be located within five (5) feet of any Lot for any Zoning District requiring a Rear Yard setback less than twenty (20) feet.

Side Yard(s)

Covered Patios, Covered Pools, and similar Structures, as defined in Article XII, may project into the required Side Yard but shall not be located within five (5) feet of any Lot.

Through Lots

Covered Patios, Covered Pools, and similar Structures, as defined in Article XII, may project into the required Front Yard which functions as a Rear Yard and has no access to a Street but shall not be located within ten (10) of any Lot.

4. For Through Lots, a Covered Patio may intrude thirteen (13) feet into the required Front Yard which functions as a Rear Yard and has no access to a Street. In no case shall the permitted intrusion of the Covered Patio reduce the Yard provided to less than ten (10) feet.

5. No recreational equipment shall be used for living, sleeping, or housekeeping purposes when parked or stored in a residentially zoned Lot or in any other location not approved for such Use. Major recreational equipment, including utility trailers and boat trailers, may be parked or stored in a required Rear or Side Yard but not in required Front Yards; provided however, that such equipment may be parked anywhere on residential premises, but not to exceed twenty-four (24) hours during loading or unloading.

I. Minimum Lot Dimension

The minimum dimension of the buildable Lot shall not be less than the required minimum Lot width at the Front Yard. In the case of Lots not meeting the minimum dimension at the minimum required Front Yard defined in Table 6.01, the Front Yard shall be extended to the point at which the minimum dimension is met.

J. Minimum Lot Area

Minimum Lot Area is the minimum square footage required for a Lot by this Code. The Minimum Lot Area shall not include lands waterward of the Mean High Water Line. Roadways or Rights-of-Way provided by the Owner or Developer of the Lot may be included with the zoning Lot for the purposes of calculating Density or Floor Area Ratio, but may not be included in calculating compliance with the minimum Lot area for individual Lots. If a zoning Lot includes different zoning districts, the Minimum Lot Area requirements for each district shall be met.

Sec. 6.01.04 Zero Lot Line Residential

A. Generally

This is a residential Lot type that permits a reduction in Lot area by concentrating development in a specific area to allow the remaining land to be used for recreation, open space, preservation of environmentally sensitive areas, or to encourage Affordable Housing opportunities. All Zero Lot Line Developments shall be platted in accordance with the requirements of this Code and Florida Law, shall be served by Central Water and Wastewater Systems, and shall only be allowed within Planned Unit Development Districts approved in accordance with the requirements of Part 5.03.00 of this Code.

B. Single Family Dwelling Design Standards

- 1. Minimum Lot Area shall be five thousand (5,000) square feet.
- 2. The Dwelling Unit shall be placed along one interior side property line except where the unit is located at the end of a sequential row of units and cannot be placed on a Lot line without attaching to an adjacent unit. In that event, a minimum spacing of five (5) feet shall be provided from the Dwelling on the adjacent Lot.
- 3. The Side Yard on the other interior side property line shall be a minimum of fifteen (15) feet excluding connecting elements such as fences or walls.
- 4. A five (5) foot Easement shall be provided along the Lot perimeter adjacent to a zero setback Dwelling for maintenance of the Structure. The Easement shall be

shown on the plat. The roof shall be designed so that water runoff from the Dwelling placed on the Lot line is limited to the Easement area.

- 5. Minimum Front Yard shall be ten (10) feet for a Dwelling Unit with a side entry garage or carport and twenty-five (25) feet for a front entry garage or carport.
- 6. Minimum Rear Yard shall be fifteen (15) feet.
- 7. Maximum Lot coverage by all Buildings shall not exceed fifty percent (50%).
- 8. Roofs shall not overhang property lines.

C. Townhome Dwelling Design Standards

In Townhome Developments where each Dwelling Unit owner also individually owns the land underlying that unit (as distinguished from Condominium form of ownership or apartment rental units), the following criteria shall apply:

1. All area, height, bulk and placement standards shall apply to the Townhome Building(s) as provided in the applicable Planned Unit Development ordinance.

Sec. 6.01.05 Minimum Lot Area By Available Utilities

A. Table of Minimum Lot Area Based on Utilities

In addition to the Minimum Zoning Lot Area requirements specified in 6.01.01, the following regulations shall apply to all new residential Subdivisions (platted or legal and documented Lots of Record existing prior to the initial effective date of this Code are exempt from these requirements). Where there is a conflict with Section 6.01.01, the greater standard shall apply.

TABLE 6.02

Minimum Lot Area and Width Based on Utilities							
Available Utilities	Minimum Lot Area	Minimum Lot Width					
Private Well and Private Septic Tank	43,560 square feet	100 feet					
Central Water and Private Septic Tanks	21,780 square feet	100 feet					
Private Well and Central Wastewater	10,890 square feet	75 feet					

B. Other Requirements

- 1. No multi-family Use exceeding four (4) units shall use septic tanks.
- 2. Farm Worker Housing is not subject to the provisions of this Section, but shall be subject to the requirements of Section 2.03.21.
- 3. A Minimum Lot Area of one (1) acre exclusive of lands waterward of the Mean High Water Line is required for a Single Family or Two Family Dwelling for the use of a septic system within the Coastal Area as shown on the St. Johns County Comprehensive Plan (platted or legal and documented Lots of Record existing prior to the initial effective date of this Code are exempt from this requirement).

PART 6.02.00 SUBDIVISION DESIGN STANDARDS AND GUIDELINES

Sec. 6.02.01 Access

- A. Access to Public Road Required
 - 1. These regulations shall be in accordance and comply with Roadway standards found in Part 6.04.00 Roadway, Drainage & Utilities Standards of this Code.
 - 2. All Lots within a Platted Subdivision shall have access to a Street dedicated to public use which has been accepted for maintenance by St. Johns County, a municipality, a Community Development District, or the Florida Department of Transportation. Where a proposed Subdivision Lot does not abut such a Street, the Applicant shall provide access in accordance with the requirements set forth within these regulations.
 - a. If access is provided by a Street maintained by the Florida Department of Transportation (FDOT) a copy of the results of a pre-application meeting with FDOT is required.
 - 3. Any unplatted Subdivision, lot, or parcel proposing access to a publicly owned and maintained road via an Easement or common area shall meet the requirements of Section 6.02.01.B.3.
 - 4. Adequate vehicular and pedestrian access shall be provided to each Parcel. The primary function of local Streets is service to abutting properties. Street widths, placement of sidewalks, pattern of Streets and number of intersections are related to safety and efficiency of access to abutting lands.
 - 5. Local circulation systems and land Development patterns shall not detract from the efficiency of bordering major Streets. This principle may involve control of driveway, intersection placement, and full or partial control of access. Land Development should occur so as to minimize direct access to major Streets (Minor and Major Collectors and Arterials).
 - 6. Design of residential Streets should clearly reflect their local function. These Streets should have an appearance commensurate with their function as local Streets. They should not be over-designed or over-built, i.e. high speed, excessive width, etc.
 - 7. Subdivisions should be designed so as to conform to and take advantage of the topographic and other natural features of the land. Local, state, or federal laws, rules, or regulations in this Code may require the conservation of existing Trees, Wetlands, Natural Water Bodies, wildlife habitat, and other Environmentally Sensitive Areas.
- B. Types of Lot Access to a Public Roadway; Standards

Listed below are the types of Lot Accessways allowed to a publicly-owned and maintained road and the standards that apply:

1. Public Roadway

All Lots within Subdivisions shall abut a Public Roadway dedicated to public use and accepted for maintenance by St. Johns County or shall meet the requirements for a Private Roadway.

2. Private Roadway

To gain access to a Public Roadway, Lots within Subdivisions may abut a Private Roadway privately owned and maintained. When privately owned and maintained Rights-of-Way are proposed, the Site Plan shall show the Rights-of-Way for the use of Lot Owners and to be maintained by the Lot Owners consistent with Private Roadways as defined. Roadways owned or maintained by a Community Development District are considered Private Roadways for the purposes of this Part.

3. Easements for Access

- a. Easements for access to Public Roadways shall only be permitted to serve multi-family residential projects (except Townhomes), non-residential projects, or non-platted residential Subdivisions or Subdivisions requiring plat approval may not access a Public Roadway through an easement.
- b. The Easement shall meet the requirements of Section 6.04.07.B.
- c. The Easement shall be legally sufficient to prevent the Lot or Parcel from being land locked.

C. Access to Beachfront or Riverfront Lands

Whenever a Subdivision is developed on beachfront or riverfront land, such Development shall be carried out so as to provide public access to said beach or river in accordance with Section 161.55(6), F.S., if applicable.

D. Access to Existing or Proposed Adjoining Roadway System

1. Arrangement of Roadways

The arrangement of Roadways in new Subdivisions shall make provisions for the continuation of existing Arterial and Collector Roadways from adjoining areas, or for their projection where adjoining land is not subdivided. Where the Subdivision is adjacent to another Subdivision, property owned by the St. Johns County School Board (currently, or planned as, a school site), or commercial areas, direct access shall be provided for non-motorized traffic where feasible. Residential neighborhoods shall be designed to include an efficient system of internal circulation and Roadway stub-outs to connect into adjacent Developments to link neighborhoods together.

2. Access to Arterial or Collector Roadways

Unless otherwise approved by the County Administrator for good cause, residential Lots in Subdivisions shall not have direct access to an Arterial or Collector Roadway. Residential Lots in Subdivisions that abut an Arterial or Collector

Roadway shall not front on said Roadway and access shall be blocked by a non-access buffer.

Access to Local Roads

Residential Lots in Subdivisions shall front on and have direct access to Local Roads only. Local Roads shall be arranged and designed so as to restrict their Use by through and high speed traffic.

4. Continuity of County Maintained Roads

Roads proposed for dedication to St. Johns County must have adequate continuity to other roads owned or maintained by St. Johns County.

Sec. 6.02.02 Medians and Islands

A. Allowed

Medians and islands within the road Rights-of-Way are allowed when warranted by traffic conditions and are in conformance with the requirements of the Roadway design requirements of the County.

B. Designation as Park or Recreation Area Prohibited

Medians, islands, and islands in cul-de-sacs shall not be designated as park or recreation areas.

C. Landscaping

Landscaping of medians, islands, and islands in cul-de-sacs shall be in compliance with the Landscaping requirements of the County.

D. Maintenance

Medians and islands shall be shown as separate Parcels/Tracts on the Site Plan and annotated in one of the following ways:

1.	"Parcel/Tract	is	private	property	of	and	is	to	be
	maintained by	that Owner."							

2. "Parcel/Tract _____ is dedicated to and will be maintained by the Homeowners Association".

Sec. 6.02.03 Uniform Roadway Addressing System

A. Responsibilities and Authorities

An automated system for storing and sharing the uniform addressing roadway data has been implemented. GIS Addressing and SJSO E911 will be responsible for duties related to these activities generally as follows:

1. GIS Addressing:

- a. Naming new roads
- b. Renaming roads
- c. Assigning addresses to new parcels and new residential and commercial construction
- d. Reassigning addresses

2. SJSO E911:

- a. MSAG/RSAG database maintenance
- b. Compliance for posting of numbers
- Site collection of addresses
- d. Change of address notifications
- 3. The County Administrator shall have the authority to implement rules and policies consistent with this Section.
- Road Naming and Renaming shall be deemed an executive function of the County.

B. Road Naming Standard

All roadways in unincorporated areas of St. Johns County and those municipalities within the County that elect to participate in the uniform roadway addressing system shall be named according to the following requirements:

- 1. The Board of County Commissioners has the authority to name roads, except State road designated by number by FDOT, lying outside the boundaries of any incorporated municipality. (See Section 336.05, F.S.
- 2. Duplication of roadway names is not allowed. GIS Addressing maintains the official list of existing and reserved roadway names for roadway naming purposes.
- 3. Names having the same or similar pronunciation but with different spellings are not allowed. Roadway names that "sound alike" such as Main and Maine, Lynwood and Linwood, Pinetree and Pine Tree shall not be permitted.
- 4. For the purpose of public safety, names are preferred from the English language origin. They shall be easy to pronounce with conventional spellings, and not be confused when spoken or written with other existing roadway names.
- 5. A roadway running continuously in one (1) direction will have one (1) name only throughout its length.

- 6. All roadways that serve three (3) or more properties or principal buildings must be named regardless of whether the ownership is private or public.
- 7. Roadways within multi-structure complexes (e.g., business campus, condominiums, multi-unit apartment complex) should be named and each structure individually addressed.
- 8. Roadway names that begin with a number shall not be permitted, e.g., First Street, Three Sisters Ct.
- 9. Special characters in roadway names are not allowed, such as hyphens, apostrophes, or periods, e.g., Bar-B-Ranch Road, Walker's Rd.
- 10. Directional prefixes (North, South, East, and West) will be used only when necessary to distinguish roadways that are traversing a collector/arterial roadway. Directional suffixes in the roadway name shall not be permitted.
- 11. Roadway names, including directional prefixes and spaces between words, should be no more than fifteen (15) characters in length to conform to the County Street Sign specifications.
- 12. No roadway shall be named for a person using their complete legal name, living or dead, without the approval of the Board of County Commissioners. Partial names are acceptable, e.g. Pappy Road, Doty Branch Lane, and Ashley Lane.
- 13. There will be no spaces between initials in roadway names, e.g., E W Pappy Road.
- 14. Roadway names containing the word "and" or an ampersand "&" shall not be permitted, e.g., Seek & Find Lane.
- 15. Roadway names beginning with the articles ("the", "a", "an") shall not be permitted, e.g., The Vinings Dr.
- 16. Only standard roadway types as recognized and maintained by GIS Addressing shall be used e.g. Street, Avenue, Circle.
- 17. It is not permissible to differentiate the same roadway name by a roadway type e.g., Washington Street and Washington Avenue.
- 18. Standard roadway types and directional prefixes used as roadway names shall not be permitted, e.g., Court St, North Blvd.
- 19. Roadway names which may be offensive (slang, double meanings, ethnic or racial slurs, etc.) shall not be permitted.
- 20. Roadway names must be verified for availability and reserved with GIS Addressing.

C. Address Number Posting Standard

Each principal building shall have its building number properly displayed, whether or not mail is delivered to such building. It shall be the duty of both the owner and occupant of each building or property to post the assigned number on the property in the following manner:

- 1. The principal building (address) number shall be affixed to the building on the side that the address is assigned in such a manner so as to be clearly visible and legible from the direction in which normal vehicular access to the building is made.
- 2. Numerals shall be Arabic (e.g. 1, 2, 3, 4) and visible from the roadway.
- 3. The numerals shall be of contrasting color with the immediate background of the building on which the numerals are affixed. Numerals shall be at least three inches in height for residential buildings, and at least six inches in height for all other buildings.
- 4. Assigned numbers, for principal buildings which are not visible from a public or private roadway, shall have their numbers displayed at the intersection of such street or driveway providing access to such building. The number shall be affixed to a post, mail box, fence, wall, or other structure in such a manner so as to be clearly visible and legible from the public or private street on which the use is addressed, regardless of the direction of approach.
- 5. When individual suites, units, apartments are assigned separate identifying letters or numbers, the common address number for the principal building shall be displayed as provided in this Section and the individual suite, unit, or apartment numbers shall be displayed on or near the entrance to each unit.
- 6. Any different number which might be mistaken for or confused with the number assigned in accordance with this ordinance shall be removed.
- 7. Within 45 days after the receipt or notification of an address number or change of an address number, the owner, occupant or person in charge of any principal building to which a number has been assigned shall affix the address number as outlined in this Section. In case of new construction, the address number shall be posted prior to the Certificate of Occupancy being issued.

D. Road Naming and Renaming Procedures

The Board of County Commissioners has the authority to rename roads, except State roads designated by number by FDOT, lying outside the boundaries of any incorporated municipality (See Section 336.05, F.S.

 Petitions to rename existing roadways or name unnamed roadways may be submitted by any property owner abutting the roadway; the owner of the roadway, or the County Administrator. Road naming and renaming request s must be in compliance with Section 6.02.03 (B). Names of Roads for E911 addressing purposes shall not be deemed a property right.

Review of petitions; notice to property owners; approval or denial. Petitions for roadway name changes or the naming of unnamed roads submitted by a property owner that complies with this ordinance shall be reviewed by GIS Addressing, SJSO E911 and other any other Department deemed necessary by the County Administrator to ensure the public health, safety, and welfare.

a. For a petition to be processed, 51% of the property owners on the roadway must have signed the petition.

- b. When a roadway is privately owned, 51% of the roadway owner(s) must also sign the petition.
- c. GIS Addressing will send by US mail a "notice of intent to change a roadway name" to all property owners owning or abutting the roadway involved. For the purposes of notice requirements to owners, the names and addresses will be obtained from the St. Johns County Property Appraiser records.
- d. The property owners will be given fifteen (15) days to send their response to GIS Addressing.
- e. If there is no response in opposition received, the County Administrator will consider the roadway name change petition and approve or deny the request for a roadway name change.
- 2. Procedure in case of opposition. If there is written notice of opposition timely received to a roadway name change petition and alternate names are considered, the County Administrator shall schedule a public hearing with the Board of County Commissioners.
 - a. If a hearing is necessary, notice will be mailed at least ten (10) days before the hearing to all property owners owning or abutting the roadway and shall be published at least once in a newspaper of general circulation within the county no less than ten (10) days prior to the hearing. For the purposes of notice requirements to owners, the names and addresses will be obtained from the St. Johns County Property Appraiser records. If the number of owners abutting or owning the subject roadway exceeds 100 notice by newspaper advertisement as prescribed by F.S. may be given instead of mailed notice.
 - b. Those in favor or against the petition will have an opportunity to present their position(s) on the matter before the Board of County Commissioners.
 - c. The board will approve or deny the request for the roadway name change.
 - d. GIS Addressing will notify the property owners owning or abutting the roadway affected stating the outcome of the hearing as to whether the road renaming petition was approved or denied.
 - e. If approved, SJSO E911 will notify the property owners affected with their change of address.
- 3. Procedures for naming of County connector and/or County arterial roadways. The Board may establish and/or change the name of any County connector and/or County arterial roadway within St. Johns County by the passage of a resolution upon the request or motion or a member of the Board of County Commissioners without regard to the other procedures set forth in this ordinance provided that the following are considered:
 - a. The historic value, if any, of the existing name of the road; and

- b. Petitions pertaining to the naming of the road, if any, signed by persons and entities residing and/or owning property within the general area of such road.
- c. The Board may give such weight as it deems appropriate in the particular circumstance to each factor set forth in (a) and (b) above.
- d. Road names must comply with Section 6.02.03 B. of this Ordinance unless otherwise determined by the Board of County Commissioners as being in the best interest of the public health, safety, and welfare.
- 4. Procedures for naming and renaming roads at the Board of County Commissioners initiative. When renaming roads on its own initiative, the Board shall conduct a public hearing after notice as described by Section 6.02.03.D.2a.

E. Authorization for Address Corrections

The County Administrator is hereby directed to initiate changes as necessary in existing roadway names and address numbers, so as to bring such names and numbers into reasonable conformance with this ordinance, in accordance with the following procedures:

- 1. Roadway name changes may be initiated when any of the following conditions exist:
 - a. When duplicate or phonetically similar to or otherwise easily confused with other roadway names in the same response area for the "Enhanced 9-1-1 Emergency Telephone System;"
 - b. Where a roadway has more than one name and a change to a single name would be in the interest of the public safety and welfare;
 - c. Where emergency response services has reported a response problem to a particular roadway; or
 - d. When it is deemed by the County Administrator to be in the best interest of the general public health, safety, and welfare.

GIS Addressing will send by US mail a "notice of intent to change a roadway name" to all property owners owning or abutting the roadway involved. For the purposes of notice requirements to owners, the names and addresses will be obtained from the St. Johns County Property Appraiser records.

The property owners will be given fifteen (15) days to send their response to GIS Addressing.

If there is no response in opposition received, the County Administrator will make the roadway name change and notify the property owners affected with their change of address.

If there is opposition received the procedures set forth in Section 6.02.03 D.2 will be followed.

2. An address number change may be initiated when any of the following conditions exist:

- a. Duplicate numbers on the same roadway;
- b. Duplicate numbers on the same roadway with number suffixes, e.g. 113-A, 113-B, 2-1, 2-2, or $1\frac{1}{2}$;
- c. Numbers out of sequence;
- d. Odd or even number is not consistent on the roadway; or
- e. When it is deemed by the County Administrator to be in the best interest of the general public health, safety, and welfare.

F. Maps and Data

- Uniform roadway addressing data shall be stored in County GIS. Information in the GIS is an enterprise-wide resource. To safeguard this resource and to ensure all interfaces, additions, and desired capabilities adhere to certain standards, all maintained GIS data shall be stored centrally and managed by GIS Addressing. Hardware and software relating to the central repository shall be supported by GIS Addressing. Additionally, security and network architecture for the central repository shall be developed and supported by GIS Addressing.
- 2. The GIS version of the addressing maps is the official repository of addresses assigned in the County.
- 3. Digital submittal of development plans may be required by GIS Addressing.

Sec. 6.02.04 Natural Resources and Landscaping

The Subdivision shall be designed in compliance with the applicable standards of Article IV Natural Resources and Section 6.06.00 Landscaping Regulations.

Sec. 6.02.05 Roadway Layout

A. Local Roads

- 1. The maximum length of a block shall be one thousand (1,000) feet, unless otherwise approved.
- 2. Loop roads, cul-de-sac and curvilinear designs are encouraged.
- 3. The use of "T" intersections (with a minimum offset of two hundred fifty (250) feet between intersections) are desirable.

B. Subdivision Collector Roads

Curvilinear roads are encouraged.

C. Right-of-Way

1. Right-of-Way design standards and other regulations shall be in accordance and comply with Right-of-Way regulations in Part 6.04.00 Roadways, Drainage &

Utilities Standards.

2. Right-of-Way Protection and Acquisition

Right-of-Way shall be reserved or dedicated for existing or future County or State Road corridors in accordance with the provisions of Section 6.04.04.H. of this Code.

3. Existing Roads

Additional Right-of-Way adjacent to existing St. Johns County and State Roads shall be dedicated to St. Johns County or the Florida Department of Transportation where needed to provide such sidewalks, ditches, auxiliary lanes, storage lanes, and other such Improvements necessitated by the Development.

4. Intersections

Sight distance shall be provided at all intersections by either providing rounded Right-of-Way lines or straight corner cuts (sight distance triangles). Right-of-Way at Subdivision intersections shall be rounded with a minimum twenty-five (25) foot radius, or as otherwise required by traffic conditions or geometric requirements. Corner cuts shall meet or exceed the limits of the twenty-five (25) foot radius. The engineer shall consider sight distance requirements in determining the amount of Right-of-Way to provide at Roadway intersections.

5. Dead-end Streets

The maximum length for a dead-end Street shall be eighteen hundred (1,800) feet. A cul-de-sac shall be constructed at the end of a dead-end Street and shall be in accordance with Part 6.04.00 Roadway, Drainage, & Utilities Standards. Where a Street is to be continued, or during phased Construction, a "T" type turnaround will be required when a Street is one hundred (150) feet or more in length as measured from the nearest intersection. The "T" type turnaround will be in accordance with Part 6.04.00 Roadway, Drainage, & Utilities Standards.

6. Buffer Walls

Buffer walls shall be constructed along all Arterial and Major Collector Roadways abutting residential land Uses. As an alternative to masonry buffer walls, vegetated earthen berms shall be allowed meeting the provisions of the buffer/screening requirements of Section 6.06.04. For Subdivision Projects along designated Scenic Roadways, refer to Part 6.06.00 Landscaping Regulations for requirements in lieu of these provisions.

Sec. 6.02.06 Sidewalks

A. General

Design requirements and standards shall be in compliance with Section 6.04.07.H. of this Code. All sidewalks must be constructed in compliance with the current American Disability Act (ADA) and/or the Florida Accessibility Code (FAC).

B. Types

1. External (Outside The Proposed Site)

- a. External sidewalks shall be located on County Major or Minor Collectors adjacent to a Subdivision of more than two Lots. Sidewalks shall be constructed on the Subdivision side of an existing County Major or Minor Collector from boundary to boundary of the Subdivision and shall extend to the edge of the adjacent Roadways. Sidewalks shall be constructed prior to final acceptance of the Improvement Facilities. The Developer shall be responsible for the Construction of sidewalks.
- b. The County may grant an Administrative Waiver for the Construction of sidewalks within its Right-of-Way; however, the Developer shall be required to provide funds for the cost of sidewalk to the County. The unit price for sidewalk shall be established by the County Administrator.

2. Internal (Within The Proposed Site)

The Developer shall be responsible for the Construction of sidewalks prior to Certificate of Completion and release of Bond, unless a separate bond for completion of sidewalks has been provided. In lieu of a separate Bond for completion of sidewalks, the developer or designated party shall provide language, approved by the County Administrator or his designee, assigning construction responsibility of the required sidewalks, as shown on the approved construction plans. The construction requirement shall be stated in the recorded Declaration of Covenants and Restrictions of the subdivision and/or other publicly recorded or filed documentation.

3. Internal (Other)

- a. Sidewalks along unbuildable Lots, common areas, and Stormwater ponds shall be constructed prior to final acceptance of the Improvement Facilities. The Developer shall be responsible for the Construction of sidewalks.
- b. Sidewalks shall be required, at a minimum, on one side of all local public and local private roadways within Single Family, multi-family, condominium, and Townhome developments.

4. Adjacent to parking spaces

Sidewalks adjacent to the front of one or more parking spaces within commercial and residential developments shall be elevated no less than five (5) inches from the surface of the Parking Space(s) or separated from the Parking Space(s) by a standard, permanently mounted curb stop.

Sec. 6.02.07 Reserved

Sec. 6.02.08 Lots

A. Minimum Dimensions

Lots shall conform to the standards set forth in this Code.

B. Municipal Limits and Lot Lines

Lots shall be designed so that municipal boundary lines do not divide them, except where unavoidable and upon approval of the County Administrator.

Sec. 6.02.09 Stormwater Management

Subdivisions shall comply with requirements of the St. Johns River Water Management District (SJRWMD) and Part 6.04.00 Roadway, Drainage, & Utilities.

Sec. 6.02.10 Water, Wastewater, Reclaimed Water Utilities

- A. Standards and regulations shall be in compliance with Part 6.04.00 Roadway, Drainage, & Utilities Standards.
- B. All new Subdivisions shall be required to install Water Lines, Wastewater Lines and provide a lift station site with a wetwell within the Subdivision with the following exceptions:
 - 1. Subdivisions containing less than twenty (20) Lots, or
 - 2. Subdivisions where all Lot sizes are greater than or equal to one (1) acre in size.

Where service with a central Utility Provider is not immediately available, these Water and Wastewater Lines shall be installed as dry lines in compliance with the standards contained in Part 6.04.00 of this Code for future connection to the central Utility Provider when it becomes available.

C. Subdivisions containing golf courses shall be required to install lines for reclaimed water for use as irrigation for the golf course. Where service with a central Utility Provider for reclaimed water is not immediately available, these lines shall be installed as dry lines in accordance with standards contained in Part 6.04.00 of this Code.

Sec. 6.02.11 Fire Protection

Subdivisions shall be protected in accordance with Florida Fire Prevention Code and NFPA 1 *Fire Prevention Code* and the regulations provided in Part 6.03.00 of this Code.

Sec. 6.02.12 Underground Utility Service

When underground electric service is proposed, the pad mounted transformers shall not be located within the road Right-of-Way, unless authorized by the County Administrator through an Administrative Waiver. New Utility lines to serve the Project in the Coastal High Hazard Area and in all PUDs shall be located underground. The placement of these Utility lines shall be subject to all other restrictions of the Coastal/Conservation Element of the St. Johns County Comprehensive Plan.

PART 6.03.00 FIRE PROTECTION REGULATIONS

Sec. 6.03.01 Generally

All Developments shall be protected in accordance with the most current edition that has been adopted by the Florida Fire Prevention Code which includes but is not limited to: NFPA 1 *Fire Prevention Code*, 101 (Life Safety Code), in addition to the regulations listed below. Previously platted development in which the Roadways or other infrastructure has not been constructed shall be regulated in accordance with this Part.

All Structures shall have a minimum separation of ten (10) feet measured from the furthest projection on the Structure to the furthest projection of any other Structure. If this separation cannot be maintained, then all Structures must be protected with a fire system designed and installed in accordance with NFPA 13 or the required fire hydrants shall be capable of providing an additional five hundred (500) gpm for two (2) hours. Such fire flow shall be in additional to that required by NFPA 1, Chapter 18.

Sec. 6.03.02 Fire Protection Water Supply

- A. One and Two Family, one (1) to ten (10) dwellings: This subsection shall apply only to those developments in which property is subdivided resulting in more than two (2) new Lots from an existing Parcel. For those developments with ten (10) or less detached Single Family or Two Family Dwellings, fire protection water supply shall be provided as follows:
 - 1. If the Development is within two thousand, six hundred forty (2,640) feet (1/2 mile) of a central Utility Provider, the Development shall be provide with a pressurized fire hydrant system as described in Section 6.03.03. The fire hydrant system must be connected to the central Utility Provider.
 - 2. If the Development is located MORE than two thousand, six hundred forty (2,640) feet (1/2 mile) from a central Utility Provider, the Development shall be protected per a. or b. below:
 - a. Provided with an alternative water supply as described in Section 6.03.04, AND all residential Dwelling units shall be protected with a residential sprinkler system designed and installed in accordance with NFPA 13D (Sprinklers in One and Two Family Dwellings and Manufactured Homes), edition as adopted in the Florida Fire Prevention Code, or
 - b. Provided with a pressurized fire hydrant system as described in Section 6.03.03. A non-potable water supply may be used.
 - 3. Variations to the standards and criteria of Part 6.03.02.A may be allowed by the County Administrator upon showing good cause, and where the Owner/Applicant proposes an alternative which conforms to the general intent and spirit of these regulations, and where the objectives of this article have been substantially met.
- B. One and Two Family, Eleven (11) or more dwellings: For all Developments with eleven (11) or more detached Single Family or Two Family Dwellings, fire protection water supply shall be provided as follows:

- 1. If the Development is within two thousand, six hundred forty (2,640) feet (1/2) mile from a central Utility Provider, the development shall be provided with a pressurized fire hydrant system as described in Section 6.03.03. The fire hydrant system must be connected to the central Utility Provider.
- 2. If the Development is located MORE than two thousand, six hundred forty (2,640) feet (1/2 mile) from a central Utility Provider, the Development shall be provided with a pressurized fire hydrant system as described in Section 6.03.03 that is either connected to a central Utility Provider, OR supplied by another means in compliance with NFPA 24 edition as adopted in the Florida Fire Prevention Code,or all residential dwelling units shall be protected with a residential sprinkler system designed and installed in accordance with NFPA 13 D (Sprinklers in one and two (2) family dwellings).
- C. Non-residential, multi-family, and Townhomes, One small Structure: For Development other than detached One and Two Family Dwellings, and their appurtenances with one (1) Structure less than five thousand (5,000) square feet, requires a fire protection water supply system in accordance with subsection 1. or 2. below:
 - 1. If the Development is within two thousand, six hundred forty (2,640) feet (1/2 mile) of a central Utility Provider, the Development shall be provided with a pressurized fire hydrant system as described in Section 6.03.03. The fire hydrant system must be connected to the central Utility Provider.
 - 2, If the Development is located MORE than two thousand, six hundred forty (2,640) feet (1/2 mile) from a central Utility Provider, the Development shall be protected as per subsection a. or b. below:
 - a. Provided with an alternative water supply as described in 6.03.04,or
 - b. Provided with a pressurized fire hydrant system as described in Section 6.03.03. A non-potable water supply may be used.
- D. Non-residential and multi-family, One medium Structure, or multiple Structures: For Development other than detached One and Two Family Dwellings, and their appurtenances with one (1) Structure that is five thousand (5,000) to fifty thousand (50,000) square feet, OR Developments with more than one (1) but less than eleven (11) Structures (other than accessory Structures of less than five hundred (500) square feet), fire protection water supply shall be:
 - 1. If the Development is within two thousand, six hundred forty (2,640) feet (1/2 mile) of a central Utility Provider, the Development shall be provided with a pressured fire hydrant system as described in Section 6.03.03. The fire hydrant system must be connected to the central Utility Provider.
 - 2. If the Development is located MORE than two thousand, six hundred forty (2,640) feet (1/2 mile) from a central Utility Provider, the Development shall be protected as per subsection a. or b. below:
 - a. Provided with an alternative water supply as described in Section 6.03.04. and all Structures shall be protected throughout by a fire sprinkler system in accordance with NFPA 13 or NFPA 13R or NFPA 13D if applicable. The

- edition of the NFPA 13 shall be as currently adopted in the Florida Fire Prevention Code, or
- b. Provided with a pressurized fire hydrant system as described in Section 6.03.03. A non-potable water system may be used.
- E. Large Developments: For Development other than detached One and Two Family Dwellings, with any single Structure exceeding fifty thousand (50,000) square feet, OR with eleven (11) or more Structures (other than accessory Structures of less than five hundred (500) square feet, or with any Building which is a high-rise Structure as defined in the Florida Fire Prevention Code, water supply for fire protection shall be provide as per subsection a. or b. below:
 - 1. If the Development is within two thousand, six hundred forty (2,640) feet (1/2 mile) of a central Utility Provider, the Development shall be provided with a pressurized fire hydrant system as described in Section 6.03.03. The fire hydrant system must be connected to the central Utility Provider.
 - 2. If the Development is located MORE than two thousand, six hundred forty (2,640) feet (1/2 mile) from a central Utility Provider, the Development shall be provided with a pressurized fire hydrant system as described in Section 6.03.03 that is either connected to a central Utility Provider, OR supplied by another means in compliance with NFPA 24 edition as adopted in the Florida Fire Prevention Code.
- F. Mobile Home/Recreational Vehicle Parks: "Mobile Home Parks" or "Recreational Vehicle Parks" (as defined in Chapter 69A-42 of the Florida Administrative Code) shall be protected in accordance with Chapter 69A-42 and this Section. Spacing of fire hydrants and needed fire flow shall meet the requirements of NFPA 501A, the edition adopted by reference in Chapter 69A-42. Hydrants shall not be more than five hundred (500) feet from any home, Building, or RV site, and shall not provide less than five hundred (500) gpm.
 - 1. If the Development is within two thousand, six hundred forty (2,640) feet (1/2 mile) of a central Utility Provider, the Development shall be provided with a pressurized fire hydrant system as described in Section 6.03.03. The fire hydrant system must be connected to the central Utility Provider.

Sec. 6.03.03 Fire Hydrant Systems

Pressurized Fire Hydrant systems shall be installed in accordance with this Section. In addition to the requirements of this Section, those systems, or portions of systems, which will not be owned and maintained by a central Utility Provider shall be installed in accordance with the Florida Fire Prevention Code and Florida Statutes applicable to fire protection systems. Systems, or portions of systems, which will be owned and maintained by central Utility Providers shall be installed in accordance with American Water Works (AWWA) standards, and those of the specific Utility, in addition to the requirements of this Section. All required fire flows shall be delivered at twenty (20) psi residual pressure, shall be provided in excess of maximum daily flow for systems that also supply domestic water supply, and shall be provided for a minimum of two (2) hours duration of flow.

When connecting to an existing Utility, a fire flow test shall be provided when Construction Plans are submitted, to document that the required fire flow can be provided. Flow test results must be current (within one year). The St. Johns County Fire/Rescue reviewer may waive the test requirement if available records indicate that the flow can be met.

- A. Flow Requirements, One and Two Family Dwellings: For all developments with detached dwellings, the required fire flow shall be as required in NFPA 1 as adopted by the most current edition of the Florida Fire Prevention Code. The required fire flow shall be provided for a minimum two (2) hour duration.
- B. Fire Flow Requirement, multi-family, Townhome, and non-residential: Fire Hydrant systems serving multi-family (other than detached One and Two Family dwellings) residential projects and non-residential projects shall have a minimum fire flow as required by NFPA 1 as adopted by the most current edition of the Florida Fire Prevention Code. In all cases, the required duration of fire flow shall be two (2) hours.

The required fire flow may be reduced in accordance with NFPA 1 if all structures are protected with an automatic fire sprinkler system designed and installed in accordance with the fire sprinkler standards adopted and referenced in the Florida Fire Prevention Code.

- C. General requirements for all water supply systems:
 - 1. All mains serving fire hydrants shall be a minimum of six (6) inches in diameter.
 - 2. Fire hydrants located on a street or Roadway that has a curb shall be located within three (3) feet to ten (10) feet of the curb, unless St. Johns County Fire Rescue determines another location would be more accessible for County use.
 - 3. Fire hydrants located on a street or Roadway that does not have a curb shall be located not less than six (6) feet and not more than twenty-five (25) feet from the edge of the pavement unless St. Johns County Fire Rescue determines another location is more acceptable.
 - 4. When serving a structure, hydrants along Roadways that are three (3) or more lanes in width shall be located on the same side of the Roadway as the Structure(s) to be protected. When serving Structures and along one or two lane Roadways, fire hydrants shall be located on the same side of the road as the Structure(s) to be protected, unless waived by St. Johns County Fire Rescue.
 - 5. Fire hydrants shall be located as approved by the St. Johns County Fire Rescue Department to meet operational needs. The St. Johns County Fire Rescue may approve increased fire hydrant spacing where needed to place fire hydrants in more accessible locations, such as at Roadway intersections. In no case shall fire hydrants be located more that one thousand (1,000) feet from the Structures they are intended to protect.
 - 6. Hydrants that are accessible only by crossing a drainage ditch shall have an eight (8) foot long culvert crossing provided in front to the hydrant with a ninety (90) degree access from the street. Hydrants shall not be located within a drainage ditch, swale, or other area that will contain standing or running water during storm events.
 - 7. Hydrants shall not be located in uncleared wooded (or brush areas) that are not routinely maintained in a mowed condition.

- 8. Hydrants shall be installed so the large diameter (4.5 inch) outlet is oriented at a ninety-degree angle to the Roadway on which it is located (so the outlet faces the Roadway), unless otherwise directed by the Fire Rescue Department.
- 9. All hydrants shall be installed so the center or the lowest outlet is a minimum of eighteen (18) inches above final grade.
- 10. All fire hydrants connected to a central Utility Provider shall be painted chrome YELLOW with white caps. All private fire hydrants connected to a central Utility Provider installed in accordance with NFPA 24 shall be painted RED with white caps. All hydrants that are serviced by re-use or non-Potable water shall be painted PURPLE with white caps, in accordance with AWWA.
- 11. The County Administrator may, at his or her discretion, color code the caps of all fire hydrants in accordance with color cod system listed in NFPA 291 (Recommended Practice for Fire Flow Testing and Marking Of Hydrants). All paint used on hydrants shall be a reflective type for rapid identification at night.
- 12. There shall be a blue reflective road marker placed in the center of the Roadway in front of each fire hydrant.
- 13. Fire hydrants located in parking areas shall be protected by bollards that will prevent physical damage from vehicles without obstructing the hydrant operation.
- 14. Fire hydrants shall be accessible at all times, and shall have the clearances required by the Florida Fire Prevention Code.
- D. Fire Hydrant Spacing Requirements, detached One and Two Family Residential Developments:
 - 1. Fire hydrants shall be located so that no Lot frontage of a buildable Lot is more that six hundred sixty (660) feet from a fire hydrant, as measured along the Roadway.
 - 2. Hydrants shall be spaced so the there is not more than six hundred, sixty (660) feet between hydrants, as measured along the Roadway.
 - 3. Where new water mains are extended along Roadways where hydrants are not needed for protection of Structures or similar fire problems, fire hydrants shall be provided on all Roadways within the Development at spacing not to exceed one thousand (1,000) feet to provide for transportation hazards.
 - 4. In large lot Developments, where homes may be set back a substantial distance from the Roadway, additional hydrants shall be installed so that no home is more than one thousand (1,000) feet from the nearest fire hydrant. Such measurement shall be along the Roadway or driveways, as a fire hose may be laid from an apparatus.
- E. Fire Hydrant spacing, for all Developments other than detached One and Two Family Dwellings:

- 1. Fire hydrants needed to protect Structures shall be installed along streets and from department access Roadways at a spacing not to exceed six hundred, sixty (660) feet of vehicle travel distance.
- 2. At least one (1) hydrant shall be located within three hundred, thirty (330) feet of any point of entry into each Building. Exception: For Structures less than five thousand (5,000) square feet in total area, there shall be at least one hydrant within six hundred, sixty (660) feet of one point of entry to the Building.
- 3. Where new water mains are extended along Roadways where hydrants are not needed for protection of Structures or similar fire problems, fire hydrants shall be provided on all Roadways within the Development at spacing not to exceed one thousand (1,000) feet to provide for transportations hazards.

Section 6.03.04 Alternative Water Supply Systems

Any alternative water source that is required shall be installed, and shall be capable of meeting the water demands of the Structures to be protected, in accordance with NFPA 1142 (Standard on Water Supplies for Suburban and Rural Development) (edition as adopted in the Florida Fire Prevention Code), and

In determining the reliability of the impound supply, cistern, tank, or storage facility, the quality of water to be considered available is the minimum available (at not over a 15-foot lift) during a drought with an average 50-year frequency that has been certified by a Professional Engineer.

- A. The Applicant or Developer must provide for continuous maintenance of any required fire protection water supply and /or fire hydrant as indicated in any manner indicated below:
 - 1. Adoption of the system by a central Utility Provider, with dedication of the appropriate easements for maintenance of the system to the system to the central Utility Provider, or
 - 2. Adoption and dedication of the fire protection system to a Homeowners Association or similar group which has a mandatory membership requirement of all benefiting property owners, and which has the authority to assess fees to provide for the required maintenance. The requirement for all owners to become members of the association shall be identified on the recorded plat, in such a manner as to be enforceable by the County, or
 - 3. If the fire protection system to be installed serves a single Lot or Parcel, and is contained solely within that Parcel, the system and it's maintenance may be assumed to be the responsibility of the property owner.
 - 4. Any dry line required to be installed where a central Utility Provider is not immediately available shall comply with Section 6.02.10 of the LDC.

Sec. 6.03.05 Accessibility Requirements

A. All developments shall be accessible in accordance with the requirements of the Florida Fire Prevention Code, as adopted in Chapter 69A-60 of the Florida Administrative Code. Fire department accessibility requirements are currently found in Chapter 18 of NFPA 1, of the most current edition. All Roadways required for fire department access shall be capable of supporting eighty thousand (80,000) pounds.

- B. Access driveways that are located within a single-family Lot, and serving not more than two Dwelling Units may be reduced to a minimum unobstructed width of twelve (12) feet.
- C. Turning radius for fire department access Roadways shall meet AASHTO standards for "SU 30" type vehicles and be approved by St. Johns County Fire Rescue Department.

PART 6.04.00 ROADWAYS, DRAINAGE & UTILITIES STANDARDS

It is hereby declared that it is St. Johns County policy that both individual Owners, Developers and the County be required to meet essentially the same requirements in constructing new Roadways, drainage, and utilities Improvements in the unincorporated areas of St. Johns County, Florida.

Sec. 6.04.01 Data Submittals

A. General

- 1. Signed and sealed Construction Plans and drainage calculations shall be prepared by an Engineer or other Registered Professional qualified in the appropriate field for which the Construction Plans and drainage calculations are prepared, and shall be submitted to the County Administrator under the St. Johns County Development Review Process procedures to demonstrate compliance with this Part.
 - 2. The County Administrator shall establish submittal checklists relating to the contents of all Development review submittals including plans and specifications. The checklists shall establish minimum requirements for the contents of Construction Plans and design documents to assure requirements herein have been met. Additional information may be requested if the County Administrator believes the information is reasonably necessary for support of the drainage analysis including maps, charts, graphs, tables, photographs, narrative descriptions, calculations, explanations, and citations to supporting references as appropriate to communicate the required information for responsible evaluation of the site.
 - 3. Construction plans, Flood Plan maps, or any other design or plan with vertical datum including, but not limited to bridges, culverts, or buildings shall be submitted to the County in 1988 VAVD survey datum, or the most recent datum adopted by the County. If previously approved Plans reflect the 1929 datum, lot grading information shall be provided in both 1929 NGVD datum and the most recent datum adopted by the County.

B. Commencement of Construction

Prior to the placement of any pavement within a development (residential or commercial), all proposed offsite Roadway improvements within County Right-of-Way shall be constructed and approved, including turn lanes, temporary signage and Roadway markings. This includes stabilization of the proposed Roadway cross-section and installation of at least the first course of pavement. Other work may be requested by the County Administrator or his designee if normal traffic flows are found to be unnecessarily compromised by the construction activity at the site.

Prior to commencement of any Construction, proof of obtaining satisfactory compliance with the following requirements shall be submitted to the County Administrator:

1. Applicable local, state and federal Permits referenced in Section 6.04.02 of this Part which are required by the appropriate permitting authorities for the particular portion of Development to proceed with the Construction.

- 2. A Land Clearing Permit if required by this Section and any revisions or updates thereof.
- 3. Approval of Construction Plans and related documents required for Construction through the St. Johns County Development Review Process.
- 4. Compliance with other appropriate land Use and Development regulations of St. Johns County.
- Work requiring a Development Permit shall not commence until the Permit holder or his agent posts the Permit placard in a conspicuous place on the premises. The Permit shall be protected from the weather and be maintained in such position by the Permit holder until the Certificate of Completion is issued.

It is the intent of this Section to require documentation of necessary Permits and approvals appropriate for the portion of the Development under Construction. It is not the intent of this Section to prohibit phased Development.

C. Completion of Construction

The following documentation is required upon completion of the Construction Project and prior to approval of the Final Building Inspection and the issuance of any Building Certificates of Occupancy.

- 1. An "As-Built" Survey meeting the requirements contained in the St. Johns County As-Built checklist.
- 2. Registered Professional's Certification of Completion (see Development Review Manual).
- Any other documents which are necessary to comply with the requirements of other permitting agencies and are required by St. Johns County as a condition to approval of the Final Building Inspection and the issuance of Certificates of Occupancy.
- 4. Documentation from the responsible Utility company approving Water and Wastewater installations and acceptance of same.
- 5. Surveyor's Certification (see Development Review Manual).
- 6. Test reports prepared by a licensed testing laboratory as required by Section 6.04.07.
- 7. Documentation from the Florida Department of Environmental Protection verifying acceptance of Certification of Completion of the Wastewater and/or Water System.

- 8. A Required Improvements Bond, securing the completion of sidewalks, if applicable.
- 9. A Required Improvements Bond in the amount of fifteen percent (15%) of the actual cost of construction meeting the requirements of Section 6.04.08.
- 10. A copy of Recorded Covenants and Restrictions and/or other publicly recorded or filed documentation which establishes the Property Owner's Association.
- 11. A copy of assignment language securing the completion of sidewalks within Recorded Covenants and Restrictions and/or other publicly recorded or filed documentation, if applicable.

Sec. 6.04.02 Permits

- A. Right-of-Way Permits procedures shall be as provided in Part 9.01.05 of this Code.
- B. Development Permits
 - 1. A Development Permit issued through the St. Johns County Development Review Process shall be obtained prior to commencement of any Construction for all residential, commercial, industrial, and institutional Projects meeting review requirements established by the St. Johns County Development Plan Review and Approval Procedures. The Development Permit shall be valid for a specified period not to exceed five (5) years but no less than three (3) years from date of issuance. The designated duration for the Development Permit will be dependent on the facts and circumstances of each situation, including but not limited to: the size of the Projects and the anticipated amount of time required to complete the Project. Commencement of Construction shall be made during the designated Permit time period.
 - 2. Plan review applications will be valid six (6) months from the date of the review comment notification to the Applicant. Upon expiration of the application, a new submittal is required, including all appropriate fees. Plans that have received final approval must be claimed within sixty (60) days of approval date. Upon expiration, a new application and plans must be submitted including all appropriate fees.
 - 3. The Permit shall be posted in a conspicuous and visible place in public view at the front of the property. The Permit shall be protected from the weather and be located in such position by the applicant promptly after issuance, during, and for a period not less than thirty (30) days after commencement of Construction or until a Building Permit is issued whichever comes first. It is the responsibility of the Permit Applicant to maintain the Permit, or to promptly obtain a replacement copy from the County if necessary.
 - 4. The Development Permit shall expire unless Construction has commenced on or before the three (3) year anniversary of substantial approval for Projects less than or equal to fifty (50) acres, and continued in good faith. For Projects greater than fifty (50) acres, the Development Permit shall expire based on the three (3) year anniversary period plus one (1) year for each additional ten (10) acres or portion thereof up to a maximum of five (5) years from date of issuance. Prior to expiration, a Development Permit may be granted one (1) extension upon demonstration of significant progress toward start of Construction of the Development through a

written request from the Owner/Applicant to the Development Services Department.

- 5. Once a Development Permit has expired, renewal can only be made by resubmittal through the St. Johns County Development Review Process. Resubmittals shall be subject to the then current Land Development Regulations of St. Johns County including all applicable review fees. For projects that have expired by no more than one year, one ninety (90) day extension may be approved in writing by the County Administrator when requested in writing by the Applicant for good cause.
- 6. The Owner/Applicant and their agents are responsible for constructing the site Improvements in accordance with the approved Construction Plans under the authority of the Development Permit. Any substantial deviations shall be reviewed by the Engineer or other Registered Professional who signed and sealed the approved Construction Plans and with concurrent review through the St. Johns County Development Review Process prior to field changes being made. If approval is granted for the Construction deviations, revised Construction Plans and related documents showing compliance with St. Johns County Land Development Regulations may be required.
- 7. Development Permit procedures shall be as provided in Part 9.01.00 of this Code.

C. State and Federal Permits

Copies of applicable Permits, including Permit conditions, from all agencies having jurisdiction over Construction Projects shall be provided to the County prior to commencement of Construction. These Permits include, but are not limited to: work in or near Wetland areas, Stormwater Management Systems, Special Flood Hazard Areas, coastal Construction and Roadway Construction. The burden of obtaining these Permits, if required, will be the sole responsibility of the Applicant including any work to upgrade existing Public or Private Roadway and drainage facilities which will be unreasonably impacted by the Project. Agencies that may have jurisdiction over the proposed work include, but are not limited to, the following:

- 1. St. Johns River Water Management District
- 2. Florida Department of Environmental Protection
- 3. Florida Department of Transportation
- 4. United States Army Corps of Engineers
- 5. United States Environmental Protection Agency
- 6. Federal Emergency Management Agency

Sec. 6.04.03 Notification and Inspections

A. Authorization for Inspection

- 1. The County Administrator shall have the right to inspect any Project that has been issued a "Development Permit" to ensure that all Roadway and drainage Improvements are constructed in accordance with the approved Construction drawings and related specifications.
- The County Administrator shall have the right to enter upon and inspect land where Construction activities have commenced in violation of St. Johns County Land Development Regulations, regardless of whether or not an application for "Development Permit" has been made to St. Johns County.

3. Notification

Notification requirements shall be as provided in Part 9.01.05 Right-of-Way Permits.

4. Testing

The County Administrator shall have the right to require adequate testing during Construction of on-site and off-site related Improvements to ensure that work is performed and completed as specified on the Construction drawings and related documents. All Roadway and drainage Projects, public or private, which serve or provide services to the citizens of St. Johns County shall meet the Construction and testing requirements as contained within this Code.

5. Final Inspection

- a. All Roadway and drainage Improvements shall be completed including, if applicable, installation of Street name Signs, directional Signs, and traffic control Signs prior to scheduling for Final Inspection.
- b. Unless otherwise approved by the County Administrator, an "As-Built" Survey shall be submitted at the time of scheduling for Final Inspection.
- c. The Final Inspection shall be a joint inspection consisting of at least a representative of the County Administrator, the General Contractor, and the Engineer or other Registered Professional who signed and sealed the approved Construction Plans.
- d. Upon completion of the Final Inspection and review of the "As-Built" Survey, the County Administrator shall notify the Applicant of the results of the Final Inspection and "As-Built" review including any remedial action which may be necessary to bring the on-site and related off-site Roadway and drainage Improvements or "As-Built" survey into compliance with the approved Construction drawings and related specifications and requirements of Part 6.04.00.

Sec. 6.04.04 Construction Within Right-of-Way

A. General

1. This Section is established to regulate Construction or installation of any Utility or placement of any temporary or permanent Structure within any Right-of-Way owned by St. Johns County. In addition, and in the interests of public health, safety

and welfare, this Section should be used as a guide for Construction, installation or placement of the same in private road Right-of-Way. Failure to meet these guidelines may jeopardize future acceptance of any private facility by St. Johns County.

2. The presence of existing above-ground and under-ground Utility facilities within County Right-of-Way will be presumed to be properly permitted in accordance with the existing guidelines in effect at the time of their installations whether or not documentation to that effect exists. The Utility Agency/Owner shall relocate or adjust those existing above-ground and under-ground Utility facilities to comply with current Utility accommodation standards when Roadway Improvement Projects are planned or traffic accident statistics indicate a hazard exists, providing the relocation does not conflict with other standards, codes or regulations that provide for public health and safety or will be economically unfeasible for the benefit desired.

B. Application For Right-of-Way Permit

- 1. Unless exempted herein, or otherwise approved by the County Administrator, any Construction, installation, or placement of any above-ground or under-ground temporary or permanent Structure or Utility within County Right-of-Way is prohibited unless an "Application for Right-of-Way Permit" has been submitted and approved by the County Administrator.
- 2. Temporary or permanent Structures shall include but not be limited to: driveway connections, Signs, posts, fences, landscaping, drainage connections, aboveground and under-ground Utility installations, cross drains, side drains, ditches, swales, and mailboxes.
- 3. The County Administrator shall have the right to revoke any "Right-of-Way Permit" where it is found that the permitted activity is not being performed in accordance with Permit conditions, where there has been a misrepresentation of a material fact in the Permit application, or where the activity is detrimental to the health, safety, and welfare of the public.

C. Maintenance of Traffic

- 1. Whenever Construction or Construction-related activities within County Right-of-Way will affect the movement of traffic or traffic safety, the activities shall comply with applicable traffic control standards contained in the Manual of Uniform Traffic Control Devices (Part VI) and the FDOT Standards for Traffic Control through Work Zones.
- 2. Temporary closure of one or more travel lanes shall require flaggers to control vehicular traffic. Total closure of a Roadway for more than five (5) minutes shall require prior approval of the County Administrator.
- 3. The County Administrator shall require that a Maintenance of Traffic Plan be submitted with the "Application for Right-of-Way Permit" prior to commencement of any work within County Right-of-Way on all Major and Minor Collectors, and on other Local Roads where such work could obstruct traffic or threaten the health, safety and welfare of the public.

D. Mailboxes

- 1. The location and Construction of mailboxes within County Right-of-Way shall conform to the rules and regulations of the United States Postal Service as modified within this Part and the S & D Manual.
- 2. Masonry, Concrete, block, brick, stone or other rigid foundation Structure or encasement whether above or below the shoulder ground-line is considered a Roadway hazard and is not permitted within the "Clear Zone" of any County Right-of-Way. The Roadway "Clear Zone" for each Roadway type shall be as established in the FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways and as modified by the S&D Manual. Structures and encasements that comply with the provisions of this Part and the S&D Manual require submittal of an "Application for Right-of-Way Permit" and approval by the County Administrator or his/her designee, prior to placement within the County Right-of-Way..
- 3. Mailbox support posts consisting of four (4) inch by four (4) inch wood, two (2) inch diameter schedule forty (40) steel pipe, or flanged channel meeting the material requirements of the FDOT Roadway and Traffic Design Standards Index 532 do not require submittal and approval of an "Application for Right-of-Way Permit" unless placement within County Right-of-Way is in conflict with "Mailbox Placement within Road Right-of-Way" criteria set forth in the S&D Manual.

E. Construction Standards

- 1. All underground Utility installations, excavations, and backfill within County Rightof-Way shall be installed to the following standards:
 - a. Utility locations within County Right-of-Way shall conform to the S&D Manual for Utility placement within County Right-of-Way unless otherwise approved by the County Administrator.
 - b. For minimum depths of under-ground utilities refer to S&D Manual.
 - c. The minimum depth shall be based on the vertical distance from the top of the Utility to the design cross-section of the Roadway. Actual depth as in the Right-of-Way Permit conditions may be greater depending on the existing field conditions. Maximum depths of water mains and wastewater force mains shall be thirty-six (36) inches outside pavement and forty-two (42) inches under pavement unless otherwise approved by the County Administrator.
 - d. All activity under pavement or other stabilized surface within eight (8) feet of edge of pavement on paved roads, or within fifteen (15) feet of the centerline of unpaved roads, should have backfill material placed in no greater than twelve (12) inch lifts, except for the top two (2) feet which should be placed in no greater than eight (8) inch lifts. Backfill material shall be compacted to a density of not less than ninety-five percent (95%) of the maximum density obtained using the Modified Proctor Method.
 - e. All activity under pavement or other stabilized surface more than eight (8) feet from the edge of pavement on paved roads, or more than fifteen (15)

feet from the centerline of unpaved roads, should have backfill material placed in no greater than twelve (12) inch lifts, and compacted to a density not less than ninety percent (90%) of the maximum density obtained using the Modified Proctor Method.

- 2. "Jacking and boring" or "directional boring" of utilities under existing paved Roadways are the preferred methods for all underground Utility installations crossing County paved Roadways. Standards pertaining to these methods shall be the guidelines contained in the then current FDOT Utilities Accommodation Manual.
- 3. Jetting of utilities under any Roadway is prohibited. Where a Utility is found to be illegally jetted under an existing Roadway, the Roadway section shall be removed to a depth and width as directed by the County Administrator and the Roadway section reconstructed in conformance to the design for "Open Roadway Cuts" contained in the S&D Manual.
- 4. Open cutting of existing pavement and side roads under the jurisdiction of St. Johns County generally will not be allowed. Under certain conditions, such as subsurface obstructions, limited space for jacking, high water table, or substandard Roadway surface, open cutting may be allowed with approval of open Roadway cuts. Primary consideration will be given to the age and condition of the existing Roadway pavement and safety and convenience to the public. Where open Roadway cuts are permitted, replacement of fill, base and surface course shall be in conformance with the design for "Open Roadway Cuts": contained in the S&D Manual. "Flowable Fill" or an equivalent material is the preferred method for reconstruction of open Roadway cuts.
- 5. All areas disturbed by Construction activities within County Right-of-Way shall be restored to the standards specified for new Construction, or restored to a condition equal to conditions prior to the disturbance if the prior conditions exceeded new Construction standards as determined by the County Administrator.
- 6. Drainage shall be maintained throughout the Construction or installation process and shall not be blocked, restricted, or inhibited unless otherwise approved by the County Administrator. All Roadway swales shall be returned to design grade within thirty (30) days of completion of the Utility installation. See Section 6.04.05 F for limits of driveway.
- F. Right-of-Way Improvements and Owner Responsibilities
 - 1. No fencing, shrubs, Trees or Construction other than grassing shall be placed in the Right-of-Way without prior County approval or Permit.
 - 2. Construction and maintenance of any driveway connection or other access across public and private Right-of-Way or drainage facilities is the responsibility of the individual Owner. No person shall block or impede the flow of water through any county or private drainage facility, nor shall leaves, trash or other materials be placed in or burned within the aforementioned facilities.
 - 3. All driveway and/or drainage connections to and /or across public Right-of-Way shall require a Permit. The pipe size and invert depth of all side drains/driveway culverts shall be approved by the County Administrator and set to the County

- specified grades. In cases where the driveway connection does not require a pipe, the driveway should be constructed with a minimum of four (4) inches of reinforced concrete (3,000 psi) to conform with the existing flow line of the roadside swale, or as established by the County Administrator.
- 4. Any connection to Public Roadways found to be installed incorrectly or without Permit shall be subject to enforcement procedures, fines, and/or removal of the facility by the County Administrator. The Applicant has the option to replace the facility at the Applicant's expense upon approval of the County Administrator.
- 5. All privately owned facilities shall be continuously maintained by the Owner, a Property Owners Association, the Developer, or other entity approved by the County and designated in the Construction application. Failure to adequately maintain the facilities shall be a violation of this Part.

G. Intersection Sight Distance Requirements

- 1. For the purpose of this Section, "defined intersection" is any intersection that has a County owned or maintained road, Street, or any other type of Roadway as one of the Roadways comprising the intersection; except, any such intersection where there is a required stop condition (multi-way stop Sign, traffic signal, or continual flashing red signal indication) for each Roadway traffic lane entering the intersection.
- 2. To ensure adequate visibility at defined intersections, the Owner or Owners of private real property shall not:
 - a. plant or permit the growth of shrubbery or any other vegetation above the height of thirty (30) inches from the surrounding general ground level;
 - b. allow Tree branches to extend below the height of ten (10) feet from the surrounding general ground level; or
 - c. allow any berm, fence, wall, or any other Structure to be erected, placed or exist, which will obstruct a driver's view of approaching traffic on a through road or Street. Clear sight distance shall be in accordance with criteria established in the applicable sections of the current State of Florida Department of Transportation Roadway and Traffic Design Standards and the Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways.
- 3. A visual obstruction as described in Section 6.04.04.G.2. above shall be considered a Non-Conforming Use if before the effective date of this Code it was either complete and in existence or it was both (a) formally permitted by St. Johns County and (b) substantial investment was made on its completion or erection of the obstruction which investment would be lost by compliance with this Part 6.04.00. Such Non-Conforming Use may continue to exist but shall not be altered, expanded, replaced, renewed, or enhanced after the effective date of this Code without full compliance with the terms of this Part 6.04.04.G.2.a. and b. above shall be permitted or allowed to exist as a Non-Conforming Use after the effective date of this Code.
- H. Right-of-Way Protection and Acquisition

- 1. No new Subdivisions or non-residential Development (Buildings, Parking Areas, water retention, etc.) shall be permitted within proposed future County or State Road Right-of-Way corridors, as established in the Traffic Circulation Plan and Goals, Objectives & Policies of the St. Johns County Comprehensive Plan, unless approved by the Board of County Commissioners.
- 2. Prior to the Development of new Subdivisions or non-residential Development contiguous to existing County Collector Roadways, Right-of-Way shall be reserved or dedicated to St. Johns County in accordance with the Transportation Element of the St. Johns County Comprehensive Plan or other requirements specified within County approved plans, unless otherwise approved by the Board of County Commissioners. Impact fee credits or other incentives or valuable consideration including, but not limited to, additional density, flexible setbacks or accelerated timing and phasing of development, may be granted in consideration for such Right-of-Way dedication. Other incentives including but not limited to additional density, flexible setbacks or accelerated timing and phasing of development may be granted in consideration for Right-of-Way reservation. Such impact fees, incentives, or consideration shall be negotiated with the applicant for the Development.
- 3. No Development activity shall be permitted within existing County Right-of-Way, unless approved by the Board of County Commissioners.

Sec. 6.04.05 Access Management

A. General

- 1. St. Johns County has the authority to establish, control, and limit points of ingress and egress from County Roadways to ensure the safety and efficiency of its Roadway system. These standards are intended to implement Florida law. Consequently, this Code shall be consistent with the Florida Department of Transportation (FDOT) "Manual of Uniform Standards for Design, Construction and Maintenance for Streets and Highways" (Green Book), FDOT "Roadway and Traffic Design Standards" (Standards), and the United States Department of Transportation "Manual on Uniform Traffic Control Devices" (MUTCD) unless specifically revised by this Code or the S&D Manual. References will be made to the FDOT "Standard Specifications for Road and Bridge Construction" (Specifications). No facilities for ingress or egress to County Roadways shall be constructed unless they comply with the standards set forth in this Part 6.04.00.
- 2. This Section adopts an access classification system and standards for regulation and control of vehicular ingress to, and egress from, Major Collectors on the County Roadway system. The implementation of the classification system and standards is intended to protect public safety and general welfare, provide for the mobility of people and goods, and preserve the functional integrity of the County Roadway system. All County Major Collectors shall be assigned an access classification and standard. The standards shall be the basis for connection permitting and the planning and development of County and Developer construction projects.
- 3. All Non-Residential Developments generating 300 or more p.m. peak hour trip ends shall provide a detailed site access and operational analysis to include the

nearest non-site access intersection(s) in all directions from the project site boundary if such intersection meets the standards for analysis established in Section N of the Traffic Impact Study Methodology and Procedures, Appendix A of this Code. Such analysis to be submitted prior to Construction Plan approval for review and determination. The purpose of this analysis is to identify needed improvements within the immediate project impact area to provide for safe and efficient access to the proposed development. The following criteria shall be applicable to identified improvements:

- a. Site related improvements, including right-of-way to accommodate such improvements, shall not be eligible for road impact fee credit pursuant to the Road Impact Fee Ordinance (Ord. 87-57), as amended.
- b. Site related improvements, as defined in the Road Impact Fee Ordinance (Ord. 87-57), as amended, shall mean capital improvements and right-of-way dedications for direct access improvements to and/or within the development in question. Direct access improvements include, but are not limited to, (1) access roads leading to the development; (2) driveways and roadways within the development; (3) acceleration and deceleration lanes, and right and left turn lanes leading to those roads and driveways; and (4) traffic control measures for those roads and driveways.
- c. Non-site related improvements deemed necessary shall be eligible for road impact fee credit.
- d. Traffic signals may be required if justified based on traffic signal warrants and will comply with St. Johns County and/or FDOT standards, as applicable.
- e. Existing facilities used for access may require upgrade as set forth in Section 6.04.07.M of this Code.

B. Location of Connections

- Commercial (including commercial retail, office, industrial, and multi-family residential) driveway connections shall align with other driveways on the opposite side of undivided Roadways classified as Local Roads or Minor Collectors, or shall be offset a minimum of one hundred (100) feet. Offset requirements may be increased where auxiliary lanes are required. The location of commercial driveway connections on Roadways classified as Major Collectors shall conform to the access class standards contained in Section 6.04.05.K.
- 2. The location of commercial driveways should be compatible with the internal movement of traffic and the planned parking layout. The location of the driveway connection shall never allow Vehicles to back across the throat of a driveway or back into the "through" travel lane. Developments with thirty thousand (30,000) square feet gross Floor Area or more shall have a minimum of seventy-five (75) feet of storage lane at the entrance to avoid obstructing through traffic. The throat length shall be computed from the end of the radius point and extend seventy-five (75) feet into the site.
- 3. Single Family residential driveway connections shall be restricted to Local Roads unless otherwise approved by the County Administrator. Planned Developments

shall incorporate design of the Roadway systems to alleviate residential driveway connections to Arterials and Major and Minor Collectors.

C. Driveway Design

- 1. Driveway widths, spacing, radii, and minimum angles for residential and commercial driveways shall be based on the following guidelines (See Table 6.03 and Figure 6.02 for a depiction of the measurement criteria):
- 2. The maximum number of driveways allowed for projects other than Single Family residential units shall be as follows:
 - a. Property with two hundred (200) frontage feet or less one (1) driveway
 - b. Property with more than two hundred (200) frontage feet two (2) driveways

Developments shall not be allowed more than two (2) driveways on a single frontage without approval of the County Administrator. Two (2) one-way connections shall equate to one (1) driveway for the purposes of this requirement.

- 3. Single Family residential units shall generally be limited to one (1) driveway. Circular driveways with two connections may be permitted with a minimum one hundred fifty (150) foot frontage with roadside ditches, and one hundred (100) foot frontage with curb and gutter, with the approval of the County Administrator. The minimum frontage requirement for a circular drive shall include only the frontage along the road where the driveway will be constructed. Circular driveways shall not connect to a road within twenty (20) feet of the point of tangency for a corner or curve with a centerline radius of less than one hundred (100) feet.
- 4. Where driveways are constructed within the limits of existing curb and gutter Construction, the existing curb and gutter shall be removed either to the nearest joints or to the extent that no remaining section is less than five (5) feet long. If the curb is not removed to the nearest joint, the curb will be cleanly cut with a concrete saw. Driveway materials type should conform to the original Construction on a section unless otherwise specifically provided on the Permit.
- 5. Positive drainage shall be maintained at all times regardless of distance from property line.

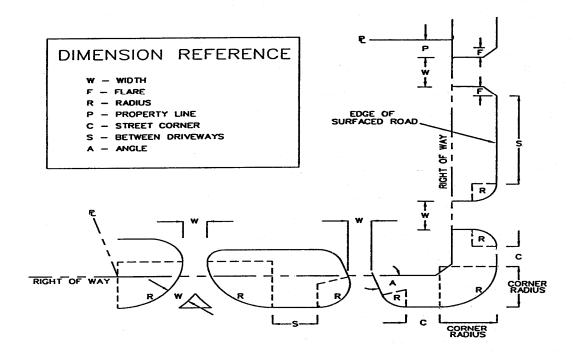
TABLE 6.03

	LOCAL		
	LOCAL	MINOR	MAJOR
RESIDENTIAL DRIVEWAYS	ROADS	COLLECTORS*	COLLECTORS*
Single Family Driveway Widths			
One or two vehicle garages	12-18 feet	12-18 feet	14-18 feet
Three vehicle garages front facing			
Setback < 35 feet	18-26 feet	18-26 feet	20-26 feet
Setback > 35 feet	12-18 feet	12-18 feet	14-18 feet
Three vehicle garages side facing	12-18 feet	12-18 feet	14-18 feet
Required Radius (R)	5 feet	5 feet	10 feet
Minimum Spacing			
From Property Line (P)	5 feet	5 feet	15 feet
From Street Corner (C)	10 feet	10 feet	20 feet
Between Driveways (S)	10 feet	10 feet	10 feet
Minimum Angle (A)	80 degrees	80 degrees	80 degrees
Multi-family**			
Minimum width	10 feet	NA	NA
Minimum flare	3 feet	NA	NA
Minimum spacing			
From adjacent lot property line	N/A	N/A	N/A
From street corner	10 feet	NA	NA
Between driveways	N/A	N/A	N/A
Minimum Angle (A)	80 degrees	80 degrees	80 degrees

^{*}See Section 6.04.05.K(e) regarding access to Major Collectors
**Includes townhouse and townhome

COMMERCIAL DRIVEWAYS	LOCAL ROADS	MINOR COLLECTORS	MAJOR COLLECTORS
Nominal Width			
One-Way (W)	16 feet	16 feet	16-20 feet
Two-Way (W)	24-30 feet	24-36 feet	24-36 feet
Required Radius (R)	25 feet	30 feet	35 feet
Minimum Spacing			
From Property Line (P)	25 feet	30 feet	*
From Street Corner (C)	25 feet	50 feet	*
Between Driveways (S)	10 feet	20 feet	*
Minimum Angle (A)	80 degrees	80 degrees	80 degrees

^{*} See Section 6.04.05.K. for minimum driveway spacing standards on Major Collectors



DRIVEWAY CONNECTION DIAGRAM

D. Driveway Grades

Figure 6.03 establishes maximum grade changes for driveways from the three classes of Roadways. For the values shown, no vertical curve connecting the tangents is necessary. For grade changes more abrupt than those in Figure 6.03, vertical curves at least ten (10) feet in length shall be used to connect tangents.

E. Connection Design

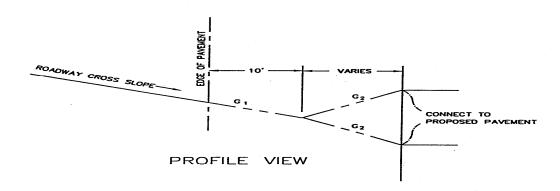
- 1. The plans submitted for review shall depict the proposed Improvements for driveway connections and driveway approaches. The plans shall provide the driveway size, width, return radii, angle to the Roadway, approach taper length, existing and proposed pavement marking, existing and proposed drainage pipes or other drains (including pipe size and type of material), and existing and proposed grades (including pavement design).
- 2. Proposed connections shall have no fences, walls, hedges, or other obstacles that will obstruct vision between a height of two and a half (2.5) feet and ten (10) feet above the centerline grade of the intersecting driveway, per FDOT Standards, Index No. 546.

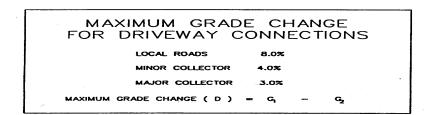
- 3. All connections to paved Roadways shall be permanent type pavement, including Portland Cement Concrete or asphaltic concrete. Gravel, bituminous surface treatments, and other materials without a permanent surface are prohibited.
- 4. Pavement design requirements of commercial driveway connections, for the extent of permanent pavement required in Section 6.04.05.F. below, including stabilized subgrade, base course, and surface course, shall equal or exceed the requirements of the adjacent Roadway travel lane. Pavement design requirements of residential driveway connections, for the extent of permanent pavement required in Section 6.04.05.F. below, shall equal or exceed the requirements for Local Roads, with the exception of Portland Cement Concrete driveways which shall have a minimum pavement thickness of five (5) inches within the right-of-way.

F. Connection Limits

Permanent pavement for commercial driveways shall extend at least to the end of the driveway curb radius, or to the Right-of-Way line, whichever is greater. Permanent pavement for residential driveways shall extend a minimum of five (5) feet from the edge of travel lane.

FIGURE 6.03





G. Temporary Driveway Connections

- 1. Temporary driveway connections shall be permitted for activities which do not require a permanent driveway connection. Examples of activities that may obtain a temporary driveway connection may include, but are not limited to:
 - Temporary Construction driveways;
 - b. Silviculture operations;
 - c. Agricultural activities;

- d. Borrow pit and mining activities.
- 2. Right-of-Way Permits shall be obtained for all temporary driveway connections and shall meet the requirements of Section 6.04.04 of Part 6.04.00. Right-of-Way Permits for temporary connections shall expire after a six (6) month period and may be extended for additional six (6) month periods upon payment of the applicable Right-of-Way renewal fee.
- 3. Temporary driveway connections shall be stabilized with limerock or other suitable material for a minimum of twenty-five (25) feet, or to the Right-of-Way, whichever is greater. Connections shall be paved for a minimum of five (5) feet from the edge of the travel lane or paved shoulder. If a roadside ditch or swale is present, a side drain is required which meets the requirements of Section 6.04.07.L.3. The temporary driveway connection shall be constructed to ensure that erosion will not occur that could affect the Roadway drainage system. The Applicant shall ensure that dirt or debris is not tracked into the Roadway travel lanes from the driveway connection or shall make provisions for its immediate removal. The location, width, turning radii, and other design elements of the driveway connection shall be consistent with all other provisions of this Code for a permanent driveway connection.
- 4. Upon expiration of the temporary driveway connection Permit, the driveway connection shall be removed and the Right-of-Way shall be restored to its original condition. Any damage to the edges of pavement, shoulder, swale or any other feature within the Right-of-Way caused by the Construction, Use, or removal of the temporary driveway connection shall be repaired or restored to its original condition at no expense to the County within thirty (30) calendar days after written notice to the Applicant.

H. Auxiliary Lanes

- 1. Auxiliary turn lanes shall be required where safety and capacity considerations warrant their use for Vehicle deceleration and storage. The provision of auxiliary lanes shall be required under the following conditions or when there is a demonstrated need for public safety unless an engineering study can demonstrate that safety hazards or capacity deficiencies will not exist. Auxiliary turn lanes shall be required at connections to all Major and Minor Collectors under the following criteria:
 - a. Collector Roads With Posted Speed Limits of thirty-five (35) mph or Greater:
 - (1) Right Turn Lane
 - Development will generate two hundred fifty (250) Vehicles per day (VPD) on the intersecting Roadway or driveway connection; or,
 - Gross Floor Area of non-residential Development is twentyfive thousand (25,000) square feet; or,
 - Development will generate five (5) truck (WB-40 or larger or

any vehicle or combination of vehicles or towed vehicle with a Gross Vehicle Weight Rating (GVWR) of 26,000 pounds or more) trips per day.

(2) Left Turn Lane

- Development will generate five hundred (500) VPD on the intersecting Roadway or driveway connection; or,
- Gross Floor Area of non-residential Development is fifty thousand (50,000) square feet; or,
- Development will generate ten (10) truck (WB-40 or larger or any vehicle or combination of vehicles or towed vehicle with a Gross Vehicle Weight Rating (GVWR) of 26,000 pounds or more) trips per day.
- b. Collector Roads With Posted Speed Limits of thirty (30) mph or Less:
 - (1) Right Turn Lane
 - Development will generate five hundred (500) VPD on the intersecting Roadway or driveway connection; or,
 - Gross Floor Area of non-residential Development is fifty thousand (50,000) square feet; or,
 - Development will generate five (5) semitrailer truck (WB-40 or larger) trips per day.

(2) Left Turn Lane

- Development will generate one thousand (1,000) VPD on the intersecting Roadway or driveway connection; or,
- Gross Floor Area of non-residential Development is one hundred thousand (100,000) square feet; or,
- Development will generate ten (10) semitrailer truck (WB-40 or larger) trips per day.
- 2. The geometric design of the auxiliary lanes shall be in accordance with FDOT Standards. The Construction of auxiliary lanes shall meet other provisions of this Code. Pavement design requirements of the auxiliary lanes, including stabilized subgrade, base course, and surface course, shall be the same as the requirements of the adjacent Roadway travel lane. The entire width of the road surface must be overlaid for the total length of the auxiliary lanes with a surface course of similar type as the adjacent Roadway sections.

I. Access Along Acceleration/Deceleration Lanes

A driveway shall not be constructed along acceleration or deceleration tapers connecting to interchange ramp terminals, intersecting Roadways, bus bays or other driveways unless access would be unreasonably denied and the driveway can be made to function properly (i.e., safe and efficient traffic operation).

J. Miscellaneous

Signing and Pavement Marking, Traffic Signal, and Maintenance of Traffic criteria and specifications are provided in Section 6.04.07 Roadway Design.

K. Access Management Classifications for Major Collectors

General Guidelines

- a. Existing median openings, and signals are not required to meet the standards or the standards of the assigned classification. Such features will generally be allowed to remain in place. These features shall be brought into reasonable conformance with the standards of the assigned classification where new connection permits are granted for significant changes in property use, or as changes to the Roadway design allow. Existing median openings may be modified or closed by St. Johns County based on a demonstrated need for public safety.
- b. The minimum connection and median opening spacing specified in this Section may not be adequate in some cases. Greater distances between connections and median openings may be required by St. Johns County to provide sufficient site-specific traffic operations and safety requirements. In such instances, St. Johns County may require the applicant to document, as part of the response to an application submitted, a justification based on traffic engineering principles as to reasons greater distances are required.
- c. When a full median opening or non-restrictive median is constructed to allow for opposing left or U-turns only, these openings shall be considered as one opening.
- d. Adjacent properties under the same ownership shall not be considered as separate properties for the purpose of the standards associated with the access class of the Roadway segment and shall be deemed to be one parcel. Applicants requesting connections for one or more adjacent properties under the same ownership may as a part of the permit application process, request the properties be considered individually for connection permit purposes. Such requests shall be included as part of the permit application and shall provide specific analysis and justification of potential safety and operational hazards, associated with the compatibility of the volume, type or characteristics of the traffic using the connection. The total number of connections permitted will be the minimum number necessary to provide reasonable access to the property.
- e. If a property fronts a County Major Collector and does not have access to a Minor Collector, Local Road or other side street, the County shall grant at least one access to such property. The County will attempt to govern the

placement of the proposed spacing to conform as close as possible to the assigned access classification of the Roadway. In any case, the County will not deny access due inadequate frontage or inability to meet access management criteria. Should a property have access to another Roadway other than the Major Collector, the applicant may be denied access to the Major Collector and be required to connect to the other Roadway.

2. Access Class Definitions

- a. Access Class 2. These are highly controlled access facilities distinguished by the ability to serve high speed and high volume traffic over long distances in a safe and efficient manner. These Roadways are distinguished by a system of existing or planned service roads. This access class is distinguished by a highly controlled limited number of connections, median openings, and infrequent traffic signals.
- b. Access Class 3. These facilities are controlled access Roadways where direct access to abutting land will be controlled to maximize the operation of the through traffic movement. This class will be used where existing or near future land and Roadway use is high. Existing or planned restrictive medians and maximum distance between traffic signals and driveway connections will distinguish these Roadways. These Roadways will be distinguished by existing or planned restrictive medians.
- c. Access Class 4. These facilities are controlled access Roadways where direct access to abutting land will be controlled to maximize the operation of the through movement. This class will be used where existing land use and Roadway sections have not completely built out to the maximum land use or Roadway capacity or where the probability of significant land use change in the near future is high. These Roadways will be distinguished by existing or planned non-restrictive median treatments.
- d. Access Class 5. This class will be used where existing land use and Roadway sections have been built out to a greater extent than those Roadway segments classified as Access Classes 3 and 4 and where the probability of major land use change is not as high as those Roadway segments classified Access Classes 3 and 4. These Roadways will be distinguished by existing or planned restrictive medians.
- e. Access Class 6. This class will be used where existing land use and Roadway sections have been built out to a greater extent than those Roadway segments classified as Access Classes 3 and 4 and where the probability of major land use change is not as high as those Roadway segments classified Access Classes 3 and 4. Existing or planned non-restrictive medians or centers will distinguish these Roadways.
- f. Access Class 7. This class shall only be used in an urbanized area where existing land use and Roadway sections are built out to the maximum feasible intensity and where significant land use or Roadway widening will be limited. This class shall be assigned only to Roadway segments where there is little intended purpose of providing for high speed travel. Access needs, though generally high in those Roadway segments, will not compromise the public health, welfare, or safety. Exceptions to standards

in this access class will be considered if the applicant's design changes substantially reduce the number of connections compared to existing conditions. These Roadways can have either restrictive or non-restrictive medians

3. Assignment of Access Classification

All County Major Collectors shall be assigned to one of the Access Management Classes 2 through 7. The assignment of a classification to a specific segment of the County Roadway system shall be the responsibility of the Board of County Commissioners. This classification decision shall take into consideration the potential for the desired access management classification and standards to be achieved based on existing land use, probability for land use change, adopted future Roadway improvements and on the ultimate cross-section of the Roadway identified in adopted plans. The assignment of a classification shall specifically take into consideration the following factors:

- a. The current and potential functional classification of the road,
- b. Existing and projected future traffic volumes,
- c. Existing and projected County, State, and Metropolitan Planning Organization transportation plans and needs (including a consideration of new or improved parallel facilities),
- d. Drainage requirements,
- e. The character of the lands adjoining the Roadway (existing and projected),
- f. Land use, zoning and Land Development Regulations as set forth in the Comprehensive Plan and Land Development Code,
- g. The type and volume of traffic requiring access,
- h. Other operational aspects of access, including corridor accident history,
- i. The availability of reasonable access to the Major Collector by way of other State, County or municipal roads or streets,
- j. The cumulative effect of existing and projected connections to provide for the safe and efficient movement of people and goods within the County.

4. Access Management Plan Approval

- a. The County shall establish access classifications for all County Major Collector Roadway segments. Until an access classification is established for a particular Roadway segment on the County Major Collector Roadway system, Access Class 7 shall be used in the interim.
- b. If an Applicant/Developer is multi-laning an existing County Major Collector that is not multi-laned, an Access Management Plan shall be submitted before approval of a development order.

- c. The Access Management Plan shall include all existing and proposed connections, median openings (full and directional) as well as any necessary traffic signals. Spacing of all connections shall be clearly depicted on the Access Management Plan. Proposed connections and median openings must be spaced from existing connections in accordance with the appropriate access classification in Table 6.03A. The Applicant/Developer should minimize the number of median openings, as much as practical, in order to maintain an acceptable level of service and operation of the Roadway. Every effort should be made to locate major connections or entrances with similar connections or entrances for full median openings.
- d. Minor deviations to the Access Management Plan may be allowed, during the plan approval process, as long as they are in conformance with Section 6.04.05.K.5. (Deviations to Access Spacing)

TABLE 6.03A

Major Collector Access Management Classifications & Standards						
		Connection	Connection Spacing Median Opening			
		(Feet)		Spacing (Feet)		Signal
Access						Spacing
Class	Medians	> 45 MPH	<= 45 MPH	Directional	Full	(Feet)
2	Restrictive with service roads	1320	660	1320	2640	2640
3	Restrictive	660	440	1320	2640	2640
4	Non-Restrictive	660	440			2640
5	Restrictive	440	245	660	*2640/1320	*2640/1320
6	Non-Restrictive	440	245			1320
7	Both Median Types	125		330	660	1320

^{* 2640} Feet for Speed Limit > 45 MPH 1320 Feet for Speed Limit <= 45 MPH

Notes: The table shows minimum spacing requirements
Restrictive Median means physically prevent vehicle crossing
Non-Restrictive Median means allow turns across a point

Deviations to Access Spacing

- a. During the development of the Access Management Plan, certain connections may have to be moved due to site conditions, such as but not limited to sight distance, intersection safety and operation, existing connections, utilities, etc. Deviations of up to ten percent (10%) of the respective connection spacing will be allowed. (As an example, on an Access Class 5 Roadway, the distance between full median openings is two thousand, six hundred forty (2,640) feet. A ten percent (10%) deviation would allow two thousand, three hundred seventy six (2,376) feet between connections, i.e., 2,640 ft. 264 (10% of 2,640) = 2,376 feet).
- b. Deviations greater than ten percent (10%) of the required connection spacing shall require approval of the County Administrator upon showing

of good cause. Such deviations may require the following from the Applicant/Developer:

- (1) Provide the County with documentation of unique or special conditions based upon established engineering principles that make strict application of the spacing standards impractical or unsafe; and
- (2) Provide documentation how the deviation would affect the traffic efficiency and safety of the transportation facility and;
- (3) Be signed and sealed by a licensed Florida Professional Engineer knowledgeable in traffic engineering; and
- (4) Be clearly beneficial or justifiable to the County Administrator.

L. Traffic Signals

Traffic signals may be required if justified based upon traffic signal warrants contained in the MUTCD and the signal location is approved by the County Administrator. All expenses, including signal warrant study, design, materials, and installation shall be the responsibility of the applicant at no cost to the County. Traffic signals shall be designed to comply with the MUTCD and FDOT Standards and Specifications, and the signal equipment shall meet County Specifications. Mast arms shall be used for signal supports. The traffic signal shall become the property of St. Johns County upon acceptance by the County of the signal installation following a ninety (90) day burn-in time period to ensure that all equipment is functioning properly.

Sec. 6.04.06 Stormwater Management

A. Objectives

- 1. This Section shall govern the design and Construction or alteration of all drainage systems, natural or man-made, within the unincorporated areas of St. Johns County. The following objectives are hereby established in order to protect, maintain and enhance both the immediate and the long term health, safety, and welfare of the citizens of St. Johns County, while allowing landowners reasonable use of their property:
 - a. To prevent loss of life and property due to Flooding;
 - b. To reduce the capital expenditures associated with Flood control and the installation and maintenance of storm drainage systems;
 - c. To minimize the adverse impact of land Development and related Construction activities on property, environmentally sensitive areas, water and other natural resources.
- Legally the Applicant shall respect the rights of other landowners with regard to volume, rate, and quality of Stormwater runoff leaving a Project site; and, shall mitigate in accordance with the requirements of this Code, the predicted impacts of the proposed activity on other lands through the use of a properly designed,

constructed and maintained Stormwater Management System. In mitigating impacts the following shall be addressed:

- a. Impacts to adjacent and downstream collection, storage, and conveyance systems due to increased volume and rate of Stormwater runoff leaving a Project site;
- b. Impacts to adjacent and upstream runoff contributing areas which may be hydrologically or hydraulically connected to the Project;
- c. Impacts to adjacent and downstream property due to sediments and other pollutants carried by Stormwater runoff during and after Construction of the Project;
- d. Impacts to "Special Flood Hazard Areas" due to earthwork activities associated with the Project which may result in reduced Flood storage or conveyance capacity;
- e. Impacts to "Volume Sensitive" areas which are Flood prone due to being land-locked or closed areas having either no drainage outlet or limited outlet capacity.
- 3. St. Johns County acknowledges that under certain circumstances, it may not be possible or practical to meet all of the objectives of Section 6.04.06.A. above. Projects will be evaluated to determine the methods by which the Applicant proposes to mitigate undesirable effects resulting from an inability to meet all the objectives herein. A Project that meets all of the minimum design standards and permitting requirements established by this Section shall be presumed to adequately mitigate for Stormwater runoff impacts identified above.
- 4. Compliance with Part 6.04.00 shall not, by itself, relieve the designer, the contractor, or the Owner of his or her liability to others affected by the drainage work.

B. Activities Requiring a Permit

- 1. Unless exempted under Section 6.04.06.C. below, the following activities will require prior approval through the St. Johns County Development Review Process:
 - a. Alteration, restriction, or removal of existing natural drainage collection, storage and conveyance systems;
 - b. Alteration, restriction, removal, reconstruction, or abandonment of existing man-made collection, storage, and conveyance systems;
 - c. Any activity which alters or disrupts the natural flow patterns of Stormwater runoff, or would result in an increase in Stormwater discharge volume and/or rate. These activities include, but are not limited to: Land Clearing, draining, compacting, filling, excavating, diverting or otherwise altering the natural flow patterns of Stormwater runoff;
 - d. Changing the Use of land and/or the Construction of a Structure or change in the size of one or more Structures;

f. The Development of recorded and unrecorded Subdivisions or the replatting of recorded Subdivisions, residential or non-residential.

C. Exemptions

- 1. Except as noted, the following Projects shall be exempted from the Stormwater permitting requirements of this Code:
 - a. Agricultural activities (Silvicultural activities shall meet requirements of Section 6.04.09.C.);
 - b. Maintenance work performed on existing mosquito control drainage canals;
 - c. Maintenance work performed on existing Stormwater Management Systems provided that such maintenance work does not alter the purpose and intent of the system as constructed;
 - d. Maintenance or renewal of existing pavement or Buildings;
 - e. Single Family Dwelling Units and Two Family Dwelling Units which are not a part of a larger common plan of Development or sale;
- 2. Projects meeting the provisions of Section 6.04.06.C.1.e. above shall be subject to the requirements of Section 6.04.06.F.8., (Special Flood Hazard Areas and Flood Prone Areas), and Section 6.04.06.H., (Finished Floor Elevations and Lot Grading Plans).
- 3. The following Projects shall be considered minor in nature and shall be exempted from the Stormwater discharge requirements of Section 6.04.06.F.3.a. only. However, depending on soil types and hydrologic conditions, Projects exempted under this provision shall at a minimum provide retention of Stormwater runoff generated from the first one inch of rainfall resulting from the developed or redeveloped area. In cases where soil types and groundwater table conditions are not conducive to retention systems, a Stormwater detention system shall be provided with the above required Stormwater volume released over a period of twenty-four (24) to seventy-two (72) hours following the storm event.
 - a. Single triplexes and quadraplexes provided that Lot coverage including the Building, driveways, and Parking Area does not exceed thirty-five percent (35%) of the total developable Lot area and the Lot is not part of a larger common plan of Development or sale.
 - b. Expansions or modifications to existing Projects provided that all of the following requirements are met:
 - (1) The site is currently served by an existing and maintained Stormwater Management System;
 - (2) The existing site Improvements plus the proposed expansion does not exceed seventy percent (70%) total site impervious coverage;

- (3) The expansion consists of no more than two thousand, eight hundred (2800) square feet of Building, sidewalks, and associated Parking Area. This requirement is based on a one-time only expansion or a cumulative expansion up to the two thousand, eight hundred (2800) square feet. Any further expansions shall be non-exempt and shall meet all the Stormwater management requirements of this Section;
- (4) The existing Stormwater Management System can be enlarged to collect and retain or detain, as required above, Stormwater runoff from the developed or redeveloped area;
- (5) The proposed Improvements and alterations to the Project site will not cause unreasonable impacts to adjacent properties;
- (6) All other applicable Land Development Regulations have been met.
- c. New Projects which are less than or equal to thirty-five percent (35%) impervious Lot coverage up to a maximum of nine thousand (9,000) square feet of impervious Lot coverage including Building, sidewalks, driveway, and Parking Area and provided that all of the following are met:
 - (1) No more than fifteen thousand (15,000) square feet of the Project site is altered, including clearing and earthwork;
 - (2) Retention or detention of Stormwater runoff as required above can be provided;
 - (3) The proposed Improvements and Alterations to the Project site will not cause unreasonable drainage impacts to adjacent properties;
 - (4) All other applicable Land Development Regulations have been met.
- 4. Projects meeting the requirements of Section 6.04.06.C.3.c.(3) above shall be required to submit a drainage plan meeting the requirements referenced in Section 6.04.06.G. below and are subject to "As-Built" inspection and certification.
- 5. The County Administrator shall have the right to exempt any Project from the drainage requirements herein, where, in the judgment of the County Administrator, the proposed Improvements will result in less than a five percent (5%) increase in volume and/or rate of Stormwater runoff from the project site; impacts to adjacent and downstream properties are negligible; and, there is no history of Flooding problems.
- 6. Exemption of any Project under the provisions of Section 6.04.06.C. does not relieve the Applicant from obtaining Permits from other local, state or federal agencies which may have jurisdiction over the Project or from meeting all other applicable Land Development Regulations.

D. Certifications

1. Professional Certification

- a. Stormwater management plans, drawings, details, calculations, and related documents, as independently submitted or as contained in the set of Construction Plans shall be prepared by an Engineer or other Registered Professional as defined herein, who is competent in the fields of hydrology; drainage and Flood control; erosion and sediment control; and, Stormwater pollution control. All final drawings, specifications, plans, reports, or documents prepared or issued by the Registered Professional shall be signed, dated, and sealed in accordance with Florida Statutes. Each sheet or page of the final drawings of record shall bear the signature, date and embossed seal of the Registered Professional. All drawings of record shall clearly identify in a legible manner the name and registration number of the Registered Professional.
- b. The registered professional shall certify to St. Johns County, either on the drainage plan or by separate document, that the drainage facilities shown on the final drawings of record were designed in conformance with the St. Johns County Land Development Code. A standard form meeting this requirement is provided in the Development Review Manual.
- c. The drainage calculations shall be submitted in a report form, and shall include a summary section which will address all the requirements of this Section specifically Section 6.04.06.F.
- d. All survey plans, (including but not limited to: boundary, topographic, asbuilt, wetland, mean high water, specific purpose and associated reports) shall be prepared by a Florida Registered Professional Surveyor and Mapper (PSM). All survey plans and related reports prepared or issued by the PMS shall be signed, dated and sealed in accordance with Florida Statutes.

2. Operation and Maintenance

Projects which do not otherwise require establishment of operation and maintenance responsibility in public records shall be required to designate the entity responsible for operation and maintenance prior to approval for Construction. A standard form meeting this requirement is provided in the Development Review Manual.

3. Maintenance of Drainage Facilities after Construction

All privately owned drainage facilities shall be continuously maintained by the Homeowners Association, the Developer, or other entity approved by the County and designated in the Construction application. Failure to adequately maintain the facilities shall be in violation of this Code.

4. As-Built Certification

"As-Built" survey requirements and related certification shall be provided in accordance with the requirements of Section 6.04.01. A standard form meeting this requirement is provided in the Development Review Manual.

E. Legal Positive Outfall

- 1. All Stormwater discharges from a Project shall be directed to a point of Legal Positive Outfall from the point of discharge to the receiving body of water without unreasonably impacting Flood levels of any upstream, downstream, or adjacent property relative to the minimum design standards of Section 6.04.06.F. and the design considerations for mitigating unreasonable impacts set forth in Section 6.04.06.A.2. No diversions of surface waters will be permitted if properties downstream of the diversion would be unreasonably impacted by such diversion for storm events up to and including the one hundred (100) year storm. Any Improvements or increase in capacity of downstream facilities necessary to serve the Project shall be the responsibility of the Applicant and shall be constructed in conjunction and prior to the Project Construction unless otherwise approved or provided by the County Administrator. Financial assurances meeting the requirements of Section 6.04.08 may be required prior to approval by St. Johns County.
- 2. County approval of a Project does not result in the grant of any Easements or property rights or authorize encroachment upon or use of the property by others. As a result, the County will assume that the Applicant and the Project Engineer have verified the existence of a legal right to discharge Stormwater from the Project outfall. However, in the event St Johns County has substantial doubts concerning such legal rights, the County may require additional information be submitted to verify the legal right to discharge prior to commencement of Construction.

F. Minimum Design Standards

General

- a. In meeting the objectives of Section 6.04.06.A. above, storage of Stormwater runoff shall be provided to meet the minimum design standards below. Required storage shall meet the volume requirements for water quality and attenuation of peak discharge rate and/or volume (for volume sensitive areas), whichever is greater. In the event another local, state, or federal regulation is more restrictive, the more restrictive standards shall prevail.
- b. Projects which are to be constructed in phases shall provide drainage Improvements meeting the minimum design standards for each phase. No phase shall be dependent upon the ultimate installation of a future phase.
- c. Stormwater retention ponds shall have a top of bank elevation no less than six (6) inches above the twenty-five (25) year maximum water surface elevation.

2. Geotechnical Evaluation

The United States Department of Agriculture (USDA), Natural Resource Conservation Service "Soil Survey of St. Johns County, Florida" shall be used as a planning guide only. Soil profiles using the USDA soil classification method shall be performed on sufficient areas throughout the site to verify soil types and hydrological conditions.

a. A geotechnical report from a licensed engineer or other professional authorized under Florida Statutes to do such work shall be submitted for any Stormwater storage facility, system or open channel (swale, ditch or canal) proposed as a "dry" facility; designed to contain standing or flowing water for less than seventy-two (72) hours after a rainfall event or which uses infiltration for sizing of the facility. The report shall include soil boring logs, estimated seasonal high water table, locations of confining layers, results of hydraulic conductivity tests, and any other parameters which may affect the design or recovery of the facility. Soil borings shall extend a sufficient distance below the proposed bottom elevation of the Stormwater storage facility to identify any constraints that may affect the design or recovery of the system. Guidelines pertaining to the depth and number of borings and hydraulic conductivity tests may be obtained from the County Administrator. In areas where it is evident that a seasonal high water table or a confining or impermeable soil layer is within four (4) feet of the bottom elevation of the proposed retention area, a "mounding analysis" is required to substantiate the design and recovery of the system.

b. Soil Investigation – Roadways

A soil investigation report shall be submitted with the Construction Plans and shall include:

- (1) Test borings to a depth (minimum four (4) feet below proposed edge of pavement) and spacing maximum five hundred (500) feet along centerline) showing existing water table and estimated water table during periods of normal rainfall and without drainage Improvements that may lower the groundwater.
- (2) In special cases additional borings to determine the soil classifications predominant to the area may be required by the County Administrator.
- (3) Soil borings for pond designs shall be in accordance with Section 6.04.06. F.2.c. below.

c. Soil Investigation – Retention/Detention Areas

- (1) At a minimum, soil borings for wet detention systems shall be made to a depth equal to the design low water. For dry retention systems, soil borings shall be of sufficient depth to determine the wet season high water table and the permeability of the soils.
- (2) Soil types and the wet season high water table elevation shall be included and illustrated as a part of the detailed lake Construction Plans.
- (3) For wet detention systems, a minimum of one (1) boring (to a minimum depth of the design low water) shall be taken per acre of lake surface. Fractions of acres of lake surface shall be rounded to the next whole acre for purposes of determining the number of borings.

- (4) If the analysis of the basin utilizes infiltration to achieve either peak flow attenuation or recovery time, a double ring infiltrometer test shall be performed at the bottom of the proposed basin.
- 3. Specific Design and Performance Criteria
 - a. Except for those Projects which are exempted under Section 6.04.06.C. above, allowable Stormwater discharge rate and discharge volume from a project shall be based on the following design and performance criteria unless otherwise indicated below:
 - (1) Projects which discharge or contribute runoff to downstream areas which are not volume sensitive and have adequate capacity to accept and convey Stormwater runoff from the Project site without increasing Flood levels shall limit peak rates of discharge for developed conditions to pre-developed or existing conditions for the five (5) and twenty-five (25) year design storm event.
 - (2) Projects which discharge or contribute runoff to downstream areas which are volume sensitive and/or do not have adequate capacity to accept and convey Stormwater runoff from the Project site without increasing Flood levels shall provide detention of the twenty-five (25) year discharge volume for developed conditions such that the volume released from the Project during the critical time period is no greater than the volume released under predeveloped or existing conditions during the same time period. For the purposes of this requirement the critical time period shall be the storm duration as indicated in Section 6.04.06.F.3.g. below unless a detailed hydrologic study of the contributing watershed demonstrates otherwise.
 - (3) Unless exempt, all projects shall meet state water quality discharge standards as regulated by the St. Johns River Water Management District. The County Administrator shall presume that this requirement is met upon submittal of a copy of a valid St. Johns River Water Management District Permit prior to commencement of construction.
 - b. The County Administrator shall have the right to exempt any project from the discharge requirements of Section 6.04.06.F.3.a.(1) which borders on and discharges directly into the St Johns River; the Intracoastal Waterway, or the Atlantic Ocean.
 - c. Stormwater discharge analysis shall consist of generating pre-Development and post-Development runoff hydrographs; routing the post-Development runoff hydrographs through the Stormwater storage system; and, sizing the storage system and discharge control Structure(s) to limit post-Development discharge rate and/or volume to pre-Development or existing conditions for the storm events indicated in Section 6.04.06.F.3.a above. Stormwater discharge computations shall include the storm frequency, storm duration, rainfall amount, rainfall distribution, hydrologic soil conditions, surface storage, changes in land Use cover and slope conditions, off-site runoff contributing areas, time of concentration, tailwater

- conditions, and any other changes in topographic and hydrologic characteristics. Where applicable, projects will be divided into sub-basins according to the drainage divides to allow for more accurate hydrologic simulations. Interconnected pond systems shall be modeled as such.
- d. Depending on soil types and hydrologic conditions, infiltration may be utilized in conjunction with Flood routing procedures to satisfy the requirements of Section 6.04.06.F.3.a.(1) and 6.04.06.F.3.a.(2) where soil and groundwater table conditions are conducive to such practices, such as NRCS Hydrologic Group "A" soils.
- e. All Stormwater storage facilities shall be designed to recover sufficient volume to satisfy state water quality discharge standards with total volume recovery within seven (7) to fourteen (14) days following the design storm event.
- f. Rainfall data shall be based on the twenty-four (24) hour precipitation amounts contained in the SJRWMD Technical Publication SJ 91-3 entitled "24-Hour Rainfall Distributions for Surface Water Basins Within the St. Johns River Water Management District, Northeast Florida."
- g. Rainfall distributions shall be based on the twenty-four (24) hour duration rainfall event utilizing the NRCS Type II Florida Modified rainfall distribution or an applicable basin specific storm frequency distribution contained in the SJRWMD Technical Publication SJ 91-3 entitled "24-Hour Rainfall Distributions for Surface Water Basins Within the St. Johns River Water Management District, Northeast Florida".
- h. Except as indicated in Section 6.04.06.F.3.i. hydrographs for Flood routing procedures shall use the U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS) runoff curve number method. Ultimate land usage shall be utilized for post-Development design and analysis using average antecedent moisture conditions (AMC II). Selection of appropriate runoff curve numbers shall be based on values contained in the latest edition of the NRCS Technical Release 55 entitled, "Urban Hydrology for Small Watersheds." With prior approval of County Administrator, other methods may be accepted based on applicability to site conditions, soil and hydrologic conditions, and demonstration that results are comparable to the NRCS runoff curve number method.
- i. The following methods are accepted for generating runoff hydrographs for Flood routing procedures:
 - (1) NRCS Unit Hydrograph Method
 - (2) Santa Barbara Urban Hydrograph Method
 - (3) Modified Rational Method *
 - * Use of the Modified Rational Method for Flood routing procedures shall be limited to small projects less than five (5) acres.
- 4. Collection and Conveyance Facilities

Unless otherwise approved by the County Administrator, the following standards shall apply to all collection, storage, and conveyance facilities:

- a. Temporary Roadway Flooding for the storm events indicated below may be permissible during the design storm event only if full recovery and use of the Roadway is available at the end of the design storm event. Flood routing analysis shall show that Flood elevations at no time will exceed the following:
 - (1) Exceed an elevation that would permit Flood water encroachment of more than one-half of a travel lane at the lowest elevation on the centerline profile of a Roadway for a twenty-five (25) year storm event;
 - (2) Exceed a depth of one (1.0) foot (12 inches) above the lowest elevation on the centerline profile of a Roadway located within a Special Flood Hazard Area or exceed the finished floor elevation of any Structure within the Project for the one hundred (100) year storm event whether located in a Special Flood Hazard Area or not.
- b. Roadway Stormwater systems shall be designed to transport Stormwater runoff resulting from a five (5) year frequency storm event using the FDOT Zone 5 intensity-duration-frequency curves. Time of concentration shall be based on standard accepted engineering practice and should consider, where applicable, overland sheet flow, shallow concentrated flow, open channel flow, or a combination of these conditions. For systems with time of concentrations less than ten (10) minutes, the minimum time of concentration of ten (10) minutes may be used.
- c. Stormwater systems serving parking lots or other non-residential Projects shall be designed to collect and handle all Stormwater flows into and through the system without creating unreasonable impacts to adjacent properties. Temporary ponding in parking lots is permissible if of shallow depth and if full recovery and use of the Parking Area is available at the end of the storm event. At a minimum, the Stormwater system shall be designed to convey the five (5) year storm event using the FDOT Zone 5 intensity-duration-frequency curves.
- d. Friction losses shall be considered in the computation of the design hydraulic gradient for all Stormwater systems. Energy losses associated with special pollution control Structures (weirs, baffles, etc.) and losses due to Utility conflict Structures shall also be included when present in the system. When hydraulic calculations do not consider all minor energy losses, the elevation of the hydraulic gradient for design storm conditions shall be at least one (1.0) foot below the gutter elevation. If all energy losses are calculated, the hydraulic gradient shall be allowed to reach the Roadway gutter elevation. Minor energy losses shall include those losses associated with entrance, exit, expansion, contraction, bends, and junction/manhole losses.
- e. Determination of hydraulic gradient and sizing of the Stormwater system shall be based on the highest tailwater which can be reasonably expected

to occur coincident with the applicable design storm event. Standard design tailwater conditions for the design of Stormwater systems are as follows:

- (1) Systems which discharge into ponds, lakes, and other wet facilities shall use the stage occurring at peak flow conditions for the design storm event used. Where no outlet exists, the seasonal high water elevation shall be used at the beginning of the storm event;
- (2) Systems discharging into tidal areas such as the Atlantic Ocean, the Intracoastal Waterway, and the St. Johns River shall use the Mean High Tide elevation plus twelve (12) inches;
- (3) Systems discharging into Regulatory Floodways shall use a tailwater elevation derived by use of the Federal Emergency Management Agency (FEMA) Flood profile data contained in the FEMA Flood Insurance Rate Study or other approved water surface profile study;
- (4) Systems discharging into ditches shall use the normal depth flow in the ditch or if downstream control exists, the greater of the normal depth flow or the stage due to backwater from the downstream control:
- (5) Systems which connect to existing Stormwater systems shall use the hydraulic grade line of the existing system at the connection.
- f. All manual calculations shall be submitted in standard FDOT stormwater tabulation format. Printouts from commercially available computer software developed specifically for analysis and design of Stormwater systems is permissible.
- g. The minimum design velocity for Stormwater systems shall be two and one-half (2.5) feet per second. Energy dissipation will be required at the point of discharge for velocities greater than six (6) feet per second. Submergence of the pipe outlet by at least two-thirds (2/3) of the pipe diameter below normal water level may be considered as energy dissipation.
- h. Unless otherwise approved by the County Administrator, the minimum allowable pipe size for Stormwater systems, within Roadway Right-of-Way, shall be fifteen (15) inches. The maximum pipe lengths without maintenance access Structures shall be based on the following:

TABLE 6.04

PIPE SIZE	MAXIMUM PIPE LENGTH
15 inches	200 feet
18 inches	300 feet
24 inches to 36 inches	400 feet
42 inches and larger	500 feet
Box Culverts	500 feet

- Open channels (swales, ditches and canals) shall be designed to convey, without damage, Stormwater flow from design storm frequencies as follows:
 - (1) Outfall ditches and canals twenty-five (25) year
 - (2) Collector Road swales and ditches ten (10) year
 - (3) Local Road swales and ditches five (5) year
- j. Unless site specific factors warrant the use of larger design storm events, Local Road cross-drains shall be designed to convey, without damage, the five (5) year storm event based on open channel flow conditions and the ten (10) year storm event utilizing available head at the entrance. Collector road cross-drains shall be designed to convey, without damage, the ten (10) year storm event based on open channel flow conditions and the twenty-five (25) year storm event utilizing available head at the entrance.
- k. Unless site specific factors warrant the use of larger design storm events, Roadway side drains shall be designed to convey, without damage, the five (5) year storm event.

Erosion and Sediment Control

- a. Erosion and sediment control best management practices shall be used as required during Construction to retain sediment on-site. These management practices shall be designed according to Minimum FDOT standards and shall be shown and noted on the "Grading and Drainage Plan" or on a separate "Erosion and Sediment Control Plan". Information pertaining to the Construction, operation and maintenance of the erosion and sediment control practice shall be included. Sediment accumulations in the system from Construction activities shall be removed to prevent loss of storage volume. Sedimentation occurring to off-site areas shall be halted and the area immediately restored to conditions prior to sedimentation.
- b. All side slopes and other areas disturbed by Construction shall be stabilized by sodding, hydro-mulching or other appropriate vegetative or nonvegetative erosion control measures. Grass shall be fully established prior to scheduling for final inspection of the Project and/or acceptance by the County Administrator. Banks or berms having a 3:1 slope or steeper shall be sodded.

c. Erosion and sediment control best management practices shall be in conformance with St. Johns County Ordinance No. 2006-62 regarding pollutant discharges to the Municipal Separate Storm Sewer System (MS4) in conjunction with participation in the National Pollutant Discharge Elimination System (NPDES).

6. Public Safety

Normally dry basins designed to impound more than two (2) feet of water or permanently wet basins shall be designed with side slopes no steeper than four (4) feet horizontal to one (1) foot vertical (4:1) out to a depth of two (2) feet below the surface control elevation. As an alternative, the basins may be fenced or otherwise restricted from public access if the slopes must be steeper due to space limitations or other constraints. A fence shall be a minimum four (4) foot high and prevent passage of a four (4) inch sphere.

7. Access and Maintenance Easements

Stormwater storage, collection and conveyance facilities shall be designed a. and constructed to permit adequate equipment access. Facilities designed and constructed to serve more than one property Owner, such as residential and non-residential Subdivisions shall provide an access and maintenance area contained within a dedicated tract or Easement designated for the Stormwater storage facility adequate to provide for future maintenance. Except where existing septic systems or wells are present on adjacent property, an access and maintenance Easement of width meeting the requirements below shall be provided landward of the top of bank elevation of all Stormwater storage, collection and conveyance facilities. Where existing septic systems or wells are present on the adjacent property, a buffer of sufficient width to meet separation requirements between the Stormwater storage facility and the well or septic system shall be provided as approved by the State Health Department or, in the case of public water wells, as approved by the St. Johns River Water Management District. Minimum Easement widths shall be based on the following unless the Applicant can demonstrate lesser widths will be adequate to provide maintenance of the Stormwater storage, collection and conveyance facility:

TABLE 6.05

STORAGE FACILITY SIZE	MINIMUM EASEMENT WIDTH			
Less than 1/4 acre 1/4 acre or greater	5 feet 8 feet			
MAXIMUM SLOPE 10 feet horizontal to 1 foot vertical (10:1)				

b. Building and Accessory Structures such as, but not limited to, decks, concrete pads, must be a minimum of three (3) feet from side and rear property lines except as provided in Section 2.02.04.B. Positive drainage

shall be maintained at all times regardless of distance from the property line.

c. Minimum drainage Easement widths for conveyance facilities other than those within a road Right-of-Way shall be based on the following:

(1) Piped Systems

Fifteen (15) feet or the pipe width plus two (2) times the average depth to the pipe invert rounded up to the nearest five (5) foot increment, whichever is greater.

(2) Open Channels

Thirty (30) feet or the width to convey the required design flows plus twenty (20) feet unobstructed area for access and maintenance measured from the top of the bank.

Lesser widths may be approved for minor conveyance systems such as Rear Yard or Side Yard swales upon demonstration that these minor systems are adequate to convey the design flows from the contributing drainage area; are capable of being effectively maintained by the property Owner; and, are not crucial to the master Stormwater conveyance system.

- d. Unless otherwise approved by the County Administrator, no permanent Structure shall be allowed within any public or private drainage or utility Easement. For the purpose of this Code, examples of permanent Structures shall include, but are not limited to: Buildings, footings, fixed mechanical equipment, electrical transformers and emergency generators, decks, screened enclosures, Patios, swimming pools, and swimming pool decks and any other vertical encroachment.
- e. The County Administrator may require a "Drainage Right-of-Way" in lieu of a drainage Easement where necessitated by maintenance requirements and functional importance to the contributing drainage basin. The width of the Drainage Right-of-Way shall be based on the same requirements as drainage Easements. No Structures, whether temporary or permanent, shall be allowed within an area designated as a Drainage Right-of-Way.
- 8. Special Flood Hazard Areas and Flood Prone Areas (A Zones) and Regulatory Floodways
 - a. Construction occurring in "Special Flood Hazard Areas" as identified by the Flood Insurance Rate Maps and/or the Flood Hazard Boundary Maps shall meet the requirements of the Federal Emergency Management Agency National Flood Insurance Program as referenced in Part 3.03.00.
 - b. Filling of "Flood Prone Areas" will be prohibited unless the Applicant can mitigate for the lost storage volume by providing other drainage Improvements to compensate for the lost storage volume elsewhere within the Flood prone area. Other drainage Improvements shall include compensating storage, downstream conveyance Improvements, or, a

combination of compensating storage and downstream conveyance Improvements. No filling shall be allowed within land-locked or closed type basins unless the Engineer can demonstrate that the filling activities will not adversely impact other properties within the Flood prone area. Raised drainfields are not to be considered fill areas.

G. Submittal Requirements

The Applicant is responsible for including in the Stormwater management review submittal sufficient information for the County Administrator to evaluate the environmental characteristics of the affected areas, the potential and predicted adverse impacts of the proposed activity on other lands, and the effectiveness of reducing adverse impacts. The County Administrator will establish submittal criteria relating to the contents of all Development review submittals. The criteria for submittals shall establish minimum requirements for the contents of Construction Plans and related design documents to assure requirements herein have been met. Other information may be requested if the County Administrator believes the information is reasonably necessary for support of the drainage analysis including maps, charts, graphs, tables, photographs, narrative descriptions, calculations, explanations, and citations to supporting references as appropriate to communicate the required information for responsible evaluation of the site. Topographic data shall extend off-site a minimum distance of twenty-five feet on all sides to support review of submittals.

H. Finished Floor Elevations and Lot Grading Plans

- 1. Finished floor elevations shall be constructed at a minimum one (1) foot above the FEMA one hundred (100) year minimum elevations in any Special Flood Hazard Area, as referenced in Section 6.04.06.F.8.a. above. In addition, on any sites developed under County approved Subdivision Lot Grading plans, the minimum floor elevations shall be as specified in those plans and the maximum floor elevation shall not exceed six (6) inches more than specified.
- 2. All Buildings except those on one acre or more of upland area will require a Lot Grading Plan (Note: For any lot over one (1) acre that proposes to add fill within ten (10) feet of any property line will not be exempted). The design shall meet the County approved master drainage plan if applicable or meet the HUD "A", "B" or "C" Lot grading configuration type (see S&D Manual). Such plans shall be approved prior to any Lot grading. On all sites, the Yard slope shall be at least one foot per hundred feet from the perimeter of the new Structure downward to the point of site drainage discharge (edge of pavement or top of swale) on paved Roadways or two feet per hundred feet for sites on unpaved roads. Floor elevations above the Yard elevation at the Building perimeter shall be no less than as required by adopted County Building codes, in addition to any aforesaid minimum specific elevations. At a minimum, the Lot Grading Plan shall be drawn to a scale of one (1) inch equals fifty (50) feet or larger and shall include the following information:
 - a. Property boundary lines;
 - b. Existing drainage patterns on the site including points of entry of off-site drainage contributing areas, points of exit of Stormwater runoff and if necessary, existing elevations and/or elevation contours;

- c. Proposed limits of filling or grading of the site including fill depth, slopes, finished floor elevations, and if necessary, final elevations and/or elevation contours of the site:
- d. Location of swales and drains to convey Stormwater runoff from the site and any off-site contributing drainage areas to an appropriate point of disposal without adversely impacting adjacent and downstream properties;
- e. Any other pertinent information as may be required by the County Administrator as appropriate for responsible evaluation of the grading plan.
- f. In addition, the Lot Grading Plan shall demonstrate that the fill will not block natural flow of Stormwater runoff from adjacent properties and will not divert or direct additional Stormwater runoff onto adjacent properties. Any additional Stormwater runoff shall be directed to the Roadway drainage system or other approved drainage facility.
- 3. The County Administrator may require Construction of retaining walls, roof gutters, underdrains, swales, or any other facility deemed necessary to provide adequate drainage.

Sec. 6.04.07 Roadway Design

A. General

- 1. All new Roadways shall be paved in accordance with approved design and Construction Plans prepared to equal or exceed the design standards established in this Section.
- 2. To prevent unnecessary damage on newly constructed roadways, temporary access for construction traffic shall be provided to each phase of a development project in such a manner as to prohibit construction traffic on any phase until after the application of the second lift of asphalt has been completed in all phases as required in Section 6.05.07.F.3.
- 3. Previously platted Roadways which have not been constructed are subject to the requirements of Part 6.04.00, unless Bonds have been received and accepted on Construction of such Roadways.
- 4. The design and specifications for Major and Minor Collectors shall comply, at a minimum, with the Florida Department of Transportation (FDOT) "Roadway and Traffic Design Standards" (Standards), "Manual of Uniform Standards for Design, Construction and Maintenance for Streets and Highways" (Green Book), and the "Manual of Uniform Traffic Control Devices" (MUTCD), unless specifically revised by this Code or the S&D Manual. Material specifications and Construction procedures shall comply to the FDOT "Standard Specifications for Road and Bridge Construction" (Specifications). Certain FDOT details may be required to be incorporated into the Construction Plans at the request of the County Administrator.
- 5. The Standards and Detail (S&D) Manual graphically depict the Roadway and drainage design details for Construction within unincorporated St. Johns County and are consistent with the objectives and standards contained within this Code.

The County Administrator shall be authorized to amend the S&D Manual from time to time when necessary for the benefit of the citizens of St. Johns County. Variations to the S&D Manual shall be permitted consistent with the provisions of the Code. The S&D Manual shall not be incorporated into Construction Plans by reference.

B. Easement Requirements

A recorded Easement, as provided in Section 6.02.01.B.3, may be allowed for access to Development as follows:

- 1. Easements for access serving Multi-Family Dwelling Projects (except Townhomes), non-residential Projects, or easements serving ten (10) or more unplatted) residential Dwelling Units:
 - a. Shall meet all requirements of Part 6.04.00 (Roadway, Drainage & Utilities Standards) for commercial driveway or local road or collector standards, as appropriate, and meet Part 6.03.00 Fire Protection Regulations.
- 2. Easements for access serving up to nine (9) unplatted residential Dwelling Units:
 - a. Minimum recorded thirty (30) foot wide Easement. Those lots that can meet the required frontage as determined by the Zoning District, exclusive of the easement, on an approved, maintained County or Private road shall not be considered as being served by the easement.
 - b. Up to five (5) homes accessing an easement: Minimum twenty (20) foot wide stabilized surface with eight (8) inch thick LBR 40 material. Stabilized width must include shoulders. Native materials below the stabilized surface shall not contain significant amounts of unsuitable materials (i.e. muck, clay, organics, etc.).
 - c. More than five (5) homes accessing an easement: The easement must be improved to local roadway pavement design standards under Section 6.04.07.F for one-hundred feet (100') from its intersection with the County-owned right-of-way
 - d. Forty (40) foot radius stabilized turnaround or equivalent.
 - e. Owner(s) shall provide a recorded maintenance agreement in a form acceptable to the County.
 - f. Easement must provide Emergency Vehicle access per Part 6.03.00.
- 3. Easements for access serving unmanned sites (e.g. Antenna Towers, relay stations and similar facilities):
 - a. Minimum recorded twenty (20) foot wide Easement.
 - b. Minimum sixteen (16) foot wide stabilized surface capable of supporting eighty thousand (80,000) pounds.

- b. Thirty-five (35) foot radius stabilized turnaround or equivalent.
- 4. Shared residential driveways are permitted in platted Subdivisions, are not considered easements for purposes of this part, and must meet Section 6.04.05 Access Management

C. Right-of-Way Requirements

1. Minimum Right-of-Way Widths shall be as listed in Table 6.06. These minimum widths may be increased to allow sufficient width for drainage facilities, utilities, sidewalks, bicycle paths, or other appurtenances within the Right-of-Way.

TABLE 6.06

MINIMUM RIGHT-OF-WAY-WIDTHS						
ROADWAY CLASSIFICATION	TION CURB/GUTTER SWALE SECTION					
	2-LANE	2-LANE 4-LANE 6 LANE		2-LANE	4-LANE	6 LANE
LOCAL ROADS	60 feet*	N/A	N/A	60 feet**	N/A	N/A
MINOR COLLECTORS	80 feet	110 feet	N/A	80 feet	130 feet	N/A
MAJOR COLLECTORS	80 feet	130 feet	155 feet	100 feet	150 feet	250 feet

^{*} Right-of-Way Widths for Local Road curb and gutter sections may be reduced to fifty (50) feet upon demonstration that an electric Utility Easement five (5) feet in width or greater is provided outside of the Right-of-Way on each side.

- 2. Swale sections on Local Roads may be permitted in public Rights-of-Way only under the following conditions:
 - a. Existing platted Subdivisions where the adjoining Rights-of-Way are predominantly existing swaled system, or
 - b. Proposed platted Subdivisions where the minimum lot size is one (1) acre or greater.
- 3. If pavement within a Roadway is divided, or if the centerline of the Roadway deviates from the centerline of the Right-of-Way, such as to allow for preservation of Trees within the Right-of-Way, the width for the remaining portion of the Right-of-Way outside of the travel lanes shall comply with the Roadway Typical Section for the designated Roadway classification. Design of the Roadway must be adequate to assure that the Tree root system will not adversely affect the integrity of the Roadway in the future or impact the proper location of the Utility placement. Utility installation must be in accordance with the S&D Manual.
- 4. All intersecting Roadways shall require additional Right-of-Way at the corners. The corner clip shall connect the two points which are twenty (20) feet from the intersecting Right-of-Way lines or a twenty-five (25) foot radius return (refer to the S&D Manual).

^{**} See all of Section 6.04.07.C.for various requirements related to swale design

5. Reduction of the minimum Right-of-Way Widths listed in Table 6.06 above may be permitted if documentation demonstrates sufficient width to safely accommodate all planned or required drainage facilities, utilities, sidewalks, bicycle paths, or other appurtenances within the Right-of-Way or separate Easements. Requirements of this Code shall not prohibit the County from undertaking, or permitting, expansion of existing travel lanes within Right-of-Way not meeting the minimum widths in Table 6.06 above if environmental, legal, or physical constraints prevent expansion of such Right-of-Way to the minimum widths so long as public safety is not jeopardized.

D. Minimum Lane & Shoulder Widths

1. Minimum travel lane widths shall be as follows:

TABLE 6.07

ROADWAY CLASSIFICATION	MINIMUM LA VEHICLE	NE WIDTHS BICYCLE
LOCAL ROADS	10 feet	0 feet
MINOR COLLECTORS	12 feet	5 feet
MAJOR COLLECTORS	12 feet	5 feet

Note: See Section 6.04.05, ACCESS MANAGEMENT for details on driveway connections.

2. If pavement within a Roadway is divided, such as to allow for preservation of Trees, the minimum pavement width shall be sixteen (16) feet. The minimum pavement width of sixteen (16) feet shall be measured from the edge of pavement. Right-of-Way Widths for the divided section shall be in accordance with Section 6.04.07.C. above.

E. Cul-de-Sacs

- 1. All Roadways without a paved outlet shall be terminated with a cul-de-sac (see S&D Manual).
- 2. The minimum Right-of-Way Width for a cul-de-sac bulb with curb and gutter sections shall be a sixty-two (62) foot radius. For a swale section, the minimum Right-of-Way Width shall be a sixty-two (62) foot radius. These widths may be increased to allow sufficient width for drainage facilities, utilities, sidewalks, bicycle paths, or other appurtenances within the Right-of-Way.
- 3. The minimum pavement radii for cul-de-sacs shall be forty-two (42) feet with the pavement design for the cul-de-sac bulb consistent with the Roadway.
- 4. Other variation or shapes of cul-de-sacs may be allowed if the design conforms to American Association of State Highway and Transportation Officials (AASHTO) criteria contained in "A Policy on Geometric Design of Highways and Streets".
- 5. Any Local Road which exceeds one thousand, eight hundred (1800) feet shall have an intersecting Street, cul-de-sac or eyebrow designed turn around.

F. Pavement Design

1. Stabilized Subgrade

a. All Roadway and driveway subgrades shall have a minimum width as shown in the Roadway Typical Sections. Minimum depth and bearing values shall be as follows:

TABLE 6.08

ROADWAY CLASSIFICATION	STABILIZED DEPTH	LIMEROCK BEARING RATIO (L.B.R.)
LOCAL ROADS	12 inches	40
MINOR COLLECTORS	12 inches	40
MAJOR COLLECTORS	12 inches	40

- b. Where the existing soils to be used in the Roadway subgrade have the required bearing value, no additional stabilizing material will be required. The stabilizing material, if required, shall be high-bearing value soil, sand-clay, limerock, shell or other materials which meet the standards established in the FDOT Specifications.
- c. The Construction of the stabilized roadbed shall meet the criteria as set forth in the FDOT Specifications. Minimum density shall be ninety-eight percent (98%) (Modified Proctor Method).
- d. Tests for the subgrade bearing capacity shall be located no more than five hundred (500) feet apart or every soil change, and tests for compaction shall be located no more than three hundred (300) feet apart. Tests shall be staggered to the left, right, and on the centerline of the Roadway with no less than two (2) tests conducted per Roadway section. When conditions warrant, in the judgment of the County Administrator, additional tests may be required to assure compliance with FDOT Specifications. The Contractor/Project Engineer will be advised in writing that additional tests will be required and the extent of such additional tests. Special attention shall be given to the need for any compaction retests in subgrade areas disturbed by underground utilities or other Construction, especially under curb areas.
- e. The bottom of the stabilized subgrade shall be a minimum of one (1) foot above the Seasonal High Groundwater Level (SHGL) as identified by an Engineer or other Registered Professional. Alternatively, the local roadways with less than 2,000 Average Annual Daily Trips (AADT) could be designed by a Registered Professional in accordance with Section 5.2.2. of the Florida Department of Transportation's (FDOT) January 2020 Flexible Pavement Design Manual.

2. Base Course



TABLE 6.09

ROADWAY CLASSIFICATION	MINIMUM THICKNESS	LIMEROCK BEARING RATIO (L.B.R.)
LOCAL ROADS	6 inches	100
MINOR COLLECTORS	8 inches	100
MAJOR COLLECTORS	10 inches	100
MAJOR COLLECTORS – SIX LANE DESIGN	12 inches	100

- b. The base course width shall be a minimum of twelve (12) inches greater than the finished surface course (see Roadway Typical Sections in the S&D Manual). Limerock and coquina shell shall conform to FDOT Specifications for base course material and Construction methods. Under special conditions where base material may be subjected to greater than normal moisture, soil cement, crushed concrete, or asphaltic base may be used after approval by the County Administrator. In such instances, the applicant shall submit the justification, test data to be used to determine mix, the Contractor's experience record, and quality control procedures. The Engineer of Record shall state whether a fabric or other method will be used in the system to minimize surface cracking.
- c. All bases shall be primed in accordance with the Specifications. A tack coat will not be required on primed bases except on areas which have become excessively dirty and cannot be cleaned, or in areas where the prime has cured and lost all bonding effect. Tack coat material and Construction methods shall conform to FDOT Specifications.
- d. The Construction of the base shall meet the criteria as set forth in the FDOT Specifications. Minimum density shall be ninety-eight percent (98%) (Modified Proctor Method).
- e. Testing for the base thickness and compaction shall be located no more than three hundred (300) feet apart and staggered to the left, right, and on the centerline of the Roadway with no less than two (2) tests conducted per Roadway section. When conditions warrant, in the judgment of the County Administrator, additional testing may be required to assure compliance with FDOT Specifications, the Contractor/Project Engineer will be advised in writing that additional tests will be required and the extent of such additional tests.

3. Asphaltic Concrete Wearing Surface Course

The County requires a two-lift pavement system with regard to application of the Wearing Surface. All infrastructure and the base course shall be constructed in accordance with applicable Land Development Code regulations; however, the Wearing Surface Course application is delayed until such time as outlined in Section 6.04.08 (Bonding). Tack (prime) coat shall be required for multiple lifts.

Surface courses for flexible pavements shall meet the following minimum thickness requirements:

TABLE 6.10

	STRUCTURAL COURSE		WEARING SURFACE COURSE	
ROADWAY CLASSIFICATION	MINIMUM THICKNESS	TYPE	MINIMUM THICKNESS	TYPE
LOCAL ROADS MINOR COLLECTORS MAJOR COLLECTORS MAJOR COLLECTORS - SIX-LANE SECTION	1 inch 1-1/2 inches 2 inches 3 inches	S-1* S-1* S-I * S-1*	3/4 inches 1 inch 1-1/2 inches 1 1/2 inches	S-III * S-III * S-III ** S-III**

^{*} S-I and S-III may be substituted with SP-12.5 and SP-9.5, respectively.

- a. Asphaltic concrete types or equivalent structural courses shall conform to the FDOT Standards and Specifications for design, materials, and method of Construction.
- b. Asphalt cores for thickness shall be located no more than two hundred (200) feet apart and staggered to the left, right, and on the centerline of the Roadway with no less than two (2) cores taken per Roadway section.
- c. Surface course shall be ½-inch higher than the edge of gutter section.
- 4. Portland Cement Concrete Pavement
 - a. Stabilized subgrade requirements for Portland Cement Concrete Pavements shall be the same as those for flexible pavements.
 - b. Minimum pavement thickness requirements shall be as follows:

TABLE 6.11

ROADWAY CLASSIFICATION	MINIMUM THICKNESS
LOCAL ROADS	8 inches
MINOR COLLECTORS	8 inches
MAJOR COLLECTORS	10 inches

c. Portland Cement Concrete Pavement, including joints, shall conform to FDOT Specifications for materials and method of Construction.

G. Roadway Alignment

Roadways shall be designed with the following minimum radii for the centerline of curves:

^{**} The FDOT downside one-quarter (¼) inch tolerance for pavement thickness does not apply.

TABLE 6.12

ROADWAY CLASSIFICATION	MINIMUM CENTERLINE RADIUS
LOCAL ROADS	100 feet
MINOR COLLECTORS	325 feet *
MAJOR COLLECTORS	500 feet *

^{*} Minimum centerline radius may be increased based upon design speed of Roadway.

H. Sidewalks

- Sidewalks shall be required on all roads that are classified as County Major or Minor Collectors. Sidewalks shall be constructed on each side of the Roadway to be developed unless otherwise provided through an approved pedestrian circulation plan. On all new County Major or Minor Collectors, sidewalks shall be required on both sides.
- The County may grant an Administrative Waiver for the Construction of sidewalks within its Right-of-Way. However, the Developer shall be required to provide funds for the cost of sidewalk to the County. The unit price for sidewalk shall be established by the County Administrator.
- 3. Sidewalks shall be designed and constructed in accordance with FDOT Standards except as modified herein. The finished grade of sidewalk shall be constructed to conform to the master drainage plan, if applicable, to prevent ponding.
- 4. The minimum sidewalk width shall be five (5) feet on Major and Minor Collectors, with six (6) feet provided in areas of high pedestrian travel such as near schools, parking facilities, shopping centers, and transportation facilities. Sidewalks provided on Local Roads shall be a minimum of four (4) feet in width and shall be placed three (3) feet inside the Right-of-Way line, unless otherwise approved by the County Administrator. Handicap ramps, meeting Florida Accessibility Code specifications, are required on all curb and gutter sections. If an obstruction is unavoidable, the sidewalk shall be widened to compensate for the obstruction.
- 5. Sidewalks should be placed as far as possible from the Roadway travel lane as practical. If Right-of-Way constraints require the sidewalk to abut curb and gutter, the minimum sidewalk width shall be six (6) feet. Utility strips should be considered in determining the location of the sidewalk to better serve the needs of the pedestrian traffic as well as the Utility companies and to increase Roadway safety. Location of Roadway Signs and signal poles should also be a consideration in establishing sidewalk location.

I. Shoulder Treatment

- 1. Construction areas within County Right-of-Way and Easements shall be treated with seed and mulch, at a minimum, to protect the Right-of-Way against erosion, siltation and rivulets caused by surface run-off.
- 2. All Roadway work shall require a minimum of sixteen (16) inches of sod adjacent to the edge of pavement (see Roadway Typical Sections in the S&D Manual).

Grasses shall be Argentine Bahia or an approved alternative. Winter Rye and/or Millet may be mixed for protection until germination. Grasses shall be fully established and free of disease and damaging insects prior to County approval of the Project. All soil preparation, grassing, mulching, sod and watering shall meet FDOT Specifications for material and method of Construction.

J. Signing and Pavement Marking

- 1. All Roadways shall comply with the Manual on Uniform Traffic Control Devices (MUTCD) for signing and pavement markings. Signing and pavement marking plans shall be submitted on all Development Plans and shall require approval from the County Administrator. All traffic control Signs and pavement markings for new Developments shall be furnished and installed at no cost to the County.
- 2. County Roads shall require Thermoplastic material be used for all pavement markings, including turn lanes, stop bars, crosswalks, and other areas as designated by the County Administrator. New asphalt shall be allowed a thirty (30) day curing period before placement of thermoplastic materials. Temporary pavement markings shall be applied where necessary to control traffic on existing Roadways during the curing period.
- 3. All Major and Minor Collectors shall be delineated with Roadway pavement markings according to FDOT Standards and Specifications. The approach leg of a Local Road with a Major or Minor Collector shall be delineated with a stop bar and a double yellow centerline for a minimum length of one hundred (100) feet from the stop bar.
- 4. All Major and Minor Collectors shall be delineated with Reflective Pavement Markers (RPM) according to FDOT Standards and Specifications. Variances may be granted for roads where highway lighting exists, or when, in the judgment of the County Administrator, the need for Reflective Pavement Markers does not exist.
- 5. All Signs installed shall conform to the criteria in the MUTCD and FDOT Standards and Specifications. When access is to a Major Collector, the stop Sign shall be thirty-six (36) inches wide. The back side of each Sign is required to have the date of installation stenciled on it (month/year), in one (1) inch figures using a long lasting flat black paint or decal.
- 6. Street name Signs on Public and Private Roadways shall have white lettering on green background. All Street name Signs shall conform to County specifications for size, shape, lettering style, and other requirements.
- 7. All Signs shall be manufactured with high-intensity sheeting material unless otherwise specified by the County Administrator.

K. Traffic Signals

Traffic signals may be required if justified based upon traffic signal warrants contained in the MUTCD and the signal location is approved by the County Administrator. All expenses, including signal warrant study, design, materials, and installation shall be the responsibility of the applicant at no cost to the County. Traffic signals shall be designed to comply with the MUTCD and FDOT Standards and Specifications, and the signal equipment shall meet County Specifications. Mast arms shall be used for signal supports.

The traffic signal shall become the property of St. Johns County upon acceptance by the County of the signal installation following a ninety (90) day burn-in time period to ensure that all equipment is functioning properly.

L. Roadway Drainage

1. Open Channels

- a. The design of open channels shall be based on design and performance criteria contained in Section 6.04.06.F.4., entitled "Collection and Conveyance Facilities."
- b. The design of open channels shall consider the need for channel linings. Standard treatment for roadside swales shall be grass with mulch and/or hydro-mulching where flow velocities are less than velocities permitted for bare soil conditions. Sodding shall be used when the design flow velocity exceeds values permitted for bare soil conditions, but do not exceed four (4) feet per second or where side slopes exceed a steepness of three (3) feet horizontal to one (1) foot vertical (3:1). Sodding shall be staggered, to avoid continuous seams in the direction of flow. For flow velocities greater than four (4) feet per second, flexible or rigid linings shall be used. Flexible linings may include use of geotextile grids, rock rip-rap, and interlocking Rigid linings shall include concrete pavement. concrete grids. following table sets forth guidelines for lining types based on various design factors which include open channel gradient, side slopes, and velocity Subject to applicability to site conditions, manufacturer's recommendations and approval from the County Administrator, alternative channel linings may be acceptable.

TABLE 6.13

GRADIENT (%)	SIDE SLOPES	VELOCITY RANGE (fps)	PROTECTIVE LINING
0.75% and Less	Flatter than 3:1	Less than 2.0	Grass with Mulch
0.75% to 2.00%	3:1 to 2:1	2.0 to 4.0	Sod
Greater than 2.00%	Steeper than 2:1	Greater than 4.0	Flexible/Rigid Lining

Note: Channel velocities greater than 6 feet per second shall require energy dissipation.

- c. For open channels where positive flow conditions are required, a minimum physical slope of 0.1 foot per 100 feet (0.1 percent) or the slope to provide for conveyance of the design flow, whichever is greater, shall be used.
- d. The design of all open channels and roadside swales shall consider ease of maintenance and accessibility. Side slopes for roadside swales shall be in general conformance with the Roadway Typical Sections. Side slopes for other facilities requiring regular maintenance shall not be greater than three (3) feet horizontal to one (1) foot vertical (3:1).

2. Cross-Drains

- a. Cross-drains shall be sized based on design and performance criteria contained in Section 6.04.06.F.4., entitled "Collection and Conveyance Facilities."
- b. The minimum allowable pipe diameter for cross drains shall be fifteen (15) inches or the equivalent section for arch or elliptical pipe.
- c. The minimum length of pipe to be used, including the end treatment, shall be the length necessary to provide for the required Roadway shoulder width and adequate clear zone requirements.
- d. Unless otherwise approved, minimum pipe cover shall be twelve (12) inches measured from the outside top of pipe to the top of the Roadway base at any point in the Roadway cross-section.
- f. Culverts under intersecting side roads shall be considered as cross drains and shall be designed using cross drain criteria.
- g. Cross-drains shall be installed with County approved end treatments. End treatments shall include mitered ends and "U" type mitered end walls. Headwalls may be allowed where placement meets clear zone requirements. Mitered ends shall be required on all Roadways with speed limits greater than thirty (30) miles per hour.

3. Side-Drains (Driveway Culverts)

- a. Side-drains shall be sized based on design and performance criteria contained in Section 6.04.06.F.4, entitled "Collection and Conveyance Facilities."
- b. Unless otherwise approved by the County Administrator, the minimum allowable pipe diameter for side drains shall be fifteen (15) inches or the equivalent section for arch or elliptical pipe.
- c. All Construction drawings submitted for review shall include a schedule showing the size, type, and invert elevation of the side-drain needed to provide access to each subdivided Lot.
- d. Side-drains shall be installed with County approved end treatments. End treatments shall include mitered ends and "U" type mitered end walls. Headwalls may be allowed where placement meets clear zone requirements. Mitered ends shall be required on all Roadways with speed limits greater than thirty (30) miles per hour.
- e. Pipe length including shoulder for side-drains shall be based on the following:

TABLE 6.14

DRIVEWAY TYPE	MAXIMUM PIPE LENGTH *	MINIMUM PIPE LENGTH *
Residential Driveways	Driveway Width PLUS 4 feet each side	Driveway width PLUS 2 feet each side
Non-Residential Driveways	Driveway Width PLUS 8 feet each side	Driveway width PLUS 4 feet each side

^{*} Pipe length does not include the length of end treatment

4. Curb, Gutter and Inlets

- a. The FDOT Standards shall be used as a guideline for selection of drainage Structure types and hydraulic capacities.
- b. Selection of curb, gutter, and inlet type, location, and spacing shall consider Roadway geometry; width of spread (flow); inlet geometry and intake capacity; maximum pipe length without maintenance access; potential for Flooding of off-site property; and pedestrian and bicycle safety. Maximum spacing for curb inlets shall be based on the width of spread. Width of spread shall not exceed one-half of the travel lane adjacent to the gutter for a rainfall intensity of four (4) inches per hour. In general, maximum spacing for inlets shall be five hundred (500) feet. Longer spacing may be allowed upon demonstration that the width of spread meets requirements set forth above.
- c. Inlets shall be placed at all low points in the gutter grade, and as appropriate at intersections, median breaks, and on side Streets where drainage could adversely affect the safety of vehicular or pedestrian movements within the Roadway intersection.
- d. Curb inlets shall not be located within drop curb locations.
- e. The minimum allowable gutter grade shall be 0.3 percent.

5. Pipe Material and Specifications

- a. The Florida Department of Transportation Standard Specifications for Road and Bridge Construction shall be used as a guideline for specifications on pipe material, placement, bedding, and backfill requirements.
- b. Pipe material shall be selected based on durability, structural capacity, and hydraulic capacity. The design service life of the facility shall be based on the following:

TABLE 6.15

FACILITY TYPE	SERVICE LIFE
Stormwater Systems Cross-Drains	100 years 50 or 100 years
Side-Drains	25 years

Note: Where more than one service life is given, the lower value shall be used for locations on Local Roadways and the higher value shall be used for locations on Minor/Major Collectors and higher road classifications and in urban areas.

- c. In estimating the projected durability of a material, consideration shall be given to actual performance of the material in nearby similar environmental conditions, its theoretical corrosion rate, the potential for abrasion, and other appropriate site factors. To avoid unnecessary site specific testing, generalized soil maps such as the NRCS Soil Survey for St Johns County may be used to delete unsuitable materials from consideration. In the event testing is necessary, tests shall be based on FDOT approved test procedures. The potential for future land Use changes which may change soil and water corrosion indicators shall also be considered to the extent practical. Backfill material shall not be more corrosive than that which is required to provide the design service life.
- d. All gravity flow pipe installations shall have a soil tight joint performance unless site specific factors warrant watertight joint performance.
- e. The pipe materials and cross-sections identified in Table 6.16 are classified as standard and alternative pipe materials and may be accepted for use by the County Administrator.
- f. Alternative Pipe Material may be accepted for use by the County Administrator on a case by case basis, based on the Engineer-of-Record for the particular project submitting a written request, signed and sealed, stating that the use of these alternative pipe materials are appropriate and that these materials meet all of the requirements and specifications of the County.
- g. All drainage pipes installed within roadway right-of-ways/easements (public or private) shall be televised by a company or individual certified to perform such work. This televising of the drainage line shall be done in color and shall be of such quality as to visually identify the proper construction of all joints and pipe alignment. A video tape shall be provided to the County upon completion. The televising of the drainage lines shall be performed after the placement of the base material and prior to the final wearing surface of the roadway. The approval, by the County, of the televising shall be required prior to the placement of the final wearing surface of the roadway. Televised record shall be reviewed and certified by the Engineer of Record (EOR).
- h. When flexible pipe is laid, the interior shall be reasonably uniform and as nearly circular as practical. Structure shape shall be checked regularly during back-filling to verify acceptability of the construction method used. Pipe shall not deflect more than 5 percent in any direction. Upon completion of installation, the Contractor shall test flexible pipe for deflection. Pipe deflection shall not exceed 5 percent. Testing equipment

and test supervision will be provided by the contractor. Testing will be done using a mandrel having a diameter equal to 95 percent of the inside diameter of the pipe. The test shall be performed without mechanical pulling devises or re-rounders. Any devise for measuring deflection shall be approved by the County Engineer. Deflection test shall be required for pipe diameters 12 inches or greater. The mandrel testing of the drainage lines shall be performed after the placement of the base material and prior to the final wearing surface of the roadway.

TABLE 6.16

STANDARD PIPE MATERIAL

Reinforced (Steel) Concrete Pipe Reinforced Concrete (Steel) Elliptical Pipe Concrete Box Culvert

ALTERNATIVE PIPE MATERIAL

Aluminum Pipe *
Corrugated Steel Pipe
Fiber Reinforced Concrete Pipe (FRCP) (Maximum Diameter of 48 inches)
Corrugated Polyethylene Pipe (Maximum Diameter of 48 inches)
High Density Polyethylene Pipe (HDPE) (Maximum Diameter of 36 inches)
Polyvinyl Chloride (PVC) Pipe (Maximum diameter of 36 inches)

6. Other Drainage Structures

- a. The Florida Department of Transportation Roadway and Traffic Design Standards shall be used as a guideline for selection and Construction of all drainage Structures, including but not limited to: manholes, inlets, and pipe end treatment.
- b. Bulkhead and/or retaining walls will be designed by a Registered Engineer.

M. Existing Facilities

- 1. Existing non-paved and stabilized base (e.g. soil cement, fast track, open graded emulsion mix, etc.) or other non-paved County-maintained Roadways used for Project access shall be required to be improved to meet the requirements of this Code from the Development's point of access on the non-paved Roadway to the terminus with the closest paved Roadway for approval of:
 - a. New Subdivision resulting in more than two (2) residential Lots, or
 - b. New multi-family residential Development, Manufactured/Mobile Home Park, or non-residential Development, or

^{*} Prior to any aluminum pipe installation, test reports on the soil pH shall be submitted with a certification that the material furnished will provide sufficient resistance to corrosion to maintain the design service life.

c. More than two (2) residential Dwelling Units per Lot of Record.

Further, it shall be demonstrated that access to the Project described in subparagraphs a. through c. above can be obtained from an existing paved Collector or Arterial Roadway to the Development's point of access via paved Roadway(s).

- 2. Existing non-paved and stabilized base (e.g. soil cement, fast track, open graded emulsion mix, etc.) or other non-paved Private Roadways used for Project access shall be required to be improved to meet the requirements of this Code from the Development's point of access on the non-paved Roadway to the terminus with the closest paved Roadway for approval of:
- a. New Subdivision resulting in more than two (2) residential Lots, or
- b. New multi-family residential Development, Manufactured/Mobile Home Park, or non-residential Development, or
- c. More than two (2) residential Dwelling Units per Lot of Record, or
- d. More than a total of ten (10) residential Dwelling Units on existing Lots of Record accessing the Private Roadway. More than ten (10) residential Dwelling Units on existing Lots of Record may be allowed with approval of a maintenance agreement in a form acceptable to the County for the continual maintenance of the Private Roadway.

Further, it shall be demonstrated that access to the Project described in subparagraphs a. through d. above can be obtained from an existing paved Collector or Arterial Roadway to the Development's point of access via paved Roadway(s).

- 3. Any new Subdivision, multi-family residential Development, or non-residential Development described in Section 6.04.07.M.1. above, that will cause a change to the functional classification of an existing Roadway used for Project access (e.g. Local Road to Minor Collector) shall be required to improve the Roadway to the requirements of this Code for the new functional classification.
- 5. Any new Subdivision, multi-family residential Development, or non-residential Development described in Section 6.04.07.M.1. above, that will not cause a change to the functional classification of an existing Roadway used for Project access must demonstrate that all existing and proposed Right-of-Way infrastructure necessary to serve the existing and proposed Development are, or will be, located within the road Right-of-Way. Notwithstanding the above, in no case shall the new Subdivision or non-residential Development be approved by the County if the existing paved portion of the Roadway used to access the Subdivision or non-residential Development is less than eighteen (18) feet in width for a Local Road or twenty-two (22) feet in width for a Collector Road.

N. Bridges and Box Culverts

1. Introduction and Purpose– This section is intended to provide guidance to County officials, Developers, engineers, etc. in the design of bridges on St. Johns County roadways.

- 2. Reference standards for bridges and box culverts FDOT Structures Design Guidelines, FDOT Plans Prep Manual, FDOT Standards and Specifications for Road and Bridge Construction, AASHTO LFRD Bridge Design Specifications.
- 3. Design Bridges and Box Culverts shall be designed by a Professional Engineer registered in the State of Florida and who specializes or has experience in structural engineering.

The Developer shall submit a bridge hydraulic report (BHR) to the County. As part of this report the engineer shall show that the new structure will be above the 100 year floodplain including the approaches. The report will recommend at least one or more types of structures, bridge or box culvert and show a conceptual design including typical section. The County shall have the final approval of the type of structure proposed. This report shall be submitted prior to any design of the structure.

In the case a bridge with piling is the approved structure, the developer will submit a geotechnical report, prepared by a Florida licensed Geotechnical Engineer. The report shall provide the recommended pile type, size and length. This report should be submitted with the first design submittal.

Bridges shall be designed for a minimum 75 year life and HL-93 live load.

- a. Bridges, or Box Culverts, that are constructed, retrofitted or rehabilitated on a County maintained roadway shall be given a Structure number assigned by FDOT. The Engineer of Record is responsible to obtain the number from FDOT. The bridge name, structure number and date shall be affixed to the structure as shown in FDOT Design Standards Index 420.
- b. Existing bridges or box culverts to be replaced shall have a new number assigned by FDOT.
- c. Markers Elevation Markers shall be placed on the top of the Traffic Railings at the end bents. On bridges longer than 100 ft one marker shall be placed on each opposing end of the bridge for a maximum of two markers. On bridges 100 ft or less one marker shall be placed at one end of the bridge only.
- 4. Bridges and Box Culverts Vehicular
 - a. Allowable materials Concrete, Steel and Pre-stressed Concrete are the only allowable materials for vehicular bridges. Timber bridges shall not be permitted. Box culverts can be concrete and steel, or pre-cast concrete. Weathering steel shall not be allowed.
 - b. Substructure Piling, Footers, Piers and Bents
 - 1) Piling shall be prestressed concrete.
 - 2) Sheet Piling shall be concrete, steel or vinyl.
 - 3) Piers, Bents and Footers shall be concrete.

- 4) End Bents shall be protected by either rip-rap (sized appropriately), Concrete slope pavement, mechanically stabilized earth wall, or sheet piling as allowed above. The end bent treatment used will depend on the bridge location and aesthetics. If Steel sheet piling is selected a rust inhibiting coating shall be applied to all areas which are exposed to water or air. The coating can be coal tar epoxy or other approved material.
- c. Superstructure Beams, Decks
 - Typical section of roadways on decks. Use Chapter 2 of the FDOT Plans Preparation Manual for guidelines on design geometry for bridge decks.
 - 2) Steel beams shall either be galvanized (preferred) or painted to resist corrosion. In no case shall weathering steel be permitted.
- d. Approaches- Bridges shall have an appropriate length concrete approach slab. The approach slabs shall be overlaid with asphalt and tapered to the deck elevation.
- e. Pedestrian accommodation on vehicular bridges Sidewalks must be provided along new structures that have sidewalks on one or both sides of the existing roadway. Sidewalks shall be constructed in accordance with Section 6.04.07 H and be ADA compliant.

The following table shows the bridge type and its corresponding sidewalk:

Bridge Location	<u>Sidewalk</u>
Local Roads	6 ft wide on one side of structure
Minor & Major Collectors	6 ft minimum on both sides of
	structure.

The County administrator or designee may waive the sidewalk requirement on bridges/box culverts with limited right of way or where no sidewalks currently exist. The waiver may require that the Developer pay in the County's Sidewalk Fund.

f. County acceptance of newly constructed bridges

As-Builts and Pile driving logs – The developer shall submit at least 2 sets of pile driving logs to the County with the As-Builts. The pile driving logs, must indicate the pile location, size, date and time driven, minimum tip elevation, final tip elevation, cutoff elevation, blows per foot, set checks (if any), pile re-drive, pile cushion changes, and hammer type.

5. Bridges – Pedestrian, Bicycle and Golf Cart

Reference the Florida Department of Transportation Plan Preparation Manual Section 8.7 Bridges, Overpasses and Underpasses and FDOT Structures Design Guidelines- Chapter 10

a. General – All pedestrian bridges shall be:

- 1) Fully designed and detailed in the plans.
- 2) Proprietary designs may be considered as long as it meets St. Johns County, FDOT and AASHTO guidelines.
- 3) Designed for a 75 year life, minimum.
- b. Overpasses and Underpasses Overpasses are preferred to Underpasses.

Underpasses are undesirable and will not be allowed unless approved by the County Administrator or designee. Such approval may require the applicant to prove that an underpass is better suited to the location geometry. Lighting of the underpass shall be required as well. Other features such as but not limited to public safety, emergency accessibility and drainage must be addressed.

c. Allowable materials - Engineered Steel and concrete pedestrian bridge superstructures including trusses and associated substructures, ramps, etc. Weathering steel shall not be allowed. Steel structures must be galvanized or coated with some other rust retardant material to inhibit oxidation.

Timber structures may be considered as docks, fishing piers or pedestrian/bicycle pathways parallel to the roadway. Timber structures shall not be allowed if it crosses over a County maintained roadway.

Fencing, if used, shall be galvanized.

Aluminum or Steel is allowed for railings.

d. Minimum widths

Structure Type Clear Width Pedestrian Bridge 8 feet

Shared Use path on Bridge 12 feet (includes cyclists)

Golf Cart Bridge 12 feet

If the approach sidewalk or path is wider than these minimums, the clear width of the structure should match the approach width. The desirable clear width should include additional 2-foot wide clear area on each side.

- e. Railings/Enclosures
 - 1) Provide pedestrian railings in accordance with AASHTO LRFD. The clear opening between elements shall be such that a 4 inch sphere shall not pass through. Fencing shall be in accordance with FDOT Design Standards Indexes 810, 811 and 812. Railings shall be in accordance with FDOT Design Standards Indexes 821, 822, 851 and 861.
 - 2) Railing Size

Railing Type Railing Height

Pedestrian 42 inches

Bicycle 54 inches (Must be used on Shared

Pathways)

The height of railings for bicyclists are generally the same as the minimum pedestrian railing height of 42 inches, except a minimum 54 inch railing or fence should be considered on bridges and retaining walls for special circumstances as identified in the commentary of the *AASHTO LRFD Bridge Design Specifications Section 13.9*.

 Other acceptable fence/railing types: The County may require an open top fence /railing combination or, Full enclosure fence/ railing combination.

The County may require Full enclosure of Pedestrian Bridges over Major Collectors and/or Arterials or other County maintained roadways or where the County deems it to be implemented for safety purposes.

f. Ramps

1) Comply with ADA requirements. See the Florida Department of Transportation. *Production Support Office - Accessibility Issues* (ADA) Website:

http://www.dot.state.fl.us/projectmanagementoffice/

- 2) Ramps (routes with grades>5%) should be provided at all pedestrian separation structures. When possible, stairways should be provided in addition to ramps.
- 3) Design ramps with the least possible grade, but in no case more than 8.33% and with 5 feet long, intermediate level platforms at a maximum 30-inch rise. Provide level platforms 5 feet long at the top of the ramp and 6 feet long at the bottom.
- 4) Provide full-length pedestrian ADA grab handrails on both sides of pedestrian ramps.

g. Lighting

The County may require lighting to be provided.

Sec. 6.04.08 Bonding

A. General

 Bonds shall be required for all Roadway, drainage, and water and wastewater Construction within a platted Subdivision or any Subdivision of more than two (2) Lots, for all Roadway and drainage Construction outside a Development's Project boundaries, and for all Construction within county or municipal service district Rights-of-Way. Such bonds shall be referred to hereinafter as Required Improvement Bonds.

- 2. The bonds referred to in this Section may be in the form of a certified or cashier's check, irrevocable letter of credit, escrow agreement, surety bond or three (3) party agreement under which an institutional lender providing Construction financing to the Owner binds itself to the County, the forms of which shall be subject to approval by St. Johns County. The Required Improvements Bond shall be issued with an automatic renewal clause. Each year sixty (60) days prior to the annual renewal date the owner or assign shall submit to the County an updated cost estimate to insure the adequacy of the existing Required Improvements Bond. The cost estimate shall be submitted in the same form as the original. To offset administrative cost for processing a fee as established by Resolution will be required in addition to the cost estimate.
- 3. Surety bonds referred to in this Section shall be payable to the order of St. Johns County Board of County Commissioners on a form acceptable to the County. Each bond shall include language covering all Improvements constructed on private or public Easements and Right-of-Way within the platted area, and any off-site Improvements if required.

B. Required Improvements Bond

- 1. No clearing or Construction of Roadway, drainage, underground utilities or any Improvements within County Rights-of-Way is authorized until such time as the Required Improvements Bond is submitted to the County Administrator for approval and acceptance by the Clerk of the Circuit Court. The Clerk, upon acceptance of the Required Improvements Bond shall forthwith provide a copy to the County Administrator.
- 2. A Required Improvements Bond shall be approved and on file or the Subdivision Improvements must be completed in accordance with the requirements for release of the Required Improvements Bond as stipulated in Section 6.04.01.C., prior to the time the Subdivision plat is accepted by the Clerk of the Court for recording. The bond amount shall be adequate to secure Construction of the approved Roadway (including the two-lift system outlined in Section 6.04.07.F.3), drainage, and water and wastewater Improvements.
- 3. A Required Improvements Bond must be provided to the County prior to Platting. The bond shall be payable to the County in a sum equal to one hundred percent (100%) of the cost of completing the Roadway (including the cost of the two-lift pavement system outlined in Section 6.04.07.F.3), drainage, and water and wastewater Improvements. Plus fifteen percent (15%) of the original value of all construction contracts for the project. At no time shall the bond be reduced to less than fifteen percent (15%) of the original value of all construction contracts for the project, as estimated by the Applicant's Engineer. Cost estimates for the Improvements shall be signed and sealed by the Applicant's Engineer and approved by the County Administrator. This bond requirement may be waived only by the Board of County Commissioners.
- 4. All requests for a bond reduction must be accompanied by a cost estimate signed and sealed by the Applicant's Engineer certifying that the amount of the amended bond is equal to one hundred percent (100%) of the cost to complete the Project, plus fifteen percent (15%) of the value of all construction contracts for the project. At no time shall the bond be reduced to less than fifteen percent (15%) of the value of all construction contracts for the project, as estimated by the Applicant's

Engineer.

5. At the discretion of the County Administrator, a Required Improvements Bond may not be required for minor work authorized by a Right-of-Way Permit or Construction Plans approved through the County Administrator.

C. Acceptance of Bonded Improvements

- 1. When the request is made for acceptance of the bonded Improvements, the person, firm or corporation seeking such acceptance shall first furnish a good and sufficient bond (known as the Required Improvements Bond) acceptable to the Clerk in an amount equal to fifteen percent (15%) of the total of all Construction contracts issued for Construction of Roadway, drainage, and water and wastewater Improvements. This bond may either be an amendment to the original Required Improvements Bond posted at time of Platting, or may be a new bond. If a new bond is posted, the original bond will be returned at the time of as-built drawing approval.
- 2. The Required Improvements Bond is to be furnished to secure the repair of the roads and Improvements as a guarantee against faulty workmanship, Construction and materials, third party damage to curb and gutter, asphalt pavement, drainage piping, Structures, sidewalks, and application of the final Wearing Surface Course, and other Improvements during the bonding period. The Required Improvements Bond shall also secure the application of the Wearing Surface Course as outlined in Section 6.04.04.F of this Article. Said bond shall be submitted by the Applicant for both public and private subdivisions to the County Administrator for approval and forwarding to the Clerk and shall remain in force until released as stipulated below, but in no case for less than twenty-six (26) months for County-owned or dedicated roadways. If the County elects to repair and take remedial action to correct deficiencies during the warranty period, the cost will be drawn from the bond.

D. Release of Required Improvements Bond

The Owner shall provide evidence annually that the Required Improvements Bond continues in force until such time that the County authorizes its release and return. Upon obtaining ninety (90) percent of the Certificates of Occupancy (CO) in the applicable phase of the subdivision, the County, upon request by the Owner or Assign, will re-inspect dedicated County roadways for corrective items and roadway improvements. For dedicated private roadways, only roadway improvements shall be re-inspected. Dedicated private roadways seeking As-Built Survey approval, may request the installation of the second lift prior to obtaining ninety (90) percent of the Certificates of Occupancy. The Owner will then correct all deficiencies to the satisfaction of the County prior to approval being granted for the application of the final Wearing Surface Course. Upon satisfactory inspection of the final Wearing Surface Course, the Required Improvements Bond shall be returned.

Sec. 6.04.09 Land Excavation and Borrow Areas and Silvicultural Operations

A. General

In addition to the requirements of the Special Use provisions in Section 2.03.10, the requirements of this Section shall apply to all Land Excavation and Borrow Areas and Silviculture Use activities. The following activities are exempt from the requirements of this Section:

- 1. Land Excavation and Borrow Area activities pursuant to Board of County Commissioners permission which may be requested by a governmental agency, an Applicant under the permission of another governmental agency, or under the permission of a court having jurisdiction in St. Johns County.
- 2. Land Excavation activities within Utility Rights-of-Way, public Rights-of-Way or easements necessary to supply electric, gas, water, sanitary or storm sewer, telephone, or cable television service, provided these activities do not adversely impact an Environmentally Sensitive Area. Land Excavation activities exempted under this Section shall be regulated under Article IV of this Code. This exemption does not include excavation for the Construction of detention basins and/or retention basins which otherwise meet the definition of Land Excavation.
- 3. Land Excavation for swimming pool construction.
- 4. Land Excavation activities disturbing less than three thousand (3,000) square feet of land area.
- 5. Bona Fide Agricultural Operations that involve standard agricultural practices.
- 6. Maintenance of dredging of canals, lakes and stormwater ponds, provided Permit requirements from other local, state and federal agencies are met.
- 7. Lake Creations and retention/detention ponds within approved Construction projects permitted through other provisions of this Code where such Lake Creations or retention/detention ponds are incidental to the primary purpose of the Construction (i.e. retention ponds constructed as part of the stormwater system for a residential development Project).
- B. Plan Requirements For Land Excavation and Borrow Areas
 - 1. A Site Plan for Land Excavation and Borrow Areas shall be prepared and submitted to the County Administrator by a Florida Registered Engineer or other professional allowed under State law which shall describe at a minimum:
 - a. Property boundary
 - b. Existing and proposed contours
 - c. Typical cross-section
 - d. Existing and proposed surface water drainage patterns
 - e. Erosion and sediment control measures

- f. Plans for any dewatering activities which discharge water off-site
- g. Access to the project
- h. Hours of operation
- I. Fence detail, if side slopes are less than four (4) feet horizontal to one (1) foot vertical (4:1) down to two (2) feet below normal water level.
- j. The Engineer shall submit as-builds as required in Section 6.04.01 C. and certify that the Project will not adversely affect the adjacent property.
- 2. The Applicant is required to obtain Permits from the St. Johns River Water Management District (SJRWMD) for Projects which exceed thresholds for Management and Storage of Surface Waters and Consumptive Use Permits. The Applicant is responsible for determining requirements of the SJRWMD.

C. Requirements for Silviculture Activities

- 1. The following standards shall be met:
 - a. Silviculture activities must meet all the guidelines of "Silviculture Best Management Practices, 1993", as updated, Florida Department of Agriculture and Consumer Services, Division of Forestry.
 - b. Shall comply with the requirements of Chapter 373 and 403, F.S., and Section 404 of the "Clean Water Act."
 - c. Shall comply with the SJRWMD Silviculture Rule, Chapter 40C-400.500, F.A.C.
 - d. Ensure that all proposed silviculture activity will not adversely impact adjacent property owners by meeting all applicable requirement of Section 6.04.06.A.

Sec. 6.04.10 Special Exception

- A. Variations to the standards and criteria of Part 6.04.00 may be allowed by the County Administrator or his designee upon showing of good cause, and where the Owner/Applicant proposes an alternative which conforms to the general intent and spirit of these regulations, and where the objectives of this Article have been substantially met. Notwithstanding the above, variations to the following provisions of this Code shall not be allowed:
 - 1. Construction Plan and Drainage Calculation Submittals
 - 2. Handicap Accessible Parking Requirements
 - Professional Certification
 - 4. Bonding

Sec. 6.04.11 Connections With Central Water & Wastewater System Required With Certain Exceptions

- A. The Owner of each new Improvement within the County that has, is required to have (under this Land Development Code, the County Comprehensive Plan or any other County Regulation), or uses potable water shall connect, or cause such Improvement to be connected to an approved central Water System. Such Improvements shall use the central Water System within ninety (90) days following notification to do so by the County Administrator or by any other person or County office that may from time to time be designated by the County Administrator to provide such notice. No connection shall be required under this paragraph A, unless required by the then current Comprehensive Plan, other Land Development Regulations or by Rule 64E-6, F.A.C. for water service where the nearest central Water Line is more than two hundred (200) feet from the property line on which the Improvement is located, or where the total length of the service line providing the connection (water main to main Structure exceeds five hundred (500) feet with the following exceptions:
 - 1. All new Subdivisions that are approved after the initial effective date of this Code and all new Planned Unit Developments (PUD), Planned Rural Developments (PRD), and other rezonings which are approved by the Board of County Commissioners after the initial effective date of this Code shall have each Subdivision Lot or Development Parcel connected to, or prepared for connection to any Water Line located within two thousand, six hundred forty (2,640) feet (1/2 mile) that is either:
 - a. Existing or scheduled to be completed on the date of Subdivision, PUD/PRD, or rezoning approval; or
 - b. Scheduled to be constructed and operated by the County or other franchised Utility Provider within one (1) year after submission of plans for Construction Permit review.
 - 2. All existing Subdivisions and Development Projects approved prior to the initial effective date of this Code that have not completed the Development's horizontal infrastructure (e.g. Roadways, Stormwater Management Systems, Water or Wastewater Systems) shall have each Subdivision Lot or Development Parcel connected to or prepared for connection to any Water Line located within two thousand, six hundred forty (2,640) feet (1/2 mile) that is either:
 - a. Existing, or
 - b. Scheduled to be constructed and operated by the County or other franchised Utility Provider within one (1) year after submission of plans for Construction Permit review.
- B. The Applicant of each Improvement within the County that is currently using or required to use, Wastewater Systems, or from which Wastewater is discharged, shall connect, or cause such Improvement to be connected to central Wastewater Systems when such Improvement meets any of the following criteria:
 - 1. The property line on which the Improvement is located is within one hundred (100) feet of a gravity line and the Improvement can be served by gravity flow; or

- 2. The property line on which the Improvement is located is within two hundred (200) feet of a central Wastewater Force Main System; or
- 3. Is located within a new Subdivision approved after the initial effective date of this Code, and all new Planned Unit Developments (PUD), Planned Rural Developments (PRD), and other rezonings which are approved by the Board of County Commissioners after the initial effective date of this Code shall have each Subdivision Lot or Development Parcel connected to, or prepared for connection to any Wastewater Line located within two thousand, six hundred forty (2,640) feet (1/2 mile) that is either:
 - a. Existing or scheduled to be completed on the date of Subdivision, PUD/PRD, or rezoning approval; or
 - b. Scheduled to be constructed and operated by the County or other franchised Utility Provider within one (1) year after submission of plans for Construction Permit review.
- 4. All existing Subdivisions and Development Projects approved prior to the initial effective date of this Code that have not completed the Development's horizontal infrastructure (e.g. Roadways, Stormwater Management Systems, Water or Wastewater Systems) shall have each Subdivision Lot or Development Parcel connected to or prepared for connection to any Wastewater Line located within two thousand, six hundred (2,640) feet (1/2 mile) that is either:
 - a. Existing, or
 - b. Scheduled to be constructed and operated by the County or other franchised Utility Provider within one (1) year after submission of plans for Construction Permit review.

Such Improvements shall use such central Wastewater System within ninety (90) days following notification to do so by the County Administrator or by any other person or County office that may from time to time be designated by the County Administrator to provide such notice.

- 5. Notwithstanding Section 6.04.11.A. and 6.04.11.B. above, unless required by the then current Comprehensive Plan, other Land Development Regulations, or by Rule 64E-6, F.A.C., water or Wastewater connection shall be based on the availability of such service. Availability, as applied to a publicly owned or investor-owned water and/or Wastewater System, means that the system is capable of being connected to the plumbing of an establishment or residence; the system is not under a Department of Environmental Protection moratorium; the system has adequate permitted capacity to provide the service, and the utility has all the necessary legal rights to provide such service in that area.
- C. Notwithstanding Section 6.04.11.A and 6.04.11.B. above, unless required by the then current Comprehensive Plan, other Land Development Regulations, or by Rule 64E-6, F.A.C., there is no mandatory requirement that an existing Improvement connect to a central Water and/or Wastewater System when, as part of its normal operations, such existing Improvement has been and is regularly operating, maintaining and using its own Water and/or Wastewater System immediately prior to the:

- 1. Installation or operation of Water and/or Wastewater Lines capable of serving such Improvement, and
- 2. Making central Water and/or Wastewater System service available to such existing Improvement.

Should an existing well casing require repair or replacement where a Permit is required for the work to be done and there is a Water Line within two hundred (200) feet from the property line, there shall be a mandatory connection required to the central Water System. Should a septic tank or other onsite Wastewater System require repair or replacement where a Permit is required for the work to be done and there is a gravity Wastewater Line within one hundred (100) feet from the property line or a central Wastewater Force Main System within two hundred (200) feet from the property line, there shall be a mandatory connection required to the central Wastewater System. In addition, existing Improvements must be demonstrated to be performing in accordance with Florida Department of Environmental Protection (FDEP) and St. Johns River Water Management District (SJRWMD) regulations, with no violations.

D. This Code shall not be construed to require or entitle any person to cross the private property of another to make any Water or Wastewater Connection.

Sec. 6.04.12 Regulation Of Water and Wastewater Connections for Improvements; Water Meters Required

- A. Each Improvement whether occupying one (1) or more Lots and whether occupying any Lot or Parcel jointly with any other Improvement shall be considered a separate unit for the payment of the monthly user rates fixed by the Utility Provider, and separate connections and meters will be required for each such unit. Nothing herein shall be deemed to prevent the Utility Provider from establishing and charging wastewater rates based upon water consumption monitored by water meters.
- B. Every connection shall be made in accordance with the Water and Wastewater Design Standards and Specifications (W&WW Manual) adopted by the Board of County Commissioners.
- C. All service from a central Water main on County Right-of-Way or Drainage/Utilities Easement to the property line must be installed by the Utility Provider or by a Utility contractor licensed to operate within the State of Florida, in accordance with the W&WW Manual, at the expense of the Applicant.
- D. All persons and entities using a central Water and/or Wastewater System shall use water meters to monitor all water entering any Improvement using potable water and/or from which wastewater is discharged.
- E. Unauthorized usage prohibited

It shall be unlawful for any Person to disturb, use, alter, or make connection to a central Water or Wastewater System without prior written permission from the County Administrator or his designee for County owned systems, or the authorized agent for other central Utility Providers.

F. Application and fees

The Applicant shall make application to the Utility Provider prior to making a connection to a central Water or Wastewater System. The application shall be supplemented by such plans, specifications, and other information considered pertinent by the Utility Provider. The appropriate fees shall be paid to the Utility Provider before such connection is approved.

G. Applicant's responsibilities

All costs and expense incident to the installations and connection of a Building Wastewater shall be borne by the Applicant. The Applicant's onsite Building Wastewater installation shall be subject to inspection and approval by the St. Johns County Building Department. The Development Services Department and/or an inspector from the Utility Provider shall inspect the off-site portion of the connection.

H. Separate Wastewater required

A separate and independent Building Wastewater shall be provided for every Building, except where one Building stands at the rear of another on an Interior Lot and no private Wastewater is available or can be constructed to the rear Building through an adjoining alley, court, Yard, Easement, or driveway. In that case, the Building Wastewater from the front Building may be extended to the rear Building and the whole considered as one Building Wastewater. However, independent Building Wastewater shall be required when the rear Building discharge is defined as a significant or categorical user by F.A.C. 62-625 and/or 40CFR 403.

I. Design and construction

The size, slope, alignment, and Construction materials of a Building Wastewater, and the methods to be used in excavating, placing the pipe, jointing, testing, and backfilling the trench, shall conform to the manual of Design Standards and Specifications, Water and Wastewater (W&WW Manual) of St. Johns County.

J. Runoff connections prohibited.

It shall be unlawful for any Person to connect roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a Building Wastewater or Building drain which in turn is connected directly or indirectly to a central Wastewater System.

K. Interceptors required

Grease, oil, and sand interceptors shall be provided for the proper handling of liquid wastes containing excessive amounts of grease as defined in Ordinance 97-62, Section 42, flammable substances as defined in Ordinance 97-62, Section 42, sand or other harmful ingredients, except that such interceptors shall not be required for Single Family residences, Multi-Family residences, travel trailers, or Manufactured/Mobile Homes. All interceptors shall be of a type and capacity specified by the W&WW Manual and shall be regularly cleaned and maintained for adequate performance.

L. Connection requirements

The connection of the Building Wastewater to a central Wastewater System shall conform to the requirements of the Building and plumbing code and other applicable rules and regulations adopted by St. Johns County.

M. Public safety and property

All excavations for Building Wastewater installation shall be adequately guarded with barricades and lights in order to protect the public from hazard. Streets, sidewalks, parkways, and other public property disturbed in the course of the work shall be restored in a manner satisfactory to the County Administrator or his designee.

Sec. 6.04.13 Unlawful Connections and Interfering with Hydrants or Water or Wastewater Service are Prohibited

- A. It shall be unlawful for any Person to connect to any central Water or Wastewater Line except as authorized by this Code. Once so connected, such Person shall not connect, or allow to be connected, to a Water Line any other Water Lines or sources of water consumption without the prior written consent of the Utility Provider. It shall be unlawful for any Person to discharge sewage or Wastewater into a central Wastewater System from a private Wastewater Line that serves additional Improvements unless such Person has the prior written consent of the Utility Provider and unless an approved water meter has been installed that monitors the water entering each Improvement that generates such sewage or Wastewater.
- B. It is unlawful for any Person to interfere, or in any way tamper with any central Utility owned fire hydrants, wells, reservoirs, basins, or with the water in the same, or with the water mains, pipes, plugs, meters or connections, or to make any connection therewith by tapping any of the pipes mains or firelines without the knowledge or written consent of the Utility Provider or to make any connection in violation of the provisions of this Code, or to knowingly permit such connection or tapping to be made on his or her premises, in his or her ownership, possession or control, or to knowingly use water from such unauthorized connection, unless he or she has received written consent to do so by the Utility Provider and after approval of plans and specifications in accordance with the W&WW Manual.

Sec. 6.04.14 Maintenance of Plumbing Systems

- A. The Owner of every Improvement, Lot or Parcel connected to a central Water and/or Wastewater System shall be responsible for maintaining and keeping clear and in good repair the Water and Wastewater pipes connecting the plumbing of Improvements thereon with the lines of the central Utility System, and for maintaining and keeping the meter site accessible to Utility personnel and free of debris, shrubbery, and overgrowth. Failure by the Owner to keep the meter site(s), pipe(s) and line(s) leading from the Owner's plumbing system to the central line(s) clean and maintained in a proper manner will give the Utility Provider the right to close or disconnect the central Water connection to the Owner's meter site, pipe(s) and/or line(s), which shall not be reconnected or reopened until the Owner's meter site, pipe(s) and/or line(s) are cleaned and maintained properly.
- B. In addition, the Owner is responsible for unstopping central Wastewater service Lines from the Improvement to the public Right-of-Way line. Upon request from a licensed plumber, the Utility Provider will make necessary repairs to a Wastewater service Line on public Right-of-Way or recorded Utility Easement.
- C. In those instances where the Owner has a private water supply, but uses a central Wastewater System, the Utility Provider shall have the right to close or disconnect the Owner's sewage pipe connection to the County Wastewater System, and the Owner shall have no right to reconnect until the Wastewater pipe or Line leading from the Owner's plumbing system to the central line has been maintained and cleaned and is in proper

condition. Any violation of this Section by reconnecting the Owner's Water Line(s) or Wastewater Line(s), before such Water and/or Wastewater pipes and Lines are cleaned and maintained properly, shall be considered a violation of Part 6.04.00, punishable as provided in Part 10.06.00.

Sec. 6.04.15 Right of Entry for Purpose of Making Inspection

The County Administrator and authorized representatives of St. Johns County or authorized Agent of other central Utility Providers, shall have the right to enter upon any property for the purposes of inspection, observation, measurement, sampling, testing review and/or photocopying of records, or investigation as are necessary or appropriate in the enforcement of this Code or any Wastewater discharge Permit or order issued hereunder. Entry shall be made during daylight or operating hours unless abnormal circumstances require otherwise. Notwithstanding the above, in the absence of abnormal circumstances, a one (1) hour notice shall be provided prior to entry.

- A. Where a User has security measures in force which require proper identification and clearance before entry onto its premises, the User shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the County Administrator will be permitted to enter without delay for the purposes of performing specific responsibilities.
- B. The County Administrator shall have the right to set up on the User's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the User's operations.
- C. The County Administrator may require the User to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the User at its own expense. All devices used to measure Wastewater flow and quality shall be calibrated every two (2) years to ensure their accuracy.
- D. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the County Administrator and shall not be replaced. The costs of clearing such access shall be born by the User.
- E. Unreasonable delays in allowing the County Administrator access to the User's premises shall be deemed a violation of this Code.
- F. If the County Administrator has been refused access to a Building, Structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this Code, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the County designed to verify compliance with this Code or any Permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the County Administrator may seek issuance of a search warrant from a court of competent jurisdiction.

Sec. 6.04.16 Regulation of Septic Tanks

Installation of septic tanks within the County is regulated by the State of Florida Department of Health and shall be in accordance with Rule 64E-6, F.A.C. St. Johns County Ordinance 97-62, Section 3, paragraphs B and C, describe the County connection requirements.

Sec. 6.04.17 Reserved

Sec. 6.04.18 Cross Connections Between Water Systems Prohibited; Installation of and Standards for Backflow Prevention Devices

- A. Cross connections between the central Water System and other water sources, systems, or equipment (including private wells) are hereby prohibited except as provided in paragraph B below. As used herein, prohibited cross connection shall mean:
 - 1. A physical connection through which a supply of potable water could be contaminated or polluted; or
 - 2. A connection between a supervised potable water supply and an unsupervised water supply of unknown potability.
- B. The central Utility Provider may, however, permit interconnection of a central Water System by other suppliers if:
 - Such other system is regularly examined as to its quality; and evidence is presented to the County Administrator or Utility Provider, on such schedule as may be reasonably required, that the water in its bacteriological and chemical quality conforms with all requirements of the ventral Water System, the FDEP and the U.S. Environmental Protection Agency;
 - 2. The interconnected systems meet all FDEP requirements; and
 - 3. Suitable protective devices, as hereinafter described, and installed in agreement with and under the supervision of the Utility Provider at the Account Holder's meter or at the property line of the Account Holder when a meter is not utilized or at a location designated by the Utility Provider. Suitable backflow protection devices consist of reduced pressure backflow preventers or devices approved by the Utility Provider, provided the device meets the specific design criteria of the Florida Administrative Code and has received the approval of the County Administrator.
- C. Backflow prevention devices must meet design and performance standards of the ASSE and/or AWWA and be approved by the Utility Provider and shall be installed on all multifamily, commercial and industrial water service lines, and any potential source of contamination that receives central potable water. Backflow preventers shall be installed between the meter and before any branch lines and shall be installed in the manner required by the W&WW Manual and Florida Administrative Code and shall also meet the requirements of the Standard Plumbing Code. There will be a valve at the Account Holder's side of the backflow prevention device. Installation and maintenance of the backflow preventer and valve are the responsibility of the property Owner. Backflow prevention devices are required to be tested and certified to meet minimum standards, in order to protect public health. The test shall be accomplished by a certified backflow technician approved by the Utility Provider. The device shall be tested at least annually and a written report submitted to the County Administrator. The Utility Department may

test or have tested the device at the Owner's cost, of labor, equipment and material plus twenty-five percent (25%) which shall be added to the Owner's water bill. In addition to the other penalties provided by this Code, failure of the Account Holder to comply with this Section, including the annual testing and reporting requirements, may result in termination of service after ten (10) days notice tagged to the front door, unless the backflow is determined to be a hazardous situation, then disconnection will be made immediately.

- D. Upon discovery of a prohibited cross-connection, the Account Holder shall eliminate the cross-connection by installation of an appropriate backflow prevention device acceptable to the Utility Provider.
- E. Any customer utilizing an irrigation system, or reuse water, must install a Utility Provider approved backflow preventer on the potable Water service Line.
- F. Installation, testing, and inspection standards must comply with the W&WW Manual.

Sec. 6.04.19 Water and Wastewater Lines

All Water and Wastewater Lines installed by the Developer and deeded to the central Utility Provider must meet the requirements outlined in the W&WW Manual. Deeds transferring Water and/or Wastewater Lines to the Utility Provider shall be recorded in the County's official public records at the Developer's expense.

Sec. 6.04.20 Reserved

Sec. 6.04.21 Reserved

Sec. 6.04.22 Construction or Alteration of Wastewater Collection System Connected to the County Wastewater System

No Person shall construct a new Wastewater collection system that is to be connected to the County Wastewater System or substantially alter or improve any Wastewater collection system that is connected to the County Wastewater System, until the County Administrator has first determined such Construction to be in conformance with this Code, the W&WW Manual, and is compatible with any long-range County Wastewater System infrastructure plans that have been approved by the Board of County Commissioners.

Sec. 6.04.23 Pretreatment Measures

A. Pretreatment of Wastewater

Users shall provide Wastewater treatment as necessary to comply with this Code and shall achieve compliance with all categorical pretreatment standards and local limits within the time limitations specified by EPA, the State, or the County Administrator, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated, and maintained at the User's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the County Administrator for review, and shall be acceptable to the County Administrator before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the User from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the County under the provisions of this Code.

B. Additional Pretreatment Measures

Whenever it is deemed necessary, the County Administrator may require Users to implement additional pretreatment measures such as:

- The County Administrator may require any person discharging into the POTW to install and maintain, on the Person's property and at his or her expense, a suitable storage and flow-control facility to ensure equalization of flow. A Wastewater Discharge Permit may be issued solely for flow equalization.
- 2. Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

Sec. 6.04.24 Industrial Wastewater Discharge Permitting

Application for connection of an Industrial Waste Discharge into a central Wastewater System or any Connected System shall be obtained from the Utility Provider. The Utility Provider has set standards and requirements for Industrial Wastewater Discharge Permits, which may be obtained from the Utility Provider.

Sec. 6.04.25 Public Information on Industrial Users

Information and data concerning individual Industrial Users obtained from reports, questionnaires, Permit applications, Permits, monitoring programs, and inspections shall be available to the public to the extent permitted by Florida law upon request without restriction unless the Industrial User specifically requests and is able to demonstrate to the satisfaction of the County Administrator that such release is not required under the Florida Public Records Law and that the release would divulge information, processes, or methods of production entitled to protection as trade secrets of the User. Wastewater constituents and characteristics will not be recognized as confidential information.

St. Johns County shall publish annually in a daily newspaper with the largest circulation within the County, a list of Industrial Users which during the previous twelve (12) months were in Significant Noncompliance with applicable Pretreatment Requirements. This is consistent with requirements of Rule 62-625.500(2)(b)(8), F.A.C.

Sec. 6.04.26 Discharge of Cooling or Condensing Water into the Storm Drainage System

Cooling and/or condensing water may be discharged to the storm drainage system only if a NPDES Permit is obtained from the proper permitting agency.

PART 6.05.00 PARKING AND LOADING

Sec. 6.05.01 Parking and Loading Review Procedures and Submission Requirements

A. Generally

All off-street parking and loading and related facilities shall be provided in accordance with the requirements and standards of this Part.

No Off-Street Parking or Off-Street Loading Space, affected by these regulations, which meets all or part of the requirements of this Code for such space, shall be reduced or eliminated by private action, except where approved alternative Off-Street Parking or Off-Street Loading Space, meeting such requirements, is provided, unless no longer required by this Code.

B. Parking and Loading Submission Requirements

The Applicant shall submit written information and documentation as set forth in the Development Review Manual.

Sec. 6.05.02 Parking and Loading Standards

A. Off-Street Parking Required

In all districts, in connection with every industrial, commercial, institutional, residential or any other use, there shall be provided, at the time any new Structure is erected, any use of a Structure or land is enlarged or increased in Density or Intensity or any other Use or change of Use established, Off-Street Parking Spaces for automobiles in accordance with requirements contained in this Part.

B. Joint Use Facilities and Shared Parking

Nothing in this Section shall be construed to prevent the joint use of Off-Street Parking or Off-Street Loading Space for two or more Structures or Uses, if the total of such spaces, when used together, will not be less than the sum of the requirements of the various individual Uses computed separately in accordance with the requirements of this Code and may require a Special Use Permit as provided in Section 2.03.15.

- 1. An agreement for such joint use, in the form of a reciprocal Easement acceptable to the Office of the County Attorney shall be filed with the County Administrator and recorded with the Clerk of the Circuit Court for St. Johns County, Florida.
- 2. No part of an off-street Parking Area or off-street loading area required for any Structure or Use for the purpose of complying with the provisions of this Code, shall be included as a part of an off-street Parking Area or off-street loading area similarly required for another Building or Use, unless the County Administrator determines that the periods of peak usage of such Buildings or Uses will not be simultaneous with each other.
- 3. An agreement, with St. Johns County as one of the parties with a right of enforcement, for such joint use, in the form of a reciprocal Easement acceptable to the Office of the County Attorney shall be filed with the County Administrator and recorded with the Clerk of the Circuit Court of St. Johns County, Florida.

4. All Development Orders or Permits covering such approval shall include the requirements that the order or Permit is valid only so long as the conditions described in the application for order or the Permit exist.

C. Compliance With Regulations

The requirements for Off-Street Parking Space and Off-Street Loading Space applicable to newly erected or substantially altered Structures, or changes in Use shall be a continuing obligation of the Owner of the real estate upon which any such Structure is located, so long as the Structure is in existence and its Use requiring parking or loading, or both, continues. It shall be unlawful for an Owner of any Structures affected by this Code to discontinue, change or dispense with, or cause the discontinuance or change of the required Vehicle Parking or loading space apart from the discontinuance of such Structure, without establishing alternative parking and loading space which meets the requirements of and is in compliance with this Code.

- D. Methods of Providing Required Parking and Loading
 - 1. All required parking shall be located on the same zoning Lot as the principal Use(s) it serves, except as provided below.
 - 2. In lieu of actual Construction of required on-site Parking Spaces, all or any portion of the off-street parking required for a Use on a zoning Lot may be located on another zoning Lot, either by itself or combined as joint use or shared parking for other Uses, subject to approval of a Special Use Permit and certification by the County Administrator that the following requirements have been met:
 - a. The Use being served by the off-site parking shall be a permitted principal Use as established in Article II, in the zoning districts within which the zoning Lot containing such parking is located.
 - b. The off-site Parking Spaces shall be located within three hundred (300) feet walking distance of a public entrance to the Structure or land area containing the Use for which such spaces are required. A safe, direct, attractive, lighted and convenient pedestrian route shall exist or be provided between the off-site parking and the Use being served.
 - c. The continued availability of off-site Parking Spaces, necessary to meet the requirements of this Section, shall be ensured by an appropriate reciprocal Easement, satisfactory to the Office of the County Attorney and recorded with the Clerk of the Circuit Court of St. Johns County, Florida.
 - d. For purposes of determining applicable minimum and maximum land Use intensities, the land area devoted to off-site parking shall be added to the land area of the zoning Lot containing the Use being served by such parking and shall be subtracted from the area of the zoning Lot containing the off-site parking.
 - e. The provision of off-site required off-street parking shall not occur in residential districts, except as provided in Section 2.03.15.
 - f. Off-site required off-street parking shall not be separated from the Use it serves by Arterial or Major Collector Roadways, or other similar physical barriers to convenient access between the parking and the Use.

Townhome development may provide off-site parking, subject to compliance with all other provisions of this Code.
 Number of Required Off-Street Parking Spaces
 The number of required Off-Street Parking Spaces is set forth in Table 6.17 below.

E.

TABLE 6.17

OFF STREET PARKING REQUIREMENTS		
Use Parking Spaces Required		
Single and Two Family Dwellings	Two spaces per Dwelling Unit	
Apartments	spaces per one/two bedroom dwelling unit. Two (2) spaces per three (3) or more bedroom dwelling unit. An additional guest parking space for each four individual dwelling units.	
Condominiums	1.5 spaces per one/two bedroom dwelling unit. Two (2) spaces per three (3) or more bedroom dwelling unit. An additional guest parking space for each four individual dwelling units	
Townhouses	spaces per one/two bedroom dwelling unit. Two (2) spaces per three (3) or more bedroom dwelling unit. An additional guest parking space for each four individual dwelling units	
Rooming and Boarding Houses	One space for each two bedrooms	
Mobile Home Parks and Subdivisions	Two spaces per Manufactured/Mobile Home	
Institutional Uses such as sanitariums, rest homes, hospitals, and nursing homes	One space for each three beds	
Place of public assembly such as auditoriums, theaters and Adult Arcade Amusement Center	One space for each four seats	
Electronic Game Promotions or Sweepstakes	One space for each three seats	
Schools	Two spaces for each classroom, office room, kitchen, and gymnasium and auditorium	
Clubs, lodges, dances, art and music studios, vocational, trade and business school and other similar semi-public Uses	One space for each 300 square feet of gross Floor Area	
Churches and funeral homes	One space for each four seats in sanctuary or chapel area	
Art Gallery, library, museum	One space for each six hundred square feet of gross Floor Area	
Motels and Hotels	One space for each sleeping room. Additional spaces necessary for Accessory Uses such as restaurants shall also be provided	
Restaurant, night clubs, bar or tavern	One space for each three seats in public rooms	
Theaters	Ten spaces for first one hundred seats plus one space for each additional five seats	
Medical and dental office or clinic	One space for each 250 square feet of gross floor area	
Professional and business offices (other than medical or dental)	One space for each three hundred square feet of gross floor area	
Radio or television broadcasting office or studio	One space for each five hundred square feet of gross Floor Area	
Business, commercial or personal service establishment (not otherwise listed)	One space for each five hundred square feet of gross Floor Area, plus where applicable, one space for each one thousand square feet of Lot or ground area outside Buildings used for any type of sales or display	
Community Marinas, and Marinas	One space per two slips, plus one space per five dry storage spaces. Accessory commercial uses shall meet the parking requirements provided within the Code.	
Boat Dock, Non-Commercial (Neighborhood Dock, Single Family Dock)	None, provided that the community or residence for which it serves has adequate off street parking. If none exists one space per two slips.	
Bus, railroad or other transportation terminals	One space for each five hundred square feet of gross Floor Area	
Commercial shopping centers	One space for each two hundred fifty (250) square feet of non-storage Floor Area	

Industrial Uses	One space for each 3,000 square feet of gross Floor Area plus accessory commercial uses (e.g. office, showroom, etc) shall meet the parking requirements provided for within the Code.
Personal Property Mini-Warehouse Facilities	One Space for each 7,000 square feet of gross Floor Area plus accessory commercial uses (e.g. office). This parking requirement only applies to storage units with at least a 24 ft wide drive aisle for enhanced vehicular maneuverability.
Ports	Refer to Section 6.05.02.G Determination of Alternative Parking to address berth, docking space, and occupancy demands of vessels.

<u>Special Note</u>: Where fractional spaces result in the foregoing Parking Space requirements, the Parking Space shall be the nearest whole number.

<u>Editor's Notes</u>: Notes 1, 2, and 3 of Table 6.17 are repealed by implication through the Board's approval of the revised Table 6.17 on June 1. 2010.

F. Calculation of Certain Parking Requirements

Where parking requirements relate to number of seats, and seating is in the form of undivided pews, benches, or the like, one (1) space per each three (3) permitted occupancy standard approved by the County Fire Marshall. Where parking requirements relate to movable seating in auditoriums and other assembly rooms, One (1) space per each three (3) permitted occupancy standard approved by the County Fire Marshall.

G. Determination for Unlisted Uses or Alternative Parking

- 1. For a Use not listed in the Table above in Section 6.05.02.E., the County Administrator shall make a determination based on a similar Use for the minimum required Off-Street Parking Spaces.
- 2. In reaching the determination, the County Administrator shall be guided by the requirements for similar Uses, the number and kind of Vehicles likely to be attracted to the proposed Use and studies of the parking requirements of such Uses in other jurisdictions.

H. Parking Area Design Standards

- 1. Except for Single Family and Two Family Dwellings, non-commercial boat docks and piers Agricultural and Related Uses, and those Uses listed under Section 6.0.42, every off-street Parking Area and Vehicular Use Area shall be surfaced with asphaltic or portland cement binder pavement or an equivalent Improvement, so as to provide a durable and dustless surface with adequate drainage and Stormwater management provisions as required by Section 6.04.06, unless a Special Use Permit has been approved, pursuant to Section 2.03.15 of this Code. In making a determination as to the suitability of an equivalent Improvement, the County Administrator or designee shall find that such Improvement:
 - a. Provides a safe and permanent surface, suitable for the quantity and quality of traffic expected to use it.
 - b. Provides a surface which will accept permanent delineation of Parking Spaces, aisles, Accessways and maneuvering areas.
 - c. Provides a surface that will not contribute to erosion or sedimentation, either on-site or off-site.

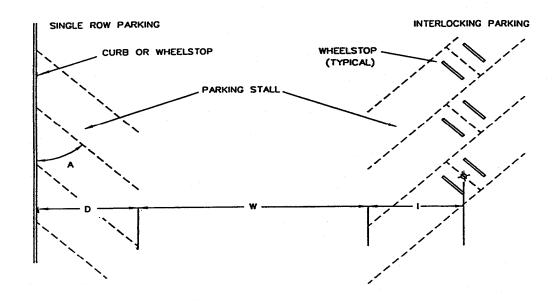
- d. Provides a surface that meets the design standards of the St. Johns County Administrator.
- 2. Parking for seasonal Uses or Special Events may be exempted from the paving requirements above if approved pursuant to a Temporary Use Permit as provided in Section 2.02.05. Such Uses shall provide for a safe surface and an adequate number of parking spaces suitable to accommodate traffic.
- 3. All Off-Street Parking Spaces shall be directly accessible from an aisle or driveway. Access to Parking Areas shall be designed so as not to obstruct free flow of traffic. Improvements shall be provided as necessary to prevent ingress and egress to Parking Areas at any point other than designated driveways.
- 4. Parking Spaces at the perimeter of parking lots shall be provided with curbing, individual wheel stops for each space, or other similar physical barrier to ensure that parked Vehicles do not come into contact with sidewalks, landscaping, walls, fences or Buildings. If a raised sidewalk is located immediately adjacent to the front overhang of the Parking Spaces, the parking stall depths may be decreased by two (2) feet, provided the four (4) foot sidewalk width is increased by the corresponding two (2) feet.
- 5. All paved Parking Spaces, except handicap accessible spaces, shall be marked with white paint four (4) inches in width or other striping material approved by the County Administrator. Marking and signing of handicapped accessible spaces shall be governed by provisions required by the Florida Accessibility Code for Building Construction, latest edition.
- 6. All Parking Spaces, except handicap accessible spaces and small car spaces, shall be a minimum of nine (9) feet in width. Other stall and aisle dimensions shall be based on the following standards (see Table 6.18 and Figure 6.04 for a depiction of the measurement criteria):

TABLE 6.18

ANGLE	STALL DEPTH	STALL DEPTH	AISLE
(DEGREES)	TO WALL (D)	TO INTERLOCK (I)	WIDTH (W) *
90 (2-WAY)	17.5 feet	17.5 feet	26.0 feet
60 (2-WAY)	18.0 feet	16.5 feet	26.0 feet
75 (1-WAY)	18.5 feet	17.5 feet	22.0 feet
60 (1-WAY)	18.0 feet	16.5 feet	18.0 feet
45 (1-WAY)	16.5 feet	14.5 feet	15.0 feet

^{*} Aisle width may be decreased by two (2) feet for one-sided parking modules where four (4) feet of clear, unobstructed area is provided adjacent to the parking aisle opposite the Parking Spaces.

FIGURE 6.04



PARKING DIMENSION REFERENCES

A = PARKING ANGLE

D = STALL DEPTH TO WALL

= STALL DEPTH TO INTERLOCK

W = AISLE WIDTH

- 7. Small car Parking Spaces shall be permitted in low turnover parking areas such as employee lots and residential parking sites. The small car Parking Spaces shall not exceed thirty percent (30%) of the total required spaces and shall be clearly designated with Signs. Small Parking Spaces shall be a minimum of eight (8) feet in width with stall depths a minimum of sixteen (16) feet. Small car spaces shall be considered only for ninety (90) degree layout.
- 8. Parking stall dimensions, access aisles, and curb ramps for handicap accessible spaces shall be designed to meet the standards of the Florida Accessibility Code for Building Construction.
- 9. Commercial facilities with drive-through windows shall provide adequate Vehicle storage area for queuing outside the road Right-of-Way.
- 10. Off-street loading facilities and maneuvering areas shall be separated from required off-street Parking Areas; however, access aisles may serve both parking and loading facilities. All loading facilities shall be designed with adequate maneuvering area for the expected size of truck using the loading facility and shall meet the requirements of Section 6.05.02.K. and Section 6.05.02.L of this Code. Corner radii at driveway connections, end aisles, and other areas within the vehicular path of the truck access to the loading facilities shall be adequate for the expected truck size.

I. Off-Street Parking Requirement Reduction

Where Protected Trees exist within a proposed Parking Area, the County Administrator may allow a reduction up to five percent (5%) of the number of required Parking Spaces to preserve existing Trees. In cases where less than ten (10) Parking Spaces are required, this provision shall not apply.

J. Off-Street Perimeter/Distant Parking Standards

- 1. Developers of commercial centers of one hundred thousand (100,000) square feet or larger may provide sodded grass Parking Spaces along the perimeter Parking Area or the area most distant from the entrance(s) to the Building of their off-street parking.
- 2. The sodded grass spaces shall be a maximum of ten (10) percent of the required number of spaces. In addition, all spaces provided in excess of the number required by this Code may be sodded.
- 3. The grass perimeter/distant Parking Spaces shall be stabilized using drought tolerant sod and shall include parking wheel stops and landscape barriers to protect landscaping within terminal/internal islands and landscaping within perimeter buffer areas.
- 4. The sodded grass perimeter/distant Parking Area shall be delineated on the commercial center's Site Plan.
- 5. Any other approved Uses with five hundred (500) or more Parking Spaces may provide sodded grass Parking Spaces along perimeter/distant Parking Areas provided that they meet Section 6.05.02.J.2 above.

K. Off-Street Loading Space, Required

- 1. Every Use requiring the receipt or distribution, by Vehicles, of materials and merchandise shall have one or more loading berths or other space for standing, loading and unloading on the same or adjoining premises in accordance with the requirements of the table below. Loading space shall be sufficient to allow normal loading and unloading operations of a kind and magnitude appropriate to the property served. Loading spaces shall not be used for the storage of Vehicles or materials, or to meet off-street parking requirements, or in conducting the Use.
- 2. The requirements in the table below shall apply to new Structures or additions to Structures, and shall not be considered to make any existing Structure non-conforming for lack of such off-street loading.
- For any land Use which is not listed in the table below, the County Administrator, upon review of the proposed Use, shall specify the required number of loading spaces to be provided, using generally accepted traffic engineering practices and standards.

Off-Street Loading Requirements

Land Use Classification Space Requirements

Hotel/Motel Uses One loading berth for every one hundred

thousand 100,000 square feet of Floor Area,

up to a maximum of 5 berths.

Industrial and commercial Uses as follow Minimum number of loading berths required

 Under 8,000 square feet
 1 berth

 8,000 - 25,000 square feet
 2 berths

 25,000 - 50,000 square feet
 3 berths

 50,000 - 100,000 square feet
 4 berths

 100,000 - Over square feet
 5 berths

L. Off-Street Loading Space Standards

All Off-Street Loading Spaces shall meet the following standards:

- 1. Off-Street Loading Spaces shall meet, be located and arranged so that a semitrailer truck (WB 50 class) shall be able to gain access to and use such spaces by means of one continuous backing maneuver totally within the site.
- 2. Loading space shall observe the minimum Street and interior setback established for Structures.
- 3. All loading space and maneuvering space shall be surfaced with an all-weather material which shall be maintained in a safe, sanitary, and neat condition.
- 4. No loading space shall be located so that a Vehicle using such space intrudes on or hinders the use of travel lanes, walkways, Public or Private Roadways, or adjacent properties.
- 5. Each required Off-Street Loading Space shall have a minimum width of twelve (12) feet and a minimum vertical clearance of sixteen (16) feet above finished grade of the space. The length shall be a minimum thirty (30) feet for local delivery and sixty (60) feet for semitrailers. A maximum of two-thirds (2/3) of the required loading spaces can be used for local delivery Vehicles.

M. Bicycle Parking

- 1. All bicycle parking facilities shall be located on the same Building site as the Use for which such facilities serve and as close to the Building entrance as possible without interfering with the flow of pedestrian or motor Vehicle traffic. Bicycle and auto Parking Areas shall be separated by a physical barrier which shall be at a minimum a two (2) foot high wall, fence or berm; a ten (10) foot wide buffer; or a six (6) inch curb with four foot buffer to protect parked bicycles from damage by cars.
- 2. All bicycle parking facilities shall be clearly identified as bicycle parking. Where bicycle Parking Areas are not clearly visible to approaching cyclists, Signs shall clearly indicate the location of the facilities. When possible, this facility should protect the bike from inclement weather including wind-driven rain. Bike parking shall be located in an area of high visibility and shall be well lighted.

3. Design Standards

- a. Bicycle parking facilities shall include provisions for the secure storage and locking of bicycles in a stable position without damage to wheels, frames, or components. All required bicycle parking facilities shall be from an approved list of bicycle parking devices maintained by the County Administrator. Other devices may be used if it can be established by the County Administrator that they are equivalent to any device on the approved list in function, quality, and Construction.
- b. An aisle or space shall be provided to bicycles to enter and leave the facility. This aisle shall have a width of at least four feet to the front or rear of a standard six (6) foot bicycle parked in the facility.
- c. All bicycle Parking Spaces shall conform to the following minimum design standards:

Minimum width - two (2) feet Minimum length - six (6) feet

d. The County Administrator shall be authorized to modify these standards where the facilities will be used predominately by bicycles having different space needs such as adult tricycles, or when another design (such as the provision of bike lockers) could serve the needs to an equal or greater degree.

PART 6.06.00 LANDSCAPING AND BUFFERING REQUIREMENTS

Sec. 6.06.01 Applicability and Exemptions

- A. In St. Johns County, with the following exceptions, it shall be unlawful for any Person, firm, or corporation either individually or through Agents, employees or independent contractors, to construct any Building or off-street Parking Area on land within the unincorporated areas of St. Johns County without first having obtained a Development Permit from St. Johns County. The terms and provisions of this Part shall apply to all Development within the unincorporated areas of St. Johns County except for the following exceptions:
 - 1. Land which is used for and has the corresponding property assessment as Bona Fide agricultural operations.
 - 2. Land within the boundaries of an airport, heliport, helistop or ultralight flight park, determined by the Federal Aviation Administration or the Florida Department of Transportation to be required for the ground or aerial maneuvering of aircraft.
 - 3. Construction of an addition to an existing Building or Construction of a minor or ancillary Building or off-street Vehicular Use Area with less than five (5) Parking Spaces.

Sec. 6.06.02 General Standards and Guidelines

A. Plant Species

- 1. These standards and guidelines shall be in accordance with Section 4.01.05 Trees and Other Vegetation. Section 4.01.05 contains regulations on the minimum number of Trees, Tree Inches, Historic and Specimen Trees, exemptions, Protected Trees, Land Clearing, Tree replacement requirements, Tree Permits, Permit application procedures, along with other regulations about Trees and vegetation in unincorporated St. Johns County. Plant species shall be appropriate for their designated use and environment.
- 2. The use of Xeriscape or Florida Friendly landscaping techniques and the use of native plants as part of the overall landscaping plan shall be required, as specified in these regulations.
- 3. A minimum of fifty (50) percent of the required plant materials shall be native species, or hybrids or cultivars of native species. Species listed by the Florida Exotic Pest Plant Council or on the Exempt Tree list (except slash or longleaf pines) shall not be used to meet this standard. The fifty (50) percent requirement for plant materials shall be met individually for trees and shrubs.
- 4. Vegetation that exceeds twenty-five (25) feet in height at maturity should not be planted closer than fifteen (15) feet of the vertical plane of an existing power line, excluding service wires.
- 5. Non-living ground cover, such as rocks, gravel, and mulch, may be used in combination with living plant material. The use of artificial plants shall not be permitted to meet any of the landscaping requirements.
- 6. All plantings shall be selected based on the principles of Florida Friendly

landscaping including planting the right plant in the right place and providing for efficient watering. Exempt from this requirement are golf courses, sports fields, Agriculture and Silviculture.

B. Tree Inch requirements and scoring procedures are in Section 4.01.05.E, represented in whole inch increments.

C. Landscaping Material

The following plant material standards shall be considered the minimum requirements for complying with the Landscaping Regulations, unless specified differently elsewhere in these regulations.

1. Quality

Plant material shall conform to the standards for Grade #1 or better as given in the latest "Grades and Standards for Nursery Plants, Parts I and II," Florida Department of Agriculture and Consumer Services or to the standards as given in the latest "American Standard for Nursery Stock," American National Standards Institute. They shall be appropriate for St. Johns County annual weather and temperature patterns.

2. Installation

All landscaping shall be installed according to sound nursery practices and shall follow ANSI A300 Transplanting Standards. Plants grown in containers prior to installation shall be removed from their containers before they are planted in the ground. Balled and burlapped strapping wire shall be cut back away from the trunk, and any synthetic material shall be removed at time of final inspection.

- a. Mulch shall be provided a minimum of two (2) to three (3) inches in depth around all newly planted landscaping.
- b. A mulch ring for all newly planted Trees shall be provided at least five (5) feet in diameter and spaced at least six (6) inches away from the tree trunk.

3. Trees

At the time of planting, a Tree shall have a minimum height of eight (8) to ten (10) feet and two (2) inch of caliper. The use of exempted Tree species to meet the requirements of the landscaping regulations shall be prohibited with the exception of slash or longleaf pines.

4. Palms

Where palms are used, only palms up to thirty percent (30%) of total required Trees will receive Tree Inches, unless otherwise reasonably determined by the County Administrator based upon Site conditions.

5. Shrubs

When used for screening purposes, shrubs shall be cold tolerant and non-deciduous and have a minimum height of twenty-four (24) inches at the time of planting and shall be spaced a maximum of three (3) feet on center.

6. Ground Cover Plants

Ground cover plants shall be spaced so as to present a finished appearance and have reasonably complete coverage within one (1) year after planting. The use of any non-living ground cover such as mulch, gravel, rocks, etc. shall be in conjunction with living plants so as to cover exposed soil.

D. Maintenance and Protection of Landscaping

- 1. The property Owner shall be responsible for the establishment and maintenance of all landscaped areas which shall be maintained in good condition so as to present a healthy, neat and orderly appearance, free of refuse, debris and weeds.
- 2. All required plant material that is newly-planted shall be watered by temporary or permanent irrigation systems consistent with 3a below until such time as they are established. Required plant material that fails establishment shall be replaced within thirty (30) days of written notification, or as reasonable determined by the County Administrator.
- 3. Irrigation in Site Development Projects.
 - a. High Volume irrigation shall be limited to no more than fifty percent (50%) of the total irrigated landscape area. All plantings shall be grouped according to similar water needs for efficient irrigation zones. Exempt from this requirement are golf courses, sports fields, Agriculture, Silviculture or systems using Reclaimed water.
 - b. Irrigation systems may consist of an automatic or manual underground systems, drip systems, quick coupling valves, or hose bibs located within fifty (50) feet of all landscaping plant material or other systems as approved by the County Administrator.
 - c. A low volume irrigation system should be used wherever possible to minimize evaporation.
 - d. The irrigation system shall use the lowest quality water available.
 - e. The irrigation system shall be designed to minimize adverse impacts to existing Trees and other vegetation to be preserved on the site. No irrigation shall be required within areas where existing vegetation is preserved.
 - f. Where Xericape or Florida Friendly is used to meet all the landscaping requirements, the County Administrator may waive the requirement for a permanent irrigation system as long as establishment of the planted materials is provided.

- g. Irrigation systems shall be designed as to prevent spraying of water onto paved areas.
- h. A functioning rain shutoff devise or soil moisture sensor shall be utilized in automatic irrigation systems.
- 4. Where necessary to prevent encroachment by parked or moving Vehicles into landscaped areas, wheel stops or curbs shall be used and shall measure a minimum of six (6) inches in height and six (6) inches in width.
- 5. Paving, treating or covering a required landscaped area in a way that renders it impervious is prohibited.

E. Road Right-of-Way

- Public and private road Right-of-Way may only contain Trees and other landscaping material after approved by the County Administrator in accordance with Part 6.04.00 Roadway, Drainage, & Utilities Standards. Provided their location does not present a traffic hazard, impede drainage, or adversely interfere with the use of the Right-of-Way by Utilities.
- 2. Written approval from the Florida Department of Transportation shall be required for all landscaping materials proposed for placement on State Highway System Rights-of-Way.

F. Scenic Highways and Scenic Roadways

- 1. Notwithstanding the provisions of the landscaping regulations of this Code, other landscaping standards shall apply to any Scenic Highway or Scenic Roadway designated in Appendix B of this Code to protect its special visual character.
- Upon designation of any Scenic Highway or Scenic Roadway, all new Development, Permits, Improvements, including maintenance thereon, excluding individual single-family Lots created before September 15, 1999, shall be in accordance with the following standards and any other Roadway-specific, Board of County Commission approved plan for the designated Scenic Highway or Scenic Roadway.
 - a. Rural Scenic Highways or Roadways

Outside the Development Area Boundaries on the Future Land Use Map, a forty (40) foot minimum undisturbed scenic buffer shall be provided adjoining the Right-of-Way which shall be left in a natural state, unless actively used for agricultural purposes. Land in Agricultural Use may continue in Agricultural Use.

b. Residential Scenic Highways or Roadways

Within the Development Area Boundaries on the Future Land Use Map, a thirty (30) foot scenic buffer shall be provided with four (4) Canopy Trees and four (4) understory Trees per one hundred (100) linear feet. If street Trees do not exist in the undeveloped existing Right-of-Way, the Developer shall provide one (1) street Tree for every fifty (50) linear feet. Where the existing vegetation meets or exceeds the buffer requirements stated above

in the Right-of-Way or thirty (30) foot scenic buffer, the existing vegetation shall remain undisturbed.

3. If the property has sufficient area for the scenic buffer, no Building Permits shall be issued that would result in encroachment of the buffer area. If the property does not have sufficient area for the scenic buffer, any Use permitted in the zoning district shall be allowed to encroach into this area the minimum amount necessary to meet other setback requirements subject to approval of a Non-Zoning Variance in accordance with the provisions of Section 10.04.03 of this Code.

G. Northwest Sector Scenic Edges

- 1. Scenic Edges shall be provided to preserve the rural character and preserve and enhance scenic view sheds, such as, scenic vistas, the St. Johns River, natural areas, and agricultural areas within the Sector. The primary purpose of scenic edges is to screen development and designed in a way that creates a natural edge between development and the roadway through the preservation of existing trees and vegetation and/or the use of a variety of native canopy trees, understory trees, bushes, shrubs and ground cover.
- Within the Community Commercial Future Land Use Map designation located at SR13 and Racetrack Road, and within any commercially zoned property or the commercial component of a planned development, or where the lot depth of a development parcel, or portion thereof, measured from the property line or reserved right-of-way is less than 500 feet, the scenic edge shall be allowed a reduction to the required 75 foot buffer requirement to a minimum of 30 feet through the application of enhanced performance standards that will provide sufficient landscaping where little or no natural vegetation exists in order to preserve or enhance the rural character along the roadway. Any request for a reduction to the 75 foot scenic edge shall adhere to the following enhanced performance standards:
 - a. Shall consist of all native evergreen canopy trees planted every twenty (20) to thirty (30) foot on center.
 - b. All native non-canopy trees shall be planted every ten (10) to twenty (20) foot on center.
 - c. Shrubs shall be of native species and be planted between every five (5) to fifteen (15) foot on center and appropriately staggered.
 - d. Native groundcover shall be planted every three (3) to five (5) foot on center.
 - e. Breaks in the scenic edge may be allowed in otherwise continuous edges to allow for access and associated entrance features, and provide view corridors to parks, scenic areas and other publicly accessible areas. The spacing may also be modified through the clustering of the required trees provided the same number of trees is planted and the gap between the trees cannot exceed 30 feet.
 - f. Commercial properties located adjacent to the scenic edge shall be allowed to maintain visibility to commercial structures, signage and entrance features.

- H. Northwest Sector Development Edges
 - 1. Development edges and recreational trail systems provide a foundation of the Northwest Overlay. Development edges and recreational trails provide natural corridors, recreational opportunities, aesthetics, habitat protection and open space, maintain rural character and provide screening from roadways and adjacent development. Development edges shall be a minimum of 35 feet in width and located along the edge of the development boundary. Deviations to the 35 foot minimum development edge shall only be allowed where there are practical difficulties in the meeting of the development edge requirement, due to exceptional shallowness or unusual shape of a specific piece of property, where connectivity to adjacent development makes a logical pattern or other extraordinary condition of such property. The development edge shall be allowed to be reduced to a minimum of 20 feet with the approval of a non-zoning variance or waiver and through the application of performance standards. Where little or no native vegetation exists, buffers should be supplemented as follows:
 - a. Shall consist of all native evergreen canopy trees planted every twenty (20) to thirty (30) foot on center.
 - b. All native non-canopy trees shall be planted every ten (10) to twenty (20) foot on center.
 - c. Shrubs shall be of native species and be planted between every five (5) to fifteen (15) foot on center and appropriately staggered.
 - d. Native groundcover shall be planted every three (3) to five (5) foot on center.
 - e. Breaks in the development edge may be allowed in otherwise continuous edges to allow for access and associated entrance features, and provide view corridors to parks, scenic areas and other publicly accessible areas. The spacing may also be modified through the clustering of the required trees provided the same number of trees is planted and the gap between the trees cannot exceed 30 feet.
 - f. Commercial properties located adjacent to the development edge shall be allowed to maintain visibility to commercial structures, signage and entrance features.
 - 2. Deviations not addressed above shall be subject to a non-zoning variance or waiver review (if associated with a Planned Development) and approval in accordance with the provisions established in the Land Development Code. Additional buffer and screening requirements may be imposed as a condition of approval of the non-zoning variance or waiver to minimize the effect of the reduced development edge and ensure the intent of the Northwest Sector. In no case shall the development edge be less than 20 feet, except where a non-residential property line abuts another nonresidential property line in which case a narrower development edge may be allowed with approval of a non-zoning variance or waiver review.
- I. Wet Retention or Detention Pond

1. West Retention/Detention ponds or stormwater systems developed within a scenic edge or development edge shall be designed as an amenity to the neighborhood and should be permanently protected from development. Any area of the wet retention/detention pond or stormwater system lying within the scenic or development edge shall be required to vegetate along the entire perimeter of the banks of the wet retention/detention pond or stormwater system. Vegetation shall include native grasses and understory plantings.

Sec. 6.06.03 Off-Street Vehicular Use Areas

A. Canopy Trees

Seventy percent (70%) of the required Trees shall be Canopy Trees. This provision does not exclude the use of existing Tree species for which Tree Inches is received in accordance with Section 4.01.05.E.

B. Existing Trees

Existing Trees shall be credited toward the number of required Tree Inches in accordance with Section 4.01.05.E., if the reduction does not subvert the intent of Section 6.06.03 to provide shaded areas throughout a parking lot.

C. Perimeter Buffer Adjacent to Road Right-of-Way

On any Parcel of land providing an off-street Vehicular Use Area, where such area is not entirely screened from an abutting Right-of-Way by an intervening Building or other Structure, a landscaped buffer a minimum of eight (8) feet in width and containing an opaque screen of living landscape at least three (3) feet in height, of which the three (3) foot height may be obtained in one (1) year, and shall be twenty-four (24) inches at the time of planting, shall be provided between the off-street Vehicular Use Area and the Right-of-Way (Figure 6.05), unless the buffer or screening requirements of Section 6.06.04 are more stringent, in which case the more stringent requirements shall apply. The landscape buffer shall be planted within eight (8) feet of the Vehicle Use Area.

D. Perimeter Buffer Adjacent to Parking Area Driveway

A driveway into a Parking Area shall be bordered by a landscaped buffer a minimum of eight (8) feet in width and three (3) feet in height (Figure 6.06) containing an opaque screen of living landscape at least three (3) feet in height, of which the three (3) feet may be achieved within one (1) year, and shall be twenty-four (24) inches at the time of planting.

E. Other Perimeter Buffer

1. A landscaped buffer a minimum of six (6) feet in width shall be required between the off-street Vehicular Use Area and any property boundary not fronted by a road Right-of-Way, containing an opaque screen of living landscape at least three (3) feet in height or provide such landscape that is at least two (2) feet in height and capable of obtaining a height of three (3) feet within one (1) year from the time of planting unless the buffer or screening requirements of Section 6.06.04 are more stringent, in which case the more stringent requirements shall apply. The landscaped buffer shall not be required if such a buffer and required screening are provided on the adjacent property along said boundary.

- 2. A landscaped buffer a minimum of six (6) feet in width shall be provided between the off-street Parking Area and another Use on the property, e.g., Building, Stormwater retention or detention pond, open space. As an alternative to providing this perimeter buffer adjacent to a Building, landscaped islands may be provided in accordance with Section 6.06.03.G.2.
- 3. A perimeter buffer is optional along the phase boundary of phased Construction where the off-street Vehicular Use Area does not front on road Right-of-Way.

F. Perimeter Landscaping

- 1. At least one (1) Tree shall be planted for each fifty (50) linear feet of property perimeter shall be required. Where a six (6) or eight (8) foot buffer is required, newly planted Trees shall be located within the buffer so as to maximize shading of the Parking Area.
- 2. Wherever Off-Street Parking Spaces for ten or more automobiles are located closer than forty (40) feet to a Lot zoned residential and when such Parking Spaces are not entirely screened visually from such a Lot by an intervening Building or Structure, there shall be provided along the Lot line, a continuous screen with a minimum height of six (6) feet. Such screen shall consist of a solid wall, fence or compact permanent shrubbery.
- 3. The remainder of a perimeter buffer shall be landscaped; and the landscaping material may include grass, ground cover, mulch, shrubs, Trees or other landscaping treatment, excluding sand or pavement.

G. Interior Requirements

1. Terminal Islands

A row of Parking Spaces not abutting perimeter landscaped areas shall be terminated on each end by a terminal island. When an Interior Tree Island is not required as a terminal island in accordance with the subsection below, an island no less than fifteen (15) feet in width, measured from back of curbs, and extending the required length of the Parking Space shall be provided. At least one Tree shall be planted in the island. When an Interior Tree Island is required as a terminal island in abutting rows of Parking Spaces, the island abutting the terminal Tree island shall be no less than fifteen (15) feet in width, measured from back of curbs, and shall extend the required length of the Parking Space. Terminal islands shall be landscaped and the landscaping material may include grass, other vegetative ground cover, mulch, shrubs, or other landscaping treatment, excluding sand or pavement. The soil in the islands shall have at least twelve (12) inches of suitable soil for tree plantings, and be void of any construction debris or unsuitable materials.

2. Interior Tree Islands

Interior Tree Islands shall be provided as indicated below:

All Parking Areas and other paved ground surface areas used shall have internal landscaping to provide visual and climatic relief from broad expanses of pavement and to channelize and define logical areas for pedestrian and vehicular circulation.

- a. Within each Vehicular Use Area of nine thousand (9,000) square feet or more, there shall be a minimum of five percent (5%) of landscape area which shall be reasonably distributed within each nine thousand (9,000) square feet area. Interior landscape areas shall be dispersed so as to define aisles and limit unbroken rows of parking to a maximum of one hundred (100) feet. Each landscape Tree island shall be a minimum of fifteen (15) feet wide and extend the entire length of the Parking Space, unless technically infeasible as reasonably determined by the County Administrator. The soil in the islands shall have at least twelve (12) inches of suitable soil for tree plantings, and be void of construction debris. A Tree shall be planted in each island.
- b. Landscape islands may be relocated and exceed the one hundred (100) foot distance requirement to preserve existing Trees and meet the requirements of Part 4.01.00.

Divider Medians

As an alternative to providing Interior Tree Islands within abutting rows of Parking Spaces, a landscaped divider median between abutting rows of Parking Spaces shall be provided. The minimum width of a divider median shall be ten (10) feet measured from inside of curb to inside of curb. At least one (1) Canopy Tree spaced no closer than twenty (20) feet from another canopy Tree shall be planted in the median with Trees located along the median to maximize shading of the Parking Area. The remainder of the divider median shall be landscaped; and the landscaping material may include grass, ground cover, mulch, shrubs, Trees or other landscaping treatment, excluding sand or pavement. When this alternative is chosen, the minimum width of the terminal islands shall be fifteen (15) feet, measured inside of curb.

H. Public Takings

- 1. Where a lawful public taking or an action pursuant to court order results in a reduction of the required perimeter buffer and associated landscaping, this reduction shall not result in a violation of the landscaping requirements of this Code, provided the property Owner clearly demonstrates that reasonable alternatives are not available to retain or provide the buffer and landscaping material in a manner consistent with County regulations and zoning conditions if applicable.
- 2. In the event Improvements are made to the property subsequent to a lawful public taking or an action pursuant to court order, only those areas within the limits of the improved area shall be required to meet the current perimeter buffer and landscaping requirements.

Variations

Variations to the standards and criteria of Part 6.06.03 may be allowed by the County Administrator or his designee upon showing of good cause, and where the Owner/Applicant proposes an alternative which conforms to the general intent and spirit of these regulations, and where the objectives of the Article have been substantially met.

Sec. 6.06.04 Buffering and Screening Requirements

A. Buffers Between Incompatible Land Uses

The minimum required buffer distance between proposed land Uses and the zoning Lot line is set forth in the tables below. If the land next to the proposed Development is vacant, the buffer required shall be determined by the existing zoning on the adjacent vacant Parcel. If the adjacent Parcel is vacant but is zoned for a more intensive zoning district, no buffer area shall be required of the less intensive Use. For any Special Use listed on Table 2.03.01, the buffer required shall be determined by the Use Category the Special Use is permitted in.

The nature of surrounding Land Uses shall be considered in order to mitigate incompatibilities. Buffer widths and screening standards represent minimum required details which may be expanded, averaged, modified and/or increased to minimize external impacts. The relative degree of intensity shall be determined as follows:

TABLE 6.19

Table of Intensity for Buffers and Screening							
Group	Land Use Classification						
1	Residential - Single-Family						
2	Residential - Multi-Family less than or equal to six (6) units/acre (u/a)						
3	Residential - Multi-Family greater than or equal to six (6) u/a Cultural/Institutional Office and Professional Services						
4	Neighborhood Business and Commercial General Business and Commercial Rural Commercial Town Center Mixed Use						
5	High Intensity Commercial Highway Commercial Public Service/Emergency Service						
6	Light Industrial Heavy Industrial Mining and Extractive Regional Business and Commercial Regional Cultural and Entertainment Solid Waste & Correctional Facilities Correctional Institutions						
7	Outdoor/Passive Agricultural (Except Bona Fide Agricultural and Silvicultural Uses)						

TABLE 6.20

17.62E 0.20									
Minimum Buffer Screening Matrix									
Proposed Use Intensity Group	Abutting Use Intensity Group								
	1	2	3	4	5	6	7		
1	None	10/A	20/B	20/B	20/B	30/C	10/A		
2	10/A	None	10/A	20/B	20/B	30/C	10/A		
3	20/B	10/A	None	10/A	20/B	30/C	20/B		
4	20/B	20/B	10/A	None	10/A	20/B	20/B		
5	20/B	20/B	20/B	10/A	None	10/A	25/B		
6	30/C	30/C	30/C	20/B	10/A	None	30/B		
7	10/A	10/A	20/B	20/B	25/B	30/B	None		

<u>Legend</u> Buffer Width in Feet/Screening Standard

B. Screening

- 1. Screening shall be installed within the buffers required above. Screening shall meet specified height requirements except in those Front Yard areas that are Street access frontages, and except those areas for which the intersection sight distance requirements contained in Section 6.04.04.G. supercede. In Front yard areas that are Street access frontages, screening shall not exceed four (4) feet in height. In meeting the screening standards, it is recommended that staggered hedge row plantings be installed on three (3) foot centers to achieve the opacity indicated.
- 2. The required height of screening material and/or a fence when required for the purpose of screening is measured from the finished grade at the minimum required setback or buffer line of the property requiring the fence.
- 3. Screening Standard "A"

Minimum required screening shall consist of the following:

- a. Evergreen plants, at the time of planting, shall be six (6) feet in height and provide an overall screening opacity of seventy-five percent (75%); or
- b. A masonry wall six (6) feet in height, located within the required buffer; architecturally finished on all sides, and if a block wall, shall be painted on all sides; or
- c. A solid wooden fence six (6) feet in height (finished side out); or
- d. A berm not steeper than two to one (2:1) in combination with 1, 2, or 3 above, to achieve a minimum height of six (6) feet and seventy-five percent (75%) opacity at the time of installation; and
- e. Lawn, low growing evergreen plants, evergreen ground cover, or rock mulch covering the balance of the buffer.
- 4. Screening Standard "B"

Minimum required screening shall consist of the following:

- a. The requirements of Screening Standard "A"; and
- b. A row of evergreen Canopy Trees which are not less than ten (10) feet high at the time of planting, a minimum of two (2) inch caliper, and are spaced not more than twenty (20) feet apart. The Trees are to be planted within ten (10) feet of the property line.
- 5. Screening Standard "C"

Minimum required screening shall consist of the following:

a. A row of evergreen Canopy Trees which are not less than ten (10) feet high at the time of planting, a minimum of two (2) inch caliper, and are spaced not more than twenty (20) feet apart. The Trees are to be planted within ten (10) feet of the property line; and

- b. A masonry wall, architecturally finished on all sides, located within the required buffer; such wall shall be a minimum height of six (6) feet and, if a block wall, shall be painted on all sides; and
- c. Lawn, low growing evergreen plants, evergreen ground cover, or rock mulch covering the balance of the buffer.
- 6. Areas Adjacent to Arterials and Major Collectors

If proposed residential Development is adjacent to Arterials or Major Collectors, screening shall consist of the landscaping required per Screening Standard "B" above or a berm/planting combination, with the berm an average height of four (4) feet and dense plantings which will, when combined with the berm, achieve a minimum height of eight (8) feet and seventy-five percent (75%) opacity within two (2) years of planting. If demonstrated that screening has been or will be provided by another entity to an equivalent or higher degree, the Board of County Commissioners may waive any portion or all of these requirements.

7. Open Storage

- a. Open storage which constitutes the principal Use of a site shall be buffered in accordance with screening standard "C".
- b. Open storage areas which are accessory to a principal Use shall be screened from view of any Street and from residentially zoned land as follows:
 - (1) Where an open storage area is in view from a Street, the method of screening shall consist of solid masonry walls or solid wooden fences at least six (6) feet in height, or evergreen shrubs which at the time of installation shall be six (6) feet in height and seventy-five percent (75%) opaque and shall grow to form a continuous hedge, with access from the Street only through solid gates which shall be closed except when in use. Said screening shall extend interior to the site a minimum of one hundred (100) feet from the Street property line or the entire depth of the open storage area, whichever is less, unless an existing permanent Structure shields the storage area from public view.
 - (2) Where an open storage area is in view from a residentially zoned district within two hundred (200) feet, the method of screening shall consist of solid wooden fences or painted solid masonry walls at least six (6) feet in height, or evergreen shrubs which at the time of installation shall be six (6) feet in height and seventy-five percent (75%) opaque and shall grow to form a continuous hedge. Said screening shall be installed along all boundaries of the storage area including internal boundaries, that are in view from the residential districts.

8. Solid Waste Storage

All new Buildings and Uses, except for Single Family and Two Family Dwellings, shall provide facilities for the central storage of solid waste within the Lot.

a. Shopping Centers or other Commercial Buildings with mixed uses.

Where a Building is divided into units for several businesses, or a group of buildings, each business space/unit shall demonstrate that adequate capacity exists whether within the building or on the lot.

b. Single use Commercial Businesses

Commercial Buildings not part of a Shopping Center or mixed use building, shall demonstrate adequate capacity whether within the building or on the lot. Curb side pick up may be allowed by the County Administrator for those businesses generating not more than 100 pounds of solid waste per week.

c. Residential uses, except for Single Family and Two Family Dwellings.

Multi Family uses shall demonstrate that adequate capacity exists whether within the building or on the lot.

d. Where such facilities are provided outside of a Building, they shall be screened from public Rights-of-Way and adjacent property by an enclosure constructed of materials compatible color and style with the materials on the walls of the Building the facility serves and must be located on a concrete pad. In addition when the location is abutting or within 25 feet of a residentially zoned property or property with residential uses, the screening shall include screening at a minimum in accordance with Screening Standard B of Section 6.06.04.B.4 between the proposed site and the residential lot line.

For the purpose of this section "adequate capacity" is an industry standard solid waste container capable of internally storing solid waste for up to one week with no overflow or unsightly accumulation of waste above the rim of the container. Collection schedules may be established to empty containers more frequently than once per week; however all containers with the exception of fully enclosed solid waste compactors, must be emptied at a minimum of once weekly.

All locations shall provide for adequate maneuverability, vehicle loading and unloading and adequate overhead clearance free of overhead obstruction such as electrical lines or building overhangs.

All locations shall adhere to the requirements of Ordinance 94-49 as amended.

9. Mechanical Equipment

All non-residential and non-Agricultural Uses shall screen all mechanical equipment, including rooftop equipment, such as but not limited to air conditioners, or pumps, from view from public places and neighboring properties. Ground level equipment shall be screened through the use of features such as berms, fences, false facades or dense landscaping. Rooftop equipment shall be screened through the use of a parapet wall or false facade that is an integral part of the Structure.

10. Recreational Vehicle/Boat Storage

Where Recreational Vehicle/Boat Storage constitutes the Principal Use for a Site the storage areas shall be screened from public view and from all streets or Roadways and residentially zoned property. Screening shall be provided with Evergreen plants six (6) feet in height at the time of planting and an overall screening opacity of seventy-fine percent (75%) or greater, or a solid wooden, polyvinyl chloride or similar material fence, or masonry or concrete block wall at least six (6) feet in height. If masonry or block wall is provided, it shall be painted and architecturally finished on the outside.

11. A solid screening fence or wall, a minimum of six (6) feet in height, shall be required to be placed between any property used for a drive-through facility and any abutting property zoned residential. The intent of this solid screening is to screen vehicular headlight glare from adjacent residential property.

Sec. 6.06.05 Review, Permitting, and Compliance Procedures

A. Landscape Plan

- 1. Whenever the provisions in accordance with this Part apply, a Landscaping Plan prepared by a Landscape Architect registered to practice in the State of Florida, or other authorized individuals as set forth in Chapter 481, Part II, F.S. shall be submitted to the County Administrator for review upon application for Site Plan review.
- 2. The Landscaping Plan shall include information as set forth in the Development Review Manual.

B. General Procedure

Except as modified below, a Landscaping Plan or Master Subdivision Landscaping Plan shall be submitted and reviewed in accord with the procedures for issuance of Development Permits contained in Part 9.01.00.

C. Modifications to General Procedure

- 1. A copy of the Landscaping Plan shall be available onsite during installation of the landscaping.
- No Certificate of Occupancy or Certificate of Completion shall be issued until the County Administrator has performed a final inspection and determined compliance with the minimum landscaping requirements according to the approved plan and the Construction Permit, if required.



PART 6.07.00 HEIGHT REGULATION

Sec. 6.07.01 Generally

- A. The maximum height of a Structure shall be measured as the vertical distance from the lowest point of the established grade surrounding the perimeter of the Structure to the highest point of the Structure, except as may be excluded in Section 6.07.02.
- B. For a new Single Family or Two Family Dwelling Unit or Manufactured/Mobile Home constructed or placed on a Lot less than or equal to one (1) acre in size, the maximum height of fill allowed to be placed on the Lot to create the established grade shall not exceed the lesser of:
 - 1. Three (3) feet above the highest existing natural grade on the Lot prior to the placement of any fill, or
 - 2. Three (3) feet above the finished floor elevation of adjoining Lot(s).

Variations to these requirements may be approved by the County Administrator to meet the Flood Damage Control Regulations of this Code or Federal Emergency Management Agency (FEMA) regulations for Areas of Special Flood Hazards. A Zoning Variance to these requirements may be granted by the Board of County Commissioners for other unusual or unique topographic features of a Lot.

Sec. 6.07.02 Excluded Portions of Structures

Except as specifically provided herein, the height limitations of this Code shall not apply to the following:

- (a) any usable or habitable roof area or any roof Structures such as housing elevators, stairways, tanks, ventilating fans, solar energy collectors, or similar equipment required to operate and maintain the Building, provided the following are met:
 - 1) the combination of usable or habitable roof area and such roof Structures shall not cover more than twenty percent (20%) of roof area;
 - 2) walls, parapet walls, guard railings surrounding the area or structures may not extend more than five (5) feet above the roof; and,
 - 3) roof structures may not extend over ten (10) feet in height above the roof.
- (b) Church spires, steeples, belfries, cupolas, domes, monuments, or similar non-habitable architectural features;
- (c) Water towers, skylights, flag poles, vents, Construction or mining cranes or draglines, or similar Structures;
- (d) Firewalls or parapet walls along the perimeter of the roof of all non single-family structures, provided such walls do not exceed five (5) feet above the roof.

Sec. 6.07.03 Aviation Hazards

No Building or other Structure (regardless of exclusions set forth above) shall be located in a manner or built to a height which constitutes a hazard to aviation or creates hazards to persons

or property by reason of unusual exposure to aviation hazards. In any area within the unincorporated portion of St. Johns County, in addition to height limitations established by this code, limitations established by lawful Federal, State, and St. Johns County ordinances, rules, and regulations, shall apply to heights of Buildings, Structures, and natural vegetation. Refer to Section 3.04.00 for additional requirements.

Sec. 6.07.04 Amateur Radio Antenna Support Structures

Section 125.0185, Florida Statutes (1991), and Federal Communications Commission "Amateur Radio Preemption", 101 FCC 2d 952 (1985) require County regulations to reasonably accommodate amateur communication, and to represent the minimum practicable regulation to accomplish the local authority's legitimate purpose. Under these federal and state preemption provisions, Amateur Radio Antenna Support Structures are excluded from regulation under the provisions of this Code.

Sec. 6.07.05 Unusually Tall Structures

Unless specifically stated otherwise elsewhere in this Code concerning height, towers that are principal Structures in themselves, such as high voltage transmission line towers, telephone or electronic relay or transmission towers; grain elevators, silos and other such Agricultural Uses; and similar principal Structures, may only exceed the height limitations established for the district wherein they are proposed for relocation following review by the County Administrator who may only grant the Permit where he finds:

- A. That the proposed Structure would not result in restriction or interference with air traffic or air travel to or from any existing or proposed Airport;
- B. That the proposed Structure is consistent with the existing surrounding Uses, and is compatible with the existing neighborhood Development;
- C. That the proposed Structure is consistent with any adopted or projected Development Plan for the area;
- D. That the proposed Structure is not detrimental to the existing or proposed Use of any neighboring property, and does not unreasonably restrict the free flow of light, sunlight and air to those properties.

PART 6.08.00 SUPPLEMENTAL DESIGN STANDARDS FOR SPECIFIED USES

Sec. 6.08.01 Generally

The following Uses have been determined to require additional design standards to ensure compatibility with adjacent Uses and the surrounding neighborhood. The standards described for each Use below shall supplement and be in addition to the standards and criteria otherwise required within this Code. Compliance with these supplemental standards shall be determined during Development review and shall not require any additional procedural steps or review processes. Unless stated differently below the following Uses shall be allowed only in the appropriate zoning district as provided in Article II of this Code.

Sec. 6.08.02 Adult Care Center

- A. Adult Care Center shall be permitted without regard to subsequent standards set forth in this Section if such Uses are accessory to the following permitted Uses: churches, social service agencies, health care facilities, community centers, or elderly housing Developments. Said adult care center Uses may be on a Lot with the aforementioned permitted Uses, or on an adjoining Lot, may be a part of the principal Structure, or may be housed in a second Structure on such Lots.
- B. The location and extent of the center shall not adversely affect the character of the existing neighborhood. The Adult Care Center not governed by Section 6.08.02.A. shall be located in a Building that is in scale with the Buildings located within two hundred (200) feet of said Building. Said Adult Care Center Buildings shall not deviate by more than thirty percent (30%) from the median scale of neighboring Buildings as determined by site volume ratio and total Building volume.
- C. No overnight lodging shall be permitted for any type of Adult Care Center.
- D. Adult Care Center with a capacity of ten (10) or less individual may be requested in specified zoning districts per Section 2.03.04. Those Adult Care Centers with a capacity of more than ten (10) individuals shall be allowed only in a non-residential district. Those Adult Care Centers with a capacity of more than twenty-five (25) individuals shall access from an Arterial or Major or Minor Collector.
- E. Required patron parking shall be adjacent to the center and clearly designated by raised directional signage and pavement or wheel stop markings. Each Parking Space shall be fronted with wheel stops set two (2) feet from a continuous five (5) foot wide sidewalk leading to the Building entrance, or a raised curb and a continuous seven (7) foot wide sidewalk leading to the Building entrance.
- F. If a circular driveway is provided for pick-up/drop-off of individuals, the following shall be required in addition to Paragraph A above; a paved circular driveway, twelve (12) feet in width with a minimum inside turning radius of twenty (20) feet, and an area a minimum of fifteen (15) feet from the designated discharge point where the individuals are picked up or dropped off, into which cars shall not park or back. If fire regulations require the designation of a fire lane, then the width of the circular driveway shall be at least twenty (20) feet.
- G. Employee and van parking shall be designated by raised directional signage and pavement or wheel stop markings.

Sec. 6.08.03 Agricultural Equipment Storage

- A. This Use shall be allowable in the OR zoning district.
- B. Agricultural equipment storage is an Accessory Use and shall be located only on a Lot with a permitted principal Use.
- C. Equipment storage shall be located a minimum of two hundred (200) feet from the zoning Lot boundaries.
- D. Agricultural equipment shall not include junk or inoperable equipment.
- E. Agricultural equipment storage shall not include equipment sales.

Sec. 6.08.04 Animal Hospital, Veterinary Clinic, General and Small

- A. All activities, with the exception of Animal exercise yards and confinement areas, shall be conducted within an enclosed Building.
- B. Enclosed Buildings: If completely enclosed with four solid walls, Buildings housing animal hospitals or veterinary clinics shall be located no closer than fifty (50) feet from any adjacent residentially zoned property.
- C. Non-enclosed Buildings: Buildings housing animal hospitals or veterinary clinics, which are not fully enclosed, shall be located no closer than one hundred fifty (150) feet from any adjacent residentially zoned district.
- D. Exercise Areas: Exercise areas shall be not less than one hundred (100) feet from any Dwelling Unit on adjacent property and seventy-five (75) feet from any residentially zoned property with the exception of farm Animal grazing areas containing a density of less than three farm Animals per acre. Such grazing areas may be located anywhere on the Lot.
- E. Confinement yards: The confinement yard shall not be less than two hundred (200) feet from any Dwelling Unit on adjacent property and one hundred fifty (150) feet from any residentially zoned property with the above exception for farm Animals. The operator of the animal hospital/veterinary clinic shall be responsible for using good management practices to discourage undesirable odors, insects, and excessive noise.

Sec. 6.08.05 Boarding House

- A. In each boarding house, for the purposes of calculating Density, every two and a half (2.5) residents shall constitute one (1) Dwelling Unit. Therefore, the facility must be located on a Lot large enough to meet the Density requirements of the Comprehensive Plan for the equivalent number of Dwelling Units or the minimum requirements of the zoning district in which it is located, whichever is more restrictive.
- B. All boarding houses containing more than fifteen (15) residents shall have direct access to an Arterial or Major or Minor Collector.
- C. Where boarding houses shall be located within two (2) Lots, or one hundred (100) feet, from the boundary of a Single Family residential zoning district of lesser Density than

permitted in the zoning district in which said boarding house is located, then said boarding house shall be in scale with the Building located within two hundred (200) feet of said boarding house. Said boarding house shall not deviate by more than thirty (30) percent from the median scale of such neighboring Buildings as determined by site volume ratio and total Building volume.

Sec. 6.08.06 Bus Terminal

- A. Such Use shall not adjoin a residential zoning district of less than six (6) Dwelling Units per acre.
- B. Such Uses shall be separated from any residentially zoned property by a minimum thirty (30) foot buffer.

Sec. 6.08.07 Canopies and Gasoline Pump Islands as Accessory Uses

The canopies provided over the pump islands at gas stations, service stations and convenience stores, and the pump islands themselves shall meet the Yard requirements of a principal Structure. However, if the following requirements can be met, the canopy and pump islands may intrude a limited amount into a Front Yard:

- A. The outside edge of the canopy may intrude up to ten (10) feet into the required Front Yard as measured from the rear of the required Front Yard.
- B. Pump islands, their surrounding Structures and the canopy support Structures may encroach up to ten (10) feet into the required Front Yard provided that traffic movements between the pump island and the road Right-of-Way are restricted to one-way.
- C. Neither the canopy nor the pump islands shall block visibility at intersections of Rights-of-Way or drives.
- D. Underground fuel storage tanks over one-thousand (1,000) gallons shall maintain a three-hundred (300) foot setback from: (1) all properties that maintain a residential zoning designation provided in LDC section 2.01.02.B.; and (2) platted residential Lots in Planned Unit Developments. A setback is not required from unplatted residential portions of PUDs or from Open Rural properties.
- E. Existing underground storage tanks (USTs) of more than 1,000 gallons that do not comply with, but pre-date the effective date of, the 300 ft. setback in sub-section 6.08.07.D or USTs that become non-conforming due to subsequent residential rezoning or platting of residential lots are considered legal non-conforming uses and structures pursuant to Part 10.03.00 of this Code and will not be a basis of discontinuing the use of the structure. However, retrofitting, maintenance, replacement, and repairs of the existing legal non-conforming UST shall be allowed by right without any limitation under Part 10.03.00 and without need for a variance so long as (1) the location of the UST remains unchanged and within the same footprint; or, (2) the retrofitting or upgrade is mandated by the state or federal authority so long as it does not increase the size or capacity and so long as it does not affect an additional platted lot.

Sec. 6.08.08 Cemeteries, Human

A. A Minimum Lot Area for the entire cemetery site shall be eighty-five thousand (85,000) square feet.

- B. There shall be adequate space within the site for the parking and maneuvering of funeral corteges.
- C. No interment shall take place within thirty (30) feet of any adjoining Lot line.
- D. All Structures shall be set back a minimum of twenty (25) feet from any boundary line of the cemetery property.
- E. All Structures over twenty-five (25) feet in height must be set back from any boundary line of the cemetery a minimum of twenty-five (25) feet plus two (2) feet for each one (1) foot of height over twenty-five (25) feet to the maximum height permitted by the zoning district in which it is located or fifty (50) feet, whichever is more restrictive.

Sec. 6.08.09 Cemeteries, Pet

- A. A Minimum Lot Area of one (1) acre is provided for the entire cemetery property.
- B. No interment shall take place within thirty (30) feet of any adjoining Lot line.
- C. All Structures shall be set back a minimum of twenty-five (25) feet from any boundary line of the cemetery property.
- D. All Structures over twenty-five (25) feet in height must be set back a minimum of twenty-five (25) feet plus two (2) feet for each one (1) foot of height over twenty-five (25) feet to the maximum height permitted by the zoning district in which it is located or fifty (50) feet whichever is more restrictive.

Sec. 6.08.10 Child Care Center

- A. Child Care Centers with a capacity of ten (10) or less children may be requested in specified zoning districts per Section 2.03.04. Those Child Care Centers with a capacity of more than ten (10) children shall be allowed only in a non-residential district and shall access from an Arterial or Major or Minor Collector.
- B. Required patron parking shall be adjacent to the center and clearly designated by raised directional signage and pavement or wheel stop markings. Each Parking Space shall be fronted with wheel stops set two (2) feet from a continuous five (5) foot wide sidewalk leading to the Building entrance, or a raised curb and a continuous seven (7) foot wide sidewalk leading to the Building entrance.
- C. If a circular driveway is provided for pick-up/drop-off of children, the following shall be required in addition to Paragraph A above; a paved circular driveway, twelve (12) feet in width with a minimum inside turning radius of twenty (20) feet, and an area a minimum of fifteen (15) feet from the designated discharge point where the children are picked up or dropped off, into which cars shall not park or back. If fire regulations require the designation of a fire lane, then the width of the circular driveway shall be at least twenty (20) feet.
- D. Employee and van parking shall be designated by raised directional signage and pavement or wheel stop markings.
- E. A fenced outdoor play area for the children shall be provided. The Use of the play yard shall be limited to between 8:00 a.m. and 6:00 p.m. if the fenced play area is within one

- hundred (100) feet of a residential zoning district unless otherwise specifically approved by the Board of County Commissioners.
- F. The location and extent of the facility shall not adversely affect the character of the existing neighborhood.
- G. The Child Care Center shall be of a design, intensity and scale to serve the surrounding neighborhood and to be compatible with the surrounding land Uses and zoning.

Sec. 6.08.11 Colleges/Community Colleges/Universities

- A. The site shall have a Minimum Lot Area of ten (10) acres.
- B. The Use shall qualify for accreditation by the Southern Associations of Colleges and Schools.

Sec. 6.08.12 Communication Antenna Towers

A. Intent and Purpose

- 1. It is the intent of this Section to promote the health, safety and general welfare of the citizens of St. Johns County by regulating the siting of Antenna Towers to accomplish the following purposes:
 - a. To provide uniform standards for the placement and construction of Antenna Towers within the County;
 - To protect the natural features and aesthetic character of the County by regulating the location and design of Antenna Towers, providing special attention to residential neighborhoods, public parks, scenic corridors, historic districts, historic landmarks and environmentally senvsitive lands;
 - c. To minimize adverse visual and aesthetic impacts of Antenna Towers through innovative design, siting, landscaping standards, including incentives to promote the use of Camouflaged Structures, co-location of new antennas on existing communication towers and the placement of antennas on roofs, walls, existing towers and other suitable existing structures;
 - d. To accommodate the growing demand for wireless communication services, consistent with the Federal Telecommunications Act of 1996 and the Florida Wireless Emergency Communications Act, and facilitating efficient and high-quality wireless communications networks; and
 - e. To avoid or minimize potential damage to adjacent properties from tower failure through engineering and careful siting of tower structures.

B. Applicability

1. All new Antenna Towers in St. Johns County shall be subject to these zoning regulations and all other applicable Building and Construction codes. In the event of any conflict between the zoning district regulations and the regulations contained in this Section, the provisions of this Section shall override and supersede such other regulations unless otherwise specifically set forth herein.

- 2. The provisions of this Section shall not apply to air traffic control towers and Antenna Towers associated with aviation use constructed on property zoned Airport Development District or to Antenna Towers and Antennas built for St. Johns County government use.
- 3. All Antenna Towers lawfully existing on the initial effective date of this Code shall be allowed to continue to be used as they presently exist. Routine maintenance shall be permitted on such existing towers. New Construction, other than routine maintenance and modifications to accommodate Collocation on an existing Antenna Tower shall comply with the requirements of this Section. Replacement of an operational tower which lawfully existed and was lawfully permitted shall be permitted with a new tower of similar Construction or replacement with a monopole or Alternative Tower Structure in substantially the same location as the tower being replaced. Construction of such replacement tower may proceed while allowing continuous service from the existing tower until such replacement tower is constructed, providing such existing tower shall be removed within one hundred twenty (120) days, from issuance of Building Permit for the replacement tower. Such replacement towers shall be the same or less height as the existing tower and shall be designed and constructed with modifications to accommodate the Collocation of an additional user or users. The provisions of this Section, other than Section 6.08.12.S. shall not apply to replacement towers, as provided herein.
- 4. For the purposes of this Section, an Antenna Tower that has received final approval in the form of either a Special Use, Variance or Building Permit, but has not yet been constructed, shall be considered an existing Structure so long as such approval is valid and unexpired.
- 5. No rezoning, Special Use or Variance shall be required to locate an Antenna on an existing Structure, provided however, that the Antenna does not extend more than twenty (20) feet above the existing Structure. Such Structures may include, but are not limited to, Buildings, water towers, existing Antenna Towers, recreational Light Fixtures and other essential public service Structures.
- 6. Structures supporting only Ham/CB/TV Antennas that are under seventy (70) feet in height, or with a setback greater than one hundred percent (100%) of the Structure height shall be exempt from this Section provided those Structures meet applicable Building Codes, manufacturer's specifications and recommendations. Applicants proposing Ham/CB/TV Antennas greater than seventy (70) feet with a setback of less than one hundred percent (100%) shall provide documentation showing compliance with the Structural Maintenance and RF radiation standards of this Section.

C. Location on Lot

An Antenna Tower may be located on a Lot utilized for other principal Uses on a Parcel or portion of a Parcel smaller than the Minimum Lot Area required in the zoning district. This area for the Antenna Tower and related equipment shall be considered as the "Tower Site." The Tower Site, but not the entire Lot, shall be subject to all of the requirements of this Section, except as specifically provided herein.

D. Antenna Towers In or Near Residential Zoning Districts

- 1. Regardless of the zoning district in which the Antenna Tower is located, any tower proposed to be within two hundred, fifty (250) feet of the nearest Lot line of any residential zoning district or Open Rural (OR) district shall be reviewed as a Special Use.
- 2. The distances shall be measured from the center of the base of the Antenna Tower to the Lot line of the applicable residential zoning district or Parcel, as the case may be.
- 3. Notwithstanding anything to the contrary in this Code, except as provided in Section 6.08.12.B. above, no Antenna Tower other than an unguyed monopole tower or Alternative Tower Structure shall be located in any residential zoning district.

E. Maximum Height

The maximum height of Antenna Towers shall be:

- 1. In all residential districts:
 - a. If constructed for a single user, up to ninety (90) feet in height; or
 - b. If constructed for two or more users, up to one hundred fifty (150) feet in height.

If located in a residential district, the Antenna Tower shall not exceed the minimum height requiring lighting as designated by the FAA and shall not be lighted.

- 2. In all other zoning districts:
 - If constructed for a single user, up to one hundred fifty (150) feet in height;
 - b. If constructed for two users, up to two hundred fifty (250) feet in height;
 - c. If constructed for three or more users, up to three hundred (300) feet in height.
- 3. An Antenna Tower shall be considered to be constructed for more than one user if it is constructed so as to provide sufficient excess capacity over the initial single user loading for one or more additional comparable users.
- 4. Measurement of Antenna Tower height shall include, base pad, and other all appurtenances and shall be measured from the finished grade of the Tower Site to the top of the tower or the top of the highest appurtenance whichever is higher.

F. Collapse Zone Distance Requirements

The distance of an Antenna Tower from the closest Residential Dwelling, school, or emergency evacuation shelter, measured radially from the Antenna Tower, shall be equal to or greater than the designed Collapse Zone. The Collapse Zone shall be certified by a registered engineer. If the designed Collapse Zone extends beyond the Tower Site, covenants and restrictions or other legal document acceptable to the County, granted by the fee Owner(s) of all residential and OR property within the radius from an Antenna Tower equal to the designed Collapse Zone shall be recorded which prohibits Residential

Dwellings within such distance of the Tower. No Residential Dwellings, schools, or designated emergency evacuation shelters shall be allowed within the Collapse Zone; however, all other non-residential uses may be allowed within the Collapse Zone subject to zoning restrictions contained in this Code and all other federal, state and County regulations. The fenced Yard of the Tower Site shall be at least large enough to contain the Antenna Tower and all other equipment and/or Buildings required for the Antenna Tower. For a guyed tower, the fenced Yard shall contain the Antenna Tower and guy wires plus an additional ten (10) feet.

G. Illumination

No signals, lights, or illumination shall be permitted on the Antenna Tower, unless required by a federal, state, or local agency, or such lighting or illumination is part of the design of a camouflage scheme, or County approved security lights. If a federal, state or local agency requires lighting, the most unobtrusive method of lighting available shall be requested from the regulating agency.

H. Finished Color

Antenna Towers not requiring FAA painting/marking shall have either a galvanized finish or a dull blue or gray finish unless at the time the application is initially submitted, the applicant provides a written petition to the County requesting use of an alternative color. The petition shall include the proposed alternative color and/or shade and a statement specifically detailing how the alternative color will be more effective in mitigating the visual impact of the proposed Antenna Tower. The County Administrator, or designee, shall approve all petitions seeking use of an alternative color in writing. Requests for changes in color made after initial submission of the application shall be granted in writing by the County Administrator or designee when required by State or Federal law or upon a satisfactory showing that the requested change will be more effective in minimizing the adverse visual and aesthetic impacts on the area surrounding the proposed Antenna Tower.

I. Structural Design

Antenna Towers shall be designed and constructed to ensure that the structural failure or collapse of the tower shall not create an unreasonable safety hazard, according to all applicable County Building Codes. A Professional Engineer shall seal all plans for the Construction of towers. Further, any Improvements and/or additions (i.e. Antenna, satellite dishes, etc.) beyond the original design to existing Antenna Towers less than seven hundred (700) feet in height, and any Structural Modification to towers higher than seven hundred (700) feet shall require submission of Site Plans and structural verification sealed and verified by a Professional Engineer which demonstrates compliance with the applicable Building Codes. Said plans shall be submitted to and reviewed and approved by the Building Department at the time Building Permits are requested.

J. Fencing

A minimum eight foot finished masonry wall or decay-resistent fence, other than chain link, with not less than seventy-five percent (75%) opacity shall be required around all Antenna Towers located in a residential or commercial zoning district; provided however, in all other zoning districts, the fence may be any type of security fence. Access to the tower shall be through a locked gate.

K. Required Signs

A Sign, measuring no more than thirty (30) inches wide by twenty-four (24) inches high, identifying the primary party responsible for the operation and maintenance of the facility, the address and telephone number of that party, and the FCC/FAA registration number of the Structure shall be permanently attached to the fence or wall surrounding the Antenna Tower. The E-911 address shall also be displayed in a conspicuous place.

L. No Advertising

Neither the Antennas, Antenna Tower, nor the Tower Site shall be used for advertising purposes and shall not contain any Signs for the purposes of advertising.

M. Landscaping

The visual impacts of residentially or commercially located Antenna Towers shall be mitigated through landscaping or other screening materials at the base of the tower and ancillary Structures.

- 1. The following landscaping and buffering of Antenna Tower shall be required around the perimeter of the tower and Accessory Structures:
 - a. A row of shade Trees a minimum of ten (10) feet tall and a maximum of ten (10) feet apart shall be planted around the perimeter of the fence;
 - b. A continuous hedge at least thirty-six (36) inches high at the time of planting, capable of growing to at least forty-eight (48) inches in height within eighteen (18) months, shall be planted in front of the Tree line referenced above:
 - c. All required landscaping shall be of the evergreen variety;
 - d. All required landscaping shall be native drought tolerant species and/or irrigated and properly maintained to ensure good health and vitality.
- 2. Required landscaping shall be installed outside the fence or wall.
- 3. Existing vegetation shall be preserved to the maximum extent practicable and may be credited as appropriate toward landscaping requirements.
- 4. These standards may be waived by the Board of County Commissioners for those sides of the proposed tower that are located adjacent to undevelopable lands and lands not in public view.
- 5. Vegetation shall be maintained in a healthy state and vegetation that perishes or fails to thrive shall be replaced.

N. Abandonment

In the event the use of any Antenna Tower has been discontinued for a period of one hundred eighty (180) consecutive days, or if required obstruction lights are out of service for sixty (60) consecutive days, or if the electrical power is turned off for sixty (60) consecutive days then, the tower shall be deemed to be abandoned. Determination of the abandonment shall be made by St Johns County based on documentation and/or affidavits from the Antenna Tower Owner/operator

regarding the issue of tower usage. Upon St Johns County's determination of such abandonment, the Owner/operator of the tower shall have an additional one hundred eighty-five (185) days within which to:

- a. Reactivate use of the tower or transfer the tower to another Owner/operator who makes actual use of the tower, or
- b. Dismantle and remove the tower.
- 2. At the earlier of one hundred eighty-five (185) days from the date of abandonment without reactivation or upon completion of dismantling and removal, any Special Use Permit, Special Use and/or Variance approval for the tower shall automatically expire.
- O. Antenna Tower Applications for Special Uses and Variances

Part 9.03.00 deals with the procedures for obtaining applications and forms provided by the County Administrator. The County Administrator will provided the information required for Special Use and Variance submittals.

P. Special Uses

The Antenna Tower shall be compatible with the existing contiguous Uses or with the general character and aesthetics of the neighborhood or the area, considering the design and height of the Antenna Tower, the mitigating effect of any existing or proposed Buildings or Structures in the area, the proximity of the Antenna Tower to existing or proposed Buildings or Structures, and similar factors. The Antenna Tower shall not have any significant detrimental impact on adjacent property values.

Q. Special Antenna Tower Zones

Areas in the County with no suitable Existing Structures have been designated Special Tower Zones. These Zones are designated on the County GIS maps. After the first applications for Antenna Towers in these areas, the zone shall be considered no longer existent. The Applicant shall certify that it plans to complete Construction of the Antenna Tower within one hundred eighty (180) days of approval by the Board of County Commissioners, that the Antenna Tower is designed and located to permit Collocation and that the height of the Antenna Tower is the minimum required.

R. Collocation

- 1. Prior to applying for approval or permitting of a new Antenna Tower under this Section, the Applicant shall use reasonable efforts to collocate on Reasonable Collocation Terms, or place Antennas proposed to be located on a new Antenna Tower on other currently permitted facilities or Structures. Prior to granting of an application for a new Antenna Tower, the applicant shall demonstrate that there are no other suitable existing antenna Towers or structures on which the applicant/provider can reasonable place its antennas, by providing evidence of any of the following:
 - a. No existing Antenna Towers or tall Structures (those that exceed the zoning district height limits) are located within the Search Area.

- b. Existing Antenna Towers or tall Structures are not of sufficient height to meet engineering requirements of the Provider proposed to be located on the tower.
- c. Existing Antenna Towers or tall Structures do not have sufficient structural strength to support Provider's proposed Antenna and related equipment.
- d. The Provider's proposed Antenna would cause electromagnetic interference with the Antenna on the existing Antenna Towers or tall Structures, or the Antenna on the existing Antenna Towers or tall Structures would cause interference with the Provider's proposed Antenna.
- e. The fees, costs or contractual provisions required by the owner in order to use an existing Antenna Tower or tall Structure or to adapt an existing Antenna Tower or tall Structure for use are unreasonable. Costs exceeding new Antenna Tower development are presumed to be unreasonable.
- f. The applicant demonstrates that there are other limiting factors that render existing Antenna Towers and tall Structures unsuitable.

In the event a dispute arises as to whether an Applicant has met this requirement, the County may require a third party technical study at the expense of any or all of the parties to the proposed or feasible Collocation.

- 2. The Owner of an Antenna Tower shall, in return for reasonable compensation, allow location on the Antenna Tower of Antennas by any party or entity that applies for such provided that such new Antenna does not substantially degrade the existing communication Uses of the facility or cause significant and utilitarian impairment of any other electro-magnetic device.
- 3. Failure to comply with the Collocation requirements of this Section may result in the denial of a Variance, Special Use and/or Permit request, revocation of an existing Permit for the specific Antenna Tower, or other code enforcement action as permitted by this Code and/or State statute.
- 4. The Board of County Commissioners may waive the Collocation requirements of this Section upon finding that enforcing such requirement in a given instance does not substantially further established public purposes or is in violation of State or Federal Law.
 - a. All applicants shall demonstrate reasonable efforts in developing a Collocation alternative for their proposal.
 - b. Failure to comply with the Collocation requirements of the Section may result in the denial of a Permit request or revocation of an existing Permit for the specific tower.

S. Antenna Tower Removal

Notwithstanding any other provision of this Section, each approval by St. Johns County of a Development Order or Permit as defined in Chapter 163, F.S. which would have the effect of allowing or approving the location or Construction of an Antenna Tower, shall be conditioned upon receipt by the County of the following:

- 1. Either a surety bond, third party controlled escrow account, insurance policy (which may be a blanket policy) or standby letter of credit, in each case reasonably acceptable to the County Administrator as to form and financial condition of the issuer, securing the obligations of the Applicant to dismantle the Antenna Tower as required by Section 6.08.12.N. The bond, insurance policy or letter of credit shall be payable to the Board of County Commissioners of St. Johns County and shall provide to the County funds equal to the lesser of twenty-five thousand dollars (\$25,000) or one hundred fifty percent (150%) of the estimated cost of dismantling the Antenna Tower (net of salvage value), as evidenced by a certificate of a Florida Professional Engineer or other evidence reasonably satisfactory to the County Administrator. Each such bond, insurance policy, or letter of credit shall be maintained in force for a minimum of fifteen (15) years and thereafter for additional periods designated by the County Administrator if the Antenna Tower remains in place at the end of the original fifteen year term. Such financial security shall be payable to the County if the Applicant is in default of its obligation under Section 6.08.12.N. to dismantle the Antenna Tower and all proceeds shall be used to pay the cost of such dismantling and removal.
- A valid Easement, in favor of St. Johns County, to adequately access the Antenna Tower site for removal of the subject tower not complying with the time periods established within Section 6.08.12.N. Written permission from all record Owners, beneficial Owners and leaseholders of the tower in a form acceptable to the County, for County staff, Agents or contractors to enter upon the subject site and to remove the subject Antenna Tower located there if it is found to be in violation of Section 6.08.12.N.
- 3. Written permission from all record Owners, beneficial Owners and leaseholders of the tower in a form acceptable to the County, for County staff, Agents or with contractors to enter upon the subject site and to remove the subject Antenna Tower located there if it is found to be in violation of Section 6.08.12.N.

T. Antenna Tower Structural Analysis and Maintenance

1. Structure Analysis

A Structure Analysis shall be performed when the Structure is first designed. Further, a reanalysis of the Structure shall be performed when, additions or changes to the tower loading beyond the original design are proposed, or the Structure or foundation has been damaged, as required by the county's building codes.

2. Non-structural Maintenance

Antenna Towers, foundations and attachments shall be maintained in such a way so that they present the most visually unobtrusive appearance practical. Lighting and markings shall be maintained to retain compliance with federal, state and local regulation. Electrical power and grounding systems shall be maintained to retain compliance with state and local Building regulation. Landscaping, drainage, fencing, security, and signage shall be maintained to retain compliance with local regulation.

U. Temporary Antenna Support Facilities

A Temporary Antenna Support Facility may be used by a Provider in any zoning district for purpose of providing temporary wireless service for special short-term events such as political events, sporting events, or entertainment events; to allow for modification, replacement and/or repairs to a permanent Antenna Tower; or as necessary to aid in post-disaster relief efforts. A Temporary Use Permit shall be required prior to placement of a Temporary Antenna Support Facility as provided in Section 2.02.05.

V. Antenna Towers Located on Scenic Highways

No Antenna Tower shall be built or erected within six hundred (600) feet of the center line of any designated Scenic Highway or Scenic Roadway without the final approval of the Board of County Commissioners, after consideration and recommendation by the Planning and Zoning Agency. The use of an Alternative Tower Structure shall be considered in the approval of an Antenna Tower within six hundred (600) feet of a designated Scenic Highway or Scenic Roadway.

The Board of County Commissioners shall not issue an approval for the location of an Antenna Tower within six hundred (600) feet of any designated Scenic Highway or Scenic Roadway as defined in Article XII of this Code unless the applicant establishes that disapproval of such tower would prohibit communications service to a particular area.

When the location of an Antenna Tower is proposed within six hundred (600) feet of any designated Scenic Highway or Scenic Roadway as defined in Article XII of this Code, the Board of County Commissioners shall specifically consider the visual impact and aesthetics of locating the Antenna Tower within six hundred (600) feet of the designated Scenic Highway or Scenic Roadway, with priority on minimizing the visual impact of the proposed Antenna Tower and preserving the aesthetic characteristics of the designated Scenic Highway or Scenic Roadway. In addition to other applicable grounds for denial of the Antenna Tower, the Board of County Commissioners may deny approval for the location of a proposed Antenna Tower if, after consideration, it finds that one of the following circumstances exists: (1) there is a suitable existing Tower or Structure reasonably available for use by the carrier within the carrier's same Search Ring; or (2) there is an alternative site/location within the same Search Ring available to the carrier at commercially reasonable terms that is located outside of the 600-foot distance.

W. Additional Requirements for Tower Applications

1. Recognizing the public interest associated with the placement, location, construction, and/or installation of Antenna Towers in or near residential neighborhoods, applicants for Antenna Towers proposed to be located within two hundred and fifty (250) feet of the nearest Lot line of any Residential Use, Residential zoning district, or residential portion of a Planned Development shall conduct at least one neighborhood workshop. The applicant shall conduct the neighborhood workshop within fourteen (14) days of submitting the initial Antenna Tower application. Written notice of the neighborhood workshop, evidenced by certificate of mailing, shall be provided to all property owners within 500 feet of the Tower site and to the St. Johns County planning staff at least ten (10) days before the workshop is conducted. If required, conducting a neighborhood workshop will be deemed a pre-requisite for considering an Antenna Tower application properly complete.

- 2. The applicant shall submit photo simulations of the view of the Antenna Tower from surrounding residentially zoned areas, publically accessible parks, waterways, environmentally sensitive areas and public roadways from a minimum of eight (8) views (representing photo simulations from at least a North, Northeast, Northwest, South, Southeast, Southwest, East, and West, vantage point) clearly identified on the site plan or aerial map of the surrounding area. The County Administrator or designee may require the submission of additional photo simulation views to further demonstrate the potential visual impact of the proposed tower structure. The photo simulations shall incorporate before and after scenarios; a scaled color image of the proposed type of the tower at the proposed height; aerial images with the location of the views noted; and a description of the technical approach used to create the photo simulations.
- 3. If the County Administrator has a reasonable belief that the submitted photo simulations do not accurately depict the proposed tower, the County Administrator or designee may require the applicant to conduct a Visual Impact Demonstration consisting of a two-hour balloon test, which shall demonstrate the maximum height of the proposed tower. During the test, the County Administrator or designee shall be provided access to the parcel (on which the propose tower is to be located) for the purpose of observing and photographing the balloon test from several locations surrounding the tower site. The County Administrator or designee will evaluate the photo simulations in light of the balloon test. If the photo simulations are not clearly representative of the proposed tower, the County Administrator or designee shall produce, or have produced by an independent consultant, additional photo simulations, at the applicant's sole expense, unless waived or reduced by the Board of County Commissioners.
- 4. The applicant shall verify that the proposed height of the tower or antenna(s) is necessary to provide the carrier's designed service.

X. Criteria for Review of Antenna Towers

- 1. Applications for Antenna Towers reviewed as a Use allowable by right shall be reviewed for compliance with the provisions of this Section, Part 3.04.00 and any other applicable provisions of the Land Development Code. Applications for Antenna Towers reviewed as a Use allowable by right under the requirements of a DRI or Planned Development shall also be reviewed for compliance with the applicable standards of that DRI or Planned Development.
- 2. Applications for Antenna Towers reviewed as a Special Use shall be reviewed for:
 - a. Compliance with the provision of Section 2.03.01-A;
 - b. Compliance with the provisions of this Section;
 - c. Compliance with the provisions of Section 2.03.26;
 - d. Compliance with the provisions of Section 3.04.00;
 - e. Compliance with all other applicable provisions of the Land Development Code; and

- 3. All applications for Antenna Towers shall be reviewed for compliance with applicable Federal, State, and Local laws, statutes, ordinances, policies, and/or rules.
- 4. The Applicant shall present competent, substantial evidence in the form of testimony, documents, plans, exhibits and the like in order to support an Antenna Tower application. The burden of demonstrating compliance with these criteria shall rest with the Applicant. Failure to adequately demonstrate compliance with all applicable criteria shall be grounds for denial of the Antenna Tower application.
- 5. Misrepresentation of a material fact in an application for an Antenna Tower may be grounds for denial of such application and grounds for revocation of any such application having been granted.

Y. Completeness Review

- 1. Within the time frames specified in Sections, 9.01.04, 9.03.02 and other applicable sections of the Land Development Code, but in no case greater than 20 business days of receipt of an application for an Antenna Tower, the County Administrator or designee shall determine if the application is Complete. If the application is determined not Complete, the County Administrator or designee shall notify the applicant in writing with a letter of incompletion.
- 2. The letter of incompletion shall include a list of those items that are deficient, incomplete or missing. Upon receipt of the letter of incompletion, the applicant may resubmit a completed application or withdraw the application in its entirety.
- 3. If the applicant resubmits materials to make the application Complete, the County Administrator or designee shall review the resubmitted materials and determine if the application is now Complete. If the application is still not Complete, the County Administrator or designee shall send the applicant another letter of incompletion indicating the remaining deficiencies, within normal review timeframes, but in no case longer than 20 business days after the materials are resubmitted.
- 4. After issuance of the letter of incompletion, if the applicant does not complete the application and submit all required items within sixty (60) days of mailing of the letter of incompletion, nor withdraws the application by the date specified, the County shall notify the applicant that the application is closed and any fees paid are nonrefundable.
- 5. If the County Administrator or designee does not notify the applicant in writing that the application is not Complete within 20 business days after the application is initially submitted or additional information is resubmitted, the application is deemed, for administrative purposes only, to be properly complete.
- 6. When the application is complete and all required items have been submitted, the County Administrator or designee shall send the applicant a letter of completion and begin processing the application.

Z. Timeframes for Application Review; Automatic Approval

1. The County Administrator or designee, the Planning and Zoning Agency or the Board of County Commissioners shall grant or deny each properly completed application for an Antenna Tower based upon the application's compliance with all

- applicable provisions of the County Land Development Code, and in accordance with Section 365.172(12)(d)(2) of the Florida Statutes, but in no case later than 90 business days after the date the application is determined to be Complete.
- 2. In accordance with Section 365.172(12)(d)(3) of the Florida Statutes, if the County Administrator or designee, the Planning and Zoning Agency or the Board of County Commissioners fails to grant or deny a properly completed application for an Antenna Tower within the timeframes set forth in subsection 6.08.12Z(1) of the Land Development Code, the application shall be deemed automatically approved. The timeframes specified in subparagraph 6.08.12Z(1) may be extended only to the extent that the application has not been granted or denied because the application requires action by the Board of County Commissioners and such action has not taken place within the timeframes specified in subsection 6.08.12Z(1). Under such circumstances, the Board of County Commissioners shall act to either grant or deny the application at its next regularly scheduled meeting or, otherwise, the application is deemed to be automatically approved.

Sec. 6.08.13 Convenience Store

- A. The Use shall have direct access to an Arterial or Major or Minor Collector, except where it is part of a non-residential Development where access is provided by a parallel access road or reverse frontage road where non-residential Uses will be on both sides of the Street.
- B. Where the Use abuts residentially zoned property, a minimum twenty (20) foot buffer shall be provided. Said buffer shall include a masonry wall, six (6) feet in height and architecturally finished on both sides, and a row of evergreen Trees, excluding exempted Trees, which are not less than six (6) feet high at the time of planting and are spaced not more than twenty (20) feet apart. No more than ten (10) feet of the width of said twenty (20) foot buffer shall be utilized as a retention area.
- C. All Convenience Stores abutting residentially zoned property shall use the same exterior architectural materials (excluding windows) on all sides of the Building.
- D. All outdoor lighting shall be directional and shall not shine directly onto adjacent properties.
- E. Location of Canopies and Gasoline Pump Islands.

The canopies provided over the pump islands at Convenience Stores which dispense gasoline shall meet the Yard requirements of a principal Structure. However, if the following requirements can be met, the canopy may intrude a limited amount into a Front Yard.

- 1. The outside edge of the canopy may intrude up to ten (10) feet into the required Front Yard as measured from the rear of the required Front Yard.
- 2. Pump islands, their surrounding Structures and the canopy support Structures may encroach up to ten (10) feet into the required Front Yard provided that traffic movements between the pump island and the road Right-of-Way are restricted to one-way.
- 3. Neither the canopy nor the pump islands shall block visibility at intersections of Rights-of-Way or drives.

- F. The number of Vehicle Fueling Positions associated with a Convenience Store shall be limited to eight (8). Facilities with more than eight (8) Vehicle Fueling Positions shall be classified as a Gas Station and shall meet the requirements of Section 6.08.19.
- G. The sale of alcohol beverages shall be allowed only as a Special Use as provided in Section 2.03.02.

Sec. 6.08.14 Display/Meeting Tents

- A. All parking shall be on-site.
- B. All trash and debris shall be removed when the display/meeting tent is removed.
- C. Any electrical Permits for the display/meeting tent shall be obtained by a licensed electrical contractor.
- D. A letter of approval from the Fire Marshall shall be required for all applications and a letter of approval from the Health Department shall be required if portable toilets are to be used.
- E. The display/meeting tent shall intrude no more than fifty (50) percent into any required Yard, and shall not reduce the number of Parking Spaces by more than twenty percent.
- F. Written consent from the Owner, or authorized Agent, of the property shall be obtained.
- G. When a display/meeting tent is used in conjunction with a Seasonal Sales Lot, only a Seasonal Sales Lot Permit shall be required (a separate display/meeting tent shall not be required).

Sec. 6.08.15 Drive-In Theaters

- A. No part of any theater screen, projection booth, or other Building shall be located closer than five-hundred (500) feet from any residential district nor closer than fifty (50) feet from any property line.
- B. The image on the theater screen shall not be visible from any Arterial or Major or Minor Collector.
- C. Queuing space within the Lot shall be provided for patrons awaiting admission in an amount equal to thirty percent (30%) of the vehicular capacity of the theater.
- D. The following Accessory Uses may be permitted as incidental to, and limited to patrons of the principal Use:
 - 1. Children's playground; and/or
 - 2. Refreshment stands or booths.
- E. The viewing area (Parking Area) shall be screened in such a manner that it cannot be observed from outside the property.
- F. All entrances and exits shall be separated, and internal circulation shall be laid out to provide one-way traffic flow.
- G. The minimum site area shall be five (5) acres.

Sec. 6.08.16 Drive-Through Restaurants

Eating establishments providing drive-through service wherein a patron is served through a window or other device while remaining in a motor Vehicle shall meet the following criteria:

- A. No order box used in the ordering of food or beverages from a drive-through window shall be located within two hundred (200) feet of any property zoned residential.
- B. Adequate automobile stacking space will be provided from the order box to ensure that any public Right-of-Way or common Vehicular Use Area will not be blocked by or utilized for vehicular stacking.

Sec. 6.08.17 Family Farm

- A. A Family Farm Use as described in this Section shall be allowed only in the Rural/Silviculture (R/S) and Agricultural-Intensive (A-I) Future Land Use Map designations of the Comprehensive Plan and shall only be used for family members.
- B. A Family Homestead shall be used only for a member of the Owner's Immediate Family. For the purposes of this provision, Immediate Family shall mean the Owner's parents, step-parents, adopted parents, spouse, siblings, children, step-children, adopted children, and grandchildren; and the parents, step-parents, adopted parents, siblings, children, step-children, adopted children, and grandchildren of the Owner's spouse.
- C. Dwelling Units on site shall be the permanent residences of those persons in residence on the Family Farm.

Sec. 6.08.18 Flea Markets

This Use shall not be permitted abutting a residential zoning district.

Sec. 6.08.19 Gas Station

- A. The Use shall access from an Arterial or Major or Minor Collector, except where it is part of a non-residential Development where access is provided by a parallel access road or reverse frontage road where non-residential Uses will be on both sides of the Street.
- B. Where the Use abuts residentially zoned property, a minimum twenty (20) foot buffer shall be provided. Said buffer shall include a masonry wall, six (6) feet in height and architecturally finished on both sides, and a row of evergreen Trees, excluding exempted Trees, which are not less than six (6) feet high at the time of planting and are spaced not more than twenty (20) feet apart. No more than ten (10) feet of the width of said twenty (20) foot buffer shall be utilized as a retention area.
- C. All Gas Stations abutting residentially zoned property shall use the same exterior architectural materials (excluding windows) on all sides of the Building.
- D. All outdoor lighting shall be directional and shall not shine directly onto adjacent properties.
- E. The canopies provided over the pump islands at Gas Stations and Service Stations shall meet the Yard requirements of a principal Structure. However, if the following requirements can be met, the canopy may intrude a limited amount into a Front Yard:

- 1. The outside edge of the canopy may intrude up to ten feet into the required Front Yard as measured from the rear of the required Front Yard.
- 2. Neither the canopy nor the pump islands shall block visibility at intersections of Rights-of-Way or drives.
- 3. All repair services shall be performed in no more than three (3) enclosed service bays or stalls.
- 4. No more than three (3) Vehicle Parking Spaces per service bay plus one (1) space per employee shall be permitted.
- F. All storage of Vehicles awaiting needed parts shall be within the Building or completely screened from off-site view in a Yard.
- G. All damaged or nonoperable parts shall be stored indoors until removed from the premises.
- H. A Gas Station shall store all Vehicle parts within a completely enclosed Building.
- I. The sale of alcohol beverages shall be allowed only as a Special Use as provided in Section 2.03.02.

Sec. 6.08.20 Heliport

- A. Landing and take-off areas shall be located a minimum of one hundred fifty (150) feet from any zoning Lot boundary and a minimum of five hundred (500) feet from any Dwelling Unit or residentially zoned property.
- B. All storage and repair shall be conducted in enclosed Buildings.
- C. Hangars and repair facilities shall be set back at least one hundred fifty (150) feet from any zoning Lot boundary and all other Buildings shall be set back at least fifty (50) feet from any zoning Lot boundary.
- D. All Heliport facilities shall comply with all Federal and State regulatory and design criteria.

Sec. 6.08.21 Helistop

- A. Landing and take-off areas shall be located a minimum of five hundred (500) feet from any Dwelling Unit or residentially zoned property.
- B. All Helistop facilities shall comply with all Federal and State regulatory and design criteria.

Sec. 6.08.22 Kennel

- A. The disposal of all feces and other solid waste generated by the Kennel operation shall be reviewed and approved by the Health Department.
- B. All runs and Kennel areas shall be fenced with chain link, solid wood fencing or a masonry wall.

- C. All outdoor runs shall be a minimum of one hundred fifty (150) feet from any residential zoning district and all exercise areas shall be fifty (50) feet from any residential zoning district.
- D. The minimum size of property for use as a Kennel within the Open Rural (OR) zoning designation shall be five (5) acres.

Sec. 6.08.23 Manufactured/Mobile Home Parks

- A. Each Manufactured/Mobile Home Park shall be located on a well-drained site and facilities shall be provided for the disposal of sanitary wastes as required.
- B. Each Manufactured/Mobile Home space shall be provided with a paved Patio with a minimum of one hundred twenty (120) square feet and one Off-Street Parking Space.
- C. Each Manufactured/Mobile Home Park shall be provided with a park and recreational area having a minimum area of one hundred fifty (150) square feet per Manufactured/Mobile Home space. Such areas shall be consolidated into usable areas with a minimum dimension of not less than thirty (30) feet.
- D. Each Manufactured/Mobile Home Park shall be provided with a management office and such service Buildings as are necessary to provide facilities for mail distribution, storage space for supplies, maintenance materials and equipment.

Sec. 6.08.24 Manufacturing, Agricultural

All activity shall be agriculturally related. Where fifty percent (50%) or more of the agricultural product or service is used or produced on the site of a commercially active farm where the product or service is associated with that particular farm or immediately adjacent farms, the Use shall be permitted to have open storage equal to the size of the Structure(s) used in the manufacturing, processing or assembly operation. For those operations which are not on the site of a commercially productive farm where the product or service originates, the use of open storage shall be prohibited and all activity shall be required to be in a completely enclosed Structure.

Sec. 6.08.25 Nursing, Convalescent and Extended Care Facilities

- A. Minimum Lot Area shall be one (1) acre with a minimum frontage on a Public Roadway of one hundred fifty (150) feet.
- B. Front, rear and side setbacks shall be a minimum of fifty (50) feet.
- C. Each Nursing, Convalescent, or Extended Care Facility shall not exceed a Floor Area Ratio of 0.25.

Sec. 6.08.26 Outdoor Regional Cultural and Entertainment Facilities

- A. The Use shall be located so as to discourage traffic through residential areas.
- B. The Site Plan shall be so designed to facilitate the easy access of emergency Vehicles including both fire and rescue Vehicles.
- C. The location and size of setback for places of assembly shall meet the following criteria:
 - 1. The actual Structure or seating areas for Places of Assembly shall be set back from residential areas as follows, based on the capacity of the place of assembly:

less than 200 people	100 feet
200 - 500 people	200 feet
501 - 2,000 people	300 feet
2,001 - 5,000 people	400 feet
more than 5,000 people	500 feet

- 2. No such Use shall access from a residential Local Road.
- 3. All places of assembly located within one thousand (1,000) feet of a residential district accommodating more than two thousand (2,000) people shall submit a noise study prepared by an acoustical Engineer demonstrating that the design of the place of assembly either directs the noise away from the residential area or has taken steps to minimize the noise level at the property boundary.

Sec. 6.08.27 Power Generation Facilities

- A. Front, Rear, and Side Yards shall be a minimum of fifty (50) feet. When adjacent to residentially zoned property, Yards shall be a minimum of one thousand (1,000) feet.
- B. Proof of the ability to meet all applicable local, state, and federal environmental standards shall be provided.

Sec. 6.08.28 Reserved

Sec. 6.08.29 Recreation Services Neighborhood Level

- A. Where membership is not limited to residents of adjacent residential areas, the site shall have direct access to an Arterial or Collector Roadway.
- B. All courts, pools and playing fields shall meet the principal Structure Yard requirements of the district in which they are located.
- C. All outdoor lighting shall be directional and shall not directly shine onto adjacent properties.

Sec. 6.08.30 Recyclable Household Goods Collection Facilities

- A. The truck trailer shall not be permanently anchored, but shall be removable to transport the recyclable goods to the recycling center.
- B. The truck trailer shall be located behind the Yard requirements for a principal Structure in the district.

- C. The truck trailer shall meet the required Front Yard requirements.
- D. The truck trailer shall not interfere with traffic circulation, both on and off-site, shall not be located in any Right-of-Way or Easement for access, and shall not occupy any Parking Spaces required to serve any surrounding Development.
- E. The signage, including signage on the truck trailer, shall be limited to signage allowed for a commercial Structure of the same size by the Sign provisions of this Code (See Article VII).
- F. The truck trailer shall be screened from adjacent residential or agricultural properties and public Rights-of-Way as is required for commercial Structures in these Regulations and the landscape and land alteration provisions of this Code. Additionally, the base of the truck trailer shall be screened on all sides except points of entry into the trailer by a three (3) foot fence, hedge or wall with a minimum of seventy-five percent (75%) opacity.

Sec. 6.08.31 Sanitarium/Mental Institution

- A. The Minimum Lot Area shall be five (5) acres with a minimum frontage on a Public Roadway of two hundred (200) feet.
- B. The Structures shall be located a minimum of one thousand, two hundred (1,200) feet from any residential Development or zoning district developed to or permitting a Density of two (2) units per acre or greater; five hundred (500) feet from any existing Dwelling Unit developed at a Density of less than two (2) units per acre and a minimum of two hundred (200) feet from any zoning Lot boundary.
- C. At the time of Development review, the operator of a mental institution shall provide information on, and if approved, shall utilize adequate measures to prevent the unauthorized exit of the patients.

Sec. 6.08.32 Service Stations- See Sec. 6.08.19, Gas Stations

Sec. 6.08.33 Slaughterhouse

- A. All slaughtering, butchering and related operations shall be conducted within enclosed Buildings.
- B. All offal shall be stored in water tight and odor tight containers.
- C. The operation shall meet all Federal and State of Florida requirements and qualify for all Federal, State and local health Permits.
- D. All Animal holding areas shall be located a minimum of one thousand, three hundred twenty (1,320) feet from any residential Development or zoning district developed to or permitting a Density of two (2) units per acre or greater; a minimum of five hundred (500) feet from any Dwelling Unit existing on adjacent property developed at less than two (2) units per acre at the time of the Development or expansion of the Use; and a minimum of two hundred (200) feet from any property line.

Sec. 6.08.34 Solid Waste Facilities

- A. Solid Waste Facilities shall have a minimum Front, Rear and Side Yard of fifty (50) feet with the following exceptions:
 - 1. Composting facilities adjacent to residentially zoned property shall have minimum Yards of five hundred (500) feet for non-office type Buildings and Uses.
 - 2. Material recovery facilities adjacent to residentially zoned property shall have minimum Yards of five hundred (500) feet for non-office type Buildings and Uses.
 - 3. A transfer facility, when adjacent to residentially zoned property, shall have Yards of a minimum of two hundred (200) feet for non-office type Buildings and Uses.
 - 4. A waste to energy facility, when adjacent to residentially zoned property, shall have Yards of a minimum of seven hundred fifty (750) feet for non-office type Buildings and Uses.
- B. Proof the ability to meet all applicable local, state and federal environmental standards shall be provided.
- C. The facility shall have direct access to an Arterial or Major or Minor Collector.
- D. The site shall be fenced by a six foot high opaque fence.

Sec. 6.08.35 Stables, Commercial

- A. The Minimum Lot Area for commercial Stables shall be one acre. This Minimum Lot Area shall be increased by forty thousand (40,000) square feet for each equine in addition to a single equine.
- B. The following minimum setbacks shall also be provided:
 - 1. On Parcels of land less than two hundred thousand (200,000) square feet, all feed and bedding shall be stored indoors.
 - 2. On Parcels of land two hundred thousand (200,000) square feet or more, piles of feed or bedding shall be located seventy-five (75) feet from any Street or common Lot line of an adjacent non-residential Use and one hundred (100) feet from any common Lot line of an adjacent residential or vacant Parcel, in order to minimize odor and nuisance problems.
 - 3. Pasture may extend to the Lot line.
- C. Manure piles shall be stored, removed, and/or applied in accordance with County health regulations.
- D. All points on the perimeter of any Stable Building or coral shall be at least thirty (30) feet from the nearest boundary line of the Parcel on which it is located.
- E. Front Yards shall be a minimum of fifty (50) feet.
- F. Parking (stabilized) shall be provided at a ratio of one (1) Parking Space for every five (5) stalls.

- G. The operator or Owner of the stable shall be responsible for using good management practices to discourage undesirable odors and insects.
- H. Incidental sales of supplies and equipment to patrons of the facility which are directly related to the stable operation shall be permitted. No signage or other exterior identification of the retail sales shall be permitted.

Sec. 6.08.36 Swimming and Tennis Club

- A. Where membership is not limited to residents of adjacent residential areas, the site shall have direct access to a road.
- B. A Minimum Lot Area of twenty thousand (20,000) square feet shall be provided.
- C. All pools, pool decks, or courts shall meet the principal Structure Yard requirements of the district in which they are located.
- D. All outdoor lighting shall be directional and shall not shine directly onto adjacent properties.

Sec. 6.08.37 Ultralight Flight Park

- A. Approval of said Ultralight Flight Park shall not limit or prohibit operation of existing or approved Airports, aircraft landing fields or Ultralight Flight Parks.
- B. All ultralight Vehicles and operators operating from the flight park should be registered with and/or licensed by the United States Ultralight Foundation.
- C. Ultralight Vehicles may not be operated from locations other than flight parks or Airports specifically designated for that purpose.
- D. Runways of all classes shall be a minimum of one hundred fifty (150) feet from the boundary of the flight park property.
- E. Hangars and repair Buildings shall be at least one hundred fifty (150) feet away from all property boundaries and all other Structures shall be at least fifty (50) feet away from property boundaries.
- F. All repairs shall be conducted within an enclosed Building.
- G. Parking shall be provided at the rate of at least one (1) Parking Space for every two (2) ultralight Vehicles permitted to operate from the flight park.
- H. The hours of operation at the flight park shall be from official sunrise to official sunset.

Sec. 6.08.38 Vehicle Auction

Wholesale operations shall be a minimum of two (2) acres.

Sec. 6.08.39 Yard Waste Air Curtain Incinerator

- A. Front, Rear and Side Yards shall be a minimum of fifty (50) feet. When adjacent to residentially zoned property, Yards shall be a minimum of two hundred (200) feet.
- B. The site shall be fenced by a six (6) foot high fence.

Sec. 6.08.40 Port and Marina Siting

A. Intent and Purpose

- 1. It is the intent of this Section to promote the health, safety and general welfare of the citizens of St. Johns County by regulating the siting of Ports and Marinas to accomplish the following purposes:
 - a. To provide uniform standards for the placement and construction of Ports and Marinas within the County;
 - b. To protect the natural environment and aesthetic character of the County by regulating the location and design of Ports and Marinas, providing special attention to residential neighborhoods, public parks, scenic corridors, historic districts, historic landmarks and environmentally sensitive lands;
 - c. To minimize adverse environmental and aesthetic impacts of Ports and Marinas through prohibitions, design, siting, and other Development standards; and,
 - d. To accommodate the growing demand for water access that is in compliance with the State and Federal permitting.

B. Applicability

- 1. All new Ports or Marinas in St. Johns County shall be subject to these zoning regulations and all other applicable Building and Construction codes. In the event of any conflict between the zoning district regulations and the regulations contained in this Section, the provisions of this Section shall override and supersede such other regulations unless otherwise specifically set forth herein.
- 2. The siting of all new Ports or Marinas in St. Johns County shall be limited to Aquatic Delineations ICW-S(1) or ICW-N(3) as depicted on Figure 4 in the St. Johns County, "Water Dependent Uses and Marine Study", October 2002.
- 3. All Ports or Marinas lawfully existing on the initial effective date of this Code shall be allowed to continue to be used as they presently exist.
- 4. For the purposes of this Section, a Port or Marina that has received final approval in the form of a Special Use, a Variance or a Building Permit, but has not yet been constructed, shall be considered an existing Structure so long as such approval is valid and unexpired.

C. Prohibitions

- 1. Marinas and Ports, as defined in Article XII of this Code, shall not be located in areas where approved or conditionally approved shellfish harvesting is located and shall not be located in areas that are closed to shellfish harvesting.
- 2. Marinas and Ports, as defined in Article XII of this Code, shall not be located in Outstanding Florida Waters (OFW's) or Aquatic Preserves.
- 3. Marinas and Ports, as defined in Article XII of this Code, shall not be located in areas that DEP and USFWS have determined to be critical habitat areas for the survival of endangered species, such as the Manatee, sea turtle, and least tern.

D. Application Submittal

The Application for a Port or Marina shall, at a minimum, provide the following information to be submitted by the applicant for review by the County Administrator. This information shall be required prior to any other action or application for review. Additional criteria and information may be requested, based upon the character, size, and location of the Marina or Port:

- 1. Provide that the Port or Marina is sited in areas where the water depth is a minimum of four (4) feet below mean low water to provide adequate water depth for channel navigation and in areas that require minimum dredging. Marinas and Ports shall first be located in existing disturbed areas and where aquatic resources shall not be adversely affected.
- 2. Provide that the proposed location for the Port or Marina is the area that requires minimum dredging.
- 3. Provide a map depicting the adjacent Land Uses, and upland vegetation, using Level III classification of the Florida Land Use, Forms and Cover Classification System (FLUCCS).
- 4. Provide the underwater vegetation and other aquatic resources and a description of the Marina and Port's impact upon these aquatic resources. This evidence shall be presented in an environmental impact study that addresses at a minimum, water depths, type and location of grass beds, type and location species habitat, and speed zone requirements.
- Provide the minimum tidal currents.
- 6. Provide a hurricane evacuation plan and storm contingency plan.
- 7. Provide procedures to maintain water quality, which at a minimum includes the following:
 - a. Fuel facilities shall be designed and constructed to contain spills on the land side of the facility and to prevent runoff into surface waters.
 - b. Impervious surfaces associated with the Marina or Port shall be designed and constructed so that runoff flows away from surface waters. All drainage facilities shall be designed and constructed in accordance with Section 6.04.06.

- 8. Provide a market feasibility report, providing that the Marina or Port is needed at the proposed location and provides service to meet a demand.
- 9. Provide the following design criteria. Additional design criteria may be requested, based on the size or scale of the Marina or Port:
 - a. The location of all Vehicle and pedestrian access to the site, the location of all Parking Areas and the number of Parking Spaces, the location of water access to the Marina or Port, the location of all slips, berths, docking facilities, and walkways.
 - b. All proposed buffering, landscaping, lighting, drainage facilities, solid waste disposal areas, and other land-based factors of the Marina or Port.
 - c. The maximum height of all Structures, Density, if applicable, and Intensity of the Marina or Port.
 - d. The location of all fueling stations and pump-out facilities, if applicable.
 - e. All Accessory Uses that may be included with the Marina or Port operation.
- 10. A map of the Marina or Port site and the adjacent land Use and zoning.

Sec. 6.08.41 Community Marina and Neighborhood Dock

A. Intent and Purpose

- 1. It is the intent of this Section to promote the health, safety and general welfare of the citizens of St. Johns County by regulating the siting of Community Marinas and Neighborhood Docks to accomplish the following purposes:
 - a. To provide uniform standards for the placement and construction of Community Marinas and Neighborhood Docks within the County;
 - b. To protect the natural environment and aesthetic character of the County by regulating the location and design of Community Marinas and Neighborhood Docks, providing special attention to residential neighborhoods, public parks, scenic corridors, historic districts, historic landmarks and environmentally sensitive lands;
 - c. To minimize adverse environmental and aesthetic impacts of Community Marinas and Neighborhood Docks through prohibitions, design, siting, and other Development standards; and,
 - d. To accommodate the growing demand for water access that is in compliance with the State and Federal permitting.

B. Applicability

1. All new Community Marinas and Neighborhood Docks in St. Johns County shall be subject to these zoning regulations and all other applicable Building and Construction codes. In the event of any conflict between the zoning district regulations and the regulations contained in this Section, the provisions of this

Section shall override and supersede such other regulations unless otherwise specifically set forth herein.

- 2. The siting of all new Community Marinas and Neighborhood Docks in St. Johns County shall be limited to Aquatic Delineations depicted on Figure 4 in the "Water Dependent Uses and Marine Study", October 2002, as follows:
 - a. Community Marinas shall be limited to Aquatic Delineations ICW-S(1), ICW-N(3), ICW-N(2) as revised (eastern shore only from ICW Marker 51 to the south), and SJR-N(1) and (2).
 - b. Neighborhood Docks shall be limited to Aquatic Delineations ICW-S(1), ICW-N(3), ICW-N(2) as revised (eastern shore only from ICW Marker 51 to the south), SJR-N(1) and (2), SJR-S (1), (2) and (3).
- 3. All Community Marinas and Neighborhood Docks lawfully existing on the initial effective date of this Code shall be allowed to continue to be used as they presently exist.
- 4. For the purposes of this Section, a Community Marinas and Neighborhood Docks that have received final approval in the form of a Special Use, a Variance or a Building Permit, but has not yet been constructed, shall be considered an existing Structure so long as such approval is valid and unexpired.

C. Prohibitions

- Community Marinas and Neighborhood Docks, as defined in Article XII of this Code, shall not be located in areas where approved or conditionally approved shellfish harvesting is located and shall not be located in areas that are closed to shellfish harvesting, unless properly permitted by all agencies having jurisdiction over the activity.
- 2. Community Marinas and Neighborhood Docks, as defined in Article XII of this Code, shall not be located in Outstanding Florida Waters (OFW's) or Aquatic Preserves, unless properly permitted by all agencies having jurisdiction over the activity.
- 3. Community Marinas and Neighborhood Docks, as defined in Article XII of this Code, shall not be located in areas that DEP and USFWS have determined to be critical habitat areas for the survival of endangered species, such as the manatee, sea turtle, and least tern.

D. Application Submittal

The Application for Community Marinas or Neighborhood Docks shall, at a minimum, provide the following information to be submitted by the applicant for review by the County Administrator.

This information shall be required at the time of submittal of the Development application for the Community Marina or at the time a Development application is submitted for the Residential Development associated with the Neighborhood Dock:

1. Provide a site plan depicting the proposed location for the Community Marina or Neighborhood Dock.

- 2. Provide a map depicting the adjacent Land Uses and upland vegetation, using Level III classification of the Florida Land Use, Forms and Cover Classification System (FLUCCS), the mean high water line, dredging requirements and submerged aquatic vegetation location and any other aquatic resources.
- 3. Provide the following design criteria. Additional design criteria may be requested, based on the size or scale of the Community Marina or Neighborhood Dock:
 - a. The location of all Vehicle and pedestrian access to the site, the location of all Parking Areas and the number of Parking Spaces, the location of water access to the Community Marina or Neighborhood Dock, the location of all slips, berths, docking facilities, and walkways.
 - b. All proposed buffering, landscaping, lighting, drainage facilities, solid waste disposal areas, and other land-based factors of the Community Marina or Neighborhood Dock.
 - c. The maximum height of all Structures, Density, if applicable, and Intensity of the Community Marina or Neighborhood Dock.
 - d. The location of pump-out facilities, if applicable.
 - e. All Accessory Uses that may be included with the Community Marina or Neighborhood Dock operation.

Sec. 6.08.42 Unpaved Parking

A. Intent and Purpose

- 1. It is the intent of this Section to promote the health, safety, and general welfare of the citizens of St. Johns County by regulating the Use of unpaved parking and Vehicular Use Areas to accomplish the following purposes:
 - a. To provide uniform standards for the use of unpaved parking with the County; and
 - b. To protect the natural environment and aesthetic character of the County by regulating the design of unpaved parking and Vehicular Use Areas, providing special attention to Churches, Parks/recreational facilities, Primitive Campgrounds, maintenance/utility facilities, equestrian facilities, environmentally sensitive Projects, and other substantially similar Uses which do not have considerations related to size, use, safety, compatibility, or intensity of Use that would more appropriately require a Special Use Permit (SUP).

B. Applicability

All new unpaved parking and Vehicular Use Areas shall be subject to these regulations and all other applicable Building and Construction codes. In the event of any conflict, the provisions of this Section shall supersede such other regulations unless otherwise specifically set forth herein.

C. Minimum Application Requirements

A site plan showing areas to be unpaved, and all other proposed Improvements must be submitted meeting requirements established by the St. Johns County Development Plan Review and Approval Procedures and the following minimum requirements:

- 1. The Parking and Vehicular Uses Areas shall be stabilized with materials such as coquina, crushed stone, or gravel in a manner acceptable to the County Administrator or designee;
- 2. The access apron leading from unpaved areas into a County or State maintained Roadway shall be paved so as to not damage the Roadway. Access aprons leading from unpaved areas into Private maintained Roadways are encouraged to be paved;
- 3. In all cases, parking and accessibility requirements in compliance with the Americans with Disabilities Act (ADA) shall be satisfied;
- 4. Unpaved Parking and Vehicular Use Areas are considered Impervious Surfaces for stormwater management purposes, and
- 5. All surfaces subject to use by Fire Service and EMS must have the ability to support an 80,000 pound Vehicle.

Sec. 6.08.43 Animal Care Facility

- A. All domestic animals shall be kept within a completely enclosed structure and under direct control of the kennel operator at all times and in accordance with St. Johns County Animal Code.
- A. Structures shall be located no closer than 100 feet of any property that maintains a residential zoning designation, or any property zoned Open Rural (OR) in a Residential Future Land Use designation.
- B. Daytime domestic animal boarding shall only occur between the hours of six 12 o'clock (6:00 A.M.) and eight o'clock (8:00 P.M.).
- C. The operation of the Pet Care Facility shall not allow the creation of noise by any animal or animals under its care which can be heard by any person at or beyond the property line of the lot on which the kennel is located.
- D. Overnight boarding is prohibited.

PART 6.09.00 LIGHTING STANDARDS

Sec. 6.09.01 Generally

A. Purpose

The purpose and intent of this article is to ensure that exterior (outdoor) lighting positively enhances the visual impact of a Building or Project on surrounding properties and Uses. To that end, exterior lighting at a Building or Project should be designed and installed in a consistent and coordinated fashion to provide safe, convenient and efficient lighting for customers, pedestrians and vehicles, and to avoid the creation of hot spots, glare, obtrusive light, light pollution, light trespass, and visual nuisance.

B. Applicability

Except as provided below, the provisions of this Part shall apply to non-residential or multifamily Uses or for common improvements of single-family Developments, such as recreational facilities, club houses, and entrance features, where new exterior lighting is proposed or existing exterior lighting is relocated or replaced. Additionally, where applicable, lighting shall meet the requirements of Article III, Special Districts and Article IV, Lighting Management for Protection of Marine Turtles.

- 1. Regular maintenance to existing exterior lighting shall not require compliance with the requirements of this Part. For the purposes of this Part, regular maintenance shall be considered to include cleaning and changing lamps, ballasts, starters, housing, lenses, replacing damaged poles, and other similar components.
- 2. When fifty percent (50%) or more of the existing lighting fixtures of an exterior lighting system are upgraded, changed, or replaced, as measured cumulatively from the effective date of this Part, the entire exterior lighting system shall be brought into compliance with the requirements of this Part. This requirement shall not apply to regular maintenance of an existing lighting system.
- Outdoor recreational facilities (public or private), such as, but not limited to stadiums, football fields, soccer fields, baseball fields, softball fields, tennis courts, auto racetracks, horse show arenas shall be subject only to the provisions of Section 6.09.02.G below.
- 4. Lighting within a community plan area or overlay district with Development standards shall comply with any specified requirements found in Article III for that community plan area or overlay district in addition to the requirements of this Part. Where there is a conflict in any provision of this Part with the regulations of a community plan area or overlay district, the more restrictive shall prevail.

C. Exemptions

Exterior lighting meeting the applicability criteria of 6.09.01.B. is exempt from the requirements of this Part in the following instances:

- 1. Projects with unexpired Construction plan approval at the time of the effective date of this Part.
- 2. Correctional facilities.

- 3. Temporary lighting needed for the performance of emergency safety repairs or natural disaster recovery.
- 4. Low wattage holiday decorative lighting used for holiday decoration.
- 5. Lighting used for illumination of Construction, renovation, or repair of roads and utilities.
- 6. Underwater lamps in swimming pools installed for safety in accordance with state or local regulations.
- 7. Exit signs or lighting for doorways, stairs or ramps as required by the Florida Building Code.
- 8. All lighting required by Federal or State regulatory agencies.
- 9. Lights, including laser lights that are part of the sensing system for gate operations at gated residential communities and non-residential facilities.
- 10. Lighting used to highlight features of public monuments and registered Historic Landmark Structures or Buildings.
- 11. Boat dock or Marina lighting as legally required for safety purposes.

Sec. 6.09.02 Standards

- A. Illumination values at the property line of a Project shall not be more than 0.2 fc at any point when the Project is located next to any residential Use or residentially zoned property. The illumination values at the property line of a Project adjacent to any other Use shall not be more than 1.0 fc. Compliance with these criteria shall not be required between two adjacent non-residential properties of like zoning or Use classification provided that the properties are under the same ownership, or have common parking areas or driveways.
- B. Lighting fixtures shall be installed in the position recommended by the manufacturer for the intended use.
- C. When the Project is located next to any residential Use or residentially zoned property, all Light Fixtures shall be full cutoff type unless specific authorization for use of another type of Light Fixture is provided by the County Administrator or designee. Additionally, Light Fixtures may be equipped with shields if required in order to meet the requirements of 6.09.02.A.
- D. Any bright light shining onto adjacent property or Streets, including individual residential Lots, which would result in a nuisance glare or a disabling glare, shall not be permitted. Light trespass beyond property boundaries or above the horizontal plane shall be considered noncompliant.
- E. At canopied areas, such as those found at drive-through facilities, service stations, convenience centers, and car-washes, lighting under the canopy, awning, porte-cochere, or similar structure shall be either recessed or cut-off fixtures.
- F. Lighting intensities at Automated Teller Machines (ATMs) shall be governed by applicable Florida Statutes and shall also comply with the requirements of Section 6.09.02.A.

G. Recreational Facilities

Lighting of outdoor recreational facilities (public or private), such as, but not limited to stadiums, football fields, soccer fields, baseball fields, softball fields, tennis courts, auto race-tracks, horse show arenas shall conform to the requirements of IESNA RP-6-01 and the following requirements:

- 1. The use of lighting systems, including but not limited to sports lighting systems, shall be limited to the time from sunrise to 11:00 p.m., unless otherwise allowed through an approved Development plan, Variance or Special Use permit. Illumination levels from outdoor recreational facility lighting systems shall not exceed 0.5 fc at property lines next to any residential Use or residentially zoned property or 1.0 fc at property lines next to any other property Use.
- 2. Illumination of outdoor swimming pool decks and water surface area(s) shall conform to the applicable Florida Administrative Code requirements.

History: Ord. 2009-48, Ord. 2010-17, Ord. 2010-23, Ord. 2010-53, Ord. 2011-15, Ord. 2011-36, Ord. 2011-38, Ord. 2012-2, Ord. 2012-23, Ord. 2013-26, Ord. 2015-14. Ord. 2017-17; Ord. 2018-41; Ord. 2018-62; Ord. 2019-84