Landscape Development Ordinance

City of Hahira, Georgia
As adopted November 3, 2005.

ORDINANCE TO AMEND THE CODE OF THE CITY OF HAHIRA REGARDING LANDSCAPE DEVELOPMENT ORDINANCE FOR INCLUSION TO THE CODE OF ORDINANCES OF THE CITY OF HAHIRA.

BE IT ORDAINED by the Mayor and Council of the City of Hahira, Georgia, and it is hereby ordained by authority of same, pursuant to their authority, do hereby adopt the following:

1.

Chapter 18, Part II of the Code of the City of Hahira, Georgia is hereby amended by striking in its entirety Chapter 18 entitled Landscape Development and substituting in lieu thereof the following so that as amended said

ordinance shall read as follows:)

Chapter 18 Landscape Development

Section 18 - I. Purpose and Intent.

The purpose of this Chapter is to protect, maintain, and enhance the immediate and long-range health, safety, economic stability, and general welfare of the present and future citizens of the City. This ordinance is enacted to provide standards for the preservation and/or replacement of trees and vegetation as part of land development and building construction within the City.

The intent of this Chapter is to provide information to facilitate the development of project design, plan and review and enforcement processes administered in a most effectively and efficiently so as to accomplish the purpose of this ordinance and to provide for orderly, enhanced development within the corporate limits of the City of Hahira.

It is not the intent of this chapter to cause the violations of other City of Hahira Ordinances. Where conflicts between this ordinance and other ordinances occur, the other ordinances shall prevail.

Hahira is known as the Honey Bee City; the use of flowering plants where appropriate is encouraged.

Section 18 - 2. Definitions.

For purposes of this chapter, the following terms or words used herein shall be defined as follows:

- 1. <u>Applicant</u>. The person or entity making application for a permit as provided herein and who shall be responsible for, and in charge of, a project; the applicant may be the owner, developer, project manager or contractor.
- 2. Basal Caliper. Diameter of a plant's main stem measured at six inches above ground level.
- 3. Board of Appeals. The Mayor and Council of the City of Hahira
- 4. <u>Buffer</u>. An area of land which includes landscape material established for the purposes of separating, screening, or shielding a use from a dissimilar or more intense use.
- 5. <u>Building Permit</u>. A permit issued by the Department of Inspections to proceed with the development or redevelopment of property meeting the form and requirements as established by the City of Hahira.
- 6. <u>Canopy Tree</u>. A large tree or group of trees that has a distinct presence in the landscape or forest. For the purpose of this ordinance, all large trees and all medium trees identified as canopy trees are listed in Appendix A.

- 7. <u>Certificate of Occupancy</u>. A certificate issued by the Department of Inspections certifying that all requirements for development or redevelopment of property have been met and authorizing occupancy of buildings and structures.
- 8. <u>Change of Ownership</u>. When the legal title or owner of the property changes from person, entity or corporation to another person, entity or corporation.
- 9. City Arborist. The person designated by the Mayor and Council of the City of Hahira.
- 10. <u>Critical Root Zone (CRZ)</u>. The minimum area beneath a tree which must be undisturbed in development in order to preserve a sufficient root mass to assure a tree a reasonable chance of survival. The critical root zone (CRZ) shall be a concentric circle centering on the tree's trunk with a radius equal in feet to one times the number of inches of the trunk diameter; i.e., the CRZ radius of a 20-inch diameter tree shall be 20 feet.
- 11 <u>Diameter, Breast Height (DBH)</u>. The diameter or width of the main stem of a tree as measured $4\frac{1}{2}$ feet above the ground.
- 12. <u>Drip Line</u>. A vertical line extending from the outermost portion of a tree canopy to the ground.
- 13. <u>Encroachment</u>. The protrusion or extension of a vehicle outside or beyond the parameters of a parking space, display area, storage area, or access way into a landscaped area.
- 14. <u>Green Space</u>. Lands to be left as natural areas or landscapes in accordance with this ordinance after development.
- 15. <u>Grubbing</u>. The removal of underbrush, such as shrubs, vines and trees under 4 inch basal caliper. Grubbing does not include root raking and/or soil disturbance within the drip line of preserved trees.
- 16. <u>Interior Planting Area</u>. The area within vehicular use area devoted to growing plants or vegetation.
- 17. <u>Landscape</u>. Existing natural vegetation or the placing of ground cover, shrubs or trees in a planting area in accordance with the requirements of this chapter.
- 18. <u>Land Disturbance Activity</u>. Any activity, including, but not limited to clearing, dredging, grading, excavating, transporting, and/or the filling of a parcel with topsoil or landfill soils. Land disturbance activity shall not include agricultural practices.
- 19. <u>Mature Tree</u>. The mature height and canopy width of a tree as described in the Manual of Woody Landscape Plants, latest edition.
- 20. <u>Outparcel</u>. A parcel of property adjacent to a principal development not included in the original or first development, but intended to be developed or sold or leased for development separately or at a later time.
- 21. <u>Outside Storage Area</u>. An outdoor area, open or fenced or a separate building constructed for storage of materials or refuse.
- 22. <u>Perimeter Planting Area</u>. The front, sides and rear yard areas between vehicular surface areas and adjacent property lines designed for planting and landscaping.
- 23. <u>Planting Area</u>. An outdoor area devoted entirely to the planting or conservation and maintenance of trees, shrubs and ground covers.
- 24. <u>Preserved Tree</u>. Any tree designated on a site development plan that is to be preserved during development for incorporation into the final landscaping of the developed parcel.
- 25. Retention/Detention Basin. Land area designed to temporarily retain or detain storm water runoff.

- 26. <u>Sight Triangle</u>. The area of property on both sides of a driveway formed by the intersection of each side of the driveway and public right-of-way with the two sides of each triangle being a minimum of 20 feet in length from the point of intersection and the third side being a straight line connecting the ends of the two other sides.
- 27. <u>Soil Erosion and Sedimentation Control</u>. See Code of Ordinances, City of Hahira Ordinances and/or requirements for issuance of Land Disturbance Permits.

- 28. <u>Specimen Tree</u>. Any tree designated by the City of Hahira for preservation because of its rarity, aesthetic value, historical value, botanical importance, or size. The following criteria shall apply:
 - a. <u>Size Criteria</u>. Large species trees: oak and magnolia species, 14" DBH or larger; long leaf and spruce pines 10" DBH or larger; other pines 20" DBH or larger. All other species, 18" DBH or larger. Small species trees: 6" DBH or larger. Protected trees are listed in appendix A
- 29. Street Yard. A landscaped area required adjacent to a street right-of-way.
- 30. <u>Substantial Improvements</u>. Substantial improvements as used herein are defined as repair, reconstruction, alterations or improvements to existing structures in which the cost thereof exceeds 25% of the ad valorem tax value as established by the current digest at the time the proposed improvements are begun or contemplated.
- 31. <u>Tree Inventory</u>. A listing and designation of all trees with a 6" DBH or larger on a map or survey drawn to scale.
- 32. <u>Tree Save Area</u>. An area consisting of a group of trees designated to be preserved.
- 33. <u>Utility Service Area</u>. An area, which contains any surface, mounted HVAC equipment or free-standing, above ground devices, such as utility boxes, booster boxes, switch boxes and transformers that are part of an underground utilities system.
- 34. <u>Vehicular Use Area</u>. Any ground surface area, excepting public right-of-way used by any type of vehicle, whether moving or at rest for the purpose of, including but not limited to, driving, parking, loading, unloading, storage or display, such as, but not limited to, new and used car lots, activities of a drive-in nature in connection with banks, restaurants, service stations, grocery and convenience stores.
- 35. <u>Wetlands</u>. Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For this purpose, wetlands must have one or more of the following attributes:
 - a. At least periodically, the land supports predominately hydrophytes;
 - b. The substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year, or is designated by the National Cooperative Soils Survey of the Soil Conservation Service by the U.S. Department of Agriculture as designed by the National Wetlands Inventory, United States Department of Interior; or any future approved and designated State or

Section 18 - 3. Office of Inspection.

The Valdosta Office of Inspection, acting through the Hahira City Manager or his designee with the assistance of the City Arborist, shall be charged with the enforcement of this chapter and the regulation of the care and removal of all trees growing now or hereafter in the City of Hahira in accordance with this chapter.

Section 18 - 4. Application of this Chapter.

The terms and provisions of this chapter shall apply to real property within the City of Hahira, as follows:

- 1. All undeveloped property, existing commercial or multi-family residential development that undergoes substantial improvement as defined by this ordinance. The current developed and existing property zoned single family or two-family residential is exempt from the application of this chapter.
- 2. That portion of each lot that corresponds with the portion of the lot covered by the front (street), side, rear yard, or interior vehicle use area as defined in this chapter.

3. Redeveloped or substantially improved property. All property except that zoned single family or two family residential which is redeveloped or substantially improved. Substantial improvements or renovations that results in a 25% increase in size, within a twelve month period of the building footprint, shall require full compliance with the landscape standards and requirements of this chapter. Exceptions may be granted by the Hahira City Manager in existing developed areas where there no available space for landscaping.

This provision shall not apply to reconstruction or rebuilding of structures that are destroyed by fire or other natural disaster, if such compliance is not possible due to conflict with health, safety, or zoning codes. Where construction is the result of fire or destruction by natural disaster, the provisions of this chapter shall not result in noncompliance with zoning and parking regulations or noncompliance with the American with Disabilities Act or other Federal law or the City of Hahira Zoning Ordinance.

- 4. Property hereafter annexed into the corporate limits of the City of Hahira is subject to the following conditions
 - a. Upon annexation, the property owner shall have 12 months from the effective date of annexation within which to comply with the provisions and terms of this ordinance.
- 5. Any expansion of existing vehicular use area shall require compliance with the landscape standards of this chapter for expanded area only.

Section 18 - 5. Permits.

- **A.** <u>Tree Removal Permit.</u> Before commencing development or substantial improvements, no person, firm, organization or corporation or other entity, shall directly or indirectly remove or destroy any tree without first obtaining a permit for same.
- 1. Permits shall be obtained by making written application to the office of inspections. The application shall be submitted with a site drawing to scale giving a complete tree inventory and proposed landscaping plan, if applicable, showing all trees to be saved and all trees to be removed. The proposed plan must be submitted to and approved by the City Arborist by the issuance of a tree removal permit.
- 2. Upon receipt of the application and accompanying documents, the office of inspections shall review the same and either approve or reject said application within 5 days of its receipt. Should any applicant be dissatisfied with the denial of said permit or request an interpretation of this chapter, an appeal should be filed within 30 days with the Hahira City Manager. If the applicant is dissatisfied with the decision of the city manager, the city manager shall forward the request to Mayor and Council for consideration.
- **B.** <u>Landscape Permit</u>. No person, firm, organization, corporation or entity shall directly or indirectly commence landscaping of any development or any construction project without first obtaining a landscape permit as provided herein.
- 1. A permit shall be obtained by making written application in the form prescribed by the City Manager to the Inspections Department. The application shall be accompanied by a detailed plan of the site drawn to scale on a scale of 1 inch equals 20 feet or larger indicating or exhibiting the following:
 - a. Proposed and existing buildings: Location type, dimension and square footage of vehicular use areas, outdoor storage areas, utility service areas and proposed parking spaces, including proposed truck parking and loading service area.
 - b. Sidewalks or other pedestrian circulation or walkways.
 - c. All proposed landscaping, including location, botanical or common names, and size of proposed trees, shrubs and ground cover which meets the landscaping requirements of this chapter, and the location and dimension of planting areas, street yards, and the location and size of earthen berms and buffers.

- d. All setback lines.
- e. Location of all signage on property.
- f. The location, species and DBH of existing trees to be preserved and those to be relocated or removed.
- g. Any barriers to be erected to protect any existing vegetation and trees from damage during construction as required under the tree and protected zone preservation standard.
- h. A brief description of the type of barriers to be erected.
- i. All walls, fences and railings.
- j. Location of all overhead utility lines.
- k. Any trenching adjacent to or within the drip line of trees to be preserved.
- 1. Location of all surface water retention and/or detention areas.
- m. The proposed plan shall also indicate lineal feet of the street yard.
- n. The total area in square footage of vehicular use areas, number of parking spaces provided and required.

Section 18 - 6. Permit Procedures.

The applicant and the City shall follow the following procedures and requirements:

- 1. Landscape plans shall be reviewed and approved by the City Arborist or landscape inspector prior to the issuance of permits by the Inspections Department.
- 2. The Inspections Department shall have 5 working days after receiving the completed landscape plan within which to approve or deny the application for a landscape permit. If the permit is denied, the Inspections Department shall specify to the applicant in writing the reasons for denial.
- 3. No certificate of occupancy shall be issued unless and until the Inspections Department has determined at the final inspection that required site improvements have been installed according to the approved application and all landscaping has been completed in accordance with the landscaping plan. The City may require a performance bond or other security in an amount of not more than 110% of the cost of required improvements in lieu of withholding a certificate of occupancy and may further require that the improvements be satisfactorily installed and completed within the specified length of time, not to exceed six months; excepting, however, additional allowances up to one month may be granted from time to time if weather conditions do not permit planning with a reasonable probability of plant survival.
- 4. An applicant objecting to the interpretation and/or any enforcement of this ordinance shall have the right to appeal the action to the Hahira City Council who shall make the final decision. The appeal shall be filed in writing with the City Manager within 30 days of the action aggrieved. The appeal shall then be processed and heard with the next regularly scheduled monthly meeting cycle of Mayor and Council.

Section 18 - 7. Landscaping Standards.

To insure the attainment of the objectives of this chapter, the design and installation of required landscaping shall be consistent with the following standards unless it can be demonstrated that alternative design and installation plans will meet the intent and spirit of this chapter.

1. Buffer

- a. Buffer Requirements. A Buffer shall be required along the side and rear yards of the proposed development, wherever the proposed development abuts a different existing, permitted use. The existing, permitted use of the adjacent property shall determine the type of buffer required
- b. Buffer Specifications. The following tables prescribe buffer types, as well as minimum number of trees and shrubs per 100 linear feet. Where feasible and appropriate, developers are encouraged to exceed these minimum requirements. A minimum 50% of all canopy trees, and minimum of 75% of all understory trees and shrubs shall be evergreen vegetation. Planting areas must be mulched with approved material. Upon maturity, buffer yards shall not contain any unobstructed openings more than 10 feet in width.

Buffer Type Required

	Existing Development					
New Development	Single- family Subdivision / Duplex	Multi- family	Office/ Institution al/ Profession al	Commerc ial	Industria l	Recreati on
Single/Two family (new subdivisions only)		С	С	В	В	D
Multi-family	В		D	С	В	D
Office / Institutional / Professional	С	D				
Commercial	В	В				
Industrial	A	A				
Recreation	С	D				

Buffer Type Descriptions

Buffer Component	Buffer Type				
(per 100 linear feet)	A	В	C	D	
# Canopy Trees	7	4	3	2	
# Understory Trees	11	6	4	3	
# Shrubs	50	25	20	15	
Buffer Width	25	15	10	5	

- c. Location. Buffer shall be located on side and rear yard of the lot or parcel and extend inward from the parcel boundary line for the required depth. Buffer shall not be located in any portion of an existing or dedicated public right-of-way, public easement or private street, or stormwater detention/retention area. Buffer shall not be used by any parking or loading purposes, nor contain any structures. Only driveways and pedestrian pathways may encroach into a required buffer.
- d. Existing Vegetation. Existing vegetation may be retained and used to meet buffer requirements. In the event existing vegetation does not satisfy buffer requirements, it shall be supplemented with additional plantings. Proposed plant materials shall be grouped or massed to achieve a natural looking and unified buffer.
- e. Maintenance. The entire buffer shall be maintained as green open space with the required plantings consistent with the requirements of this Ordinance. Maintenance of a required buffer shall be the responsibility of the property owner or any consenting grantee. If the plant materials die, they shall be replaced within 60 days.
- f. Supplemental Fencing: For all buffer types, buffer yard widths may be reduced 50% in exchange for an opaque fence or solid wall between the height of 6 feet and 8 feet, being erected along the property line where buffer yards are required. Such fence or wall shall consist of durable materials and be constructed to last at least ten years with minimum maintenance. The fence shall also be constructed to be straight and plumb, and to be aesthetically pleasing. The number of plants may be reduced 25% if the fence is constructed described above.

2. General Requirements.

- a. Green Space. All properties subject to the provisions of this chapter shall be developed with a minimum of 15% of the total area developed as green space. The street yard, side yard, rear yard, wetlands, surface water retention and/or detention areas and parking islands may be used to satisfy the green space requirements, provided these areas meet the landscape requirements. All barren areas within the green space must be landscaped with a minimum of one tree every 600 square feet. The minimum area to be designated green space is 100 square feet and the minimum width of any area shall be 3 feet.
- b. Line of Sight. All landscaping shall be in compliance with the City's minimum line of site standards and site triangles for streets, intersections or driveways as defined herein and in the City of Hahira Zoning Ordinance. No landscaping plant materials shall obstruct or impede the traffic flow on any public right of way or pedestrian walkways.

- c. Plant Protection. All planting in areas which are adjacent to vehicular use area or outdoor storage areas shall be protected from vehicular encroachment by construction of curbing or other appropriate barriers.
- d. Erosion Control. Surface water on all planting areas shall be stabilized to prevent erosion by the use of live ground cover, mulches, shrubs, permeable pedestrian paver blocks, or any combination thereof.
- e. Maintenance. The owner and/or developer is responsible for maintaining all plant materials in healthy condition. Maintenance practices include sufficient water, weeding and replacement of dead plant materials, proper pruning and litter removal. All tree trunks shall be protected from damage from string trimmers and mowers by a protective collar, a mulch ring or surrounded by other bedding material. It is recommended that the mulch rings shall be a minimum of 3 feet in diameter for up to 3" DBH trees and expanded 6" for every additional one inch diameter.
- f. Overhead Utility Lines. The location of all overhead utilities shall be considered during the placement of required trees in accordance with the following standards:
 - (1). Small species at maturity not to exceed height of utility line shall be used when located within 35 feet of the overhead utility lines. (See Appendix A for characterization of tree sizes by species).
 - (2). Medium to large species at maturity may be used when located more than 35 feet from the nearest overhead utility lines(s). (See appendix A for a characterization of tree sizes by species.)
- g. Fire Equipment. A minimum 5 feet radius shall be maintained around all fire protection equipment, including fire hydrants, and shall contain no plant materials or structural elements other than ground cover plants.
- h. Minimum Planting Area Per Existing or Proposed Tree. Trees with irrigation provided shall have no less than 100 square feet of planting area surrounding its base. Said area shall be maintained in either vegetative landscape material or other pervious surface cover. The length of all planting beds shall not exceed 2½ times its width.
- i. Root Barriers. Prior to the installation of trees, a determination shall be made as to whether root barriers are necessary to prevent roots from uplifting or cracking sidewalks. If needed, root barrier collars shall be installed at the time of planting.
- j. Tree Wrap and Binding Devices. All tree wrap, burlap, wire baskets, tied, or other binding devices shall be removed from all vegetation and trees at the time of planting.
- k. Preservation of Existing Trees. Preservation of existing trees shall be given special consideration in the preparation of landscape plans. The City of Hahira desires to preserve all existing trees wherever possible in all developments. Preserved trees may be used in the minimum landscape requirements. To be deemed a preserved tree and to comply with the minimum landscape requirements, any existing tree must be at least 4" DBH and be included among the approved species listed in Appendix A. (See Tree and Protected Zone Preservation Standards.)
- Selection Criteria. All plants shall be healthy, well-proportioned, disease free and pest free, and suitable for
 the climate. All trees selected for planting shall be made from the locally adapted species list included in
 Appendix A. If a species not included is intended for planting, it must first be approved by the City
 Arborist or landscape inspector. All plants must conform to the American Nursery and Landscape
 Association Nursery State Standards, latest edition.
- m. Planting Islands. Planting islands shall have at least a six (6) inch clearance of good soil, including 6" around and below the root ball of all trees.
- 3. <u>Vehicular Use Area Landscape Requirements</u>. The following landscaping standards shall apply to all interior or

perimeter vehicular use areas:

- a. Tree, Shrub and Ground Cover Selection and Minimum Size Requirements.
 - (1) All medium and large trees must be at least 2½" basal caliper and at least 8 feet in height; if container grown trees are used, they must be a minimum of 30 gallon size. If field grown trees are used, sufficient root mass must be preserved to guarantee survival of trees.
 - (2) All small trees planted must be at least two (2) inches basal caliper and at least 6 feet in height, and a minimum 15 gallon container for container trees at the time of planting.
 - (3) For multi-stemmed container trees, such as Crepe Myrtles and River Birch, the minimum size shall be 30 gallon containers, and for all other multi-stemmed trees a minimum installation height of 8 feet is required.
 - (4) Shrubs included in interior planting areas must be a minimum of 12 inches in height at the time of installation. At least 60% of the shrubs must be 3 gallon containers or larger. Shrubs shall be locally adapted species and shall be spaced according to growth habit. Not more than 30% of the shrubs shall be deciduous species.
 - (5) Ground Cover. Ground cover other than lawn grass shall be placed 18 inches on center
- b. Interior Vehicular Use Area Minimum Landscape Requirement.
 - (1) Minimum landscape requirements for interior vehicular use areas shall be: One (1) tree; 5 shrubs, and a combination of ground cover, grass or mulch to cover barren areas for every 2,100 square feet of vehicular use areas or greater fraction thereof. All trees and shrub plantings may be spaced in any pattern so long as no parking space is located more than 50 feet from the base of any tree. The street yard or exterior trees may be included when calculating the 50 feet requirement for location of parking spaces. Interior planting areas shall be protected from vehicular encroachment by curbing or other barrier.
 - (2) Industrial areas and other areas dedicated for large truck parking are exempt from this requirement, however the passenger vehicle parking areas shall comply to this chapter.
 - (3) A minimum of 60% of all trees planted in the interior vehicular use areas shall be canopy trees. Canopy trees are identified in Appendix A and shall consist of all large trees and designated medium trees. (All trees have a minimum planting area as described in the General Requirements of the Landscape Standards.)
- c. Perimeter Area Minimum Landscape Requirement.
 - (1) Street Yard.
 - (a) A minimum 6 foot wide landscaped street yard shall be required adjacent to all street rights-of-way. A minimum of 3 trees and 15 shrubs and a combination of grass, mulch or ground cover to cover barren area shall be required in every 100 linear feet or greater fraction thereof of all street yards. Under no circumstances will the street yard contain less than 2 trees and 20 shrubs. The width of all street yards is measured from the right-of-way line to the nearest impervious area.
 - (b) All walkways constructed of impervious material shall be no less than 4 feet from the trunk of any existing tree.

(c) A minimum of 60% of all trees planted shall be large canopy trees whose growth form will provide shade. Canopy trees are identified in Appendix A and consist of all large trees and designated medium trees. (All trees have a minimum planting area as described in General Requirements of Landscape Standards.)

Section 18 - 8. New Residential Subdivision Requirements.

- 1. All new residential subdivisions are required to have a landscaped street yard at the primary street entrance to the development. If there is more than one entrance, the developer shall designate the primary entrance. Planting shall consist of 3 trees and 20 shrubs at each side of the primary entrance. A combination of grass, mulch or ground cover for bare areas shall also be required. Existing trees that exceed 4" DBH can be used to meet minimum plant requirements. Specimen trees provide a two-for-one credit.
- 2. All residential subdivision developments must comply with the buffer requirements.
- 3. In all residential subdivision developments of 50 or more lots or phases of developments of 50 or more lots with a minimum lot size of 10,000 square feet or less, the developer shall designate on the plat thereof one (1) lot as green space or open space to be landscaped in accordance with the green space development standards hereinafter stated.
- 4. Upon obtaining the written consent from the Mayor and Council, the residential subdivision developer may, before or at the time 50% of the total number of lots have been sold, substitute a different lot within the subdivision as the designated green space lot, provided the substituted lot satisfies the minimum square footage and landscape requirements set forth in this section. Upon substitution of the green space, a revised plat shall be prepared and recorded, along with any other documents necessary to effect such change at the expense of the developer.

Section 18 - 9. Green Space Development Standards.

The specimen tree provisions of this ordinance shall apply to residential subdivisions for the street yard only. Trees required to be planted in the green space must meet the minimum size of 2.5 inches basal caliper or, if containerized, a minimum container size of 30 gallons.

Section 18 - 10. Tree and Protected Zone Preservation.

1. Preservation Standards

- a. Trees, groups of trees, or protected zones to be preserved shall be protected during development or construction by completely surrounding the critical root zone of all trees to be preserved with appropriate materials.
- b. No construction or soil disturbance shall occur within a tree's drip line unless protective measures to insure the protection of the tree or trees are detailed in the Landscape Plan.
- c. The Landscape Plans shall indicate what tree protection devices are to be used. Active tree protection devices are required where trees or protected zones are located in close proximity to construction activity.
- d. Trees proposed to be preserved during construction shall be replaced prior to building occupancy.

2. Materials.

- a. Active Tree Protection shall consist of chain link, orange laminated plastic, wooden post and/or rail fencing or other equivalent restraining material.
- b. Passive protection shall consist of heavy grade plastic flagging, a minimum of 4 inches wide with dark lettering on bright background reading "Tree Protection Area Do Not Enter" or equivalent signage on a continuous, durable restraint.

3. <u>Installation and Removal</u>. All tree protection devices shall be installed prior to any clearing, grubbing or grading. The City Arborist or the Department of Inspections shall inspect and approve the installation of protection control devices before a land disturbance permit is issued. Tree protection shall remain in functional condition throughout all phases of development.

4. Other Specifications.

- a. Clearing. Where clearing has been approved, all trees shall be removed in a manner, which does not adversely impact preserved trees. No felling of trees into protection zones or disturbance of roots inside the protection zones is permitted.
- b. Erosion and Sedimentation Control. All erosion and sedimentation control measures shall be installed in a manner, which will not result in the accumulation of sediment in a tree protection zone.
- c. Signage. All tree protection zones shall be designated as such with "Tree Save Area" signs posted visibly at intervals along the perimeter of the fenced in area during construction.
- d. Tunneling. All boring under the tree protection zone shall be a minimum of 36 inches deep on center and shall begin before the critical root zone and end beyond the critical root zone or drip line, whichever is greater.
- e. Trenching. All trenching shall meet the following specifications:
 - (1) All crushed or torn roots shall be cleaved back to good wood and a sharp clean cut made to promote re-growth.
 - (2) All work in the area and foot traffic should be on the farthest side of the trench away from trees.
 - (3) All exposed root ends shall be kept moist.
- f. Pruning. All tree pruning is recommended to be in accordance with ANSI (American National Safety Institute) A300 1995 Standard Practices for Tree Care Operations (a copy is on file in the office of the City Arborist) for trees, shrubs, and other woody plant maintenance.
 - (1) All pruning shall start beyond the branch collar of the tree.
 - (2) Pruning shall be done so as to remove branch weight as much as possible before final cut to prevent tearing of bark and cambium.
 - (3) In all pruning, the branch collar, part of the trunk, shall remain intact and uninjured.
- g. Safety. All tree care operations shall comply with ANSI (American National Safety Institute) Z133.1 1994 Safety Requirements for Pruning, Trimming, Repairing, Maintaining, and Removing Trees and Cutting Brush.

Section 18 - 11. Outdoor Storage/Utility Service Screening Standards.

- 1. All outdoor storage with a lineal dimension of 15 feet or greater, or any dumpster type refuse container with a lineal dimension of 5 feet or greater which is not screened by a building or other structure shall be screened from view from street rights-of-way for the entire length of the structure, except for necessary access. All utility service areas shall be screened from public rights-of-way. Screening for both outdoor storage areas and utility service areas shall be as follows:
- 2. Evergreen plants shall have a minimum installation height of 36 inches, spaced 3 feet on center and be expected to reach a minimum height of 6 feet within 3 years.

- 3. Fences or walls shall be constructed of a compatible material with that of the principal building of masonry, stone or wood and of a height and width equal to or greater than the utility service structure to be screened. One third of fences or walls must be screened with plants within 3 years, after year of planting.
- 4. No screening shall be installed which would impair the safe operation, maintenance or function of the utility service equipment.

Section 18 - 12. Surface Water Retention and Detention Basins.

Surface water retention and detention basins designed to handle surface water runoff and overflow are recommended to be constructed so as to appear natural in appearance. Landscaping must be provided at or immediately above the high water mark consistent with the interior vehicular area use standards. Trees may be located for integration into the surrounding landscape. Where surface water retention and detention basins are to be considered as part of the 15% Green Space requirements, all trees must be planted at a density of one tree per 300 square feet, except in residential developments. Only a maximum 50% of the total Green Space requirement can come from stormwater retention basins.

Section 18 - 13. Land Disturbance Permit for Site Development.

- 1. Land Disturbance Permit for site development is required for parcels 1.1 acre or greater and shall be obtained only after the approval of and issuance of a Tree Removal Permit as required by this chapter.
- 2. The applicant is required to insure that the Land Disturbance Permit and Tree Removal Permits are obtained in the name of the owner of the project and displayed on the site prior to any land disturbance activity and is required to insure that all contractors and workers are in compliance with the tree and protected zone preservation standards stated herein.

Section 18 - 14. Tree Removal Permit for Specimen and Canopy Trees.

- 1. Permit Procedure. Permits for removal of specimen or canopy trees shall be obtained by making written application on the form prescribed by City Manager to the Inspections Department.
- 2. Identification of Specimen Trees. Specimen trees are trees that warrant special consideration and encouragement for preservation. Specimen trees may be designated for preservation because of rarity, aesthetic value, historical value, and botanical importance, importance to overall community planning or size. The size or condition of trees will be evaluated by the City Arborist to determine if they qualify as specimen trees based upon the following criteria:
 - a. Size Criteria Large and medium species trees, as listed in appendix A.

Oaks and Magnolia species:

Long leaf Pine:

All other Conifers (Pines):

All other species:

Small species trees:

14" DBH or larger

10" DBH or larger

20" DBH or larger

18" DBH or larger

b. Condition Criteria All trees must be relatively sound and have a solid trunk. No major insect or pathological problems. Trees which face imminent death within five (5) years based upon the judgment of the City Arborist may be disqualified as specimen trees.

Section 18 - 15. Preservation of Specimen and Canopy Trees.

Preservation of specimen and canopy trees shall be given special consideration in the preparation of site development

plans. It is the desire of the city to preserve all existing trees wherever possible in development. Preserved specimen and canopy trees may be used in minimum landscape or buffer requirements.

Section 18 - 16. Removal and Replacement of Specimen Trees.

- 1. Where application is made for removal of a specimen tree, a plan or written documentation indicating the reason for the removal must be submitted and approved by the City Manager or designee.
- 2. The replacement of specimen softwood species (pines) shall be on a one-for-one basis. Each specimen pine removed must be replaced with one tree having a minimum 2.5 inch basal caliper. The replacement of all other specimen trees shall be equivalent to 25% of the total diameter of removed trees with a minimum of 2.5 inch basal caliper. Small specimen trees shall be replaced with a minimum of 2.0 inch basal caliper.
- 3. Replacement trees may be planted on site, if the site can accommodate trees above the required minimum specifications. In the event replacement trees cannot be planted on site, the canopy and specimen trees will be valued and funds placed in the Tree Bank established under this chapter at the rate of fifty (\$50.00) dollars per diameter inch. Funds in the Tree Bank funds shall be used to install trees on public property, entrances to the city, or other approved property.
- 4. If a specimen tree is preserved, a 2 for l credit is provided for new plantings. The root zone area for each preserved tree shall be equal to two trees.
- 5. Where payment to the Tree Bank is required under subsection 3 above, the developer may plant trees larger than the minimum requirement and shall be entitled to a credit of (\$50.00) dollars per inch above the minimum inch requirements.
- 6. Removal of specimen trees from property not being currently developed also requires the replacement of 15% of caliper inches on same property or public property with a minimum of $2\frac{1}{2}$ inch basal caliper trees. All removed trees that cannot be planted on site will be valued and funds placed in a Tree Bank at the rate of (\$50) per diameter inch.
- 7. The same species or a species having the potential for comparable size, quality and longevity must replace specimen trees.
- 8. No specimen tree or canopy tree overhanging any public right of way shall be removed without first obtaining a Tree Removal Permit.

Section 18 - 17. Tree Bank Fund.

There is hereby established by the City Manager a separate fund to be known and designated as the Tree Bank Fund. Funds herein provided shall be accumulated in said fund and used for the planting and installation of trees on public property, parks and other approved property within the City. All projects for planting shall be approved by the Hahira Better Hometown Committee.

Section 18 - 18. Continuing Compliance.

All developments are to be reviewed within one (l) year to insure continuing compliance with the landscape permit and to determine and to establish that all plants are thriving and healthy. The owner of the property shall be notified by the Department of Inspections of any missing or dead plants to be replaced. Replacement will be required if existing remaining plants or inventory of trees falls below the minimum landscape requirements.

Section 18 - 19. Enforcement.

1. Enforcement Authority. The Department of Inspections and Hahira Police with the assistance of the City Manager or their designee shall be charged with the enforcement of this chapter.

- 2. Enforcement Procedures. The following inspections shall be conducted in conjunction with all development activities under this chapter:
 - a. Initial Inspections. Any inspection by the City Arborist and/or the Director of Inspections or their designee shall be conducted prior to approval of any permit application.
 - b. Vegetation Protection Inspection. An inspection by the City Arborist to ensure proper installation of tree and vegetation protection devices before site disturbance. (See Tree and Protected Zone Preservation Standards.)
 - c. Final Inspection, Notice of Completion and Certificate of Occupancy. This inspection shall occur when all development activities permitted for the site have been completed. No certificate of occupancy shall be issued, nor any building or premises occupied, unless and until final inspection reveals that all work has been installed in accordance with the approved permit and tree protection or removal activity has been carried out according to the approved permit and plan.
 - d. Inspection for Performance Bond and Temporary Certificate of Occupancy. In the event that there is a delay in complying with the approved permits and plans by final inspection, the owner will be required to secure a performance bond or other securities in the amount of no less than 110% of the cost of the non-constructed improvements. A temporary certificate of occupancy may be issued where a performance bond has been approved, provided that such bonded uncompleted improvements be satisfactorily installed within a reasonable length of time as specified by the City of Valdosta Inspections Department not to exceed 3 months. After improvements are completed and approved, a permanent Certificate of Occupancy will be issued after a final inspection by the Department of Inspections.

Section 18 - 20. Notification of Violations.

Where it is determined that a violation of this chapter has occurred, the Department of Inspections shall give written notice of the violation to the occupant, applicant, and or the owner shown on the most recent tax roll of the City of Hahira. Said written notice shall include, but not be limited to:

- 1. A description of the location of the property involved, either by street address or by legal description.
- 2. A statement indicating the nature of the violations.
- 3. A statement showing the time within which all necessary remedial action must be accompanied which time may not be less than 10 days nor more than 60 days from the date of said written notice.
- 4. The name of the person(s) upon whom the notice of violation is served.
- 5. A statement advising that upon failure to comply with the requirements of the notice the Department of Inspections, City Manager and/or Hahira Police Department shall take such enforcement procedures as may be required under this notice.
- 6. Written notice required above shall be served upon the person violating this ordinance and the person owning this land by either personal delivery or Certified mail.

Section 18 - 21. Stop Work Order

The City Manager or the Hahira Police Department shall have the authority to issue a Stop Work Order in any of the following circumstances:

1. When development is being implemented without approved permits;

- 2. When ongoing non-complying work is not immediately and permanently stopped upon receipt of a written or oral Notice of Violation;
- 3. Upon failure to post all required and approved permits under this chapter;

Section 18 - 22. Failure to Comply After Notice of Violation or Stop Work Order.

Where work or development continues after issuance of a stop work order, the City Manager may initiate any appropriate act or legal action authorized by law.

Section 18 - 23. Notice of Compliance.

Upon satisfactory completion of corrective action required by a notice of violation or stop work order, the City Manager or his designee shall issue a notice of compliance and allow the work to continue.

Section 18 - 24. General Section - Appeal.

In the event any person is dissatisfied with the decisions of the Inspections Department adversely affecting such person involving the application of this chapter may, within 30 days of the decision for which the appeal is taken, file an appeal with the City Manager who shall forward the request to the Hahira City Council for final decision at their next regularly scheduled meeting. Appeals from the decision of the Hahira City Council must be made within 30 days to Superior Court in accordance with the applicable state laws.

Section 18 - 25. Violations and Penalties.

The following shall constitute offenses punishable in the Municipal Court of the City of Hahira:

- 1. It shall be unlawful to any person or entity to remove, destroy and tree without first obtaining a permit where applicable. The removal or destruction of each tree shall constitute a separate offense under this chapter.
- 2. It shall be unlawful for any person or entity to commence construction or development without first obtaining a land disturbance permit, tree removal permit, and/or landscape permit where applicable. Each day said development or construction continues without obtaining a permit shall constitute a separate offense.
- 3. It shall be unlawful for any person or entity to fail to protect and preserve trees designated for preservation during development. Each day said failure to protect said designated trees continues shall constitute a separate offense.
- 4. It shall be unlawful for any person or entity to fail to replace any dead plants or trees after 60 days written notice to replace said plants or trees. Each day that said party fails to replace said dead plants or trees after said notice shall constitute a separate offense.
- 5. The violation of any other provision or requirement of this chapter shall constitute a violation punishable in the Municipal Court of the City of Hahira.

Section 18 - 26. Permit Exemptions.

- 1. In the event any tree is damaged by a wind storm or any other act of God, or shall be in a hazardous or dangerous condition so as to endanger the public health, welfare or safety and require immediate removal without delay, the same shall be removed without obtaining a permit as herein required.
- 2. During any period of emergency, such as tornado, hurricane, flood, or any other act of nature, the requirements of this chapter may be waived by Mayor and Council or their designee.

- 3. The pruning or trimming of trees for beautification purposes or for removal of dead or diseased limbs shall be exempt. Also, the pruning or trimming of trees, as part of normal maintenance, or public utilities maintaining lines and easements within the City shall be exempt from the provisions of this chapter; however, all public utilities holding easements within the City shall give notice at least 3 days in advance when pruning or trimming of easements and rights-of-way is done. All trimming and pruning shall be done prudently so as to maintain the natural shape and beauty of all plants and trees.
- 4. The downtown area of Hahira, where there is significant planting by the city, and areas of existing development where there is no room for landscaping.

2.

All ordinances, parts of ordinances, or regulations in conflict herewith are repealed.

3.

Should any section or provision of the Ordinance be declared invalid or unconstitutional by any court of competent jurisdiction, such declaration shall not affect the validity of the Ordinance as a whole or any part thereof which is not specifically declared to be invalid or unconstitutional.

4.

It is the intention of the Mayor and Council, and it is hereby ordained that the provisions of this Ordinance shall become and be made a part of the Code of Ordinances, City of Hahira, Georgia and the sections of this Ordinances may be renumbered to accomplish such intention.

5.

The above Ordinanc	e was read and approv	ed by the Mayor ar	nd Council of the	City of Hahira,	Georgia on the

This Ordinance shall take effect and be in force from and after the date of its adoption, the public demanding it.

day of	2005.	are ranger und country or the cary or ramand, coorgan on the
		Myron Crowe/Mayor
Attest:		
Aucst.		
Janice Logue, City Ma	nager/City Clerk	

Appendix A

A Listing of Tree Species

Recommended for the high humidity and temperatures characteristic of U.S.D.A. planting zones 8 and 9 in the Valdosta, Georgia area.

SMALL TREES

15 - 25 Feet in Height at Maturity

Botanical Name Remarks	Evergreen (E)	Habit or Growth
Common Name	Deciduous (D)	Form
Acer sellowiana	D Red/purple fall colo	More upright than trident maple
Acer buergeranum Trident Maple	D Yellow-red fall colo	Oval-rounded or
Acer palmatum ² Japanese Maple	D Bronze-purple fall color	Oval-rounded .
Aesculous pavia ¹ Red Buckeye	D Palmately compound	Weakly branched dileaves
Amelanchier arborea ¹ Serviceberry	D Flower clusters appe	Irregular crown ear With leaves
Bumelia species ¹ Buckthorns	D Thorny branches	Open irregular crown
Butia capitata Pindo Palm	E Long arching fronds	Columnar
Cercis canadensis 1,2 Eastern Redbud	D Flowers before leave	Irregular crown es appear
Chionanthus retusus Fringe Tree	D White flowers apperated	Irregular crown 1 week after
Chionanthus virginicus ¹ Fringe Tree	D Flowers before leaves	Open-rounded crown s appear

^{1 -} Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 1

Remarks Common Name(s) Deciduous (D) Form Cornus florida 1,2 Spreading layered crown Flowers before leaves appear Flowering Dogwood Crataegus unifolia 1 Irregular crown Thorny branches Hawthorn Eriobotyra japonica E Rounded crown Large edible fruits Loquat Firmiania simplex Rounded crown, sparse Large leaves, showy fruits Parasol Tree branching Halesia diptera 1 D Irregular crown Prefers shade Silverbell shrub-like Hammamelis virginiana 1 Irregular crown Flowers in fall Witchhazel shrub-like Ilex X attenuata 2 E Densely pyramidal Abundant red berries in fall Ilex cornuta 2 E Irregular crown Chinese Holly llex cassine 1 Irregular crown Coarse, spinless leaves Dahoon Holly

Evergreen (E)

Habit or Growth

Botanical Name

llex latifolia

lex vomitoria 1

Youpon Holly

1 - Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 2

Large leaves, bold texture

Irregular crown

Irregular crown

Remarks Common Name(s) Deciduous (D) Form Ilicium parviflorum 1 Irregular crown Tolerates wet sites, good dense hedge Small Anise Tree Lagerstroemia X fauriei 2 Irregular crown Several cultivars resistant to HybridCrape Hybrid Crape Myrtle powdery mildew Lagerstroemia indica 2 Irregular crown Showy flowers in summer Crape Myrtle Several colors available Ligustrum species 2 E Shrub-like Can be pruned to tree form Ligustrum Magnolia X soulangeana 2 Low branched, irregular crown Large flowers before leaves. Japanese Saucer Magnolia Magnolia grandiflora 'Little Gem' Multistem, shrub-like Early flowering, small leaves, dwarf growth Malus species 2 Rounded crown Profusion of fragrant, showy flowers Flowering Crabapples Myrica cerifera 1 Low branched, rounded crown Prunes well to tree form, tolerates Wax Myrtle or Bayberry wet sites. Ostrya virginiana 1 Graceful, rounded crown Exfoliating bark Eastern Hornbeam Osmanthus americanus 1 Small fragrant flowers in summer

Evergreen (E)

Habit or Growth

Botanical Name

Devilwood

1 - Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 3

Glossy foliage

Common Name(s) Deciduous (D) Form Parkinsonia aculeata Graceful, rounded crown Drought tolerant, showy yellow Jerusalem Thorn flowers in summer Persea palustris Irregular crown Spicey-scented leaves, tolerates wet Redbay soil Poncirus trifoliata Irregular crown, shrub-like Thorny branches Hardy Orange Prunus carolinana 1 Elliptic-rounded crown Withstands heavy pruning Carolina Laurel Cherry Prunus campanulata 'Okame' Elliptic-rounded crown Profusion of showy flowers Fowering Cherry Ptelea trifoliata Rounded crown, low branching Yellow fall color Water Ash Pyrus calleryana 2 D Pyramidal when young Good fall color. 'Aristocrat' Rapidophyllum hystrix 1 Shrub-like palm Good native plant, most cold hardy palm Needle palm Rhus copallina 1 Irregular open crown, Yellow-scarlet fall color Winged Sumac few branches Sabal palmetto 1 Columnar Tight clustered fan-shaped fronds Cabbage or Sabal Palm

Evergreen (E)

Remarks

Habit or Growth

Botanical Name

Serenoa repens

1 - Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 4

Light gree color, course texture

Shrub-like palm

Botanical Name Evergreen (E) Habit or Growth Remarks Deciduous (D) Common Name(s) Form Saw-Palmetto Styrax americana Shrub-like, irregular crown Small bell-like flowers in spring Trachycarpus fortunei Good palm form small gardens and Windmill Palm courtyards Vaccinium arboreum 1 Rounded crown Showy flowers late spring Sparkleberry Bonsai-like Viburnum species 1,2 Elliptic-rounded Showy flowers have an offensive Viburnums

Zanthoxylum clava-herculis 1

D Prickly stems

odor

Irregular crown, shrub-like

Prickly Ash

*

Evergreen (E) Remarks Habit or Growth

Common Name(s)

Deciduous (D)

Form

MEDIUM TREES

30 - 45 Feet in Height at Maturity

Botanical Name Evergreen (E) Habit or Growth Remarks Common Name Deciduous (D) Form Acer saccharum ssp barbatum ¹ D Elliptic-rounded, canopy tree Dead leaves persist into winter Florida Maple Acer saccharum ssp leucoderme 1 Elliptic-rounded Bright yellow fall color Cialk Maple Acer rubrum 1,2 Pyramidal-elliptic crown Yellow-red fall color Red Maple Betula nigra Pyramidal with good bark texture River Birch delicate branching, canopy tree Carpinus caroliniana 1 Round-flat crown Slow growing Blue-beech Catalpa bignonioides 1 Open oval crown Purple flowers in spring, Southern Catalpa canopy tree caterpillars devour leaves Cupressus glabra Pyramidal Gray-green scale-like foliage Arizona-cypress good blue forms available

1 - Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 6

Botamodi Mamo		Remarks	Habit of Growth		
Common Name(s)		Deciduous (D)	Form		
		*			
Ginkgo biloba ²	= 1	D Yellow fall color, drop	Open pryamidal ps leaves Maidenhair Tree		
		quickly			
Gleditsia triacanthos 1		D Thorny branches, tho	Open spreading crown ornless cultivars Honeylocust		
		available			
Gordonia lasianthus ¹		E Tolerates wet sites	Pyramidal, canopy tree		
Loblolly-bay					
llex opaca 1,2		E Cultivars highly varia	Pyramidal-elliptic crown		
American Holly		Cultivars Highly Varia	able		
Juniperus virginiana ^{1,2.}		E Tolerates adverse cor	Densely pyramidal		
Eastern Red Cedar					
Koelreuteria paniculata		D Showy yellow flowers	Rounded crown, canopy tree in summer		
Golden Raintree		followed by pink seed capsules			
Laurus nobilis		E	Elliptic-rounded		
Mediterranean Bay		Spicy-scented leaves			
Oxydendrum arboreum 1	T.,	D Summer flowering, red	Pyramidal -purple fal Sourwood		
		color			
Pinus echinata ¹		E Persistent cones	Open pyramidal		
Shortleaf Pine					
Pistacia chinensis .		D Orango crimson fall col	Oval-rounded		
Chinese Pistachio		Orange-crimson fall col	ior crown		

Evergreen (E)

Habit or Growth

Botanical Name

^{1 -} Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 7

Botanical Name · Evergreen (E) Habit or Growth Remarks Deciduous (D) Common Name(s) Form Populus deltoides D Pyramidal when young Tolerates moist conditions Eastern Cottonwood Robinia pseudoacacia 1 Open diffuse Thorny branches, tolerates adverse Black Locust conditions, root suckers Salix babylonica Rounded with drooping branches Prefers moist sites Weeping Willow Sapindus marginatus 1 Pyramidal-rounded crown Yellow fall color Florida Soapberry Sassafras albidum 1 D Irregular crown Good fall color, root sprouts Common Sassafras Ulmus alata 1 Weakly pyramidal crown Twigs with flat corky extensions Winged Elm Ulmus crassifolia 1 Rounded crown Tips of branches droop Cedar Elm

Ulmus parviflora 'Athena

Ulmus parviflora 'Ailee'

Rounded crown Interesting, exfoliating bark

Chinese Elm

Vase like, upright Interesting, exfoliating bark, good Chinese Elm

canopy tree

street tree

Ulmus Parviflora 'Drake'

Rounded crown

exfoliating bark, width and height Chinese Elm

canopy tree

about equal

1 - Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 8

Evergreen (E) Remarks

Habit or Growth

Common Name(s)

Deciduous (D)

Form

^{1 -} Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 9

Evergreen (E) Remarks

Habit or Growth

Common Name(s)

Deciduous (D)

Form

LARGE TREES

50 - 90 Feet in Height at Maturity

	Botanical Name	Evergreen (E) Remarks	Habit or Growth
	Common Name(s)	Deciduous (D)	Form
	Carya glabra ¹	D	Open oval crown
	Pignut Hickory	Shade tolerant	canopy tree
1	Carya tomentosa ¹	D Prefers full sun	Open oval crown
1	Mockernut Hickory	Prefers full sun	canopy tree
(Celtis laevigata ¹	D	Spreading crown
5	Sugarberry	Tolerates drought	canopy tree
C	Cunninghamia lanceolata	E Stiff needle-like foliage	Pyramidal
C	hina-fir	our needle-like follage	canopy tree
F	agus americana	D Yellow-brown fall color	Stately wide spreading crown
Α	merican Beech	. Show brown rail color	canopy tree
	Interesting winged seeds, nee	n, rounded crown	
W	hite Ash	shade	canopy tree
Fi	axinus pennsylvanica ^{1,2}	D Vopundentable	Irregular crown
Gı	reen Ash	Very adaptable	canopy tree

^{1 -} Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 10

Evergreen (E) Remarks

Habit or Growth

Common Name(s)

Deciduous (D)

Form

Liquiambar styraciflua 1	D 5-lobed leaves, god	Pyramidal when young od fall color	
American Sweetgum		canopy tree	
Liriodendron tulipifera ¹	D Showy tulip-like flov	Pyramidal when young,	
Yellow Poplar		overtops, canopy tree	
Magnolia grandiflora 1,2	E Showy fragrant flow	Densely pryamidal crown	
Southern Magnolia	onewy magrant now	canopy tree	
Metasequoia glyptostroboides	D Red-brown fall colo	Pyramida when young, overtops	
Dawn Redwood	The state of the s	canopy tree	
Nyssa sylvatica ¹	D Tolerates drier sites	Tapering-rounded crown	
Blackgum	rolorates arier sites	canopy tree	
Pinus clausa	E Irregular Persistent	Open crown	
Sand Pine	megalar rersistent	canopy tree	
Pinus elliottia ¹	E Sheds cones yearly	Pyramidal when young, overtops	
Slash Pine	oned coned yearly	canopy tree	
Pinus glabra ¹	E Persistent cones	Pyramidal when young, overtops	
Spruce Pine	. eveletent denies	canopy tree	
Pinus palustris ¹	E Sheds cones yearly	Open sparsely branched	
Long Leaf Pine	oneds cones yearly	canopy tree	
Pinus taeda 1	E Persistent cones	Pyramidal when young, overtops	
Loblolly Pine	,	canopy tree	
Platanus X acerifolia	D Tolerates pollutants	Irregular, open crown	
London Planetree	. o.orates polititarits	canopy tree	

1 - Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 11

Platanus.occidentalis 1 D Irregular, open crown Susceptible to blight Sycamore canopy tree Quercus acutissima Irregular open crown Long toothed leaves Sawtooth Oak canopy tree Quercus alba D Pyramidal when young, overtops Stately, doesn't tolerate White Oak canopy tree alkaline sites Quercus X comptoniar D canopy tree Coupton oak Quercus falcata Broad oval crown Tolerates dry conditions Southern Red Oak canopy tree Quercus hemisphaerica 1 Spreading crown Scrubby when young, not long-lived Darlington oak canopy tree Quercus laurifolia 1 Spreading crown Not long-lived Laurel Oak canopy tree Quercus lyrata D canopy tree Overcup oak Quercus michauxii 1 D Oval-rounded leaves Stately with large lobed Swamp Chestnut Oak canopy tree Quercus phellos 1 Pyramidal when young, overtops Narrow fine-textured leaves Willow Oak canopy tree Quercus shumardi 1 Spreading crown Large toothed leaves

Evergreen (E)

Deciduous (D)

Remarks

Habit or Growth

Form

Botanical Name

Shumard Oak

Common Name(s)

1 - Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 12

canopy tree

Quercus stellata 1 D Spreading crown Coarse lobed leaves Post Oak canopy tree Quercus velutina 1 Spreading crown Tolerates clay soils Black oak canopy tree Quercus virginiana 1 Broadly rounded crown Short trunk, needs plenty spreadingk Live Oak canopy tree room Taxodium ascendens 1 Pyramidal when young, overtops Tolerates upland sites cinnamon fall Pond-cypress canopy tree color Taxolium distichum 1 D Pyramidal when young, overtops Tolerates upland sites cinnamon fall Bald cypress canopy tree color Ulmus americana 1,2 D Spreading-rounded crown Select cultivars resistant to Dutch Elm American Elm canopy tree disease

Evergreen (E)

Deciduous (D)

Remarks

Habit or Growth

Form

Botanical Name

Common Name(s)

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1 - Native species 2 - Many cultivars are available, locally adapted ones should be planted Appendix A, Page 13