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Environmental Ordinance

City of Gainesville DRAFTED: July 10, 2009 REVISED: October 19, 2009

30-23. Definitions.

Archaeological Site: A property or location which has yielded or may yield information on the City's history or prehistory. Archaeological sites may be found within archaeological zones, historic sites, historic districts, private properties, City properties and other areas of the City. Archaeological sites are evidenced by the presence of artifacts and features below the ground surface indicating the past use of a location by people.

Artifact: Objects which are a product of human modification or objects which have been transported to a site by people. Generally, this term shall apply to objects equal to, or greater than, 50 years in age.

Bona fide agriculture: The good faith commercial agricultural use of the land. Determining whether the use of the land for agricultural purposes is bona fide, seven conditions as outlined in F.S. 193.461(3)(b)1-7 should be consulted.

Ecological integrity: The condition of an ecosystem having natural communities and physical environment with structure, composition, and natural processes that are resilient, self-sustaining, and able to accommodate stress and change. Its key ecosystem processes, such as nutrient cycles, succession, water levels and flow patterns, and the dynamics of sediment erosion and deposition, are functioning properly within the natural range of variability.

Ecological value: The value of functions performed by uplands, wetlands, and other surface water to the abundance, diversity, and habitats of fish, wildlife, and listed species. These functions include, but are not limited to, providing cover and refuge; breeding, nesting, denning, and nursery areas; corridors for wildlife movement; food chain support; and natural water

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storage, natural flow attenuation, and water quality improvement, which enhances fish, wildlife, and listed species utilization.

Ecosystem: A natural community and its physical environment, functioning together as an interdependent unit.

Endemic species: Is a species that is unique to a particular geographic location. For example, the Florida Scrub Jay is endemic to the State of Florida because it only lives and breeds within the boundaries of the State.

Habitat: The natural abode of a plant or animal that contains the arrangement of food, water, cover and space required to meet the biological needs of a given species. Different species have different requirements, and these requirements vary over the course of a year.

High aquifer recharge areas: Those areas on the Floridan Aquifer Recharge Map in the Future Land Use Map Series of the City's Comprehensive Plan shown as having recharge greater than 8 inches per year, or as having moderate to high recharge potential.

Listed species: Those species of plants and animals listed as endangered, threatened, rare, species of special concern, or commercially exploited by an official state or federal plant or wildlife agency, or ranked as S1, S2, or S3* by the Florida Natural Areas Inventory (FNAI). These species are targeted for protection for a number of reasons, e.g. they are in imminent danger of extinction, are rapidly declining in number or habitat, or have an inherent vulnerability to habitat modification, environmental alteration, or human disturbance which puts them at risk of extinction.

*Only those animals that are breeding/nesting will be considered if listed as an FNAI ranked S3 species.

Native plants: All plant life that persists and reproduces in the north central Florida region

without the influence of humans and that is thought to have been present in the region before the time of documented European contact about A.D. 1500.

Note: Delete existing native plant definition and replace with this one.

Natural community: An assemblage of living things, including plants, animals, fungi, and microorganisms, which occur together in defined areas and that have the potential to interact with one another. A natural community is the living part of an ecosystem.

Natural resources: The biological, physical, geological and hydrological components of the environment in the City of Gainesville.

Nature parks: Those lands owned by the City of Gainesville that are purchased for the protection, preservation, and/or conservation of natural habitats, as well as any other public park, preserve, or conservation area, or the portion of those parks, preserves, or conservation areas, established for the purpose of preserving natural habitats.

Note: Delete existing nature park definition and replace with this one.

Planning parcel: A land area made up of contiguous parcels under common ownership or control as of [date], even if a development proposal or application includes only a portion of such land area.

Significant geologic features: Geologic features such as sinkholes, springs, caves, stream bluffs, escarpments, outcroppings, and other karst features.

Significant habitat: Contiguous stands of natural upland plant communities that have been documented to support, and that have the potential to maintain, healthy and diverse populations of plants or wildlife. Significant habitats are those that are ranked as S1, S2, or S3 by the Florida Natural Areas Inventory (FNAI), as well as Mesic Flatwoods, Wet Flatwoods, Wet Prairie, Hydric Hammock, Baygall, Bottomland Forest, Bottomland Swamp, Floodplain Swamp, and

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Slough.

Significant uplands: Areas identified as Uplands in the Environmentally Significant Land and Resources Map Series within the Future Land Use Map Series of the City of Gainesville's Comprehensive Plan.

Sinkhole: A funnel-shaped depression in the land surface, generally in a limestone region, caused by solution processes and often resulting in connection(s) with subterranean passages and groundwater systems.

Spring: A point where ground water emerges onto the earth's surface, including under any surface water of the state, as well as seeps. The term spring shall include karst windows, which are depression openings that reveal portions of a subterranean flow or the unroofed portion of a cave. It shall also include spring runs, whose flow is predominantly composed of spring discharge.

Springshed or spring recharge basin: Those areas within ground and surface water basins that contribute to the discharge of a spring.

Steep slope: Any ground surface having a slope of greater than or equal to five percent.

Strategic ecosystems: Sites that are identified in the KBN/Golder Associates report, "Alachua County Ecological Inventory Project" (1996).

Surface waters: Note: insert "wetlands" into existing definition.

Uncommon species: A term used to describe a species that is not abundant or frequently found.

Uncommon species are regarded as being at high risk of extinction because they occur in low numbers.

Uplands: All areas that are neither wetlands nor other surface waters.

Wetlands: Those areas that are inundated or saturated by surface water or ground water at a

frequency and duration sufficient to support, and, under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soils. Soils present in wetlands generally are classified as hydric or alluvial, or possess characteristics that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are typically adapted to areas having soil conditions described above. These species, due to morphological, physiological, or reproductive adaptations, have the ability to grow, reproduce or persist in aquatic environments or anaerobic soil conditions. Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps and marshes, hydric seepage slopes, tidal marshes, mangrove swamps and other similar areas. Florida wetlands generally do not include longleaf or slash pine flatwoods with an understory dominated by saw palmetto.

Note: Delete existing wetlands definition and replace with this one.

Wildlife corridor: A vegetated transportation route for plants and animals that connects natural areas.

30-400. Administrative.

The City manager or designee shall be responsible for the enforcement of this section.

- 1. No more than 50% of uplands will be required to be set aside regardless of the total amount of each individual set-aside that occurs in uplands, however the extent of protection of significant geological features and wetland and surface water buffers shall not be reduced by this limitation.
- 2. The set-aside limitations shall constitute full compliance with policies in Section 30-415 addressing avoidance, minimization, and mitigation of the protected resource(s).
- 3. The removal of non-native invasive exotic species is exempt from any and all natural resource regulations.

30-401. Resources assessment requirements.

An assessment of natural and archaeological resource information shall be included with applications for development plan approval, for land use changes to planned use district (PUD), and for zoning changes to planned development (PD), as specified below.

- (a) Applications required to include assessment.
 - 1. Applications for areas within, or partly within, the boundaries of strategic ecosystems and annexed into the City of Gainesville after [date].
 - 2. Applications for areas within, or partly within, the boundaries of significant uplands.
 - 3. Applications for areas entirely outside those areas included in subparagraphs 1 and 2 that are determined by the city manager or designee to have a potential adverse impact to regulated natural or archaeological resources. The city manager or designee shall make such determination before the development review stage.

(b) General requirements.

The assessment shall be completed prior to submittal of development, land use, or zoning application(s), unless otherwise deemed unnecessary by City staff. The assessment shall be prepared by person(s) qualified in the appropriate fields of study, conducted according to professionally accepted standards, and based on data that is considered to be recent with respect to the resource. Names, qualifications, and resumes of all personnel involved in the assessment, and their roles with respect to the assessment, shall be attached, if not already on file with the City of Gainesville.

(c) Methodology.

The assessment shall use and report professionally accepted scientific methodology specific to

each natural and archaeological resource on site, in order to assess the actual and potential presence of natural and archaeological resources. The assessment shall include background research and analysis of available existing data, as well as ground-truthing. Field surveys shall be conducted during the seasons, times of day, and field conditions under which each natural and archaeological resource characteristic would most likely be observed. If they are not, the city manager or designee may presume that the resource is present.

(d) Minimum contents.

The assessment shall include site-specific identification, mapping, and analysis of each natural and archaeological resource or characteristic present on the site, and background research and analysis with aerial map review and ground-truthing of resources adjacent to, and up to at least 50 feet away from, the site. At a minimum, the following shall also be provided:

- 1. Cover letter and/or executive summary, including written explanation of the need and intent of the project, description of construction or alteration methodologies, and signed statement as to the likely presence of regulated natural or archaeological resources.
- 2. Maps drawn to scale, including a north arrow and scale showing the following:
 - a. Location of project site in relation to major roads or other readily identifiable landmarks, showing parcel boundaries with dimensions.
 - b. Existing roads, structures, wells, utilities, and other existing conditions and noteworthy features.
 - c. Identification of all regulated natural and archaeological resources, labeled by resource type.
 - d. General vegetation characteristics and quality.
 - e. General soil types.

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- f. Proposed location of protected conservation resources and open space.
- g. Potential connections to existing green space, open space, trails, and adjacent preservation or conservation resources.
- 3. Data and analysis that includes assessment and evaluation of the following:
 - a. Existing quality and characteristics of regulated natural or archaeological resources.
 - b. Impact of the proposal on each individual natural resource and on the ecosystems in which they function.
 - c. Proposed measures to protect natural resources, or to avoid, minimize, or mitigate impacts on natural resources.
 - d. Methods of stormwater pollution prevention.

(e) Additional information.

Additional data and analysis may be required as appropriate to the complexity of the proposed activity and types of natural or archaeological resources identified. Such information may include but is not limited to:

- 1. Copies of historical and recent aerial photographs, topographic and other resource maps reviewed.
- 2. Land use and land cover classifications according to the Florida Land Use, Cover and Forms Classification System or Water Management District systems.
- 3. Wetlands, surface waters, or 100-year floodplains identified by the National Wetlands Inventory, United States Geological Survey, Water Management Districts, or Federal Emergency Management Agency.
- 4. Wildlife corridors, biodiversity hot spots, strategic habitat conservation areas, or

element occurrences identified by the Florida Fish and Wildlife Conservation

Commission, Florida Natural Areas Inventory, Florida Department of Environmental

Protection, or North Central Florida Regional Planning Council.

- 5. Field surveys that provide for actual and potential presence of plant and animal species, including indicators (sightings, signs, tracks, trails, rests, evidence of feeding, etc.), population estimates, and occupied habitat boundaries.
- 6. Inventories of natural or archaeological resources within an expanded planning parcel that includes additional lands under common ownership or control, or additional lands within a designated resource planning area.
- 7. In a proposal involving only a portion of a parent tract, detailed assessments of areas more than 50 feet beyond the proposal boundary that are necessary to understand the scope of impact of proposed activities on areas not included in the proposal.
- 8. A mitigation and monitoring plan.
- 9. A resource management plan.
- 10. Habitat survey.
 - a. When survey is required. A habitat survey shall be required prior to vegetation removal on any portion of a planning parcel for which development plan approval is sought, where either direct or indirect impact to significant plant and wildlife habitat, significant uplands, listed species habitat, or strategic ecosystem is known or reasonably likely to occur.
 - b. Pre-application conference. Applicants are encouraged to arrange a preapplication conference with City staff prior to undertaking a habitat survey.
 - c. Professional standards and methodology. The habitat survey shall be

conducted in accordance with the requirements for a natural resources assessment under this section and must also meet the following standards:

- i. Non-destructive techniques designed to minimize disturbance of species shall be required, except where destructive or disruptive techniques (such as capture studies) are the preferred means to document species use given the size of the site and complexity of the resource.
- ii. The survey shall include detailed descriptions and maps indicating:
 - 1. Field methods, conditions, dates, times of day, observations and results.
 - 2. Transect locations, where applicable.
 - 3. Habitats or natural communities as field checked across the site
 - 4. Representative color photographs taken at ground level.
 - 5. Recent aerial photographs.
 - 6. Actual and potential presence of plant and animal species, including indicators (sightings, signs, tracks, trails, rests, evidence of feeding, etc.), population estimates, and occupied habitat boundaries.
 - 7. Professional opinions and conclusions regarding ecological value of the site.
- d. City verification. The City shall be notified of the schedule for significant fieldwork and allowed the opportunity to observe or independently verify survey techniques. Results may be field verified by the City.
- (f) Use of Assessment.

The city manager or designee shall review and evaluate the natural and archaeological resources assessment to determine whether the proposal is consistent with the Comprehensive Plan and Article VIII of Chapter 30, Code of Ordinances, and to identify appropriate site designs and strategies that maintain and protect the functions and values of natural and archaeological resources.

30-402. Exemptions from natural resources assessments.

The following activities are exempt from natural and archaeological resources inventory and assessment requirements.

(a) Removal of invasive or non-native vegetation.

Projects for which a plan has been approved by a federal, state, or local agency or water management district for the removal of undesirable invasive or non-native vegetation on lands owned, controlled, or managed for conservation purposes, excluding vegetation in surface waters and wetlands.

(b) Parks and recreation.

Alteration of vegetation pursuant to an adopted management or restoration plan for government maintained parks, recreation areas, wildlife management areas, conservation areas and preserves.

(c) Activities authorized by city-approved management plan.

Activities consistent with a management plan adopted by, or reviewed and approved by, the City of Gainesville, provided that the activities further the natural values and functions of the natural communities present. Examples of such activities include clearing firebreaks for prescribed burns or construction of fences.

(d) Existing utility installations, drainage or stormwater easements, and road right-of-way.

Alteration of vegetation within an existing utility, drainage, or stormwater easement after installation, where the vegetation is interfering with services provided by a utility or alteration of vegetation within an existing road right-of-way for normal maintenance activities. Alteration associated with new construction, as of [date], or with the acquisition or transfer of easements or right-of-way, is not an exempt activity.

(e) Fencing.

The minimal removal of trees or understory necessary to install a fence or wall, provided that no regulated tree is removed, the path cleared for the fence does not exceed ten feet in width, no equipment heavier than a one-ton pick-up truck, handheld outdoor power equipment or a standard farm tractor is used in clearing for the fence or installing the fence, no dredge or fill activity is required other than the installation of posts and fence materials, and navigational access will not be impaired by the fence construction.

(f) Survey or other required test.

The necessary removal of vegetation by, or at the direction of, a State of Florida licensed professional surveyor and mapper, professional geologist, or professional engineer to conduct a survey or other required test, provided that no regulated tree is removed and the path cleared does not exceed five feet in width.

(g) Miscellaneous.

Other exemptions may be granted if City staff determine there is no adverse impact to natural resources.

30-403. Development of planning parcel.

Planning parcels containing regulated natural resources located within or partly within strategic ecosystems, significant uplands, and/or significant habitat shall not be disaggregated, processed in piecemeal fashion, reviewed or developed in any manner that results in lesser natural resources protections than would otherwise be required if all land under common ownership or control were considered as a single proposal. To this end, where development or alteration of a part of a single parcel, or of a part of two or more contiguous parcels under common ownership or control, is proposed, the following shall be required:

- 1. The applicant shall provide documentation identifying all properties within the City of Gainesville or adjacent Alachua County that are contiguous, and that are not separated by a public road, and that are under common ownership or control extending to the more recent of either [date], or five years before submittal of the application.
- 2. A detailed natural and archaeological resources assessment, pursuant to section 30-401, shall be provided for the proposed project area. Regulated natural and archaeological resources shall be inventoried using the best available data for the remainder of the planning parcel.
- 3. Where regulated natural or archaeological resources are identified, in order to proceed, the applicant must demonstrate that the proposed project does not result in lesser protection than would otherwise be required if the entire planning parcel were considered as a single proposal. If the applicant cannot demonstrate such protection, the applicant must complete a master plan for the protection of regulated natural or archaeological resources for the planning parcel subject to approval by the appropriate reviewing board. This resource master plan shall identify the location of regulated natural resources.

including both the area set aside for permanent protection and any remaining area subject to minimization requirements, and shall include signed affidavits from all property owners within the planning parcel identifying their willingness to participate in the master plan process.

4. Each application submitted subsequent to an approved resource master plan shall provide for significant habitat and listed species habitat protection that is either consistent with, or greater than, the protection afforded under the approved plan.

30-404. Restoration prior to submitting an application.

Regulated natural resources that have been adversely impacted shall be required to be restored or mitigated for that portion of the parcel that would have otherwise required protection in accordance with the standards of this Article during development plan approval.

30-405. Alternative compliance for natural or archaeological resources.

An applicant may submit a proposal which varies from the strict application of the requirements of this Article to accommodate an extraordinary hardship or to utilize innovative design.

Requests for alternative compliance from any natural or archaeological resource provision shall be decided by the body responsible for reviewing a proposed development.

(a) Extraordinary hardship.

The applicant shall have the burden of demonstrating the existence of an extraordinary hardship due to unique site characteristics and the reasons for alternative compliance. The application shall set forth facts demonstrating each of the following:

- 1. That the applicant did not create their own hardship by taking actions that makes the property unable to be developed. Diminished value or inconvenience is not considered extraordinary hardship.
- 2. There are no feasible onsite alternatives to the proposal. Feasible onsite alternatives include, but are not limited to:
 - a. Reduction in density or intensity;
 - b. Reduction in scope or size;
 - c. Change in timing, phasing, or implementation; or
 - d. Layout revision or other innovative site design considerations.

(b) Innovative design.

The applicant shall have the burden of demonstrating that an innovative site design may be utilized that better protects regulated natural and archaeological resources. The application shall set forth facts demonstrating that the proposed innovative design can be shown to protect regulated natural and archaeological resources and will not jeopardize the ecological integrity of

natural resources on or adjacent to the proposed property.

- (c) Granting a request for alternative compliance.
 - 1. Where granted, the alternative compliance shall be the minimum deviation from the requirements necessary to permit reasonable use or access.
 - 2. Mitigation may be required as a condition of granting the alternative compliance.
 - 3. An alternative compliance plan shall be approved only upon a finding that it fulfills the intents and purposes of the City of Gainesville's Comprehensive Plan and of Article VIII as well as, or more effectively than, adherence to the strict application of this Article.

30-406. Significant plant and wildlife habitat.

(a) Applicability.

Development activities on all parcels greater than or equal to two acres in size shall be evaluated for the protection of significant habitat prior to clearing, grading, or other alteration of the parcel.

(b) Identification.

- 1. General mapping The locations and general extent of natural communities that constitute significant habitat have been mapped on a state-wide basis by public agencies and non-profit private organizations, available from the Florida Geographic Data Library, http://www.fgdl.org.
- 2. Site-specific identification.
 - a. The City shall review and analyze applications using digital data sources, including but not limited to the following:
 - i. Florida Fish and Wildlife Conservation Commission maps of land cover, strategic habitat conservation areas, and biodiversity hot spots.
 - ii. Florida Natural Areas Inventory maps of areas of potential conservation interest and element occurrences.
 - iii. Water Management District land cover maps.
 - iv. Digital aerial photographic series.
 - b. Where map review indicates the likelihood of impact to significant habitat, ground-truthing shall be required in accordance with section 30-401 in order to identify the existence, scope and extent of significant habitat associated with the application. If map review indicates the likelihood of listed species habitat, the requirements of section 30-408 shall apply.

- c. Significant habitat shall be delineated based on consideration and assessment of at least the following factors:
 - i. Quality of native ecosystem.
 - ii. Overall quality of biological diversity.
 - iii. Wildlife habitat value.
 - iv. Presence of listed, endemic, or uncommon species.
 - v. Grouping, contiguity, and compactness of native plants.
 - vi. Proximity to other natural preserve areas and corridors.
 - vii. Impact by prohibited and invasive non-native vegetation.
 - viii. Habitat size that will support a viable population.

(c) Habitat survey.

The requirements of section 30-401(e) 9. shall be followed.

- (d) Onsite habitat protection and set-aside limitations.
 - 1. No more than 25 percent of the upland portion of a parcel not in other required natural-resource buffers may be required to be protected because it is or includes significant habitat unless the landowner provides consent, or state or federal agencies require additional protection. This provision shall be applied as follows:
 - a. If the significant habitat equals less than 25 percent of the upland area of the planning parcel not in other required natural-resource buffers, the entire significant habitat shall be protected.
 - b. If the significant habitat is greater than or equal to 25 percent of the upland area of the planning parcel not in other required natural-resource buffers, no additional set-aside area shall be required. The City shall work with the applicant to select

that portion of the significant habitat that will be included in the set-aside area, based on the limitations and factors identified above and in accordance with criteria in section 30-413(b), Site Selection and Design for Conservation

Management Areas. However, the City shall encourage the applicant to protect the significant habitat on the planning parcel through creative and flexible approaches to development of the property.

- 2. Boundaries of protected significant habitat. If a resource master plan or special area plan is not required, the boundaries of the protected significant habitat shall be designated in a certified survey submitted to the City for approval prior to issuance of the development order. Significant habitat shall be permanently protected and managed in accordance with the standards in section 30-413 for Conservation Management Areas.
- (e) Alternatives to onsite habitat protection.
 - 1. When considered. Alternatives to onsite habitat protection may be considered in the following circumstances:
 - a. When physical constraints of the parcel preclude maintenance of ecological integrity of preserved vegetation, given considerations as to size of the development site, habitat quality, connectivity, adjacent uses, and feasibility of management;
 - b. When opportunities exist for long-term protection and management of significant habitat of equal or greater habitat value than would not have otherwise been protected; or
 - c. When establishment of conservation management areas within a project would result in small, fragmented areas with limited habitat value compared to available

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alternatives.

- 2. Standards. If protection of the existing significant habitat area is not feasible due to one of the circumstances identified in this Section, an applicant may pursue one of the following options:
 - a. The applicant may relocate existing vegetation to another portion of the site or establish a new area of native plants on another portion of the site, as part of an approved management plan in accordance with the requirements of section 30-414; or
 - b. The applicant may provide as a conservation management area at least two acres of comparable habitat area for every one acre of onsite significant habitat that would have otherwise required protection by this section.
- 3. The City may also consider alternative proposals that provide equal or greater protection.
- 4. Alternatives to onsite protection shall be evaluated by the appropriate reviewing board in accordance with the criteria of this section. If listed species are determined to be on the parcel, the criteria of section 30-408 shall also apply.

(f) Violations.

Violators of this section of the code shall be required to restore the site meeting all City requirements, shall provide proof of fulfillment of any State and Federal requirements to the City; and no development permit may be issued for a minimum period of two (2) years and/or fines up to \$25,000 may be assessed.

30-407. Significant Uplands.

(a) Applicability.

Development activities on all parcels within, or partly within, areas identified as upland in the Environmentally Significant Land and Resources map series within the Future Land Use map series of the City of Gainesville's Comprehensive Plan shall be evaluated for the protection of significant uplands prior to clearing, grading, or other alteration of the parcel.

(b) Identification.

- 1. The City shall review and analyze applications using the digital versions of the Environmentally Significant Land and Resources map series within the Future Land Use map series.
- 2. Where map review indicates that parcels proposed for development are within, or partly within, areas identified as Upland, ground-truthing shall be required in accordance with section 30-401 in order to identify the existence, scope and extent of significant uplands on the parcel. If map review indicates the likelihood of listed species habitat, the requirements of section 30-408 shall also apply.
- 3. Significant uplands shall be set-aside based on consideration and assessment of at least the following factors:
 - a. Quality of native ecosystem.
 - b. Overall quality of biological diversity.
 - c. Wildlife habitat value.
 - d. Presence of listed or uncommon species.
 - e. Grouping, contiguity, and compactness of native plants.
 - f. Proximity to other natural preserve areas and corridors.

- g. Impact by prohibited and invasive non-native vegetation.
- h. Habitat size that will support a viable population.

(c) Habitat survey.

The requirements of section 30-401(e) 9. shall be followed.

(d) Onsite habitat protection and set-aside limitations.

No less than 25 percent of contiguous significant uplands on the parcel shall be required to be protected because it is or includes significant uplands. This provision shall be applied as follows:

- 1. If the significant upland area is less than or equal to 25 percent of the area of the planning parcel, the entire significant upland shall be protected.
- 2. If the significant upland area is greater than or equal to 25 percent of the area of the planning parcel, the City shall work with the applicant to select that portion of the significant habitat that will be included in the set-aside area, based on the limitations and factors identified above and in accordance with criteria in section 30-413(b), Site Selection and Design for Conservation Management Areas. However, the City shall encourage the applicant to protect the significant upland on the planning parcel through creative and flexible approaches to development of the property.

(e) Boundaries of protected significant uplands.

The boundaries of the protected significant upland shall be designated in a certified survey submitted to the City for approval prior to issuance of the development order. Significant uplands shall be permanently protected and managed in accordance with the standards in section 30-413 for Conservation Management Areas.

- (f) Alternatives to onsite protection of more than 25 percent of planning parcel.
 - 1. When considered. Alternatives to onsite protection of more than 25 percent of a

planning parcel may be considered in the following circumstances:

- a. When physical constraints of the parcel preclude maintenance of ecological integrity of preserved vegetation, given considerations as to size of the development site, habitat quality, connectivity, adjacent uses, and feasibility of management;
- b. When opportunities exist for long-term protection and management of significant habitat of equal or greater habitat value than would not have otherwise been protected; or
- c. When establishment of conservation management areas within a project would result in small, fragmented areas with limited habitat value compared to available alternatives.
- 2. Standards. If protection of more than 25 percent of the planning parcel is not feasible because of one of the circumstances identified in subparagraph (*f*)1. above, an applicant may pursue one of the following options:
 - a. The applicant may relocate existing vegetation to another portion of the site or establish a new area of native plants on another portion of the site, as part of an approved management plan in accordance with the requirements of section 30-414; or
 - b. The applicant may provide as a conservation management area at least two acres of comparable habitat area for every one acre of onsite significant upland that would have otherwise required protection by this Chapter.
- 3. The City may also consider alternative proposals that provide equal or greater protection.

4. Alternatives to onsite protection shall be evaluated by the appropriate reviewing board in accordance with the criteria of this Chapter. If listed species are determined to be on the parcel, the criteria of section 30-408 shall also apply.

(g) Violations.

Violators of this section of the code shall be required to restore the site meeting all City requirements, shall provide proof of fulfillment of any State and Federal requirements to the City; and no development permit may be issued for a minimum period of two (2) years and/or fines up to \$25,000 may be assessed.

30-408. Listed plant and animal species.

(a) Applicability.

Parcels within development proposals shall be evaluated for the presence of listed species prior to clearing, grading, or other alteration of the proposal area. Where only a portion of a planning parcel is presented as an application, the entire planning parcel shall be evaluated in accordance with section 30-403.

(b) Listed species.

Listed plant and animal species include those species identified in 50 CFR 17.11 and 17.12, Endangered and Threatened Wildlife and Plants, F.A.C. 5B-40.0055, Regulated Plant Index, F.A.C. 68A-27, Rules Relating to Endangered or Threatened Species, and those identified as S1, S2, or S3 by the Florida Natural Areas Inventory (available at www.fnai.org). Tables of the habitats with which these species are commonly associated are maintained by the Alachua County Environmental Protection Department and are available in a variety of written and electronic formats.

(c) Site-specific identification.

- 1. The city manager or designee shall review and analyze applications using digital data sources, including but not limited to the following:
 - a. Florida Fish and Wildlife Conservation Commission maps of land cover, strategic habitat conservation areas, and biodiversity hot spots.
 - b. Florida Natural Areas Inventory maps of areas of potential conservation interest and element occurrences.
 - c. Water Management District land cover maps.
 - d. Digital aerial photographic series.

- 2. Where map review indicates the likelihood of listed species habitat, ground-truthing shall be required in accordance with section 30-401 in order to identify the existence, scope and extent of listed species habitat associated with the application.
- 3. Listed species habitat shall be delineated based on consideration and assessment of at least the following factors:
 - a. Quality of native ecosystem.
 - b. Overall quality of biological diversity.
 - c. Habitat value.
 - d. Presence of listed species.
 - e. Grouping, contiguity, compactness of native plants.
 - f. Proximity to other natural preserve areas and corridors.
 - g. Impact by prohibited and invasive non-native vegetation.
 - h. Habitat size that will support a viable population.

(d) Habitat Survey

The requirements of section 30-401(e) 9. shall be followed.

(e) Management plan.

If the habitat survey identifies the presence of listed species or listed species habitat, or potential for adverse impacts to any listed species habitat, the applicant shall submit to the City for review and approval a management plan that ensures protection of the habitat with no adverse effect on species survival. The management plan shall meet the requirements of section 30-414 and the standards set forth in this section.

(f) Intergovernmental coordination.

Where listed species are regulated by the state or federal government, the applicant shall submit

to the City the state or federally approved habitat survey and associated management or mitigation plans prior to the issuance of a development order. The City shall consult and coordinate with appropriate agencies to streamline the permitting process. All activities shall comply with applicable state and federal laws, regulations, performance standards, and management guidelines.

(g) Onsite habitat protection and set-aside limitations.

No more than 25 percent of the upland portion of a parcel outside of other required natural-resource buffers may be required to be protected because it is or includes listed species habitat unless the landowner provides consent, or state or federal agencies require additional protection. This provision shall be applied as follows:

- 1. If the listed species habitat is less than or equal to 25 percent of the planning parcel, the entire listed species habitat shall be protected.
- 2. Where the listed species habitat is greater than 25 percent of the upland portion of the planning parcel, no additional upland set-aside of the listed species habitat area shall be required. However, the City shall encourage the applicant to protect the portions of the listed species habitat outside the set-aside area through creative and flexible approaches to development of the property.

(h) Conditions of approval.

Development approval conditions may limit or preclude development of structures, impervious surfaces, and other uses within an appropriate distance of locations of protected species and habitat, if necessary, for the continued viability of the protected species and habitat. Depending on the type of species, the following special design standards may be required adjacent to protected listed species habitat to minimize disturbance:

- 1. A minimum setback of 25 feet from the protected listed species habitat may be required for construction activities. Clearing, grading, and filling may be prohibited within the setback area unless the applicant can demonstrate that vegetation within the protected area will not be damaged.
- 2. Landscaping within associated buffers or construction setbacks may require utilization of native plants that is compatible with existing native plant communities, soils, and climatic conditions.
- 3. Habitat corridors may be required between protected habitat areas on-site, and between protected areas on and off-site, subject to the 25 percent limitation in (g) above.
- (i) Boundaries of protected listed species habitat.

If a resource master plan, special area plan, or management plan is not required, the boundaries of the protected significant habitat for listed species shall be designated in a certified survey submitted to the City for approval prior to issuance of the final development order. Listed species habitat shall be permanently protected and managed in accordance with the standards in section 30-413 for Conservation Management Areas.

- (j) Alternatives to onsite protection.
 - 1. Circumstances for consideration of alternatives.
 - a. When scientific data demonstrates that onsite protection will not be conducive to the long term health of the listed species or listed species habitat;
 - b. When evidence presented by the applicant demonstrates that the protected habitat would be prohibitively difficult to manage adequately due to the management requirements of the habitat; or
 - c. When protected areas would be less than the smallest minimum territorial

requirements of identified species individuals, and cannot be connected with other protected areas which would result in sufficient territorial requirements.

- 2. Protected habitat standards. For every one acre of onsite listed species habitat not protected through avoidance or minimization, an offsite protection area shall provide two acres of comparable habitat as a conservation management area. The City may consider alternative mitigation proposals which provide equal or greater protection.
- 3. Relocation of listed species.
 - a. Relocation of listed species may be permitted only as a last resort in consultation with the appropriate state or federal agency, provided that the listed individuals are relocated prior to any site modifications, in accordance with an approved development plan.
 - b. If relocation of gopher tortoises is necessary, as per the Florida Fish and Wildlife Conservation Commission (FWC) regulations, proof that an FWC gopher tortoise relocation permit has been issued will be required prior to the issuance of a development order.

(k) Violations.

Violators of this section of the code shall be required to restore the site meeting all City requirements, shall provide proof of fulfillment of any State and Federal requirements to the City; and no development permit may be issued for a minimum period of two (2) years and/or fines up to \$25,000 may be assessed.

30-409. Strategic ecosystems.

(a) Applicability.

The provisions of this section apply to development proposals, land use changes, or zoning changes for planning parcels within or partly within the boundaries of a strategic ecosystem that have been annexed into the City of Gainesville after the effective date of this ordinance, or that have been annexed before the effective date of this ordinance but have not had City land-use and zoning applied before the effective date of this ordinance.

(b) Identification.

Strategic ecosystems are identified in the KBN/Golder Associates report, "Alachua County Ecological Inventory Project" (1996), and generally mapped by the KBN/Golder Ecological Inventory Map, adopted and made a part of this section by reference. The specific location and extent of strategic ecosystem resources shall be determined through ground-truthing using the KBN/Golder Associates report as a guide to determine the location and extent of the ecological community or communities described, generically, in the KBN/Golder report or of other natural resources generally consistent with the pertinent site summary in the KBN/Golder report. The ground-truthing process shall be implemented as part of the development review process, or the process for review of land use changes or zoning changes. Variability of community quality shall not be a basis for the delineation, but may be a basis for determining the most appropriate locations for development and conservation, respectively. Those areas found not to contain strategic ecosystem resources shall be eligible for consideration for development as part of a development plan provided the ecological integrity of the strategic ecosystem as a whole will be sufficiently protected.

(c) Agricultural and silvicultural activities.

The City shall work with owners of agricultural and silvicultural lands to retain the ecological integrity and ecological value of strategic ecosystems through management plans and incentives. For bona-fide agricultural activities, including silvicultural activities, within strategic ecosystems, identification and verification of best management practices shall be required as specified below.

- 1. Identification of best management practices. The most recent federal, state, and water management district best management practices (BMPs) shall be required, as applicable, for all agricultural and silvicultural activities including but not limited to the following:
 - a. Best Management Practices for Silviculture (2003), incorporated in Rule 5I-6.002, F.A.C., and available from the Florida Department of Agriculture and Consumer Services (FDACS).
 - b. BMPs for Agrichemical Handling and Farm Equipment Maintenance (1998), published by FDACS and FDEP.
 - c. Water Quality BMPs for Cow/Calf Operations (1999), published by the Florida Cattleman's Association.
 - d. Water Quality/Quantity Best Management Practices for Florida Vegetable and Agronomic Crops (2005), available from FDACS.
 - e. Protecting Natural Wetlands: A Guide to Stormwater BMPs (1996), published by the U.S. EPA.
- 2. Verification of best management practices. Where use of best management practices provides the basis for exemption to, or compliance with, any federal or state law or regulation, local regulation, code, or requirement, the owner or operator shall submit to the City a signed statement identifying and verifying the use of current applicable best

management practices. Alternatively, verification may be satisfied by participation in one or more of the following programs:

- a. Non-silvicultural Activities: Notice of Intent filed with Department of Agriculture and Consumer Services as outlined in the Florida Administrative Code.
- b. Silvicultural Activities.
 - i. Notice of Intent filed with Division of Forestry, as outlined in Rule 5I-6.004, Florida Administrative Code; or
 - ii. Certification by one of the following:
 - (a) Forest Stewardship Council (FSC, www.fscus.org)
 - (b) American Forest and Paper Association's Sustainable Forestry Initiative (SFI, www.aboutsfi.org)
 - (c) American Forest Foundation's American Tree Farm System (www.treefarmsystem.org)
 - (d) Green Tag Forestry (www.greentag.org)
 - (e) Forest Stewardship Program (FSP, www.foreststeward.org); or iii. Participation in one of the following cost-share programs:
 - (a) Conservation Reserve Program (CRP).
 - (b) Environmental Quality Incentives Program (EQIP).
 - (c) Wildlife Habitat Incentives Program (WHIP).
 - (d) Forest Land Enhancement Program (FLEP).
- 3. Management plan required. A management plan shall be required before any agricultural or silvicultural activity occurs in a strategic ecosystem that has not been used

for bona-fide agriculture or silviculture within the last 20 years, in accordance with one of the following:

- a. The management plan shall provide for retention of the ecological integrity and ecological value of the strategic ecosystem.
- b. The management plan shall be submitted to the City of Gainesville for review and approval by staff. Management plans not meeting the general template standards of section 30-414(c) will require review and approval through the development review process.
- c. The management plan may be satisfied by land acquisition, conservation easement, or participation in a conservation program sponsored by the United States Department of Agriculture Natural Resources Conservation Service.
- d. The management plan may be satisfied by any agricultural or silvicultural certification program's required management plan, provided it demonstrates that the ecological integrity and value of the system is protected.

(d) Onsite habital protection and set-aside limitations.

No more than 50 percent of the upland portion of a parcel, not in other required natural-resource buffers, may be required to be preserved if it is within, or partly within, a strategic ecosystem unless the landowner provides consent, or state or federal agencies require additional protection. This provision shall be applied as follows:

- 1. If the strategic ecosystem is less than or equal to 50 percent of the upland portion of the parcel not in other required natural-resource buffers, the entire strategic ecosystem shall be protected.
- 2. If the strategic ecosystem is greater than 50 percent of the upland portion of the parcel

not in other required natural-resource buffers, the City shall work with the applicant to select that portion of the strategic ecosystem that will be included in the set-aside area, based on limitations and factors identified in this section and in accordance with criteria in section 30-413(b), Site Selection and Design for Conservation Management Areas. The City shall encourage the applicant to protect the portions of the strategic ecosystem outside of the set-aside area through creative and flexible approaches to development of the property, using the provisions of paragraph (f) 3, for guidance.

(e) Additional development application submittal requirements.

The following information shall be submitted with an application for development within a strategic ecosystem.

- 1. All information required by section 30-401 as part of a natural and archaeological resources assessment:
- 2. General analysis of adjacent properties sufficient to provide resource context;
- 3. Ownership and use information, including parcel numbers and acreage, for all land under common ownership or control within the strategic ecosystem or contiguous to the proposed development site; and
- 4. All proposed protection and management strategies for the natural and archaeological resources on the site and on any properties under common ownership and control as identified in 3. above.
- (f) Review of development proposals in strategic ecosystems.

As part of the development review process, the city manager or designee shall evaluate whether a proposal is sufficiently protective of the ecological integrity of the strategic ecosystem, and a finding shall be made by the appropriate review body as to whether development may proceed in

accordance with the provisions of this section. The evaluation shall be made using the information required in paragraph (e) that is based on consideration of natural resource and land use characteristics specific to the system as identified by the KBN/Golder Ecological Inventory Map and through ground-truthing in accordance with paragraph (b).

- 1. Evaluation. The evaluation shall include an assessment as to whether the proposal protects resources within the project area and within the ecosystem as a whole, according to the following:
 - a. Features that define the strategic ecosystem;
 - b. Areas critical for system connectivity; important plant or wildlife habitat areas and characteristics;
 - c. Feasibility of important management strategies, such as prescribed burning;
 - d. Protection and management of additional resources for all properties under common ownership and control within the strategic ecosystem; and
 - e. Density transfers within the property shall be allowed.
- 2. Equal to or less than 50 percent strategic ecosystem. Where the evaluation shows that the strategic ecosystem constitutes no more than 50 percent of the upland portion of the subject property, development will be allowed pursuant to paragraph (d) of this chapter and the applicable provisions of Article VIII of the Land Development Code.
- 3. More than 50 percent strategic ecosystem. Where the evaluation shows that the strategic ecosystem constitutes more than 50 percent of the subject property, development may be allowed provided that the following development standards are applied:
 - a. Mechanisms to coordinate management activities with adjacent resources in the strategic ecosystem shall be provided, and management plans shall be required in

accordance with section 30-414.

- b. Vegetation loss, grade change, and disturbance of the development site shall be minimized by careful site design fitted to the topography and soil; removal of vegetation shall be limited to only that necessary to develop the site.
- c. Access, infrastructure, stormwater management and utilities shall be sited with consideration to minimizing impacts across multiple properties, providing for wildfire mitigation, and maximizing opportunities for shared facilities such as common driveways, utility access, and building impact areas.
- d. Natural and archaeological resource protections required elsewhere in Chapter 30 or by federal, state and regional permitting agencies shall be applied.
- e. No development or other adverse impact to the set-aside portion of the property shall be allowed, except where no other access is available, in which case impact may be allowed in the least sensitive portion of the system in accordance with paragraph c. above, subject to the mitigation requirements in sections 30-302.1 and 30-415.
- f. Where impact is proposed in the remaining conservation area outside the required set-aside, the following shall apply:
 - i. The applicant shall locate development on buildable area outside of the strategic ecosystem to the greatest extent practicable.
 - ii. Parcels, lots, building areas and driveways shall be configured to minimize overall impact to ecosystem integrity.
 - iii. Subdivisions and non-residential development shall meet requirements for clustered subdivisions set forth in section 30-190.

(g) Violations.

Violators of this section of the code shall be required to restore the site meeting all City requirements, shall provide proof of fulfillment of any State and Federal requirements to the City; and no development permit may be issued for a minimum period of two (2) years and/or fines up to \$25,000 may be assessed.

30-410. High Aquifer Recharge Areas.

(a) Standards.

The following planning and design principles shall control development on parcels containing high aquifer recharge areas to ensure both short and long-term mitigation of impacts on groundwater created by activities occurring in high aquifer recharge areas.

1. Stormwater.

- a. All new development or modifications to existing development shall provide stormwater treatment consistent with the Stormwater Element of the Comprehensive Plan and section 30-270.
- b. All stormwater basins on parcels containing high aquifer recharge areas shall be designed and constructed to provide for at least three (3) feet of unconsolidated solid materials such as sand, silts, and clays between the surface of limestone bedrock and the bottom and sides of the stormwater basin.

2. Hazardous materials.

- a. Existing facilities.
 - i.. Existing facilities shall meet the requirements of Alachua County's Hazardous Materials Management Code pertaining to such facilities.
 - ii. Corrective action to retrofit or upgrade facilities that handle or store hazardous materials consistent with standards applicable to new facilities shall be required.
 - iii. Where existing facilities are proposed to be modified, development review and permitting activities shall include careful evaluation and implementation of engineering and management controls, setbacks and

buffers, and monitoring.

- b. New uses and activities.
 - i. New development activities which involve handling or storing of hazardous materials may be prohibited in high aquifer recharge areas, and, where permitted, shall be subject to the general requirements, siting prohibitions, storage facility standards, secondary containment and monitoring requirements contained in Alachua County's Hazardous Materials Management Code.
 - ii. The following new uses shall be prohibited on parcels containing high aquifer recharge areas unless it can be demonstrated that the material, in the quantity and/or solution stored or the conditions under which it is to be stored, does not pose a hazard to human health or the environment:
 - i. Asphalt plant;
 - ii. Auto salvage or junk yard;
 - iii. Battery reclamation or manufacturing;
 - iv. Chemical manufacturing;
 - v. Electronics manufacturing using halogenated solvents;
 - vi. Pesticide distribution site (regional);
 - vii. Pesticide manufacturing;
 - viii. Portland cement manufacturing;
 - ix. Underground storage tank for the storage of hazardous materials;
 - x. Wholesale bulk fuel storage;

xi. Any hazardous waste transfer site; or
xii. Any site defined by the Resource Conservation and Recovery
Act (RCRA) as a treatment, storage, or disposal (TSD) facility for
hazardous waste.

30-411. Archaeological resources.

(a) Significant archaeological resources.

Significant archaeological resources are those archaeological resources that are listed, or are eligible for listing, on the National Register of Historic Places (see 36 CFR Ch. I, Part 60; www.cr.nps.gov/places.htm).

(b) Identification of archaeological resources.

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- 1. General mapping. Maps of known archaeological sites are maintained by the Florida Department of State, Division of Historical Resources, Master Site File. Areas of known or probable archaeological resources have been modeled in Alachua County, "An Archaeological Survey of Unincorporated Alachua County, Florida" (Phase 1 and Phase 2), by Southeastern Archaeological Research, Inc., October 2001.
- 2. Site-specific determination. Surveys and analyses for archaeological resources shall be required prior to alteration of a property known or likely to contain resources of archaeological significance where:
 - a. Archaeological resources are mapped; surveys and analyses shall be required by the City without recommendation of the Florida Department of State, Division of Historical Resources.
 - b. Archaeological resources are not mapped; surveys and analyses may be required by the City upon recommendation of the Florida Department of State, Division of Historical Resources, or qualified professional.
- 3. Standards for authorized investigation of archaeological resources. Surveys and analyses for archaeological resources shall be conducted in accordance with standards and methodology for the natural and archaeological resources assessment set forth in

section 30-401. Authorized investigations and reporting of archaeological resources shall, at a minimum, conform to Chapter 1A-46, Florida Administrative Code, and the provisions and standards contained in the "Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation," September 29, 1983 (see http://www.nps.gov/history/local-law/arch_stnds_0.htm), prepared under the authority of Sections 101(f), (g), and (h), and Section 110 of the National Historic Preservation Act of 1966, as amended. These documents are adopted and made part of this Chapter by reference.

(c) Prohibited activities.

Except as otherwise expressly provided in this Section, no development activity involving ground disturbance shall occur on a property containing, or having reasonable potential to harbor, resources of archaeological significance, without the appropriate analysis and opportunity for mitigation as specified in paragraph (d).

- (d) Standards for protection of archaeological resources.
 - 1. Avoidance, minimization, and mitigation (in that order of preference) of adverse impacts on significant archaeological resources shall be required as appropriate to the scale and significance of the resource.
 - 2. Development orders for parcels containing known or suspected areas of archaeological significance shall be conditioned, where appropriate based on recommendation from qualified professional, to accomplish the following:
 - a. Insure proper archaeological investigation prior to construction; and, where appropriate, avoidance, minimization, and mitigation of impacts.
 - b. Preserve and provide perimeter buffering around significant archaeological

sites in order to maintain the security and integrity of the resource. This may include, if necessary, alteration to the proposed or originally approved development plan.

- c. Where archaeological sites are to be preserved, incentives to encourage retention of these areas may be provided.
- 3. Mitigation of archaeological resources may include but is not limited to the following:
 - a. The excavation of an archaeological resource or an object or property that is integrally related to a significant archaeological resource shall be prohibited without allowing an opportunity for the acquisition of fee or less-than-fee interest in the property by a governmental unit, an organization, or by any other entity committed to the preservation, restoration, or rehabilitation of the resource(s).
 - b. Adaptive use of archaeological landforms or properties consistent with preservation of their archaeological character shall be encouraged.
- 4. When unmarked human remains are discovered during excavation, construction, development or any other circumstances, such discovery must be reported to the State Archaeologist (850-245-6322), or to the County Medical Examiner, District 8 (see http://www.fdle.state.fl.us/Content/getdoc/bb3fe7b6-f6d7-4edb-ab8f-

210ebc9a87ab/District-Medical-Examiners-(1).aspx), as appropriate. Any activities on the site that may disturb the remains shall not be resumed until authorized in writing by such offices. This requirement is enforced under Florida Statutes, Sections 872.02 and 872.05, and is a violation of this Code (see also

www.flheritage.com/archaeology/FS872/procedure.cfm).

(e) Significant archaeological resources on public projects.

When significant archaeological resources are encountered in the course of construction or maintenance of any public project, or on any publicly owned land, the city manager or designee shall be notified within 24 hours of the discovery, and further activity within 100 feet of the resource shall be postponed to allow proper investigation. The city manager or designee shall report the discovery to the Florida Department of State, Division of Historical Resources, and reasonable opportunity shall be provided for State personnel to investigate and excavate the resource prior to further disturbance. The following practices are specifically prohibited:

- 1. No person shall conduct field investigations on, or remove or attempt to remove, or deface, destroy, or otherwise alter any archaeological resource or property, except in the course of activities authorized by the city manager or designee, as permitted by the State Division of Historical Resources, and unless said person is a Certified Archaeological Monitor.
- 2. No person shall offer for sale or exchange any object with knowledge that it has been collected or excavated in violation of this Section, or procure, counsel, solicit, or employ any other person to violate any prohibition contained herein, or to sell, purchase, exchange, transport, receive, or offer to sell, purchase, or exchange any archaeological resource or property excavated or removed, except with the express written consent of the city manager or designee and as permitted by the State Division of Historical Resources.

 3. In the instance that specimens, objects, and materials are removed or attempted to be removed, or defaced, destroyed, or otherwise altered, each item may constitute a separate violation. In addition, all such specimens, objects and materials, together with all photographs and records relating to such materials, shall be forfeited to the City.

30-412. Significant geological features.

(a) Significant geological features.

Significant geologic features include but are not limited to: point source features such as sinkholes, caves, spring heads, and limestone outcrops; lineal features such as lineaments, ridges, escarpments, and spring runs; and areal features such as steep slopes and springsheds.

(b) Protection strategies.

Strategies for protection shall be based on the unique characteristics of the resource and shall be tailored to address diverse geometries, connections to surface water and ground water, habitat functions and values, and the dynamics of natural systems processes. Avoidance, minimization, and mitigation, in that order of preference, of significant adverse impacts shall be required. Strategies may include but are not limited to the following.

1. Onsite protection.

- a. Significant geologic features shall be designated and protected as conservation management areas in accordance with the requirements of section 30-413.

 Significant geological features that are capable of being managed onsite shall be identified on development proposals and protected during construction and after development.
- b. Features may be incorporated as aesthetic elements into the project design for a site.
- c. Natural topographic features may be retained through lot layout and infrastructure siting within the context of significant geologic features.
- 2. Buffers for significant geologic features. Buffers shall be required around protected significant geologic features in order to maintain natural context, edge vegetation, and

structural protection. In the absence of scientific information which demonstrates that another buffer width is appropriate, the following default buffer widths shall be applied:

- a. Sinkholes: an average of 50 feet, but no less than 35 feet away from the outermost closed contour.
- b. Caves, lineaments, ridges, and escarpments: an average of 75 feet, but no less than 50 feet, away from the outermost contour associated with the feature.
- c. Springs, and significant geologic features located within springsheds: an average of 150 feet, but no less than 100 feet, away from the outermost contour associated with the feature.
- 3. Habitat functions. In instances where geologic features function as habitats for listed species, special protection will be provided commensurate with the character of the habitat and needs of the species as per section 30-408.
- 4. Use of best management practices. Use of best management practices may be required to minimize erosion and maintain water quality, as provided in the Alachua County Water Quality Code, including but not limited to: Chapter 6 of the Florida Land Development Manual: A Guide to Sound Land and Water Management (Florida Department of Environmental Regulation 1988) (see Rules 40C-4.381(1)(d), 40C-42.032(2)(a)7, 40B-400.115(1)(d), F.A.C.)
- 5. Mitigation. Alternatives to onsite protection may be considered when physical constraints of the parcel preclude maintenance of the integrity of the resource, given considerations as to size of the development site, resource quality, connectivity to the Floridan Aquifer, adjacent uses, and feasibility of management. Any activity permitted within or affecting a significant geological feature onsite or adjacent to the site (on the

same parcel or on a contiguous tax parcel) causing a significant adverse impact shall be mitigated at the expense of the landowner. Mitigation proposals must maintain or improve the level of resource functions and values.

(c) Sinkhole management.

Management strategies for sinkholes and sinkhole-prone areas shall be applied as part of the development approval process to protect water quality, hydrologic integrity, and ecological value. Management strategies may include, among other techniques, filling and development restrictions, buffers, runoff diversion, muck and debris removal, berm and weir construction, and filtration.

- 1. Protection of sinkholes. Open sinkholes and sinkholes with stream inflow shall be identified and protected as conservation management areas. The sinkhole shall be fully protected or restored as a natural area as required in subparagraph a. below. Where the applicant seeks to continue access or make improvements to existing access, a special exception shall be sought as provided in subparagraph b. below.
 - a. Restoration plan. The applicant shall submit a plan that demonstrates the elimination of access and the restoration of the land to a natural condition, including stabilization of erosion channels, limiting drainage from non-natural areas, and restoration of buffer areas that have been disturbed.
 - b. Access. If there are (or were) points of access to the sinkhole's bottom or if access is proposed, all the conditions in subparagraph 1. above shall be met. In addition, an applicant for development shall demonstrate the following in the proposed management plan, or if access to the sinkhole is proposed after a management plan has been approved, a revised management plan must be

submitted for review, demonstrating the following:

- i. That there is a recreational or scientific benefit that the public derives from the retention or creation of access. If access exists, show that use of the area is such that closing the access would not be practical based on the current level of use.
- ii. That all sources of erosion or pollution within the sinkhole buffer and the sinkhole are mitigated to eliminate or reduce erosion and pollution to the lowest reasonable level.
- iii. That the access is the minimum needed to meet the needs. The route chosen shall be the least damaging and least vulnerable to erosion.
- iv. That a plan for the maintenance of the access, stormwater controls, waste collection, and landscaping has been submitted, approved by the City, and funded.
- 2. Sinkhole buffers. The buffer areas around sinkholes or other karst surficial features are intended to protect the feature and groundwater by providing areas where surface or subsurface flows into the features are preserved or restored to a natural condition, allowing vegetation and soil dwelling life to clean the water and trap surface debris, and restoration of tree canopy to maintain microclimate conditions within the feature.
- 3. Drainage area of sinkhole. The drainage area is the surface drainage shed of the sinkhole. The management objective is to limit impervious surfaces and design drainage to ensure that sediments or contaminated water does not reach the feature. The following should govern the design of development within the drainage area:
 - a. Recharge. The stormwater management facilities for any development should

be located as far from the feature as possible, including outside the drainage area so that stormwater flows toward the feature are reduced.

b. Professional geologic study. —A professional geologic study may be required to assess subsurface conditions for avoiding negative recharge impacts to significant solution channels.

(d) Other karst features.

- 1. Karst sensitive areas. Retention areas constructed in karst sensitive areas (where rock surfaces are within 10 feet of land surface) shall be designed and constructed to minimize the potential to allow water to flow directly into the aquifer. Minimally, this shall require three feet of unconsolidated soil material between the surface of limestone bedrock and bottom and sides of stormwater basin. More stringent requirements may apply based on potential for contamination to the Floridan aquifer.
- 2. Water bodies. Lakes and ponds in the City are often old sinkholes. A hydrogeological study may be required to determine the degree to which the lake or pond basin is connected to the aquifer or providing flow to nearby springs.
 - a. Where the water body is an open sinkhole, a periodically drained water body, or otherwise hydrologically connected water bodies (ex. where water level fluctuates in response to climatic or groundwater conditions), it shall be treated as an open sinkhole as specified in paragraph (c).
 - b. Where the water body is connected erratically, it shall be treated as a sinkhole unless geological studies and water quality studies can show that other techniques can be used to ensure recharge is meeting the pre-development standard.
- 3. Subsurface channels. A professional geologic study may be required to determine

locations that are likely to drain to subsurface channels or conduits.

- a. Protection area. The protection area for subsurface channels is 100 feet on both sides of the channel.
- b. Stormwater management. Stormwater facilities should be located outside the subsurface channel area where possible. If not possible, stormwater facilities shall be located to minimize any threat that the increased level of recharge will open or enlarge sinkholes or weaken areas so that new channels are opened. The disconnection of the stormwater system from the subsurface channel should be maximized by the use of such techniques as green roofs, rain barrels, vegetated swales, or retention with vegetative uptake or irrigation.
- c. Excavation. All permitted excavations shall be conducted in areas where there is the lowest risk of encountering sand-filled sinkholes or where rock is riddled with small channels or has a high porosity. No mining shall be permitted.
- d. Septic systems. No septic systems shall be permitted in the protection area for subsurface channels.
- 4. Closed depressions. Closed depressions are areas where there is a significant probability that there are sand-filled sinkholes that have no surface indication. A professional geologic study may be required with the objective of locating any sinkholes that are not visible from the surface. The study shall map all sinkholes and their buffers. Any land remaining in the closed depression that is not a sinkhole or sinkholes buffer will continue to be treated as a closed depression.

(e) Steep slopes.

Where slopes greater than or equal to five percent are found adjacent to watercourses, existing

vegetation shall be substantially retained to minimize erosion consistent with best management practices and surface water and wetland buffers.

(f) Seepage slopes and shallow groundwater tables.

Development shall be designed to include retention of the natural character of seepage slopes and shallow groundwater tables.

30-307. Nature park district.

(a) Application and administration.

Adoption of nature park district. - The nature park district is delineated in maps on file and maintained by the Nature Operations Division.

- (b) Requirements and procedures.
 - 1. Development plan requirements. Refer to Article VII, pertaining to development plan review process.
 - 2. Buffer. New developments (except existing individual lots of record) must leave a buffer at least 25 feet in width extending from the boundary of the nature park to be left in a natural condition. Buffer must be maintained as common open space and not part of lots.
 - 3. Fencing. New developments (except existing individual lots of record) adjacent to a nature park may be required to install and maintain a fence, as determined at the time of development review, between the nature park and the development area. If required, the fence can either be installed along the actual property boundary or the buffer boundary at the developer's discretion.
 - 4. Building and lighting height limit.
 - a. Maximum building height: 35 feet.
 - b. Maximum lighting height: 45 feet.
 - c. Maximum transmitter tower height: 80 feet.
 - 5. Exterior lighting control. All exterior lighting shall be shielded or directed away from the park. No exterior lighting shall cause illumination in excess of four-tenths foot-candle measured at the park property boundary. Buildings shall not be externally illuminated on

the faces fronting the park, except that exterior lighting of building entrances, exits or loading docks is permitted. Down-lights shall be used for area lighting instead of full globe lights or any similar type of light which illuminates in all directions.

(c) Stormwater control.

Refer to section 30-270(b)(2)d.

(d) On-site transfer of development intensity and density.

In order to protect nature parks, development intensity and density for building areas may be transferred from areas near the park to areas remote from the park within the same property or adjacent property under same ownership and zoning category.

30-413. Conservation management areas.

Conservation management areas may be required to be set aside for the conservation and management of regulated natural and archaeological resources, pursuant to sections 30-406 through 30-412.

(a) Size.

The amount of land to be protected within a conservation management area shall include the entire regulated natural or archaeological resource, as well as additional areas such as buffers, setbacks and linkages that preserve natural systems functions on the planning parcel, except where limited by sections 30-400 or sections 30-406 through 30-412.

(b) Site selection and design.

Conservation management areas shall be designed and maintained in areas with intact vegetation, including canopy, understory and groundcover where applicable, in functional, clustered arrangement, with logical contiguous boundaries to eliminate or minimize fragmentation to the greatest extent practicable. Where alternative sites exist, the site or sites selected for onsite protection shall be the best suited to preserve ecological integrity, maximize use by wildlife and maintain the long-term viability of natural plant or animal communities. The selection shall be based upon the following:

- 1. Function and value of natural resources;
- 2. Quality and condition of natural resources;
- 3. Protectability and manageability;
- 4. Size and shape, avoiding enclaves of development or areas fragmented by development, and providing, where appropriate, adequate buffers from the secondary impacts of development and adequate wildlife corridors;

- 5. Contiguity with adjacent existing habitat, functional wetland system, floodplain, or habitat corridor;
- 6. Existing species population sizes and life history requirements;
- 7. Proximity and accessibility to other populations of the same species;
- 8. Compatibility of conservation with adjacent land uses; and
- 9. Recommendations from the Florida Fish and Wildlife Conservation Commission and other appropriate agencies.

(c) Location.

Conservation management areas shall be located in one or a combination of the following configurations:

- 1. Common open space; or
- 2. Entirely within the boundaries of a single individual lot.

(d) Permitted uses.

The use of conservation management areas shall be limited to that which is compatible with protection of the ecological integrity of the protected resources. The following uses may be permitted as part of an approved management plan, provided they do not adversely affect natural resource function and ecological integrity:

- 1. Nature trails (mulched walking paths, elevated wooden walkways);
- 2. Low intensity, passive recreational activities such as wildlife viewing and hiking;
- 3. Scientific and educational activities (interpretive trails and signage, observation points);
- 4. Site investigative work such as surveys, soil logs, and percolation tests;
- 5. Scenic, archaeological, wildlife, or scientific preserves;

- 6. Ongoing agricultural and silvicultural activities that:
 - a. Are consistent with the protection of the natural resource(s) identified on the site for protection under the management plan; and
 - b. To the extent consistent with the protection of such resources, follow certification programs or Best Management Practices as set forth in 30-409(c).
- 7. Single-family residential dwellings established as part of an approved management plan or special area plan;
- 8. Constructing fences where no fill activity is required; and
- 9 Other uses demonstrated to be compatible with natural resource protections as outlined in the management plan.

(e) Prohibited activities.

The following activities are prohibited unless part of an approved management plan:

- 1. Construction or placing of buildings, roads, signs, billboards or other advertising, utilities, or other structures on or above the ground.
- 2. Dumping or placing of soil or other substance or material as landfill or dumping or placing of trash, waste, or unsightly or offensive materials.
- 3. Removal or destruction of native trees, shrubs, or other vegetation.
- 4. Excavation, dredging, or removal of loam, peat, gravel, soil, rock, or other material substance in such manner as to affect the surface.
- 5. Surface use except for purposes that permit the land or water area to remain predominantly in its natural condition.
- 6. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation.

- 7. Acts or uses detrimental to such retention of land or water areas.
- 8. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or cultural significance.

(f) Discharges to protected areas.

Wastewater and stormwater discharges to conservation management areas are generally prohibited. Discharges may be allowed only in surface waters, wetlands and significant geologic features if the following criteria are satisfied:

- 1. The quantity, timing, and quality of discharge maintains or improves water quality, biological health, and function of the natural ecosystem.
- 2. Downstream waters are not affected by nutrient loading.
- 3. The project owner or developer prepares and implements maintenance and monitoring plan acceptable to the City.
- 4. The project owner or developer corrects any failures in design or operation of the wastewater and/or stormwater system that cause degradation of water quality, biological health, or the function of the natural ecosystem.
- 5. The owner or developer posts a performance bond or similar financial guarantee to assure implementation of maintenance and monitoring in compliance with sections 30-302.1 or 30-415(d) 8.
- 6. Treatment is provided in accordance with the requirements of section 30-270 and the requirements of the appropriate water management district.

(g) Protection during construction.

Prior to and during parcel alteration, the conservation management area boundaries shall be

clearly marked and appropriately protected as follows.

- 1. Physical barriers shall be installed around the outer extent of the set aside portion of conservation management areas as necessary to prevent disturbance by individuals and equipment. Protective barriers must be installed and approved prior to commencement of permitted activities and maintained in place until activities are complete.
- 2. Erosion and turbidity control measures shall be required in order to prevent runoff of turbid water into conservation management areas.
- 3. The developer shall completely restore any portion of a protected conservation management area damaged during the activity. Certificates of occupancy shall not be issued until restoration activity has been completed.

(h) Permanent protection.

Conservation management areas shall be permanently protected with a conservation easement as follows:

- 1. Dedication. All areas protected under this Section shall be restricted from further subdivision, and protected in perpetuity using a legal instrument that runs with the land, in a form acceptable to the City and duly recorded in the public record, which assures the preservation and continued maintenance of the conservation management area.
 - a. The preferred legal instrument shall be a conservation easement in accordance with F.S. 704.06, to be recorded in the public records of Alachua County, which shall restrict the use of the land in perpetuity to nondevelopment uses and be expressly enforceable by the City.
 - b. Other forms of dedication may be considered by the City if comparable protection is demonstrated which assures the preservation and continued

maintenance of the conservation management area.

- c. The city manager or designee may issue development approval subject to the recording of the approved legal instrument. Issuance of construction and building permits shall be withheld until proof of recordation is provided to the City.
- 2. Plat notations. The boundaries of designated conservation management areas, including any required buffers, shall be clearly delineated on development plans, plats, and deed restrictions, and a legal description of the boundaries shall be included. A plat shall identify express prohibitions preceded by the following statement:

"The activities/acts/uses identified below are prohibited in designated 'conservation management area(s)', unless part of an approved management plan, without express written permission from the City of Gainesville. Violation of any one of these provisions without such written permission shall be considered a discrete violation of a Development Order issued by the City of Gainesville.

Development Order terms are enforceable by the Code Enforcement Division.

Violations may result in monetary penalties of up to \$15,000 and/or an order to restore conservation area(s) to preexisting conditions at the expense of the owner(s). Failure to comply with Code Enforcement orders may result in liens against the property.

Prohibited activities/acts/uses in 'conservation management area(s)' include:

i. Construction or placing of buildings, roads, signs, billboards or other

advertising, utilities, or other structures on or above the ground; ii. Dumping or

placing of soil or other substance or material as landfill or dumping or placing of

trash, waste, or unsightly or offensive materials; iii. Removal or destruction of

native trees, shrubs, or other vegetation; iv. Excavation, dredging, or removal of loam, peat, gravel, soil, rock, or other material substance in such manner as to affect the surface; v. Surface use except for purposes that permit the land or water area to remain predominantly in its natural condition; vi. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation; vii. Acts or uses detrimental to such retention of land or water areas; and viii. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or cultural significance."

- 3. Field markers. Permanent survey markers using iron or concrete monuments to delineate the boundary between conservation management areas and contiguous land shall be set, according to current survey standards. Markers shall be installed prior to issuance of the initial certificate of occupancy or other final approval, and shall be maintained by the owner in perpetuity.
- 4. Signs.
 - a. The perimeter of conservation management areas shall be permanently identified with City approved signs that identify the area as protected conservation area.
 - b. When signage is required by another governmental agency, and coincides with City requirements, the alternate signage shall satisfy this requirement.
- 5. Rezoning. Areas protected as conservation management areas may be rezoned to a conservation zoning category with landowner approval at the City's expense.
- (i) Management requirements.

Conservation management areas shall be maintained in compliance with standards set forth in sections 30-406 through 30-412 and any required management plan.

- 1. Responsibility. Unless otherwise agreed by the City, the cost and responsibility of managing the protected area shall be borne by the owner or responsible entity.
- 2. Minimum requirements. Management shall maintain or enhance the ecological value of the protected area and support the survival of listed species. Management shall include but not be limited to the following:
 - a. Non-native vegetation shall not be introduced into the protected area. Invasive, non-native vegetation shall be removed in accordance with section 30-251(7)h., or reduced to a level of noninterference with the growth of native plants. Removal shall be accomplished utilizing ecologically sound techniques, including but not limited to, manual removal, hand-held power equipment, and prescribed burning. Non-native trees which are used as nesting sites shall be retained until nesting season is over and then they will be controlled as per any City, State, or Federal regulations. All vegetative debris must be disposed of outside the protected area.
 - b. Dead trees that are not a hazard to humans and that provide habitat for wildlife shall remain in the protected area.
 - c. Where non-native vegetation is removed, replacement with appropriate native species may be required.
 - d. Future owners, tenants, or other users of the protected area and resource shall be informed of the specific requirements of the approved management plan, and relevant state and federal laws. Information shall consist of tangible materials, including but not limited to deed or title notes, brochures and signage.

- e. Fencing may be required to control access to the protected area.
- 3. Management plan. A management plan may be required in order to provide long-term protection and maintenance of the values and functions of the conservation management area, in accordance with section 30-414. The parcel owner shall maintain the protected area in accordance with the management plan. Adequate financial resources to maintain and manage the protected area may be required. Modifications to the management plan are prohibited without prior written approval by the City.
- 4. Failure to maintain. If the conservation management area is not properly maintained or managed, the City may assume responsibility of maintenance and may charge the property owners or responsible entity a fee which covers maintenance and administrative costs.
- (j) Ownership of conservation management area.

The conservation management area may be owned by one or a combination of the following:

- 1. Landowner;
- 2. Homeowners' association;
- 3. Established land trust;
- 4. Non-profit conservation organization;
- 5. Alachua County, with approval;
- 6. City of Gainesville
- 7. Other public agency with conservation responsibilities and expertise (e.g., Water Management District).

30-414. Management plans.

(a) When required.

A management plan shall be required for all development applications involving properties within or partly within, a strategic ecosystem and annexed into the city after [date]. For all other development applications not located within or partly within, a strategic ecosystem, a management plan shall be required if the property meets 2 of the following 3 criteria:

- 1. Contains significant and/or regulated natural or archaeological resources greater than or equal to 5 acres in size.
- 2. Contains at least one listed, uncommon, or endemic species.
- 3. Contains the opportunity to provide a wildlife corridor adjacent to a nature park.

The city manager or designee shall determine at or before submittal of an application for development review whether a management plan will be required. The management plan shall be submitted for review and approval by the appropriate reviewing board.

(b) Professional standards.

(c) Contents.

The management plan shall be prepared at the expense of the applicant by person(s) qualified in the appropriate fields of study, and conducted according to professionally accepted standards.

The management plan shall include the following:

- 1. Description of goals and objectives based on type of natural resources to be managed;
- 2. Description of all proposed uses, including existing and any proposed physical and access improvements;
- 3. Description of prohibited activities, such as mowing in wetland buffers, or removal of native plants in protected habitat areas;

- 4. Descriptions of ongoing activities that will be performed to protect, restore, or enhance the natural resources to be protected. This may include:
 - a. Removal or control of invasive non-native vegetation and debris;
 - b. Replanting with native plants as necessary;
 - c. Provision for listed species habitat needs, including restricting, at appropriate times, intrusions into sensitive foraging, breeding, roosting, and nesting areas;
 - d. Fencing or other institutional controls to minimize impact of human activities on wildlife and vegetation, such as predation by pets;
 - e. Prescribed burning, thinning, or comparable activities performed in an environmentally sensitive manner to restore or maintain habitat;
 - f. Cooperative efforts and agreements to help promote or conduct certain management activities, such as cleanups, maintenance, public education, observation, monitoring, and reporting;
 - g. Any additional measures determined to be necessary to protect and maintain the functions and values of conservation areas in conjunction with wildfire mitigation;
 - h. Schedules, estimated costs, staffing requirements, and assignments of responsibility for specific implementation activities to be performed as part of the management plan, and identification of means by which funding will be provided;
 - i. Performance standards with criteria for assessing goals and objectives;
 - j. Five-year monitoring plan with schedule and responsibility;
 - k. Ownership and party responsible for management activities;
 - 1. Provision for changes to be reviewed and approved by the City; and

- m. Contingency plans for corrective measures or change if goals are not met, and recognition of City enforcement authority.
- 5. Revision of an approved management plan. Modifications to an approved management plan that do not result in lesser protection of the resource(s) present may be allowed, subject to approval by the reviewing board that approved the original management plan.
- 6. Management standards in lieu of plan. The agreement to use management practices in accordance with a standard management plan template provided by the City may satisfy the requirement of a management plan. Nature Operations Division will provide this template per request.
- 7. Enforceability. The existence of the management plan shall be noted on plans and plats, covenants and restrictions, conservation easements and other documents as appropriate to the type of development and manner of protection provided. The management plan shall be specifically enforceable by the City.

30-415. Avoidance, Minimization, Mitigation, and Monitoring.

(a) Applicability.

Approval shall only be granted for proposed activities that are located, designed, constructed, and maintained to avoid, minimize, and, where necessary, mitigate adverse impacts on regulated natural and archaeological resources, consistent with upland habitat limitations under sections 30-400 and 30-406 through 30-412, the requirements for surface waters and wetlands in sections 30-302 and 30-302.1, and the requirements for tree preservation in section 30-254.

(b) Avoidance measures.

Specific measures for avoidance which will be required prior to authorization of any adverse impact may include, but are not limited to, the following:

- 1. Limiting the scope, degree or magnitude of the proposed activity.
- 2. Using appropriate and best available technology.
- 3. Sensitive site design, siting of facilities, and construction staging activities.
- 4. Exploring alternative on-site locations to avoid or reduce impacts of activities.
- 5. Scheduling proposed activities at times of minimum biological activity to avoid periods of migration, rearing, resting, nesting and other species-specific cycles and activities.
- 6. Managing the access to conservation management areas, such as fencing designed to separate wildlife and pets or to exclude humans from sensitive denning or breeding areas.

(c) Minimization measures.

The following special design standards may be required to minimize disturbance caused by activities adjacent to natural resources:

1. Minimum setbacks for clearing of native plants adjacent to regulated natural resources,

or for construction of impervious surfaces greater than 100 square feet in base coverage.

- 2. Limiting native plants removal to the minimum necessary to carry out the proposed activity or to meet fire hazard standards. Protection of tree crowns and root zones may be required for all trees planned for preservation.
- 3. Roads and other development features located to follow existing topography and minimize cut and fill.
- 4. Designing stormwater to maximize overland flow through natural drainage systems and grassed overland (roadside and lot line) swales; multi-purpose use of stormwater management systems; use across or for multiple properties.
- 5. Using performance-based treatment systems, or siting septic tanks and drainfields to prevent discharges that adversely impact the environmental quality of regulated natural and archaeological resources.
- 6. Other reasonable protective measures necessary to minimize adverse effects may be required depending on conditions specific to a particular site.

(d) Mitigation measures.

Where impacts to regulated natural resources cannot be avoided or minimized, mitigation may be required subject to the requirements below. Mitigation of significant adverse impacts to Conservation Management Areas shall be required for both public and private projects, in accordance with criteria specific to the resource and criteria generally applicable to mitigation proposals as set forth herein.

Mitigation of significant adverse impacts on conservation areas shall include funding for the acquisition and management, preservation, replacement, or restoration of significant ecological resources. A proposal for mitigation of significant adverse impacts must meet the following

general mitigation standards. Mitigation of impact to wetlands is provided in section 30-302.1. Mitigation of impact to regulated trees is provided in section 30-254.

- 1. Determination of impact. Significant adverse impacts to a conservation area shall be evaluated based on the terms of the natural function and value of the resource. Mitigation shall be acceptable only where it is determined that mitigation will result in no actual net loss of the resource function and value.
- 2. Characteristics of mitigation proposals. A mitigation proposal shall provide compensation for all functions and values of impacted resources by protecting two times the area of comparable resource type, and good or superior resource quality, as the area being impacted, except where no other access is available and impact is allowed in the least sensitive portion of the resource, in which case mitigation shall be reduced to a replacement ratio of 1:1. The following characteristics shall be included in the proposal:
 - a. The hydrologic, soil, slope, and other basic characteristics of the proposed project must be adequate to achieve proposed project goals.
 - b. The mitigation area must be at least as persistent as the existing natural resource it is intended to replace.
 - c. The size of the mitigation area shall be based on the quality of habitat or vegetation on both the area of impact and the area of proposed mitigation.
- 3. Resource-based mitigation. Where mitigation is required, resource-based mitigation may be provided on or adjacent to the site, or offsite. The order in which mitigation will be considered shall be:
 - a. Onsite restoration or enhancement: An applicant may mitigate for impacts onsite by replanting on or adjacent to the parcel, relocating movable resources

from one portion to another portion of the parcel, or other measures to restore the quality, function and value of the resource. An easement may be required to ensure the continued viability of the area to be restored or enhanced.

- b. Offsite preservation: The applicant may provide offsite mitigation through the preservation of land through offsite dedication, transfer of fee or less-than-fee simple title to a land conservation agency, non-profit conservation organization, or other entity approved by the City. Portions of offsite conservation management areas requiring protection under this section shall not be used as credit towards a mitigation proposal. Mitigation of impacts to a regulated plant or animal species or its habitat that is required by a State or federal agency (such as the water management districts) shall be applied towards offsite mitigation if it is for the same development project and meets the following requirements:
 - i. Offsite protection sites shall meet all appropriate size, site selection and design, protection, ownership and maintenance, and other provisions of this Chapter applicable to onsite conservation management areas. Fencing may be required to control access to the mitigation area.
 - ii. Offsite conservation management areas shall be located in the City of Gainesville and may include:
 - (a) Sites composed of addition of land to existing publicly managed areas held for conservation purposes, such as State or City parks;
 - (b) Sites recommended for preservation or restoration by a State or local governmental land conservation agency; or

- (c) Other suitable sites within an ecosystem or watershed in proximity to the conservation or preservation area being adversely impacted by development.
- 4. Fee-in-lieu of land. As a last resort alternative to the protection of land, the City may allow contribution of a fee-in-lieu of land to the environmentally sensitive lands fund, under which the City shall purchase or manage land to protect natural resources in accordance with standards of this land development code. Where fee-in-lieu of land is allowed, the cash payment shall be equivalent to 150% of the average per acre-appraised market value, at the time of permit application, multiplied by the number of acres of regulated natural resource for which mitigation is required, plus estimated total cost of management required to establish the viability of that type of resource.
- 5. Submittal of proposal. A mitigation proposal shall be submitted in conjunction with the resource assessment required under section 30-401. The mitigation proposal shall require the same assessment and specify the same details for mitigation areas as required for areas with natural or archaeological resources that are otherwise protected. The cost and timing of any monetary contribution or offsite acquisitions shall be specified. A management plan shall be required in accordance with section 30-414, and shall include contingency plans for corrective measures or change if goals are not met.
- 6. Mitigation before alteration. The initial construction, earthwork and planting for mitigation, or payment of fee-in-lieu, shall be completed prior to the permitted alteration of regulated natural resources. However, in special situations where the City determines that this requirement will place an unreasonable scheduling hardship on the applicant, the applicant shall post double the required performance guarantee to ensure that the

mitigation project will be completed.

- 7. Management and monitoring. For all mitigation projects, the City shall require management and monitoring for a minimum of twenty-five (25) years. This period may be extended as necessary, based on the complexity of the resource or type of mitigation proposed, in order to demonstrate substantial establishment and success of mitigation. In conjunction with a management plan pursuant to section 30-414, the following shall apply:
 - a. Where plantings are required, success shall be measured by maintenance of at least 80 percent survivorship of all plantings. Semiannual replanting shall be required to maintain required survivorship.
 - b. Non-native or invasive vegetation shall be eliminated or controlled.
 - c. Monitoring reports of the status of the mitigation area shall be submitted to the city manager or designee no less than annually. Indicators appropriate to the resource shall be tracked and evaluated. Such indicators may include water quality chemistry, number of surviving plantings and any plantings made to maintain required survivorship.
- 8. Performance guarantee. A performance guarantee shall be required in an amount equal to 110 percent of the estimated cost of mitigation, management and monitoring activities, to ensure the adequate monitoring and long-term viability of mitigation activities. The guarantee shall be provided for the duration of the time period required for maintenance and monitoring, but in no case less than two years.
 - a. Execution. The performance guarantee shall be executed by a person with a bona-fide legal interest in the parcel. The performance guarantee shall be kept in

full force until all obligations are satisfied.

- b. Form of guarantee. The guarantee shall be:
 - i. Cash deposit or certificate of deposit assigned to the City;
 - ii. Escrow agreement for the benefit of the City and on a City-approved form;
 - iii. Performance bond issued by a State of Florida registered guarantee company which shall be listed by the U.S. Department of Treasury Fiscal Services, Bureau of Government Financial Operations, and on a Cityapproved form;
 - iv. Irrevocable letter of credit on a City-approved form; or
 - v. Similar security acceptable to the City.
- c. Certification. Within six months of the completion of the period established for management and monitoring, the applicant shall submit a final report that includes, at a minimum, the following:
 - i. Discussion of the projected relative success or failure of the project in mitigating for lost natural resource area value and function;
 - ii. Analysis of measures undertaken during the project that contributed to success;
 - iii. Analysis of problems encountered during the project that decreased success;
 - iv. Recommendations to increase the success of similar, future projects; and
 - v. Summary of data collected.

(e) Failure to mitigate, manage or monitor.

The City may exercise its option on the guarantee in the event that mitigation, management or monitoring is not in compliance with the approved plan. In the event the City exercises its option on the guarantee, all obligations of the applicant under the mitigation and monitoring plan shall cease.