CONSERVATION ELEMENT

NOTE: Unless otherwise noted, the goals, objectives and policies contained in this element shall guide development of the Main Campus and Southwest Campus in Tallahassee as well as the Panama City Campus in Panama City, Florida.

Goal 1
To ensure the conservation, protection, and wise use of all natural ecosystems and natural resources on the University campus and in the context area.

Objective 1A
Maintain and enhance air quality on all campuses.

Policy 1A-1
Improve air quality by restricting vehicles on Main Campus within the inner traffic loop and through Transportation Element policies designed to discourage dependence on the personal automobile as the primary transportation mode on campus, and to encourage the use of alternative modes of transportation on-campus (i.e., bicycles, public transit, etc.).

Policy 1A-2
Encourage laboratory users to modify their operations as needed to minimize the discharge of pollutants from laboratory exhaust hoods. FSU shall install appropriate filtering devices on fume hoods and minimize the storage and use of volatile and hazardous materials in campus buildings.

Policy 1A-3
The University shall monitor both indoor and outdoor air quality. Indoor sampling shall occur at chemistry laboratories, kitchens, and other sites where fumes are produced. Outdoor sampling sites shall include parking lots and congested intersections. Failure to meet air quality standards adopted by the Florida Department of Environmental Protection (FDEP) shall result in an assessment of the probable cause and the preparation and implementation of a plan to improve and maintain air quality.

Policy 1A-4
Design utility plant improvements to minimize the discharge of pollutants.

Objective 1B
Conserve and protect the quality of current and projected water sources.

Policy 1B-1
FSU shall continue to mitigate the impacts of University-generated stormwater-borne pollutants through the implementation of a system of Best Management Practices, which includes but is not limited to:

- Incorporating stormwater management retention and detention features into the design of parks, trails, commons, and open spaces, where such features do not detract from the recreational or aesthetic value of a site;

- Use of slow release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to groundwater;

- Educating maintenance personnel about the need to maintain motor vehicles to prevent the accumulation of grease and other fluids on impervious surfaces, where they might be conveyed to surface or ground waters by runoff, and the need to regularly collect and properly dispose of yard debris;

- Avoid the widespread application of broad-spectrum pesticides by involving only purposeful and minimal application of pesticides, aimed at identified targeted species;

- Coordinating pesticide application with irrigation practices to reduce runoff and leaching to ground water;

- Consider turf blocks to minimize impervious surface area;

- Incorporating features into the design of fertilizer and pesticide storage, mixing and loading areas that are designed to prevent/minimize spillage.

Policy 1B-2
Establish procedures to guard against accidental dumping or spillage of oils, solvents, paints, or other by-products.

Policy 1B-3
Properly dispose of contaminants; do not deposit them into septic fields or other groundwater recharge areas.

Policy 1B-4
Minimize facility development in floodplain areas; limit construction to facilities that have relatively small impacts on the floodplain, such as recreational and athletic fields. See **Figure 13.1** for Main Campus, **Fig. 13.2** for Southwest Campus.

Policy 1B-5
Investigate the use of reclaimed wastewater (gray water) and condenser water from central plant chillers for irrigation for campus landscape and lawn watering to reduce the use of well water.

Policy 1B-6
Protect and conserve floodplains to the extent possible by ensuring their use for only appropriate uses, such as casual athletic fields, greenspaces, parking, etc. FSU Main Campus does not have rivers or wetlands; however, see **Fig. 13.2** for features found on the Southwest Campus. The Panama City Campus does not have rivers or wetlands but does have a sensitive edge along North Bay.

Policy 1B-7
Prevent erosion of soils through compliance with Future Land Use Element Policy 1C-5.

Policy 1B-8
Conserve water resources and reduce chemical use through the use of xeriscape design principles including:

- Use of drought tolerant and native plant material;
- Use of low volume delivery fixtures;
- Zoned irrigation systems;

- Moisture sensors and rain switches;
- Use of drought tolerant ground cover;
- Use of canopy trees; and
- Use of soil amendments and mulch to enable soils to retain moisture.

Policy 1B-9
The University shall minimize activities on campus that might contaminate groundwater sources or designated recharge areas and make provisions to prevent or mitigate such contamination or otherwise provide mitigation for such activities so as to maintain established water quality and quantity.

Policy 1B-10
The University shall continue to implement comprehensive water conservation measures, to include:

- compliance with NFWMD conservation program requirements;
- limiting the hours of outdoor irrigation;
- the use of automated timers and other irrigation flow monitoring equipment;
- xeriscape landscaping procedures
- the use of low-volume and ultra-low volume fixtures.

Objective 1C
Conserve, appropriately use, and protect native vegetative communities and wildlife habitat.

Policy 1C-1
Protect existing mature trees on-campus, particularly the "Heritage Oaks", consistent with Landscape Design Guidelines Element Policy 1I-3.

Policy 1C-2
The University shall use native plant species in restoration or enhancement plantings. The use of native plant species in general campus landscaping shall be encouraged.

Policy 1C-3
It is the intent of the University to remove from campus grounds all non-native or exotic invasive plants (whether grasses, forbs, shrubs or trees) that are identified by the Florida

Department of Agriculture and Consumer Services (Division of Plant Industry) as Noxious Weeds or identified by the Florida Department of Environmental Protection (Bureau of Invasive Plant Management) as Prohibited Plants. As these species are located on campus, FSU shall coordinate with Division of Plant Industry and Bureau of Invasive Plant Management to ensure the proper removal of these exotic species.

Policy 1C-4
The University shall continue to protect and conserve known endangered and threatened species of plants and wildlife, and species of special concern, as required by the Endangered Species Act of 1973, as amended, Chapter 372, F.S., Chapter 39, F.A.C., and federal and state management policies relating to the protection of threatened and endangered species and species of special concern.

Policy 1C-5
During the initial design phase of any programmed improvements to the campus, the University shall perform a census of wildlife and plants in the area to be affected where appropriate. Plants or animals identified in the "Official Lists of Endangered & Potentially Endangered Fauna and Flora in Florida," which is updated annually by the Florida Game and Fresh Water Fish Commission, or otherwise afforded protection by the host communities and local, state and federal agencies, shall be noted. Protection plans for listed species shall be formulated consistent with those of the host communities and appropriate local, state and federal agencies.

Policy 1C-6
University personnel shall, when encountering listed species, follow procedures and seek consultation with the appropriate agencies as identified in the Florida Game and Fresh Water Fish Commission's Wildlife Methodology Guidelines (January 15, 1988).

Policy 1C-7
Copies of land development criteria and guidelines reflected in the policies contained in the adopted master plan shall be provided to design consultants, as well as University staff. The University shall continue to follow construction review procedures to assure adherence to appropriate master plan policies.

Objective 1D
Conserve and appropriately use energy.

Policy 1D-1
Pursue cogeneration of electricity and the generation of steam from waste heat where it can be demonstrated that energy savings will result.

Policy 1D-2
Seek State, Federal or other sources of funds to assist in the upgrading of equipment and studying of procedures to save energy.

Policy 1D-3
Upgrade campus chillers and boilers to more efficient equipment.

Policy 1D-4
Expand, enhance, and promote the use of StarMetro "fare-free" zones to encourage the use of public transportation on and to the campuses.

Policy 1D-5
Encourage walking and biking on campus through Transportation Element policies designed to reduce dependence on the single-occupant automobile as the primary mode of transportation.

Policy 1D-6
Expand, enhance, and promote existing administrative and operational procedures to conserve energy and minimize future demand, under the leadership of the Facilities Department.

Policy 1D-7
Energy conservation fixtures, air conditioning and lighting systems, and other building specific energy use and management techniques shall continue to be a required element of all new and renovated buildings on campus.

Policy 1D-8
Continue review procedures for mechanical and electrical equipment replacement that shall

guarantee improved energy efficiency with the incorporation of new equipment.

Policy 1D-9
Where feasible, buildings on campus shall be equipped with devices to automatically reduce energy usage in rooms and buildings not in use, including programmable thermostats for air conditioners and sensors that automatically turn off lights.

Policy 1D-10
The University shall continue to investigate the possibility of using alternative energy sources.

Objective 1E
Protect and conserve the natural functions of soils and floodplains.

Policy 1E-1
Protect and conserve the natural functions of soils and floodplains on the campus by:

- Adhering to Future Land Use Element Policy 1C-5.
- Adhering to state, regional and federal environmental permits, when received.
- Instructing architects, engineers, landscape architects, etc. designing facilities for the University to identify modifications to facility design, programs or site plans that would improve the functions of soils and floodplains.
- Instructing University maintenance personnel in the proper procedures for use and disposal of hazardous and toxic substances.
- Limiting construction in designated floodplains to facilities which have relatively small impacts on the floodplain, minimal impervious surfaces for example, and which retain floodwater capacities in as close to natural conditions as possible, such as recreational and athletic fields. See Figure 13.1.

Objective 1F
To maximize on-campus reclamation of hazardous materials and consumer products.

Policy 1F-1
All new or renovated University buildings shall be designed with facilities to accommodate collection, storage and disposal of recycled materials.

Policy 1F-2
The University shall coordinate on-campus recycling programs with those of local government in regard to materials collected, and disposal/collection procedures.

Policy 1F-3
The University shall provide on-campus facilities for the collection and storage of hazardous materials used in University operations as required by federal, state and local regulations.

Policy 1F-4
The University shall encourage academic programs that promote awareness of environmental impacts of resource recycling.

Policy 1F-5
The University shall implement hazardous materials handling and storage procedures to include as a minimum the proper containment, classification and labeling of all hazardous waste.

Policy 1F-6
The University shall utilize only licensed hazardous waste transportation and disposal companies.

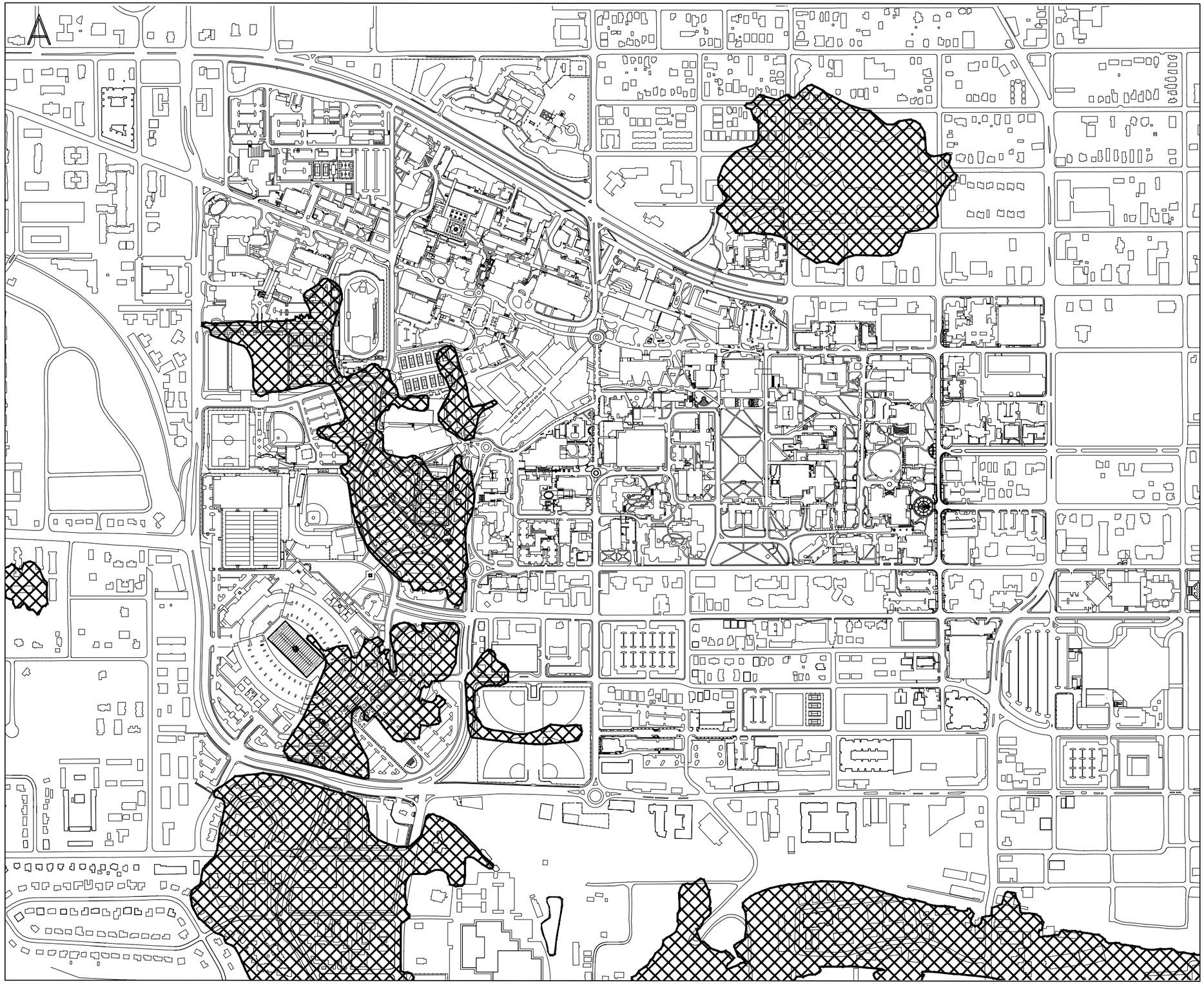
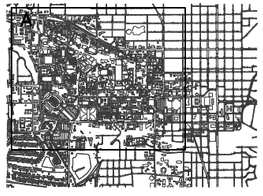


FIGURE 13.1.1

100 - YEAR FLOOD PLAIN

MOORE BASS CONSULTING, INC.
LAND USE PLANNING - ENGINEERING DESIGN - ENVIRONMENTAL PERMITTING
LANDSCAPE ARCHITECTURE - SURVEYING

KEY PLAN:

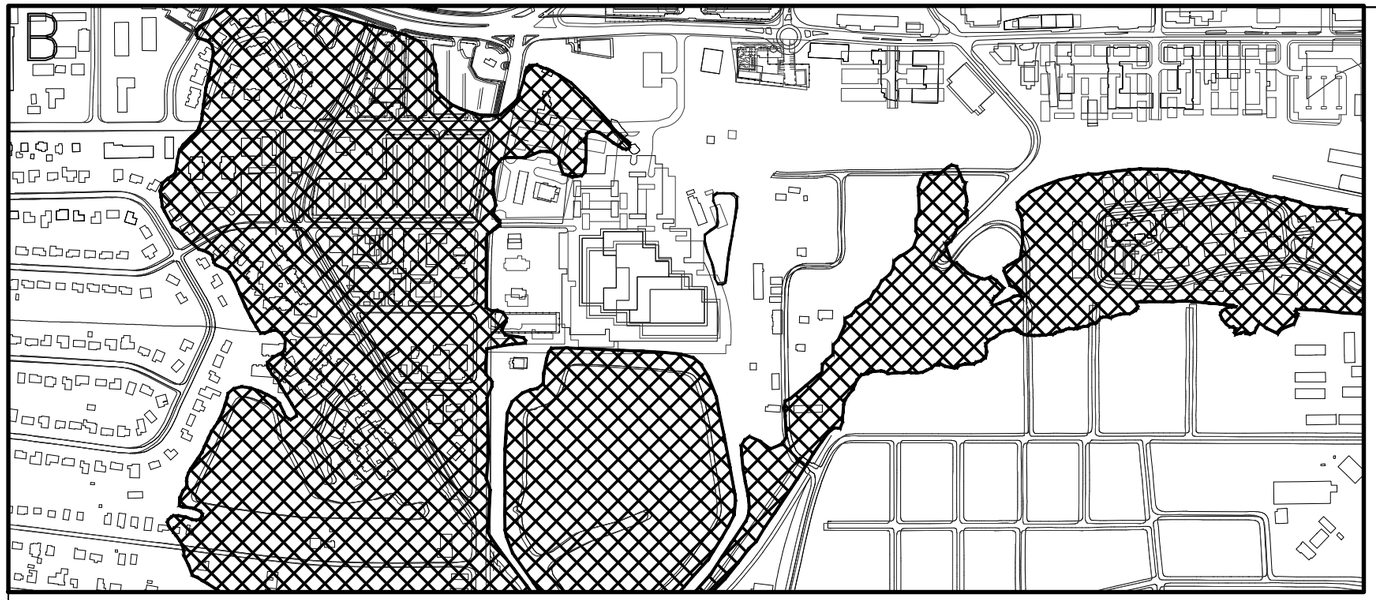


SOURCE:

FEMA FIRM MAPS (2009)
(12073C0283F, 12073C0284F,
12073C0291F. 12073C0292F)

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
GOP
13 JUNE 2008
REV: 10 JUNE 2016

0 400' 800' 1600'



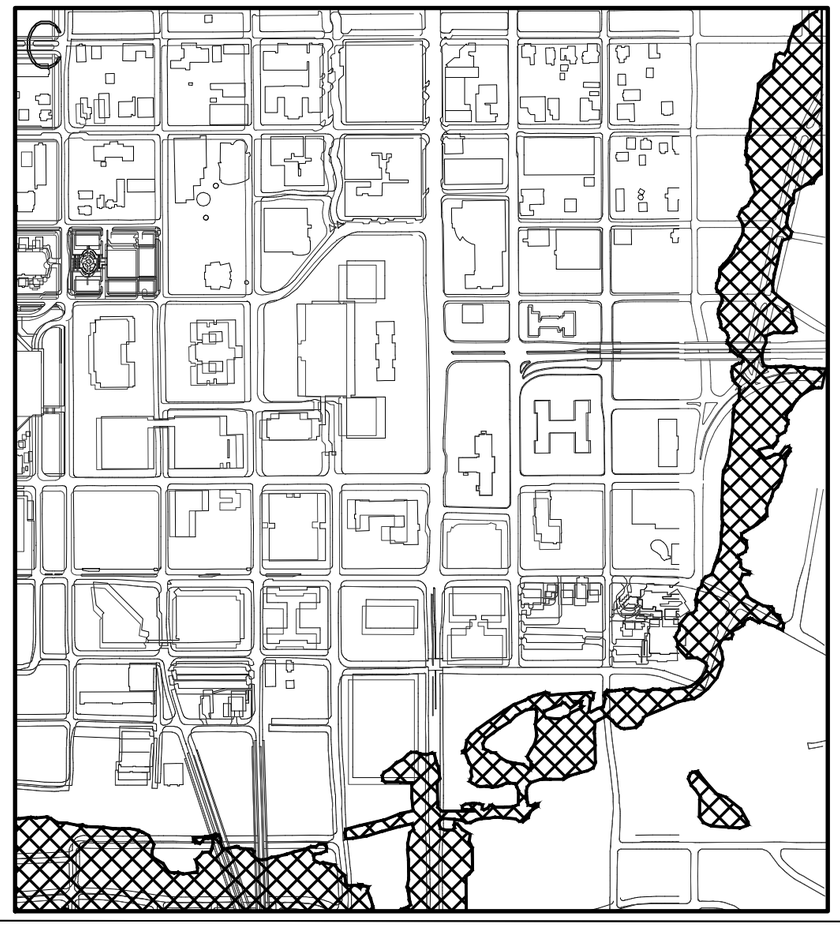
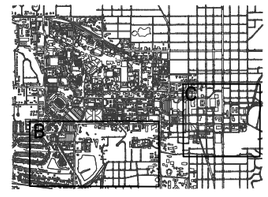


FIGURE 13.1.2

100 - YEAR FLOOD PLAIN

MOORE BASS CONSULTING, INC.
LAND USE PLANNING - ENGINEERING DESIGN - ENVIRONMENTAL PERMITTING
LANDSCAPE ARCHITECTURE - SURVEYING

KEY PLAN:



SOURCE:

FEMA FIRM MAPS (2009)
(12073C0283F, 12073C0284F,
12073C0291F. 12073C0292F)

COMPREHENSIVE MASTER PLAN
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA
GOP
13 JUNE 2008
REV: 10 JUNE 2016

0 400' 800' 1600'

SOURCE:
BASEMAP BY FSU
MASTER PLAN BY PARSONS
FEMA FIRM MAPS (2009)
(12073C0286F, 12073C0287F, 12073C0291F)

COMPREHENSIVE MASTER PLAN:
FLORIDA STATE UNIVERSITY
TALLAHASSEE, FLORIDA

SOUTHWEST CAMPUS
GOALS, OBJECTIVES AND POLICIES

FIGURE 13.2

CAMPUS ENVIRONMENTAL AREAS

GOP
13 JUNE 2008
REV.: 10 JUNE 2016

0 500' 1000' 1500'