CAMPUS MASTER PLAN 2010

UNIVERSITY OF SOUTH ALABAMA

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1 INTRODUCTION AND PURPOSE

Introduction

In a speech to the general faculty in the spring of 1999, University of South Alabama President V. Gordon Moulton addressed areas of strategic development in which he challenged members of the University community to work cooperatively toward a shared, long-term vision of the institution.

In response to this challenge, the University initiated a comprehensive planning process that would culminate in 2001, in a planning document that would formalize and endorse the collective "visions" outlined by the President. The basic planning principles established in this document would impact all facets of university life from academics and student life to enhancing diversity, strengthening public and private financial support of the University and improving planning and assessment processes. In support of these goals, the "Visions" document included a number of facilities-related recommendations that would directly impact existing buildings and infrastructure on campus and determine patterns of future growth for the University as a whole. These specific recommendations or objectives served as the basis for a comprehensive study of existing facilities, land use, and growth patterns on the Main Campus that would lead directly to the development of the 2004, "University of South Alabama, Campus Master Plan".

The 2004 master plan established a successful development strategy and framework for growth for USA. However; the success of the Master Plan over the past five years has led to new challenges for the University. Increasing student enrollment, the advent of new programs on campus, and advances in technology all contributed to a necessary re-evaluation of the original goals and objectives that formed the basis for this plan. In 2008, the University issued a revised document that expanded the "visions" established in the original. This new document, more a minor course correction than actual change, has had a direct impact on many of the planning parameters established by the 2004 Plan. New campus buildings and associated infrastructure are now necessary to meet the requirements of a rapidly growing institution. Land use patterns need to be re-evaluated to accommodate these new facilities, and campus transportation, circulation and parking all require modification to meet the increased demands placed on these systems. The need to incorporate these issues and provide a mechanism to guide the efforts of the University in the future has led to the current planning effort and the development of the "University of South Alabama, Master Plan 2010".

The 2010 Master Plan is not an "original" document. It is built on the foundation of the 2004 Plan and incorporates many of the planning principles established by its predecessor. The primary

focus of the current plan remains the same; to ensure that the physical campus setting continues to enhance the mission of the University. This will be accomplished by:

- Providing quality physical facilities that promote academic excellence, encourage student engagement in campus activities, and enhance the public image of the institution.
- Reinforcing the major campus districts or facility "use" zones established in the 2004 Master Plan.
- Establishing a greater campus identity through the continuation of the campus "gateway" concept, creation of campus "portals" at major entrance points, the development of a unified signage/wayfinding system, and through building design and material standards.
- Promoting a strategy and framework for growth and to allow the University to respond to the challenges of the future.

As envisioned, this Master Plan will continue the basic planning principles established by the President and the University Long Range Planning Committee over ten years ago. However, it is assumed that this is merely another step in the continuing planning process, and hopefully, the basic tenets of this document will serve as a template for future planning efforts. The fundamental goal of any campus master plan should be to provide options and opportunities for decision makers and to position an institution to respond to the ever-changing conditions that will, most assuredly, present themselves in the future.

The Mission of the University

The University of South Alabama was chartered in 1963 by the State of Alabama as a comprehensive, coeducational institution of higher education. The University serves as a major center of high-quality and accessible undergraduate, graduate, and professional education for metropolitan Mobile, the State of Alabama, the Gulf Coast region, and the southeastern United States. The mission of the University of South Alabama is to offer high-quality programs of teaching, research, public service, and health care that create, communicate, preserve, and apply knowledge in service to the people of Alabama as citizens in a global community. As it grows and develops, the University will focus its strengths to produce programs of interdisciplinary excellence that address the special needs of the people it serves.

The University Vision

A resolution of the Board of trustees in the spring of 1999 authorized the President of the University to coordinate with the Chair of the Long Range Planning Committee of the Board to establish a central planning committee. This committee was to be made up of University administrators, faculty, and students as well as business, community and governmental leaders. The resolution set forth the charge to develop a collective, long-term vision for the University and a comprehensive planning process that would include all areas and functions of the institution. Out of this effort came a series of strategic goals or "visions" that were endorsed by the Long Range Planning Committee, and adopted by the Board of Trustees. The "visions" established by the Committee included:

1. *Continue to build the academic quality of the University and improve the learning environment on campus.*
2. *Build on the quality of student life and the overall campus atmosphere.*
3. *Enhance diversity among student, faculty, and staff, and evince a commitment to multiculturalism.*
4. *Reinforce and improve the public image of the institution.*
5. *Improve public and private financial support of the University.*
6. *Improve University planning, budgeting, and assessment processes.*

In April, 2001, the Long-Range Planning Committee completed a planning reference which set forth objectives under each of the adopted strategic goals, described the flow of information and documentation in the University planning process, and enumerated assumptions about the institution's characteristics and external environment relevant to the planning effort. ***VISIONS: Strategies for Realizing Shared Visions of the University of South Alabama*** was adopted by the Board of Trustees to guide the institution's planning and planning outcomes at all levels within the University. The specific goals and objectives outlined in the "Visions" document were included in the University's 2004, Campus Master Plan and formed the basis for the facilities-related recommendations that were central to the plan.

While the basic goals and objectives of the 2001 "Visions" document remained vital, rapidly changing conditions on campus and in the University's health care system, and an increased emphasis on research and technology transfer led to a re-evaluation of the visions contained in the original document. In 2008, the Long Range Planning Committee endorsed changes to the original vision statement as well as to the subsequent goals and objectives, and in March, 2008, the Board of Trustees approved the **"University of South Alabama Goals and Objectives (2008 – 2013).** The provisions of the revised document are as follows:

Vision Statement

Our vision is to become a pre-eminent comprehensive university that is recognized for its intellectual, cultural, and economic impact on the health and well-being of those we serve as leaders and citizens in a global community.

Goals and Objectives

Goal 1: To build upon the academic quality and learning environment of the University.

- Objective 1.1: To facilitate student achievement of learning outcomes.
- Objective 1.2: To recruit and graduate high caliber students from diverse backgrounds.
- Objective 1.3: To recruit, recognize, and develop high quality faculty and staff.

Goal 2: To enhance the quality of student life.

- Objective 2.1: To provide responsive services for traditional and non-traditional students.
- Objective 2.2: To promote a safe campus environment.
- Objective 2.3: To provide quality physical facilities.
- Objective 2.4: To promote faculty engagement in student activities.
- Objective 2.5: Encourage student engagement in campus activities.

Goal 3: To embrace diversity.

- Objective 3.1: To promote tolerance and create a welcoming environment.
- Objective 3.2: Implement and evaluate the University's strategic diversity plan.
- Objective 3.3: To increase opportunities for study abroad and international faculty and student exchange.
- Objective 3.4: To infuse a global perspective across the curriculum.

Goal 4: To enhance the public image of the University.

- Objective 4.1: To increase the understanding and appreciation of USA contributions through all available methods
- Objective 4.2: To increase USA participation and visibility in community service and environmental projects.
- Objective 4.3: To increase community engagement with USA by maximizing art, cultural, entertainment, and athletic opportunities.
- Objective 4.4: To bolster relationships with civic, government, and business leaders.
- Objective 4.5: Expand relations in the international community.

Goal 5: To strengthen financial support of the University.

- Objective 5.1: Continue to expand and strengthen the University development program.
- Objective 5.2: Maximize efforts to secure increased public funding.
- Objective 5.3: Increase institutional support from the USA Foundation.
- Objective 5.4: Increase extra-mural funding.
- Objective 5.5: Increase student enrollment commensurate with reasonable institutional capacity.

Goal 6: To ensure appropriate University planning and assessment.

- Objective 6.1: To continue and improve documentation of planning and assessment.
- Objective 6.2: To expand use of electronic tools for planning and assessment.

Goal 7: To sustain the growth of high quality health care services.

- Objective 7.1: To integrate, coordinate, and further develop the health care delivery system and related clinical service programs across the University to further enhance the health of the region.

- Objective 7.2: To enhance the delivery of health care services through a comprehensive, systematic management approach that ensures effective, efficient, high quality, fully accredited inpatient and outpatient clinical services are offered to all patients throughout this region.

- Objective 7.3: To further stabilize the financial position of clinical programs by developing adaptive strategies in the face of declining reimbursements, and to balance the commitment to attending to the health care needs of underserved and health disparities populations with the need to maintain financial stability for the health care delivery system.

- Objective 7.4: To ensure that clinical services maintain their academic focus by sustaining the primacy of the educational and research focus of the health care delivery system, equivalent in importance to excellence in the delivery of health care services.

- Objective 7.5: To establish practice plans for clinical programs from across the University, and, where appropriate, establish new faculty clinical practice plans.

- Objective 7.6: To establish collaborative relationships with clinical entities outside the University, and, where mutually beneficial, to develop cooperative ventures between clinical programs within and outside the University.

Goal 8: To promote research and scholarly activities.

- Objective 8.1: To increase annually the scholarly capacity, capability, recognition, and impact of University investigators.

- Objective 8.2: To enhance technology transfer and diffusion of new knowledge across the University.

- Objective 8.3: To enhance resources to grow the University's research enterprise.

- Objective 8.4: To accelerate campus-wide development of translational, clinical, basic, and applied research through collaborations with industries, agencies, foundations, faculty, education, and health care providers.

The Role of the Campus Master Plan

The role of a master plan in the context of an educational institution such as the University of South Alabama is to create

a framework for future growth and development. This framework supports the institution's mission, goals, and programmatic needs by enhancing the physical environment and facilities of the Campus. It evaluates and presents recommendations on elements of campus organization, land and facilities use, utility infrastructure, vehicular and pedestrian circulation and landscape enhancements. A master plan should be regarded as a guideline or a philosophy and not a rigid document that must be completely adhered too item-by item. The guideline should be flexible enough to allow for future modifications without making a total reassessment each time a new issue is presented. It should also provide a timeframe and order that best implements the master plan by looking at the short and long term needs of the Campus. The ultimate goal of the master plan is to provide an attractive campus that promotes intellectual and social interchange between students, faculty, staff and the surrounding community.

Implementation and Maintenance of the Campus Master Plan

The University Space and Facilities Committee is responsible for implementation of the Campus Facilities Master Pan. The Committee, a standing committee of the Institution, provides a vehicle for discussion and decision involving faculty, staff, students, and administrators. Oversight of implementation of the Campus Facilities Master Plan is specified in the revised charge to the Committee.

The University Space and Facilities Committee is responsible for reviewing each project in the Campus Facilities Master Plan in context of:

- the project's responsiveness to programmatic needs identified in the University's strategic goals and objectives as set forth in the Visions planning document;
- application of institutional design standards for architecture and landscape architecture; and
- Emerging objectives and challenges related to the institution's enrollment, program development, and finances.

The University Space and Facilities Committee is chaired by the Director, Facilities Management. The Associate Vice President for Institutional Research Assessment and Planning serves as an ex officio member and provides the needed information and technical support to the Space and Facilities Committee in the areas of the institution's strategic objectives, academic program and student services development, and enrollment projections.

The University Space and Facilities Committee is required to meet as needed to review the status of the construction and renovation projects identified in the Campus Facilities Master Plan. The Committee also provides a vehicle for discussion of recommendations for amendment of the Master Plan and consideration of requests for space assignment and reallocation. The Committee forwards its recommendations to the University President for approval, and where appropriate, for communication to the University Board of Trustees for their consideration and approval.

2 EXISTING INVENTORY AND ANALYSIS

This section provides a general overview of The University of South Alabama; its location, history and development, and physical characteristics. Information obtained from an analysis of this data formed the basis for the planning principles contained in this Master Plan. These principles, rooted in the location and history of the campus are intended to ensure that future development is appropriate for the University of South Alabama.

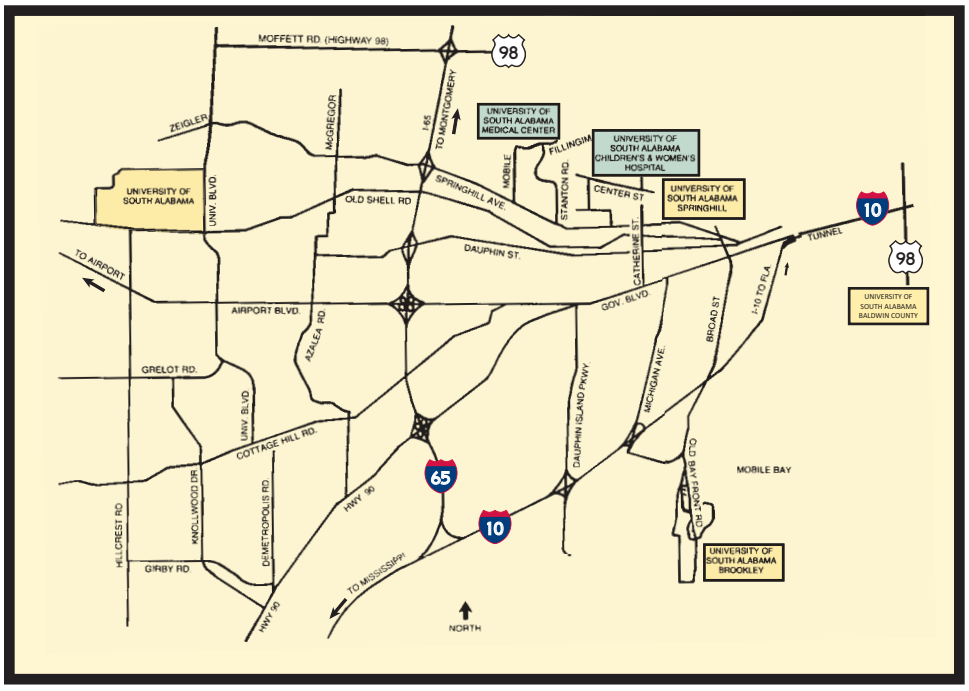
Location and Land Area

The University of South Alabama is located in Mobile, Alabama, approximately 140 miles east of New Orleans and 240 miles west of Tallahassee, Florida. With a population of almost 400,000 people, Mobile is the second largest metropolitan area in Alabama. Due to its unique setting on the western shore of Mobile Bay, with direct access to the Gulf of Mexico and Alabama's inland waterways, Mobile has become a major port city. While trade and ship building have always been mainstays of the local economy, aerospace, petro-chemical, and most recently steel manufacturing have become major factors in the growth and development of the area.

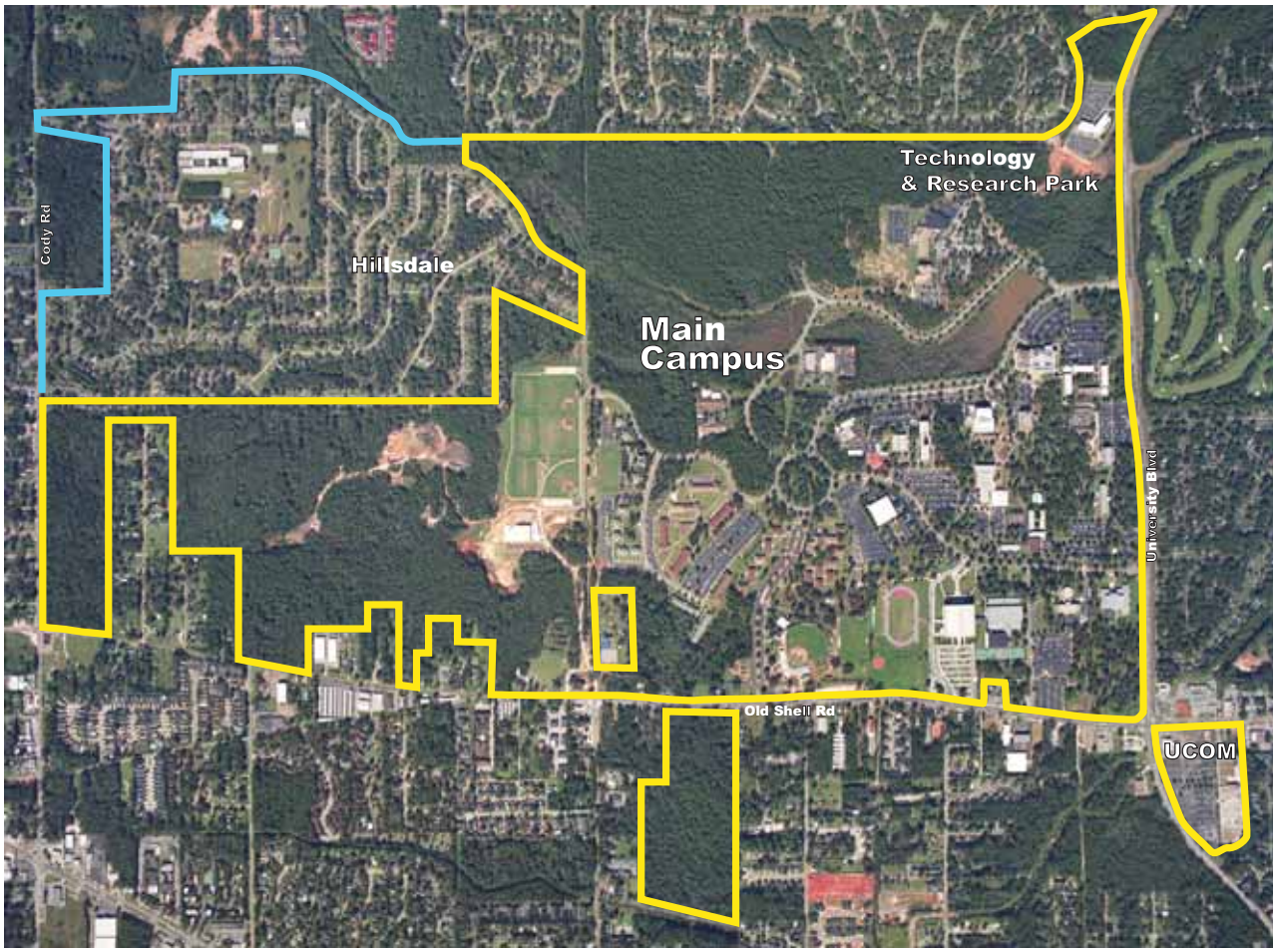
The expansion of the City has traditionally occurred from east to west and the University of South Alabama was originally sited to take advantage of this pattern of growth. The main Campus is located approximately 9 miles west of the central business district on a 1,200 acre site, bounded by Old Shell Road on the south and University Boulevard on the east. The main Campus is within close proximity to the Mobile Regional Airport, and the City's major interstate highways; I-65, providing access to the Campus from central and northern Alabama, and I-10, providing access from the Florida panhandle, and the Mississippi gulf coast.

The main Campus is bordered primarily by single family residential neighborhoods, however, a mix of multi-family apartments available for student occupancy and light commercial structures characterize the south, Old Shell Road, boundary. The Campus itself is relatively wooded with native pine predominating. The terrain slopes gently to a watershed that bisects the north central portion of the campus. While the eastern and southern sections of the campus are more developed, the northern and western sections are still relatively un-touched. The heavily wooded area to the north has been dedicated for use by the Technology and Research Park and the westernmost section, extending to Cody Road, has been reserved for future growth. In addition, another 120 acres have been made available to the University through the re-development of the eastern half of the Hillsdale neighborhood.

USA also has a number of satellite campus' in Mobile County within easy driving distance of the Main Campus. The Brookley



Location Plan



Main Campus Plan

Brookley Campus - Looking From the North

USA Baldwin County Campus

Campus is strategically located 3 miles south of downtown Mobile on 327 acres of prime Mobile Bay waterfront. This campus currently houses departments from the School of Continuing Education & Special Programs, a conference and lodging facility and an 18 hole golf course. The Springhill Avenue Campus, in mid-town Mobile, houses University Hospital administrative functions and several Health Services clinics. To support USA's College of Medicine, the University also operates two major hospitals in the Mobile area; the USA Medical Center, and Children's and Women's Hospital.

In addition to the Mobile County locations, the University also maintains a campus in Baldwin County located "across the bay" in downtown Fairhope, Alabama. Rapid growth in this area, due in part to the Mobile economy but also due to its scenic waterfront and recreational opportunities, has led Baldwin County to become one of the fastest growing counties in Alabama. The Baldwin County Campus offers a multi-disciplinary curricula intended to serve the diverse needs of Baldwin County.

Institutional Characteristics

The University of South Alabama is a public institution comprised of ten academic colleges and schools. These include Allied Health Professions, Arts and Sciences, Mitchell College of Business, Computer and Information Sciences, Continuing Education and Special Programs, Education, Engineering, Medicine, Nursing, and the Graduate School. The University also supports a Pharmacy program in conjunction with the Auburn University, Harrison School of Pharmacy. Current enrollment statistics are listed in Table 2.1. Enrollment breakdown statistics are listed in Tables 2.2 – 2.6.

Table 2.1 - Enrollment Statistics*

Undergraduate Students	11,356
Graduate Students	2,824
Medical Students	342
Total Student Enrollment	14,522

Note: 235 Medical Center Residents not included in computations

Table 2.2 - Enrollment by College and School*

College / School	Number	% of Total
Allied Health Professions	1,803	12.4
Arts & Sciences	4,147	28.6
Computer & Information Sciences	443	3.1
Continuing Education & Special Programs	272	1.9
Education	2,023	13.9
Engineering	1,189	8.2
Medicine	342	2.4
Mitchell College of Business	1,730	11.9
Nursing	2,556	17.6
Graduate School	17	0.1
Total	14,522	100.0

Table 2.3 - Enrollment by Level*

Level	Number	Percent
Lower Division	5,874	40.4
Upper Division	5,376	37.0
Unclassified	158	1.1
Graduate I	2,404	16.6
Graduate II	420	2.9
Professional	290	2.0
Total	14,522	100.0

Table 2.4 - Enrollment by Status*

Status	Number	Percent
Full-Time	10,934	75.3
Part-Time	3,588	24.7
Total	14,522	100.0

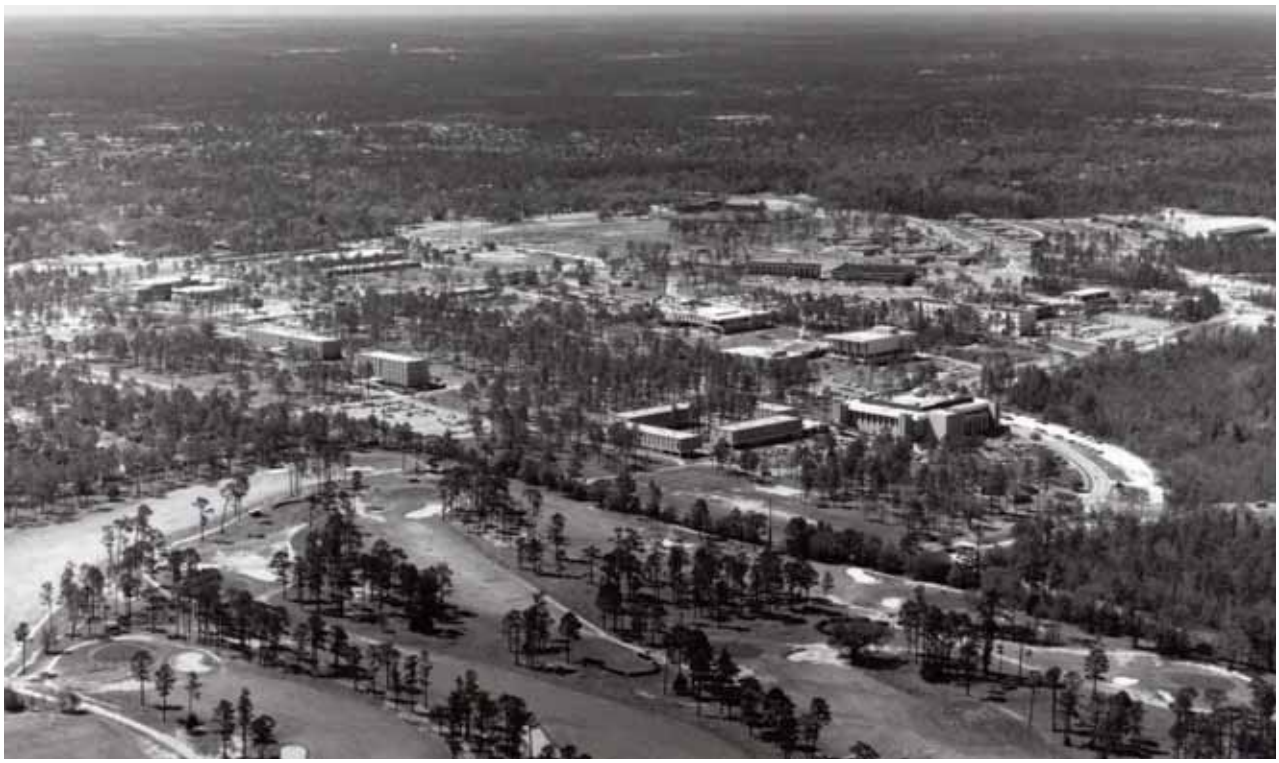
Table 2.5 - Enrollment by Ethnic Background*

Ethnic Background	Number	Percent
White	9,704	66.8
African American	2,543	17.5
Hispanic American	294	2.0
Asian American	382	2.6
Pacific Islander	55	0.4
Native American	113	0.8
Nonresident Alien	777	5.4
Multiracial	34	0.2
Unknown	620	4.3
Total	14,522	100.0

Table 2.6 - Enrollment by Gender*

Gender	Number	Percent
Male	5,729	39.5
Female	8,793	60.5
Total	14,522	100.0

* Fall 2009 - Source, USA Institutional Research, Assessment & Planning



Main Campus - 1970's

History and Development of the Main Campus

The University of South Alabama was created by an Act of the Alabama Legislature in June, 1963. The University's founding was the goal of the Mobile County Education Foundation for Public Higher Education, whose members understood the need for a four-year, state-supported institution to serve the rapidly growing population of Southwest Alabama and the central Gulf Coast region. With Alabama's two major public Universities over 200 miles distant, access to higher education programs was a paramount concern to citizens of the State's second most populous metropolitan area. The Foundation was chartered by a Special Act of the Alabama Legislature in February, 1961. The University was created by an Act passed by the Legislature in May, 1963.

The institution was initially housed in a single building on St. Louis Street in downtown Mobile. With an eye to the future expansion of enrollment and programs, the Mobile County Higher Education Foundation, with the support of the City of Mobile and the County of Mobile, purchased a large tract of "sixteenth section" land in the western suburban area of the city and construction was begun on the first building – the present Frederick Palmer Whiddon Administration Building. This structure housed all of the fledgling institution's functions when the first 276 students were admitted in the summer of 1964. During the subsequent four years, construction was completed on the Instructional Laboratory Building (1966), a cafeteria and faculty office buildings (1966), the four-building Alpha Residence Hall Complex (1967), Engineering Building (1968), Health and Physical Education Facility (1968), and the University Library (1968). In 1968, the University received its initial accreditation by, and was admitted to membership in, the Southern Association of Colleges and Schools.

Alpha Complex - 1967

Business and Management Studies Building - 1969

Student Center - 1971

During the next decade, the needs for the University to respond to demands for a broader range of degree programs and to accommodate a rapidly growing enrollment brought the addition of specialized facilities to the Main Campus. Construction of the Business and Management Studies Building (1969), the Life Sciences Building (1970), Bookstore (1970), the Humanities Building (1974), and the Engineering Classroom and Laboratory Buildings (1978), provided facilities to house new undergraduate and graduate degree programs. Campus life facilities such as the Student Center (1971) and the Stanky Field Baseball Stadium (1979) were also completed. Student residence space was more than doubled by completion of the two large apartment and dormitory complexes: the Gamma Apartment Complex in 1977 and the Beta Residence Hall Complex in 1979.

The 1970's also brought construction of one the largest buildings to be completed on the University's campus. In May of 1971 the first Dean of Medicine was appointed and the charter class of 25 students entered the College of Medicine in January, 1973. In the next year, construction of the 161,000 square foot Medical Sciences Building was completed. In addition to supporting the first-professional medical education program, the Medical Sciences Building allowed the University to proceed with initiation of its first Doctor of Philosophy program - in Basic Medical Sciences – in 1978. The subsequent addition of research laboratories and a vivarium brought the total gross area of the Medical Sciences Building to over 243,000 square feet.

The 1970's and early 1980's also saw significant additions of land to the Main Campus. Purchases of tracts to the west of the campus brought the University's total area to over 1,200 acres. As new academic programs were implemented and the University's enrollment continued to increase, plans for development of facilities encompassed several new buildings and an extensive program of renovation and reallocation of space in existing buildings. In 1984 construction of the Chemistry Building was completed and the Computer Services Center was relocated from the Administration Building to a dedicated building, permitting reallocation of Administration Building space to the Office of Admission's, the Bursar's Office, and the Registrar's Office. Student residence space was increased again with the completion of the Delta Complex in 1982 and 1983.

Facilities also were being added to support the University's growing medical research and clinical programs. The Cancer Center/Clinical Building was completed in 1980 followed by the Primate Breeding Laboratory in 1981, and the 136,000 square foot Health Services Building in 1982. Research facilities of the Laboratory of Molecular Biology were expanded in 1986.

In 1990, the University acquired the 127,000 square foot University Commons, allowing relocation of the entire College of Education, the Department of Communication, the Department of Speech and Hearing Sciences, and several administrative and service units. The former home of the College of Education – the Instructional Laboratory Building - was renovated to house the Department of Mathematics and Statistics and the Department of Physics. Completion of the

Humanities Building - 1974

36,000 square foot Visual Arts Building in 1992 allowed the consolidation of Department of Art and Art History classrooms and studios that had been dispersed around the campus. With construction of the new Delta and Epsilon residence hall complexes, three of the Alpha Complex buildings were renovated for academic purposes, providing space for the Biomedical Library, the School of Continuing Education and Special Programs, and administrative offices and research laboratories of the College of Medicine. In 1992, the Student Recreation Center was completed as an addition to the Health, Physical Education, and Leisure Services Building.

University capital projects during the 1990's were directed toward improving the quantity and quality of academic space, enhancing student life and campus activities, and providing additional research space. The John W. Laidlaw Performing Arts Center, completed in 1997, provides over 52,000 square feet of space for the Department of Dramatic Arts and the Department of Music including a recital hall and black box theatre. In 1999, the 208,000 square foot Mitchell Center was completed. The facility accommodates a 10,000 seat sports and performance arena, the Department of Athletics offices, meeting and banquet spaces, and classroom space. The Mitchell Center also houses the Coastal Weather Research Center and the University's Meteorology degree program.

Visual Arts Complex - 1992

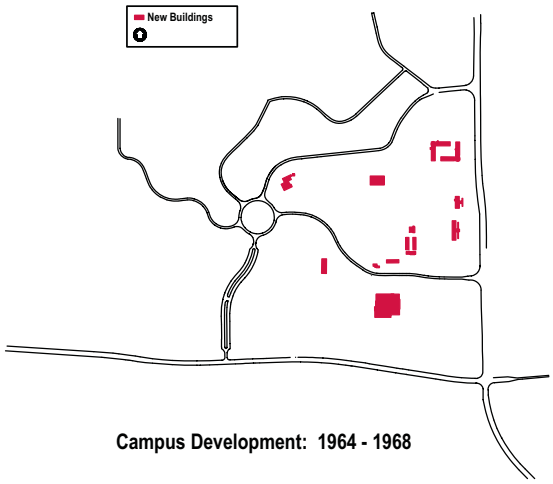
In 2001, extensive renovation of the Mitchell College of Business Building was completed. The project was directed toward improving the College's classroom space, relocating the academic advising office and the offices of the Dean and Associate Dean to more visible areas, and improving handicapped access.

Other projects aimed at improving campus recreation and athletics programs include renovation of the Jaguar Track and Field facility (2001), and relocation and expansion of the Intramurals Athletics Complex (2003) which includes multiple fields for flag football, soccer, and softball as well as a fieldhouse with offices and locker rooms. Also in 1993, extensive renovation of the Jaguar Gymnasium was undertaken to provide improved practice facilities for the intercollegiate basketball programs.

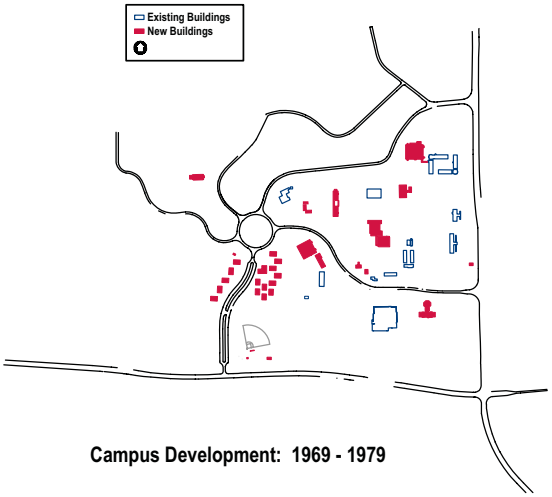
A 53,000 square foot addition to the University Library was dedicated in March, 2003, and provides for expanded collection and reference space, a 110-seat auditorium, and campus network and Internet connectivity in student study spaces. The new addition also houses the Program for Enhancement of Teaching and Learning (PETAL), a resource for faculty in developing multi-media instruction. Also in 2003, renovations to a previously unfinished 10,000 square foot area of the Engineering Laboratory Building were completed to provide additional space to support the College of Engineering's growing research activities.

Technology & Research Park Building 1 - 2003

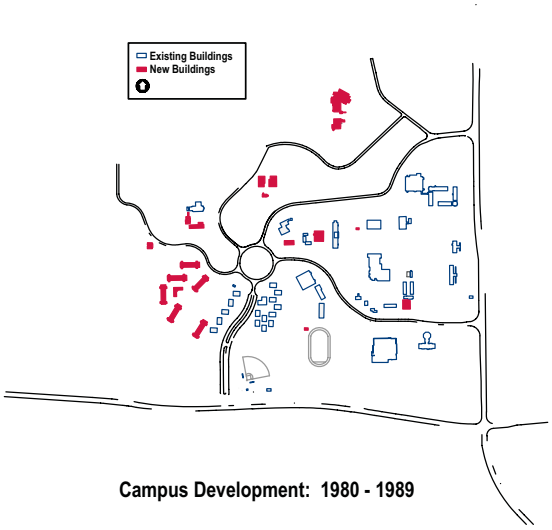
During this period the University also established the USA Technology and Research Park in the northeastern section of the main campus. In 2003, the University completed the first building in the Park, a 76,000 square foot speculative office building to be occupied by the Mentor Graphics Corporation.



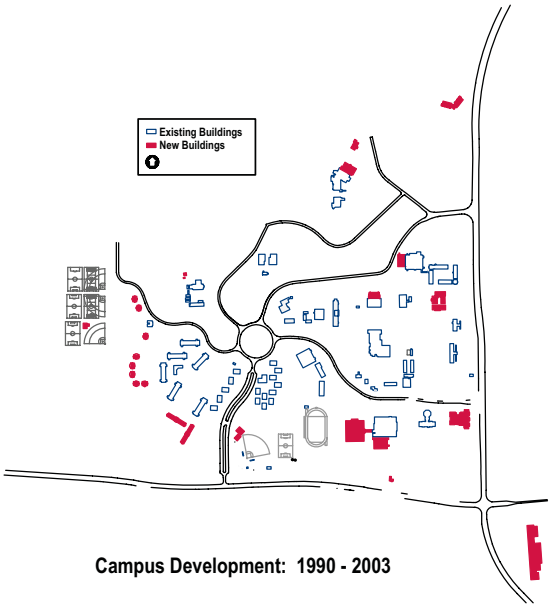
Campus Development: 1964 - 1968



Campus Development: 1969 - 1979



Campus Development: 1980 - 1989



Campus Development: 1990 - 2003

Campus Development: 1964 - 2003

Meisler Hall - 2006

Archaeology Research Center - 2006

Health Sciences Building - 2009

The 2004 Master Plan

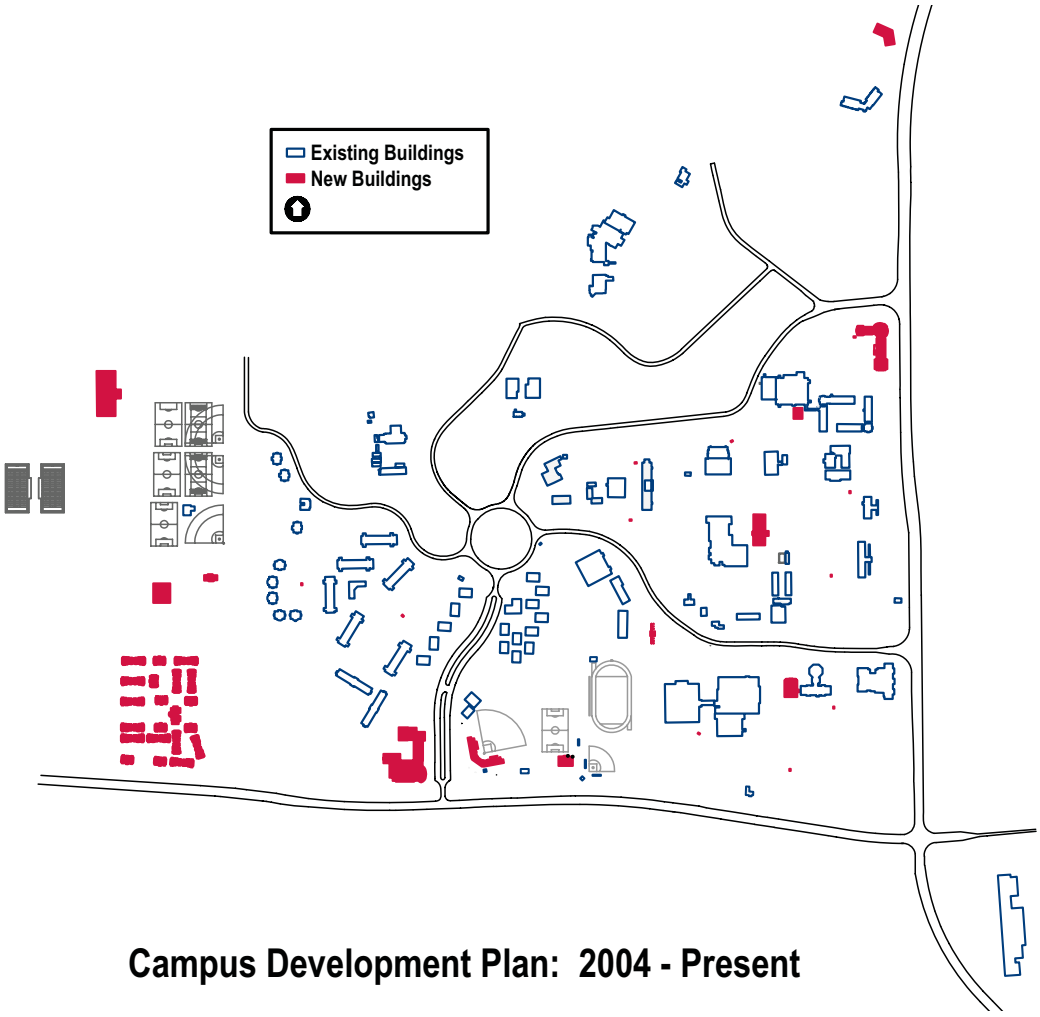
In the 1990's and early 2000's, the University experienced unprecedented growth in student enrollment. In response to this growth and the associated demands on existing campus facilities and an aging infrastructure, the University commissioned a planning study that became the USA Campus Master Plan. This study was based on the goals and objectives established by the University's Long Range Planning Committee. The 2004 Master Plan included recommendations for new buildings and facilities, utilities and infrastructure to support these projects, land use and zoning, transportation and circulation, campus amenities, and architectural standards. This document has successfully served as the basis for campus growth and development since that time.

One of the major components of the 2004 Master Plan was the Campus Circulation and Parking Study, prepared by a private traffic engineering consultant. This study was initiated by the University in response to steadily increasing student enrollment and the parking and traffic congestion associated with such increases. In addition to a series of campus roadway enhancements to reduce congestion this study also proposed the development of a campus transit system paired with a "zoned" parking scheme.

The infrastructure for the new campus transit (JagTran) system was completed in 2004 and included a 20,400 square foot Transportation Services Building, a 5,000 square foot addition to the existing Maintenance Garage, an internal campus tramway loop, and a number of covered shelters located at the designated JagTran stops. The JagTran system made its initial run in spring, 2005 and has steadily increased ridership since that time. The parking study noted that, in order to effectively reduce traffic congestion and encourage ridership, a zoned parking scheme would need to be implemented along with the transit system. This recommendation was carefully evaluated by the University and the current north, east, central and south parking zones were established approximately one year later.

The 2004 Master Plan also recognized the need for enhanced student services, additional academic and research space, and expanded athletic and student life facilities. A 46,900 square foot student services building, dedicated as Meisler Hall, was completed in 2006. This centralized facility includes the Office of Admissions, Orientation, Student Accounting (Bursar), Registrar, Financial Aid, Enrollment Services, and Veteran's Affairs from the Administration Building and the Office of International Student Services and Career Services from separate locations. As a result of this move, the Administration Building underwent a phased renovation that was completed in 2009.

Academic and research needs were addressed by the addition of a number of new facilities on Campus. The 10,400 square foot Alfred and Lucille Delchamps Archaeology Research Center was constructed in 2006. In addition to long needed research, controlled storage and administrative space, the new Archeology Center includes a large gallery and display space for the Archaeology Department's permanent collection. The second phase of the renovation of the Mitchell College of Business was



Campus Development Plan: 2004 - Present

completed in 2005, and a 15,200 square foot addition, designated as the Joseph & Rebecca Mitchell Learning Resource Center, opened in 2007. Another critical recommendation included in the master plan was the relocation of the Colleges of Nursing and Allied Health from their locations on the Springhill Avenue Campus and in University Commons back to the main campus. These programs were co-located in the 188,000 square foot, Health Sciences building which opened during the summer, 2009. This building is a part of the medical "corridor" that includes the College of Medicine, Charles Baugh Biomedical Library, and the pharmacy collaborative with Auburn University.

Because of its prominent University Boulevard location, the Health Sciences Building was designed to serve as one of three proposed campus "gateway" buildings that would define the main campus on the northern and western boundaries and at the Old Shell Road and University Boulevard intersection. The second such building, the 120,000 square foot Student Recreation Center, located on Stadium Boulevard at the Old Shell Road intersection, broke ground in 2008 with completion slated for mid-year, 2010. In addition to the recreational and exercise areas, this state of the art facility includes both indoor and outdoor pools, and an indoor track and climbing wall. The final gateway building broke ground in the fall of 2009. The 186,000 square foot Shelby Hall, Engineering and Computing Sciences Building will house the Colleges of Engineering and Computer and Information Sciences and is slated for completion in 2011.

An expansion of Athletic programs over the last ten years led to recommendations in the 2004 Master Plan for new or upgraded facilities. Areas within the existing Health, Physical Education and Leisure Services Building were renovated in 2004 to create a dedicated practice facility for the varsity basketball team. Stanky Field received a much needed facelift in 2005 with the addition of a new grandstand/ press box structure and support facilities. The addition of the women's softball program led to the development of a new softball park in 2007. The park's location, adjacent to the women's soccer facility, was planned to allow for the construction of a joint women's athletic facility (field house). This 7,800 square foot structure housing both the women's softball and soccer programs was completed in 2009.

The 2004 Master Plan also addressed student life enhancements with recommendations for a new dining hall, expansion of the University Bookstore, renovation of the existing Student Center, and a new University Club. The proposed 24,000 square foot, Student Dining Facility will be centrally located in the student housing area to better serve the needs of campus residents. Construction began on this facility in 2009 with a scheduled opening in 2010. The expansion and renovation of the existing University Bookstore will allow for the relocation of the Health Sciences Bookstore from its Springhill Avenue location back to the main campus and also provide an upgrade to the existing facility to more efficiently serve an increasing student population. The Student Center renovation is currently in the planning stages; however, the proposed improvements will impact the meeting and public areas as well as the administrative spaces and provide a much-needed face lift to an aging facility. The need for a common gathering space for faculty, staff and students will be addressed by the construction of a University Club, located in the southwestern section of the main campus, near the new Student Recreation Center. This 5,100 square foot facility is scheduled for completion in 2010.

Due to the unprecedented growth in student enrollment, the need for additional student housing was also anticipated in the 2004 master plan. To meet this need, the University contracted with a private development firm to build student housing on University land adjacent to the existing student housing area. The Grove has provided 1000 additional bedrooms to meet the needs of the increased student population. Phase I (500 bedrooms) opened in the fall of 2007 and Phase II (an additional 500 bedrooms) opened in 2008.

Bell Tower and Plaza - 2010

General campus improvements and administrative projects were also included in the 2004 plan. In order to further define the entrances to the Campus and compliment the "gateway" concept, a series of campus entrance portals were proposed. The first phase of this work is currently in construction. Future portals are also being considered. A separate phase of this work, a major Campus identification sign and associated landscaping, located at the University Boulevard/ Old Shell Road intersection, is included in the development of Shelby Hall. Another major campus amenity proposed in the master plan was the Bell Tower and Alumni Plaza. This 130 foot tall structure is located prominently near the Mitchell Center and Alumni Hall, and, when completed in early 2010, will serve as the preeminent landmark honoring the USA alumni who provided support for the project. The Bell Tower has been named for Gordon and Geri Moulton.

Realizing the importance to the University of public/private research partnerships, the 2004 Master Plan listed expansion of the USA Technology and Research Park as one of its priorities. In 2004, the Research and Technology Corporation completed the first phase of its own master plan with the construction of the main entrance, roadway, and supporting Infrastructure. The intent of the Phase I roadway and infrastructure was to provide access to and facilitate development of the first four building sites in the Park. In part due to the Phase I improvements, a second speculative office building was completed in 2006. This 35,000

Table 2.7

#	BUILDING NAME	YEAR CNST	TOTAL GSF	USE
1	Administration Bldg.	1964	63,618	E/G
2	Alpha East Extension	1968	3,362	E/G
3	Alpha Hall East	1967	37,632	E/G
4	Alpha Hall South	1967	33,144	E/G
5	Alumni Hall	1977	6,172	E/G
6	Archaeology Building	2006	10,400	E/G
7	Archaeology Lab One	1969	2,622	E/G
8	Archaeology Lab Two	1969	2,567	E/G
9	Baseball Batting Cage Facility	2001	8,151	E/G
10	Baseball Field House	1996	4,603	E/G
11	Baseball Ticket Booths	1979	124	AUX
12	Baseball Field Storage Building	1983	1,800	E/G
13	Bell Tower	2009	NA	AUX
14	Beta Residence Hall 1	1979	12,194	AUX
15	Beta Residence Hall 2	1979	12,194	AUX
16	Beta Residence Hall 3	1979	12,194	AUX
17	Beta Residence Hall 4	1979	12,194	AUX
18	Beta Residence Hall 5	1979	12,194	AUX
19	Biomedical Library	1967	33,555	E/G
20	Bookstore	1970	21,570	AUX
21	Cafeteria	1984	35,389	E/G-AUX
22	Cancer Center Clinical Bldg	1980	59,970	E/G-Other
23	Central Services Administration Bldg (CSAB)	1967	34,132	E/G
24	Central Utilities Management Office	1967	579	E/G
25	Central Utilities Plant	1967	19,012	E/G
26	Chemistry Building	1984	32,428	E/G
27	CIS Classroom Building	1966	11,986	E/G
28	Computer Services Center	1984	20,967	E/G
29	Construction Services Building	1969	8,486	E/G
30	Delta Commons	1988	7,691	AUX
31	Delta Residence Hall 1	1982	36,460	AUX
32	Delta Residence Hall 2	1983	36,460	AUX
33	Delta Residence Hall 3	1983	36,460	AUX
34	Delta Residence Hall 4	1983	36,460	AUX
35	Delta Residence Hall 5	1983	37,996	AUX
36	Delta Residence Hall 6	1988	37,996	AUX
37	Dialysis Building	1984	3,770	Other
38	Electrical Engineering	1968	12,569	E/G
39	Engineering Classroom Building	1978	26,460	E/G
40	Engineering Laboratory Building	1978	53,009	E/G
41	Epsilon Residence Hall 1	1992	33,482	AUX
42	Epsilon Residence Hall 2	1993	33,482	AUX
43	Faculty Court East	1966	6,580	E/G
44	Faculty Court South	1968	6,266	E/G
45	Faculty Court West	1966	6,331	E/G
46	Football Field House	2009	50,000	E/G
47	Fraternity House	1999	9,032	AUX
48	Fraternity House	1998	9,032	AUX
49	Fraternity House	1989	8,641	AUX
50	Fraternity House	1998	9,032	AUX
51	Gamma Commons	1977	8,875	AUX
52	Gamma Dorm 0	1976	10,489	AUX
53	Gamma Dorm 1	1976	10,489	AUX
54	Gamma Dorm 2	1976	10,489	AUX
55	Gamma Dorm 3	1976	10,489	AUX
56	Gamma Dorm 4	1976	10,489	AUX
57	Gamma Apartments 5	1977	12,175	AUX
58	Gamma Apartments 6	1977	12,175	AUX
59	Gamma Apartments 7	1977	12,175	AUX
60	Gamma Apartments 8	1977	12,175	AUX
61	Gamma Apartments 9	1977	12,175	AUX
62	Health Sciences Building	2009	188,000	E/G
63	Humanities Building	1974	82,840	E/G
64	Instructional Laboratory Building (ILB)	1966	50,074	E/G
65	Intramural Field House	2003	3,016	E/G
66	Library	1968	136,775	E/G
67	Life Sciences Lecture Hall	1970	2,821	E/G
68	Life Sciences Building	1970	76,801	E/G
69	Laboratory of Molecular Biology (LOMB)	1978	15,049	E/G
70	Maintenance Garage	1982	20,887	E/G
71	Maintenance Grounds	1981	11,994	E/G
72	Medical Sciences Bldg (MSB)	1974	243,130	E/G
73	Meisler Hall	2006	46,890	E/G
74	Mitchell Center	1999	208,300	E/G-AUX
75	Mitchell College of Business	1969	58,937	E/G
76	Mitchell Learning Resource Center	2006	15,185	E/G
77	Mobile Townhouse	1968	5,722	E/G
78	Molecular Research Center	1980	4,854	E/G
79	Node Bldg	1985	504	E/G
80	Performing Arts Center	1998	52,449	E/G
81	Physical Education (HPELS)	1968	107,000	E/G
82	Police Dispatch Bldg	1975	640	E/G
83	Property/ Inventory Bldg	1985	14,742	E/G
84	Psychology Teaching Clinic	1994	3,406	E/G
85	Pumphouse	1979	576	E/G
86	Satellite Utilities Plant	2009	5,425	E/G
87	Seaman's Bethel	1970	5,001	E/G
88	SGA Pavilion	2006	NA	E/G
89	Soccer/Softball Field House	2008	7,767	E/G
90	Softball Press Box	2007	1,152	E/G
91	Sorority House	1999	9,274	AUX
92	Sorority House	1999	9,274	AUX
93	Sorority House	1999	9,274	AUX
94	Sorority House	1999	9,274	AUX
95	Sorority House	1999	9,274	AUX
96	Stanky Field Stadium	2005	21,090	AUX
97	Student Center	1971	50,779	E/G-AUX
98	Student Recreation Center	1992	47,610	E/G
99	Swimming Pool	1966	1,684	E/G
100	Technology & Research Park Bldg 1 (TRP I)	2003	76,000	Other
101	Technology & Research Park Bldg 2 (TRP II)	2005	35,150	Other
102	Technology & Research Park Bldg 3 (TRP III)	1981	135,742	E/G-Other
103	Telecommunications Building	1989	2,516	E/G
104	Track Field House	1978	1,566	E/G
105	Transportation Services Building	2004	20,466	E/G
106	University Commons	1990	117,826	E/G
107	Visual Arts Complex	1992	35,922	E/G

Existing Campus Building Plan

0 100' 500' 1000'

Legend

- Academic
- Administration/ Student Services
- Athletic
- Student Housing
- Recreation
- Utility/Maintenance
- Research Park
- University Land

square foot structure provides office space for smaller, "start-up" companies with research or other ties to the University and will hopefully serve as a stimulus for future development in the Park. Additionally, the University's Health Services Building was transferred to the Research and Technology Corporation in 2007. This building, designated as TRP III, currently houses a number of University and Technology and Research Park tenants.

The 2004 Master Plan has been extremely successful. A large percentage of the projects proposed in this plan have been completed or are currently under construction. A master plan, by design, is merely a guideline for future growth. Due to circumstances unknown at the time, a number of proposed projects may not be realized while others not anticipated may come to fruition. This is certainly the case with the USA Master Plan. The unexpected addition of a varsity football program led to the development of a football field house and administrative facility. This 40,000 square foot building along with the associated practice fields, completed in 2009, is located in the western section of the Campus on land that was previously a part of the Hillsdale neighborhood. Another project unanticipated in 2004 is the Glass Arts Building in the Visual Arts Complex. Currently under construction, this 4,700 square foot addition will provide studio and furnace space to support the new Glass Arts program.

Projects included in the 2004 recommendations that have not been realized include a university auditorium, visual arts gallery, University Library Special Collections and Archives building, University Library renovation, University Commons renovations, Mitchell College of Business addition, Development and Alumni Affairs facility, track Field House, and a continuing education/conference/ wellness center and hotel located in the Technology and Research Park. There is still a demonstrated need for these projects and because of this, they have been made a part of the current master plan.

Buildings and Facilities

The main campus of the University of South Alabama contains approximately 3,097,600 gross square feet of space, distributed in 108 principal structures. Of this amount, approximately 2,225,210 square feet is dedicated to academic and administrative uses, 561,760 square feet to student housing, and 246,890 square feet to the Technology & Research Park and Other. A list of existing Campus buildings along with the year constructed, gross building area, and principal use is provided in Table 2.7.

Building Assessment

An exhaustive, on-site, building assessment was not a parameter of the previous or the current master planning effort. In general, however, the overall condition of the buildings and facilities on the main campus can be considered "good". As with any college campus, there are buildings of widely varying age, functional requirements, and construction quality. As a State institution, funding is always an issue and money for preventative maintenance is sometimes targeted toward more pressing building issues. As a result, many of the structures on campus are in excellent condition while others are in need of repair or renovation.

An assessment of main campus building roofs was performed as part of the 2004 Master Plan. Selected roofs were evaluated and rated based on roofing material, guarantee, age and condition. At that time, roof conditions ranged from "good" to "poor". Of the roofs listed in the 2004 Assessment, the following have been replaced or received major repairs:

Life Sciences Building Lecture Hall (2004)
Seaman's Bethel (2004)
Student Recreation Center (2005)
Visual Arts Complex (2005)
Alpha Complex (2005)
Bookstore (2005)
Mitchell College of Business (2006)
Cancer Clinical building (2008)
University Commons (partial re-roof/repair 2005)

Major hurricanes in 2004 (Ivan) and 2005 (Katrina) also had an impact on the condition of the roofs on the main campus. The majority of the buildings suffered at least some damage from these storms. Several structures, including the Recreation Center and the Seaman's Bethel received major damage from Hurricane Katrina and had to be re-roofed. The hurricane repair effort was a positive for the University in that, in many cases, damage assessments revealed roof problems unrelated to these storms and the necessary repairs were made concurrently with the hurricane repair work. As a result of this and the University's on-going roof replacement program, the roofs of the main campus are in much better shape than in 2004.

Utilities and Infrastructure

The following information relating to the electrical, chilled water, high temperature water, domestic water, and natural gas systems was furnished by the University's Central Utilities Department. Telephone and computer/data systems information was provided by the Telecommunications and Computer Services departments.

Electrical System

- Single source power service from 115kv transmission system with multiple feed directions from ***Alabama Power Company*** (local utility).
- Transformer (APCO furnished) is rated at 20 mva with internal voltage regulation of ± 1%.
- Campus peak load is 14,500 kva @ 0.99 power factor (3600 kvars). Central Utilities is planning to add approximately 7,600 kvars to be switched to meet current and future load requirements.
- Campus is served by seven (7) radial circuits (distribution voltage = 12,470 volts) installed in 4-inch pvc conduit in underground concrete duct banks; five circuits comprised of 4/0 copper, 15kv cable (3 wire with ground), rated at 250 amps with a nominal load of 125-165 amps per circuit (25% - 45% spare capacity). Two circuits of 500 kcmil copper rated at 400 amps each dedicated to specific loads. An eighth circuit comprised of 500 kcmil copper is planned to serve the new Shelby Hall in the southeastern section of campus.
- Fault coordination is achieved through fuse sizing.

- Fault indicators have been installed at critical points throughout campus circuits to allow identification of fault location.
- Sectionalizing switches have been installed to allow alternate service capability in critical areas of campus.
- There are twenty-one (21) emergency generators ranging from 15kw to 900kw installed at critical buildings.

Chilled Water System

- System design is a primary loop rated at 42^0 f supply, 52^0 f return, 100^0 f drop across the chilled water coils in the building air handling units.
- Chilled water is produced at the main central utilities plant and a satellite plant located adjacent to the Medical Sciences Building. Electrically driven centrifugal chiller units; five (5) at the main central utilities location and two (2) at the satellite plant, produce chilled water that is distributed across main campus.
- The distribution system consists of underground supply and return pipe constructed of transite or insulated steel material.
- Individual buildings utilize a chilled water pump designed to draw from the distribution header and discharge through the building loop, returning to central plant.
- A number of main campus buildings including the new Health Sciences Building, Football facility, Intramural Field House, Transportation Services Building, TRP I and II, University Commons, and others, are "self-contained" and are not connected to the campus chilled water system.

High Temperature Water System

- System design is of a primary loop rated at 180^0 f (supply).
- There are two (2) fire tube boilers located at central plant. Boilers are Cleaver-Brooks manufactured, gas fired units.
- The distribution system consists of underground supply and return pipe constructed of insulated steel pipe.
- A number of campus buildings are heated by boilers (gas fired) which are located in the individual building, not connected to the central hot water system.
- Generators:
  Two (2) gas fired boilers*
  700 hp – 23,432,500 btu/hr
  3500 sq ft - heating surface
- Circulating pumps:
  Three (3) - Gould pumps* rated at 1850 gpm @ 175 ft head.
- Operating conditions:
  System flow rate (constant for all loads):
  194,000 #/hr operating pressure @ 74 psig
- Temperatures:
  Winter (4 months): supply - 180^0 f
  Summer (8 months): supply - 170^0 f
- A number of main campus buildings including the new Health Sciences Building, Cancer Building, TRP I, II, and III, Dialysis Building, Football facility, Intramural Field House, Transportation Services Building, University Commons, and others, are "self-contained" and are not connected to the campus high temperature water system.

  * Normal operation consists of one (1) boiler and one (1) HTW circulating pump.

Domestic Water System

- The main campus is served by ***Mobile Area Water and Sewer System*** (local utility), principally through two (2) meters; one 8-inch meter located at the Old Shell Road/Stadium Boulevard intersection and one 10-inch meter just south of the Health Services Building on University Boulevard. A number of individual buildings are served directly by smaller meters. These buildings include the Football facility, Intramural Field House, Transportation Services Building, Softball facility and Softball/Soccer Field House, and University Commons. Technology and Research Park buildings are also metered separately.
- Water pressure averages 55 psig (static pressure) across campus. Some variation is typical at different elevations.
- The campus distribution system is constructed of predominately 8-inch ductile-iron piping with some of the original buildings served through 6-inch pipe.
- Irrigation systems on campus are served by five (5) sub-meters (***MAWSS***) and two (2) deep wells.
- Cooling tower water makeup at central plant is sub-metered (***MAWSS***).

Natural Gas System

- The main campus is served by Mobile Gas Service Corporation (local utility), primarily through a single six-inch meter located at central plant. A number of campus buildings are served individually including the Psychological Teaching Clinic, Softball facility and Softball/Soccer Field House, fraternity and sorority houses, Football facility, Cancer Building and TRP III, and University Commons. Technology and Research Park buildings are also metered separately.
- Natural gas is distributed throughout campus at 42 psig with service pressure regulated at each building.

Telecommunications / Data System

- The main campus telephone system is served by ***Harbor Communications*** (local utility) through multiple feeds on Old Shell Road and University Boulevard. Individual buildings are fed from two (2) "node" buildings on campus. Node 1 is located just west of the Library and serves the eastern section of the campus. Node 2 is located in the Telecommunications building in the Maintenance complex and serves the west/central sections of campus. A proposed Node 3 will be located in the new Dining Facility and will serve future buildings/facilities in the western section of campus.
- The computer/data system is served by Southern Light LLC (local utility) primarily through a fiber optic feed from the Old Shell Road/Jaguar Drive intersection. Southern Light also provides the University with internet bandwidth and operates the link between the main campus and the satellite campus'.
- Individual campus buildings are fed by the Computer Services Building primarily through a multiple conduit, concrete encased, duct bank; the auxiliary duct system. However, a number of cables are fed through individual conduit or, in the case of some telecommunications lines, by direct burial.

Land Use Zones

The 2004 Master Plan identified a number of campus zones based on the principal use of the buildings within those designated areas. The zones included Academic, Administration/ Student Services, Athletic, Student Housing, Recreation, Utility/ Maintenance, and Research Park. It was noted at the time that the pattern of development prior to 2004 was surprisingly coherent considering that an active master plan was not in place to guide the placement of new buildings and facilities.

The University is anchored by an administrative core located in the east/central section of the campus, adjacent to University Boulevard. This core is encircled on the north, west and south by a horseshoe shaped academic zone (see Table 2.8 for distribution of programs within this zone) that is extended to include University Commons. An area of athletic facilities abuts the academic zone to the south and runs along Old Shell Road from Jaguar Drive to Stadium Boulevard, and a small utility/maintenance zone attaches to the north. A large area of student housing that includes the Gamma, Beta, Delta and Epsilon dorms as well as the sorority and fraternity houses is located immediately to the west of the academic zone.

The Student Recreation zone is now somewhat more fragmented than it was in 2004. The previous Master Plan anticipated that the proposed student recreation facility would be located in the immediate area of the intramural fields. Two years later when this facility was in the planning stages, it became apparent that the Stadium Boulevard/Old Shell Road location would better serve the University community and the site was moved. The Student Recreation Center is now separated from the Intramural Fields but because of the direct connection through the student housing area, the basic concept of the student recreation zone remains intact.

Finally, the Research Park zone is located primarily on undeveloped land to the north of the main campus watershed

Table 2.8 – Academic Programs Housed in Main Campus Buildings

Administration Building
The Graduate School

Alpha Hall East
Continuing Education & Special Programs
English as a Second Language
Interdisciplinary Studies
International Programs
Developmental Studies Program
Counseling Services

Alpha Hall South
ROTC

Archaeology Building/Labs 1& 2
Archaeology

Chemistry Building
Chemistry

CIS Classroom Building/Faculty Court
College of Computer & Information Sciences

Engineering Complex
College of Engineering
Chemical Engineering
Civil Engineering
Electrical and Computer Engineering
Mechanical Engineering
Chemical Engineering

Health Sciences Building
College of Allied Health Professions
College of Nursing
Biomedical Sciences
Cardiorespiratory Care
Clinical Laboratory Sciences
Occupational Therapy
Physical Therapy
Physician Assistant Studies
Radiologic Sciences
Speech Pathology and Audiology

Humanities Building
College of Arts & Sciences
African American Studies
English
Foreign Languages and Literature
Gender Studies
Gerontology
History
International Studies
Philosophy
Political Science/Criminal Justice
Sociology, Anthropology & Social Work

Instructional Laboratory Building (ILB)
Mathematics/StatisticsPhysics

Life Sciences Building
Biology
Earth Sciences
Marine Sciences
Personalized Studies Program
Psychology

Medical Sciences Building
College of Medicine

Mitchell Center
Department of Athletics
Meteorology and Coastal Weather Center

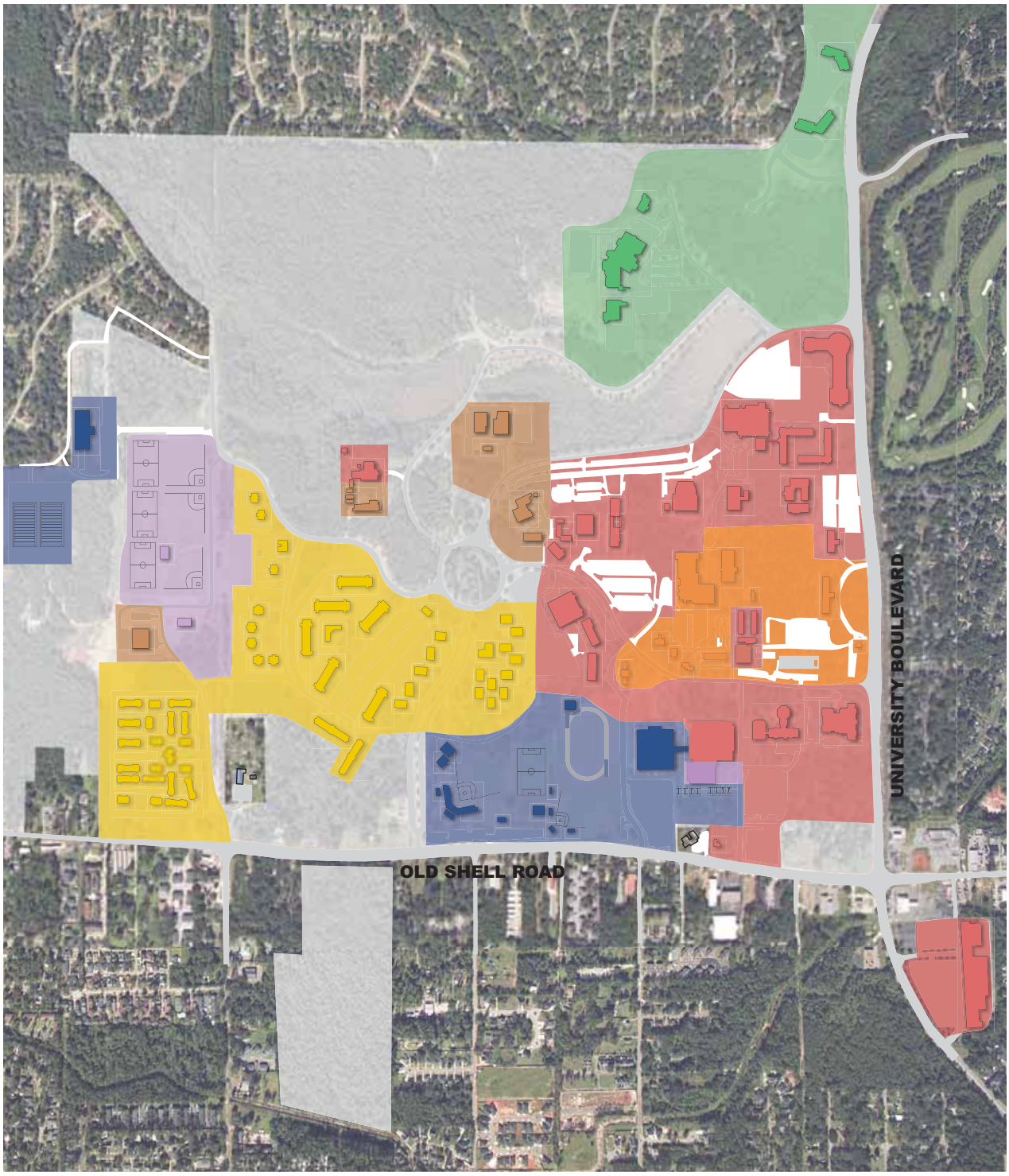
Mitchell College of Business Complex
Mitchell College of Business
Accounting
Finance and Economics
Marketing and Transportation
Management
Small Business Development Center

Physical Education Building (HPELS)
Physical Education
Sports Medicine
Leisure Services

Performing Arts Center
Dramatic Arts
Music

University Commons
College of Education
Communications

Visual Arts Complex
Visual Arts



Existing Campus Zone Plan

0 100' 500' 1000'

Legend

- Academic
- Athletic
- Recreation
- Research Park
- Administration/ Student Services
- Student Housing
- Utility/Maintenance

area. In 2004, this zone encompassed only the two existing research park buildings (TRP I & II), and the three available sites bordered by University Boulevard, USA North Drive and Health Services Drive. After 2004 the University's Health Services Building was turned over to the Technology and Research Park and space in the adjacent Cancer Clinical building was converted for use by the Research Park. The current Master Plan is also proposing a conference/hotel facility to be located to the southeast of these buildings. Because of this, the Research Park zone has been expanded to include all of the above referenced structures.

Even with the anticipated growth of the University over the coming years, the existing zone structure established in the 2004 Master Plan is expected to remain valid. Despite the concentration of buildings and facilities in the southeastern portion of the campus, there is still room for growth in each of these zones. This is evidenced by the proposed location of new buildings and facilities included in the 2010 Plan; all conform to the established zone structure.

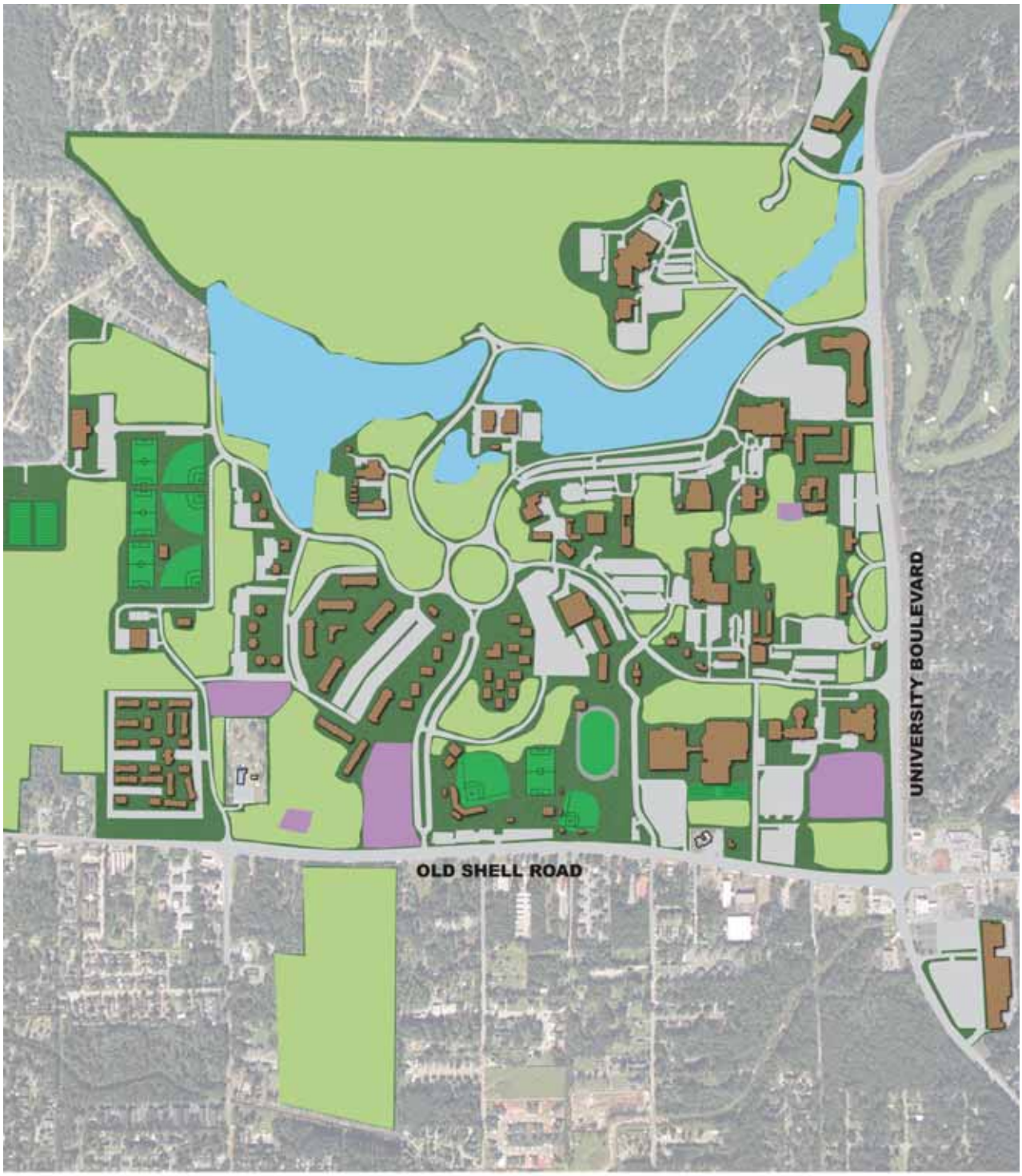
If needed to accommodate future growth or non-conforming uses, University owned property along Old Shell Road to the west of the student recreation zone (approximately 136 acres), in the eastern section of the Hillsdale neighborhood (approximately 104 acres), and on the south side of Old Shell Road (approximately 37 acres) is available.

Campus Watershed

Open Space/Landscaping

The University began, in 1964, with a single building located on heavily wooded, 16th Section land in west Mobile. With this "blank canvas" and a lack of any type of master plan or formal structure to guide the placement of new buildings and facilities, development occurred somewhat haphazardly. Early buildings were located along what was then Gaillard Drive (now University Boulevard) using this frontage road as an organizing element. As the campus grew and access roads were constructed, the planning focus shifted. By default, the "Brittle Star" shaped system of internal roadways became the overarching planning element that defined the University. With few exceptions, campus buildings were now "sited" to address these new roadways (or their associated parking lots) with little to no acknowledgement of public space or a connection to other campus buildings. This resulted in a series of informal, open spaces that now characterize the developed sections of the campus. The open spaces have slowly diminished with each new building but they still persist.

Formal open spaces on campus are rare but they do exist. The courtyard outside the Student Center and the Bookstore was the first such space. This courtyard has been the site of campus gatherings and special events since its completion in 1971. The importance of this courtyard was acknowledged by the placement of Meisler Hall in 2006. This building was designed to roughly mirror the footprint of the Student Center and to enclose the courtyard on the east side, making this space a focal



Existing Campus Open Space Plan

0 100' 500' 1000'

Legend

- Green Space
- Current Development
- Wetlands/Reserved

point for an axis that would extend northward to the green space east of the Library and beyond.

Additional formal open spaces were envisioned as part of the 2004 Master Plan. The first of these was the Bell Tower and Plaza. The tower itself will certainly serve as an important "visual" reference for the campus and the plaza will provide much needed organization by linking the Bell Tower and the Mitchell Center with Alumni Hall and buildings to the north. An additional formalizing element of the 2004 Plan has not been realized. A campus "oval" was proposed that would organize the large green space between The Administration Building and ILB on the east, the Life Sciences building on the north and Meisler hall on the west. More importantly, a formal axis would be created from the Meisler Hall entry eastward to University Boulevard. The creation of this "oval" is dependant on a number of factors that, to date, have not developed. However, this project is still under consideration and has been included as a part of the current Master Plan.

The main campus is also characterized by the large watershed area running from the western to the eastern boundary and effectively separating the heavily wooded northern section of campus from the academic/administrative core to the south. The natural beauty of this watershed is a major asset to the University but perhaps more importantly, it serves as a valuable retention area to contain storm runoff from virtually all sections of the campus. This area also serves to define the southern boundary of the Technology and Research Park.

The Main Campus contains areas of both natural vegetation and ornamental landscaping. Masses of native tree species occur in the undeveloped northern and western portions of the property. Some areas of the campus, particularly the space between the Student Center and the Administration and Humanities Buildings have a fairly dense coverage of native tree and shrub species. These existing tree and shrub plantings on the campus are a valuable resource and should be protected where possible. Dominant species of plant materials found on campus consist of the following:

Trees:	Shrubs:
Pine varieties	Ligustrum
Red Cedar	Azalea
Sweet Gum	Oleander
Magnolia	Indian Hawthorn
Water Oak	Russian Olive
Live Oak	Burford Holly
Crape Myrtle	Juniper varieties
Bradford Pear	Pittosporum
Sycamore	Nandina
	Camellia

Much has been done since the 2004 Master Plan to enhance the landscaping on campus. Most new construction projects have included landscaping as a central part of the building design. The University's Grounds Department has installed irrigation systems over much of the campus and has completed numerous landscaping and campus beautification projects. Recently, a portion of the campus was added to the City's Azalea Trail.

Transportation and Circulation

By the late 1990's student enrollment had increased to almost 12,000. At the time, a relatively small percentage of these students lived in student housing leaving a large number that would drive and park in one of the lots distributed around campus. Because of the distance (perceived or real) between some academic buildings, students had become conditioned to driving from one class to the next. Also, due to the "commuter" nature of the University, many students would travel to or from off campus jobs at varying times during the day. By the late 1990's, traffic congestion at peak times had become a major concern.

In 1999, the University commissioned a traffic engineering consulting firm to complete a study of traffic conditions on campus and make recommendations on options to relieve traffic congestion. The first part of this study, addressing circulation issues and campus transit, was released In October, 1999. It was followed, in 2002, by a comprehensive study of campus parking. Both studies, along with their respective recommendations, were included in the 2004 Master Plan. A multi-part proposal emerged, that included the following:

- Vehicular circulation
- Pedestrian circulation
- Campus transit system
- Zoned parking system

Vehicular Circulation and Campus Roadways

The University is served by two 4-lane public roadways; University Boulevard to the east of the campus, and Old Shell Road to the south. Off of these two main roads are a number of access roadways leading into the campus. There are seven entrances off of University Boulevard alone. These include the Technology & Research Park main entry and building one and two parking lot access, USA North Drive, the Health Sciences/Alpha parking lot access, ILB/Visual Arts parking lot access, Administration Court, and USA South Drive. Old Shell Road has an additional five entrances including Jaguar Drive, Mitchell Center Drive, Stanky Field parking lot, Stadium Boulevard and Cleverdon Parkway. While aiding the flow of traffic into and out of the University, this large number of campus access points contributes to a lack of vehicular control and makes it more difficult to properly define the campus boundary.

The plan of the campus, obvious from the air but not as much from the ground, is characterized by a "brittle star" shaped system of internal roadways. The system is centered on the traffic circle or roundabout located at the western end of the academic core and just north of the student housing area. The major legs of the star include USA North and USA South Drives and Stadium Boulevard, but the core is also fed from the north by Aubrey Green Drive and from the west by Hillsdale Road. The traffic circle functions well but traffic congestion is a major problem along the majority of USA South Drive, and on USA

Existing Campus Circulation Plan

0 100' 500' 1000'

Legend

- Public Street
- Primary Campus Street
- Secondary Campus Street
- Campus Entry Points

North Drive at the Health Services Drive intersection and the entrance to the Life Sciences Building/Library parking lots. Congestion is also experienced on some of the secondary roads and parking lot entries.

The 2004 Master Plan included a number of traffic circulation proposals to ease congestion and facilitate traffic flow in and out of campus. Some of these were deemed not feasible and were not implemented. Others were accepted and the modifications were made after the 2004 Plan was issued. These modifications included a connection between the Mitchell College of Business parking area and the main Business Building parking lot to the south, relocation of the entrance to the Administration parking lot off of USA South Drive, Stadium Boulevard lane/parking revisions and construction of the new Gamma Connector roadway.

Pedestrian Circulation

There are an adequate number of concrete sidewalks on the campus, but there is a lack of organization to them. Over the campus' development, there seems to have been additions of new sidewalks corresponding to the construction of new buildings. These walks have been linked, creating a crisscross effect and subsequently preventing any formalized green and open spaces. Because most of the walks are somewhat random and relatively narrow (4-6 feet in width), there are no "major" pedestrian corridors. In the last few years, new walkways were installed by the City of Mobile to facilitate pedestrian traffic along Old Shell Road and University Boulevard. This has improved access to/from off-campus housing and retail, especially on Old Shell Road.

While pedestrian circulation on campus is generally efficient, problem areas occur at crosswalks, especially at major intersections. Traffic congestion and the failure of drivers to yield right of way are both serious concerns. Problems also occur between intersections. In many cases, crosswalks are not well marked and do not have proper signage warning drivers of the crosswalk. And despite existing traffic calming devices, speed is an issue. Drivers do not always recognize crosswalks or simply fail to slow down.

The 1999 Traffic Study noted that, "Pedestrian crosswalks should be better defined. Major pedestrian crossings, especially at USA South Drive, should be raised and constructed of a material which contrasts with the roadway. These crossings should also be well signed for vehicles to yield to pedestrians." Work is currently in progress to implement these recommendations. A number of raised traffic "tables" are currently planned for locations on USA South Drive.

Campus Transit System - Tram

Campus Transit System

One of the major components of the 1999 Traffic Study and the 2004 Master Plan was the recommendation for an on-campus transit system. The stated goal was to reduce traffic congestion in the heart of the campus, assist students in their movement around the campus and to link to the City's mass transit system. Secondarily, the University would also reduce fuel consumption and decrease emissions. In order to meet this goal The Master Plan recommended the establishment of a campus shuttle

Existing Campus Transit Route Plan

0 100' 500' 1000'

Legend

- Blue Line
- Red Line
- Tan Line
- Green Line
- Purple Line
- JagTran Stops

Campus Transit System - Typical Tram Stop

system that would transport students, faculty, staff and campus visitors between student housing, major academic buildings and parking lots, City of Mobile transit stops, and the central campus "hub". In order to realize this goal, the University would have to:

1. Modify existing roadways to allow for tram/bus crossing and to provide for the safe operation of the proposed shuttle vehicles traveling on these roadways
2. Institute control measures to address the traffic flow problems, particularly on USA South Drive
3. Construct the necessary infrastructure to successfully implement the system, including:
    - Dedicated, paved tramways to allow better access to internal buildings and parking lots without the need to travel on main campus roadways
    - Covered bus/tram stops located at strategic points on campus
    - An enclosed light-duty warehouse for storage and maintenance of vehicles
    - Expansion of the existing Maintenance Shop to accommodate servicing the shuttle vehicles
    - Miscellaneous - roadway signage, warning lights and area lighting as required for safe operation, communications equipment, etc.

Construction began in 2004 and the necessary infrastructure was completed in the spring of 2005. The “JagTran” system began operation at that time and has steadily increased ridership over the last four years. Vehicles include enclosed “cutaway” buses that transport students over campus and public roadways and a series of open air trams that operate on internal tramways. The JagTran system currently operates 5 separate routes serving 19 stops, including major academic buildings and parking lots, student housing, The Grove, University Commons, Student Health and the central hub. Since its inception, several routes have been revised and a number of stops added/relocated to accommodate changes in ridership and campus traffic conditions.

Campus Parking

Another key aspect of the 2004 Master Plan was the proposal for a “zoned parking” system. The 2002 Parking Study emphasized the problem of students “driving from one parking lot to another to change classes.” The study also noted that, based on on-site surveys, “several parking lots on campus are utilized very heavily, to the point where parking is unavailable. However, these surveys also showed parking lots that were almost completely empty at the same time frame.” Overall parking demand has changed significantly over the last 6 years but recent parking surveys reveal a similar pattern of use.

In order to reduce the traffic congestion associated with multiple parking lot changes during the day and to regulate the overall parking process, The University instituted a zoned parking system in 2006. Four separate zones were established; a South zone made up of the “Business” and University Commons lots, a Central zone serving the Student Center/Bookstore, Humanities and Chemistry south, and the

Existing Campus Zone Parking Plan

0 100' 500' 1000'

Legend

Central
North
Student Housing
East
South
Open Lot

Engineering complex, a North zone serving Humanities and Chemistry north, the Library and Life Sciences, and an East zone made up of the Medical Sciences/Health Sciences/Alpha lot and the ILB/Visual Arts lot. The Mitchell Center lot was designated as "open" parking available for use by students on an as-needed basis but demand on this lot has increased over the last few years and some control mechanism is now needed. The zoned parking scheme has worked hand-in hand with the transit system in successfully reducing traffic flow and congestion on the main campus.

Campus/Building Accessibility

Through on-site observations it appears that, in general, existing sidewalks provide an accessible means of travel between buildings and facilities on campus. There are a few exceptions, most notably the route between the Humanities building and the Library/ Student Center which is currently being addressed. Some crosswalks create problems for the disabled because of visibility issues and the additional time required to cross. While there are curb cuts at most street crossings, many do not meet ADAAG standards and are difficult to recognize and negotiate. Another item to be addressed is that of accessible routes between some handicap parking spaces or transit stops and an accessible building entrance.

Campus Boundaries and Entries

Typical Campus Portal From 2004 Master Plan

Due to the previously noted number of campus entrance points and the lack of sufficient identification signage fronting the main public thoroughfares, the boundaries of the main campus are somewhat ill defined. One does not get the feeling that they have "arrived" at the University. The 2004 Master Plan addressed this lack of identity in several ways. First, a recommendation was made to establish a series of campus "portals" at the major entrances to the campus. These portals incorporate formal landscaping along with campus identification signage and standard building materials to establish a campus identity and reference to the existing buildings. The first phase of this project which includes USA North Drive, USA South Drive and Stadium Boulevard is currently in the planning stages. The remaining portals at Jaguar Drive, Mitchell Center Drive and at University Commons have been included in the current plan. The second part of the 2004 proposal involved replacing the existing campus identification sign at the University Boulevard/Old Shell Road intersection with a new sign more in scale with the site and the importance of this location. This sign is being designed and is scheduled to be installed in conjunction with the Shelby Hall construction.

Campus Boundaries - Health Sciences "Gateway" Building

Another important element in the establishment of campus boundaries is the concept of the campus "gateway" building. During the planning of the Health Sciences Building and the new Student Recreation Center (currently under construction), it was determined that these structures could be used to further identify the University and reinforce the effective limits of the main campus. And through the creation of a visual corridor to the southeast, the new Shelby Hall building (also under

Campus Boundaries - Student Recreation "Gateway" Building

construction) could be used to anchor the gateway theme at the University Boulevard/Old Shell Road intersection. These buildings will employ campus standard materials as well as a common building form and massing to readily identify them as USA buildings.

Campus Amenities

Campus amenities are important to an institution for providing a sense of identity and to create an enhanced and user-friendly environment. Existing amenities on the USA Campus include a mix of exterior lighting, various site accessories and public artwork. These items have been installed on an as-needed or as-desired basis over the years without benefit of an overall campus standard or plan for placement. With the exception of artwork, campus amenities were addressed in the 2004 Master Plan. It was noted at the time that, "The wide variety of types and design of site accessories, contribute to the lack of visual unity of the physical campus." This was one area of the plan that was not implemented and the lack of an established campus standard for campus amenities still exists.

Exterior lighting on campus consists of streetlights, security lights, pedestrian scale lighting bollards and building accent lighting. Many types of lighting fixtures and poles can be found on campus. Each new building seemingly utilizes a different style of fixture and lighting design. Although this fragmentation cannot be consciously noted, a standardized light pole and fixture can help to reinforce a feeling of campus identification and unity, which is an important factor in creating a "sense of place.

Site accessories include freestanding benches, pic-nic tables, trash receptacles and bicycle racks. These items are limited in number and randomly placed on campus. Also, as with campus exterior lighting, there is no consistency in style between buildings. Accessories provided by the University are utilitarian in nature and detract from the overall aesthetics of the campus. Accessories selected for new buildings are generally more appealing, but styles vary greatly.

The lack of sufficient bicycle racks is also an issue addressed in the 2004 Plan. The placement of Bike racks on campus is random and many major academic buildings have no bike racks at all. This tends to discourage the use of bicycles as a means of travel on campus.

Campus Artwork

Although public artwork was not addressed in the 2004 Master Plan, it has become a priority for the current Administration. A number of pieces of sculpture have been added to the campus since that time. The presence of artwork in public spaces can not only enliven a campus but also instill a sense of pride in the University by students, faculty/staff, and the general public who come on to the campus. Public artwork can also be used as a campus planning/ordering element to define formal public spaces and reinforce visual axes.

Existing Campus Signage Plan

Legend

- C Campus Identification
- D Directional Sign
- I Informational Sign
- V Visitor Information
- P Public Venues

Campus Signage

An extensive on-site survey of existing campus signage was performed as a part of the current master planning effort. A number of different types of sign systems were identified including, traffic control, directional and informational type signs (both vehicular and pedestrian), campus and building identification, and donor recognition. As was noted in the 2004 Plan, there is very little continuity between signage style, shape and location across campus. This condition still exists.

Campus directional and informational signs do exist but they are unattractive and, due to a lack of identifying colors or school logo, do not convey any recognition of being on the USA Campus. Also, these signs generally function individually and do not contribute to a campus-wide "wayfinding" system. Building identification signs vary greatly in age, material, design, and location. None indicate that this is a "USA building". What could be a major component in establishing a campus identity actually serves to reinforce the notion of USA as just a collection of individual buildings. Traffic control signs and posts are, in many cases, in poor repair and detract from the campus aesthetic. As was noted previously, access signs for the disabled are non-existent in many areas of the campus. The current planning survey revealed a number of issues with the existing signage system. These are:

- ***No formal campus visitor/welcome center – existing facility not easily identified***

Due to its prime University Boulevard/ South Drive location, the current "dispatch" building serves as the main campus "visitor center". Despite the location the facility is not easily identified. The building is partially obscured by large shrubs and the existing building signage does not identify it as a visitor center. There is also no off campus signage directing visitors to this facility. A secondary issue has been created by the building's use as a dispatch office. The adjacent parking lot, used for police vehicle parking and equipment storage, has created somewhat of an eyesore at the "front door" of the campus.

Main Campus Sign

- ***Existing Campus identification is outdated, inconspicuous and does not properly establish the University "brand"***

The original campus identification signs located at the Old Shell Road/University Boulevard intersection and in front of the Administration Building were installed in the 1960's. While still in good shape, they are no longer representative of the image of the University in the 21st century. Because these signs are set back from the street and partially obscured by vegetation they are largely unreadable from a moving vehicle.

Additional campus identification was added in 1999 in the form of the Mitchell Center marquis. The primary purpose of this sign is to provide a means of notification of Mitchell Center events and for advertisement. University and building identification is secondary and becomes somewhat lost in the lighted, electronic display above. The 2004 Master Plan addressed the issue of campus identification with a proposal to replace the existing sign

Mitchell Center Marquis

at the Old Shell Road/ University Boulevard intersection and to add a number of campus "portals", with appropriate USA identification signage.

- ***There are multiple campus entry points – many are not properly identified***

This is a multi-faceted problem stemming from the physical size/layout of the campus and the number of entry points. Campus entry points are not designated as such and, in many cases, there is no directional signage to indicate whether or not a visitor is entering the campus at the proper location. This problem is made worse by the sometimes confusing campus roadways and the lack of a formal campus "wayfinding" system.

- ***Finding specific buildings on campus is difficult for visitors and new students. Campus buildings are not always identified – signage is inconsistent.***

Typical Building Identification Monument Sign

The original concrete monument signs (Library, Humanities, etc.) are generally located away from the street and, due to the low height and minimal contrast, are hard to find and read from a moving automobile. Some have been poorly maintained over the years and need to be removed or replaced. Newer signs have generally departed from the "monument" design but vary greatly. The Mitchell College of Business employed a street-side monument type sign but the look is quite different from the original campus signage. More recent buildings have included metal letter, wall mounted signs (with mixed results - LOMB, Health Sciences, etc.) or incorporated cast stone signs with lettering in relief (Laidlaw, Performing Arts). Some employed the campus "standard" metal panel signs (Student Recreation, etc.). Several buildings such as Chemistry and ILB have no building identification signs at all. Overall, building identification signage is very inconsistent with nothing to signify that the facility is a "USA" building.

Mitchell College of Business - Monument Sign

- ***Interior roadways on campus can be confusing to those not familiar with the layout and there is currently no campus wayfinding system or campus "landmarks" to guide visitors. Existing campus directional signs are unattractive, outdated, and hard to read***

Wayfinding on the USA campus is currently relegated to a series of bronze colored, aluminum directional and marquis type signs. While providing limited direction to buildings and facilities from various points on campus, these signs were planned and installed individually for a specific purpose and as such, are not capable of providing a true campus wayfinding system. It is also sometimes difficult to give directions to visitors due to the lack of any type of landmark. The new Bell Tower will definitely serve as USA's first real landmark but its use in wayfinding may be limited. The majority of the existing directional/marquis signs are 25 years old or older and, due to the nature of the aluminum finish and applied vinyl graphics, are in poor condition. Also, letter size and limited contrast along with placement of some signs makes recognition difficult; especially from a moving vehicle.

Meisler Hall - Building Mounted Sign

Typical Campus Directional Sign

Typical Campus Directory Sign

Directory Sign From 2004 Master Plan

The 2004 Master Plan included designs for several typical directional signs but there was no attempt at developing a wayfinding system or to employ these new signs in any type of coordinated fashion. The large (brick) directional signs are scheduled to be incorporated into the entry portal design but the smaller (black aluminum) signs proved to be largely unworkable for directional purposes (two of the signs were actually installed at the ILB/Visual Arts parking lot) due to the design/size of the signs and the amount of text that is typically required. Letter height is limited and recognition is difficult.

- ***Existing vehicular/street signs are unattractive***

Existing "traffic" and other vehicular informational signs are typically mounted on DOT standard perforated, channel type metal poles. These poles are unattractive and tend to lend a more "industrial" look to the campus. Even when a decorative pole has been established as a standard (white tube poles at Jagtran stops for example), later additions or revisions have not always included such poles. Additionally, some poles carry multiple signs creating a sign "column" effect.

- ***Some campus signs may not meet current requirements for accessibility.***

Non-compliant signs should be identified and replaced. In addition, any building entrances/accessible routes currently not in compliance should be identified the proper signage installed.

- ***There is no standardized University plan for Directory or for web based maps***

Many people (especially students) rely on laptops, smart phones and other mobile devices for directions and other information. The University currently has no internet based plans for campus orientation or directions. Many universities have established interactive campus maps on their websites for visitor and student/faculty use. A web-based system could greatly assist wayfinding on campus and reduce the need for directional signage.

Architectural Standards

For the first forty years of its existence, the University operated without any type of published standards to guide the design and construction process. In part due to the tremendous growth of the University over the last five to ten years, it was determined that a set of guidelines was needed to aid University personnel in the administration of building and utility construction projects. As a result, the Department of Facilities Management, through its Engineering Design & Construction office has developed a USA Design and Construction Standards document outlining this process.

The purpose of the University of South Alabama building standards is to provide guidelines for designing and constructing facilities for the University of South Alabama. The standards are intended to set design, construction, maintainability, and

operational parameters, as well as summarize information that may be unique to the University, either by choice or by the specialized nature of the facility. The standards are for use by design professionals, building contractors and sub contractors to ensure the successful delivery of projects for the University of South Alabama.

The standards are divided into three discrete parts; The Design Process, covering design relationships and the typical phases of a construction project, Design Guidelines, listing applicable codes, regulatory agencies and safety concerns, and Specification Guidelines, which includes technical standards for building materials and systems. These standards, if properly implemented, should provide for more uniformity in campus buildings and also serve to further the goals of this Master Plan by helping to establish a campus identity.

3 PROGRAMMING AND METHODOLOGY

The programming phase of the Master Plan focuses on understanding the needs and objectives of the University. Through background research, user input and site analysis these needs are discovered and synthesized into concepts and strategies used to give direction to the physical planning of the campus. This section of the document will describe the method of discovering the University's programmatic needs and objectives and how they where organized. It also enumerates the

Methodology

The process of creating the 2010 Campus Master Plan began with a review of the 2004 Master Plan document to identify those recommendations and planning concepts that are still valid and those that have been impacted by changes over the last five years. The status of completion of the building/ facility projects listed in the Plan (the Program) was also noted. Areas requiring further study were included in the proposal for the 2010 Plan. The review of the 2004 Plan was followed by a preliminary data gathering phase that included meetings with University Administration, Academic Affairs, the Dean's Council, and members of the Facilities staff. This initial discovery phase also involved meetings with the department of Institutional Research, Assessment and Planning, to integrate current Southern Association of Colleges and Schools (SACS) and Alabama Commission on Higher Education (ACHE) requirements into the Master Plan.

Early in 2009, a master plan steering committee was established to guide the planning process and advise the Long Range Planning Committee and the Board of Trustees on recommendations for the Master Plan. The Steering Committee included representatives of the USA Administration, Faculty Senate, and the Student Government Association. Periodic meetings of the Steering Committee allowed for presentation of preliminary concepts and later, more specific facility "program" recommendations and alternatives. Open discussion between Committee members provided valuable feedback throughout this process. A number of sub-committees were also established to guide the process. Areas of specific concern included building assessment, infrastructure, circulation and parking, security, and campus signage. These sub-committees met regularly to evaluate current issues facing the University and to draft recommendations addressing these issues.

The initial data gathering effort was followed by an extensive inventory and analysis phase. The inventory portion of the work was accomplished, primarily, through an on-site survey of existing campus conditions. This included an assessment of current land use, roadways and parking areas, signage and way finding, circulation patterns, and pedestrian access. Information on existing buildings was provided by the responsible University departments through the Building Assessment sub-committee. Utility and infrastructure information was supplied by the departments through the sub-committee structure as well. Supporting data gleaned from numerous University sources also formed a part of the inventory. The information collected as a part of the on-site surveys and through the input of the various departments was provided to the appropriate sub-committee in follow-up meetings and used to formulate their final recommendations to the Steering Committee. Additional information was incorporated directly into the Master Plan.

Upon completion of the inventory and analysis, a draft plan was established. A key element of the draft plan was a list of building and facility projects to be included in the 2010 Master Plan "Program". In order to determine the programmatic needs of the University, the Division of Academic Affairs requested strategic planning information from the Deans of the various academic colleges and schools. A similar request for programmatic information was also issued to the Department of Athletics, Development and Alumni Relations, Financial Affairs, Health Sciences, and Student Affairs. The Deans, Vice Presidents, and Directors were asked to review their existing facilities against current student enrollment, faculty/staff requirements, and other issues, and develop a list of facilities or improvements considered necessary over the next five to ten years. Projects from the 2004 Master Plan that were not realized but still considered vital to the University were also included. This information was evaluated in the context of the University "vision" and the overall planning effort, and a final list of building/facility projects was presented to the Steering Committee for approval. The "Program", as approved by the Master Plan Steering Committee, was integrated into the 2010 Master Plan.

The Program

This list of building and facility projects developed in direct response to the current and future needs of the University and as a result of the strategic planning effort of the University as a part of the 2010 Master Plan. A number of projects including the large lecture hall, visual arts gallery, relocation of the USA Archives and Special Collections, conference center/hotel, and the campus portals are carried over from the 2004 Master Plan. Others, such as the interdisciplinary and clinical research buildings, Lung Biology research space, BSL 3 laboratory replacement and Imaging Center indicate an increasing awareness of the importance of research and technology to an

institution like USA. Considered as a whole, the list represents all aspects of University life, from academics (Chemistry Building addition, distance education center), to student life (additional student housing, Student Center renovation, expansion of the Intramural fields), athletics (track and soccer facilities), continuing education (relocation of Continuing Education and Conference Activities), development (relocation of Development and Alumni Affairs), Technology and Research Park (conference center/hotel/wellness center, new roadways and infrastructure), and campus amenities (parking facility, campus portals). All of the projects listed demonstrate a commitment to the continued growth and development of the University of South Alabama.

Large Lecture Hall: A dedicated lecture hall facility (12,500 – 25,000 GSF) to serve the University in general. The facility is to be located adjacent to the existing Student Center. It will provide space for a 500 - 1000 seat lecture hall with stage/podium, lobby/pre-function area, storage, media rooms, administrative, and support space. The option planned for this building is to include the Visual Arts Gallery (10,000 GSF-listed below). This would bring the total area of the building up to 22,500 - 35,000 GSF.

Visual Arts Gallery: A 10,000 GSF gallery/display space to serve the College of Arts and Sciences and the Department of Visual Arts. This space is conceptually included as part of the Large Lecture Hall (above).

Addition to Chemistry Building: A 20,000 GSF addition to serve the Chemistry Department. The addition will provide space for teaching and research labs, additional classrooms, storage, and miscellaneous administrative and support space. The project will also include general renovation of the existing building as required for new addition.

Performance/Recital Hall/Theater: A dedicated performance hall (27,000 SF – 43,000 GSF) to serve the College of Arts and Sciences and the University in general. This facility will provide space for a 750-1200 seat performance hall with full stage, lobby/ pre-function area, large storage areas, media rooms, and miscellaneous administrative and support space.

Multipurpose Lecture Hall: A 10,000 GSF addition to serve the Mitchell College of Business. The addition will provide space a 300 seat lecture hall with small stage/ podium, lobby/ pre-function area, storage, media rooms and miscellaneous administrative and support space. The project will also include general renovation of the existing building as required for new addition.

Relocate the Center for Continuing Education and Conference Services to Main Campus from Brookley: Continuing Education/Conference Services (approx. 11,100 NSF + approximately 5 acres of outdoor training space) currently planned for the proposed Wellness/Conference Center (below).

Relocate USA Special Collections/Archives to Main Campus from the Springhill Campus: Special Collections/ Archives (approximately 25,000 NSF existing) currently proposed to occupy a portion of the Engineering Laboratory Building after the completion of Shelby Hall.

Distance Education Center: A 3,000 NSF renovation - includes a lab with 25 stations, adjacent faculty/ staff offices, two classrooms and three soundproof studios. Location to be determined.

Track Restroom/ Locker Room Facilities – New locker rooms, storage and public restrooms to serve the Department of Athletics and the Track Team. To be located in the existing track area.

Soccer Press Box/ Storage Facility – to serve the Department of Athletics and the Soccer Team. To be located in the existing soccer field area.

Relocate Development and Alumni Affairs: Development and Alumni Affairs currently occupies 12,101 NSF in TRP III and Alumni Hall. They estimate needing an additional 3,360 SF for a total of 15,661 NSF over the next 5 years. Location to be determined.

Interdisciplinary Research Building: A 30,000 SF shared research facility. Includes dry and wet labs, classrooms, and miscellaneous administrative and support space.

Virtual Hospital/Simulation Space: (10,000 NSF) – Includes mock clinical offices, hospital rooms, control room/observation space, classrooms, and miscellaneous administrative and support space.

Lung Biology Research Space: A 28,000 GSF addition to the Cancer Clinical Building and a 7,664 SF renovation of the 3rd and 4th floor of the existing Cancer Building.

Replacement of BSL 3 lab: New lab building to conform to current BSL 3 standards.

Imaging Center: A 37,000 GSF, free standing building to be located adjacent to the existing Cancer Clinical Building.
Clinical Research Building: (30,000 SF) – Will serve as an initial module for this program. Includes dry lab space, classrooms, conference and miscellaneous administrative and support space.

Continued Upgrade and Repair of the Medical Sciences Bldg: (30,000 SF) – May include an addition to the Medical Sciences Building.

Wellness Center/Conference Center/Research Park Hotel: Public/ private partnership to be located in the Technology and Research Park.

USA Technology and Research Park Infrastructure: Utilities/infrastructure to support current facilities future growth in Research Park.

Roadway Connecting Technology & Research Park with Health Services Drive: To facilitate access to TRP III/ Cancer Clinical Building and the proposed Wellness/ Conference Center (item

#19, above) from the main Technology & Research Park entrance. Final location/ layout to be determined. Need to coordinate with wellness/conference center and hotel location.

New Recreational Tennis Courts: 3-4 lighted courts to be located near Intramural fields.

Expansion of Sports Club Field and Lighting (at Intramural Fields): Convert existing northwest recreation field to Sports Club field and relocate existing soccer field to open area west of fraternity houses.

Additional Student Housing: To be Located south of the JagTran facility.

Campus Portals and Design Enhancements: The first phase of this work includes USA South & North Drives and Stadium Blvd. A second phase is to include Jaguar & Mitchell Center Drives and the UCOM entry on University Blvd

Student Center Renovation: General renovation to enhance student services and address accessibility and other code requirements.

Parking Structure: A 65,000 GSF, 2 story, 220 car facility.

Demolish Faculty Court South Building

4 THE CAMPUS MASTER PLAN

The 2010 Campus Master Plan represents another step in a continuing planning dialog that began with President Moulton's initial vision for the University in 1999. Through this vision statement and the more specific "Goals and Objectives" a set of planning principles has emerged. Although not formalized in 2004, these principles formed the basis for the recommendations of the first master plan and have guided campus growth and development since that time.

Planning Principles

- ***Create Campus Identity***
  One of the primary goals of the 2004 Master Plan was to strengthen the identity of the campus through the creation of a series of thresholds or portals located at campus entry points. This was later reinforced by the strategic placement of several of the plan's recommended buildings to create the campus "gateway" concept. The 2010 Plan recommends that the portals be completed within the current planning period. It also hopes to build on this with the phased development of a campus-wide signage and wayfinding system that will identify and link and identify the various areas and elements of the USA Campus.

- ***Unify the Campus***
  Another major goal of the 2004 Plan was to establish a stronger visual continuity on campus through the introduction of more formal, organizing spaces and through the establishment of standards for architectural elements and amenities. In an attempt to further strengthen this effort, the 2010 Plan has expanded the architectural standards to include guidelines for building materials, building form and massing, fenestration, and other considerations. The proposed campus signage and wayfinding system should aid in this effort as well.

- ***Promote an Environment for Learning, Research and Student Interaction***
  The 2004 Master Plan identified a number of usage zones that had logically developed on the main campus over time. These zones were formalized and incorporated into the 2004 Plan. While the 2010 Program adheres to the established "campus zone" concept, it also seeks to promote connections or nodes of interaction between these zones through the selection and strategic placement of the Program elements and the enhancement of the University's existing circulation systems.

- ***Develop an Integrated Campus Circulation and Parking System***
  An integrated campus-wide transit and zoned parking system was established as a major goal of the 2004 Plan. Both have been realized along with a number of the other traffic circulation recommendations proposed in the plan. The 2010 Master Plan will seek to improve traffic and parking conditions on campus with a series of recommendations to accommodate the changes that have occurred over the last five years.

- ***Centralize Campus Programs***
  A move that began with the relocation of the Nursing and the Allied Health programs back to the main campus will continue in the 2010 Plan with the proposed relocation of the USA Special Collections and Archives, and the Center for Continuing Education and Conference Services, from their current homes on the Springhill Avenue and Brookley Campus' respectively.

- ***Implement Strategic Growth Practices***
  Through the implementation of its land use, utility/infrastructure, transportation, and circulation recommendations, the Master Plan strives to ensure that future campus development will be linked to the strategic mission of the University as outlined in the current goals and objectives.

The 2010 Campus Master Plan

The Campus Master Plan is a comprehensive document. It includes not only the buildings and facilities that make up the Program (the "Master Plan Projects" – see Table 4.1), but also recommendations for other critical issues impacting future development on the USA campus. These issues include, utilities and infrastructure, land use, transportation and circulation, accessibility, campus amenities, signage and wayfinding, and architectural guidelines.

Utilities and Infrastructure

The continued maintenance and development of the campus utilities/ Infrastructure system is an extremely important aspect of campus growth. Currently, the University is facing a number of challenges associated with an aging infrastructure and a dramatic increase in buildings and facilities on the main campus. The challenges include the on-going maintenance of

existing systems, up-grading of existing services/ equipment, the ability to provide additional service to existing or new infill structures in the central campus, and the ability to provide for future growth in the undeveloped sections of the campus to the west and north.

Current utility and infrastructure systems include data and telecommunications, electrical, mechanical, domestic water / sanitary sewer, storm sewer, and natural gas. Critical issues facing each of these systems are outlined below:

Primary concerns for the data and telecommunications systems are service and equipment upgrades to existing buildings and the need to extend the campus-wide distribution system (ADS) to serve future development in the western sections of the campus. The infrastructure to support this new development will be accommodated through a third data/ telecommunications "node" to be located in the new Dining Facility located on Tonsmeire Drive, just south of the sorority houses.

Concerns for the electrical system include the up-grading of existing service/ equipment and the installation of new feeder circuits to service infill structures in the central part of the campus. There is also a need to address new development to the west and, to meet this need, an additional feeder circuit has been proposed to serve the Intramural/ sports facilities and possible future growth beyond.

On-going maintenance is an especially critical issue for the mechanical (chilled and high temperature water) systems. Due to the nature of an aging, underground high temperature water piping system, failures of the various components are not uncommon. These maintenance issues have been addressed in the current plan, along with the additional concerns of upgrading existing Central Plant equipment and providing a new chilled water "loop" in the western section of campus.

The domestic water system appears to be functioning well, with only minor, day-to-day maintenance issues. Domestic water pressure has been a factor in the development of new buildings over the last few years, but recent changes in the Mobile Area Water and Sewer System "feeds" to the main campus have improved conditions. An additional feed in the western section of campus may be necessary to serve future growth in this area. The sanitary sewer system is currently able to effectively service the main campus and no recommendations for improvements are included in the plan.

The storm sewer system also appears to be in reasonably good shape; however, upgrades are necessary along the North Drive corridor. In addition, new infrastructure may be required to service development to the west and north of the central campus.

Final recommendations for Utility and Infrastructure are included as Appendix A.

One additional issue that continually confronts utilities/ infrastructure personnel is the inability to locate valves, junction/ pull boxes, manholes and other underground system components for routine maintenance or during emergency situations. Existing campus utility drawings are not always up-dated and the information contained on these drawings is diagrammatic at best. As part of the current planning effort, the existing campus utility drawings have been updated to include new buildings/ facilities completed to date, and all utility/ infrastructure improvements not previously recorded. In addition, an effort is currently underway to identify and accurately record the location of system components by means of an on-site, global positioning system (GPS) survey. It is recommended that this survey be completed and all information be recorded during the current planning period. The campus utility drawings are included in this document as Appendix E.

Campus Security & Safety

Final recommendations for Campus Security & Safety are included as Appendix B.

Land Use

The appropriate and effective use of available land is perhaps the most important goal of a master plan. Despite the growth of the central campus in recent years, there is still a great deal of open space that needs to be used wisely. In addition to the available land in its central core, the University has been blessed with large parcels of undeveloped property contiguous to the main campus. This property represents tremendous potential for growth in the future. The Program for new buildings and facilities and the following land use recommendations seek to make the most efficient use of available land while maximizing the University's options for future growth and development.

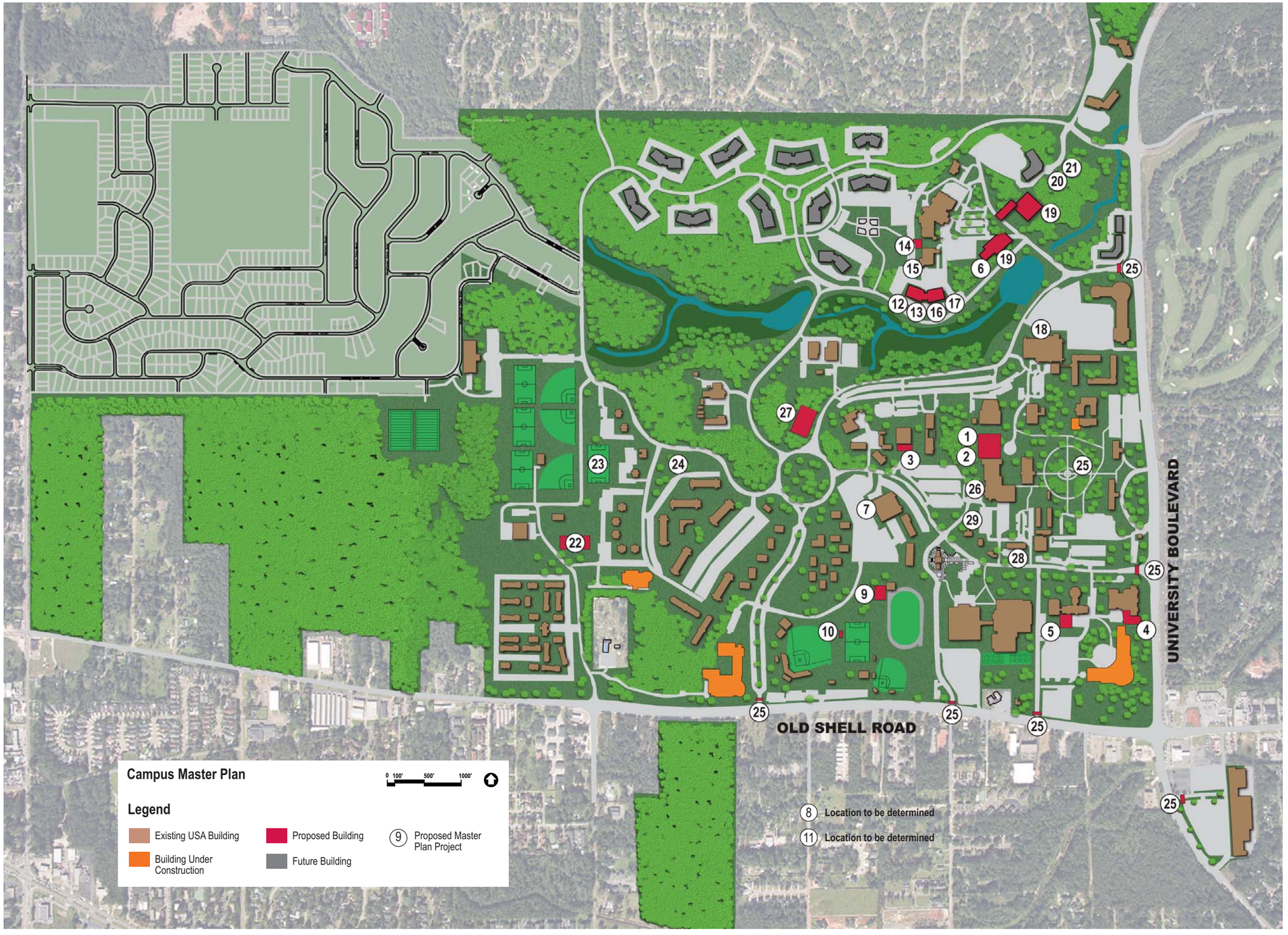
Campus Zones

The land use zones identified in the 2004 Master Plan have served as an effective planning tool to guide the placement of new buildings and facilities on the main campus. As such, it is recommended that the University continue with appropriate development within the corresponding zones. Adherence to the zone concept will not only ensure that future buildings and facilities are located in an area of campus best suited for their purpose, it will also provide a necessary structure for other, supporting planning elements. Established pedestrian circulation paths can be utilized, vehicular circulation and parking can be planned to serve campus zones more effectively, and campus transit routes can also be made more efficient.

The zone system also has important implications for campus buildings/ facilities and utilities and infrastructure systems. Each building type comes with its own specific requirements for building size, form, and massing, which strongly influences building fenestration and selection of materials. As such, architectural guidelines should be specific to each zone. Buildings can be differentiated while still retaining a common campus theme or identity. Different use zones also have differing

Table 4.1 – Master Plan Projects

No.	Building/ Facility Project	Approximate Area
1	Large Lecture Hall	12,500 – 25,000 GSF
2	Visual Arts Gallery	10,000 GSF
3	Addition to Chemistry Building	20,000 GSF
4	Performance/Recital Hall/Theater	27,000 SF – 43,000 GSF
5	Multipurpose Lecture Hall	10,000 GSF
6	Relocate the Center for Continuing Education and Conference Services	11,100 NSF
7	Relocate USA Special Collections & Archives	25,000 NSF
8	Distance Education Center	3,000 NSF
9	Track Restroom/ Locker Room	NA
10	Soccer Press Box/ Storage Facility	NA
11	Relocate the Office of Development and Alumni Affairs	15,661 NSF
12	Interdisciplinary Research Building	30,000 GSF
13	Virtual Hospital/ Simulation Space	10,000 NSF
14	Lung Biology Research Space	28,000 GSF addition/ 7,664 SF renovation
15	Replacement of BSL 3 lab	NA
16	Imaging Center	37,000 GSF
17	Clinical Research Building	30,000 SF
18	Upgrade and Repair of the Medical Sciences Building	30,000 SF
19	Wellness/Conference Center/ Research Park Hotel	NA
20	Research Park Infrastructure	NA
21	Roadway Connecting Research Park with Health Services Drive	NA
22	Recreational Tennis Courts	NA
23	Expansion of Sports Club Field	NA
24	Additional Student Housing	NA
25	Campus Portals & Enhancements	NA
26	Student Center Renovation	NA
27	Parking Structure	65,000 GSF
28	Demolish Faculty Court South Building	NA
29	Alumni Hall Expansion	NA


UNIVERSITY BOULEVARD
OLD SHELL ROAD
Campus Master Plan
0 100' 500' 1000'
Legend
Existing USA Building
Building Under Construction
Proposed Building
Future Building
9 Proposed Master Plan Project
8 Location to be determined
11 Location to be determined

Aerial View of the Main Campus Looking from the North

utility requirements. A classroom building has different needs than a dormitory. By respecting the zone system for future development, a new building can access existing utilities specific to that zone, thus reducing the amount of infrastructure required.

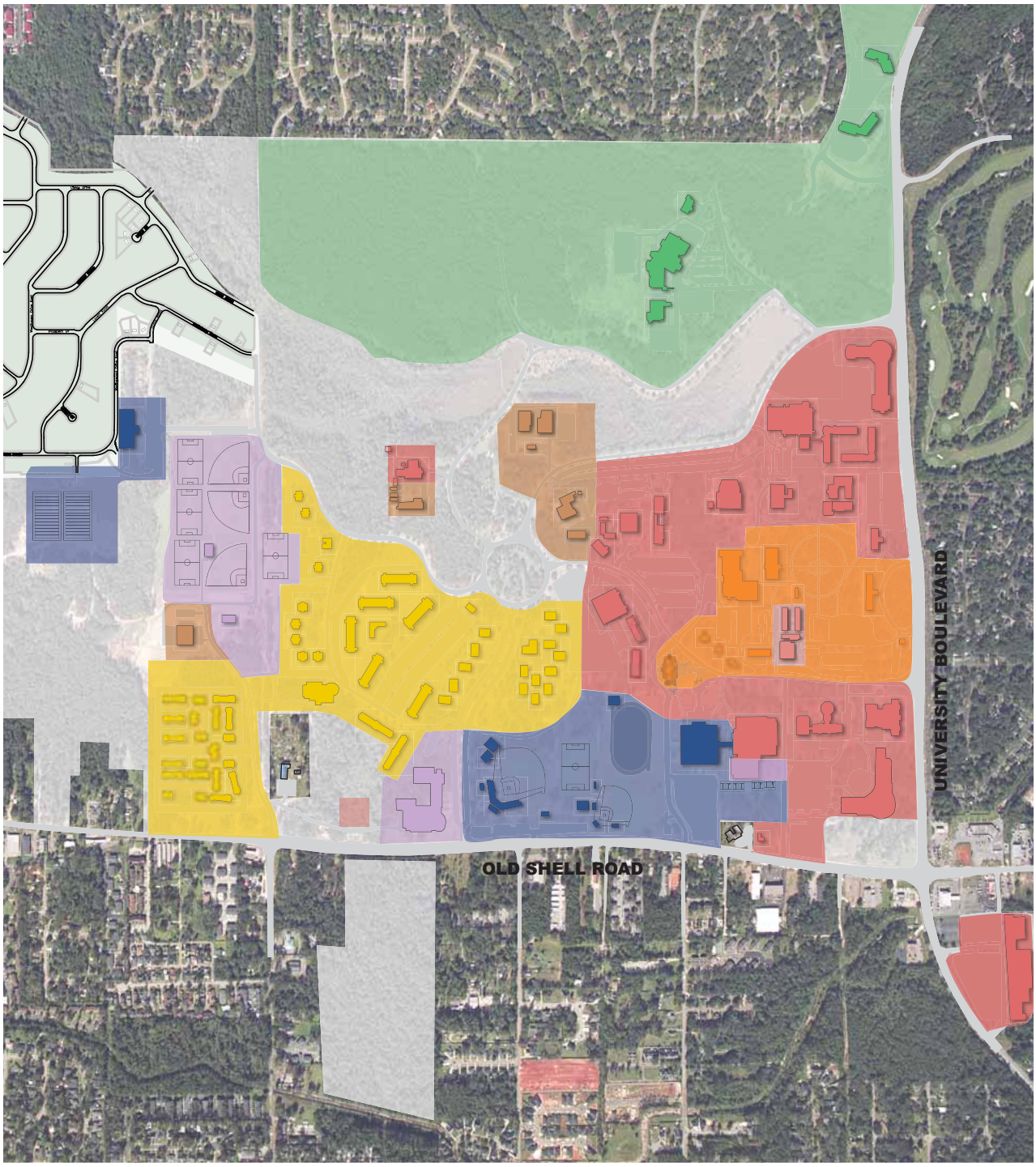
Where appropriate, land use zones should remain separated by natural or man-made buffers to distinguish these areas. However, it is important to establish links between adjacent zones. This should be accomplished by means of pedestrian and/or visual corridors and through the creation of "nodes" of interaction that overlap two or more of these zones. The Bell Tower Plaza will serve as an important link between the Academic and Athletic (and to some degree Student Housing) zones, as will the new Student Recreation Center between the Housing and Student Recreation zones. However, others should be considered between the Academic/Housing zones (near the traffic circle), between the Academic/Research Park zones (near Health Sciences), and between Housing and Student Recreation (near the Intramural Fields).

Growth and Development

Despite the amount of available land on the main campus, many of the land use zones have a limited capacity for growth. The Academic zone is probably the best example of this. Meisler Hall, the recently completed Health Sciences Building and Shelby Hall (currently under construction) have greatly reduced the amount of "buildable" land in this central core of the campus. Additional land is available but the need to develop these areas must be weighed against the importance of the existing open spaces that continues to define the campus. In order to maintain the zone concept, the density of buildings and facilities within these zones will certainly have to increase.

Continued increases in enrollment and the associated growth may force the University to expand into its adjoining property to the west. This Section 17 land consists of two distinct parcels; an undeveloped area to the south, bordering Old Shell to Cody Road, and the eastern section of the Hillsdale neighborhood, recently cleared (most parcels) for future use by the University. This area of the campus has much opportunity for development and should be carefully planned when the need arises.

The northern section of the main campus also represents a major opportunity for growth. Despite its adjacency to the campus watershed area, the land is very buildable. In fact, the highest point on the main campus is contained within this parcel. This property is currently reserved for use by the Technology and Research Park to support future growth but, if conditions change, it could be made available for other campus uses. In addition to these contiguous parcels, the University also owns an undeveloped site of approximately 30 acres on the south side of Old Shell Road. This property also presents a variety of options for development.



Campus Zone Plan

0 100' 500' 1000'

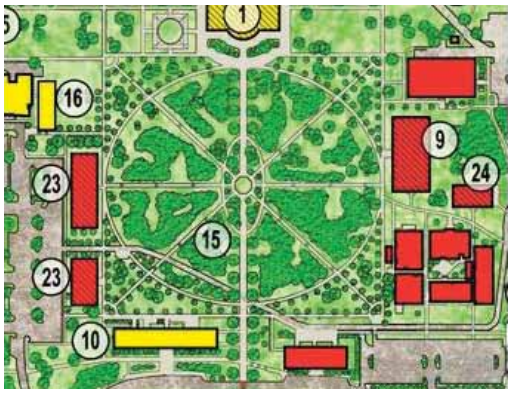
Legend

- Academic
- Administration/ Student Services
- Athletic
- Student Housing
- Recreation
- Utility/Maintenance
- Research Park

Typical Campus Wooded, Open Area

Campus Watershed

Bell Tower Plaza



Campus Oval - 2004 Master Plan

Open Space

The quality of a university campus is determined as much by its open spaces as it is by its buildings. The University of South Alabama's campus has always been characterized by its large, open wooded areas. The amount of open area in the central campus has steadily decreased as new buildings have been developed over time, but it is still an extremely important feature of the campus and should be preserved.

As noted previously, the majority of the open space on campus is either informal wooded area or watersheds. Existing athletic and intramural fields represent the bulk of the formal open space that does exist. Current exceptions include the Student Center courtyard and the recently completed Bell Tower Plaza. In addition to serving as a critical "organizing" element for the entire campus, these formal spaces provide valuable points of student/faculty/staff interaction

Several other formal open spaces or "greens" were proposed under the 2004 Plan. Probably the most important of these was the creation of a campus "oval" in the existing open area of the Administrative zone. A large oval walkway connecting The Administration Building, ILB, Life Sciences, Meisler Hall, and a proposed building to the south, was to be installed along with an east-west axis connecting an entrance portal on University Boulevard and the east entry of Meisler Hall. An intersecting, north-south axis was also recommended to connect the Student Center/Meisler Hall courtyard with the open area to the east of the Library. Additional connections were recommended from the Student Center southward to the Bell Tower and from the Bell Tower west to Student Housing.

All of these areas were planned to establish important visual and spatial links between the various campus zones and also to provide a means of connecting the perimeter of the campus with its central core. For this reason, the 2010 Master Plan is recommending that these projects be completed within the current planning period.

Landscaping

Landscaping is valued because of its strong visual appeal and its ability to delineate and reinforce the design of formal open spaces. Landscaping can also be used to unify a campus through the repetition of planting materials and schemes. For these reasons, the 2004 Master Plan recommended that a comprehensive campus landscape plan be prepared to complement the building/ facility projects and the open space recommendations proposed in that plan. If properly implemented, it would reinforce the established planning principles and provide a necessary structure for all future campus landscaping.

The campus landscape plan is one aspect of the 2004 Master Plan that has not been realized. It is the recommendation of the 2010 Plan that this plan be commissioned with the actual work phased in over the current planning period. The proposed landscape plan should emphasize the following:

- Major campus entry points (campus portals)
- Formal open spaces

Shade Trees at Parking Lot Islands

Pedestrian Scale Trees/Shrubs at Walkways

Landscaped Berms at Parking Lots

- Interactive spaces between campus zones/campus nodes
- Prominent buildings where landscaping does not currently exist
- Major walkways
- Campus roadways
- Parking areas.

The Master Plan promotes the use of native and naturalized plants requiring less maintenance and lower watering requirements. However, these native species should be combined with other non-native species as appropriate, to create a more diverse palette of landscape materials. A list of standard plant materials should be included as a part of the overall plan. In general, large evergreen trees should be used to provide shade in parking lots and other open areas and, where possible, additional islands should be created to minimize the overall scale of these parking lots and to reduce the heat island effect created by large expanses of asphalt. Smaller, pedestrian scale trees are to be used in formal landscaped areas and along pedestrian paths. Decorative planting materials should be reserved for points of interest around buildings, in formal landscaped areas and at the termination of a visual axis. Landscaped earth berms, such as the ones currently employed at the Cancer/ TRP III buildings and along Old Shell Road at the Business South parking lot should be used to screen parking areas from adjacent buildings, roadways and pedestrian walkways.

The implementation of a comprehensive landscape plan will help to further define the main campus by establishing identity, creating a sense of continuity, accentuating campus buildings and reinforcing the basic tenets of the Campus master Plan.

Transportation and Circulation

Transportation and circulation were key elements of the 2004 Master Plan. Because of the importance placed on these systems, the majority of the Plan's recommendations were implemented within two years of the completion of the document. Due to the success of the campus transit system, recommendations for change are minimal. Zoned parking is currently experiencing growing pains and additional study is needed to "fine tune" the system. Traffic congestion is perhaps the biggest problem facing the University at this time and a series of recommendations have been included to rectify this situation. The recommendations for all transportation and circulation systems are outlined below:

Campus Transit System

The campus transit (JagTran) system has proved to be an excellent tool for transporting students, faculty and staff to destinations around campus; reducing traffic congestion at peak times, and alleviating some of the campus' parking problems in the process. This system has been in operation for approximately four years and, except for problems related to changing conditions in routes and stop locations, has been functioning well. Because of the success of the system, recommendations under the current plan are minor. In light of the expected campus growth and new buildings coming on line, the Jagtran system

should continue to carefully monitor ridership and routes and make adjustments as necessary to accommodate changing conditions.

Final recommendations for the campus shuttle system are included in Appendix C.

Parking

The zoned parking system is working relatively well but is experiencing problems associated with a rapidly growing student population. A parking count study for each individual parking lot is performed yearly by the University's Facilities Office. The information obtained from this study is used to evaluate current parking conditions and to make recommendations for changes if necessary. Recent studies have revealed the over utilization of some lots and an under-utilization of others.

Due to the increased demand on the Health Sciences/ MSB lot, the recommendation was made to use the Cancer Building/TRP III lots for overflow. Also, the Mitchell Center Lot is currently an "open" lot to be used by students and faculty/ staff on an as-needed basis. The demand on this lot is increasing and a recommendation to make this a "pay to park" lot was included. Overall, increased student enrollment has taxed existing parking lots and forced the University to consider additional parking. As a result, a multi-level parking structure, to be located in the western section of campus, has been included in the list of Master Plan Projects.

Final recommendations for parking are included in Appendix C.

Vehicular Traffic

As was noted previously, although implementation of the campus transit and zoned parking systems has reduced traffic on the University's major streets, congestion is still a problem in some areas of campus. Two principal areas of concern are along the entire length of USA South Drive and on USA North Drive at the major intersections. Additional concerns exist along the campus' busier secondary roads as well.

The major problems on USA South Drive occur primarily at the major intersections during peak class change times. Recommendations include a reconfiguration of the Jaguar Drive intersection, revising the direction of traffic flow on Alumni Drive, and the addition of raised crosswalks. The relocation of Mitchell Center Drive has impacted traffic conditions in this area but, because the roadway was only recently opened, it is recommended that traffic conditions be monitored with a final recommendation for traffic control to be made at some point in the future. Also, due to a number of accidents at the USA South/ USA North Drive - University Boulevard intersections, a recommendation for additional signage to control traffic in the right turn lanes is included in the 2010 Plan.

USA North drive is currently experiencing traffic congestion at the entrance to the Library and Life Sciences parking lots during peak class change times. In order to alleviate this congestion, an additional entry in front of the Library along with the closing of the connecting drive between the Library and Life Sciences lots has been proposed. Another major problem on USA North Drive is the traffic back-up at the Health Services Drive intersection. The recent completion of the Health Sciences Building coupled with additional tenants in the TRP III/ Cancer Buildings has resulted in an increase in traffic entering and exiting USA North Drive. The recommendation is to consider either a four-way stop/ traffic signal at this intersection or develop a traffic circle/roundabout similar to the one in the western part of campus.

The current two-lane system (one traffic/ one parking access lane) on Stadium Boulevard is not working well. Both lanes are being utilized for traffic, causing problems for vehicles attempting to back out from the curb-side parking spaces. The recommendation is to add traffic "peninsulas" to restrict traffic flow in the parking access lanes. Raised pedestrian crossings/ speed tables would also be added to regulate traffic speed on this road.

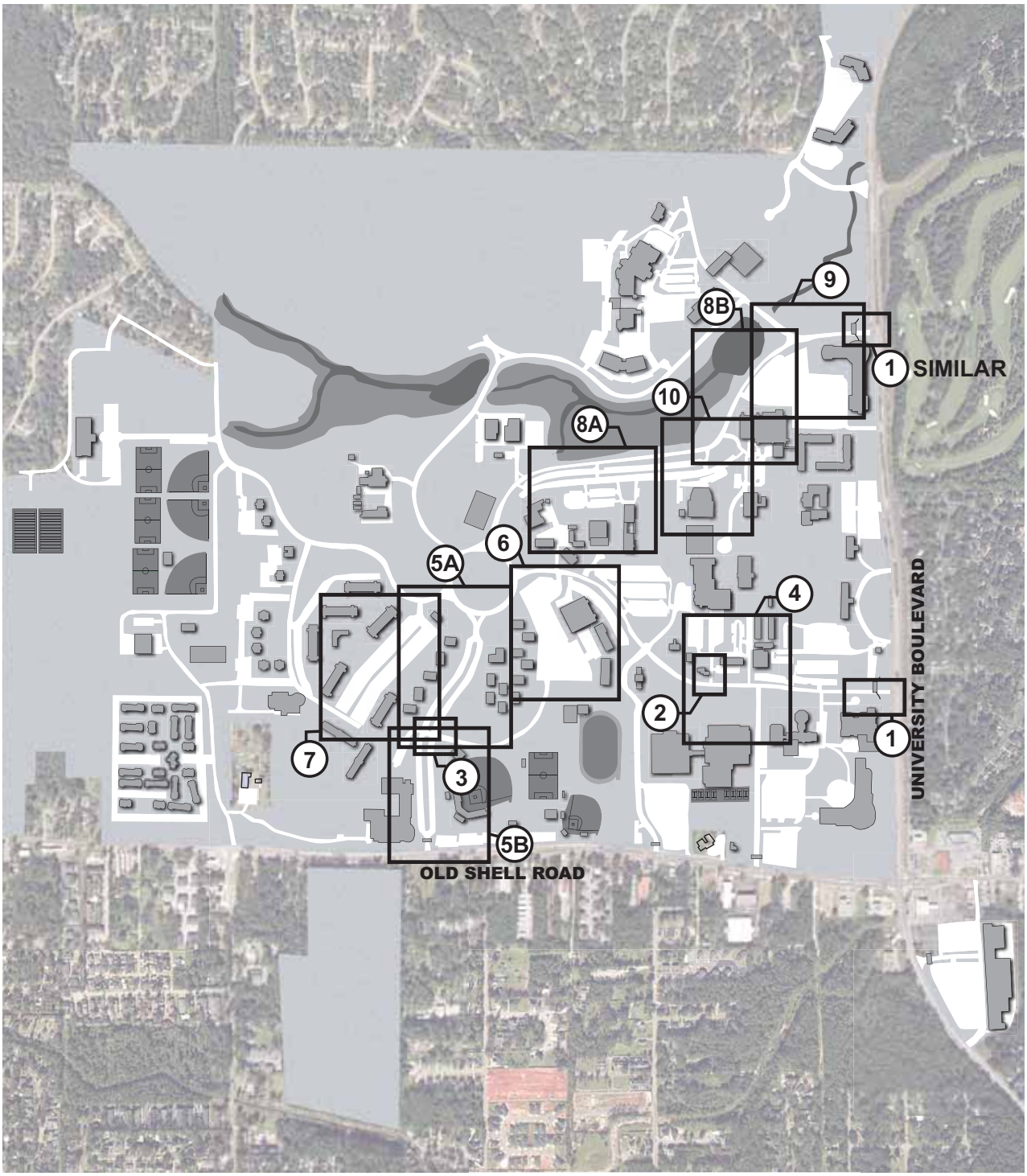
The connecting Cleverdon Parkway/ Brannan Way/ John Counts Drive roadway is currently being used as a "cut-through" from Hillsdale Road to Old Shell Road and Hillcrest. The excess traffic and higher speeds associated with this roadway configuration is creating problems at intersections, and at the traffic signal on Old Shell Road. A traffic count study is recommended to determine the number of cars utilizing these roads and to provide a basis for recommendations for traffic control. The entrance to The Grove on Cleverdon Parkway is also an issue. Speed and the failure of vehicles to yield right of way has led to a number of accidents. Additional traffic calming devices are recommended to control speed along Cleverdon Parkway.

Final recommendations for vehicular traffic are included in Appendix C.

Pedestrian Circulation

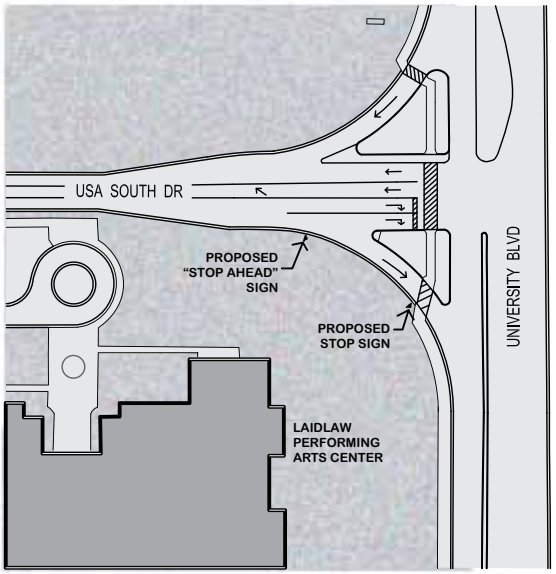
The layout of existing campus sidewalks tends to be "informal", typically running directly from building to building or following campus roadways. This is desired in most cases because it creates more direct pedestrian paths. However, some "formal" walks are needed on a campus of this size to provide an overlying structure or organization and link the various campus use zones. Several formal walkways were proposed as part of the 2004 Plan, with the Bell Tower Plaza and the campus "oval" being the most prominent. Other suggested formal walkways included the Student Center/ Meisler hall courtyard to Library corridor and the link from the Bell Tower to Student Housing. Additional, formal corridors should be considered as new buildings are completed and circulation paths change.

One additional issue associated with pedestrian circulation is that of crosswalks at major intersections. Current sidewalks are not always well marked and are sometimes hard to recognize from a moving vehicle. Excessive speed is also a problem in certain areas of campus. The 2004 Master Plan recommended



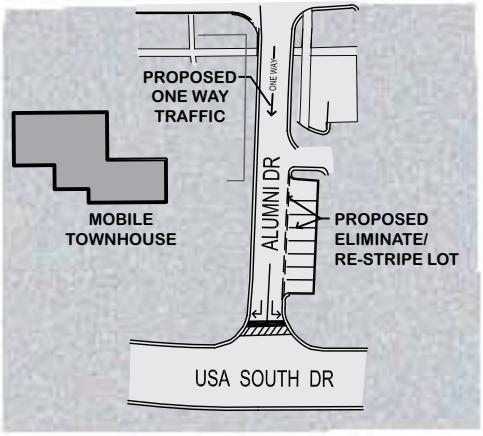
Traffic-Circulation Plan

Reference enlarged plans page 54-56



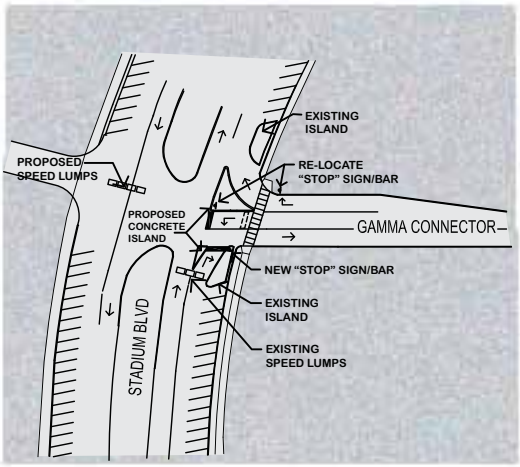
1 USA SOUTH DRIVE - UNIVERSITY BLVD INTERSECTION (USA NORTH DRIVE SIMILAR)

0 12.5' 50' 125'



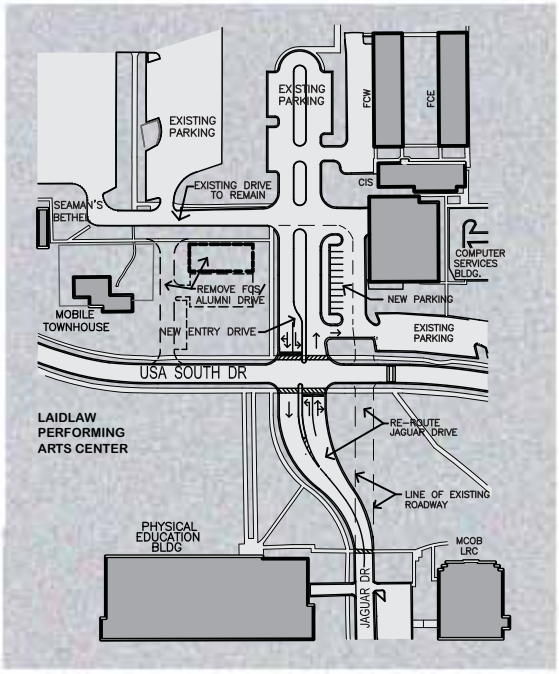
2 USA SOUTH DRIVE - ALUMNI DRIVE INTERSECTION

0 12.5 50' 125'



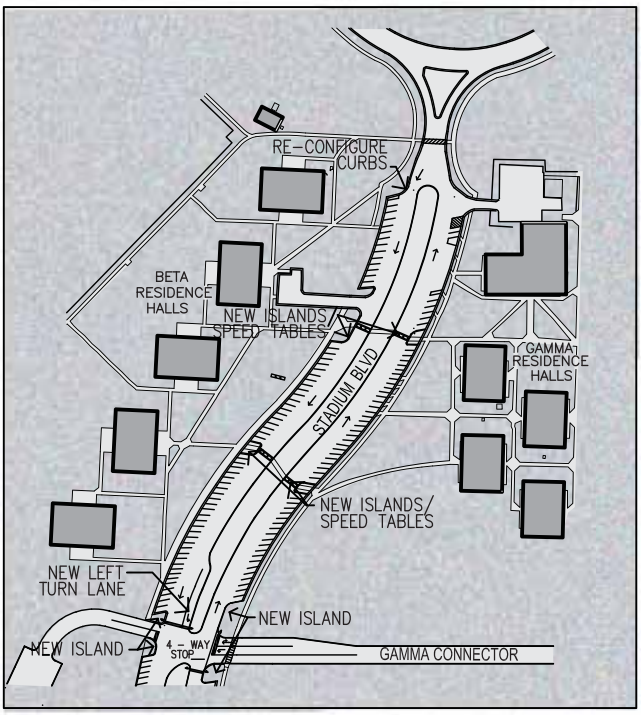
3 STADIUM BLVD-GAMMA CONNECTOR INTERSECTION (ALTERNATE)

0 12.5' 50' 125'



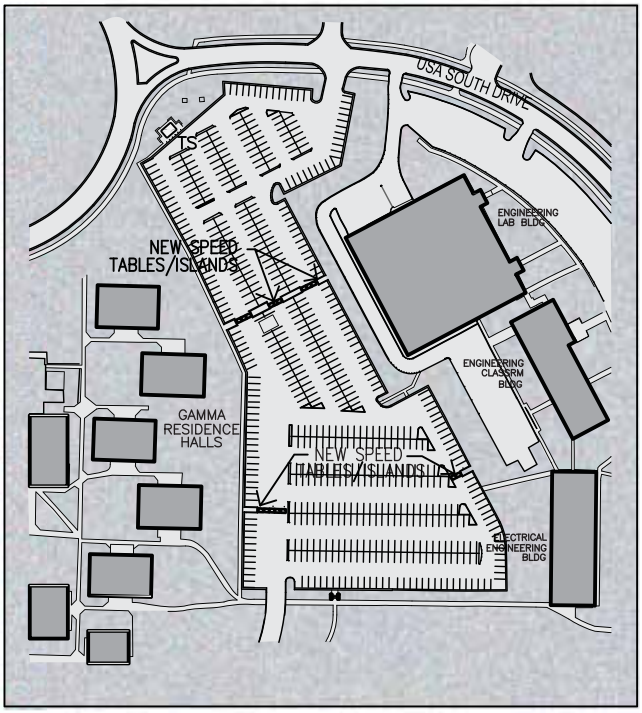
4 JAGUAR DRIVE RE-ALIGNMENT AT USA SOUTH DRIVE

0 25' 100' 250'



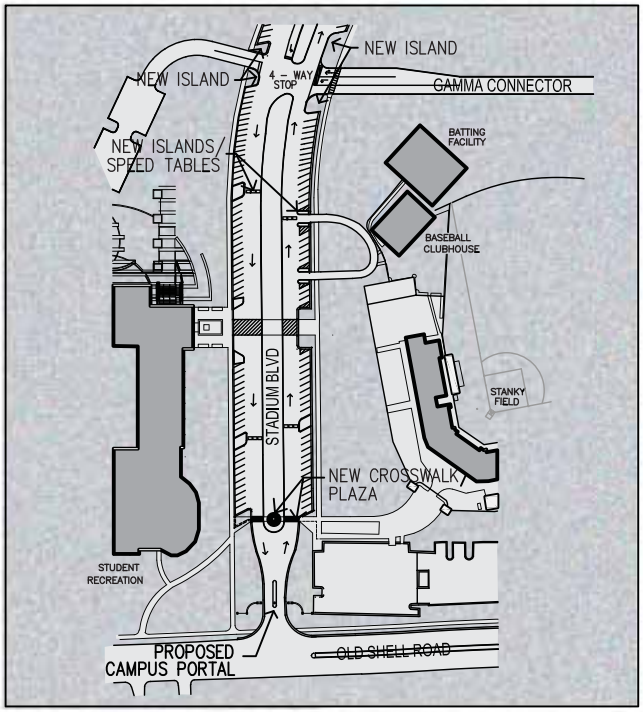
5A STADIUM BLVD-LANE REVISIONS (NORTH)

0 25' 100' 250'



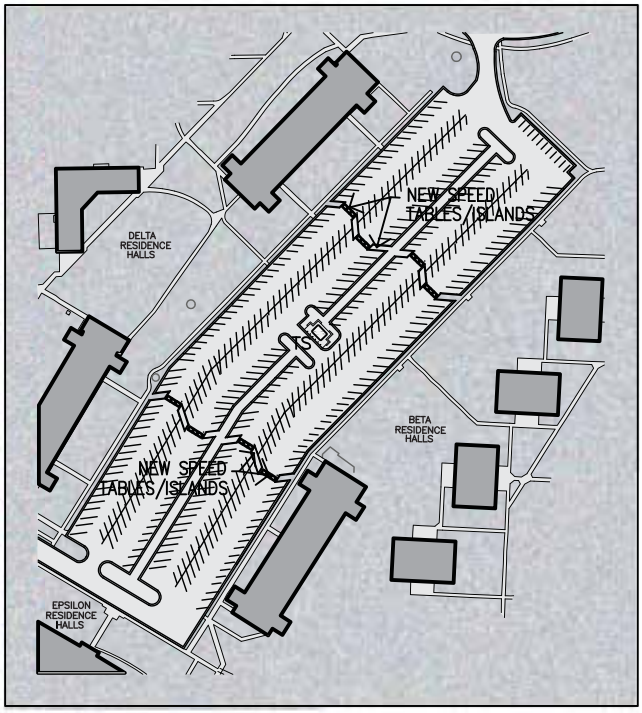
6 GAMMA / ENGINEERING PARKING LOT

0 25' 100' 250'



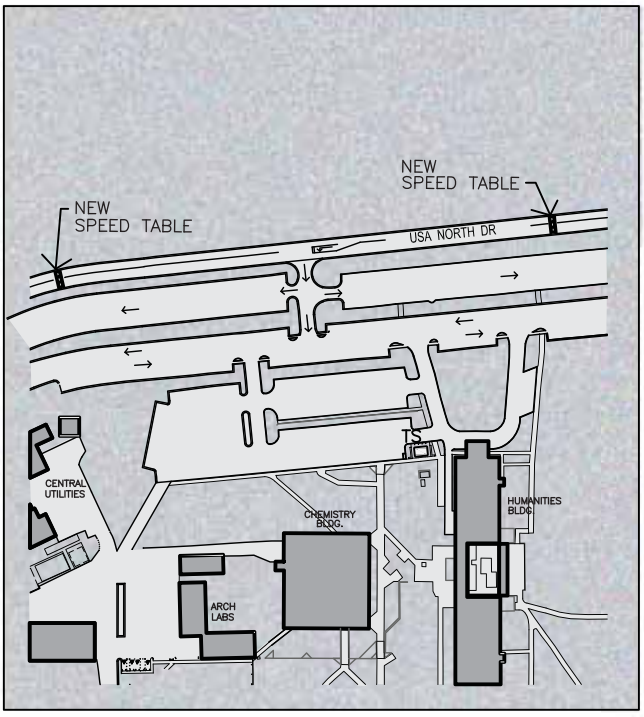
5B STADIUM BLVD-LANE REVISIONS (SOUTH)

0 25' 100' 250'



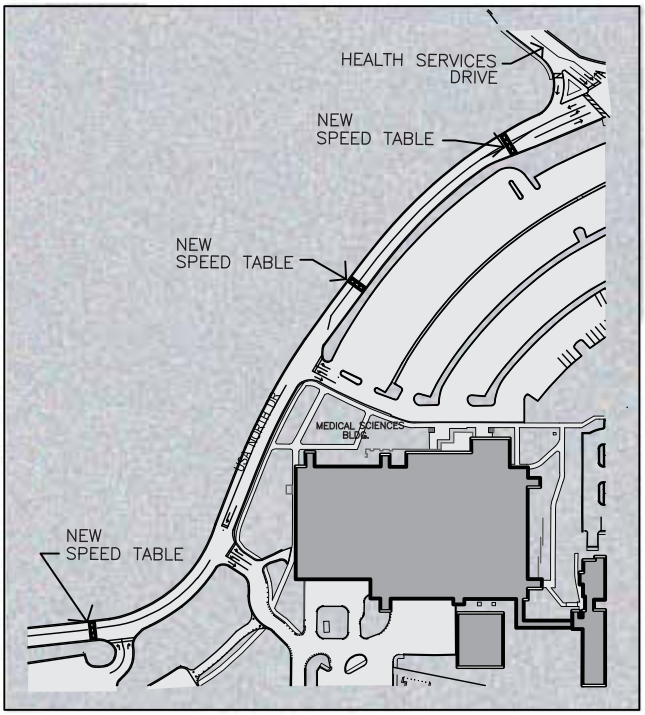
7 DELTA / EPSILON PARKING LOT

0 25' 100' 250'



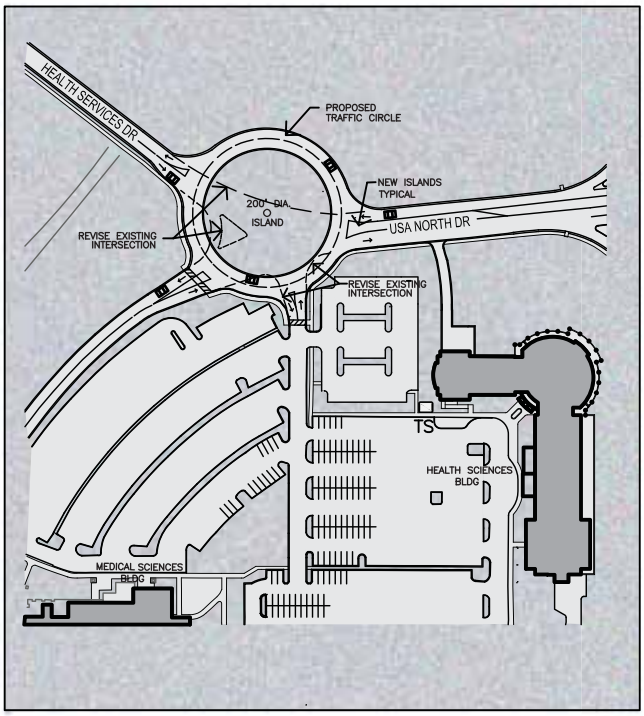
8A USA NORTH DRIVE - NEW SPEED TABLES (WEST)

0 25' 100' 250'



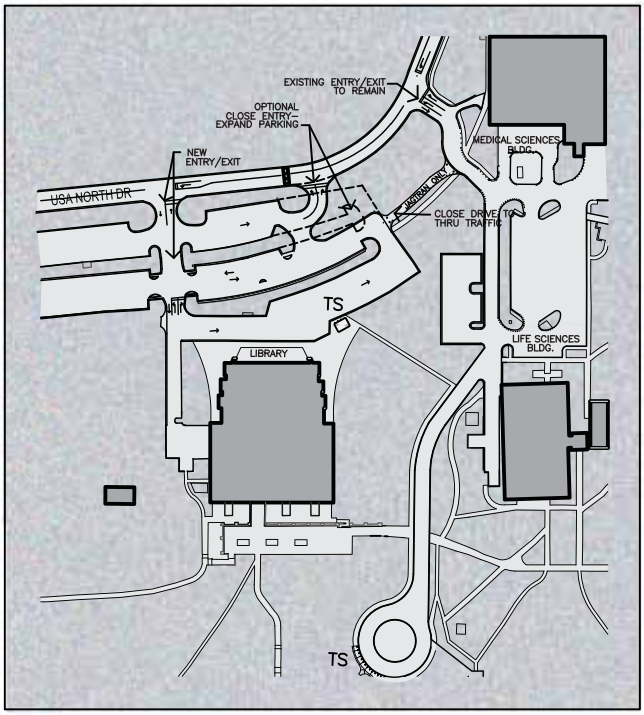
8B USA NORTH DRIVE - NEW SPEED TABLES (EAST)

0 25' 100' 250'



9 USA NORTH DRIVE - HEALTH SERVICES DRIVE INTERSECTION

0 25' 100' 250'



10 USA NORTH DRIVE - NORTH PARKING LOT REVISIONS

0 25' 100' 250'

Informal Walkways

Student Center Courtyard - Library Corridor

Campus Portals - 2004 Master Plan

that pedestrian crosswalks be combined with raised speed tables to be used in place of existing crosswalks. Work on the first of these raised speed tables is in progress. It is recommended that the effectiveness of these devices be monitored and the information obtained be used to determine requirements for additional crosswalk/ speed tables.

Final recommendations for pedestrian circulation are included in Appendix C.

Campus Accessibility

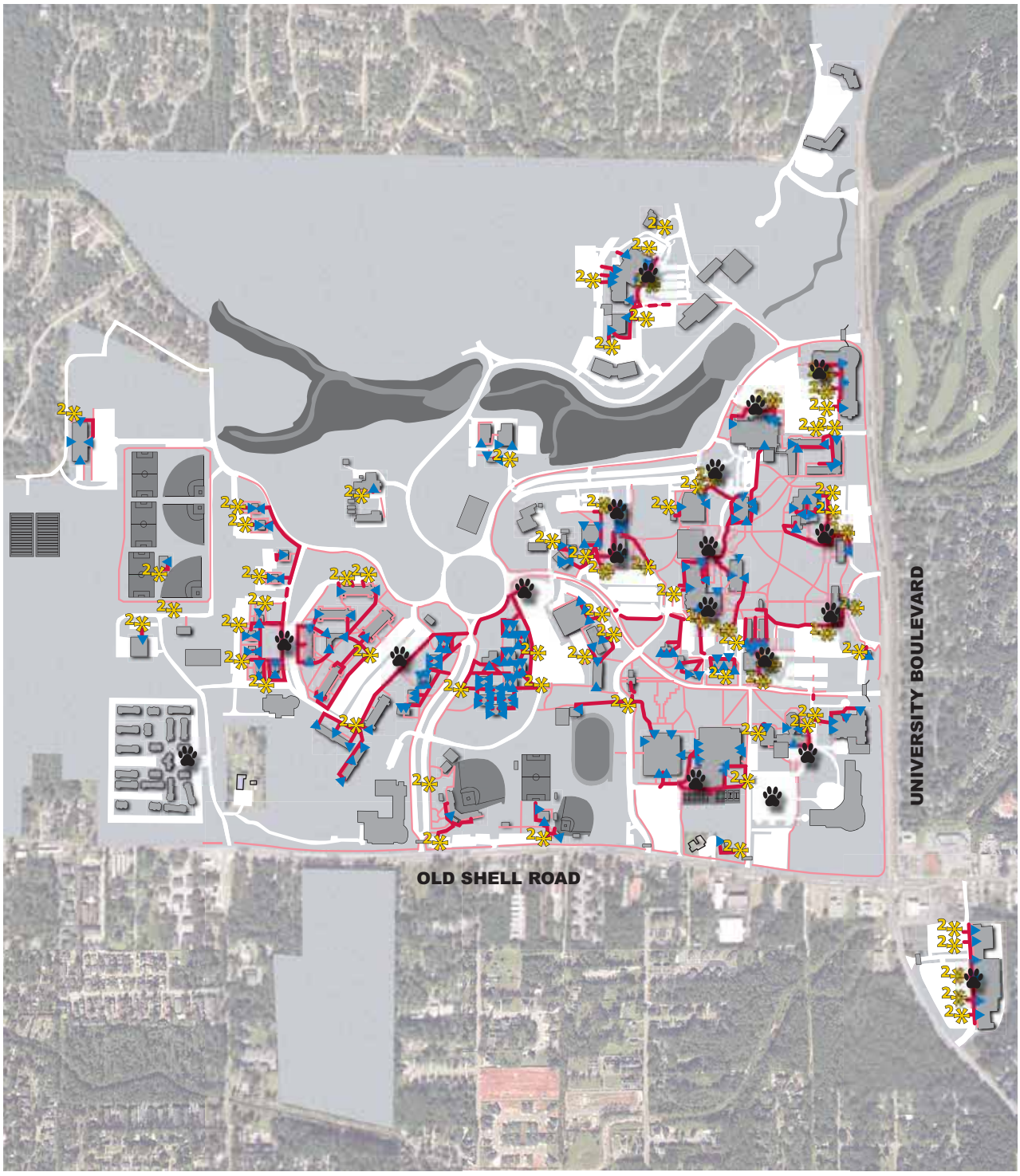
Because the general scope of the 2010 Master Plan precluded the review and analysis of conditions inside campus buildings, the recommendations under this section address only exterior accessibility issues. As was noted in Part 2, "accessible routes" (walkways from building to building, from accessible parking to a building entrance, and from a campus/public transportation stop to a building entrance) are typically not identified and, in some cases, physical conditions do not meet the requirements of the Americans with Disabilities Act. Due to the irregular terrain, circuitous layout of some walkways, and lack of ability in some cases to actually recognize where a walkway is leading, the absence of signage can be an issue for persons with disabilities. In addition, there are no posted maps identifying the location of accessible parking spaces or accessible routes on campus.

It is recommended that the University complete a campus-wide accessibility survey to identify all accessible parking areas, routes and building entrances currently not in compliance with the requirements of the Americans with Disabilities Act. ADA compliant signage should be added to all accessible parking spaces or routes, and non-complying walkways, curb cuts, building entries or other items should be revised to conform to current regulations. Finally, campus accessibility information should be included on the standard campus map to be posted at major campus entries and also on the USA website.

Campus Boundaries and Entries

As was noted previously, the 2004 Master Plan made specific recommendations for the establishment of thresholds or portals at each of the major entrances to the campus. Larger, more monumental portals were suggested for USA North and South Drives and Stadium Boulevard, with smaller scale portals at secondary entrances such as Jaguar and Mitchell Center Drive. All of these portals included campus identification signage, decorative landscaping and hardscaping. Building materials chosen for these structures included brick and cast stone to conform to the newly established campus standards. The design of these structures was commissioned but, to date, construction has not started.

The 2010 Plan recommends that this work be completed in phases during the current planning period. The first phase should include the "major" portals at the USA North/ USA South Drives and Stadium Boulevard entrances, with the remainder completed in a second phase as funding permits. The current plan also recommends that an additional portal be added in this later phase at the University Boulevard entrance to University Commons.



Accessibility Plan

Legend

- Accessible Route
- Accessible Building Entrance
- Accessible Parking/Number of Spaces
- Transportation Stop

Parking Lot Lighting

Pedestrian Lighting

Light Bollards

Campus Amenities

The University currently has a wide variety of campus amenities that have been installed for a number of different purposes and projects over time. This variety has contributed to the lack of overall design continuity on campus. The 2004 Master Plan included recommendations for campus amenities such as exterior lighting, benches, trash receptacles and bicycle racks but some were inappropriate for the changing design aesthetic and others have simply not been implemented. In addition to serving a basic campus function (lighting, seating, etc.) and enhancing a building or public space, amenities can play a crucial role in unifying a campus. For this reason the 2010 Master Plan recommends the adoption of a standard that is appropriate to the needs and of the University and complements the design of campus buildings and facilities. Campus amenities should conform to the following general guidelines:

- A consistent palette of form and color to reinforce a sense of unity on campus
- Consideration should be given to both functionality and aesthetics
- The design and placement of campus amenities should support accessibility
- Materials should be selected based on the principles of sustainability

The recommendations for exterior lighting, site furnishings, and bicycle racks are as follows:

Exterior Lighting

The primary consideration in the selection of an exterior lighting fixture is the fixture's ability to provide the proper lighting levels necessary for visual acuity, security, accent, or recognition. Almost as important are the requirements for design, maintenance, and the reduction of energy consumption and light "pollution". All of these factors need to be carefully considered in the creation of a standard for exterior lighting on campus. The current recommendations include fixtures for street and parking lot lighting, pedestrian scale pole and bollard type lighting, security lighting, building/ facility accent lighting, and landscape lighting. Recommended lighting styles are shown below.

Bench

Typical Seating Wall

Table with Seating

Trash Receptacle

Site Furnishings

Site furnishings include benches, seating walls, tables and trash receptacles and planters. These accessories should complement the buildings and landscape of the campus and help to enforce a visually unified campus. Recommended site furnishings are shown below.

Benches are important but, surprisingly, not that common on the USA Campus. Benches provide necessary resting points between and around buildings and in formal outdoor spaces and, If properly positioned, they can also direct and focus attention on site features or other visual elements. As such, natural vistas, formal landscaping, artwork, or building elements should be carefully considered in the placement of these elements. Seating walls are more integral with the building design and are typically located around building entries and in formal outdoor spaces. Seating walls are used more for group interaction between classes than for resting or framing a view. Both are important site elements for a campus and their use should be a consideration in the planning of all new buildings and formal open spaces. In addition, benches should be added along major pedestrian walkways as a means of providing nodes of social interaction between buildings.

Tables with benches (picnic type tables) are also important to a campus such as USA's. Because they are usually located away from buildings and high traffic areas they provide a more quiet setting for eating, studying or just conversation. The existing picnic type tables are mostly concrete and, while in relatively good shape, are not attractive and should be replaced with new metal units as funding permits. Additional picnic type tables should be added at strategic, shaded areas around campus.

In order to serve their intended purpose, trash receptacles should be placed near building entries, close to benches and other areas where people might congregate, and along pedestrian walkways between buildings. Planters are typically located at building entries and in formal areas outside buildings.

Considerations for the selection of the site furnishings are based on both design and maintenance characteristics. Benches, tables and trash receptacles should all be of the same or similar design. The look should be contemporary to complement the current building aesthetic. The color should be a medium gray/ clear aluminum to match the standard metal color selected for roofing, window frames and other building elements. The recommended furnishings all have heavy-duty cast frames and are powder coated to stand up to the rigors of day-to-day use. All should be anchored to a permanent concrete slab or other type of foundation. Planters should be concrete or other material matching the appearance of the cast stone used on buildings.

Bicycle Racks

In order to encourage the use of bicycles on campus, bike racks should be included in all new campus buildings and facilities and added to existing buildings. Like site furnishings, bike racks should be manufactured of heavy-duty material and have either a powder coat or galvanized finish. Two types of racks are recommended; individual, permanently mounted racks

Individual Bicycle Post

Mitchell Center - Brick and Cast Stone

Meisler Hall - Gray metal roofing, Railings, trim

(preferred), and gang-type, portable racks for use in areas that may require relocation in the future. Bicycle racks should be located in protected areas near building entrances. The number of racks/spaces should be sufficient to meet the needs of the riders. Recommended bicycle racks are shown below.

Architectural Design Guidelines

In order to meet the needs of an expanding institution, growth must take place in the physical environment of the campus as well as in the educational programs. The intent of the architectural design guidelines is to promote harmonious and cohesive growth extending through all levels of future construction and renovations.

These guidelines are not meant to limit creativity and expression in new construction, rather they are put in place to ensure that future buildings are compatible with the overall character of the campus and that they contribute to and complement the vision of the master plan. The assessment of the architectural context, building form and massing, fenestration, building materials, and colors that follows is intended merely as a guide for future designers.

Architectural Context

Construction of the main campus began in the 1960s during the Late Modernist period of architecture, also known as the International Style. This style dominated the early buildings of the Campus with its expressed structure, vertical bands of windows, flat roofs and non-essential decoration. The majority of construction that followed in the seventies and eighties tend to complement this image, but with fewer windows and a more "brutalistic" appearance. Buildings constructed in the late 1980's and early 1990's exhibited a more eclectic style.

It was not until the late 1990's that the current campus design aesthetic began to emerge with the completion of the Mitchell Center. The scale and massing of this structure was, by necessity, out of character with existing campus buildings but the choice of building materials (the now campus standard red "velour" blended brick and cast stone cornice and trim) established the basis for future buildings on campus. This style evolved with the design of Meisler Hall in 2006. The use of the "Mitchell Center" brick and cast stone was repeated, however, a new building material was used that would become a defacto campus standard, the gray metal used for roofing, fenestration and accessory elements. Additionally, Meisler Hall emphasized the horizontal over the vertical and introduced the "punched" window façade.

The next building to follow, the Health Sciences Building (completed in 2009) was constructed on a narrow, "L" shaped lot and thus, the building form was dictated by the parameters of the site. The shape was accentuated by a central "rotunda" that joined the two wings of the building and served as the main entry element. The emphasis was still on the horizontal but vertical elements were introduced to create a balance. Also, the height and scale of the building had increased from a more modest, two stories to a grander three to four story structure.

Health Sciences Building - Classic "L" Shape

Student Recreation Center - Campus "Gateway"

Shelby Hall - Campus "Gateway"

Mitchell College of Business - Breaking Down Building Massing

Because of its size and prominent location at the University's North Drive entrance, it was recognized that the Health Sciences Building would establish an architectural identity for the campus and the concept of the "gateway" building was born. The Health Sciences Building would be followed by two additional gateway structures; the Student Recreation Center at the campus' western boundary and Shelby Hall, overlooking the Old Shell Road/ University Boulevard intersection. Both buildings would emulate the design principles put forth by their predecessors; The relatively narrow, "L" shaped footprint with rotunda like hinge, three to four story massing with punched windows and employing the now standard building materials. The architectural guidelines that follow are based on the design principles established by these buildings.

Building Form and Massing

In general, building plans should be kept simple and efficient. Except for special use type Buildings, footprints should be either rectangular or "L" shaped, with narrow widths (3:1 to 4:1 length to width ratio) used where possible. When wider plans are required for programmatic reasons, the massing should be broken down through the use of more appropriately scaled building recesses/ courtyards or projections. Rectangular shaped buildings should be organized around an expressed, vertically oriented, entry element. "L" shaped structures should utilize a "rotunda" or similar organizing element to define the main building entry and provide a necessary visual connection between the two wings.

Building heights should typically be in the range of three to four stories to match the overall context of the existing campus. Smaller buildings are discouraged in the central, Academic core. In order to reduce the perceived height of a building, the lower one to two floors should be differentiated through the use of a separate building material, horizontal banding, or both. Also, the use of an articulated building cornice should be considered for taller structures. Building entries should be appropriately scaled through the sizing of openings and the use of projections, canopies and site elements.

Building Facades and Fenestration

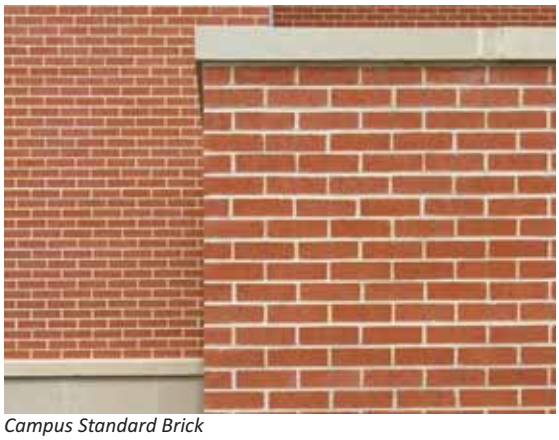
Future campus buildings should follow the building façade and fenestration principles established by more recent campus buildings such as Meisler Hall, the Health Sciences Building, Student Recreation Center, and the new Shelby Hall. These later campus buildings feature well proportioned, "tri-partite" facades with articulated bases, mid-sections and caps or attics. Cast stone or stucco is used at the base, with brick at the mid-section, and a cast stone, stucco or metal at the cap. Horizontal lines are emphasized but vertical elements are introduced to achieve a visual balance. Vertical elements include brick columns, pilasters, glazing, and building projections. Facades are typically organized around a central entrance feature.

Windows are most often expressed as "punched" openings in a

Health Sciences Building - Differentiation of Lower Floors

Shelby Hall - Tri-Partite Façade

Meisler Hall - "Punched" Openings



Campus Standard Brick

continuous brick wall; however, more vertical bands of glass have been used at building entries, end walls, and for special use areas of the building. Large expanses of curtainwall are discouraged for both aesthetic and environmental reasons. Punched windows are typically vertically proportioned (1.5:1 to 3:1 height to width ratio on the upper floors, slightly higher on the lower floor), and are accented with cast stone lintels and/or sills. The horizontal rhythm established by these punched openings is typically 1:1 (width of opening to brick) or less making the windows the predominant element. This serves to reinforce the verticality of the openings in balancing out the façade. Glazing is clear or lightly shaded with matching spandrel panels in the lower lights if required. Glazed areas are separated by thin, vertically oriented mullions.

Building Materials

Future buildings should employ a palette of materials similar to those used in more recent buildings on campus. Brick, cast stone, coated metal, stucco, and lightly tinted or clear glass have all come to signify a "USA" building, and their use should be continued. These materials also provide a connection to existing buildings, thus reinforcing the concept of unifying the campus.

Acceptable materials will vary across the campus zones but major buildings in the campus core should employ the following:

Brick - Brick is the predominant building material on the main campus. Over the years, three color ranges have been used. These include the pronounced light red/tan blend used in the original campus buildings (Administration Building, ILB and the Alpha Complex), a more brownish, earthtone blend used in the 1980's and early 1990's (the Chemistry Building, Engineering Complex, and Visual Arts), and finally the reddish "velour" blend used in the late 1990's to the present. This last brick was selected for the Mitchell Center with the thought that it would become the campus standard and it has been used in all major buildings since that time. It is recommended that the use of this brick continue in all future buildings.

Cast Stone - Pre-cast concrete or cast stone has been used throughout the campus since its inception but it was not established as a major campus building material until the late 1990's. Like the reddish brick, a "limestone" look cast stone was used for the cornice and trim on the Mitchell Center. This look was adopted in the 2004 Master Plan and it has been used in one form or another on every building since that time. Cast stone should be used where feasible for the lower story (base) and on the upper portion of a building as a cap or cornice. It should also be used for door and window lintels/ sills, expressed columns and other decorative building elements, and for site elements.

Metal - Coated metal has been used for sloped roofing and other building components on a number of recent campus buildings. The medium gray metal used for the roofing on the JagTran stops was also used at Meisler Hall for roofing, aluminum doors/windows, railings and accessories. This was continued on the Health Sciences Building, Student Recreation Center and other campus buildings. Because of its ubiquitous presence

Limestone Look Cast Stone

Gray Metal Roofing

Gray Metal Window Mullions

Gray Metal Railings/Trim

around campus it is recommended that a gray metal roof be used where feasible for future campus buildings (the use of the standard green metal roof should be continued for all athletic facility structures). The finish on metal window/door frames, decorative panels, railings, trim, etc. should also be gray to match the roofing color as closely as possible. Alternates for the coated metal include a matching clear anodized aluminum for door/ window frames and trim, and a galvanized finish for selected building and site elements.

Stucco - Stucco has been used sparingly on campus but it is an attractive and durable material that can be used to accentuate building elements. Applications include the articulation of a building's base, decorative panels, building soffits and eaves, and for cornices where appropriate. The use of an exterior insulation and finish system (EIFS) is discouraged in the central core of the campus.

Glazing - Typically, glass used for windows and doors on campus is clear or slightly tinted. This has contributed to the perception of transparency in campus buildings. Future buildings should continue the use of lightly tinted glazing, using "low-E" coatings or other energy saving measures.

As stated previously, the intent of the architectural guidelines is to promote harmonious and cohesive growth for all campus planning and building design. The principles outlined above are provided as a guide rather than prescriptive standard. Prominent campus buildings such as the Mitchell Center and Meisler Hall, the recently completed Health Sciences Building and Bell Tower, and the Student Recreation Center and Shelby Hall (both still under construction) should all be studied. It is recommended however, that Instead of copying these buildings, designers should apply the basic principles of form and massing, scale, rhythm, and use of materials to the context of the specific program and site requirements of the proposed new building.

Signage and Wayfinding

The purpose of the Master Plan 2010 signage guidelines is to establish a comprehensive identification and wayfinding system for the main campus. The plan provides a framework which will reinforce the University's identity and create a "sense of place" that will be apparent as one approaches the campus and as one experiences the campus itself.

Goals

- Reinforce the University of South Alabama identity and campus experience to create and strengthen a positive perception of the University
- Establish a "sense of place" on campus
- Create a strong campus identity at the campus perimeter and "gateways"
- Establish a true campus wayfinding system through the use of standard signage components such as style, type, color, scale and materials

Stucco at Cornice

Transparent Glazing

- Improve the visitor experience through the strategic placement of informational maps and directional signs
- Use appropriate location and scale to maximize sign visibility
- Establish a consistent hierarchy of sign types and messages
- Design and locate signs to enhance accessibility on campus
- Provide a flexible system to facilitate future changes, maintenance and repair
- Keep the number of signs used in the wayfinding system to a minimum

The Wayfinding System

The signage and wayfinding system has been developed with a hierarchy approach to guide visitors to the main information center or campus entry portals on the campus perimeter, and from that point, to their final destination.

The first level of signage begins on University Boulevard and Old Shell Road as the visitor approaches the main campus. Directional signs guiding visitors to a campus information/ visitor center should be located at several locations along the City right-of-way on both north and south bound lanes of University Boulevard, and the east and west bound lanes of Old Shell Road.

Level two signs include the main campus identification sign at University Boulevard/ Old Shell Road intersection and the proposed campus portal signs located at the major campus entry points.

The third level of information is in the form of informational kiosks located at “pull-offs” just inside the campus portals and at the information/visitor center. These kiosks will include a campus map/ directory and other related wayfinding information.

The next level of signage would include both primary and secondary directional signs, guiding visitors to campus buildings and facilities and to visitor parking areas. Directional signs should be located at all “decision points” on campus with larger (primary) directional signs located at major campus intersections and smaller signs at secondary roadways and approaches/entrances to parking lots. Directional signs should be appropriately positioned and sized to ensure legibility from a moving vehicle and allow for the necessary reaction and decision time.

Directional signs would be followed in the hierarchy by parking lot and building identification signs. The existing “zoned” parking lots are currently identified by zone signs but because there are multiple lots in each zone, the signs are of little use in the overall wayfinding system. It is recommended that the parking lots that contain visitor and/or accessible parking spaces be formally named (with the names corresponding to major building names such as “Administration Building Lot” or “Mitchell Center Lot”) and identified with additional signage at the existing zone sign locations. Because visitors are looking first for a parking space close to their final destination, parking lot identification would greatly assist with oral directions and would reinforce the wayfinding effort.

Building and facility identification signs represent a critical layer in the overall signage and wayfinding hierarchy and may take several forms based on the function, scale and exact placement of the building or facility. These may include:

1. Large freestanding signs for the major campus buildings/facilities
2. Smaller freestanding signs for smaller scale buildings or for those located in restricted areas
3. Individual lettered, building mounted names (either attached metal letters or engraved/relief type letters in cast stone) for special use buildings or as an addition to the main, freestanding sign when the building/facility entrance is not easily identifiable from the street or parking area
4. Small, building mounted signs at student housing structures

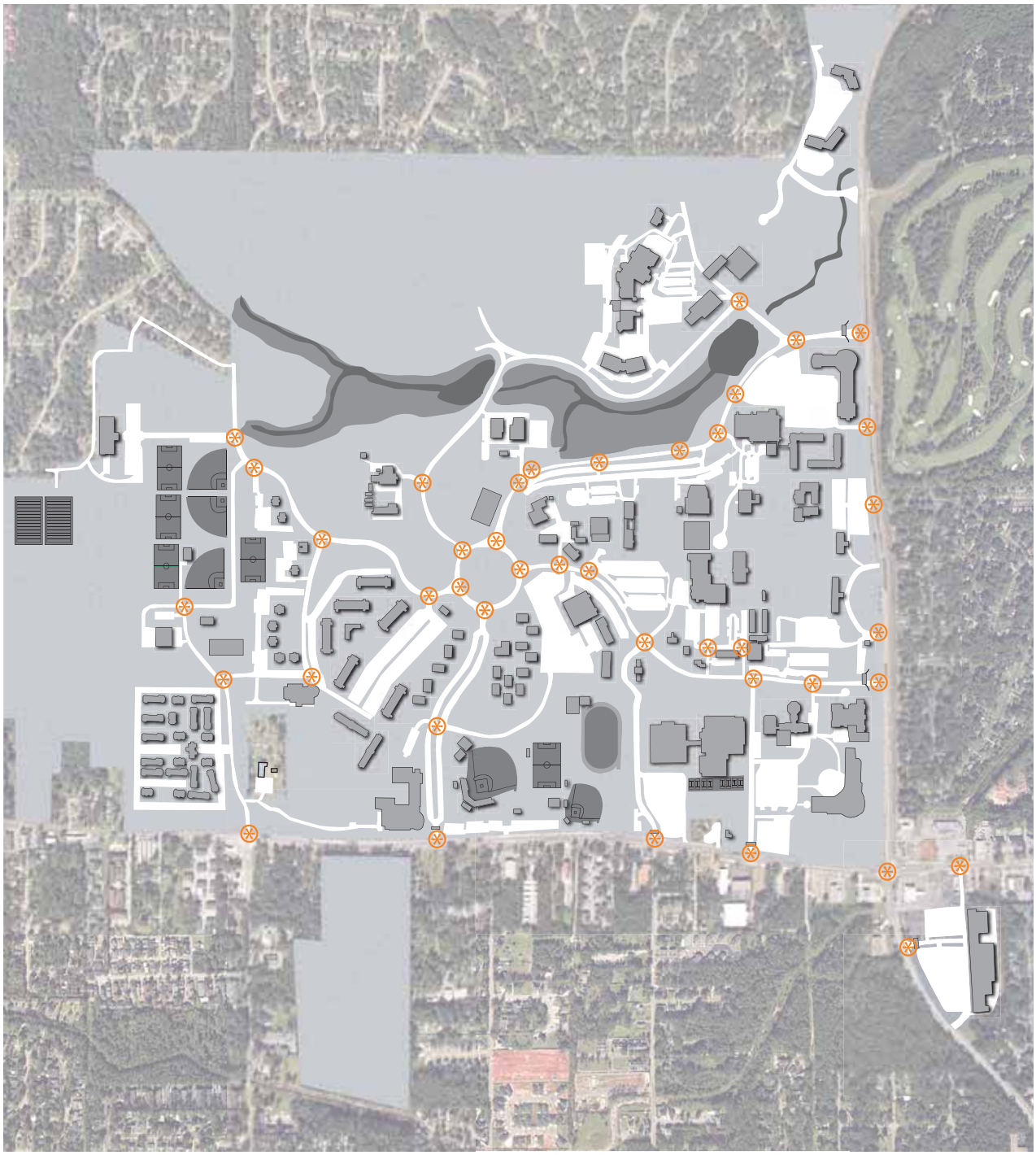
Buildings with a high level of public interface should include the primary functions of the building on the sign along with the building name. Meisler Hall with its Admissions, Registrar, etc. functions is a primary example of the need for this type of sign. All other building identification signs should only include the building/facility name.

The final level of wayfinding signage includes the various types of pedestrian signs necessary for internal campus navigation. Pedestrian scale signs guiding visitors to a building or building entrance and identifying accessible routes are essential in the overall wayfinding plan. Additionally, informational/directional kiosks should be located at strategic points on campus to assist visitors and also serve as a social "node" for students, faculty and staff. And because of the more "architectural" nature of these pedestrian scale kiosks, they will also reinforce the overall campus identity through the use of standard building materials.

The University of South Alabama is committed to the principle of inclusivity and accessibility on campus and, as such, the proposed signage and wayfinding system should be consistent with this goal. All signs should be designed and constructed in accordance with current Americans with Disabilities Act Guidelines including legibility, access and Braille. Wayfinding maps located at major informational kiosks should also be accompanied by audio messaging.

Sign Program

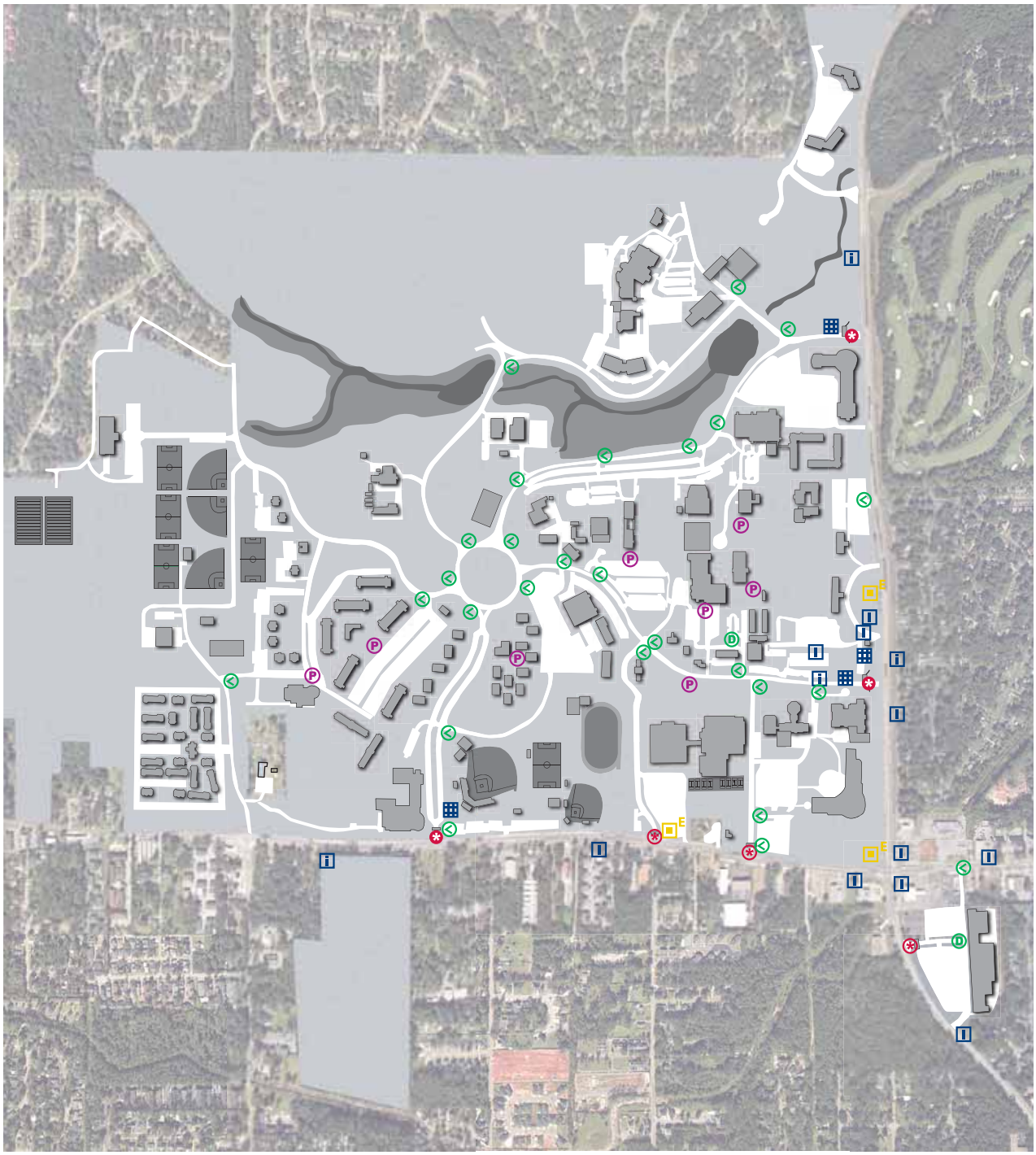
The following description and graphics illustrate the various elements of the proposed signage and wayfinding system for the University of South Alabama.



Decision Point Plan

Legend

Decision Points / Potential Directional Signs

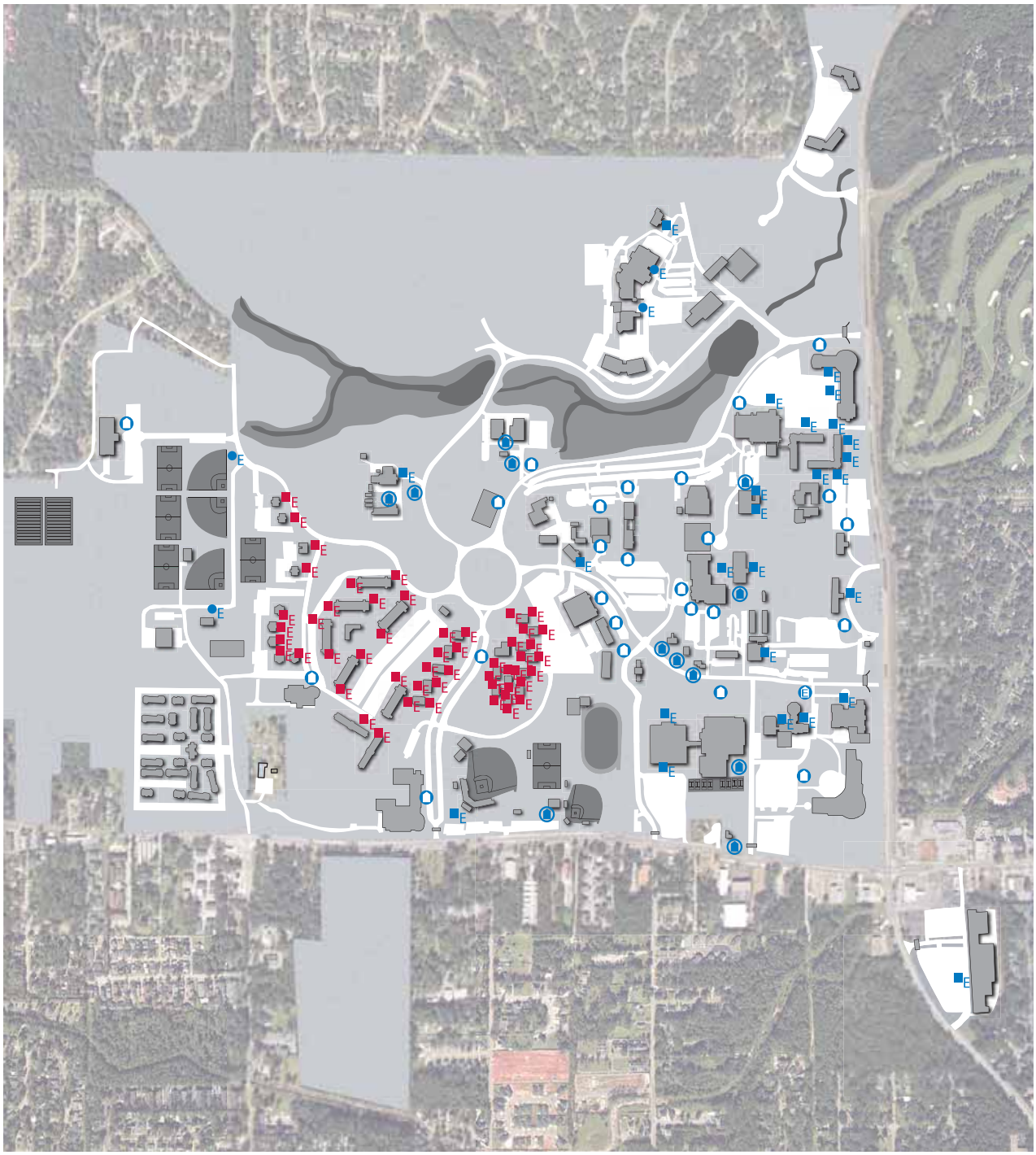


Campus Wayfinding Plan

0 100' 500' 1000'

Legend

- Visitor Information Directional Sign
- Information Kiosk with Campus Map
- Directional Sign
- Directory Sign
- Campus Portal (Primary)
- Campus Portal (Secondary)
- Pedestrian Directional Kiosk
- Campus Identification Sign

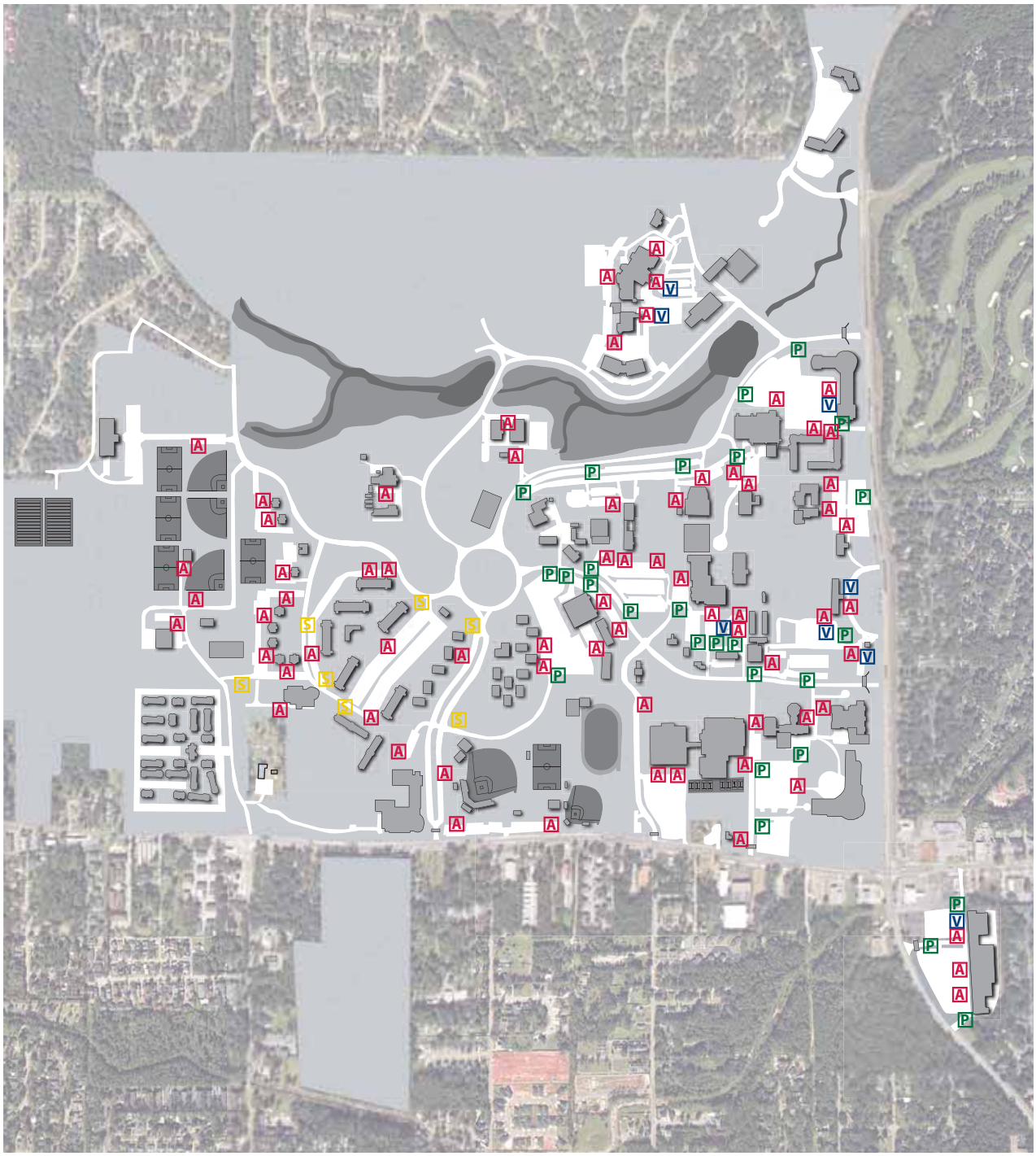


Campus Building Sign Plan

0 100' 500' 1000'

Legend

- New Primary Building Sign
- New Secondary Building Sign
- Existing Pylon Sign
- Existing Primary Building Sign
- Existing Building Mounted Sign
- Student Housing Building Sign



Campus Parking Sign Plan

0 100' 500' 1000'

Legend

- P Zoned Parking Signs
- V Visitor Parking Signs
- A Accessible Parking Signs
- S Student Housing Zone Signs

Off-Campus Visitor Directional Signs – These signs should include the international information symbol ("?") along with the USA name/logo. The colors used should be USA standard red, white and blue. The materials should be steel/aluminum with size and design conforming to Alabama Department of Transportation standards.

Main Campus Identification Signs – These signs, located at the University Boulevard/ Old Shell Road intersection and at the campus portals include cast metal letters on a brick/ cast stone background in accordance with the 2004 Master Plan recommendations.

Informational Kiosks – Located just inside the campus portals at major campus entries, the kiosks should include a large, sectioned campus map with associated building/ facility directory. In addition to campus buildings, the map should also include visitor/ accessible parking lot designations and locations. Materials should reflect those used for the portals; brick with cast stone accents and gray metal roofing/trim.

Vehicular Directional Signs – These signs should be simple and flexible, allowing for changes in building names and for the addition of new buildings in the future. The base sign materials should be aluminum with a high quality paint finish and applied vinyl graphics. Color should be gray to match the standard metal used on campus buildings. The signs should be designed for maximum flexibility.

Parking Lot Identification Signs – These signs are designed for easy identification of the zone designation for students and parking lot name/accessibility for visitors. The wayfinding system will direct visitors to a parking area as the primary destination and the priority is to provide a sign that enables the visitor to identify and understand the information quickly. The signs should include the zone designation, the parking lot name and a standard accessibility symbol as an indication that the lot provides accessible parking. Colors and materials should match those used for the vehicular directional signage.

Building Identification Signs – freestanding (monument and pylon type) building identification signs should be scaled appropriately for the building context but should be large enough to be legible from the roadway and/or parking area and to contain all required information (building name and primary use in the case of some campus buildings). Larger identification signs should include the use of the campus brick and cast stone to relate these signs to the building aesthetic. Colors and remaining materials should match those used for the vehicular directional signage.

Pedestrian Directional Signs – Pedestrian wayfinding signs should be either a small scale pylon type sign (directional) to match the vehicular directional signs or an aluminum sign mounted on a standard vertical pole (accessible route).

Pedestrian Kiosks – These informational/directional signs should be located at key pedestrian decision points on campus. Kiosks should include a campus map/directory, directional signage guiding visitors to major buildings/facilities and a campus bulletin board to announce campus events or other information. Material should be the same as for the main informational kiosks, brick, cast stone and metal roofing/trim.

Vehicular Regulatory Signs – The basic sign design/material shall be per D.O.T./ University of South Alabama standards. The poles used for all vehicular signs shall be a round, heavy-gauge aluminum with decorative cap. Color shall be campus standard gray.

Graphic Standards

University of South Alabama graphic standards and typography have been documented in the USA Publication Services, Graphic Design Guidelines. Basic elements governing exterior signage are:

Standard Colors (Paint and Vinyl):
Red – to match PMS 193
Blue – to match PMS 281
Gray – to match PMS 420
Black/ White – standard
Paint finish to be "matte" unless otherwise specified

Standard typestyles:
Palatino – University of South Alabama logo/branding applications
Trade Gothic – Building identification and informational signage
Trade Gothic Condensed – Directional signage and other applications where available copy space is limited and maximum readability is required

Letter Size shall vary depending on the sign type and placement, however a general rule of thumb of a minimum of 1 inch of text height for every 50 feet of viewing distance shall apply.

University Standard logo:
Logos and other University artwork used in conjunction with exterior signage shall conform to the published standards.

DRAWING D21 – SIGN DRAWINGS
(Multiple Pages)

5 APPENDICES

APPENDIX A

USA Master Plan 2010
Utility/ Infrastructure Recommendations

DATA/ TELECOMMUNICATIONS

Data cabling in buildings - A number of existing campus buildings have insufficient room for required data/ telecommunications equipment and cabling needs to be upgraded to CAT 6 to accommodate current and future data requirements.
Recommendation – Upgrade buildings as noted in Attachment #1.

Node Buildings - The existing telecommunication "nodes" located in the Telecommunications building (Node #1) and just west of the Library (Node #2) are undersized for the current campus demand and need to be expanded/updated. In addition, new buildings/facilities in the western part of campus cannot be efficiently served by the existing nodes due to the distances involved and will require a new node structure.
Recommendation – Space within the new Dining Facility has been dedicated for a new telecommunications "node" to serve the western portion of the main campus. Evaluate future campus growth and make recommendations for future data/ telecommunications nodes.

Telecommunications distribution system - A majority of telecommunications cabling is fed to campus buildings through an underground, auxiliary duct system (ADS) – a series of conduits, encased in concrete in many cases, connecting Computer Services and telecommunication nodes with campus buildings. The original ADS is limited to the campus "core" and does not extend to areas where newer buildings are located or planned. As such, each building project is saddled with the additional expense of running individual data/ telecommunications "duct" back to the nearest node or point of connection – as much as several thousand feet. In addition, available space in the existing ADS is limited and, in some cases, non-existent. This has resulted in the direct burial of cable in some situations – not ideal due to the high cost of repair if the cable is accidentally cut.
Recommendation – USA Telecommunications will work with the Facilities office to identify areas of future growth and develop a plan for extension of the existing ADS. This should incorporate the proposed new western "node". The study should also look into options for more efficient utilization of the existing ADS.

ELECTRICAL

Capacitors at electrical sub-station - Additional electrical load due to new campus buildings has created a need for increased capacitors to maintain optimum power factor.
Recommendation – Increase size of Capacitors at sub-station.

Additional feeder circuit for Engineering/ Science Building - Existing electrical feeder circuits do not have the capacity to supply power to the proposed Engineering & Science building.
Recommendation – Install a feeder circuit (no.8) for Engineering and Sciences Building.

Continuous metering at sub-station - There is currently no individual metering of feeder circuits at the electrical sub-station. The ability to monitor actual power loads will allow load switching and shedding during emergencies.
Recommendation – Install continuous metering on all feeder circuits at sub-station.

Connection of individual building meters - Currently, individual building electrical meters are not connected and must be read/ monitored separately. Connecting these meters would permit more efficient management of electrical loads across campus.
Recommendation – Connect all meters already in buildings to power management software.

Additional feeder circuit for west campus - Current and proposed construction in the western part of campus requires an additional feeder from Central Plant to the Sigma Chi house switch.
Recommendation - Add new feeder from Central Plant (circuit 1002) to Sigma Chi switch #282 to serve intramural sports, football and future expansions to the west.

Sectionalizing switch at Computer Services - Currently, there are no electrical controls at the Computer Service Building to isolate or redirect loads in the event of a power failure.
Recommendation - Install sectionalizing switch at Computer Services.

Sectionalizing switch at Library - Currently, there are no electrical controls in the area of the Library to isolate or redirect loads in the event of a power failure.
Recommendation - Install sectionalizing switch near Library.

Replace circuit to Alumni Hall - The existing circuit (#1003 – 250 amp) from the electrical sub station to the switch at Alumni Hall needs to be replaced. The demand on this circuit has increased and there is little available capacity. In addition, the conductor is over 30 years old and has deteriorated appreciably.

Recommendation – Replace existing 250 amp rated cable with a 400 amp to allow for future loads and regain lost redundancy on this circuit.

Replace generator at Administration building - The existing generator at the Administration Building is old and parts in the next five to ten years will be hard to find.
Recommendation – Replace with new auto start generator.

Replace generator at Humanities/ Chemistry - The existing generator at Humanities & Chemistry is old and parts in the next five to ten years will be hard to find.
Recommendation – Replace with new generator.

Replace generator at CSAB - The existing generator at CSAB is old and parts are already hard to find.
Recommendation – Replace with new generator.

MECHANICAL

High temperature isolation valves - Existing isolation valves in the high temperature water distribution system are old and are failing. In addition, isolation valves are non-existent in many critical parts of the distribution system.
Recommendation – Replace existing/ install new isolation valves in high temperature water distribution systems as required.

Central Plant control system - The existing high temperature water system at Central Plant is not tied in to the controls system. This impacts the ability to monitor and control this system.
Recommendation - Install Johnson Controls, "Metasys" system type controls on high temperature water system.

Central Plant variable speed pumps - The conversion of the existing 3-way valve system to a 2-way system will require modifications at the Central Plant.
Recommendation - Convert Central Utilities to variable speed pumps as follows:

2 ea. Cooling tower pumps 60HP
5 ea. Chilled water pumps 75HP.
Convert crossover piping to Chiller

Central Plant cooling tower/ chillers - Existing cooling towers and chillers at the Central Plant are old and need to be upgraded/ replaced.
Recommendation – Replace cooling tower (5 cell) and replace 2 chillers with high efficiency units

New chilled water loop - The high temperature/ chilled water system serving the new Recreation Center has been planned to extend to the location of the proposed Dining Facility. In order to serve additional development in the western part of campus it will be necessary to extend the chilled water line back to the Central Plant.
Recommendation – Install new chilled water line from the Dining Facility, down Fraternity Row to Building 1375/ LOMB and then back to Central Utilities.

STORM SEWER SYSTEM

Replace storm sewer - Partial failure of an existing storm sewer line in the area of North Drive and the Humanities Building has led to the inability of the system to effectively convey storm water.
Recommendation – Replace 48" storm drain on North Drive.

Attachment #1

DATA CABLING IN BUILDINGS

MSB – Needs additional telecommunications rooms and is primarily Type9 cabling on both the old and new sides - upgrade to CAT 6 cable.
HUMB – Needs dedicated and additional telecommunications rooms and is primarily Type 9 - upgrade to CAT 6 cable.
LSB – Needs additional telecommunications rooms and is primarily Type 9 cabling - upgrade to CAT 6 cable.
ILB – Needs additional telecommunications rooms and has a significant amount of Type 9 cabling remaining - upgrade to CAT 6 cable.
HPELS – Needs additional telecommunications rooms and has a significant amount of Type 9 - upgrade to CAT 6 cable.
CSAB – Needs additional telecommunications rooms and is primarily Type 9 cabling - upgrade to CAT 6 cable.
AHE – Needs additional telecommunications rooms and is primarily Type 9 cabling - upgrade to CAT 6 cable.
Engineering Complex – Needs renovation and significant changes.
UCOM – Needs additional telecommunications rooms and has a significant amount of Type 9 - upgrade to CAT 6 cable.
VAB Complex – Needs additional telecommunications rooms and has some Type 9 cabling - upgrade to CAT 6 cable.
PAC – Needs dedicated telecommunications rooms and is primarily Type 9 cabling - upgrade to CAT 6 cable.
MCOB – Has some Type 9 cabling remaining - upgrade to CAT 6 cable.
Psychology Clinic – Has some remaining Type 9 - upgrade to CAT 6 cable.
Mobile Townhouse – Is primarily Type 9 - upgrade to CAT 6 cable.
Bethel Theatre – Is primarily Type 9 - upgrade to CAT 6 cable.
Student Center – Has Type 9 remaining - upgrade to CAT 6 cable.
Chemistry – Needs a dedicated telecommunications rooms, an additional telecommunications rooms, and has a significant amount of Type 9 - upgrade to CAT 6 cable.
Archaeology Lab 1 & 2 – Needs dedicated telecommunications rooms and is primarily Type 9 - upgrade to CAT 6 cable.
Central Utilities – Has remaining Type 9 - upgrade to CAT 6 cable.
LMB – Has remaining Type 9 - upgrade to CAT 6 cable.

APPENDIX B

USA Master Plan 2010
Security & Safety Recommendations

CAMPUS EMERGENCY NOTIFICATION SYSTEM

Currently the University has the following systems that function independently and must be individually activated as events require:

1) W.A.R.N. – Wide Area Rapid Notification Service, is a web based system that enables the University to quickly contact cell phones, traditional phones, pagers and email accounts when mass notifications are necessary.
2) A siren / public address system was installed on the main campus in 2008 with five units strategically placed around the campus. The system can be activated by computer or through the University Police department's 800 MHz radios. The System is primarily for emergency notification purposes on the campus grounds when individuals could not be reached through other systems.
3) The University's cable television system was recently upgraded to include an emergency notification screen & sound override feature. This is similar to traditional National Weather Service warnings.
4) GroupWise mass email notification system created by the University's IT specialist which provides a campus by campus emergency notification option.

Emergency notification systems are managed and operated by the University's Police & Safety and Environmental Compliance departments. To reduce response times and improve emergency notifications the systems should be interfaced into one system. This would also eliminate the need for multiple PC's and monitors. Creating a comprehensive emergency notification system will require IT support, software modifications and a coordinated plan among the principle departments. An assessment of the various emergency notification systems, IT support and department needs has been conducted. The next phase of the project will be to determine system features that will best serve the University's current and future applications.

Recommendation

- Develop an interoperable communications and instant alert notification program that allows University officials the ability to initiate communications with all devices regardless of existing infrastructure, hardware and locations.

BUILDING FIRE ALARM SYSTEMS

Current fire alarm systems are analog requiring at least one dedicated analog telephone line, in some cases two, for fire alarm monitoring and alarm transmission. The central receiving station equipment can not receive new technology connections as a result. Newer systems communicate through IP networks with redundancy configurations providing secondary receiver IP address back up. In addition modernized systems allow monitoring sites to remotely detect and identify panel conditions. All new buildings and many of the recently renovated buildings on campus utilize the newer, IP addressable alarms, however, the majority of campus buildings do not currently have an IP addressable system (see Fire Alarm System, Building List, Appendix #1). Also, while student housing facilities on-site alarms are functioning correctly, fire alarm systems used are manufactured by three firms: Simplex, Notifier, and Edwards. These systems are all older and, due to available technology at the time, are unable to effectively communicate with one another and the Central Plant.

Recommendation

- *Upgrade existing fire protection systems in existing campus and student housing buildings as required, to IP addressable systems for fire alarm monitoring and communications.*
- Upgrade fire alarm systems in Gamma, Beta, Delta, and Epsilon # 1/ Epsilon #2 dorms, and in all fraternity/ sorority houses.

FIRE PROTECTION (SPRINKLER) SYSTEMS IN STUDENT HOUSING FACILITIES

The majority of the Student Housing buildings are not equipped with an automatic sprinkler system. Currently only the Epsilon II dorm and eight "Greek" houses (all, except for the Sigma Chi house) are "sprinkled".

Recommendation

- *Install an automatic fire protection (sprinkler) system in all new Student Housing construction and in major renovations of existing facilities.*

BUILDING ACCESS SYSTEMS

Currently, there are several different building access control systems in place at the University of South Alabama. The Medical Sciences Building has one type of system, Chemistry and Life Sciences another. New campus buildings (Health Sciences, Student Recreation Center, etc.) are all utilizing the recently instituted USA standard building access system which is different from the systems used in the existing buildings. All of these systems are locally managed and do not report to a central location. Without a central reporting system in place there is no way to monitor the security of the building or lock the building down remotely in case of an ongoing emergency on campus.

Recommendation

- Develop a "standard" for a single building access control management system on the main campus.
- The system should be managed locally by the individual building coordinators but should also report to the University Police Department by way of the University internal network system. With this type of system in place

the police department will have the ability to monitor the security of the building and also have the ability to remotely secure either an individual building or all buildings on the system in case of an ongoing emergency incident.

SECURITY CAMERA SYSTEM

The USA Police department is currently expanding the campus security, closed circuit television (CCTV) system and, as a part of this expansion, is installing security cameras in both new buildings and in existing buildings/facilities on campus. Camera locations and system infrastructure are typically planned into new construction but retrofitting older buildings and outdoor facilities is more problematic. Installation has been hampered in certain areas by the lack of available underground duct bank/conduit to carry the required cabling. The costs associated with installing conduit on a building-by-building basis can be prohibitive in certain cases. Also, current space, equipment and staffing are insufficient to handle projected expansion demands.

Recommendation

- Develop a plan to install additional security cameras in the residence halls and in "major" (on USA North and South Drives) parking lots on campus.
- Develop a plan for a campus wide conduit system to facilitate camera installation at the above noted facilities as well as in future campus buildings.
- USA Police to study additional space, equipment, and staffing requirements associated with the expansion of the security camera system and make recommendations on existing and future needs.
- Include camera locations/infrastructure as a separate "utility" plan in the master plan.

HAZARDOUS MATERIALS SURVEY

Many older campus buildings still contain some type of asbestos or other hazardous materials. The existing building surveys that are currently being used are at least 20 years old and are, in many cases, inaccurate and incomplete.

Recommendation

- Commission a new survey of all buildings known or suspected to have asbestos containing materials (ACM) present.
- A licensed asbestos management planner should be retained to identify asbestos containing materials and develop an organized program to either abate or encapsulate all such materials as buildings are renovated or as materials become unstable.
- The Department of Safety and Environmental Compliance should coordinate all testing and assist in program updates.

Attachment #1

Existing buildings <u>without</u> an IP addressable fire alarm system

AD	Whiddon Administration Bldg
AEE	Alpha East Extension
AH	Alumni Hall*
AHE	Alpha Hall East
AHS	Alpha Hall South
AGDSH	Alpha Gamma Delta Sorority House (SOR4)*
AOPSH	Alpha Omega Pi Sorority House SOR3)*
ARC1	Archaeology Lab One*
ARC2	Archaeology Lab Two*
BBF	Baseball Batting Cage Facility*
BFH	Baseball Fieldhouse*
BFSB	Baseball Field Storage Bldg*
BRH1	Beta Residence Hall 1
BKST	Bookstore
BT	Bell Tower
CAF	Cafeteria
CHEM	Chemistry Building
CMN	Gamma Commons
COSH	Chi Omega Sorority House (SOR1)
CPLT	Central Utilities Plant*
CSAB	Central Services Administration Bldg*
CSB	Construction Services Bldg*
CSCB	CIS Classroom Bldg*
CSC	Computer Services Center
CSS	Carpenter's Shop and Storage*
DRH1	Delta Residence Hall 1
DRH2	Delta Residence Hall 2
DRH3	Delta Residence Hall 3
DRH4	Delta Residence Hall 4
DRH5	Delta Residence Hall 5
DRH6	Delta Residence Hall 6
DO	Central Utilities Management Office*
EEB	Electrical Engineering
EGCB	Engineering Classroom Bldg
EGLB	Engineering Laboratory Bldg
ERH1	Epsilon Residence Hall 1
ERH2	Epsilon Residence Hall 2
FCE	Faculty Court East*
FCS	Faculty Court South*
FCW	Faculty Court West*
GRH0	Gamma Residence Hall 0
GRH1	Gamma Residence Hall 1
GRH2	Gamma Residence Hall 2
GRH3	Gamma Residence Hall 3
GRH4	Gamma Residence Hall 4
GRH6	Gamma Residence Hall 6
GRH7	Gamma Residence Hall 7
GS4	Garage Service
HG	Housing Garage
HPE	Health, Physical Education and Leisure Services Bldg
IFH	Intramurals Field House*
LMB	Laboratory of Molecular Biology
LMBS	LOMB Storage Bldg
LSLH	Life Sciences Lecture Hall
KAFH	Kappa Alpha Fraternity House (FRA3)
KDSH	Kappa Delta Sorority House (SOR5)
MG	Maintenance/Grounds (old Primate Lab/1375)*
MSHP	Maintenance Garage
MTH	Mobile Townhouse*
MW	Maintenance Warehouse*
OR	Outdoor Recreation Bldg (old Property Office)*
PAC	Laidlaw Performing Arts Center
PD	Police Dispatch*
PGB	Paint and Groundskeepers Bldg*
PIW	Property/Inventory Warehouse (old Grounds Bldg)*
PKAFH	Pi Kappa Alpha Fraternity House (FRA2)
PKPFH	Pi Kappa Phi Fraternity House (FRA1)
PMSH	Phi Mu Sorority House (SOR2)
PN1	Phone Node Building #1
PN3	Phone Node Building #3
PS	Property Storage
PTCL	Psychology Teaching Clinic*
PUMP	Pump House*
SA	Automotive Shop*
SBT	Seaman's Bethel
SCFH	Sigma Chi Fraternity House
SPLT	Satellite Utilities Plant
SRH	Alpha Hall South
SSFH	Softball/Soccer Field House
STAD	Stanky Field Stadium
SP	Swimming Pool*
TEL	Telecommunications Building
TKST	Track Storage Building*
TSDB	Treatment, Storage & Disposal Building
UCOM	University Commons Communications suite Speech & Hearing suite* Bio-Medical suite* Photography suite* Comm TV Studio* Talent Search*
VAB	Visual Arts Complex
WARE	Housing Warehouse*

* Building currently has no panel or is not listed.

APPENDIX C

USA Master Plan 2010
Transportation/Circulation & Parking Recommendations

The Transportation/ Circulation and Parking Sub-Committee reviewed the Campus Circulation and Parking Study from the 2004 Master Plan. Applicable items from this report were discussed and the following assessments were made:

General
Problem – "Due to the perception, or reality, of long distances between class locations, students are driving from one parking lot to another to change classes. This leads to an extraordinary amount of congestion, approaching grid-lock, during class changes. Very little pedestrian or bicycle usage was noted along USA North and South Drives"
2004 Recommendation – "A major goal would be to utilize various means to induce students to use another mode of transportation to change class locations rather than driving." Encourage pedestrian and bicycle usage, consider various roadway and parking lot revisions, and institute a campus transit system and zoned parking scheme.
Sub-Committee Assessment - The implementation of the JagTran system and zoned parking has eased this situation but it is still a major problem. Many of the Sub-Committee recommendations noted below address traffic congestion on campus and should help to reduce this in the future.

Problem – "Pedestrian crossings should be better defined."
2004 Recommendation – "Major pedestrian crossings, especially of USA South Drive, should be raised and constructed of a material which contrasts to the roadway. These crossings should always be well signed for vehicles to yield to pedestrians. A majority of these raised crossings should also be designed as speed tables to slow or stop traffic. Sidewalk locations appear adequate throughout the campus. However, a means to concentrate the street crossings at controlled locations, and to control jaywalking should be used. "
Sub-Committee Assessment – The Sub-Committee agrees with the recommendation. The Sub-Committee recommendation under pedestrian crosswalks-general has attempted to address this issue.

Stadium Boulevard from Old Shell Road to the Roundabout
Problem – "Currently, through traffic is in conflict with vehicles parking, or especially those backing out to leave parking spaces. There is also a high volume of pedestrian traffic generated by these parked cars. The pedestrians treat the area as a parking lot and cross the through lanes at will."
2004 Recommendation – "Reconfigure (Stadium) Boulevard to separate parking from the through traffic." This scheme called for the elimination of all parking in the east (in-bound) lane and converting this lane into a three-lane boulevard.
Sub-Committee Assessment – This recommendation was carefully evaluated at the time of the 2004 Master Plan and it was decided that it would eliminate too many parking spaces (approximately 240) and, because of the parking access and other issues, possibly cause more problems than it solved. The Administration also felt strongly that the existing "boulevard" look was important and should be maintained. As a result, the current drive configuration was implemented. The issues noted in the 2004 report are still valid and all agreed that the something more needed to be done to correct the problem.
The Sub-Committee recommendation under Stadium Drive – lanes, has attempted to address this issue.

Alumni Drive from USA South to Bookstore/Student Center Parking Lot
Problem – The four-way stop at the intersection leading to the Bookstore and Student Center lots creates traffic back-up and congestion in this area.
2004 Recommendation – "Change to a through movement for north/south traffic, while the east/west traffic should continue to stop." "Consideration should also be given to another tie between the (two) lots."
Sub-Committee Assessment – The additional vehicular "tie" between the two lots was implemented after the 2004 plan was approved, however, the four-way stop remains. Traffic conditions in this area have improved but congestion at this intersection is still a problem. The USA Facilities Office has studied the situation and has made a recommendation for one-way traffic flow south (out-bound) from the parking lots to South Drive in an attempt to facilitate traffic movement in and out of these lots.

USA North/South Drives at University Boulevard
Problem – "There are numerous rear-end accidents occurring on the feeder lane southbound to University Boulevard from USA North and South Drives."
2004 Recommendation – "A heavy pruning of the landscaping in the islands north of these lanes should improve safety by improving the line of sight north, thus adding merging. A stop-until-clear for merging signage rather than the yield could also be used if the above recommendation is not effective."
Sub-Committee Assessment – The Sub-Committee agrees with the recommendation. Subsequent pruning of the existing vegetation has helped but there are still problems with rear-end collisions. The Sub-Committee recommendation under USA South/North Drives, University Boulevard intersection has attempted to address this issue.

Exit from Library/Humanities/ILB Parking Lot to USA North Drive
Problem – "A considerable amount of back-up was observed from (the) parking lot trying to exit on to USA North Drive."
2004 Recommendation – "This can be improved by revised striping and rework of the exit lanes." "A signal or traffic direction officer during peak traffic times may be required.
Sub-Committee Assessment – This situation was not addressed after the 2004 study and an increase in student enrollment along with the subsequent implementation of the JagTran and zoned parking systems has led to increased traffic and congestion in

these lots and on North Drive. The Sub-Committee agrees with the recommendation but feels that additional measures need to be taken. The Sub-Committee recommendation under Life Sciences/ Library/ Humanities/ Chemistry parking lot access has attempted to address this issue.

The issues and recommendations discussed by the Transportation/ Circulation and Parking Sub-Committee are as follows:

USA SOUTH DRIVE

University Blvd. intersection

Excessive number of traffic accidents in the South Drive right turn lane and on University Boulevard due to yield sign and limited visibility/sight lines.

Recommendation - Replace the existing "yield" sign with a stop sign. Add a second "stop ahead" sign on South Drive to alert traffic of the stop sign at the intersection. Evaluate traffic conditions after the installation of these signs. If the problem persists, consider adding a separate traffic/control signal for the right turn lane only. (Dwg #1)

Administration/MCOB parking lot intersection

Traffic back-up in the Administration and the Laidlaw/Mitchell College of Business parking lot entrance drives at peak times due to high traffic volume and proximity of the pedestrian crosswalk on South Drive. Also, drivers attempting to make left turns out of these lots create further congestion.

Recommendation – Congestion at this intersection is not critical at this point but may become more of an issue in the future if parking designations in the Administration lot are changed or when the proposed Engineering and Computer Science Building comes on-line. Recommend installing signs in these lots indicating the location of additional exits. Evaluate traffic conditions after implementation of any Master Plan revisions and after completion of the new building. Leave existing drive entrances as is for now.

Jaguar Drive intersection

Traffic back-up on Jaguar Drive and South Drives at peak times due to left turn lanes and proximity of pedestrian crosswalks.

Recommendation – A new crosswalk/speed table on the east side of South Drive at the Jaguar Drive intersection is scheduled for installation. Recommend relocating the east/west crosswalk on Jaguar Drive and stop bars closer to the intersection.

Alumni Drive (Faculty Court South) intersection

Traffic back-up on Alumni Drive at peak times due to the width of the drive, lane configurations, and the adjacent on-street parking.

Recommendation – Proposed revisions to the traffic flow around Faculty Court South may allow Alumni Drive to become one-way "out" in the future. Even with one way traffic flow, the existing on-street parking may still be a problem. Recommend re-striping parking spaces to increase width or eliminating this parking area altogether. (Dwg #2)

Mitchell Center Drive/Campus Drive intersection

The aligning of the revised Mitchell Center Drive with Campus Drive should result in increased traffic flow on these roadways with the potential for congestion at the South Drive intersection.

Recommendation - This intersection is currently a 4-way stop. Recommend monitoring traffic flow. If congestion becomes a factor, consider installing a traffic signal.

JAGUAR DRIVE

Mitchell College of Business Parking Lot

Traffic back-up in MCOB parking lot and on Jaguar Drive at peak times due to the width of the parking lot entrances and lane configurations. This is a problem now, however, the proposed Engineering and Computer Science Building will have a major impact on traffic in this area.

Recommendation – Evaluate traffic after the Engineering and Computer Science Building comes on-line. Consider widening entrances/increasing radius of curbs and possibly adding a third entrance to this lot on Jaguar Drive.

South Drive Intersection

Due to its "interior" location and the somewhat confusing nature of the "feeder" roads in this area, Meisler Hall is difficult to find and access. The Signage and Wayfinding Sub-Committee has noted that the existing directional signage is insufficient to properly direct visitors to this building and have included additional signage as one of their recommendations. The existing roads, however, are also a contributing factor and should be addressed.

Recommendation – In conjunction with the Police headquarters relocation, demolish the Faculty Court South building and relocate the Jaguar Drive/South Drive intersection to the west to allow a more formal (and visible) approach to Meisler Hall. Landscape the resulting open area and install new directional signage. (Dwg 4)

STADIUM DRIVE

Gamma Connector intersection

The existing stop sign/bar on the Gamma Connector is located too far back from the intersection to allow drivers to safely see approaching traffic.

Recommendation – Relocate sign and stop bar west to edge of "active" Stadium Boulevard traffic lane. Separate left turn and right turn lanes by a concrete island rather than the existing pavement striping. (Dwg 3)

This recommendation is valid only if the Stadium Drive lane revision (below) option is not accepted.

Stadium Drive Lanes

The current dual lane configuration on Stadium Boulevard (one active traffic lane/one parking access lane) can be confusing. Drivers tend to ignore the parking access designations and drive in this lane. Speed is also an issue. In addition, the opening of the new Student Recreation Center will lead to increased traffic, greater demand for on-street parking and the need for additional pedestrian crossings.

Recommendation – Add traffic "peninsulas" to restrict traffic flow in the parking access lanes and install additional pedestrian crossings/speed tables to control speed, (Dwg 5A & 5B)

USA NORTH DRIVE

University Blvd. intersection

Excessive number of traffic accidents in the North Drive right turn lane and on University Boulevard due to yield sign and limited visibility/sight lines (same as USA South Drive/University Boulevard intersection).

Recommendation - Replace the existing "yield" sign with a stop sign. Add a second "stop ahead" sign on North Drive to alert traffic of the stop sign at the intersection. Evaluate traffic conditions after the installation of these signs. If the problem persists, consider adding a separate traffic/control signal for the right turn lane only. (Dwg #1 similar)

Health Services Drive intersection

Traffic back up on Health Services Drive (students/ Research Park tenants) and high traffic volume on USA North Drive at peak times. The opening of the new Health Sciences Building will have an impact on both vehicular and pedestrian traffic at this intersection, and currently, Health Services Drive and the Health Sciences entrance are offset creating even more problems for efficient traffic flow.

Recommendation – The intersection is currently a two way stop (Health Services Drive and the Health Sciences/MSB parking lot traffic stop). Recommend either relocating a portion of the Health Sciences/MSB parking lot entry drive to align with Health Services Drive and making this intersection a 4-way stop or installing a traffic signal, or eliminating the intersection and installing a traffic circle/roundabout (Dwg 9). The traffic circle/roundabout shown is minimal based on "buildable" land and the design may not function well due to limited length of merge lanes.

Future development of the Technology and Research Park and the possible extension of the existing Research Park Drive to service a proposed conference/wellness center and hotel could provide a secondary entrance/exit for this part of the campus and would serve to reduce traffic flow through the North Drive/Health services Drive intersection. This possibility should be a consideration in the selection of one of these options.

Life Sciences/Library/Humanities/Chemistry parking lot access

Traffic back-up in the parking lots at peak times due to the large number of vehicles attempting to exit, and also back-up on USA North Drive due to vehicles attempting to turn left into the Life Sciences Building entrance drive. Congestion in this area also directly impacts JagTran vehicles that use the Life Sciences entrance/exit to service the main Jagtran hub at the Student Center/Meisler Hall circle stop.

Recommendation – Eliminate the connecting drive from the Library parking area to the Life Sciences drive (maintain the connection for JagTran vehicles and pedestrians only) and provide a new Library/Humanities/Chemistry parking entrance/exit immediately north of the Library. Install speed lumps in the traffic lanes of the "lower" level parking area to control speed (Dwg 10).

North Drive – general

Excessive speed is an issue on North Drive, even with the existing traffic calming devices. Current spacing exceeds recommendations for the established speed (30 mph). The rubber speed lumps that have been installed are difficult for JagTran vehicles to safely negotiate. Also, material to match the existing speed lumps can no longer be purchased – need an alternate material/design.

Recommendation – Remove the existing speed lumps and install speed "tables" which can be safely negotiated by JagTran vehicles. Reduce spacing of these speed tables as recommended for posted speed limits. (Dwg 8A & 8B)

CLEVERDON PARKWAY/BRANNAN WAY/JOHN COUNTS DRIVE

General

Vehicles are utilizing John Counts Drive, Brannan Way and Cleverdon Parkway to cut through from Hillsdale to Old Shell Road. These "non-student/faculty/staff" vehicles increase congestion in this part of the campus and create potential safety issues for the University.

Recommendation – During the day most "university" traffic follows Cleverdon parkway from Old Shell Road to Tonsmeire Drive and then to Student Housing or into the main part of campus. The majority of non-university traffic will utilize Brannan/John Counts as well. For this reason, recommend conducting a traffic (count) study on Brannan Way/John Counts Drive to determine the number of vehicles using these roads and at what times. Determine a course of action after completion of the study.

Cleverdon Parkway

Excessive traffic speed and cars entering and exiting the Grove are safety issues on Cleverdon parkway.

Recommendation – The 3-way stop at Tonsmeire Drive and the JagTran stop signals at the entrance to the Grove have tended to slow traffic somewhat on Cleverdon, however, future vehicular and pedestrian traffic associated with the new Dining Facility will only increase the need for traffic calming/controls on this road. Evaluate traffic after the Dining Facility comes on-line. Consider additional traffic calming devices or other means of controlling speed.

JAGTRAN SYSTEM

Health Sciences Building

The opening of the Health Sciences Building along with the lack of available parking in this area will almost certainly increase the demand on the JagTran "Purple" route.

Recommendation – Evaluate passenger count and add additional vehicles or adjust routes as required.

Jag Tran – general

Proposed Master Plan revisions on USA North and South Drives may substantially impact the operational parameters of the JagTran system.

Recommendation – Current JagTran routes/stops should be considered in establishing and implementing current Master Plan recommendations. Also, need to re-evaluate and adjust JagTran routes/stops after Master Plan recommendations have been put into place.

PARKING LOTS

Cancer Clinical Building/Technology and Research Park - Building III parking lots

Increased demand on the Cancer Building/TRP III lots as a result of new tenants in these buildings. Also, a portion of one or more of these lots may be needed for overflow parking when the Health Sciences building achieves full occupancy in the fall. Joint use of these lots by students/ faculty/staff and tenants may create conflicts.

Recommendation – Consider designating the Cancer Clinical Building lot or a portion of the Cancer Building or TRP III lot, as "zoned". Dedicate tenant parking in the west lot (behind TRP III).

Gamma/Engineering and Delta/Epsilon parking lots

Excessive speed in these lots is a safety issue.

Recommendation – Install traffic calming devices/islands to control traffic. (Dwg 6 & 7)

Gamma/Engineering parking lot

The Gamma/Engineering lot (719 student parking spaces) is currently under-utilized for student parking.

Recommendation – Consider ways to encourage parking in this lot.

Administration parking lot

The Administration lot (27 faculty/ 183 student/ 3 handicap spaces) is currently under-utilized for parking.

Recommendation – Consider revising student/faculty parking mix in conjunction with the ILB lot.

ILB/Visual Arts parking lot

The ILB/Visual Arts lot (100 faculty/ 207 student/ 8 handicap spaces) is heavily used during daytime class hours. The newly renovated Alpha South building will place an even greater demand on this lot.

Recommendation – Consider revising student/faculty parking mix in conjunction with the Administration lot.

Mitchell Center parking lot

The Mitchell Center lot (374 open/ 22 handicap spaces) is currently an "open" lot (not a part of the zoned parking system and not requiring a parking hang tag). The intention was to allow students to use this lot on an as needed basis. Demand has been increasing and it was noted that students from The Grove are utilizing this lot during class times. In addition, the grass/gravel paving in this lot has not held up well to daily use and requires continual (and costly) maintenance.

Recommendation – Consider making this a "pay to park" lot for use by students or others on an as needed basis.

Stanky Field parking lot

The Stanky Field (97 open spaces - 45 paved/ 52 gravel) and softball/soccer (81 open spaces) lots are currently used for event parking only. Because the new Student Recreation Center will not provide any additional student/faculty parking, the Stanky Field paved lot is likely to be utilized for this purpose. Also, the existing gravel lots are in poor shape and experience drainage problems in heavy rains.

Recommendation – The USA Facilities office has commissioned an engineering study/re-design of this lot that includes paving, lighting, a new drainage system and relocation of the main entry/exit to correspond with Old Shell Road center islands. Recommend implementing the engineering design. Consider use of the westernmost section of the Stanky Field lot for overflow Recreation Center parking and provide a safe pedestrian path from this lot, across Stadium Boulevard, to the entrance to the Student Recreation Center.

General

The majority of student parking is located in the central part of campus (Gamma/Engineering (Central) lot, Humanities/ Chemistry (Central) lot, Student Center/Bookstore (Central) lots, Chemistry/ Humanities/Library/ LSB (North) lots). Accessing these lots creates traffic congestion on USA North and South drives during peak times. Increasing student enrollment along with the associated demand for on-campus parking will only make this situation worse. Also, certain parking lots (the Humanities/Chemistry Central lot for example) are prime sites for future campus buildings and may be eliminated or reduced in size at some point in the future.

Recommendation – All new on-grade parking lots shall be located on the perimeter of the campus. Study locations for a major parking structure on campus.

PEDESTRIAN CIRCULATION

Gamma parking lot to baseball/softball/soccer complex

Overflow parking for Stanky Field and soccer/softball is handled by the Gamma/Engineering lot. There is currently no sidewalk connection between the Gamma/Engineering lot and these fields.

Recommendation – A pedestrian walkway is currently planned to follow the Gamma Connector roadway from the Gamma/Engineering lot to Stadium Boulevard (to allow pedestrian access to the new Student Recreation facility and Student Housing). This walkway will provide access to Stanky Field via Stadium Boulevard but is somewhat lengthy. Recommend installing a "spur" pedestrian walkway from the Gamma Connector to the softball facility to connect with existing sidewalks on the south side of the fields.

Accessible routes

In most cases "accessible" campus walkways (from handicap parking to building entrances and from building to building) are not properly identified on designated on any campus map. Without such signage or maps, locating accessible routes can be a problem for persons with disabilities.

Recommendation – Review current walkways/routes for accessibility and make recommendations for compliance with applicable standards. Include a plan showing all accessible routes on campus.

Pedestrian crosswalks – general

Existing pedestrian crosswalks are not always well marked and are sometimes hard to recognize from a moving vehicle.

Recommendation – The Campus Circulation and Parking Study from the 2004 Master Plan emphasized that pedestrian crosswalks should be combined with raised speed tables. There

is funding in place for new speed tables/pedestrian crossings on South Drive in front of the Engineering complex, Archaeology building, and at the Jaguar Drive intersection. The effectiveness of these crossings should be evaluated and, based on this information, Study location and marking of existing crosswalks – make recommendations for new crosswalks/additional markings or warning devices. Combine crosswalks with new speed tables.

OTHER

Campus to UCOM travel time

Due to traffic congestion at peak traffic times on USA North/South Drives and on University Boulevard, it is impossible to get from certain parts of the main campus to University Commons in the allotted class change time.

Recommendation – Consider the possibility of altering class schedules at UCOM.

MCOB/Laidlaw Drive

Traffic on the MCOB/Laidlaw access drive will increase when the proposed Engineering and Computer Science Building opens.

Recommendation – Need to evaluate the additional parking/transportation/pedestrian load imposed by the new facility and make a recommendation as to access and new JagTran routes/stops. Look into making the resulting open space between MCOB and the engineering facility a formal landscaped yard.

APPENDIX D

USA Master Plan 2010
Signage/Wayfinding Recommendations

NO FORMAL CAMPUS VISITOR/WELCOME CENTER – EXISTING FACILITY NOT EASILY IDENTIFIED

Recommendation

- Relocate Police Dispatch in conjunction with the relocation of USA Police Office.
- Renovate the existing facility to accommodate a campus welcome/information center with provisions for issuing visitor parking permits.
- Include an identification sign on University Boulevard to match the campus entry portals.
- Remove the existing parking lot and landscape to create an attractive campus entry point.
- Install Campus Visitor Information directional signs at decision points on Old Shell Road and University Boulevard.

EXISTING CAMPUS IDENTIFICATION IS OUTDATED, INCONSPICUOUS AND DOES NOT PROPERLY ESTABLISH THE UNIVERSITY "BRAND"

Recommendation

- Complete 2004 Master Plan portal design recommendation for USA North, USA South and Stadium Boulevard, currently in design.
- Implement 2004 Master Plan recommendations for main campus identification sign at the Old Shell Road/University Boulevard intersection.

THERE ARE MULTIPLE CAMPUS ENTRY POINTS – MANY ARE NOT PROPERLY IDENTIFIED

Recommendation

- Complete 2004 Master Plan portal design recommendation for USA North, USA South and Stadium Boulevard, currently in design
- Implement 2004 Master Plan recommendations for additional portals/campus wayfinding signage at Mitchell Center and Jaguar Drives.
- Consider additional portal/campus identification at the main (University Boulevard) entrance to UCOM.

FINDING SPECIFIC BUILDINGS ON CAMPUS IS DIFFICULT FOR VISITORS AND NEW STUDENTS. CAMPUS BUILDINGS ARE NOT ALWAYS IDENTIFIED – SIGNAGE IS INCONSISTENT

Recommendation

- Develop a standard building identification signage system that would serve to unify the campus and identify each building as a USA facility.
- This signage system should include options appropriate for the various campus building designs and locations.
- Provide a sign location plan to ensure that future signs are positioned to compliment each building and to maximize recognition based on the sign option selected.
- New building identification signs shall be included on all new campus buildings and facilities.
- Replace existing concrete monument signs with new and install new signs in buildings currently without identification signage.
- Develop a long term schedule to install standard building identification signs at existing buildings with building mounted or other type identification signs.

INTERIOR ROADWAYS ON CAMPUS CAN BE CONFUSING TO THOSE NOT FAMILIAR WITH THE LAYOUT AND THERE IS CURRENTLY NO CAMPUS WAYFINDING SYSTEM OR CAMPUS "LANDMARKS" TO GUIDE VISITORS. EXISTING CAMPUS DIRECTIONAL SIGNS ARE UNATTRACTIVE, OUTDATED, AND HARD TO READ

Recommendation

- Develop a campus wayfinding system to include standard directional and informational signs to be located at primary and secondary "decision points" on campus.
- Provide a design for a standard orientation kiosk to be located at the main visitor/ information center and at various points on campus. Develop a campus map to be used for this purpose.

EXISTING VEHICULAR/STREET SIGNS ARE UNATTRACTIVE

Recommendation

- Select a standard decorative pole as a campus standard to be used for all vehicular regulatory /informational signs.
- Install the selected pole on all new vehicular regulatory /informational signs.
- Develop a schedule for the replacement of existing sign poles with new standard.
- Develop a standard for number/location of sign panels on poles.

MANY CAMPUS SIGNS ARE NOT ADA COMPLIANT AND ACCESSIBLE BUILDING ENTRANCES AND ROUTES ARE NOT PROPERLY MARKED

Recommendation

- Review all existing campus signage for compliance with ADA standards and make recommendations for replacement.
- Review all campus building accessible entrances and make recommendations for additional accessible route signs.
- Comply with ADA standards on all new/revised accessible routes.

NO STANDARDIZED UNIVERSITY PLAN FOR DIRECTORY OR WEB-BASED MAPS

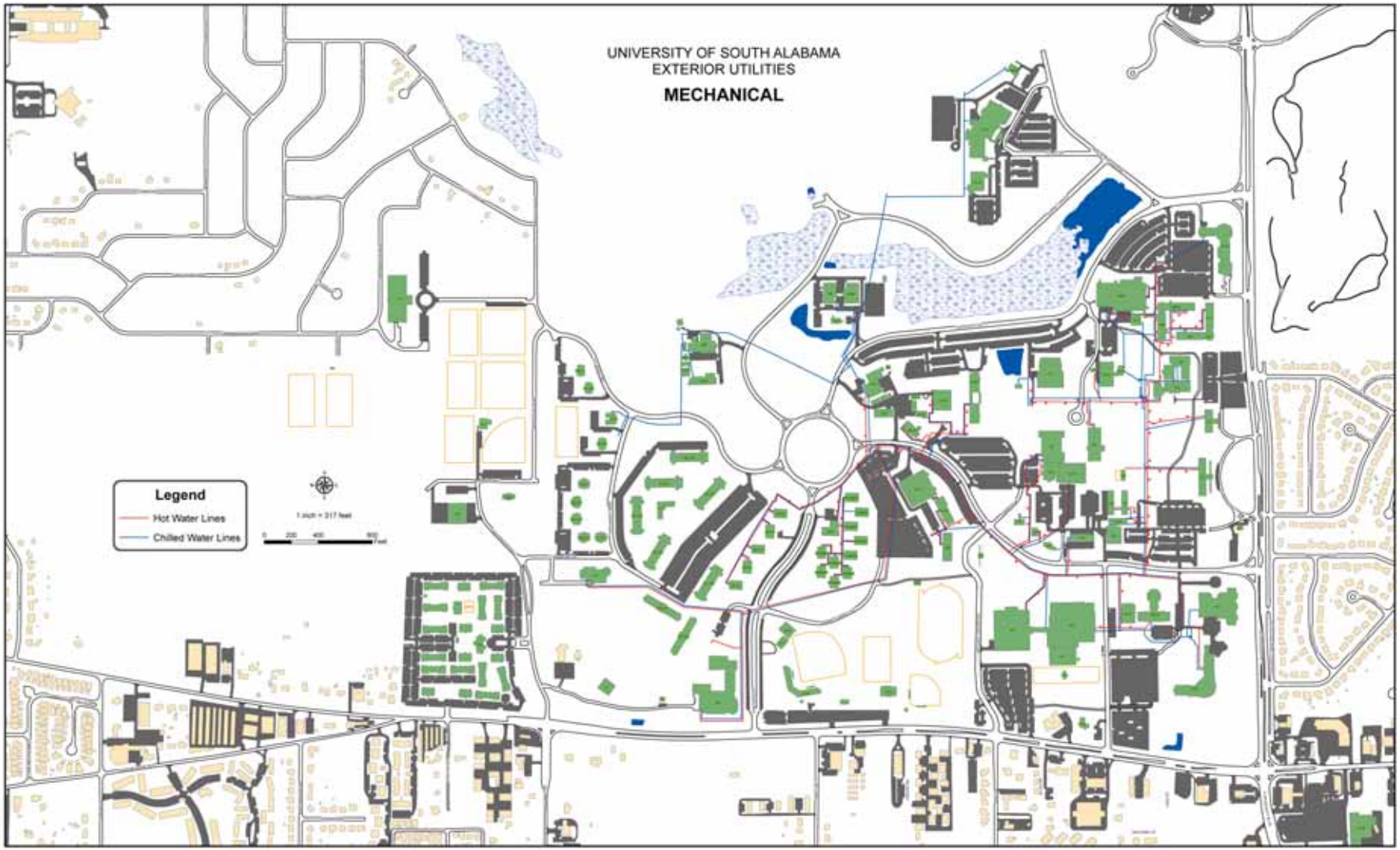
Recommendation

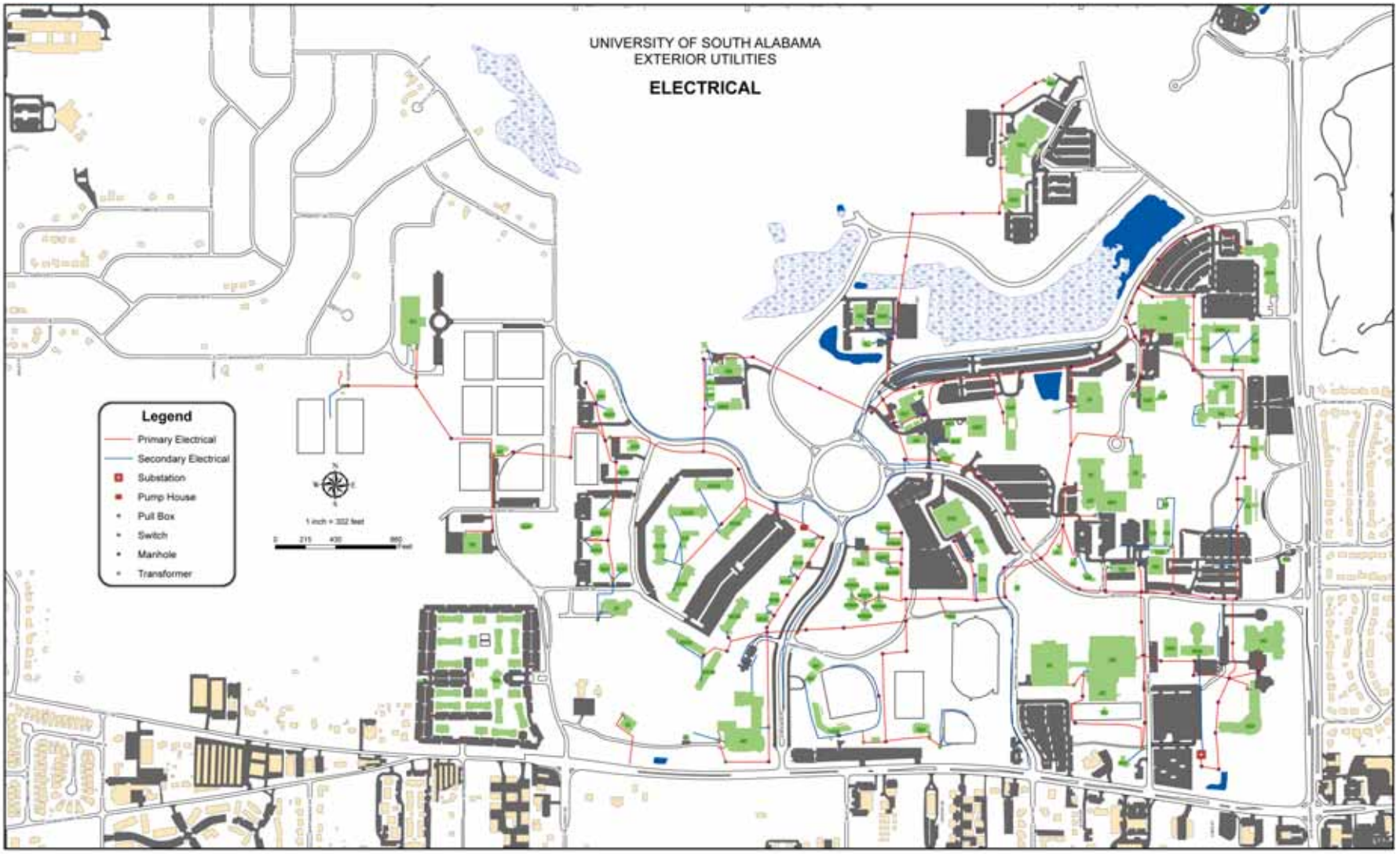
- Develop a standard campus map for use on the USA website. In addition to the campus plan this map could include directional/wayfinding information, accessible routes and parking, Jagtran routes and schedules and other pertinent information.
- Work with USA web services to incorporate this map into the the University website.

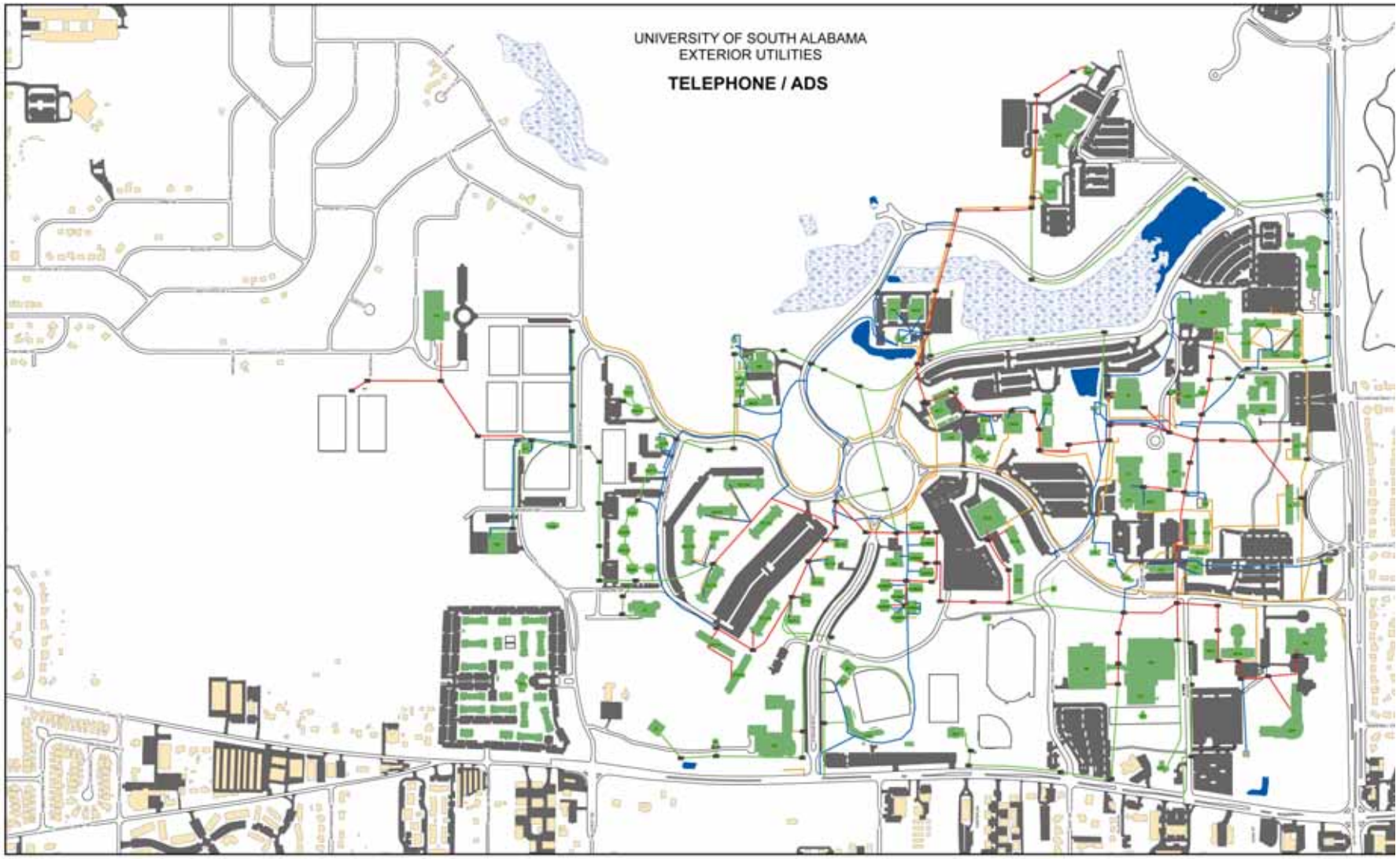
APPENDIX E

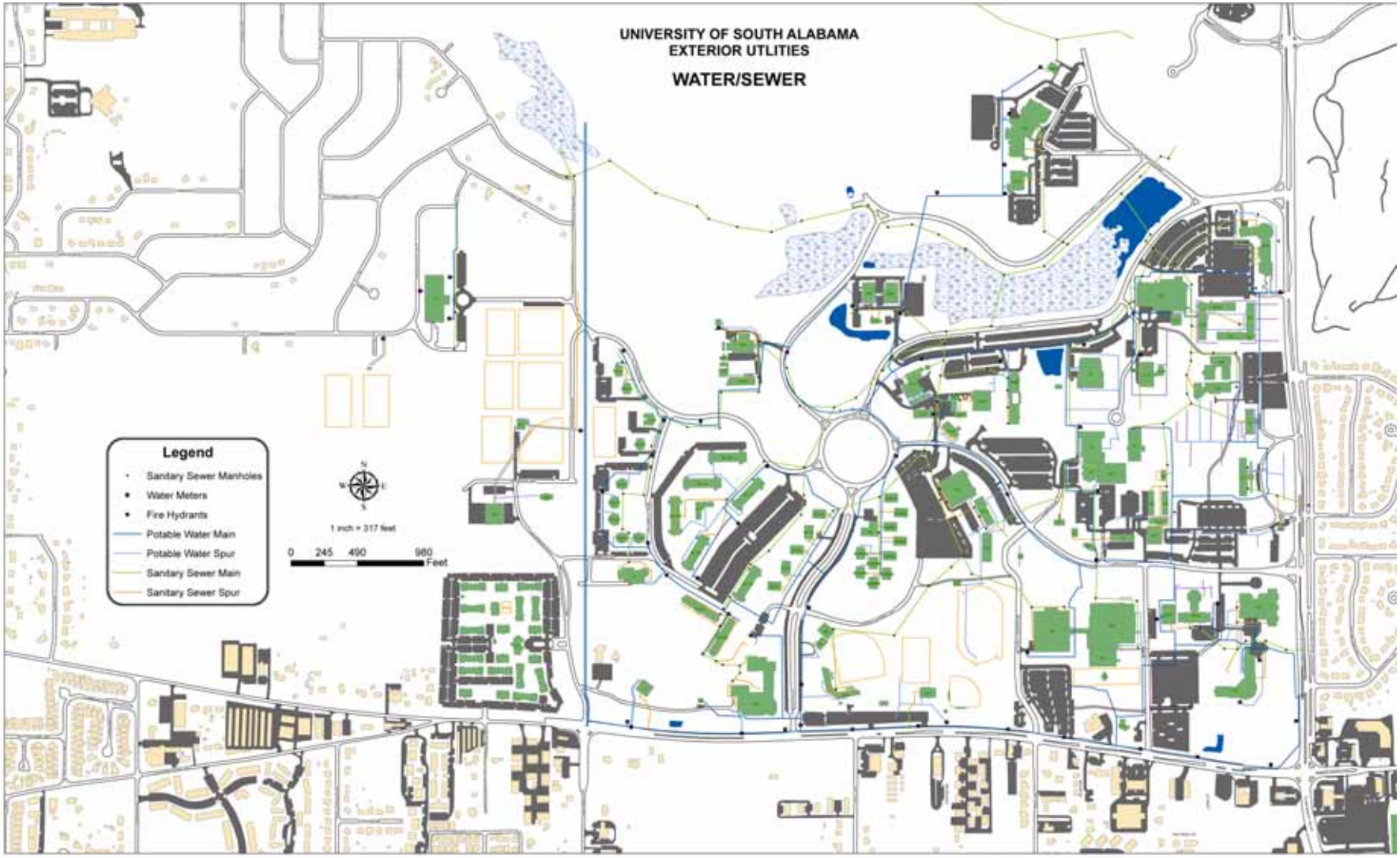
USA Master Plan 2010
Campus Utility Plans

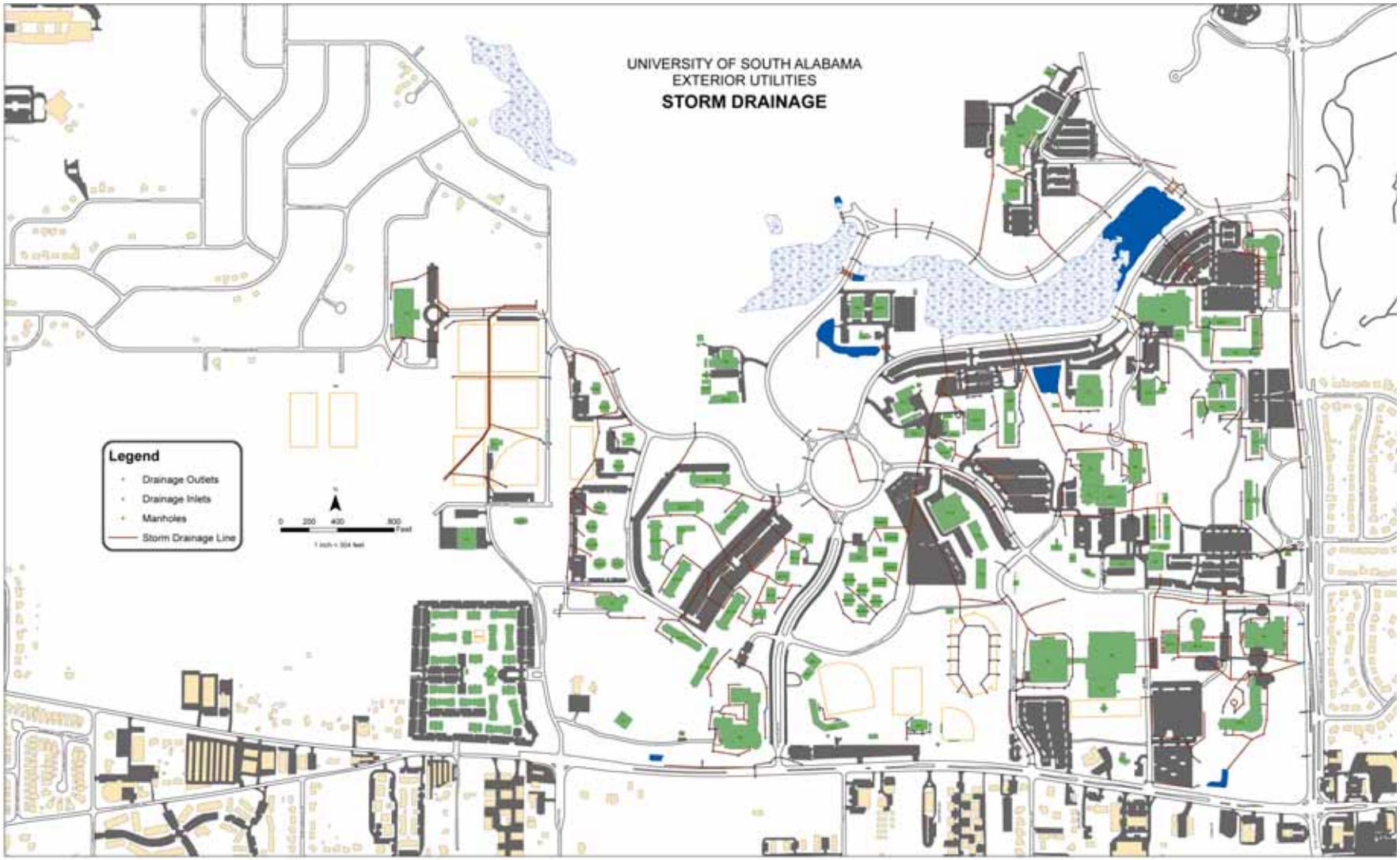
The following Campus Utility Plans are included as a part of this Appendix:
1. Mechanical Plan
2. Electrical Plan
3. Telephone/ADS Plan
4. Domestic Water/Sanitary Sewer Plan
5. Storm Sewer Plan
6. Natural Gas Plan

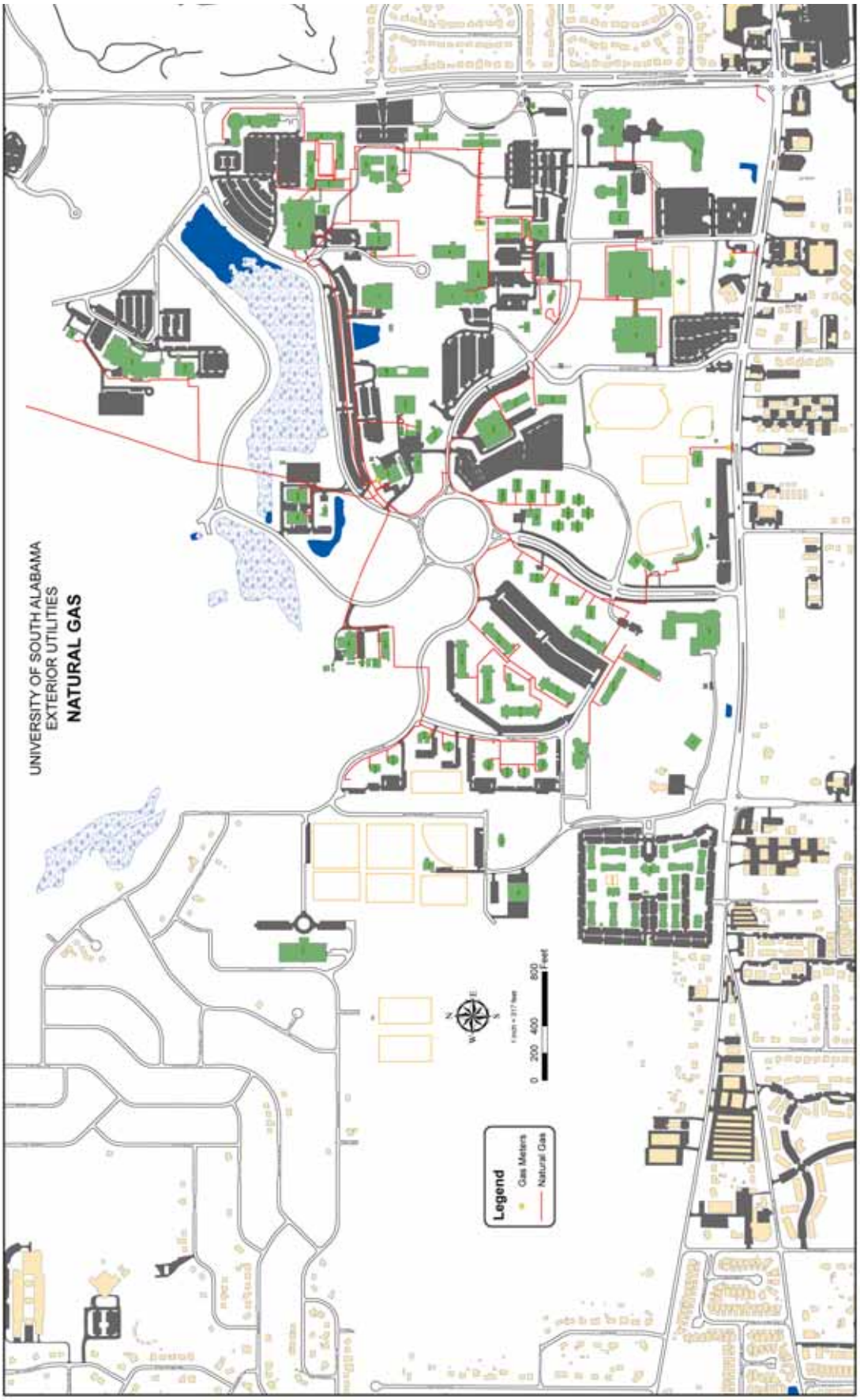

UNIVERSITY OF SOUTH ALABAMA
EXTERIOR UTILITIES
MECHANICAL
Legend
Hot Water Lines
Chilled Water Lines


UNIVERSITY OF SOUTH ALABAMA
EXTERIOR UTILITIES
ELECTRICAL
Legend
Primary Electrical
Secondary Electrical
Substation
Pump House
Pull Box
Switch
Manhole
Transformer
1 inch = 332 feet
0
215
430
860
Feet


UNIVERSITY OF SOUTH ALABAMA
EXTERIOR UTILITIES
TELEPHONE / ADS


UNIVERSITY OF SOUTH ALABAMA
EXTERIOR UTLITIES
WATER/SEWER
Legend
Sanitary Sewer Manholes
Water Meters
Fire Hydrants
Potable Water Main
Potable Water Spur
Sanitary Sewer Main
Sanitary Sewer Spur
1 inch = 317 feet
0 245 490 980
Feet


UNIVERSITY OF SOUTH ALABAMA
EXTERIOR UTILITIES
STORM DRAINAGE
Legend
Drainage Outlets
Drainage Inlets
Manholes
Storm Drainage Line
0 200 400 800 Feet
1 inch = 304 feet


UNIVERSITY OF SOUTH ALABAMA
EXTERIOR UTILITIES
NATURAL GAS
Legend
Gas Meters
Natural Gas
0 200 400 800
Feet

APPENDIX F

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