



**MISSISSIPPI STATE
UNIVERSITY**

2016 MASTER PLAN







CONTENTS

PART I: CAMPUS MASTER PLAN

PURPOSE OF THE MASTER PLAN	15
THE PLANNING PROCESS	21
THE PLANNING CONTEXT	27
MASTER PRINCIPLES AND GOALS	28
THE VISION	38
THE FRAMEWORKS: INTRODUCTION	41
PHYSICAL DESIGN FRAMEWORKS	47
PROGRAMMATIC FRAMEWORKS	87
FUNCTIONAL FRAMEWORKS	98
INFRASTRUCTURE	108

Appendix

MASTER PLAN LANDSCAPE GUIDANCE	121
MISSISSIPPI STATE UNIVERSITY-MERIDIAN	140

PART II: ATHLETICS MASTER PLAN

ATHLETICS MASTER PLAN INTRODUCTION	152
DEFINING PRINCIPLES OF MSU ATHLETICS	154
ATHLETICS PLANNING PROCESS	160
ATHLETICS MASTER PLAN GOALS	168
ATHLETICS DISTRICT FRAMEWORK	176
ATHLETICS MASTER PLAN	188



PART I

CAMPUS MASTER PLAN





EXISTING CONDITIONS



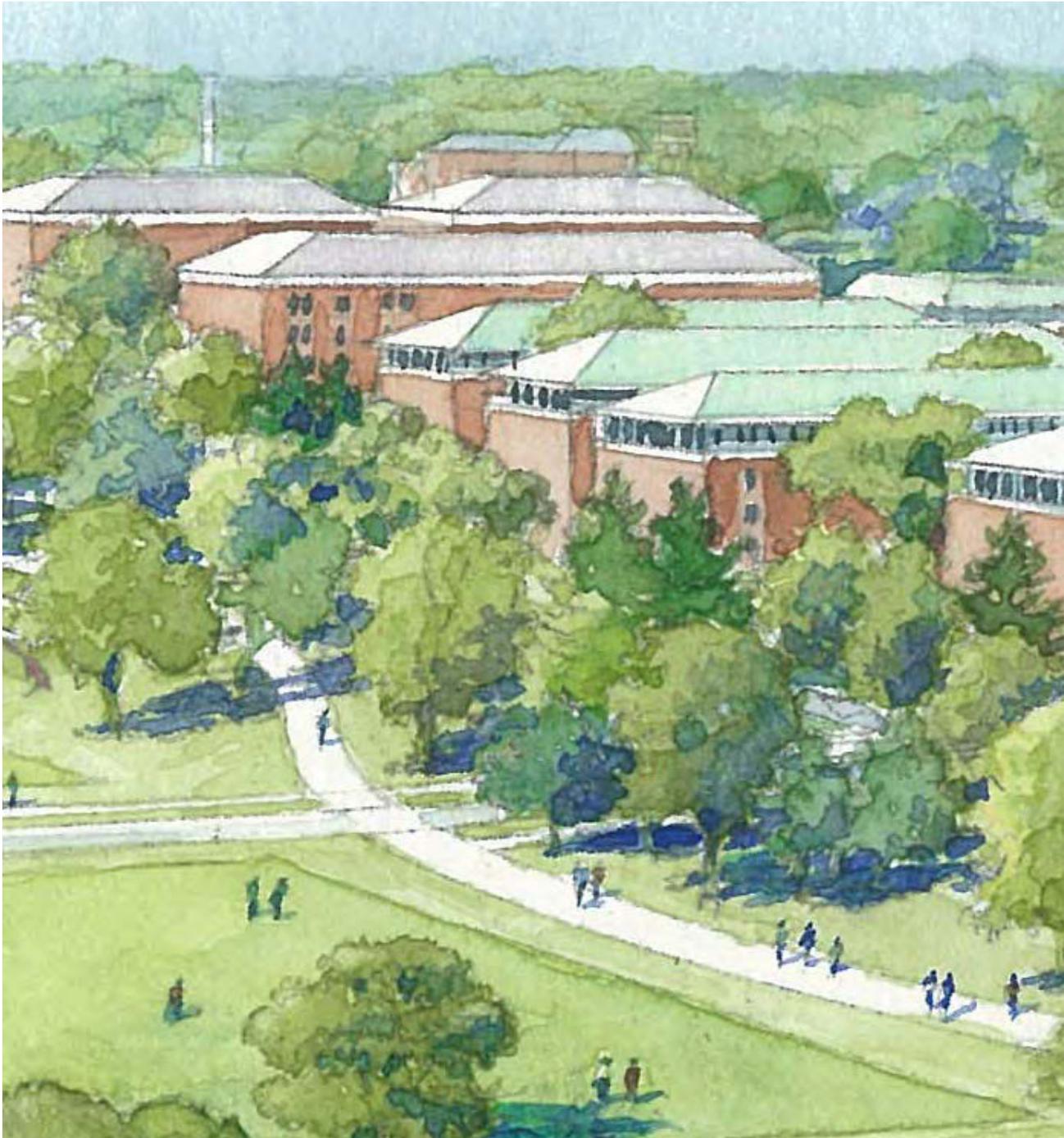
MASTER PLAN VISION-NEAR TERM

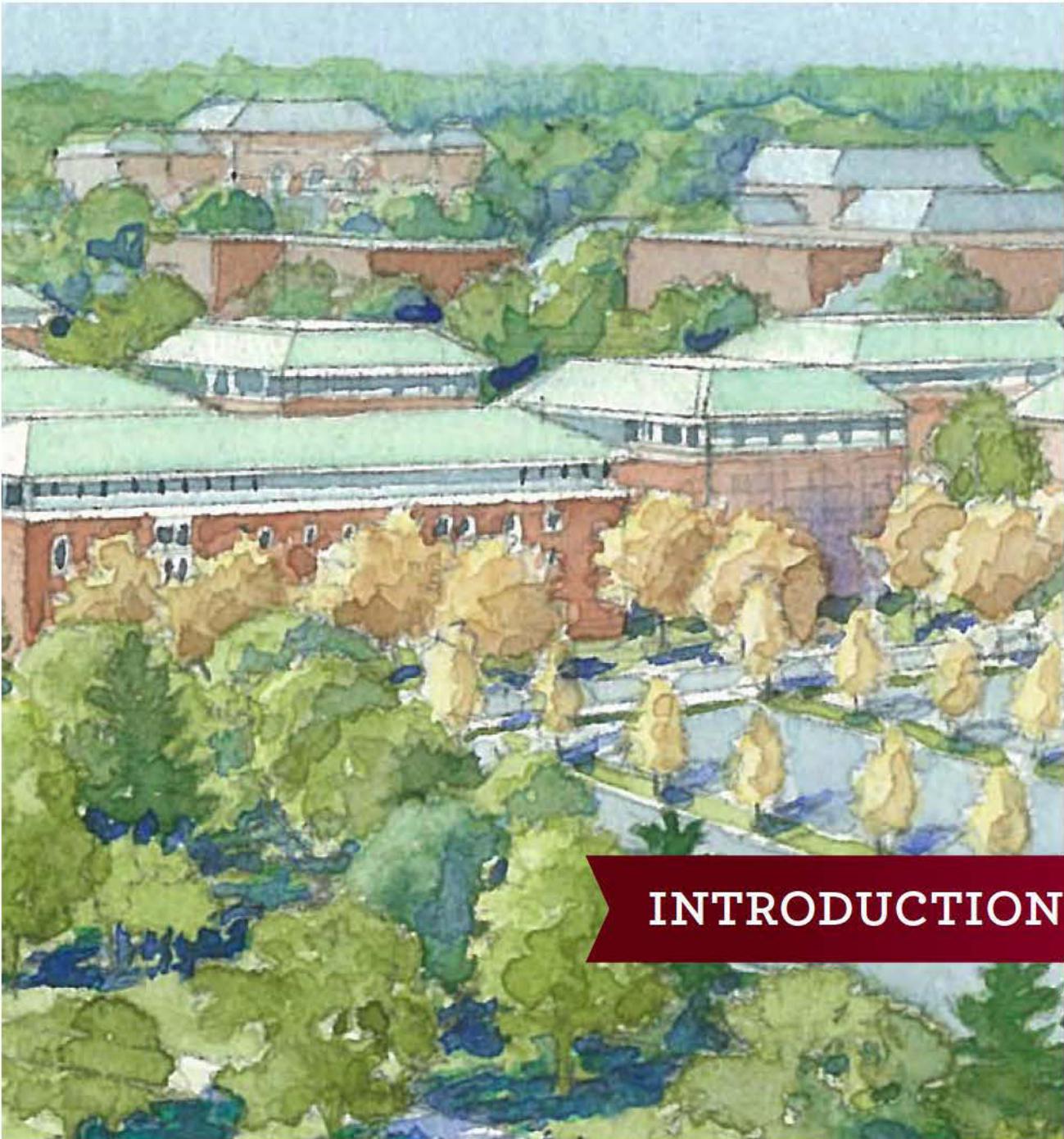


EXISTING CONDITIONS



MASTER PLAN VISION-LONG TERM





INTRODUCTION



AERIAL VIEW OF THE MASTER PLAN

The Mississippi State University (MSU) Master Plan provides a vision for the campus informed by the academic, research and outreach mission of the University, the history, traditions and resources of the campus, the enrollment targets and aspirations for the future, and the sustainability goals established by the University.

The Master Plan is based on five strategic opportunities:

1 Enhancing the academic and research environment in support of the MSU Mission

The Master Plan provides a flexible approach for accommodating the academic and research mission of the University in a combination of existing and proposed facilities including collaborative environments for students, faculty and staff.

2 Protecting the history and traditions of the campus

The Master Plan protects and enhances the historic buildings, iconic open spaces and landscapes, monuments and traditions of the University while linking these cultural resources to a broad range of improvements proposed across the campus.



3 Promoting an ethic of stewardship and sustainability

In line with the aspirations of the University, the Master Plan embraces the concept of sustainability, and is informed by social, environmental and economic goals. The Master Plan establishes land use policies, preserves open spaces and natural features, and envisions a change in mobility and the pattern of parking.

4 Improving campus and community life

The Master Plan improves campus and community life by emphasizing the need for more gathering, study and dining space across the campus, by incorporating new residential communities, by incorporating recreation amenities in the context of the campus-wide landscape and open space vision and by creating better gateways and linkages to the surrounding community.

5 Fostering connectivity and cooperation with the community

The Master Plan promotes connectivity within the campus and with the surrounding community by coordinating transportation, stormwater management, land use and economic development objectives to the benefit of MSU and Starkville.



INDUSTRIAL EDUCATION BUILDING TOWERS



INDUSTRIAL EDUCATION BUILDING ENTRANCE



SWALM HALL



COLVARD STUDENT UNION



LEE HALL



YMCA

The Master Plan serves as the foundation document for the future strategic development of the campus, as coordinated by the Master Plan Development and Advisory Committee. The Master Plan provides guidance for building placement, landscape vision and required infrastructure.

PURPOSE OF THE MASTER PLAN

The Master Plan serves as the foundation document for the future strategic development of the campus, as coordinated by the Master Plan Development and Advisory Committee. The Master Plan will provide guidance for building placement, architectural standards, landscape vision and required infrastructure. The document summarizes the design and planning recommendations for the campus and is one of several tools developed during the planning process that will guide decision-making for years to come. The outcomes include an accurate digital base map and a 3D computer model of the campus both of which are intended to assist with future planning and design decisions. A campus-wide space data base developed by the University and refined during the planning process is now in place to guide future space allocation, renovation and new construction decisions. In addition, several other products are available to guide future decision-making:

- **Master Plan Report**—the contents of this document provide a detailed overview of the Master Plan vision and its component elements.
 - » Space Needs Analysis—for existing and future enrollment
 - » Building Conditions
- **Athletics District Report**—a district plan for Athletics provides specific details and recommendations for facility and landscape improvements.
 - » Mobility—transportation and circulation
 - » Civil Engineering Elements—stormwater, potable and sewer infrastructure
- **Architectural Guidance**—architectural guidance is provided to inform the design and development of future buildings (documented separately).
 - » Mechanical, Electrical and Plumbing
- **Landscape Guidance**—landscape guidance is provided to assist with the implementation of the landscape recommendations.
- **Technical Appendix**—technical reports are provided in a separate technical binder to document data and information with regard to the following:



LEE HALL AND THE DRILL FIELD

In a time of budget challenges and limited resources, why should a Master Plan be a priority for the University?**There are several reasons.**

- First, even in lean economic times, the University continues to invest in the campus whether to address maintenance or infrastructure problems or to construct new facilities funded in previous budget cycles. A Master Plan is developed to coordinate millions of dollars of investment. Significant opportunities for cost savings and for addressing multiple goals with such incremental investments can be overlooked unless coordinated.
- Second, physical planning, like budget planning, is an important activity for a large complex organization such as MSU. The act of planning and the culture it fosters, enables the institution to make informed decisions that address multiple constituencies and needs across the campus.
- Third, the nature of the environmental goals established by the University require coordination if they are to be achieved. Therefore, the purpose of the Master Plan is to provide a flexible framework within which decisions can be made judiciously and such that incremental investments can be coordinated in the context of a long-term vision—all with the aim of creating a coherent, efficient campus environment.



To that end, Master Plan provides a dynamic framework that can be reinterpreted over time. It is intended to:

- Serve as a living document that can adjust to the changing circumstances of the University.
- Offer a long-range strategic view coordinated with more predictable near-term capital investments.
- Provide specific guidance for several broad frameworks including land use, landscape, infrastructure, mobility and the relationship of the campus to the surrounding community.

The goal is to provide a coordinated context for guiding near-term decisions that ultimately contribute to a long-term vision for the campus. To remain flexible and current, it is recommended that the Master Plan be updated every five years followed by a major re-examination every ten years.



VIEW OF THE MASTER PLAN LOOKING NORTH



In summary, the purpose of the Master Plan is:

- To provide a vision for the future
- To provide a comprehensive framework for decision-making; one that enables “Joined-up” thinking and coordinates investment
- To assist in developing a culture of planning; an ongoing process and “accounting” procedure for decision-making
- To create a dynamic plan; one that is flexible



MASTER PLAN REVIEW HELD WITH CAAD AND LANDSCAPE ARCHITECTURE STUDENTS



PUBLIC MEETING TO REVIEW PROGRESS ON THE DEVELOPMENT OF THE PLAN



PUBLIC MEETING TO REVIEW PROGRESS ON THE DEVELOPMENT OF THE PLAN

The Master Plan is the outcome of a year-long planning process that engaged a wide cross section of the campus and local communities. The process itself is one of the results of the Master Plan; a process designed to foster a planning culture to not only inform the development of the plan but to also guide future implementation.

THE PLANNING PROCESS

The Master Plan is the outcome of a year-long planning process that engaged a wide cross section of the campus and local communities. The process itself is one of the results of the Master Plan; a process designed to foster a planning culture to not only inform the development of the plan but to also guide future implementation. The process is viewed as a critical success factor for the Master Plan and the “culture of planning” that formed during the development of the plan and will continue into the future through the Master Planning Development and Advisory Committee assembled for the project.

The planning process commenced in February of 2010 with representation from the University and broader communities and was completed under the direction of the Master Planning Development and Advisory Committee. It included seven multi-day work sessions with a variety of University and community representatives.

The process consisted of three-phases. The products of each phase are recorded in detailed and extensive PowerPoint presentations and memoranda provided to the University in digital format.



EXISTING CONDITIONS 2010



ALTERNATIVE 1

PHASE ONE: INVENTORY AND ANALYSIS

Phase One included interviews with University stakeholders to ascertain the desired outcomes, principles, goals and objectives for the Master Plan. A preliminary investigation of existing conditions was also conducted for the campus and surrounding community context. These initial efforts were followed by an in-depth analysis of campus conditions, addressing such elements as program organization, open space structure, circulation patterns, utilities and stormwater management, energy use, and carbon emissions. Phase One also included investigation of the planning history of the campus. Specifically, research was conducted on the involvement of the Olmsted firm in the design and planning of the physical environment of the campus from the late 1960s–1980s. The Olmsted firm is the succession landscape practice of Frederick Law Olmsted, designer of Central Park in New York. Over 700 MSU-

related documents are on file with the Olmsted Archive maintained by the National Park Service in Brookline, Massachusetts. A PowerPoint presentation documenting the firm's contribution to the campus is on file with the Office of Campus Planning.



ALTERNATIVE 2



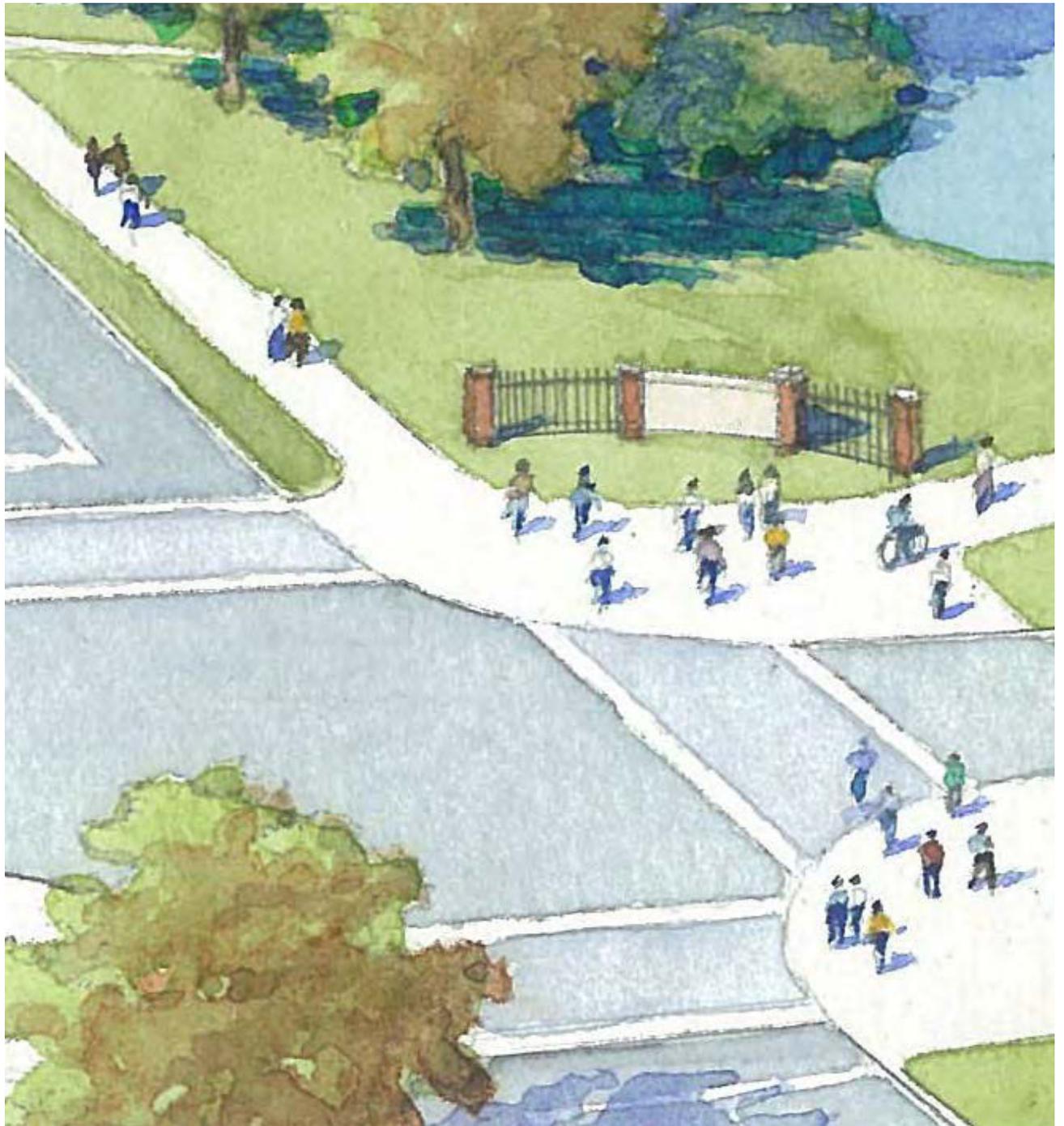
ALTERNATIVE 3

PHASE TWO: CONCEPT ALTERNATIVES

The concept alternatives phase examined the most favorable and acceptable options for near-term and long-term campus development. The alternatives addressed options for land use, landscape character, circulation and parking, program accommodation and overall campus integration. The purpose of Phase Two was to identify a preferred concept alternative or a hybrid of the alternatives. The process included a comparative assessment of the concept alternatives in association with the Master Planning Development and Advisory Committee, other University stakeholders and community leaders. The Phase Two process resulted in the selection of a preferred direction for the future of the campus.

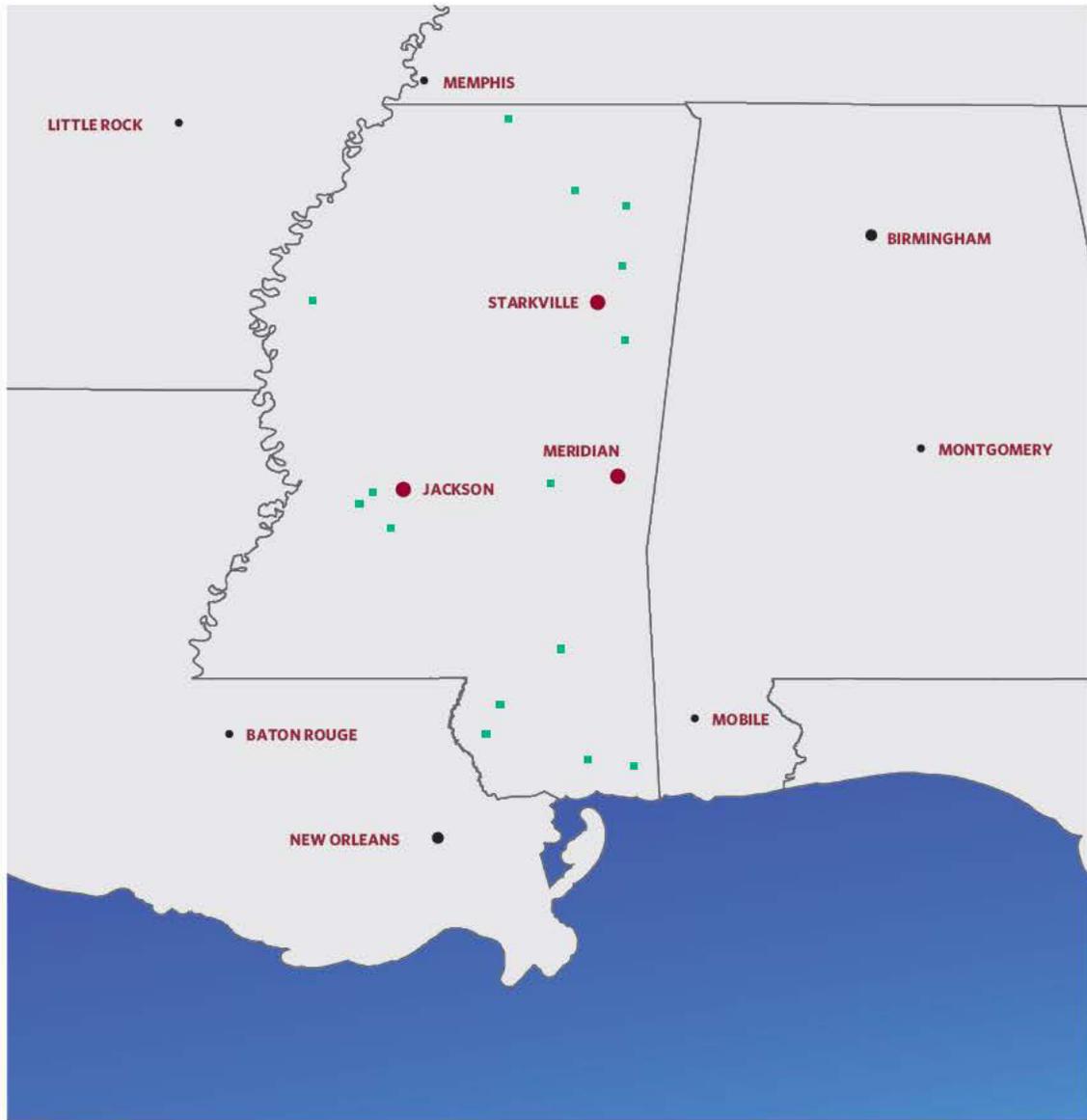
PHASE THREE: MASTER PLAN DOCUMENTATION

Phase Three focused on the detailed development and documentation of the Master Plan. The final documentation records the findings of the process and is intended to guide decision-making and the incremental implementation of the Master Plan. The Master Plan provides a vision for the future and illustrates the long-term build-out potential of the campus. It prioritizes immediate and long-term strategies, identifying specific target projects for implementation. The Master Plan serves as a foundation for the Office of Campus Planning, as a document for fundraising, and as a basis for promotional efforts.





PLANNING BACKGROUND



MSU LOCATIONS

- MAFES RESEARCH STATIONS
- MSU CAMPUSES AND ACADEMIC FACILITIES



MSU CAMPUS CONTEXT

THE PLANNING CONTEXT

Mississippi State University has locations throughout the state related to the Mississippi Agricultural and Forestry Experiment Stations (MAFES) which encompass over 20,000 acres of land dedicated to agricultural and forestry research. The University also has offices in all 82 Mississippi counties as part of the United States Department of Agriculture's Cooperative Extension Service program. The main campus in Starkville encompasses over 4,400 acres of land including the contiguous R. R. Foil Plant Science Research Center (North Farm) and the H. H. Leveck Animal Research Center (South Farm), the Thad Cochran Technology and Economic Development Park, and the Forestry Operations and Wildlife and Fisheries Facility on Blackjack Road.

The main campus is located in the Golden Triangle Region of the state which includes Starkville, Columbus and West Point. The Golden Triangle is the primary economic development region associated with the University. MSU also operates branch campuses in Meridian and Jackson. The Meridian Campus includes a purpose-built education campus on the west side of town and the Riley Center (a performing arts and convention center) and adjacent buildings in downtown Meridian. The Jackson location accommodates the fifth year program of the College of Architecture.

The main campus is bordered by the town of Starkville on the west and unincorporated parts of Oktibbeha County on the north, east and south. MSU works closely with the city and county on planning, transportation and economic development matters including the initiatives of the Thad Cochran Technology and Economic Development Park.

The Master Plan focuses on the main campus in Starkville and Meridian and provides design, planning and policy guidance to govern land use, development, transportation and environmental protection.

MASTER PRINCIPLES AND GOALS

The Master Plan embraces the concept of sustainability and is informed by a comprehensive range of **social, environmental and economic goals**. These goals informed the analysis, concept development and final recommendations of the Master Plan. The goal statements reflect the issues discussed during the planning process and incorporate the aspirations and initiatives of MSU, including the goals established by the MSU Sustainability Coordinator (MSU-SC). The charge of the MSU-SC is to develop policies and implementation procedures for guiding the wise use of institutional resources, enhance the quality of life on campus and in the larger community, and foster a sustainable future.

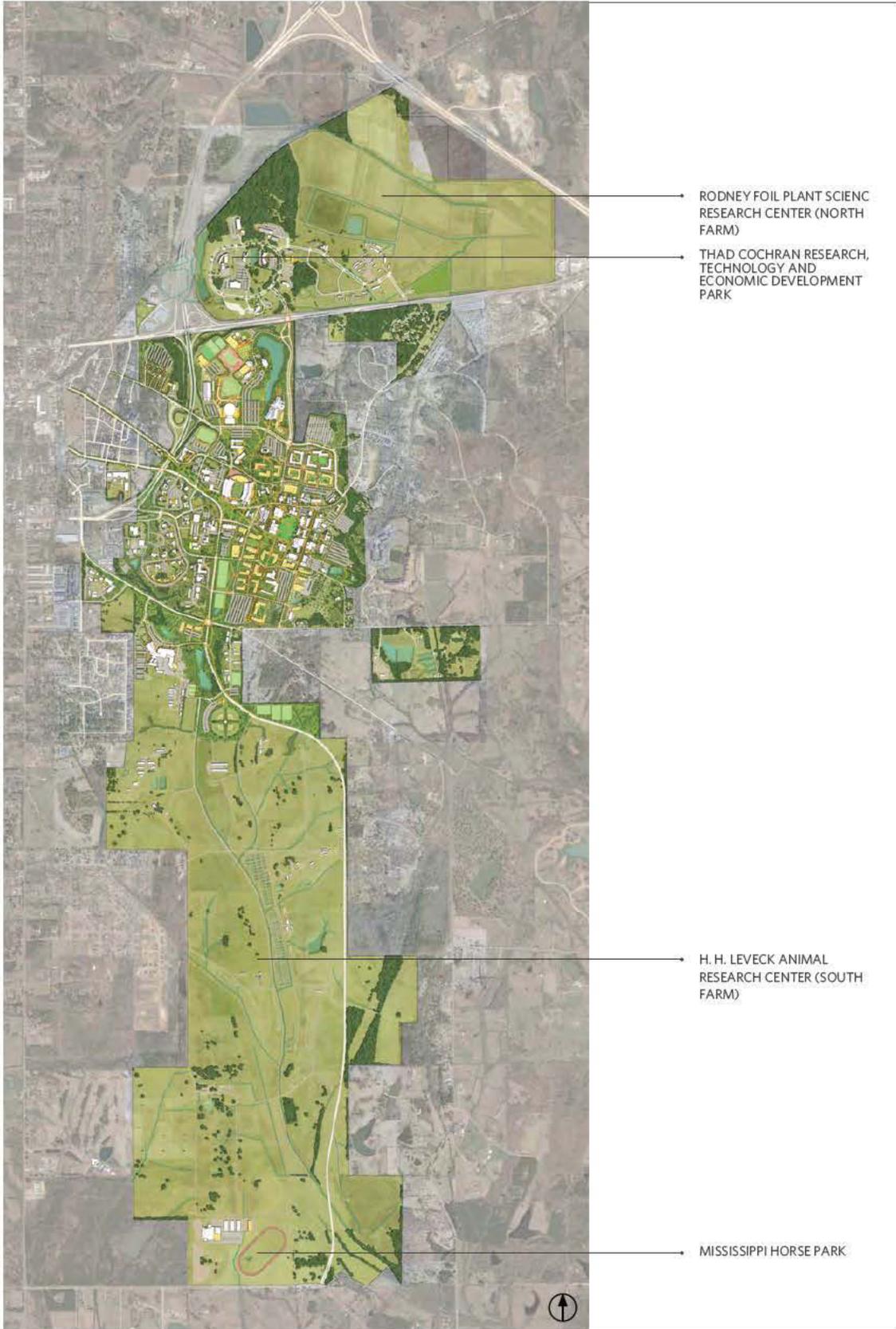
MSU-SC offers targets and guidance through its Vision 2020 initiatives. Vision 2020 addresses goals and performance metrics intended to improve the campus environment. The goal is to obtain and operate a sustainable campus with the following targets:

- 50 percent reduction in resource use and waste/pollution production
- 50 percent increase in sustainable transit measures
- 50 percent increase in recycling activity
- 50 percent increase in sustainable curriculum and research activities
- 50 percent increase in community/university sustainable partnerships by the year 2020

Source: www.eco.msstate.edu, March 24, 2010

The Master Plan goals fall into the following categories:





MASTER PLAN VISION FOR THE STARKVILLE CAMPUS

The Master Plan recommendations respond to the following goals developed during the planning process:

Social

The social goals and issues addressed in the Master Plan include campus population, the vision and mission of MSU, and the quality of community life.



PEOPLE (POPULATION): PLAN FOR GROWTH

The Master Plan is based on a targeted increase in headcount from 18,600 (Starkville headcount Fall 2009) to 22,000 students on the main campus within a timeframe of 5 years. The associated impact of this growth, including the need for additional faculty, staff, space, housing and parking, is accommodated in the Master Plan.

The proposed increase in headcount to 22,000 students equates to a projected Full-time Equivalent (FTE) of 19,100 students and associated increases in Faculty and Staff FTE. The projected increases in campus population are detailed in Space Need Analysis Report provided in the Technical Appendix.



MISSION: SUPPORT THE ACADEMIC, RESEARCH AND OUTREACH MISSION OF MSU

A key goal of the Master Plan is to ensure that the facilities and resources needed to support the academic, research and outreach mission of MSU are addressed. The Master Plan includes a space needs analysis for existing and future enrollment levels and a series of policy recommendations intended to ensure that appropriate academic and research facilities are provided and efficiently utilized. The land resources required to support the land grant legacy of the University are also protected through land use planning and policy guidance.

For reference, the Vision and Mission Statements of the University are as follows:

Vision

Mississippi State University will be a leading public research university that is globally aware and involved, accessible and responsive to the many constituencies it serves, and fully integrated with the intellectual, social, and economic development of the state, while delivering excellent programs of teaching, research, and service.

Mission

Mississippi State University is a public, land-grant university whose mission is to provide access and opportunity to students from all sectors of the state's diverse population, as well as from other states and countries, and to offer excellent programs of teaching, research, and service.

Enhancing its historic strengths in agriculture, natural resources, engineering, mathematics, and natural and physical sciences, Mississippi State offers a comprehensive range of undergraduate and graduate programs; these include architecture, the fine arts, business, education, the humanities, the social and behavioral sciences, and veterinary medicine.

The university embraces its role as a major contributor to the economic development of the state through targeted research and the transfer of ideas and technology to the public, supported by faculty and staff relationships with industry, community organizations, and government entities.

Building on its land-grant tradition, Mississippi State strategically extends its resources and expertise throughout the entire state for the benefit of Mississippi's citizens, offering access for working and place-bound adult learners through its Meridian Campus, Extension, and distance learning programs.

Mississippi State is committed to its tradition of instilling among its students and alumni ideals of diversity, citizenship, leadership, and service.

Source: <http://www.msstate.edu/web/mission.html> (accessed November 30, 2010)



LEE HALL



MCCAIN HALL



PLACE: PROTECT AND ENHANCE THE HISTORIC BUILDINGS, LANDSCAPES AND MONUMENTS OF THE CAMPUS; RESPECT THE TRADITIONS OF THE CAMPUS

The value placed on the historic buildings, landscapes and monuments of the campus by the MSU community, alumni, visitors and residents of Starkville is an important consideration. The Master Plan includes recommendations for protecting these cultural resources and the sense of Place they collectively form.

The MSU campus is distinguished by its historic, contributing buildings and landscapes which form a memorable image and identity for the University. The campus landscapes and iconic open spaces such as the Drill Field are as important to the image and character of the campus as the historic buildings. The memorable landscapes, in addition to the Drill Field, include the Junction, Bell Island, Eckies Pond, Chadwick Lake and "lost" landscapes such as President's Circle.

MSU has three buildings listed on the National Register of Historic Places (Cooley, Montgomery, Industrial Arts) and several other buildings designated as Mississippi landmarks. The historic buildings and landscapes along with a well-planned series of monuments are protected and enhanced as the cultural resources of the campus while ensuring that each addresses current and future programmatic needs.



QUALITY OF LIFE (COMMUNITY): ENHANCE THE QUALITY OF LIFE ON CAMPUS AND IN STARKVILLE

Quality of life, defined as the overall quality of the environment and the health and well-being of the campus population and local residents, is an important aspect of a sustainable community. The Master Plan provides recommendations for improving the quality of campus life for resident students, commuter students, faculty and staff as well as recommendations for improving relationships and connectivity with the local community.

The Master Plan addresses several campus life elements including: housing, dining services, and space for lounges, study space and recreation. It also addresses connectivity and linkages between the campus and the town with the understanding that engagement with the city provides the opportunity to foster the social and economic dimensions of sustainability.

Environmental

The environmental goals and issues addressed in the Master Plan are divided into three sub-categories: 1) natural systems; 2) built environment; and 3) resource flows.

1. NATURAL SYSTEMS



CLIMATE: PLAN AND DESIGN IN RESPONSE TO THE CLIMATE

Sustainable building and landscape design requires an understanding of the local climate conditions and the impact these conditions have on human comfort, energy use, and rainwater management. In response, the Master Plan provides specific guidance for building orientation and the use of landscape to provide shading and address rainwater (stormwater) management objectives.



LAND FORM, VEGETATION AND HABITATS: PROTECT AND MANAGE THE LAND RESOURCES, NATURAL SYSTEMS AND HABITATS OF THE CAMPUS.

As a land grant institution, the way in which MSU protects the land resources, forests and the habitats of the campus is a reflection of the sustainability values of the institution. The Master Plan provides planning and design guidance to ensure that sustainable land management practices are observed.



HYDROLOGY: PROVIDE A COMPREHENSIVE CONCEPT FOR STORMWATER MANAGEMENT

With the focus on sustainability, stormwater management concepts are incorporated in the landscape and infrastructure design recommendations for the campus and the surrounding context. Stormwater is noted to be a community-wide concern given the way in which off-campus development affects the hydrological conditions on the campus and vice versa.

The Master Plan recommends a comprehensive stormwater management strategy for the campus utilizing low-impact design techniques combining engineering with landscape elements. The intended outcome is a stormwater strategy featuring ponds, bioswales, and rain gardens that manage water above ground in association with landscape solutions that improve the aesthetic qualities of the campus environment.

2. BUILT ENVIRONMENT



LAND USE: PROTECT CAMPUS LAND FOR AGRICULTURE, FORESTRY, RESEARCH, ATHLETICS AND RECREATION.

MSU's legacy as a land grant University is evident in the 4,400 acre main campus and extensive land holdings across the state. To ensure that land resources are provided to support the existing and future mission of MSU, the Master Plan includes policies and planning guidance to protect and preserve land for mission-related purposes.



LANDSCAPE: DEVELOP A "WORKING LANDSCAPE"

Sustainable landscape practices are proposed in the Master Plan to assist the University in developing a "working landscape". A working landscape strategically positions trees and other landscape elements to provide shade, mitigate the heat island effect and contribute to a comprehensive stormwater management strategy. A working landscape contributes to energy efficiency goals by shading buildings and horizontal surfaces, thereby, reducing the air conditioning loads on buildings. The landscape can also be viewed as a location for geothermal energy.



SPACE: PROVIDE SPACE FOR THE ACADEMIC, RESEARCH AND OUTREACH MISSION

Providing appropriate and adequate space to support the academic, research and outreach mission of MSU is a goal of the Master Plan. The space needs recommendations are based on assessments of building conditions and analysis of space needs. Building renovation and demolition recommendations are provided along with potential new development to meet projected space needs. Detailed information for the building conditions and space needs is provided in the Technical Appendix.

The Master Plan provides a flexible approach for accommodating the current and future academic and research space requirements of MSU. Based on the projected needs for a headcount of 22,000 students, additional space is required for offices, study and library functions, assembly and exhibition, dining, student union and lounge and recreation (details are provided in the Space Needs Report of the Technical Appendix). Interdisciplinary research is noted to be an emerging focus area requiring new facilities to encourage collaboration among faculty members. The Master Plan, through a combination of renovation and new construction, illustrates adequate capacity to accommodate the emerging academic and research needs of MSU.



INFRASTRUCTURE: PROMOTE SUSTAINABLE INFRASTRUCTURE SYSTEMS

The efficiency of the campus generation and distribution systems is a key consideration for the sustainable future MSU is targeting. The Master Plan concentrates future development in the academic core in order to better utilize existing infrastructure and to facilitate an efficient expansion of the systems. Detailed recommendations for infrastructure improvements are provided in the Technical Appendix.



MOBILITY: TARGET A 50% INCREASE IN SUSTAINABLE TRANSPORTATION OPTIONS BY 2020

MSU's recent focus on the pedestrianization of the campus combined with an emphasis on bicycle use supports the sustainability objectives of the MSU-SC, notably the desired increase in sustainable transportation options and the associated reduction in transportation-related greenhouse gas emissions.

The recommendations of the Master Plan provide a comprehensive, integrated approach to transportation embracing the concept of mobility; recommendations that provide a number of transportation options to serve the campus community with the goal of decreasing single occupancy vehicle use on the campus and reducing the associated impacts including congestion and emissions. To that end, improvements to infrastructure, land use coordination and scheduling/operational strategies are proposed in the Master Plan.

Resource Flows



POTABLE WATER: Target a reduction in water consumption

The University consumes an average of one million gallons of water per day. In line with the sustainability objectives of MSU, strategies are required to reduce consumption and patterns of use. The Master Plan supports this objective, in part, by proposing the use of indigenous plant materials (plants that require less irrigation) and other infrastructure improvements. Details for the potable water infrastructure and strategies for reduction consumption are provided in the Technical Appendix.



ENERGY: TARGET A 30% REDUCTION IN ENERGY CONSUMPTION BY 2020

MSU has made good progress toward its sustainability goals by reducing energy consumption by 20+ percent since 2006 (the base line year). This progress is of particular importance given the IHL's mandate to reduce energy consumption by 30 percent and MSU's decision to sign the American College and University President's Climate Commitment (ACUPCC) and the ultimate goal of working toward climate neutrality.

The Master Plan incorporates planning and landscape strategies to reduce energy consumption on both existing and proposed buildings. A shade strategy, based on the strategic placement of trees, is incorporated in the plan to reduce the cooling load of buildings and diminish the size and impact of heat islands adjacent to buildings. Future buildings are oriented on the east-west axis to minimize excessive heat gain in the warmer months and to enhance the passive solar qualities during the winter months. Details for reducing energy consumption of the campus buildings and infrastructure are provided in the Technical Appendix.



EMISSIONS: ACHIEVE CLIMATE NEUTRALITY

As a signatory of the American College and University Presidents Climate Commitment (ACUPCC), Mississippi State University has committed to the goal of climate neutrality. The ACUPCC not only signals the beginning of a focused effort to reduce carbon emissions but also a commitment to sustainability in the broadest sense – a commitment not only to transform the MSU campus, but to continue with the transformation of the mission, curriculum, research and operations of the University. This commitment is in synch with the original land grant values of stewardship, education, research and outreach.

Achieving climate neutrality will necessitate significant changes to University operations and will be detailed in the MSU's forthcoming Climate Action Plan.



MATERIALS/WASTE: TARGET A 50% REDUCTION IN WASTE AND A 50% INCREASE IN RECYCLING BY 2020

In support of this goal, MSU will need to complete an analysis of the waste streams and volumes associated with campus activities, expand the recycling programs and continue to enhance and potentially expand the composting program among other initiatives.

Economic



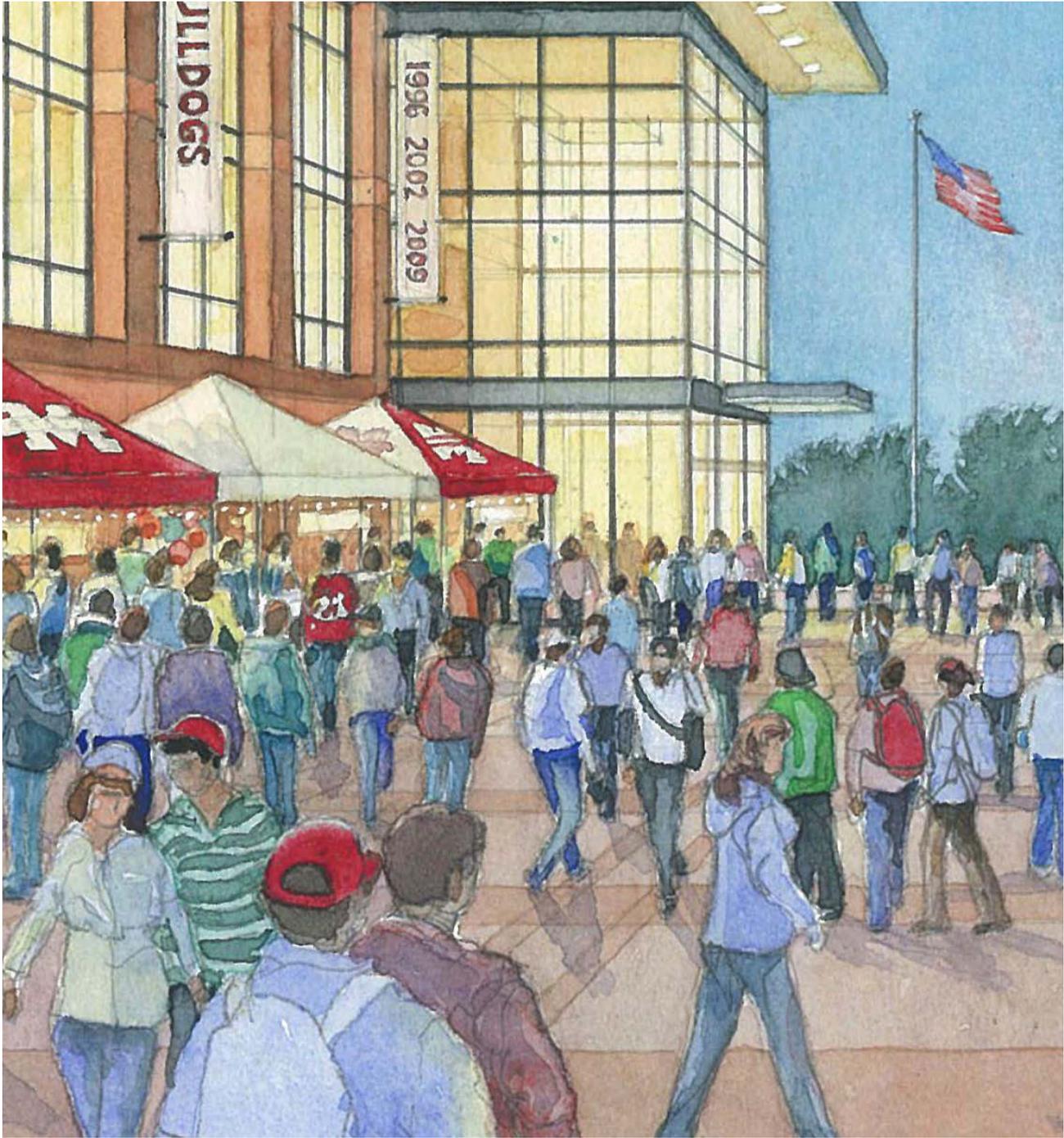
CAMPUS FINANCE: OPERATE THE CAMPUS EFFICIENTLY; COORDINATE INVESTMENTS

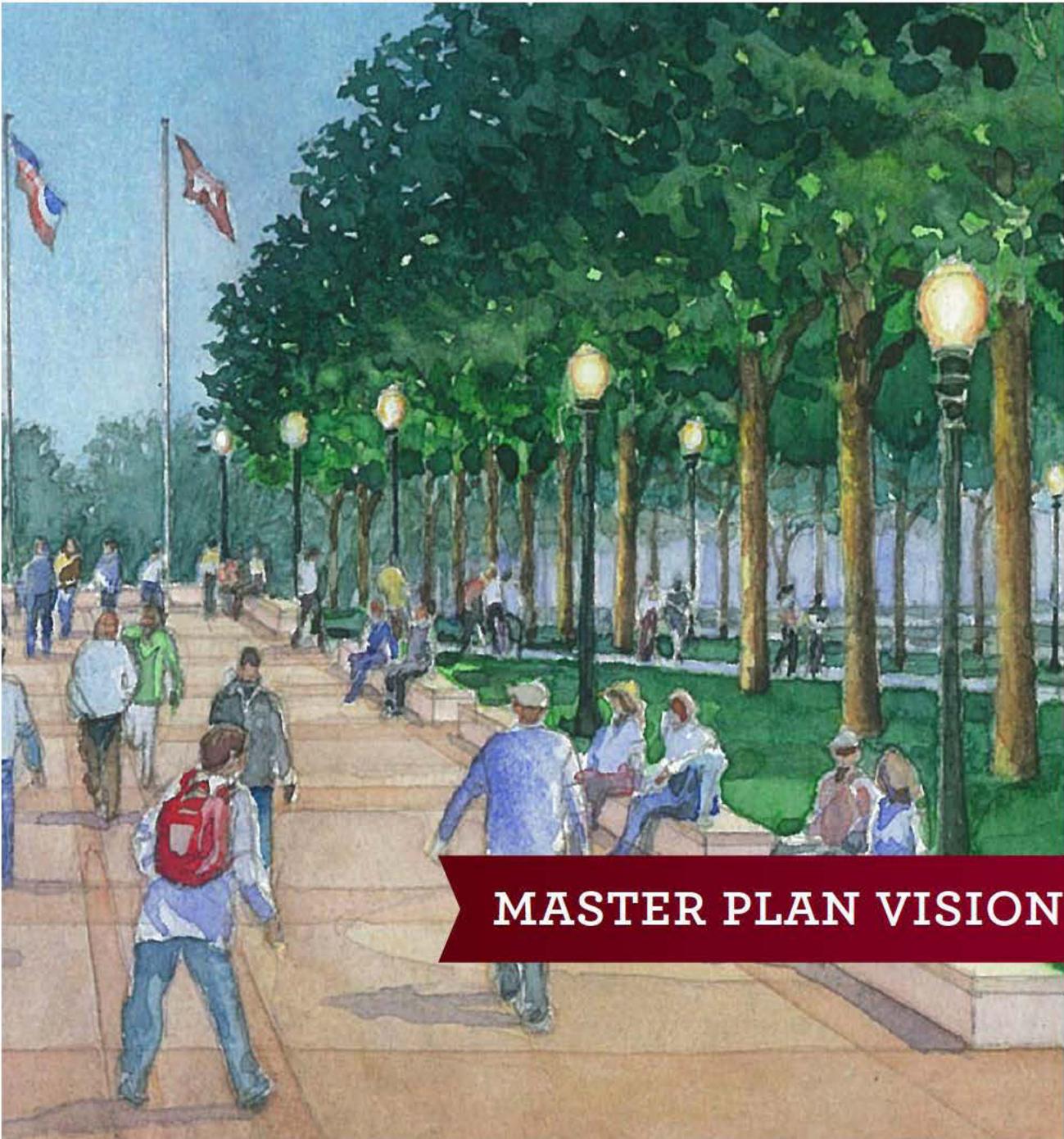
The Master Plan provides a vision for coordinating incremental investment and change in the campus environment. The vision is intended to assist MSU in coordinating infrastructure, landscape, and facilities investment in a way that enables “joined-up” thinking. For example, infrastructure projects that can be coordinated with the envisioned landscape framework such that the vision can be implemented efficiently and economically over time.



ECONOMIC DEVELOPMENT: TARGET A 50% INCREASE IN COMMUNITY/UNIVERSITY SUSTAINABLE PARTNERSHIPS BY THE YEAR 2020

Economic Development is identified as a key focus by MSU-SC. The Master Plan supports this goal by expanding the Thad Cochran Research Park and by fostering better physical connections between the campus and Starkville. The intent is to provide the development opportunities and connections needed to encourage stronger business and social ties with the local community.





MASTER PLAN VISION



THE CENTRAL CAMPUS IN PRESIDENT'S CIRCLE

THE VISION

The Master Plan establishes a vision for the future rooted in the unique history and traditions of MSU, the academic and research mission and the goals and aspirations of the campus community.

The Master Plan promotes sustainable and responsible development with the aim of enriching the natural environment, local community and campus life. It concentrates academic, research and support facilities in the central campus area, limits impacts on surrounding farm land and wooded areas, aims to utilize existing

infrastructure efficiently and promotes a collegiate, pedestrian-scale environment.

The sustainable design strategies of the Master Plan respond to the context and address the relationship between the quality of life, the local climate and resource consumption patterns. It addresses environmental sustainability in four (4) areas: 1) land use; 2) water resources; 3) climate response (energy and atmosphere); and 4) mobility.



In this section of the report, the Master Plan is described holistically and in terms of its physical, programmatic, functional and design frameworks; a series of interrelated systems and elements. The design, programmatic and functional frameworks collectively form a comprehensive and coordinated vision for guiding incremental change on the campus; a vision that will assist the University in transitioning toward a sustainable future.

It is important to note that achieving this vision will require a different way of thinking, budgeting and governing for campus improvements. The Office of Campus Planning is

working to address these issues in the early stages of implementation.

The Master Plan goes beyond buildings to view campus landscape as a capital investment; one that is viewed not only for its aesthetic value but also for the functions it performs with regard to human comfort, shade and rainwater management. Landscape, therefore, requires a funding mechanism to assist the University in achieving a broader range of goals and objectives.



THE MASTER PLAN VISION

THE FRAMEWORKS: INTRODUCTION

The Master Plan consists of physical design, programmatic and functional frameworks which collectively form a comprehensive and coordinated vision for guiding incremental change. The Frameworks are summarized below followed by more detailed descriptions in the subsequent sections of the report.

1. Physical Design Frameworks

The physical design frameworks of the Master Plan describe the sense of place envisioned for the campus and its relationship with the surrounding community.

COMMUNITY INTEGRATION FRAMEWORK

The Community Integration Framework illustrates the physical design concepts for strengthening connections between the campus, the Cotton District and downtown Starkville.

LAND USE FRAMEWORK

MSU's legacy as a land grant University is evident in the extensive land holdings of the 4,400 acre main campus. The South and North Farms serve as open laboratories for a number of programs in agriculture, forestry, veterinary medicine and MAFES. The Master Plan promotes the stewardship of this land to meet the need of current programs as well as future generations. In response, recommendations are provided to protect campus farm land the encroachment of from continued sprawl.

LANDSCAPE FRAMEWORK

The Landscape Framework provides the overall organizational structure for the campus. It responds to the land form, drainage patterns, existing open space structure, and historic landscapes (existing and lost) of the campus. The Landscape Framework is characterized by the Green Corridor, a north/south "central park" through the campus, and the Cultural Corridor, a landscape and circulation route following the former Mobile and Ohio rail alignment through the campus.

CULTURAL RESOURCE FRAMEWORK

The Cultural Resource Framework preserves and enhances the unique history and traditions of the MSU campus. The Framework is defined by the historic buildings, the iconic landscapes such as the Drill Field, and existing and repositioned historic monuments.

DISTRICT PLANS

District Plans provide the general basis for building placement and placemaking in the Master Plan. The Plans encourage infill development and redevelopment in areas of the campus that are underutilized or that would benefit from regeneration. It illustrates a "future state" and includes several new development sites, many of which may not be required for several years. The purpose of the District Plans are to guide incremental development and change in the context of a vision for the future.

The following District Plans are provided:

- Central Academic Core (Drill Field and surrounds)
- South Campus
- Barr Avenue
- Athletics District



MCCARTHY QUADRANGLE

2. Programmatic Frameworks

The programmatic frameworks of the Master Plan describe the manner in which academic, research, and campus life programmatic needs are accommodated in the Master Plan.

LEARNING AND RESEARCH FRAMEWORK

The Learning and Research Framework illustrates known and future academic and research locations proposed in the Master Plan. It is coordinated with the Space Needs Report documented separately in the Technical Appendix.

CAMPUS LIFE FRAMEWORK

The Campus Life Framework highlights the amenities, civic nodes and residential communities that contribute to the quality of campus life. The Master Plan supports the sense of community on campus by creating and enhancing civic meeting points and by providing connectivity between those nodes and to areas in the surrounding community. Community is addressed at the following levels: 1) campus-wide gathering and meeting spaces such as the expanded Colvard Union; 2) residential communities; 3) dining and food services; 4) indoor and outdoor recreational facilities.



THE SOUTH GATEWAY

3. Functional Frameworks

The functional frameworks of the Master Plan describe how the design vision is coordinated with the circulation and infrastructure systems of the campus.

MOBILITY AND ACCESS FRAMEWORK

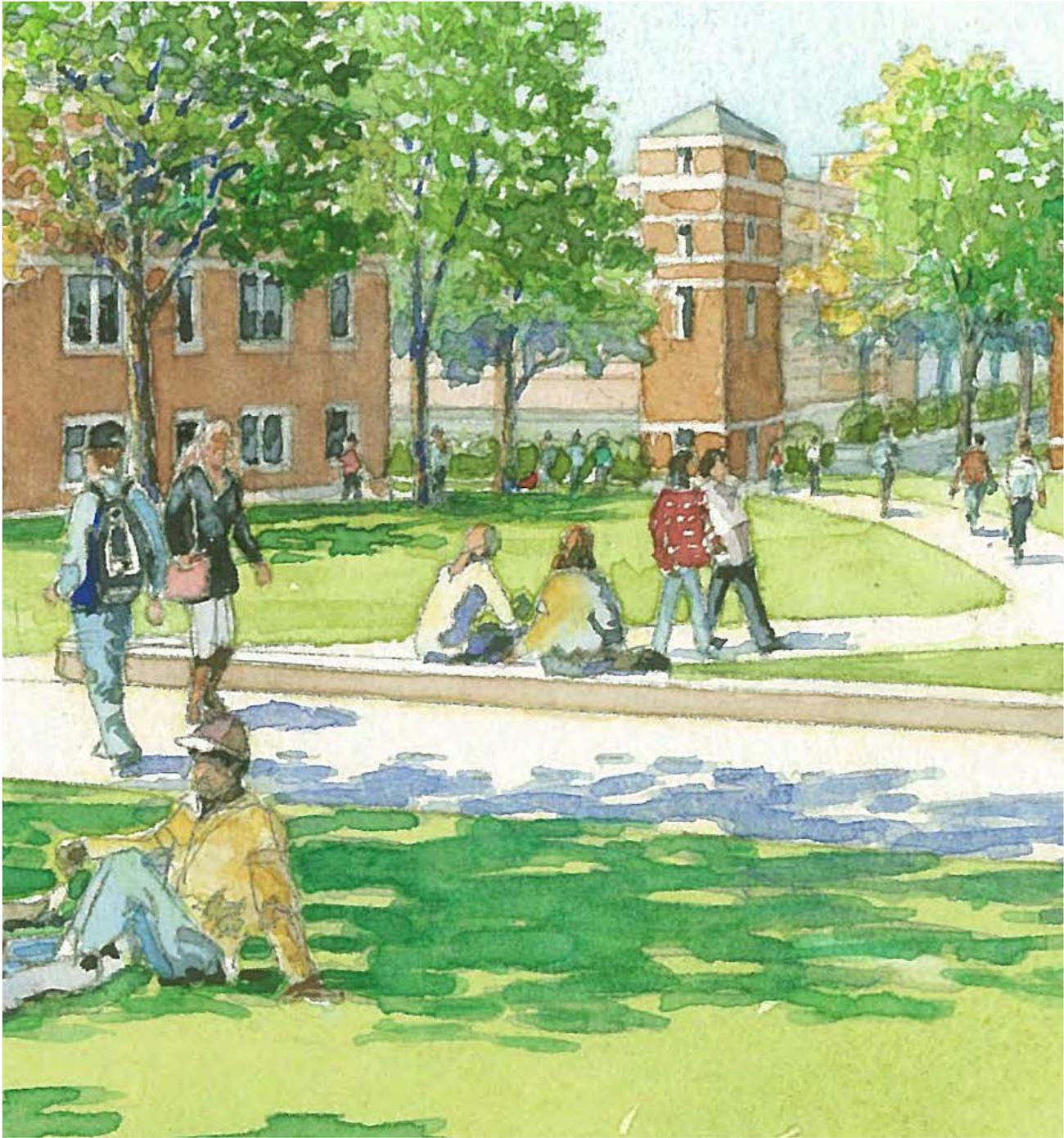
The Master Plan broadly defines transportation and circulation as Mobility and Access to accurately express a more comprehensive and integrated approach to movement. The intent is to transition from the auto-dominated transportation system of today to a more balanced approach emphasizing pedestrian, bicycle and transit movement. This proposed shift is consistent with the stated goals of the MSU Sustainability Coordinator to target a 50% increase in sustainable transportation options by 2020; a goal consistent with the emissions reduction objectives of the University.

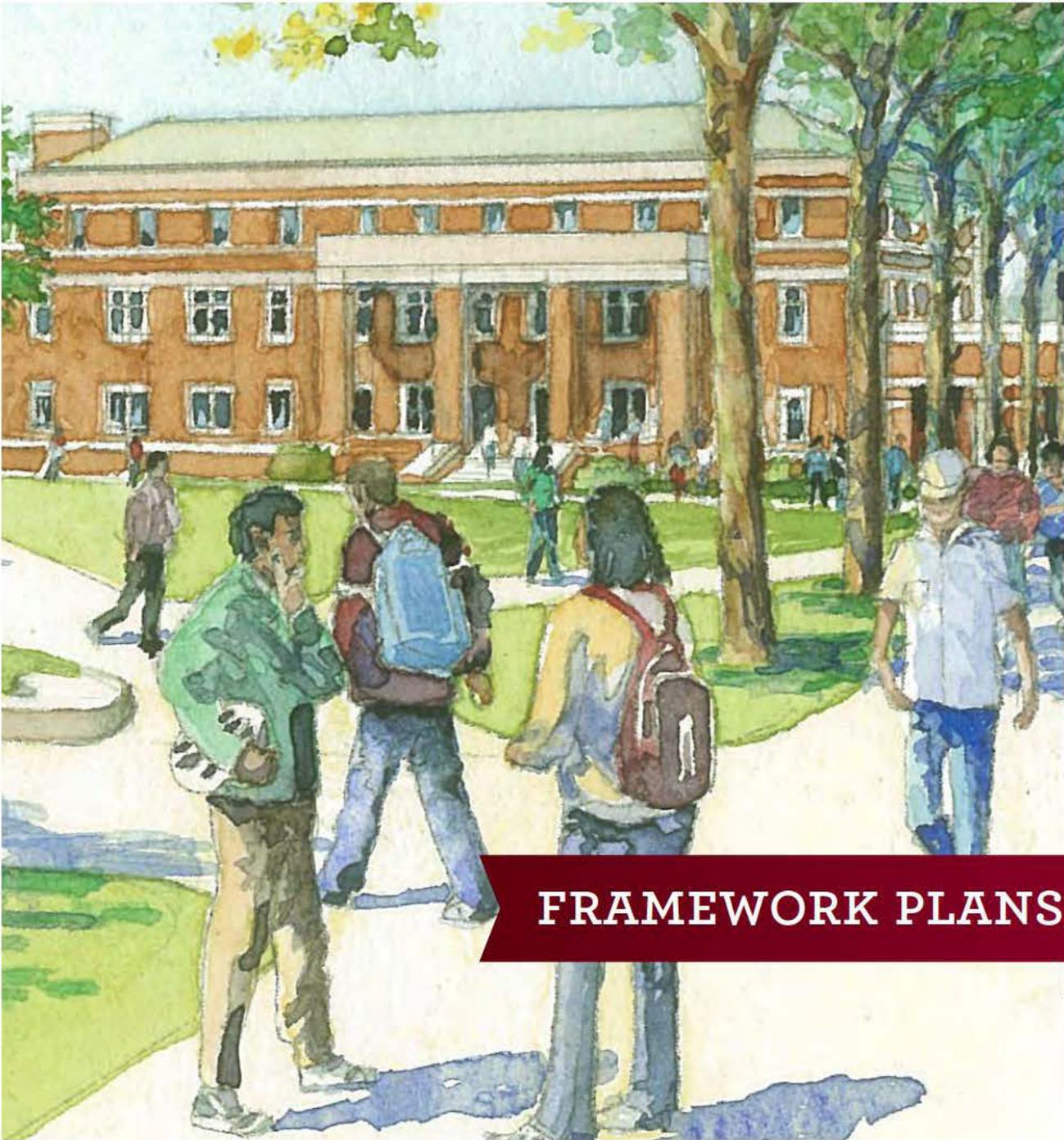
INFRASTRUCTURE FRAMEWORK

The Master Plan provides recommendations for establishing a “green” approach to infrastructure. It focuses on efficiency in the traditional infrastructure and introduces landscape design as a contributor to stormwater management and energy efficiency.

Water Resources Framework: The Master Plan provides a comprehensive stormwater management concept and recommendations with the intent of improving water quality, decreasing runoff and preventing erosion and flooding.

Energy and Emissions: The Master Plan frames the recommendations for reducing energy consumption and the associated emissions of campus activities.





FRAMEWORK PLANS



THE NEAR-TERM VISION FOR THE CAMPUS MAINTAINS ALLEN HALL AND THE FACULTY HOUSING AREA OF THE SOUTH CAMPUS. THE LONG-TERM VISION ILLUSTRATES REDEVELOPMENT IN THE SOUTH CAMPUS AREA.

This section provides a summary of each of the framework plans that together form the comprehensive Master Plan for the campus. The framework plans are organized into three categories: 1) Physical Design Frameworks; 2) Programmatic Frameworks; and 3) Functional Frameworks.

PHYSICAL DESIGN FRAMEWORKS

The physical design frameworks describe the vision for transforming and improving the campus as a place and for providing stronger connections to the surrounding context.

Community Integration Framework

The relationship and connectivity between the University and the surrounding community is enhanced through several physical design recommendations. Specifically, the Community Integration Framework provides stronger connectivity to downtown Starkville, the neighborhoods to the southwest of the campus and apartment complexes to the east of campus. Connections are enhanced by physical design improvements including:

- **Russell/Highway 12 Intersection**—this intersection is improved by the removal of the dedicated right-hand turn roadway segments in order to reconfigure the pedestrian crosswalks and better accommodate bicycle movement.
- **University Drive Land Bridge**—this bridge is reimaged as a “land bridge”; a wider bridge incorporating landscape, pedestrian and bicycle circulation.
- **Collegeview**—bicycle and pedestrian routes are improved along this route to create stronger connections to the existing Aiken Village site and the Nash Street neighborhood.

The Russell and University Drive improvements support the extension of the Cultural Corridor of the campus to the west along the historic railroad alignment.

The goal is to ensure that the campus investments in infrastructure and transportation are coordinated with initiatives of the local community and to encourage social engagement between the University and the community.



PROPOSED STREET SECTIONS ALONG UNIVERSITY AND RUSSELL IN AREAS WITH PARKING



PROPOSED STREET SECTIONS ALONG UNIVERSITY AND RUSSELL IN AREAS WITHOUT PARKING







→ NORTH FARM

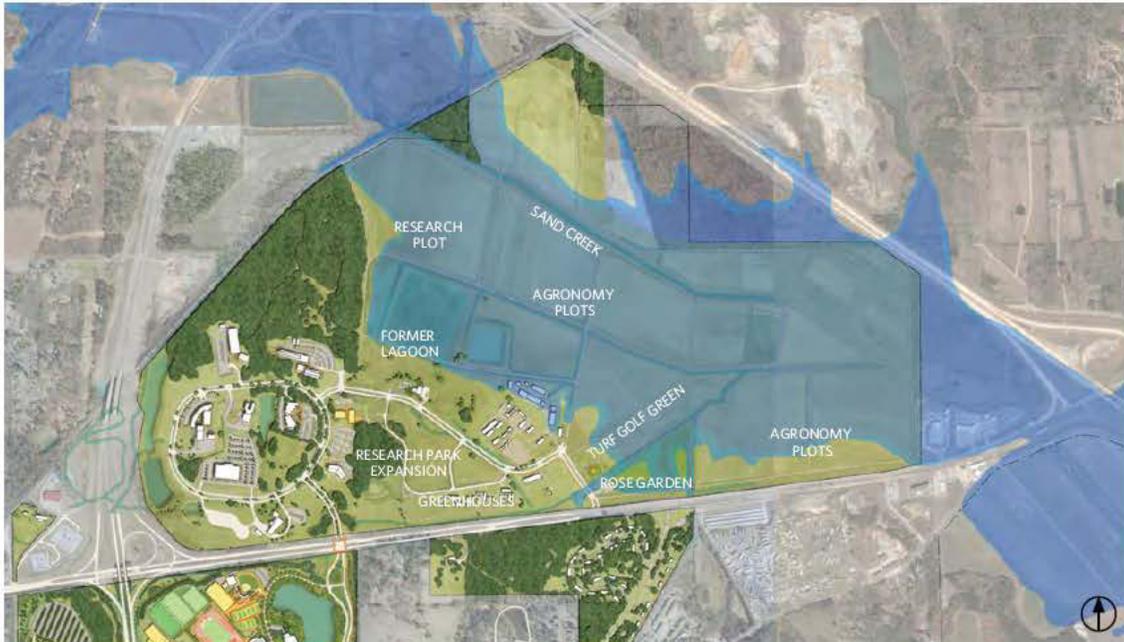
→ RESEARCH PARK

→ CAMPUS CORE

→ VET MED

→ SOUTH FARM

LANDUSE FRAMEWORK ■ FLOOD PLAIN



THE NORTH FARM

Land Use Framework

MSU's legacy as a land grant University is evident in the extensive land holdings of the 4,400 acre main campus. The South and North Farms serve as open laboratories for a number of programs in agriculture, forestry, and veterinary medicine. The Master Plan promotes the stewardship of this land to meet the need of current programs as well as future generations. To that end, recommendations are provided to protect campus farm land from continued sprawl.

RODNEY FOIL PLANT SCIENCE RESEARCH CENTER (NORTH FARM)

The North Farm encompasses some of the best farmland in Oktibbeha County, a factor that can be attributed to the extensive floodplain associated with Sand Creek. To protect this land, no development is permitted on North Farm in the floodplain areas. Development outside the floodplain is limited to uses that are directly related to and support agricultural activities.

The Research Park

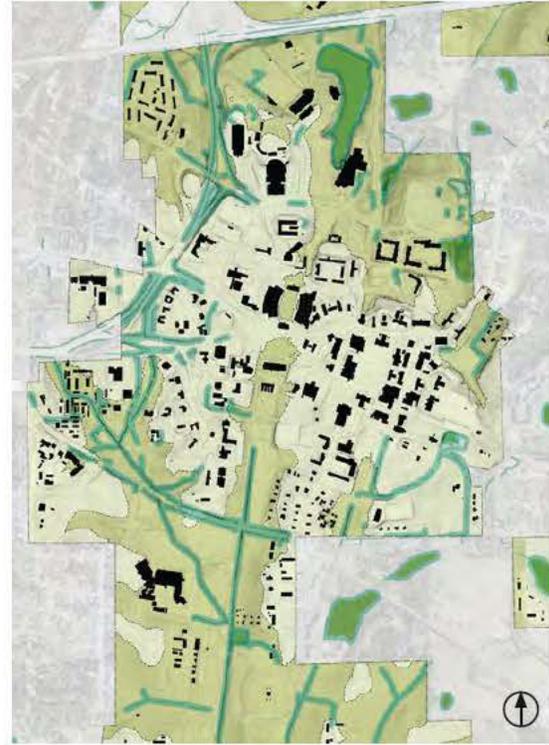
Expansion for the Research Park is reserved to the east of the current development. A new access roadway is proposed to connect Research Boulevard with the expansion site.

H. H. LEVECK ANIMAL RESEARCH CENTER (SOUTH FARM)

The South Farm is defined by the low lying areas of the campus and the associated floodplain conditions Catalpa Creek. A 100 foot wide buffer centered on the alignment of the Creek is provided to ensure protection of water quality and to control erosion. To protect the South Farm lands, development is prohibited unless it is directly related to academic or research activity. Development along the proposed south entry road is also prohibited for any purpose other than agricultural or forestry facilities.



THE PLATEAU
BUILDINGS HISTORICALLY HAVE BEEN SITED ON THE HIGHER GROUND OF THE CAMPUS ABOVE ELEVATION 360'



HYDROLOGY
THE STREAM CORRIDORS AND DRAINAGE PATTERNS OF THE CAMPUS

THE CORE CAMPUS LAND USE FRAMEWORK

The design and planning recommendations for the core campus are informed by the topography, hydrology, landscape, historic and land use development patterns, and circulation routes of the core campus.

- **Topography:** The influence of the topography on the campus development is apparent in the placement of buildings. A majority of the buildings are sited on the higher ground or "plateau" of the campus; the land above elevation 360'. The edges of the plateau, in several areas, are characterized by steep slopes which complicate pedestrian circulation and building placement. The most valuable land for the academic mission is defined by the 10 minute walking radius surrounding the Drill Field. In response, the land within the 10 minute walking radius is prioritized for academic and key campus life facilities.
- **Hydrology:** The stream corridors and drainage patterns are evident in the land use pattern of the campus. Catalpa Creek and its eastern and western branches define the low lying areas along Stone Boulevard and Hardy Road. The open spaces, landscapes and woods associated with these areas are reinforced in the Master Plan as defining features of the campus. On the north side of campus, the low lying area extending from Barr Avenue to Coliseum Drive, and ultimately to Chadwick Lake, is reimagined as a landscape and water management corridor providing strong links between the academic core of the campus and the Athletics District.



PEDESTRIAN SCALE
THE MOST VALUABLE CAMPUS LAND FOR THE ACADEMIC AND RESEARCH MISSION LIES WITHIN A 10-MINUTE WALK OF THE DRILL FIELD



DEVELOPMENT SITES
AREAS IDENTIFIED FOR REDEVELOPMENT

- **Land Use Patterns:** The iconic landscapes and open spaces contribute to a memorable campus character. Building upon the organizational structure established by these spaces, new landscape linkages are proposed in the Master Plan to provide better connectivity and to extend the positive qualities of the landscape to other areas of the campus.
- **Circulation Patterns:** The circulation patterns of the campus are improved and extended to provide a comprehensive network of pedestrian, bicycle, transit and vehicular circulation routes across the campus.
- **Development Sites:** Within the framework of topography, hydrology, land use and circulation patterns of the campus, several development sites are identified. In some cases, the proposed sites include the redevelopment of existing buildings while in other cases, the sites are readily available for development. The Building Conditions Report (see the Technical Appendix) informed the facilities selected for demolition.



DRILL FIELD



THE JUNCTION ON GAME DAY



ECKIES POND



OLD MAIN PLAZA

Landscape Framework

The landscape and iconic open spaces such as the Drill Field are as important to the image and character of the campus as the historic buildings. Ensuring that these landscapes are protected and enhanced is an objective of the Master Plan.

ICONIC LANDSCAPES

The proposed Landscape Framework maintains and enhances the iconic open spaces of the campus including the Drill Field, the Junction, and Eckies Pond. It also extends and enhances recent landscape initiatives including Old Main Plaza and Bell Island.

- Old Main Plaza is extended to connect with the proposed McCarthy Quadrangle and southward to connect with redevelopment that will eventually occur in the South Campus area.
- Bell Island is reimagined to create a new open space east of Davis Wade Stadium; one more closely connected with Old Main Plaza. The removal of parking and traffic from East Lee Boulevard in the vicinity of the Colvard Union facilitates this transformation.



THE GREEN CORRIDOR



THE GREEN CORRIDOR AT DAVIS WADE STADIUM

THE GREEN CORRIDOR (NORTH/SOUTH SPINE)

- The Green Corridor is envisioned as the central “park” of the campus. Defined by the low lying land of the campus topography, the Corridor includes new pedestrian and bicycle pathways linking Chadwick Lake to the RecPlex on the south. The Green Corridor concept provides a long-term strategy for establishing a strong organizational structure for campus development; a structure that can be implemented incrementally over time in conjunction with investments in infrastructure and new facilities.

In addition to broad campus aesthetic goals, the Green Corridor includes a number of functional features of campus-wide importance.

- First, it forms a north/south pedestrian and bicycle corridor through the campus, the intent of which is to provide alternatives to driving.
- Second, it includes rainwater management features, the purpose of which are to address water quality, runoff and erosion concerns, especially along Catalpa Creek south of Blackjack Road.
- Third, it serves as a recreation corridor linking existing and proposed recreational facilities by means of a pathway system, a stronger landscape expression character, and new recreation fields along Stone Boulevard and south of Blackjack Road.
- Fourth, it defines the south gateway to the campus in conjunction with the proposed South Entry Road.



MAJOR ELEMENTS OF THE GREEN CORRIDOR

The character of the Green Corridor changes as it moves through the campus, incorporating existing open spaces such as Chadwick Lake and the Junction while introducing new landscapes where gaps exist. The following is a summary of the major segments of the Green Corridor from north to south:

Chadwick Lake

The Green Corridor originates at Chadwick Lake on the north. As a memorable landscape of the campus, Chadwick Lake is incorporated into the Green Corridor and enhanced by a series of pedestrian and bicycle pathways around the Lake. Additional tree planting is proposed to enhance the picturesque landscape qualities. Connections are provided to the Thad Cochran Research, Technology and Economic Development Park via an improved pedestrian and bicycle crossing at the intersection of George Perry Street and State Highway 182.

Sanderson Link

North of Davis Wade Stadium, Sanderson Link is a new linear landscape proposed in the low lying areas east of Memorial and Giles Halls. Sanderson Link is intended to provide a stronger and more attractive link between the core campus, the Athletics District and the Sanderson Student Recreation and Fitness Center. The aim is to tie the MSU Athletics District more meaningfully to the memorable open spaces and historic buildings of the core campus. It is envisioned to feature new pedestrian and bicycle pathways and a landscape character defined by informal tree groupings and strategically positioned shade trees. It includes rainwater management features designed to improve water quality and decrease the rate of runoff.



STONE BOULEVARD AND RECREATION FIELDS

Davis Wade Stadium lies at the center of the Green Corridor diverting north/south circulation to the east and west. In response, the pedestrian and bicycle pathways embrace the stadium on the east and west in combination with stadium access improvements. On the east side, the existing buildings, Williams and Butler, are removed to allow for the reconfiguration of the entrances to the stadium and to allow for the strong north/south connectivity envisioned in the Green Corridor and Bell Island proposals. On the west side of the stadium, BS Hood Drive is closed along with its continuation to the north, Collegeview Street, to create a western branch of the Green Corridor. The western branch terminates in a new gateway landscape proposed at the intersection of Coliseum Boulevard and the northern extension of Bost Drive.

The Junction

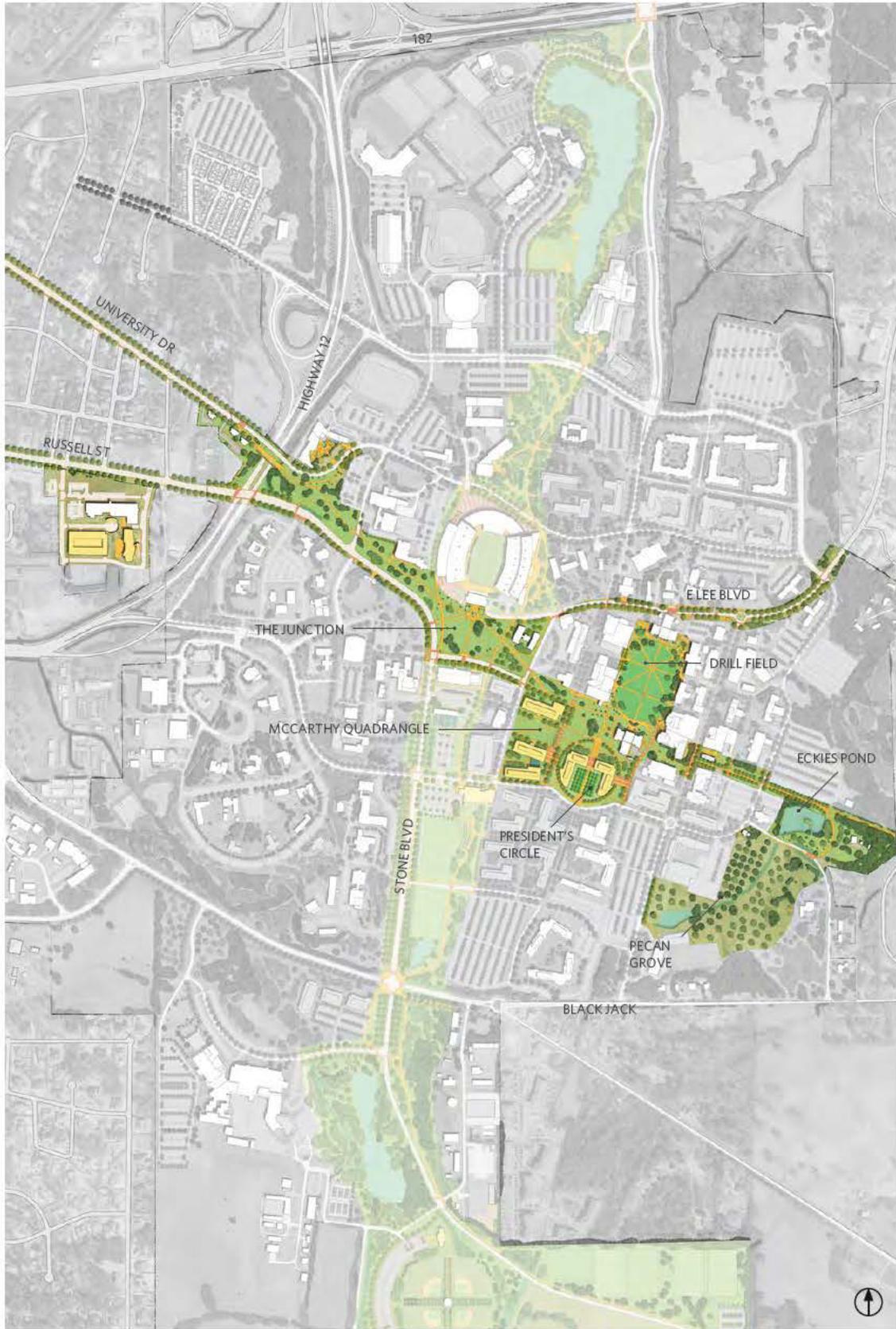
The Green Corridor passes through and incorporates the Junction landscape. The Junction is the intersection point of the Green and Cultural Corridors.

Dorman Walk

The Green Corridor is extended from the Junction to the Stone Boulevard Recreation Fields via a new landscape connection. Dorman Walk extends the pathways and landscape expression of the Corridor between Creelman Street and Bully Boulevard and provides connections to proposed McCarthy Quadrangle to the east.

Stone Boulevard Recreation Fields

The Green Corridor features reconfigured and additional recreation fields along Stone Boulevard in conjunction with the proposed north-south pedestrian and bicycle pathway system. In response to topographic conditions, an amphitheater is proposed on the east side of the fields providing an overlook and seating for competition events. The fields address a significant need for campus intramural sports programs and provide an amenity for residents of the emerging and future housing in the South Campus District. The fields are designed as part of the South Gateway. Pending the details of implementation, the proposed field space may become a component of the Catalpa Creek stormwater management strategy. Specifically, the fields may be positioned at a lower elevation and designed to flood during major storm events, holding back water and preventing downstream erosion and flooding problems. A pond is proposed at the south end of the fields as part of a comprehensive central stormwater management strategy.



THE CULTURAL CORRIDOR



THE SOUTH GATEWAY

The South Gateway

The Green Corridor encompasses the alignment of the proposed South Entry Road linking Poor House Road to the Blackjack Road/Stone Boulevard intersection. The new roadway provides the opportunity: 1) to rethink the land area south of Blackjack Road as part of the campus entry and gateway experience; 2) to address the significant flooding problems that occur along Catalpa Creek to the east of the College of Veterinary Medicine; and, 3) to coordinate a number of planned and required investments such that they contribute to a broader vision for the South Entry.

The vision for the South Entry Road is to create a new South Gateway defined by ponds set in a picturesque landscape; a southern equivalent to Chadwick Lake. The Gateway experience begins on the east boundary of the South Farm where the South Entry Road adopts a northwesterly alignment. Land uses along the proposed road transition from the rural character of the South Farm, to the RecPlex and proposed recreational fields (south of the 21 Apartments), to the ponds located east of the College of Veterinary Medicine. The South Gateway landscape is designed to create a dramatic new entrance landscape to the campus while solving several functional problems:

- First, it incorporates ponds designed to solve flooding and stormwater management problems that currently exist on the south end of campus.
- Second, it includes the redesign of the Blackjack/Stone Boulevard intersection to facilitate safer pedestrian and bicycle connectivity between the expanded RecPlex and the core campus.
- Third, it enhances the Blackjack streetscape from Stone Boulevard to Hardy Road by means of a decorative fence on the north and south side of the road to channel pedestrians from the 21 Apartments to a safe crossing point at the Stone Boulevard/Blackjack intersection.
- Fourth, it expands the RecPlex to include additional fields and replacement recreational tennis courts.



THE CULTURAL CORRIDOR

The proposed Cultural Corridor follows the alignment of the former Mobile and Ohio railway that crossed the campus prior to the 1960s. The Corridor is envisioned as a link from the Junction to the Drill Field and eastward to Eckies Pond and is defined by landscape improvements and new pedestrian/bicycle pathways.

THE CULTURAL CORRIDOR

The proposed Cultural Corridor follows the alignment of the former Mobile and Ohio railway that crossed the campus prior to the 1960s. The Corridor is envisioned as a link from the Junction to the Drill Field and eastward to Eckies Pond and is defined by landscape improvements and new pedestrian/bicycle pathways. It builds upon the recent improvements to the Junction and extends westward along Stone Boulevard to Highway 12. Ultimately, the Corridor is intended to link the campus and downtown Starkville along University Drive and Russell Street. It is also intended to provide a link to Eckies Pond and the apartment complexes located to the east of the campus.

The Cultural Corridor is intended to improve the quality of the campus landscape while addressing broader functional needs. In particular, it forms the east/west pedestrian and bicycle link providing the substantial student population west of Highway 12 with alternative means of access to the campus. The landscape of the Corridor transitions from the informal character of Stone Boulevard, to the formal qualities of the Drill Field, to an informal character at Eckies Pond.



PRESIDENT'S CIRCLE ILLUSTRATING "NEW ALLEN HALL"



HIISTORIC VIEW OF PRESIDENT'S CIRCLE



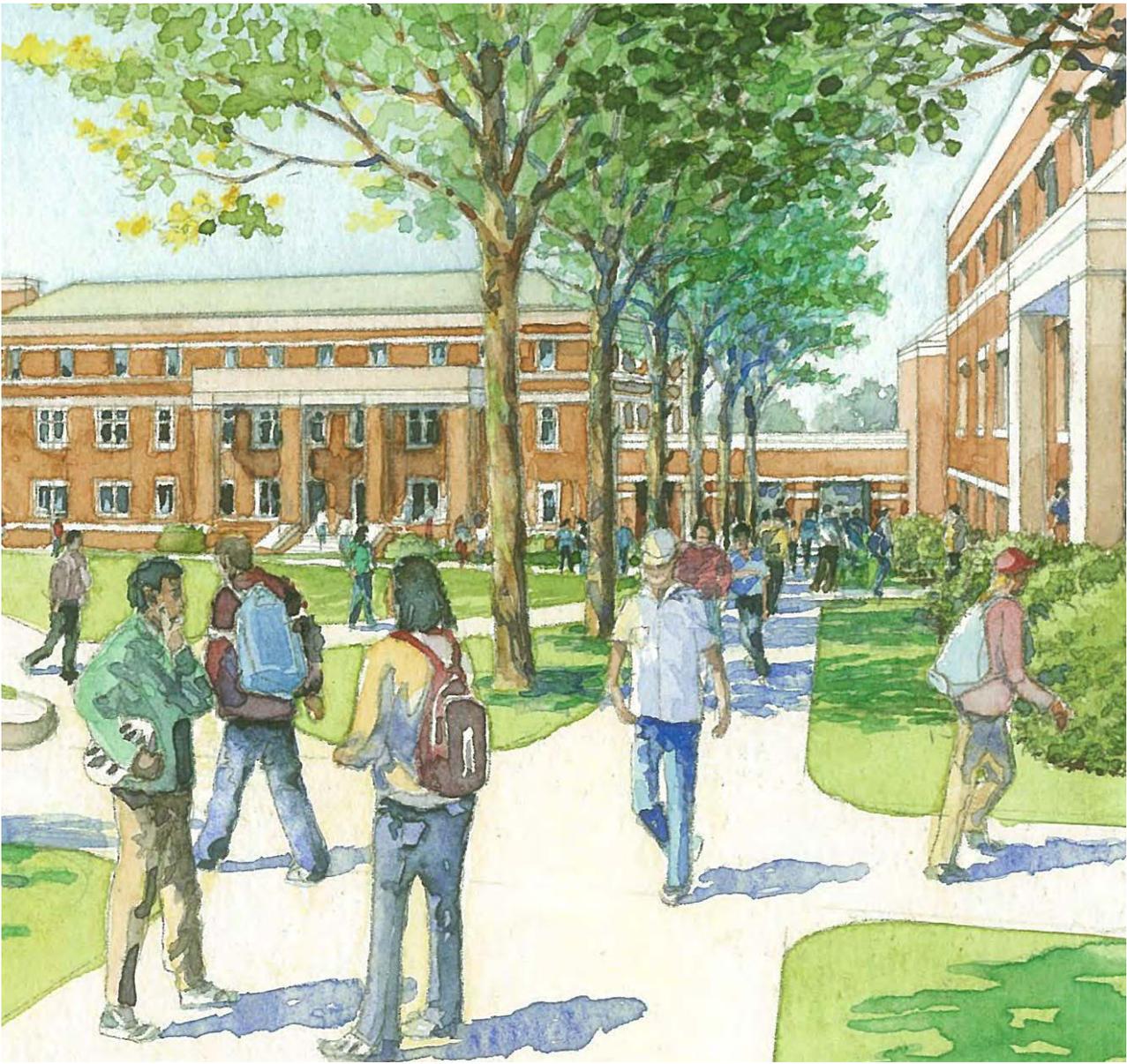
President's Circle

President's Circle is one of the lost spaces of the campus. Centered on the current site of Allen Hall, this former open space was the site of the President's House until the 1960s. The Master Plan resurrects this campus organizational concept to guide the placement of future buildings that will eventually replace Allen Hall. In the interim, the new Circle is intended to better integrate Allen Hall into the campus landscape.



McCarthy Quadrangle

In order to expand the academic core in close proximity to the Drill Field, new academic facilities are proposed on the site of McCarthy Gymnasium. The placement of the proposed buildings is defined by McCarthy Quadrangle, a new open space centered on the Agricultural and Biological Engineering Building (Ag/Bio).





BARR AVENUE CORRIDOR

EAST/WEST CONNECTIONS

The Landscape Framework incorporates several east/west routes through the campus with the intention of improving pedestrian connectivity and clarity. The pattern of connections follows existing and proposed pathway alignments coordinated with the broader tree planting and shade strategy of the Master Plan. The idea is to ensure that the east/west connections emerge as shaded, safe and convenient routes that encourage pedestrian movement. Notable east/west connections include:

- 1 McCarthy Quadrangle to the Landscape Architecture Building.
- 2 Creelman Street to the Sorority and Fraternity neighborhoods.
- 3 Arbour Road—a new east/west road proposed through the South Campus District—to the Sorority neighborhoods.
- 4 Barr Avenue—east of George Perry is redesigned to extend the character and bike routes.
- 5 Hurst Lane—is reimagined to provide better pedestrian and landscape connectivity.



EAST/WEST CONNECTIONS





NORTH/SOUTH CONNECTIONS



LEE WALK

NORTH/SOUTH CONNECTIONS

A finer grain of north/south connectivity is enhanced by improvements to existing pathways and new linkages designed to facilitate pedestrian movement. The north/south connectivity recommendations extend and improve existing corridors such as Old Main Plaza and Hardy Road. Several new alignments are proposed:

- 1 Lee Walk connecting Lee Boulevard to Zacharias Village. Lee Walk features a series of landscape terraces that transition the slope conditions between Barr Avenue and Lee Boulevard. It is coordinated with the Barr Avenue Garage to ensure that pedestrian access is available to each level of the garage via the terraces.
- 2 Old Main Plaza is extended to the north to establish strong pedestrian connectivity between the Union and the Barr Avenue Garage and to the south to the South Campus District.
- 3 Hardy Road is improved by consistent tree planting and traffic calming features to facilitate east/west pedestrian movement.
- 4 Magruder Walk (pedestrianized Magruder Street) connecting President's Circle to the South Campus Housing District.

CAMPUS PERIPHERY

Along the perimeter of the core campus, especially adjacent to and between existing wooded areas, a long-term strategy for reforestation is envisioned. Reforestation is proposed along the north side of Blackjack Road between Locksley Way and Stone Boulevard. The intent is to provide a strong definition to the campus edge in this area. Reforestation is also proposed along the eastern boundary to serve as a buffer between the campus and adjacent land uses. This perimeter of woods is the "framing" element of the Landscape Framework.



LEE HALL (1909)



PERRY HALL (1921)



MAGRUDER HALL (1938)



MCCAIN (1905)

Cultural Resource Framework

The cultural resources of the campus, including the historic buildings, monuments and open spaces form the memorable qualities that define MSU as a place; a place in the collective memory of students, faculty, staff and alumni. The Master Plan acknowledges the contribution these resources make to the image and character of the campus.

The contributing or historic buildings of the campus include:

- 1 Bowen Hall (1929)
- 2 Carpenter Engineering Building (1910)
- 3 E.E. Cooley Building (John M. Stone Cotton Mill) (1902)
- 4 Harned Hall (1921)
- 5 Hull Hall (1938)
- 6 Lee Hall (1909)
- 7 Industrial Education Building (1900)
- 8 Lloyd-Ricks Building (1929)
- 9 Magruder Hall (1938)
- 10 McCain Engineering Building (1905)
- 11 Middleton Hall (ROTC Building) (1910)
- 12 Montgomery Hall (1902)
- 13 Perry Hall (University Cafeteria) (1921)
- 14 Power Plant (1921)
- 15 The Stennis Center (1928)
- 16 YMCA Building (1914)



CULTURAL RESOURCES FRAMEWORK



YMCA (1914)



CARPENTER (1910)

The contributing landscapes and open spaces of the campus that have endured over time include the iconic Drill Field, the central open space of the campus, Eckies Pond, the oldest man-made structure on the campus and former irrigation reservoir, and the W.S. Anderson Pecan Grove, a remnant agricultural activity. The Master Plan preserves and enhances these spaces. President's Circle, the former site of the President's House, is resurrected and the Mobile and Ohio railroad alignment is redefined as a landscape, pedestrian and bicycle corridor through the campus. The definition of the Cultural Corridor follows this alignment. The Master Plan expands on previous improvements to the corridor at the Junction and extending to the west toward Highway 12.

Mississippi State has several historic structures that can be classified as "contributing buildings". A contributing building is defined by The Secretary of the Interior Standards for the Treatment of Historic Properties With Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings as essential to the historic character and image of the historic context.

The historic integrity of contributing buildings is also an important consideration. Significant alterations to a building can compromise the historic value of a building.

BUILDING RECOMMENDATIONS

The following recommendations apply to existing historic buildings, additions to historic buildings and new buildings constructed in the context of existing historic buildings. The recommendations are based on the The Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings and The Secretary of the Interior Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes.

The recommendations are intended to promote the preservation and appropriate reuse of historic buildings and provide guidance for new construction or additions adjacent to historic buildings.

New buildings constructed adjacent to historic buildings should adhere to the following guidelines:

- The new building's scale and massing should not overwhelm the scale and massing of its neighbors.
- The new building should incorporate some of the materials utilized on the buildings that surround it.
- The new building should respect the context of the site and its historic neighbors.
- Textures and details of new buildings should complement those of adjacent historic buildings.
- New buildings should be representative of their own time, differentiated from but respectful of the historic context.

New additions to historic buildings should be constructed in such a manner that if removed, the essential form and integrity of the historic property and the context would exist unimpaired.



BOWEN (1929)



MONTGOMERY (1902)



STENNIS (1928)



INDUSTRIAL EDUCATION BUILDING (1900)

- Respect the character and memorable campus image established in the historic core of the campus.
- Renovate historic buildings in a manner that respects the integrity of the building.
- Locate programs in the historic buildings that are appropriate for the size and conditions of the structure.
- Encourage infill development



GEORGE HALL



LLOYD-RICKS (1929)

District Plans

Within the established developed area of the campus, the District Plans serve as the basis for building placement and placemaking. The District Plans provide a strategy for infill development and redevelopment in areas of the campus that are underutilized or that would benefit from regeneration. They illustrate a “future state” and includes several new development sites, many of which may not be required for several years. The purpose of the District Plans is to guide incremental development and change on the campus in the context of a vision for the future.

The following campus districts are identified in the Master Plan:

1. Central Campus
2. South Campus
3. Barr Avenue
4. Athletics

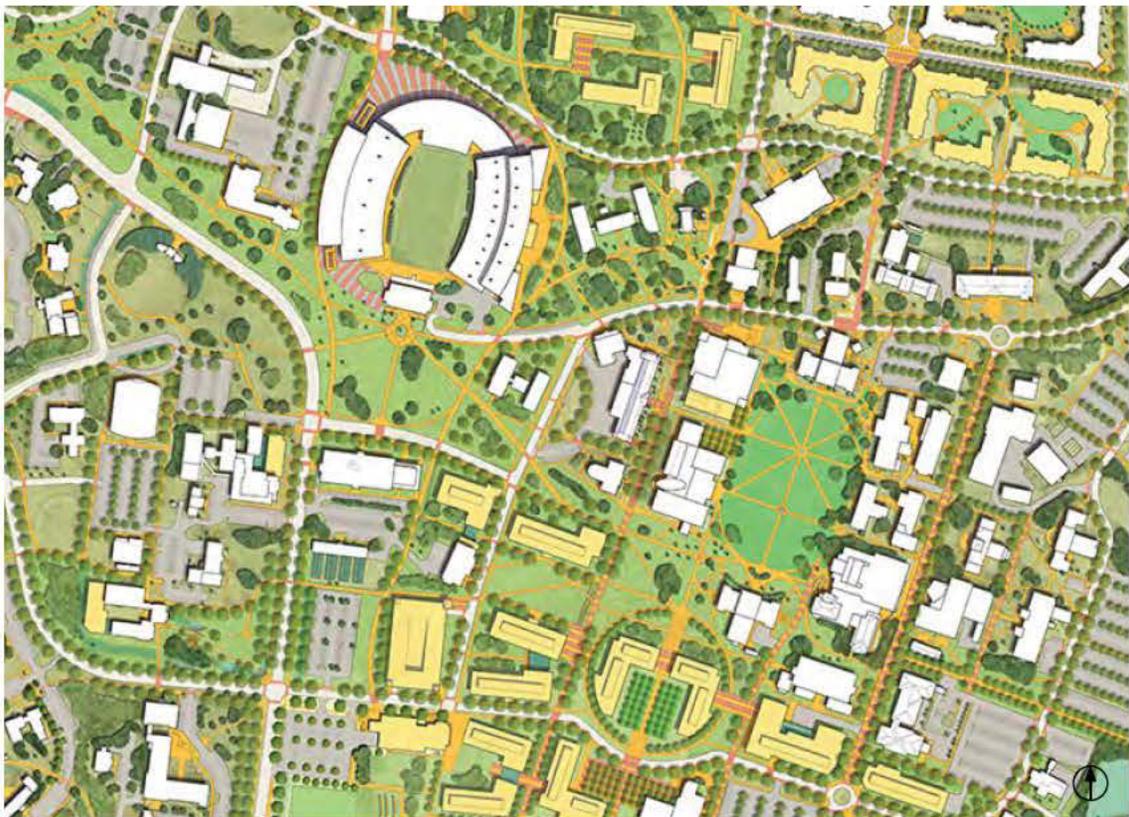
CENTRAL CAMPUS DISTRICT

The Central Campus District encompasses the iconic Drill Field and the historic buildings that define the character and image of the MSU Campus. The district functions as the academic and social center of the University.

The Central Campus District generally is defined by Barr Ave on the north, Hardy Road on the east, Bully Boulevard on the south and Stone Boulevard on the west. The Master Plan acknowledges the importance of the historic buildings and the landscape of the Drill Field by preserving and enhancing these cultural resources. A goal of the Master Plan is to extend the positive landscape qualities of the Central Campus District outward to proposed new districts. Landscape improvements include the creation of new pedestrian corridors, quadrangles and open spaces.



CENTRAL CAMPUS DISTRICT-EXISTING



CENTRAL CAMPUS DISTRICT-PROPOSED



OLD MAIN PLAZA

Landscape and Open Space Structure

The landscape structure of the Central District is defined by the Drill Field and the Cultural Corridor. The positive qualities of the Drill Field landscape are enhanced by additional shade trees and are extended outward to create new open spaces and pedestrian corridors. The major features include:

- McCarthy Quadrangle organizes an academic expansion zone defined by new academic facilities centered on the existing Agricultural and Biological Engineering Building (Ag/Bio). The Quadrangle is envisioned as a new campus gathering space featuring outdoor seating and shade trees. The pedestrian routes through the Quadrangle are intended to create pleasant and direct connections to the parking garage proposed to the south of Ag/Bio.
- President's Circle re-establishes this former landscape to better integrate Allen Hall into the campus context and eventually to organize a replacement for Allen. The Circle is recreated by means of tree planting and a new circular walkway.
- Old Main Plaza is extended southward to provide a consistent, shaded, pedestrian link between the Central District and the proposed redeveloped South District.
- Bell Island—longstanding plans for improving Bell Island are incorporated into the Master Plan to better integrate this landscape into the campus. The previous proposal is redefined in the Master Plan to remove parking from East Lee Boulevard and to link with the Green Corridor on the east side of the stadium, where new north-south pedestrian links are proposed as well as a new entrance into the stadium (the existing buildings, Butler and Williams are removed to allow for the Green Corridor).



COLVARD STUDENT UNION



AG/BIO BUILDING



THE CHAPEL



ALLEN HALL



PRESIDENT'S CIRCLE AND MCCARTHY QUADRANGLE

Proposed Central Campus Facilities

The Master Plan provides recommendations for infill and redevelopment in the Central Campus reserving development sites for academic, research and campus life facilities. The Central Campus is reinforced in the Master Plan as the primary location for academic functions. While several sites have no current programmatic need, they are reserved for future uses.

The following redevelopment is proposed:

- 1 Colvard Union—an expansion is proposed on the south side of Colvard Union to provide much needed student lounge and group study space. The expansion is envisioned to be transparent in nature in order to reveal the indoor activities along the east—west pedestrian route leading to Perry Cafeteria. The landscape associated with the addition and the area east of McCool Hall is envisioned to feature trellises and shade trees planted in a grid pattern, the intent of which is to provide outdoor gathering and dining facilities.
- 2 Classroom Building and Parking Garage - with house 90,000 SF of Classroom and common space and provide parking for approximately 150 cars.
- 3 McCarthy Quadrangle—two future academic buildings are proposed to define this quadrangle which requires the removal of McCarthy Gym (In order for this development to proceed, the Kinesiology facilities are relocated to an



expanded Sanderson Center). The new facilities are envisioned to complement the scale and materials utilized on Ag/Bio, which is expanded to the north.

- 4 The McCarthy Garage is proposed south of Ag/Bio to consolidate parking. The garage features a tower on the northeast corner directly adjacent to Ag/Bio to accommodate the vertical circulation elements.
- 5 Academic/Lab building—a new academic facility is proposed to the south of Hand Lab, defining the eastern boundary of President’s Circle. The building is envisioned as a major new academic building and teaching lab building.
- 6 A new academic or research building is proposed at the reconfigured corner of Hardy Road and Bully Boulevard.
- 7 Future redevelopment on the sites of Etheredge, Walker, and Patterson is proposed as programmatic need arises.

SOUTH CAMPUS DISTRICT

Given the proximity of the South Campus District to the central academic core and its position on the plateau or high ground of the campus, the District is envisioned for long-term redevelopment to accommodate future academic and residential facilities. The Master Plan includes an interim strategy to maintain the existing faculty houses located on Morgan Avenue and Magruder Street until such time that the land is needed. Existing buildings to remain in the near term include McComas Hall, South Hall and Rice Hall.

Landscape and Open Space Structure

The landscape structure of the South District includes several new quadrangles and pedestrian connections linking the district to the Drill Field on the north and the Green Corridor on the west. The proposed landscape improvements include:

- 1 **Magruder Walk**—Magruder Street is pedestrianized and reimagined as a tree lined corridor connecting President’s Circle to Arbour Road, a new east—west road proposed between Stone Boulevard and Hardy Road. Magruder Walk serves as the armature for future building placement, including facilities replacing Cresswell and Hathorn and provides a convenient connection to the proposed dining facility on President’s Circle. It extends to the south of Arbour Road to link with a future housing quad and parking areas.
- 2 **Old Main Plaza** is extended to the South District as a shaded pedestrian connection linking future parking and residential facilities to the Perry Cafeteria and the Colvard Union.
- 3 **East-West Walk**—a new walk connecting South Hall to the Green Corridor is proposed to tie the District to the Stone Boulevard Recreation Fields and associated pedestrian/bicycle pathways. The intent is to provide residents of existing and future housing in the South District with a direct connection to the park-like amenities envisioned in the Green Corridor and access to the north-south pedestrian and bicycle paths.
- 4 **McComas Walk**—the existing walk to the east of McComas Hall is reinforced by additional tree planting to provide a direct connection to the President’s Circle dining facility and the Drill Field.
- 5 **Quadrangles**—the proposed buildings are defined by a series of new quadrangles, which are envisioned as water receiving landscapes.

Proposed South Campus Facilities

The Master Plan includes several near-term and long-term development opportunities in the South District.

- The proposed Civil and Environmental Engineering (CEE) building is located at the reconfigured intersection of Hardy Road and Bully Boulevard.
- An expansion of the Band Building is shown to accommodate a consolidated Music program (the existing Music buildings are displaced by the CEE Building).
- Two new residential halls are proposed on the site of the existing Arbour Acres arranged around a quadrangle. The proposed site is defined on the east by the eastern branch of Catalpa Creek and the associated wooded area and on the west by Magruder Walk.
- Two development sites are identified along Bully Boulevard to the west of McComas Hall to accommodate either academic or residential program with priority being given to academic needs. The western most site is envisioned as a courtyard building while the eastern most building is envisioned to create a “L” shaped plan similar to that of McComas Hall.



VIEW OF THE SOUTH CAMPUS- EXISTING



SOUTH CAMPUS DISTRICT-PROPOSED



GEORGE PERRY STREET



BARR AVENUE

BARR AVENUE DISTRICT

Barr Avenue serves as a major east-west corridor through the campus and links the campus to downtown Starkville via University Drive. Significant redevelopment and transformation is proposed along Barr Avenue to address both near term and long term development needs.

The proposed redevelopment sites include the Briscoe, Freeman, Moore, Garner, Stafford and Butler sites and the Suttle (demolished 2010) /Critz site. Each of these facilities are identified for replacement over the long-term thereby providing an opportunity to reimagine the character of Barr Avenue.

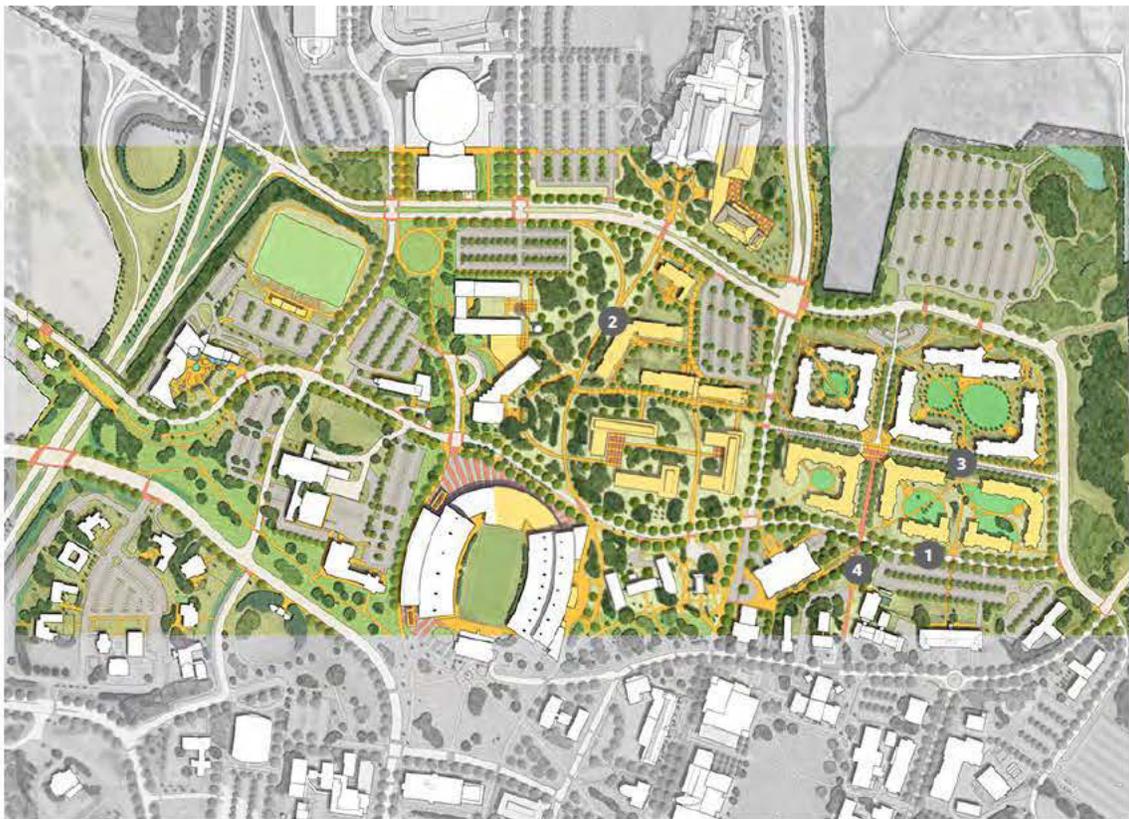
Landscape and Open Space Structure

The proposed landscape structure for the Barr Avenue District includes improvements to the streetscape, the creation of new north-south pedestrian links, including the Sanderson Link portion of the Green Corridor, and new quadrangles defined by the proposed buildings. The specific landscape improvements include:

- 1 **Barr Avenue:** The positive qualities of the Barr Avenue streetscape, especially those in the area north of the Chapel, are extended eastward to redefine the Suttle/Critz site. The aim is to provide a new context for development and to extend the existing bike paths, sidewalks and tree planting on Barr Avenue further to the east.
- 2 **Sandersson Link:** The Green Corridor extends through the district along Sanderson Link, the low lying area east of Giles and Howell Halls. This significant transformation includes the removal of parking to create a stronger and more meaningful pedestrian and landscape connection between the academic core and the Athletics District to the north. It is envisioned as an informal landscape featuring shade trees and bioswales.
- 3 **Hurst Lane:** the existing east-west corridor is enhanced by means of new tree planting and improvements to the sidewalks, roadways and parking (proposed on the south side of the road). Hurst Lane is extended to the west to provide direct connection to Sanderson Link.
- 4 **Lee Walk:** Lee Walk and a second north-south pedestrian link are proposed to connect the existing Zacharias Village and new development on Barr Avenue to the Academic Core.



BARR AVENUE DISTRICT- EXISTING



BARR AVENUE DISTRICT- EXISTING



BARR AVENUE

Proposed Barr Avenue Facilities

The Master Plan includes the following new facilities along Barr Avenue:

- Zacharias Village expansion: three new residential quadrangles are proposed on the former Suttle Hall and Critz site to provide 1,200 beds of new housing. The proposed expansion is intended to complement the design success of the existing Zacharias Village.
- Redevelopment of the Briscoe, Freeman, Moore, Garner, Stafford and Butler sites: over the long-term, this former housing site is proposed for redevelopment to accommodate future academic and support facilities. The buildings on the redevelopment site are envisioned in courtyard arrangements.
- Giles/Howell expansion: in support of the College of Architecture, Art and Design's objectives, an expansion of Giles Hall and a renovation of Howell Hall to consolidate the various programs of the College is proposed. The Giles expansion is envisioned to include gallery and studio space linking Giles to Howell.



ATHLETICS DISTRICT LOOKING SOUTH

THE ATHLETICS DISTRICT

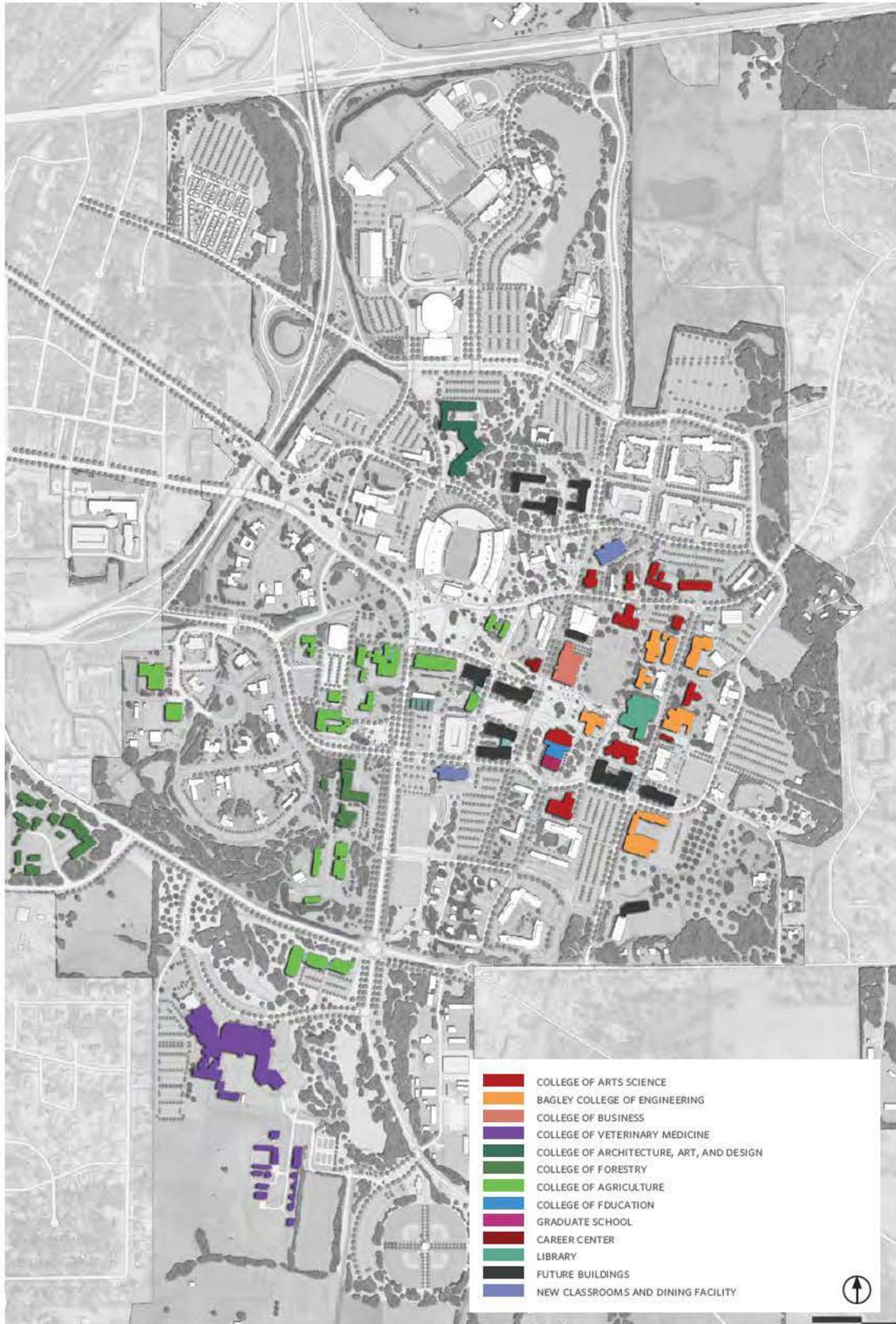
In conjunction with the development of the Master Plan, the facilities required to support the Athletics programs were the subject of a comprehensive analysis and study. The study provides specific facility recommendations which are documented in Part II of the Master Plan.

Landscape and Open Space Structure:

The landscape recommendations of the District are coordinated with the Framework plans of the Master Plan including the Green Corridor which encompasses the Chadwick Lake landscape. The landscape surrounding the Lake is enhanced by pedestrian and bicycle trails to complete the comprehensive north-south network proposed in the Green Corridor. Other open space improvements include a realignment of Lakeview Drive east of the Hump. Specifically, the roadway alignment is shifted to the east in order to facilitate the expansion of the Hump and to create a new plaza in association with the expansion.

Proposed Facilities

For the proposed Athletic facilities, please see the separately documented MSU Athletics Master Plan Report.



LEARNING AND RESEARCH FRAMEWORK

PROGRAMMATIC FRAMEWORKS

The Programmatic Frameworks illustrate how the master plan accommodates academic, research and campus life facilities across the campus.

Learning and Research Framework

The Master Plan supports and reinforces the academic and research mission of the University by providing guidance for future building placement and programmatic relationships. The Space Needs Report in the Technical Appendix provides detailed information concerning the quantity of space required for the future.

The principles for future academic and research building placement are:

- Academic and research programs are concentrated in the academic core, generally defined as the area bounded by East Lee Boulevard on the north, Stone Boulevard on the west, President's Circle on the south and the proposed East Road on the east. The aim is to preserve the 10 minute class change interval by ensuring that the majority of academic space generally is located within a 10 minute walk of the Drill Field.
- Interdisciplinary research space is provided in the academic core to encourage collaboration between academic units and between faculty, graduate and undergraduate students.
- Future academic space should include social learning space. The University currently has significant shortfalls in student-centered learning support spaces. During interviews with faculty, staff, and students, the need for informal study space was mentioned repeatedly. The success of the McCool lobby as study space was also mentioned as a model for future renovation or new construction. The Space Analysis indicates a shortfall of up to 65,000 assignable square feet at the target enrollment of 22,000.

PROPOSED ACADEMIC EXPANSION

A total infill and redevelopment capacity of 1.4 million gsf is proposed on several sites in the Central Campus. While program is not identified for each site, they are held in reserve for future academic and research needs. The following expansion areas are as follows:

- **McCarthy Quadrangle**—a key expansion area of the academic core is proposed for the current site of McCarthy Gym. The Quadrangle is framed by two new academic buildings and an expanded Ag/Bio Building.
- **President's Circle**—The President's Circle area is proposed for redevelopment over the long term. Initial improvements include a new academic building to the south of Hand Lab. Pending architectural programming, the proposed building will include a state-of-the-art academic learning center, potentially with student study, support space and food service amenities. Over the long-term, a replacement for Allen Hall is proposed within President's Circle.
- **Hardy Road Corridor**—Two new academic/research facilities are proposed at the intersection of Hardy and East Road. The first, the CEE building, is sited on the southeast corner of the intersection. The second, a future development site, is reserved for a future academic or interdisciplinary research building. An expansion of the Band Building is proposed to accommodate a consolidated Music program.

- **Library District Concept** — The space analysis indicates a significant need for library space at the projected enrollment target. The analysis is based on national guidelines that identify three types of space needs: study/reading, stack space, and service space. Library design is undergoing significant evolution with an increased emphasis on study and reading space, a move towards off-site storage of physical volumes, and digital retrieval of material. In discussions with the University Librarian, several strategies were discussed for meeting the space needs. The Master Plan recommends a library study to develop a specific program and review the emerging trends in library use and design. The Librarian indicated the following ideas for addressing library space needs: adding two floors to the existing structure, consolidating or decanting existing stack space to create more study and technology space, relocating pieces of the special collections, and embracing a “library district” concept that includes informal study space, meeting space, and group study space within existing and new buildings at the southern end of Hardy Road.

Future redevelopment is proposed for existing buildings along Hardy Road as programmatic need arises. Several building sites including Etheredge, Patterson and Walker are proposed redevelopment.

Outside the academic core, building sites are reserved for future academic and/or support facilities. These include:

- **USDA facility**—a site for a new USDA facility is reserved at the southwest corner of Blackjack and Stone Boulevard.
- **Landscape Architecture**—an expansion site is reserved.
- **Herzer Hall**—an expansion site is reserved on the east side of the building with the intent of creating a new façade and entry to the building.
- **Giles Hall**—in line with the expansion and consolidation plans of the College of Art Architecture and Design, an addition is proposed to link Giles and Howell Halls. The intent is to consolidate Interior Design, Art and Graphic Design.
- **The Briscoe, Freeman, Moore, Stafford and Garner Site** is reserved for future flexible uses. Depending on programmatic need, the site could be used for academic or academic support facilities.

DEVELOPMENT CAPACITY

The Master Plan provides a flexible framework for accommodating known facility needs as well as future opportunities. It illustrates how potential building sites contribute to a larger design vision with the aim of building community, fostering collaboration and protecting land resources. Within this vision, the Master Plan allows decision makers to choose future building locations that not only contribute to the overall vision but also best serve particular needs.

Future academic, research and support facility development is concentrated within the academic core, the extent of which is loosely defined by current infrastructure and a 10-minute walk from the center of campus. The Master Plan provides ample capacity to accommodate future facilities. An estimated gsf of new academic space is illustrated in the Master Plan.

The following principles informed the estimated Development Capacity of the Master Plan:

- The historic buildings of the campus are maintained to support current and future programmatic needs that are appropriate for the structure and character of the buildings.
- Buildings are phased out that:
 - » are in poor condition
 - » do not contribute to the broader campus character
 - » are temporary in nature
 - » do not represent the highest and best utilization of land resources
- Infill development/redevelopment is a priority in order to promote a pedestrian-scale environment and efficiently utilize campus infrastructure.



MASTER PLAN VISION-LONG TERM

Development Capacity Summary

CENTRAL DISTRICT			FOOTPRINT	FLOORS	GSF
C-1	COLVARD UNION EXPANSION	STUDENT LIFE	7,500	2	15,000
C-2	CLASSROOM/PARKING GARAGE BUILDING	ACAD/PRKG	30,000		150,000
C-3	ACADEMIC BUILDING	ACAD/SUPPORT	22,300	4	89,200
C-4	MCCARTHY QUAD BLDGS 1	ACAD/SUPPORT	26,100	4	104,400
C-4	MCCARTHY QUAD BLDGS 2	ACAD/SUPPORT	20,500	4	82,000
C-4	MCCARTHY QUAD BLDGS 3	ACAD/SUPPORT	49,850	4	199,400
C-5	MCCARTHY GARAGE	PARKING			280,000
C-6	ALLEN HALL REPLACEMENT	ACAD	53,900	4	215,600
C-7	ACADEMICE BUILDING	ACAD	24,600	4	98,400
C-7	DINING	STUDENT LIFE	17,500	2	35,000
C-8	ACADEMIC/RESEARCH BUILDING	ACAD/LAB	24,500	4	98,000
C-9	LANDSCAPE ARCHITECTURE	ACAD	10,800	2	21,600
C-10	HERZER ADDITION	ACAD	11,800	2	23,600
					1,412,200

SOUTH CAMPUS DISTRICT			FOOTPRINT	FLOORS	GSF
S-1	CEE	ACAD/LAB	63,900	2.5	159,750
S-2	BAND BUILDING	ACAD	15,200	2	30,400
S-3	RESIDENCE HALL 1	RESIDENTIAL	36,500	4	146,000
S-4	RESIDENCE HALL 2	RESIDENTIAL	36,500	4	146,000
S-5	FUTURE BUILDING 1	ACAD	32,900	4	131,600
S-6	FUTURE BUILDING 2	LAB	42,300	4	169,200
S-7	RES HALL 1	RESIDENTIAL	30,400	4	121,600
S-8	RES HALL 2	RESIDENTIAL	20,800	4	83,200
S-9	RES HALL 3	RESIDENTIAL	20,300	4	81,200
S-10	USDA	RESEARCH	56,800	2	113,600
S-11	WISE CENTER ADDITION	LAB	12,100	1	12,100
					1,194,650

BARR AVENUE / COLLEGE VIEW			FOOTPRINT	FLOORS	GSF
B-1	ZACHARIAS VILLAGE EXPANSION	RESIDENTIAL			390,000
B-2	BRISCOE-GARNER-MOORE-STAFFORD-FREEMAN BUTLER BLDG 1	ACAD/SUPPORT	25,200	4	100,800
B-2	BRISCOE-GARNER-MOORE-STAFFORD-FREEMAN BUTLER BLDG 2	ACAD/SUPPORT	22,300	4	89,200
B-2	BRISCOE-GARNER-MOORE-STAFFORD-FREEMAN BUTLER BLDG 3	ACAD/SUPPORT	22,800	4	91,200
B-3	GILES/HOWELL	ACAD	15,500	1.5	23,250
B-4	COLLEGE VIEW DRIVE MIXED USE	RESIDENTIAL/RETAIL	105,000	3	315,000
B-5	DAY CARE CENTER EXPANSION	ACAD/SUPPORT	8,100	1.5	12,150
					1,021,600

ATHLETICS DISRICT			FOOTPRINT	FLOORS	GSF
A-1	SANDERSON ADDITION		72,500	2	145,000
A-2	NORTH END ZONE		26,500	4	106,000
A-3	HUMP ADDITION		28,100	2	56,200
A-4	BASEBALL		10,000	1	10,000
A-5	FOOTBALL PRACTICE		31,000	1	31,000
A-6	TENNIS/SOFTBALL		53,000	1	53,000
				SUBTOTAL	401,200

				TOTAL	4,079,750
	TOTAL ACADEMIC/SUPPORT/STUDENT LIFE				1,721,950
	TOTAL RESEARCH				113,600
	TOTAL RESIDENTIAL				1,283,000
	TOTAL PARKING				560,000
	TOTAL ATHLETICS				401,200



CAMPUS LIFE FRAMEWORK



HERBERT HALL



ZACHARIAS VILLAGE



HULL HALL



RICE

Campus Life Framework

The Campus Life Framework highlights the amenities, civic nodes and residential communities that contribute to the quality of life for students, faculty, staff, visitors and residents of Starkville. The Campus Life Framework encompasses buildings as well as the open spaces that foster collegial interaction. This section focuses primarily on the facilities; the open spaces are described in more detail in the Landscape Framework.

The Master Plan improves campus life by creating and enhancing civic meeting points and by providing connectivity between these nodes. Campus life is addressed at the following levels: 1) campus-wide gathering and meeting spaces; 2) learning nodes; 3) residential communities; 4) dining and food services; and 5) recreation facilities. The nodes serve the various population groups that utilize the campus and address the varying needs of each group. The population groups include campus residents, commuter students, faculty, staff and the broader communities consisting of alumni, local residents and visitors.

RESIDENTIAL COMMUNITIES

The Master Plan improves the existing residential communities of the campus including Zacharias Village, the South Village and the Greek Housing area. These areas are enhanced by means of landscape improvements, new support facilities and amenities as well as additional housing. The Master Plan articulates a student life framework within which housing can be developed for all sectors of the University community.

The Master Plan also provides a bed replacement strategy over the long-term. The goal is to provide 5,000 beds (up from approximately 4,000 beds in 2010) in a combination of existing facilities that will remain for the foreseeable future and a series of new facilities.

The following table summarizes the existing and proposed facilities:

	EXISTING + NEW BEDS	BEDS TO BE REPLACED
NORTH CAMPUS HALLS		
CRITZ		216
SESSUMS		254
MCKEE		256
EVANS		288
		1,014
ZACHARIAS VILLAGE		
RUBY	400	
GRIFFIS	300	
HURST	250	
NORTH HALL	250	
	1,200	
EVANS EXPANSION		
EVANS SOUTH	350	
EVANS NORTH	350	
	700	
ZACHARIAS EXPANSION		
SOUTH 1 (PROPOSED)	400	
SOUTH 2 (PROPOSED)	400	
SOUTH 3 (PROPOSED)	400	
	1,200	
HERITAGE HALLS		
HULL	290	
HERBERT	120	
	410	
SOUTH VILLAGE		
CRESWELL		300
HATHORN		274
RICE	511	
MOSELEY	350	
	861	574
SOUTH VILLAGE EXPANSION		
MAGNOLIA	350	
OAK	350	

Zacharias Village

Zacharias Village, consisting of Ruby (400 beds), Griffis (300 beds), Hurst (250 beds) and Building III (250 beds), is expanded southward to incorporate the sites of Suttle Hall (demolished 2010) and Critz. The expansion area is planned to accommodate an additional 1,200 beds in a manner that complements the success of the existing Zacharias Village facilities. Three additional buildings are proposed, each featuring a quadrangle. Strong pedestrian links are proposed to connect the existing and proposed facilities to the central academic core via a new north/south pathway, Lee Walk. An east/west connection is provided along Hurst Lane which includes improvements to the sidewalks, the roadway, and parking (head-in parking is provided on the south side of Hurst Lane).

The expanded Zacharias Village is intended to replace Critz (216 beds), Sessums (254 beds), McKee (256 beds) and Evans (288 beds) Halls over the long-term (total 1,014 beds).

Evans Expansion

With the removal of Evans Hall the site lends itself to the construction of two 350 bed residence halls and the addition of a new Sonny Montgomery Center for America's Veterans.

Heritage Halls

Two of the historic heritage halls, Herbert Hall (120 beds), Hull Hall (290 beds) are maintained in the Master Plan. The context surrounding Hull Hall is enhanced by landscape improvements to Bell Island and the Green Corridor of the campus to the west. Connections to Herbert Hall are improved by the removal of parking and by means of new walkways and landscape.

South Village

The South Village consisting of Cresswell (300 beds), Hathorn (274 beds), Rice (511 beds) and South (350 beds) Halls is identified as a housing replacement and expansion zone. South Hall (completed 2010) and Rice Hall remain in service for the foreseeable future while Creswell and Hathorn are targeted for replacement.

Greek Housing

Greek Life is an important aspect of campus life on the MSU campus. Sorority Housing is located on the west side of campus north of Bully Boulevard and fraternity housing to the south of Bully Boulevard. Both communities are enhanced in the Master Plan by means of landscape upgrades, new pedestrian connections to the core campus and water features. Six expansion sites are reserved on the south side of the fraternity housing area.

STUDENT GATHERING SPACES

To enhance the learning and social environment of the campus and address significant shortfalls in study space across the campus, the Master Plan recommends additional study and gathering space. The intent is to distribute informal learning and study spaces throughout the campus environment in existing and proposed facilities. Key new facilities include:

- new classroom/learning center south of Hand Hall
- Colvard Union expansion to incorporate student lounge and study space

DINING AND FOOD SERVICES

Dining and food services are provided at the following locations: 1) Perry Cafeteria; 2) Colvard Union; 3) Templeton and a proposed new dining hall located to the south of Hand Lab in conjunction with a new classroom/learning center.



VIEW OF PROPOSED STONE BOULEVARD RECREATION FIELDS

RECREATION FACILITIES

Several new recreation facilities and enhancements are proposed in the Master Plan in conjunction with the broad landscape concepts and the proposed campus-wide pedestrian and bicycle network. The new facilities include:

- **Stone Boulevard Recreation Fields**—the existing fields along Stone Boulevard are reconfigured and expanded to create an enhanced intramural facility in the Green Corridor of the campus.
- **South Campus Recreation Fields**—four new fields are proposed to the east of the RecPlex.
- **Tennis Courts**—six new courts are proposed in the south campus area (to replace the Bully Boulevard courts displaced to create the Green Corridor)
- **Sanderson Center Expansion**—an expansion of Sanderson Center is proposed to meet current and projected demand for recreation and fitness space.



FUNCTIONAL FRAMEWORKS

The Functional Frameworks of the Master Plan describe the circulation and infrastructure systems of the campus.

Mobility Framework

The Master Plan broadly defines transportation and circulation as Mobility and Access to accurately express a more comprehensive and integrated system of movement. The intent is to transition from the auto dominated transportation system of today to a more balanced approach emphasizing pedestrian, bicycle and transit movement. This proposed shift is reflected in the stated goal of the Environmental Collaborative Office to target a 50% increase in sustainable transportation options by 2020; a goal consistent with the emissions reduction objectives of the University. It is estimated that 10 to 15 percent of greenhouse emissions generated by University activity can be attributed to campus commuting patterns.

The Framework also coordinates land use and circulation strategies with the goal of creating a compact academic core that facilitates pedestrian movement within a 10 minute walk of the Drill Field.

The Mobility and Access Framework provides an integrated approach to circulation with the aim of transitioning the modal split. As the single occupancy vehicle will continue to be the primary mode of access for the foreseeable future, vehicular access and parking are reorganized to provide convenience while reducing pedestrian vehicular conflicts.

The transition to a more sustainable Mobility and Access Framework requires new policies, cost models and investment in the circulation networks of the campus. The proposed transformation is summarized in this section. The specific access and circulation recommendations are as follows:

PEDESTRIAN NETWORK

An objective of the Master Plan is to pedestrianize the academic core of the campus. Emphasis is placed on creating a safe pedestrian environment taking into account the need for shade and shelter during inclement weather. A system of existing and proposed pedestrian routes is coordinated with a comprehensive shade strategy for the campus. Beyond the campus core, connections to

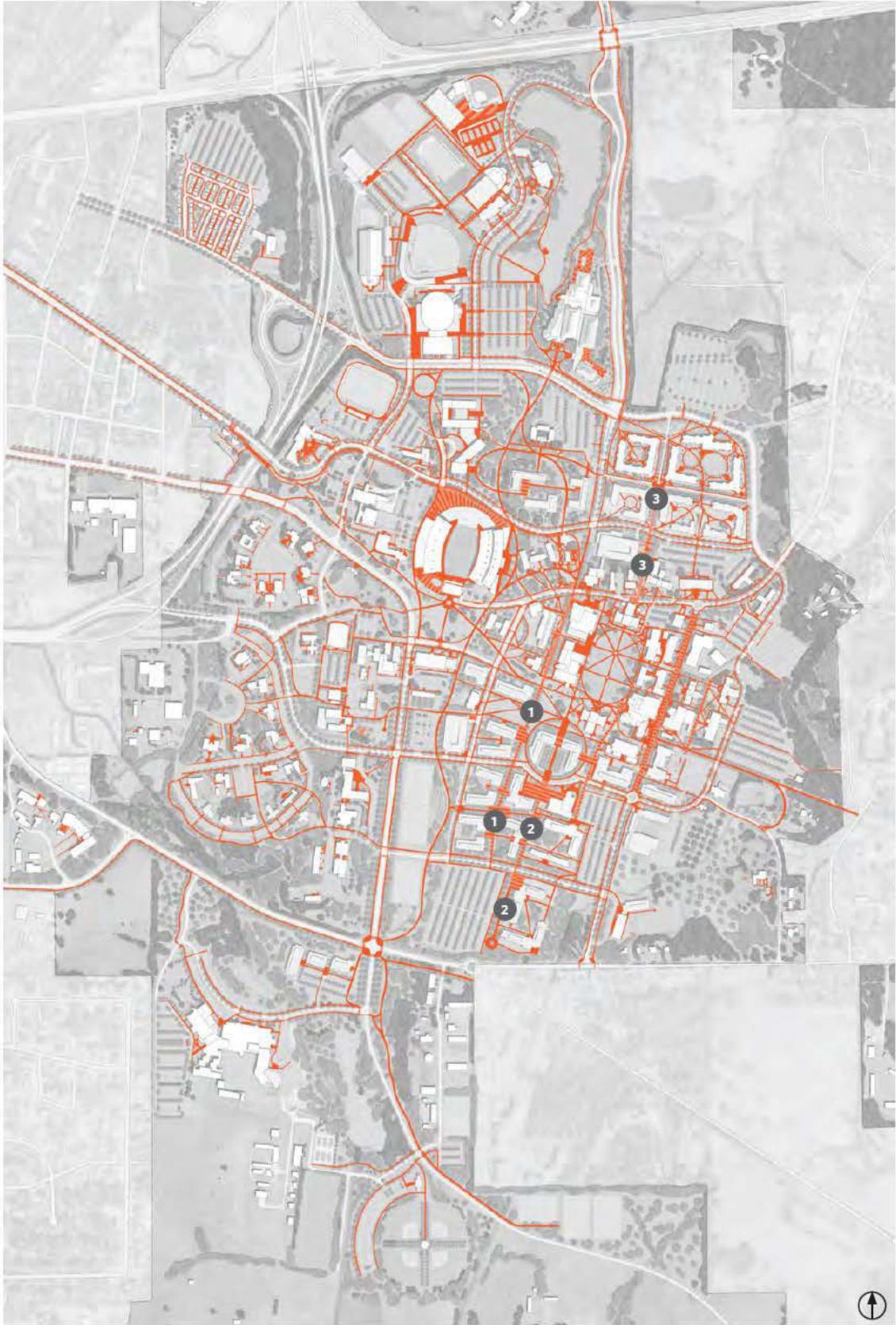
the Green Corridor and the Cultural Corridor extend the campus pedestrian network between campus districts and beyond the campus to the surrounding community.

RECOMMENDATIONS

Major improvements to the pedestrian network, in addition to the Green Corridor and Cultural Corridor, include:

- 1 Old Main Plaza is extended to the south to connect to McCarthy Quad and the redevelopment areas proposed in the South Campus District and to the north to connect to the Barr Avenue Garage.
- 2 Magruder Walk (pedestrianized Magruder Street) connects President's Circle to the South Campus Housing District.
- 3 Lee Walk connects Lee Boulevard to Zacharias Village. Lee Walk features a series of landscape terraces that transition the slope conditions between Barr Avenue and Lee Boulevard. It is coordinated with the Barr Avenue Parking Garage to ensure that pedestrian access is available to each level of the garage via the terraces.

Establish a pedestrian route linking the 21 Apartments with the Stone Boulevard / Blackjack intersection; utilize new decorative fencing on the north and south sides of Blackjack between Stone Boulevard and Hardy Road to prohibit students crossing at the roundabout and other locations.



PEDESTRIAN NETWORK



SHADED WALKS (SUMMER)



SHADED WALKS (WINTER)

Accessibility

As the University moves forward with changes and improvements to the pedestrian network, it will be important to resolve existing accessibility barriers both at building entries and other areas across the campus. Notable improvements are needed on the east side of campus where the topography transitions from the parking areas to the “plateau” of the campus. The transition from Barr Avenue to East Lee Boulevard also requires improvements. The proposed Barr Avenue Garage is designed to assist with this transition.

Traffic Calming

Several traffic calming measures are proposed to provide safer pedestrian crossings. Potential design solutions include differentiation in pavement material, narrowed road sections at crossing points, and raised crosswalks or speed tables. Traffic calming is proposed at major pedestrian crossing points throughout the campus including Hardy Road, Stone Boulevard, Barr Avenue, and Coliseum Boulevard among others.

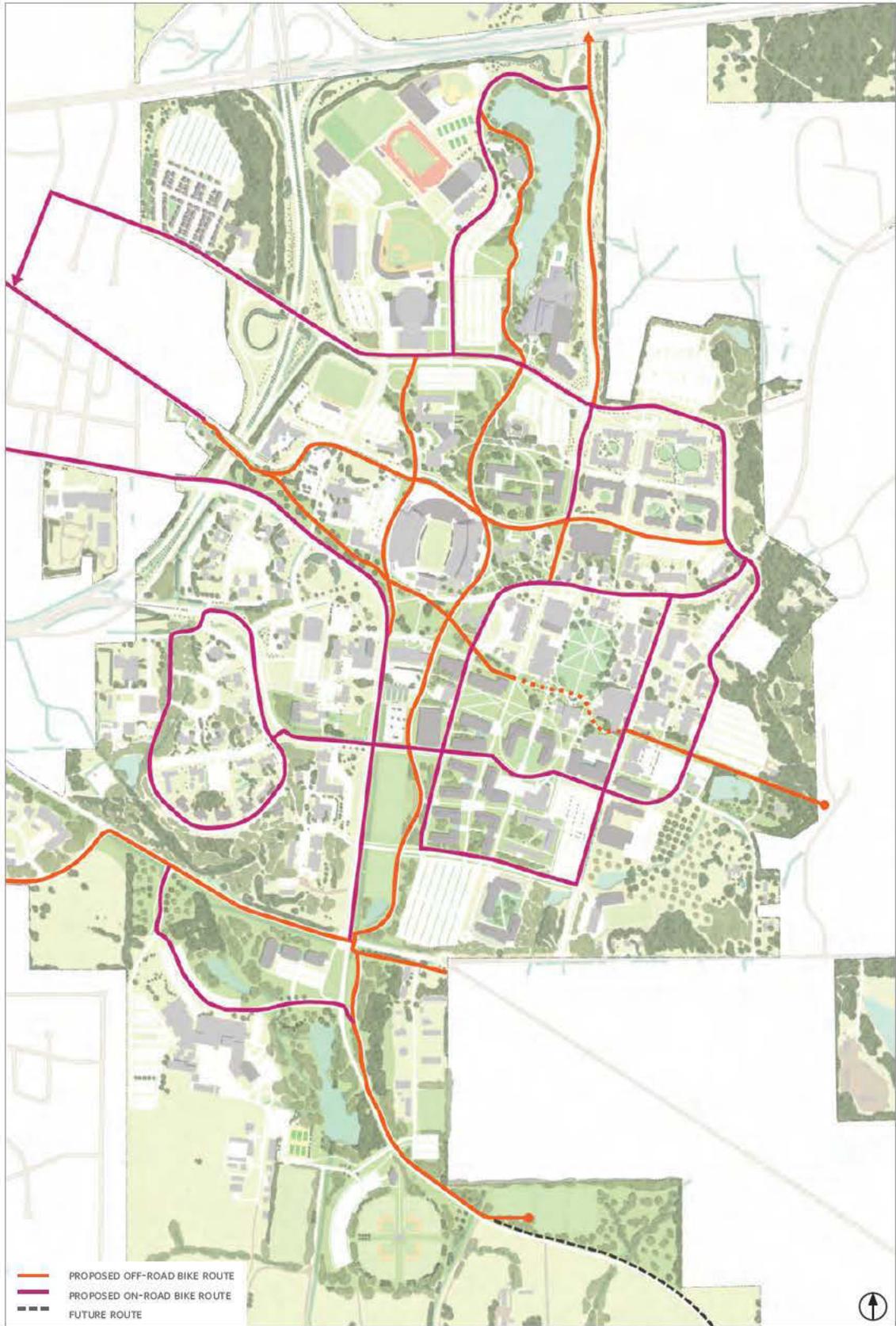
In addition to safer crossing points, roundabouts are proposed at the intersection of Bully Boulevard and Hardy and at the intersection of East Lee Boulevard and Hardy. Both roundabouts are intended to slow and divert traffic to the proposed East Road.



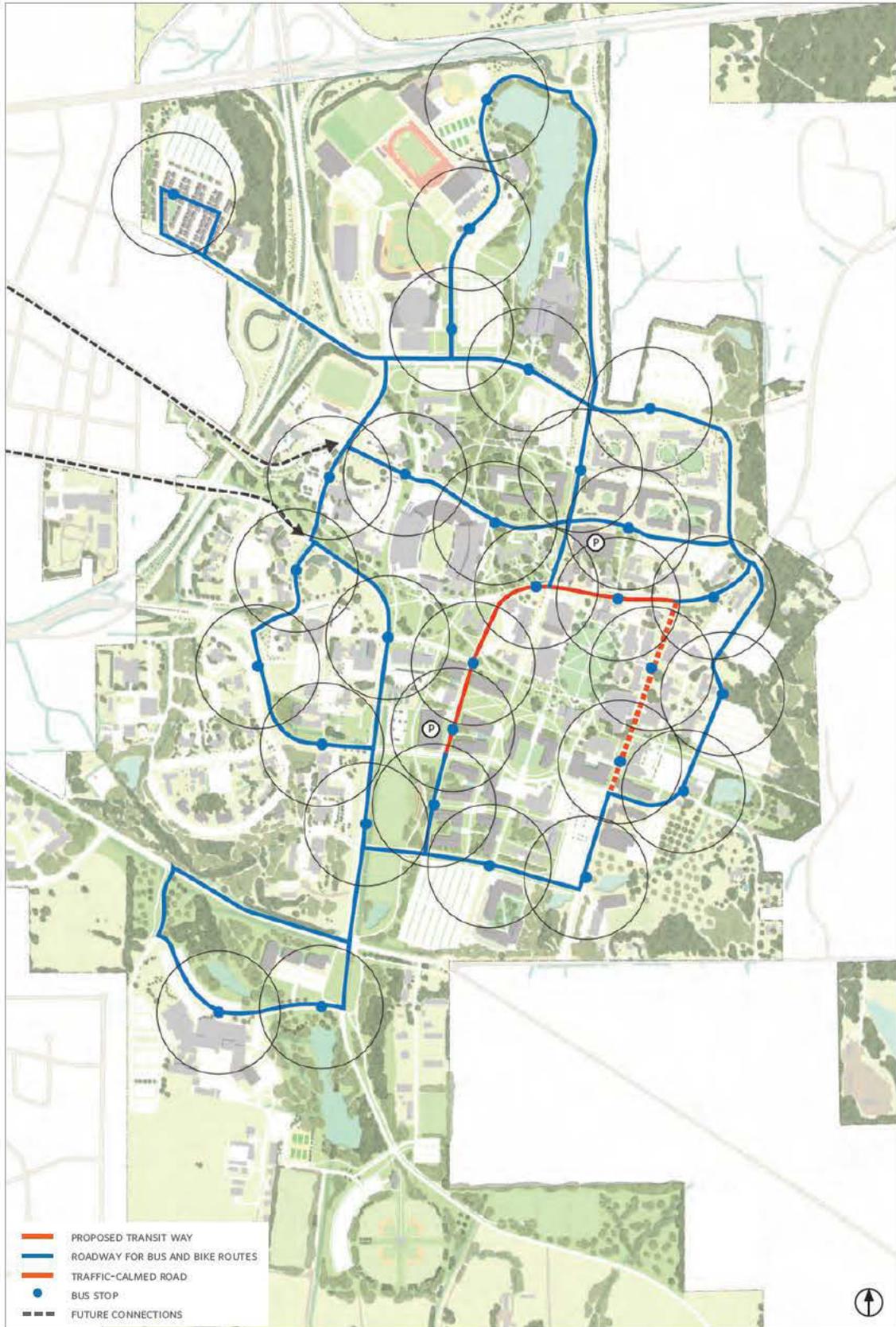
BIKES AND PEDESTRIANS IN THE CORE

BICYCLE NETWORK

The campus bicycle network is extended to connect with existing and proposed community routes. Existing routes along University Drive/Barr Avenue and George Perry are coordinated with the north/south route proposed in the Green Corridor, with the east/west route proposed in the Cultural Corridor, and the academic core perimeter route (the transit loop). Routes are also designated along Stone Boulevard and Hardy Road. The campus network is intended to facilitate bicycle circulation within the campus and provide connections to the Cotton District and other residential areas.



BICYCLE NETWORK



TRANSIT NETWORK



ROUTE ALONG STONE BOULEVARD



BUS STOP

TRANSIT NETWORK

To broaden mobility options, potential transit services are coordinated with the circulation networks and land use patterns of the campus. Potential transit routes are identified to accommodate a greater focus on transit services in the future. To facilitate access to the pedestrianized academic core, a perimeter transit loop defined by East Lee Boulevard on the north, Tracy Drive and a southward extension on the west, the proposed Arbour Road on the south and Hardy Road on the east. Transit portals are coordinated with activity nodes and major destinations, such as Colvard Union and Mitchell Library as well as future destinations in the McCarthy Quad and South Campus Housing District. The Transit Portals are envisioned as amenity locations for transit users and would be coordinated with building lobbies or other facilities where conditioned space and services can be provided.

Beyond the proposed transit loop, routes radiate outward along existing roads to provide access to other campus districts and beyond to the local community in the future.

VEHICULAR CIRCULATION

Vehicular circulation on the campus is transitioned away from the loop road concept that has guided roadway development for several years to the concept of a grid formed by a combination of existing and new roads. New roads proposed as part of the campus grid include:

- 1 **Tracy Drive**—an extension and reconfiguration of Tracy Drive is proposed to connect Creelman to Bully Boulevard. This new segment of roadway is proposed for the exclusive use of transit vehicles and bicycles. Tracy Drive, ultimately, is extended further to the south connecting Bully Boulevard to the proposed Arbour Road.
- 2 **Arbour Road**—an east—west connection between Stone Boulevard and Hardy Road. This segment of road provides direct access to new parking areas proposed in the South Campus District and provides an alternative east—west route from Stone Boulevard to Hardy Road.
- 3 **East Road**—a new north—south road linking Morrill Road to East Lee Boulevard is proposed on the east side of campus. This road segment provides access to the parking on the east side of the campus and revises the Loop Road concept illustrated in previous master plans. Specifically, the road is envisioned as a connector street rather than an express route around the campus.
- 4 **Bost Drive extension**—a new road linking Barr Avenue to Coliseum Boulevard to provide more direct north—south circulation and to enable the closure of BS Hood.

Several roadway closures and reconfigurations are proposed:

- 5 **President's Circle** (west segment) is pedestrianized in order to extend Old Main Plaza to the south.
- 6 **Bully Boulevard/Hardy Road** intersection is reconfigured to create development sites south of Hand Lab and TK Martin.
- 7 **BS Hood** and **Collegeview** are closed to vehicular traffic as part of the Green Corridor concept.
- 8 **George Perry** is closed from Barr Avenue to East Lee Boulevard (with the exception of access to the proposed Barr Avenue Parking Garage).

Parking Rationale

Parking is and will continue to be an important aspect of the Mobility and Access Framework. The Master Plan maintains the existing quantity of parking. As enrollment increases, the scale and intensity of activity on the campus will necessitate a shift from small, proximate surface lots to garages and remote parking facilities. This shift is a pattern observed at other universities as enrollment approaches 20,000 students.

Given the value of land within the campus core for academic, research and support purposes and the desire for a pedestrian environment, some existing surface parking areas are displaced over the long term in favor of development sites. The goal is to utilize core campus land for mission-related purposes. To that end, parking is consolidated and reorganized in the Master Plan with the aim of providing a more efficient distribution and decreasing the traffic volumes associated with the current dispersed supply. Several small lots, therefore, are removed along with parking on most campus streets. It is important to note that transitions in the parking supply and allocation will occur over a long period of time. The University will have the opportunity to evaluate and make adjustments to the proposed distribution strategy.

The Master Plan locates parking to ensure that it is generally distributed within a five minute walk of major campus destinations.



VEHICULAR CIRCULATION AND PARKING



UNIVERSITY DRIVE GATEWAY



RUSSELL STREET GATEWAY

Parking Supply

Within the academic core, parking is consolidated in two garage locations: 1) the Barr Avenue Garage with 800 spaces; and, 2) the McCarthy Quadrangle Garage with 800 spaces. The garages are located at the periphery of the core to intercept traffic from the north and south respectively, thereby eliminating the need to drive through the campus in search of parking.

Surface parking is consolidated in reconfigured and expanded lots on the east side of campus area and in the South Campus area. Parking on the north end of campus, most notably, in the Athletics District, is subject to minor modification in the Master Plan. A major new source or remote parking is proposed on the existing site of Aiken Village; a supply that is intended to function as a future park and ride facility in conjunction with an expanded transit system.

CAMPUS GATEWAYS

Access to the campus from the surrounding road network occurs at several locations, each requiring an appropriate design approach in terms of signage, landscape expression and pedestrian/bicycle connectivity. In response, upgrades and improvements are proposed at the following gateways:

- 1 **George Perry/Highway 182**—Currently a significant regional entry to the campus, this gateway has a positive landscape expression and signage. To improve connectivity between the main campus and the Research Park, a reconfiguration of this intersection is proposed to improve the pedestrian and bicycle crossing.
- 2 **Russell Street**—this gateway is defined by signage and a positive landscape character; however, it lacks sidewalks and safe crosswalks. In order to improve pedestrian and bicycle connectivity, the existing intersection at Highway 12 is reconfigured. The “free-right” turn lanes are removed in favor of a more straightforward intersection design featuring crosswalks and improved signalization for both pedestrians and bicyclists.
- 3 **University Drive**—a “land bridge” is proposed over Highway 12 to create a more generous entrance to the campus for both pedestrians and cyclists. This entrance features the original class of 1922 brick gateway pillar which is to remain.
- 4 **Bully Boulevard**—this entrance to the campus is defined by the Highway 12 interchange. This underutilized entrance provides access to the South Campus and ultimately to the proposed McCarthy Quadrangle parking garage. Better signage and landscape expression are envisioned for this entrance.
- 5 **South Entry at Blackjack and Stone Boulevard**—the proposed South Entry Road connecting Poor House Road to Blackjack requires the reconfiguration of this important gateway. Proposed improvements include new crosswalks, fencing, signage and landscape in conjunction with the Green Corridor concept.
- 6 **Hardy Road**—the Hardy Road/Blackjack intersection is a secondary entrance but one that provides access to the east campus area. Proposed improvements include new signage, fencing and landscape.



CAMPUS GATEWAYS



CATALPA CREEK (WEST OF HARDY ROAD)



CATALPA CREEK (EAST OF STONE BOULEVARD)

INFRASTRUCTURE

The Master Plan includes recommendations for promoting efficiency in the traditional infrastructure and for introducing landscape design as a contributor to stormwater management and energy efficiency.

Water Resources Framework

The MSU campus lies within the Noxubee and Tybee watersheds with Catalpa Creek as the central water course of the campus. Catalpa Creek extends from the stadium through the South Farm and southward through the community. The impervious development in the central campus coupled with the soil conditions (high clay content) result in erosion and downstream flooding along the Creek. Extensive areas of FEMA defined floodplains exist south of Blackjack Road. At the convergence of the northern and western branches of Catalpa Creek (at the Wise Center), there is a considerable floodplain area that, as a result of development, contributes to flooding problems in the Wise Center.

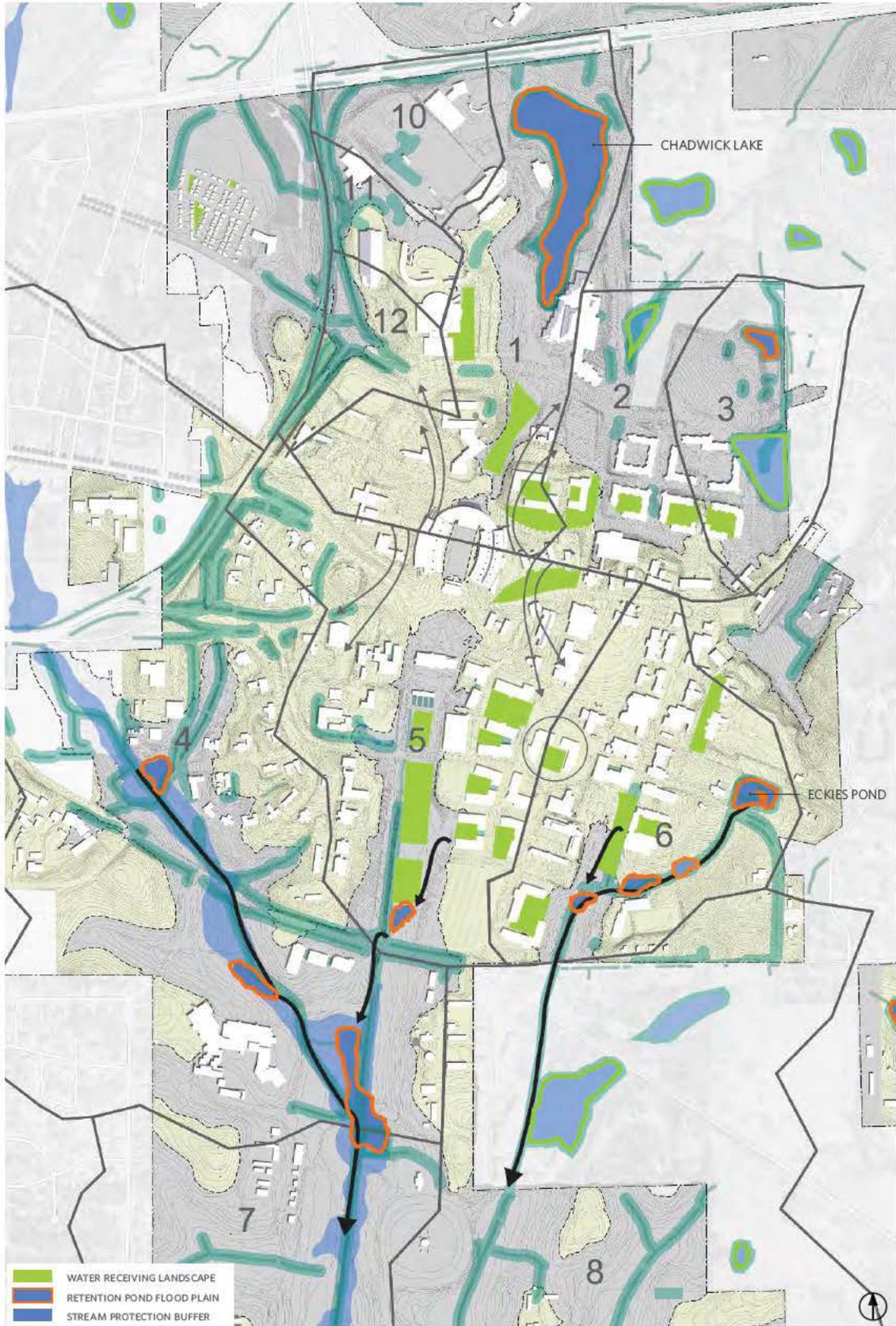
STORMWATER EXISTING CONDITIONS

The site surface cover of the campus includes wooded areas, wetlands, creeks, open spaces and urban conditions containing roof tops, streets and parking areas. The impervious cover of the main campus is approximately 12 percent of the total land area. Environmental degradation generally occurs in watersheds with greater than ten

percent impervious surface area; some aspects of degradation are reversible.

A stormwater analysis was performed during the planning process on the existing campus conditions to inform the Master Plan and identify existing problem areas. The analysis was based on site topography and surface cover. The land within the campus boundaries breaks down into 12 different watersheds, six (6) of which drain into the Catalpa Creek. The remaining five (5) drain to various points along the north and east perimeter. Soils on campus are hydraulic, with slow infiltration rates and high runoff potential.

In the developed campus core the percent of impervious surface ranges from 24 percent to 53 percent. The chief concern in the core campus is water quality control, peak run off volume and total runoff volume. Since most of the area discharges directly to Catalpa Creek, addressing water quality is an important issue. The initial inch of rain and subsequent stormwater run-off is known to contain the majority of stormwater pollutants, thus, addressing the initial run-off can greatly improve water quality.



WATER RESOURCES FRAMEWORK

PROPOSED CONDITIONS

Strategies

The proposed sustainable stormwater management strategies to be considered on the MSU campus address three interrelated variables/metrics: 1) water quality, 2) water volume, and, 3) peak rate of flow.

- Water quality—impervious pavement and development prevents natural percolation of stormwater into the soils. Run-off from developed areas is contaminated by chemical pollution such as motor oil and salt resulting in water quality concerns. Proposed water treatment strategies include “green” alternatives that mimic the functions of the natural landscape and allow for treatment in the form of green roofs and rain gardens integrated into the campus landscape.
- Water volume—on the MSU campus stormwater is collected and flows to Catalpa Creek and other stream corridors
- Peak Flow Rate—is a concern due to the surcharging during high intensity, short duration rainfall events. The recommended strategies for mitigating the peak flow rate include detention and retention facilities incorporated with the landscape features of a site.
- Stone Boulevard Recreation Fields—a retention pond is proposed at the south end of the recreation fields to intercept water from the adjacent parking necessary to support south campus development.
- Hardy Road—two retention facilities are proposed along the eastern branch of Catalpa Creek to intercept water flowing south and west from Eckies Pond. A second pond, directly west of Hardy Road, is proposed to intercept run-off from development in the South Campus District.

Stream Protection Buffers

A 100 foot wide stream protection buffer is proposed along all major stream corridors throughout the campus. The buffers are envisioned to incorporate appropriate riparian planting to minimize erosion and control runoff. The proposed buffers are indicated in the Water Resources Framework.

The proposed stormwater recommendations focus on horizontal surfaces and the rainwater capturing potential of those surfaces. The goal is to leave the water as diffusely scattered across these surfaces as possible. The recommended strategies for future facilities and sites include:

Green Roofs

MSU should consider installing Green Roofs on roof replacement projects and on new buildings. Green roofs retain stormwater and return a portion directly to the atmosphere through evapotranspiration. Features include:

RECOMMENDED MANAGEMENT PRACTICES

The recommended best management practices for existing campus buildings and infrastructure as well as new facilities are as follows.

Retention Basins

The Master Plan minimizes the impact of future expansion by concentrating development in the established core of the campus and by incorporating several retention basins to address water quality and rate of runoff. The retention basins, which are proposed as part of the landscape strategy for the campus, are proposed along the central, eastern and western branches of Catalpa Creek to intercept runoff associated with campus development as well as runoff associated with development off campus. The following retention facilities are proposed:

- South Entry—a major new retention pond reminiscent of Chadwick Lake is proposed on the south end of campus in conjunction with the new South Entry Road improvements. This new facility is envisioned as part of the gateway experience and is intended to intercept water flowing from the central and western branches of Catalpa Creek. The pond is one of a series extending along the northwest branch of Catalpa Creek.
- A layer of vegetation installed on flat or low sloped roofs
- “Extensive” green roofs feature a thin layer of soil and are usually composed of sedum
- “Intensive” green roofs have a thicker soil layer and contain shrubs, trees and other vegetation
- Green roofs can retain 15-90% of rainfall
- Green roofs are most effective in reducing run-off volume and rate
- Green roofs can reduce air pollution, provide habitat for wildlife and sound insulation.



CATALPA CREEK (EAST OF STONE BOULEVARD)



CATALPA CREEK (WEST OF HARDY)

Rain Gardens

MSU should drain roofs into rain gardens wherever possible.

Rain gardens are landscape features designed to retain and infiltrate stormwater. They are typically 6 to 18 inches deep and include plants tolerant to periodic submersion. It is recommended that all future quadrangles and landscape areas be designed as rain gardens or water receiving landscapes, conditions permitting.

Rain Gardens feature:

- Small, vegetated depressions used to capture and infiltrate stormwater runoff
- Plants with appropriate soil mixture and planted with native shrubs, grasses and flowering plants
- Detention times of no more than 24 hours

Pedestrian Hardscape

MSU should consider pervious paving for pedestrian hardscapes.

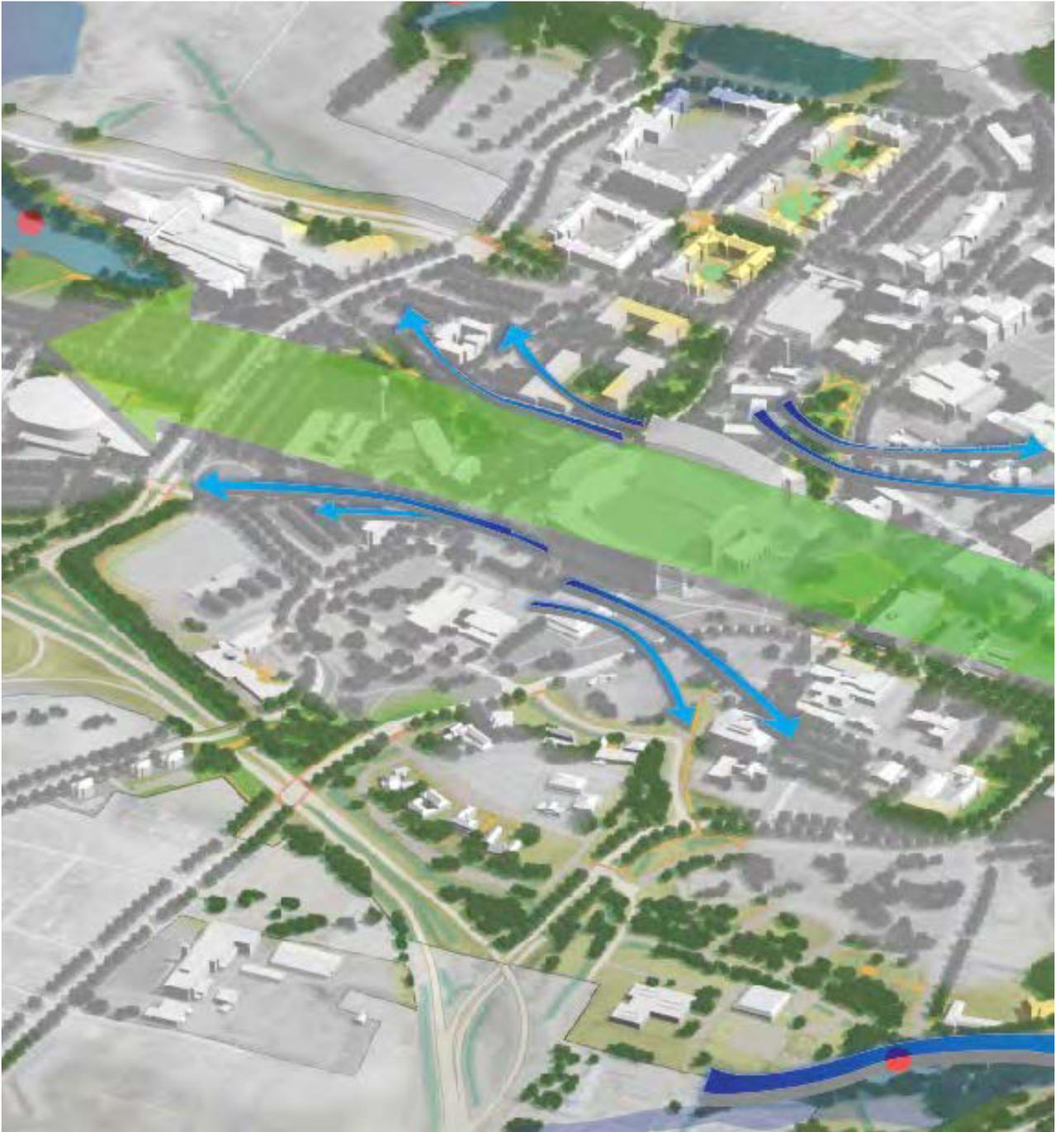
Permeable concrete, paving stone or crushed stone allowing water to drain directly into the ground. In the clay soil conditions, such as those on the MSU campus, the excavation and creation of a drainage layer approximately 24 inches deep is required. Pervious paving is recommended where there is no option for creating a water receiving landscape.

Other hardscape design strategies

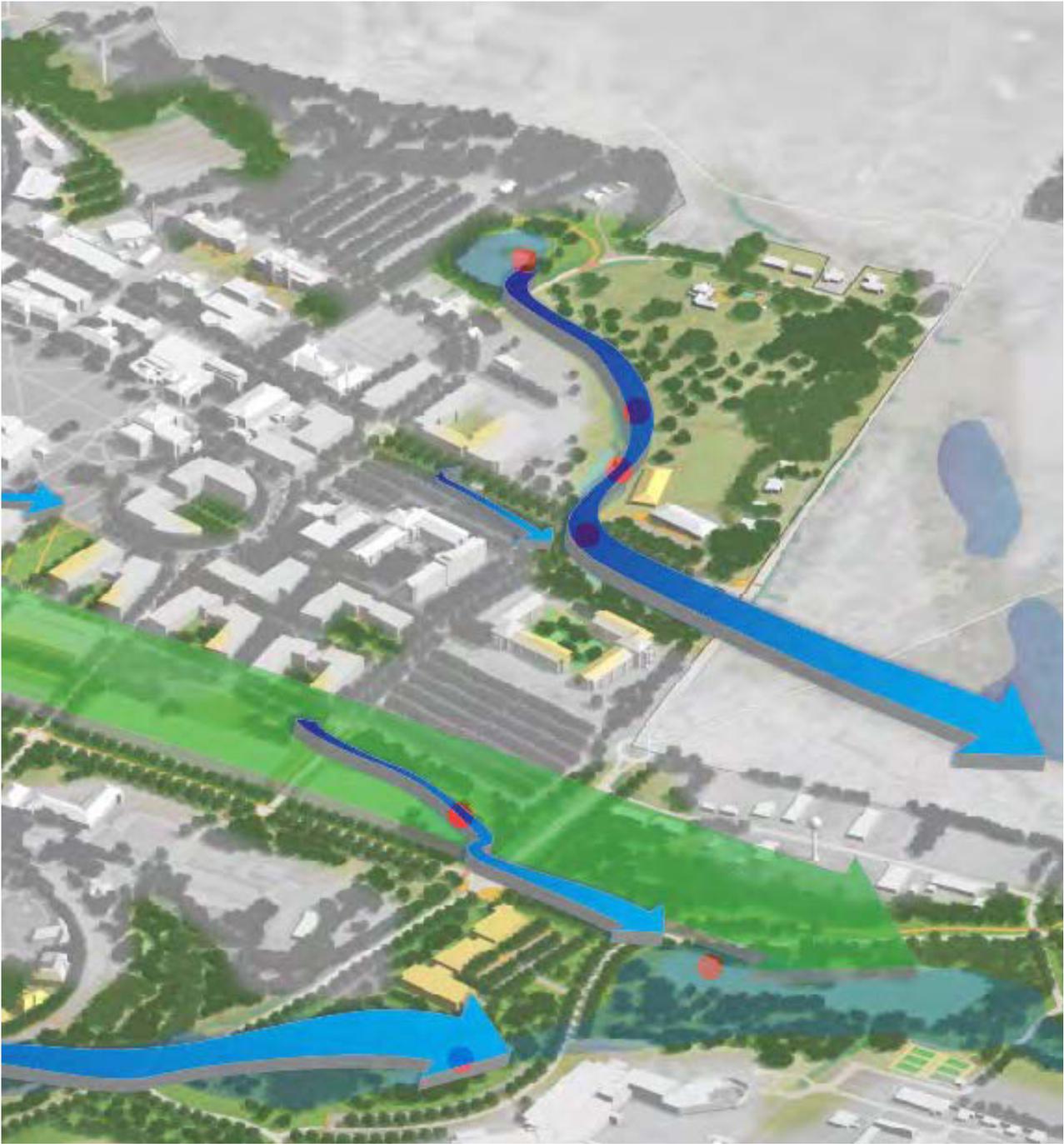
- Plan for a reduction in impervious area
- Utilize French Drains and dry wells in appropriate locations (soil conditions permitting)

Bio-retention Swales

Bio-retention swales are recommended in all future surface parking areas with adequate land area (suggested area: equivalent to 5% of the surface area drained) and suitable soil conditions. The bio-retention swales are landscapes where water is diverted and detained to treat and slow down peak flow rates. Pervious paving should be considered but only where water receiving landscapes are not possible.



WATER RESOURCES FRAMEWORK



As a signatory of the American College and University Presidents Climate Commitment (ACUPCC), Mississippi State University is transitioning toward the goal of climate neutrality. The ACUPCC requires the University to take several immediate or tangible actions to reduce emissions of the six greenhouse gases addressed under the Kyoto Protocol, the most significant of which is carbon dioxide (CO₂).

Energy and Emissions

As a signatory of the American College and University Presidents Climate Commitment (ACUPCC), Mississippi State University is transitioning toward the goal of climate neutrality. The ACUPCC requires the University to take several immediate or tangible actions to reduce emissions of the six greenhouse gases addressed under the Kyoto Protocol, the most significant of which is carbon dioxide (CO₂). The ACUPCC also requires the University to develop a Climate Action Plan (CAP), the purpose of which is to set out a strategy for achieving climate neutrality over a period of time to be determined by the University.

The recommendations of the Master Plan are intended to assist the University in addressing the requirements of the ACUPCC. While the ACUPCC will be largely addressed by the University's forthcoming Climate Action Plan, the Master Plan does provide physical design strategies and recommendations for assisting the University in reducing energy consumption and carbon emissions.

In planning for climate neutrality, energy and emissions are key areas of focus. For the purposes of analysis and planning, energy is considered at two levels: 1) supply and 2) demand. The supply level includes the energy purchased for on-site generation purposes (natural gas) and electricity purchased from public utility companies. Demand addresses energy consumed in campus facilities (buildings and otherwise), as well as the cultural aspects of energy use.

MSU has made good progress toward its sustainability goals. Energy consumption has been reduced by 20+ percent since 2006 (the base line year). Energy use in MSU facilities is inextricably tied to the types and amount of space provided, the efficiency of the buildings (operational and envelope), operational practices, the maintenance of equipment and the efficiency of energy generation.

Recent IHL mandates require a 30% reduction of energy intensity by 2015 compared to MSU baseline year of 2006. To achieve that goal, MSU must develop energy conservation and performance targets for existing and future facilities. As a result, a coordinated approach to energy and space management is recommended. Looking ahead, it will be challenging for MSU to increase square footage while decreasing overall energy consumption.

BEST MANAGEMENT PRACTICES

MSU will need to manage and plan for efficient utilization of energy in a context of increasing square footage. In response to IHL's mandate, several recommendations are proposed and coordinated in the Master Plan. The recommendations fall into the following categories:

- Efficiency and Conservation
- Passive Design Strategies
- Energy Usage Intensity (EUI) Targets
- Renewable Energy

EFFICIENCY AND CONSERVATION

Reducing energy consumption in existing MSU facilities is a consideration in meeting the reduction targets. A range of efficiency improvements are possible including HVAC upgrades, lighting retrofits and other adjustments to the building systems. As major renovations are carried out on existing buildings in association with programmatic moves, specific efficiency targets should be kept in mind. Reducing energy consumption in existing buildings is necessary to offset the increased demand generated by new buildings. Several conservation measures are proposed:

- **Efficiency Upgrades:** complete buildings system upgrades and renovation projects with energy conservation as a key goal.
- **Education programs:** MSU should develop programs to educate faculty, staff and students about energy use and encourage them to conserve energy. Empowering the campus community to divert money from energy bills to capital investment and programmatic support can provide strong incentives to conserve energy.
- **Operations:** Coordination of building occupancy/building use to reduce wasteful operation of almost empty buildings during non-peak hours.
- **Self-funding revolving fund:** Recent IHL policies require MSU to establish an account and return 25% of energy savings to it. Account funds are to be used for further energy projects.

Climate Response (Passive Design)

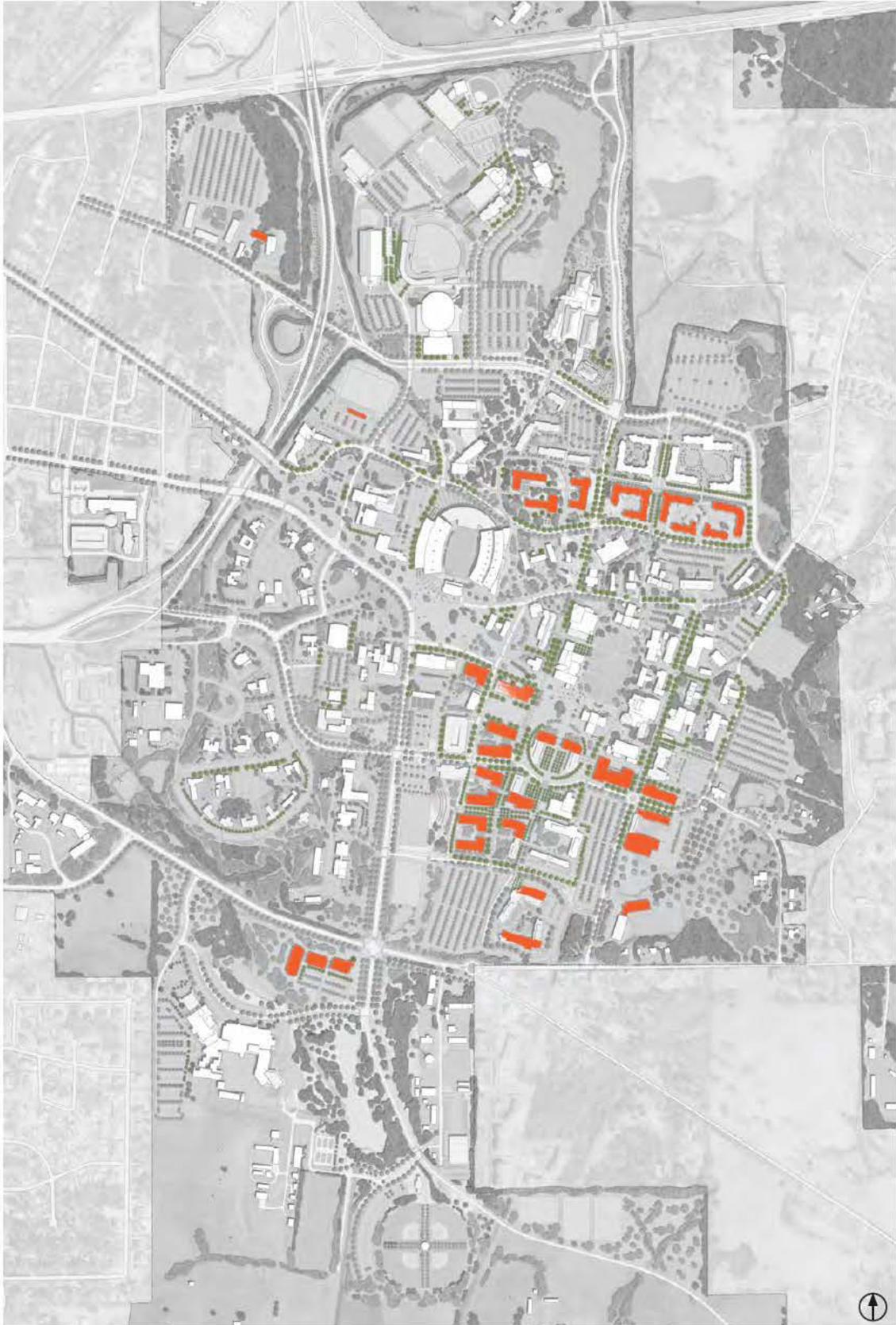
Building orientation is an important factor determining the energy requirements for future buildings, especially those that do not have a large internal heating or cooling load generated by lab equipment or high occupancies. Where possible, proposed buildings are oriented on the east—west axis in the Master Plan to ensure optimal solar design opportunities and passive design techniques.

Landscape plays an important role in providing shade and wind protection in the campus environment in addition to the stormwater management benefits. Designing landscapes to address functional as well as aesthetic goals helps reduce heat islands (horizontal surfaces such as parking lots that absorb solar radiation), and shade buildings to decrease cooling loads. A comprehensive shade tree strategy is recommended in the Master Plan for existing buildings with significant east and west exposure. The shade strategy is also planned to protect pedestrian routes.

RECOMMENDATIONS

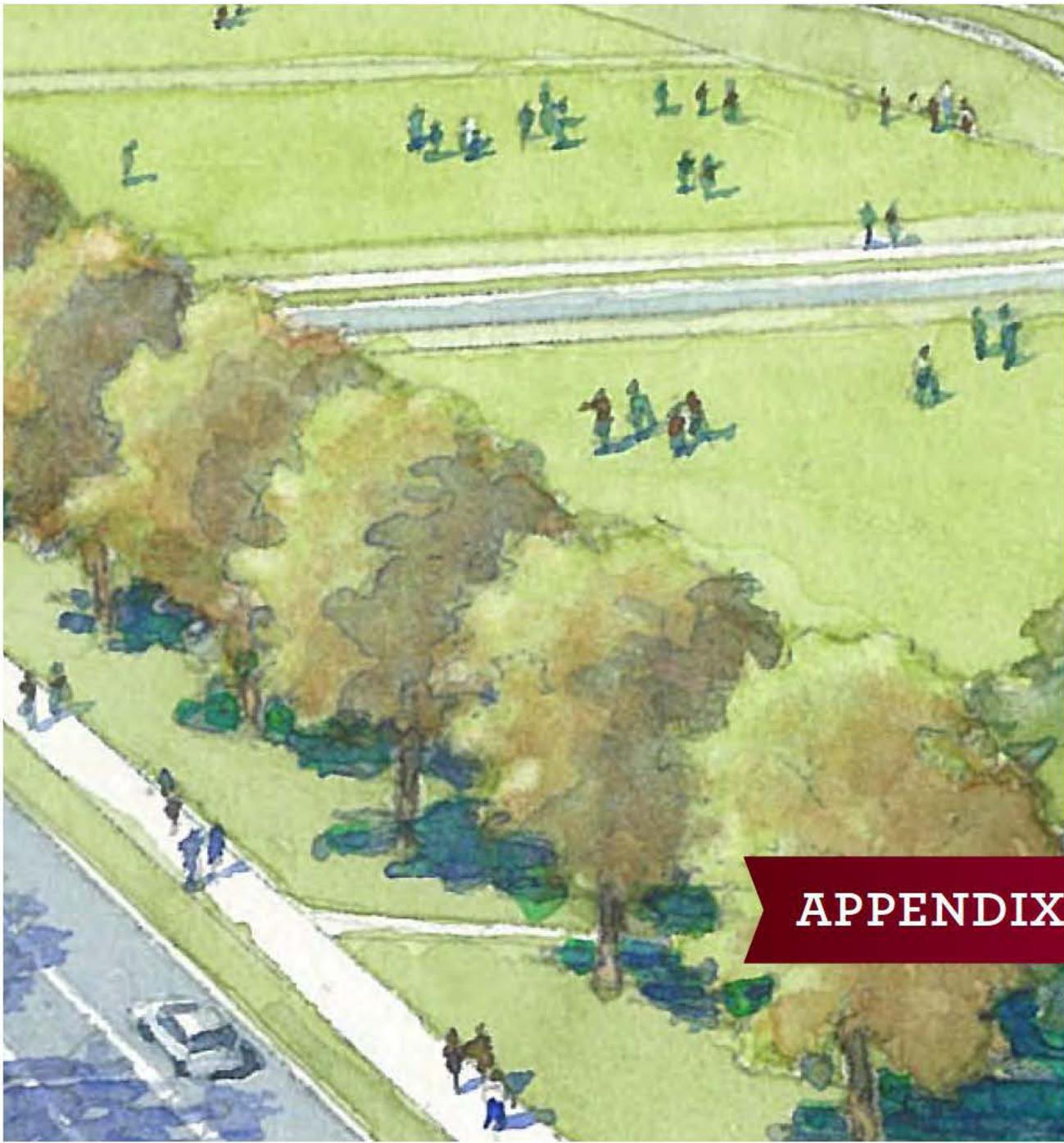
The following recommendations are provided for consideration as the University develops its Climate Action Plan:

- **Utilize existing building space efficiently** recognizing the connection between space, energy and emissions. Before constructing new non-specialized space, make sure existing space is utilized as intensely as possible. It will be important to stress that ALL campus space consumes energy and, therefore, has an emissions component. This requires a new mindset with regard to the true cost of space.
- **Passive Solar:** Proposed buildings are oriented on an east - west axis where possible and spaced to ensure maximum solar access. Where east—west orientation is not possible, shade trees and architectural shading strategies are proposed.
- **Solar Hot Water and Photovoltaics (PV):** Plan to incorporate solar hot water technology and photovoltaic technology in proposed buildings and existing building retrofits (with the assumption that costs and technological developments will become more favorable in the future). This requires that buildings be oriented to favor southern exposure.
- **Landscape (Shade) Strategy:** the proposed landscape and building placement framework is intended provide solar access to buildings and outdoor spaces. The Master Plan includes strategically placed north-south rows of trees to shade the east and west facades of existing buildings and proposed buildings
- **Transportation:** The Master Plan emphasizes pedestrian, bike and transit circulation. The proposed shift in modal split is intended to allow for a more sustainable transportation system.
- **Improve the Energy Performance of Existing Buildings:** reduce energy consumption as part of addressing deferred maintenance and building renovation. The **energy usage intensity** (EUI) of existing buildings will need to be decreased or stabilized as existing buildings and systems are remodeled.
- **Establish target EUI for new construction:** Establish EUI targets for all proposed building types on the campus. This will help the University with energy and emissions planning and help with the new “accounting” procedures for emissions.



PROPOSED BUILDING ORIENTATION AND SHADING: AN EAST-WEST ORIENTATION IS EMPHASIZED ON PROPOSED BUILDINGS. STRATEGIC TREE PLANTING IS PROPOSED ON THE EAST AND WEST FACADES OF EXISTING BUILDINGS.





APPENDIX



LANDSCAPE FRAMEWORK

MASTER PLAN LANDSCAPE GUIDANCE

INTRODUCTION

The Landscape Guidance serves as a planning tool designed to bring consistency to the campus landscape and facilitate future planning and design decisions. It provides more detail relative to the Master Plan Landscape Framework and focuses on preservation, restoration and enhancement of MSU's vital campus open spaces and natural systems. The Landscape Guidance compliments the Master Plan and builds upon the MSU Exterior Design Guidelines Draft completed by the University in July 2009. The MSU Exterior Design Guidelines include adopted standards pertaining to furnishings, lighting, signs, fences and railings, walls, and walks.

As stated in the Master Plan, Landscape is viewed as an important aspect of the campus environment. The aim of the Master Plan is to create a working landscape; a landscape that has functional as well as aesthetic value. Landscape is viewed as a part of the campus infrastructure, especially with regard to stormwater management.

Given the importance placed on landscape for functional and aesthetic aims, it is important that a new funding approach and strategy be developed. Moving forward, landscape should be viewed as a capital investment that will contribute to the beauty and functionality of the campus. It will also be important to adequately fund maintenance and operations.

LANDSCAPE GOALS AND OBJECTIVES

The campus landscape is currently defined by the unique landforms, drainage patterns, historic landscapes and connective open spaces of the campus. As identified in the Master Plan, the Landscape Framework provides a powerful organizational structure for guiding incremental change on the campus. Any future landscape development project should be designed to contribute to the larger campus Landscape Framework and blend seamlessly beyond the limits of its project boundaries. To that end, the following overarching Landscape Guidance goals and objectives are provided to reinforce the social and environmental goals of the Master Plan:

- Strengthen the Campus Landscape Experience. Introduce a strong direction and purpose to the campus landscape, providing stronger connections to MSU's history, culture, outdoor activities, education, stormwater management and microclimates.
- Provide a consistent landscape structure to reinforce both the well-defined and undeveloped open spaces of the campus including streets, pedestrian connections and inherent water bodies.
- Improve the campus landscape to support the daily life of the University and enrich the interface between the campus and community.
- Initiate a "native/adaptive hardy" tree species planting program to renew and develop the overall campus landscape and reinforce the relationship of the campus to the surrounding regional landscape.
- Reinforce and strengthen pedestrian/bike connections with a clear and visible structure of landscape materials and plantings that provide shade and promote ecological diversity.

STRUCTURE OF THE LANDSCAPE GUIDANCE RECOMMENDATIONS

The Landscape Guidance is organized in two sections including:

Section 1: Landscape Components, and

Section 2: Landscape Framework Guidance.

The Landscape Components section provides more direction for rehabilitation, new construction and maintenance associated with the overall MSU campus landscape. The Landscape Framework Guidance section highlights the character defining aspects of Master Plan Landscape Framework, identifies strategies and provides recommendations for specific campus landscape spaces.

Part 1: Landscape Components

The Landscape Components include: Circulation (Streets, Parking and Bicycle Network) Monuments, Plantings, Irrigation and Stormwater. The Landscape Components serve as a reference for new landscape projects. Similar to the 2009 MSU Exterior Design Guidelines, each landscape component should be considered as an adopted standard that applies throughout the campus.

STREETS

Streets and roads play an important organizing role in the campus fabric and influence the way in which one perceives and experiences the MSU campus. Landscape, therefore, is integral with the design and enhancement of proposed and existing campus roadways. The following recommendations apply to campus streets:

- Enhance existing streets and provide new streets with landscape elements that fulfill functional requirements while improving the aesthetic experience of the campus.
- Provide visual unity and human scale by using consistent materials, lighting, signage and planting.
- A single tree species is recommended for campus streets (see landscape Framework Guidance section for additional information). The uniform tree shape and habit of single species will reinforce a consistent streetscape character.
- Where feasible, street tree planting beds between campus sidewalks and streets should be prepared as a continuous planting bed to provide optimal soil conditions for root growth.
- If street trees are planted in conjunction with underground utility projects, design coordination should ensure that tree roots and crowns have an adequate growth zone below and above surface grades.
- Implement clear and safe pedestrian crossings at appropriate road locations (i.e. campus road intersections and raised traffic speed tables/flush curb at mid-roadway crossings).



PATHWAY AT THE JUNCTION



CAMPUS PATHWAY



DRILL FIELD



TREES NEAR ALLEN HALL



GEORGE PERRY STREET



BARR AVENUE

PARKING

Surface parking is reconfigured and expanded in the Master Plan on the east and south portions of the core campus. The design and reconfiguration of parking lots should be designed to address: 1) stormwater run-off; 2) clarify vehicular circulation and pedestrian connections; 3) reduce the visual impact of parked vehicles; and 4) reduce the heat island effect of paved surfaces.

As depicted in the Master Plan Landscape Framework, continuous planting islands, between parking bays are proposed. It is recommended that the continuous planted parking islands be implemented with curb-less or interrupted (flush curb cuts). This will ensure that stormwater sheet flow from paved surfaces is directed to the planted islands. Other recommendations for new and existing parking lots on campus include:

- Implement planted swales to restrain surface flows, filter water and reduce stormwater drainage into campus streams and water bodies.
- Incorporate shade trees at restructured and or new parking lots to reduce the heat island effect on adjacent pavement and parked vehicles.
- Integrate mulch and or low growing groundcover at parking island edges (approx. 2'-0") to reduce maintenance requirements associated with vehicle wheel base overhang conditions.
- Plant parking islands with native groundcover and or low growing grasses that do not require mowing.
- Provide appropriate lighting levels that control light and avoid glare and spill-over onto non-parking areas.

BICYCLE NETWORK

An important aim of the Master Plan is to promote and expand the bicycle network within the core campus and provide stronger connections to the Starkville community. Landscape treatment associated with separated and designated bicycle lanes should primarily focus on providing shade along the routes and at bike parking locations. Bicycle network recommendations include:

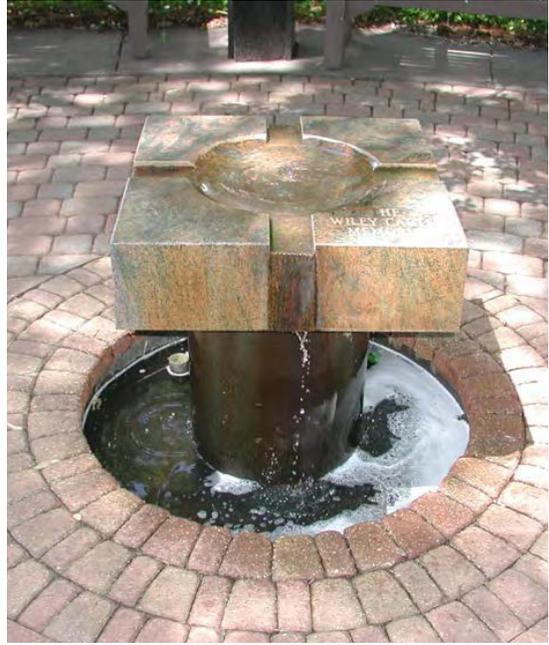
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- Shade trees planted along the south side of east-west bike lanes and the west side of north-south bike lanes can reduce heat island effect and provide shade for cyclists.
 - Shade trees with an upright branching habit and adequate set-backs from the edge of bike lanes is recommended to allow for clear site lines and prevent impact hazards.
 - The current use of concrete pavement for dedicated bike lanes is recommended.
 - Where space permits, dedicated bike lanes such as the existing bike lanes located at Barr Avenue and George Perry Street, should be extended to other campus areas.
 - Within denser academic core and pedestrian zones (10 minute walking of the Drill Field), bicycle circulation should be studied further and bicycle routes should be assigned and designated. Policies for bike use in the core should also be established.
 - Bike lanes should conform to AASHTO standards (<http://www.bicyclinginfo.org>).
 - Bike racks should be located in close proximity to building entrances for convenience.
 - The quantity of bike racks should be carefully considered in relationship to the building use and occupancy.
 - Bike parking areas should be sized to allow for adequate bike access and be located adjacent to walkways and plazas rather than floating independently in lawn or planted areas.
 - Where feasible, bike parking areas should be located such that direct site lines to building entrances and historic landscape settings is not possible.
 - Bike amenities such as compressed air stations, parking and lockers should be considered for the proposed campus parking garages.



MONUMENTS

MSU has a wide array of monuments and memorials which include plaques, sculptures, fountains, benches and plantings. In total, approximately 60 monuments exist on the campus with a concentration in and around the Drill Field. A Survey of Outdoor Monuments prepared by the Office of Campus Planning (July 2010) provides excellent photographic documentation, historical background, donor information, date of installation and a physical condition assessment of each monument. The following highlights the recommendations for monuments in relation to the Master Plan.

- Protect and restore existing monuments as identified in the 2010 Survey of Outdoor Monuments. Whenever possible, future projects in an area where dislocated or dismantled monuments were originally located should incorporate the restoration of these monuments
- The Master Plan should be reviewed for future locations of art and monuments on the campus grounds and considered in relation to long-term development.
- Assignment of an endowment (for repair and or maintenance) shall be at the discretion of the University as part of the gift.
- Monuments should serve as a catalyst for the development of new campus landscapes to include seating, paving, lighting and planting. The Master Plan and Exterior Design Guidelines should be reviewed in conjunction with new art and or monument design proposals.
- Stewardship programs should be developed that endow broad areas of existing and newly installed campus landscapes that can provide opportunities for commemoration while avoiding the over population of individual gift and or commemoration plaques.



PLANTINGS

The vegetative elements of the landscape including trees, shrubs, ground cover and lawns are an essential and defining part of the MSU campus. Trees and shrubs help define campus open spaces, help define the quality of the campus environment and also support the long-term goals of campus sustainability. Plantings can also facilitate the performance of natural systems (i.e. waterways and drainage patterns) and improve overall campus stormwater management and performance. Protecting existing vegetation, removing invasive plants, and supplementing with new plantings will ensure that natural systems continue to function and improve over time. Appropriate selection and location of trees can provide shade and mitigate heat islands of pavement and west facing building facades. In all cases, plantings should be implemented to emphasize these larger formative landscape characteristics.

As an on-going effort to sustain and develop the Landscape Framework as outlined in the Master Plan, it is recommended that future plantings be coordinated through the development of a campus wide Planting Master Plan. Updating existing and developing plant data information, location, plan size, species, and health condition should be incorporated into the Planting Master Plan. This endeavor can provide learning and research opportunities for the MSU Landscape Architecture Department working with campus facilities and or consultants.

A Planting Master Plan would facilitate guidance pertaining to plant selection and location coordination with distinct microclimates, subsurface utilities, soil, drainage and floodplain conditions. The Planting Master Plan would also assist the Office of Campus Planning, facilities staff and future design consultants ensuring that the Master Plan Landscape Framework goals and objectives are integrated.

Plant Selection

As a general guideline, new tree, shrub and groundcover plantings should consist of species that are native and or “adaptive hardy” to Starkville, Mississippi and suited to the various habitat conditions found on the campus. This will provide the opportunity for long term adaptation of plants to the campus environment in a way that harmonizes with the characteristic beauty of the region. Considerations of durability, maintenance and specialized requirements for care should factor into future plant installations (see recommended plant list available on the University website).

Plant Composition and Scale

The primary compositional goals of the campus plantings are to achieve proper scale and unity within the overall campus Landscape Framework. The size of shrubs and plant beds should be considered with respect to their scale and compositional relationship to campus buildings, streets, walks and lawn areas. In general, plantings should be simple and conceived in broad strokes that are appropriately scaled to the campus. Intricate, domestic-scaled plantings are inappropriate when arbitrarily located next to large buildings or floating in the large lawns and open campus spaces.

Reforestation and Restoration

The Master Plan Landscape Framework promotes a “working landscape” that will reconnect fragmented natural systems on campus. This includes reforestation, restoration of wetlands, and implementation of water receiving landscapes that will reduce flooding associated with existing creeks and drainage patterns on campus. Landscape reforestation and restoration will also increase campus habitats for new native flora and fauna.

As identified in the Master Plan, reforestation is recommended as a long-term campus landscape strategy on the periphery of the academic core. In some cases, reforestation could be implemented over time through natural vegetation succession and blend in with existing wooded areas. Efforts associated with campus reforestation can also provide a learning and research opportunity for Forestry students and faculty with regard to the research, design, installation, management and monitoring process.

Tree Replacement and Tree Sizes

A campus wide Planting Master Plan will enable the University to make informed decisions about tree replacement new planting locations and species. The following tree sizes should be implemented for future planting on campus.

Newly installed Street Trees should range from 2.5 inch 4.5 inch caliper size with high branching structure and uniform shape to ensure visual impact at the time of planting and provide continuity in combination with other landscape elements, such as, campus streets and roads.

Other campus tree planting sizes should range from 2.0 inch caliper up to 6 inch caliper, depending on the particular tree species (fast growing vs. slow growing) campus location such as prominent locations, newly installed landscape, reforestation, and or supplemental planting amongst existing stands of trees.

Tree Care

Tree care should be integral to the Planting Master Plan in order to sustain existing and new tree plantings on campus. A dedicated tree care program should address maintenance items including tree hazard assessment, tree removal, structural pruning, fertilizing on a yearly basis.

Tree pruning and other routine tree care should be integrated as part of campus grounds operation and maintenance. (i.e. arborist certification and appropriate tree maintenance equipment).

The new tree planting establishment period will be enhanced by proper tree pit preparation, soil enhancement fertilization, monitored watering and protection associated with potential hazards.

On site campus composting should be reintroduced to support soil amendment as well as mulching practices associated with tree plantings.

Lawns

Currently, MSU manages approximately 300 acres of manicured lawn. In addition, some lawn areas are over-seeded with winter rye so that a green grass-like appearance is sustained throughout the year. These lawns require high mowing cycles during the growing season and other associated maintenance (leaf litter removal) throughout the year. As Master Plan strives to reduce the overall environmental impact of operations and the carbon footprint of the campus, deliberate decisions regarding the lawn areas and the associated maintenance requirements are needed. The following recommendations pertain to campus lawns:

- Institute a comprehensive review of the mowed campus lawn areas and develop a maintenance program focused on reducing lawn maintenance activities.
- Form a committee between facilities and university departments with expertise in turf grass management and research as part of the lawn maintenance program.
- Reduce over-seeding (winter rye) practices and limit reseeded to historic, recreational and visually prominent landscape areas.
- Grass clipping recycling should be integrated with lawn maintenance practices.
- Convert portions of the campus landscape to grass species (meadow/prairie) that require less water and mowing.

IRRIGATION

Currently MSU's entire irrigation water supply comes from potable sources (campus wells). Annual rainfall in the Starkville, Mississippi area is over 55 inches per year and is distributed evenly over the course of the academic year. Given these statistics, it is recommended that all MSU plantings be designed to thrive without irrigation after an initial growth establishment period. Recommendations relating to irrigation include.

- Limit irrigation to campus lawn areas that receive heavy pedestrian and tailgating use (i.e. The Junction).
- Consider non-potable water sources for the irrigation water supply (Chadwick Lake and Eckies Pond).
- Limit irrigation operations to periods of time associated with heavy use (i.e. tailgating, recreation activities).
- Implement weather station(s) for monitoring and managing irrigation zones and programming irrigation time periods.
- Update mapping of all existing campus irrigation zones and plan for improved maintenance planning and operations.
- Conduct periodic inspections of irrigation heads to repair and reduce over-spray onto non-irrigated surfaces.
- All newly implemented planted areas should be supplied with amended planting soils designed with moisture retention capacity to reduce irrigation dependency.
- Provide a supplemental watering program (in-house maintenance operations or landscape installation contract) associated with new plant growth establishment and limit to a two year period.
- Native and adaptive hardy plant selection criteria should consider watering demands as part of the plant selection process



CATALPA CREEK AT STONE BOULEVARD

STORMWATER

Stormwater management is a key component of the Landscape Framework. Flooding problems exist along the east and west branches of Catalpa Creek and are especially problematic on the South Farm. A landscape strategy for stormwater management and mitigation offers great possibilities to further shape and enhance the MSU campus landscape and quality of the overall campus environment. The use of the landscape as of a means of reducing peak rate of stormwater runoff, limiting the total volume of runoff to pre-developed hydrologic conditions and providing water quality treatment can avoid the expense of subsurface infrastructure systems and deep (fenced-off) detention basins. The following outlines landscape recommendations associated with stormwater:

- Provide a 100' stream protection buffer on all campus streams.
- Incorporate Low Impact Development landscape solutions as vital component of future campus planning and development.
- Sub-watersheds should be studied in relation to future campus projects that impact pervious surfaces (i.e. existing lawn or planted areas) so that landscape mitigation proposals (on-site or off-site) can be incorporated as part of the project.
- Where feasible, on-site storm water treatment should be provided for all newly constructed campus buildings and landscape projects.
- Protect and re-vegetate landscape areas along existing creeks and drainage ways (within the 100' buffer).
- Direct stormwater flow from existing creek beds to water receiving landscapes that are designed to allow for infiltration and slow discharge (i.e. bio-retention cells).
- Enhance landscapes around existing on-site water resources (Chadwick Lake) with vegetated filters and water absorbing plantings at stormwater discharge points to improve water quality.



LANDSCAPE FRAMEWORK

Part 2: Landscape Framework Guidance

The Landscape Framework Guidance section focuses on three primary components of the MSU Master Plan including:

1. Iconic Landscapes
2. The Green Corridor and
3. The Cultural Corridor

Defining characteristics are identified for each of the three framework landscapes. Specific areas within the frameworks are highlighted with more detailed landscape recommendations and guidelines.

THE ICONIC LANDSCAPE

MSU is fortunate to have a wide array of Iconic landscapes including the Drill Field, the Junction, Bell Island, Eckies Pond and the Pecan Grove. These landscapes are iconic in that they establish MSU's unique sense of place and character. They are memorable open spaces where the landscape, in most cases, prevails over the surrounding campus architecture. Defining characteristics of these landscapes include attributes such as pedestrian dominant spaces that are devoid of intrusive vehicular traffic and or parking. Typically, these landscapes are demarcated by lawn and mature shade trees that define the overall open space. The Iconic landscapes also offer outdoor environments for informal gatherings and large programmed events. These landscapes are as significant as MSU's historic buildings and need to be protected and enhanced.

Eckie's Pond

Eckie's Pond is significant cultural landscape and landmark. In the late 19th century, the Pond served as an experimental horticultural project demonstrating the capture of rainwater for irrigation use. Located in the southeast portion of the core campus, the Pond is bordered by parking on the north and the Pecan Grove to the south. The main objective is to protect and enhance this Iconic landscape. Recommendations are as follows:

- Designate a campus landscape zone around the pond which preserves and protects this iconic landscape.
- Consider reinstating Eckies Pond as an irrigation source to supplement new tree/ planting during the establishment period.
- Reconfigure parking to the north to provide a landscape buffer between the pond edge and parking.
- Implement an east-west walk and shade trees marking the former Mobile and Ohio Rail line and connecting Eckies Pond to the core campus and points east.
- Provide a walkway/pedestrian circuit around the Pond and at wet areas.
- Consider the relocation of the Eckies Pond monument to the east-west walkway so that it becomes more visible to people approaching the Pond from the core campus.

W.S. Anderson Pecan Grove

The W.S. Anderson Pecan Grove, located south of Eckies Pond, is a landscape rich in campus and cultural history. This landscape represents a time period when MSU's agriculture and horticulture research were an integral part of the core campus experience. Today, the majority of agricultural research occurs on the South and North Farms, yet the Pecan Grove is still a prominent landscape when approaching the core campus from South Hardy Road. Landscape guidance for the Pecan Grove should focus on preservation, rehabilitation and integration of a water receiving landscape as outlined below:

- Designate an entire landscape zone which protects the Pecan Grove and allows for tree rehabilitation and replacement and expansion.
- Protect existing Pecan tree roots and trunks by using appropriately sized equipment for maintenance operations within this zone.
- Integrate native/prairie grasses that require less mowing under the existing tree stand and open area to the east.
- Eliminate frequent mowing along the existing drainage swale that flows southwest through the Grove and cultivate native grasses that can slow down the flow of rain water and infiltrate water runoff.
- Implement a new water receiving landscape which connects the existing drainage swale at the Pecan Grove to the north/south drainage swale east of Hardy Road.
- Consider a landscape stewardship program between MSU and the Mississippi Pecan Growers Association which can serve to further commemorate and rehabilitate the W.S. Anderson Pecan Grove landscape.

THE GREEN CORRIDOR

The Green Corridor is significant Landscape Framework component of the Master Plan providing an important opportunity to establish new and enhanced campus landscapes connecting Chadwick Lake to the South Farm. This north-south landscape spine will also serve as a pedestrian and bicycle circulation route connecting MSU indoor and outdoor recreation facilities.

A defining characteristic of proposed Green Corridor is its position in relation to the inherent hydrological conditions and watersheds of the campus. North of Davis Wade Stadium, the Green Corridor is situated within a sub-watershed defined by a low lying land area and sloping topography that extends to Chadwick Lake. The Green Corridor south of the Stadium is centrally located within a large watershed which receives storm water runoff from the core campus and directs south to Catalpa Creek.

This existing landscape is dominated by an assortment of parking lots, roadways, overhead utilities, open play fields and undistinguished plantings which make wayfinding in this area challenging. A main objective for the Green Corridor is to provide a visually unified landscape that includes pedestrian and bike movement, that includes plantings that respond to climatic conditions and improve water quality and that reduce the impact of run-off entering Catalpa Creek

Chadwick Lake

Chadwick Lake is a significant landscape feature within the MSU Athletic District. It also provides a notable landscape arrival sequence for people entering the campus from Highway 182. The existing lake perimeter landscape is characterized by a broad expanse of manicured lawn and scattered tree stands. This open landscape allows for long views to MSU athletic facilities but does not allow for any formal pedestrian access to the edge of the water. A goal is to improve access to the edge of the water and enhance the overall landscape environment around the Lake. The following landscape recommendations will overtime transform this currently underutilized campus open space.

- Provide a recreational path (mowed or pervious) that allows for recreational access (i.e. Frisbee golf) and a walking/bike circuit around the entire lake perimeter.
- Provide direct pedestrian walkway connections to various athletic facilities and parking area at the west-side of the Lake.
- Introduce grass species (meadow/prairie) that require less water and mowing.
- Provide shaded seating areas and overlook areas that allow path users to get close to the edge of the Lake



CHADWICK LAKE

- Implement a native tree planting program (with tree species identification tags) that provides shade along the paths, seasonal interest and enhances native bird habitat.
- Place new plantings to allow for framed views of campus buildings while screening parking areas
- Take advantage of the existing sloped topography at the west side of the Lake and provide natural amphitheater for seating and gathering.
- Introduce native wetland plant species at the existing stormwater discharge point along the west side of the lake.

Sanderson Link

This portion of the Green Corridor consists of a low lying campus open space oriented north/south between Coliseum Boulevard and Barr Ave. The area is currently dominated by parking, roadway lighting and overhead utilities, and an undefined landscape. As proposed in the Master Plan, Sanderson Link provides a new campus open space that links the Athletics District to the core campus. The new landscape proposes the reduction of imperious pavements and introduction of water receiving plantings. A summary of Sanderson Link landscape recommendations are as follows:

- Provide a pedestrian walkway as well as a dedicated bike lane that connects the Sanderson Center to Barr Ave.
- Remove overhead utilities and implement pedestrian pole lighting along one side of the walkway.
- Integrate rain garden seating areas along the pedestrian walk that consist of native shade trees and low growing plantings.
- Introduce grass species (meadow/prairie) that require less water and mowing requirements at existing slopes.
- Provide rainwater catchment areas (swales) at the toe of existing slopes that capture runoff from paved walkway and bike lane surfaces.
- The overall shape, size of rain gardens plant composition and scale should be thoughtfully designed in relationship to the larger scale of adjacent buildings and campus landscape spaces.
- New plantings should include a mix of deciduous and evergreen trees adaptable to existing slope and soil conditions.
- Deciduous canopy trees should be located to provide shade from afternoon sun along the walk and bike lane.

Dorman Walk and Stone Boulevard Recreation Fields

This portion of the north south Green Corridor will connect the Junction to the South Gateway. Currently, this area consists of surface parking lots, open manicured lawn areas, and vegetated slopes to the south. The land also mediates between low lying topography at the Stone Boulevard Recreation Fields and the higher “plateau” of core campus. Similar to Sanderson Link, this area is envisioned as new landscape that will provide shade and human comfort in conjunction with the pedestrian and bike network. The new landscape and circulation system will need to be carefully designed to connect gracefully between the lower and high grade conditions. Landscape recommendations for this area include:

- Where feasible, provide both a dedicated bike lane and pedestrian walkway.
- Provide pedestrian pole lights along one side of the pedestrian walkway.
- Implement new tree plantings consisting of both deciduous trees and evergreens which are adaptable to existing slope and soil conditions.
- Introduce new grass species (meadow/prairie) that require less water and mowing requirement along the recreational pathways.
- Take advantage of the topography and provide an amphitheater for seating overlooking the recreation fields
- Re-vegetate slopes with trees and meadow/prairie grasses.
- Integrate native wetland vegetation planting at the edge of the stormwater pond south of the recreation fields and along Catalpa Creek.

THE SOUTH GATEWAY

The South Gateway forms a prominent portion of the Green Corridor. The alignment of the new south entry road allows for a significant landscape intervention at this location. This area falls within a large sub-watershed in which several drainage channels and Catalpa Creek converge. Portions of the land along the open water channel fall within the 100-year flood plain and frequently flood during storm events. The existing landscape is largely comprised of open manicured lawn with vegetation concentrated at the water edges and existing slopes. Parking exists at the Rex-plex complex, however, there no provision for pedestrian and cyclists to access the recreation facilities. The main objective of the South Gateway is to provide a new vehicular campus and landscape arrival sequence from the south. The landscape associated with the South Gateway will be designed to address the flooding problems associated with Catalpa Creek. Recommendations include:

- Introduce a series of stormwater ponds that reduce runoff and improve water quality discharged to Catalpa Creek.
- Construct wetland plantings at pond edge locations.
- Implement bio-retention cells in low lying land areas which incorporate soil remediation that can capture both surface and subsurface drainage.
- Re-vegetate the Catalpa Creek 100' protected buffer with native plantings that can tolerate flood events.
- Provide a diversity of deciduous and evergreen plantings that reinforce the habitat system associated with Catalpa Creek.
- Re-vegetate the sloped land areas east of the South Entry Road to buffer existing maintenance facilities.
- Provide dedicated bike lanes and pedestrian walkways that connect to the Stone Boulevard/Black Jack Road intersection and the recreation facilities at South Farm.
- Provide an east-west bike lane connection that links the 21 Apartments to the Stone Boulevard/Blackjack intersection.
- Provide pedestrian pole lights along one side of the pedestrian walkway.
- Integrate meadow /prairie grasses and informally placed (naturalized) groupings of trees around the pond(s) that convey the same character as the proposed Chadwick Lake landscape.
- Plant a single tree species at the South Entry Road gateway that matches the proposed street tree planting at Stone Boulevard.



SOUTH GATEWAY AND RECREATION FIELDS

THE CULTURAL CORRIDOR

The Cultural Corridor follows the east-west alignment of the former Mobile and Ohio railway. Defining characteristics of this landscape include mature deciduous trees and lawn located at the Junction and area south of the Depot. The mature tree groupings and simple lawn provide a memorable landscape setting that accommodates large tailgating events and every-day campus activities (walking and biking). The existing pedestrian/bike lane and lighting are appropriately scaled in relation to the surroundings. The landscape east of the Junction is less defined and fragmented with an assortment of parking, roads and buildings which interrupt the former historic rail line alignment. The main objective of the Cultural Corridor is to extend the Junction's landscape character, circulation and lighting attributes to the west and east of the Junction. Landscape recommendations for the Junction and points east include the following:

The Junction

- Protect the mature tree canopy, establish replacement tree plantings to retain and enhance the scenic beauty of this historic area.
- Implement new tree plantings (at larger tree caliper size) match existing tree species to provide consistency in tree form and character.
- Locate new trees in informal groupings to match the landscape character of the area south of the Depot and existing junction.
- Maintain a simple lawn and tree palette.
- Match and extend existing east-west junction walkway (south of bookstore) east to connect to the Drill Field and Eckies Pond.

President's Circle

The site of the former President's house appears in some of the earliest photographs of the MSU campus. Existing up until the early 1960's, this landscape consisted of an informal grove of canopy trees and lawn. Over time a circular road which surrounded the house and later Allen Hall captured the overall landscape setting. The Master Plan recommends reestablishing a new campus open space around Allen Hall which will guide the placement of future buildings. The following interim landscape recommendations include:

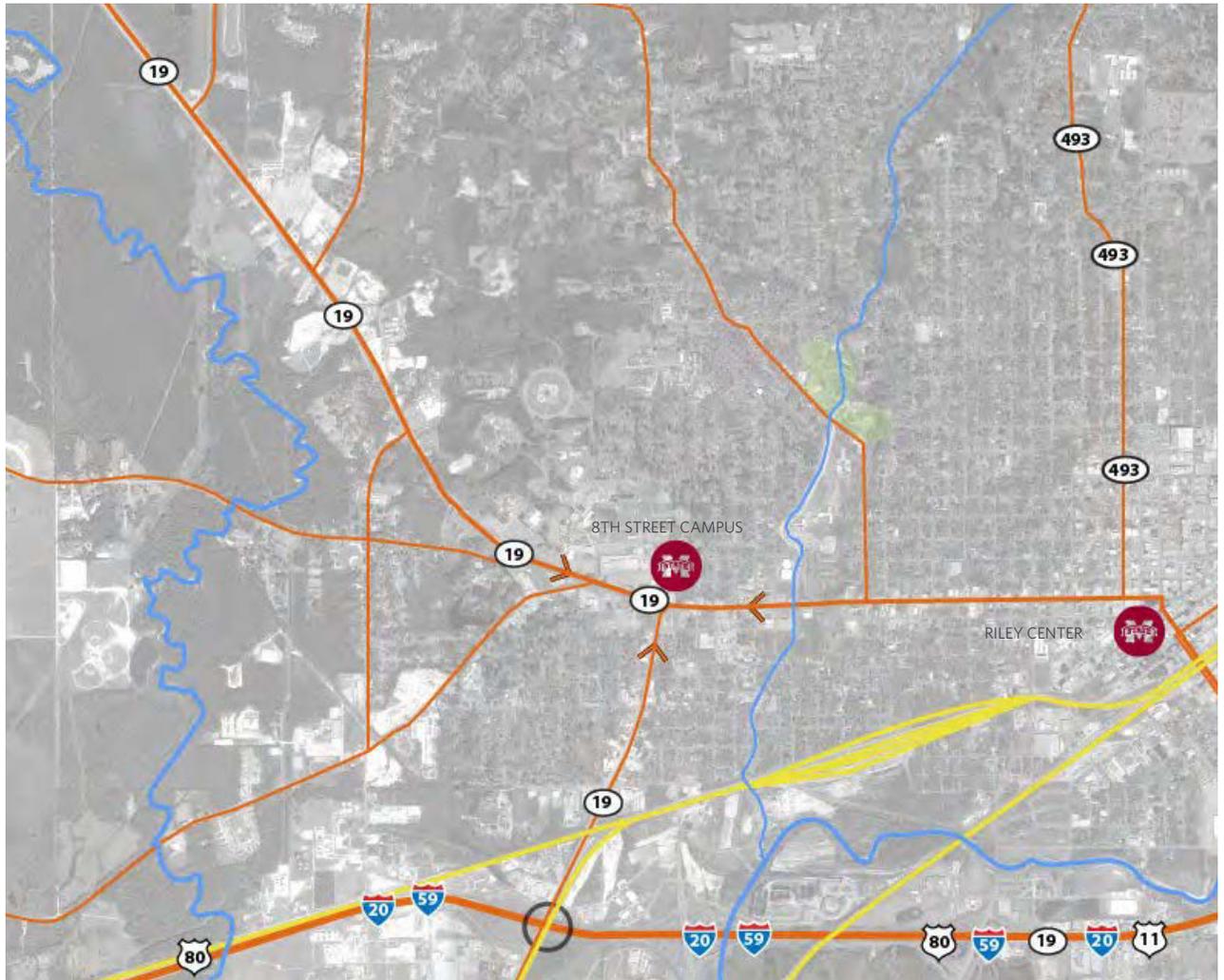
- Eliminate parking on the east and limit parking on west side of Allen Hall to allow for restoration of the President's Circle landscape.
- Implement a new pedestrian walkway and lighting that completes the circle surrounding Allen Hall.
- Protect the mature tree canopy surrounding Allen Hall and develop a tree replacement program.
- Provide new lawn and shade trees (at larger tree caliper size) south of Swalm.



THE CULTURAL CORRIDOR



HIISTORIC VIEW OF PRESIDENT'S CIRCLE



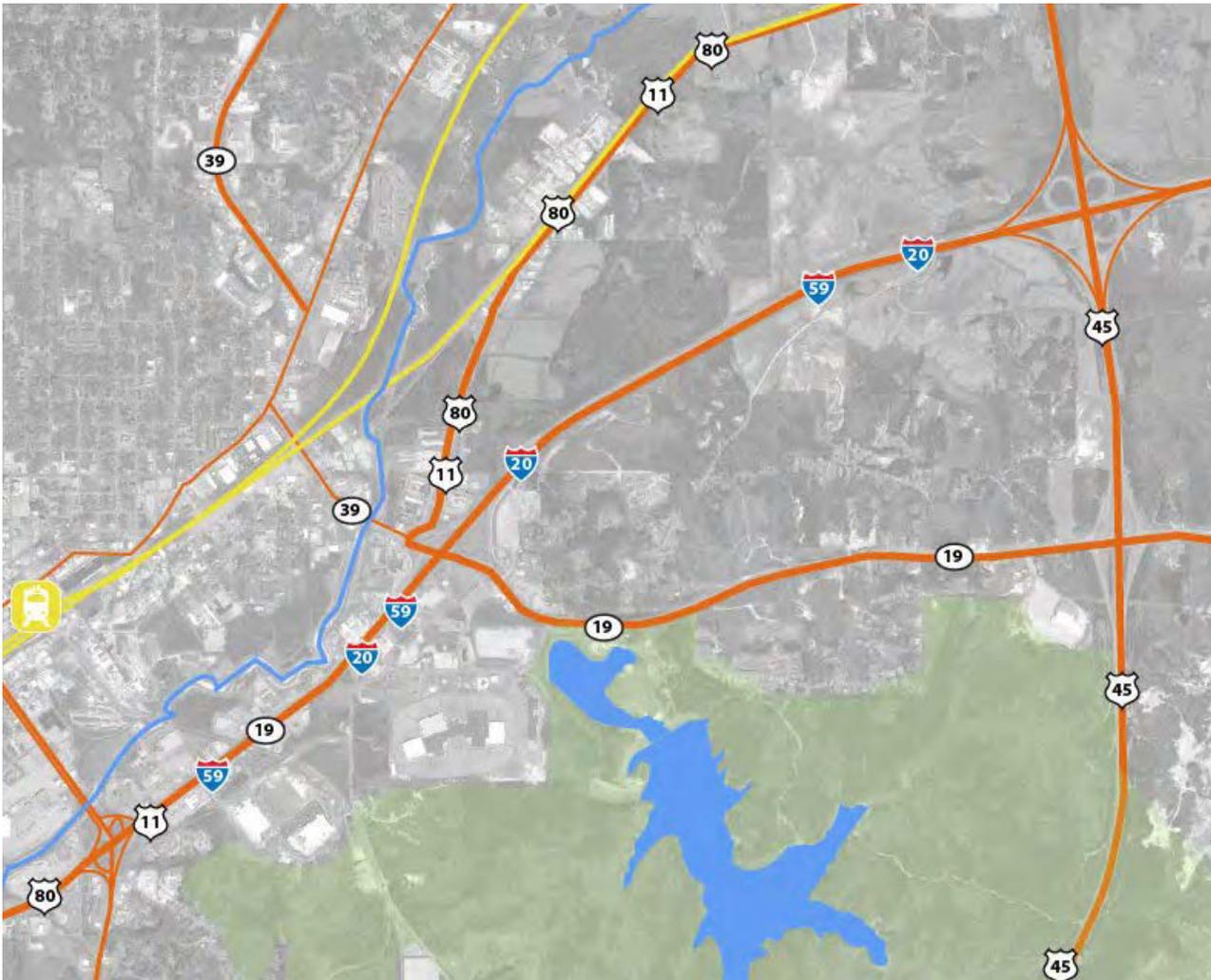
MSU MERIDIAN: ACCESSIBILITY

— ROAD NETWORK
 — RAILWAY

MISSISSIPPI STATE UNIVERSITY—MERIDIAN

Since 1972 MSU has operated a satellite campus in Meridian. Today, MSU Meridian offers a range of degree and certificate programs in the Division of Arts and Sciences, Division of Business and Division of Education. Over the coming years, it is anticipated that the number and types of programs will be expanded to serve the educational needs of the area population.

The following provides an overview of the existing facilities and describes the potential expansion capacity to serve future needs.



MSU Meridian Locations

MSU Meridian occupies two facilities in Meridian: a purpose-built campus located west of downtown on 8th Street / Highway 19; and, the Riley Center located at the corner of 5th Street and 22nd Avenue in downtown Meridian. Both facilities are accessible from Interstate 59/20.



MSU 8TH STREET CAMPUS: POTENTIAL EXPANSION

8TH STREET CAMPUS

The purpose-built campus of MSU Meridian lies west of the Meridian Community College Campus on 8th Street. Designed by the firm of Mockbee Cocker Architects, the facility was occupied in 1993 and serves as the primary location for MSU's educational presence in Meridian. The building features a distinctive tower, red brick, and a red roof. The surrounding site includes an amphitheater to the south and a pond to the west, both of which contribute to a unique setting. The amphitheater is located on the steep slopes that define a major site depression located directly to the south of the building—a depression that separates the facility from 8th Street. As a result, the building is located some distance from 8th Street, a factor which is considered to limit visibility.

Expansion, should it be required in the future, is proposed on the southwest corner of the site. The proposed expansion extends perpendicular to the existing building toward 8th Street, the intent of which is to establish a stronger presence along the roadway. Potential features of the expansion include a landmark element/structure near the street and a bridge connecting the facility to the existing building. A bridge is required to span the site depression. The expansion, as illustrated, can accommodate in the range of 42,000 gross square feet.



POTENTIAL EXPANSION AS VIEWED FROM THE SOUTH



EXISTING AMPHITHEATER



SOUTH FACADE

Expansion, should it be required in the future, is proposed on the southwest corner of the site. The proposed expansion extends perpendicular to the existing building toward 8th Street, the intent of which is to establish a stronger presence along the roadway. Potential features of the expansion include a landmark element/structure near the street and a bridge connecting the facility to the existing building.



MSU RILEY CENTER: CONTEXT

RILEY CENTER

Located in historic downtown Meridian, the MSU Riley Center opened in 2006. The educational, cultural and arts center includes a restored grand opera house theatre constructed (occupancy 950), a 200-seat studio theatre, and 30,000 square feet of meeting space, including a large exhibit hall, break-out rooms and board rooms.

The Riley Center is comprised of buildings constructed by the Rothenberg brothers: the Marks Rothenberg department store and the Grand Opera House (1889). The Opera House operated from 1889 to 1927. From 1927 onward, the building remained virtually untouched resulting in "preservation through neglect". The department store operated under various forms of ownership until 1990.

Community leaders and MSU worked collectively to develop a regeneration vision for the opera house and adjoining Marks Rothenberg and Newberry buildings beginning in January 2000. The Riley Foundation provided \$10 million in the funding to purchase and restore the buildings with MSU becoming the owner and operator. A total of \$25million, including donations from local, state and federal agencies, was been invested to fully restore the buildings from 2003 to 2006.

1. MSU RILEY CENTER
2. KRESS BULDING: FUTURE MSU EXPANSION
3. MERIDIAN LAUDERDALE COUNTY TOURISM
4. MERIDIAN COUNCIL FOR THE ARTS
5. MERIDIAN MUSEUM OF ART
6. TEMPLE THEATER
7. MERIDIAN COURTHOUSE
8. MERIDIAN CITY HALL
9. MERIDIAN PUBLIC LIBRARY
10. U.S. POST OFFICE
11. REGENCY HOSPITAL MERIDIAN
12. RILEY HOSPITAL
13. RUSH FOUNDATION HOSPITAL
14. SPECIALTY HOSPITAL OF MERIDIAN
15. JEFF ANDERSON REGIONAL MEDICAL CENTER
16. UNION STATION
17. WEIDMANN'S
18. MISSISSIPPI ARTS AND ENTERTAINMENT SITE



VIEW OF THE RILEY CENTER ALONG THE 5TH STREET



MSU RILEY CENTER

A second phase of the Riley Center project includes renovations to the adjacent Newberry and Kress Buildings, which were also purchased and donated to MSU by the Riley Foundation. The renovated Kress and Newberry buildings will accommodate the MSU bookstore and library as well as provide space for future academic programs. With the completion of the second phase, MSU will occupy the city block defined by 22nd Ave., 5th Street, 23rd Avenue and 6th Street. The resulting renovated facilities will contribute to the regeneration of historic downtown Meridian and establish a major presence for MSU in close proximity to a range of public and private governmental, cultural and medical facilities.

Parking for the conference facility and the bookstore and library will be accommodated in on-street spaces as well as a municipal garage located on 8th Street, approximately one block north of the Riley Center.



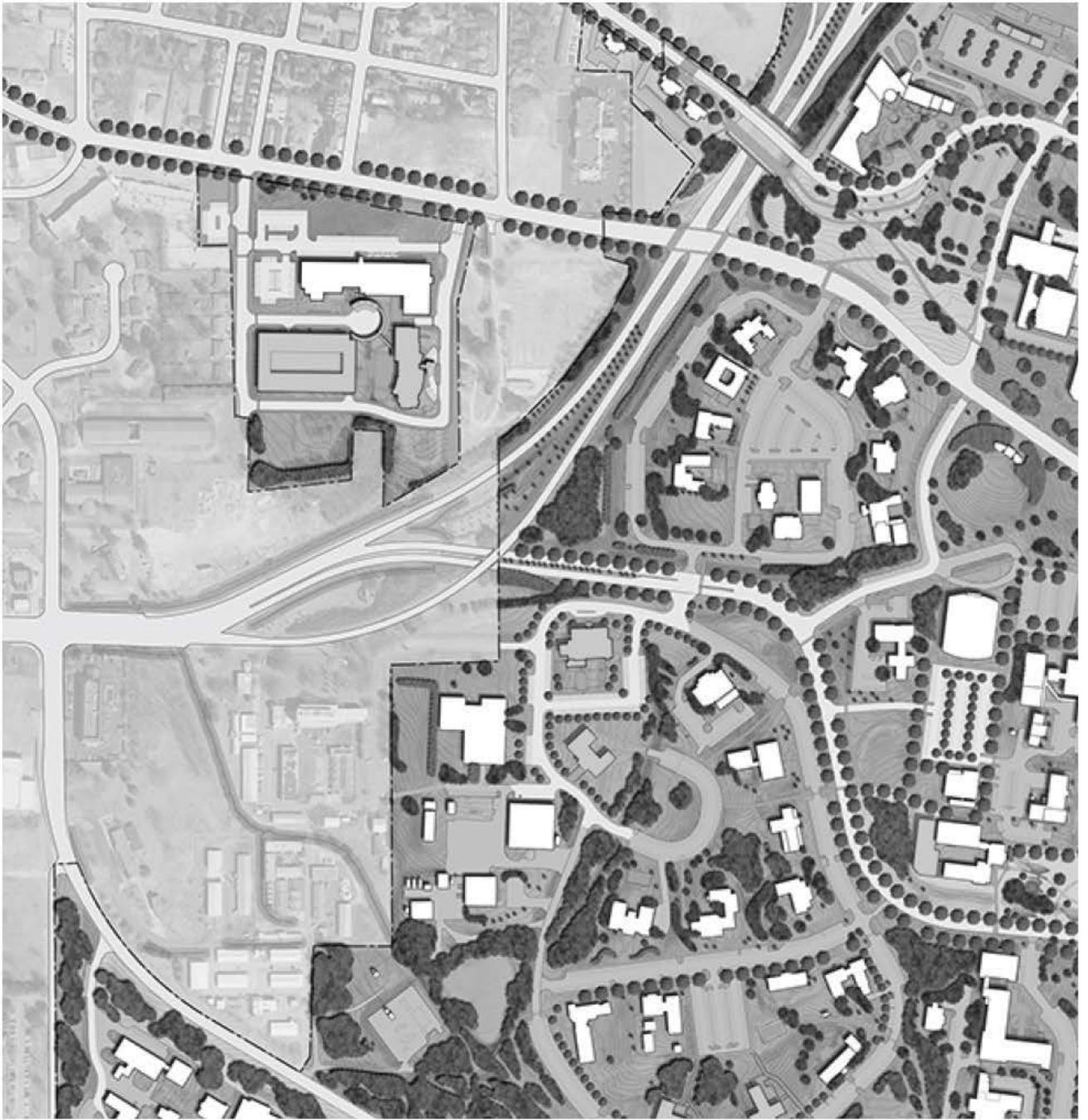
THE RILEY CENTER THEATER



THE KRESS BUILDING



RILEY CENTER (5TH STREET AND 22ND AVENUE)



LPK
architects p.a.

SASAKI



**MISSISSIPPI STATE
UNIVERSITY**

2016 MASTER PLAN



