

DRAFT

University of Maryland Eastern Shore Master Plan

January 2016



**BEYER
BLINDER
BELLE**

Acknowledgements

BOARD OF REGENTS

OFFICE OF THE BOARD OF REGENTS UNIVERSITY SYSTEM OF MARYLAND
3300 Metzerott Road Adelphi, MD 20783
301-445-2701 (phone); 301-445-1931 (fax)

James L. Shea, *Chairman*
Barry P. Gossett, *Vice-Chairman*
Gary L. Attman, *Treasurer*
Linda R. Gooden, *Assistant Treasurer*
Michelle a. Gourdine, *M.D. Secretary*
Thomas G. Slater, *Assistant Secretary*
Norman R. Augustine
James T. Brady
Louise Michaux Gonzales
Joe Bartenfelder, *ex officio*
The Hon. Francis X. Kelly, Jr.
David Kinkopf
Robert Neall
Robert Pevenstein
Robert D. Rauch
Dr. Frank M. Reid, III
Sydney Comitz, *Student Regent*

UNIVERSITY SYSTEM ADMINISTRATION

Dr. Robert L. Caret, *Chancellor*
Dr. Joann Boughmann, *Senior Vice Chancellor for Academic Affairs*
Mr. Joseph Vivona, *COO and Vice Chancellor for Administration and Finance*
Dr. Leonard Raley, *Vice Chancellor for Advancement*
Ms. Anne Moultrie, *Vice Chancellor for Communications*

UNIVERSITY SYSTEM ADMINISTRATION

Juliette B. Bell, Ph.D., *President*
Patrick Liverpool, Ph.D., *Provost and Vice President for Academic Affairs*
Kimberly Dumpson, CFRE, *Executive Vice President*
Kevin Appleton, *Vice President of Administrative Affairs*
D. Jason DeSousa, Ph.D., *Vice President for Student Affairs and Enrollment Management*
G. Dale Wesson, Ph.D., *Vice President for Research and Economic Development*
Stephen McDaniel, CFRE, *Vice President for Institutional Advancement*

UNIVERSITY FACILITIES MASTER PLAN STEERING COMMITTEE

Dr. Maurice C. Ngwaba, *Assistant to the Vice President for Administrative Affairs (Co-Chair)*
Mrs. Nelva Collier-White, *Acting Vice-President for Administrative Affairs (Co-Chair)*
Dr. Ayodele J. Alade, *Dean, School of Business and Technology*
Mr. Lukman Anidu, *Energy Management Specialist*
Mr. Kenneth Belton, *Director of Physical Plant*
Dr. Cynthia Boyle, *Interim Dean, School of Pharmacy and Health Professions*
Dr. William Chapin, *UMES Faculty Assembly Chairperson*
Dr. Ray J. Davis, *Dean, School of the Arts and Professions*
Kimberly Dumpson, Esq., *CFRE, Executive Vice President*
Dr. Enrique Escobar, *Interim Extension Administrator for 1890 Programs*
Mr. Tracey Hunter Hayes, *Interim Dean, Library Services*
Mr. Marvin Jones, *Director of Residence Life*
Dr. Moses Kairo, *Dean, School of Agriculture and Natural Sciences*
Dr. Jennifer Keane-Dawes, *Dean, School of Graduate Studies*
Dr. Lombuso S. Khoza, *UMES Senate Chairperson*
Mr. Ken Kundell, *Chief Information Officer*
Dr. Patrick Liverpool, *Provost and Vice President for Academic Affairs*
Mr. Stephen McDaniel, *Vice President for Institutional Advancement*
Dr. Stanley Nyirenda, *Director of Institutional Research*
Mr. Peter Okemmuo, *Architect*
Mr. Seth Ward, *President, Student Government Association*
Dr. G. Dale Wesson, *Vice President for Research and Economic Development*
Dr. James White, *Acting President for Student Affairs and Enrollment Management*
Dr. Kimberly Whitehead, *Vice Provost for Academic Affairs*

PROJECT TEAM

UNIVERSITY OF MARYLAND EASTERN SHORE

Dr. Maurice C. Ngwaba, *Assistant to the Vice President for Administrative Affairs*
Mr. Peter Okemmuo, *Architect*
Mr. Edward Johnson, *Civil and Structural Engineer*
Mr. Lukman Anidu, *Energy Management Specialist*

BEYER BLINDER BELLE ARCHITECTS & PLANNERS, LLP

DRAFT





University of Maryland Eastern Shore Facilities Master Plan Update

Building from the Strategic Plan	06
Campus Context	16
Campus History and Morphology	18
Campus Today	20
Recent Achievements	22
What We Heard.....	24
Campus Strengths.....	26
Campus Challenges	28
Goals and Guiding Principles	30
Campus Themes	32
Campus Spatial Organization	
Identity, Gateways and Wayfinding	
Pedestrian Experience	
Vehicular Environment	
Campus Experience	
Campus Character	
Sustainability	
Building and Facility Data	65
Evolution of the 10-Year Master Plan.....	73
Future Phase Master Plan	95
Appendix	(under separate cover)

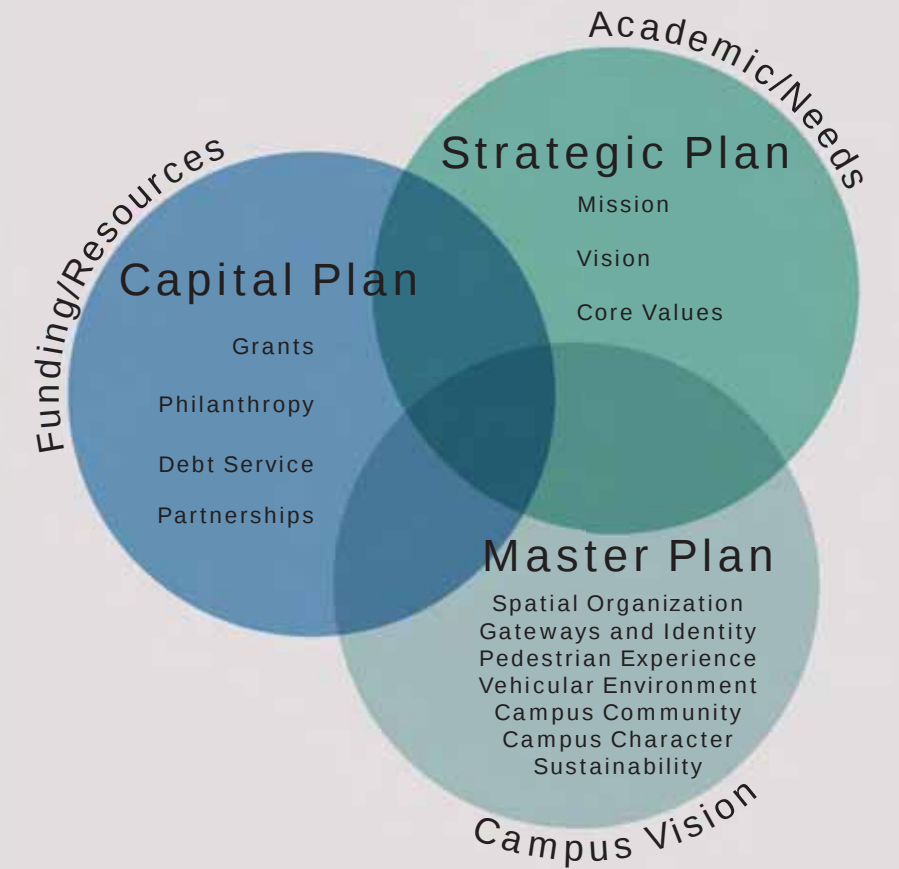
Building from the Strategic Plan

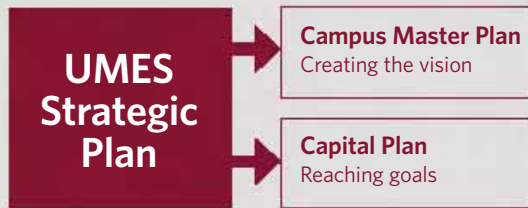
Institutions often embark on a strategic planning process to identify needs, guide academics and student life, and set goals for the future. UMES's 2011-2016 Strategic Plan "Celebrating the Journey of the Past 125 Years and Charting Paths to the Future" identifies missions, visions, and core values.

A campus master plan is a physical manifestation of a university's strategic plan. At its best, a master plan captures the unique sense of place and identity of the campus and expresses a shared vision of the campus community for its future growth, including how the physical design of the campus serves the university's mission and academic objectives.

The master plan provides a road map for realizing this vision and becomes a crucial tool in confirming that short-term projects are working in conjunction with long-term plans and goals. Individual decisions about new building locations, facility designs, renovations, landscape, and infrastructure improvements can be understood in the context of the larger strategic, aesthetic, and environmental goals for the campus. A good campus plan builds in flexibility, and is adaptable to shifting academic priorities and economic conditions, while maintaining larger principles and priorities.

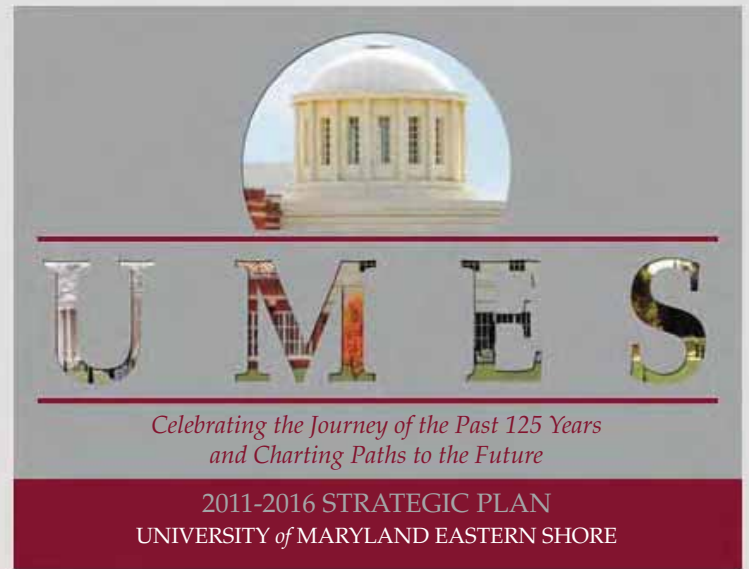
Implementing a master plan and projects contributes to the vision involves assessment of priority projects, considers academic and student needs, identifies opportunities and constraints, and improves campus infrastructure. The Capital Plan will respond to the Master Plan and Strategic Plan and will act as an implementation tool which will guide decision making during the advancement of the campus.





“UMES aspires to be a doctoral research university and a national model for producing globally competent citizenry in the 21st century”

-From the *Strategic Plan*



The UMES Strategic Plan can inform the Master Plan Update through several of its stated key goals. The Master Plan weaves these goals into the physical planning framework. Goals and sub-goals which have informed the Master Plan include:

UMES Goal II: Enhance university infrastructure to advance productivity in research, economic development, technology development and transfer; contribute to an enhanced quality of life in Maryland; and facilitate sustainable domestic and international economic development and competitiveness

- Sub-goal 2.2: Enhance existing successful research initiatives to become recognized centers of excellence
- Strategy 2.2.2: Enhance the research and development infrastructure to advance productivity in research and technology development and transfer
- Sub-goal 2.4: Enhance interdisciplinary research opportunities to impact the quality of life for all Maryland citizens

UMES Goal III: Promote and sustain a campus environment that supports a high quality of life and learning that positively impacts retention through graduation and produces knowledgeable and culturally competent citizens able to lead effectively and compete globally

- Sub-goal 3.6: Enrich the campus and community environment.
- Strategy 3.6.3: Continue to maintain, and enhance physical facilities to ensure a safe, healthy, and attractive place for living and learning
- Strategy 3.6.6: Construct and enhance residence halls to support living learning communities

UMES Goal V: Efficiently and effectively manage the resources of the University and aggressively pursue public/private resources to support the enterprise

- Sub-goal 5.1: Enhance research and laboratory facilities
- Sub-goal 5.2: Continue to implement cost savings/avoidance measures
- Strategy 5.2.2: Continue to use innovative technology for heating and cooling new and renovated facilities
- Sub-goal 5.3: Reduce the campus carbon footprint
- Sub-goal 5.4: Improve teaching, research and learning facilities
- Strategy 5.4.1: Identify and remove physical barriers to academic facilities
- Sub-goal 5.5: Invest in new teaching, research, living and learning facilities

Building from the Strategic Plan

Mission

UMES MISSION STATEMENT

The University of Maryland Eastern Shore (UMES), a Historically Black Land-Grant University, is a teaching, research, and doctoral institution that nurtures and launches leaders in a student-centered environment, particularly from among ethnic minorities. UMES is committed to providing high quality programs in an ethnically diverse environment and preparing students who serve and shape the global economy. UMES is a growing, primarily residential university with a teaching, research, extension, and engagement mission, consistent with valuing the scholarship of faculty in the discovery of knowledge, the development and dissemination of new knowledge, and the application of that knowledge to the extended community. The University recognizes that it is also responsible for developing human potential, enriching cultural expressions, and sharing its expertise with individuals, businesses, educational and governmental agencies. Teaching, research, and engagement focuses align with UMES' legacy and mission as Maryland's 1890 land-grant institution. UMES is proud of its more than one hundred ten years of continuous educational service, initially under the aegis of the Methodist Church.

One of the original purposes of the land-grant institutions, the education of citizens for life in the American economy (then largely agrarian, but now more diverse), includes the disciplines of agriculture, home economics, and mechanical arts. UMES continues to embrace the original purposes as well as their current expansions to include the liberal arts, scientific, business, technological, and professional programs. Through the Maryland Cooperative Extension and the Agriculture Experiment Station, UMES works corroboratively with the University of Maryland, College Park, an 1862 land-grant institution. The University's expanding instructional technology infrastructure supports the increasing externally funded research grants generated by campus personnel to examine pertinent research questions.

Quick responses to the economic and educational needs of the region and the State characterize the role that the University plays. The Hotel and Restaurant Management (HRM) program's provision of well-trained personnel for state and national business and tourism support, the President's membership on the Governor's Pfiesteria Task Force, and the work of faculty researchers that relates to natural resource management and water pollution prevention exemplify this responsiveness. The Rural Development Center provides timely responses to businesses and government requests for financial, technical, organizational, and Internet assistance. The Seafood Technology program assists businesses with the development of procedures that maximize quality, safety, and profitability of seafood products through the use of applied research, certified training and educational materials.

UMES engages in numerous collaborative efforts to broaden access and opportunity for students and to meet the stated needs. Collaborative educational connections with local school systems address the Professional Development Schools and the Redesign of Teacher Education, including the K-16 initiative, and other programs. For instance, Salisbury University and UMES collaboratively operate the Master of Arts in Teaching, the dual degree in Sociology/Social Work, and Biology/Environmental Science programs. The Department of Human Ecology and Chesapeake Community College are in the first stages of implementing an articulated 2+2 Early Childhood program. Allegany Community College of Maryland, Frostburg State University, and UMES collaboratively offer HRM course work to the western region. The Hotel and Restaurant Management and Aviation Science programs conduct their baccalaureate degrees on selected community college campuses through articulated

agreements. Additionally, the HRM program participates in the USM Shady Grove Center. Continuing education and Elder Hostel programs are coordinated from UMES' Ocean City Center.

The University provides Special Education programs, a teaching area of great State and national need, in the Eastern Shore at both the undergraduate and graduate levels. The University also has the only Agricultural Education and Technology Education programs in Maryland. Access to the Salisbury-Ocean City Airport allows the Engineering and Aviation Sciences program to establish strong link with airport personnel. Aviation students simulate flight conditions in the flight laboratory on campus. Physical Therapy majors provided professional service alongside staff of McCready Hospital—a 16 bed rural hospital with a 60-bed nursing home—for home residents and hospital patients of Somerset County. Agricultural and Natural Science students and faculty leaders partner with local agricultural and aqua cultural businesspersons to conduct and apply appropriate research findings that improve their economic base. Career and Technology Education courses are offered outside of Princess Anne, such as in downtown Baltimore at the Maryland Center for Career and Technology Education Studies in the Baltimore Museum of Industry. These courses are targeted for technology education teachers who are seeking degrees and teacher certification. UMES offers the Ph.D. in Marine-Estuarine-Environmental Sciences (MEES) and in Toxicology in conjunction with other University System institutions.

While the Carnegie Foundation classifies UMES in its new system as Masters (Comprehensive) Colleges and Universities, MA 1, the University aspires to Doctoral/Research Universities-Intensive classification as it develops new doctoral programs. This aspiration will be supplemented by an increase in bachelors' and masters' programs. Future planned program emphases include such programs as new health care needs, especially those in rural areas, UMES plans to add to its allied health sciences programs at all degree levels. The University, in order to accommodate changes in the accountancy licensure exam, will develop a master's program in accounting.

Food and Agricultural Sciences, Physical Therapy, and Organizational Leadership are among the areas with new freestanding doctoral degree programs at UMES. These program expansions address needed terminal degree access on the Shore. These programs are enhancing existing and academic programs at the University.

INSTITUTIONAL CAPABILITIES

UMES views with pride its achievements regarding the provision of high-quality academic programs and services for ethnically and culturally diverse students. Toward that end, the University offers programs and assistance that have attracted, served, retained, and graduated first generation college populations, nationally recognized scholars, and international clientele as part of its core capacity. Students come from approximately 50 different countries, and the number of full-time non-African-American faculty exceeds the number of those of African-American descent.

The University leads the comprehensive institutions in the System in externally funded grants and contracts per FTE faculty. Grants and research focus on information technology, faculty and student development, agricultural sciences and international programs.

The presence of first-rate graduate faculty with strong national reputations increases the probability that stronger students will come to the University. Faculty-student research

pairs present their findings to the University, community funding agencies, and national professional conference participants. Thus, UMES attracts, supports, and graduates the academically capable who have experience in research.

UMES' Office of Information Technology and Outreach, using a value-added strategy, is committed to leveraging the advances in information technology to support innovative research, education, and service to meet the needs of the University, students, and external constituents. The Applied Information Technology Research and Education Center (AIT Center) emphasizes both research and educational objectives, while providing state-of-the-art information technology services in support of government agencies, regional businesses, and university aspirations.

INSTITUTIONAL OBJECTIVES AND OUTCOMES

During the four-year span of this mission statement, the University of Maryland Eastern Shore will address initiatives that support the Maryland Higher Education Commission's 2000 Maryland State Plan for Postsecondary Education, complement the University System of Maryland's 2010—Responding to the Challenges that Lie Ahead, and UMES' Strategic Plan. Accordingly, UMES will:

1. Continue to strive to provide the highest quality undergraduate and graduate education by: a) equipping students with the skills, knowledge, and experience necessary for appropriate professional employment and professional development through strong academic programs whose strength is assured through regular review and accreditation where appropriate; b) developing and implementing programs of performance assessment of student learning outcomes; c) reviewing curricula on a regular basis to ensure compatibility with discipline standards, student demands, and societal needs; and d) setting standards for skill development in the use of information technology for all students; and e) by increasing passing rates on professional examinations.
2. Attract and retain a faculty committed to teaching scholarship by: a) increasing the percent of faculty with terminal degrees; b) providing regular and intensive faculty development programs and opportunities, especially in approaches to enhancing student learning through the use of current technology; c) providing faculty with technologies and facilities that promote teaching, scholarship, public service, and engagement; d) stimulating and promoting grant activity among faculty and students that support scholarship; and e) increasing faculty salaries to at least the 85th percentile of those in the appropriate category of the annual salary rates of the American Association Of University Professors.
3. Reaffirm the University's role, as the State's 1890 land-grant institution of providing educational opportunities and access to help citizens develop economically, socially, and culturally to enhance their lives, their businesses, and their communities by: a) increasing the number and quality of programs and activities that will help enable agricultural producers to achieve economic and environmental sustainability; b) supporting renewable natural resource stewardship and promoting individual health and nutrition; c) providing, through Cooperative Extension programs of educational and technical assistance to families in an effort to meet the needs of homemakers, farmers, youth and the elderly; d) promoting and expanding credit and non-credit continuing education offerings that meet the needs of community groups, including youth, senior citizens, and working professionals; e) working with local and regional economic groups to create an explicit role for the University in local/

regional development and planning; and f) creating and promoting comprehensive plans for partnerships with area businesses and industries.

4. Continue to encourage the use of technology in support of instructional programs in the development of graduates who are able to use technology effectively, and in efficient administrative and support services by: a) identifying and implementing the most promising applications of technology; b) providing faculty and staff with the latest technology and training in support of their daily activities; and c) equipping the library with appropriate resources so that access can be provided to national and international databases and connections, government agencies, industries, and research institutes.

5. Facilitate the seamless integration of all education levels through PreK-16 programs by: a) enhancing and expanding the teacher education program in pursuit of the guiding principles of Maryland's K-16 Partnership program; b) addressing the critical shortage of qualified teachers, especially African Americans and males by seeking scholarship support and active recruiting and incentives; c) requiring passage of students who pass the national professional licensure examination; and e) enhancing the status of teacher education at the University through attainment of National Council for Accreditation of Teacher Education (NCATE) accreditation.

6. Respond to the educational needs of an increasingly diverse student population by: a) making the instructional, research, outreach, and engagement programs accessible; b) developing and implementing an enrollment plan designed to attract the best and brightest as well as to reach out to the educationally disadvantaged; c) increasing retention and graduation rates by providing effective support programs and practices designed to give student opportunity for academic success, and by offering flexible, innovative, and varied learning formats and opportunities for both traditional and non-traditional students enrolled on and off campus; d) keeping tuition increases at or below those of similar institutions; and e) sustaining the enrollment mix through active recruitment, especially of other-race students, and enhancing a campus climate that will assist in the retention of this mix.

7. Ensure overall efficiency of institutional operations by: a) adopting the university-wide strategic plan which sets institutional priorities, establishes a framework for budget and resource allocations, and demands that accountability permeate every aspect of the University community; b) applying cost-benefit analysis in reviewing existing programs and evaluating new programs; and c) using comparisons with State and regional peers to assist in the examination of operations.

Building from the Strategic Plan

Program Initiatives

1. SCHOOL OF BUSINESS AND TECHNOLOGY

DEPARTMENT OF BUSINESS AND MANAGEMENT AND ACCOUNTING

EMERGENCY MANAGEMENT (BS)

This program prepares students for careers in emergency management positions in the public and private sector. It is an interdisciplinary program that draws on management, behavior and communications theory and practice, including applications from psychology and sociology, along with basic knowledge in biological, chemical, environmental and physical processes. Students learn response time, preparedness, control measures and field operational techniques for coordinating responses to natural disasters, bio-chemical and physical hazards, terrorist, war and related violence and societal disruptions.

ACCOUNTING (MS)

This program, a Master of Accountancy Degree, meets the legislated 150-credit-hour requirement for students to sit for the Uniform Certified Public Accountants Examination in Maryland, and thereby meets a workforce need in the state.

ENTREPRENEURSHIP (MS)

This program is designed to serve the advanced training needs of business people and students, relevant to existing small or new business start-up and innovation. The program will cover all major functional areas of business, including other technical areas as needed such as construction management, engineering, information systems, etc.

BUSINESS (Ph.D)

This program will serve the needs of those seeking a terminal degree in Business Administration for academic or public service, private sector consulting, etc. Specialization fields include the major functional areas of business such as accounting, finance, and marketing.

DEPARTMENT OF ENGINEERING AND AVIATION SCIENCES

Enhancement of Existing Programs

The Department of Engineering and Aviation Sciences is not planning any new program initiatives at this time. The Department will focus on growing the new four-year Engineering Program.

DEPARTMENT OF HOTEL AND RESTAURANT MANAGEMENT

HOSPITALITY MANAGEMENT (MS)

This program focuses on hospitality management and leadership skills in marketing, finance and operations for the commercial and not-for-profit enterprises of the hospitality industry, such as hotels, restaurants, convention centers, country clubs, stadiums, and school and hospital food service. The degree also serves as an introductory academic credential for those desiring to teach in accredited hospitality degree programs.

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

INFORMATION SYSTEM (BS)

This program is intended to replace the existing Bachelor's program in computer science with the business track option, with an updated curriculum in information systems, the current industry standard in the field of information technology.

MATHEMATICS (MS)

This program addresses a critical state and national workforce need in one of the STEM fields, mathematics. The program will offer advanced mathematics courses for students who need to satisfy content area knowledge for teaching mathematics in secondary school and those who need advanced mathematics for applications in science, engineering and technology fields.

APPLIED COMPUTER SCIENCE (Ph.D)

This program will serve the needs of practitioners in information systems or

closely related fields such as engineering and technology who desire to advance in government, industry and academia by seeking a terminal degree. This program will offer a curriculum and applications that are cutting edge and state of the art in the field.

DEPARTMENT OF TECHNOLOGY

ENHANCEMENT OF EXISTING PROGRAMS TO ATTAIN NATIONAL ACCREDITATION

The Department of Technology is not planning any new program initiatives at this time. Due to the need for resources to prepare for accreditation of the Engineering Technology program and continue to enhance Construction Management Technology and Technology Education, it would be wise not to seek program expansion at this time. In addition, the off-campus programs at the Universities at Shady Grove and the Baltimore Museum of Industry are posing challenges that should be addressed before new initiatives are pursued.

CERTIFICATE PROGRAMS

The following certificate programs will be offered:

- Information Technology (training in the protection of information and information systems from unauthorized access and use)
- Homeland Security (training to meet specific career needs in the Transportation Security Administration)
- Personnel Management (training to meet career needs in the Human Resources or Personnel Management office area)

2. SCHOOL OF AGRICULTURE AND NATURAL SCIENCES

DEPARTMENT OF AGRICULTURE, FOOD AND RESOURCE SCIENCES

URBAN FORESTRY (BS)

This program addresses the interrelationship between urban environments, surrounding

natural resources such as forests, land use and care and replenishment of forests for environmental and recreational purposes. The program is aimed at preparing students for careers in forestry.

HUMAN ECOLOGY (MS)

This program will provide advanced training and leadership skills in Dietetics, Human Development, or Family and Consumer Sciences for practitioners, those seeking career change and those teaching in high school who desire an advanced degree.

Ornamental Horticulture Concentration in the General Agriculture Degree (BS)

This concentration prepares students for careers in the landscape and nursery industries

Veterinary Technology concentration in the General Agriculture Degree (BS)

This concentration prepares students for licensure as Veterinary Technicians.

CERTIFICATE PROGRAMS

The Food Science and Technology program in collaboration with the Hotel Restaurant Management program will offer a certificate program in Culinology®. The Food Science and Technology program will also offer a certificate program in Food Safety and Food Defense which targets small processors who want to sell locally grown or harvested and processed food through retail marketers

DEPARTMENT OF NATURAL SCIENCES

BIOCHEMISTRY (BS)

This program will prepare students for entry level laboratory and industry careers in biochemical and biomedical fields and for those seeking entrance into first professional degree programs.

APPLIED PHYSICS (BS)

This program will develop strong student competencies in physics and its applications in a technology-rich, interactive environment and a strong skill-set in the research, analysis

and interpretation of complex information. The program is designed for careers in research and industry, for teaching at the high school level in a critical national and state needs STEM discipline and for those who go on for advanced training.

BIOLOGY (MS)

This program will prepare students for laboratory and industry careers that require advanced training and mastery of research skills and techniques in Biology, for entry level university teaching positions in a critical state and national needs STEM discipline and for seeking entrance into doctoral and first professional degree programs.

CHEMISTRY (MS)

This program will prepare students for laboratory and industry careers that require specialized training and mastery of research skills and techniques in Chemistry, for entry level university teaching positions in a critical state and national needs STEM discipline and for seeking entrance into doctoral and first professional degree programs

QUANTITATIVE FISHERIES MANAGEMENT (MS)

This program, a Professional Science Master's (PSM) terminal degree program, is an innovative and non-traditional course of study that allows individuals to receive academic training in an interdisciplinary area to meet a specific need in industry for quantitative analysis and modeling. Career opportunities are projected across several federal agencies

BIOLOGY (Ph.D)

The curriculum for this program will provide the current trends in biomedical sciences and mastery of the knowledge and investigative approaches needed to prepare those for undertaking advanced research in industry, designing public policy and teaching in a critical needs STEM discipline at the university level.

CHEMISTRY (Ph.D)

This program will provide advanced training in fields of chemistry such as physical,

environmental, organic, inorganic, analytical, colloidal, surface and nanotechnology for careers in industry, government and teaching in a critical needs STEM discipline at the university level.

3. SCHOOL OF ARTS AND PROFESSIONS

DEPARTMENT OF ENGLISH AND MODERN LANGUAGES

COMMUNICATIONS (BA)

The curriculum for this program incorporates communication theory, practice and acquisition of skills for careers in radio, television, media outlets, writing, marketing, advertising, public relations, among others.

MODERN LANGUAGES (BA)

This program will provide modern language options in Spanish, French, Arabic, Swahili, Japanese and Chinese with corresponding courses on the culture, history, literature and cinema of each language. The program will

prepare students for entry level careers in international business, tourism, foreign service and the language content area for those desiring to teach in the K-12 school system.

SPEECH AND DRAMA (BA)

This program will complement practical study in the fields of Language Arts and English with insight into the production of voice and speech sounds, performance techniques, literature as it relates to poetry and drama, and the history and techniques of oratory and presentational speaking. This program is for students interested in careers in the performing arts and performing arts production, marketing, media and public information offices, among others.

DEPARTMENT OF CRIMINAL JUSTICE

FORENSICS SCIENCE (BS)

The program is an interdisciplinary degree program that complements the criminal justice system, particularly criminal and civil investigations and litigations, by the use of physical, chemical, biological and forensic



New Engineering, Aviation, Computer and Mathematical Sciences "STEM" Building

evidence gathered or associated with a crime scene investigation. Careers are in law enforcement at all levels.

DEPARTMENT OF SOCIAL SCIENCES

SOCIOLOGY (MS)

This program prepares students for either advanced study at the doctoral level or careers in organizational settings such as business, government, social services, or private non-profit agencies. The curriculum provides students with a solid foundation in sociological theory, research, and methods.

PUBLIC POLICY CENTER FOR THE DEPARTMENT OF SOCIAL SCIENCES

A Public Policy Center will augment the minor and planned major in Public Policy in the Department of Social Sciences. The Public Policy Center will solicit students to become involved in problem solving solutions to social issues facing the Delmarva community and the state of Maryland.

DEPARTMENT OF FINE ARTS

DANCE (BA)

This program adds a performing arts dimension to the Department of Fine Arts, aptly to be housed in the campus's Ella Fitzgerald Center for Performing Arts. Students will be exposed to and learn multiple dance forms and production techniques of the performing arts and the theatre industry. Field trips and student participation in productions will be incorporated with theory and practice.

MUSIC BUSINESS (BA)

This program provides a non-teaching degree option in music for students who wish to become successful music entrepreneurs in the music retail or the music performance area. The program draws on existing management and business courses on campus as well as specialized courses offered by the music faculty.

STUDIO RECORDING (BA)

This program provides a non-teaching degree option in music for students who wish to

pursue careers in the highly technology-oriented recording industry. Students explore the techniques of mono, stereo, and multi-track recording and recording processes.

AFRICAN-AMERICAN ART MUSEUM FOR THE DEPARTMENT OF FINE ARTS AND THE AFRICAN AND AFRICAN AMERICAN STUDIES PROGRAM

The University of Maryland Eastern Shore is one of the few predominantly African-American universities that do not have a repository of Black Culture. The museum will serve as a teaching laboratory for Fine Arts and a cultural center for the university and the community at-large.

DEPARTMENT OF EDUCATION

PSYCHOLOGY (BS)

Psychology is the science that investigates the relationship between brain and behavior, environment and behavior and the understanding of behavior. This program provides the basic knowledge and principles of human behavior that are essential for students preparing for career paths in psychology, social services, business, education, law, allied health, among others. The program also provides the courses for programs at UMES that require advanced level supportive courses in the different areas of psychology.

SPEECH & LANGUAGE PATHOLOGY (MA)

Majors in audiology and speech-language pathology study communication problems and learn how to help people improve their ability to communicate. Majors in speech-language pathology learn how to help children and adults who have trouble communicating because of speech-related delays or disorders. They are trained to evaluate and treat patients in cooperation with doctors, psychologists, and teachers.

CERTIFICATE PROGRAM IN AUTISM SPECTRUM DISORDERS

This program provides coursework, behavioral interventions, assessment and assistive technology in working with individuals with

autism and other pervasive developmental disorders. It is useful for upper level teacher education candidates and graduate students in special education.

4. SCHOOL OF PHARMACY AND HEALTH PROFESSIONS

DEPARTMENT OF REHABILITATION

REHABILITATION PSYCHOLOGY (BS)

This is a curriculum in Rehabilitation and in Psychology to satisfy the needs of those who desire study and training in both fields for entry-level positions in rehabilitation and other allied health, addictions, counseling and those who will go on for advanced training and study in Rehabilitation, Psychology and related fields.

DEAFNESS CONCENTRATION IN THE REHABILITATION SERVICES DEGREE PROGRAM (BS)

A Concentration in Deafness will provide UMES students with a unique opportunity to acquire knowledge skills and abilities in working with the deaf and hard of hearing through a series of courses on deafness, centered on a four course sequence (12 credit hours) in American Sign Language (ASL). Programs in Deafness are among the fastest growing across the country, providing entry level career positions in rehabilitation and related areas.

CERTIFICATE PROGRAM IN THERAPEUTIC REHABILITATION

This program provides training in the design and implementation of rehabilitation programs for people with disabilities and injuries.

5. UNIVERSITY-WIDE CERTIFICATE PROGRAM IN GLOBAL STUDIES

This program permits undergraduate students to receive a Certificate in Global Studies during their study for the Bachelor's degree, based on a preapproved list of interdisciplinary courses across the curriculum that are internationally or world region focused in content.

DRAFT



State of Maryland Context Map

Regional Context and Campus Location

The UMES campus comprises 745 acres located adjacent to the town of Princess Anne, Maryland and is approximately 20 miles south of Salisbury, Maryland and 20 miles north of Pocomoke City, Maryland. It is accessible to three major metropolitan areas (Washington, DC, Baltimore and Annapolis) by a straightforward system of Interstate and State highways. The campus is connected to adjacent towns by shuttle services. The towns of Salisbury, Pocomoke and Crisfield have commuter shuttles servicing the campus as well.

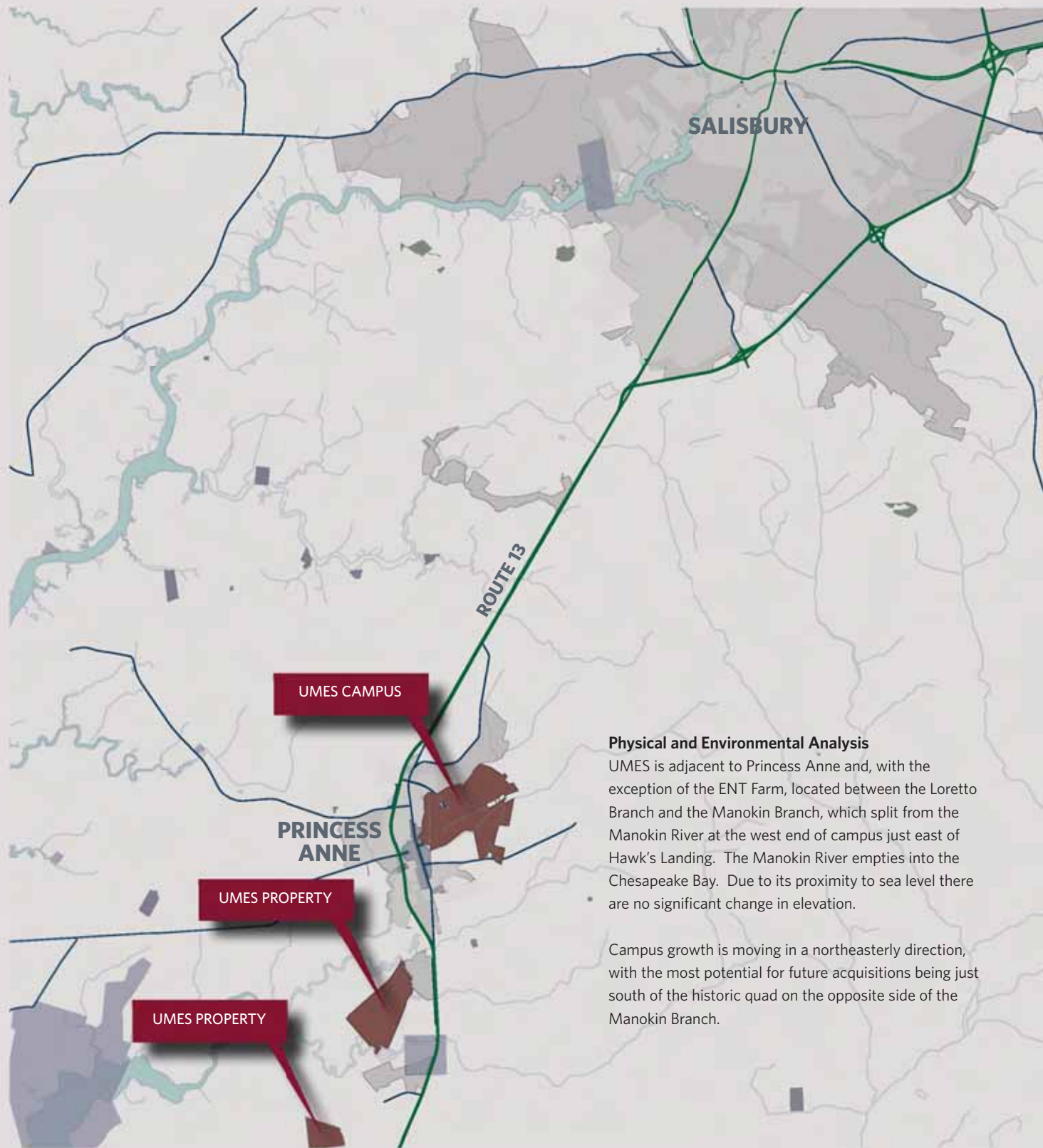
Campus Context

To the north, UMES is bordered by the Loretto Branch, and to the south, by the Manokin Branch. These branches of the Manokin River, which empty into the Chesapeake Bay, are not so significant in size and scale as to prohibit future expansion and acquisition of land beyond their borders, as was evidenced by the acquisition of the ENT Farm to the south east. To the east it is bordered by Forestation Reserves. To the west, the campus is bordered by an active freight railway line, which separate Hawk’s Landing from the main campus.

Topography

The regional topography of the eastern shore area of Maryland is relatively flat and, due to it’s proximity to the Chesapeake Bay, is laced by rivers as well as wetlands and swamps. The highest elevation in the Lower Eastern Shore is 65 feet above sea level. The land use is 25% agriculture, 40% forest, 32% water/wetland, and 3% developed.

The topography of the campus reflects that of the regional environment. The majority of the campus is presently between the aforementioned Loretto Branch, which runs along Hawk’s Landing to the west and along the boundary of campus to the north, and the Manokin Branch to the south. It is along the banks of these branches that the most change in elevation occurs throughout the campus. Otherwise, the topography varies by only a few feet over the entire 700 acres.



Physical and Environmental Analysis

UMES is adjacent to Princess Anne and, with the exception of the ENT Farm, located between the Loretto Branch and the Manokin Branch, which split from the Manokin River at the west end of campus just east of Hawk's Landing. The Manokin River empties into the Chesapeake Bay. Due to its proximity to sea level there are no significant change in elevation.

Campus growth is moving in a northeasterly direction, with the most potential for future acquisitions being just south of the historic quad on the opposite side of the Manokin Branch.

Campus History and Morphology

Historically Black Colleges and Universities

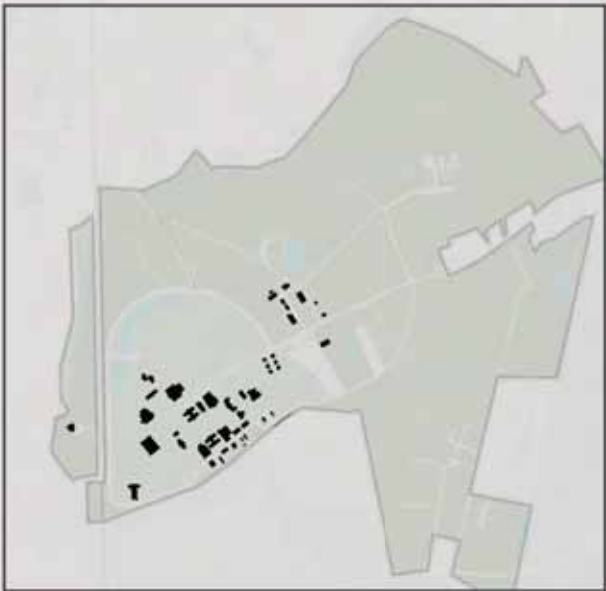
HBCU's were largely established after the American Civil War with the primary mission to educate black Americans. There are 107 institutions in the United States and they are considered a source of accomplishment and great pride for the African American community. UMES is the State's Historically Black 1890 Land-Grant Institution that is committed to launching students to leadership roles domestically and internationally in a variety of fields.



1900 Founded in 1866 through the offices of the Delaware Conference of the Methodist Episcopal Church and was known as the Delaware Conference Academy. It was also later called Industrial Branch of Morgan State College and Princess Anne Academy.



1940-1949 In 1948, after becoming a Division of the University of Maryland, the school became Maryland State College.



1970-1979 In 1970, the University obtained its current name of University of Maryland Eastern Shore.



1980-1989



1950-1959



1960-1969



1990-1999



2000-2015

Note: buildings represented in grey have unknown dates of construction.



Historic Quad



Dr. John Taylor Williams



The Flag Mall

Campus Today

Campus Scale and Environment

Over the past century, the UMES campus has exhibited different growth patterns. There have been variations in building location, size, and arrangement as a result of use, age, and planning principles established in previous Master Plans. Along the historic quad buildings are smaller in footprint size and scale. The character of the buildings, reflect the Architectural building style of that period. It also seems consistent with the scale and character of Princess Anne. Buildings were organized around a central open space that formed the original heart and center of the campus. As expansion proceeded northward, larger academic buildings, in response to growing academic needs, were arranged around more loosely defined quads.

Although there are significant differences in the size of building footprints and amount of square footage, there is uniformity in building height throughout the campus. No building exceeds four stories and few are under three stories.

There are intimate open spaces and more vast open spaces as well as tree lined corridors. Some areas of campus are well manicured and landscaped while others appear unfinished and barren, specifically along the outer edges of Backbone Road. There are also densely forested areas, especially along the eastern edge of campus and a good portion of the land is large, open fields used for agriculture, animal pastures and farming.





New Engineering, Aviation, Computer and Mathematical Sciences “STEM” Building



Campus Solar Fields

Recent Achievements

UMES has successfully implemented several projects in recent years that have advanced the campus both in terms of campus sustainability and academics.

In 2008, the first set of geothermal fields were completed near Wicomico Hall.

In 2011 Somerset Hall, a 1950s-era building was renovated and received a LEED “Gold” certificate and the 17-acre solar farm was completed.

In 2014, innovative renewable energy solutions landed UMES as the top most eco-friendly public HBCU.

In 2015, the “STEM” Engineering, Aviation, Computer and Mathematical Sciences Building was completed on the eastern edge of campus. In addition to classrooms, labs and faculty offices, the new building features conference rooms, a library, media production facilities, and central computing services. As a part of the campus’ commitment to sustainability, it has been fitted with an eco-friendly geothermal heating and cooling system and a second set of geothermal fields were installed in the field to its east.





The Master Plan included input from the campus community to inform both the process and the recommendations. Students and faculty were provided questionnaires to provide input from the users directly. They were asked questions such as:

What We Heard

- Are there new types of campus spaces needed to foster the UMES academic missions?
- What do you like best about the UMES campus?
- Is there a single, significant asset of the campus planning, architecture, landscape, or overall environment you want to see protected, enhanced, or cultivated in any future plans?
- What would most improve the faculty and staff experience on campus?
- Do student residential facilities function well? How should they expand to capture projected growth of student population over the next decade?

The surveys provided insight on issues like the need for healthier food options that are closer to dorms and open late night, better sidewalks along main roads, upgraded student residences, and spaces for interdepartmental gatherings/engagements. We also learned about things that are currently working on campus such as some beautiful and park-like landscapes and the appreciation for the historic character of traditional brick buildings. Many of the issues brought to light have factored into the Master Plan recommendations and proposed plan. The adjacent mapping of issues summarizes what we heard.





Campus Strengths

Historic Core and Landscapes

The historic campus landscapes and core campus are well maintained, aesthetically pleasing, and create a campus character to be admired.

Commitment to Sustainability

A commitment to sustainability is apparent and demonstrated on campus through several recent projects such as geothermal fields, solar fields, LEED building renovations and forest conservation areas.

Advancing the Built Environment

Recent new construction on campus is providing needed spaces for academic advancement and contributing to the built environment.

Successful Spaces

Many students and faculty find the core campus quads to be successful spaces that people want to occupy. Specifically Sommerset Hall and Waters are nice areas to study in the grass. In addition, Carver is a valuable location for studying between classes and holding open events such as Pi Day.



DRAFT



Campus Challenges

Gateways, Wayfinding, Identity

Campus gateways and arrival moments need improvement in terms of signage and arrival sequence. In addition, wayfinding on campus could be upgraded and the campus identity enhanced.

Connectivity

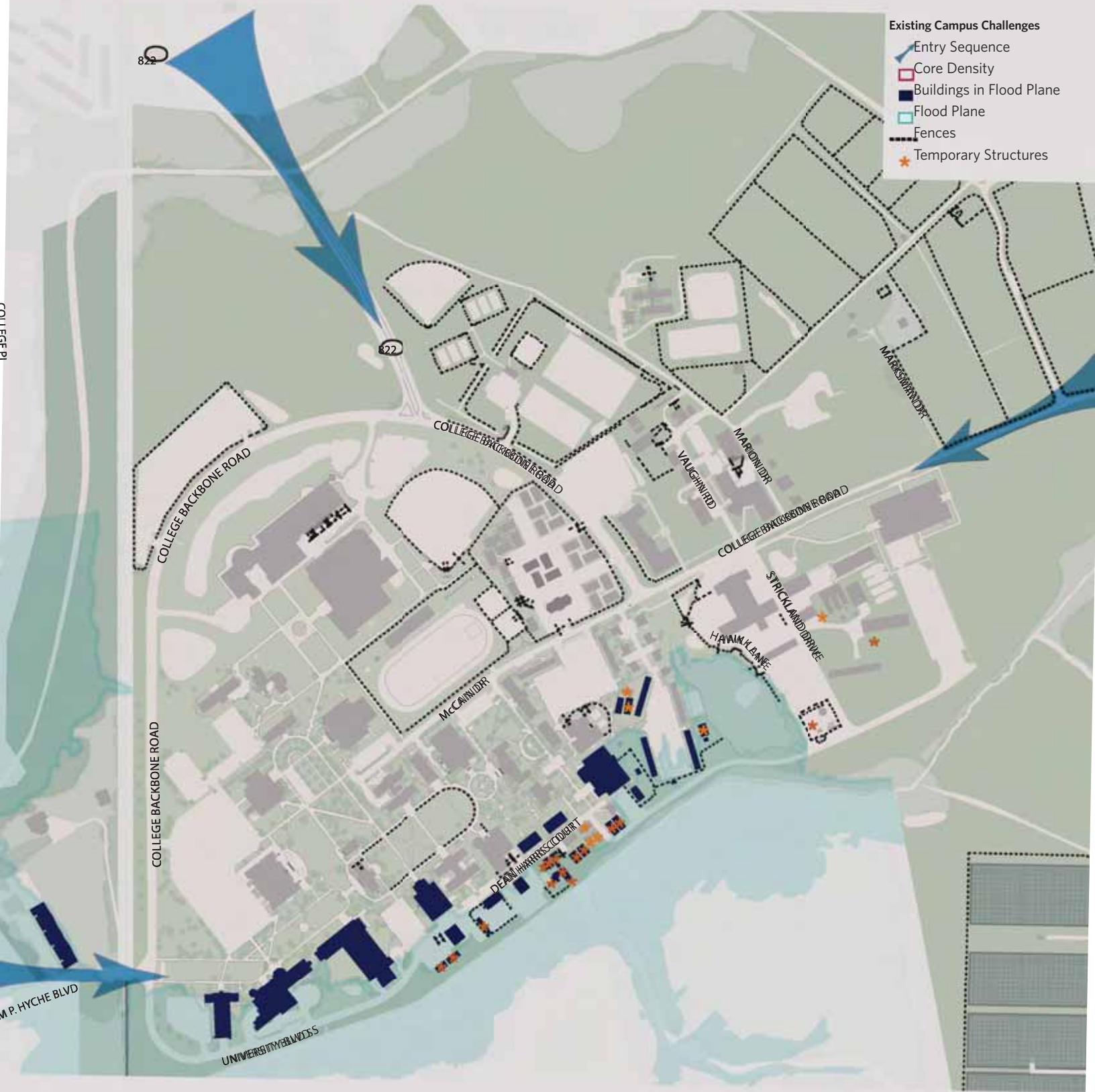
Pedestrian pathways are often interrupted by barriers such as fences or bioswales. Sidewalks and safe crossings should be built upon to improve connectivity throughout the campus.

Middle Zone Sprawl

The campus core density creates a nice character and feeling of activity. UMES is set within an agricultural rural environment which also contributes to the campus character. However, there is a middle zone of sprawl between these two character-defining areas which is neither dense nor rural. This zone is in need of improvement and enhancement.

Temporary Structures

While many of the buildings on campus are serving the campus population well, some growth has been accommodated with temporary structures. Many of these structures are also located within the flood plane. Temporary structures should be removed and an assessment of permanent buildings located within the flood plane should be performed.





Goals and Guiding Principles

Goals of the Master Plan

It is imperative to set goals for any campus planning process and master plan. The adjacent key goals summarize the intentions of the Master Plan Update.

Guiding Principles

Guiding Principles are a statement of priorities for a campus master plan. They articulate for a broad audience both within and outside the university the values that the university will seek to follow as it implements individual projects over time. The process of articulating principles helps the university to define what it cares most about in creating a master plan. Once defined, they provide a way of testing each proposed alternative or concept to see if it hews to these tenets. Guiding principles assist in making decisions not only during the planning process, but also long after the master plan has been published.

A set of principles should be both broadly applicable but also specific to the unique characteristics and values of the institution. They should allow the university to actively refer to them for guidance in making individual decisions, while providing flexibility as to how to achieve the larger goals they represent. Guiding principles also represent a public statement and commitment by the university to its extended community, which often includes surrounding residents and stakeholders.

Master Plan Key Goals

- Fulfill UMES's commitment to the Board of Regent's directive that a Facilities Master Plan (FMP) be evaluated and updated on a periodic basis, including when substantial changes to the institution's mission statement have taken place
- Lay out a framework for the academic and physical growth of the University over the next ten years guided by projected enrollment growth and space needs
- Establish a development strategy that prioritizes projects in terms of siting, infrastructure capacity, funding, phased renovations of existing buildings, and phased new construction
- Determine the amount of future development that can be accommodated throughout campus
- Build upon the campus identity and provide an urban design framework for future projects and the overall campus evolution
- Retain the commitment Climate Change Mitigation through Climate Neutrality and campus-wide sustainability consistent with the USM system-wide sustainability initiatives

Master Plan Guiding Principles

- Enhance the character of UMES's exceptional historic campus core
- Build upon and strengthen the compact, walkable historic core for short-term and mid-term growth, while preserving the rural quality of outlying areas and reserving them for potential long-term growth needs
- Preserve existing historic and agricultural landscapes and conservation areas while expanding the network of quads and interconnected open spaces
- Improve walkability, multi-modal connections, and access throughout campus
- Strengthen the campus identity at gateway arrival moments and throughout campus
- Create spaces that foster campus community, interdisciplinary encounters and informal gathering spaces for all students, faculty, and staff
- Plan and build in an environmentally sustainable manner which also responds to local landscapes, climate, and agricultural and rural context
- Foster design excellence in new campus projects

Campus Spatial Organization

Campus growth, academic core and land use recommendations

Identity, Gateways and Wayfinding

Building upon identity, wayfinding, gateways and arrival on campus

Pedestrian Experience

Improvements to walkability, pedestrian crossings, and student desire lines

Vehicular Environment

Roadways, parking, transit and bike recommendations

Campus Experience

Housing, living/learning, and opportunities for interdisciplinary interactions

Campus Character

Design excellence, architectural and open space principles

Sustainability

Continued commitment to sustainability



Master Plan Themes

The plan is structured around seven Campus Themes

- Campus Spatial Organization
- Identity and Gateways
- Pedestrian Experience
- Vehicular Environment
- Campus Experience
- Campus Character
- Sustainability

Each of the Campus Themes captures forward looking issues on campus. Together the themes create a cohesive Master Plan which respond to and expand upon the campus-wide Guiding Principles.

The Campus Themes are organized each with existing campus conditions and analysis, followed by Master Plan recommendations.

Campus Spatial Organization

Existing Conditions

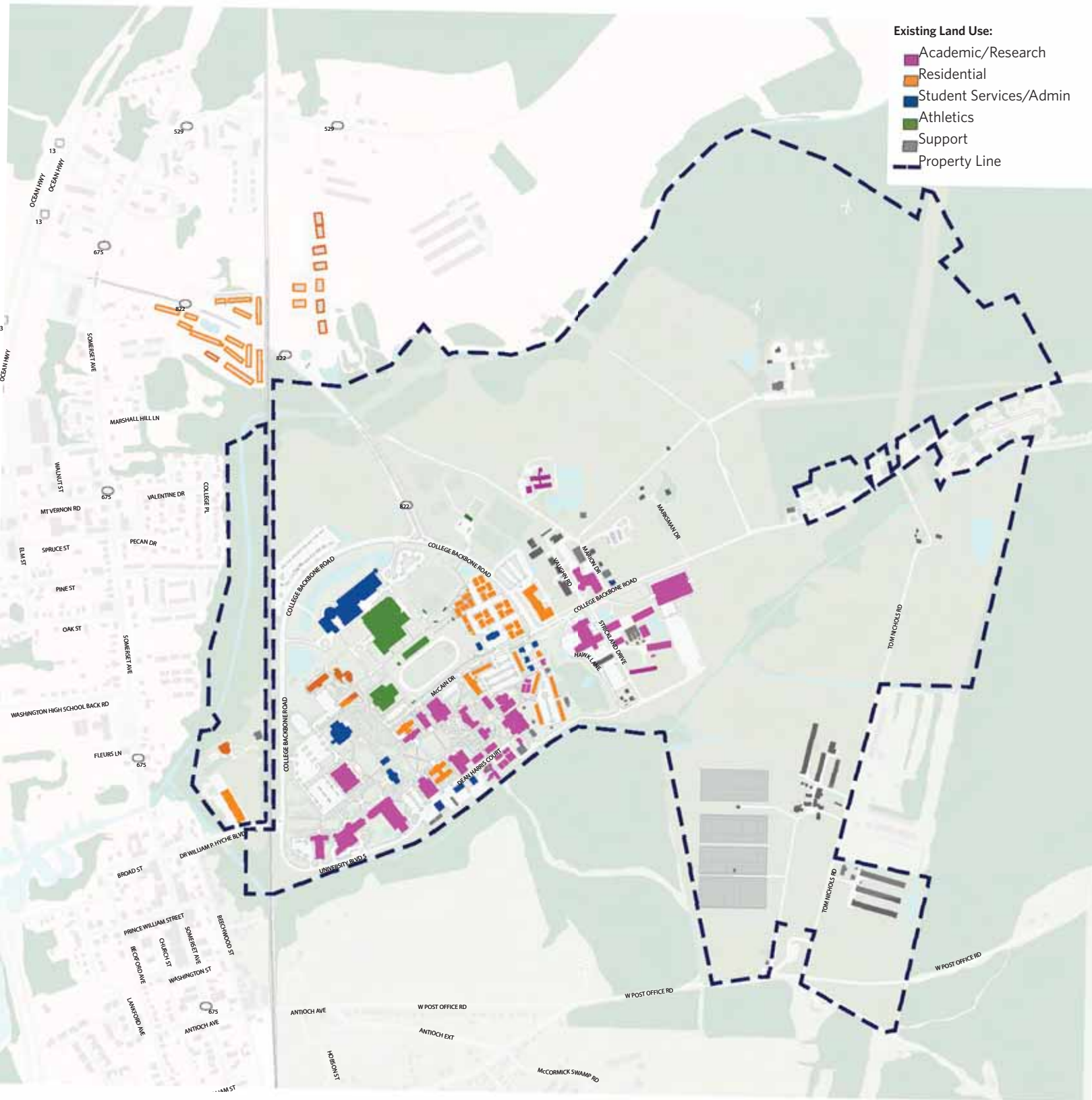
The primary building and land uses consist of Academic, Research, Residential, Student Services, Administration, Athletic facilities and Support. A large zone of academic and administrative/ student services buildings has evolved around the historic quad. To the north of the quad is the athletic zone and student life, which has already outgrown the campus proper and is straddling Backbone Road onto the large field of land just east of the new Access Road.

The residential cluster is presently located at the intersection of Backbone Road and McCain Drive. This represents a good central location as the campus expands eastward with more dormitories and academic uses. The acquisition of the residential apartment at Hawks landing represents the expansion trend of the student housing to the western edge of the campus as well.

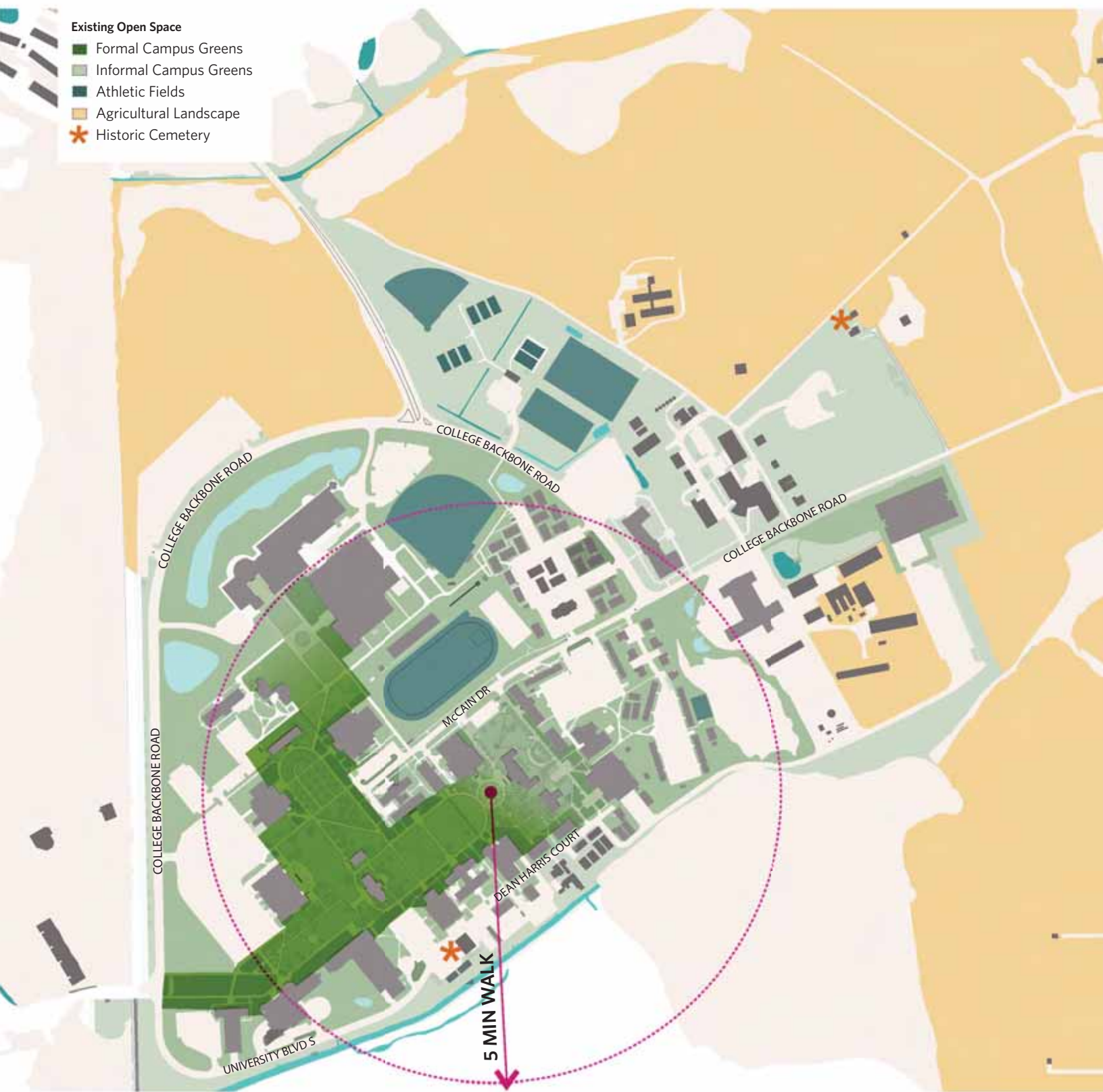
Parking has been zoned along the periphery of campus, serving the campus needs while accessible to and from the main road. It is evident that the parking has intentionally been planned on the periphery to allow for uninterrupted quads and greenways and a pedestrian environment within the campus.

The rich natural character of UMES is due in large part to the variety and quality of open spaces. Existing open spaces can be categorized as formal campus greens, informal campus greens, athletics fields, and agricultural landscapes. Though the open spaces on the main campus are linked together by a series of pedestrian paths, greenways and smaller quadrangles, presently the east campus is edgeless and the open spaces are undefined and poorly linked to the main campus.

The vast majority of land is farm and forest. It should be noted that as the present farmland is developed with projected buildings, new land may be acquired to replace it, thus maintaining the farmland capacity, a unique character of the campus that meets the needs of several agricultural programs. Forest area occupies a substantial area of the campus and forms natural boundaries and buffers along the campus perimeter. This natural feature contributes to the UMES unique character. The forest area and forestation reserve are along the eastern boundaries, while the forest area on Hawk's Landing is along the western edge of the campus.

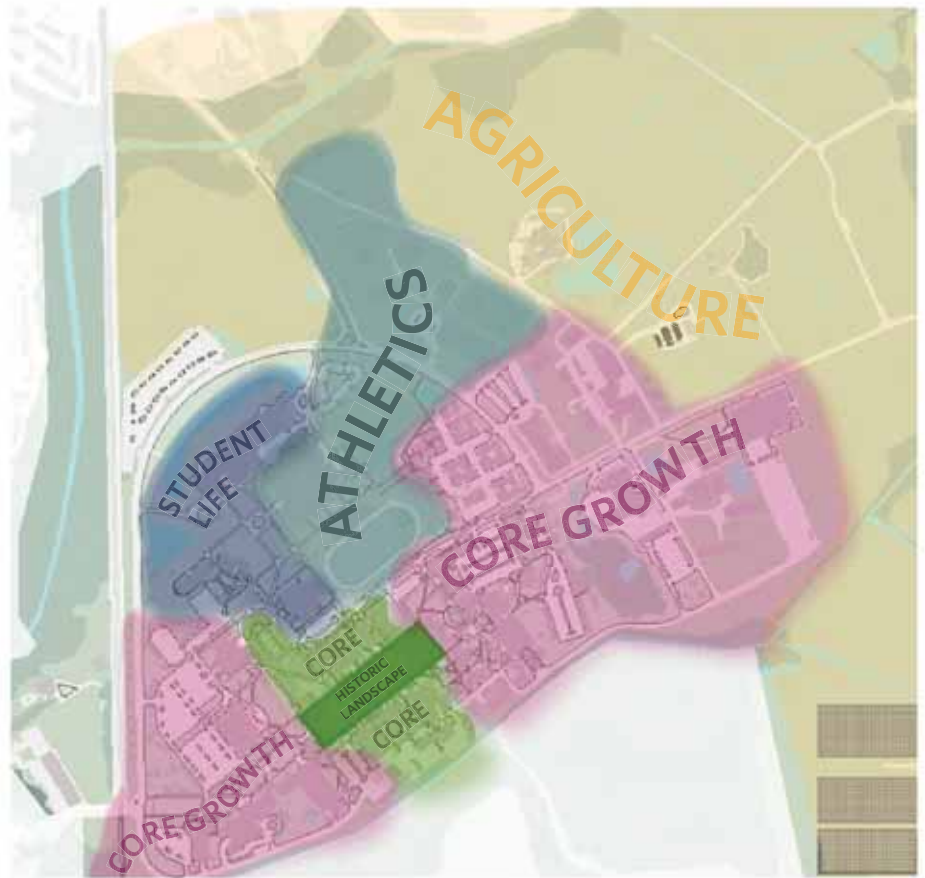


DRAFT



Existing Campus Growth

- Historic Core
- Core
- Core Growth
- Student Life
- Athletics
- Agriculture



Campus Growth

Growth on campus, primarily building growth and sports facilities, has emanated from the historic core. The direction of growth was originally north and west of the historic core, but it is now naturally towards the east and northeast. This is where the largest areas of undeveloped land is presently located, with the exception of the development of Hawk's Landing to the west.

Residential Growth

Residential clustering should occur so that the residential zones are evenly distributed across the campus. Residential expansion has followed core growth to the east on either side of College Backbone Road and to the west with Hawk's Landing apartments.

Academic Growth

Some academic uses have begun an eastward migration with the Agricultural Research and Education Center stretching to the farthest eastern development on campus. McCain Drive can be strengthened to act as an academic corridor connecting the expansion. As the academic districts begin to grow, the land on the core campus should be optimized with strategic infill.

Sports Facilities Growth

As the athletic district moves north, an athletic campus begins to form. This district becomes an entity unto itself, but it is still close enough to the academic and residential zone such that walking to practice and spectator events is feasible.

Campus Spatial Organization

Recommendations

Campus Spatial Organization Recommendations:

1. Concentrate new building development in or near the historic campus core to:
 - Complete unfinished quads
 - Strengthen the close proximity of human-scaled living and learning spaces, providing more opportunities for interdisciplinary interaction
2. Create new quads, including one adjacent to the new Sciences building, that connect to the historic quad in a meaningful way
3. Plan landscapes that foster outdoor activity
4. Consider future development outside of the core for only strategic or very long-term uses
5. Strengthen pedestrian connections to existing precincts outside of the campus core, including to off-campus housing
6. Remove and replace temporary structures by infilling their uses within existing or new structures
7. Renovations should address building conditions, functionality, as well as health and safety and environmental constraints (such as the floodplain, ADA access, etc)
8. Land use patterns should properly distribute residential and academic buildings as well as parking to create an active dynamic campus
9. Establish an athletics precinct on campus which is robustly connected with trails, open spaces and bike paths



UMES Core Campus

Identity, Gateways and Wayfinding

Existing Conditions

Gateways and Wayfinding

There are three main gateway arrival points to campus. The main highway access to the campus is Route 822, which is off US 13. This main arrival point is marked with signage and plantings and proceeded by a boulevard-like streetscape with street trees. Additionally, an information kiosk is located along Route 822 just before campus arrival. The Route 822 arrival brings the visitor past athletic fields and new signage.

The main entry to campus used to be limited to US 13 through town via Broad Street. This western entrance is now considered secondary. The Broad Street arrival point affords a graceful view of campus with landscape markers and signage on an oblique axis with the historic and international quads. There is a minor third access along McCain Drive from the direction of Palmetto. A freight railroad line separates Hawks Landing from the main campus.

Identity

Signage, arrival moments, and graphic consistency across campus all contribute to the identity of an institution. At UMES, the water tower with campus logo also contributes to the campus identity from many view points on campus. However, consistent and robust signage on campus is lacking currently.

- Existing Gateways and Wayfinding
- Campus Entrances
 - Existing Entry Feature
 - Proposed Vertical Element at Main Entrance
 - Property Line





Wayfinding Example, Washington DC

Identity, Gateways and Wayfinding

Recommendations

The gateway arrival moment for all three campus approaches should be studied for an improved experience. There could be a potential to incorporate a vertical element and UMES signage into a new Welcome Center at the Route 822 entry point. These facilities at institutions vary in size and program but are often one to two story buildings, with information for the visitor, small meeting rooms, and some administration. Campus signage, landscape, or buildings at other gateways should be considered for an improved experience as well.

Wayfinding and identity can be strengthened on campus through improved consistent signage. Locations for signage for pathways, roads, and buildings, as well as campus maps should be studied.



Entry Signage Examples

Identity, Gateways and Wayfinding Recommendations:

- 1. Use consistent University logos, graphics, colors for all permanent and temporary signage on campus
- 2. Develop consistent buildings, roads, and pathways signage
- 3. Strategically place campus maps in kiosks for visitors and new students
- 4. Mark the points of entry to campus with strong entry signage, landscape design and/or architectural feature, with a stronger emphasis on the curving entry boulevard from the north



Look Out Tower Example



The Oskar-von-Miller-tower is a meteorological tower built in 2010 at the Technical University of Munich, in Garching. The tower is the new landmark of the campus, and replaced the old meteorological mast from the campus center. Its use is collecting weather data necessary for the operating license of the neutron source Heinz Maier-Leibnitz.



Welcome Center with Incorporated Vertical Element and Signage_WSU



Welcome Center with Incorporated Vertical Element and Signage_Rutgers University

Pedestrian Experience

Existing Conditions

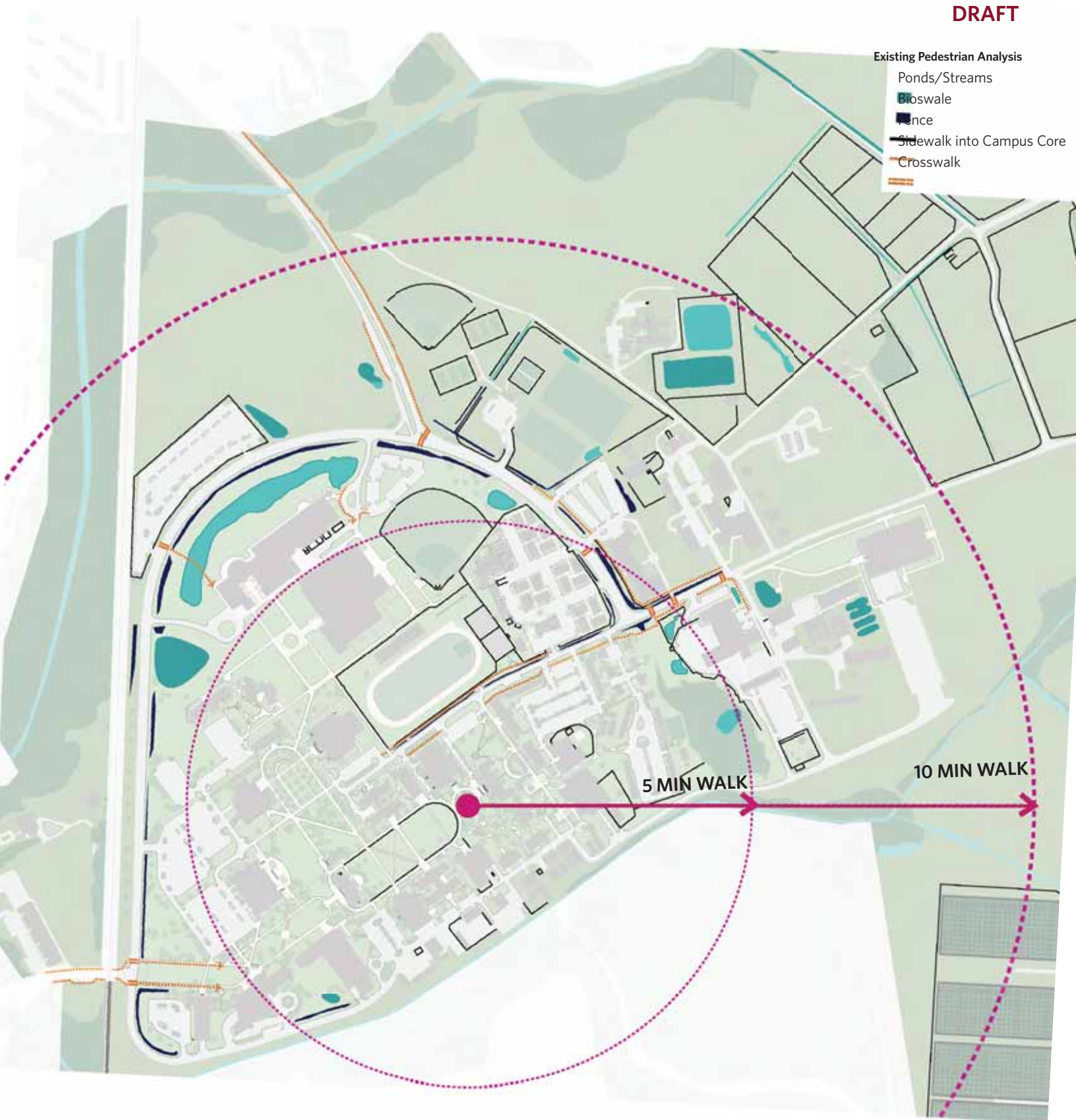


Pedestrian Analysis

Connectivity and a robust campus path network is integral to the campus experience for the pedestrian. As students, faculty, staff, and visitors move across campus throughout the day and evening, the pathways, routes, and associated landscapes all affect the overall qualitative pedestrian experience.

The walking distances from major points of arrival, such as shuttle drop-off, commuter parking, and the main residential core of campus are affected by their location at the periphery of campus. From these points, typically a five-minute walk will get a pedestrian half way across campus, and a ten-minute walk will cover most of the campus. Most parking is located to the north side of Backbone Road in the Backbone Parking Lot. Therefore, the walk to the main academic core of campus around the historic quad is outside of the 5-minute comfortable walking distance.

Pedestrian pathways are often interrupted by barriers such as fences or bioswales. Sidewalks along main roads and paths are missing, leaving students to walk along the road in some locations. Bioswales are often located along the roadside creating a barrier for pedestrian access. Fences surrounding residential, sporting uses, or even core campus lawns create an atmosphere of inaccessibility.



Pedestrian Experience

Recommendations



Connectivity and Quality of Outdoor Spaces

Overall connectivity on campus should be improved to ensure that the campus community can move about campus with ease from one destination to another. Campus paths should be both functional to connect as well as qualitatively contributing to the campus environment with carefully chosen paving and designed landscapes.

Pedestrian Experience Recommendations:

1. Create connections and remove existing barriers on major pedestrian desire lines
2. Bridge over topography in key locations to create a more connected pedestrian network
3. Remove fencing or portions of fencing which act as a barrier to the pedestrian network
4. Create comfortable, safe pedestrian paths along roadways and safe crossings at key locations
5. Develop a consistent palette of hardscape, landscape and lighting for pedestrian paths



Campus Walk Example, Northeastern University



Campus Walk Example, The College of Idaho



Campus Walk/Bridge Example, Morgan State College



Campus Walk Example, Lehigh University



Bridging Over Bioswales Example, Missouri Botanical Garden

Vehicular Environment

Existing Conditions



Route 822



College Backbone Road

Vehicular Circulation

UMES has historically had a relationship with Princess Anne and its primary campus gate oriented westward towards the town center. The gateway at the end of Broad Street is on axis with the International quad, and used to be the main entry into campus. McCain Drive once cut directly through the middle of what is now the main campus, just north of the historic quad. It was diverted in the 80's and now vehicles are looped around to the other side of campus along Backbone Road.

Today, the main entry to campus is the Maryland Rt. 822- UMES Boulevard, which brings traffic from US 13 directly into campus without passing through the city. At the intersection with College Backbone Road, one direction leads to the residential zone, farmland and ultimately exits the campus toward Palmetto Road. The other direction leads to the original campus core looping back to Backbone Road via South University Road and connecting to McCain Drive beside the new Physical Plant building.

Most of the parking is easily accessed from Backbone Road, as it has been kept to the periphery. There are parking lots designated primarily for commuter parking. There is also a drop-off point for the commuter shuttle in front of Waters Dining Hall and the student development center. The traffic pattern allows for landscaped open space and limits the vehicular circulation and service access.

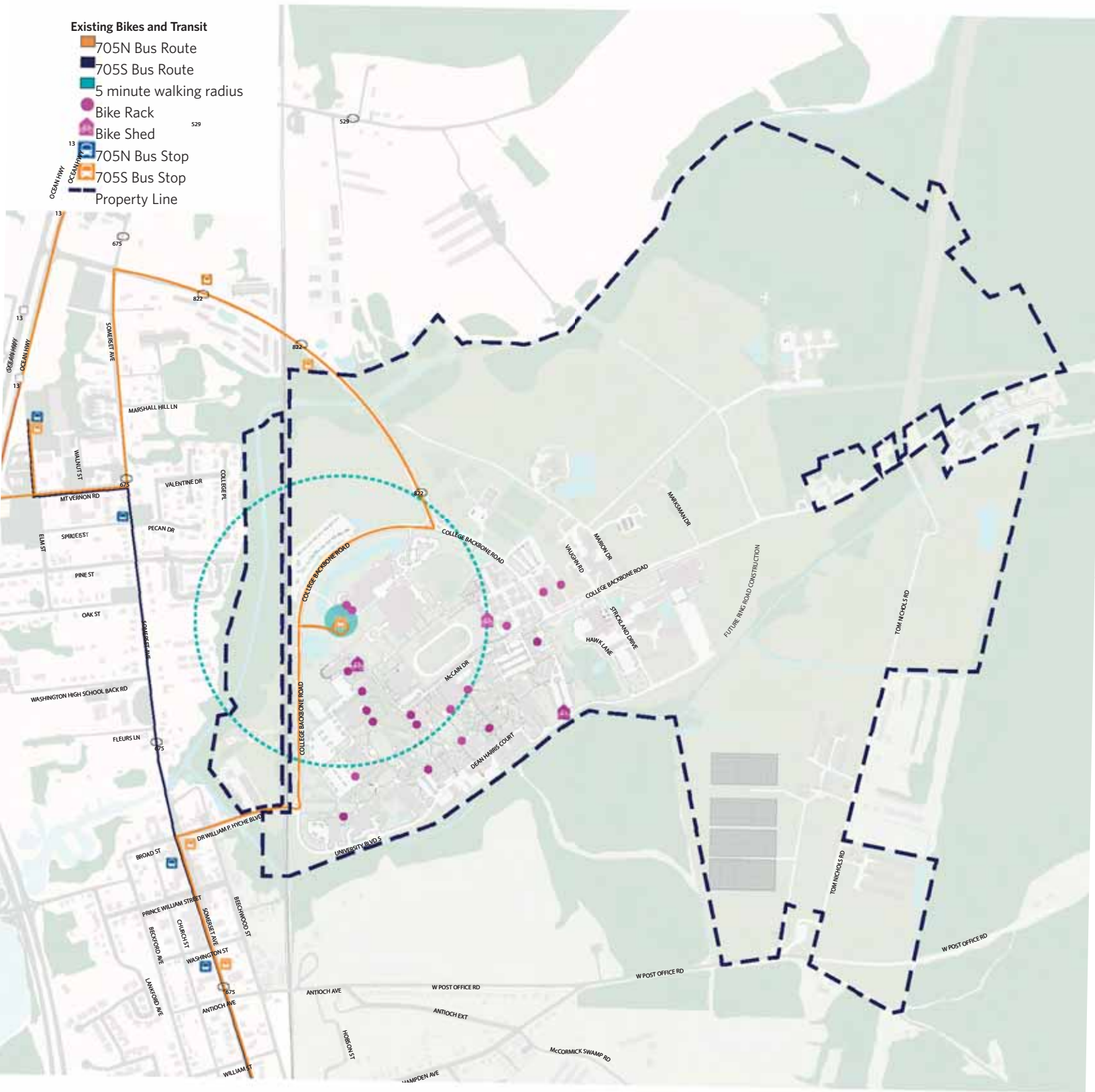
Parking Analysis

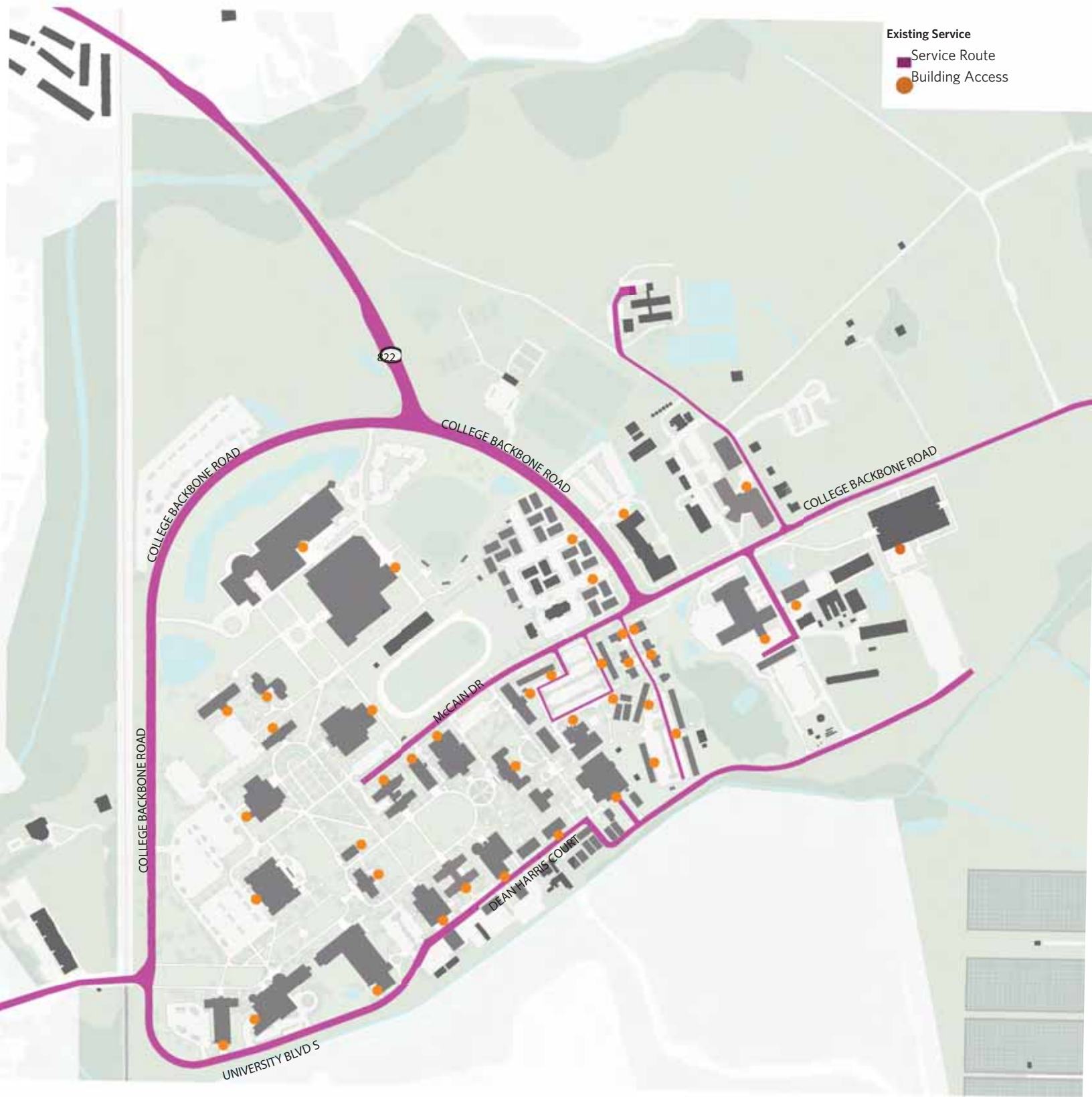
The surface parking areas on the campus are organized on the periphery, thus allowing the center of campus to be occupied by quads and greenways which are inviting to pedestrians. There are presently 2,255 parking spaces on campus, although not well distributed leading to longer walking distances. Over the next 10 years there will be additional parking need as the campus to support campus growth. It is important that the future parking needs of the campus be distributed in a fashion that creates comfortable walking distances and proximity to the buildings and activities.

Service Access

The importance of providing proper access to the service of buildings cannot be overlooked. Presently, with few exceptions, there is a successful internal network of roads that allow service trucks to reach their destinations. This planning principal should be continued as the campus expands.

DRAFT





Vehicular Environment Recommendations



Road Hierarchy

A campus should be easily navigable for the campus community and visitors alike. Road hierarchy can define the overall campus circulation with clear routes to and from different precincts of campus, and service and access routes.

Public Transit and Bikes

Alternate forms of transportation such as bicycles and public transit are both sustainable and integral to maintaining a connected campus. UMES has made efforts to provide for these modes of transportation and should continue to do so.

Parking and Service

Service access and parking are a necessity to support an institutional system such as UMES. However, as many students live on campus, the campus environment should prioritize the pedestrian experience while providing service and parking access.

Vehicular Environment Recommendations:

1. Plan for parking that is accessible from the existing and future ring road, but screened with landscaping
2. Minimize parking in the campus core; existing lots should be evaluated for potential relocation where buildings or landscape would more appropriately contribute to the campus environment
3. Consider a porous parking surface such as gravel, grass pavers, or structured grass for new parking areas outside of the core campus
4. Eliminate road patterns which are confusing and intrusive; plan for circulation routes that help create a more clear and unified whole
5. Continue to assess and provide for infrastructure supporting public transit and bikes such as bike shelters, bus shelters and information on bus routes



Parking Landscape Example, Penn State University



Parking Landscape Example, Bremerton College



Gravel Parking Example



Grass Pavers Parking Example



Structured Grass Parking Example



Tree Lined Street/Allee Example, Princeton University

Campus Experience

Existing Conditions



Outdoor Picnic Tables



Residential Student Clusters at College Backbone Rd and McCain Drive

Existing Student Experience

Many institutions have found that successful student experiences are linked to spaces outside the classroom. Informal gatherings, meetings, dining opportunities, and recreational space can often enhance the educational and student experience.

Existing dining opportunities are concentrated at Bird Hall. While concentrating dining in one area guarantees a bustling lunch rush, it also does not provide for students on the other side of campus or in search of a different dining experience. Diverse dining opportunities that provide a variety of space types such as quiet vs. loud, open and large vs. small and intimate can provide spaces for all students to feel comfortable.

Similarly, a variety of residential experiences and recreational opportunities contribute to the comprehensive student experience. Learning opportunities which are proximate or embedded within student residences can create a living and learning environment to complement the classroom experience.

Housing and Student Life

New housing, dining facilities, and recreational spaces should enhance the student experience on campus.



Dining Example, North Carolina A&T State University

Recommendations

Student Experience Recommendations:

1. Infuse existing housing with communal spaces for teaching, learning, studying and informal gatherings
2. Plan for the replacement of obsolete, under-performing student housing that negatively impacts campus connections, security, and open space networks with more communal housing typologies that provide for a range of public, semi-public, and private spaces
3. Build new housing with robust opportunities for “sticky” collisions such as shared amenities, study nooks, classrooms, meeting rooms
4. Locate new housing in precincts that could benefit from student activities such as sites which are intermingled with academic uses or directly adjacent an existing student residence to create a “sister building” and shared quad
5. Renovate existing academic buildings to create flexible teaching and research venues to foster innovative teaching and learning models as well as cross disciplinary opportunities
6. Strategically locate programs in buildings and throughout campus to foster opportunities for collaboration
7. Strategically locate campus life amenities, particularly food-related, to encourage student interaction and overall campus vibrancy

Campus Character

Existing Conditions



Engineering and Aviation Sciences Complex



Hawk's Landing



John T Williams Hall



Murphy Residential Complex

Campus Architecture: Historic and New

A strong architectural language in the campus core is a character-defining element of the campus. The historic brick buildings and associated formal campus quads create a collegiate and comfortable sense of place for the campus community.

The rural Eastern Shore character is also evident on the edges of campus with agriculture and fields defining buildings and open spaces. This sense of place is also important to the identity of UMES and should be embraced as the campus evolves.

Recently constructed buildings have incorporated brick and vernacular forms into designs. Future projects should consider all recommendations on the following page.

Recommendations



New Science Building, North Carolina A&T State University

Architectural Language

New buildings on campus should respond to the context in terms of scale, building height and massing, and materiality. Landscaping, plazas, entry points, and building footprints should all be studied in depth for new projects to ensure that the building feels a part of the existing campus.

Renovations or additions to existing buildings should consider the same recommendations if exterior modifications are within the scope of work. Building conditions and functionality should be assessed on an ongoing basis to identify buildings in need of both interior or core and shell renovations.

Campus Character Recommendations:

1. Foster design excellence in new building and landscape projects through design competitions
2. Build to a scale and height that responds to the context - both in the historic core and in other precincts on campus
3. Connect new buildings into the landscape and infrastructure of their surroundings so that they feel connected to campus
4. Design new buildings which respect the historic nature of campus, yet create state of the art facilities
5. Use building materials which respond to the existing architecture on campus

Sustainability

Campus Wide Commitment

UMES has incorporated long term comprehensive sustainability concepts in its Master Plan. The sustainability strategic goals and implementation plans are evolving and comprehensive in nature. In the area of clean energy and energy consumption reduction strategies, UMES has been implementing energy management strategies that have reduced energy uses and cut costs across the campus. Not only is the campus procuring Energy Star certified appliances and equipment, it is also using green certified products in our housekeeping and maintenance programs. In addition, UMES and the USM has constructed of a 20 acre Solar Farm that generates about 2.2 Megawatts of clean electricity. Geothermal systems are used in generating heating and cooling for multiple buildings on campus — a first in the University System of Maryland. All these efforts are geared toward responsive facility operation and the reduction in the campus's carbon footprint.

UMES is part of the University System of Maryland. The USM chancellor and the various institutions are committed to a minimum LEED silver rating for its major capital projects. To achieve this goal, members of the facilities staff are certified as LEED Accredited Professionals and will work with other professionals to ensure that required LEED-rated facilities are constructed. Programs already exist in the National Sciences that focus on environmental sustainability and preservation. New courses in green building concepts are being offered in the Technology Department and additional measures and programs are being contemplated.

In the area of transportation, UMES has developed partnerships with the Maryland's Eastern Shore Transit System in creating one of the public transportation systems in the Eastern Shore. This system has enabled UMES students, faculty and staff to travel to nearby institutions and towns. Necessary infrastructure such as bus shelters, bicycle sheds and racks are provided across the UMES campus. Recycling, waste management, and material conservation programs are in place and are receiving improvement measures. UMES intends to continue to expand campus-wide awareness of climate change and sustainability initiatives and programs as resources are available.

University of Maryland Eastern Shore President's Climate Change Update: February 18, 2009

University of Maryland Eastern Shore has made remarkable strides in meeting our commitment within the provisions of the American Colleges & University Climate Commitment (ACUPCC) and the University System of Maryland (USM) Sustainability Initiatives. Since Dr. Thelma Thompson, UMES President, signed the commitment with ACUPCC, UMES has developed an effective organizational structure charged to implement the commitment. The Organization structure consists of a 26 member steering committee and 9 sub-committees that are working with the entire campus community in the development of the UMES Climate Action Plan. The committees are: GHG Inventory Committee, Stationary, Recycling & Solid Waster Committee, Energy Committee, Community Partnership Committee, Campus Master Plan & Architecture Committee, Student Engagement/Residence Life Committee, Academic Curriculum Committee, Campus Research, Agricultural Research & Institutional Data Committee, and the Transportation Committee. There are between 15-20 members that are representative of the campus community in each committee. The various committees will report to the steering committee and each committee has representatives from the steering committee. The University Liaison and co-chair is responsible for coordinating the overall climate change program with assistance from other co-chairs.

At the interim UMES has met its obligation with ACUPCC and submitted its Greenhouse Gas (GHG) inventory with strategies for reducing carbon footprint. Additional steps will include the implementation of new initiatives for strengthening research in clean energy, and the development of new academic curricula that is supportive of sustainability and the well-designed and built environment.



President's Signing of the White House Act on Climate Pledge: November 12, 2015

PLEDGE:

As institutions of higher education, we applaud the progress already made to promote clean energy and climate action as we seek a comprehensive, ambitious agreement at the upcoming United Nations Climate Negotiations in Paris. Although we are optimistic that world leaders will reach an agreement to secure a transition to a low-carbon future, we recognize the urgent need to act now to avoid irreversible costs to our global community's economic prosperity and public health. Today our school pledges to accelerate the transition to low-carbon energy while enhancing sustainable and resilient practices across our campuses.

WE PUT FORTH OUR PLEDGES AS FOLLOWS:

As a signatory in one of Second Nature's three Climate Leadership Commitments, the University of Maryland Eastern Shore is part of a robust network of over 600 college and university presidents and chancellors who have committed their institutions to take bold and catalytic climate actions. These Climate Leadership Commitments are key driving forces for transformative change on our campus. As part of our commitment we will:

- Achieve carbon neutrality by 2050 and create thresholds for increasing climate resilience
- Make carbon neutrality and climate resilience a part of the curriculum and other educational experiences for all students
- Expand research in carbon neutrality and climate resilience
- Expand the on-site generated renewable energy (Photovoltaics) from 2.2 MW (12% of consumed energy on campus) to 6.6 MW over the next 10 years thus generating 36% of green consumed electricity on campus
- Construct two 2-MW wind turbines on the campus over the next 15 years, thus generating nearly 58% of green consumed energy on campus by year 2030
- Continue renewable energy development partnerships, and training for the students and in support of Maryland's Eastern Shore Green Energy Workforce Development.
- Sustain "The Green Collar Initiative", a collaborative project between a local utility and the University of Maryland Eastern Shore that aims to grow green jobs and promote green living
- Share renewable energy education with young students from within the surrounding community; tour our campus sustainability programs, initiatives, and renewable energy infrastructures; and learn what it means for a sustainable future.

Sustainability

Campus Wide Commitment

The University is committed to Climate Change Mitigation through Climate Neutrality and campus-wide sustainability consistent with the USM system-wide sustainability initiatives (including participation in the ACUPCC). This Facilities Master Plan, by necessity, focuses more on the physical components of sustainability. Other, non-physical sustainability initiatives will be addressed in other strategic planning efforts.

The Master Plan goal is to set the stage for long-term, comprehensive sustainability. The concept of “sustainability”, as defined by the UN World Commission on Environment and Development Report 1987, involves “meeting the needs of the present generation, without compromising the ability of future generations to meet their own needs.”

More specifically, this Master Plan bases its actions and goals on the following definitions, both from the ACUPCC:

Climate Neutrality: “[D]efined as having no net GHG emissions, to be achieved by minimizing GHG emissions as much as possible, and using carbon offsets or other measures to mitigate the remaining emissions. To achieve climate neutrality under the terms of the Commitment, all Scope 1 and 2 emissions, as well as those Scope 3 emissions from commuting and from air travel paid for by or through the institution, must be neutralized.”

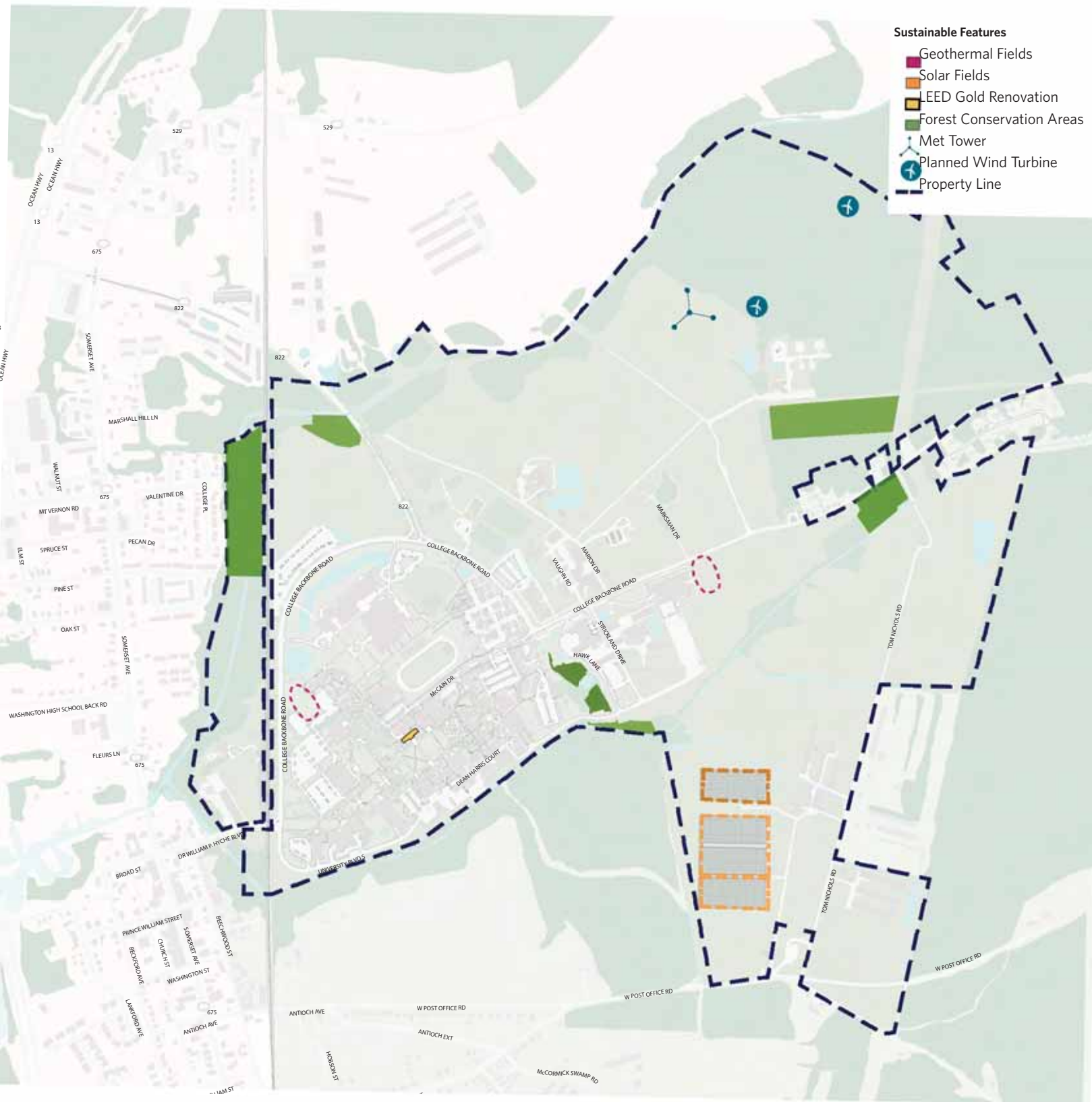
Sustainability: “A dynamic state in which global ecological and social systems are not systematically undermined. Sustainable development is often defined as that which meets the needs of the present without compromising the ability of future generations to meet their needs. Ensuring that activities do not systematically undermine ecological and social systems is to ensure that the ability of future generations to meet their needs is not compromised. There are four basic ways ecological and social systems can be undermined (as originally articulated by The Natural Step): when natural systems are subject to systematic increases in...

- Concentrations of substances from the earth’s crust (e.g. fossil fuels, heavy metals)
- Concentrations of substances produced by society (e.g. CFC’s, DDT)
- Degradation of physical means (e.g. deforestation, overfishing);

and, when social systems are subject to conditions that systematically undermine people’s ability to meet their needs.

Sustainability goals in this chapter are divided into five categories:

- Building
- Energy
- Site
- Transportation
- Water



Sustainability

Campus Wide Commitment



Biomass Energy Plant Example



Solar Panel Field Example



Central Chiller Plant Example

BUILDING

Objective: Create superior places to study, work and live that enhance the health and performance of building occupants through sustainable planning, design, construction, operations, retrofits and biomimicry.

USGBC LEED Standards

The United States Green Building Council's LEED (Leadership in Energy and Environmental Design) rating system sets standards for achieving 'green' energy-efficient buildings, and is applicable to both new construction and the updating/renovation of existing buildings. All new buildings and major renovations on the UMES Campus must meet or exceed LEED-Silver, or equivalent, standards.

Materials Standards

In addition to compliance with the above LEED-Silver (or equivalent) standards, UMES encourages the achievement of LEED points (or equivalent standards) related to: certified recycled / recyclable, locally produced, and low-emitting materials.

Mechanical/Electrical Equipment Standards

In addition to compliance with the above LEED-Silver (or equivalent) standards, UMES encourages the achievement of LEED points (or equivalent standards) related to: the optimization of energy performance, utilization of high-efficiency / Energy Star mechanical / electrical equipment and appliances, advanced commissioning, and measurement and verification.

Roof Configuration

All new buildings should have roof configurations capable of accommodating present or future solar panel equipment and/or green roof plantings. This includes siting buildings so that portions of roofs designated as potential locations for solar harvesting have sufficient (un-shaded) exposure.

ENERGY

Objective: Minimize greenhouse gas emissions as much as possible, through energy efficiency, conservation, on-site generation and strategic procurement of clean and renewable energy.

Infrastructure Improvements

UMES will focus on the continued renovation and increased efficiency of all HVAC and lighting systems on campus.

Green Power Production or Purchasing

Per ACUPCC standards, continue producing at least 15% of UMES's electricity consumption from renewable resources. To achieve this goal, UMES may: install and operate one or more renewable electricity generating devices on campus (wind, solar, geothermal, low-impact hydropower, clean biomass, and/or bio-diesel); purchase renewable electricity purchased off-site but directly connected to campus; purchase renewable energy credits; or any combination thereof.

Central Chiller Plant

UMES will study the feasibility for developing a central chiller plant on campus.

Solar Farm

UMES will follow-through on plans to expand the approximately 40 acre Solar Farm (to be completed in two phases) for harvesting solar energy. The Solar Farm is located on the southern-most point of the campus, on a previously existing farm site.

Biomass Energy Program

UMES will study the feasibility for developing a small-scale Biomass energy plant on campus.

ENERGY STAR Procurement

Per ACUPCC standards, adopt an energy-efficient appliance purchasing policy requiring purchase of ENERGY STAR certified products in all areas for which such ratings exist.

Facility Clustering

Cluster future facilities to minimize energy loss during long runs.



Forest Conservation



Shade Tree Example



Existing Bioswale



Vegetated Bioswale Example

SITE

Objective: Protect and maintain the natural campus environment through restoration, preservation, and education while enhancing the campus as a classroom.

Use Distribution

Distribute uses on campus to encourage pedestrian activity and minimize vehicular activity. Students living on-campus should be able to comfortably walk to classes and campus amenities. Commuter students should be able to park once, and comfortably walk or use campus transit to access a variety of activities.

Clustering of Similar Functions

Cluster similar functions for efficiency and walkability, and provide remote areas for potential solar and wind power generating equipment, biomass energy production, composting, waste management, and recycling facilities.

Campus Housing

Provide more on-campus housing and amenities for students, faculty and staff to minimize vehicular commuting and daily off-campus vehicular trips.

Building Placement / Site Planning

Placement of new buildings and building additions should be oriented to maximize LEED point opportunities, taking full advantage of solar alignment, shade opportunities, and prevailing winds and breezes.

Building Footprints

Minimize physical building footprints through effective building massing and use of site materials.

Heat-Island Effect and Impervious Surfaces

Reduce impervious surfaces to help mitigate the urban heat-island effect; maintain a high percentage of pervious surfaces. Where paving is necessary, encourage the use of open-grid (or other porous) paving

systems and/or paving materials with a Solar Reflectance Index of at least 29.

Forest Conservation

All future development will continue to contribute to the Forest Conservation Easement areas.

Shade Trees and Liberal Plantings

In order to encourage pedestrian activity throughout the UMES campus:

- Provide additional shade trees at all main walkways and sidewalks to encourage pedestrian mobility. Once trees reach a substantial shade capacity, the increased areas with shade will decrease the demand on water for landscaping.
- Provide additional shade trees at parking lots to reduce heat island effect.
- In addition to shade trees, other campus planting should include native plants, recommended because they generally don't require fertilizer and are more tolerant of the local climate, soil, and water conditions.

Bioswale Improvement

In order to prevent runoff and sediment, bioswales cleanse water before it enters Maryland's stream network. New and existing campus bioswales can be improved from simple drainage ditches into "rain gardens". This can be achieved with the abundant native planting, which may include a selection of wetland edge vegetation, such as wildflowers, sedges, rushes, ferns, shrubs and small trees, that take up excess water flowing into the rain garden. Water filters through soil layers before entering the groundwater system. Root systems from the vegetation enhance infiltration and moisture redistribution.

Sustainability

Campus Wide Commitment

TRANSPORTATION

Objective: Develop transportation strategies that reduce fuel use, air pollution and carbon dioxide emissions while providing opportunities for alternative transportation including bicycle and pedestrian infrastructure.

Campus Transit (Bus/ Shuttle)

In addition to walking and biking opportunities, encourage students to utilize campus transit (bus/shuttle) with an improved system. Potential improvements include: stops located no more than a five-minute walk (1/4 mile) from any major campus facility and parking lot; covered waiting areas at every stop; decreased wait times between shuttles; improved signage.

Campus Bike Facilities

Supplement existing bike facilities with the following:

- Covered bike storage facilities at every campus housing cluster
- At least one additional covered bike storage facility at a central campus location (for use by commuters and off-campus housing)
- Bike racks at every campus facility/building

Campus Bike Sharing Program

UMES will study the feasibility of campus-wide bike-sharing program, evaluating other college campus bike-sharing precedents.

Bike and Walking Paths

Maintain continuous, interconnected paved biking and walking paths throughout the campus.

Alternative Fueling

Provide facilities for refueling of vehicles operating on alternative or mixed fuels.

WATER

Objective: Reduce potable water use while protecting and conserving all water resources within the campus watershed through implementation of efficiency measures, collection technologies, re-processing and re-use.

Runoff/Stream Protection During Construction

Meet the LEED site prerequisite standards regarding construction activity pollution prevention, in which an Erosion and Sedimentation Control Plan is required for new projects. This plan should follow the 2003 EPA Construction General Permit or local erosion and sedimentation control standards, whichever is more stringent. The intent is to prevent sedimentation of storm sewer or receiving streams.

Drought Resistant Landscaping

Utilize drought-resistant landscaping (often native species) to minimize irrigation needs.

Sanitary Systems

UMES will consider advanced water-saving technologies in new buildings. These include, dualflush and waterless toilets and urinals, and monitored sanitary systems.

Storm Water Management

- Maintain and maximize pervious surfaces, including green roofs, throughout the campus to minimize stormwater runoff.
- Reduce use of potable water for landscape irrigation and building sewage conveyance through the use of captured rainwater and/or recycled greywater.

Implementation

UMES will implement a carbon audit and mitigation plan.



Existing UMES Bus Shelter



Bike Path Example



Covered Bike Shelter Example

Building and Facility Data

Historical and Projected Student Enrollment

Student enrollment continues to grow and for the Fall of 2008 the headcount totaled 4,290. By Fall 2018, this number is projected to be 5,358 with a Full-Time Equivalent of 4,772 and a Full Time Day Equivalent (FTDE) of 4,085. (See Appendix)

The University of Maryland System Space Planning Guidelines Data Sheet (See Appendix) outlines how this anticipated student enrollment and increased headcount will produce a corresponding increase in credit hour activity and demand for instructional space.

Historical and Projected Faculty and Staff

The University of Maryland System Space Planning Guidelines Data Sheet (See Appendix) also outlines the Full Time and Part Time Faculty and Staff, including graduate research assistants and other graduate students, currently employed by UMES. It shows significant increases in these numbers over the next 10 years. Full Time and Part Time Faculty are projected to increase to 264 and 150, respectively. Full Time and Part Time Staff are expected to increase to 658 and 131, respectively. As with the student enrollment, this projected increase in faculty and staff will produce a corresponding increase in credit hour activity and demand for instructional space.

DRAFT

Building and Facility Data

900	Student Development Center	935	Murphy Hall	969	Cattle Shed
901	Wilson Hall	936	Murphy Hall Annex	970	Corn Crib
902	Trigg Hall	937	Waters Hall	972	Quonset Hay Storage
903	Early Childhood Research Center	938	Somerset Hall	973	Implement Shed - East
904	Thomas/Briggs Arts & Technology Building	939	Hartford Hall	974	Physical Plant/Central Receiving
905	Kiah Hall	940	Wicomico Hall	975	Public Safety Office
906	Henson Center	941	Resident Director House #1	976	Marksman - West
909	Taws Gymnasium	942	Student Radio Station	978	Crop and Aquaculture Building
910	Food Science & Technology	943	Student Apartments Laundry	979	Crop and Farm Maintenance Building
912	Research Green House	944	Student Apartments #1	980	Swine Reproduction Facility
913	Banneker Hall	945	Student Apartments #2	981	Swine Research Facility
914	Spaulding Hall	946	Student Apartments #3	982	Environmental Storage
915	Tanner Airways Science Center	947	Student Apartments #4	983	President's House
916	Lida Brown/Student Health Center	948	Student Apartments #5	984	Student Residence Cluster #1
917	Academic Green House	949	Student Apartments #6	985	Student Residence Cluster #2
919	Farm Shop	950	Student Apartments Office and Lounge	986	Student Residence Cluster #3
920	Ella Fitzgerald Performing Arts Center	951	Resident Director House #2	987	Student Residence Cluster #4
921	Alumni House	952	International Program Office	988	Student Residence Cluster #5
922	G.W. Carver Science Building	953	Learning Resource Center	989	Student Residence Cluster #6
923	Engineering, Aviation, Computer & Math Science Building	954	Nuttle Residence Hall - A/B	990	Student Residence Community Center
924	Crab Research Trailer	956	Plaza Residence Hall	991	Student Residence Community Laundry
926	MAES Poultry Office Lab	957	Court Plaza Residence hall	992	Manure Shed 1
927	MAES Poultry Environmental Research	958	University Terrace	993	Manure Shed 2 (not located)
928	MAES Poultry Science Research	960	Richard Hazel Hall	994	Hydroponic Greenhouse (shown as demolished)
929	J.T. Williams Administration Building	961	Central Steam Plant	995	Outfield House
930	Bird Hall	962	WESM Radio Station	996	William P. Hytche Center
931	Temporary Classroom . 1 & 2	963	Dairy Barn	997	Student Services Center
932	Access & Success	964	Implement Shed - West	998	Hawks Landing Apartments
933	Frederick Douglass Library	965	Maintenance Storage	999	Hawks Landing Shop
934	Modular (1 - 6)	966	Maintenance Shop		
		967	Ruminant Farm Office		



Building and Facility Data

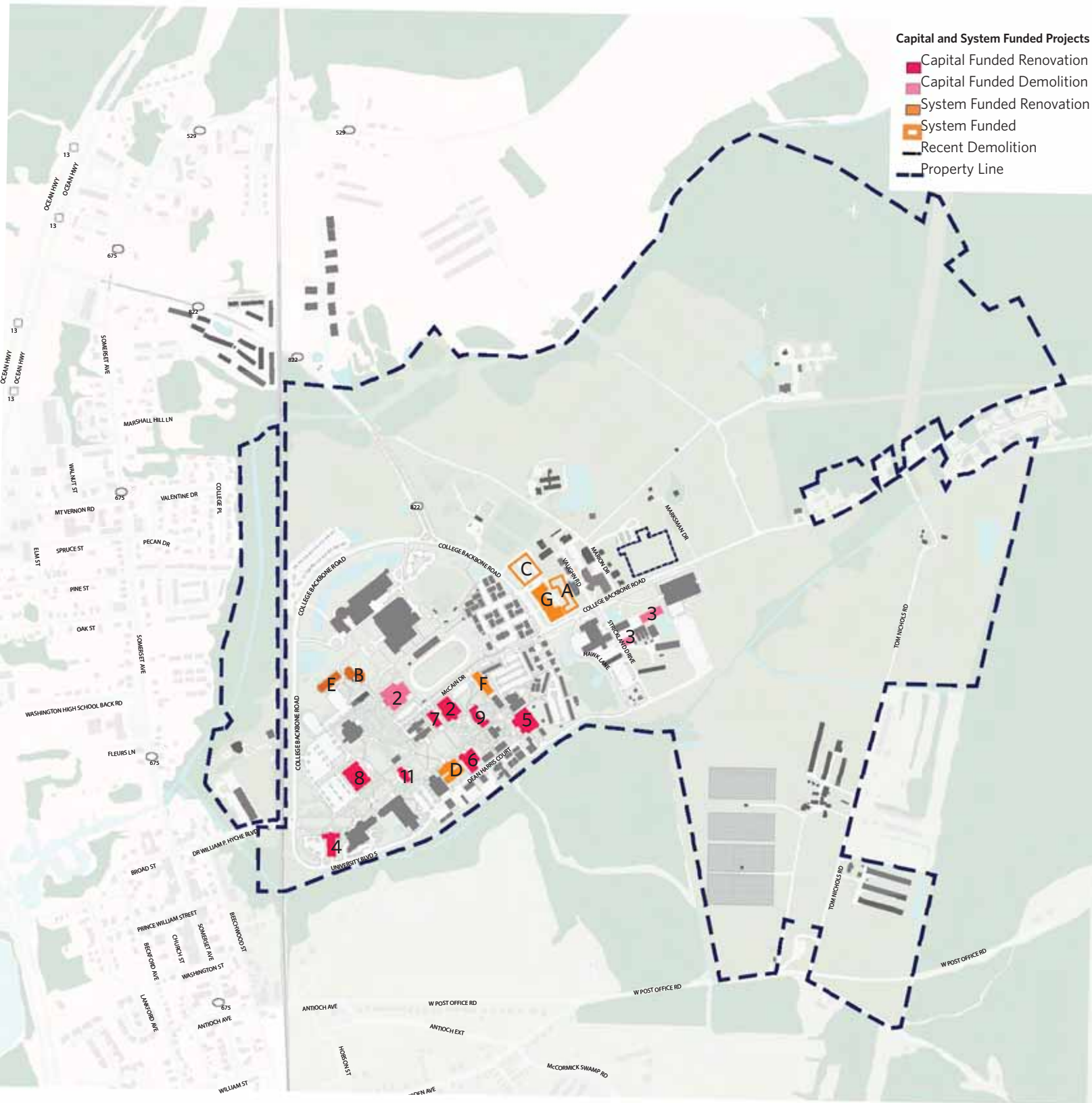
Over the next ten years there are numerous Capital and System Funded Projects. It is important to locate these future projects in a position that benefits the user groups and the campus environment as a whole. The diagram illustrates where these projects are either presently located, as in the case of a renovation, or proposed to be located for new projects.

Capital Funded Projects in Next 10 years

1. School of Pharmacy & Allied Health Professions
2. New Frederick Douglas Library
3. Farm Support Buildings
4. Kiah Hall Building Renovations
5. Arts & tech . Renovation
6. Carver hall renovation & Addition
7. Wilson Hall Renovation
8. Performing Arts Renov/Addition
9. Trigg hall renovation
10. Site Improvement Projects Campuswide
11. J. T. William Building Renov/Addition
12. Construct Aquaculture/Wildlife
13. Agricultural Research and Education Center

System Funded Projects

- A. 400 Bed Residence hall Phase II
- B. Nuttle Hall Renovation
- C. New 400 Bed Residence Phase III
- D. Murphy Hall/annex renovation
- E. Court Plaza Renovation
- F. Plaza Residence Renovation
- G. University Terrace Renovation



Capital Funded Projects in the Next 10 yrs (2016-2026)

Project #	Building	GSF	NASF	Classification	Cost	Start construction
1	School of Pharmacy & Allied Health Professions	110,000	66,000	New	62,225,000	
2	New Frederick Douglass Library	119,750	72,650	New	79,225,000	
	Auxiliary Gym	30,000	18,000	New		
3	Farm Support Buildings	97,250	10,900	New	31,935,000	
4	Kiah Hall Building Renovation	36,000	18,000	Renovation	16,305,000	
5	Arts & Tech Bldg. Renovation	50,497	28,970	Renovation	32,280,000	
6	Carver Hall Renovation & Addition	106,345	51,000	Renovation/New	56,160,000	
7	Wilson Hall Renovation	13,000	8,101	Renovation	7,820,000	
8	Performing Arts Renov/Addition	78,127	42,000	Renovation/New	51,145,000	
9	Trigg Hall Renovation	27,509	16,227	Renovation	17,540,000	
10	Site Improvement Projects Campuswide				16,545,000	
11	J.T. William Building Renov/Addition	36,000		Renovation/New	11,510,000	
12	Construct Aquaculture/Wildlife Bldg.	26,000	14,600	New	14,835,000	
13	Agricultural Research and Education Center					

System Funded Projects

Project #	Building	GSF	NASF	Classification	Cost	Start construction
1	400 Bed Residence Hall Phase II	113,647		New	26,000,000	Dec-16
2	Nuttle Hall Renovation	22,392	13,678	Renovation	10,800,000	Apr-17
3	New 400 Bed Residence Hall Phase III	113,647		New	27,000,000	Dec-19
4	Murphy Hall/Annex Renovation			Renovation		
5	Court Plaza Renovation			Renovation		
6	Plaza Residence Renovation			Renovation		
7	University Terrace Renovation			Renovation		

Acquisitions in the Past 10 yrs (2005-2015)

Project #	Properties	Classification	Acreage	Date Acquired
	Off Campus Sites			

Project #	Buildings	Classification	Acreage	Date Acquired
-----------	-----------	----------------	---------	---------------

New building projects completed in the Past 10 yrs (2005-2015)

Building #	Building Name	GSF	NASF	Year Constructed
918	Paul C. Sarbanes Center	12,900	6,563	2005
923	Engineering & Aviation Sci. Bldg	165,991	90,192	2015
Total		178,891	96,755	

Projects in Progress

Project #	Building	GSF	NASF	Classification	Cost	Start construction
-----------	----------	-----	------	----------------	------	--------------------

CAPITAL FUNDED

SYSTEM FUNDED

Renovations of buildings over the Past 10 yrs (2005-2015)

Building #	Buildings Name	GSF	NASF	Year Constructed	Renovation Cost
900	Student Development Center	44,364	23,035	1976	\$935,000

Facility Renewal in UMES

Projects	Completed/Continuous
----------	----------------------

DRAFT

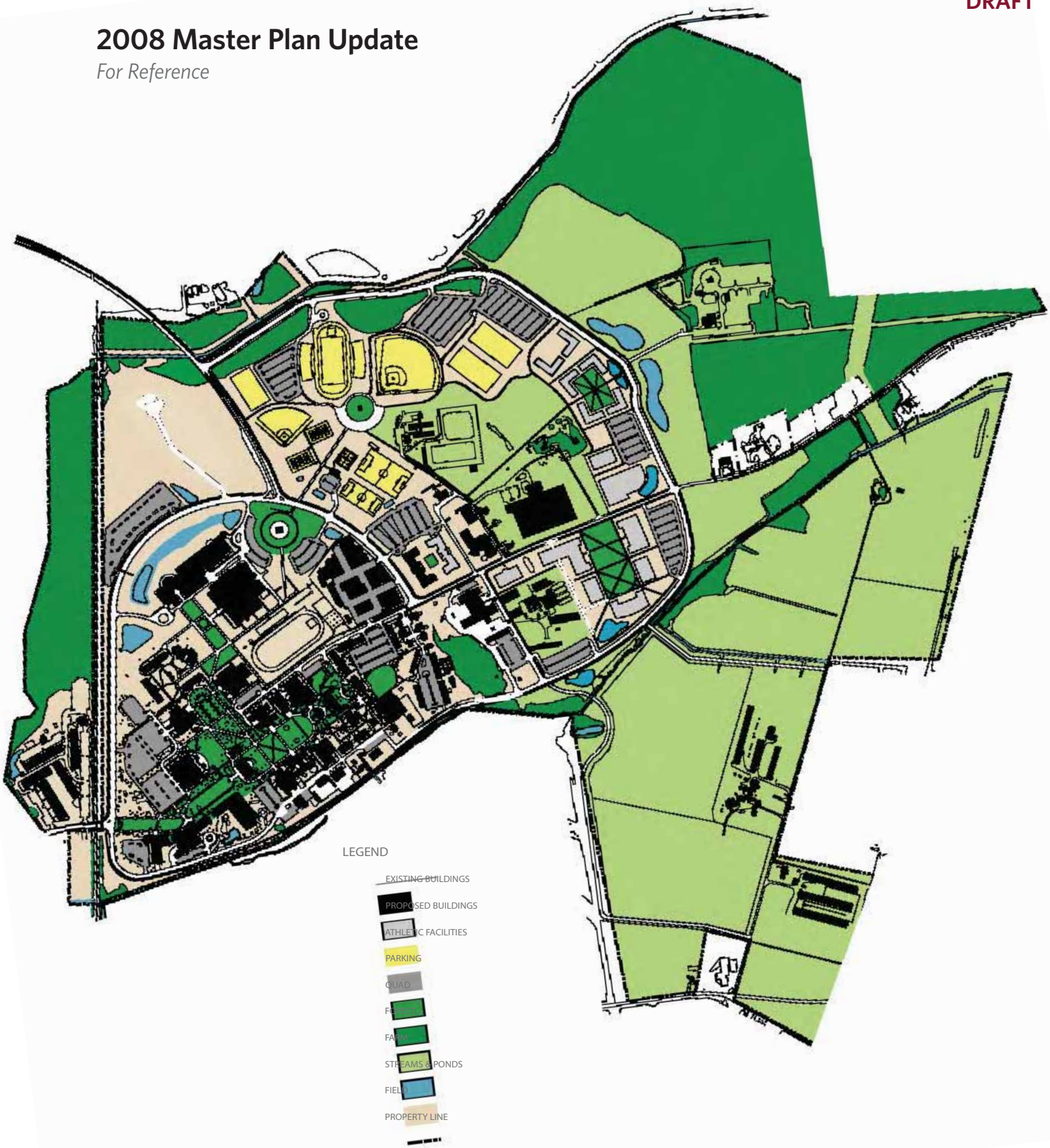
Evolution of the 10-Year Master Plan

This document addresses the need for a new campus Master Plan to help guide the immediate and long-term growth of the UMES Campus, and maximizes the choices available for future expansion needs. The 10-year Master Plan will address the years 2016-2025.

DRAFT

2008 Master Plan Update

For Reference



LEGEND

- EXISTING BUILDINGS
- PROPOSED BUILDINGS
- ATHLETIC FACILITIES
- PARKING
- QUAD
- FOREST
- FARM
- STREAMS & PONDS
- FIELD
- PROPERTY LINE

DRAFT
2016 Existing Conditions
For Reference



10 Year Master Plan

2016-2025

Proposed projects of the **10-YEAR MASTER PLAN** are outlined for UMES and categorized as sites for new construction, campus life, major pedestrian paths, landscape & open space, gateways, transportation, and sustainability.



Sites for New Construction

10 Year Master Plan

New building construction on campus should consider the dynamic mix of uses campus-wide. Building sites have been identified by the Master Plan, and in some cases, could be considered appropriate for more than one type of building project. Here we identify the potential appropriate use for each of the proposed building sites.

Potential Sites for Academic New Construction

- NC4 Academic Building(s)
- NC5 Academic Building (Pharmacy Option)
- NC6 Agricultural Research and Education Center
- NC8 Academic Building
- NC9 Academic Building (Gateway Building, Pharmacy Option)
- NC12 Academic Building
- NC13 Academic Building

Potential Sites for Residential New Construction

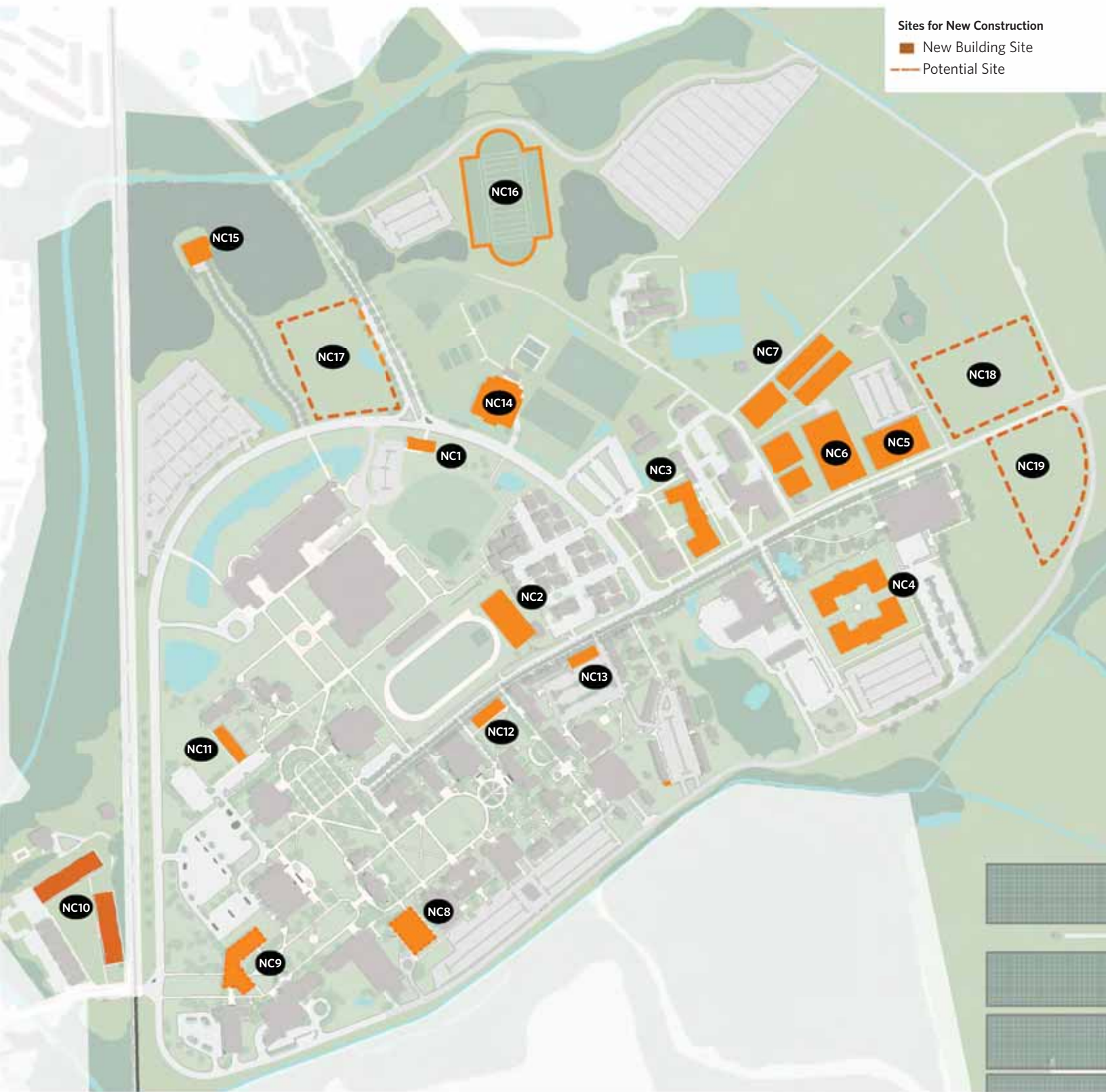
- NC3 Residential Dorm
- NC4 Residential Dorm(s)
- NC10 Hawk’s Landing Expansion
- NC11 Residential Dorm
- NC12 Residential Dorm
- NC13 Residential Dorm

Potential Sites for Athletics New Construction

- NC2 Field House
- NC14 Tawes Replacement
- NC16 Stadium (10,000 seat)

Potential Sites for Specialty or Support New Construction

- NC1 Welcome Center
- NC7 Farm Support (replacement facilities)
- NC15 President’s House (replacement)
- NC17 Potential Conference Center Option
- NC18 Potential Conference Center Option
- NC19 Potential Conference Center Option





Welcome Center Example, Washington State University

Gateways

10 Year Master Plan

The Master Plan proposes enhanced gateway arrival moments to campus through new construction buildings and associated site planning.

NC1 Welcome Center Building

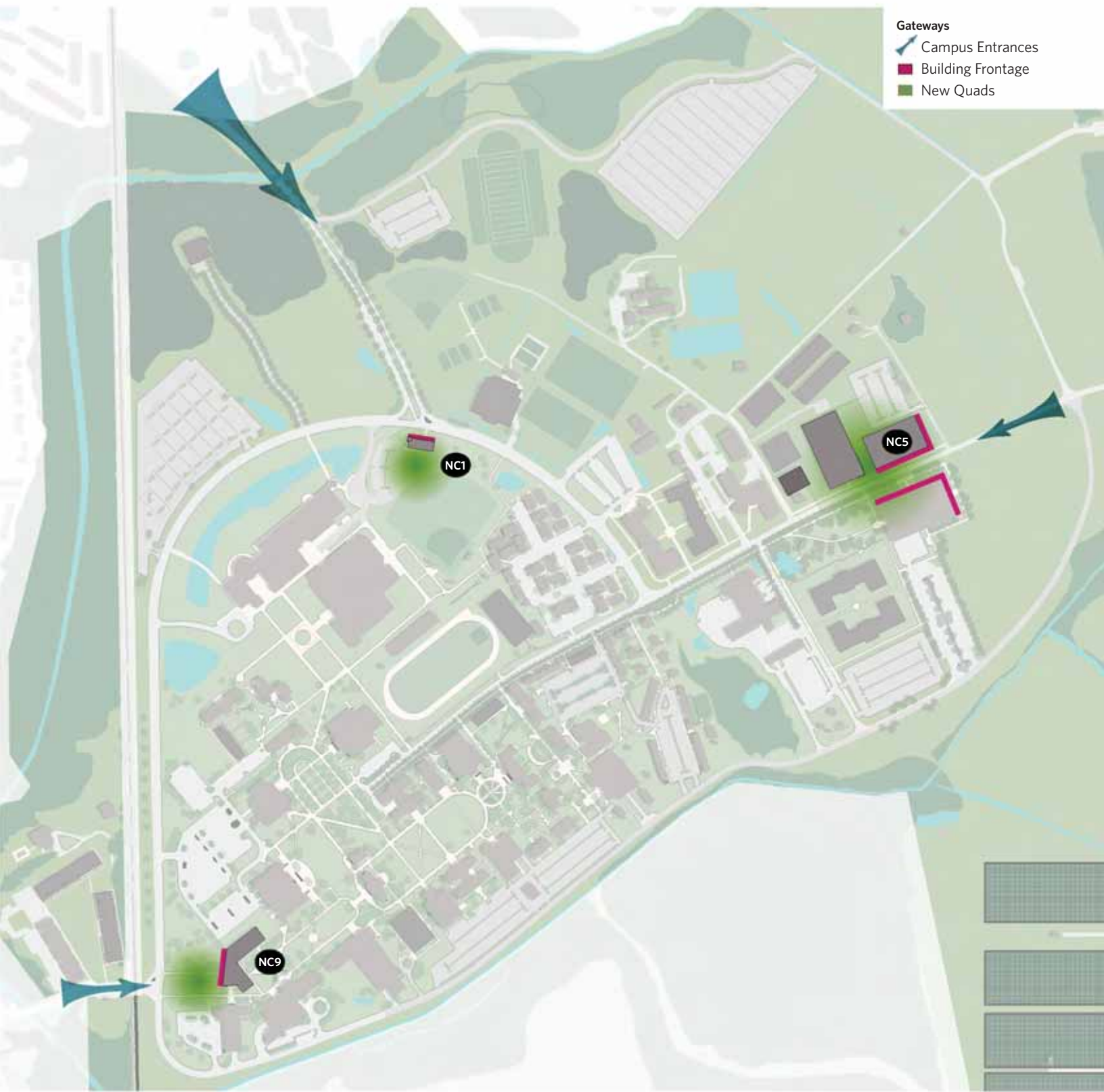
A UMES Welcome Center at the entry to campus from Route 822 has the potential to create a space for visitors to get an introduction to the campus as well as provide a gateway arrival view. The building could incorporate a vertical element and UMES signage to serve as a visual focal point on campus.

NC5 Eastern Gateway Building

The newly built Engineering and Aviation Sciences Complex is beginning to create a gateway view and entry moment from the East. A proposed new building directly to the North can complement this complex and establish a strong entry experience. The new building should address the view from the east with architectural articulation at the south-east corner, and UMES signage could be incorporated into this building or associated landscape. This prominent gateway site should be considered for the proposed Pharmacy building.

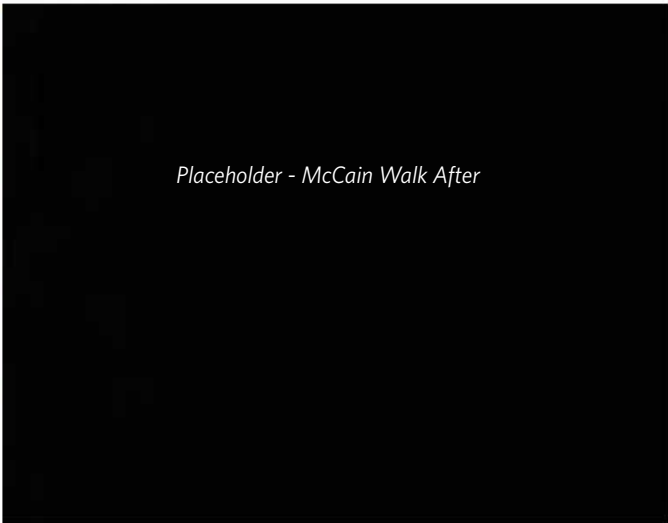
NC9 Western Gateway Building

A new building at the western entry to campus from town and Dr. William P. Hyche Blvd. has the potential to create a new face for the campus for visitors





Existing McCain Drive



Proposed McCain Walk

Major Pedestrian Paths

10 Year Master Plan

The Master Plan proposes an improved pedestrian experience through several projects focused pedestrian pathways improving and enhancing campus connectivity.

P1 McCain Walk

An improved east/west connection from core campus to recent and proposed western development will enhance the campus connectivity and integrate new development to the east with the core campus.

P2 Athletics Spine

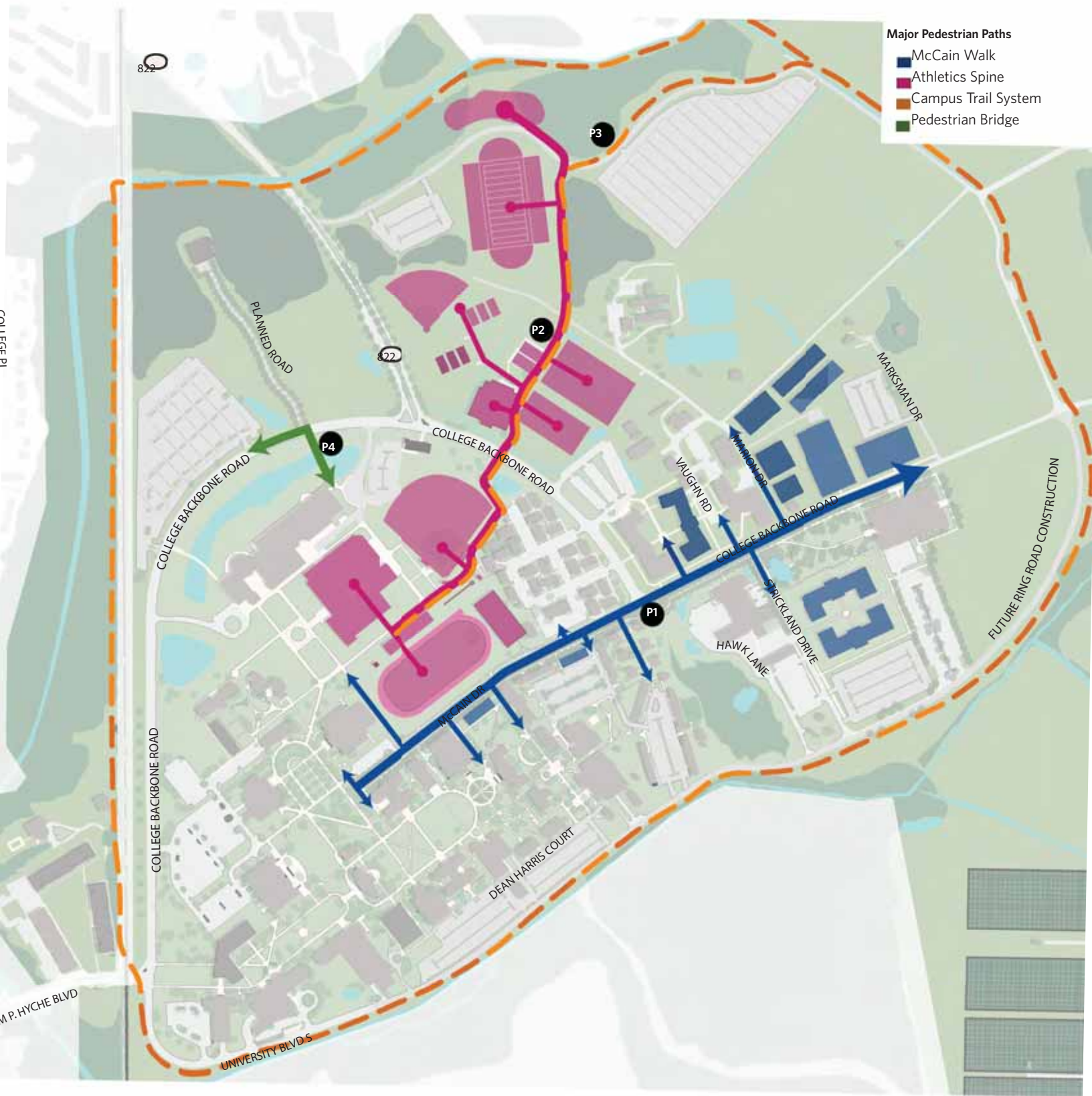
Connectivity throughout the athletics district is imperative for student circulation. A generous pedestrian path can connect all the athletics buildings and fields to create a cohesive sports and recreation experience. The pedestrian spine has the potential to connect to other proposed recreational projects such as the ropes course and campus trail system.

P3 Campus Trail System

Extending from the Athletics Spine and connecting the proposed Ropes Course, a formalized trail system has the potential to create a recreational loop for walking, running, biking, as well as improve the overall connectivity of the larger campus.

P4 Pedestrian Bridge

An additional bridge to traverse the topography and water along College Backbone Road will improve connectivity between the parking to the north and the campus.





Ropes Course Example, NC State

Landscapes associated with new construction projects should be considered and designed along with the new building project. However, in addition, the Master Plan proposes an improved pedestrian experience through several independent projects focused on landscape and open space on campus.

L1 Gateway Allee

Proposed new trees along Route 822 can create a graceful and collegiate entry experience and allee from the north into campus.

L2 Welcome Center Landscape

Open space immediately adjacent the proposed Welcome Center is an opportunity to create a gateway landscape, with UMES signage and potentially highlighting the commitment to sustainability. A vertical element can be incorporated into the building or directly adjacent landscape.

L3 Western Gateway Landscape

An improved landscape, incorporating UMES signage, at the western gateway can compliment a new gateway building, or stand alone as a campus open space.

L4 Eastern Gateway Landscape

An improved landscape, incorporating UMES signage, at the eastern gateway can compliment a new gateway building, or stand alone as a campus open space.

L5 Ropes Course

A ropes course can enhance the student recreational experience on campus. The Master Plan identifies a potential area which is connected by the Athletics Spine and can engage with the existing forest.

L6-L11 New Quads

In addition to general landscapes to integrate new buildings into the campus, several new quads are proposed which are associated with new construction projects.

Landscape & Open Space

10 Year Master Plan



Transportation

10 Year Master Plan

Improved roadways and parking are imperative to enable and support campus growth and circulation.

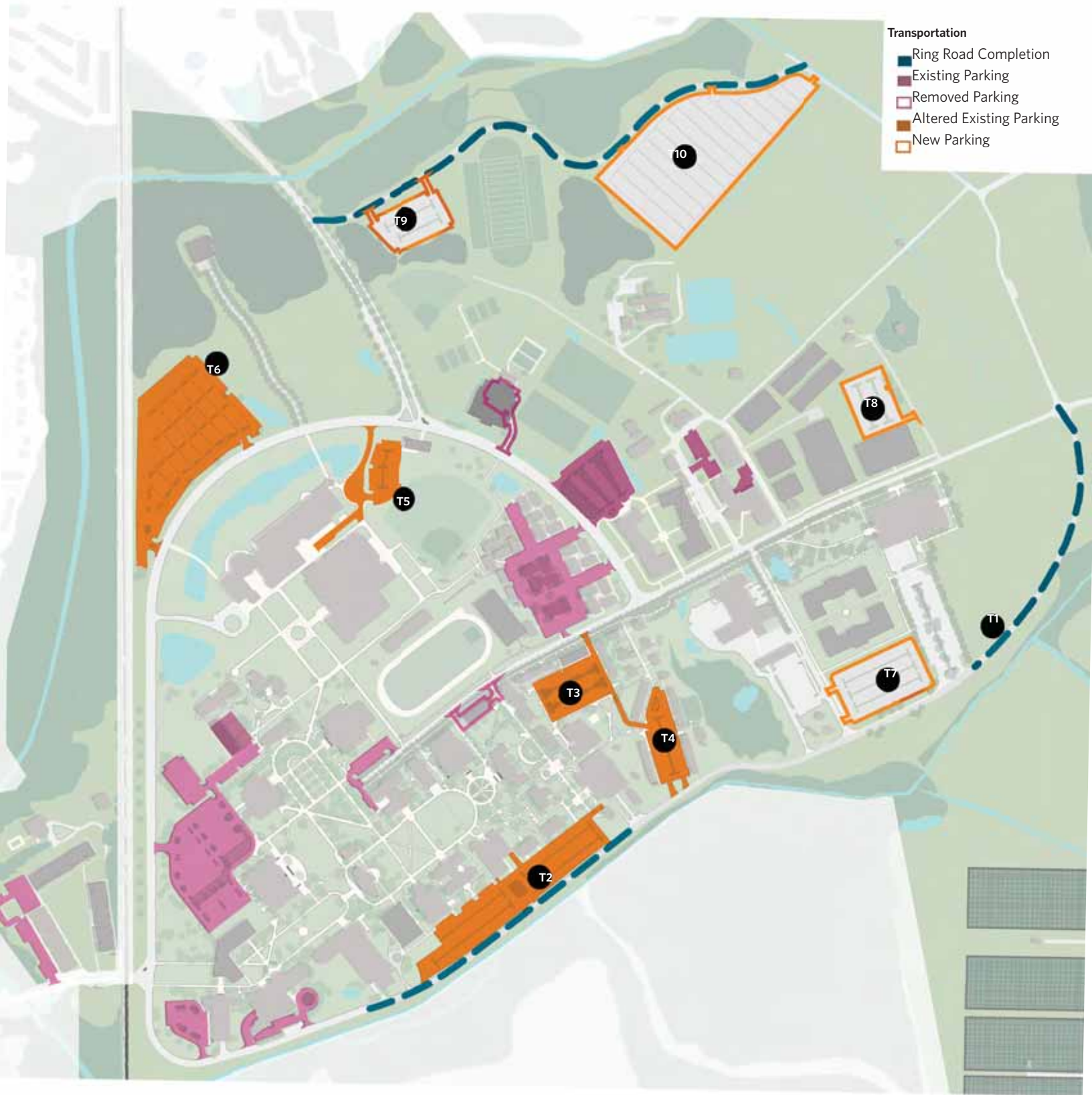
T1 Ring Road Completion

Portions of the Ring Road have been implemented already, and the Master Plan proposes a completed Ring Road to serve the campus and address growth to the east and north. See Sustainability pages for detailed information on the portion of the Ring Road to the South of Dean Harris Court.

T2-T10 Proposed Altered and New Parking Lots

Several new proposed parking lots are shown in the master plan to replace lost parking for building sites or to address additional parking needs. Some lots, particularly at the edges of campus should consider porous surfaces such as gravel, grass pavers, or structured grass. Additionally, large parking areas potentially needed for a new athletics stadium or and extended commuter lot could incorporate solar panels into the parking lot design. (See Sustainability pages for more information)

- T2 Reconfigured parking in conjunction with the Ring Road roadway work.
- T3 -T4 The building site along McCain Walk will decommission a small portion of T3 parking and require a reconfigured entry/exit from McCain Walk. This lot will also be connected to T4 parking with a small roadway so that it is accessible from the Ring Road.
- T5 A reconfigured more efficient parking layout will replace existing parking to allow for the proposed Welcome Center.
- T6 An expanded commuter parking lot will provide for growing parking needs.
- T7 New parking accessed from the Ring Road will provide for proposed building projects.
- T8 New parking accessed from Marksman Drive will provide for proposed building projects
- T9 New parking access from the Ring Road will provide for proposed new athletics uses.
- T10 New parking access from the Ring Road will provide for proposed new athletics uses.





Pavilion Example, University of Texas



Pavilion Example, Aalto University

Campus Life

10 Year Master Plan

The Master Plan recognizes the need to provide for rich and active campus life for students, faculty, and staff. Invigorating the campus with dynamic hubs of activity can enrich the campus and present opportunities for gathering, informal interaction, and cross-disciplinary communication.

Potential Sites for New Campus Life Uses:

NC1 Welcome Center

The new center can serve as a resource for the campus community with meeting spaces or administrative functions.

NC3 - NC4 Residential Dorm

New residential dorms located to the east of campus can incorporate new student dining for the campus community located in that area of campus.

CL1 Cafe

A cafe in a state of the art library can create a hub of activity.

CL2 Quad Pavilions

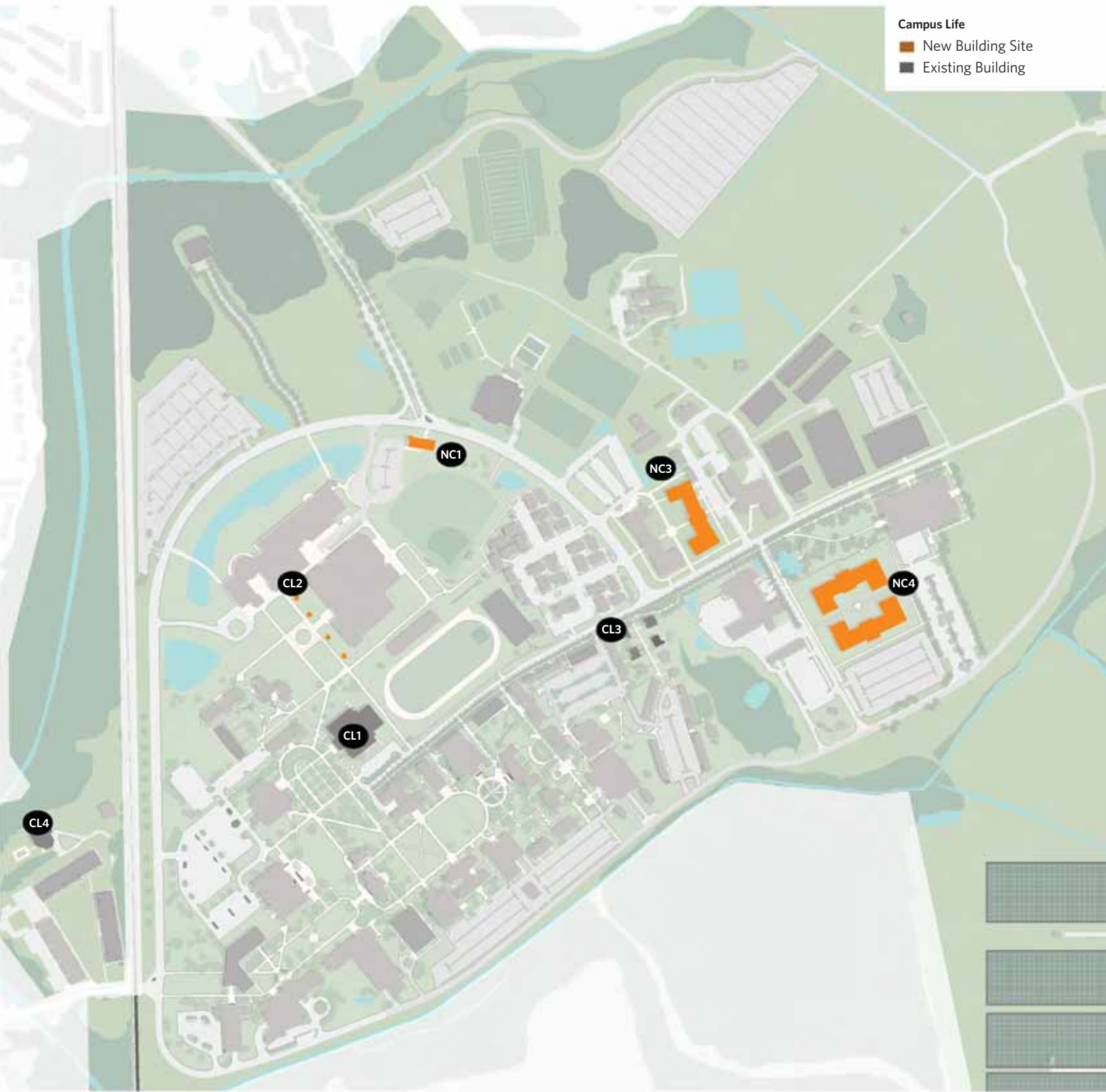
Pavilions/structures can provide an areas for gathering, outdoor seating, and interaction. These pavilions also create an active front on the quad.

CL3 Convenience Retail

Small structures have the potential for renovation to serve campus life. A cafe or small scale convenience store may be appropriate.

CL4 Faculty Club

Should the President's house move to a new location as proposed, the existing and historic home could become a faculty club, providing a place for meetings, gatherings, and dining.





Solar Fields at Parking Lots



Levee Road and Landscape Example, Vietnam

Sustainability

10 Year Master Plan

The Master Plan supports the campus wide commitment to sustainability and proposes several contributing projects:

S1 Levee Road

University Blvd S currently curves northward to become Dean Harris Court and jogs back south to connect to the existing extents of the Ring Road. As this area is both within the flood zone and housing majority temporary buildings to the South of Dean Harris Ct, there is potential to construct a road which acts as a levee for flood protection and aligns to create a continuous Ring Road.

S2 Bike Paths

A robust bike network can support this alternate sustainable means of transportation. The proposed bike network connects the campus along main roads, through major pedestrian paths, and to the proposed trial system with shared access.

S3 Solar Fields

Building upon the success of the existing solar fields, the Master Plan proposes additional fields to be co-located with large parking areas such as the commuter parking lot or a new parking area to the north serving the proposed stadium.

S4 Forest Conservation

As new construction develops on campus, it may be desirable to designate new forest conservation areas. The Master Plan proposes potential areas for consideration.



All Proposed Projects

10 Year Master Plan

Potential Sites for New Construction

- NC1 Welcome Center
- NC2 Field House
- NC3 Residential Dorm
- NC4 Residential Dorm/Academic Building(s)
- NC5 Academic Building (Pharmacy Option)
- NC6 Agricultural Research and Education Center
- NC7 Farm Support (replacement facilities)
- NC8 Academic Building
- NC9 Academic Building (Gateway Building, Pharmacy Option)
- NC10 Hawk's Landing Expansion
- NC11 Residential Dorm
- NC12 Academic Building/Residential Dorm
- NC13 Academic Building/Residential Dorm
- NC14 Tawes Replacement
- NC15 President's House (replacement)
- NC16 Stadium (10,000 seat)
- NC17 Potential Conference Center Option
- NC18 Potential Conference Center Option
- NC19 Potential Conference Center Option

Campus Life

- CL1 Cafe
- CL2 Quad Pavilions
- CL3 Convenience Retail
- CL4 Faculty Club

Major Pedestrian Paths

- P1 McCain Walk
- P2 Athletics Spine
- P3 Campus Trail System
- P4 Pedestrian Bridge

Landscape and Open Space

- L1 Gateway Allee
- L2 Welcome Center Landscape
- L3 Western Gateway Landscape
- L4 Eastern Gateway Landscape
- L5 Ropes Course
- L6-L11 New Quads

Gateways

- NC1 Welcome Center
- NC5 Academic Building
- NC9 Academic Building

Transportation

- T1 Ring Road Completion
- T2-T10 Proposed Altered and New Parking

Sustainability

- S1 Levee Road
- S2 Bike Paths
- S3 Solar Fields
- S4 Forest Conservation



DRAFT

Future Phase Master Plan

The Future Phase Master Plan diagrams identify long-term opportunities to further the vision. These opportunity sites provide a longer horizon growth plan, creating a framework as future master plans evolve or if campus growth is more rapid than currently expected.

Future Opportunity Sites

Future Phase Master Plan

The **FUTURE PHASE MASTER PLAN** provides a framework for future opportunities that build off of the 10-year Master Plan. Opportunity sites are areas of campus which are natural extensions of growth or sites near the core campus which would be better suited for academic or residential uses.

OS1 McCain Drive Intersection Site

The residential clustering at the intersection of McCain Drive and College Backbone Road will eventually reach the end of their building lifespan, when rebuilding outweighs renovation costs. This site will become a prime site for either new academic uses or residential uses, located at a key intersection near the core campus.

OS2 Northern Gateway Site

Should the existing baseball field move to the north side of College Backbone Road, the gateway site adjacent the proposed Welcome Center and fronting the main vehicular campus entrance becomes a prime site for either new academic uses or residential development near the core campus.

OS3 Quad Infill

New academic, residential, or student life development can complement the uses adjacent the Athletics Center and Student Services Center as well as strengthen the character of that quad. Should Nuttle Hall reach the end of its building lifespan, this area could be considered part of the development site as well.

OS4 Track Infill

Should new athletic development north of College Backbone Road replace the functionality of the existing track, this site located in the core campus has the potential to become an informal open space with residential development surrounding.

OS5 Eastern Gateway Quad

A natural extension of the campus growth to the east, this site builds off of the Engineering and Aviation Sciences Complex and will contribute to the gateway experience from the east. This development should consider the existing geothermal wells which have the potential to create a quad open space.

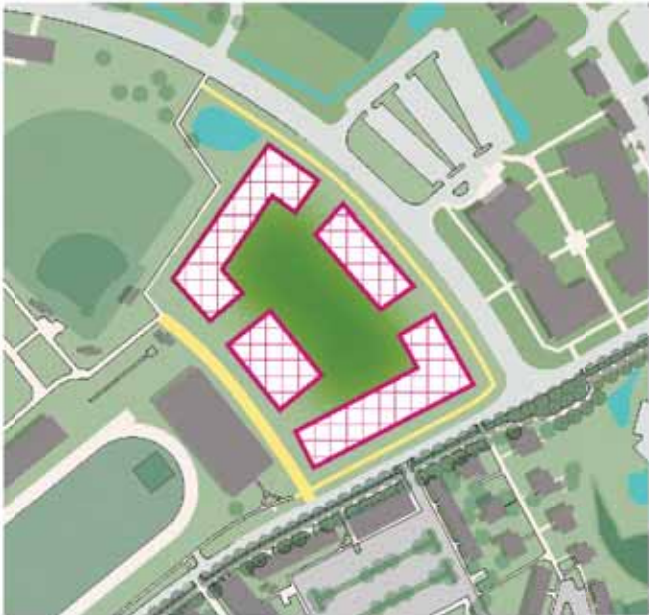
OS6 Eastern Gateway

A natural extension of the campus growth, this site builds off of the Agricultural Research and Education Center and will contribute to the gateway experience from the east.



Future Opportunity
Sites

Future Phase
Master Plan



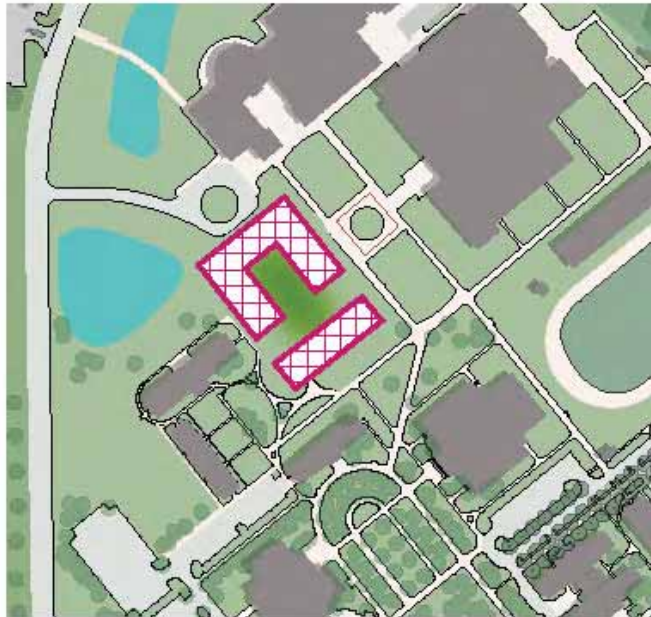
OS1 McCain Drive Intersection Site

The residential clustering at the intersection of McCain Drive and College Backbone Road will eventually reach the end of their building lifespan, when rebuilding outweighs renovation costs. This site will become a prime site for either new academic uses or residential uses, located at a key intersection near the core campus.



OS2 Northern Gateway Site

Should the existing baseball field move to the north side of College Backbone Road, the gateway site adjacent the proposed Welcome Center and fronting the main vehicular campus entrance becomes a prime site for either new academic uses or residential development near the core campus.

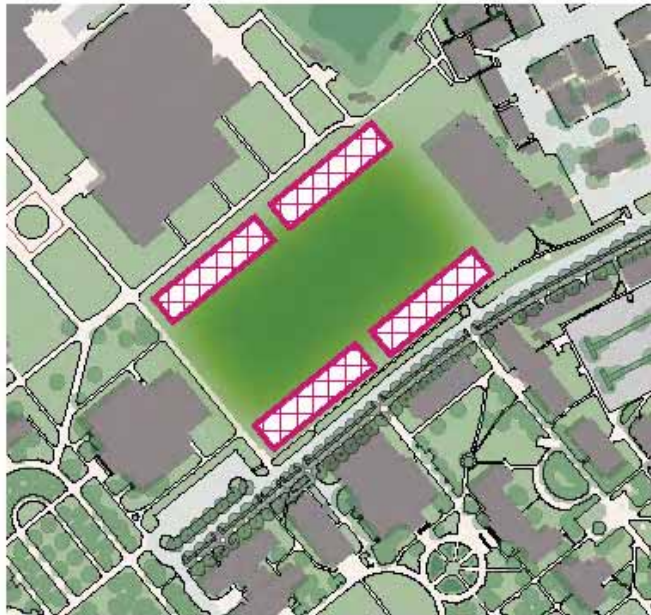


OS3 Quad Infill

New academic, residential, or student life development can complement the uses adjacent the Athletics Center and Student Services Center as well as strengthen the character of that quad. Should Nuttle Hall reach the end of its building lifespan, this area could be considered part of the development site as well.



Open Space Example, College of William and Mary, Sunken Garden



OS4 Track Infill

Should new athletic development north of College Backbone Road replace the functionality of the existing track, this site located in the core campus has the potential to become an informal open space with residential development surrounding.

Future Opportunity
Sites

Future Phase
Master Plan



OS5 Eastern Gateway Quad

A natural extension of the campus growth to the east, this site builds off of the Engineering and Aviation Sciences Complex and will contribute to the gateway experience from the east. This development should consider the existing geothermal wells which have the potential to create a quad open space.



OS6 Eastern Gateway

A natural extension of the campus growth, this site builds off of the Agricultural Research and Education Center and will contribute to the gateway experience from the east.



Open Space and Landscape Network

Future Phase Master Plan

The Future Phase Master Plan outlines potential opportunities for development of new buildings and associated open spaces. The overall open space organization can be categorized as formal quad-like landscapes, and informal naturalistic landscapes with a strong east/west connector along McCain Walk.

New formal landscape areas associated with new buildings, often creating a semi-enclosed outdoor room. These spaces should build off of the existing historic landscape character in the core campus.

Informal naturalistic landscapes have the opportunity to depart from the formal axial language associated with formal quads and incorporate sustainable green infrastructure. These spaces can link to the existing forest and stream system, incorporate native plant species, and highlight the campus commitment to sustainability through bioswales, rain gardens, or bioretention systems.

A reimagined McCain Walk will link the campus east/west and strengthen both the open space connectivity and campus growth. Generous pedestrian walks with bike capacity and substantial supporting landscape can create a major campus link, connecting the historic core campus and a new hub to the east.



**BEYER
BLINDER
BELLE**