

University of Maryland Eastern Shore Master Plan

March 31, 2016



UNIVERSITY of MARYLAND
EASTERN SHORE

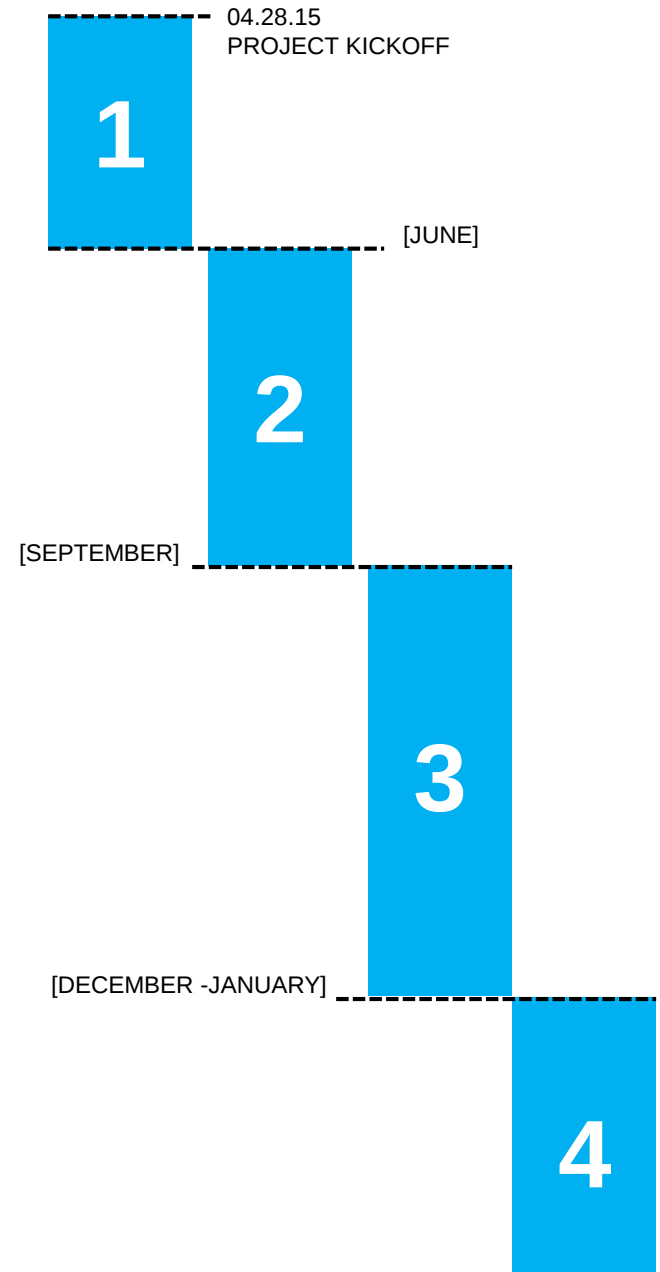


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BELLE

Campus Planning Process

Master Plan Process

1. Data Review and Analysis
2. Stakeholder Engagement
 - Meetings with President, cabinet
 - Campus community questionnaires
3. Refine and Document the Preferred Plan
 - Examine in detail the resulting impacts to campus systems with the preferred development strategy
 - Update the phasing and implementation plan
 - Receive feedback and review of updated plan
 - Submit Draft 2016 Master Plan in December
4. Finalize the Plan
 - Submit final 2016 Master Plan late February



Master Plan Key Goals

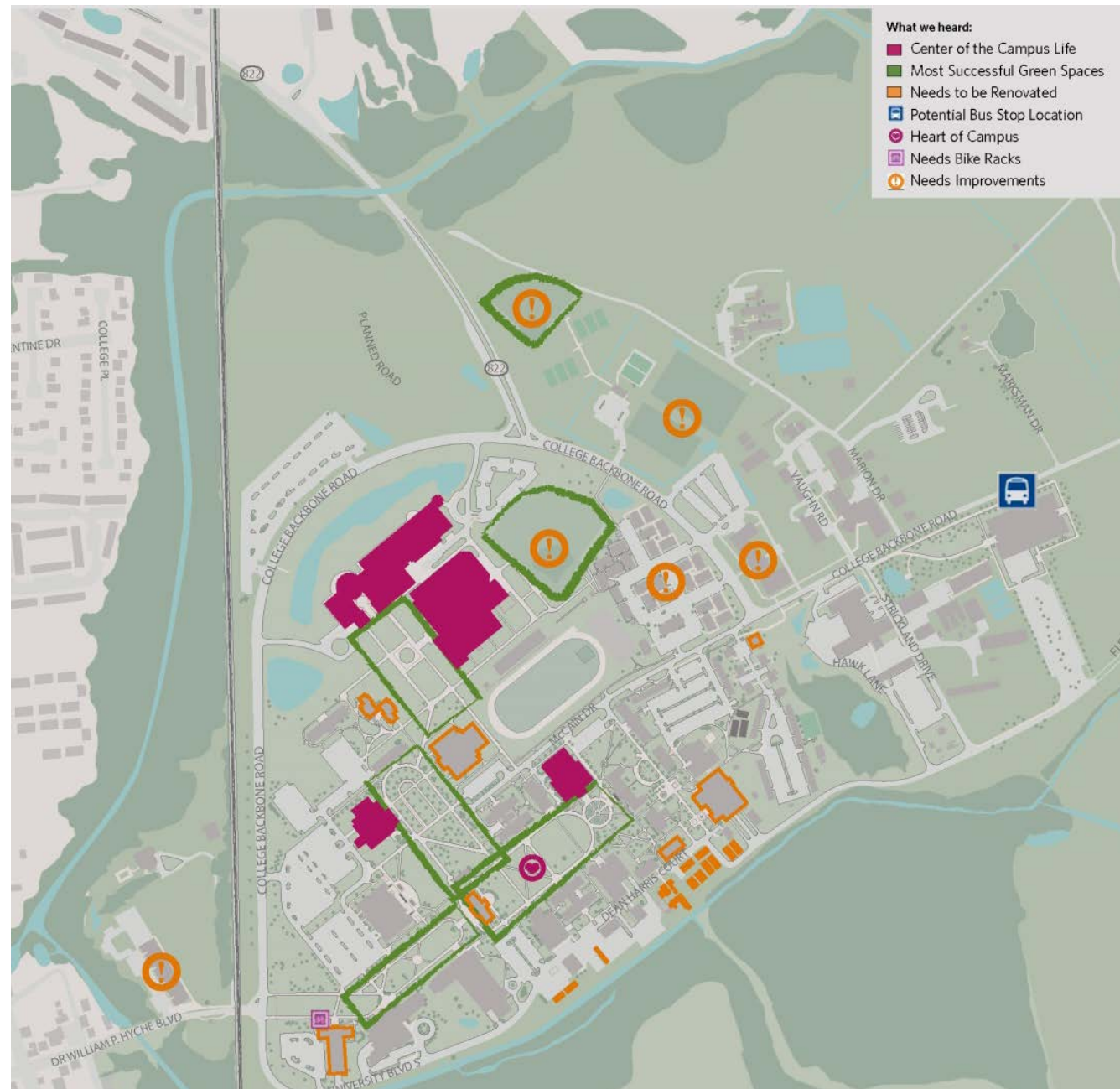
- Fulfill UMES's **commitment to the Board of Regent's** directive that a Facilities Master Plan (FMP) be evaluated and updated on a periodic basis, including when substantial changes to the institution's mission statement have taken place
- **Lay out a framework for the academic and physical growth** 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

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?



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Building From the Strategic 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

2016-2025 Draft Master Plan



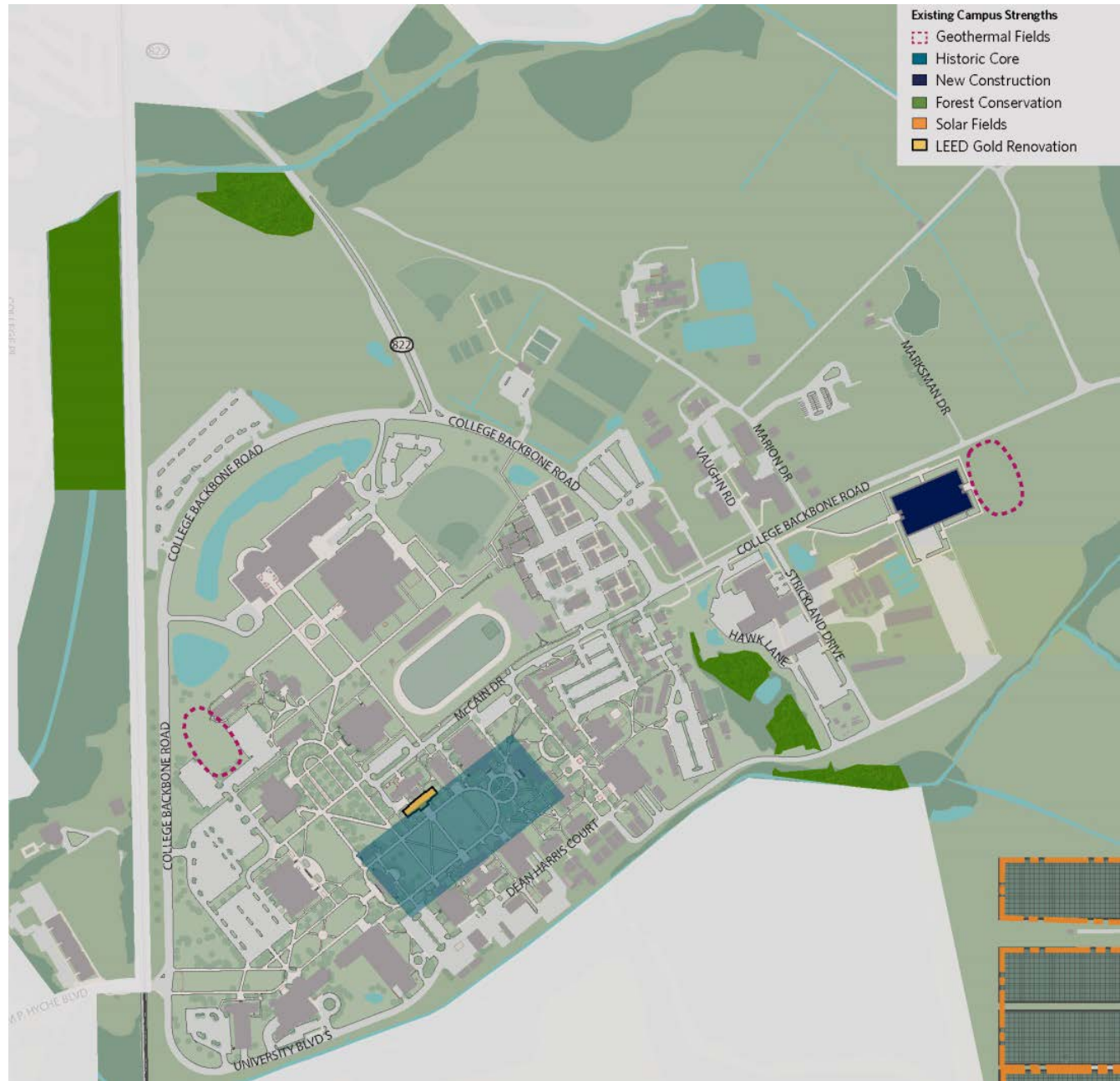
University of Maryland Eastern Shore Facilities Master Plan Update

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Planning Context

Campus Strengths

- Historic Core and Landscapes
- Commitment to Sustainability
- Advancing the Built Environment
- Successful Spaces



Planning Context

Campus Challenges

- Gateways, Wayfinding, Identity
- Connectivity
- Middle Zone Sprawl
- Temporary Structures



Master Plan

Campus Themes

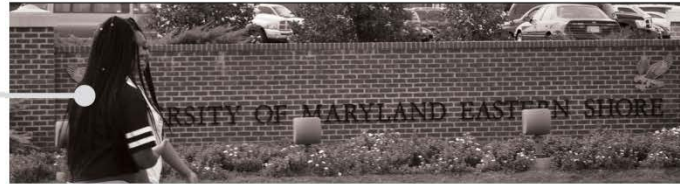
Campus Spatial Organization

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 Life

Housing, living/learning, and opportunities for interdisciplinary interactions



Campus Character

Design excellence, architectural and open space principles

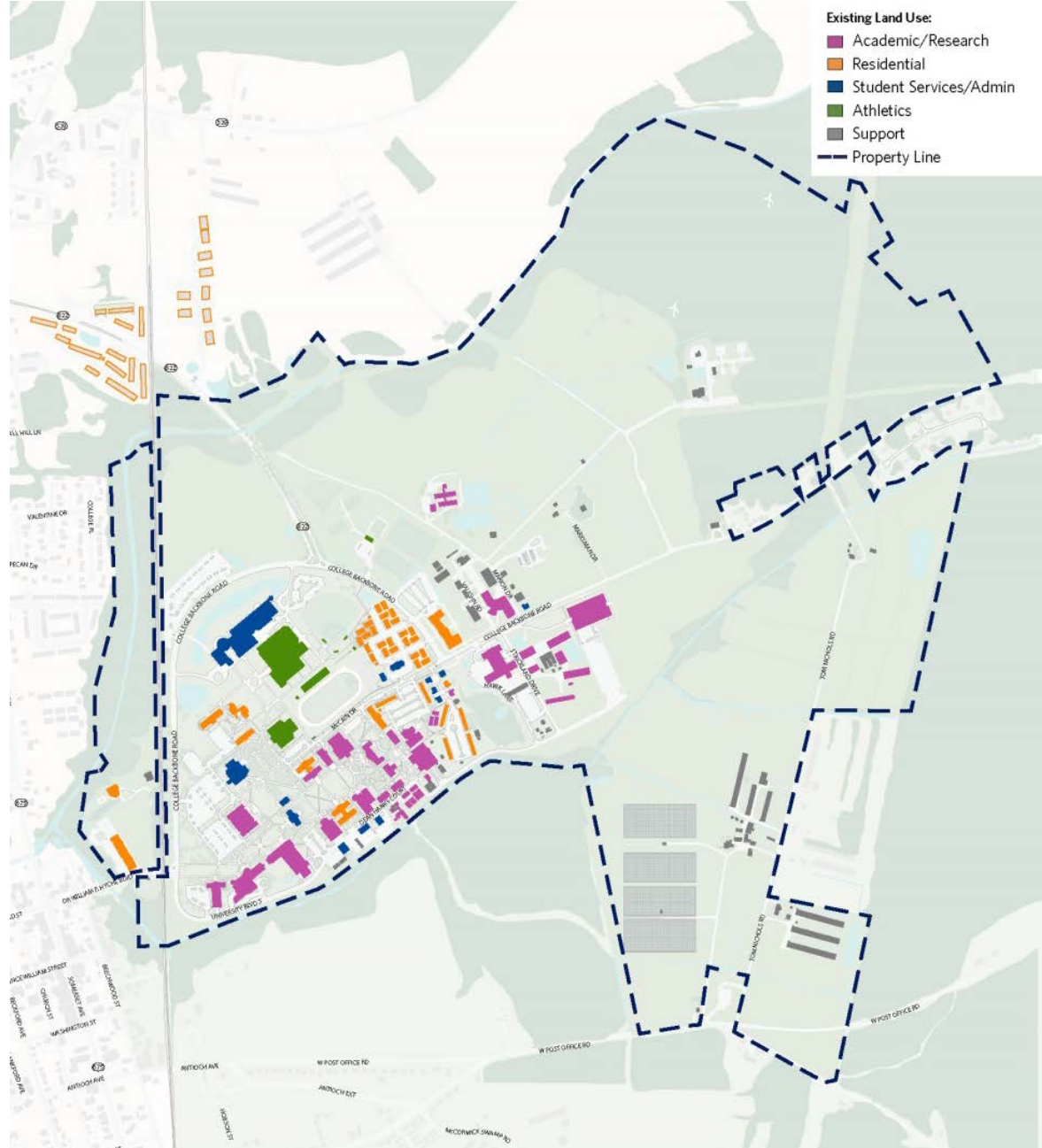
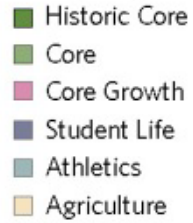


Sustainability

Continued commitment to sustainability



Campus growth, academic core and land use recommendations

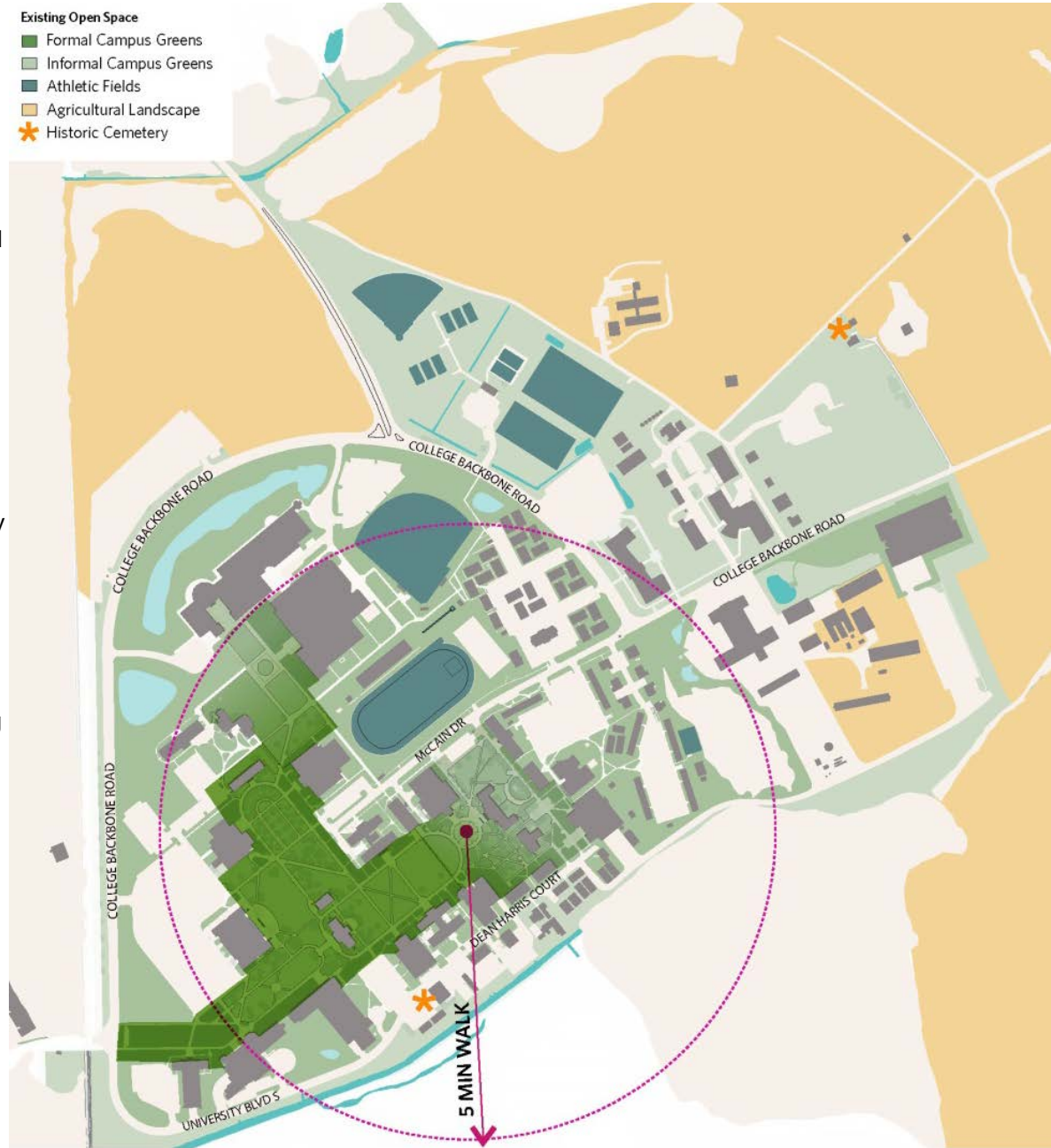


Campus Themes

Campus Spatial Organization

Existing Open Space

- Formal Campus Greens
- Informal Campus Greens
- Athletic Fields
- Agricultural Landscape
- Historic Cemetery



- **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
- **Create new quads**, including one adjacent to the new Sciences building, that connect to the historic quad in a meaningful way
- Plan landscapes that **foster outdoor activity**
- Consider future development outside of the core for only **strategic or very long-term uses**
- **Strengthen pedestrian connections** to existing precincts outside of the campus core, including to off-campus housing
- **Remove and replace temporary structures** by infilling their uses within existing or new structures
- Renovations should address building conditions, functionality, as well as health and safety and environmental constraints (such as the floodplain, ADA access, etc)
- Land use patterns should properly distribute residential and academic buildings as well as parking to create an **active dynamic campus**
- **Establish an athletics precinct** on campus which is robustly connected with trails, open spaces and bike paths

Campus Themes

Identity, Gateways, Wayfinding

Building upon identity, wayfinding, gateways and arrival on campus



Campus Themes

Identity, Gateways, Wayfinding

- **Use consistent University logos, graphics, colors for all permanent and temporary signage on campus**
- **Develop consistent buildings, roads, and pathways signage**
- **Strategically place campus maps in kiosks for visitors and new students**
- **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



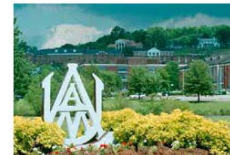
The Oskar-von-Miller-tower is a meteorological tower built in 2010 at the Technical University of Munich, in Garching. The tower is the new landmark of the campus, and replaced the old meteorological mast from the campus center. Its use is collecting weather data necessary for the operating license of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



Entry Signage Examples

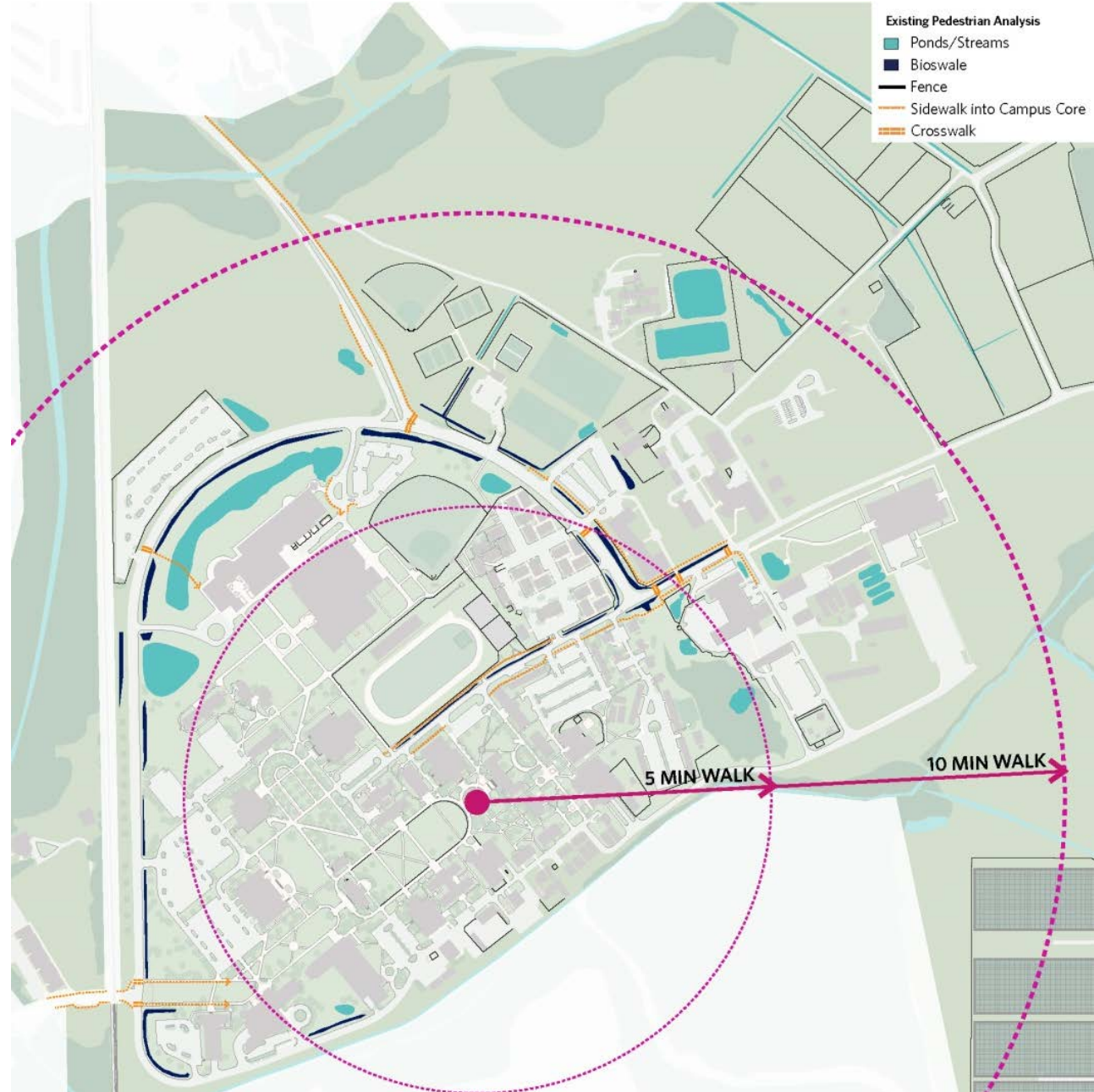


Wayfinding Example, Washington DC

Campus Themes

Pedestrian Experience

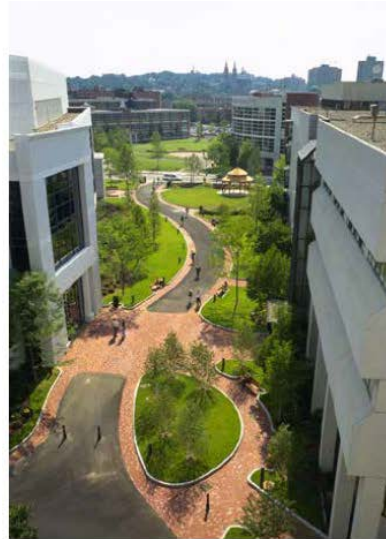
Improvements to walkability, pedestrian crossings, and student desire lines



Campus Themes

Pedestrian Experience

- Create connections and **remove existing barriers** on major pedestrian desire lines
- **Bridge over topography** in key locations to create a more connected pedestrian network
- **Remove fencing** or portions of fencing which act as a barrier to the pedestrian network
- Create comfortable, **safe pedestrian paths** along roadways and safe crossings at key locations
- **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

Roadways, parking, transit and bike recommendations



Route 822



College Backbone Road



Campus Themes

Vehicular Environment



Campus Themes
Vehicular Environment



Campus Themes

Vehicular Environment

- Plan for **parking that is accessible from the existing and future ring road**, but screened with landscaping
- **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
- Consider a **porous parking surface** such as gravel, grass pavers, or structured grass for new parking areas outside of the core campus
- Eliminate road patterns which are confusing and intrusive; plan for **circulation routes that help create a more clear and unified whole**
- 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/Allée Example, Princeton University

Campus Themes

Campus Life

Housing, living/learning, and opportunities for interdisciplinary interactions

- **Infuse existing housing with communal spaces** for teaching, learning, studying and informal gatherings
- **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
- Build new housing with **robust opportunities for “sticky” collisions** such as shared amenities, study nooks, classrooms, meeting rooms
- 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**
- Renovate existing academic buildings to **create flexible teaching and research venues** to foster innovative teaching and learning models as well as cross disciplinary opportunities
- Strategically locate programs in buildings and throughout campus to **foster opportunities for collaboration**
- **Strategically locate campus life amenities**, particularly food-related, to encourage student interaction and overall campus vibrancy



Dining Example, North Carolina A&T State University

Campus Themes

Campus Character

Design excellence, architectural and open space principles

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



Engineering and Aviation Sciences Complex



New Science Building, North Carolina A&T State University

Campus Themes

Sustainability

Continued commitment to sustainability

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.

Campus Themes

Sustainability

● Building

- USGBC LEED Standards
- Materials Standards
- Mechanical/Electrical Equipment Standards
- Roof Configuration

● Energy

- Infrastructure Improvements
- Green Power Production or Purchasing
- Central Chiller Plant
- Solar Farm
- Biomass Energy Program
- ETC...

● Site

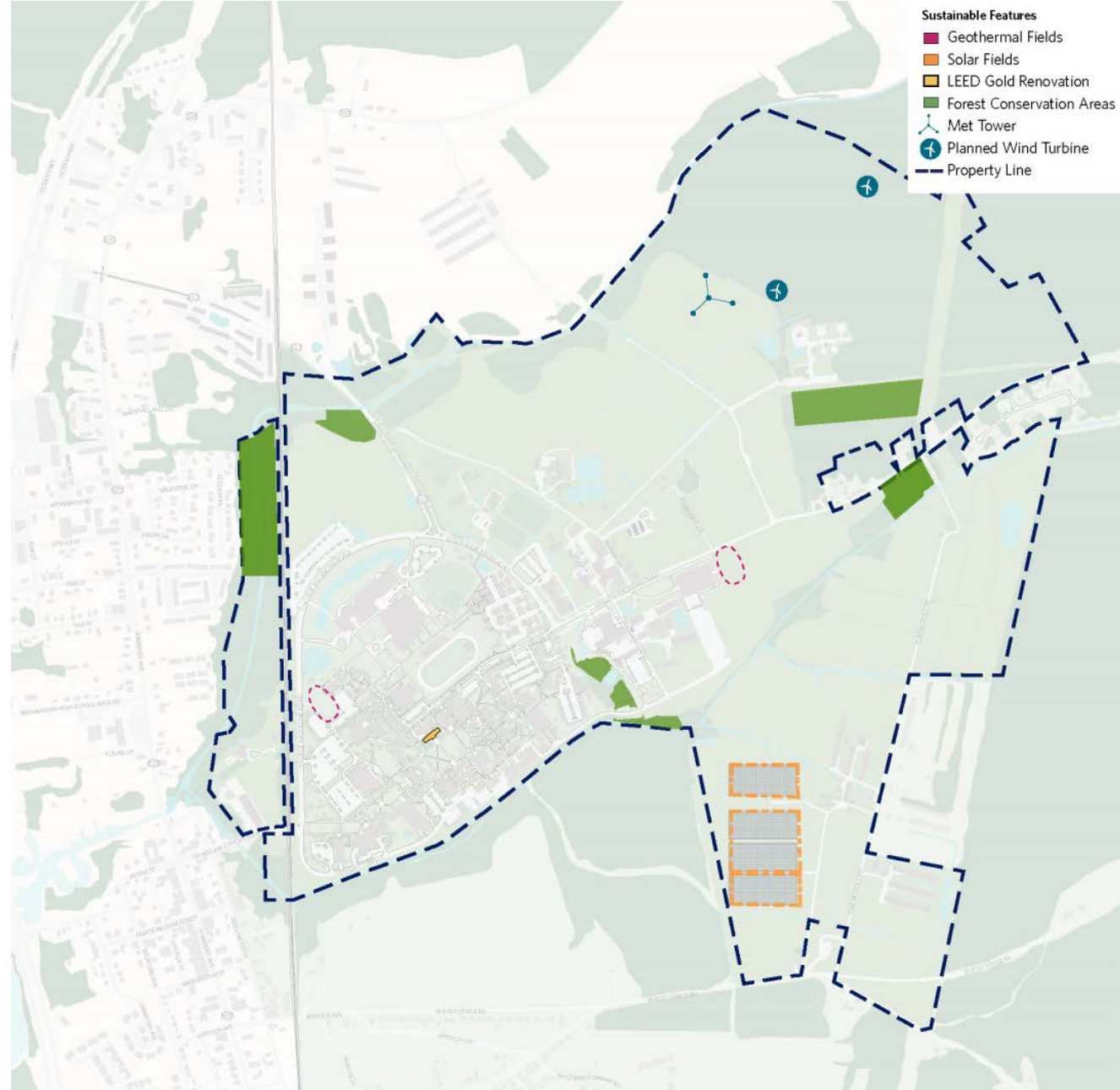
- Use Distribution
- Clustering of Similar Functions
- Campus Housing
- Building Replacement/Site Planning
- Building Footprints
- ETC...

● Transportation

- Campus Transit
- Campus Bike Facilities
- Campus Bike Sharing Program
- Bike and Walking Paths
- Alternative Fueling

● Water

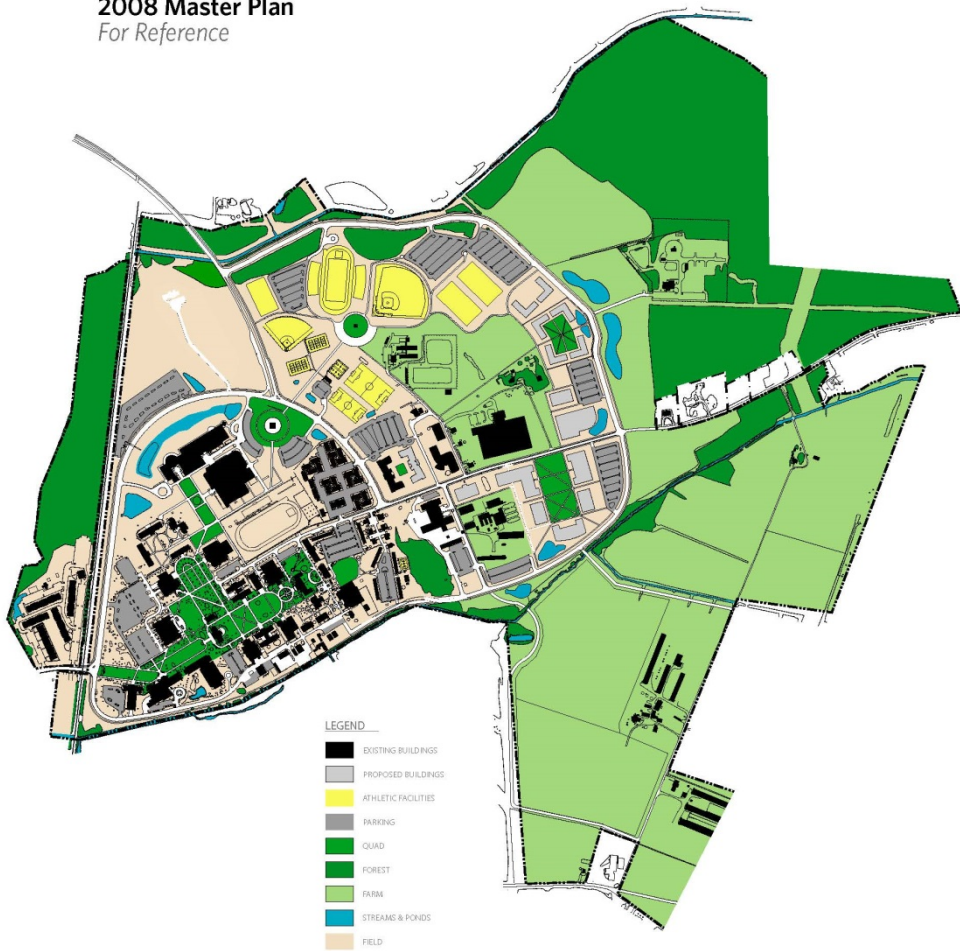
- Runoff/Stream Protection During Construction
- Drought Resistant Landscaping
- Sanitary Systems
- Stormwater Management
- ETC...



2016-2025 MASTER PLAN

Existing Plan | Existing Conditions

2008 Master Plan
For Reference



Evolution of the Master Plan

Existing Conditions | 2016-2025 Master Plan

2016 Existing Conditions

For Reference

- Existing Campus Conditions
- Existing Building
 - Existing Parking Lot
 - Existing Athletic Field
 - Existing Landscape Tree
 - Existing Solar Field

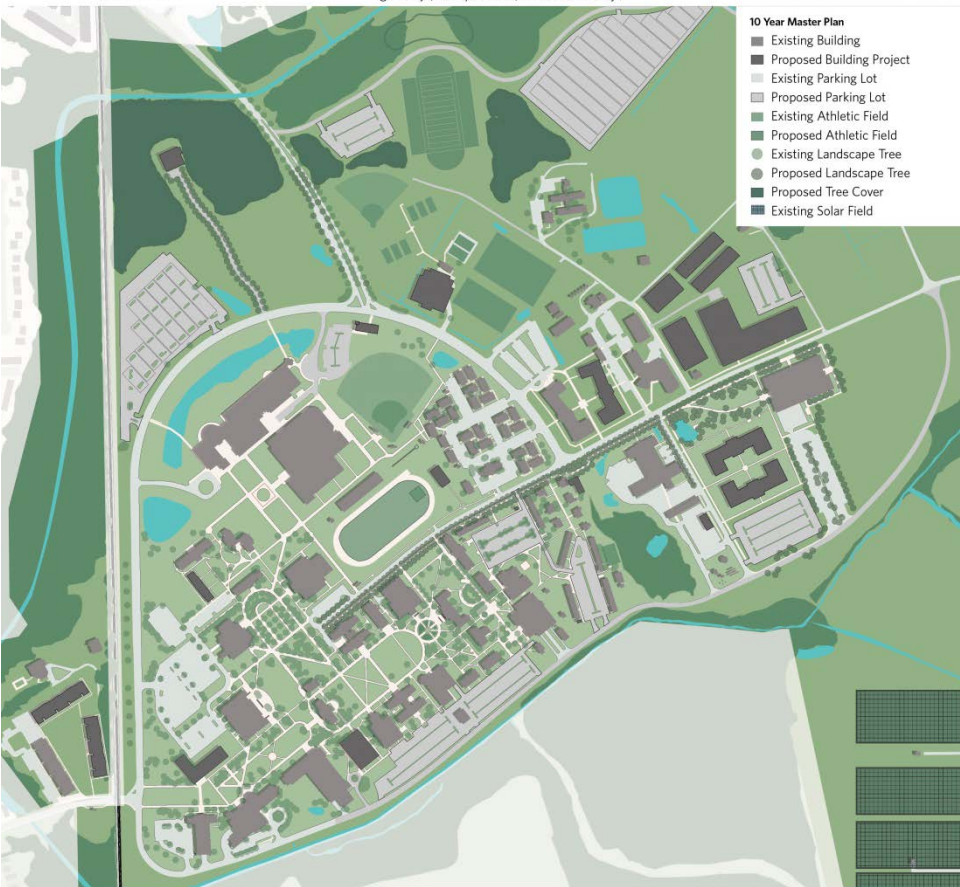


10 Year Master Plan

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.

- 10 Year Master Plan
- Existing Building
 - Proposed Building Project
 - Existing Parking Lot
 - Proposed Parking Lot
 - Existing Athletic Field
 - Proposed Athletic Field
 - Existing Landscape Tree
 - Proposed Landscape Tree
 - Proposed Tree Cover
 - Existing Solar Field



2016–2025 Master Plan

Sites for New Construction & Planned Renovations

Potential Sites for Academic New Construction

- NC2 New Frederick Douglass Library
- NC5 Pharmacy & Health Professions (Phases I & II)
- NC6 Agricultural Research and Education Center
- NC8 Academic Building
- NC9 Criminal Justice Center & Police Station
- NC12 Academic Building

Potential Sites for Residential New Construction

- NC3 Residential Dorm
- NC4 Residential Dorm(s)
- NC10 Hawk's Landing Expansion
- NC11 Residential Dorm

Potential Sites for Athletics New Construction

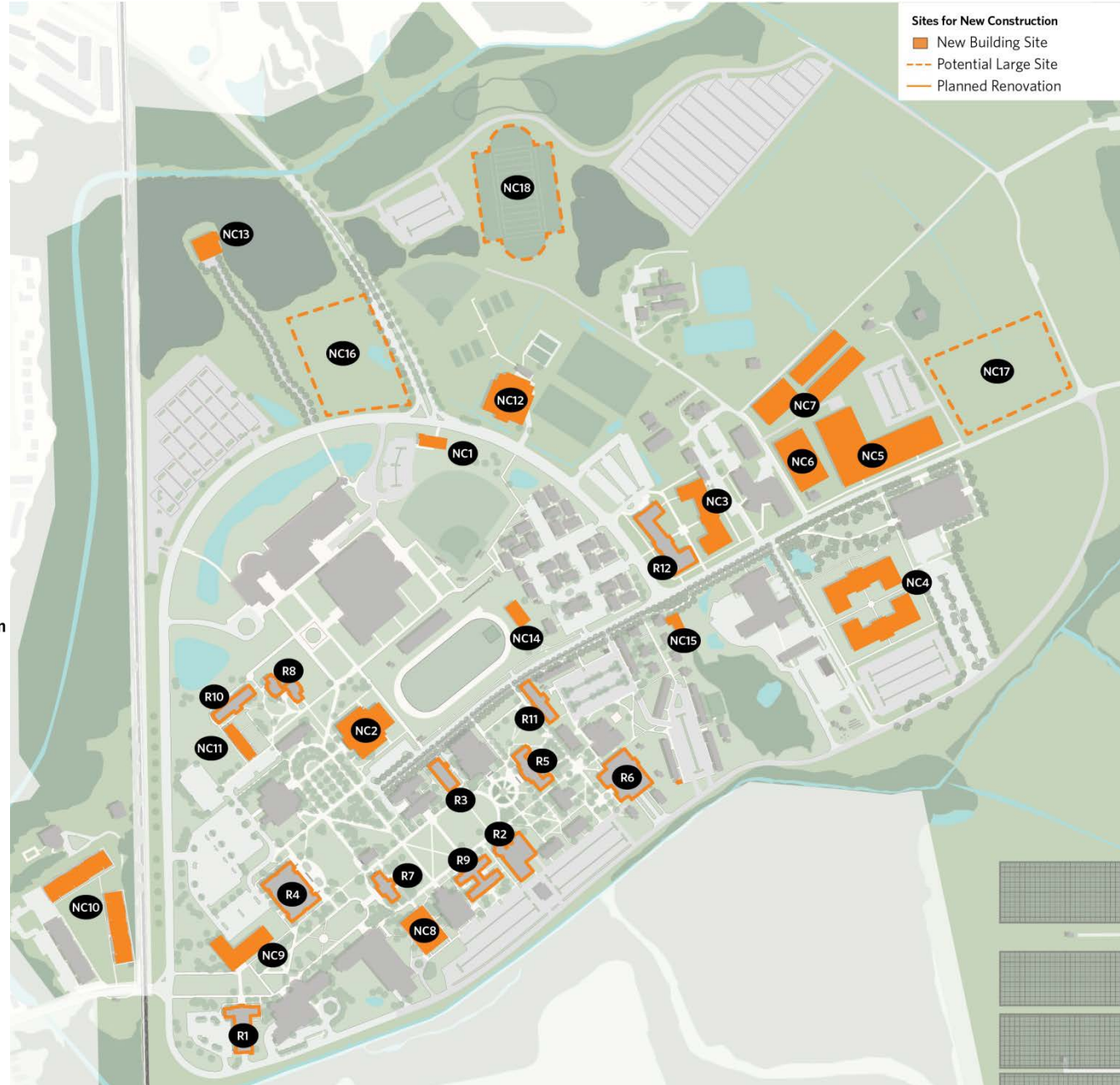
- NC12 Tawes Replacement
- NC14 Field House
- NC18 Potential Stadium Location (10,000 seat)

Potential Sites for Specialty or Support New Construction

- NC1 Welcome Center
- NC7 Farm Support (replacement facilities)
- NC13 President's House (replacement)
- NC15 Expanded WESM Radio Station
- NC16 Potential Conference Center Option
- NC17 Potential Conference Center Option

Planned Sites for Renovation

- R1 Kiah Hall Renovation
- R2 Carver Hall Renovation & Addition
- R3 Wilson Hall Renovation
- R4 Performing Arts Renovation & Addition
- R5 Trigg Hall Renovation
- R6 Arts & Technologies Building Renovation
- R7 J. T. Williams Building Renovation
- R8 Nuttle Hall Renovation
- R9 Murphy Hall & Annex Renovation
- R10 Court Plaza Renovation
- R11 Plaza Residence Renovation
- R12 University Terrace Renovation



Sites for New Construction

- New Building Site
- Potential Large Site
- Planned Renovation

2016-2025 Master Plan Gateways

- G1
Campus Gateway -
Welcome Center
- G2
Eastern Gateway
- G3
Western Gateway



2016-2025 Master Plan

Campus Gateway Precedents



Palm Drive
Stanford University

2016-2025 Master Plan

Gateway Precedents



Pedestrian Gate
Kenyon College



Allen Street Gate
Penn State



Allen Street Gate
Penn State



Main Entrance
University of Maryland – College Park



Rt. 1 Campus Entrance
University of Maryland – College Park



Three Gates Entry
University of California - Berkley

2016-2025 Master Plan

Welcome Center Precedents



WSU Visitor Center
Washington State University



Welcome Center and Bookstore
University of Texas - Dallas



Rutgers Visitor Center
Rutgers University



Wake Forest Welcome Center
Wake Forest University



Welcome Center and Bookstore
University of Texas - Dallas



Visitor Center
University of Texas – Pan American



WSU Visitor Center
Washington State University

2016-2025 Master Plan

Business Innovation Center



Microsoft NERD Center
Microsoft



Business Innovation Center
Bowie State



Dean Hubbard Center for Innovation &
Entrepreneurship



Shepley Bulfinch – iLab
Harvard University



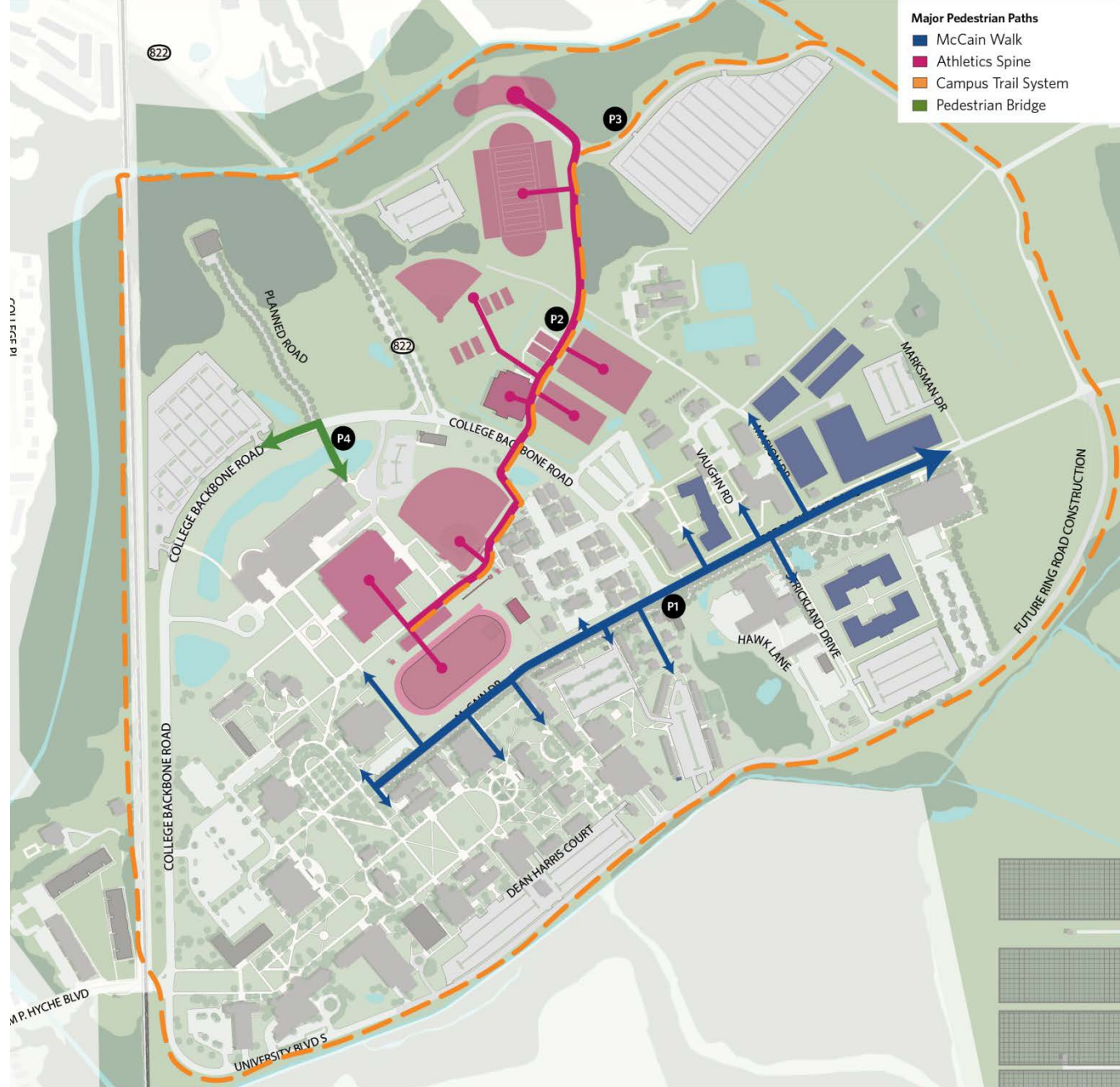
Dogpatch
New York



Dean Hubbard Center for Innovation &
Entrepreneurship
Northwest Missouri State University

2016-2025 Master Plan Major Pedestrian Paths

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



2016-2025 Master Plan

Pedestrian Oriented Streets



University Place
Princeton University



Interior Pedestrian Streets
Leigh University



Existing McCain Drive
UMES



Williams Drive
Leigh University



Pedestrian Street Connection
Leigh University



Pedestrian Street
Leigh University

2016-2025 Master Plan

Pedestrian Oriented Streets



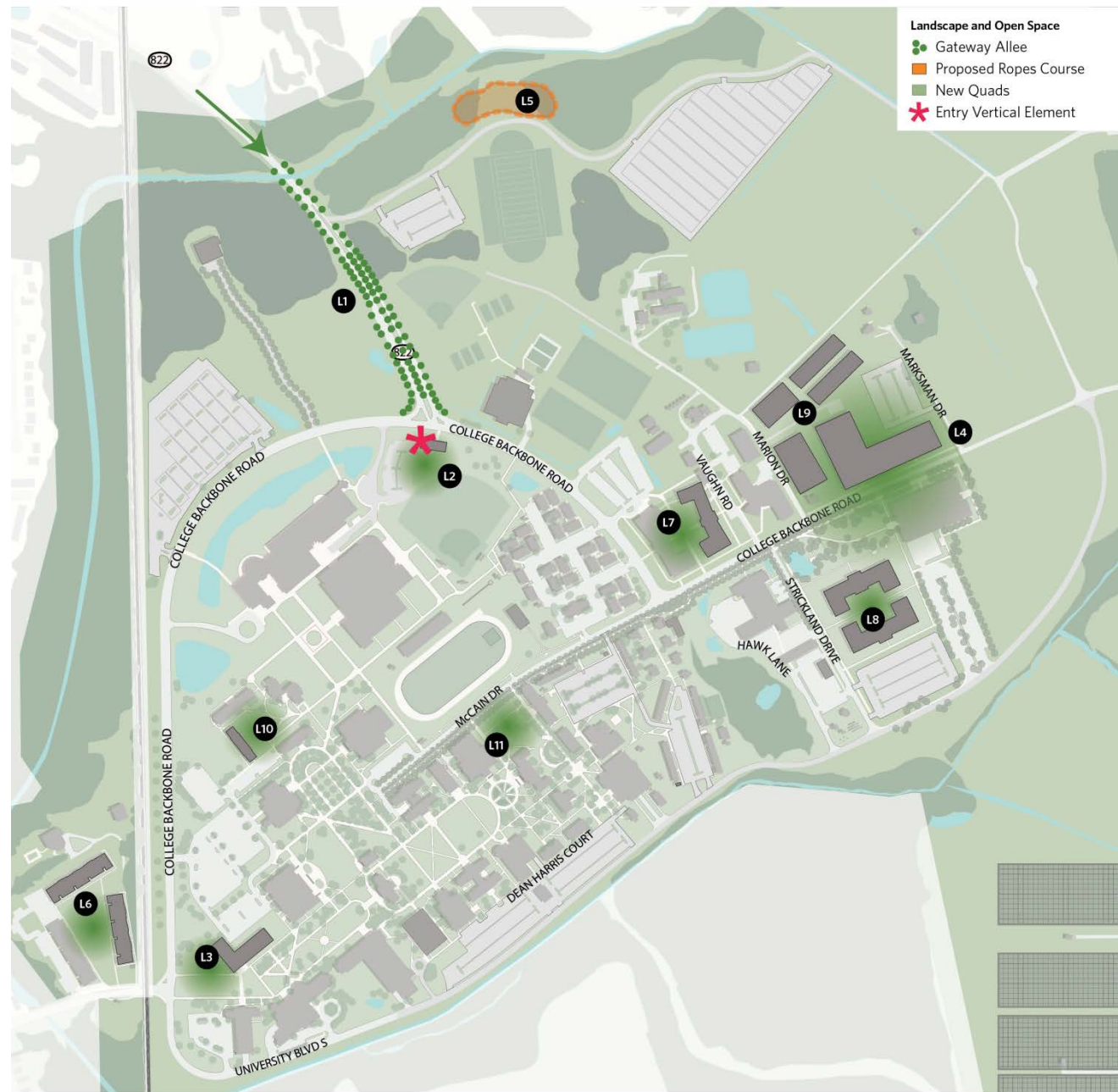
*Existing McCain Drive
UMES*



*Proposed McCain Drive
UMES*

2016-2025 Master Plan Landscape & Open Space

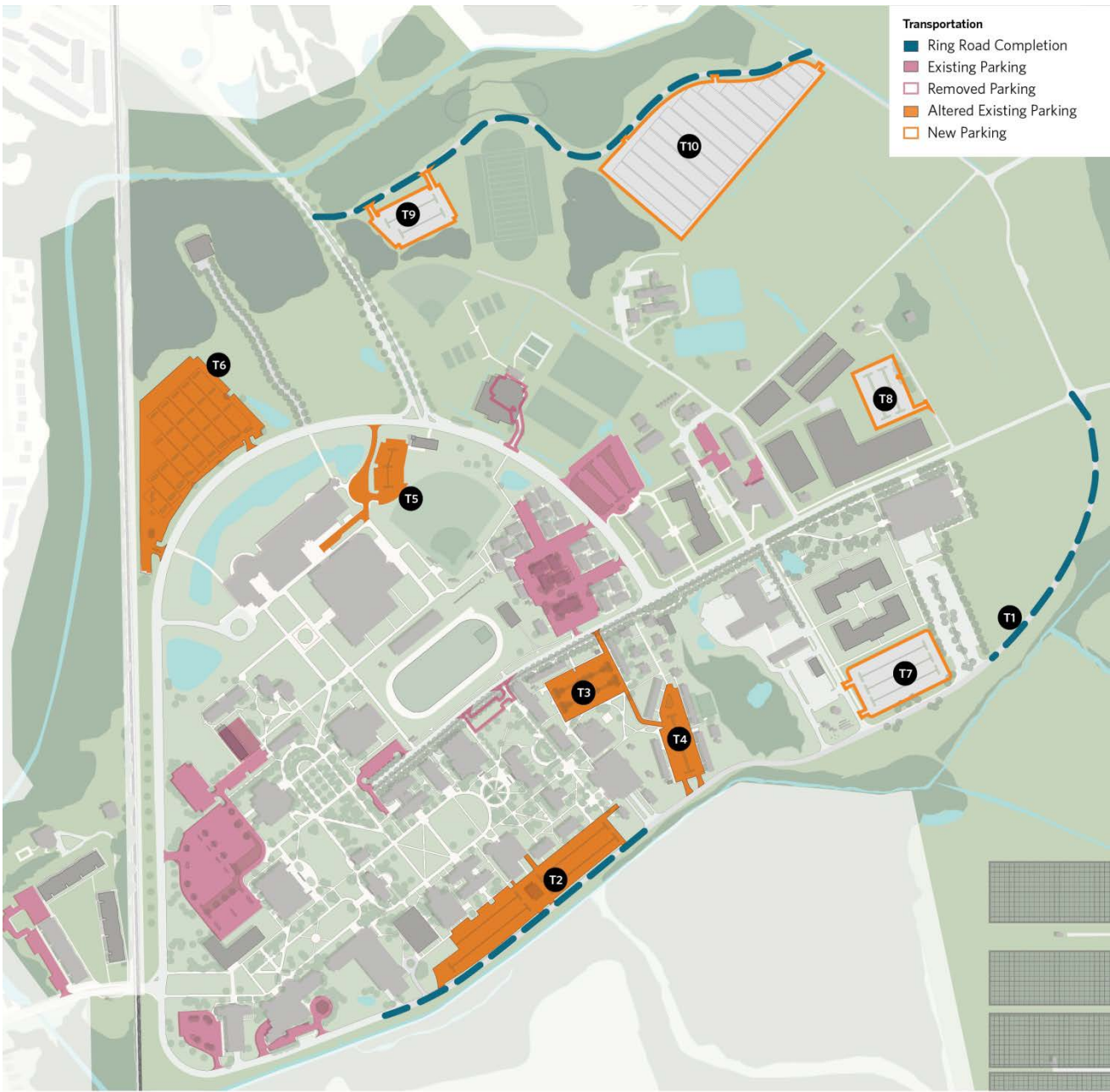
- L1 Gateway Allee
- L2 Welcome Center Landscape
- L3 Western Gateway Landscape
- L4 Eastern Gateway Landscape
- L5 Ropes Course
- L6 New Quads



2016-2025 Master Plan Transportation

T1
Ring Road Completion

T2-T10
Proposed Altered and
New Parking Lots



2016-2025 Master Plan

New Campus Life

- NC1 Welcome Center
- NC2 New Douglass Library
- NC3 Residential Dorm
- NC4 Residential Dorm
- CL1 Quad Pavilions
- CL2 Convenience Retail
- CL3 Faculty Club



2016-2025 Master Plan
Campus Pavilion Precedents



World Design Capital Pavilion
Aalto University



Cowboys Pavilion
University of Texas



Brochstein Pavilion
Rice University



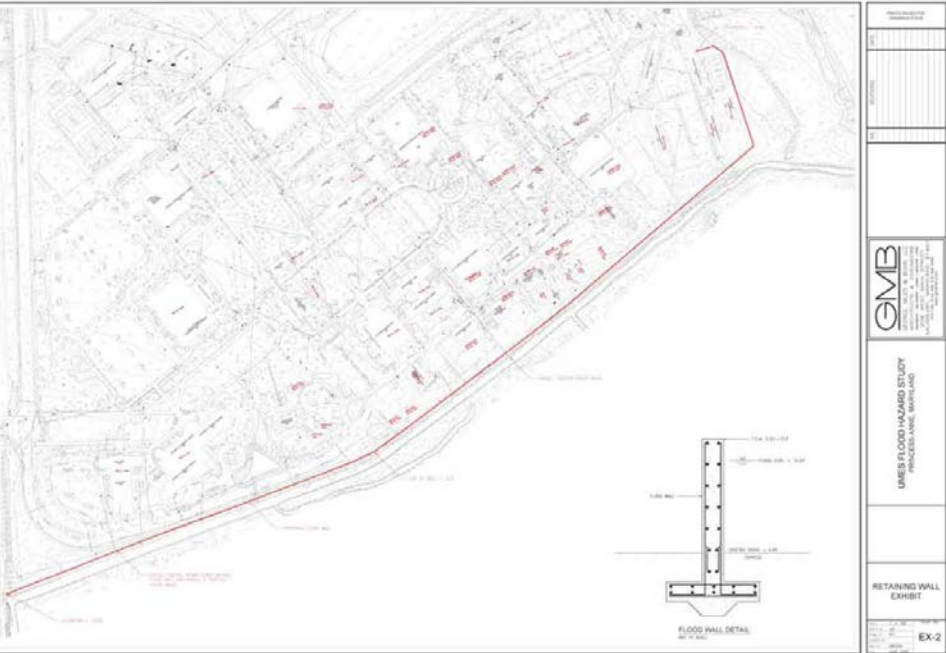
2016-2025 Master Plan

Sustainability

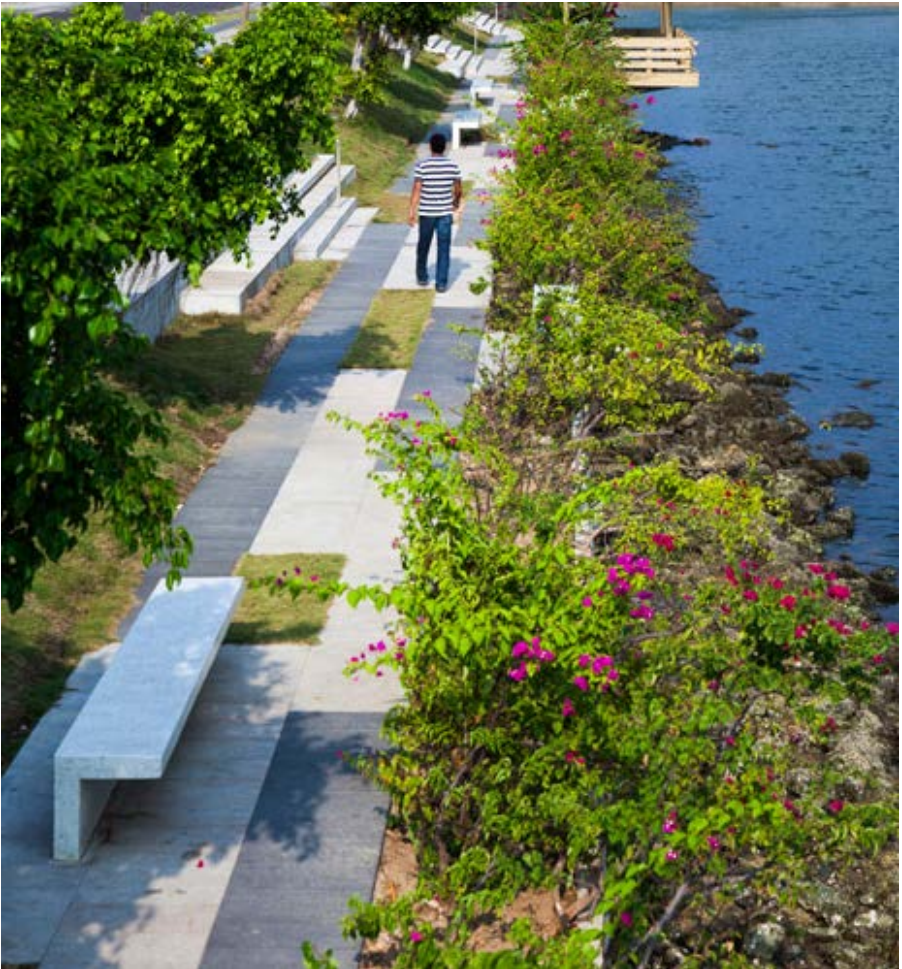
- S1 Levee Road
- S2 Bike Paths
- S3 Solar Fields
- S4 Forest Conservation



2016-2025 Master Plan Flood Protection



Hazard Mitigation Plan: Flood Wall Option



Master Plan: Proposed Integrated Landscape/Levee Option

2016-2025 Master Plan

Proposed Projects

Potential Sites for New Construction

- NC1 Welcome Center
- NC2 New Fredrick Douglass Library
- NC3 Residential Dorm
- NC4 Residential Dorm(s)
- NC5 Pharmacy & Health Professions
- NC6 Agricultural Research and Education Center
- NC7 Farm Support (replacement facilities)
- NC8 Academic Building
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- R8 Nuttle Hall Renovation
- R9 Murphy Hall & Annex Renovation
- R10 Court Plaza Renovation
- R11 Plaza Residence Renovation
- R12 University Terrace Renovation

Gateways

- G1 Campus Main Gateway
- G2 Eastern Gateway
- G3 Western Gateway

Major Pedestrian Paths

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

Landscape and Open Space

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

Transportation

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

Campus Life

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

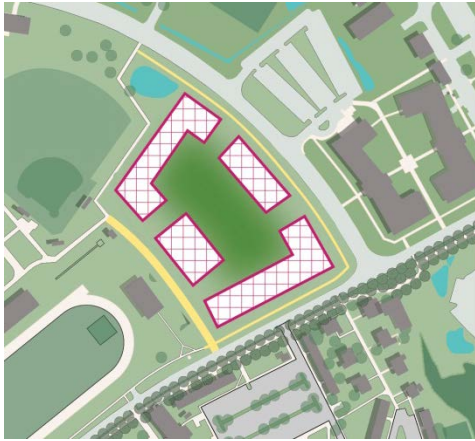
Sustainability

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



FUTURE PHASE MASTER PLAN CONCEPTS

Future Phase Master Plan Opportunity Sites



OS1 McCain Drive Intersection Site



OS2 Northern Gateway Site



Future Phase Master Plan

North Quad Landscape Character

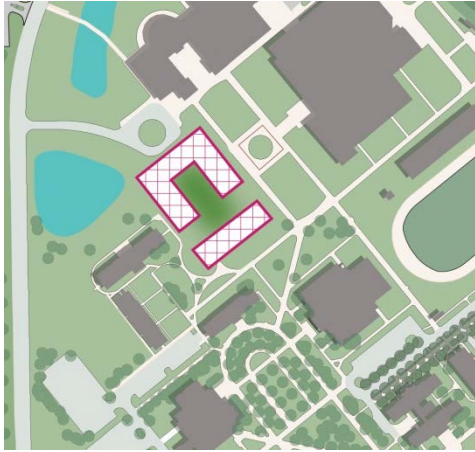


Quaker Meeting House and Arts Center

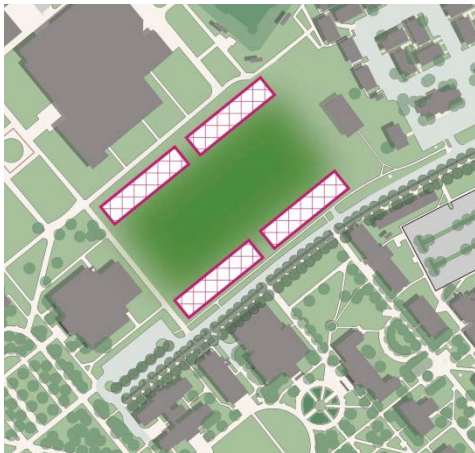


Sidwell Friends School

Future Phase Master Plan Opportunity Sites



OS3 Quad Infill



OS4 Track Infill



Future Phase Master Plan Opportunity Sites



Sunken Gardens
William and Mary

Future Phase Master Plan Opportunity Sites



OS5 Eastern Gateway Quad



OS6 Eastern Gateway



Future Phase Master Plan

Open Space & Landscape Network



2016-2025 Master Plan

