
FIU
FLORIDA
INTERNATIONAL
UNIVERSITY
2015-2035 CAMPUS MASTER PLAN UPDATE
November 2024
DLRGROUP
MILLER LEGG
SGM
ENGINEERING

President's Message

The FIU **2015-2035 Campus Master Plan Update** is a forward-looking blueprint that will guide our university's physical growth and development to support the academic and research goals of our university community. This update builds on the successes of the original plan, while recognizing the need to address the evolving needs of our campus and stakeholders over the next two decades. The plan is grounded in our **Experience Impact 2030** strategic vision, ensuring that our campus supports our mission and provides an environment where innovation, collaboration, and academic excellence are harnessed.

Key aspects of this plan include:

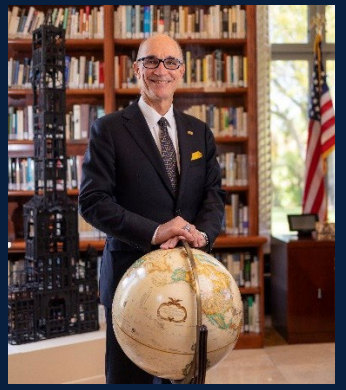
- **Building a Sustainable Campus**: We are committed to enhancing our campus through environmentally responsible design and sustainable practices that reduce our environmental footprint and provide an innovative infrastructure for future generations of students and researchers.
- **Enhancing Accessibility and Connectivity:** Our Master Plan includes improved transportation and access options that integrate seamlessly with surrounding neighborhoods, ensuring that our campus is easily accessible and well-connected to the broader community.
- **Facilities Supporting Strategic Pillars:** The plan outlines strategic investments and alliances in academic and research facilities, as well as housing, to meet student demands and intentionally design the student journey with the FIU Experience in mind.
- **Maximizing Land Use:** We are mindful of the constraints of our land and are dedicated to optimizing our campus layout, ensuring that we make the best use of available space while fostering an inclusive, engaging, and dynamic campus environment.
- **Leveraging Strategic Focus Areas**: Aligned with our broader institutional priorities, this update will provide spaces that support our strategic focus areas of **Environment & Environmental Resilience, Health,** and **Technology & Innovation**, and the intersection of these fields.

With the adoption of the **2015-2035 Campus Master Plan Update**, it is important to reflect on the extraordinary progress FIU has made and the future we are building together. Our university provides a blueprint for the mission and impact of a public research institution, creating transformative experiences for students and making a measurable difference in the lives of individuals and communities. I am proud to lead FIU, a leading American research university that continuously rises to meet every challenge, exceeds every goal, and positions itself as a top-tier institution of learning and innovation.

Throughout the past decade, FIU has experienced incredible milestones. This university is now recognized as a national leader in higher education by the Wall Street Journal, U.S. News & World Report, and Washington Monthly. We are very proud to be a Top 50 public university, according to U.S. News. FIU also has been designated a Preeminent State Research University by the Florida Board of Governors; has been the top performer in the state's performance funding metrics in 2021, 2023, and 2024; and has entered into a transformational alliance with Baptist Health South Florida. Given the collective impact of these accomplishments, our continued growth depends on our ability to adapt and evolve.

We recognize that our campus is not just a physical space — it is the heart of the university, and it must reflect our values and ambitions. This updated Campus Master Plan will help FIU create an environment that supports our continued success and strengthens our identity as a leading public research institution.

I invite all members of our university community to embrace this vision, ensuring that we remain a place of academic achievement and a transformative institution that impacts the world around us.



Kenneth A. Jessell

President

ACKNOWLEDGMENTS

Kenneth A. Jessell	FIU President

FIU EXECUTIVE COMMITTEE/VICE PRESIDENTS

Elizabeth Bejar	Provost, Executive Vice President + Chief Operating Officer
Aime Martinez	Chief Financial Officer, Senior Vice President for Finance and Administration
Charlie Andrews	Vice President, Student Affairs
Michelle Palacio	Senior Vice President, Strategic Commuications, Government and External Relations
Scott Carr	Athletics Director
Carlos Castillo	General Counsel
Juan Carlos Cendan	Senior Vice President, Health Affairs + Dean, Herbert Wertheim College of Medicine
Bridgette Cram	Interim Vice President, Innovative Education and Student Success
Andres Gil	Senior Vice President, Research & Economic Development + Dean, University Graduate School
Bobby Grillo	Vice President, Information Technology + CIO
EK Hudson	Senior Vice President, Human Resources
Javier Marques	Vice President, Operations and Safety + Chief of Staff

CAMPUS MASTER PLAN CONSULTANT TEAM

DLR Group	Architecture and Campus Planning
Miller Legg	Landscape Architecture and Civil Engineering
SGM Engineers, Inc	MEP Engineering

FIU FACILITIES PLANNING & MANAGEMENT

John M. Cal	Associate Vice President, Facilities Management
Robert Griffith	Director Facilities Planning
William Hoang	Assistant Director of Facilities Planning

PLANNING FOCUS GROUPS

Group 1	MMC & EC - Academics and Research
Group 2	MMC & EC - Student Life
Group 3	MMC & EC - Infrastructure
Group 4	BBC

FOCUS GROUP PARTICIPANTS

Luis Salas	Professor, Associate Vice President of Research
Julissa Castellanos	Assistant Vice President, Regional and World Locations
Marianne Piñeda	Director, Academic Space Management
Barbara Manzano	Associate Provost, Planning & Finance
Nestor Mateus	Associate Director of Information Technology
Julie Berg-McGraw	Senior Associate Athletic Director
Heath Glick	Senior Associate Athletic Director, Chief Operating Officer
James Wassenaar	Director of Facilities Planning & Operations, Division of Student Affairs
Roger Clegg	Assistant Vice President Business Services
Joe Paulick	Associate Vice President, Auxiliary Operations
Andrew Naylor	Senior Director, Housing Administration

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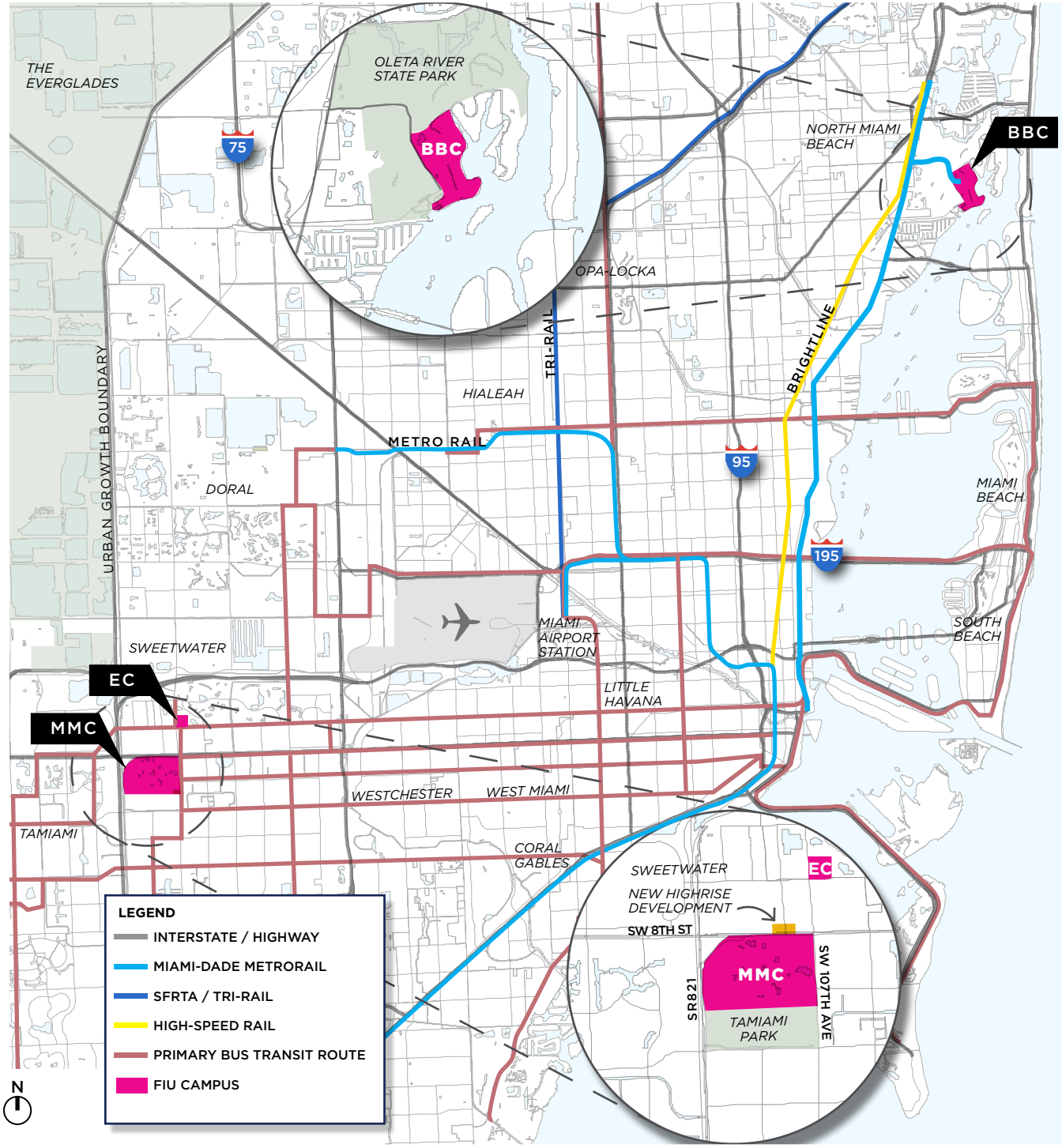

FIGURE 0.1 - FIU REGIONAL CONTEXT MAP

The Florida International University (FIU) 2015-2035 Campus Master Plan builds on previous physical and capital planning initiatives, aligns with recent strategic advancements, and introduces new initiatives focusing on three strategic pillars: enhancing the FIU experience, advancing research, and fostering mission-aligned engagement and partnerships. This plan further incorporates our areas of focus on environmental resilience, health, and technology, acknowledging successful achievements and priority improvements since the last master plan in June 2015.

The 2035 planning effort primarily targets FIU's two principal campuses, Modesto A. Maidique and Biscayne Bay, along with the Engineering Center, accommodating the bulk of FIU's property and facilities while reflecting the dynamic shifts in higher education participation and enrollment.

With no anticipated major growth or decline in student numbers, either in-person or virtually, this plan reevaluates past goals to ensure they remain relevant in today's rapidly evolving educational landscape. To ensure broad-based input and reflect diverse perspectives, FIU engaged a wide cross-section of on-and off-campus groups through interviews, focus groups and public hearings, thereby embracing inclusive planning processes that are sensitive to the needs and aspirations of all stakeholders.

[1] FIU DOWNTOWN ON BRICKELL
[2] THE WOLFSONIAN-FIU

INTRODUCTION

The 2015-2035 Campus Master Plan Update provides a framework of flexible growth opportunities for FIU based on the following:

MAJOR PLANNING GOALS

1. **Support the University's 2030 Strategic Plan currently under development.**
   The 2030 Strategic Plan has three areas of focus: Environment/Environmental Resilience, Health, and Technology and three strategic pillars: the FIU Experience, Research, and Mission-aligned Engagement and Partnerships.
2. **Develop a sustainable campus environment.**
   Future development should seek to mitigate rising issues from urbanization and the heat-island effect, provide infrastructure for photovoltaic panels and shading canopies, anticipate sea level rise, and provide short walking distances between buildings and transit service.
3. **Develop better transportation and access options.**
   Integrate transit into each campus to limit long walking distances. Explore expanded shuttle stops or increased frequency in shuttle services. Provide shaded bus terminals. Expand infrastructure for charging stations for electric vehicles.
4. **Establish better connectivity with neighboring communities.**
5. **Provide adequate academic, research, and housing facilities to meet the needs of current enrollment.**
6. **Optimize development within land use constraints.**

GUIDING PRINCIPLES

In addition, the following Guiding Principles help to inform the Campus Master Plan Update and support the University Strategic Plan:

1. **Develop forward looking, innovative and interdisciplinary learning and research environments.**
2. **Reinforce a culture of sustainability and a sustainable campus environment.**

   Develop FIU's campuses as centers for innovation in sustainability as an active part of student learning. Campus life can be structured to create an experience of sustainable living, with an educational goal for students to incorporate these habits into their careers.
3. **Strengthen FIU's identity and sense of place through the expression of its campus environment. Strengthen the FIU brand and legacy.**

   Native plants and building materials of South Florida provide local identity and regionalism. FIU is proud to be a recognized member of Tree Campus USA, a status it has achieved annually since 2010. It is committed to effectively managing its tree canopy, expanding engaged teaming within the College of the Arts, Sciences and Education, and fostering heat island reduction. In concert with increasing the sustainable maintenance and operations of its campuses, FIU supports opportunities to become an educational arboretum. As curriculum and research are directly linked to existing trees and vegetation, augmented planting is identified, and funding is established, an arboretum can be identified and approved for accredidation. Campus development should be reviewed for impacts achieving this goal, both in terms of preserving significant trees and adding specifies diversity.
4. **Create a more compact and comprehensive urban environment with-modal solutions to transportation & infrastructure.**
5. **Establish better connectivity with neighboring communities.**
6. **Create a safe, transparent, connected, pedestrian-friendly campuses.**
7. **Site core academic programs along main axes.**
8. **Develop student life mixed-use communities.**
9. **Foster learning through multipurpose open space.**
10. **Reinforce FIU's opportunistic character by maximizing flexibility for future expansion.**

Each of the eighteen elements identified by the State University System planning guidelines are outlined in this document. Together, they provide a holistic and integrated guide for effectively planning campus change in the years to come.

The following illustrative site plans depict the future vision and concepts for each FIU campus.

Note: Late in the development of this document, the buildings designated herein as Engineering I and II were renamed Innovation I and II to create the Innovation Complex.

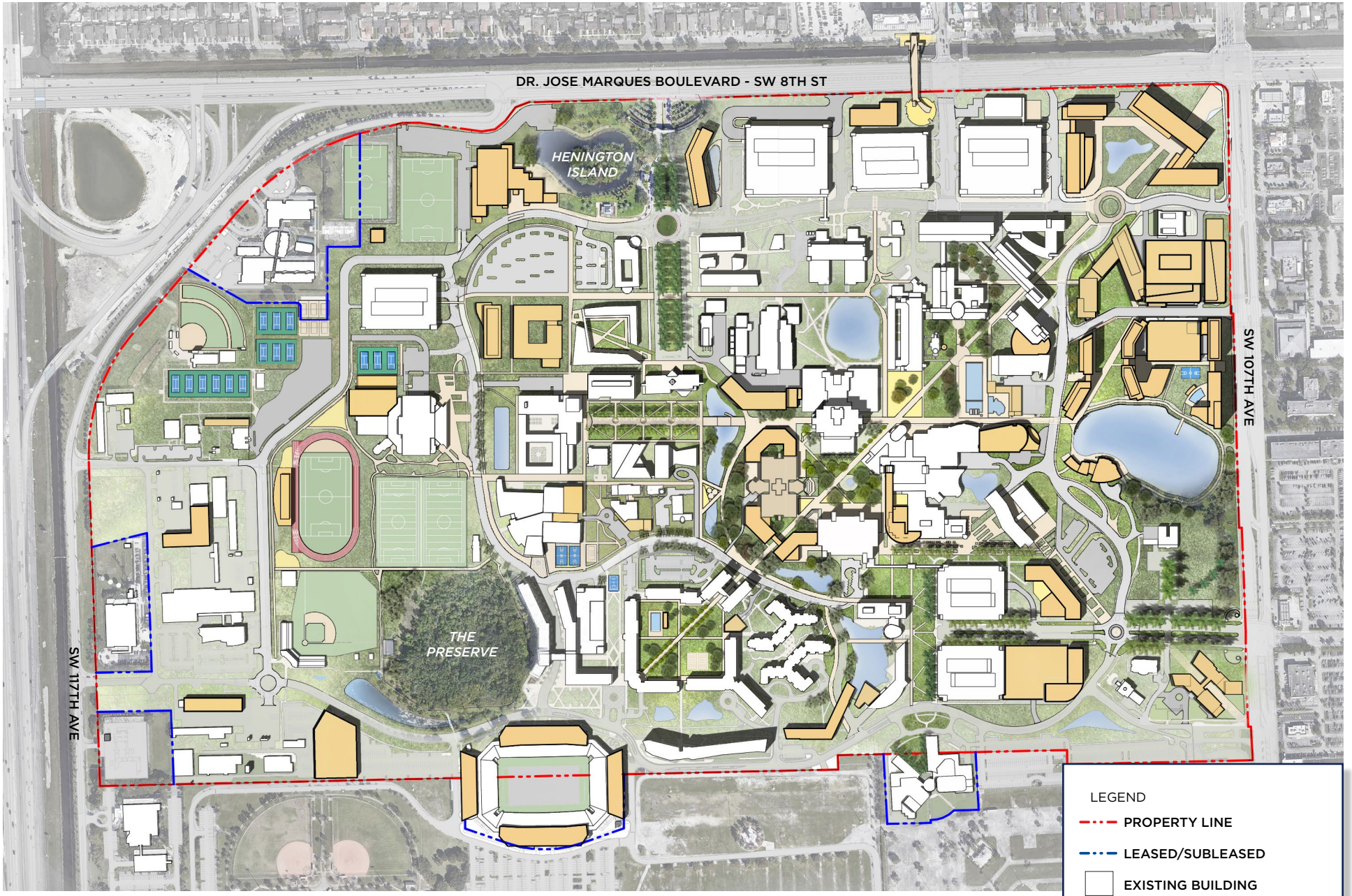

FIGURE 0.2a - MMC 2035 ILLUSTRATIVE PLAN

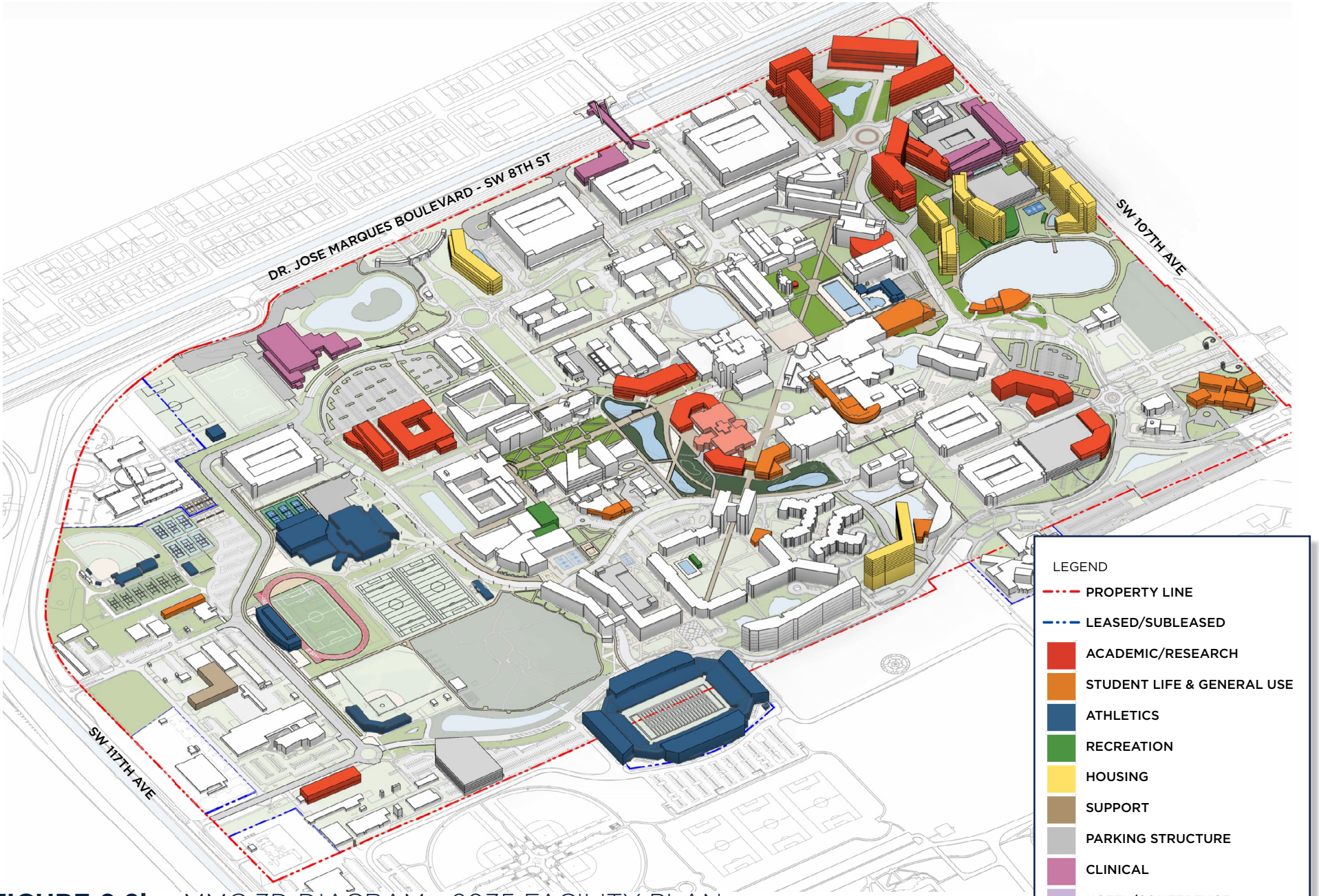

FIGURE 0.2b - MMC 3D DIAGRAM - 2035 FACILITY PLAN

FIGURE 0.3a - EC 2035 ILLUSTRATIVE PLAN

LEGEND

- PROPERTY LINE
- EXISTING BUILDING
- FUTURE BUILDING
- EXISTING BUILDING RENOVATION

N

0 100 300

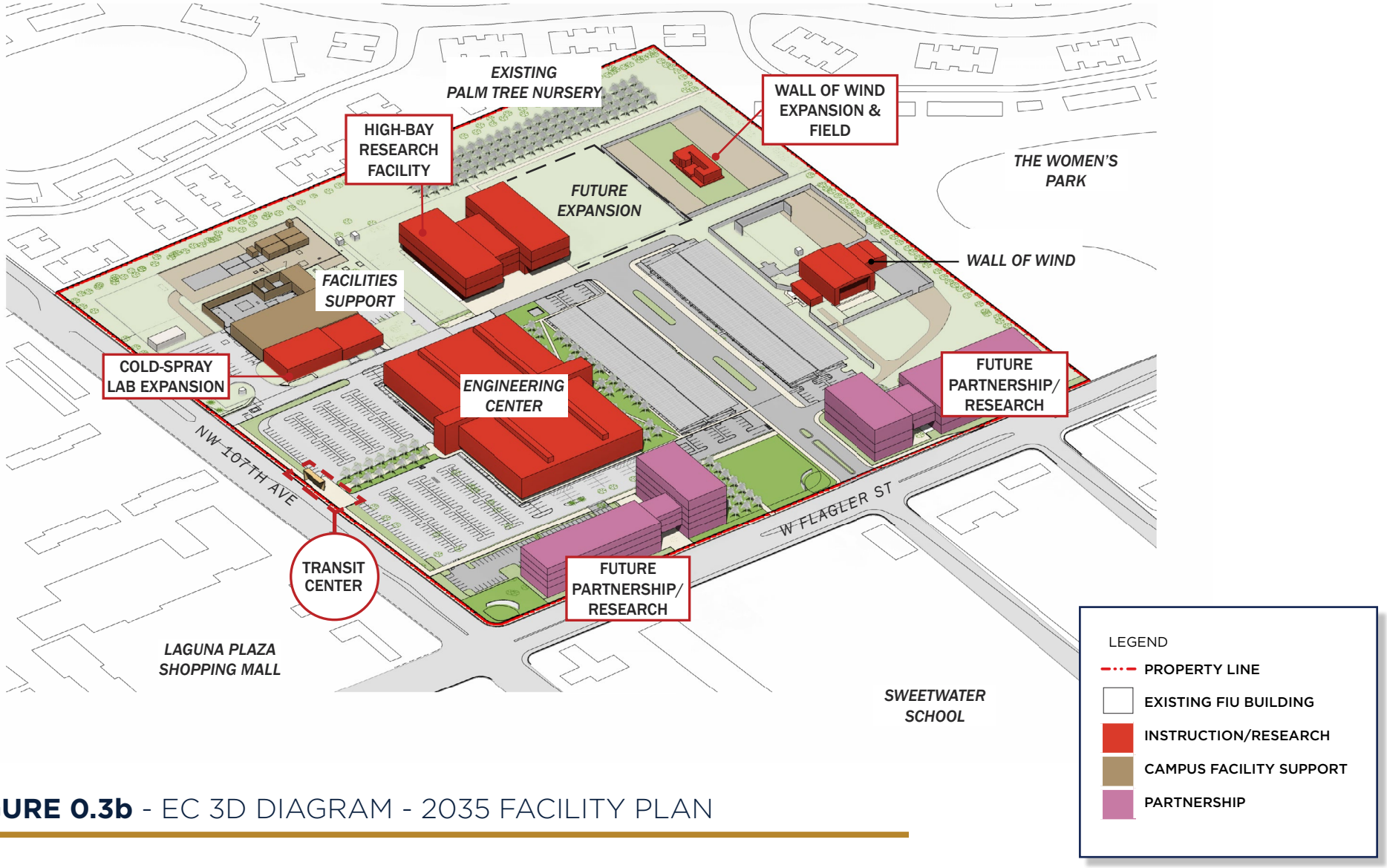

FIGURE 0.3b - EC 3D DIAGRAM - 2035 FACILITY PLAN

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FIGURE 0.4a - BBC 2035 ILLUSTRATIVE PLAN

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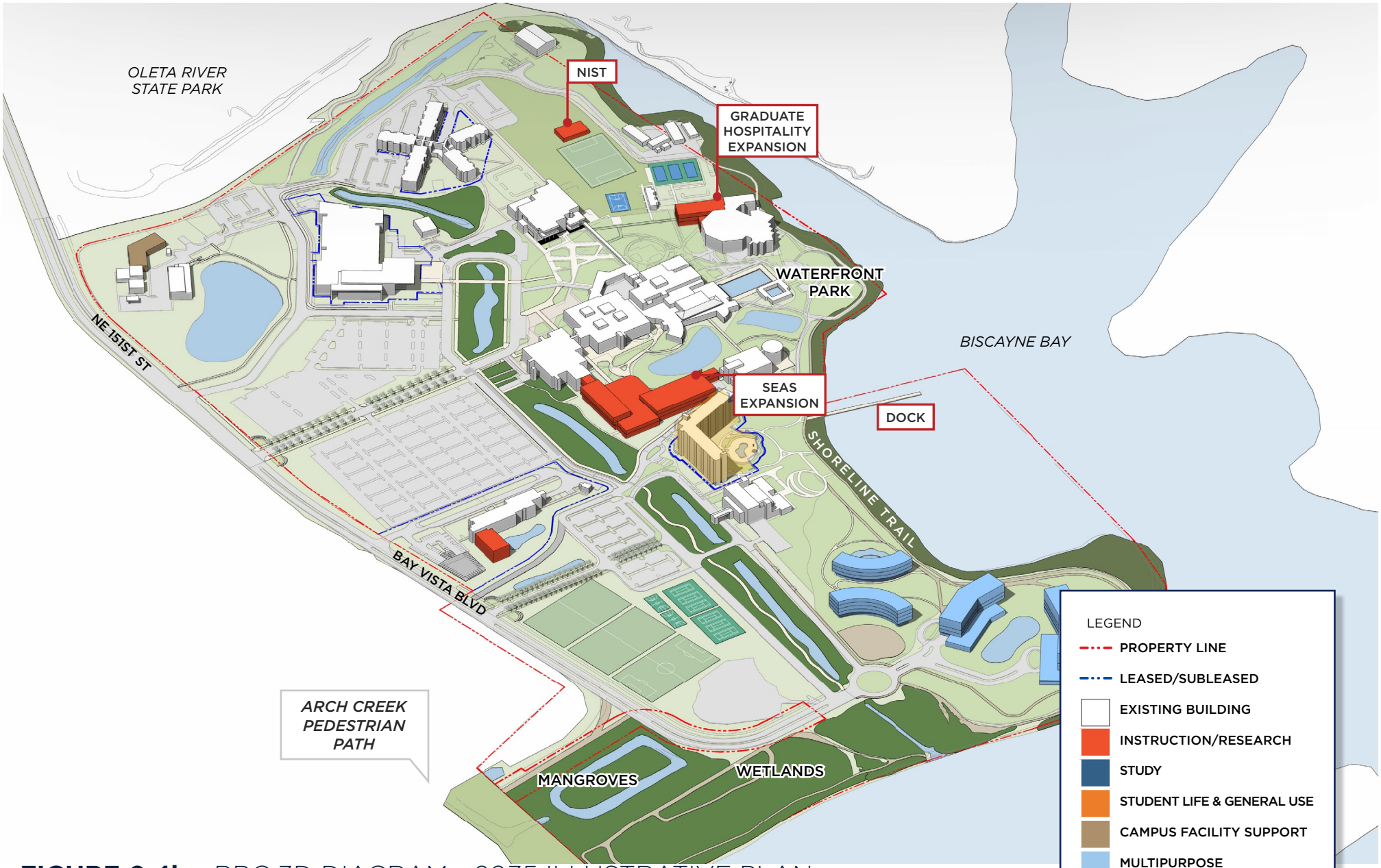

FIGURE 0.4b - BBC 3D DIAGRAM - 2035 ILLUSTRATIVE PLAN

N

1.0

ACADEMIC MISSION

1.0 ACADEMIC MISSION

Since its founding in 1965, FIU has grown to become one of South Florida's premier research institutions and one of its largest public universities. As a member of the State University System (SUS) of Florida, FIU offers a broad selection of undergraduate, graduate, and professional programs. Reflecting the diverse and vibrant culture of South Florida, our student body includes a growing number of minority groups and international students, creating a dynamic environment that fosters significant talent and innovation both locally and globally.

As outlined in our "2030 Strategic Plan," FIU has identified three strategic pillars:

- *Enhancing the FIU experience*
- *Advancing preeminent research*
- *Fostering mission-aligned engagement and partnerships*

These pillars support three areas of focus:

- *Environment / environmental resilience,*
- *Health*
- *Technology*

These strategic priorities, integral to our 2030 Strategic Plan, build on previous efforts while addressing the rapid changes in higher education and the evolving needs of the workforce.

Mission Statement

Florida International University is an urban, multi-campus, public research university serving its students and the diverse population of South Florida. We are committed to high-quality teaching, state-of-the-art research and creative activity, and collaborative engagement with our local and global communities.

Vision Statement

Florida International University will achieve exceptional student-centered learning and upward economic mobility, produce meaningful research and creative activities, and lead transformative innovations locally and globally, resulting in recognition as a Top-30 public university.

University Service Areas

South Florida is one of the most dynamic, artistically expressive, ethnically diverse, and cosmopolitan regions in the United States. As the gateway for Central America, the Caribbean and South America, it is a global center for trade, finance, health care, tourism, and manufacturing. To meet its consumers' needs, FIU has two main campuses – the 342.2-acre Modesto A. Maidique Campus, in western Miami-Dade County and the 198.6-acre Biscayne Bay Campus, on Biscayne Bay in northeast Miami-Dade County. In addition to the two main campuses, Modesto A. Maidique Campus also encompasses the Engineering Center, a 36 acre site located North of the City of Sweetwater.

FIU's Institutional Values Statement commits to:

Truth — in the pursuit, generation, dissemination, and application of knowledge

Freedom — of thought and expression

Respect — for diversity and the dignity of the individual

Responsibility — as stewards of the environment and citizens of the world

Excellence — in intellectual, personal, and operational endeavors

GOAL

Florida International University (FIU) is a leading public research university with multiple campuses in urban Southeast Florida, serving the local area, the state, the nation, and international communities. The university's 2030 Strategic Plan, aligned with FIU's mission and vision, structures its goals and objectives around three main pillars and three focus areas. The pillars include enhancing the FIU Experience, advancing Research, and fostering Mission-aligned Engagement and Partnerships. The focus areas are the Environment/Environmental Resilience, Health, and Technology.

Objective 1.1

Maintain College/School Missions:
The missions of individual colleges and schools shall be reviewed annually and modified to support FIU's mission in accordance with the Division of Academic Affairs planning, implementation and evaluation annual cycle.

Policy 1.1.1

FIU shall review and prioritize proposals for new academic programs in accordance with the current FIU Strategic Plan's procedures and subsequent modifications of its mission statement.

Policy 1.1.2

Priorities shall be established among prospective new programs based on the following criteria:

- Local, regional, national and international need
- Potential enrollment
- Maturity of the program being modified

Policy 1.1.3

The Academic Mission, Strategic Themes and Institutional Goals of FIU shall reflect both the recent and planned substantial growth in research activity.

Policy 1.1.4

The Campus Master Plan shall be amended, as needed, to reflect any revisions or modifications to the missions of individual colleges and schools.

Objective 1.2

Modification to University Mission:

The University Mission shall be modified at each interval required by State Statutes, and no less than 10 years after adoption, as part of the Florida Board of Education Master Plan process.

Policy 1.2.1

The Office of the President shall develop mission statement revisions in accordance with the internal in coordination with the Executive Committee, the Strategic Planning Advisory Committee, Administrative Council, and the University Council.

Policy 1.2.2

The Campus Master Plan shall be amended, as needed to reflect any revisions or modifications to the University's mission statement.

Objective 1.3

Maintain and Up-to-Date Campus Master Plan:

The University shall participate in the periodic updating of the adopted campus master plan in accordance with the Florida Board of Education

Policy 1.3.1

FIU shall submit to the SUS Board of Governors, within 4 years from the date of plan adoption and every 5 years thereafter, an evaluation and appraisal report which:

1. Lists accomplishments during the implementation of the campus master plan, describing major problems associated with

development and land uses, and the degree to which the goals, objectives, and policies have been successfully reached;

2. Identifies obstacles or problems which resulted in under achievement of goals, objectives and policies;

3. Identifies the need for new or modified goals, objectives, or policies needed to correct unanticipated and unforeseen problems and opportunities that have occurred since adoption of the campus master plan;

4. Addresses local government and public participation in the process;

5. Addresses the effects of changes to the State Comprehensive Plan and to the comprehensive plans of the host local government and any affected local governments;

6. Identifies proposed and anticipated amendments necessary to address identified problems and opportunities; and

7. Identifies a means of ensuring continuous monitoring and evaluation of the plan during the remainder of the overall planning period.

Policy 1.3.2

FIU shall submit the Inventory and Analysis Report and the Campus Master Plan Update to the Florida Board of Governors according to BOG Chapter 21.

2.0

ACADEMIC PROGRAM

2.0 ACADEMIC PROGRAM

As of Fall 2023, Florida International University enrolls 49,130 undergraduate and graduate students, offering nearly 190 degree programs that align with our strategic goals of enhancing the FIU experience, advancing research, and fostering mission-aligned engagement. Our students benefit from the flexibility of attending multiple campuses and centers across the Miami-Dade area and internationally, reflecting our commitment to global and community engagement.

Interdisciplinary, team-based pedagogy has been a cornerstone of FIU's educational success, fostering robust partnerships with businesses, health service providers, and community organizations. These collaborations enhance our interdisciplinary teaching and research, particularly in areas of environmental resilience, health, and technology, ensuring that our academic programs contribute effectively to regional and global challenges.

FIU is dedicated to maintaining high educational standards and supporting growth in our student population and academic offerings without planning significant fluctuations in enrollment numbers by the end of the 2035 planning period. Our strategic planning is informed by detailed HC and FTE enrollment data and includes contributions from various schools and colleges, including:

- Arts, Sciences & Education
- Business
- Chaplin School of Hospitality and Tourism Management
- Communication, Architecture + The Arts
- Engineering and Computing
- Herbert Wertheim College of Medicine
- Honors College
- Law
- Nicole Wertheim College of Nursing & Health Sciences
- Robert Stempel College of Public Health & Social Work
- Steven J. Green School of International and Public Affairs

GOAL

FIU should develop and maintain academic programs reflecting and implementing the Missions of both the University and individual schools and colleges.

OBJECTIVES AND POLICIES

Objective 1.2
Support projected Enrollment and Program Growth and Campus Distributions.

Policy 1.1.1
Enrollment projections should be as shown on Table 2.3 of the Inventory and Analysis Report. The methodology for enrollment projections should factor in FIU's market share projections.

Objective 1.2
Support Planned and Proposed Academic Programs:

Locate academic programs to support the academic mission and sustainable levels of enrollment at the Modesto A. Maidique and Biscayne Bay Campuses through 2035.

Policy 1.2.1
Locate the academic programs of the following colleges and schools at the Modesto A. Maidique through 2035. Review campus and program enrollments annually to assure that the University is meeting its enrollment goals for each location.

- Arts, Sciences and Education
- Communication, Architecture + The Arts
- Business
- Chaplin School of Hospitality and Tourism Management
- Engineering and Computing
- Honors College
- Law
- Herbert Wertheim College of Medicine
- Nicole Wertheim College of Nursing and Health Sciences
- Robert Stempel College of Public Health and Social Work
- Steven J. Green School of International and Public Affairs

Policy 1.2.2
Locate academic programs of the following Colleges and Schools at Biscayne Bay Campus through 2035. Review campus and program enrollments annually to assure that the university is meeting its goals for each location.

- Arts, Sciences and Education
- Communication, Architecture + The Arts
- Business
- Chaplin School of Hospitality and Tourism Management
- Engineering and Computing
- Honors College
- Law
- Herbert Wertheim College of Medicine
- Nicole Wertheim College of Nursing and Health Sciences
- Robert Stempel College of Public Health and Social Work
- Steven J. Green School of International and Public Affairs

Policy 1.2.3
Provide the specific academic programs within each college as contained in Table 2.3 in the Campus Master Plan: Inventory and Analysis.

Policy 1.2.4
As one of the largest providers of online learning in the country, monitor and develop online programs based on market demand and aligned with the academic mission.

Policy 1.2.5
Reflect priorities for new academic programs documented by the Florida Board of Governors as outlined in the State University System 2025 Strategic Plan.

Policy 1.2.6
Distribute Funding based on a pro rata basis to existing academic programs based on existing and projected enrollments

Policy 1.2.7
Priorities for new academic programs should be based on the following criteria;

1. Local, regional, national and international need
2. Potential enrollment
3. Maturity of program being modified

Policy 1.2.8
Review and prioritize unforeseen potential academic program elements and grant opportunities with the Office of Sponsored Research Administration (OSRA). Apply the following criteria:

- Compliance with State and Federal regulations
- Appropriateness to Academic Program and Mission
- Capacity of physical and administrative infrastructure

Policy 1.2.9
Amend the Campus Master Plan to include any approved unforeseen program elements.

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3.0

URBAN DESIGN

3.0 URBAN DESIGN

The physical environment of FIU's campuses is pivotal to the educational experiences of its students and the health and well-being of the community, aligning with our strategic pillars and focus areas of enhancing the FIU experience, fostering environmental resilience, and advancing health and technology. Our urban design strategy aims to create memorable and functional campus spaces with well-connected pedestrian networks that incorporate sustainable design practices, integrate impactful art installations, and expand high-quality student spaces.

As we increase facility density in the campus core and expand on-campus housing, maintaining a high-quality campus environment supports not only a successful student experience but also enhances safety, security, and effective branding and wayfinding. The introduction of high-rise building typologies in the adjacent Sweetwater neighborhood sets a precedent for similar developments on campus, necessitating careful planning to preserve, define, and enhance open spaces through well-thought-out regulating axes, campus streets, and a hierarchy of landscapes.

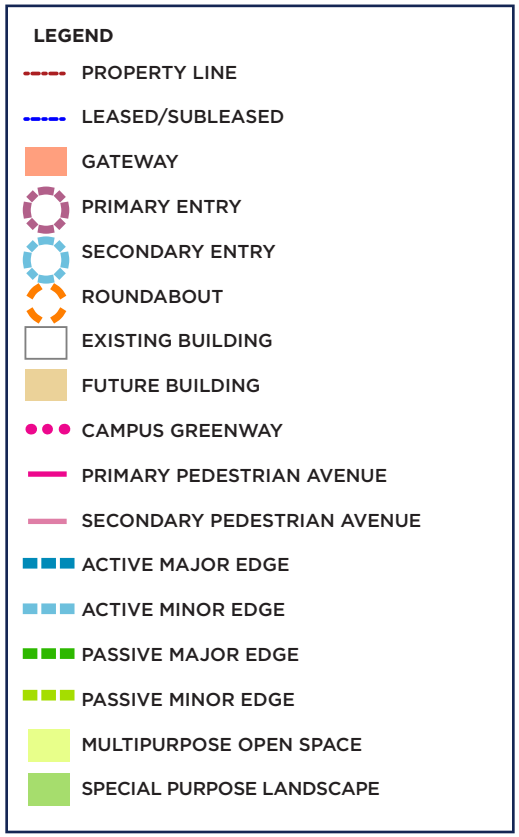
Historically, the urban context surrounding our campuses has been somewhat disconnected. As we expand, creating accessible and permeable campus edges is crucial for fostering stronger relationships with host communities and promoting sustainable urban environments that support our strategic goals of community engagement and interdisciplinary collaboration.

Modesto A. Maidique Campus

With increased density of facilities in the campus core and the need to expand on-campus housing, maintaining high quality campus environments is essential to supporting a successful student experience, as well as safety, security, branding, and wayfinding. Recent mixed-use development in the adjacent neighborhood of Sweetwater has introduced a high-rise building typology to the urban context of FIU, and creates a precedent for mid and high-rise on-campus housing. Development must be planned to effectively preserve, define, and enhance campus open space through the use of regulating axes, campus streets, and a hierarchy of landscapes.

Growth at the Modesto A. Maidique Campus should continue to leverage infill building sites and facility additions to create a compact and pedestrian-friendly urban setting. Development should be guided by major pedestrian corridors to preserve and reinforce the rich outdoor tropical open spaces.

Realignment and improvements to the campus loop road should better define the central academic core of campus while allowing for the placement of future facilities within key adjacencies. To effectively implement this goal and promote pedestrian circulation, surface parking should be redistributed into mixed-use parking structures located outside of the campus loop road at the campus edges.



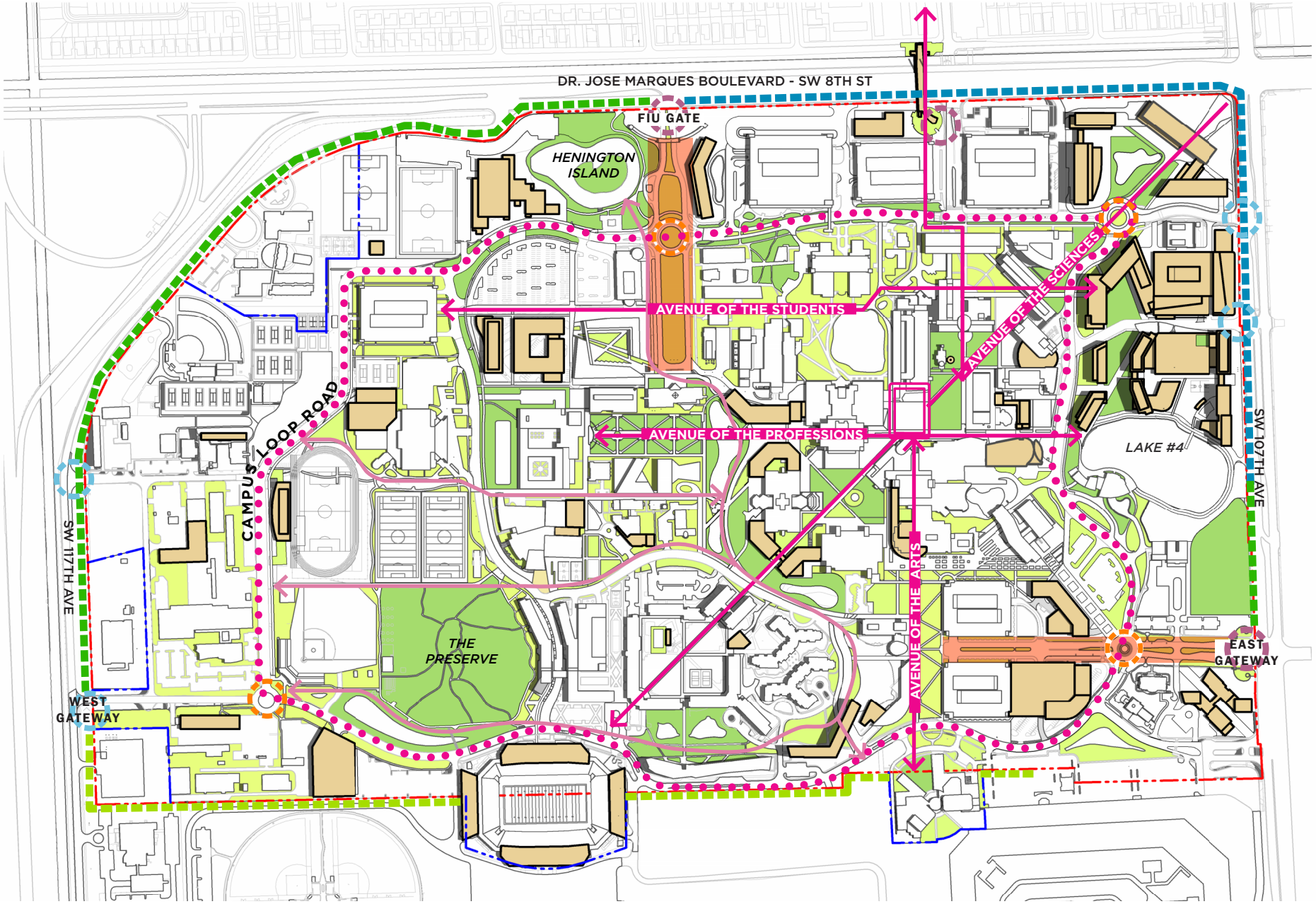


FIGURE 3.1a - MMC URBAN DESIGN CONCEPT PLAN

N

0 200 400 800 FT

GOAL

Florida International University shall create high-quality, memorable, and sustainable campus environments that enhance education and foster a sense of collegiality. Our development approach emphasizes a pedestrian-friendly, dense, and compact pattern, which aligns with our strategic pillars of enhancing the FIU experience, advancing research, and fostering mission-aligned engagement and partnerships. This approach is set within a rich, ecologically appropriate tropical environment, supporting our focus areas of environmental resilience, health, and technological, to ensure that our campuses serve as models of sustainable and innovative urban design.

OBJECTIVES AND POLICIES

Objective 1.1
Develop, enhance, and preserve existing and proposed major pedestrian corridors on campus to foster a vibrant pedestrian experience that connects students, faculty, and their research. All future development shall strategically place buildings and landscape features to preserve and reinforce these corridors, enhancing the FIU experience. By doing so, we aim to strengthen the connectivity and accessibility of our campus, fostering engagement and partnership opportunities at strategic points. This approach is integral to our commitment to the strategic plan, ensuring that our campus design supports and enhances academic and community collaboration.

Continue to coordinate with Miami-Dade Transit on all campuses to enhance the user experience and maximize ridership. [Figure 3.1a]

Policy 1.1.1
MODESTO A. MAIDIQUE CAMPUS – Primary Axes

Existing East-West Pedestrian Walkway 1 (Avenue of the Professions): The "Avenue of the Professions" connects the Rafael Diaz-Blart Hall, through the Green Library to the Earnest R. Graham Center and onto SW 107th Avenue.

Future buildings along this avenue shall be oriented and configured in a manner to reinforce the axis.

Existing East-West Pedestrian Walkway 2 (Avenue of the Students): The "Avenue of the Students" extends from the west façade of Owa Ehan at the northern end of the building west to the Panther Parking Deck. This axis bisects several significant spaces including the Ryder Quad, College of Education, and the Business School district.

Existing Major North-South Pedestrian Walkway 1 (Avenue of the Arts): The "Avenue of the Arts" provides a north-south connection through campus from 8th Avenue through the Graham Center, terminating at the Wertheim Performing Arts Center. Following construction of the University City Prosperity Project pedestrian overpass on 8th Avenue, the campus entry at 109th will become a major pedestrian entrance while also providing vehicular access to PG5, PG6, and the red garage. Pedestrian access should be prioritized with shaded walkways and clear wayfinding.

Existing Diagonal Major Pedestrian Walkway 1 (Avenue of the Sciences): The "Avenue of the Sciences" links a sequence of spaces extending from the Panther Village quadrangle through the Foundation Court northeast to the emerging Academic Health Center, terminating at the intersection of SW 8th Street and SW 107th Avenue.

Proposed Diagonal North South Major Pedestrian Walkway 2 – a major pedestrian corridor is proposed connecting various campus precincts from north west or south east (from Henington Island to North to 17th Street to south.

North-South Axis 1 (107th Avenue Main Vehicular Entrance): One of two established signature campus gateways to FIU, this visual corridor connects the SW 107th Avenue entrance to the Management and Advanced Research Center along the Avenue of the Arts.

North-South Axis 2 (8th Street Main Entrance): The second established signature campus gateway provides a visual corridor from SW 8th Street to the Ryder Business Administration.

FIGURE 3.2 - EC 2035 URBAN DESIGN CONCEPT PLAN

LEGEND
- PROPERTY LINE
- GATEWAY
- PRIMARY ENTRY
- SECONDARY ENTRY
- EDGE - ACTIVE MAJOR
- EDGE - ACTIVE MINOR
- EDGE - PASSIVE MAJOR
- EDGE - PASSIVE MINOR
- MULTIPURPOSE OPEN SPACE
- SPECIAL PURPOSE LANDSCAPE
- ENHANCE WAYFINDING
- EXISTING BUILDINGS
- FUTURE FIU BUILDING

N
0 100 300 FT

Policy 1.1.2
MODESTO A. MAIDIQUE CAMPUS – Secondary Axes

North-South Axis 3 (Connecting the Stadium to the Avenue of the Professions): Develop a pedestrian circulation corridor from the eastern side of FIU Community Stadium north to the Avenue of Professions.

North-South Axis 4 (8th Street Secondary Entrance): Continue to develop the visual and pedestrian corridor from SW 8th St. through the Science Building to the Graham Center.

East-West Axis 4 (117th Main Vehicular Entrance): Develop an enhanced visual and vehicular corridor from SW 117th Avenue through the campus support area that connects to the Campus GreenBelt.

Policy 1.1.3
Engineering Center
East-West Axis (107th to Wall of Wind):
Develop a pedestrian focused corridor from SW 107th Avenue east through the existing Engineering Center connecting to the Wall of Wind. [Figure 3.2]

FIU shall coordinate proposed improvements along SW 8th Street and SW 107th Avenue with Florida Department of Transportation. Improvements along SW 117th to be coordinated with Department of Transportation and Public Works in accordance with the Transportation Improvement Program and Long Range Transportation Plan.

Policy 1.1.4
Biscayne Bay Campus

East-West Axis 1: Remove portions of the existing surface parking lots and develop and enhance the arrival and drop-off experience north of Academic One and Two. Expand the academic core to define and enclose the quad with future development towards the southern quad that defines the visual corridor that frames bay views.

Policy 1.1.5
Biscayne Bay Campus

East-West Axis 2: Develop an east-west axis that defines the visual corridor of the southern quad. Centered on the academic buildings to the west, the axis shall preserve the view to Biscayne Bay.

Policy 1.1.6
Biscayne Bay Campus

North-South Axis 1: Develop an enhanced visual and pedestrian connection extending from the North Quad south to the Koven's Conference Center, along the existing mangrove stand.

Objective 1.2
Develop, protect and enhance Campus Spaces as a sequence of distinct interconnected open spaces. Place future buildings and landscape features to preserve and reinforce the open space network of quadrangles, plazas, promenades, courtyards, and special-purpose landscape areas.

Policy 1.2.1 UNIVERSITY-WIDE
Ensure future buildings are sited to avoid encroachments upon designated open spaces, special purpose landscapes, major pedestrian corridors, and view corridors.

Policy 1.2.2
Secure funding for new and enhanced open spaces by:

1. Allocating proportional costs to future building programs and budgets.

2. Establishing funding line items for open space enhancements.

FIGURE 3.3 - BBC 2035 URBAN DESIGN CONCEPT PLAN

Policy 1.2.3
Designate campus open spaces and landscapes on all campuses with names as a way to identify and relate each space to its location and proximity to uses or buildings. The naming of spaces, such as Founder's Park, will strengthen the brand of the University and its broader wayfinding strategy.

Campus outdoor spaces should predominantly provide shaded areas. Hardscape surfaces should include shade trees or architectural canopies, while open, unshaded areas should be programmed towards non-daytime use. Hardscape surfaces should maximize permeability whenever possible.

Four types of Campus Open Spaces have been identified throughout the three campuses. Variations of each are dependent on the connection to the surrounding context, building engagement, and the use of the spaces within the campus:

Quad: A quadrangle is a green space that is usually square or rectangular in plan. The sides are entirely or mainly defined by buildings and reinforced by the landscape design. The single most important aspect of a quadrangle is clear spatial definition. The specific qualities of each quad vary with size, purpose and context but all are primarily informal articulated spaces, characterized by open usable green space with a combination of shade trees planted in asymmetrical groups and paths configured to provide direct pedestrian access to key buildings and spaces beyond.

Quads should have significant areas shaded and protected from rain by structures. These should be used for individual and group interaction and study.

Courtyard: Courtyards are spaces between or within buildings but are more compact than quads. They offer either private or semi-private spaces providing immediately accessible opportunities for informal outdoor gathering, studying and collaborating. Courtyards are predominately hardscape spaces with landscape material along their edges or as a central focal point.

Promenade: Promenades are public places for walking that directly connect one point to another. More than just a wide sidewalk or trail, a promenade is of significant importance with distinct hardscape materials, lighting, pedestrian seating, and formal canopy plantings. Promenades may define one edge or bisect a larger space. The space is characterized by pedestrian-friendly features and a clearly defined architectural volume that can allow for congregation as well as settings for small group study areas. Promenades should have continuous areas shaded and/or protected from the rain by structures.

Plaza: Plazas occur at points of entry or gateways to the campus, various districts and key buildings throughout the Campus. The specific qualities of each may vary but all will be primarily characterized by hardscape elements and architectural character with canopy trees reinforcing the spatial geometry of the space. Plazas should incorporate significant spaces shaded by and protected from the rain by structures, ample pedestrian seating, and aesthetic features such as art.

Objective 1.3
Preserve and enhance Special Purpose Landscapes at Florida International University campuses to serve as vibrant hubs for teaching, research, recreation, social gatherings, and community engagement, aligning with our strategic pillars of enhancing

the FIU experience, advancing research, and fostering mission-aligned engagement. Each landscape is uniquely designed to support and enrich our educational environment.

The proposal for an arboretum designation at the Modesto A. Maidique Campus (MMC) includes creating curated landscapes with tree collections that correlate with specific academic disciplines, strategically located near related facilities. This arboretum will actively support student learning and research, providing hands-on experiences that align with our focus areas of environmental resilience, health, and technology, thereby enhancing our commitment to integrating sustainable and educational practices on campus.

Policy 1.3.0
MODESTO A. MAIDIQUE CAMPUS – Henington Island: Preserve the teaching and research environment of Henington Island. Establish a no-build zone that will replace turf over time with low-growing native wetland species.

Policy 1.3.1
MODESTO A. MAIDIQUE CAMPUS – The Preserve: Preserve the teaching and research environment of the Preserve. Establish a no-build zone to ensure the space will remain open for passive recreational use.

Policy 1.3.2
MODESTO A. MAIDIQUE CAMPUS – President's Garden: Preserve and enhance the existing palm tree collection at the Reagan House as a prominent greenspace feature of the East Gateway campus entrance on SW 107th Ave.

Policy 1.3.3
MODESTO A. MAIDIQUE CAMPUS – Palm Collection: Preserve and enhance the existing palm tree collection in the Green Library Quad to ensure continued teaching and research opportunities.

Policy 1.3.4
MODESTO A. MAIDIQUE CAMPUS – The GreenWay: Create a signature pedestrian corridor and informal landscape that provides a critical stormwater infrastructure function and a wildlife corridor, as well as opportunities for research and teaching with connectivity to the Wertheim Performing Arts Center north to Henington Island and west along the existing service road to the Preserve.

Policy 1.3.5
BISCAYNE BAY CAMPUS – The Green Spine: Continue the restoration and preservation of the existing mangroves in partnership with Miami-Dade County as part of the "North Biscayne Bay Wetland Restoration Project." Expanded areas around the south end of campus could be restored a coastal hammock and mangrove with native trees and shrubs, while some areas reserved for research to study native plant habitats, water quality, and coastal resiliency research. [Figure 3.3]

Policy 1.3.6
BISCAYNE BAY CAMPUS – The BayWalk: Continue to develop the coastline as a BayWalk. The Baywalk should be shaded with established lookout points or bay access that enhances the mangrove fringe. With over a mile of undeveloped bay-front exposure, providing connectivity to water and research and teaching opportunities, the BayWalk provides an amenity that is unique to FIU and its campus at BBC. [Figure 3.3]

Objective 1.4
Enhance the internal vehicular circulation of campus streets within the FIU campuses to become a binding element within the Campus as well as a means of circulation for visitors, service vehicles, and emergency access.

Policy 1.4.1 MODESTO A. MAIDIQUE CAMPUS – Campus GreenBelt – Parkway
Future development at FIU should consider opportunities that transform the campus from a traditional parkland approach of green areas and scattered trees to an urban forest and arboretum setting, designed to host native ecosystems with a continuous canopy of shade trees, shurb understory and shrub-tolerant groundcover to provide wildlife corridors between the campus and the Preserve. Limit use of exotic trees to one third of the tree canopy in any campus area, and plant future trees in clusters to better resist hurricane force winds.

The Campus Greenbelt Parkway "ring road" should provide shade and access to amenities and pedestrian-oriented destinations. Continue to develop as a complete street multipurpose circulation corridor that defines the limits of the central academic core. This Parkway should be distinguishable from other internal vehicular streets by enhancing its aesthetic character through a well-defined landscape and hardscape palette. A minimum of 80 feet. from building face to building face should be reserved for the Parkway.

Policy 1.4.2
MODESTO A. MAIDIQUE CAMPUS – Campus GreenBelt – Main Street
Develop a more urban condition along the Campus GreenBelt in key student areas and within the Academic Health Center. This "main street" will be similar in character to that of other commercial streets adjacent to traditional universities set in an urban environment, such as Georgia Tech's Technology Square or MIT's University Park. A minimum of 80 feet. from building face to building face should be reserved for the Main Street.

Policy 1.4.3
MODESTO A. MAIDIQUE CAMPUS – Secondary Streets
There are several variations of secondary streets within the Modesto A. Maidique Campus. The type is determined by the adjacent building orientation, concentration of activity, and adjacent community context.

Typical – Varies in number of vehicular travel lanes but is primarily utilized as building service or parking access corridors. Sidewalks are separated from the travel lanes and enhanced with shade trees.

Urban – Located within the Academic Health Center and similar to a city streetscape, these streets vary in width but are pedestrian friendly with wide sidewalks, active ground floor building uses, shade trees, and street furniture evenly spaced and buildings engaging the streets. Urban streets are often the first impression of the campus for students, staff, and visitors.

Policy 1.4.4
MODESTO A. MAIDIQUE CAMPUS – Gateways
There are three primary gateways to the Modesto A. Maidique Campus, each strategically intersecting the Campus GreenBelt. These include the visually prominent 107th Avenue "East Gate" at 16th Street, adorned with columns, and the 8th Street "FIU Gate," which forms a formal entry forecourt serving as a significant pedestrian gateway that strengthens the campus' ties with Sweetwater.

Additionally, the western entrance from SW 117th Avenue should be upgraded to match the ceremonial grandeur of the other main entrances, which would involve widening the existing drive to accommodate a landscaped median, complete with a landscape zone and flanking sidewalks.

The secondary gateways, primarily linked to service access and parking structures, often provide the initial impression of the campus to many visitors, students, faculty, and staff. These entrances should also be enhanced to foster a welcoming and pedestrian-friendly atmosphere, incorporating wide sidewalks, canopy trees, and clear wayfinding elements to align with our strategic pillars of enhancing the FIU experience and fostering community engagement. Moreover, these improvements support our focus areas of environmental resilience and health by promoting accessible and green campus environments. The two new gateways constructed since 2014 will also be evaluated to ensure they meet these strategic and aesthetic standards.

Policy 1.4.5
MODESTO A. MAIDIQUE CAMPUS – Traffic Circle
Traffic circles allow for a sense of arrival to various districts within the campus as well as serving as a traffic-calming device. Too often, traffic circles are difficult for pedestrian crossings at high volume vehicular and/or pedestrian locations. Future traffic circles should be limited to significant vehicular intersections along the Campus GreenBelt.

Policy 1.4.6
ENGINEERING CENTER
Enhance the entrance from West Flagler Street with materials similar to Modesto A. Maidique Campus. Visually link the two campuses.

Policy 1.4.7
ENGINEERING CENTER
Provide better internal circulation. Develop an internal vehicular street that extends the main entrance from Flagler Street to the entry drive from SW 107th Avenue.

Policy 1.4.8
BISCAYNE BAY CAMPUS
Develop a secondary internal vehicular street connection between the academic campus to the north and the conference center to the southwest of the existing mangroves to increase campus connectivity. [Figure 11.3]

Objective 1.5
Define and enhance the Campus Edges to create a welcome and aesthetically pleasing interaction with the surrounding community through the appropriate placement of buildings, massing, and scale based on the existing or proposed character of the surrounding community. Provide an enhanced ground level character and access to existing or proposed transit while still clearly delineating the boundaries of the campus.

UNIVERSITY WIDE

Policy 1.5.0
Continue active dialogue with the planning staff of Miami-Dade County, City of Sweetwater, City of North Miami, and other entities within the context area to provide mutual review of urban design implications of future developments near the campus/ community interface.

Policy 1.5.1
Four types of Campus Edges have been identified throughout the three campuses. Variations of each are dependent on the connection to the surrounding context and the use of the spaces within the campus:

Active Major: An active major edge is similar to that of a downtown city streetscape with wide sidewalks, large canopy street trees, and building placement that engages the street with appropriate active ground floor façade articulation. While final building placement shall be specific to place, a comfortable distance between building and the curb is between 20 feet to 30 feet. The distance should remain relatively consistent in order to create a pedestrian friendly condition.

Active Minor: An active minor edge has few if any buildings adjacent to the boundary. The edge is delineated by open landscape that separates but maintains visibility and permeability, with buildings generally placed between 40 feet to 60 feet from the curb.

Passive Major: A passive major edge is similar to a traditional public park, generally a large open space with canopy trees, minimal hardscape and a clear understory of lawn or meadow. It has limited permeability, generally screening views into the campus.

Passive Minor: A passive minor edge clearly delineates the boundary between the public realm and the campus through the use of dense vegetation and site elements such as decorative walls and fencing. It enhances the visual perception of the University as well as providing a buffer element that screens maintenance yards or service areas from the adjacent properties.

Policy 1.5.2
MODESTO A. MAIDIQUE CAMPUS
SW 107th Avenue – North: Develop the edge along SW 107th Avenue from the 8th Street intersection to the north edge of Lake #4 as an active major edge. [Figure 3.1a]

Create a defined pedestrian path and campus edge with shade trees along the campus side of 107th Avenue and pedestrian street crossing improvements at SW 16th St.

Policy 1.5.3
SW 107th Avenue – South: Develop the edge along SW 107th Avenue at the Reagan House President's Garden from the north edge of Lake #4 to the SW 17th Street entry as an active minor edge.

Policy 1.5.4
The Future Transit Center on SW 112th at 8th Avenue will significantly increase traffic between 107th Avenue to the east and FIU Gate (the main entrance to campus at SW 112th Avenue), with completion of the new Engineering Phase 1 building, future pedestrian bridge and bus transit center on the north side of PG6. This edge of campus should be developed as an active major edge with pedestrian-oriented streetscape development as a way to improve connectivity between the campus and community.

Policy 1.5.5
The Future Transit Center on SW 112th at 8th Avenue will significantly increase traffic between 107th Avenue to the east and FIU Gate (the main entrance to campus at SW 112th Avenue), with completion of the new Engineering Phase 1 building, future pedestrian bridge, and bus transit center on the north side of PG6. This edge of campus should be developed as an active major edge with pedestrian-oriented streetscape development as a way to improve connectivity between the campus and community.

Policy 1.5.6
SW 117th Ave: Continue to develop the edge along SW 117th Avenue as a minor passive edge.

Policy 1.5.7
ENGINEERING CENTER
NW 107th Avenue: Develop the edge along NW 107th Avenue as an active major edge, with pedestrian-oriented streetscape at the future transit center and bus station across from the Engineering Center. In future development, pedestrian safety should be addressed at the intersection of W Flagler St and NW 107th Avenue due to the proximity of commercial business centers and services.

Policy 1.5.8
West Flagler Street: Develop the edge along West Flagler Street as an active major edge.

Policy 1.5.9
Women's Park: Continue to develop the edge along Women's Park as a passive major edge.

Policy 1.5.10
Continue to develop the north edge of the Engineering Center along the residential neighborhood as a minor passive edge.

Policy 1.5.11
BISCAYNE BAY CAMPUS
Develop an edge along Bay Vista Boulevard as a passive major edge.

Objective 1.6
Preserve and enhance Campus Landmarks throughout the university as branded, wayfinding and ceremonial elements on campus.

Policy 1.6.1
UNIVERSITY-WIDE
Strategically place public and environmental art throughout the campus to serve as significant landmarks within various campus spaces, enhancing the FIU experience by integrating art with our academic and community environments. These installations, serving as focal points within campus spaces, are guided by the Public Art Advisory Task Force and align with our strategic pillars of enhancing research, fostering mission-aligned engagement and partnerships, and supporting our focus areas of environmental resilience, health, and technology. This thoughtful placement of art not only beautifies the campus but also stimulates intellectual and cultural discourse, contributing to a vibrant and inspiring educational atmosphere.

Policy 1.6.2
MODESTO A. MAIDIQUE CAMPUS
Redevelop the Bridge at the Central Quad as a significant landmark element that represents the University. The Bridge has special symbolic meaning to the students, faculty, staff, and alumni of the campus. The stature of the Bridge should reflect that significance.

Objective 1.7
Enhance campus linkages to support vibrant campus life, aligning with our strategic goals to improve the FIU experience and research by creating more interconnected and accessible spaces for collaboration and engagement.

Policy 1.7.1
UNIVERSITY-WIDE
Create effective and continuous pedestrian and visual linkages with strong axial orientations. Enhance these linkages with canopy trees, building placement and articulation, varying landscape features, and strategically located art pieces.

Policy 1.7.2
Create a system of interconnected covered walkways, both architectural and landscape, where appropriate to link facilities. There are four types of covered walkways. [Figure 3.4]

Type A – Arcade: The covered walkway is integrated into the massing of the building.

Type B – Attached Architectural Walkway: The Covered walkway is attached to the building.

Type C – Detached Architectural Walkway: The covered walkway is a free standing architectural structure.

Type D – Landscape: Shade trees and/or palms provide concentrated shade. Funding will be allocated from building construction budget for the creation of covered walkways.

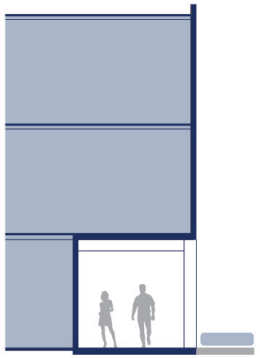


Figure 3.4 - Walkway Type A

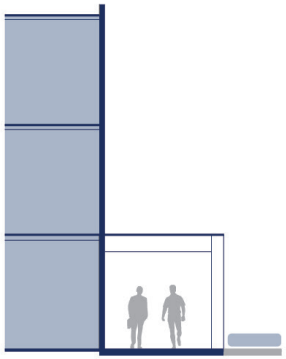


Figure 3.5 - Walkway Type B

Figure 3.6 - Walkway Type C

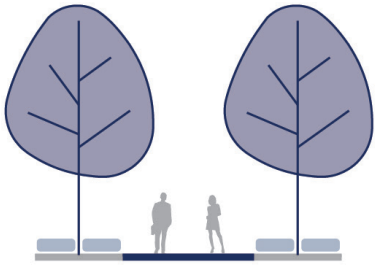


Figure 3.7 - Walkway Type D
Images: 2015 FIU Campus Master Plan

Policy 1.7.3
Continue to invest in the internal campus transit system.

Policy 1.7.4
Organize academic and support functions into compact neighborhoods to foster interdisciplinary collaboration and enhance the educational environment, supporting our strategic research goals.

Policy 1.7.5
MODESTO A. MAIDIQUE CAMPUS
Optimize campus parking to minimize pedestrian-vehicular conflicts and promote a pedestrian-friendly campus environment, reflecting our strategic focus on creating a safe and engaging campus experience.

Policy 1.7.6
Prioritize the improvement of the pedestrian elements of regulating axes to establish a hierarchy of pedestrian movement, wayfinding, and institutional significance on campus.

Policy 1.7.7
Prioritize the improvements of the pedestrian elements of the Campus GreenWay and GreenBelt to provide a consistency in function and appearance.

Policy 1.7.8
Enhance the pedestrian connection through the Preserve from the Recreation Center to the baseball and track stadiums to safely connect the central campus to the athletic areas of campus. Maintain the natural setting and appearance of the Preserve.

Policy 1.7.9
ENGINEERING CENTER
Strengthen all pedestrian connections to facilitate easy access to nearby commercial areas and transit options, enhancing the Engineering Center's role as a hub for technology and community interaction. This includes considering a signaled and tabled intersection for crossing NW 107th Avenue.

Policy 1.7.10
BISCAYNE BAY CAMPUS
Develop a new primary entry for the Biscayne Bay Campus with features that enhance the entry experience, integrating bicycle lanes and minimal parking interruptions to support our strategic emphasis on sustainability and a welcoming campus atmosphere.

Policy 1.7.11
Future drop-off for transit access adjacent to the Academic Health Center Two buildings to be studied with future development. Plan for improved transit access with amenities that enhance comfort and convenience, reflecting our strategic commitment to accessibility and user-centered design.

Policy 1.7.12
Reconfigure parking lots as needed for greater ease of travel while developing covered pedestrian corridors to the academic core of the campus.

Policy 1.7.13
Reconfigure the existing entry drive as a secondary access to the campus with enhanced landscaping, signage, and lighting to promote better wayfinding and a sense of arrival to the campus.

Policy 1.7.14
Improve the entry drive at the Kovens Conference Center with additional planting, lighting, and sidewalks.

Objective 1.8
Organize and place service and loading functions to avoid pedestrian conflicts and minimize visibility from the campus open space system.

UNIVERSITY WIDE
Policy 1.8.1
Cluster service and loading areas to minimize service drives and geographic dispersion of service functions.

Policy 1.8.2
Place service functions in areas screened from major open spaces, with minimum crossing of open spaces by service drives.

Policy 1.8.3
Screen service and loading areas with visual and acoustical structures or landscape enclosures that incorporate critical elements for crime prevention based on Environmental Design Principles.

Objective 1.9
Monitor conformance of future developments with the urban design guidelines referenced in this element in addition to Elements 15.0 Architectural Guidelines and 16.0 Landscape Guidelines.

UNIVERSITY WIDE
Policy 1.9.1

Review future development compliance with urban design criteria, integrated with the review of architectural and landscape design characteristics.

Objective 1.10
Develop the campus spatial environment in coordination with the development and phasing of future buildings and landscape improvements.

Policy 1.10.1
UNIVERSITY WIDE:
Timing and priorities for development of the spatial environment of the University shall reflect the timing and priorities for future buildings, landscape, and open space development.

Policy 1.10.2
"Landscaping improvements," as detailed in Section 16.1, are designed to create secure and environmentally sustainable campus settings that exhibit rich visual quality. These improvements will seamlessly integrate new development sites with existing mature landscapes, enhance and clearly define open spaces, and reinforce primary campus axes and entryways, contributing to the overall campus character. This approach supports our strategic pillars of enhancing the FIU experience, advancing research, and fostering mission-aligned engagement and partnerships. Additionally, these improvements align with our focus areas of environmental resilience, health, and technology, ensuring that our campus development promotes a holistic and sustainable environment for all community members.

Objective 1.11
Development of the campus spatial environment in coordination with the development and phasing of future buildings and landscape improvements.

UNIVERSITY-WIDE

Policy 1.11.1
Timing and priorities for development of the spatial environment of the University shall reflect the timing and priorities for future buildings, landscape and open space development.

Policy 1.11.2
"Landscaping improvements" as described in Section 16.1 shall create secure, environmentally sound campus settings of rich visual quality that seamlessly integrates new development sites with mature campus landscapes, enhance and define open spaces, refinforce primary campus axes and entryways, and establish a sense of campus character.

4.0

FUTURE LAND USE

4.0 FUTURE LAND USE

To accommodate future expansion needs and meet the challenge of shrinking land resources, strategic infill, renovation, and development are crucial to enhancing existing campus precincts while supporting the growth of our academic programs, student life, and outreach initiatives. This development strategy not only aligns with the urban context of our campuses but also conscientiously avoids competing interests with surrounding host communities. Importantly, it addresses key environmental challenges such as rising sea levels and storm surges, underscoring our commitment to environmental resilience, one of our strategic focus areas.

Multipurpose land-use approach maintains our tradition of urban campus development with mid to high-rise density, facilitating vertical zoning of uses and fostering robust university partnerships. This approach is in line with our strategic pillars, enhancing the FIU experience and promoting research and community engagement.

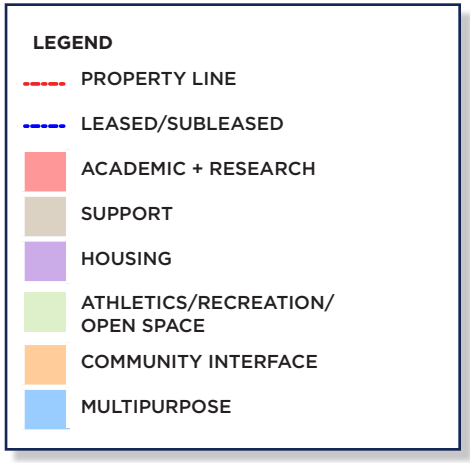
Moreover, ensuring that existing and proposed land use and development patterns within our campus boundaries are compatible and coordinated with plans by Miami-Dade County, the City of Sweetwater, and the City of North Miami reflects our dedication to community integration and sustainable urban planning.

Modesto A. Maidique Campus
At the Modesto A. Maidique Campus, our primary goal is to evolve into a more pedestrian-friendly, connected, and denser campus environment, as illustrated in [Figure 4.1]. Through strategic project planning, programming, and design, we aim to fund the construction of taller buildings for academic purposes, support facilities, and student housing. Optimizing the use of the campus core will facilitate closer proximity and collaboration between academic programs, fostering an environment rich in spontaneous encounters and discovery—key components of our strategic pillars of enhancing the FIU experience, fostering research, and enabling mission-aligned engagement.

We plan to redistribute surface parking to multi-story, multipurpose structures at the campus periphery, thereby reducing vehicular and pedestrian conflicts and creating a safer, more integrated campus core. This aligns with our strategic focus on environmental resilience and health by promoting a more sustainable and pedestrian-oriented campus layout.

Moreover, we encourage the integration of arboretum elements in all future developments to enhance our campus's ecological and aesthetic value, supporting our strategic focus on environment and technology. This coordination between plant materials and land use not only enhances our campus design but also strengthens FIU's identity and branding.

Compact development that promotes compatible adjacencies is prioritized to preserve and enhance open spaces and pedestrian corridors, ensuring efficient use of our limited undeveloped land. This approach supports our ongoing efforts to develop programs that promote joint use and partnerships, furthering our commitment to community engagement and interdisciplinary collaboration.



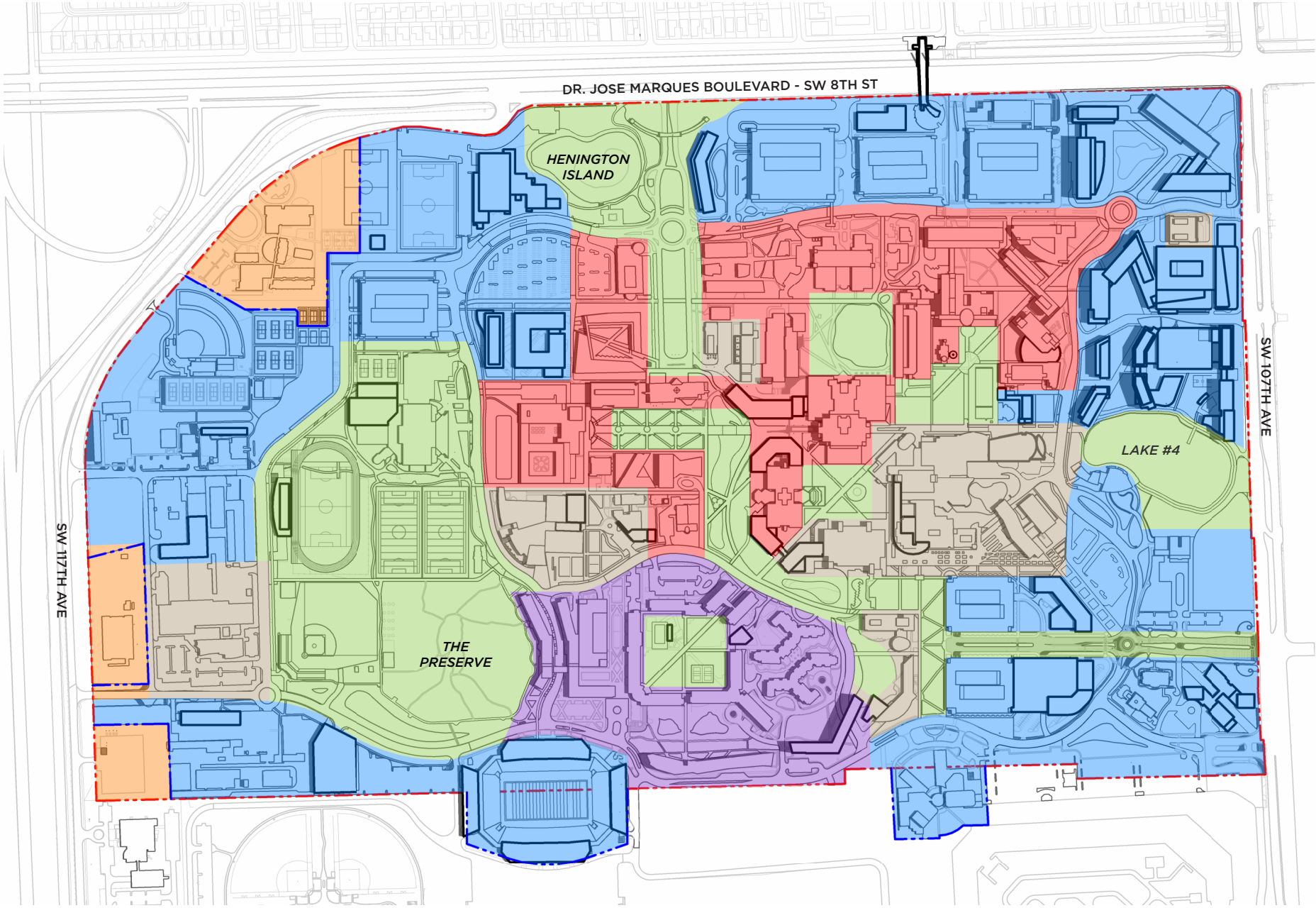


FIGURE 4.1a - MMC 2035 PLAN LAND USE ELEMENT

N

0 200 400 800 FT

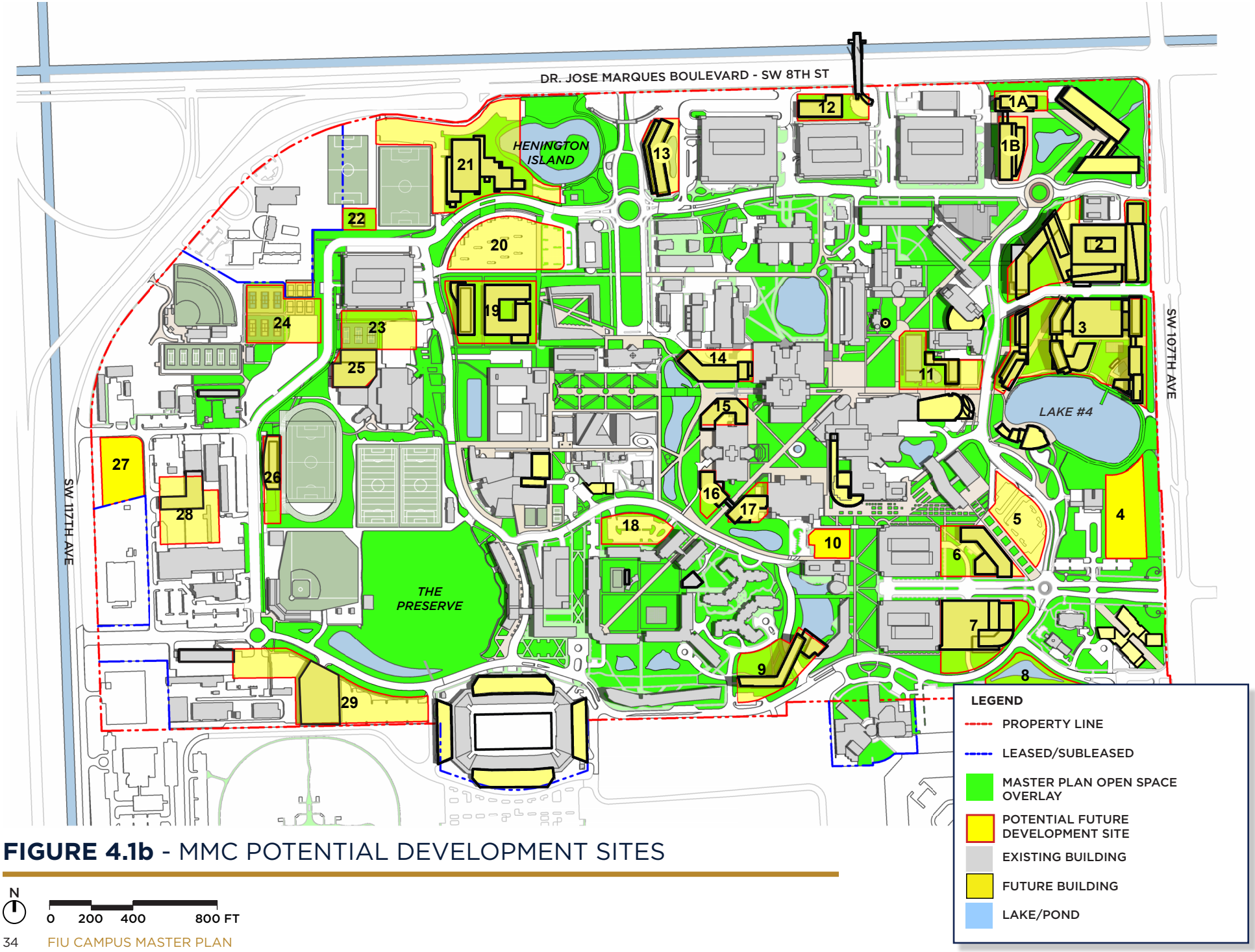


FIGURE 4.1b - MMC POTENTIAL DEVELOPMENT SITES

N

0 200 400 800 FT

SITE #	PARCEL AREA (SF)	ACRES	EXIST. PARKING
1A	17,543 SF	0.40	0
1B	32,926 SF	0.75	128
2	194,520 SF	4.41	220
3	263,766 SF	6.05	241
4	81,616 SF	1.87	0
5	65,129 SF	1.49	100
6	73,300 SF	1.68	95
7	112,718 SF	2.58	205
8	48,848 SF	1.12	0
9	82,705 SF	1.89	23
10	25,225 SF	0.57	0
11	35,098 SF	0.80	77
12	43,875 SF	1.00	0
13	53,705 SF	1.23	0
14	49,019 SF	1.12	15
15	24,925 SF	0.57	0
16	20,121 SF	0.46	0
17	25,337 SF	0.58	0
18	48,628 SF	1.11	77
19	117,582 SF	2.69	199
20	123,043 SF	2.82	386
21	226,678 SF	5.20	0
22	16,783 SF	0.38	0
23	56,113 SF	1.28	0
24	75,775 SF	1.91	239
25	35,957 SF	0.82	32
26	34,311 SF	0.78	59
27	61,857 SF	1.42	0
28	85,654 SF	1.96	125
29	166,505 SF	3.82	376
TOTAL	2,229,291 SF	51.18 acres	2,597 spaces

GOAL 1

Manage land use on the campuses of Florida International University to effectively support our academic mission, aligning with our strategic pillars of enhancing the FIU experience, advancing research, and fostering mission-aligned engagement and partnerships. This management strategy aims to conserve land for future needs, protect valuable natural resources, and coordinate with the land use policies of our host communities, directly supporting our focus areas of environmental resilience, health, and technology. Additionally, it addresses the challenges posed by global climate change and its regional impacts, ensuring that our campus development is sustainable and responsive to both environmental and community needs.

OBJECTIVES AND POLICIES

Objective 1.1
Protect Natural Resources:
Ensure that future campus development conserves valuable marine areas, wetlands, surface waters, and upland natural resources consistent with Federal, State, and Miami-Dade County regulations. Ensure that future campus development projects identified within historic and archeological resources, if any, are consistent with federal, state and local requirements.

Policy 1.1.1
Maintain information documenting key development limitations including but not limited to jurisdictional wetlands and habitats of threatened or endangered species.

Policy 1.1.2
Prior to a historic property being demolished or substantially altered in a way that adversely affects its character, form, integrity, or archaeological or historical value, the University should consult with the Department of State's Division of Historical Resources to avoid or mitigate any adverse impacts, or to undertake any appropriate archaeological salvage excavation or recovery action.

Objective 1.2
Maintain land use compatibility with the host communities: coordinate with Miami-Dade County, the City of Sweetwater, the City of North Miami, the City of Miami Beach and other entities within the context area to eliminate or minimize present land use conflicts, avoid future land use compatibility problems, and ensure that future construction is consistent with height limits established in respective comprehensive plans.

Policy 1.2.1
Monitor land use planning activity, development regulations, and proposed developments by Miami-Dade County, Sweetwater, the City of North Miami and other entities within the context area of Modesto A. Maidique and Biscayne Bay Campus.

Policy 1.2.2
Evaluate the impact of off-campus land use on all on-campus University development activity and document findings as part of the land management review process.

Policy 1.2.3
Evaluate the impact of on-campus land use on neighboring areas to minimize conflicts.

Policy 1.2.4
Evaluate the impact of on-campus building heights on neighboring land uses to minimize conflicts. Although the University is located on State of Florida land and is not required to comply with city regulations, FIU will adhere to city regulations to the greatest extent possible. The University will ensure that all future land uses and structure heights comply with all applicable Federal, State, and local aviation regulations.

Objective 1.3
Optimize land use and promote compatible adjacencies: Develop Modesto A. Maidique, Engineering Campus, and the Biscayne Bay Campus to ensure compatibility of academic, support and service functions.

Policy 1.3.1
MODESTO A. MAIDIQUE CAMPUS
As depicted in the future land use map, Figure 4.1, align land use with our 2030 Strategic Plan to:

- Focus partnership opportunities along 8th Street, enhancing development in Sweetwater and fostering community engagement as outlined in our strategic goals.
- Concentrate future academic and directly related support functions inside the loop road to reinforce the planned sequence of major and minor axes, quadrangles, and malls.
- Concentrate future academic health science, research, and clinical facilities in the northeast corner of the campus, adjacent to similar existing facilities.
- Concentrate the future replacement of University Apartments south of SW 11th Street and within E Campus Circle, Lake #4 and SW 107th Avenue. Locate additional housing to the south of campus adjacent to the the Stadium and Performing Arts Center.
- Redistribute surface parking within multipurpose garages at the campus perimeter to accommodate critical academic facility development within the campus loop road.
- Integrate future transit hubs into land use planning, working in partnership with Miami-Dade Transit, to expand access to public transportation.
- Expand student support facilities adjacent to Graham Center to create a student support core at the main entrance from 107th Avenue.
- Provide major support, service, and outdoor recreational activities along the west and southwest perimeter of the campus outside of the loop road.
- Develop the southern campus edge with programs that promote joint use and partnerships with the Miami-Dade Youth Fair and Exposition property and Tamiami Park.

Policy 1.3.2
ENGINEERING CENTER
As depicted in the future land use map, Figure 4.2, implement land use patterns that support our strategic focus on technology:

- Allocate space along SW 107th Avenue to establish a “public realm” with enhanced transit options, facilitating connectivity and supporting our commitment to sustainable transportation.
- Provide adequate open space along Flagler Street to create an identifiable “public realm” and connectivity to the adjacent Women’s Park.
- Create an identifiable pedestrian corridor from Flagler Street to interior facilities.
- Concentrate new facility construction in a manner that reinforces the pedestrian corridor.
- Maintain fenced open space around the Wall of Wind to protect adjacent facilities from damage.
- Maintain support facilities in the northwest corner of the property, screened from public view and under controlled access.

Policy 1.3.3
BISCAYNE BAY CAMPUS
As depicted on the Future Land Use Map, Figure 4.3, implement land use patterns that reinforce our strategic commitments to the environment/ environmental resilience and community engagement and partnerships:

- Position future facilities to bolster and safeguard key open spaces, aligning with our environmental objectives.
- Locate high density, multipurpose and partnership facilities to the south of the academic core.
- Locate low density, multipurpose and partnership facilities, such as RCCL and the Wildlife Center, to the north of the academic core.
- Maintain a waterfront park along Biscayne Bay, with unobstructed bay views where possible. Enhance with landscaping.
- Provide sports / recreation open space south of the MAST Academy.
- Provide all parking to the west of the academic core to eliminate pedestrian-vehicular conflicts.
- Maintain all support and service uses at the northwest corner of campus.
- Maintain conservation zones bordering Oleta State Park to the north, canals and plantings west of the Kovens Center, and wetlands / native plant habitats at the southwest corner of the campus.
- Any future installation of facilities, open space or infrastructure should avoid adverse impacts to the surrounding natural resources.

Policy 1.3.4
As part of the "land management review process," address unanticipated development requirements with siting criteria that align with our strategic goals of fostering interdisciplinary collaboration and supporting the academic mission of the university as laid out in the 2030 Strategic Plan.

- Confirm that all proposed developments within the academic core are directly related to the academic programs of the University and/or otherwise necessitate a central location. Seek alternative sites outside the academic core for facilities that do not meet this criterion.
- Confirm that all proposed developments outside the academic core meet land use plan guidelines and are directly supportive of the mission of the University. Seek alternative off-campus sites for facilities that do not meet this criterion.

Objective 1.4
Coordinate with topographical and soil conditions: Ensure that future development on Modesto A. Maidique and Biscayne Bay Campus is consistent with the limitations imposed by topographic and soil conditions.

Policy 1.4.1
Maintain information of existing topographic and soil conditions, updated with as-built and survey data developed for future construction projects.

Policy 1.4.2
Ground level uses of new development should be planned with sea level rise in mind. Uses that will suffer critical damage due to flooding should not be placed at ground level.

Policy 1.4.3
FIU should require that appropriate methods of controlling soil erosion and sedimentation to help minimize the destruction of soil resources be used during site development and use. Such methods shall include, but not be limited to:

- Phasing and limiting the removal of vegetation.
- Minimizing the amount of land area that is cleared.
- Limiting the amount of time bare land is exposed to rainfall.
- Use of temporary ground cover on cleared areas if construction is not imminent.
- Maintaining vegetative cover on areas of high soil erosion (e.g., banks of streams, steep or long slopes, conveyances, etc.).

Objective 1.5
Enhance coordination with off-campus utility and service providers to ensure robust and sustainable infrastructure that supports both current and future university needs.

Policy 1.5.1
FIU will actively engage with Miami-Dade County, the City of Sweetwater, the City of Miami Beach, and the City of North Miami to align development plans with community and environmental goals, promoting sustainable and beneficial outcomes for all stakeholders.

Objective 1.6
Strategically plan for long-term growth in research, engagement/partnerships, and student experience and campus expansion, ensuring that developments support our educational mission and strategic objectives.

Policy 1.6.1
FIU will continue to pursue an agreement with Miami-Dade County for joint use and development of student recreational and sports activities, parking, and other joint uses.

Objective 1.7

Minimize Off Campus Constraints/Context Area Conflicts:

Off-campus constraints should be identified and impacts of campus development should be anticipated and ameliorated.

Policy 1.7.1
FIU should monitor traffic and utility volumes and levels of service, in coordination with Miami-Dade County, the City of Sweetwater, the City of North Miami, other entities within the context area and applicable utility providers. By interlocal agreement with each entity, FIU should request to be notified of any planned or proposed improvement which may materially affect traffic or utility level of service in the context area. FIU should request to review and comment upon any off-campus development, which may create conflicts with campus development, prior to the issuance of development approvals or permits.

Objective 1.8
Promote compact, efficient, and environmentally sensitive land use planning that aligns with our strategic goals for sustainable development and efficient space utilization.

Policy 1.8.1
Optimize campus land use to achieve maximum density and intensity that support sustainable growth and strategic objectives while considering environmental and cost factors.

Policy 1.8.2
As part of the "land management review process", ensure adequate provision of stormwater management, open space, safe and convenient on-campus traffic flow, and emergency vehicle access.

Objective 1.9
Coordination of on-campus utility requirements: Ensure the adequate provision of long range infrastructure improvements are consistent with development of a climate action plan and the University-driven direction that all new facilities meet United States Green Building Council (USGBC) standards and target LEED Gold or equivalent as a minimum requirement.

Policy 1.9.1
As part of the land management review process, review and evaluate all construction projects to ensure adequate provisions for long range infrastructure needs by documenting:

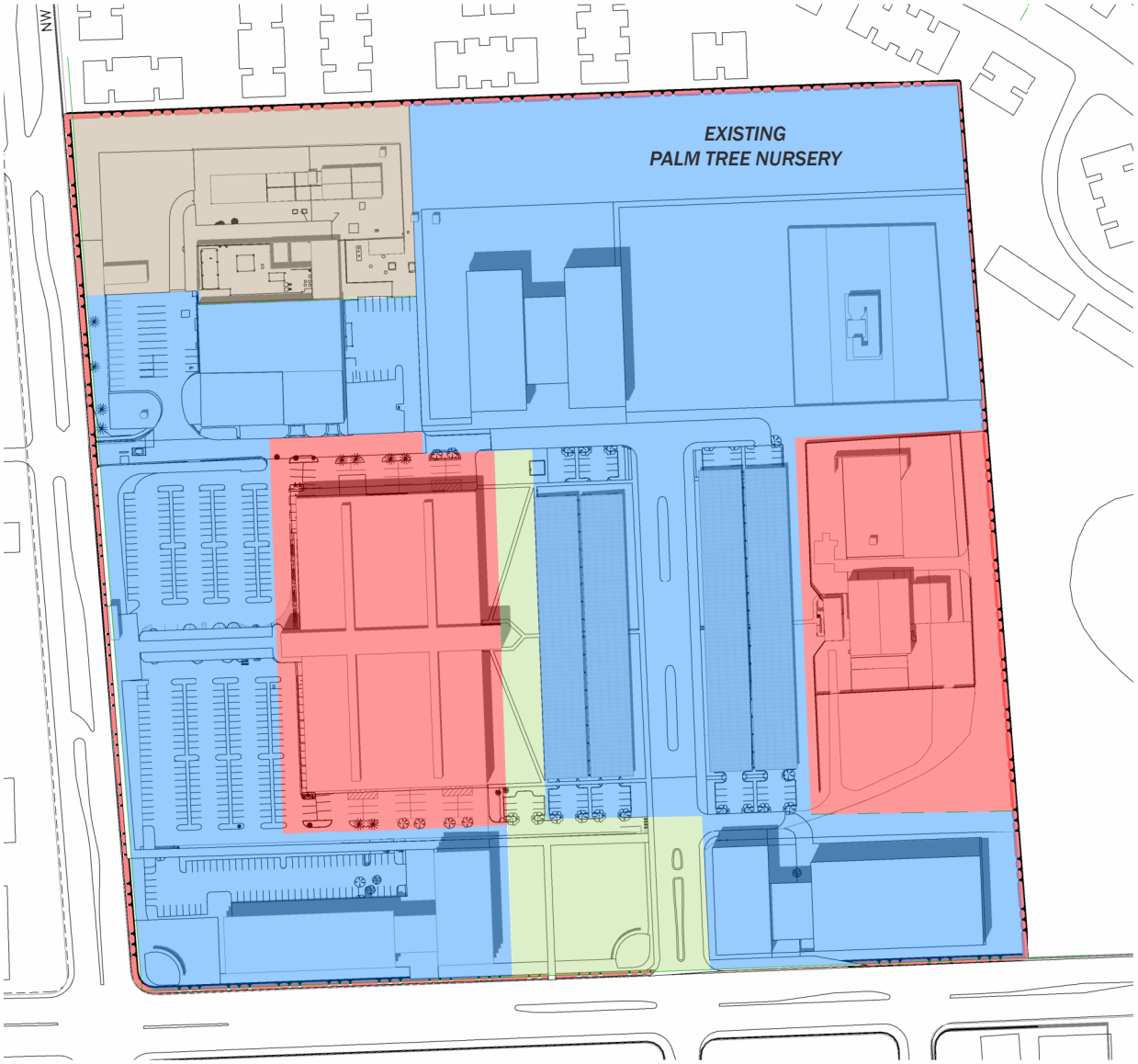
- Maintenance and protection of planned utility corridors, easements, and points of connection
- Provision of adequate utility capacities to accommodate future development and facility expansion

Policy 1.9.2
Maintain an up-to-date file of campus utility systems, updated with as-built survey data from future construction projects.

Policy 1.9.3
Specify in future Five Year Capital Improvement Plans infrastructure improvements and associated costs necessary to support long-range facility needs.

Policy 1.9.4
Encourage and assist the State University System and State Legislative funding procedures to ensure efficient and timely construction and expansion of utility improvements.

Policy 1.9.5
Install advanced instrumentation to monitor utility service levels, optimizing resource utilization in line with our strategic goals for research, sustainability and efficiency.



Engineering Center

The Engineering Center (EC) will continue to serve as a strategic site for expanding our leading academic and research programs in engineering and applied sciences, directly supporting our strategic pillar of Research Excellence. This center will also enhance our Mission-Aligned Engagement by fostering technology development and deepening industry partnerships. Located near diverse neighborhood uses, the EC is poised to evolve into a vibrant research park and innovation hub, aligning with our FIU Experience goals to create an interconnected academic and community environment.

Future development will echo the successful spatial organization found at Modesto A. Maidique Campus, emphasizing central open spaces designed for partnership-driven placemaking, effective branding, and passive outdoor use, thereby enhancing our campus as a living lab for sustainability and innovation.

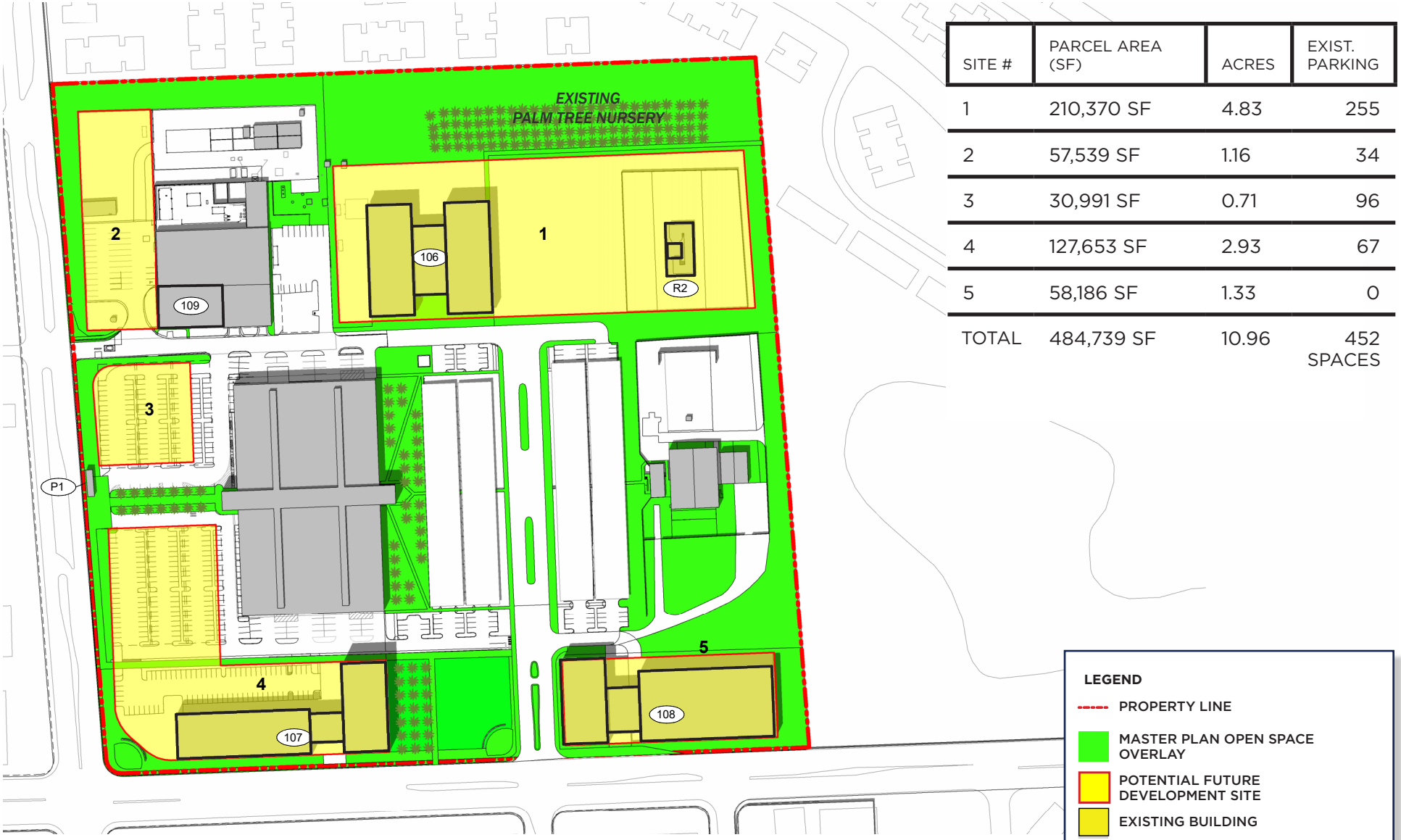
LEGEND

- PROPERTY LINE
- INSTRUCTION (FICM 100-200)
- CAMPUS FACILITY SUPPORT (FICM 700)
- ATHLETICS/RECREATION/ OPEN SPACE (FICM 500-600)
- MULTIPURPOSE

FIGURE 4.2a - EC 2035 PLAN LAND USE PLAN

N

0 100 300 FT



SITE #	PARCEL AREA (SF)	ACRES	EXIST. PARKING
1	210,370 SF	4.83	255
2	57,539 SF	1.16	34
3	30,991 SF	0.71	96
4	127,653 SF	2.93	67
5	58,186 SF	1.33	0
TOTAL	484,739 SF	10.96	452 SPACES

FIGURE 4.2a - EC POTENTIAL DEVELOPMENT SITES

N
0 100 300 FT

Policy 1.9.6
BISCAYNE BAY CAMPUS
Conduct a survey for all infrastructure, especially chilled water, to ascertain if it remains adequate for future FIU development. All partnership facilities will be developed with their own stand-alone MEP systems.

- Any future installation of facilities or infrastructure should avoid adverse impacts to natural resources.

Objective 1.10
Develop Consistent and Transparent Administration Procedures to Amend Master Plan: Ensure that master plan amendments undergo appropriate intergovernmental and public review appropriate to the degree of proposed plan modification.

Policy 1.10.1
All proposed "major" plan modifications which exceed the threshold contained in 1013.30 Florida Statues must be reviewed and approved in accordance with 1013.30155 Florida Statutes.

Policy 1.10.2
Plan amendments which alone, or in conjunction with other plan amendments, do not exceed the thresholds established in 1013.30 Florida Statues, should be submitted to the FIU Board of Trustees for review and approval. Prior to and as a part of minor plan modification requests the following review procedures should be followed.

- Florida International University should apply criteria for site location suitability.
- Florida International University should assess the impact of proposed plan modifications on surface waters, wetlands, upland natural resources, and historic resources.
- Florida International University should determine impacts upon utilities, campus pedestrian and vehicular circulation patterns and confirm the ability to meet land needs for planned academic and support structures.
- FIU is encouraged to include submerged vegetation in their planned assessment to determine adverse impacts of proposed plan modifications.

Policy 1.10.3
Proposed amendments to the adopted campus master plan which do not exceed the thresholds established in 1013.30, Florida Statues, and which have the effect of changing land use designations or classifications, or impacting off-campus facilities, services, or natural resources, should be submitted to the host and affected local governments for a courtesy review.

Biscayne Bay Campus

Development at Biscayne Bay Campus will focus on maximizing the unique bayfront location, in alignment with our strategic goals for enhancing community engagement and fostering environmental resilience as outlined in our 2030 Strategic Plan. This development will consolidate existing patterns to enhance integration with key FIU programs, particularly those fostering interdisciplinary research and industry partnerships. Facilities for partners will be strategically positioned along the west perimeter, fostering a vibrant hub for innovation and collaboration. The development will be compact, enhancing pedestrian connectivity to the campus core with shaded walkways and amenities, promoting an engaging and sustainable campus environment.

The southern edge of the campus, adjacent to the wetland restoration area, is designated for multifunctional development including workforce housing, academic buildings, and research facilities, supporting our commitment to ensure a blend of uses that benefit both our academic community and the environment.

All new developments will prioritize minimal impact on natural resources and preserve unobstructed bay views, integrating wetland restoration with research facilities and natural features like boardwalks and mangroves to create a living laboratory for environmental study and community interaction.

LEGEND

- PROPERTY LINE
- ACADEMIC + RESEARCH
- SUPPORT
- HOUSING
- ATHLETICS/RECREATION/ OPEN SPACE
- COMMUNITY INTERFACE
- MULTIPURPOSE

FIGURE 4.3a - BBC LAND USE PLAN

N

0 400 1,000 FT

SITE #	PARCEL AREA (SF)	ACRES	EXIST. PARKING
1	214,228 SF	4.92	57
2	101,270 SF	2.32	0
3	220,659 SF	5.07	328
4	93,138 SF	2.14	931
5	338,621 SF	7.77	231
6	124,271 SF	2.85	135
7	317,594 SF	7.29	129
8	548,144 SF	12.58	0
TOTAL	1,957,925 SF	44.98	1,811 SPACES

LEGEND

- PROPERTY LINE
- MASTER PLAN OPEN SPACE OVERLAY
- POTENTIAL FUTURE DEVELOPMENT SITE
- EXISTING BUILDING
- FUTURE BUILDING
- LAKE/POND

FIGURE 4.3b - BBC POTENTIAL DEVELOPMENT SITES

N

0 400 1,000 FT

5.0

ACADEMIC & RESEARCH FACILITIES

5.0 ACADEMIC & RESEARCH FACILITIES

Strategic expansion of academic and research facilities is essential to support FIU's academic mission, address the growing demands of innovative research, and overcome facility deficits, aligned with our strategic pillars of enhancing the FIU experience, advancing research, and fostering mission-aligned engagement and partnerships. To optimize departmental adjacencies, facilitate interdisciplinary research, and maximize space utilization while conserving our limited buildable land, our guidelines advocate for increased density within the 'academic core' and the establishment of flexible development zones. These strategies are designed to enhance departmental synergies and foster cross-disciplinary interactions across colleges, crucial for fostering our focus on environmental resilience, health, and technology. Future developments will aim to create and reinforce 'precincts' that cluster related programs within a compact academic core, enhancing our capability to deliver a superior educational and research environment.

Modesto A. Maidique Campus
Academic and research infill sites are located within close proximity to similar facilities that reinforce each other in use. The northeast corner of the campus is reserved for facilities that house laboratory, research, and clinical facilities. These future building sites form a "precinct" defined primarily by academic science and engineering facilities. Additional building sites, for primarily classroom use, surround the Avenue of the Professions. These support Social Science and Arts and Science expansion sites and strengthen the edge of the quadrangle anchored by the Rafael Diaz-Balart Hall on the west and the Green Library on the east.

Building sites for the Colleges of Business, Law, Education and other professional programs are located north of Rafael Diaz-Balart Hall. They reinforce the edge of a pedestrian corridor that runs parallel to the Avenue of the Professions, terminates at Owa Ehan, and extends the Main Street created by Parkview Housing Phases I and II.

GOAL

Provide academic and research facilities that support the university's strategic goals of fostering a top-tier educational experience, enhancing research excellence, and facilitating mission-aligned engagement. These facilities will be designed to meet the needs of our projected student enrollment and effectively address facility deficits by the end of the planning period, ensuring our infrastructure aligns with the aspirations of our 2030 strategic plan.

OBJECTIVES AND POLICIES

Objective 1.1
Timing and Phasing:

By 2035, FIU will initiate planning, programming, design, or construction of future academic and research facility development in the following increments by location:

	Existing GSF	Proposed New 2035	Total 2035 GSF
MMC	2,106,000	1,086,000	3,192,000
EC	290,000	8,530	298,530
BBC	375,000	130,000	505,000
Total	**2,771,000**	**1,224,530**	**3,995,530**

The table above includes classrooms, teaching labs, study areas, and research labs and accounts for new facilities and renovation and expansion of existing structures.

Based on projects included in the 2015-2035 Capital Improvement Plan.

Policy 1.1.1
Apply space use standards in Element 14.0 Capital Improvements in determining future academic building programs and in planning the adaptive reuse of existing facilities to ensure optimum utilization of academic facilities.

Policy 1.1.2
Define building and facility use priorities to directly support our strategic goals, emphasizing academic and research excellence as outlined in our 2030 strategic plan. Future development priorities, including academic and research facilities, will be guided by detailed needs assessments in alignment with the strategic objectives described in the Capital Improvements Element Table 14.1. This approach ensures that our physical infrastructure effectively supports our research, mission-aligned engagement and partnerships, as well as the FIU experience.

Policy 1.1.3

Eliminate facility deficits by modifying facility programming and funding request procedures as follows:

- Submit facility requests 3-4 years prior to projected need, rather than current need, to accommodate lag time in facility planning, funding, design and construction.
- When planning funds become available, architects prepare a detailed program and use programs to coincide with facility requests and real space needs.

Policy 1.1.4

Unanticipated academic facility development opportunities which are determined to be consistent with the academic mission and current/planned programs shall be accommodated in planned but unassigned future academic buildings.

To encourage more efficient development, all new academic and research facilities should be multi-disciplinary, a minimum of six stories, and adhere to a minimum square footage of approximately 100,000 gross square feet. The Campus Master Plan will be amended as

necessary to incorporate any new and unforeseen academic facilities.

Policy 1.1.5

Apply building design and construction criteria to encourage energy efficiency, including cost containment guidelines, active and passive solar design features, and life cycle (capital and operating) cost analysis.

Policy 1.1.6
Apply building design and construction criteria that supports the Research I status of the University, addressing fully all the special needs associated with research and scientific buildings.

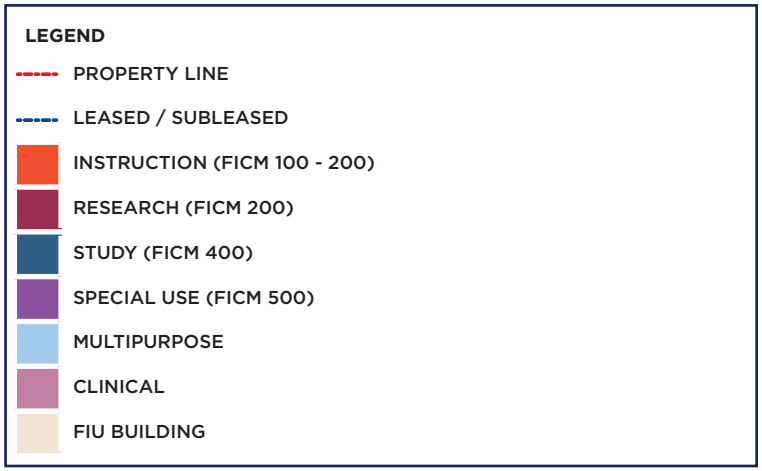
Planning modules, based on programmatic function, are incorporated into this Campus Master Plan to accommodate flexibility for future uses while maintaining an efficient building footprint. In addition to site-specific considerations, buildings should be oriented with their longest sides facing north-south to optimize solar control. The following building module widths are incorporated into the master plan:

	Building Module Width	Min. Floor-to-Floor Height
Housing	55 feet - 75 feet	10-12 feet
General Academic, Office	70 feet - 75 feet	14 feet
Research Laboratory, Healthcare	85 feet - 100 feet	16 feet
Athletics and Recreation (Indoor)	varies	25 feet

Proposed Academic Facility Expansion

ACADEMIC			FLOORS
05A	LIBRARY/STUDY EXPANSION	81,346 SF	5
35A	ACADEMIC 2	40,901 SF	2
35B	HONORS COLLEGE (DM ADDITION)	44,500 SF	2-3
37	ACADEMIC 1	31,200 SF	1
38A	PLANETARIUM	71,091 SF	6
48A	INNOVATION II	94,154 SF	4
59A	AHC INTERDISCIPLINARY 3	197,071 SF	9
59B	AHC INTERDISCIPLINARY 4	71,091 SF	6
62	AHC STUDY COMPLEX	50,054 SF	5
64	AHC/INTERDISCIPLINARY 1	195,631 SF	9
65	AHC/INTERDISCIPLINARY 2	71,091 SF	6
67	ACADEMIC 6	112,496 SF	4
68	ACADEMIC 7	73,382 SF	5
OPTIONAL MULTIPURPOSE			
74	ACADEMIC	138,600 SF	4
75	ACADEMIC	83,308 SF	4
76	ACADEMIC	93,963 SF	5

Project square footage and height are shown for preliminary planning purposes and should be confirmed with FIU.



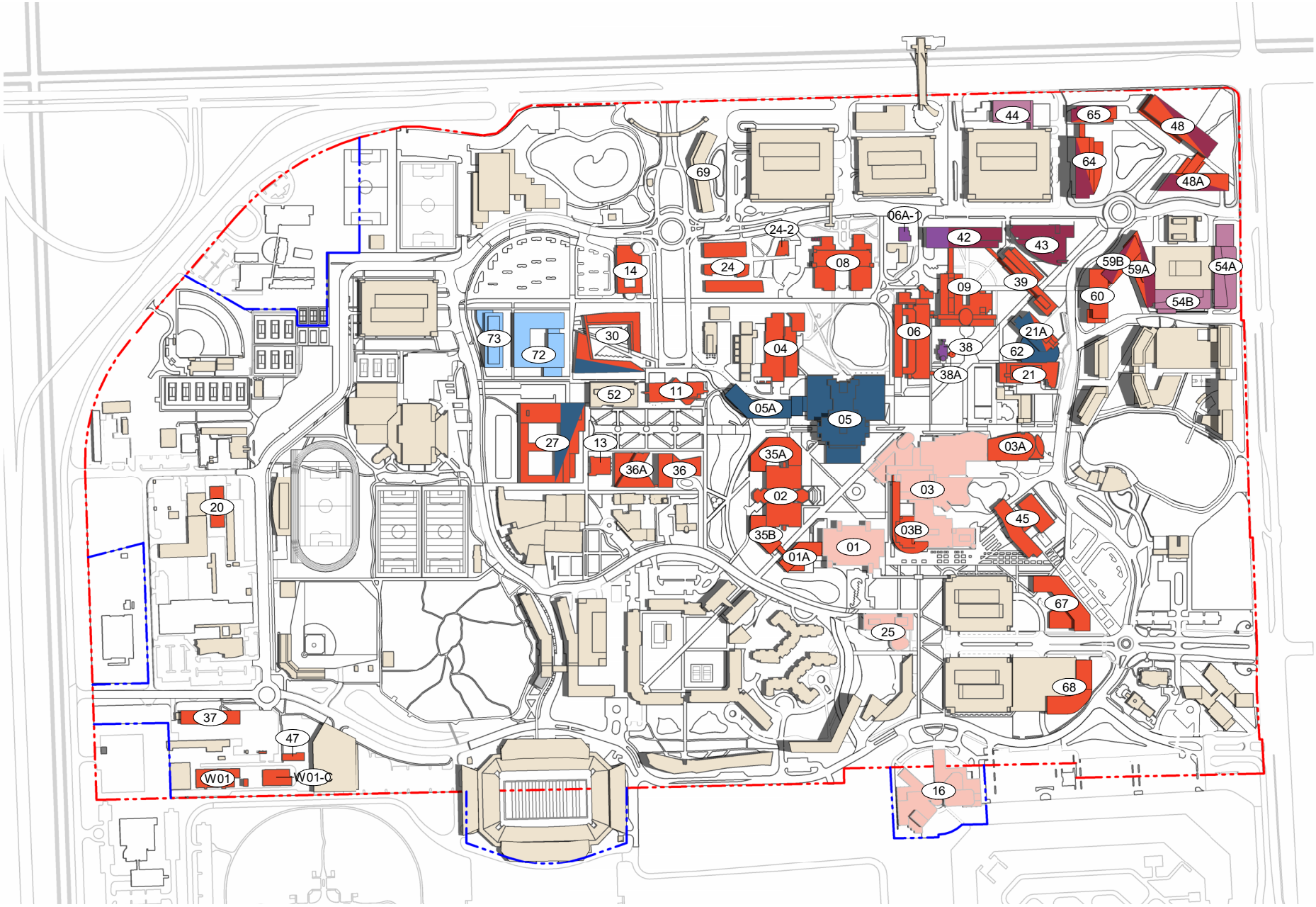


FIGURE 5.1 - MMC ACADEMIC & RESEARCH FACILITIES

N

0 200 400 800 FT

Note: Halftone color indicates the colored program comprises less than half of the building.

Objective 1.2

Strategically locate future academic and research facilities to reinforce college identities and cluster related programs within a compact 'academic core', aligning with our strategic goals to foster interdisciplinary collaboration and enhance the FIU Experience through integrated academic precincts.

Policy 1.2.1

Implement the four open space types (quad, courtyard, promenade, plaza) as outlined in Element 3.0 Urban Design, enhancing campus aesthetics and functionality to foster community engagement and provide identity to academic clusters, in line with our strategic pillars of creating a cohesive and interactive campus environment.

MODESTO A. MAIDIQUE CAMPUS
Academic and research infill sites, strategically positioned within close proximity to enhance interdisciplinary collaboration, are key to achieving our strategic goal of fostering a vibrant research community as outlined in the Research Excellence pillar. [Figure 5.1 – MMC Academic & Research Facilities]

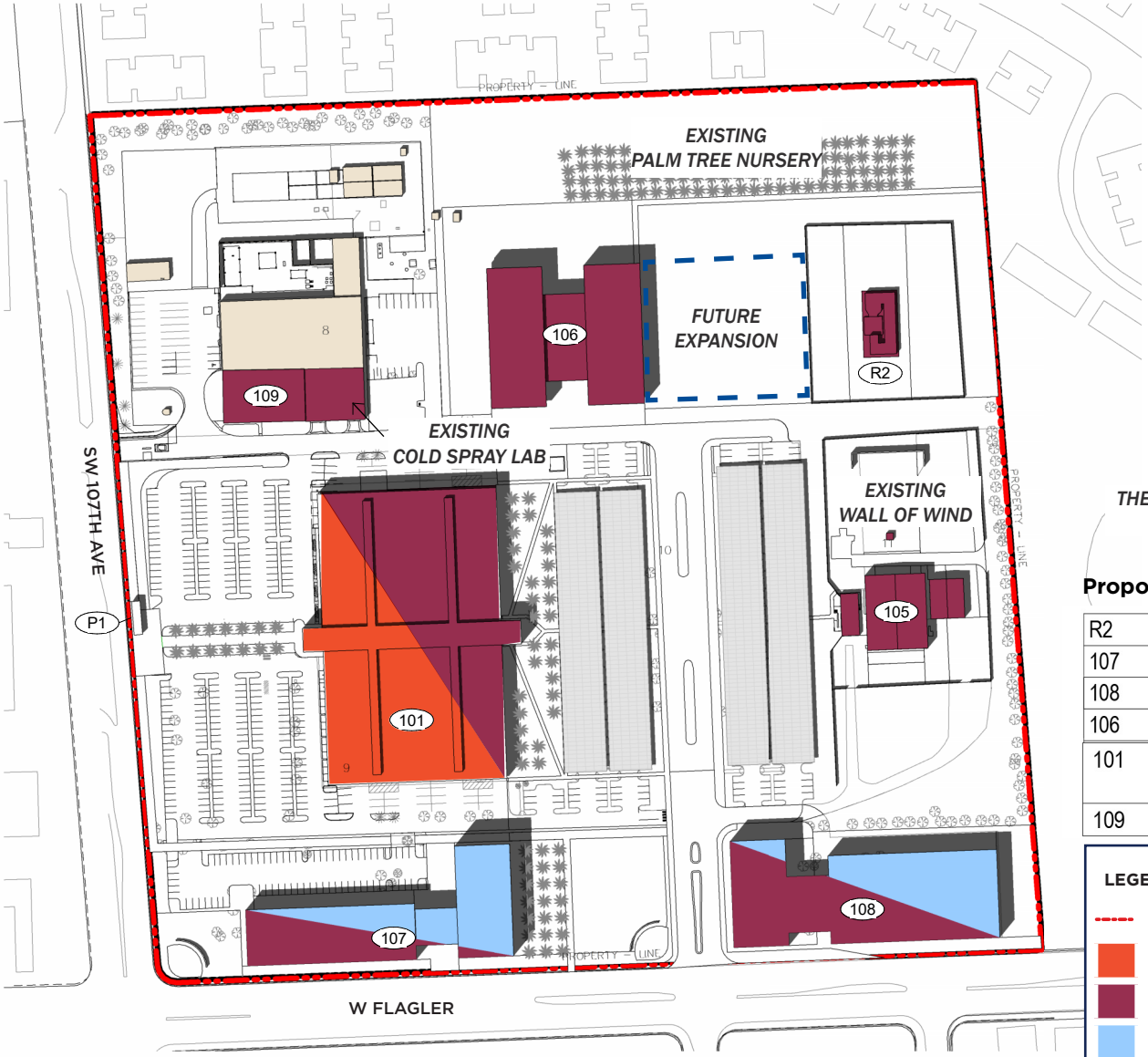
The northeast corner of campus, designated for laboratory, research, and clinical facilities, will develop into a hub of innovation and research, forming an academic neighborhood that supports our strategic emphasis on science and engineering.

Surrounding the Avenue of the Professions, additional sites primarily for classrooms support the Social Sciences and Arts, aligning with our goal to create a dynamic FIU Experience. The construction of Engineering 1 marks the beginning of an academic sciences complex, further supported by Engineering 2, enhancing our research capabilities and academic offerings.

North of Rafael Diaz-Balart Hall, building sites for the Colleges of Business, Law, Education, and other professional programs bolster our mission-aligned engagement by reinforcing the pedestrian corridor that connects various academic disciplines, fostering community interaction and accessibility, and extending to the Main Street created by Parkview Housing Phases I and II.

ENGINEERING CENTER
A future academic and research facility is located adjacent to the existing building, defining a central quadrangle. [Figure 5.2A and Figure 5.2B]

BISCAYNE BAY CAMPUS
Two future laboratory/research facilities, strategically planned to the south of Academic Two, will enhance our research capabilities in alignment with our strategic goal of research excellence. Coordinated with the existing Marine Biology building, these facilities will not only expand our capacity for cutting-edge research but also foster an integrative learning environment. The development will encircle an academic quadrangle, centralizing around the existing pond, which is designed to promote an interconnected academic and research community, reflecting our commitment to the FIU experience and mission-aligned engagement. [Figure 5.3A and Figure 5.3B]



Engineering Center

Planning for the 10-year projected Academic and Research space need is accommodated at MMC. With no programs anticipated to relocate to EC, this plan envisions EC as a research park with purpose-built facilities. A high-bay research facility should be sited at the north end of the central greenspace with adequate space that can function as a buffer from noise at the Wall of Wind expansion.

Proposed Academic Facility Expansion

R2	WALL OF WIND EXPANSION		1
107	MULTIPURPOSE	TBD	5
108	MULTIPURPOSE	TBD	3
106	HIGH-BAY RESEARCH	TBD	3
101	ENGINEERING CENTER RENOVATION & INFILL	TBD	1 (EXIST.)
109	COLD SPRAY LAB	8,530 SF	1

LEGEND

- PROPERTY LINE
- INSTRUCTION (FICM 100 - 200)
- RESEARCH (FICM 200)
- MULTIPURPOSE
- FIU BUILDING

FIGURE 5.2 - EC ACADEMIC & RESEARCH FACILITIES

N

0 100 300 FT

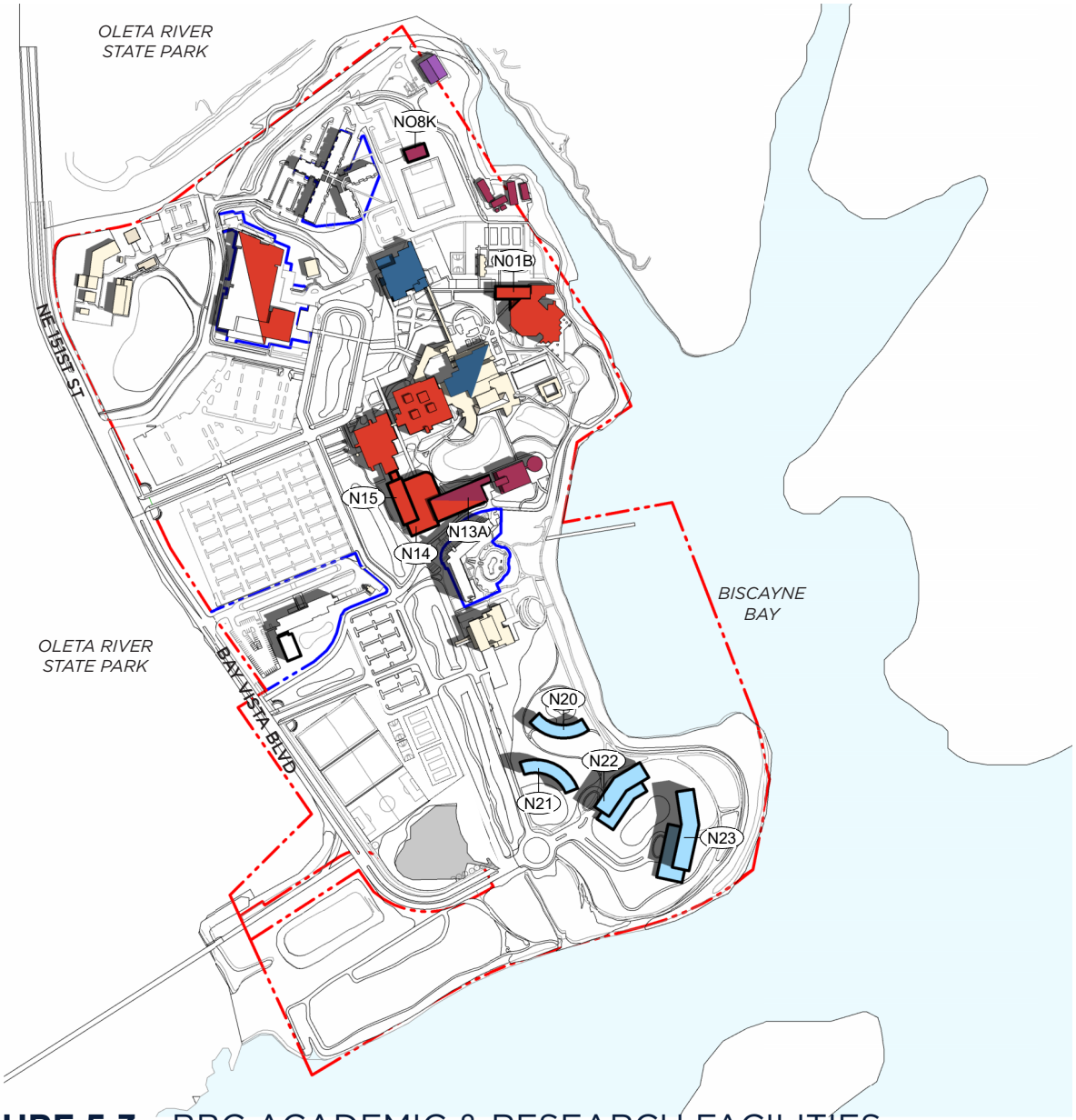


FIGURE 5.3 - BBC ACADEMIC & RESEARCH FACILITIES

Biscayne Bay Campus

As part of our strategic planning for 2030, anticipated facility expansions include further development for the Hospitality Management program and an expansion for the School of Environment, Arts and Society (SEAS), which are integral to our mission of fostering a robust academic and research environment. The SEAS expansion aims to complete a central quad that is encircled by the Wolfe University Center, Academic One, Two, and the Marine Sciences Building, embodying our commitment to creating interconnected academic spaces that enhance both environmental and societal research. Furthermore, this expansion is designed to enhance the central north-south pedestrian spine, reinforcing our goal of mission-aligned engagement by making the campus more accessible and integrated, thus defining its eastern edge and promoting a cohesive experience.

Proposed Academic Facility Expansion

			FLOORS
N01B	GRADUATE HOSPITALITY	32,000 SF	3
N13A	SEAS EXPANSION	42,000 SF	3
N14	ENVIRONMENTAL COMMUNICATIONS	34,000 SF	2
N15	MEDIA INNOVATION CENTER	22,000 SF	3
N20	MULTIPURPOSE A	TBD	4
N21	MULTIPURPOSE B	TBD	5
N22	MULTIPURPOSE C	TBD	4
N23	MULTIPURPOSE D	TBD	4
NO8K	NIST	6,000 SF	2

LEGEND

- PROPERTY LINE
- INSTRUCTION (FICM 100 - 200)
- RESEARCH (FICM 200)
- STUDY (FICM 400)
- SPECIAL USE (FICM 500)
- MULTIPURPOSE
- FIU BUILDING

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6.0

SUPPORT FACILITIES

6.0 SUPPORT FACILITIES

The ongoing need for academic and non-academic spaces, a result of FIU's rapid expansion over the last two decades, underscores our strategic commitment to enhancing the FIU experience through improved campus support facilities. Primarily, these needs manifest in additional office spaces integrated within our academic buildings, supporting our research and teaching missions. Funding strategies at the SUS level will remain crucial for achieving FIU's strategic objectives, ensuring the continued development of on-campus support facilities [Figure 6.1: Modesto A. Maidique Campus, Figure 6.2: Engineering Center, and Figure 6.3: Biscayne Bay Campus for locations of support facilities].

Furthermore, with the constraints of limited land at Modesto A. Maidique Campus, we are planning to develop a new Athletic and Recreation Master Plan in collaboration with Miami/Dade County, reflecting our strategic pillar of mission-aligned engagement. This plan will be rigorously evaluated to align with our broader goals of creating a vibrant, active community that supports both academic achievements and physical well-being. FIU's commitment to ongoing strategic planning ensures continuous alignment with our goals, addressing the evolving needs for support facilities at all our campuses.

Project square footage and height are shown for preliminary planning purposes and should be confirmed with FIU.

Modesto A. Maidique Campus
Future maintenance and facility operations functions should be concentrated on the western edge of campus, with additional physical plant support spaces located in all new parking garages. General use and student auxiliary support space should be located adjacent to the Graham Center. Throughout campus, student support services should be integrated within all new student housing development by designating the first floor of each building as multi-purpose space. Retail dining hubs with study space hubs should be incorporated into new and existing academic buildings in accordance with the FIU auxiliary services business plan to create profitable and consistent nodes of service.

Proposed Support Facility Expansion

PARTNERSHIP			FLOORS
51	HOTEL/CONFERENCE	TBD	4

STUDENT LIFE/GENERAL USE			FLOORS
01A	CENTRAL HUB (PRIMERA CASA ADDITION)	TBD	3
03A	GRAHAM CENTER ADDITION	102,272 SF	1
03B	GRAHAM CENTER ADDITION	36,200 SF	1
12A	STUDENT HEALTH EXPANSION	9,525 SF	1
17A	CHILDREN'S CREATIVE LEARNING CENTER	TBD	1
29A	MUSEUM EXPANSION	TBD	6
49	CASACUBA	4,885 SF	2
70	HOUSING DINING FACILITY	10,064	1

SUPPORT			FLOORS
61	FACILITIES 1	44,358 SF	2

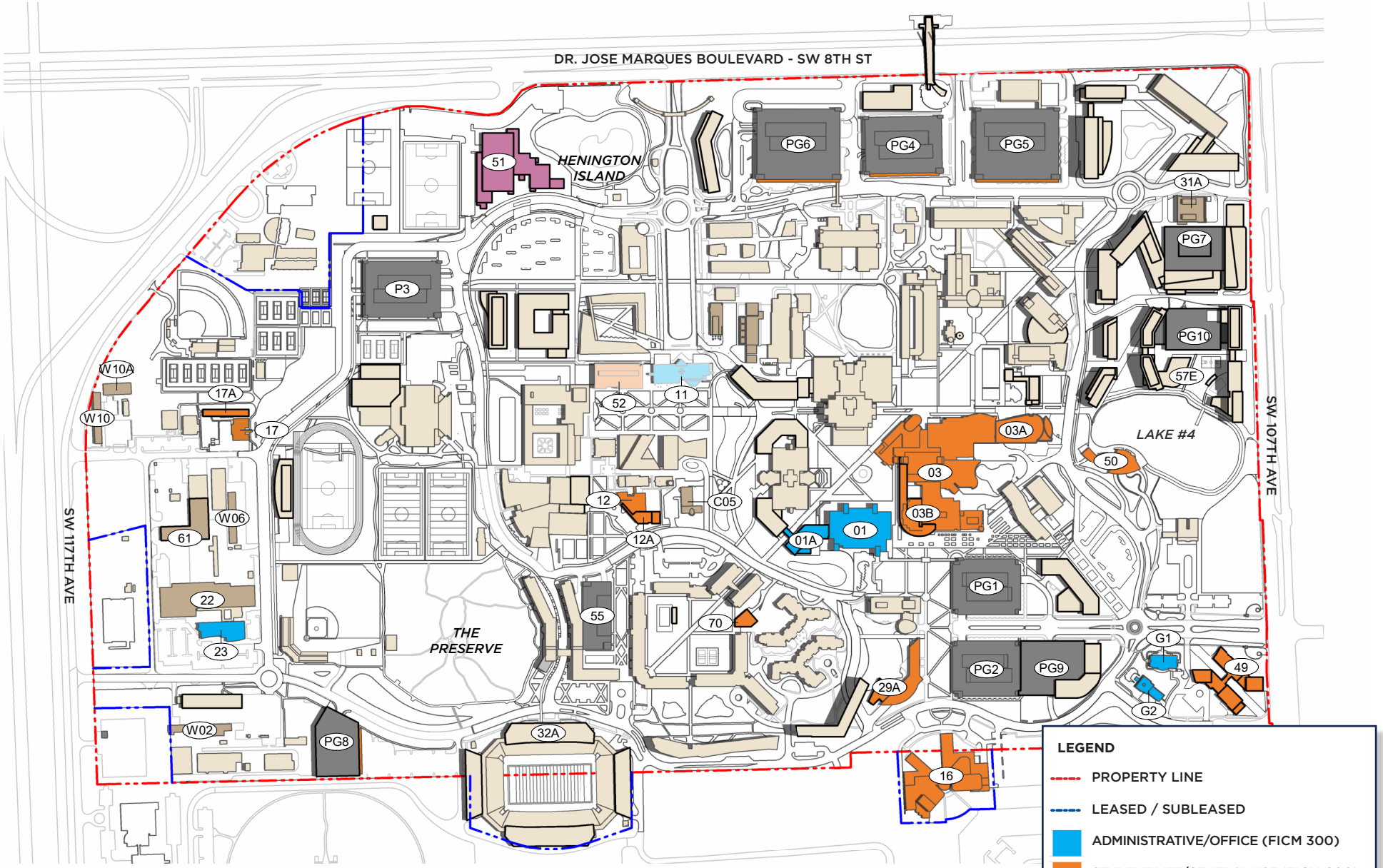
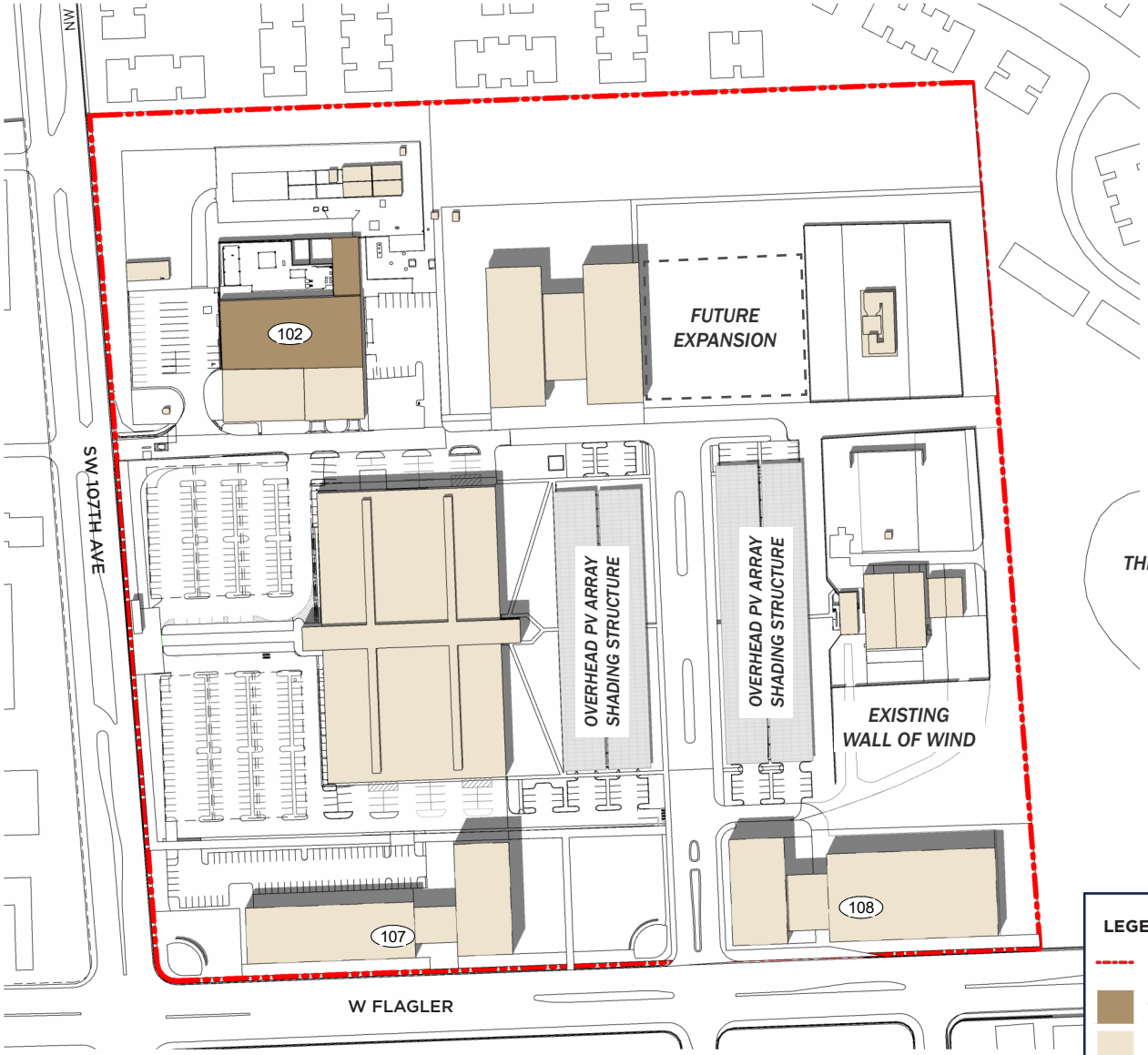


FIGURE 6.1 - MMC 2035 PLAN SUPPORT FACILITIES

N

0 200 400 800 FT

DLR GROUP



Engineering Center

The Engineering Center should maintain campus support and maintenance functions in the northwest portion of the campus.

LEGEND

- PROPERTY LINE
- CAMPUS FACILITY SUPPORT (FICM 700)
- FIU BUILDING

FIGURE 6.2 - EC 2035 PLAN SUPPORT FACILITIES

N

0 100 300 FT

Biscayne Bay Campus

Support space should be incorporated into the first floor of new facilities, similar to the Modesto A. Maidique Campus. This also supports a strategic response to resiliency requirements in a coastal location. Flexible, informal office and meeting space is the most appropriate facility investment on sites that are subject to storm surges and sea-level rise. Existing physical plant facilities should be expanded to serve projected campus growth and provide adequate chilled water for FIU facilities. Campus facility support should continue to be located in the northwest corner of campus.

Proposed Support Facility Expansion

			FLOORS
S05	FACILITIES SUPPORT	11,000 SF	1

LEGEND

- PROPERTY LINE
- ADMINISTRATIVE/OFFICE (FICM 300)
- STUDENT LIFE (FICM 600)
- FACILITIES/CAMPUS SUPPORT (FICM 700)
- CLINIC (FICM 800)
- FIU BUILDING

FIGURE 6.3 - BBC 2035 PLAN SUPPORT FACILITIES

N

0 400 1,000 FT

GOAL

Provide support facilities necessary to correct present deficits and satisfy existing unmet needs of enrollment through the planning period, aligning with our strategic goals to enhance the FIU experience and support our research and engagement initiatives.

OBJECTIVES AND POLICIES

Objective 1.1
Identify critical facility needs and required locations:

Strategically develop future support facilities, including office, administrative, and maintenance services, that align with the 2035 Strategic Plan. These facilities will be phased and located to correct prioritized deficiencies and meet projected needs, thereby enhancing our capacity to deliver a top-tier FIU experience, foster research, and facilitate mission-aligned engagement and partnerships.

Policy 1.1.1
MODESTO A. MAIDIQUE CAMPUS

Concentrate maintenance and facility operations functions on the western edge of campus. Locate additional physical plant support spaces in all new parking garages.

Policy 1.1.2

Locate general use/campus support space adjacent to Graham Center.

Policy 1.1.3

Locate general use/campus support space adjacent to Graham Center.

Policy 1.1.4

Integrate student support services within student housing and all new facility development by designating the first floor of each building as multi-purpose space.

Policy 1.1.5

Incorporate retail dining hubs with study space hubs at new and existing academic buildings in accordance with the FIU auxiliary services business plan to create profitable and consistent nodes of service.

Policy 1.1.6
ENGINEERING CENTER

Maintain campus support and maintenance functions in the northwest portion of the campus.

Policy 1.1.7
BISCAYNE BAY CAMPUS

Maintain campus support and maintenance functions in the northwest quadrant of the campus.

Policy 1.1.8

Incorporate retail dining hubs with study space hubs at new and existing academic buildings in accordance with the FIU auxiliary services business plan to create profitable and consistent nodes of service.

Policy 1.1.9

Provide multi-purpose support spaces within all new facilities, reserving the first floor for flexible office, study and meeting space as well as student oriented retail.

Objective 1.2

Integrate Phasing and Funding:

Develop support facilities to reflect prioritized needs. Take advantage of partnerships and non-traditional opportunities to secure funding necessary to address projected needs.

Policy 1.2.1

Integrate Phasing and Funding:

Develop support facilities to reflect prioritized needs. Take advantage of partnerships and non-traditional opportunities to secure funding necessary to address projected needs.

	Existing Support Space GSF (Fall 2019)	2035 Space Need	Total GSF
MMC	1,301,000	375,000	1,676,000
EC	36,000	11,000	36,000
BBC	638,000	36,000	649,000
TOTAL	1,975,000	386,000	2,361,000

Includes food service, student lounge, merchandising, athletics, recreation and health care. Based on 2015-2035 CIP (see 14.0 Capital Improvements).

Policy 1.2.2

Accommodate support facility development opportunities that are aligned with our strategic goals, as outlined in the 2030 strategic plan, ensuring consistency with the academic mission and integration with current and planned programs in:

- Planned but unassigned future support buildings
- Building sites designated in the Future Land Use Plan (Figure 4.1)

Amend the Campus Master Plan as necessary to incorporate any new and unforeseen support facilities, ensuring they support our commitment to enhancing the FIU experience, fostering research excellence, and expanding mission-aligned engagement.

Objective 1.3

Funding:
Secure funding necessary to develop support facilities projected to be needed through the planning period.

Policy 1.3.1

Supplement normal CIP funding requests with resources, which may be available from pursuing joint development agreements with Miami- Dade County Parks and Recreation Department, and the Miami- Dade County Fair and Exposition.

7.0

HOUSING

7.0 HOUSING

As FIU matures in its stature as a leading educational institution, the need for appropriate and affordable on-campus housing continues to grow. On-campus housing must adapt to both changing student needs and preferences, as well as the proximity of new off-campus, developer-provided housing that targets FIU faculty, staff and students. FIU is committed to providing a variety of housing types and styles to support student success and the amenities that a 24/7 resident population brings to all students (both commuting and virtual).

To promote housing availability and supply, FIU will actively plan with local community and development partners for the availability of an adequate supply of affordable housing units and support facilities both on-campus and off-campus Furthermore, FIU will provide a variety of high quality alternatives to traditional dormitories to reflect user preferences and particular student classifications such as honors students, graduate students, international students, researchers, married students and members of sororities and fraternities.

Housing facilities at FIU should promote sustainable site standards, living learning communities, and walkability, aligning with our strategic goals to enhance the FIU experience through fostering engaging and sustainable campus environments. New facility designs will be multi-purpose and multi-story, incorporating essential student support services and parking facilities to support our mission of creating a cohesive, integrated campus community. The completion of Parkview Housing serves as a model, demonstrating how new facilities can be designed to achieve this level of strategic integration and operational flexibility, furthering our commitments to research, engagement, and the overall student experience.

Modesto A. Maidique Campus

Student housing is located in east campus and south central campus. Future housing is proposed to increase in height, to promote increased density and open space. It should be located consistent with the housing business plan, providing 2,000 new beds for undergraduate students (including the Honors College) and replacing the University Apartments with facilities to house this new capacity. The recently constructed promenade adjacent to Tamiami Hall will be extended east to connect with PG1 & PG2 via the proposed bridge over Lake #6 terminating between MARC and the Frost Museum. The Honors College Residence Hall should be explored with a stand-alone presence on campus, with potential to increase recruitment and retention of students.

Proposed Facility Expansion

HOUSING			FLOORS	
57A	EAST RESIDENCE HALL A	91,944 SF	12	~228 BEDS[1]
57B	EAST RESIDENCE HALL B	115,604 SF	12	~235 BEDS
57C	EAST RESIDENCE HALL C	146,984 SF	16	~328 BEDS
57D	EAST RESIDENCE HALL D	136,348 SF	12	~305 BEDS
58A	EAST RESIDENCE HALL E	147,300 SF	12	~330 BEDS
58B	EAST RESIDENCE HALL E	273,046 SF	16	~574 BEDS
63	TAMIAMI HALL II	TBD	TBD	~ 816 BEDS
69	WORKFORCE HOUSING	110,216 SF	4	150 UNITS

[1] Project square footage and height are shown for preliminary planning purposes and should be confirmed with FIU.

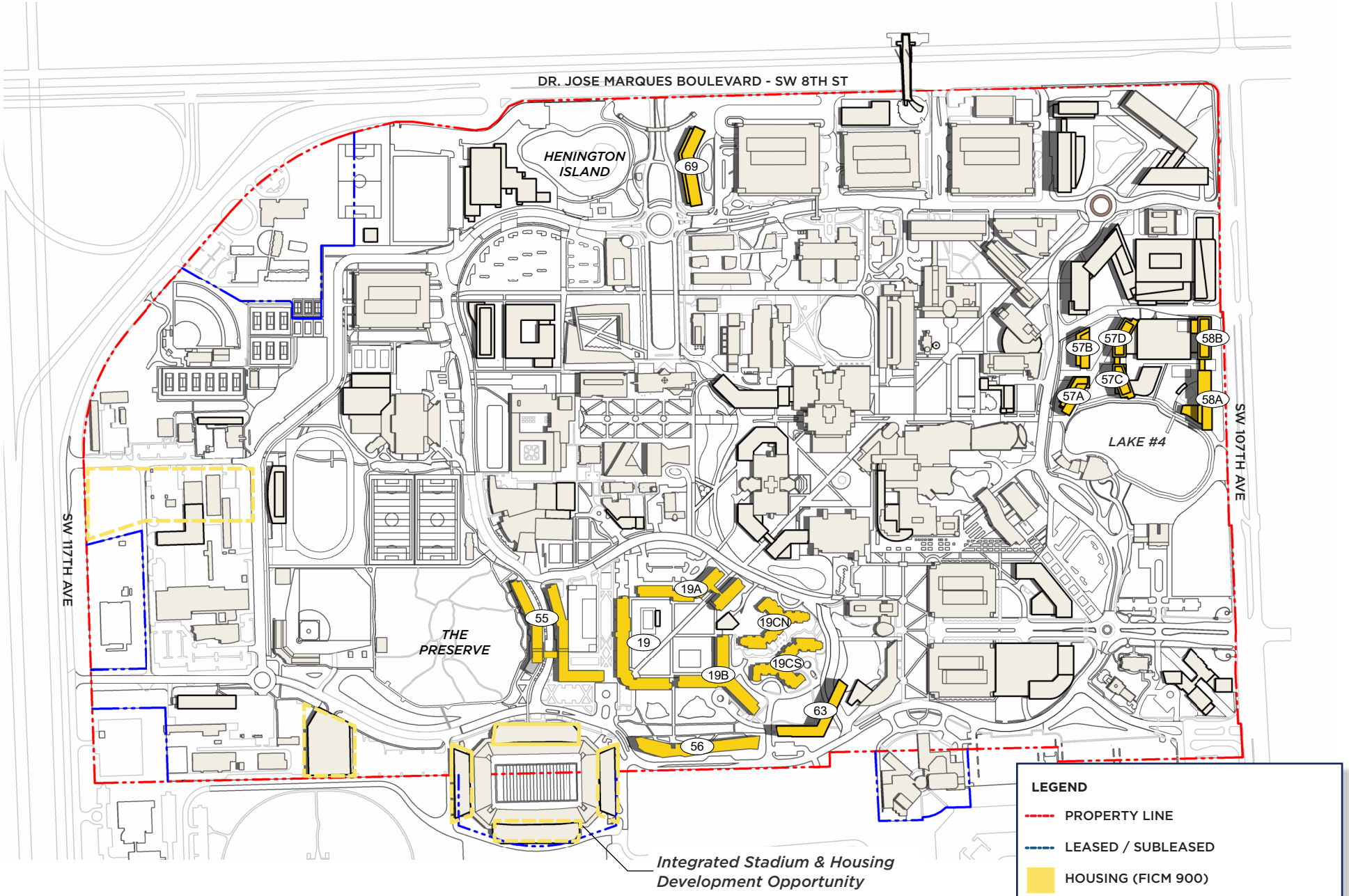


FIGURE 7.1 - MMC 2035 PLAN - HOUSING FACILITIES

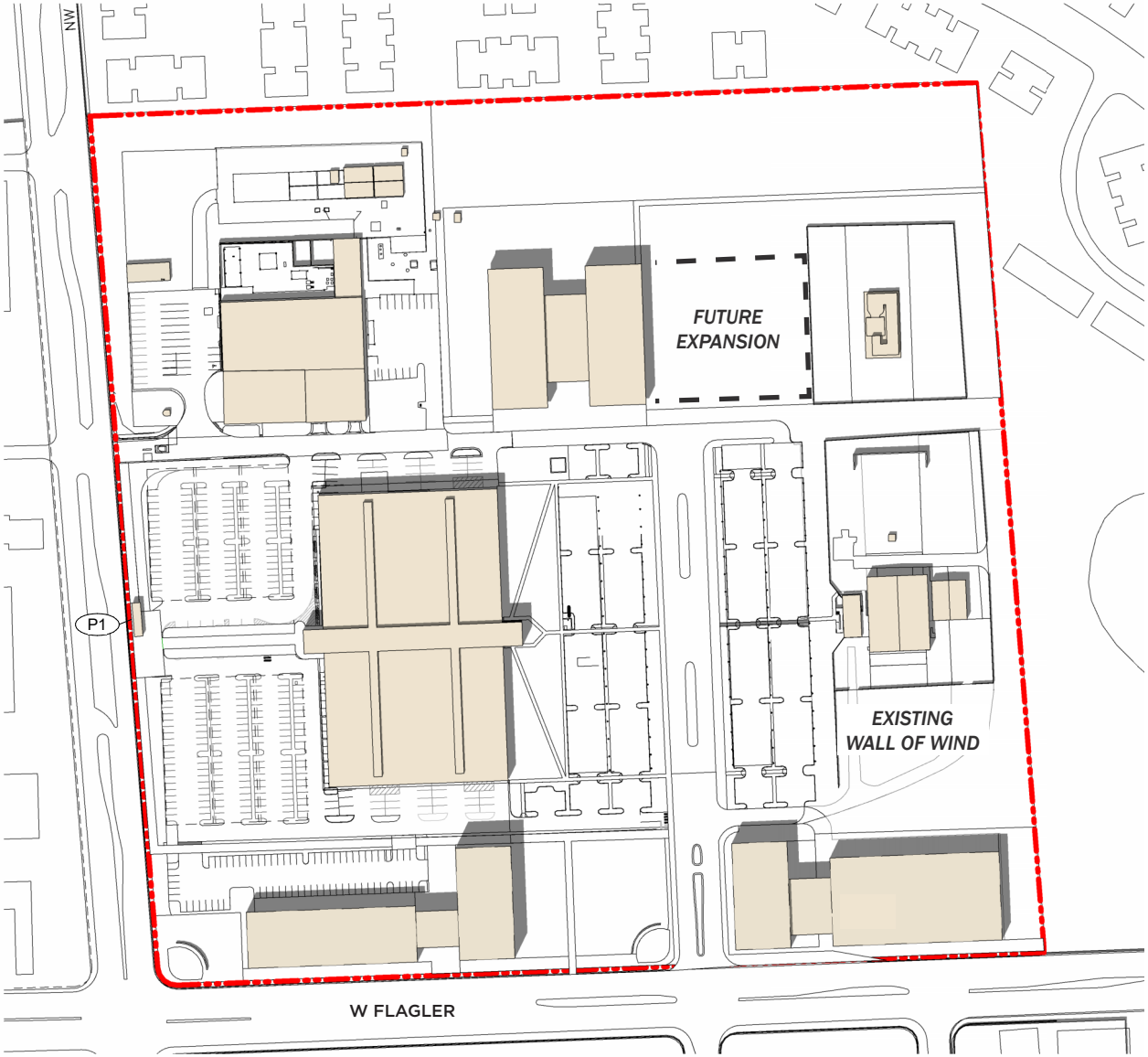


FIGURE 7.2 - EC 2035 PLAN

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Engineering Center

Student housing is not currently located at the Engineering Center.

No future student housing is anticipated at EC.

LEGEND

PROPERTY LINE

FIU BUILDING

Biscayne Bay Campus
Student housing at Biscayne Bay Campus is located along the north-south central spine, adjacent to the academic quadrangles. Housing for Royal Caribbean Cruise Lines provides an infux of non-traditional students on campus while employees are present for training.

Existing capacity is adequate and expanded housing at BBC is not anticipated in this planning period.

FIGURE 7.3 - BBC 2035 PLAN - HOUSING FACILITIES

GOAL

Florida International University shall assist all students in securing adequate, affordable on and off-campus housing through the planning period, reinforcing our commitment to enhancing the FIU experience and supporting our strategic objectives to ensure that every student has access to safe and sustainable living environments.

OBJECTIVES AND POLICIES

Objective 1.1
Promote Housing Availability and Supply: Actively plan with local community and development partners for the availability of an adequate supply of affordable housing units and support facilities both on campus and off campus.

Policy 1.1.1
UNIVERSITY-WIDE

Provide a variety of residential unit types to reflect user preferences and particular student classifications (undergraduate, honors, and graduate housing)

Policy 1.1.2

Provide support services and facilities within a 5-minute walking distance of each housing development to include:

- Dining facilities
- Recreation and open space commons
- Meeting and study space
- Offices for Student Services and student organizations

Policy 1.1.3

Construct new housing as multi-purpose facilities and incorporate amenities that improve pedestrian and bicycle-oriented transportation.

Policy 1.1.4

To ensure an adequate supply of housing as the phased demolition of University Village Apartments occurs, FIU should provide a surplus of student housing to accommodate displaced beds.

Policy 1.1.5

Provide handicapped accessible units, in compliance with Americans with Disabilities Act for no less than five percent of on-campus housing.

Policy 1.1.6
MODESTO A. MAIDIQUE

Provide a total of 5,739 on-campus housing beds by the end of the planning period, contingent on demand. Develop a strategy to accommodate the unmet need for additional beds and the phased demolition of University Village Apartments in the first half of the next planning period or through partners. The beds will be distributed generally as follows:

	Bed Count
Existing (Fall 2019)	3,645
Planned (under construction + CIP)	676
Planned Demolition (UA)	582
Future Housing Development	1,772
Honors College Residence Hall	228
TOTAL	6,903

Policy 1.1.7
Locate housing consistent with the Housing Business Plan as follows:

In total, FIU will provide 2,000 new beds for undergraduate students, including the Honors College. Replace the University Apartments with facilities to house this new capacity. This would create a significantly higher density of student housing, and would increase parking demand by approximately 1,000 spaces, using a 2:1 ratio of beds to parking spaces.

Extend the recently constructed promenade (adjacent to Tamiami hall) east to connect with PG1 & PG2 via the proposed bridge terminating between MARC and the Frost Museum.

Plan for future housing adjacent to the Frost Museum and Lakeview South.

The Honors College Residence Hall should be developed as a living-learning experience, aligning with our strategic goals to enhance the overall FIU experience. With its stand-alone presence on campus, this facility is envisioned to significantly boost the recruitment and retention of high-achieving students, directly supporting our mission-aligned engagement initiatives and fostering an environment that enhances academic excellence and community integration.

Policy 1.1.8

Prioritize funding and phase housing development, consistent with the campus Housing Business Plan and the Capital Improvement Plan.

Policy 1.1.9

Evaluate the demand and financial feasibility of a future privately developed hotel to serve the Modesto A. Maidique Campus and expanded partnerships.

Policy 1.1.10
BISCAYNE BAY CAMPUS

Maintain existing on-campus housing capacity, contingent on demand. No additional housing is proposed at this time. BBC includes a total of 680 existing beds (Fall 2019).

Policy 1.1.11
OFF-CAMPUS HOUSING

Monitor the anticipated adequacy and affordability of off-campus housing to serve the needs of students, faculty, and staff through a bi-annual campus survey.

Policy 1.1.12

Work with the City of North Miami, Sweetwater, and Miami-Dade Planning Department to state current trends and forecast supply and availability.

Objective 1.2
Remove or Improve Substandard Housing:

Monitor and evaluate housing deficiencies and ensure the timely elimination of substandard student housing as well as improving the infrastructure (electrical, mechanical, plumbing, etc.) and aesthetics of existing student housing.

Policy 1.2.1
UNIVERSITY-WIDE

Provide handicapped accessible units, in compliance with Americans with Disabilities Act for no less than five percent of on-campus housing.

Policy 1.2.2

Annually monitor the condition, deficiencies and repair needs of existing housing at both campuses consistent with the policies and procedures established by the Facilities Maintenance Element.

Policy 1.2.3

Monitor housing demands and develop a business plan to support housing needs in a timely fashion at both campuses.

8.0

RECREATION & OPEN SPACE

8.0 RECREATION & OPEN SPACE

Six categories of open space identified in this Campus Master Plan — multipurpose open space, athletics, special purpose landscape, recreational open space, courtyard/plaza, and campus gateways—are integral to our strategic goals of enhancing the FIU experience and fostering mission-aligned engagement and partnerships. These spaces are vital components of our urban design and open space framework for each campus. To conserve natural resources and support our sustainability objectives, development encroachment on these areas is discouraged. Multipurpose open spaces enhance pedestrian connectivity and contribute to environmental sustainability by providing continuous natural areas with native trees that mitigate the heat island effect and create wildlife corridors.

The 2035 Master Plan Update underscores the need for additional on-campus recreation facilities and the preservation of open space to support these functions. At the Modesto A. Maidique Campus, where land is at a premium for academic uses, recreational activities are constrained to the western edge, posing challenges to expanding on-campus recreational facilities. These limitations underscore the need to pursue off-campus joint use facilities to maintain our commitment to student engagement, success, and wellness, essential for keeping students connected to the University and active in both intercollegiate and intramural activities.

Modesto A. Maidique Campus

Currently, the majority of recreational facilities are located at the western edge of campus. In response to increased neighboring development, negotiations with Miami-Dade County for possible joint use of Tamiami Park should remain an ongoing resource for additional recreational facilities – which it already relies upon for student use.

These properties are key for satisfying demand for both recreational and academic/research facilities. In addition to active recreation, improved open space that promotes easy access and campus movement is critical. FIU will continue to work with the Miami-Dade County Park and Recreation Department regarding the recreation and open space needs for both the University and Miami-Dade County.

Campus outdoor space should be enhanced with proposed new event and food-truck plazas, upgrades to historic and heritage open spaces, and quadrangles as well as the protection of specimen trees.

Proposed Facility Expansion

ATHLETICS			FLOORS
07B	INDOOR TRAINING FACILITY	47,666 SF	1
32A	STADIUM UPPER BOWL EXPANSION	103,600 SF	1
34A	NORTH FIELD REC SUPPORT BUILDING	3,600 SF	1
71	ACQUATIC CENTER	16,242 SF	2
RF1*	TRACK & FIELD BUILDING*	43,448 SF	1

RECREATION			FLOORS
33B	REC CENTER EXPANSION EAST	29,973 SF	2
58E	EAST VILLAGE REC CENTER	26,370 SF	2
72	EAST VILLAGE POOL HOUSE	885 SF	1
73	PANTHER RESIDENCE HALL POOL	1,400 SF	1

Project square footage and height are shown for preliminary planning purposes and should be confirmed with FIU.

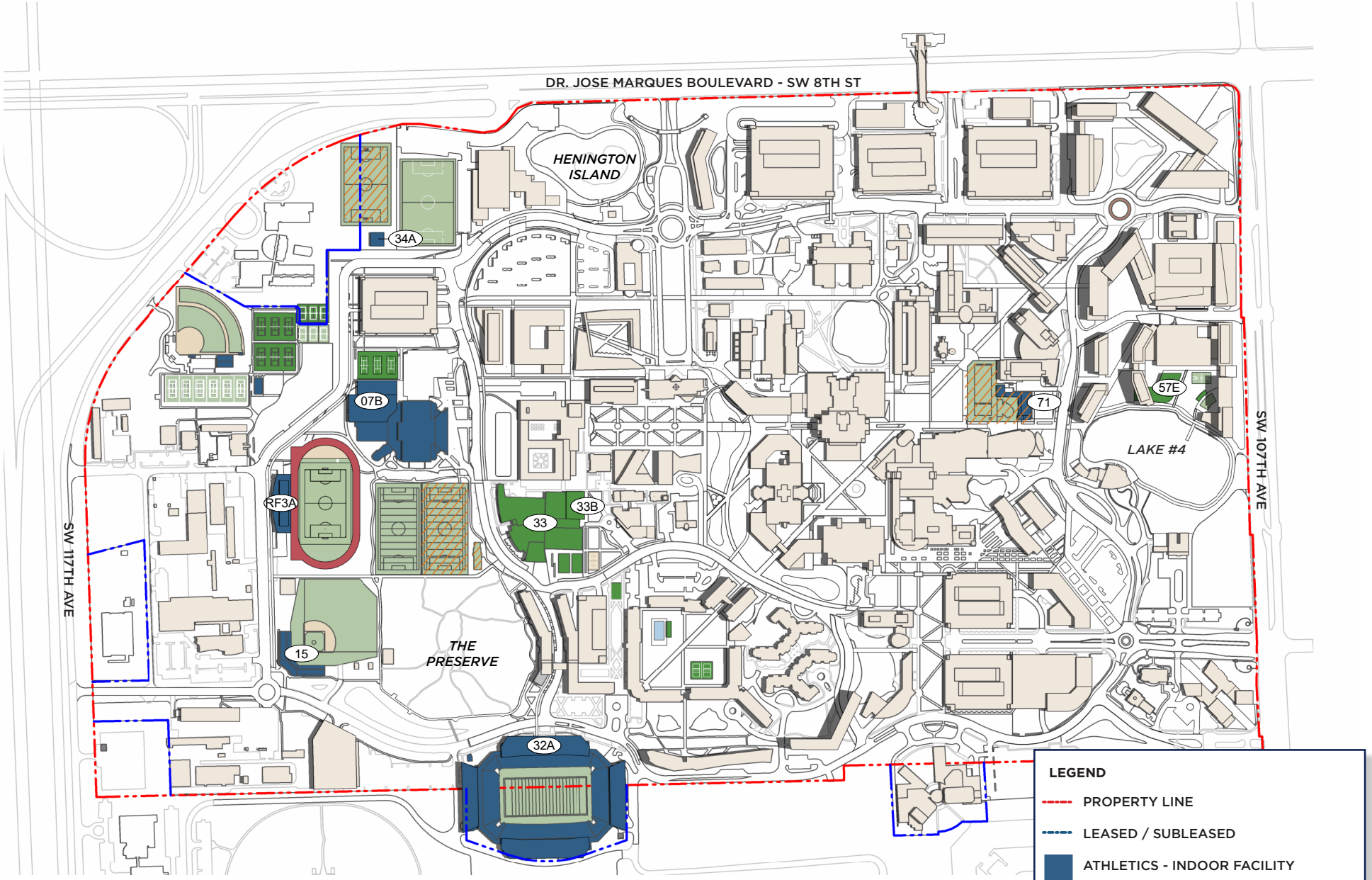

FIGURE 8.1a - MMC 2035 PLAN - ATHLETICS & RECREATION

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DLR GROUP

GOAL

Protect, enhance, and develop adequate recreation facilities and open space amenities to serve projected student enrollments, aligning with our strategic goals to foster a vibrant FIU experience, support holistic student wellness, and enhance community engagement.

OBJECTIVES AND POLICIES

Objective 1.1
Meet Demand for Quality and Quantity of Recreation Facilities:

Coordinate public and private resources as necessary to ensure the timely and efficient provision of recreation facilities to meet projected needs.

Policy 1.1.1
UNIVERSITY-WIDE

Utilize campus roadways and paths for planting trees that not only provide shaded connections between destinations but also support our strategic goals of enhancing the FIU experience and promoting environmental resilience through continuous wildlife corridors.

Actively assess and respond to student needs for on-campus recreational fields and facilities, ensuring alignment with our strategic objectives to enhance student wellness and engagement. Recreational fields displaced by new construction will be replaced either on FIU property or through strategic partnerships with the community.

Policy 1.1.2

Ensure that adequate open and recreation space is provided beyond Miami-Dade County standards. Utilize guidelines and criteria set forth by either FIU peers or NIRSA Standards for large urban universities.

Policy 1.1.3

Phase development of open space improvements consistent with 14.0 Capital Improvement.

Policy 1.1.4

Renovate and improve roadways to incorporate Floridas DOT standards for bike lanes and lane dimensions. Connect to bicycle and pedestrian routes developed by host communities. Promote bicycle, pedestrian, and mass transit connectivity between the University community and recreational facilities. When possible, future development of surface parking should provide shaded canopy structures or photovoltaic panels to shade cars and pedestrians.

Policy 1.1.5
MODESTO A. MAIDIQUE

Strengthen public venues in special purpose landscape areas and near water.

Policy 1.1.6

To address the needs of the projected student growth and lack of developable land on campus, investigate FIU expansion to Miami-Dade Youth Fair and Exposition property to house needed recreation facilities.

Policy 1.1.7
ENGINEERING CENTER

No recreation or support facilities are planned on this campus.

Policy 1.1.8
BISCAYNE BAY CAMPUS

Cluster new and relocated athletic fields and facilities in the southern portion of the campus. Additional multi-purpose fields, tennis courts and basketball courts should be located south of the MAST Academy.

Policy 1.1.9

Preserve multi-purpose, pedestrian, open space and bike paths along Biscayne Bay. Strengthen the character and quality of informal open space, and consider easements for connecting to the waterfront trail and views with campus partners.

Policy 1.1.10

Strengthen public access to the bay. Develop a park along the central waterfront, near the dock.

Objective 1.2
Develop Signature and Sustainable Open Space:

Protect and enhance present open space resources to support our strategic goals of fostering a vibrant FIU experience, enhancing environmental sustainability, and promoting community engagement. This objective underscores our commitment to creating dynamic, usable, and sustainable campus environments that facilitate connectivity, academic success, research opportunities, and holistic well-being.

FIU is proud to be a recognized member of Tree Campus USA, a status it has maintained annually since 2010, aligning with our strategic goals of enhancing sustainability and fostering an engaging learning environment as part of the FIU experience. Committed to effectively managing its tree canopy and reducing heat islands, FIU actively integrates these efforts into the curriculum and research activities within the College of the Arts, Sciences, and Education, promoting interdisciplinary research and educational excellence. FIU is enhancing its sustainable maintenance practices and operations, paving the way for the establishment of an educational arboretum. This initiative furthers our commitment to environmental stewardship and educational innovation.

The potential to transform the MMC campus into an arboretum would involve several curated landscapes with tree collections associated with institutional disciplines, located near their respective building entrances and plazas. Trees with functional uses associated with specific disciplines on campus are proposed for future planting. This association of campus trees enhances discipline identity and supports experiential learning, while providing shade, extending wildlife corridors, and creating inviting spaces through the addition of signature landscapes.

Future plantings should be clustered to provide a continuous dense canopy and incorporate native groundcover. With over 200 existing tree species on campus, an Arboretum Plan for FIU would assure responsible stewardship of campus heritage trees, accelerate the impact on research and innovation, and celebrate the international diversity of the FIU community.

Policy 1.2.1
UNIVERSITY-WIDE

Select sites for infrastructure and academic support facilities that strengthen the viability and character of campus open space.

Policy 1.2.2

Maintain densities and intensities for the development of the campus which maximize the retention of open space. These densities and intensities are established in 4.0 Land Use Element.

Policy 1.2.3

Maintain the Campus Master Plan figure-ground relationships and urban design framework for the purpose of designating and creating high quality and diverse landscaped open space.

Policy 1.2.4

Protect designated landscaped open spaces from development and create an interconnected framework of malls, quadrangles, courtyards, plazas, and open spaces, enhancing the FIU experience by integrating high speed WiFi connectivity and electrical outlets. Promote digital connectivity in open spaces, so they will become, versatile areas for collaborative work in a sustainable environment.

Policy 1.2.5

Create, enhance, and maintain new and existing primary entry points into campus with identifiable, signature campus gateways that incorporate native plantings and trees (see 16.0 Landscape Design Guidelines Element).

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Policy 1.2.6
MODESTO A. MAIDIQUE

Coordinate any development within the Preserve, as indicated by Table 14.2: Capital Improvement Plan, with the most recent development study of the Preserve, ensuring alignment with our strategic goals to enhance the FIU experience and support mission-aligned engagement. Development within the Preserve will be carried out with sensitivity to the existing wooded areas, incorporating eco-friendly buildings, pathways, seating areas, interpretative displays, and amenities that enhance the natural setting and support biodiversity. This approach not only preserves but enhances the habitat for existing species and utilizes their natural characteristics to foster a sustainable environment.

The Preserve will continue to serve as a vital resource for teaching, research, and outdoor recreation, in line with our commitment to creating immersive educational experiences and promoting wellness. Recommendations from past design charrettes conducted by FIU, along with recent modifications, provide a strategic framework for leveraging the Preserve to support these multidisciplinary educational and research activities

Policy 1.2.7

Maintain and enhance streetscapes along SW 8th Street and SW 107th Avenue to brand the campus perimeter and to provide additional pedestrian and vehicular separation (see 16.0 Landscape Design Guidelines Element).

Policy 1.2.8

Develop distinctive and branded entrances from SW 8th Street, SW 107th Avenue and SW 117th Avenue into campus. Provide a heightened level of detail according to their hierarchy. Follow recommendations in 16.0 Landscape Design Guidelines Element.

Policy 1.2.9

Create a GreenWay that links the small ponds within the academic core and to the campus boundaries (refer to 16.0 Landscape Design Guidelines Element).

Policy 1.2.10

Enhance and preserve the Reagan House site landscape. Improve pedestrian access as roadways are developed in the southeast quadrant of campus. Coordinate a high quality landscape setting with the proposed chapel and park pavilion.

Policy 1.2.11

Coordinate with Miami-Dade County Parks, Recreation and Open Spaces for the joint utilization of open space to meet recreation and open space needs.

Policy 1.2.12
ENGINEERING CENTER

Enhance existing open space along SW 107th Avenue with additional streetscaping and the creation of a campus gateway.

Policy 1.2.13

Enhance open space bordering West Flagler Street with the creation of a campus gateway and streetscape.

Policy 1.2.14

Create an enhanced transit stop with one articulated and one regular bus stop with covered seating and landscape along SW 107th Avenue to allow for enhanced connectivity to public transportation.

Policy 1.2.15

Utilize existing open space to form an interior quadrangle around which to organize future academic and research facilities.

Policy 1.2.16

Establish north/south pedestrian spine to connect Flagler, existing buildings and potential development, to the north.

Policy 1.2.17

Preserve setbacks and open space around the Wall of Wind to provide protection from research activities.

Policy 1.2.18

BISCAYNE BAY CENTER

Protect environmentally sensitive and bayfront open spaces from development encroachment. Strictly enforce future placement of buildings, parking, infrastructure, and other man-made improvements consistent with the land use plan. Coordinate with Campus Development Agreements.

Policy 1.2.19

Renovate the original campus quad and develop new quads, courtyards and plazas throughout campus that enhance adjacent campus buildings.

Policy 1.2.20

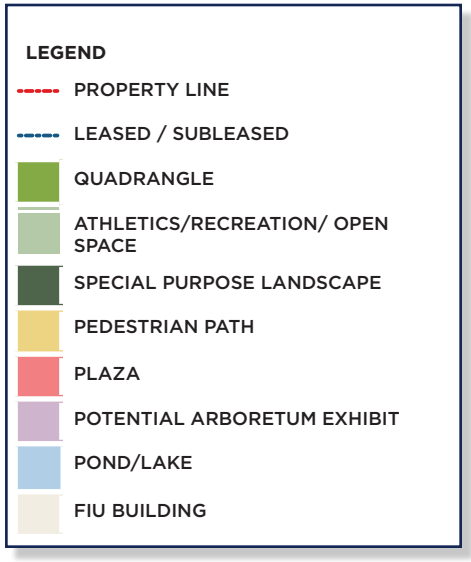
Enhance key symbolic campus open spaces to the north and south of Academic One and Two/Wolfe University Center and to the east of the Conference Center (see 16.0 Landscape Design Guidelines Element).

Policy 1.2.21

Highlight the GreenSpine with sensitively constructed walkways and appropriate plant materials (see 16.0 Landscape Design Guidelines Element).

Policy 1.2.22

Create courtyards, outdoor rooms and gathering spaces in all new development adjacent to the BayWalk as transition points to public open space along the bay.



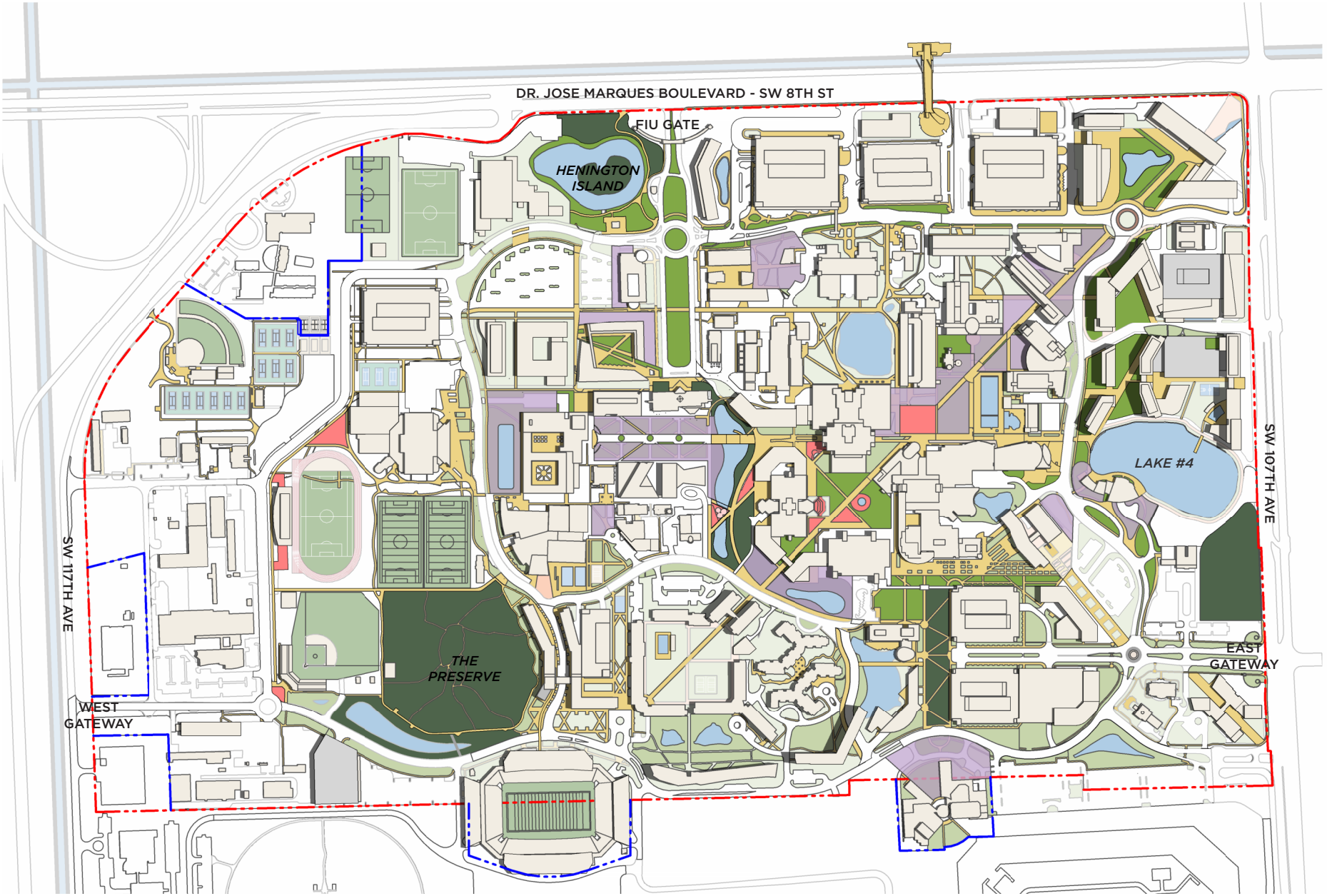


FIGURE 8.1b - MMC 2035 PLAN - OPEN SPACE CONCEPT

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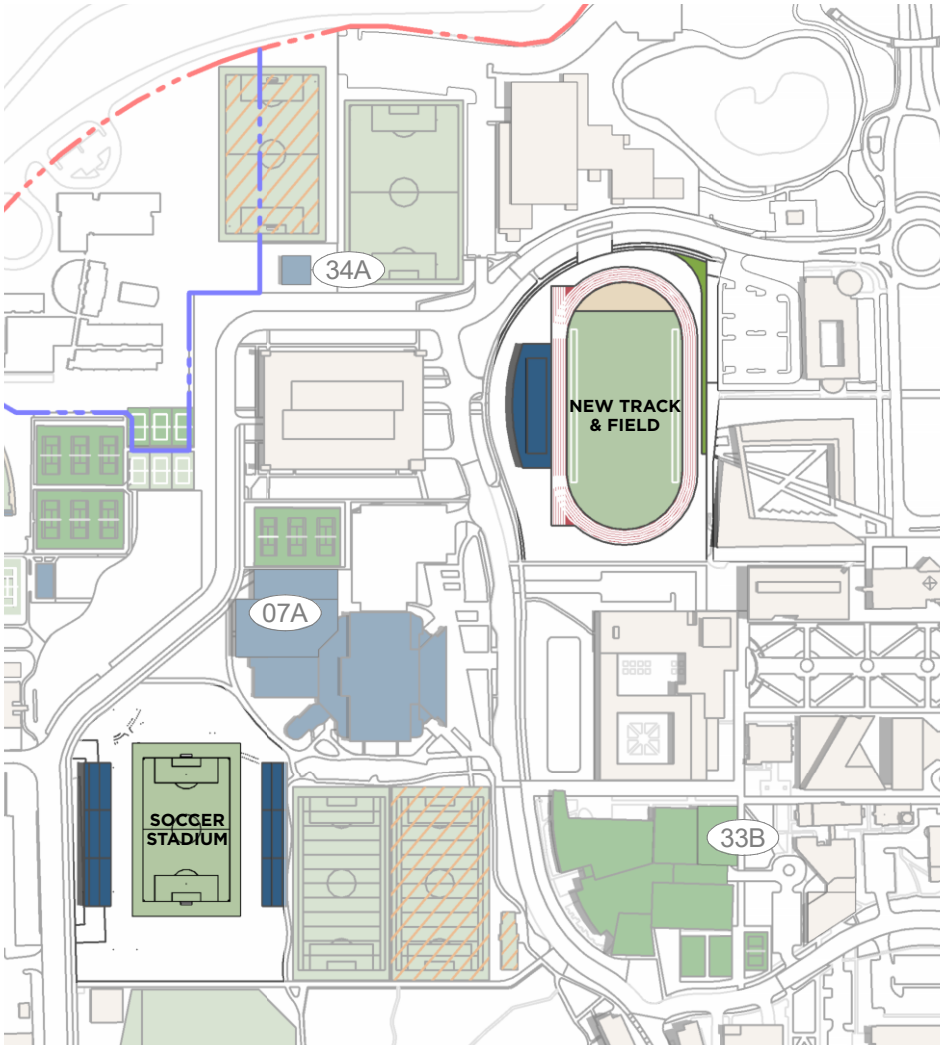

TRACK AND SOCCER STADIUM TEST FIT - PLAN DIAGRAM

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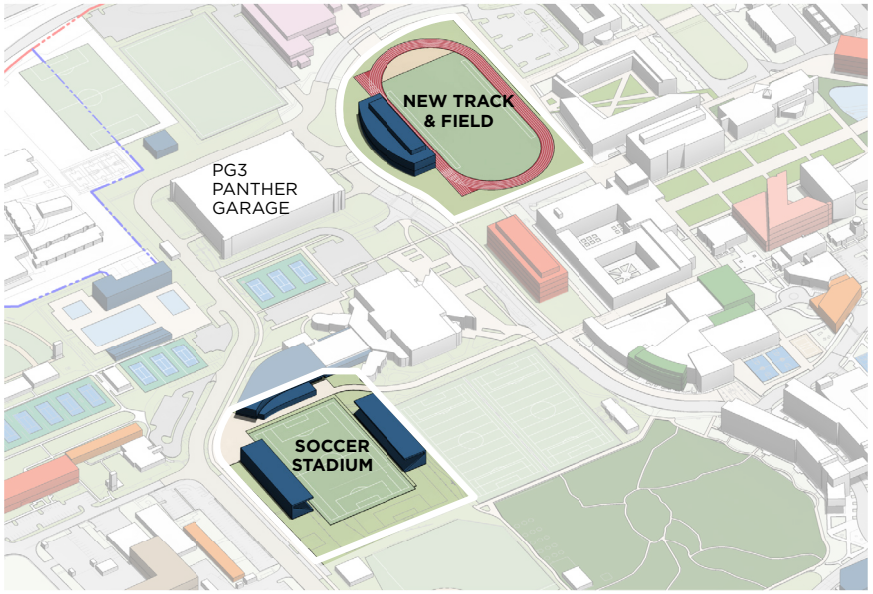

TRACK AND SOCCER STADIUM TEST FIT - 3D DIAGRAM

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An alternative site for a track and field location, separate from a soccer stadium facility was explored in this study. The track located north of the FIU Ocean Bank Arena provides capacity for the existing soccer field site to integrate a new indoor training facility and accommodates field events and standard turning radii at the ends of the track, as well as reduced scheduling conflicts between events.

FIGURE 8.1c - MMC TRACK & FIELD SITE TEST FIT

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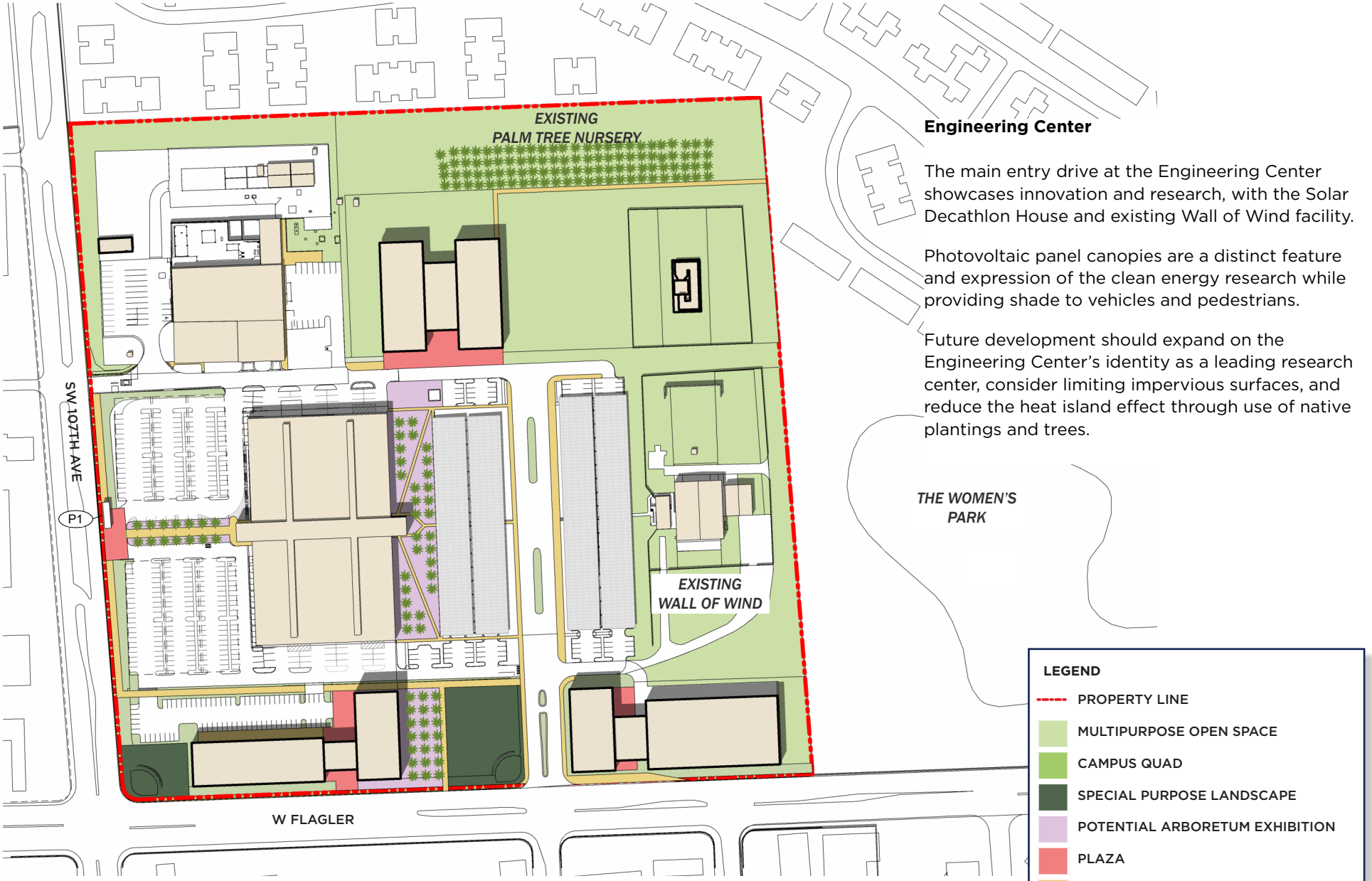

Engineering Center

The main entry drive at the Engineering Center showcases innovation and research, with the Solar Decathlon House and existing Wall of Wind facility.

Photovoltaic panel canopies are a distinct feature and expression of the clean energy research while providing shade to vehicles and pedestrians.

Future development should expand on the Engineering Center's identity as a leading research center, consider limiting impervious surfaces, and reduce the heat island effect through use of native plantings and trees.

FIGURE 8.2 - EC 2035 PLAN - OPEN SPACE CONCEPT

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0 100 300

Biscayne Bay Campus

Aligning with our 2030 strategic goals, the campus master plan update proposes a north-south circulation spine enhanced with Mangrove demonstration plantings and shade trees, designed to support pedestrian-oriented, multi-modal circulation and underscore our commitment to environmental sustainability. This spine also integrates special demonstration plantings that showcase our leading-edge campus research, furthering our mission of research excellence.

The design prioritizes native plantings and minimizes ornamental lawns, reflecting our dedication to natural resource conservation. The strategic clustering of new and relocated athletic fields and facilities in the southern portion of the campus, including multi-purpose fields, tennis courts, and basketball courts near the MAST Academy, aims to enhance student engagement and wellness, aligning with the FIU experience.

Additionally, easements for connecting to the waterfront trail and improving views are planned to enhance the quality and character of informal open spaces, fostering community connections and mission-aligned engagement. The development of a park along the central waterfront near the dock will enhance public access to the waterfront, promoting community integration and making the campus a focal point for collaboration and public engagement.

LEGEND

- PROPERTY LINE
- ATHLETICS/REC FIELD
- WATER
- MULTIPURPOSE OPEN SPACE
- SPECIAL PURPOSE LANDSCAPE
- POTENTIAL ARBORETUM EXHIBITION
- PLAZA
- EXISTING BUILDING
- FUTURE BUILDING

FIGURE 8.3 - BBC 2035 PLAN - OPEN SPACE CONCEPT

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9.0

GENERAL INFRASTRUCTURE

9.0 GENERAL INFRASTRUCTURE

The purpose of this element is to ensure the coordinated provision of public facilities and services required to meet the future needs of the University, aligning with our strategic goals to foster a sustainable and resilient campus. This includes addressing sustainability issues through the development of a Climate Action Plan and ensuring that all new facilities meet United States Green Building Council (USGBC) standards and target LEED Gold or equivalent (at a minimum), reflecting our commitment to environmental stewardship. Key infrastructure improvements will include:

1. Solid waste handling and arrangements for disposal capacity
2. Stormwater management capacity to protect the welfare of both the University's and host community's residents.
3. Potable water and water reuse for irrigation purposes.
4. Sanitary sewer and treatment capacity to meet anticipated University needs.

STORMWATER MANAGEMENT: FIU addresses stormwater management issues in the design and review process for each building project. Each project shall meet the County's criteria and will be submitted to the County for review. The stormwater management plan for Modesto A. Maidique Campus is a combination of percolation, overland flow, exfiltration systems and positive drainage systems with outfalls into existing onsite lakes. No offsite discharge connections exist, as all stormwater runoff is contained onsite (see Figure 9.1a: Drainage System Map).

The Engineering Center drainage system is designed to handle on-site stormwater runoff with a combination of exfiltration trenches, dry and wet retention areas, drainage swales, overland flow, and positive drainage pipe systems (see Figure 9.2 a: Drainage System Map).

The stormwater management plan for the Biscayne Bay Campus is a combination of percolation, overland flow and exfiltration systems. The Biscayne Bay Campus stormwater management plan also utilizes positive drainage systems with outfalls both to onsite lakes and adjacent off-site water bodies. Currently, there are t wo outfalls to offsite surface water bodies located on the north and east sides of the site. The north outfall system consists of a 42-inch culvert and the east outfall consists of an 8" x 12" culvert (see Figure 9.3a: Drainage System Map).

WATER: Potable water for Modesto A. Maidique Campus is provided by the Miami-Dade Water and Sewer Department (MDWASD). MDWASD owns and maintains all existing watermains inside the campus. It is important to note most water mains on campus do not have easements over them. However, easements have been required for recent development and all future development will need to consider easements as required from MDWASD. MDWASD easements along water mains will include restrictions on development within the easements. The internal water distribution system is fed via existing water mains located within the right- of-way of SW 8th Street, SW 107th Ave and SW 117th Avenue (see Figure 9.1b: Water Distribution System Map).

The Engineering Center is serviced from a MDWASD owned water distribution system with points of connection on SW 107th Avenue and West Flagler Street (see Figure 9. 2b: Water Distribution System Map).

Potable water service to the Biscayne Bay Campus is provided by the City of North Miami. Connections are made to the City owned off-site system located along NW 151st Street and NW 135th Street (see Figure 9.3b: Water Distribution System Map.)

SEWER: The Modesto A. Maidique Campus sanitary sewer system consists of gravity sewer lines, force mains, a series of privately owned sanitary sewer lift stations.

Sewage flows from the campus are transmitted off-site to the MDWASD owned system via two connection points located within the right-of-way of SW 8th Street and SW 117th Avenue. [Figure 9.1c: Sanitary Sewer Map]

The Engineering Center sanitary sewer collection system is comprised of a series of gravity sewer lines which flow into a single privately owned lift station. The sanitary sewer flow generated by the Engineering Campus is transmitted off-site into the MDWASD owned system via a connection point located on West Flagler Street. [Figure 9.2c: Sanitary Sewer System].

The Biscayne Bay Campus sanitary sewer system consists of a combination of gravity sewer lines, a force main and a master pump station with connections to multiple on-site secondary pump stations. The sanitary sewer system for the Biscayne Bay Campus is transmitted to the City of North Miami's collection system and ultimately to the MDWASD system for treatment and disposal of the of the wastewater flows. [Figure 9.3c: Sanitary Sewer Map].

SOLID WASTE: Solid waste collection and disposal is accomplished at Modesto A. Maidique Campus, Engineering Campus and Biscayne Bay Campus by utilizing a combination of University staff, private contractors and public entities. Upon collection, the solid waste material is either recycled or sent to the landfill for disposal.

GOAL 1

Florida International University shall provide a stormwater management system which incorporates sustainable practices, protects real property, and ensures maintenance of ground water quality. Ensure that adequate solid waste disposal services are available and that these services are provided in an environmentally sound and economically efficient manner.

OBJECTIVES AND POLICIES

Objective 1.1
Adequacy of Campus Drainage:

Florida International University shall ensure that future development is coordinated with current drainage infrastructure and on-going site improvement projects in order to meet campus drainage system requirements in an efficient manner and protect University property.

Policy 1.1.1

Engineering surveys shall be provided to obtain detailed data for implementation of accurate records, and to identify condition of facilities.

Policy 1.1.2

Maintain, update, and keep current, accurate as-builts of stormwater facilities.

Policy 1.1.3

FIU shall maintain, update and keep current records of any existing swales, dry retention areas, lakes, wetlands, preservation areas, and any other areas within the campus properties that provide stormwater storage and retention capacities, as well as any areas contributing to those retention areas. FIU shall reserve these stormwater storage and retention areas or incorporate into future development.

Policy 1.1.4

FIU shall design and construct or improve stormwater management facilities as identified in Figures 9.1a, 9.2a and 9.3a. To ensure appropriate flood control, the timing and phasing of these stormwater management improvements should be ahead of the associated developments.

Policy 1.1.5
Any development proposing connection to an existing drainage system shall evaluate the impacts of the proposed development on the affected stormwater management

system as part of the project's design phase. Otherwise, sufficient stormwater management improvements must be provided to handle all of the runoff from the new developments on a stand-alone basis.

Policy 1.1.6

Campus water bodies and onsite stormwater management systems shall be interconnected whenever possible to maximize the capacity of sub-basins.

Objective 1.2
Flood Protections / Water Quantity:

Florida International University shall ensure that all planned and future developments provide sufficient stormwater management capacity to protect buildings during a 100-year flood.

Policy 1.2.1
New construction and substantial improvements in areas subject to special flood hazards shall be constructed by methods and practices that minimize flood damage.

Residential construction: Residential buildings (such as University Housing) shall have the lowest floor elevated no lower than 1 foot above the base flood elevation or highest elevation as required by Miami-Dade County, SFWMD, or Florida Building Code. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movement of flood waters shall be provided. Structures will be anchored to prevent flotation, collapse, or lateral movement of the structure.

Non-residential construction: Non-residential buildings shall have the lowest floor elevated no lower than 1 foot above the base flood elevation or highest elevation as required by Miami-Dade County, SFWMD, or Florida Building Code. Buildings located in a Velocity Zone, will be constructed to adhere to the requirements for this zone. Walls and roof structures will be sufficiently anchored to prevent loss from high winds. FIU will work with the Miami-Dade County Division of Environmental Resources Management (DERM) to determine the proper criteria for construction within this zone.

Elevated buildings: Elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls. Structures will be anchored to prevent flotation, collapse, or lateral movement of the structure.

Policy 1.2.2

All vehicular paved surfaces and landscaped islands shall utilize curbing or curb and gutter when necessary for stormwater runoff control and conveyance.

Policy 1.2.3

Drainage systems for all new development shall be designed in accordance with the campus master development plan, the Miami-Dade County Transportation and Public Works (MDTPW) - Public Works Manual Section D4 Water Control, Miami-Dade County Division of Environmental Resources Management guidelines, and the South Florida Water Management District Permit Information Manual Volume IV guidelines. In addition, stormwater management facilities at Modesto A. Maidique Campus and the Engineering Center shall also be designed in conformance with Florida Department of Transportation drainage requirements.

Policy 1.2.4

Florida International University shall adopt the following stormwater quantity level of service standards for Modesto A. Maidique Campus, the Engineering Center, and Biscayne Bay Campus, and shall use these standards as the basis for drainage system design.

Road Crown/Ground Surface LOS: The minimum acceptable flood protection/drainage level of service (LOS) standards for Modesto A. Maidique Campus roadways, parking areas, and ground surfaces shall be protection from the degree of flooding that would result from a storm duration of 6 hours that statistically occurs once in twenty-five years. For development that contains at least 10 acres of total area, or at least 2 acres of impervious

surface area, the minimum level of service shall be on-site retention of the 25-year/3-day storm event with zero off-site discharge.

A current elevation required per the Miami-Dade County Flood Criteria Map, as amended is:

- 8.0 ft. NGVD for Modesto A. Maidique Campus and the Engineering Center
- 7.0 ft. NGVD for Biscayne Bay Campus

Minimum Floor Elevations LOS: The minimum acceptable flood protection/drainage level of service (LOS) standards for minimum floor elevation shall be the elevations as specified in the Federal Flood Insurance Rate Maps for Dade County or the protection from the degree of flooding that would result from a storm duration of three days that statistically occurs once in one hundred years or elevation of:

- 10.0 ft NGVD, whichever is greater, for Modesto A. Maidique Campus and the Engineering Center.
- 11.0 ft. NGVD, whichever is greater, for Biscayne Bay Campus, with the exception of buildings along the southern edge of the campus which should be set at 12.0 ft. NGVD (whichever is greater).

Policy 1.2.5

The minimum acceptable Flood Protection Level of Service standards for University stormwater management system facilities shall provide protection for the degree of flooding that would result for a duration of one day from a ten-year storm or a duration of 6 hours from a twenty-five year storm, whichever is greater.

Policy 1.2.6

To ensure that the LOS standards are continuously met, all new developments must prepare a pre-post development analysis of the entire development-affected site to evaluate the 100-year flood stages.

Policy 1.2.7

All new construction shall adhere to the Disaster Resistant University - FEMA Hazard Mitigation standards.

Objective 1.3
Water Quality:

Florida International University shall ensure that all existing and proposed developments have drainage systems that provide water quality enhancement to stormwater runoff.

Policy 1.3.1

Best Management Practices shall be incorporated into the drainage system design to minimize the impacts from development to the ground water and surface water quality. These practices shall include, but not be limited to:

1. Incorporating stormwater management retention and detention features into the design of parks, trails, common and open spaces, where such features do not detract from the recreational or aesthetic value of a site.
2. Use of slow-release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water runoff or leaching to groundwater.
3. Educating maintenance personnel about the need to maintain motor vehicles to prevent the accumulation of oil, grease, and other fluids on impervious surfaces, where they might be conveyed to surface and ground waters by runoff, and the need to regularly collect and properly dispose of yard debris.
4. Avoid the widespread application of broad spectrum pesticides by involving only purposeful and minimal application of pesticides, aimed at identified targeted species. Use of synthetic pesticides and herbicides are prohibited for use in landscape maintenance on all campuses.
5. Coordinating pesticide application with irrigation practices to reduce runoff and leaching to groundwater.
6. Use of pervious paving such as turf blocks to minimize impervious surface area.
7. Incorporating features into the design of fertilizer and pesticide storage, mixing, and loading areas that are designed to prevent and minimize spillage.
8. Use of downturned elbows in catch basins. All new construction should follow FEMA's Disaster Resistant University guidebook.

Policy 1.3.2

Florida International University should adopt the following water quality level of service standards and shall use these standards as the basis for drainage system design:

The minimum acceptable water quality/ drainage level of service (LOS) standards for FIU shall be the treatment of the onsite retention systems' volume, first inch of stormwater runoff or 2.5 inches of the total impervious area, whichever is greater, and provide pollutant load reduction when required in accordance with Miami-Dade County Division of Environmental Resources Management and South Florida Water Management District criteria.

Environmental Contamination Reviews In accordance with section 24-15, Code of Miami-Dade County, all construction plans (inclusive of drainage) and dewatering plans shall require review and approval from DERM as it relates to environmental contamination issues.

Policy 1.3.3

All stormwater runoff shall be contained within a project site utilizing an exfiltration trench, with overflow to an on-site water body when available and shall not adversely affect adjacent campus property.

Policy 1.3.4

Exfiltration trench systems with overflow into a water body shall be designed to retain on site all the volume of runoff generated by the contributing drainage area. Sea level rise may impact the effectiveness of exfiltration trench. Future exfiltration trench designs need to consider current design standards. Existing exfiltration trenches should be monitored for ongoing effectiveness.

Pursuant to section 24-48.1(1)(b) of the Code, Class II permits are required for the construction, installation and/or alteration of any outfall or overflow system in, on, under or upon any water body of Miami-Dade County, including, but not limited to, canals, rivers, lakes, lagoons and for all tidal water bodies. Therefore, stormwater runoff from any proposed development or redevelopment project(s) shall be treated prior to discharge to the existing or proposed outfalls and eventually into Biscayne Bay to prevent water quality impacts to estuarine and marine habitats within Biscayne Bay. Signed and sealed calculations/analysis shall be provided by the Engineer of Record demonstrating there are no adverse impacts in the pre- vs post-development including water quality impacts in receiving Biscayne Bay.

Policy 1.3.5

Design of new facilities as well as retrofitting of existing drainage systems and areas having drainage deficiencies shall be undertaken in accordance with Element 14.0 Capital Improvements.

Policy 1.3.6

All drainage inlets receiving runoff directly from potentially contaminated surfaces shall have pollution retardant baffles installed.

Policy 1.3.7

All drainage inlets with an outfall to an exfiltration trench or water body shall have pollution retardant baffles installed.

Policy 1.3.8

All future developments constructed after the implementation of Florida Department of Environmental Protection Statewide Stormwater Criteria shall be designed and constructed to comply with the stormwater treatment requirements outlined by the regulation.

Objective 1.4
Maintenance of Campus Drainage:

Florida International University shall properly maintain the stormwater management system and ensure that all deficiencies are corrected.

Policy 1.4.1

An inspection, cleaning, maintenance, and repair program for all facilities shall be developed and implemented. The maintenance program shall be implemented on a continuing, regularly scheduled basis with major repairs prioritized and scheduled based on the availability of funding.

Objective 1.5
Maintenance of Campus Drainage:

Florida International University shall consider in all future planning, the protection of natural stormwater management and hydrologic areas, and the protection of the quality of these receiving waters.

Policy 1.5.1

Use environmentally friendly designs such as detention systems, ground storage

(percolation), littoral treatment in wet detention ponds (including the use of wetland vegetation along the shoreline within the pond's littoral zone), metered-release devices, porous or vegetative liners. Minimize impervious surfaces as appropriate and as called for by state design guidelines, to protect natural stormwater management and hydrological areas from erosion and contamination, and to mitigate the impacts of campus generated stormwater. Consider rain gardens to receive and filter runoff.

Policy 1.5.2

It shall be the policy of FIU that no stormwater discharges shall cause or contribute to a violation of water quality standards in waters of the State. All discharge of stormwater shall be consistent with the standards of the water quality of South Florida Water Management District (SFWMD) and Miami-Dade County Division of Environmental Resources Management (DERM).

Policy 1.5.3

All applicable new developments shall include sustainable site elements required to meet USGBC standards and target LEED Gold or equivalent as a minimum requirement.

GOAL 2

Florida International University shall ensure that potable water is available for existing and future campus development.

Objective 2.1
Adequacy of Potable Water Supply & Distribution:

Florida International University shall ensure that prior to development activities, adequate potable water supply, treatment, and distribution facilities, and adequate fire flow protection are available at the adopted level of service standards in accordance with Element 14.0 Capital Improvements.

Policy 2.1.1

The level of service water pressure standard shall be a minimum of 20 PSI and no greater than 100 PSI. A minimum flow of 2,000 gallons per minute should be added to this level of service standard to comply with the required minimum fire flow levels for schools.

Policy 2.1.2

The minimum level of service water main size for primary and secondary distribution systems shall be twelve inches in diameter, per Miami-Dade WASD, to provide sufficient capacity for potable water and fire protection demands.

Policy 2.1.3

All potable water plans for the Modesto A. Maidique Campus and the Engineering Campus shall be reviewed and approved by the State of Florida Department of Environmental Protection, Miami-Dade County Division of Environmental Resources Management, Miami-Dade County Water and Sewer Department, and the State Fire Marshall as applicable. Plans for the Biscayne Bay Campus will require the review and approval of the City of North Miami, as well as the Florida Department of Environmental Protection as applicable.

Policy 2.1.4

All potable water mains in primary distribution and secondary distribution systems shall be looped.

Policy 2.1.5

All existing dead-end potable water primary and secondary distribution systems shall be minimized by constructing links to complete a loop where possible.

Policy 2.1.6

All primary and secondary potable water distribution systems shall incorporate fire system demands.

Policy 2.1.7

All fire protection services for new developments shall be in accordance with the National Fire Protection Association (NFPA 24 Private Water Distribution System).

Policy 2.1.8

The priorities for potable water improvements shall be:

1. Elimination of dead-end water distribution systems.
2. Expansion of potable water infrastructure.

Policy 2.1.9

New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system and shall be according to Miami-Dade County WASD standard and specification.

Policy 2.1.10

FIU shall design and construct or improve potable water facilities as identified in Figures 9.1b, 9.2b, and 9.3b as needed to serve future development. The timing and phasing requirements for these improvements are established in Element 14.0 Capital Improvements.

Policy 2.1.11

All looped water main systems shall be designed with sufficient valving to allow isolation of each building within the loop. Existing water main loops shall be retrofitted to allow for this condition.

Policy 2.1.12

FIU shall annually review future construction programs and priorities to remediate deficiencies, ensure capacity, and provide the capital improvements required to meet the University needs, based on needs identified in other Campus Master Plan elements.

Objective 2.2
Water Conservation Program:

Florida International University shall develop and implement a comprehensive water conservation program.

Policy 2.2.1

Promote an educational program geared toward students, faculty, staff, and visitors, which will discourage waste and conserve water.

Policy 2.2.2

Enforce requirements, and establish new requirements and procedures as needed, to assure that high efficiency plumbing fixtures are used in all new facilities and in conjunction with renovations to existing facilities.

Policy 2.2.3

The use of "Florida Friendly Landscaping," including the maintenance and installation of selected vegetative species, low volume irrigation, and compact hydrazone concepts, shall be required for all new buildings and ancillary facility construction, in order to minimize water use and landscape maintenance costs.

Policy 2.2.4

Ensure that all existing and future irrigation systems within the Biscayne Bay Campus tie in to the existing reclaimed water system (where possible).

Policy 2.2.5

Miami-Dade County WASD is responsible for maintenance of water mains. FIU maintains building service lines, irrigation lines, and general service lines on the building side of the meter.

Policy 2.2.6

University-wide development will comply with water use efficiency techniques for indoor water use in accordance with Sections 8-31, 32-84 and 8A-381 of the Code of Miami-Dade County.

Policy 2.2.7

University-wide development shall comply with the landscape standards in Chapter 18A and 18B of the Miami-Dade County Code, in order to conserve the use of potable and non-potable water supplies for irrigation purposes.

GOAL 3

Florida International University shall ensure that sanitary sewer is available for existing and future campus development.

Objective 3.1

Florida International University shall provide an efficient and adequate pump station, force main system and transmission system to convey sewage to off-site mains. Collection and transmission systems should be protected from flood waters and inflow following best practices outlined by ASCE 24-14, Flood Resistant Design and Construction.

Policy 3.1.1

No new developments shall be permitted to connect onto the existing on-site pump stations and force mains unless it can first be shown that sufficient capacity exists within the pump station and associated force main and collection system to convey the wastewater generated by the project's proposed use.

Policy 3.1.2

Existing pump stations shall be designed to accommodate the peak flow.

Policy 3.1.3

In addition to upgrades to existing pump stations, the proposed 2035 build out shall include construction of new pump stations where required to collect sanitary sewer flow generated by the proposed developments.

GOAL 4

Florida International University shall ensure that adequate solid waste disposal and recycling are available and that these services are provided in an environmentally sound and economically efficient manner.

Objective 4.1
Solid Waste Collection and Disposal:

Florida International University shall ensure that adequate arrangements are made to ensure both that solid waste collection service and disposal capacity is available to FIU buildings and facilities within the University generated by the University is properly disposed at a permitted disposal facility in order to meet the current and future demands generated by the University.

Future expansion of composting programs on campus should be implemented with the eventual goal of utilizing industrial composting for all food service waste and packaging.

Policy 4.1.1

Florida International University shall adopt the following levels of service standards:

Level of Service Standard:
0.60 pounds per full-time equivalent (FTE) student per day.

Policy 4.1.2

Florida International University Purchasing Services Department shall ensure that the bid solicitation and contractor selection process for campus-wide solid waste collection services shall be completed and reviewed on an annual or multi-year basis.

Policy 4.1.3

Florida International University Purchasing Services Department shall ensure that the bid solicitation and contractor selection process for campus wide compacting and recycling services shall be completed and reviewed on annual or multi-year basis.

Policy 4.1.4

Florida International University Environmental Health and Safety Department shall ensure that any hazardous, biohazardous, and radioactive waste, generated by the University shall be collected and disposed of by firms licensed and regulated in accordance with applicable Chapter(s) of the Florida Administrative Code.

Policy 4.1.5
Florida International University Environmental Health and Safety Department shall solicit bids for the disposal of hazardous wastes by utilizing a single licensed contractor on an annual or multiyear basis.

Policy 4.1.6

On-campus waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

Policy 4.1.7

The University shall establish timing and phasing requirements for solid waste collection and disposal facility improvements to meet future University needs.

Policy 4.1.8

FIU shall also ensure that any and all growth in the volume of solid waste generated by all new University developments shall have both adequate collection service and be include in the arrangement for waste removed for disposal at a properly permitted disposal facility, include the provision of a solid waste disposal system capable of handling the solid waste.

Policy 4.1.9

All on-campus dumpsters shall be housed within an enclosed structure with 6-feet high concrete walls and on a 10 ft deep by 15 ft wide concrete pad. A chain link fence gate shall be provided for access.

Objective 4.2
Solid Waste Recycling:

Florida International University shall increase the amount of solid waste recycled beyond the currently estimated 5% of total material generated (see 13.0 Conservation Element).

Policy 4.2.1

Florida International University will determine the University's eligibility for participation in the State of Florida Department of Environmental Protection, Solid Waste Management Trust Fund Program.

Policy 4.2.2

Recycling containers shall be provided adjacent to waste bins at convenient locations across the Modesto A. Maidique Campus, Engineering Center and Biscayne Bay Campus. Composting containers should be provided in all food service areas and housing.

Policy 4.2.3

Florida International University shall promote recycling through periodic educational campaigns for the student body, faculty, and staff.

Policy 4.2.4

Florida International University shall implement a mandatory recycling program targeted towards faculty and staff. This includes mandatory recycling at all student housing buildings, to include (but not limited to) recycling of items such as newspaper, glass, aluminum cans, steel cans, and plastics.

Coordinate solid waste policies with purchasing to reduce plastic and non-recyclable material waste on campus. Coordinate with food service and campus contractors to reduce plastics and non-recyclables.

Policy 4.2.5

Expand upon existing food waste composting programs. FIU shall evaluate the techniques and benefits of composting of vegetation and vegetation refuse and landscape debris landscape refuse for future implementation at the University. See also Policy 2.2.1 in Element 13.0.

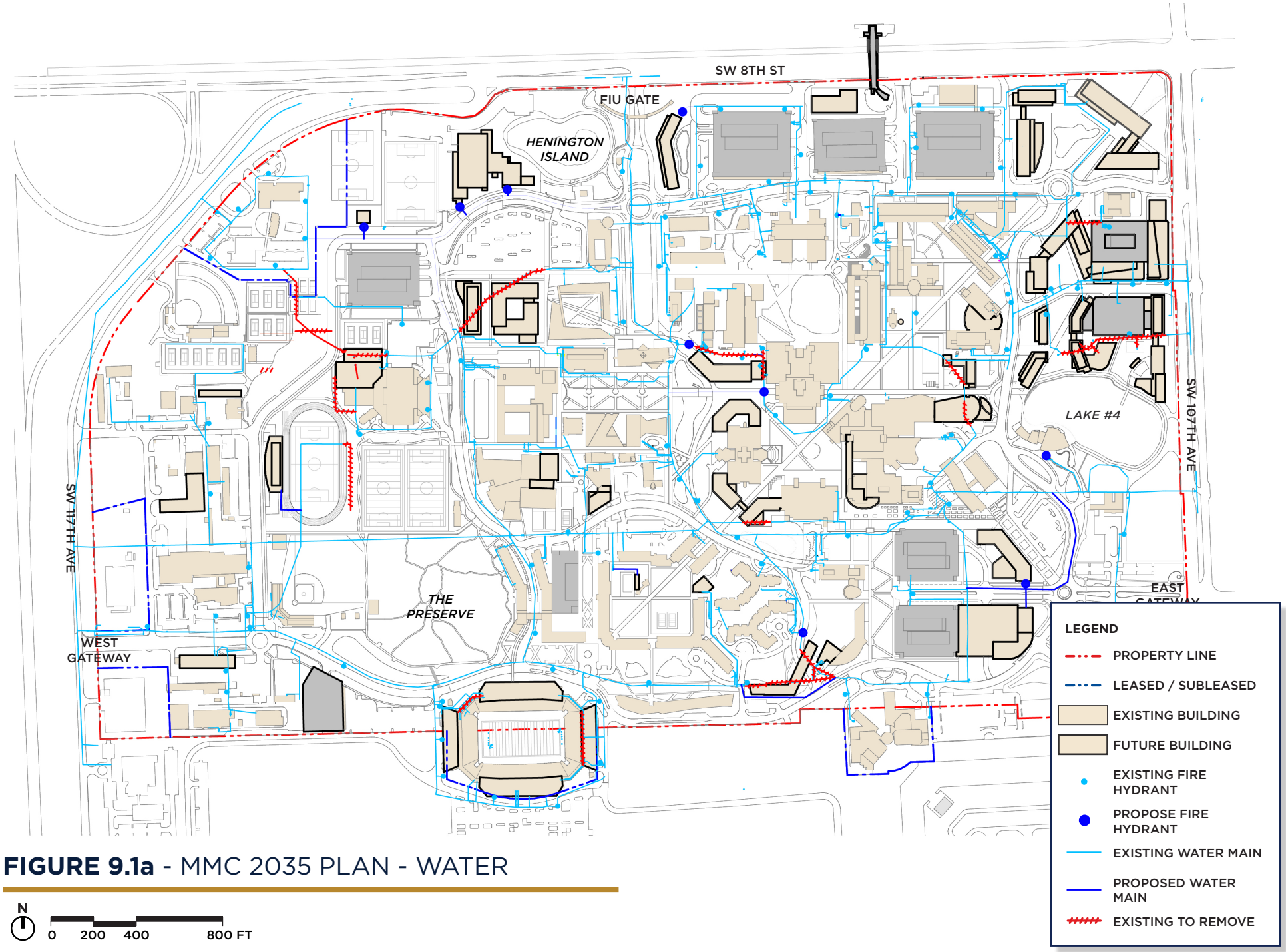


FIGURE 9.1a - MMC 2035 PLAN - WATER

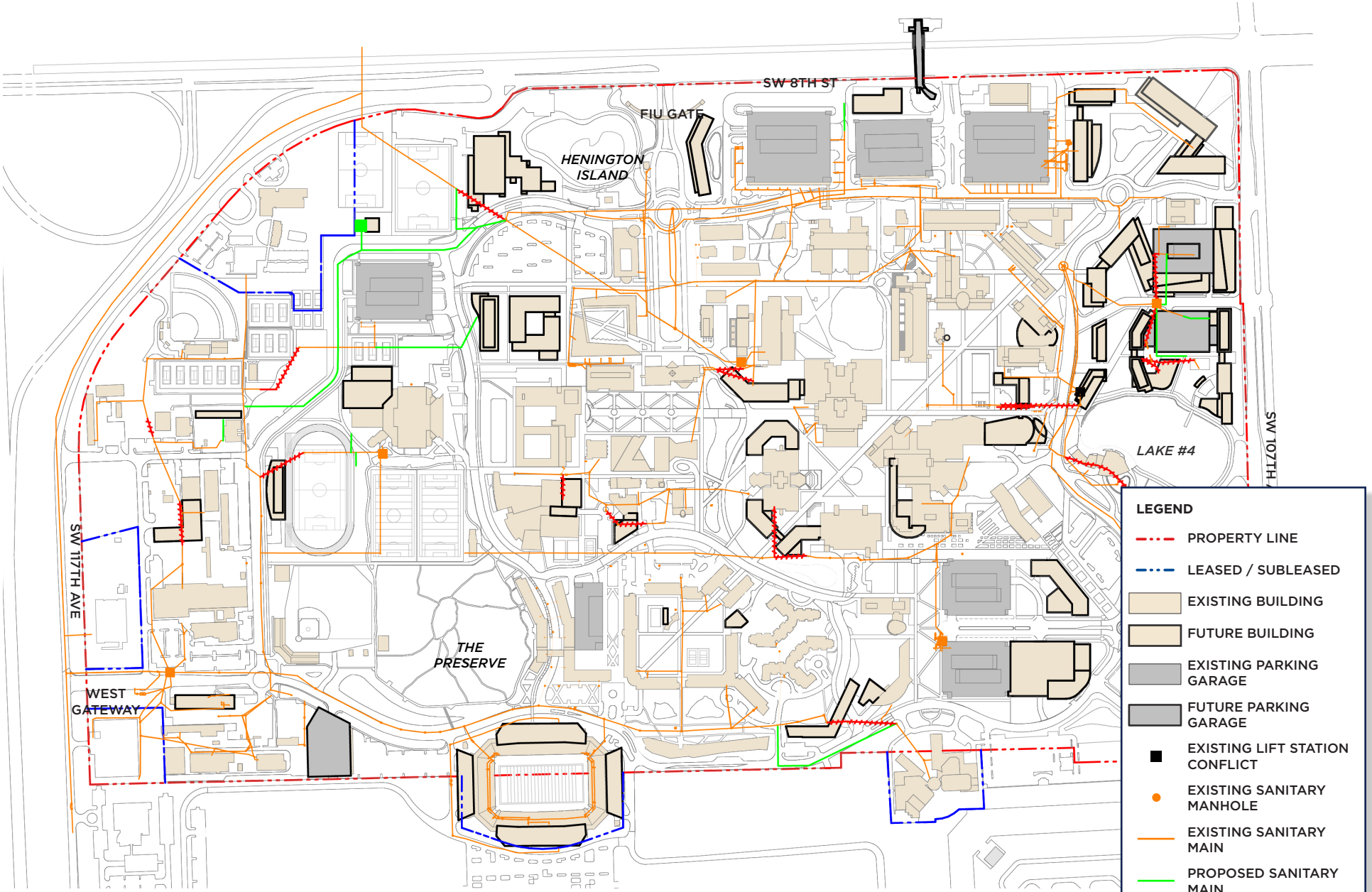


FIGURE 9.1b - MMC 2035 PLAN - SANITARY

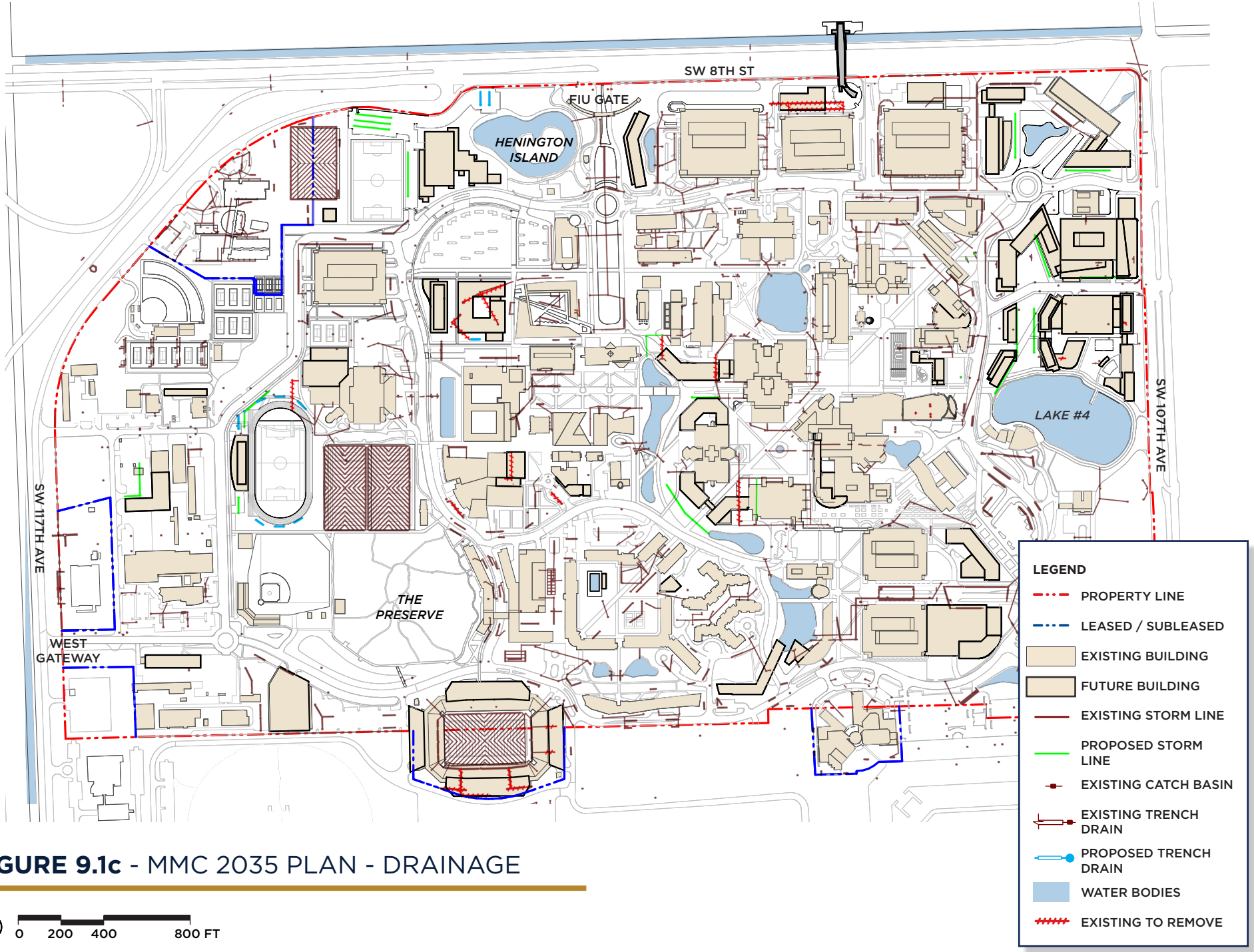


FIGURE 9.1c - MMC 2035 PLAN - DRAINAGE

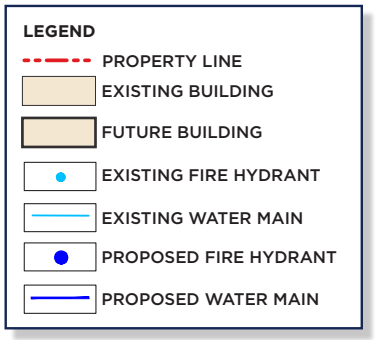


FIGURE 9.2a - EC 2035 PLAN - WATER

N

0 100 300 FT

FIGURE 9.2b - EC 2035 PLAN - SANITARY

LEGEND

- PROPERTY LINE
- EXISTING BUILDING
- FUTURE BUILDING
- ST — EXISTING STORM LINE
- EXISTING CATCH BASIN
- EXISTING TRENCH DRAIN
- PROPOSED TRENCH DRAIN

FIGURE 9.2c - EC 2035 PLAN - DRAINAGE

N

0 100 300 FT

FIGURE 9.3a - BBC 2035 PLAN - WATER

N

0 100 300 FT

FIGURE 9.3b - BBC 2035 PLAN - SANITARY

N

0 100 300 FT

FIGURE 9.3c - BBC 2035 PLAN - DRAINAGE

10.0

UTILITIES

10.0 UTILITIES

The purpose of this element is to ensure coordinated provision of utility services required to meet the future needs of the University, consistent with current efforts to address sustainability on campus such as the development of a Climate Action Plan (a responsibility as a signatory of the American College and University Presidents Climate Commitment) and the University-driven direction that all new facilities meet United States Green Building Council (USGBC) standards and target LEED Gold or equivalent as minimum criteria. This element includes the following:

1. Provision of a chilled water supply
2. Provision of electric power supply and other fuels

CHILLED WATER: The facility expansions proposed in this Campus Master Plan will require a number of improvements to the chilled water generation and distribution system on the MMC Campus. The central chiller plant will need to be upgraded to pump chilled water to all proposed growth areas. Energy efficiency will need to be optimized for generating and pumping equipment. And plant capacity will need to be expanded to satisfy the higher chilled water demands imposed by new buildings.

ELECTRICAL POWER: Electrical energy is furnished to Florida International University by Florida Power and Light (FP&L). They master plan their facilities to satisfy all campus expansion. Close coordination must be maintained with them so the needs of new buildings are provided for. Additionally, FP&L offers various incentive programs that may be used by the University to improve the energy consumption of their lighting and chiller systems.

TELECOMMUNICATIONS: The existing telecommunications grid has been heavily used in some areas of MMC. The planning priorities are to expand the grid to serve new buildings and to reinforce the existing grid by adding new duct banks. Another area of development is the creation of a second feed at MMC so the grid has the reliability of two sources of off-campus communication.

For all updated information pertaining to utilities and infrastructure, a copy of the *Utility Infrastructure Survey Update* is on file in the offices of FIU Facilities Planning and Construction.

GOAL 1

Ensure the existing underground chilled water distribution system is not in conflict with future development indicated in this Campus Master Plan.

OBJECTIVES AND POLICIES

MODESTO A. MAIDIQUE CAMPUS

Objective 1.1
Coordinate proposed new development with existing and future underground chilled water distribution and locate proposed buildings to avoid existing underground chilled water piping or include chilled water piping relocation in the program requirements for each development.

Policy 1.1.1

Address potential conflicts of underground chilled water piping locations with proposed buildings established in the 14.0 Capital Improvement Element and as indicated in Figure 10.1 as follows:

MMC - Chilled Water Piping Conflicts - Present to 2035	
Building Tag	**Building Description**
01A	Central HUB (Primera Casa Addition)
05A	Library/Study Expansion
12A	Student Health Expansion
29A	Museum Expansion
33B	Rec Center Expansion East
35B	Honors College (DM Addition)
57A	East Residence Hall A
59	AHC/Interdisciplinary 3
63	Tamiami Hall II

Policy 1.1.2

In order to facilitate future maintenance, emergency repairs, facilities upgrades, and additions, begin implementation of Building Information Modeling for all campus buildings and other applicable improvements. This investment in BIM, 3D Civil, and GIS would (ultimately) reduce maintenance costs, reduce design costs, reduce need for utility relocation, serve as an aid for emergency services, provide better electronic wayfinding, and provide many other benefits.

GOAL 2

Upgrade the chilled water generation and distribution system to efficiently serve Modesto A. Maidique Campus's present and future needs.

Objective 2.1

Extend the existing chilled water piping loop to maintain the current level of service standard for existing facilities and to serve areas of projected growth. Refer to Figure 10.1. The timing and phasing requirements and priorities for the improvements identified in the following policies are established in the 14.0 Capitol Improvement Element.

Policy 2.1.1

Establish defined utility corridors for underground chilled water distribution piping coordinated with future roadway improvements, new buildings, and building additions. Refer to Figure 10.1 for proposed chilled water distribution routing.

Policy 2.1.2

Establish chilled water flow required at each expansion segment so piping sizes may be established. Cumulative flow requirements will be instrumental in determining the parameters for the chiller plant capacity upgrade and pumping ability.

Policy 2.1.3

Update the University Building Standards to clearly establish piping loop materials and methods of installation. Similarly establish parameters for the piping, controls, and pumping arrangements for the connection of new buildings to the piping loop.

Objective 2.2

Chiller Water Production and Pumping System Upgrade:

Increase chilled water production capacity and chilled water pumping capacity to accommodate additional demands associated with the capital improvements identified under Element 14.0 for both the campus main chiller plant and the satellite chiller plant.

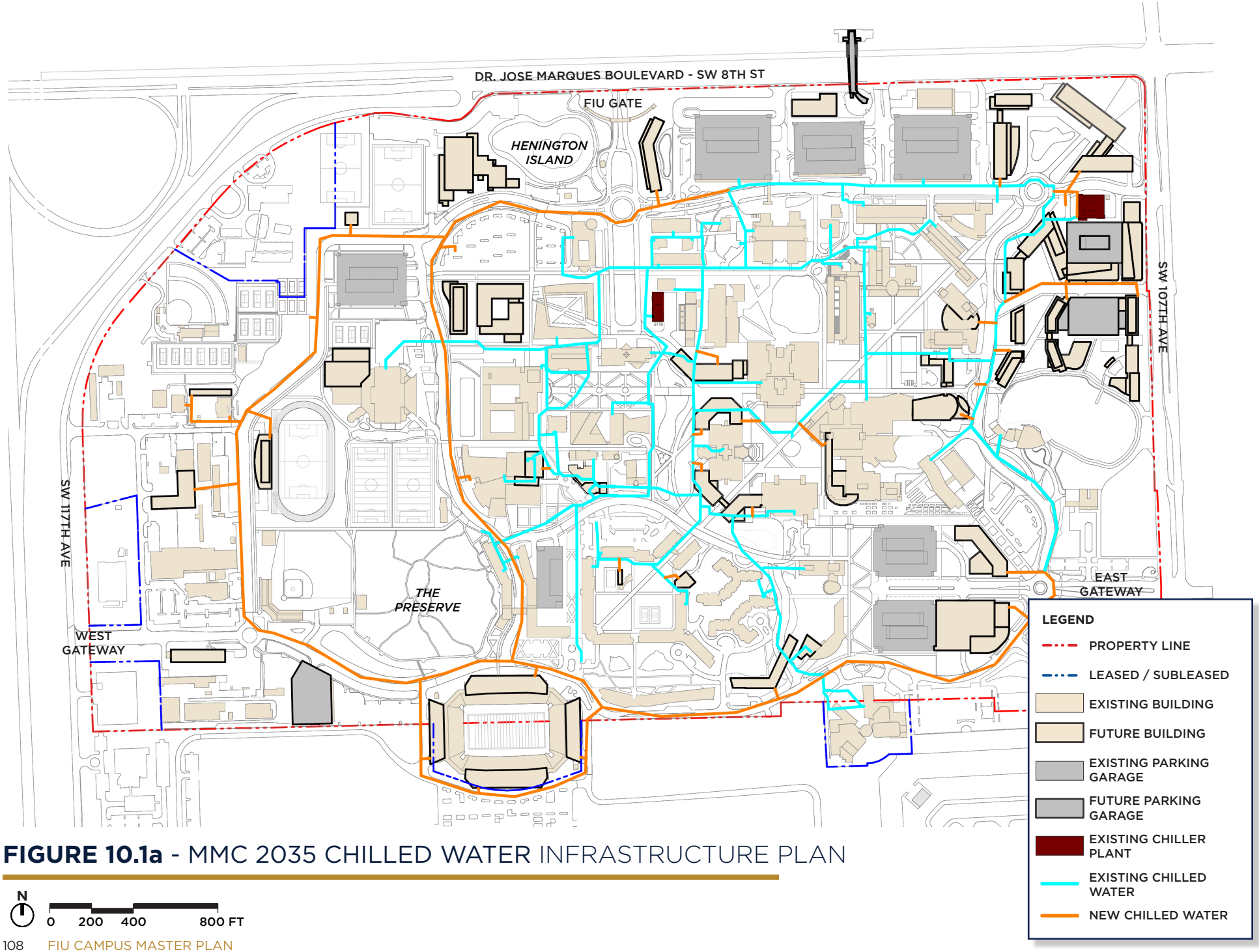


FIGURE 10.1a - MMC 2035 CHILLED WATER INFRASTRUCTURE PLAN

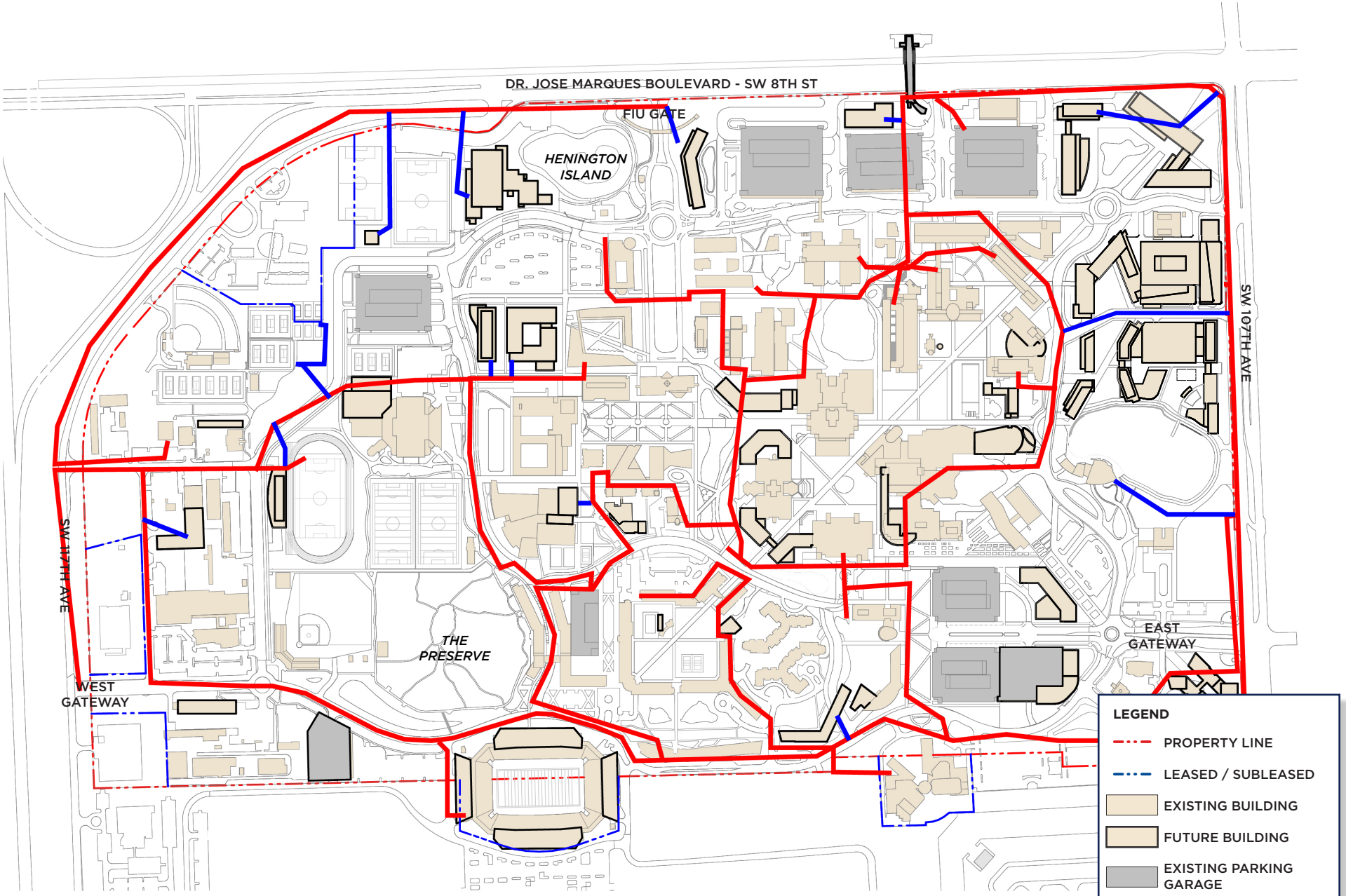
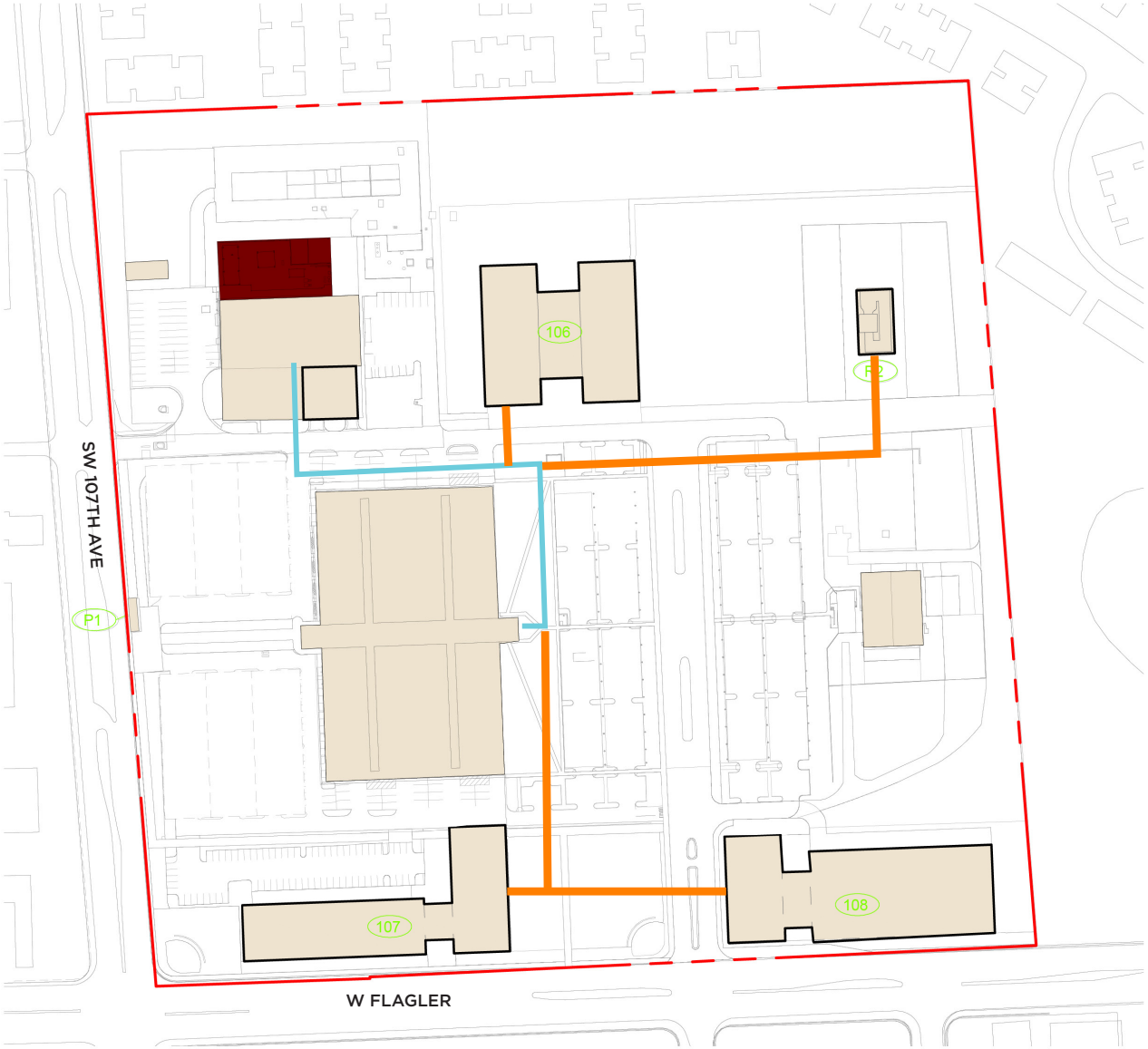


FIGURE 10.1b - MMC 2035 ELECTRICAL INFRASTRUCTURE PLAN

N

0 200 400 800 FT



LEGEND
- PROPERTY LINE
- EXISTING BUILDING
- FUTURE BUILDING
- EXISTING CHILLER PLANT
- EXISTING CHILLED WATER
- FUTURE CHILLED WATER

FIGURE 10.2a - EC 2035 CHILLED WATER INFRASTRUCTURE PLAN

N

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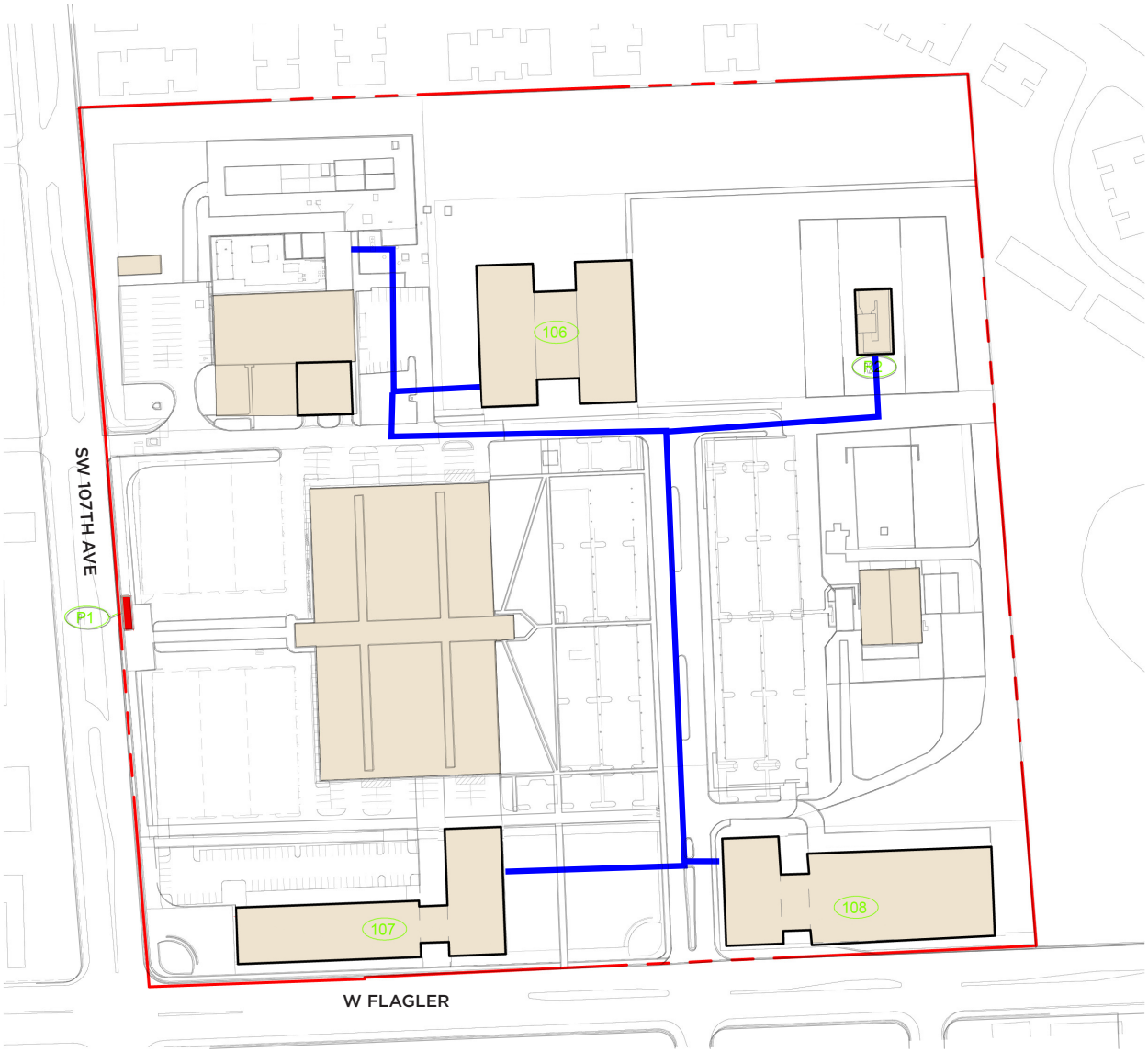

LEGEND

- PROPERTY LINE
- EXISTING BUILDING
- FUTURE BUILDING
- FUTURE ELECTRICAL

FIGURE 10.2b - EC 2035 ELECTRICAL INFRASTRUCTURE PLAN

N

0 100 300 FT

DLR GROUP

FIGURE 10.3a - BBC 2035 CHILLED WATER INFRASTRUCTURE PLAN

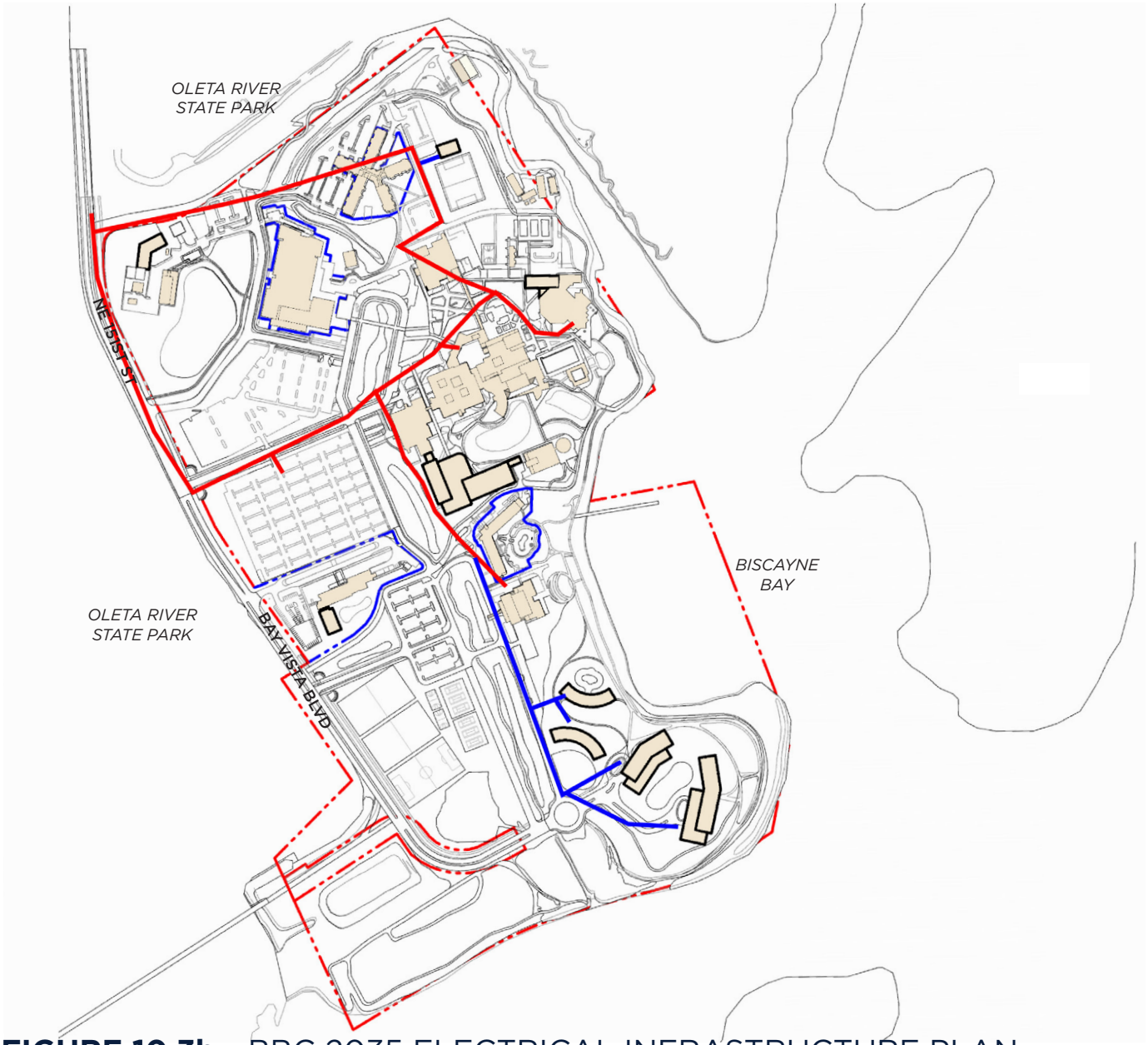

FIGURE 10.3b - BBC 2035 ELECTRICAL INFRASTRUCTURE PLAN

Policy 2.2.1

Increase chilled water production capacity using the available space planned for future chillers within the existing plants to serve new building demands. The timing and phasing requirements and priorities for the improvements identified in the following policies are established in the 14.0 Capital Improvements Element. The estimated chilled water production capacity requirements are indicated below:

Present to 2035		
Building Tag	Building Description	Estimated Tonnage
01A	Central HUB (Primera Casa Addition)	95
03B	University Center Addition	80
05A	Library/Study Expansion	200
07A	Indoor Training Facility	105
12A	Student Health Expansion	25
17A	Children's Creative Learning Experience	15
29A	Museum Expansion	50
32A	Stadium Upper Bowl Expansion	55
33A	Rec Center Expansion West	40
33B	Rec Center Expansion East	70
34A	North Field Rec Support Building	10
35B	Honors College (DM Addition)	110
37	Art Studios	100
48A	Engineering PH2	750
54	AHC/Interdisciplinary 1	1200
547	(removed)	225
35B	Honors College	80
57A	East Residence Hall A	285
57B	East Residence Hall B	360
57C	East Residence Hall C	335
57D	East Residence Hall D	360
57E	East Residence Hall E	675
57F	East Village Rec Center	60
59	AHC/Interdisciplinary 3	980
60	Science Laboratory Complex	910
61	Facilities 1	100
62	AHS Study Complex	140
63	Tamiami Hall II	470
65	AHC/Interdisciplinary 2	505
67A	Academic 6	345
68	Academic 7	225
69	Workforce Housing	255
70	Café	5
71	Aquatic Complex	35
72	Pool House	2
73	University Park Pool House	3
RF1	Track & Field Building	95
RF3A	Soccer Stadium	60
PG7	Garage and Multi-Purpose	80
PG8	Garage and Multi-Purpose	65
PG9	Garage and Multi-Purpose	80
PG11	Garage and Multi-Purpose	75
	Total Design Tonnage (Present to 2035)	**9715**

Policy 2.2.2

Upgrade and modify pumping system to operate with the existing and expanded piping loop. The timing and phasing requirements and priorities for the improvements identified in the following policies are established in the 14.0 Capital Improvements Element.

New developments identified as partnership buildings shown on Figure 10.1 shall be stand alone facilities. Each building shall have dedicated cooling production equipment. These buildings will not connect to the campus chilled water loop. The new partnership buildings indicated in the 14.0 Capital Improvement Elements and shown on Figure 10.1 for the Present to 2035 planning period with their respective expected capacities are:

Partnership Buildings		
Building Tag	Building Description	Estimated Tonnage
64	Partnership	120
66	Partnership	80
Total Design Tonnage (Present to 2035)		**200**

Cooling towers are a significant source of water consumption. Consideration shall be given to installation of water meters for makeup water supply and cooling tower blowdown to monitor consumption and avoid sewer fees associated with the water that is evaporated from the cooling tower. Sewage is metered at the Central Pumping Station.

GOAL 3

In the process of upgrading the chilled water generation and distribution system, optimize the control sequences and temperature differentials to reduce energy costs by increasing operational efficiency.

Objective 3.1

Convert Direct Expansion Systems to Chilled Water:

Policy 3.1.1

Ensure that the chilled water production capacity, pumping capacity, and piping distribution can accommodate the additional demand of the existing buildings currently served by direct expansion systems.

Policy 3.1.2

Extend the existing main chilled water loop to serve the existing campus support buildings on the west end of campus as well as additional academic and student life buildings on the Southeast end of campus.

Objective 3.2

Provide means to measure and verify the efficiency of the HVAC systems serving all the campuses.

Policy 3.2.1

MODESTO A. MAIDIQUE CAMPUS

Install chilled water BTU meters and chiller power consumption meters to determine overall kW/ton performance.

Policy 3.2.2

Install chilled water meters for each building on campus served by the campus chilled water system to monitor chilled water consumption and demand at the building level.

GOAL 4

Ensure the existing underground chilled water distribution system is not in conflict with future development indicated in this Campus Master Plan.

Objective 4.1

Coordinate proposed new development with the existing underground chilled water distribution, and locate proposed buildings to avoid existing underground chilled water piping or include chilled water piping relocation in the program requirements for each development.

ENGINEERING CENTER
Policy 4.1.1

Proposed buildings on future development sites have been planned generally to avoid conflicts with existing underground chilled water distribution. Subsequent design should continue to coordinate these utilities with future development.

Policy 4.1.2

In order to facilitate future maintenance, emergency repairs, facilities upgrades and additions, begin implementation of Building Information Modeling for all campus buildings and other applicable improvements. This investment in BIM, 3D Civil and GIS would (ultimately) reduce maintenance costs, reduce design costs, reduce need for utility relocation, serve as an aid for emergency services, provide better electronic wayfinding, etc.

GOAL 5

Upgrade the chilled water generation and distribution system to serve efficiently Engineer Center Campus's present and future needs.

Objective 5.1

Extend the existing chilled water piping loop to maintain the current level of service standard for existing facilities and to serve the new areas of projected growth. Refer to Figure 10.2. The timing and phasing requirements and priorities for the improvements identified in the following policies are established in the 14.0 Capitol Improvement Element.

Policy 5.1.1

Establish defined utility corridors for underground chilled water distribution piping coordinated with future roadway improvements, new buildings and building additions. Refer to Figure 10.2 for proposed chilled water distribution routing.

Policy 5.1.2

Establish chilled water flow required for the expansion segment so piping sizes may be established. Cumulative flow requirements will be instrumental in determining the parameters for the Chiller Plant capacity upgrade and pumping ability.

Policy 5.1.3

Update the University Building Standards to establish clearly piping loop materials and methods of installation. Similarly establish parameters for the piping, controls, and pumping arrangements for the connection of new buildings to the piping loop.

Objective 5.2

Chilled Water Production and Distribution System Upgrade:

Increase chilled water production capacity to accommodate additional demands associated with the capital improvements identified under Element 14.0.

Policy 5.2.1

Increase chilled water production capacity using the available space planned for future chillers within the existing plants to serve new building demands. The timing and phasing requirements and priorities for the improvements identified in the following policies are established in the 14.0 Capital Improvements Element. The estimated chilled water production capacity requirements are indicated below:

Present to 2035		
Building Tag	Building Description	Estimated Tonnage
R2	Wall of Wind Expansion	0
106	High-bay Research	560
	Total Design Tonnage (Present to 2035)	**560**

ENGINEERING CENTER

Policy 5.2.2

Extend the chilled water piping to serve the high-bay Research Building as shown in Figure 10.2 for the current to 2035 planning period. The estimated chilled water requirements to serve the new high-bay Research building is 960 GPM.

Policy 5.2.3

New developments identified as partnership buildings shown on Figure 10.2 shall be served by chilled water production equipment dedicated for each building. The new Partnership buildings indicated in the 14.0 Capital Improvement Elements and shown on Figure 10.2 for the Present to 2035 planning period with their respective expected capacities are:

Partnership Buildings		
Building Tag	Building Description	Estimated Tonnage
107	Partnership 1	850
108	Partnership 2	230
PG	Multi-purpose Garage	65
	Total Design Tonnage (Present to 2035)	**1145**

GOAL 6

Optimize control sequences and temperature differentials to reduce energy costs by increasing operational efficiency.

Objective 6.1

Provide means to measure and verify the efficiency of the HVAC systems serving each campus.

Policy 6.1.1

Install chilled water BTU meters and chiller power consumption meters to determine overall kW/ton performance.

Policy 6.1.2

Install chilled water meters for each building on each campus served by the campus chilled water system to monitor chilled water consumption and demand at the building level.

GOAL 7

Ensure the existing underground chilled water distribution system is not in conflict with future development indicated in the updated master plan.

Objective 7.1

Coordinate proposed new development with existing underground chilled water distribution and locate proposed buildings to avoid existing underground chilled water piping or include chilled water piping relocation in the program requirements for each development.

BISCAYNE BAY CAMPUS

Policy 7.1.1

Address underground chilled water piping conflicts with proposed buildings established in the 14.0 Capital Improvement Element and as indicated in Figure 10.3 as follows:

BBC - Chilled Water Piping Conflicts - Present to 2035	
Building Tag	**Building Description**
N14	Environmental Communications
N15	Media Innovation Center

Policy 7.1.2

In order to facilitate future maintenance, emergency repairs, facilities upgrades and additions, begin implementation of Building Information Modeling for all campus buildings and other applicable improvements. This investment in BIM, 3D Civil and GIS would (ultimately) reduce maintenance costs, reduce design costs, reduce need for utility relocation, serve as an aid for emergency services, provide better electronic wayfinding, etc.

GOAL 8

Upgrade the chilled water generation and distribution system to efficiently serve Biscayne Bay Campus's present and future needs.

Objective 8.1

Extend the existing chilled water piping loop to maintain the current level of service standard for existing facilities and to serve the new areas of projected growth. Refer to Figure 10.3. The timing and phasing requirements and priorities for the improvements identified in the following policies are established in the 14.0 Capitol Improvement Element.

BISCAYNE BAY CAMPUS

Policy 8.1.1

Establish chilled water flow required at each expansion segment so piping sizes may be established. Cumulative flow requirements will be instrumental in determining the parameters for the chiller plant capacity upgrade and pumping ability.

Policy 8.1.2

Establish chilled water flow required at each expansion segment so piping sizes may be established. Cumulative flow requirements will be instrumental in determining the parameters for the chiller plant capacity upgrade and pumping ability.

Objective 8.2

Chilled Water Production and Pumping System Upgrade:

Increase chilled water production capacity and chilled water pumping capacity to accommodate additional demands associated with the capital improvements identified under Element 14.0.

Policy 8.2.1

Increase chilled water production capacity to serve new building demands. Additional chiller capacity must be added to the system to maintain the N+1 redundancy for any expansion during the Present to the 2035 planning period. This may be accomplished by the replacement of the existing chiller that is currently out of service. All alternatives will require an upgrade of the condenser water (cooling towers and pumps) system. The timing and phasing requirements and priorities for the improvements identified in the following policies are established in the 14.0 Capital Improvements Element. The estimated chilled water production capacity requirements are indicated below:

Present to 2035		
Building Tag	Building Description	Estimated Tonnage
N01B	Graduate Hospitality	75
N13A	Seas Expansion	190
N14	Environmental Communications	140
N15	Media Innovation Center	100
N20A	Facility Housing	460
N20B	Facility Housing Garage	15
N21A	Facility Housing	85
N21B	Facility Housing Garage	15
N22A	Facility Housing	300
N22B	Facility Housing Garage	15
S05	Facilities Support	20
	Total Design Tonnage (Present to 2035)	**1415**

Policy 8.2.2

Upgrade and modify pumping system to operate with the existing and expanded piping loop. The timing and phasing requirements and priorities for the improvements identified in the following policies are established in the 14.0 Capital Improvements Element.

Policy 8.2.3

Cooling towers are a significant source of water consumption. Consideration shall be given to installation of water meters for makeup water supply and cooling tower blown down to monitor consumption and avoid sewer fees associated with the water that is evaporated from the cooling tower.

GOAL 9

In the process of upgrading the chilled water generation and distribution system, optimize the control sequences and temperature differentials to reduce energy costs by increasing operational efficiency.

Objective 9.1

Convert Direct Expansion Systems to Chilled Water:

Convert existing general use (not including special systems such as IT room emergency systems) direct expansion systems to chilled water operation.

BISCAYNE BAY CAMPUS

Policy 9.1.1

Ensure that the chilled water production capacity, pumping capacity, and piping distribution can accommodate the additional demand of the existing buildings currently served by direct expansion systems.

Policy 9.1.2

Install chilled water BTU meters and chiller power consumption meters to determine overall kW/ton performance.

GOAL 10

Ensure the existing underground electrical distribution system is not in conflict with future development indicated in the updated master plan.

Objective 10.1

Coordinate proposed new development with existing electrical distribution and locate proposed buildings to avoid existing underground electrical distribution or include underground electrical distribution relocation in the program requirements for each development.

MODESTO A. MAIDIQUE CAMPUS

Policy 10.1.1

Address underground electrical distribution conflicts with proposed buildings established in the 14.0 Capital Improvement Element and as indicated in Figure 10.01b as follows:

01A	Primera Casa Addition
03A/B	Graham Center Addition
05	Library/Study Expansion
35A	Academic 2
35B	Honors College (DM Addition)
49	CasaCuba
58A	East Residence Hall A
58B	East Residence Hall B
58C	East Residence Hall C
58D	East Residence Hall D
58E	East Residence Hall D
59	AHC/Interdisciplinary 3
63	Tamiami Hall II
54A/B	Partnership
66	Partnership
PG7	Garage and Multi-Purpose
PG11	Garage and Multi-Purpose

Policy 10.1.2

In order to facilitate future maintenance, emergency repairs, facilities upgrades and additions, begin implementation of Building Information Modeling for all campus buildings and other applicable improvements. This investment in BIM, 3D Civil and GIS would (ultimately) reduce maintenance costs, reduce design costs, reduce need for utility relocation, serve as an aid for emergency services, provide better electronic wayfinding, etc.

GOAL 11

Extend the utility power primary voltage network to efficiently serve the campus in its present and future configurations.

Objective 11.1

Extend the existing electrical power grid in coordinated with Florida Power and Light to maintain the current level of service standard to the existing as well as the new buildings.

MODESTO A. MAIDIQUE CAMPUS

Policy 11.1.1

Extend electrical feeders to planned building expansions at Modesto A. Maidique Campus with increased service capacity. [Figure 10.01b]. The planned expansions from Present to 2035 are:

Present to 2035		
Building Tag	Building Description	Estimated Demand
01A	Primera Casa Addition	588 KW
03B	University Center Addition	507 KW
05A	Library/Study Expansion	1269 KW
07A	Indoor Training Facility	667 KW
12A	Student Health Expansion	163 KW
17A	Children's Creative Learning Experience	84 KW
29A	Museum Expansion	268 KW
32A	Stadium Upper Bowl Expansion	290 KW
33A	Rec Center Expansion West	239 KW
33B	Rec Center Expansion East	420 KW
34A	North Field Rec Support Building	50 KW
35B	DM Addition	503 KW
37	Art Studios	437 KW
48A	Engineering PH2	1318 KW
54A/B	Partnership	2739 KW
58D	East Residence Hall D	1473 KW
58E	Residence Hall	2730 KW
58F	East Village Rec Center	369 KW
59	AHC/Interdisciplinary 3	1887 KW
60	Science Laboratory Complex	1729 KW
61	Facilities 1	621 KW
62	AHS Study Complex	876 KW
64	AHC/Interdisciplinary 1	2739 KW
65	AHC/Interdisciplinary 2	995 KW
67A	Academic 6	1575 KW
68	Academic 7	1027 KW
69	Workforce Housing	1568 KW
70	Dining Support	34 KW
71	Aquatic Complex	227 KW
72	Pool House	12 KW
73	University Park Pool House	20 KW
RF1	Track & Field Building	608 KW
RF3A	Soccer Stadium	403 KW
PG7	Garage and Multi-Purpose	860 KW
PG8	Garage and Multi-Purpose	700 KW
PG9	Garage and Multi-Purpose	863 KW
PG11	Garage and Multi-Purpose	809 KW
	Total Estimated Demand (Present to 2035)	**35844 KW**

Policy 11.1.2

The primary service capacity for the partnership buildings shall be coordinated with FP&L and this Campus Master Plan. The partnership buildings may be developed at any time within the campus master planning time period. (see Figure 10.01b) The planned partnership buildings are:

Partnership Buildings		
Building Tag	Building Description	Estimated Tonnage
54A/B	Partnership	784 KW
66	Partnership	536 KW
	Total Estimated Demand (Present to 2035)	**1320 KW**

Policy 11.1.3

Maintain close coordination Florida Power & Light (FP&L) so they may tailor their facilities to the projected campus growth. FP&L is responsible for extending their facilities on campus to serve all new buildings. Therefore, Campus Master Plan information must be accessible to FP&L and the University must act as coordinator to guarantee that FP&L planning is in step with Campus Master Plan requirements.

GOAL 12

Improve the efficiency of electrically powered equipment to reduce operating costs.

Objective 12.1

Install energy efficient equipment in planned buildings and retrofit existing facilities with energy efficient components.

Policy 12.1.1 MODESTO A. MAIDIQUE CAMPUS

Purchase Energy Star rated equipment.

GOAL 13

Ensure the existing underground electrical distribution system is not in conflict with future development indicated in this Campus Master Plan.

Objective 13.1

Coordinate proposed new development with existing underground electrical distribution and locate proposed buildings to avoid existing underground electrical distribution or include underground electrical distribution relocation in the program requirements for each development.

ENGINEERING CENTER

Policy 13.1.1

Address potential underground electrical distribution conflicts with proposed buildings established in the 14.0 Capital Improvement Element (Figure 10.02b).

Policy 13.1.2

In order to facilitate future maintenance, emergency repairs, facilities upgrades and additions, begin implementation of Building Information Modeling for all campus buildings and other applicable improvements. This investment in BIM, 3D Civil and GIS would (ultimately) reduce maintenance costs, reduce design costs, reduce need for utility relocation, serve as an aid for emergency services, provide better electronic wayfinding, etc.

GOAL 14

Extend the utility power primary voltage network to efficiently serve the campus in its present and future configurations.

Objective 14.1

Extend the existing electrical power grid coordinated with Florida Power and Light to maintain the current level of service standard to the existing as well as the new buildings.

ENGINEERING CENTER

Policy 14.1.1

Extend electrical feeders to planned building expansion at Engineering Center with increased service capacity. [Figure 10.02b]. The planned expansions from Present to 2035 are:

Present to 2035		
Building Tag	Building Description	Estimated Demand
R2	Wall of Wind Expansion	
106	High-bay Research	1571 KW
	Total Estimated Demand (Present to 2035)	**1571 KW**

Policy 14.1.2

The primary service capacity for the partnership buildings shall be coordinated with FP&L and this Campus Master Plan. The partnership buildings may be developed at any time within the campus master planning time period. (see Figure 10.01b) The planned partnership buildings are:

Partnership Buildings		
Building Tag	Building Description	Estimated Demand
107	Partnership 1	2260 KW
108	Partnership 2	1986 KW
PG	Multi-purpose Garage	646 KW
	Total Estimated Demand (Present to 2035)	**2632 KW**

Policy 14.1.3

Maintain close coordination with Florida Power & Light (FP&L), so they may tailor their facilities to the projected campus growth. FP&L is responsible for extending their facilities on campus to serve all new buildings. Therefore, Campus Master Plan information must be accessible to FP&L and the University must act as coordinator to guarantee that FP&L planning is in step with Campus Master Plan requirements.

GOAL 15

Improve the efficiency of electrically powered equipment to reduce operating costs.

Objective 15.1

Install energy efficient equipment in planned buildings and retrofit existing facilities with energy efficient components.

ENGINEERING CENTER

Policy 15.1.1

Purchase Energy Star rated equipment.

GOAL 16

Ensure the existing underground electrical distribution system is not in conflict with future development indicated in this Campus Master Plan.

Objective 16.1

Coordinate proposed new development with existing electrical distribution and locate proposed buildings to avoid existing underground electrical distribution or include underground electrical distribution relocation in the program requirements for each development.

BISCAYNE BAY CAMPUS

Policy 16.1.1

Address underground electrical distribution conflicts with proposed buildings established in the 14.0 Capital Improvement Element (Figure 10.03b).

Policy 16.1.2

In order to facilitate future maintenance, emergency repairs, facilities upgrades and additions, begin implementation of Building Information Modeling for all campus buildings and other applicable improvements. This investment in BIM, 3D Civil and GIS would (ultimately) reduce maintenance costs, reduce design costs, reduce need for utility relocation, serve as an aid for emergency services, provide better electronic wayfinding, etc.

GOAL 17

Extend the utility power primary voltage network to efficiently serve the campus in its present and future configurations.

Objective 17.1

Extend the existing electrical power grid coordinated with Florida Power and Light to maintain the current level of service standard to the existing as well as the new buildings

BISCAYNE BAY CAMPUS

Policy 17.1.1

Extend electrical feeders to planned building expansion at Biscayne Bay Campus with increased service capacity. (see Figure 10.03b). The planned expansions from Present to 2035 are:

Present to 2035		
Building Tag	Building Description	Estimated Demand
N01B	Graduate Hospitality	446 KW
N13A	SEAS Expansion	1130 KW
N14	Environmental Communications	831 KW
N15	Media Innovation Center	590 KW
N20A	Facility Housing	2478 KW
N20B	Facility Housing Garage	916 KW
N21A	Facility Housing	2245 KW
N21B	Facility Housing Garage	233 KW
N22A	Facility Housing	1650 KW
N22B	Facility Housing Garage	173 KW
S05	Facilities Support	166 KW
	Total Estimated Demand (Present to 2035)	**10858 KW**

Policy 17.1.2

Maintain close coordination Florida Power & Light (FP&L), so they may tailor their facilities to the projected campus growth. FP&L is responsible for extending their facilities on campus to serve all new buildings. Therefore, Campus Master Plan information must be accessible to FP&L and the University must act as coordinator to guarantee that FP&L planning is in step with Campus Master Plan requirements.

GOAL 18

Improve the efficiency of electrically powered equipment to reduce operating costs.

Objective 18.1

Install energy efficient equipment in planned buildings and retrofit existing facilities with energy efficient components.

BISCAYNE BAY CAMPUS

Policy 18.1.1

Purchase Energy Star rated equipment.

11.0

TRANSPORTATION

11.0 TRANSPORTATION

For all campuses, FIU's goal is to increase multi-modal access, aligning with our strategic objectives to enhance the FIU experience by ensuring safe, sustainable, and inclusive access for students, faculty, staff, and visitors. By employing a range of innovative strategies, FIU is committed to increasing accessibility and mobility, while simultaneously reducing our carbon footprint, in support of our broader mission of sustainability, and environmental stewardship. This approach is integral to fostering an interconnected, dynamic campus environment that supports our academic and research goals, as well as our mission-aligned engagement with the community.

Transit
Florida International University will continue to coordinate with its respective host communities and Miami-Dade Transit to create additional opportunities for improved and more frequent public transportation, additional bus stops near campus, and enhanced bus stops with amenities such as shelters and landscaping. Both the Modesto A. Maidique Campus and the Engineering Center will provide major transit hubs for evolving bus rapid transit programs to serve the University and local community.

Traffic Circulation
Improvements to existing infrastructure are needed to alleviate the demand placed on roadways from the current University population as well as accommodate future growth. Intersection and lane improvements adjacent to each campus have been identified. Coordination with Miami-Dade County and FDOT is needed to ensure proper and successful execution of these recommended improvements. In addition, the incorporation of safe and efficient bicycle lanes for commuting students is required both off and on campus. Streetscape improvements to perimeter streets, access drives, and campus roads are required to promote a safe, secure, and comfortable pedestrian-oriented environment to complement the street network.

FIU shall coordinate proposed improvements along SW 8th Street and SW 107th Avenue with Florida Department of Transportation. Improvements along SW 117th to be coordinated with Department of Transportation and Public Works in accordance with the Transportation Improvement Program and Long Range Transportation Plan.

Parking
Parking demand and availability continues to be a challenge for FIU. While both the Engineering Center and Biscayne Bay Campus have adequate available land for additional parking facilities, the Modesto A. Maidique Campus has limited available land and road capacity. This lack of capacity has led to the recommendation in this plan for multi-purpose parking structures at the campus edge to reserve land within the academic core. In order to manage parking demand and reduce the need for additional parking facilities, FIU will continue to promote alternatives to traditional commuting such as improved transit, carpooling, additional on-campus student housing, new off-campus housing with campus connectivity, eLearning and hybrid class modules, and flexible work schedules.

Pedestrian and Non-Vehicular Circulation
Pedestrian circulation remains a major planning concern, closely aligned with our strategic goals of enhancing the FIU experience and fostering community engagement. FIU is committed to expanding its network of safe, accessible pedestrian walkways from the perimeter to the core of our campuses at pedestrian "hot spots", ensuring they are sufficiently wide to accommodate the growing community. Concurrently, we aim to enhance identifiable crosswalks at strategic locations to improve access from parking areas to academic and student life centers. Enhanced signage and lighting are crucial for supporting these developments and ensuring the safety of all users. Additionally, the design of new facilities and their pedestrian access points will prioritize safe movement, integrating vistas, weather protection, seating areas, and public art to make navigating our campuses more intuitive and enjoyable. The proposed 8th Street TIGER Grant Pedestrian Bridge exemplifies our commitment to safety, connectivity, and innovative campus branding.

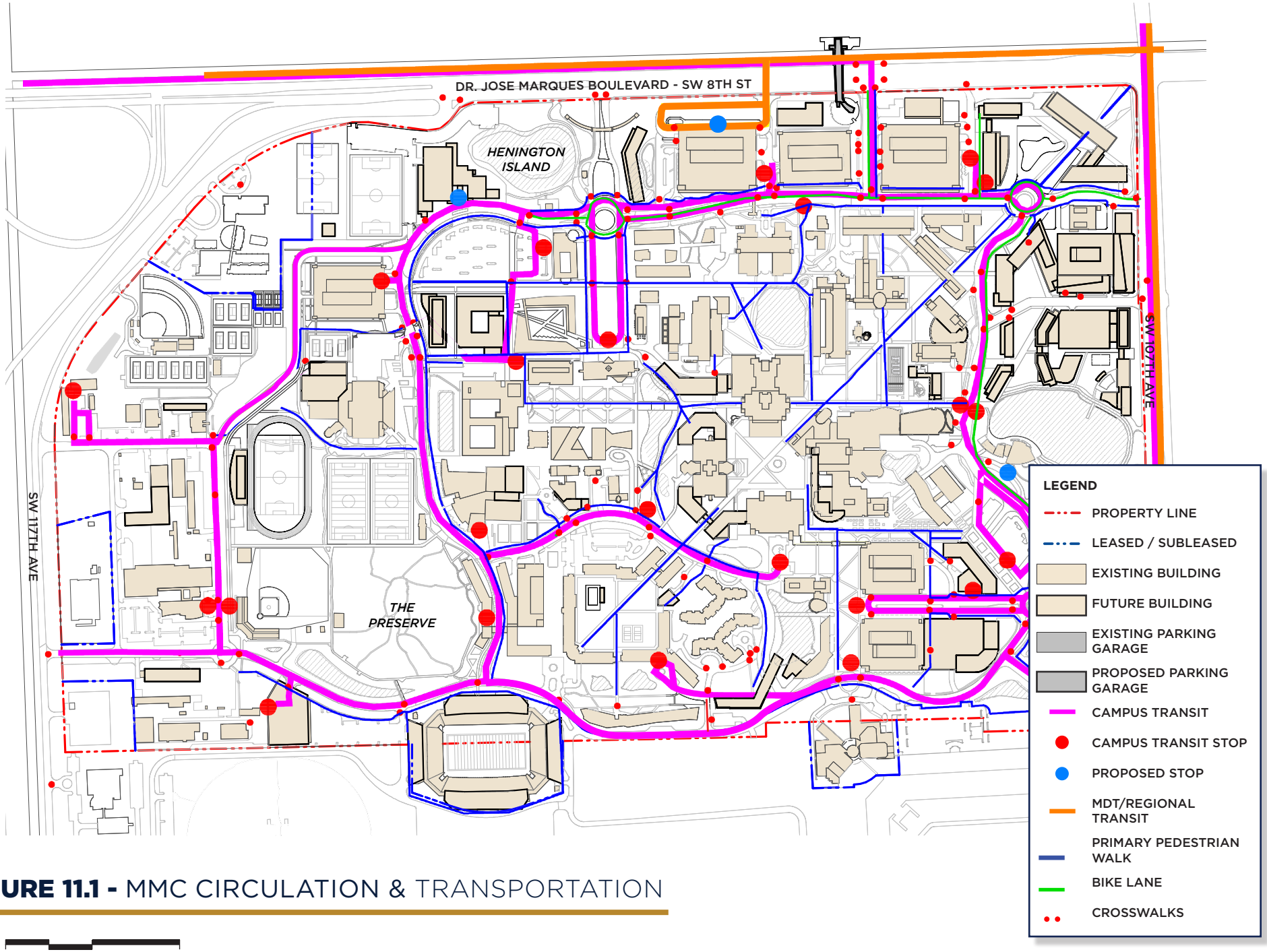

FIGURE 11.1 - MMC CIRCULATION & TRANSPORTATION

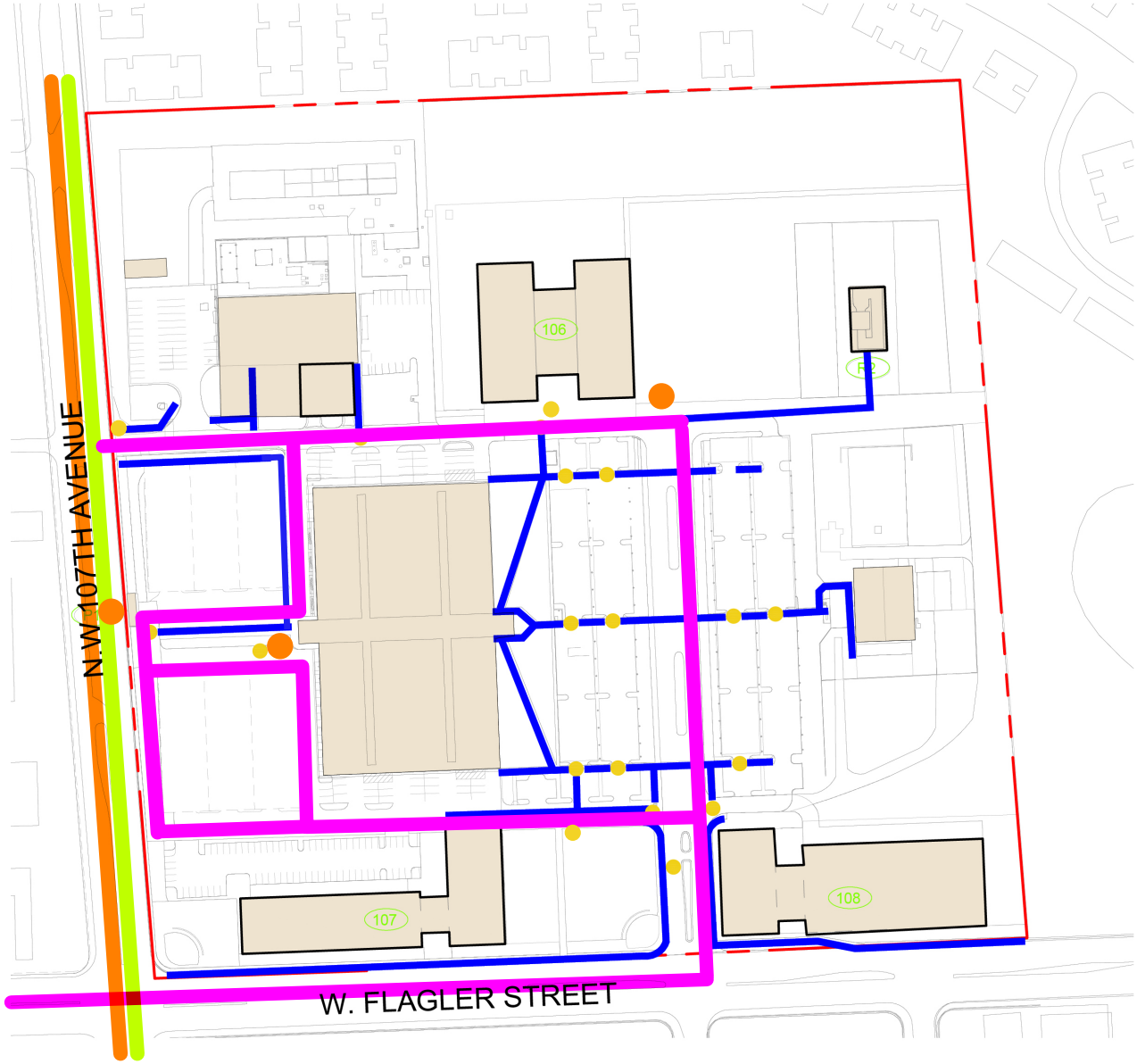

FIGURE 11.2 - EC CIRCULATION & TRANSPORTATION

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0 100 300 FT

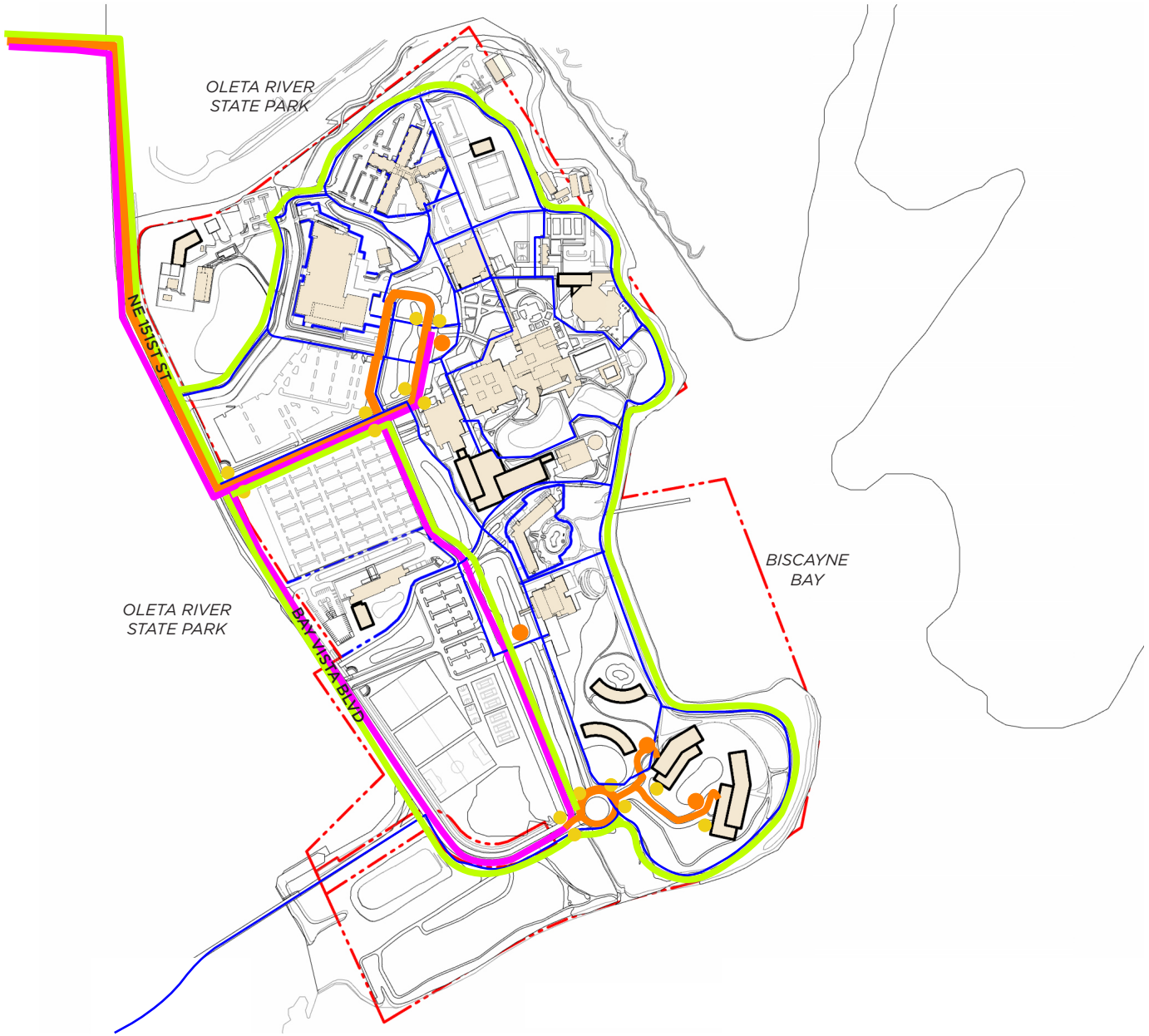


FIGURE 11.3 - BBC CIRCULATION & TRANSPORTATION

GOAL 1

Florida International University shall continue to develop, operate, and maintain a safe and efficient multi-modal circulation system that provides ease of mobility. This will lead to decreases in number of single occupant vehicles; reduction in fuel consumption and dependence on foreign oil, reduction in greenhouse gas emissions, promotion of energy conservation and protection of the natural environment. Evaluate options for shuttle service between MMC and off-campus student housing. Expand infrastructure for charging stations in parking structures and elsewhere on campus to promote adoption of electric vehicles.

Transit
Objective 1.1

The University shall allocate funds for capital expansion and improvements of multi-modal systems that relieve on-campus traffic congestion and reduce the demand for additional parking. Coordinate with Miami-Dade Transit (MDT) and local/host communities to determine the best and highest use for the transit proposed to serve the campuses.

UNIVERSITY-WIDE
Policy 1.1.1

Continue to improve the quality and frequency of on campus and inter-campus University transit services/routes.

MODESTO A. MAIDIQUE CAMPUS:

Policy 1.1.2

Coordinate transit centers and bus entry points to campus with Miami-Dade Transit. Evaluate locations that minimize walking distances.

Policy 1.1.3

Enhance on-campus transit along the loop road to improve connections between housing, parking-garages and key education/support locations. Provide new transit stops along the realigned loop road.

Policy 1.1.4

Encourage MDT to continue increased frequency of service based on ridership (including Sweetwater Circulator and the Better Bus Network), provide dedicated areas for rideshare services, bikeshare services MetroConnect at transit stations, express bus service, maintain clean and comfortable vehicles, and provide weather-proof shelters (the University shall provide weather-proof access to transit shelters).

ENGINEERING CENTER

Policy 1.1.5

Provide a transit hub at the entrance to ECC along NW 107th Avenue and adequate transit circulation routes within campus to support the transit hub.

BISCAYNE BAY CAMPUS

Policy 1.1.6

Evaluate options for connecting shuttle service from BBC to nearby transit hubs. Continue to strengthen coordination efforts with the City of North Miami in order to promote the use of the City's NoMi Express Free Trolley as an alternative transportation option available to both students and employees of the University. As the traffic conditions on NE 151st Street at the intersection with Biscayne Blvd are expected to deteriorate, amenities should be considered near the intersection to facilitate bus transfers. Coordination with Miami Dade Transit should take place to ensure the new enhanced bus service provides a stop near the intersection.

GOAL 2

Traffic Circulation

The University shall promote roadway designs to improve traffic circulation, ease congestion, promote safety, and provide sufficient capacity to serve on future campus roadways at the adopted level of service (LOS) standard. The University shall also coordinate with FDOT and Miami-Dade County to improve capacity and level of service on deficient roadways adjacent to the campuses.

Traffic
Objective 2.1

On a case-by-case basis, the University may consider allocation of funds for roadway improvements to improve traffic circulation, relieve traffic congestion, and decrease delay and fuel consumption.

UNIVERSITY-WIDE
Policy 2.1.1

Enhance pedestrian and bicycle facilities that improve connectivity to host communities and local/regional transit facilities.

Policy 2.1.2

Future proposed campus roadways will use 11-feet wide travel lanes, 4-feet bike lane (except 5-feet wide for keyhole lanes (area between through and turn lane)), type "F" curb and gutter, 6-feet minimum sidewalk with 11-feet landscape buffer in between back of curb and front of sidewalk. FIU shall maintain a suitable roadway network in compliance with State, local, and the National Fire Protection Association standards in order to provide emergency response vehicles with adequate and safe access to emergencies and fires within each campus. Roadway design should also consider potential future raised bike lanes as funded by FDOT grants.

MODESTO A. MAIDIQUE CAMPUS
Policy 2.1.3

Re-align the current campus loop road to traverse between Panther Garage and Carlos Finlay Elementary School and connect to the improved SW 115th Avenue. Re-route the campus loop road to limit vehicular access to the campus core. Provide for pedestrian safety by constructing separate traffic and pedestrian facilities.

Policy 2.1.4

The improved campus loop road should consist of one through vehicular lane in each direction, a center turn lane, bike lanes, curb and gutter, landscaping, and sidewalks. The lane geometry shall include one through lane in each direction and a center left turn lane or two way left turn lane. Proposed road design should accommodate a 45.5-foot long intermediate semi-trailer. SW 8th Street/SW 112th Avenue and University Drive/SW 112th Avenue intersections' design revisions shall accommodate an Articulated
Bus (60-feet long).

Policy 2.1.5

Maintain the following existing entrances per current standards:

- SW 109th Ave and SW 8th St
- SW 112th Ave and SW 8th St
- SW 107th Ave and SW 16th St
- SW 107th Ave and SW 12th St (connect to University Dr.)
- 107th Ave and 10th St
- 107th Ave and 17th St

Policy 2.1.6

Provide a roundabout at the following location to improve capacity, traffic flow and enhance safety: SW 17th St.& SW 115th Ave.

Policy 2.1.7

Coordinate with Miami-Dade County on the future widening of SW 24th Street (Coral Way) from four to six lanes, between SW 117th Avenue and SW 107th Avenue. All improvements and/or work in the right-of-way are subject to further traffic/ design evaluation, review, approval, and permitting by the County. This includes but is not limited to landscaping, signage, new or modified driveway connections, and roadway modifications.

Policy 2.1.8

Coordinate with Miami-Dade County on the future widening of SW 117th Avenue from two to four lanes, between SW 8th Street and SW 24th Street (Coral Way). All improvements and/or work in the right-of-way are subject to further traffic/ design evaluation, review, approval, and permitting by FDOT. This includes but is not limited to landscaping, signage, new or modified driveway connections, and roadway modifications.

Policy 2.1.9

Coordinate with Miami-Dade County on the future widening of NE 151st Street (Bay Vista Blvd) from four to six lanes, between Biscayne Boulevard to east of Biscayne Landing Entrance. All improvements and/or work in the right-of-way are subject to further traffic/design evaluation, review, approval, and permitting by the County and FDOT. This includes but is not limited to landscaping, signage, new or modified driveway connections, and roadway modifications.

Policy 2.1.10

At the main access to the campus (US 1 (Biscayne Blvd)/NE 151st Street intersection), there is substantial delay to campus traffic and this will likely worsen with the completion of the Biscayne Landings development. Major capacity improvements are necessary to enhance safety and operation. In addition, along NE 151st Street near the Biscayne Landing entrance, consider widening from 4 to 6 lanes to alleviate potential 2035 demand. Coordinate with FDOT and Miami-Dade County Roadway Department on these intersection and roadway improvements. All improvements and/or work in the right-of-way are subject to further traffic/design evaluation, review, approval, and permitting by the County and FDOT. This includes but is not limited to, landscaping, signage, new or modified driveway connections, and roadway modifications.

Coordinate with Florida Department of Transportatioin and Miami-Dade County Roadway Department on intersection and roadway improvements at NE 151st Street near the Biscayne Landing entrance. Coordinate improvements and/pr work in the right-of-way with the Traffic Engineering Division and Highway Division in Florida Department of Transportation.

BISCAYNE BAY CAMPUS
Policy 2.1.11

Due to traffic congestion at the main access to the campus (US 1 (Biscayne Blvd.)/NE 151st Street intersection), a second vehicular access point is necessary to ease congestion and serve as an emergency evacuation route due to the nature of proposed developments (School, University, Housing, Health Center, etc.). Per Figure 11.3, the existing easement should be considered in the future for providing this critical vehicular access. FIU will coordinate with state, regional, municipal and private partners to secure this additional access to the campus.

Policy 2.1.12

The Bay Vista Blvd. (NE 151st Street) and NE 145th Street (main campus entrance) intersection's level of service (LOS) will likely approach failure by 2035. To mitigate this potential issue, provide new signal at Bay Vista Blvd. and Golden Panther Drive, and convert it to the main campus entrance. Modify the current main entrance at NE 145th Street to a secondary entrance.

Policy 2.1.13

Coordinate with the City of North Miami and Miami-Dade County with the completion of the widening of NE 151st Street between Biscayne Blvd to east of Biscayne Landing entrance.

GOAL 3

Parking
The University will evaluate the future parking needs of the campuses and shall provide parking facilities as necessary. It will also encourage the implementation of transportation demand strategies to reduce parking demand.

Objective 3.1
To accommodate future parking requirements on-campus, University shall evaluate and construct as necessary additional multi-purpose parking structures or surface parking lots, and establish programs or administrative procedures.

Policy 3.1.1

Maintain a ratio for parking spaces and future student housing beds to limit impact to daily commuter traffic and parking. Enhance pedestrian connectivity to bus transit and campus shuttle areas to encourage carless or multi-modal transit use.

Policy 3.1.2

Replace surface parking lots with multi-purpose parking garages, when feasible, adjacent to the facilities they serve.

Policy 3.1.3

Handicap accessible parking should be reserved

in the vicinity of each academic, support, and residential facility. Parking space counts should range from 2 to 10 spaces depending on facility size, occupancy, and assigned use.

UNIVERSITY-WIDE
Policy 3.1.4

Parking structures and surface lots shall be designed with internal walkways to be fully integrated with the campus pedestrian and traffic circulation system.

MODESTO A. MAIDIQUE CAMPUS:
Policy 3.1.5

Evaluate the accommodation, routing, and design impacts of the potential express bus stop at PG6, pending support from MDT. Evaluate the potential parking impact due to riders using the express bus service at PG6.

Policy 3.1.6

Multi-purpose parking structures shall be built concurrently with proposed private partnership projects to meet partnering needs.

Objective 3.2
University-Wide Implementation of Transportation Demand Management (TDM) strategies:

The University shall implement Transportation Demand Management (TDM) techniques, such as increasing the number of students living on campus, enhancing transit services, modifying academic scheduling, and promoting carpooling, to align with our strategic goals of reducing parking demand and fostering a more sustainable, connected campus environment. These TDM strategies, aimed at reducing or shifting the number of single-occupant vehicle (SOV) trips to non-SOV modes or non-peak periods, support our commitment to sustainability and enhance the overall FIU experience. By encouraging and facilitating pedestrian and bicycle use, improved transit options, ride-sharing, and other sustainable travel alternatives, we aim to implement these strategies across all FIU campuses, promoting not only reduced traffic congestion but also a healthier, more engaging community atmosphere. TDM strategies that are in place and/or could be improved at FIU's campuses include the following:

UNIVERSITY-WIDE
Policy 3.2.1

Local Connectors – Continue to encourage the use of local connector public transportation. This can be achieved by continuing to improve the relationships with each campus host community and improving local connector bus facilities within the FIU campuses. Partnering with the host communities to allow their residents to enjoy activities on campus at reduced rates may encourage these communities to further enhance the quality/frequency of these connector routes.

Policy 3.2.2
Reduced Transit Rates – Continue to work with Miami Dade Transit (MDT) to provide reduced student transit rider rates. This could also be extended to FIU employees to encourage their use of this service. MDT offers discounts for college students and encourages a Corporate Discount Program – FIU should coordinate with MDT to provide corporate discount transit passes to FIU faculty and staff.

Policy 3.2.3

Transit in Lieu of Parking – Provide an annual or semester pass for public transit to students rather than a parking pass as an alternative strategy.

Policy 3.2.4

Improving Transit Facilities - Provide user-friendly transit stop locations on campus that provide amenities such as bus arrival signs, power pedestals, bike parking and adequate amentieis for inclement weather protection to encourage usage.

Policy 3.2.5

Carpool and Ridesharing - Continue to promote the carpool program that is being coordinated with the FDOT's South Florida Commuter Services as well as the County's MetroConnect. This program encourages carpool usage by allowing users to search for other carpool members by selecting the location and schedules they need to meet. Continue to encourage ride sharing and carpooling by providing more easily accessible parking spaces for these types of vehicles.

Policy 3.2.6

Flexible Working Schedule – Provide flexible schedules for FIU administration, staff, and

faculty. This would allow for telecommuting and reduce the volume of traffic generated by these personnel. This will also help reduce traffic flows at peak times.

Policy 3.2.7

On-Campus Housing - Increase the amount of on-campus housing to reduce the need for those residents to have a vehicle to get to campus. This would significantly reduce the number of SOV trips required by nonresident commuter students.

Policy 3.2.8

Distance-Learning Programs – Increase distance learning programs offered by the University to enable students to take classes without traveling to the campuses. More courses and programs through distance learning reduce trips to the University campuses significantly.

Policy 3.2.9

Transit Oriented Development (TOD) - Introduce transit oriented development on campus. Transit oriented development refers to residential and commercial centers designed to maximize access by transit and nonmotorized transportation, with features to encourage transit ridership. Providing a transit station at Modesto A. Maidique Campus and/or the Engineering Center would provide transit access to the surrounding area.

Policy 3.2.10

Transit Information - Provide a system whereby commuters can access and monitor real-time public transportation route schedules and times on their wireless devices.

Policy 3.2.11

Parking Permit Buyback - Implement a buyback program for parking permit holders that would reimburse commuters who give back their parking permit and choose to use public transportation or ridesharing.

Policy 3.2.12

Parking Information - Install parking information boards at main campus entry points to show in real time the number of parking spaces available in key parking lots and decks. This will help reduce traffic by directing drivers to the appropriate deck or lot. This information should also be made available on the web or via an app.

Objective 3.3

Signage:
The University shall create a hierarchy of internal signage.

UNIVERSITY-WIDE
Policy 3.3.1

Assess the current signage system and create better way-finding through the establishment of a hierarchy of signage which includes varying sizes and designs for way-finding. Include signage for directing traffic to nearby parking.

Policy 3.3.2

Create a wayfinding signage system with distinct sign sizes and designs for drivers and pedestrians.

GOAL 4

Develop, operate, and maintain a safe, efficient, and economical pedestrian and non-vehicular circulation system on campus that aligns with our strategic goals of enhancing the FIU experience and fostering sustainable practices. This system, designed in conjunction with off-campus developments by the host communities, will ensure ease of mobility for all, support our mission-aligned engagement by being consistent with planned land use patterns, promote energy conservation, and protect the natural environment. By integrating these principles, we aim to create a campus that is not only accessible but also actively contributes to sustainability and community health.

Objective 4.1

Walkways:
Create a campus-wide system of interconnected walkways.

UNIVERSITY-WIDE
Policy 4.1.1

Provide a continuous system of covered walkways of appropriate width between existing and new academic and student service facilities.

Policy 4.1.2

Construct uncovered walkways of appropriate width along campus roads, between major buildings, from parking facilities, and within parking lots following "natural" walking routes, by the end of the 2035 planning period. Prioritize and coordinate improvements with Figures 11.1, 11.2 and 11.3; Urban Design, Landscape Architectural and Architectural Elements.

Policy 4.1.3

Roadways on campus and entrances to each campus should be designed with clearly designated bicycle lanes to encourage and promote safe bicycle access. Bike lanes shall be 4 feet wide, except keyhole lanes where it shall be 5 feet wide. Bicycle parking should be provided at all major buildings and recreational facilities on campus.

MODESTO A. MAIDIQUE CAMPUS
Policy 4.1.4

The Avenue of the Arts, extending from the Wertheim Performing Arts Center north through the Graham Center, and the 'Avenue of the Professions', running west from the Graham Center to the Graduate School of Business and School of Law, will serve as primary pedestrian linkages through campus. See Element 3.0 Urban Design.

Policy 4.1.5

Provide pedestrian corridors throughout the campus, particularly those extending from parking structures at the campus perimeter. Improve pedestrian routes/safety from garages/parking to campus core.

Policy 4.1.6

Enhance pedestrian safety and keep pedestrian paths away from intersections. Separate pedestrian and vehicular flows to minimize conflict. Provide appropriate warning signs and striping at mid-block pedestrian crossing.

Policy 4.1.7

Coordinate and construct pedestrian walkways with the new multipurpose parking structures to provide a linkage to the existing campus and adjacent facilities.

Policy 4.1.8

Strengthen the direct pedestrian route along the Avenue of the Professions. Route to be more axial than its existing circuitous condition to encourage efficient pedestrian use.

Policy 4.1.9

Integrate the adjacent City of Sweetwater community with the FIU campus by providing a pedestrian bridge across SW 8th Street at SW 109th Avenue, as a part of the FIU UniversityCity Project, funded by the USDOT Tiger Grant.

BISCAYNE BAY CAMPUS
Policy 4.1.10

Provide pedestrian walkways to safely link parking, academic, transit, and recreation facilities.

Policy 4.1.11

Bicycle lanes and sidewalks are not continuous along both sides of NE 151 Street and Bay Vista Blvd. to Biscayne Boulevard. Provide continuous bicycle lanes and sidewalks and extend these facilities to the campus per Figure 11.3.

Policy 4.1.12

Provide adequate bicycle lane links within the campus to the 135th Street / Arch Creek Preserve bicycle / pedestrian route. Coordinate with Miami-Dade County to provide improved bicycle lanes and sidewalks on both sides of the street on Bay Vista Blvd and 151st Street. Ensure safe pedestrian and bicycle access from the local schools nearby.

Policy 4.1.13

FIU will coordinate with the City of North Miami to maintain connections to the existing Arch Creek bike path on the 135th Street constructed by FDOT.

Objective 4.2

Campus Safety:
The University shall modify vehicular circulation patterns and parking locations to improve pedestrian/vehicular safety at crossings.

UNIVERSITY-WIDE
Policy 4.2.1

Provide safe crossings for pedestrians across all roadways. Crosswalks shall be of the high emphasis type with appropriate signage (including flashing beacons) and striping. Locations shall consider visibility of pedestrians, length of crosswalks, pedestrian crossing times, connectivity to adjacent sidewalks, pedestrian density, pedestrian signal control, crossing distance, ADA ramps, reduction of posted speed limits, speed bumps, etc.

MODESTO A. MAIDIQUE CAMPUS
Policy 4.2.2

Campus Loop Road: Provide crosswalks on the existing and re-aligned road to provide adequate warning and visibility.

BISCAYNE BAY CAMPUS
Policy 4.2.3

Provide crosswalks on the existing and re-aligned roads to provide adequate warning and visibility.

Objective 4.3
Campus Safety Plan:

Future pedestrian and non-vehicular facilities should be planned in accordance with the Campus Safety Plan and Crime Prevention through Environmental Design (CPTED) standards.

UNIVERSITY-WIDE
Policy 4.3.1

Continue to provide daily escort service after dusk for students between University buildings and parking lots.

Objective 4.4
Context Area:

The University shall create pedestrian and non-vehicular connections to the host communities in the immediate surrounding area.

UNIVERSITY-WIDE
Policy 4.4.1

Maintain a standing committee between University staff and host community representatives to provide coordination and resolve issues related to pedestrian and non-vehicular circulation.

MODESTO A. MAIDIQUE CAMPUS
Policy 4.4.2

Encourage Miami-Dade County to construct bike paths along SW 117 Avenue and Coral Way (SW 24 Street). Encourage FDOT to construct bike paths along SW 8th Street (SR 90) and SW 107th Avenue (SR 985). Provide bikeways on-campus as part of any new roadway construction and provide capital improvement budget for adding bikeways along existing roadways.

ENGINEERING CENTER
Policy 4.4.3

Coordinate with the City of Sweetwater to provide a pedestrian connection and bike path at the Women's Park and the Engineering Center recreation facilities.

Objective 4.5
Lighting

The University shall provide appropriate lighting for new roadways and all major pedestrian and non-vehicular facilities on-campus (i.e. parking, public areas, and walkways) to enhance safety.

UNIVERSITY-WIDE
Policy 4.5.1

Provide new roadways and new pedestrian walkways with lighting that meets lighting design standards for local roadways and public spaces respectively.

Policy 4.5.2

Provide appropriate lighting on the exterior of any new parking garages and new surface parking lots. Any lighting deficiencies on existing facilities shall be addressed to enhance safety.

Future Land Use
Objective 4.6
The University shall provide right-of-way necessary for roadway/transit improvements.

UNIVERSITY-WIDE
Policy 4.6.1

Determine the right-of-way necessary (including clear zone) necessary for all of the recommended roadway improvements in the 2020-2035 Master Plan. This will also include new entries at MMC and BBC.

Policy 4.6.2

Monitor the comprehensive plans of host communities to ensure that roadway/transit improvements in the FIU Master Plan do not conflict with future land uses in the context area.

12.0

INTERGOVERNMENTAL COORDINATION

12.0 INTERGOVERNMENTAL COORDINATION

Florida International University's comprehensive planning process strategically aligns with our goals to enhance the FIU experience and fosters engagement in our focus areas of environmental resilience, health, and technological. This process involves dynamic interaction among our people, programs, amenities, and the crucial elements of our surrounding host communities, jurisdictions, and governmental agencies. Essential to this comprehensive planning are cooperation, consideration, and coordination, which support our objectives to strengthen collaborative relationships with Miami-Dade County, the City of North Miami, and the City of Sweetwater, enhancing community integration and promoting sustainable development.

Cooperation

This Campus Master Plan recognizes the importance of adhering to existing regulatory frameworks at local, state, and federal levels. FIU is committed to cooperating with regulatory agencies to ensure compliance and foster environments that support our strategic focus on environmental sustainability, health initiatives, and the integration of innovative technologies. This includes the Sweetwater "University" Initiative and the TIGER Grant, which are pivotal in enhancing educational and business collaborations that benefit both FIU and the broader community.

Consideration

As a major economic force, FIU is mindful of its impact on planning, resources, and development patterns in its host communities. The university aims to ensure that its projects not only comply with but enhance the surrounding land uses, contributing positively to the community's socioeconomic and environmental fabric.

Coordination

Intergovernmental coordination focuses on collaborative planning, decision-making, and development reviews, essential for advancing FIU's strategic goals in health, environment, and technology. This Campus Master Plan outlines specific needs for coordination to address unique challenges, ensuring that all planning activities support the University's commitment to sustainability and innovation. In cooperation with the Miami-Dade County Office of Historic Preservation, FIU shall consider impacts of the Campus Master Plan to cultural resources for structures that meet the 50-year or older benchmark for historic resource eligibility such as a Cultural Resource Assessment Survey or Florida Master Site File Historical Structure Forms in the interest of preservation and adaptive reuse for historic structures.

GOAL 1

Implement and achieve the goals, objectives, and policies established in this Campus Master Plan that require the interaction of the University with the host communities and other governmental entities.

OBJECTIVES AND POLICIES

Objective 1.1
Establish a process that maintains land use compatibility between the University and the host community through the reciprocal review of local government comprehensive plans and this Campus Master Plan.

Policy 1.1.1

The Florida International University (FIU) Director of Facilities Management of their designee; shall meet with planning officials from Miami-Dade County, the City of North Miami, the City of Miami Beach and the City of Sweetwater to determine an appropriate process for reciprocal review and comment of appropriate elements of the FIU Campus Master Plan by local government officials, and of appropriate elements of local government comprehensive plans by the University. FIU Campus Master Plan elements to be reviewed by local governments shall be limited to the Future Land Use Element, Housing Element, Recreation and Open Space Element, General Infrastructure Element, Capital Improvements Element, Transportation Element, Intergovernmental Coordination Element, and the Conservation Element.

Policy 1.1.2

Proposed amendments to the adopted Campus Master Plan which exceed the thresholds established in Florida Statutes 1013.30 (9), shall be transmitted to the Miami-Dade County, City of North Miami, City of Miami Beach, City of Sweetwater, South Florida Regional Planning Council, South Florida Water Management District, Florida Game and Fresh Water Fish Commission, Florida Department of Transportation, Florida Department of State, Florida Department of Environmental Protection, Florida Land Management Advisory Council, and the State of Florida Department of Community Affairs for review in accordance with the procedures established in Chapter 6C-21, Part 1, Florida Administration Code.

Policy 1.1.3

Proposed amendments to the campus master plan which do not exceed the thresholds established in Florida Statutes 1013.30 (9), but which change how on-campus development may occur or impact off-campus facilities, services, or natural resources, shall be transmitted to the Miami-Dade County, City of North Miami, City of Miami Beach and City of Sweetwater for a courtesy review.

Policy 1.1.4

It shall be the policy of FIU that proposed amendments to the comprehensive plans of the Miami-Dade County, City of North Miami, City of Miami Beach and the City of Sweetwater which have the effect(s) of changing land uses or policies that guide the surrounding development, affect the provision of local services, or otherwise impact University facilities or resources shall be submitted to the University Director of Planning in Facilities Management for review and comment.

Policy 1.1.5

Any development proposing connection to an existing drainage system shall evaluate the impacts of the proposed development on the affected stormwater management system as part of the project's design phase. Otherwise, sufficient stormwater management improvements must be provided to handle all of the runoff from the new developments on a stand-alone basis.

Policy 1.1.6

Facilitate Environmental Coordination Reviews with construction plans, drainage and dewatering plans in cooperation with DERM as it relates to environmental contamination issues in accordance with the Miami-Dade County code,

Policy 1.1.7

University shall adhere to National Emissions Standards for renovation activities surpassing the threshold of suspect regulated asbestos-containing materials for all demolition activities. In the event an Asbestos Survey identifies materials containing more than 1 percent asbestos over regulated thresholds, an asbestos renovation notification must be filed and obtain approval from Miami-Dade County DERM-Air Quality Management Division prior to starting abatement work.

Policy 1.1.8

FIU shall make every effort to formalize this reciprocal review process through the execution of an interlocal agreement or memorandum of understanding.

Objective 1.2

In order to allow for orderly expansion of the Modesto A. Maidique Campus through and beyond the planning period of 2020-2035, Florida International University will assess the feasibility of utilization of properties adjacent and to the south of the present campus for recreation, open space, and support (including parking).

Policy 1.2.1

In order to conserve the limited land resources at Modesto A. Maidique, FIU shall discourage development of land not in conformance with the policies of this Campus Master Plan, with the exception of planned joint-use facilities with the Miami-Dade County Fair and Exposition and Tamiami Park, which considers surrounding uses when developing uses for the Park.

Miami-Dade County Fair and Exposition and Tamiami Park are the primary location identified in the Radiological Emergency Preparedness Plan for the Emergency Reception Center. The purpose of this coordinated site includes registration, monitoring, and decontamination of people; temporary sheltering: and potassium iodide distribution in the event of a radiological event. In the event of a category 3 or higher hurricane, the County's Department of Animal Services plans to move all of its operations to this facility.

Policy 1.2.2

In the event that additional lands are conveyed to Florida International University and any of the thresholds established in Florida Statutes 1013.30 (8) are reached, this Campus Master Plan shall be amended and reviewed in accordance with the criteria established under Chapter 1013.30 (6), (7) and (8) F.S.

Objective 1.3

Obtain a wetland jurisdictional determination for BBC if required for development adjacent to existing wetlands.

Policy 1.3.1

While there is no work anticipated currently, FIU should follow required protocols and determine whether a campus-wide or phased dredge and fill permit process is required.

Policy 1.3.2

FIU shall undertake wetland mitigation in a manner that maximizes the efficiency of the mitigation activities in terms of dredge and fill permit credit received, affordability, and maintenance.

Objective 1.4

Obtain Certification of sanitary sewer system collection, transmission and treatment capacity (allocation) from Miami Dade County DERM.

Policy 1.4.1

In order to expedite University development activities and in particular the installation of potable water and sanitary sewer infrastructure, FIU shall formally request that the Miami-Dade County Department of Environmental Resources Management (DERM) assign a single contact person to review the University's activities for the Modesto A. Maidique Campus, and that the City of North Miami assign a single contact person to review the University's activities for Biscayne Bay Campus.

Policy

FIU shall request that the WASD and the City of North Miami indicate what the specific sanitary sewer treatment allocation is assigned to the local governments and what proportion of that allocation is presently utilized for the Modesto A. Maidique Campus and Biscayne Bay Campuses. Adequate sewer treatment capacity for future development is determined at the time of building consistent with Policy WS2A(2) of the County's Comprehensive Development Master Plan (CDMP).

Policy 1.4.3

FIU shall request a letter of sanitary sewer allocation from Miami-Dade Department of Regulatory and Economic Resources and from the City of North Miami. This allocation confirming the capacity reserved for governmental activities in a quantity sufficient to handle the sanitary sewer projected in this Campus Master Plan to be generated at campus build out.

Policy 1.4.4

The provisions of the Certification of sanitary sewer system collection, transmission and treatment capacity shall be incorporated into the FIU development agreement and adopted

pursuant to Florida Statutes 1013.30.

Objective 1.5

Assess the impacts generated by FIU on host communities and service providers and provide mitigation measures for FIU's impacts for those services found to be deficient.

Policy 1.5.1

A draft development agreement update shall be forwarded to the local governments for review and comment. This agreement shall contain the following components:

- Identify the geographic area covered by the agreement;
- Establish the duration of the agreement;
- Identify the level of service standards for public services and facilities, the entity to provide these services, and any financial arrangements between the FIU Board of Trustees and the service provider;
- Determine the impact of the proposed campus development on public service providers and facilities, and any deficiencies projected to occur as a result of this development;
- Identify what facility improvements are necessary to correct deficiencies caused by the University's development activities;
- Identify the FIU Board of Trustees "fair share" of the cost associated with the required improvements;
- Be consistent with the adopted campus master plan and host local government adopted comprehensive plan; and
- Identify remedies that will minimize off-site impacts and include a schedule of funding for capital projects.

Policy 1.5.2

FIU Board of Trustees and the host governments shall execute the campus development agreement within 180 days after receipt of the draft agreement.

Policy 1.5.3

Upon execution of the campus development agreement, all development may proceed without further review by the host government if it is consistent with the campus development agreement and the adopted campus master plan.

Policy 1.5.4

Upon payment of the "fair share" by the FIU Board of Trustees for the capital improvements established in the campus development agreement, all concurrency management requirements of the University shall be fulfilled.

Policy 1.5.5

Any disputes between the University and the host local government which arise concerning the provisions of the campus development agreement and result in the failure to execute the agreement within 180 days after receipt of the draft agreement shall be resolved in accordance with Florida Statutes 1013.30 (16).

Policy 1.5.6

Any disputes between the University and the host local government which arise from the implementation of the campus development agreement shall be resolved in accordance with the provisions established in Florida Statutes 1013.30 (17).

Objective 1.6
University and local officials shall establish a development review process to assess the impacts of proposed development on significant local, regional, and state resources and facilities. This shall be a reciprocal process whereby local officials are given an opportunity to review proposed campus development in order to assess its potential impacts on local, regional, and state resources and facilities, and whereby University officials are given an opportunity to review proposed development within the context area in which to assess its potential impacts on University resources and facilities.

Policy 1.6.1

Except when otherwise stated in Florida Statutes 1013.30, the provisions of this Campus Master Plan and associated campus development agreement supersede the requirements of Part II of Florida Statutes 163.

Policy 1.6.2

It shall be the policy of FIU that proposed development within the context area which has the potential to impact or affect University facilities or resources shall be submitted to the University's Director of Planning and Facilities Management or designee for review.

Policy 1.6.3

The FIU Director of Planning and Facilities Management or designee shall meet with local officials to establish the criteria and thresholds for development proposals, which would be subject to review by the University. The construction or renovation of single-family homes, and other small scale developments, are to be excluded from review by the University.

Policy 1.6.4

University officials shall participate and cooperate with local officials in the review of proposed campus development to assess potential impacts on local, regional, and state resources and facilities until execution of the campus development agreement.

Policy 1.6.5

Once the campus development agreement is executed, all campus development may proceed without further review by the host local government if it is consistent with the adopted campus master plan and associated campus development agreement.

Policy 1.6.6

University officials shall participate and cooperate with local officials in the review of proposed development within the context area to assess potential impacts on University resources and facilities.

Policy 1.6.7

University officials shall participate and cooperate with local officials in the identification of appropriate strategies to mitigate the impacts of campus development on local, regional, and state resources and facilities, and to mitigate the impacts of proposed development within the context area on university resources and facilities.

Policy 1.6.8

Any dispute between the university and a host or affected local government regarding the assessment or mitigation of impacts shall be resolved in accordance with the process established in Florida Statutes Subsection 1013.30(8).

Policy 1.6.9

FIU shall coordinate with the City of North Miami, the City of Sweetwater, FDOT, and Miami-Dade Transit staff reviews for the development and expansion of pedestrian, bicycle, and transit facilities on a regular basis.

Policy 1.6.10

FIU shall partner with FDOT, Miami-Dade County and Miami-Dade Transportation Planning Organization in order to develop a Transportation Management Initiative (TMI) for the University as one means to mitigate peak hour traffic impacts through transportation demand management (TDM) programs such as carpooling, ridesharing, flex hours, etc.

Objective 1.7

The level of service standards established in this Campus Master Plan shall be reviewed by the entity having operational and maintenance responsibility for said facility.

Policy 1.7.1

In addition to the entities set forth in Florida Statutes 1013.30 (6) receiving the campus master plan for review and comment, the plan shall also be transmitted to the following service providers; FDOT; Miami-Dade Water and Sewer Department; Miami-Dade Metropolitan Planning Organization; Miami-Dade Public Works Department; Miami-Dade Transit; and North Miami Public Works and Utilities Department.

Policy 1.7.2

FIU shall request that the service providers provide comments to the FIU Board of Trustees, in particular with reference to the levels of service established in the plan, within 90 days to coincide with the timeframes established in Florida Statutes 1013.30 (6) for plan review and adoption.

Objective 1.7.3

Any disputes concerning levels of service established in the Campus Master Plan arising between the FIU Board of Trustees and the service providers shall be resolved in accordance with Florida Statutes 1013.30 (8).

Table 12.1 Intergovernmental Coordination Element

Governmental Entity	Nature of Relationship	Coordinating Entity	Coordinating Mechanism
City of North Miami	Non-regulatory	FIU Facilities Management	Coordination in accordance with the provisions of the campus development agreement and adopted goals, objectives and policies.
City of Sweetwater	Non-regulatory	FIU Facilities Management	Coordination in accordance with the provisions of the campus development agreement and adopted goals, objectives and policies.
City of North Miami Beach	Non-regulatory	FIU Facilities Management	Coordination in accordance with the provisions of the campus development agreement and adopted goals, objectives and policies.
Miami-Dade County Commission	Non-regulatory	FIU Facilities Management	Coordination in accordance with the provisions of the campus development agreement and adopted goals, objectives and policies.
Miami-Dade Transit (MDT)	Agency responsible for Miami-Dade County public transit	FIU Facilities Management FIU Liaison (proposed)	No coordination mechanism FIU staff will be assigned to monitor EWMMCS
Miami-Dade County Parks Recreation and Open Spaces	Non-regulatory	FIU Facilities Management	Campus master plan Policy 4.1.1.2 and 12.1.2.1 recommends that a joint use agreement be in place by 1996 for Tamiami Park.
Miami-Dade County Department of Regulatory and Economic Resources-Division of Planning	Regulatory	FIU Facilities Management FIU Urban Design Liaison	Regulates land development activities in accordance with the Chapter 163 Comprehensive Plan and Land Development Regulations

South Florida Water Management District (SFWMD)	Regulatory	FIU Facilities Management FIU Natural Resource Protection Management Committee	Reviews stormwater and dredge and fill permits
South Florida Regional Planning Council (SFRPC)	Reviewing agency	FIU Facilities Management	Reviews and comments on campus master plan in accordance with1013.30 F.S.
U.S. Army Corps of Engineers (ACOE)	Regulatory	FIU Facilities Management FIU Natural Resource Protection Management Committee	Regulates dredge and fill permits in accordance with S.404 of the Clean Water Act.
U.S. Environmental Protections Agency (USEPA)	Regulatory	FIU Facilities Management FIU Natural Resource Protection Management Committee	Meetings as necessary
Federal Highway Administration (FHA)	Regulatory	FIU Facilities Management Board of Governors	Reviews and comments on campus master plan in accordance with 1013.30 F.S.
Miami-Dade Metropolitan Planning Organization	Agency oversees and plans for state and county roads	FIU Facilities Management MPO Liaison (proposed)	No coordinating mechanism. FIU staff will be assigned to monitor EWMMCS
Miami-Dade Water and Sewer Department (WASD)	Utility Provider	FIU Facilities Management	Responsible for water distribution and sewer collection and treatment.
North Miami Public Works Department	Utility Provider	FIU Facilities Management	Responsible for water distribution and sewer collection and treatment.

Miami-Dade County Department of Regulatory and Economic Resources-Division of Environmental Resource Management	Regulatory	FIU Facilities Management	Monitors and regulates operation of water facilities under Chapter 24 of County Code.
Florida Board of Education, Board of Governors	Reviewing agency	FIU Facilities Management Board of Regents	Reviews and comments on campus master plans in accordance with the provisions of s.1013.30 F.S.
Florida Department of Economic Opportunity (DEO)	Reviewing Agency	FIU Facilities Management Board of Regents	Reviews and comments on campus master plans in accordance with the provisions of s.1013.30 F.S.
Florida Department of Environmental Protection (DEP)	Environmental protection, jurisdictional wetlands, dredge and fill permitting Regulatory	FIU Facilities Management FIU Natural Resources Protection Management Committee	Meetings as necessary
Florida Department of State	Reviewing agency	FIU Facilities Management	Reviews and comments on campus master plan in accordance with.1013.30 F.S.
Florida Department of Transportation (DOT)	Reviewing Agency Regulatory authority over construction and maintenance of state roads	FIU Facilities Management Board of Governors	Reviews and comments on campus master plan in accordance with 1013.30 F.S. Campus master plan Policy 401.9.1 requires that FIU enters into an interlocal agreement requiring notification of FDOT improvements.
Florida Fish and Wildlife Conservation Commission	Reviewing agency	FIU Facilities Management	Review and comments on campus master plan in accordance with 1013.30 F.S.

13.0

CONSERVATION

13.0 CONSERVATION

To appropriately manage native vegetative communities and wildlife habitats, campus expansion at FIU will adhere to local, state, and federal regulations, aligning with our strategic focus on environmental resilience. Where practicable, our efforts will conform to various agency guidelines and emphasize the use of native vegetation. We will strive to avoid or minimize wetland impacts and establish upland buffers adjacent to wetlands, implementing mitigation strategies where unavoidable impacts occur. Where possible, undeveloped upland habitats will be preserved in their natural state, protecting biodiversity and supporting the health and wellness of our campus communities.

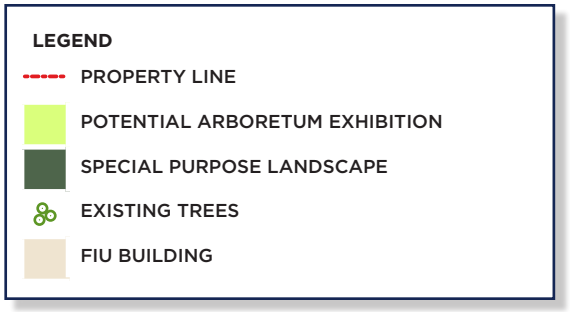
Natural resources are present at the Modesto A. Maidique Campus, Engineering Center, and Biscayne Bay Campus [Figures 13.1, 13.2, and 13.3]. These resources, many of which are protected, will continue to be preserved to support the environmental and educational goals of FIU, integrating with our commitment to sustainability and research innovation. Parcels will be assessed for their ecological value and potential for protection or development, ensuring that our development is not only sensitive but also strategically aligned with our mission to enhance natural resources alongside academic and infrastructural growth. To minimize adverse impacts to local air quality and maintain existing good air quality conditions, FIU will manage its stationary sources of air discharges through an organized preventative maintenance and inspection program. Points of discharges such as boilers and laboratory flues will be inspected regularly to ensure that their operations are within applicable regulatory standards. Implementation of preventative maintenance of stationary sources will reduce the probability of unexpected releases of air pollutants as well as establish a reliable management tool. It is also recommended that FIU follow the nine landscape principles of the Florida-Friendly Landscaping Program as detailed by the University of Florida Institute of Food and Agricultural Sciences.

Miami-Dade County provides landscape assessments as part of its Landscape Irrigation Rebate Program. In addition, upgraded fixtures by FIU may qualify for rebates when certified by the Miami-Dade County Water Conservation Program.

Where possible, less hazardous materials will be substituted for more hazardous materials. The purpose of this replacement is to reduce the potential for more serious accidents affecting the environment, reduce the generation rate of hazardous waste on campus, and reduce the volume of hazardous wastes contributed by the University to landfills elsewhere. It is an objective of the University to minimize hazardous waste accumulation points on campus and implement a system of Best Management Practices to safely manage these locations.

Potential Arboretum Exhibitions - MMC

Key ID	Exhibit Name
01	**Education**
02	**Biomimicry**
03	**Medicinial**
04	**Research**
05	**Social**
06	**Food & Crop**
07	**Ordeal**
08	**Literature**
09	**Int'l Relations**
10	**Therapeutic**
11	**Sacred**
12	**Musical**
13	**Honors**



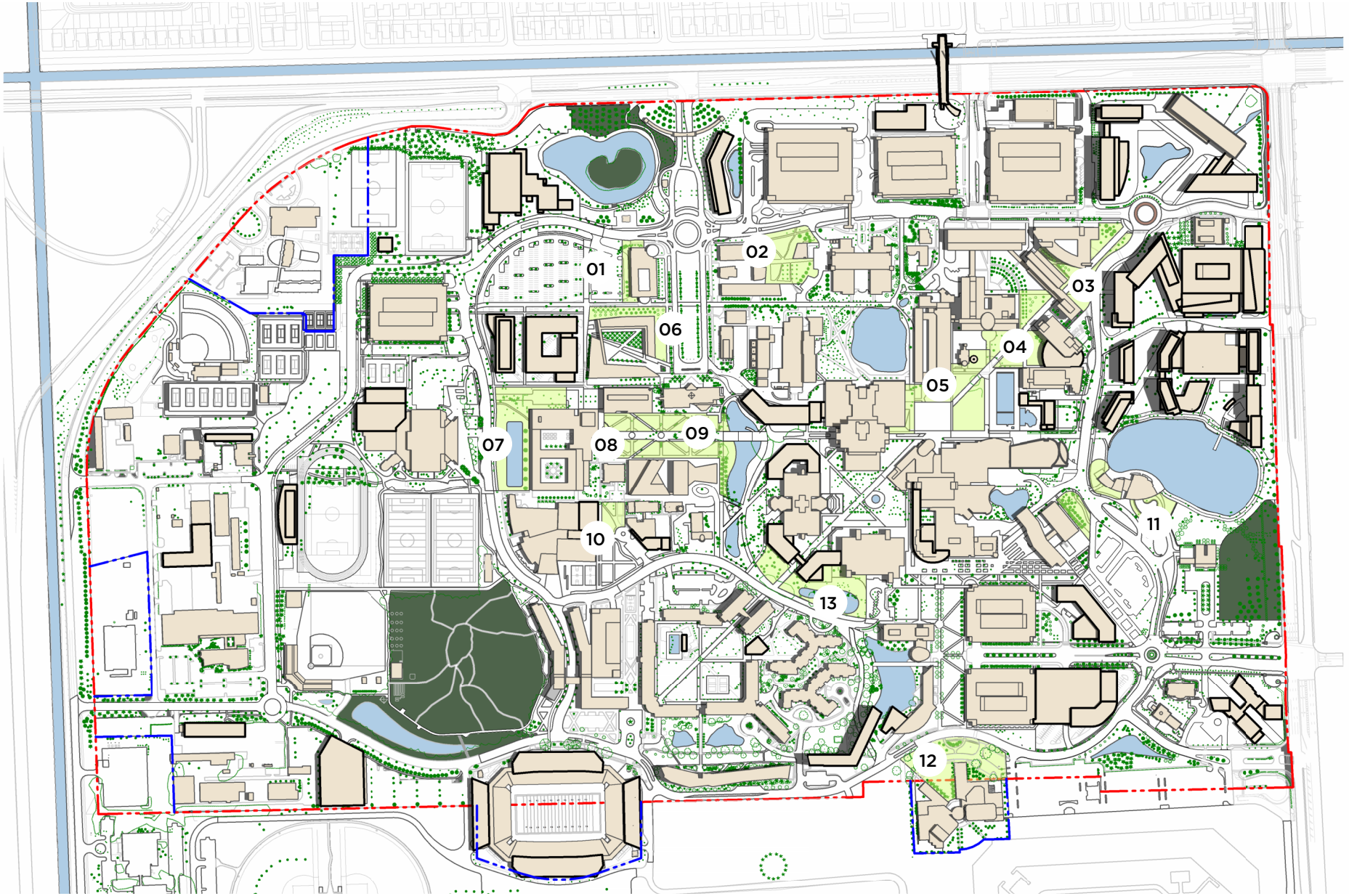


FIGURE 13.1 - MMC 2035 PLAN - CONSERVATION

N

0 400 1,000 FT

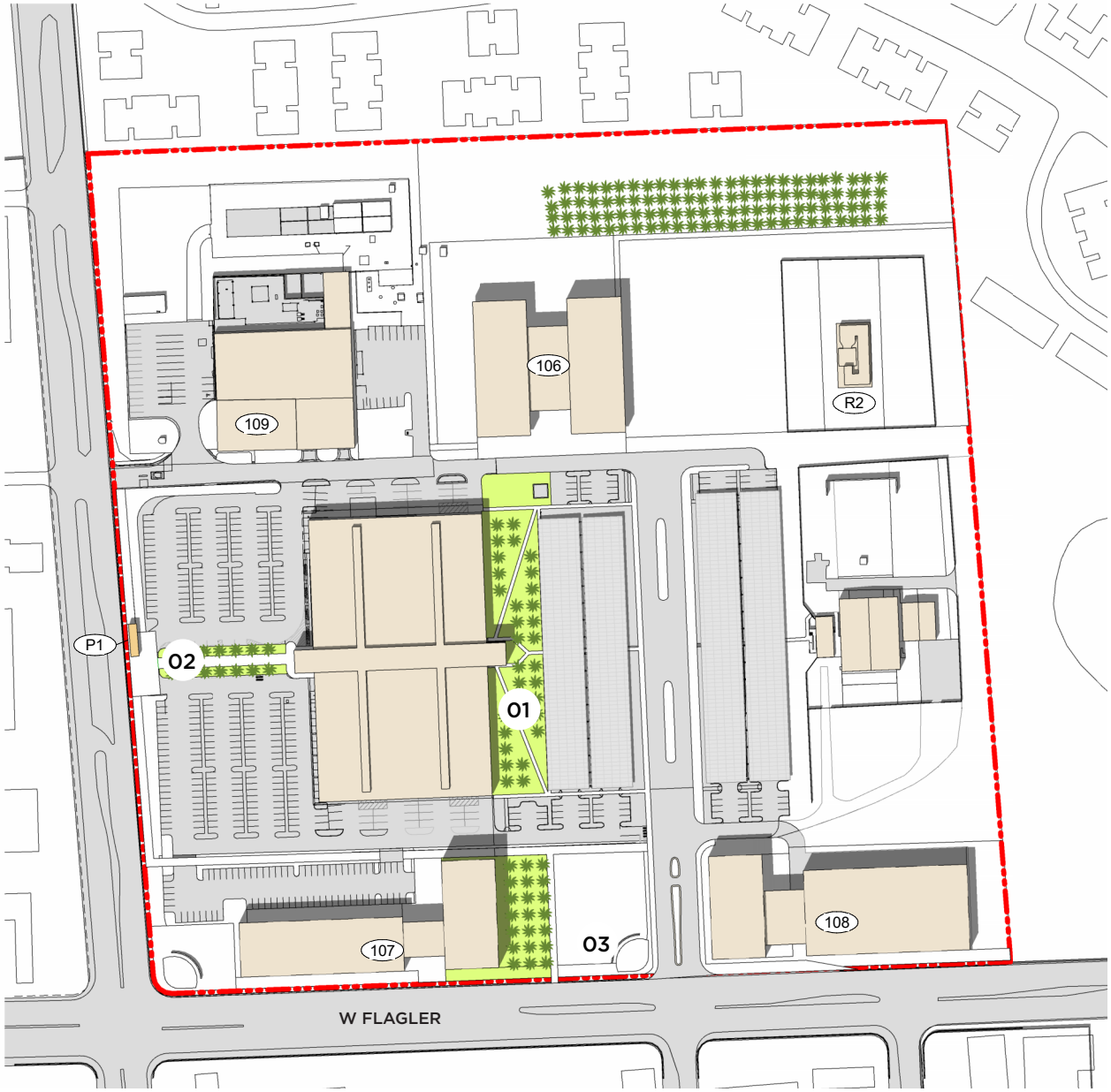


FIGURE 13.2 - EC 2035 PLAN - CONSERVATION

N

0 100 300 FT

Engineering Center

Conservation at EC proposes to allow for continued research activity that avoids negative impacts to existing natural resources including the palm tree nursery, central campus greenspace and perimeter landscape buffer against neighboring areas.

Potential Arboretum Exhibitions

Key ID	Exhibit Name
01	**Biomimicry, Computation**
02	**Environmental Engineering**
03	**Construction**

LEGEND

- PROPERTY LINE
- POTENTIAL ARBORETUM EXHIBITION
- EXISTING TREES
- FIU BUILDING

FIGURE 13.3 - BBC 2035 PLAN - CONSERVATION

N
0 400 1,000 FT

Biscayne Bay Campus
Wetland and mangrove restoration must be carefully planned to accommodate future research facilities and boardwalks before excavating land for wetlands and planting mangroves.

Potential Arboretum Exhibitions

Key ID	Exhibit Name
01	**Gastronomy, Hospitality, & Ecotourism**
02	**Hispanic & International Heritage, Welcome**
03	**Events, Initiation, Lifelong Learning**
04	**Medicinal, Therapeutic, & Wellness**
05	**Coastal and Marine Affairs, Beach Ecology & Forests**
06	**Altered Reality, Scholarship, Book Arts, Communications**
07	**Conservation**

LEGEND
- PROPERTY LINE
- WETLAND RESTORATION
- POTENTIAL ARBORETUM EXHIBITION
- SHORELINE VEGETATION
- SURFACE WATER
- EXISTING TREES
- EXISTING MANGROVES
- FIU BUILDING
- FUTURE PROJECT

GOAL 1

Conserve and enhance existing natural resources and ecosystems at the Modesto A. Maidique Campus and Biscayne Bay Campus.

OBJECTIVES AND POLICIES

Objective 1.1
Implementation and Management of Natural Resource Policies: Implement and manage natural resource policies through use of appropriate University faculty and staff.

Policy 1.1.1

The University shall endeavor to develop a resource of knowledgeable FIU experts to oversee issues relating to development and conservation of University natural resources. It shall be the task of the individuals to oversee the implementation of the coastal resource management policies defined in the Conservation Element of this Campus Master Plan. It shall also be the task of those individuals to review these policies and prepare any necessary additional policies, guidelines, procedures, and implementation schedules within one year of the adoption of this Campus Master Plan. The adopted Campus Master Plan shall be amended as necessary to incorporate those guidelines, procedures, and implementation schedules.

The University shall provide an administrative staff person of the FIU Department of Environmental Health and Safety to serve as Environmental Coordinator to manage these activities. The Environmental Coordinator shall periodically review proposed University improvements and activities to ensure University compliance with the policies defined in the Conservation and Coastal Management Elements of this Campus Master Plan. The Environmental Coordinator shall also periodically review host community, state, and federal conservation and coastal management policies to ensure University compliance with these policies.

Objective 1.2

Maintain, Protect, and Enhance Natural Resources:

Maintain and enhance existing natural resources on the Modesto A. Maidique Campus and Biscayne Bay Campus.

FIU is proud to be a recognized member of Tree Campus USA, a status it has achieved annually since 2010. It is committed to effectively managing its tree canopy, expanding engaged teaming wtihin the College of the Arts, Sciences and Education, and fostering heat island reduction. In concert with increasing the sustainable maintenance and operations of its campuses, FIU supports opportunities to become an educational arboretum. As curriculum and research are directly linked to existing trees and vegetation, augmented planting is identified, and funding is established, an arboretum can be identified and approved for accredidation.

Policy 1.2.1

UNIVERSITY-WIDE:

The University shall review, on an annual basis, the state, regional, and Federal regulations and guidelines governing the designation and delineation of environmentally sensitive lands. These regulations and guidelines include, but are not limited to, the Florida Natural Areas Inventory. Should changes in regulations or guidelines result in the designation of portions of the Modesto A. Maidique Campus and/or Biscayne Bay Campus as environmentally sensitive lands, the University shall modify existing policies or develop new policies to protect these sensitive lands and incorporate those policies into the Campus Master Plan within three months of the identification of the environmentally sensitive land.

Policy 1.2.2

UNIVERSITY-WIDE:

The University shall survey the precise locations of native vegetative associations prior to the construction of any buildings, roadways, pathways or other developments that may impact these vegetative associations. Prior to final site planning, the University shall identify those areas to be impacted and determine if minor changes in the proposed locations of roads or buildings can minimize impacts on these areas.

Policy 1.2.3

UNIVERSITY-WIDE:

In order to protect native vegetative communities, the University shall endeavor to provide for a development buffer of at least 25 feet between conservation areas (Figure 13.1, 13.2, and 13.3) and construction projects, including but not limited, to buildings, roadways, pathways, and recreation facilities.

Policy 1.2.4

UNIVERSITY-WIDE:

Consistent with requirements of Chapter 24 of the Code, prior to development or redevelopment activities, the University shall remove all prohibited and controlled invasive plant species from natural vegetation all areas and from landscaped areas. Priority shall be given to removing exotic invasive species from those native vegetation associations indicated in Figures 13.1 and 13.3. Removal of exotic species shall be carried out in a manner that minimizes impacts to native vegetation areas. Where necessary, areas from which exotic invasive plants have been removed shall be replanted with appropriate native plant species.

Removal of exotic invasive species from natural vegetation areas and from landscaped areas shall be carried out quarterly during the first year and yearly thereafter, unless monitoring activities indicate that more frequent removal is necessary.

Policy 1.2.5

BISCAYNE BAY CAMPUS:

To help curtail their further spread into mangrove areas and other natural vegetation areas on campus, the University shall continue a program of removing large stands of Australian pines. Removal of Australian pines shall be carried out in a manner that minimizes impacts to native vegetation associations. Areas from which Australian pines have been removed shall be re-vegetated in a manner consistent with the 16.0 Landscape Design Guidelines Element of this Master Plan. The use of native plant species in the landscaping of these areas shall be encouraged. The choice of native plant species shall be consistent with those recommended by FIU Facilities Planning and Construction and Landscape Architect staff. In no case shall those plant species listed in the Miami-Dade County Prohibited Plant Species List be used in any University landscaping or enhancement planting.

Because the removal of Australian pines may result in soil disturbance and provide colonization opportunities for other invasive/exotic plants, replanting of landscape vegetation shall immediately follow the removal of Australian pines. A timetable for removal of Australian pines shall be determined by Facilities Management.

Policy 1.2.6

UNIVERSITY-WIDE:

An administrative staff person of the FIU Department of Environmental Health and Safety shall establish a protocol for monitoring the establishment and spread of invasive/exotic plant species. Monitoring activities shall be carried out quarterly. If monitoring activities indicate that invasive/exotic species are becoming re-established, they should be removed using the methods outlined in 16.0 Landscape Design Guidelines Element Policy 1.5.4.

Policy 1.2.7

UNIVERSITY-WIDE:

The University shall use native plant species in restoration/enhancement planting of native vegetative communities. The use of native plant species in general campus landscaping shall be encouraged. The choice of native plant species shall be consistent with those recommended by the University's Environmental Studies staff, Fairchild Tropical Gardens staff, or other individuals or agencies competent in the selection, use, and maintenance of vegetation native to south Florida. Where restoration or enhancement planting is instituted, the species chosen shall be those that are naturally found in the particular vegetative community being restored or enhanced.

Policy 1.2.8

UNIVERSITY-WIDE:

The University shall use native plant species in new development, and where root systems are compatible, extend native vegetative communities up to buildings.

Objective 1.3
Maintain and Enhance Existing Wetland and Aquatic Natural Resources:

Maintain and enhance current wetland, littoral zone, and aquatic natural resources. For the Biscayne Bay Campus, also see Goals, Objectives, and Policies in the Coastal Management Element.

Policy 1.3.1

UNIVERSITY-WIDE:

The University shall prepare and implement a plan to enhance the ecological and aesthetic values of campus lakes, aligning with our strategic goals to promote environmental resilience and sustainability. This plan includes grading lake shores to establish littoral zones, planting native littoral vegetation, and minimizing or eliminating the use of fertilizers to prevent eutrophication, thereby supporting our commitment to maintaining biodiversity and enhancing water quality. In areas where littoral zones are impractical, we will plant native groundcovers or shrubs to serve as buffers, further protecting our lakes. The use of phosphate-containing fertilizers around these lake areas will be prohibited, reinforcing our efforts to preserve vital ecosystems and ensure clean water resources, which also supports our focus on health and innovative environmental technologies.

Policy 1.3.2

BISCAYNE BAY CAMPUS:

Maintain at least a 25-foot buffer zone between future planned buildings, ancillary structures, access roads, mangrove areas and other natural areas, slated for preservation (see Figure 13.3).

Policy 1.3.3

BISCAYNE BAY CAMPUS:

Protect and enhance existing shallow-water communities and seagrass beds in the waters of Biscayne Bay fronting the campus by reducing the impacts of stormwater runoff to these areas.

Policy 1.3.4

BISCAYNE BAY CAMPUS:

Protect the shoreline stabilization project carried out by the Miami-Dade County Department of Environmental Resources Management (DERM) in 1989 and 1991. Mangrove fringe should be widened in strategic areas.

Policy 1.3.5

BISCAYNE BAY CAMPUS:

Complete ongoing mitigation programs and protect new and ongoing mitigation programs.

Objective 1.4

Campus Setting and the Natural Environment:

Create an aesthetically pleasing, tropical educational setting through planting of xerophytic vegetation, using native species where possible, which will link natural areas on campus and provide for a harmonious transition from developed to natural areas.

Policy 1.4.1

MODESTO A. MAIDIQUE CAMPUS:

Use native vegetation to link natural areas on campus. This should be made consistent with objectives of the 3.0 Urban Design Element.

Policy 1.4.2

UNIVERSITY-WIDE:

Strongly encourage the use of native xerophytic plant species for use in general landscaping and in the creation and enhancement of wildlife habitat. Limit the use of exotic species in general campus landscaping. Use of native species will reduce landscape water demands, will reduce seed sources of potentially invasive exotic species, and provide a natural setting that is indicative of a tropical environment.

Policy 1.4.3

The University shall endeavor to prevent any harm to its natural campus environment from construction activities. Any damage occurring

will be repaired to its former state by those responsible parties.

Policy 1.4.4

BISCAYNE BAY CAMPUS:

The Environmental Coordinator shall, in cooperation with Oleta River State Recreation Area personnel, develop a plan to link mangrove areas in the northeast portion of campus with the Oleta River State Recreation Area by means of littoral zone vegetation (along the shoreline) or by plantings of strand vegetation immediately behind shoreline stabilization structures (see Figure 13.3). The Environmental Coordinator shall also encourage Oleta River State Recreation Area personnel to develop a plan for removal of Australian pines from the portion of the Oleta River State Recreation Area adjacent to Biscayne Bay Campus.

Objective 1.5

Protection of Listed Species:

Protect federal, state, and local listed species and their habitat from negative impacts of University activities.

Policy 1.5.1

UNIVERSITY-WIDE:

During the initial planning phase of any physical changes to either campus, the University shall perform a census of wildlife and plants in the area to be affected. Plants or animals identified in the "Florida's Endangered and Threatened Species", which is updated annually by the Florida Fish and Wildlife Conservation Commission, or otherwise afforded protection by the host communities and local, state, and federal agencies, shall be noted. Protection plans for listed species shall be formulated consistent with those of the host communities and appropriate local, state, and federal agencies.

Policy 1.5.2

UNIVERSITY-WIDE:

University personnel shall, when encountering listed species, follow procedures and seek consultation with the appropriate agencies as identified in the Florida Fish and Wildlife Conservation Commission's Wildlife Methodology Guidelines (1999).

Objective 1.6

Minimize Impacts of Campus Operational and Maintenance Activities:

Establish University-wide policies to minimize the impacts of campus operational and maintenance activities on water quality, and to identify hazardous material sources and reduce their negative impacts.

Policies should include the review of cleaning products used inside buildings and safe alternatives.

The University should also implement a plan to transition from gas-powered facilities carts to electric carts on all campuses.

Policy 1.6.1

UNIVERSITY-WIDE:

To limit negative impacts of campus activities on soils, wetlands, hydrology, and hydroperiod, the University staff coordinator shall, on an annual basis, review existing and proposed University activities for compliance with the surface water policies of the South Florida Water Management District.

Policy 1.6.2

UNIVERSITY-WIDE:

The University shall continue to test stormwater runoff and groundwater quarterly for compliance with standards set by the State of Florida Department of Environmental Protection, the South Florida Water Management District, and the U.S. Environmental Protection Agency. Failure to meet relevant standards for stormwater runoff shall result in an assessment of probable causes and the production and implementation of a plan to improve the quality of runoff or groundwater.

Policy 1.6.3

BISCAYNE BAY CAMPUS:

The University shall continue monitoring and logging of results of sampling and analysis of petroleum tanks and their associated wells that are housed in the Central Utilities compound.

Policy 1.6.4

UNIVERSITY-WIDE:

The University shall continue to monitor water quality in the lakes, canals, and mangrove areas on each campus on a quarterly basis. Should the water quality fall below the standards set by the State of Florida Department of Environmental Protection, the South Florida Water Management District, and the U.S. Environmental Protection Agency, an assessment of probable causes of pollution shall be performed and a plan developed and implemented to limit the point and non-point sources of pollution.

Policy 1.6.5

UNIVERSITY-WIDE:

The University shall maintain a record of types and amounts of hazardous, toxic, and medical wastes that are generated within the University and a record of hazardous, toxic, and medical waste that are collected by the Environmental Health and Safety Staff. The University shall also maintain a record of the types and amounts of hazardous, toxic, and medical waste that waste disposal companies collect. Records shall be kept of the name of the waste disposal companies and the name of the driver for each pick-up. The University shall review hazardous and toxic materials and reduce their use whenever possible.

Policy 1.6.6

UNIVERSITY-WIDE:

Handling, data records, storage, and disposal requirements for radioactive waste generated at Modesto A. Maidique Campus and Biscayne Bay Campus and the Engineer Center shall be in compliance with local, regional, state, and federal regulations.

Policy 1.6.7

UNIVERSITY-WIDE:

At present, all hazardous materials for both campuses are handled under four EPA Hazardous Waste Generator numbers. The University should investigate the possibility of operating under more than one number to ensure compliance with requirements associated with satellite collection areas.

Policy 1.6.8

UNIVERSITY-WIDE:

Eliminate the use of synthetic chemical pesticides and herbicides in landscape maintenance and minimize or eliminate impacts on water quality.

Objective 1.7

Maintain and Enhance Air Quality:

Establish a program to maintain high air quality standards on campus, both within and outside of buildings and parking structures.

Policy 1.7.1

UNIVERSITY-WIDE:

The University shall monitor both indoor and outdoor air quality, as necessary. Outdoor sites to be sampled should include parking lots and congested intersections. Failure to meet air quality standards accepted by the State of Florida shall result in an assessment of probable causes and the production and implementation of a plan to improve and maintain air quality.

Policy 1.7.2

UNIVERSITY-WIDE:

Minimize emissions of air pollutants from and within buildings on campus through the installation of appropriate filtering devices on fume hoods and by minimizing the storage and use of volatile and hazardous materials in campus buildings.

Policy 1.7.3

UNIVERSITY-WIDE:

Determine potential impacts on air quality before construction of parking structures. Design parking structures to facilitate rapid ingress and egress of vehicles to minimize idling time, and design such structures to maximize air flow through them and eliminate pockets of stagnation where levels of pollutants can build up.

Policy 1.7.4

UNIVERSITY-WIDE:

Encourage and facilitate non-polluting transportation alternatives on campus including pedestrian and bicycle access. Sidewalks should be designed to facilitate and encourage foot traffic between buildings, and to maximize accessibility.

GOAL 2

Minimize resource utilization to conserve and appropriately use energy while prohibiting campus procedures that have adverse environmental effects.

OBJECTIVES AND POLICIES

Objective 2.1
Water Conservation:

Establish measures that reduce water utilization.

Policy 2.1.1

UNIVERSITY-WIDE:

FIU shall conserve water and reduce chemical use through the use of Florida Friendly Landscape design principles, which include but are not limited to:

- Drought tolerant and native plant materials;
- EPA WaterSense certified irrigation fixtures;
- Zoned irrigation systems;
- Moisture sensors, rain switches and EPA WaterSense certified smart controllers;
- Drought tolerant ground cover;
- Canopy trees; and
- Soil amendments and mulch to enable soils to retain moisture.

Policy 2.1.2

UNIVERSITY-WIDE:

Retrofit existing campus buildings with water-saving devices. Requires that EPA WaterSense certified fixtures and other water-saving devices be installed in all future buildings.

Policy 2.1.3

UNIVERSITY-WIDE:

If feasible, expand the use of filtered wastewater (“reclaimed water”) for landscape irrigation.

Policy 2.1.4

UNIVERSITY-WIDE:

FIU will promote Florida Friendly principles through the use of drought-tolerant landscape species, the use of irrigation systems that conserve the use of potable and non-potable water supplies, and restrictions on the amount of lawn areas. FIU will adhere to Miami Dade County’s year round landscape irrigation rules as outlined in Section 32-8.2. Permanent year round landscape irrigation restrictions and utilize weather based smart controllers to maximize water savings from irrigation.

Objective 2.2
Solid Waste Recycling and Resource Conservation: Support a culture of reducing waste, recycling, and reuse.

Policy 2.2.1

UNIVERSITY-WIDE:

A general recycling program for paper, aluminum, glass, etc. shall be instituted and recycling goals for proportions of materials recycled established. All entities on campus (including food vendors/cafeterias, etc.)

should be required to subscribe to this program and compliance with the program should be monitored on a regular basis. Work toward establishing this policy at Modesto A. Maidique Campus has been initiated by the Environmental Studies Program, and further efforts in this regard should be coordinated with it. See Element 9: General Infrastructure for additional recycling program goals, policies and objectives.

Policy 2.2.2

UNIVERSITY-WIDE:

State, regional, and local standards for waste management shall be reviewed at least annually. Solid waste management on all campuses shall be in compliance with state, regional, and local standards.

Policy 2.2.3

UNIVERSITY-WIDE:

The University shall contract with a licensed recycling contractor to provide for the collection for recycling, at minimum, of paper, aluminum, plastic, glass, and paper. Separate refuse containers, as called for by the recycling contractor, shall be made available in all buildings, courtyards, open space areas, etc. on all campuses.

Policy 2.2.4

UNIVERSITY-WIDE:

Where feasible, recycled paper products shall be purchased for University use, including those used in food service.

Objective 2.3

Energy Conservation and Efficiency:

Develop a program to conserve and appropriately use energy including implementation of the Climate Action Plan (a responsibility as a signatory of the American College and University Presidents Climate Commitment) and strategies to meet USGBC standards to target LEED Gold or equivalent as a minimum requirement.

Policy 2.3.1

UNIVERSITY-WIDE:

Retrofit existing buildings with energy-conserving lighting fixtures. Require all new buildings to be equipped with energy efficient lighting devices. Design new buildings to take maximum advantage of available natural lighting.

Policy 2.3.2

UNIVERSITY-WIDE:

Where feasible, buildings on campus shall be fitted with devices to automatically reduce energy use in rooms and buildings not in use, including programmable thermostats for air conditioners and sensors that automatically turn off lights.

Policy 2.3.3

UNIVERSITY-WIDE:

Expand opportunities on campus for renewable energy sources, including use of photovoltaic panels. Consider developing a program for retrofitting PV panels on existing buildings during re-roofing projects.

Policy 2.3.4

UNIVERSITY-WIDE:

Provide energy conservation design in new and renovated buildings per USGBC LEED Gold criteria as minimum level of performance.

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14.0

CAPITAL IMPROVEMENTS

14.0 CAPITAL IMPROVEMENTS

Given the anticipated renovation, repurposing, new construction, and redevelopment needed to accommodate projected future growth at FIU, identifying and supporting funding mechanisms required for program and enrollment expansion is crucial. This process aligns with our strategic goals to enhance the FIU experience, foster innovation, and ensure environmental resilience. Implementation of the Campus Master Plan is contingent upon the strategic and efficient use of State University System (SUS) funds, FIU funds, revenues from public partnerships, private investments, and support from alumni and donors. To diversify funding sources, the University will explore various options including private gifts, grants, revenue generation, and partnerships to support campus improvements that promote health, technology advancement, and sustainable practices.

This Campus Master Plan outlines both current projects and those scheduled for later completion within the 2035 planning period. While immediate projects have funding allocated, future projects may face unforeseen funding and phasing complexities, necessitating a flexible plan that adapts to changes and enhances effectiveness through annual updates and continual monitoring. The goals, objectives, and policies of the Capital Improvements Element are designed to implement this Campus Master Plan in the most efficient and fiscally responsible manner, supporting our comprehensive strategy to advance academic and infrastructural development.

GOAL 1

Plan, program, and develop capital facilities necessary to accomplish the academic mission at projected enrollment levels, applying sound fiscal policies.

OBJECTIVES AND POLICIES

Objective 1.1
Maintain a Prioritized Schedule of Capital Improvements:

Implement a schedule of capital improvements that coordinates land use and development decisions with fiscal resources to meet projected facility needs while maintaining the level of service standards identified in this plan.

Policy 1.1.1

Coordinate with Miami-Dade County, the City of Sweetwater, the City of North Miami, and utility providers to monitor and project the availability of off-campus services and facilities at adopted levels of service concurrent with the impacts of campus development prior to the programming of each development project. The Campus Master Plan clearly documents the ability to accommodate all projected campus development requirements through 2035, consistent with the maintenance of host community levels of service.

Policy 1.1.2

Prior to programming each development project, verify that development impacts can be accommodated while maintaining on campus level of service standards herein established.

Policy 1.1.3

Ensure that the Capital Improvement Program 5-year project priority list remains consistent with this Campus Master Plan. Integrate subsequent plan revisions with applicable campus development and joint use agreements.

Policy 1.1.4

Limit Capital Improvement Program modifications to those that improve the efficiency, timeliness, and cost effectiveness of improvements to infrastructure, parking, site development, and landscaping. Amend the Campus Master Plan to incorporate any revisions to the Capital Improvement Program that meet established projections and criteria.

Policy 1.1.5

Apply and prioritize Capital Improvement Program procedures to make full use of “infill” areas where utility, parking, and related infrastructure services are in place.

Policy 1.1.6

Include provisions for the adoption of a capital budget in the annual budgeting process. Review budgets to ensure consistency with campus development agreements.

New construction shall produce "human scale" buildings by providing articulation of the different floor levels and adequate window and door openings. Architectural elements such as arcades and connectors should be utilized to encourage comfortable pedestrian movement within and between buildings. Building heights shall to the extent feasible by area and program be the same for all "fabric" buildings.

Objective 1.2
Adequate Resources:

Budgets for new projects should consider life-cycle cost analysis in addition to initial construction costs to ensure investments in energy savings and maintenance savings are included.

Secure resources sufficient to implement proposed improvements. Balance funding strategies so that facility needs do not exceed University resources. Avoid additional deficits.

Policy 1.2.1

Prepare CIP-3 Forms and CIP line item funding requests targeted to improvements to infrastructure, parking, and site (landscape) development necessary to support existing, expanded, and new facilities, separate and discrete from budgets for individual buildings.

Policy 1.2.2

Seek local ancillary funding sources to supplement PECO appropriations including the following:

- Revenues from joint use facilities (arts center, football stadium, etc.)
- User fees for upgraded parking and student/faculty services.

Policy 1.2.3

Accelerate facility development programming and feasibility studies to occur 3-4 years prior to the expected availability of PECO funds and auxiliary revenues, such as student capital improvement fees for academic support and necessary infrastructure and service facilities.

Objective 1.3
Deficiencies, Deficits, and Future Growth:

Construct capital facilities to correct existing facility deficiencies; accommodate desired future growth; and replace worn-out or obsolete facilities by the end of 2035.

Policy 1.3.1

Apply the following criteria for evaluating and prioritizing capital improvements:

- Relative program performance and value to achievement of the academic mission.
- Degree of impact on the elimination of facility or service deficits.
- Cost effectiveness and development efficiency.
- Availability of supplementary matching funds or operating revenue opportunities.

Policy 1.3.2

Apply the following criteria for prioritizing facility renewal and upgrading projects.

- Projects necessary to maintain level of service standards, achieve code compliance, and provide handicapped access.
- Projects which reduce operating costs and improve energy efficiency.
- Projects which expand facility capacities and utilization, reducing demand for new facilities.

Policy 1.3.3

By the end of the planning period, replace all inadequate, obsolete, and potentially unsafe structures including:

- Trailers and portable classrooms.
- Pre-university airport support structures (except the control tower).

Policy 1.3.4

When estimating proposed project costs, include proportional costs for all related ancillary site improvements associated with building and infrastructure removal, site preparation, construction access, material lay down, or property redevelopment. Ensure that future capital budgeting accurately reflects total anticipated site improvement, facility improvement, and infrastructure improvement costs. Future facility demolition, renovation, and new construction cost estimates should include and integrate:

- Utility extensions
- Site modifications (including mitigation costs)
- Parking expansions or modifications (including ADA, short-term, and service spaces)
- Pedestrian, bicycle, and vehicular circulation extensions or modifications.
- Landscaping (including replacing and expanding lost tree canopy, new planting to improve campus placemaking, wayfinding and branding, and new planting to augment campus plant diversity in support of a proposed campus arboretum).

Policy 1.3.5

Facilities shall be sized sufficiently to support anticipated future capacity requirements. Floor plan layout and massing should be flexible to accommodate future program changes. Massing and site location should consider future facility expansion and connections to other existing or planned adjacent facilities.

Objective 1.3.6

The following table outlines the space need assessment for MMC & EC for the 2015-2035 planning period.

State of Florida guidelines, supplemented with national space standards, were used to determine space needs based on research from 20 higher education systems in addition to space need studies conducted at 52 regional universities.

Future campus development and capital projects should correspond with space needs identified in Figure 14.1a that are consistent with State Requirements for Educational Facilities (SREF).

State of Florida guidelines, supplemented with national space standards, used to determine space needs based on research from 20 higher education state systems in addition to space needs studies conducted at 52 regional universities.

Five-Year Capital Improvement Plans (2025-2027)

	Previous Guideline (State of Florida)		DLR Group Recommended Guideline		Existing FIU Inventory		PLANNED PROJECTS	Surplus/Deficit (from recommended guideline)	
Space Use Category	NASF per FTE	Total ASF	NASF per FTE	Total ASF	NASF per FTE	Total ASF	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	GROSS SQUARE FEET
Classrooms	9.00 ASF per In-Person FTES	250,587	10.00 ASF per In-Person FTES	278,430	6.82 ASF per In-Person FTES	190,017	78,253	(10,160)	(16,256)
Teaching Labs	11.25 ASF per Total FTES	480,555	11.25 ASF per In-Person FTES	313,234	6.02 ASF per In-Person FTES	167,618	56,533	(89,083)	(142,533)
Open Labs			3.70 ASF per Total FTES	158,049	2.79 ASF per Total FTES	118,994		(39,055)	(62,488)
Research Labs	18.75 ASF per Total FTES	800,925	18.75 ASF per In-Person FTES	522,056	9.47 ASF per In-Person FTES	263,767	60,592	(197,697)	(316,315)
Office (E&G Funded)	22.50 ASF per Total FTES	961,110	142.80 ASF per FTE Staff*	862,748	104.14 ASF per FTE Staff*	629,225	147,851	(85,672)	(137,075)
Study	13.50 ASF per Total FTES	576,666	13.50 ASF per Total FTES	576,664	4.40 ASF per Total FTES	188,046	131,559	(257,059)	(441,499)
Subtotal ASF	71.87 ASF per Total FTES	3,069,843	63.47 ASF per Total FTES	2,711,180	36.47 ASF per Total FTES	1,557,667	474,788	(678,725)	
Offices (Non E & G Funded)*			142.80 ASF per FTE Staff*	309,486	105.66 ASF per FTE Staff*	228,966	16,087	(64,433)	(103,093)
Athletics*	4.50 ASF per Total FTES	192,222	16.90 ASF per Total FTES	278,208	8.40 ASF per Total FTES	138,208	0	(140,000)	(224,000)
Instructional media	3.00 ASF per Total FTES	128,148	7.78 ASF per Total FTES	128,148	0.85 ASF per Total FTES	14,022	0	(114,126)	(182,602)
Clinic*			1.04 ASF per Total FTES	17,086	0.46 ASF per Total FTES	7,560	0	(9,526)	(15,242)
Special use*			6.28 ASF per Total FTES	103,343	2.11 ASF per Total FTES	34,782	41,412	(27,149)	(43,438)
Assembly and Exhibition	2.25 ASF per Total FTES	96,111	5.84 ASF per Total FTES	96,111	4.28 ASF per Total FTES	70,524	26,678	1,091	1,746
Food Service			5.61 ASF per Total FTES	92,326	3.36 ASF per Total FTES	55,243	0	(37,083)	(59,333)
General Use			13.70 ASF per Total FTES	225,484	9.03 ASF per Total FTES	148,731		(76,753)	(122,805)
Recreation			19.18 ASF per In-Person FTES	496,936*	4.94 ASF per Total FTES	81,286	0	(415,650)	(665,040)
Support	4.40 ASF per Total FTES	187,950	11.00 ASF per Total FTES	181,115	4.37 ASF per Total FTES	71,997	37,702	(71,416)	(114,266)
Health Care			0.83 ASF per Total FTES	13,689	1.00 ASF per Total FTES	16,513	0	2,824	4,518
Total ASF	86.02 ASF per Total FTES	3,674,274	108.93 ASF per Total FTES	4,653,112	56.78 ASF per Total FTES	2,425,499	596,667	(1,630,946)	2,639,721

Total: 2,639,000 Gross Square Feet*

**Rounded to the nearest 1,000*

FIGURE 14.1a - MMC & EC 2035 PLAN SPACE NEED PROJECTION

Table 14.2 Florida International University Capital Improvement Plan (2020-2035**)**

Key	Program Element Description	Use	Area NASF	Total Area GSF	Est. Construction Cost in 2024 Dollars	Projected Year of Completion	Funding Status	# Floors
MODESTO A. MAIDIQUE CAMPUS								
	Facilities Infrastructure / Capital Renewal							
-	UCPP Pedestrian Bridge	Circulation/Open Space	-	-	TBD	2020-2025		-
-	BRT Hub (under study)	Circulation/Open Space	-	-	TBD		Next Priority	-
01A	Deuxieme-Maison Renovation	Academic/Research	-	10,829	32,194,520		Next Priority	3
03A	Graham Center Expansion	Student Life/General Use	-	138,472	TBD		Partially Funded	3
03B	Graham Center Expansion	Student Life/General Use	-	36,200	TBD		Partially Funded	2
05A	Library/Study Expansion	Study	-	82,500	TBD	2030+		5
07B	Indoor Training Center	Athletics/Recreation	-	70,600	TBD	2025+		2
12A	Student Health Center Expansion	Student Life/General Use	-	9,060	$9,377,320	2025-2030	Fully Funded	1
17A	Children's Creative Learning Center	Student Life/General Use	-	6,000	TBD	2025+		1
29A	Museum Expansion	Student Life/General Use	-	TBD	TBD	TBD		TBD
32A	Stadium Expansion	Student Life/General Use	-	TBD	TBD	TBD		TBD
33B	Wellness and Recreation Expansion	Athletics/Recreation	-	30,000	TBD	2025+	Next Priority	2
34A	Rec. Field Support Building	Athletics/Recreation	3,000	3,600	$2,204,731	2020-2025	Fully Funded	1
35A	Academic 2	Academic/Research	-	40,901	TBD	2030+		2
35B	Honors College (DM Addition)	Academic/Research	-	44,500	TBD	2030+	Partially Funded	3
37	Academic 1	Academic/Research	-	31,200	TBD	2030+		1
38A	Planetarium (Astroscience Addition)	Academic/Research		3,800	TBD	2030+		2
48	Innovation I (formerly Engineering I)	Academic/Research				Under Construction		4
48A	Innovation II (formerly Engineering II)	Academic/Research	TBD	75,166	$50,714,752	2020-2025	Partially Funded	5
49	CasaCuba	Student Life/General Use	36,173	57,876	$31,721,683	2025+	Partially Funded	3
50	Trish and Dan Bell Chapel	Student Life/General Use	-	12,659	$24,007,054	2025+	Fully Funded	1
51	Hotel/Conference	Partnership	-	TBD	TBD	TBD		TBD
54A	HWCOM AHC/Clinical Partnership	Partnership	-		$167,186,910	2025+	Partially Funded	5
54B	HWCOM AHC/Clinical Partnership	Partnership	-					5
57A	East Residence Hall A (900-1,000 Beds)	Housing	-	91,944	TBD	2025+		12
57B	East Residence Hall B (235 Beds)	Housing	-	115,604	TBD	2025+		12
57C	East Residence Hall C (328 Beds)	Housing	-	146,984	$35,613,089	2025+		16
57D	East Residence Hall D (205 Beds)	Housing	-	136,348	TBD	2025+		12
57E	East Village Recreation	Recreation	-	26,370	TBD	2025+		2
58A	East Residence Hall G (574 Beds)	Housing		273,046	TBD	2025+		16
58B	East Residence Hall F (328 Beds)	Housing	-	147,300	TBD	2025+		12

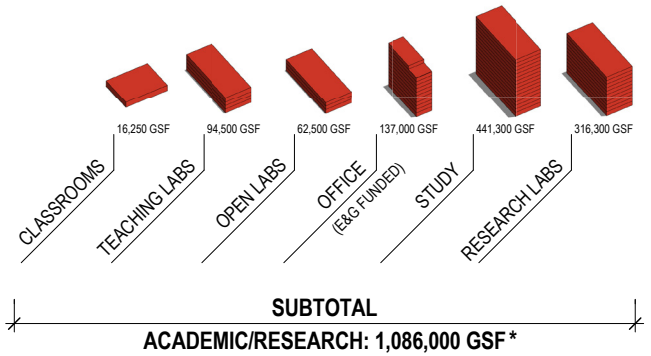
Continued on following page

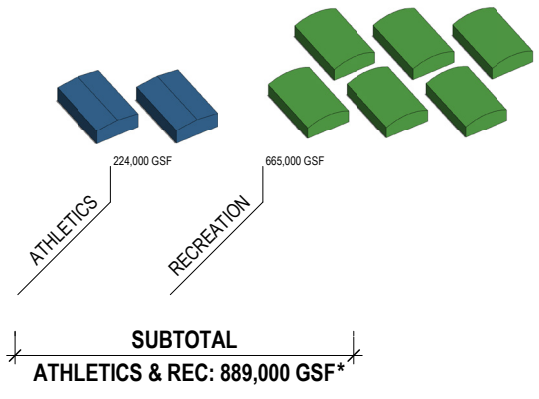
TABLE 14.1b - CAPITAL IMPROVEMENTS

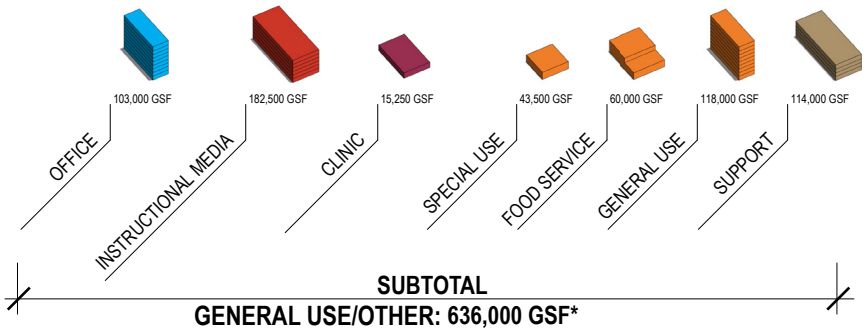
Table 14.2 Florida International University Capital Improvement Plan (2020-2035**)**

Key	Program Element Description	Use	Area NASF	Total Area GSF	Est. Construction Cost in 2024 Dollars	Projected Year of Completion	Funding Status	# Floors
MODESTO A. MAIDIQUE CAMPUS								
	Facilities Infrastructure / Capital Renewal							
59A	AHC/Interdisciplinary 3	Academic/Research		197,071	TBD	TBD		6
59B	AHC/Interdisciplinary 4	Academic/Research		71,091	TBD	TBD		9
60	Science Laboratory Complex	Academic/Research	77,184	123,495	$89,288,584	2025+	Next Priority	5
61	Support Facility	Support		22,180	TBD	2025+		1
62	AHC Study Complex	Academic/Research	39,086	62,538	$42,142,333	2020-2025	Next Priority	5
63	Residence Hall	Academic & Housing	-	45,200	$25,111,550	2025+		TBD
64	AHC/Interdisciplinary 1	Academic/Research	-	195,631	TBD	2030+		9
65	AHC/Interdisciplinary 2	Academic/Research	-	71,091	TBD	2030+		6
66	Retail/Partnership	Academic/Research	-	TBD	TBD	TBD		1
67	Academic 6	Academic/Research	-	112,496	TBD	2030+		4 to 6
68	Academic 7	Academic/Research	-	104,944	TBD	2030+		4 to 6
69	Workforce Housing	Housing	150 Units	112,008	TBD	2030+		4
70	Dining Support	Support	-	10,064	12,000,000	2025+	Partially Funded	1
71	Aquatics Center	Athletics/Recreation	-	16,480	TBD	2025+	Partially Funded	1
72	Academic 9	Academic/Research	-	116,508	TBD	2030+		4 to 6
73	Academic 10	Academic/Research	-	140,600	TBD	2030+		4 to 6
RF3A	Soccer Stadium	Athletics/Recreation	-	TBD	TBD	2025+	Partially Funded	-
PG7	Multipurpose Parking Garage	Parking	-	TBD	TBD	2025+	Partially Funded	4
PG8	Multipurpose Parking Garage	Parking	-	TBD	TBD	TBD		5
PG9	Multipurpose Parking Garage	Parking	-	TBD	TBD	TBD		5
PG10	Multipurpose Parking Garage	Parking	-	TBD	TBD	TBD		5

TABLE 14.1b - CAPITAL IMPROVEMENTS (CONT'D)







The projected space need for MMC and EC provides a guide for future space migration, space allocation, and capital planning projects for renovation and new construction.

Total projected space need excludes projects currently funded, partially funded, or likely funded as part of the Capital Improvement Plan.

With input from focus group sessions, the following assumptions for the 2035 Campus Master Plan include:

- Purpose-built facilities should stay at EC, which is more suitable as a research park with high-bay and flexible research space.
- No academic programs are planned to move to EC and the 2035 Campus Master Plan will assume higher density at MMC.
- Primary academic needs include more labs, technology space for cyber and computer science programs (office/dry lab), and facilities for research-funded projects in Biomedical Engineering and other broader research programs.
- Interdisciplinary expansions, not necessarily of individual programs, should aligns with FIU's Strategic Plan.

The above tables reference the FIU MMC Capital Improvement Plan, which is updated annually to represent projects in the Campus Master Plan. The latest CIP can be accessed on the FIU website below: https://facilities.fiu.edu/Planning/projects.htm

LEGEND

01A	Deuxieme-Maison Renovation
03A	Graham Center Expansion
03B	Graham Center Expansion
05A	Library/Study Expansion
07B	Indoor Training Center
12A	Student Health Center Expansion
17A	Children's Creative Learning Center
29A	Museum Expansion
32A	Stadium Expansion
33B	Wellness and Recreation Expansion
34A	Rec. Field Support Building
35A	Academic 2
35B	Honors College (DM Addition)
37	Academic 1
38A	Planetarium (Astroscience Addition)
48	Innovation I (formerly Engineering I)
48A	Innovation II (formerly Engineering II)
49	CasaCuba
50	Trish and Dan Bell Chapel
51	Hotel/Conference
54A	HWCOM AHC/Clinical Partnership
54B	HWCOM AHC/Clinical Partnership
57A	East Residence Hall A (900-1,000 Beds)
57B	East Residence Hall B (235 Beds)
57C	East Residence Hall C (328 Beds)
57D	East Residence Hall D (205 Beds)
57E	East Village Recreation
58A	East Residence Hall G (574 Beds)
58B	East Residence Hall F (328 Beds)
59A	AHC/Interdisciplinary 3
59B	AHC/Interdisciplinary 4
60	Science Laboratory Complex
61	Support Facility
62	AHC Study Complex
63	Residence Hall
64	AHC/Interdisciplinary 1
65	AHC/Interdisciplinary 2
66	Retail/Partnership
67	Academic 6
68	Academic 7
69	Workforce Housing
70	Dining Support
71	Aquatics Center
72	Academic 9
73	Academic 10
RF3A	Soccer Stadium
PG7	Multipurpose Parking Garage
PG8	Multipurpose Parking Garage
PG9	Multipurpose Parking Garage
PG10	Multipurpose Parking Garage

PROPERTY LINE

LEASED/SUBLEASED

INSTRUCTION (FICM 100-200)

OFFICE/ADMINISTRATION (FICM 300)

ATHLETICS (FICM 520)

GENERAL/STUDENT LIFE (FICM 600)

RECREATION (FICM 670)

CAMPUS FACILITY SUPPORT (FICM 700)

CLINIC (FICM 800)

HOUSING (FICM 900)

MULTIPURPOSE

HOTEL/CONFERENCE

PARKING GARAGE

FIGURE 14.1c - MMC & EC 2035 PLAN SPACE NEED BLOCKING

** Rounded to the nearest 1,000*

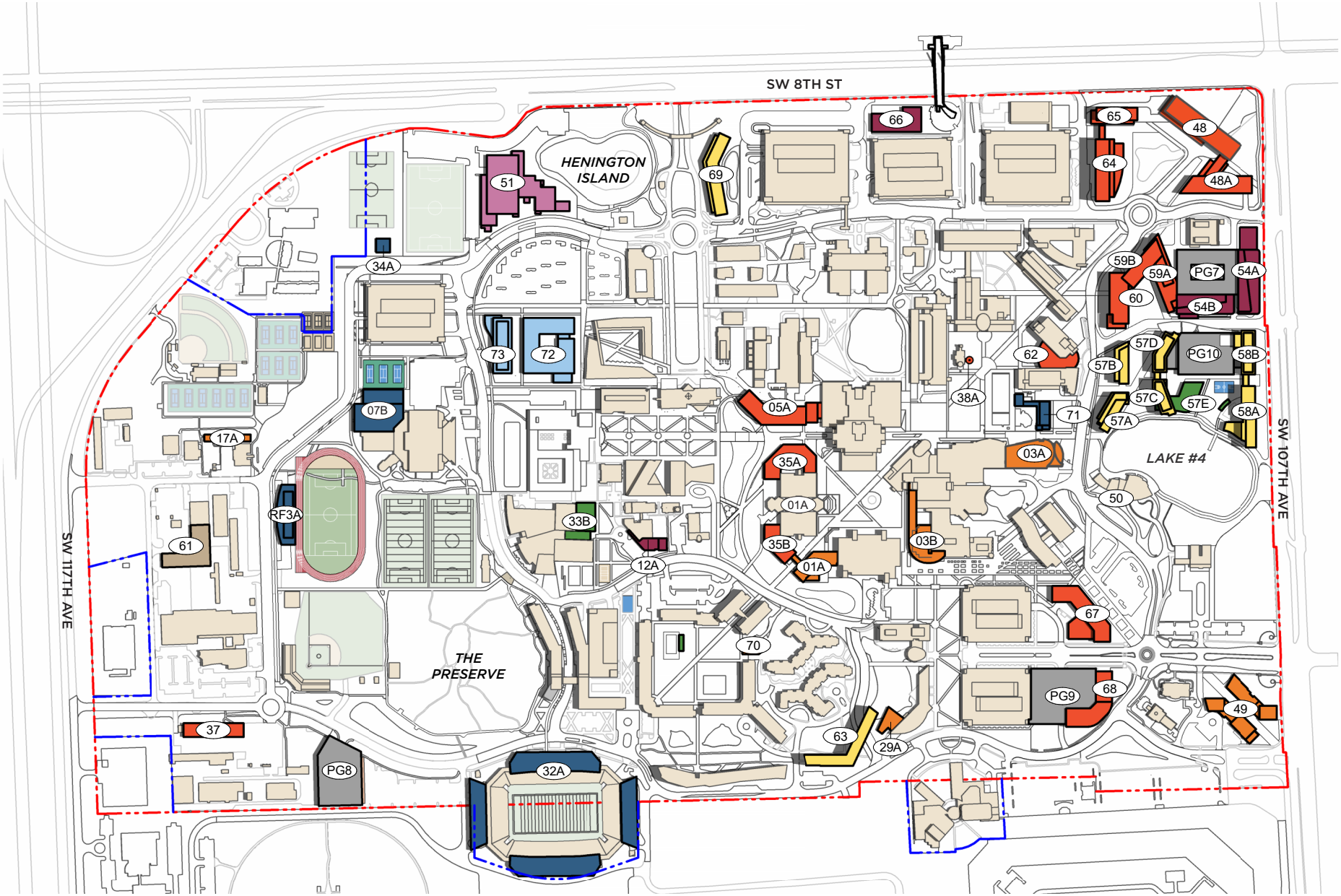


FIGURE 14.1d - MMC 2035 CAPITAL IMPROVEMENT PLAN

N

0 200 400 800 FT

Table 14.2 Florida International University Capital Improvement Plan (2020-2035**)** Continued

Key	Program Element Description	Use	Area NASF	Total Area GSF	Est. Construction Cost	Projected Year of Completion	# Floors
P1	Transit Center	Partnership	-	-	TBD	TBD	-
R2	Wall of Wind Expansion	Academic/Research	-	TBD	TBD	2025-2030	-
101	Engineering Center Renovation and Infill	Academic/Research	-	TBD	TBD	TBD	1
106	High-Bay Research Facility	Academic/Research	-	112,240	TBD	2030+	3
107	Partnership 1	Partnership	-	150,160	TBD	2030+	4
108	Partnership 2 (High Bay Research)	Partnership	-	136,800	TBD	2030+	3
109	Cold Spray Lab	Academic/Research	-	8,600	TBD	2025-2030	1

TABLE 14.2a - CAPITAL IMPROVEMENTS (CONT'D)

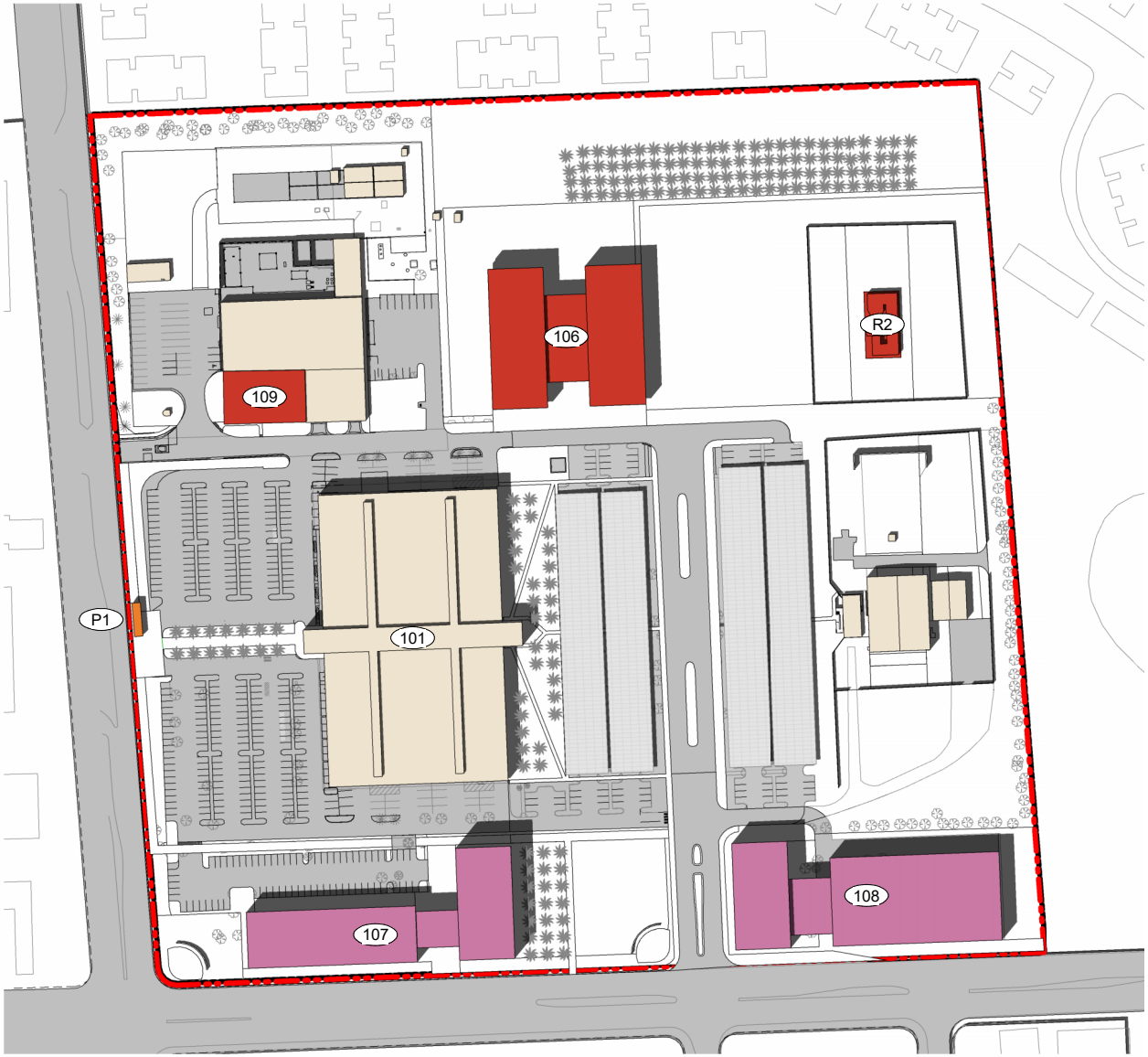


FIGURE 14.2b - EC 2035 CAPITAL IMPROVEMENT PLAN

N

0 100 300 FT

LEGEND

PROPERTY LINE

RESEARCH

GENERAL/STUDENT LIFE

PARTNERSHIP

FIU BUILDING

Five-Year Capital Improvement Plans (2025)

		Previous Guideline (State of Florida)		DLR Group Recommended Guideline		Existing Inventory		PLANNED PROJECTS	Surplus/Deficit (from recommended guideline)	
Space Use Category	*Room Use Codes (FICM)*	NASF per FTE	Total ASF	NASF per FTE	Total ASF	NASF per FTE	Total ASF	ASSIGNABLE SQUARE FEET	ASSIGNABLE SQUARE FEET	ESTIMATED GROSS SQUARE FOOTAGE
Classrooms	110,115	9.00 ASF per In-Person FTES	26,775	10.00 ASF per In-Person FTES	29,750	10.37 ASF per In-Person FTES	30,859	900	2,009	3,348
Teaching Labs	210,215	11.25 ASF per Total FTES	51,345	11.25 ASF per In-Person FTES	33,469	9.17 ASF per In-Person FTES	27,278	1,200	(4,991)	(8,318)
Open Labs	220,225			3.70 ASF per Total FTES	16,887	5.61 ASF per Total FTES	25,597		8,710	14,516
Research Labs	250,255,257	18.75 ASF per Total FTES	85,575	18.75 ASF per In-Person FTES	55,781	12.05 ASF per In-Person FTES	35,862		(19,919)	(33,198)
Office (E&G Funded)	310,312,315,317,318,350,355	22.50 ASF per Total FTES	102,690	142.80 ASF per FTE Staff*	93,936	64.50 ASF per FTE Staff*	82,911	150	(10,875)	(18,125)
Study	410,412,415,420,430,440,455	13.50 ASF per Total FTES	61,614	13.50 ASF per Total FTES	61,616	9.31 ASF per Total FTES	42,504		(19,112)	(31,853)
	Subtotal ASF	71.87 ASF per Total FTES	327,999	63.86 ASF per Total FTES	291,439	53.68 ASF per Total FTES	245,011	2,250	(44,178)	(73,630)
Offices (Non E & G Fun	310,312,315,317,318,350,355			142.80 ASF per FTE Staff*	31,312	124.70 ASF per FTE Staff*	27,320		(3,992)	(6,653)
Athletics	520,523,525	4.50 ASF per Total FTES	20,538	4.50 ASF per Total FTES	20,539	2.16 ASF per Total FTES	9,861		(10,678)	(17,797)
Instructional media	530	3.00 ASF per Total FTES	13,692	3.00 ASF per Total FTES	13,692	0.32 ASF per Total FTES	1,479		(12,213)	(20,356)
Clinic	542,547			0.40 ASF per Total FTES	1,826	0.01 ASF per Total FTES	25		(1,801)	(3,001)
Special use	550,555,570,575,580,585,590			0.00 ASF per Total FTES	0	0.01 ASF per Total FTES	49		49	82
Assembly and Exhibitior	610,611,615,620,625,694	2.25 ASF per Total FTES	10,269	2.25 ASF per Total FTES	10,269	4.22 ASF per Total FTES	19,282		9,013	15,021
Food Service	630,631,635			1.82 ASF per Total FTES	8,305	3.24 ASF per Total FTES	14,773		6,468	10,779
General Use	650,655,660,665,680,682,685			8.01 ASF per Total FTES	36,550	15.02 ASF per Total FTES	68,532		31,982	53,304
Recreation	670,675			2.60 ASF per In-Person FTES	67,262	0.37 ASF per Total FTES	1,667		(65,595)	(109,325)
Support	710,715,720,725,730,735,750,760,765	4.40 ASF per Total FTES	20,082	4.24 ASF per Total FTES	19,352	5.53 ASF per Total FTES	25,251	620	6,519	10,865
Health Care	810,815,830,835,840,845,850,855,870,880			0.34 ASF per Total FTES	1,571	0.27 ASF per Total FTES	1,211		(360)	(600)
Total ASF		86.02 ASF per Total FTES	392,580	110.02 ASF per Total FTES	502,117	90.81 ASF per Total FTES	414,461	2,870	(84,786)	(141,310)

Total: 141,000 Gross Square Feet

State of Florida guidelines, supplemented with national space standards, used to determine space needs based on research from 20 higher education state systems in addition to space needs studies conducted at 52 regional universities.

FIGURE 14.2c - BBC SPACE NEEDS

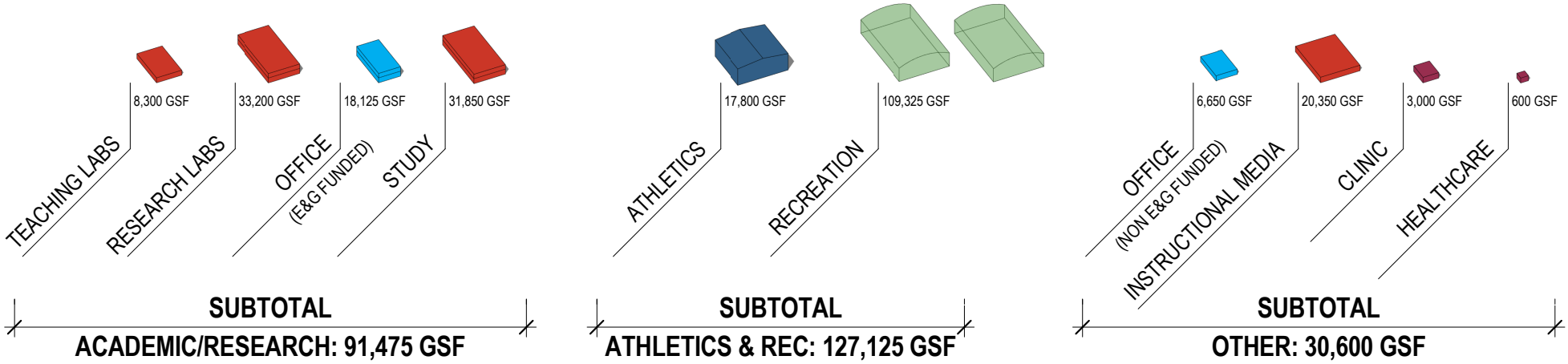


FIGURE 14.2d - BBC SPACE NEED BLOCKING

Table 14.2 Florida International University Capital Improvement Plan (2020-2030) Continued

Key	Program Element Description	Use	Area NASF	Total Area GSF	Est. Construction Cost	Projected Year of Completion	# Floors
BISCAYNE BAY CAMPUS							
	Facilities Infrastructure / Capital Renewal						
N08E	NIST	Academic/Research	-	TBD	TBD	2025-2030	1
N01B	Graduate Hospitality	Academic/Research	-	32,000	TBD	2025-2030	2
N13A	SEAS Expansion	Academic/Research	-	42,000	TBD	2025-2030	3
N14	Environmental Communications	Academic/Research	-	34,000	TBD	2025-2030	2
N15	Media Innovation Center	Academic/Research	-	22,000	TBD	2025-2030	2
S05	Facilities Support	Support	-	11,000	TBD	2025-2030	1
N20	Multi-Purpose	Multi-Purpose	-	TBD	TBD	2030+	4
N21	Multi-Purpose	Multi-Purpose	-	TBD	TBD	2030+	5
N22	Multi-Purpose	Multi-Purpose	-	TBD	TBD	2030+	4
N23	Multi-Purpose	Multi-Purpose	-	TBD	TBD	2030+	4
BISCAYNE BAY CAMPUS			**TOTAL**	**141,000**	**TBD**		

TABLE 14.2d - CAPITAL IMPROVEMENTS (CONT'D)

FIGURE 14.2c - BBC 2035 CAPITAL IMPROVEMENT PLAN

N

0 400 1,000 FT

LEGEND

PROPERTY LINE

ACADEMIC + RESEARCH

SUPPORT

MULTIPURPOSE

FIU BUILDING

15.0

ARCHITECTURAL DESIGN GUIDELINES

15.0 ARCHITECTURAL DESIGN GUIDELINES

The Architectural Design Guidelines at FIU outline protocols and procedures for the development and design of university facilities, focusing not only on the exterior but also striving to meet programmatic, aesthetic, and strategic benchmarks related to our focus on environmental resilience, health, and technological innovation. These guidelines emphasize creating facilities that are contextually sensitive and sustainable, utilizing construction materials and techniques that align with our strategic pillars of enhancing the FIU experience, advancing top-tier research, and fostering mission-aligned engagement.

Five comprehensive goals have been developed to inform these guidelines, ensuring that our facilities not only enhance the image of higher education but also support the comprehensive goals of environmental sustainability, healthful living spaces, and innovative environments. These guidelines serve as the foundation for the development of FIU facilities and ensure that our urban design, landscape, and architectural efforts collectively support FIU's mission and create a cohesive campus fabric. With limited land available, our approach includes high-density, mid to high-rise developments to efficiently use space and support University partnerships.

Highlights of Architectural Design Guidelines include the following:

- Incorporating a Project Responsibility Checklist to assist in the process of following all necessary guidelines during the design and development of projects.
- Establishing Sustainable Design Guidelines and goals to help elevate the standards of energy efficiency and performance for all new buildings, as well as specifying principles and design drivers that will enhance pedestrian and outdoor environments.
- Outline the framework for an Integrated Design Process, to assure successful implementation of all Campus Master Plan guidelines.
- Establish the FIU Design Review Process, that will provide reviews and approvals of all designs within existing campuses to ensure adequate consideration of all guidelines and achieve goals within the Campus Master Plan. Faculty may request additional information and plans for designs under review.
- Establish Architectural Guidelines and Components to reinforce and work in partnership with the Urban and Landscape Design guidelines, the FIU Building Standards, and the University sustainability guidelines.

GOAL 1

Incorporate a Project Responsibility Checklist to assist in the process of following all necessary guidelines during the design and development of projects.

OBJECTIVES AND POLICIES

Objective 1.1
Defining Characteristics for each Campus:

Respond to the similarities and differences in the campuses of Florida International University in order to establish a defining overall character for each. Each location shall develop an architectural language and vocabulary that takes advantage of its natural and manmade setting.

Policy 1.1.1

UNIVERSITY-WIDE:

Respond to the hot and humid climate of South Florida with architecture that addresses the need for weather protection and shade. Architectural elements such as covered pedestrian walkways, shaded courtyards, covered connections between buildings; protection at building entrances etc. shall be required where feasible, and be an integral part of the architectural design. Placement of vegetation shall also be encouraged to provide outdoor shade and to screen solar gain at buildings.

Policy 1.1.2

UNIVERSITY-WIDE:

Scale Proportion and Massing: New construction shall encourage the use of space-defining buildings to reinforce the open space networks of malls, quads, and courtyards. Buildings that define spaces shall be of similar scale and massing to the extent feasible by program. Buildings that together compose an open space shall consistently utilize the same architectural elements and are described in this element as “fabric” buildings that each contributes to the whole.

Other buildings will by definition be more notable or monumental and shall be carefully planned and sparingly built. Monumental buildings shall be justified by program as those that are utilized campus-wide and contribute to the importance or prestige of the University, such as the library or administration building. Monumental buildings shall be located at the end of axes or other prominent locations. Monumental buildings may have a larger scale and mass than “fabric” buildings but they shall be attentive to the issues of human scale and proportion.

New construction shall produce “human scale” buildings by providing articulation of the different floor levels and adequate window and door openings. Architectural elements such as arcades and connectors should be utilized to encourage comfortable pedestrian movement within and between buildings. Building heights shall to the extent feasible by area and program be the same for all “fabric” buildings.

Policy 1.1.3

MODESTO A. MAIDIQUE CAMPUS:

Character definition at this campus shall be provided by the creation of space-defining buildings that reinforce the open network of malls, quadrangles, and courtyards. New construction shall reinforce principles that support development and strengthening of campus image, identity, and community, including the University-wide goal of enhancing campus buildings to serve as models of healthy and sustainable practices for students and community neighbors.

Policy 1.1.4

ENGINEERING CENTER:

All new or improved architecture will be consistent with existing buildings on the Modesto A. Maidique Campus through the use of similar textures and colors for buildings, archways where applicable, and overall architectural character including signage, light fixtures, and landscape features.

Policy 1.1.5

BISCAYNE BAY CAMPUS:

The adjacency of the Biscayne Bay Campus and Oleta River State Recreation Area creates a strong of natural setting for this campus. Character definition at this site should be created by maintaining open view corridors toward the Bay and circulation elements that encourage pedestrian appreciation of the site's features. New construction should create space-defining buildings within short walking distances of one another to create a walkable urban core with an emphasis on the natural setting. Contemporary proportions and fenestration should characterize the design of the new buildings.

Objective 2.1

Standards for Materials and Systems:

Design buildings that promote quality standards of durability and reliability in the selection of materials. Materials shall be consistent with the architectural character defined for each campus, be consistent with the regional context, be energy efficient, and require no more than minimal maintenance.

Policy 2.1.1

Quality:

New construction shall reinforce principles that support the development and strengthening of campus image, identity, and community, including the University-wide goal of enhancing campus buildings to serve as models of healthy and sustainable practices for students and community neighbors.

MODESTO A. MAIDIQUE CAMPUS/ ENGINEERING CENTER:

Materials shall convey a sense of permanence on the campus. Florida keystone shall be utilized whenever stone is desired as a cladding. Poured-in-place concrete or precast concrete may also be used, provided that scale and fenestration are compatible with the scale and proportions required. Natural daylight is encouraged where possible and energy efficient. Storefront glass assemblies consisting of uninterrupted bays are generally discouraged except where uninterrupted transparency is justified by the building program. Building elements such as window frames, door openings, arches etc. shall be maintained in stone or concrete so as to discourage uninterrupted use of stucco.

BISCAYNE BAY CAMPUS:

Materials selected shall be natural in appearance and shall be compatible with the existing campus materials. Buildings shall utilize either precast concrete panels or poured in place concrete for their structural skin. High performance glazing systems shall be utilized for admitting natural light into the buildings.

Policy 2.1.2

UNVERSITY-WIDE:

Energy efficiency: All materials shall efficiently utilize natural resources in their production. New buildings shall utilize energy efficient materials and systems. Building locations shall take advantage of the cooling and shading effects of natural elements such as lakes or naturally vegetated areas. Buildings shall be designed to provide shade to mitigate solar gain and to generate passive cooling wherever possible. Insulating materials shall be generously used to reduce energy consumption.

Policy 2.1.3

UNIVERSITY-WIDE:

Life Cycle Costs: Architects shall take into consideration the life expectancy of materials and systems proposed for use. The life expectancy shall be compared with the replacement and operating costs of each building component alternative under consideration. The architect shall provide to FIU the results of the life cycle cost investigations for review.

Policy 2.1.4

Color and Texture:

ENGINEERING CENTER:

Exterior envelope material, cladding and glazing in new construction shall be consistent with campus building standards. Large glazing areas should consider solar shading and bird safe glass. Color schemes shall be provided by each architect indicating all visible building elements and details proposed to the University for review and compliance.

BISCAYNE BAY CAMPUS:

Future development at BBC should convey the innovation and values of its research in sustainability. Color schemes shall be provided by each architect indicating all visible building elements and details proposed to the University for review and compliance.

Policy 2.1.5

UNIVERSITY-WIDE:

Graphics and Signage: FIU shall create site maps that break down each campus into a series of districts or zones. These zones shall be identified with unique names and colors on the site maps. Site signage shall be located at each entry point to the campus, whether vehicular or transit, with color identified directional signage designed to guide pedestrians to their destination. The design and usage of all graphics and signage shall be consistent throughout the campus. All signs shall be illuminated to promote easy orientation during evening hours.

Policy 2.1.6

UNIVERSITY-WIDE:

Safety: Florida International University shall provide for the health, welfare, and safety of all students, faculty, and staff as well as visitors. The design of buildings shall take into account the visibility to passersby of interior and exterior spaces, so as to minimize the potential for harm that arises when spaces are hidden from view. Crime Prevention Through Environmental Design (CPTED) policies will be adhered to as a guide for design. All applicable State and Federal Codes regarding accessibility and safety during construction shall be strictly adhered to. All parking areas and walkways shall be well lit and secure. Residential dormitories shall have security systems and be closely monitored by University Police.

Policy 2.1.7

UNIVERSITY-WIDE

Lighting: Florida International University shall provide appropriate lighting for all pedestrian and non-vehicular facilities on campus (i.e. parking, public areas, and walkways) for the safety of all students, faculty, and staff as well as visitors to each campus. Avoid up-lighting in outdoor applications to reduce light pollution and meet equivalent standards to Dark Skies certification. Avoid light leak from brightly lit interiors to mitigate hazards for migratory birds.

Objective 3.1

Districts:

Florida International University should organize and develop contextual standards where applicable for the design of buildings specific to certain areas of campus or districts.

Policy 3.1.1

MODESTO A. MAIDIQUE CAMPUS:

Central Core District (1): The buildings and spaces within this district are the original campus structures built in the 1970's. New buildings, additions, and alterations shall be compatible with and complement existing building patterns, materials, and colors of the precint. The existing buildings include the following:

- Charles E Perry Primera Casa (administration building)
- Deuxieme Maison
- Green Library
- Ernest R. Graham University Center
- Ernest R. Graham University Center Addition

Policy 3.1.2

MODESTO A. MAIDIQUE CAMPUS:

Lake District (2): The buildings in this district are organized around the picturesque lake setting. New buildings, additions, and alterations shall be compatible with and complement existing building patterns, materials, and colors of the district. The buildings in this area include the following:

- Green Library
- Viertes Haus
- Engineering & Computer Science
- Owa Ehan Building

Policy 3.1.3

MODESTO A. MAIDIQUE CAMPUS:

Tamiami Mall (3): This district is located at the entry off of SW 8th St. The buildings are organized around a symmetrical vehicular mall. All future buildings in this area shall be "fabric" buildings and share a common fenestration design, building base, building height, and arcade treatment. Buildings in this area will include the following:

- Education Building
- Ryder Business Administration
- School of Architecture
- Satellite chiller plant
- Graduate School of Business

Policy 3.1.4

MODESTO A. MAIDIQUE CAMPUS:

Avenue of the Arts (4): Buildings in this mall are located immediately south of the Charles E Perry Primera Casa.

Future development should reinforce the pedestrian promenade and incorporate elements of an arcade at its base. Materials shall be compatible and complimentary to existing buildings and evaluated through the campus design review process.

- Charles E Perry Primera Casa (administration building)
- Management and Advanced Research Center (MARC)
- Frost Art Museum

Policy 3.1.5

MODESTO A. MAIDIQUE CAMPUS:

Avenue of the Professions (5): Buildings in this mall include:

- Law School
- Labor Center
- Ryder Business Building
- Social Science Complex
- Green Library
- North Graham Center

Policy 3.1.6

UNIVERSITY-WIDE:

Housing Quads (6): New construction of students housing shall be composed of multi-story apartments creating, in the case of Modesto A. Maidique Campus, a dedicated quadrangle space for residents. Buildings at the Biscayne Bay Campus shall be oriented toward the bay view. Buildings shall utilize to the extent possible an arcaded base, which will give access to the residents common areas such as lounges, laundries, etc. Housing development should reflect innovation in its architectural design and shall have the appearance of housing and not academic buildings. A residential appearance shall be achieved by creating buildings of small massing and footprints, fenestration with balconies, and more informal arrangement of building volumes.

Policy 3.1.7

UNIVERSITY-WIDE:

Housing Quads (6): New construction of student's housing shall be composed of multi story apartments creating in the case of Modesto A. Maidique Campus, a dedicated quadrangle space for residents. Buildings at Biscayne Bay Campus shall be oriented toward the bay view. The buildings shall utilize to the extent possible an arcaded base, which will give access to the resident's common areas such as lounges, laundries etc. Apartment levels shall be integral stucco exterior surfaces and shall have the appearance of housing and not academic buildings. A residential appearance shall be achieved by creating buildings of small massing and footprints, fenestration with balconies and more informal arrangement of building volumes.

Policy 3.1.8

MODESTO A. MAIDIQUE CAMPUS:

The Campus Master Plan Update identifies four primary campus precincts that build on previously identified districts on campus. They include:

- Precinct 1: Campus Core
- Precinct 2: East Gateway
- Precinct 3: Science & Engineering Complex
- Precinct 4: North Gateway

Objective 4.1

Guidelines for Architectural Building Types

Establish a vocabulary and set the parameters for building types and elements that will reinforce the visual unity within the campus and districts.

Policy 4.1.1

UNIVERSITY-WIDE:

Covered pedestrian walkways: New construction shall incorporate arcades wherever possible within the exterior face of the building volume so as to provide protection from the elements. Arcades may be designed with covered pedestrian walkways. Arcades may be used in conjunction with connecting walkways for weather protection.

Policy 4.1.2

Fenestration:

MODESTO A. MAIDIQUE CAMPUS:

Building fenestration should be designed in a manner that is consistent with the surrounding context and target LEED Gold or equivalent criteria as a minimum requirement.

ENGINEERING CENTER:

Existing facility renovations and new construction will incorporate those elements approved for the Modesto A. Maidique Campus facilities to maintain design consistency.

BISCAYNE BAY CAMPUS:

Building fenestration should be designed in a manner that is responsive to the site context and programmatic use and target LEED Gold criteria or equivalent as a minimum requirement.

Policy 4.1.3

UNIVERSITY-WIDE:

Building Forms: FIU should strive to create buildings that are simple, direct, and derived from best urban design, architectural, and sustainable planning principles for an academic and residential campus. Buildings should be thought of as either contributing to the form of the open space they create "fabric" space defining buildings, or they shall be considered as special buildings that are "monumental" or objects in space.

Monumental buildings should be planned and coordinated so that their siting and building design are appropriate to the distinguished purpose they are to provide.

Fabric buildings should be sited and designed to be harmonious and contribute to a greater whole. Fabric buildings should be derived from classical types. Fabric buildings can be "bar" buildings, courtyard buildings, "L" shaped or "H" shaped, but shall have forms that contribute a space-defining character. Building fenestration should be appropriate to the site and program context.

Policy 4.1.4

UNIVERSITY-WIDE:

Service Yards: New construction shall screen from view of all service yards. Screening shall be achieved with walls and landscaping. Combining service yards to minimize their spread is desirable, as long as the yard does not get so large as to become obtrusive.

Objective 5.1

Weather Protection (UNIVERSITY-WIDE)

Florida International University should create circulation elements that provide for weather protection and reinforce the linkages between quads, courtyards, and buildings.

Policy 5.1.1

Covered Connections

Florida International University should provide adequate parking to support the needs of students, faculty, and visitors

Policy 5.1.2

Parking Structures:

Required parking decks shall be located to minimize the impact of building bulk wherever possible. Parking structures should be articulated into smaller volumes so that long uninterrupted facades are avoided. Structures shall be designed so that only level slabs occur at the exterior. Sloping ramps may only occur in interior bays. Parking structures are strongly encouraged to incorporate ground-level amenity spaces such as convenience stores or bookstores to create pedestrian activity. Parking shall be screened by the design of the structure's skin and landscaping.

Design of future parking structures should consider adaptability for change of use in the future and the infrastructure and funding models to support retrofit and conversion.

Policy 5.1.3

UNIVERSITY-WIDE:

Surface Parking: Screen all surface parking areas by means of adequate landscaping. Signage and graphics shall be provided to orient people to their relative location on campus.

Objective 6.1

Design Review (UNIVERSITY-WIDE)

Create and monitor conformance of future design projects with referenced standards through University design review procedures.

Policy 6.1.1

Design Review Procedures:

Design of future projects shall undergo a formal review for compliance with FIU's established standards for new construction, ensuring alignment with our strategic goals of enhancing the FIU experience, advancing research, and fostering mission-aligned engagement, particularly focusing on environmental resilience, health, and technology/innovation. This review process begins after University facilities staff have assessed the project for both programmatic and design compliance.

The architect for each project will present the design, including all proposed finishes, to facilitate comprehensive feedback and necessary approvals. The review will consider the siting, landscape improvements, and signage, in addition to the architecture and interior design proposed, ensuring that each element contributes to our strategic objectives and campus aesthetics. The University facilities staff are empowered to adapt guidelines when necessary, especially if modifications lead to a superior outcome or if the project under review is of a special or monumental nature. This flexibility ensures that our campus development not only meets but exceeds standards, fostering an environment conducive to learning, research, and community engagement.

GOAL 2

Establish Sustainable Design Guidelines and goals to help elevate the standards of energy efficiency and performance for all new buildings, as well as specifying principles and design drivers that will enhance pedestrian and outdoor environments.

GOAL 3

Outline the frame work for an Integrated Design Process, to assure successful implementation of all campus master plan guidelines.

GOAL 4

Establish the FIU Design Review Process, that will provide reviews and approvals all designs within existing Campuses. to ensure adequate consideration of all guidelines and achieve goals within the FIU Campus Master Plan. Faculty may request additional information and plans for designs under review.

GOAL 5

Establish Architectural Guidelines and Components to reinforce and work in partnership with the Urban and Landscape Design guidelines, the FIU Building Standards and the Office of Sustainability Guidelines.

16.0

LANDSCAPE DESIGN GUIDELINES

16.0 LANDSCAPE DESIGN GUIDELINES

Landscape design is a crucial element of the educational environment at FIU, enhancing the FIU experience and contributing to our strategic focus on environmental resilience, health, and innovation. Our Landscape Design Guidelines provide a framework to elevate the quality of both new and existing outdoor spaces, integrating sustainable practices consistent with USGBC standards and the American Society of Landscape Architects Sustainable Sites Initiative. These practices not only aim for LEED Gold or equivalent but also support our commitment to environmental stewardship. The guidelines ensure that our landscapes reflect the dynamic academic life by reinforcing main circulation routes with distinct treatments and connecting significant pedestrian corridors that link diverse academic hubs.

- Guiding principles for our campus landscapes include:
- Integrating architectural and landscape architectural designs early in the planning process to create attractive, functional settings that support both new and existing facilities.
- Developing prominent landscape features that grow with our campuses, including quads, plazas, and thematic avenues like the ‘Avenue of the Arts’ and ‘Avenue of the Professions’, enhancing the overall campus fabric and supporting our strategic pillars.
- Designing shaded pedestrian walkways furnished with movable chairs and tables to foster a vibrant outdoor campus environment conducive to health and well-being.
- Harmonizing new developments with the mature campus environment by preserving native vegetation and incorporating similar new plantings, ensuring that our growth is sustainable and integrates seamlessly with the natural landscape.
- Using a selective palette of indigenous and site-adaptive plant species to embody our subtropical locale and promote Florida Friendly Landscape principles, focusing on sustainable groundcover solutions like mulch from leafy and woody materials and permeable paving to enhance ecological and campus health and functional value.

GOAL 1

Create high-quality, environmentally sustainable campus landscape settings that promote outdoor comfort, security, and rich visual appeal. These settings will exemplify the uniqueness and diversity of South Florida's subtropical environments and align with our strategic pillars—enhancing the FIU experience, fostering environmental resilience, and promoting health and wellness. By developing a unifying character across our campuses, we support our commitment to sustainability and technological innovation, ensuring these landscapes serve not only as aesthetically pleasing areas but also as functional spaces that enhance learning and community engagement.

OBJECTIVES AND POLICIES

Objective 1.1

Landscape Framework: Implement the Landscape Framework for the Modesto A. Maidique Campus, Engineering Center, and Biscayne Bay Campus. (Figures 16.4-16.11)

Policy 1.1.1

UNIVERSITY-WIDE

Reinforce the critical elements of the spatial organization defined in this Campus Master Plan for a consistent landscape character as outlined in this element. This framework serves as a guide to further define the character of spaces, streets, and edges within the campuses. The landscape framework is not intended to be a typical design solution for each area, but rather a set of standard principles of how a space shall be developed, enhanced, and maintained so that it remains in context with the overall campus.

Policy 1.1.2

Locate and orient all future buildings to define the open spaces depicted in the adopted Urban Design Plan depicted in Figures 3.1, 3.2, and 3.3.

Policy 1.1.3

Continue to incorporate art exhibits throughout the three campuses as an element unique to FIU. Create an inventory of all installations on campus and define the parameters for future locations of new art projects on campus.

Policy 1.1.4

Provide a continuous tree canopy (as appropriate) in all remaining parking lots and sufficiently screen all parking areas without compromising security. When possible, future development of parking lots should include canopy structures or photovoltaic panels to shade cars and pedestrians.

Policy 1.1.5

Prior to construction, relocate and incorporate existing valuable plant material in the areas of future construction and development.

Policy 1.1.6

Emergency access facilities shall be kept clear of any impeding landscape elements.

Policy 1.1.7

Screen all trash collection facilities from pedestrian or vehicular traffic view with either a fence or wall consistent with architectural guidelines or evergreen plant material.

Policy 1.1.8

Screen maintenance facilities from pedestrian and vehicular traffic with a fence, wall, or evergreen plant material.

Policy 1.1.9

Incorporate within the general campus landscape area, gardens and natural habitats not only as opportunities for botanical and environmental education but also as enhancements to the campus amenities that align with our strategic pillars. These areas will serve as living laboratories supporting our focus on environmental resilience, health, and technological innovation, while also offering spaces for relaxation and social interaction. Additionally, these spaces will be equipped with WiFi connectivity and electrical outlets to promote digital connectivity and enable technology-driven learning and research. This development is in line with Objective 1.2 of the Recreation & Open Space section: Develop Signature and Sustainable Campus Open Space.

Policy 1.1.10

Improve the integration of existing and new stormwater retention areas as landscape enhancement elements. Future development projects should include rain gardens as retention strategies for managing stormwater.

Objective 1.2
Enhance existing and proposed campus spaces to better define the open spaces as a consistent unifying element throughout the three campuses axes.

Policy 1.2.1

MODESTO A. MAIDIQUE CAMPUS:

Avenue of the Sciences - Continue to develop and reinforce the diagonal axis from Panther Village to the intersection of SW 8th St and SW 107th Ave at the future Academic Health Sciences gateway.

1. Enhance the sidewalk between Panther Village and the Graham Center/Library Plaza with additional tree canopy plantings for shade and a defined pedestrian crossing at the existing service street.

2. Redevelop the existing Graham Center Plaza/Library plaza to allow for an uninterrupted visual and functional pedestrian path through the space from the southwest to the northeast corner of the space. Provide canopy trees for shade.

3. Remove the existing curvilinear path from the northeast corner of the Graham Center and replace with a formal linear path that connects to the existing Health & Sciences Building 2 path.

Policy 1.2.2

Avenue of Professions - Enhance the pedestrian experience of the axis west of the library to the proposed loop road realignment. The space should demonstrate the significance of the axis through the use of canopy trees or palms evenly spaced to create a formal and linear connection. The pedestrian path should be wider than typical sidewalks on campus. Include benches and additional site furnishings to create a repeating pattern along the space.

Policy 1.2.3

Avenue of the Students - Develop this axis to a level distinctive from typical pedestrian circulation while clearly defining the linearity of the space. Increase the existing sidewalk width and develop segments of formal plantings at building entrances. Canopy trees should be placed adjacent to the path between formal sections to provide shade.

Policy 1.2.4

Avenue of the Arts - Maintain this already well-developed and spatially defined axis.

Quadrangles

Policy 1.2.5

MODESTO A. MAIDIQUE CAMPUS:

Particular attention should be paid to the scale of campus quads and special purpose landscapes. Continue to develop the Graham Center, Green Library, Owa Ehan, and Chemistry & Physics Buildings Quad with defined hardscape and landscape edges to clearly define those space. New sidewalks should delineate the edges of the eastern edge of the quad adjacent to the Health & Science buildings connecting north to south. Groupings of canopy trees should be placed within the quad and along existing pedestrian paths to provide shade in hardscaped areas. Shade structures or seating pavilions shall be placed within the quad to provide seating areas, shelter from the elements, and power for charging devices.

Policy 1.2.6

With the incorporation of the roundabout at the intersection of the loop road and the 112th Ave entrance, develop the Ryder Business Building quad as a pedestrian focused space. Remove the existing drive and replace with sidewalk material so the drive is visually similar in type to a sidewalk but allows for service and ADA accessibility. Provide crossing pedestrian paths centered on the existing building entrances for the Architecture, Education, and Business Complex. Maintain the current palm tree configuration to allow the visual corridors into the space from the loop road to continue.

Policy 1.2.7

ENGINEERING CENTER:

Develop a quad east of the existing Engineering Center building with canopy trees and minimal hardscape. The ground plane should allow for informal gatherings and create a picturesque quality to the space similar to the proposed park edge along West Flagler Street. Shade should be maximized at existing surface parking in the form of trees or solar panels to mitigate heat island effect and provide shade for cars and pedestrians.

Policy 1.2.8

BISCAYNE BAY CAMPUS:

Open space at BBC should convey the sustainability mission and principles of the research on campus. Continue to develop the quad south of Academic One & Two (referred to as the South Quad). Influenced by the shape of the existing lake, the quads, plantings, and pedestrian circulation should be informal in design, responding to the lake's configuration. Informal groupings of hardwood canopy trees should be placed within the quad to provide shade for gatherings and reflection.

Policy 1.2.9

Expand the quad north of Academic One & Two (referred to as the North Quad). Canopy trees should be placed in small groupings within the expanded portion of the quad. Sidewalks should cross the space to create direct links between building entrances (See Figure 16.4A & 4B). The ground plane should maximize native plantings, with understory plantings at the building edges. The formal arrangement of the hardscape and palms that exists north of Academic One should be extended west to edge of the quad. Additional canopy planting should be used to provide shade.

Plazas

Policy 1.2.10

MODESTO A. MAIDIQUE CAMPUS:

Redevelop the Graham Center/Green Library Plaza to allow for the Avenue of the Sciences to be developed as an aligned pedestrian spine. The space should be designed as a single space to insure continuity between buildings. Preserve the existing canopy trees where possible to allow the space to appear more mature upon completion.

Promenades

Policy 1.2.11

ENGINEERING CENTER:

Develop a pedestrian promenade from the park edge to the northern parking lot (See Fig 16.5 A & B). The promenade should be formal in character, primarily hardscape with canopy trees evenly spaced and minimal ground plane vegetation. Site furnishings should include a series of benches for congregation opportunities.

Policy 1.2.12

BISCAYNE BAY CAMPUS:

Develop a pedestrian promenade from the northern edge of the campus core south to the Kovens Center. The promenade should be formal in character, with a unique hardscape material. Provide canopy trees on both sides of the walk to provide shade. Consider hurricane resilience in their spacing and proximity to one another, with appropriate ground cover. Benches should be clustered in shaded areas that provide campus views and a amenities for outdoor seating.

Special Purpose Landscapes

Policy 1.2.13

MODESTO A. MAIDIQUE CAMPUS:

The teaching and research landscapes (including Henington Island adjacent to SW 8th Street) should be maintained and protected from encroachment.

Policy 1.2.14

The teaching and research landscapes (including the area south of the FIU Arena) should be maintained and protected from encroachment. This space is defined by three distinctly different plant communities that offer opportunities for teaching and research. Develop a series of interpretive signage to enhance the educational and passive activity elements within the landscape. Directly south of the arena, develop an outdoor space with opportunities for gathering as well as pedestrian circulation. Enhance the space with canopy trees for shading and picnic tables. Provide a defined pedestrian circulation path between the existing Recreation Center within the academic core to the existing soccer and baseball stadiums. The path should minimize the amount of disturbance on existing vegetation while providing adequate width for pedestrian movement and addressing safety issues with view corridors along the path. The establishment of view corridors, pedestrian scale lighting, and interpretive signage is crucial for developing a safe and useable space.

Policy 1.2.15

The area north of the Regan House should be developed with native wetland species to create formal outdoor space for gatherings and provide a landscape buffer to the adjacent commercial street corridor on 107th Ave. Maintain the littoral edge around the pond with native species and groundcover.

Objective 1.3
Develop a hierarchy of landscape treatment for campus streets.

Policy 1.3.1

UNIVERSITY WIDE:

Reinforce and improve the circulation hierarchy by developing distinct, identifiable landscape treatments for each road type, campus entrance, and pedestrian/vehicular intersection.

Streets

Policy 1.3.2

MODESTO A. MAIDIQUE CAMPUS:

Greenbelt (Primary loop road): Establish a "boulevard" treatment with Live Oaks as the dominate canopy tree. Canopy trees spaced for continuous shading should be located on both sides of the road within a planting strip comprised of appropriate groundcover and native planting (see Element 16.0 Landscape). Other hardwoods and palms are permissible at significant pedestrian and/or vehicular intersections. Existing hardwoods deemed in good condition should not be replaced. There are various land use characteristics that will define the design of the loop road. More urban development shall have a different character than areas reserved for open space. There are four different types of character proposed for the loop road:

1. **Typical** – Minimum 8-foot-wide sidewalk on each side of the street, separated from the street with a planting strip comprised of appropriate groundcover and native planting (see Figure 16.6 A & B, 16.7 A & B).

2. **Urban** – Located within the Academic Health Sciences District and similar to a city streetscape. Trees should include a mix of species and be spaced for continuous shading and storm resiliency (see Figure 16.8 A & B).

3. **Main Street** – Located east of Tamiami Hall, the Main Street should be characterized by groves of trees and native groundcover that incorporates formal areas of lawn and hardscape. A proposed widened northern sidewalk should include decorative hardscape materials, benches, and lightning to create a gathering area for markets, tailgating opportunities, and other outdoor activities (See Figure 16.9 A & B).

4. **Major Intersections** – A consistent landscape treatment at all internal intersections will provide traffic calming, pedestrian crossings, and visual reference. Shade in the form of canopy trees or shade structures should be provided for pedestrians while providing clear, unobstructed views for vehicles. Concrete pavers may be utilized to identify to pedestrian crossings. Pedestrian crosswalk markings should be in place to identify to vehicles that pedestrian crossing is primary.

5. **Secondary** – Located south of the recreation center and north of Panther Village and similar in structure to the Greenbelt. Canopy trees shall be spaced to provide continuous shading and extend wildlife corridors, with pedestrian walkways on both sides. It is anticipated that this road will become a pedestrian oriented corridor between the existing parking garages and the residential district. It is vital that it remains operable for service vehicles.

Policy 1.3.3

BISCAYNE BAY CAMPUS:

Open space at the Biscayne Bay Campus (BBC) should embody the university's sustainability mission and reflect the innovative environmental research conducted on campus, aligning with our strategic focus on environmental resilience, health, and innovation. As part of the Green Spine, which links the academic campus with the conference center, the development of this key street element will significantly influence campus perception and reinforce our commitment to creating a sustainable and health-promoting environment (see Fig 16.10 A & B).

This main street-like area will feature formal planting arrangements, large canopy trees placed at regular intervals, and wide sidewalks designed to encourage walking and reduce ecological impact. Crosswalks will be prominently defined using concrete pavers at the sidewalk level and distinctive striping across vehicle lanes, enhancing safety and accessibility. The eastern edge of the street, designed like a park with informal tree groupings and open lawn areas, will serve as a versatile space for community engagement and outdoor learning, supporting our goals to enhance the FIU experience and foster mission-aligned engagement.

Entrances

Policy 1.3.4

MODESTO A. MAIDIQUE CAMPUS:

Primary Entrance: Similar to that of the SW 16th St at SW 107th Ave entrance and in a formal arrangement, the SW 17th St at SW 117th Ave entrance shall be developed to a similar level of detail and plant palette (Fig 16.11 A & B). As FIU continues development to meet existing space deficits, increased athletic activity associated with the future FIU stadium expansion, and proximity to the Florida Turnpike, this entrance will take on a more significant role as a functionally and visual representation for the campus. The use of palms shall visually define the space, while understory plantings will screen the existing uses. Sidewalks should be placed on both sides of the entry drive. This treatment will maintain SW 112th Ave as the symbolic main entrance to the campus.

Policy 1.3.5

Secondary Entrances: Develop the SW 13th St at SW 117th Ave entrance with a similar plant palette to the SW 17th St entrance. The use of palms in a formal arrangement should be the primary canopy tree. The need for significant monument signage is not necessary. Understory plantings should be used to screen the adjacent uses. Sidewalks should be provided on both sides of the entrance.

Policy 1.3.6

Secondary Entrances: Develop the SW 109th Ave at SW 8th St entrance as an urban street with evenly spaced canopy trees, wide sidewalks, and minimal ground plane vegetation.

Policy 1.3.7

ENGINEERING CENTER:

Primary Entrance: Continue to develop an entry feature at West Flagler Street for vehicular and pedestrian access that is similar in plant palette, formal structure, and visual hierarchy to that of the Modesto A. Maidique Campus's SW 16th Street entry. Sidewalks should be relocated to allow for a planting strip between existing drive lanes and sidewalks. The entrance should use palms within the median and shade trees on both sides of of the entry drive. Understory plantings and ground plane vegetation shall be minimal to allow for sightlines to and from the park edge.

Policy 1.3.8

Secondary Entrance: As the campus grows, the NW 107th Ave entrance will serve as the primary vehicular entrance to the campus. The existing fence line should be removed and placed closer to the exiting parking lot to allow for a more significant and inviting entrance to be developed. Sidewalks should be located on either side of the entrance, but separated from the drive lanes by a planting strip. The use of palms, understory plantings, and ground plane vegetation similar to the Modesto A. Maidique Campus's SW 16th Street entry shall create consistency between the campuses.

Objective 1.4
Develop an enhanced and consistent quality for the campus edges.

Policy 1.4.1

MODESTO A. MAIDIQUE CAMPUS:

Develop an urban edge to the campus along SW 107th Avenue. As identified in the Academic Health Sciences Master Plan, SW 107th Ave is an urbanizing commercial corridor. Future buildings will be positioned closer to the street creating an urban edge similar to downtown cityscapes. Provide hardwood canopy trees and limited/low growing ground plane vegetation located within a defined planting strip between the vehicular drive lanes and sidewalk. Canopy trees should be spaced to allow for a continuously shaded walk.

Policy 1.4.2

Develop an urban edge along SW 8th street 600 feet west of the SW 107th Avenue intersection. Future building will be positioned closer to the street creating an urban edge similar to downtown cityscapes. Provide hardwood canopy trees and limited/low growing ground plane vegetation located within defined a planting strip between the vehicular drive lanes and sidewalk. Canopy trees should be spaced to allow for a continuous shaded walk.

Policy 1.4.3

Reinforce the existing park edge along SW 8th St to SW 117th Ave. A park edge is similar to that of a public park. While edges are often defined by street trees and sidewalks, the remaining space should have clusters of canopy trees, minimal hardscape, and predominately lawn as the ground plane.

Policy 1.4.4

Develop a landscape edge along SW 8th St west from the park edge. Plantings should be informal in arrangement. Canopy trees, along with palms and flowering trees, will define the landscape edge and provide views for the community consistent with other major corridors. Understory plantings are encouraged to visually screen adjacent uses both into and from the campus. Groupings of palms and flowering trees are encouraged to break the pattern of canopy trees. A decorative perimeter fence integrated within the vegetation will further define the limits of the campus.

Policy 1.4.5

ENGINEERING CENTER:

Develop a park edge along West Flagler street. Plantings should be limited to random groupings of canopy trees and some flowering trees located near proposed walks in order to provide shade. Hardscape should be minimal, with pedestrian walks creating connections between the campus and the external uses. The ground plane should be predominately lawn (Fig 16.12 A & B).

Policy 1.4.6

Develop a landscape edge along NW 107th Ave that enhances the visual quality of the campus while screening the parking from view. Plantings should be informal in arrangement. Canopy trees along with palms and flowering trees will define the landscape edge. Understory plantings are encouraged to visually screen adjacent uses both into and from the campus. Groupings of palms and flowering trees are encouraged to break the pattern of canopy trees. A decorative perimeter fence integrated within the vegetation will further define the limits of the campus. Use sidewalks to create pedestrian connections and further enhance the aesthetic quality of the campus.

Policy 1.4.7

BISCAYNE BAY CAMPUS:

Develop a landscape edge along Bay Vista Blvd that enhances the visual quality of the campus while screening parking from view. Plantings should be informal in arrangement. Understory plantings are encouraged to visually screen the adjacent parking. Groupings of palms and flowering trees are encouraged to break the pattern of canopy trees. A decorative perimeter fence integrated within the vegetation will further define the limits of the campus. A bike path should be incorporated to allow for both pedestrian and bicycle circulation.

Policy 1.4.8

Continue to develop, preserve, and enhance views to Biscayne Bay along the Baywalk. The mangrove edge to the bay could be improved with select boardwalks that provide bay access through the mangroves. Additional

groupings of appropriate coastal plants should be located to further define view corridors from the campus and conference center. Groupings located adjacent to the existing bike loop shall incorporate additional site furnishings of benches and picnic tables.

Objective 1.5
Plant Materials:
Modify and adopt a revised plant materials list that reflects native South Florida ecosystems upon Campus Master Plan adoption, eliminating the use of invasive exotic species and those which necessitate excessive maintenance, and adding species compatible with a traditional college campus environment.

Policy 1.5.1

UNIVERSITY-WIDE:

FIU's campuses should be biologically rich, with environments that sustain native flora and fauna. While information should be provided on the ecosystems and species students encounter as well as opportunities to provide visible demonstration projects at pond edges, campus plantings, and in and around buildings.

To the degree possible, landscape plans shall include the use of plant species that are indigenous to the South Florida area. The appropriate selection of native plant species shall be based on their desired size, form, texture, and color in the landscape, and their positive response to localized environmental conditions including available light levels, soil type, and plant community context. In addition, selection of native species should be based on tolerance of existing site conditions, compatibility with other indigenous species, and sustainability of the landscape to promote water conservation, reduce maintenance considerations, and ensure a sustainable landscape for educational purposes. Planting areas should work to mitigate the heat-island effect throughout campus and provide shaded roadways, parking and walkways with canopy trees. Where possible, rooftops, parking, garages, and surface parking should be utilized for photovoltaic panels or planted as green roofs.

In cases where non-invasive exotic plants are to be used to enhance the landscape, plantings should be limited to those non-invasive species that are able to resist periods of drought and which require little fertilization and use of pesticides. Plant species listed in the Miami-Dade County Prohibited Plant Species List as well as the Exotic Pest Plant Council's "List of Invasive Plant Species" shall not be permitted in any future plantings.

Policy 1.5.2

As established in the Landscape Framework, the baseline plant list for FIU shall guide all future projects and renovations. Deviations from the approved plant list shall garner permission from FIU Facilities Management department prior to a release for construction approval. Prohibited plants as identified by Miami-Dade as well as the Exotic Pest Plant Council's "Florida's Most Invasive Species List" shall not be permitted in any future plantings.

Policy 1.5.3

Monitor conformance of future construction projects with revised plant lists through University design review procedures.

Policy 1.5.4

It is the intent of FIU to remove all non-native plants (whether grasses, shrubs, or trees) which are identified in the Exotic Pest Plant Council's

"List of Invasive Plant Species" from the campus grounds. FIU shall coordinate with the Florida Department of Environmental Protection (FDEP) and other appropriate governmental entities to ensure the proper removal and disposal of these exotic species.

Objective 1.6
Furnishings, Lighting and Graphics: Adopt standards for furnishings, lighting fixtures and signage.

Policy 1.6.1

UNIVERSITY-WIDE:

FIU Facilities Management shall identify projects which may enhance campus safety and accessibility. Prioritize projects according to the following elements: 1) removal of barriers, 2) visibility, 3) enhanced lighting, 4) pedestrian/vehicular conflict.

Policy 1.6.2

In accordance with the goals outlined in this element, coordinate site furnishings, lighting fixtures, and campus signage and graphic systems with the identified manufacturer and model numbers from selected products used on campus and other acceptable products. As existing furnishings and lighting become unusable or deteriorated, implement replacement furnishings according to approved University standards.

Policy 1.6.3

Follow the design review procedures established in 15.0 Architectural Design Guidelines Element to ensure that coordination of the landscape, furnishings, and graphics on the campus are in accordance with the guidelines.

Policy 1.6.4

Future bicycle facilities shall use one selected type of bicycle rack, provide adequate adjacent pavement to accommodate bicycle traffic, and be under cover if possible. Plantings shall be kept away from the area a sufficient distance to allow for bicycle maneuverability.

Policy 1.6.5

Public transportation facilities shall be consistent with Architectural Guidelines. They should be sited to allow visibility and ease of access for both vehicular and pedestrian traffic. Landscape treatment of facilities should provide shade if not provided by shelter.

Objective 1.7

Retention/Stormwater elements: Adopt standards for landscape edge treatments surrounding ponds, lakes, and stormwater features.

Policy 1.7.1

UNIVERSITY-WIDE:

Consistent with regulatory requirements, plant native wetland littoral vegetation along gradually sloping banks of lakes and water features wherever appropriate.

Policy 1.7.2

Consistent with regulatory requirements, provide where necessary “hard edge” pedestrian treatments of water bodies in intensely developed areas.

Policy 1.7.3

FIU shall follow the design review procedures established in 15.0 Architectural Design Guidelines Element to ensure conformance of future construction projects with referenced standards.

Objective 1.8

Phasing: Implement landscape improvements in three phases, consistent with the scheduling of new academic, housing, recreation, and support buildings to which landscape improvements will be allocated.

Policy 1.8.1

UNIVERSITY-WIDE:

FIU Facilities Management should establish administrative and budgeting procedures to insure that the landscape features identified in these objectives are included in project budgets for future capital projects.

Policy 1.8.2

Implement the landscape concept for each proposed development site by allocating a proportional share of overall planned landscape improvement cost.

Policy 1.8.3

Apply the following recommendations for implementing landscape concepts of the overall Campus Master Plan.

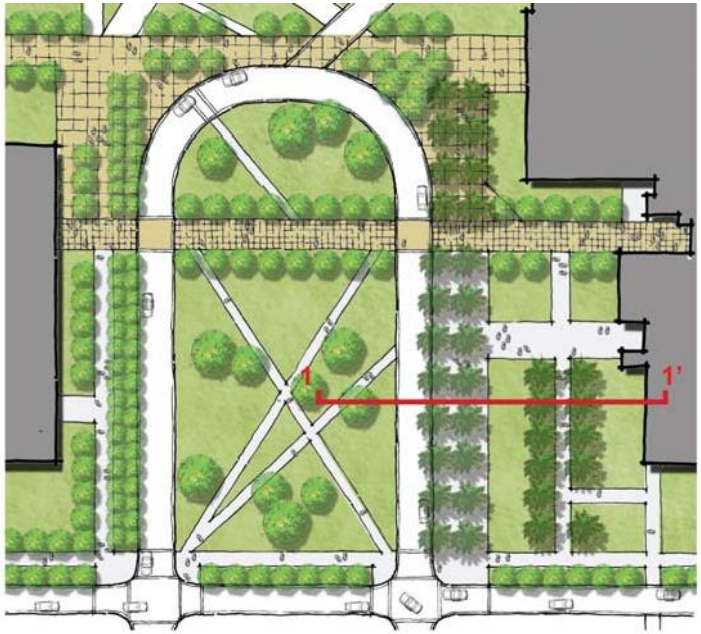


Figure 16.4A North Quad at Biscayne Bay Campus

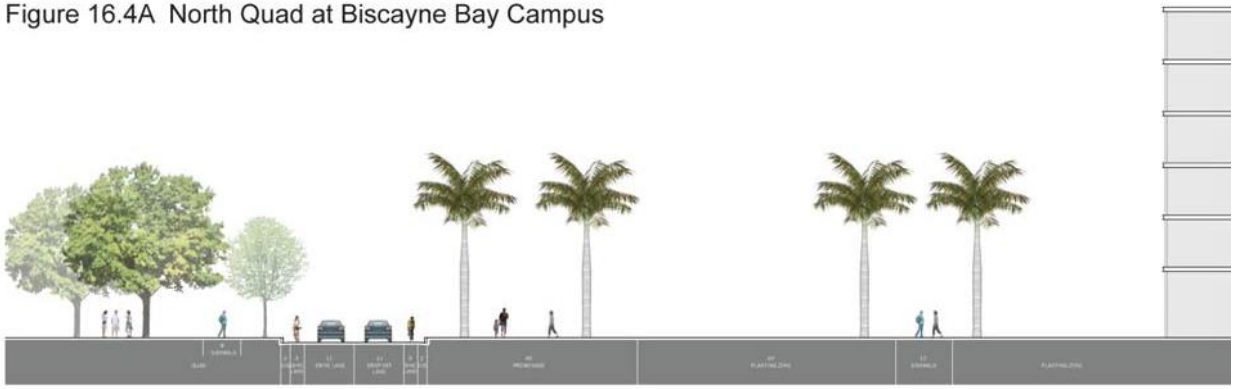


Figure 16.4B North Quad Section 1-1'

Figure 16.5A Promenade at Engineering Center

Key Plan at Engineering Center

Figure 16.5B Promenade Section 1-1'

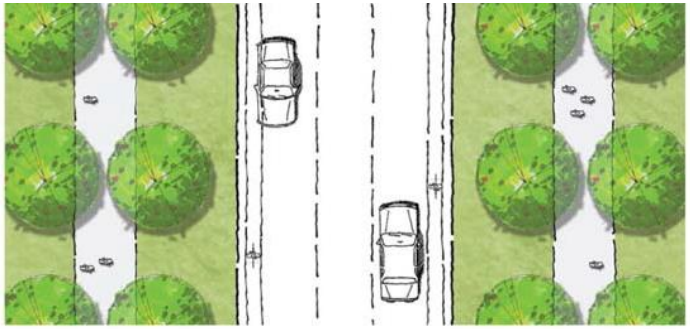
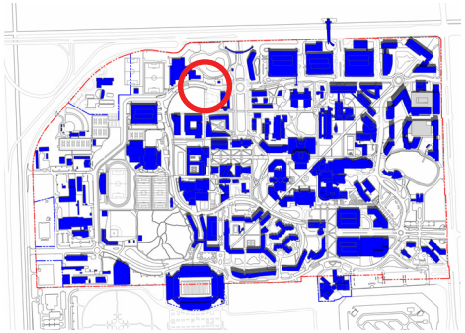


Figure 16.6A Plan of typical three-lane Campus Greenbelt



Key Plan at Modesto Maidique Campus

Figure 16.6B Section of typical three-lane Campus Greenbelt

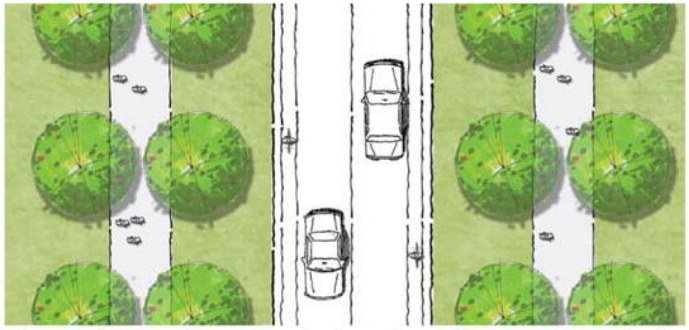
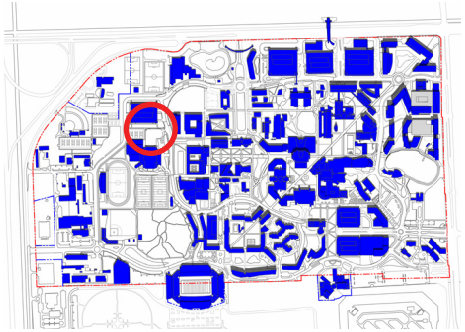


Figure 16.7A Plan of typical two-lane Campus Greenbelt



Key Plan at Modesto Maidique Campus

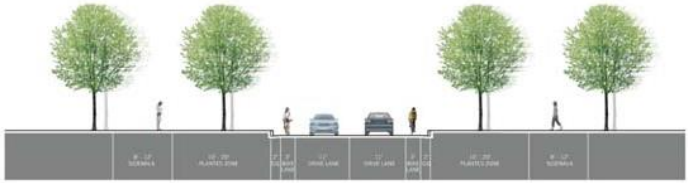


Figure 16.7B Section of typical two-lane Campus Greenbelt

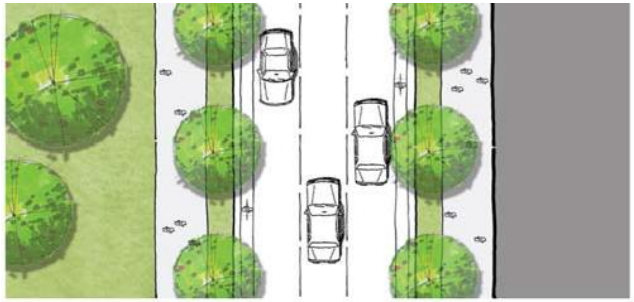
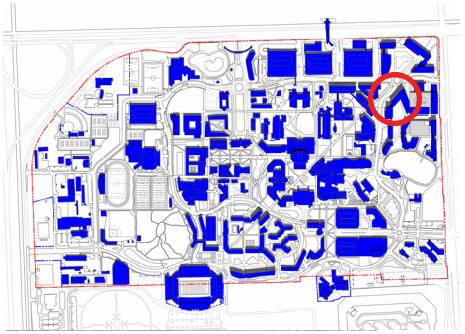
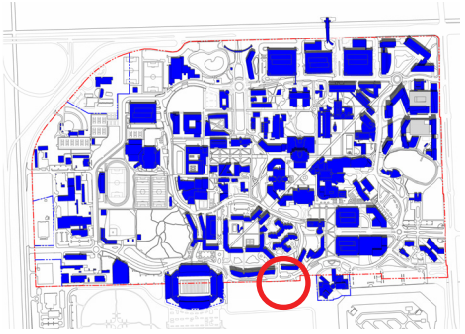


Figure 16.8A Plan of Campus Greenbelt



Key Plan at Modesto Maidique Campus

Figure 16.8B Section of Campus Greenbelt



Key Plan at Modesto Maidique Campus

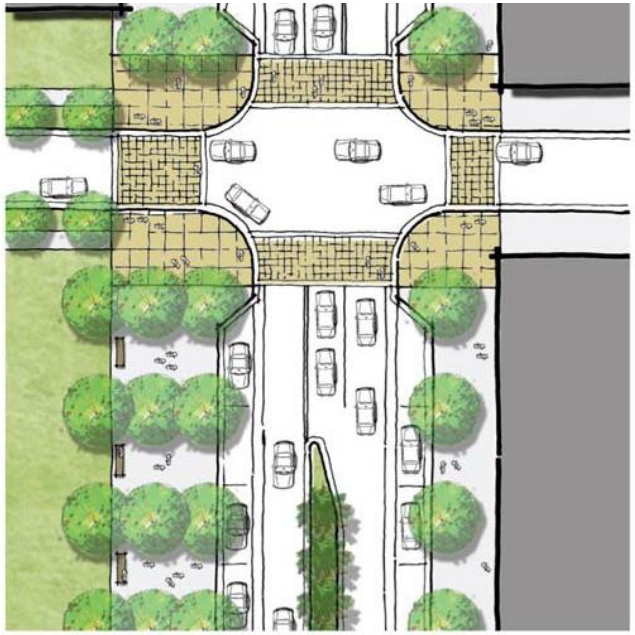


Figure 16.9A Plan of intersection

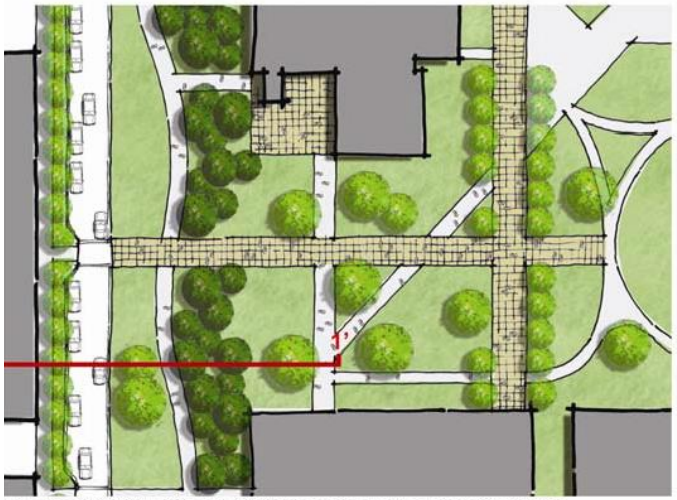
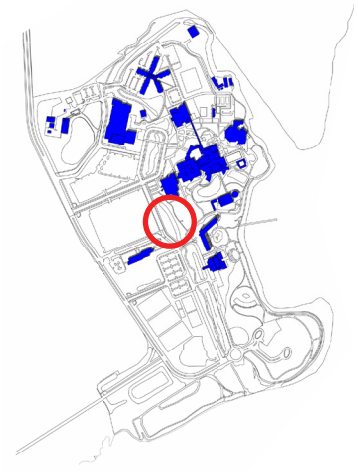


Figure 16.10A Green Spine at Biscayne Bay Campus



Key Plan at Biscayne Bay Campus

Figure 16.10B Green Spine Section 1-1'

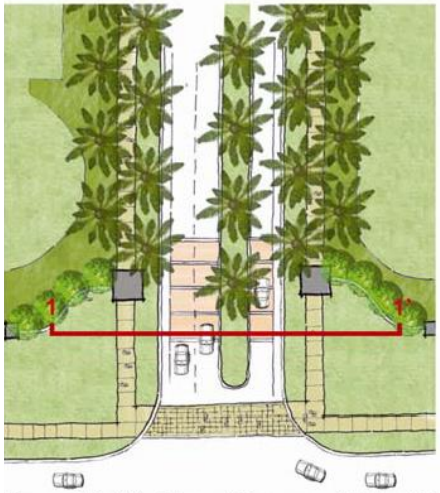


Figure 16.11A Plan of Proposed Entry Drive at Modesto A. Maidique Campus

Key Plan at Modesto Maidique Campus

Figure 16.11B Entry Drive Section 1-1'

17.0

FACILITIES MAINTENANCE

17.0 FACILITIES MAINTENANCE

The Florida International University campus buildings showcase a rich history, originating from the 1970's with some facilities that date back to the Modesto Maidique Campus' earlier days as the original Miami-Dade airport. Today, the FIU campuses blend historic buildings with new "signature" gateway facilities. Recent construction introduces diverse architectural forms and employ evolving design languages that now resonate with our 2035 focus areas of environmental resilience, health, and technological innovation.

These architecturally significant elements require diligent maintenance, and careful review for any modifications, such as repainting, window and door replacements, and broader infrastructure changes.

Across FIU's diverse portfolio of buildings, which reflects our dynamic evolution, it is crucial to harmonize building systems and materials while ensuring all facilities receive the necessary care to maintain their integrity and functionality. FIU's Integrated Facility Maintenance Program prioritizes addressing facility deficiencies based on clear criteria and standards.

These maintenance efforts are now enhanced by sustainability principles, including Dark Sky compliant lighting, ABA bird safety glass guidelines, and the use of non-toxic products to promote a healthier, more sustainable campus environment.

The Campus Master Plan's goals, objectives, and policies call for an expanded maintenance program, incorporating a structured schedule for routine, preventative, and deferred maintenance, alongside strategic renovations and repurposing to meet both current and future facility needs, thereby supporting our strategic objectives and ensuring our campuses continue to serve as vibrant, functional, and inspiring spaces for all.

GOAL 1

Provide for the timely and cost effective maintenance of campus facilities and plan for future facilities with high levels of efficiency and limited maintenance requirements.

OBJECTIVES AND POLICIES

Objective 1.1
Optimize Building Performance:

Utilize building materials, finishes, and systems which are durable, reliable, and which require limited maintenance in accordance with Association of Physical Plant Administrators Guidelines.

Policy 1.1.1

Apply the following guidelines for exterior building elements.

Ground Level - Utilize durable, weather-resistant, climate-appropriate materials including unpainted concrete masonry, natural stone (keystone), and similar materials that require only periodic pressure cleaning. The use of stucco, wood, and other materials that require high levels of maintenance, frequent painting, or which are subject to deterioration is discouraged, especially in active pedestrian areas.

Upper Levels - Exposed concrete masonry and masonry panels are preferred. Smooth finish stucco requiring painting no more often than every five years is acceptable.

Policy 1.1.2

Provide interior building materials which have a level of durability, security, and sound attenuation appropriate to projected levels of use and wear, using commonly accepted maintenance practices as follows:

High Use Areas

Utilize hard surface, impervious surfaces such as ceramic tile and pavers on floors and base walls.

Low-Moderate Use Areas

Utilize vinyl tile coupled with appropriate acoustical ceiling treatments in moderate use areas such as classrooms, labs, and hallways. Limit use of durable commercial grade carpet to low-use areas such as offices, faculty lounges, and conference rooms.

Walls should be high grade durable semi-gloss paint on drywall or plaster partitions. All trim should consist of color-integrated materials.

Policy 1.1.3

Provide durable, easily accessible, low maintenance, and high energy efficiency mechanical and electrical systems, appropriate to local climatic (high humidity) conditions. Special standards shall apply to the control of moisture related facility deterioration problems. Provide high output, low energy lighting systems with appropriate color renditions. Maximize system and component standardization to facilitate ease of operations, maintenance and replacement.

Policy 1.1.3

Provide durable, easily accessible, low maintenance and high energy efficiency mechanical and electrical systems, appropriate to local climatic (high humidity) conditions. Special standards shall apply to the control of moisture related facility deterioration problems. Provide high output, low energy lighting systems with appropriate color renditions. Maximize system and component standardization to facilitate ease of operations, maintenance and replacement.

Policy 1.1.4

The University shall make every effort to incorporate sustainable/green elements in the planning and systematic upgrade of its facilities to conserve energy and reduce overall operation costs.

Objective 1.2
Optimize Building Performance:

Optimize Facility Use and Capacity:

Manage facility utilization efficiency so as to minimize use conflicts, overcrowding, and retrofit costs.

Policy 1.2.1

Apply Chapter 6A-2 of the Florida Administrative Code to all proposed facility use modifications to ensure optimum facility utilization.

Policy 1.2.2

Limit facility use changes that involve uses with significantly different operational, spatial, or mechanical requirements (e.g. conversion of classrooms to laboratories, etc.).

Objective 1.3
Enhance the Facility Maintenance Program:

Strengthen the Comprehensive Facility Maintenance Program, building on the current Facility Deficiency Report and related surveys of facility conditions, capacities, and code compliance.

Policy 1.3.1

Continue present facility maintenance procedures outlined in this element with prioritization to the deficiencies identified in the data sources identified below for annual inclusion in the five year CIP based on available resources.

- Building Deficiency Survey
- Housing Deficiency Survey
- Life Safety (Fire Marshall) Reports
- Accessibility (ADA) Reports
- Hazardous Materials Reports (Law Engineering)
- Roof Management Reports (Garland)

Policy 1.3.2

Expand and annually update the facility deficiency reporting system, including the data sources, to include:

- ADA Compliance
- Conformance with Chapter 6A-2 of the Florida Administrative Code
- Potential for adaptive re-use
- Hazardous materials inventory
- Auxiliary and student services buildings
- Grounds maintenance needs (based on xeriscape principles)
- Short and long range cost projections

Policy 1.3.3

Priorities for the remediation of facility deficiencies shall be assigned based on the following criteria in descending order of importance.

- Emergency life-safety or plant-safety items
- Previously initiated uncompleted projects
- Threatening life-safety items
- Access corrections required by state law or ADA
- Threatening plant-safety items
- Critical needs for maintaining operations
- Expansion needs critical to University objectives
- New program or operations improvements

Policy 1.3.4

Utilize and expand upon the facility deficiency reporting system database composed of the following elements:

- Standards for the assessment of facility utilization and conditions.
- Priorities for maintenance and improvement projects that emphasize factors of safety, accessibility, operational efficiency, and long term cost effectiveness.
- Process for the periodic review of facility utilization capacity and the identification of re-use potentials.
- Schedule and budget for routine and deferred maintenance and elimination of deficiencies among all facilities with annual maintenance cost projections.

Policy 1.3.5

Establish a deferred preventative and maintenance schedule, consistent with projected funding, incorporated in the Facility Maintenance Program.

Policy 1.3.6

The review process for the use and capacity of buildings shall consist of the following elements:

1. Classroom-Laboratory utilization reports shall be prepared annually for use by Institutional Research and Space and Scheduling units of Academic Affairs in preparing class assignments.
2. The FIU Space Committee shall meet, a minimum, monthly to review and act upon space and change in use requests submitted by department heads.

Objective 1.4

Monitor Maintenance Funding:

Ensure the availability of sufficient funding and other resources to support projected facility maintenance requirements. Funding calculations for building maintenance should include the necessary levels of support to target LEED Gold or equivalent criteria as a minimum requirement.

Policy 1.4.1

Incorporate within building construction programs and funding requests projected life cycle maintenance expenses to be held in a maintenance endowment account.

Policy 1.4.2

Establish a maintenance endowment account for existing buildings through an amount to be determined as part of the Facilities Maintenance Program.

Policy 1.4.3

Based on the Facilities Maintenance Program analysis and application of the Texas Higher Education Coordinating Board Model, re-evaluate and revise maintenance cost formulas to reflect actual resources necessary to prevent building condition deterioration.

Objective 1.5

Provide campus buildings and facilities which are energy efficient.

Policy 1.5.1

UNIVERSITY-WIDE

Establish the following design criteria as part of the architectural design and siting criteria for all future buildings:

1. High efficiency lighting fixtures and control systems.
2. Minimum use of glass on west exposures and use of shading devices particularly on east and south facing windows.
3. Placement of landscaping to provide maximum solar protection and direct optimum cooling breezes.
4. Apply upgraded standards for building thermal insulation and high efficiency air conditioning systems.

18.0

COASTAL MANAGEMENT

18.0 COASTAL MANAGEMENT ELEMENT

The Biscayne Bay Campus of Florida International University, situated in a unique sub-tropical, coastal setting, exemplifies the integration of FIU's strategic pillars and focus areas—enhancing the FIU experience, advancing research, and fostering mission-aligned engagement with a particular emphasis on environmental resilience, health, and technology/innovation. This coastal environment poses unique challenges for our Master Planning process, including maximizing the benefits of this locale while mitigating vulnerabilities to hurricanes, tropical storms, and flooding, and simultaneously safeguarding critical natural resources. [Figures 13.1, 13.2, and 13.3]

In response to legislative mandates, the State University System requires an assessment of each campus's facilities to ensure adequate public shelter space for our community in times of disaster, aligned with local emergency management partnerships. This assessment is crucial in designing facilities that are not only safe shelters but also embody our commitment to sustainability and resilience.

Additionally, our Master Plan emphasizes coordination with the Department of Environmental Resources Management (DERM), especially critical at the Biscayne Bay Campus due to its proximity to shoreline and coastal wetlands. This includes complying with DERM regulations such as obtaining Class II permits for any discharges in Miami-Dade County and Class I permits for activities affecting tidal waters or coastal wetlands, ensuring that our development respects and enhances the campus's natural settings while advancing our strategic goals.

FIGURE 18.1 - BBC COASTAL MANAGEMENT PLAN

GOAL 1

Manage FIU development activities to protect, conserve, and maintain coastal and estuarine resources on the University property at Biscayne Bay Campus.

OBJECTIVES AND POLICIES

Objective 1.1
Implement and manage coastal and estuarine resource policies through the use of appropriate University faculty and staff.

Policy 1.1.1

Leverage the expertise of FIU's knowledgeable faculty and staff to oversee the implementation of the coastal resource management policies outlined in the Conservation and Coastal Management Elements of this Campus Master Plan, reflecting our commitment to environmental resilience, one of our key strategic focus areas.

Within one year of the Master Plan's adoption, these experts will develop any necessary additional policies, guidelines, procedures, and implementation schedules. Subsequent amendments to the Campus Master Plan will incorporate these elements as required. A designated staff member from the FIU Office of Sustainability and the Faculty Senate Environment and Planning Subcommittee will serve as the Environmental Coordinator. This role is crucial in managing the activities related to our strategic pillars of fostering mission-aligned engagement and enhancing research capabilities.

The Environmental Coordinator will periodically review proposed University improvements and activities to ensure compliance with our internal policies and external conservation and coastal management standards set by local, state, and federal authorities. This oversight is integral to maintaining our commitment to the health and well-being of our community and advancing technological innovation in environmental management.

Objective 1.2

Protect and maintain coastal and estuarine resources on University property.

Policy 1.2.1

The University shall undertake a binding jurisdictional determination of those areas identified as potentially jurisdictional wetlands in the Inventory and Analysis Document. Determination of jurisdictional wetlands status should be done prior to the commencement of any clearing or building activities in these areas. FIU will endeavor to obtain and comply with all required local, state and federal permits prior to any work in wetlands or tidal waters, or prior to trimming or altering mangroves where feasible.

Policy 1.2.2

Protect and enhance shallow-water communities and sea grass beds in the waters of Biscayne Bay fronting the Biscayne Bay Campus by reducing the impacts of contaminated and nutrient rich stormwater runoff to these areas.

Policy 1.2.3

The Environmental Coordinator shall evaluate any proposed changes to the siting of buildings or other University improvements to determine whether such changes are in compliance with regulations governing jurisdictional wetlands. The adopted Master Plan shall be amended as necessary to incorporate the findings and recommendations of the Environmental Coordinator. Piers and docks for recreation and research boats and vessels that require water access may be developed in accordance with local guidelines. FIU shall not site or plan any nonwater dependent fixed or floating structures in coastal wetlands or tidal waters - such facilities will be located on upland areas.

Policy 1.2.4

Monitor the water quality of the lakes, canals, and mangrove areas on each campus on a quarterly basis. Should the water quality in the water bodies fall below the standards set by the State of Florida Department of Environmental Protection, the Miami-Dade County Department of Environmental Resources Management, the South Florida Water Management District, and the U.S. Environmental Protection Agency, an assessment of probable causes of pollution shall be performed and a plan developed and implemented to eliminate the point and non-point sources of pollution.

Policy 1.2.5

Perform engineering and design analyses prior to construction of facilities that border the coastal and estuarine habitats to ensure that facilities will not contribute polluted runoff into those habitats.

Policy 1.2.6

Designate and post the mangrove-lined canals in the northern and southern portions of campus as restricted-access or no-access areas. FIU will avoid and minimize trimming or alteration of any mangroves and obtain required local, state, and federal permits prior to trimming or altering mangroves where feasible.

Policy 1.2.7

Future development activity, except for pathways, landscape improvements, and water-access-dependent facilities shall occur no closer than 100 feet from any Biscayne Bay shoreline.

Policy 1.2.8

Do not engage in water management practices that result in significant or permanent draw-down of the water table.

Policy 1.2.9

Design buildings, roadways, and paths to facilitate and support proper drainage of water to estuarine and coastal habitats. Use culverts under crossroads to maintain drainage into estuarine and coastal habitats.

Policy 1.2.10

Where feasible, comply with recommendations in the state-approved Miami-Dade County Manatee Protection Plan regarding mangroves.

Objective 1.3

Protect beaches, beach strand, and dune systems and restore them from the impacts of development.

Policy 1.3.1

Ensure that the placement of buildings and infrastructure does not encroach on shoreline areas, beach strand, or mangrove restoration areas. No future buildings or infrastructure should be located within 100 feet of shoreline areas or beach strand vegetation.

Policy 1.3.2

Post signs instructing beach visitors not to remove or destroy the beach strand or other native vegetation.

Policy 1.3.3

Establish designated areas for boat docking, and prohibit such use in areas with beach strand vegetation.

Policy 1.3.4

Encourage managed access to the shoreline that is compatible with protection of wetland and aquatic vegetation and sensitive marine resources.

Policy 1.3.5

Ensure that new construction and operation on campus facilities does not alter the hydrologic regime needed to maintain beaches, beach strand, or dunes.

Policy 1.3.6

As an element of landscape and pedestrian access improvements to open spaces along the Biscayne Bay shoreline, protect and enhance existing native beach strand vegetation. Use native beach strand vegetation in enhancement plantings in these areas.

Policy 1.3.7

Monitor existing shoreline stability. Take the appropriate steps to accomplish needed stabilization. Use native vegetation to stabilize beaches and dunes.

Policy 1.3.8

Protect the shoreline stabilization project carried out by Miami-Dade County Department of Environmental Resources Management (DERM) in 1989-1991.

Objective 1.4

Limit specific and cumulative impacts of development on natural resources.

Policy 1.4.1

In order to protect native vegetative communities, provide a development buffer of at least 25 feet between native vegetative and any future construction projects, including, but not limited to, the siting of buildings, roadways, pathways, and recreation facilities. Use visible barriers during construction or maintenance operations to delineate the boundaries of native plant communities and wetlands, where feasible.

Policy 1.4.2

Maintain a 25-foot minimum buffer zone between future buildings, ancillary facilities, and infrastructure and those areas determined to be jurisdictional wetlands (including, but not limited to, mangrove areas).

Policy 1.4.3

Monitor the surface water hydrology of on-campus areas determined to be jurisdictional wetlands on a seasonal basis. Use resultant hydrologic data to produce a plan to maintain or improve surface water flow into and out of jurisdictional wetlands. Design structures, including roadways and walkways, to maintain the surface water flow to wetland areas. Use visible barriers during construction and maintenance operations to delineate the boundaries of native plant communities and wetlands.

Objective 1.5

Restore and enhance the coastal natural resources on Biscayne Bay Campus property.

Policy 1.5.1

Remove invasive/exotic plant species from natural vegetation associations. Give priority to removing exotic species from those native vegetation associations indicated in Element 13.3. Focus efforts on the removal of Brazilian pepper (Schinus terebinthifolius), melaleuca (Melaleuca quinquenervia), and Australian pine (Casuarina equisetifolia). Remove exotic species in a manner that minimizes impacts to native vegetation associations. Replant areas where exotic plants have been removed with appropriate native plant species. Removal of exotic species from natural vegetation associations shall be carried out quarterly during the first year and yearly thereafter, unless monitoring activities indicate that more frequent removal is warranted. Refer to Element 13.0, Conservation, for additional guidelines for the treatment of natural resources. Encourage removal of invasive species in mangrove areas near campus that are controlled by the City of North Miami and Oleta River State Park to reduce the re-infestation potential on campus.

Objective 1.6

Maintain and enhance water quality in estuarine and aquatic areas on the Biscayne Bay Campus. Also see 13.0 Conservation Element policies limiting the impacts of campus operational and maintenance activities on the natural environment.

Policy 1.6.1

Review existing and proposed development activities for compliance with the surface water policies of the South Florida Water Management District. Limit negative impacts of campus activities on soils, wetlands, hydrology, and hydroperiod.

Policy 1.6.2

Test stormwater runoff for compliance with standards set by the State of Florida Department of Environmental Protection, the Miami-Dade County Department of Environmental Resources Management, the South Florida Water Management District, and the U.S. Environmental Protection Agency. Failure to meet relevant standards for stormwater runoff shall result in an assessment of probable causes and the production and implementation of a plan to improve the quality of runoff.

Policy 1.6.3

Inventory herbicide, pesticide and fertilizer use and evaluate their impacts on campus water quality. Modify or reduce herbicide, pesticide and fertilizer usage to minimize or eliminate negative impacts on water quality.

Objective 1.7

Maintain Consistencies with Host Communities' Coastal Policies:

The University's development activities and environmental protection and enhancement policies shall be consistent with the policies of the City of North Miami and Miami-Dade County and with all applicable regional, state, and federal policies regarding development in the coastal zone.

Policy 1.7.1

On a regular basis, review the host communities' natural resources management plans. If necessary, amend the Campus Master Plan to be consistent.

Policy 1.7.2

On a regular basis, review all applicable rules, regulations, and policies governing coastal zone development in the host communities during the planning and development of protection, conservation, restoration, enhancement, and management activities. Confirm compliance with the host communities' rules, regulations, and policies governing coastal zone development.

Policy 1.7.3

All applicable rules, regulations, and policies governing coastal zone development in the host communities shall be adhered to in University development activities.

Policy 1.7.4

Plant and animal species and habitats protected by the host communities or regional, state, or federal agencies shall be protected on Biscayne Bay Campus (see policies in 13.0 Conservation Element).

Policy 1.7.5

Enhancement and restoration activities of coastal resources shall, at a minimum, be consistent with those activities found in the host communities.

Objective 1.8

Enhance pedestrian and visual access to beach and shoreline areas for FIU students, faculty, and staff.

Policy 1.8.1

Improve pedestrian connections along the Biscayne Bay shoreline. Construct a bike path and pedestrian promenade that maximizes bay views and creates glimpses throughout the restored mangrove area. Preserve and enhance the bayfront edge as open space. Locate the waterfront pedestrian promenade primarily on upland. Avoid and minimize impacts to coastal wetlands, tidal waters and mangroves.

GOAL 2

Provide adequate hurricane evacuation procedures and facilities for both Modesto A. Maidique Campus and the Biscayne Bay Campus.

OBJECTIVES AND POLICIES

Objective 2.1
Hurricane Evacuation:

Coordinate with Miami-Dade County, the NOAA National Hurricane Center and regional emergency management authorities to ensure that adequate hurricane evacuation times for residents of Biscayne Bay Campus are maintained.

Policy 2.1.1

Order the evacuation of students and other residents of Biscayne Bay Campus upon issuance of a Category 1 or greater hurricane warning, or 24 hours prior to potential landfall, whichever is earlier. Provide transit vehicles as necessary to ensure that all residents are safely evacuated to the Modesto A. Maidique Campus no less than 12 hours prior to projected landfall.

Policy 2.1.2

Relocate students who reside on the BBC and MMC campuses to on-campus shelters upon issuance of a Category 2 or greater hurricane warning. Provide transit vehicles as necessary to ensure that all residents are safely relocated to on-campus shelters no less than 12-18 hours prior to projected landfall.

Objective 2.2

Hurricane Shelter Space:

Maintain Special Needs shelter requirements as necessary to maintain agreement with Miami-Dade and accommodate all students, facility, and staff needing evacuation. No public sheltering to be expanded.

Policy 2.2.1

Continue to follow construction standards for the construction of University facilities to serve as hurricane shelters.

Policy 2.2.2

Should emergency helicopter landing be needed at Biscayne Bay Campus, existing surface parking lots shall be utilized.

Policy 2.2.3

In conjunction with its host communities, FIU will continue to update a post-disaster plan to recover from the disruption of University activities.

DLRGROUP

FIU

Florida International University
Miami, FL, 33199

fiu.edu