4.0 FUTURE LAND USE ELEMENT

Florida International University faces no greater challenge than to accommodate its future expansion needs while facing dwindling land resources; preparing for sea level rise and storm surges; preserving important environmental resources; and managing complex development influences exerted by Florida's largest urban metropolitan area.

At Modesto A. Maidique, five strategies are used to accommodate future expansion needs. First, surface parking from the northeast corner of the site is relocated to create an expansion zone for academic health science programs and medical arts partnerships. The building sites in this zone are clustered near the existing facilities serving health and life science programs. Second, infill sites are identified that build upon adjacencies with academic or student life functions. Third, infill and building sites are shaped to preserve and strengthen existing open spaces and pedestrian corridor axes. Fourth, infill and new building sites are positioned to engage the Sweetwater community to create a 'University'. Fifth, circulation infill and new building sites are positioned to promote expansion or partnership development with the Miami-Dade Youth Fair and Exposition property.

At Modesto A. Maidique, the goal is to move toward a more compact, efficient urban scale of development. This can be accomplished by increasing allowable heights for new construction. The master plan recommends a six-story minimum height for potential academic and research, a seven story minimum height for housing and a four story minimum height for student support. Moreover, by planning for the best and highest use of land, academic facilities will dominate the campus core. More efficient, multi-purpose structured parking garages will be located at the periphery, reducing vehicular and pedestrian conflicts and creating a safer, more fluid environment for users (see Element 4.1A and 4.1B).

Engineering Center will remain a preferred location for expanding outreach and partnership opportunities for specific uses that benefit from either proximity to the Wall of Wind, the "University" commercial crossroads of Flagler and 107^{th} , or existing engineering, applied sciences and technology programs. The majority of the campus is positioned for redevelopment. New recreational open space is located in the northeast corner of the site. Building sites between the existing building and the Wall of Wind will accommodate new academic facilities and shape central open space development. The central open space reflects the landscape structure of the Modesto A. Maidique Campus which includes buildings organized around open space quadrangles and shared axes (See Element 4.2A and 4.2B).

Proposed development at Biscayne Bay Campus places renewed emphasis on partnerships, embraces the unique value of the bayfront and consolidates a highly fragmented development pattern. Similar to the Modesto A. Maidique Campus, this is accomplished by creating open space quadrangles that extend east-west, enhancing a sense of community and views to the bay. These quads are organizing elements for infill university development including academic, research and student life facilities. Future

partnership sites are located at the perimeter of the quadrangles, adjacent to appropriate academic, student life or outreach facilities.

To take advantage of land values and bay views, land on the south half of the campus has been reserved for potential partnerships that can provide a hotel, housing and healthcare facilities. On the north half of campus, additional potential partnership facilities include a Magnet School, Wildlife Center and a practice facility for Royal Caribbean Cruise Lines. RCCL would also take over the use and maintenance of the existing residence hall. A multipurpose emphasis will emerge over time throughout the campus. As at the Engineering Campus, the organization of land use, identified building sites and open space structure borrows from the precedents and patterns established at the Modesto A. Maidique Campus, creating a shared physical identity among the three disparate properties (See Elements 4.3A and 4.3B)

GOAL 1:

Manage land use on the campuses of Florida International University in a manner which facilitates the academic mission, conserves land for future needs, protects valuable natural resources, coordinates with land use policies of the host communities, and addresses the exigencies of global climate change and impacts in this region.

Objective 1.1

Protect Natural, Historic and Archeological Resources: Ensure that future campus development conserves valuable marine, 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 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

Establish an internal "land management review process" to ensure campus development complies with environmental and regulatory constraints. Prior to development commitments, building siting or deviations from the land use plan, the following procedures shall be followed:

- Any future development will be assessed for potential impact to any identified natural or historic resource.
- The University will coordinate with DERM when potential impacts on wetlands and significant upland resources are anticipated.

- Where potential impacts on historical or archaeological resources are anticipated consult with the County, State
 - Historic Preservation Officer and City staff to identify mitigation measures, as appropriate.
- Prior to siting unanticipated new academic and support uses on campus, contact City and County staff in order to calculate land requirements for buildings and parking to ensure that sufficient land resources remain to accommodate academic facility and support requirements through 2020 and maintain consistency with the City and County's Comprehensive Plan and Land Development Regulations.
- Discourage development of any additional facility not directly related to the academic mission of the University, except for planned partnerships and joint use facilities with the Miami-Dade Youth Fair and Exposition and Tamiami Park.
- Include information related to the internal review of each capital improvement project and compliance with applicable regulatory requirements in the building program of each development project.

Policy 1.1.3

While no buildings currently on campus meet the age requirement to be considered historic, shortly after 2020 some will. Once reaching fifty (50) years in age buildings can be considered historic. Upon meeting this criteria FIU should follow the guidelines outlined below. Coordinate with State, City and local historic preservation officials, maintain an information file which identifies and evaluates portions of the Modesto A. Maidique and Biscayne Bay Campus which may contain historic or archaeological resources which appear to qualify for the National Register of Historic Places. Include documentation of State regulations governing development in areas where such resources may be present.

Policy 1.1.4

FIU shall consult and coordinate with the Department of State's Division of Historical Resources prior to any land clearing, ground disturbing, or rehabilitation activities which may disturb or otherwise affect any property which is included, or eligible for inclusion, in the National Register of Historic Places.

Policy 1.1.5

The University shall consider the effect of any undertaking on any historic property that is included, or eligible for inclusion, on the National Register of Historic Places. The University shall afford the

State Division of Historical Resources a reasonable opportunity to comment on such an undertaking.

Policy 1.1.6

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 shall 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 facilities 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 including the Code of Miami-Dade County, Chapter 33, Airport Zoning.

Objective 1.3

Optimize Land Use and Promote Compatible Adjacencies: Develop Modesto A. Maidique, Engineering Campus and Biscayne Bay Campus to ensure compatibility of academic, support and service functions.

Policy 1.3.1 MODESTO A. MAIDIQUE

As depicted in future land use map, Figure 4.1A, implement the following land use patterns:

- Concentrate partnership opportunities along 8th Street that supports corresponding development in Sweetwater.
- 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 to the northeast corner of the campus, adjacent to similar existing facilities.
- Locate additional housing in the southwest corner of campus adjacent to the Preserve, Panther Village, the Stadium and Performing Arts Center.
- Redistribute surface parking within multi-purpose garages at the campus perimeter to accommodate critical academic facility development within the campus loop road.
- Expand student support facilities adjacent to Graham Center to create a student support core at the main entrance from 107th Street.
- 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 4.2A, implement the following land use patterns:

- Provide adequate space along SW 107th Avenue to create an identifiable "public realm" and enhanced transit stop that will not interfere with internal campus roads and traffic.
- Provide adequate open space along Flagler Street to create an identifiable "public realm" and connections to the adjacent Women's Park.

- Create an identifiable pedestrian corridor from Flagler Street to interior facilities.
- Locate recreation open space at the northeast corner.
- Concentrate new facility construction next to the existing building to reinforce 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 4.3A, implement the following land use patterns.

- Site future facilities to strengthen and protect key open space quadrangles.
- Locate new high density student housing south of the main academic quadrangle adjacent to the Kovens Center.
- Locate high density, multi-purpose and partnership facilities, such as the Magnet School, Hotel, Academic Health Center and Academic Health Center Housing, to the south of the academic core.
- Locate low density, multi-purpose and partnership facilities, such as RCCL and the Wildlife Center, to the north of the academic core.
- Maintain a linear park along Biscayne Bay, with unobstructed bay views. Enhance with landscaping.
- Provide sports / recreation open space south of the Magnet School.
- 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

Policies 1.3.4

As part of the "land management review process" address unanticipated development requirements with the following siting criteria.

- 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.

Policy 1.3.5

As part of the "land management review process", coordinate land use, development decisions and the schedule of capital improvements (Table 14.1) with the approved campus plan. Revisions to land use, development policies and capital improvement decisions will be accompanied by an analysis of capital and community impacts prior to administrative approval and submission of State University System Florida Board of Governors, Division of Colleges and Universities facility funding requests.

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

Apply topographic, soil and hydrologic data in the siting and design of all future construction projects and review consistency with such factors as part of the "design and construction process".

Policy 1.4.3

In anticipation of climate driven sea level rise, locate facilities as much as possible outside of immediate affected areas. Concentrate future development in upland sites that are least susceptible to future sea level rise. 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 on ground level.

Policy 1.4.4

FIU shall 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 by using 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

Coordinate future development with the availability of facilities and services:

Maintain coordination with off-campus utility and service providers to ensure adequacy of services and facilities.

Policy 1.5.1

As part of the "land management review process" notify all offcampus utility and service providers with all annual revisions of the Ten Year Capital Improvement Schedule, as adopted in the Capital Improvements Element and request written confirmation of each providers ability to provide adequate service.

Policy 1.5.2

Participate with Miami-Dade County, the City of Sweetwater, the City of Miami Beach and the City of North Miami in the reciprocal review of plans and development proposals, consistent with policies supporting Intergovernmental Coordination Element.

Objective 1.6 Provide for the long term growth of Modesto A. Maidique enrollment by anticipating and planning for the expansion of the campus after 2020.

- 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.
- Policy 1.6.2 FIU will pursue additional off campus land acquisition for academic, housing and recreational facility development at the Miami-Dade Youth Fair and Exposition property.

Objective 1.7 Minimize Off Campus Constraints/Context Area Conflicts: Off-campus constraints and impacts of campus development are anticipated and ameliorated.

Policy 1.7.1 FIU shall, 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, monitor traffic and utility volumes and levels of service. By interlocal agreement with each entity, FIU shall 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 shall 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:

- Policy 1.8.1 Develop campus land uses to maximum densities and intensities applying building height recommendations and gross Floor Area Ratio (total building area divided by total (gross) land area) standards.
- 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 needed vehicle.

Objective 1.9 Coordinate On-Campus Utility Requirements: Ensure the adequate provision of long range infrastructure improvements are consistent with development of a climate action plan - as a signatory of the American College and

University Presidents Climate Commitment (ACUPCC) - and the university-driven direction that all new facilities meet United States Green Building Council (USGBC) standards and be LEED certified.

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 and resource conservation by documenting:

- Maintenance and protection of planned utility corridors, easements and points of connection
- Provision of adequate utility capacities and conservation measures 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, conservation measures 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 and resource conservation.
- Policy 1.9.5 Install instrumentation to record actual utility usage to permit optimum utilization of available resources.

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.

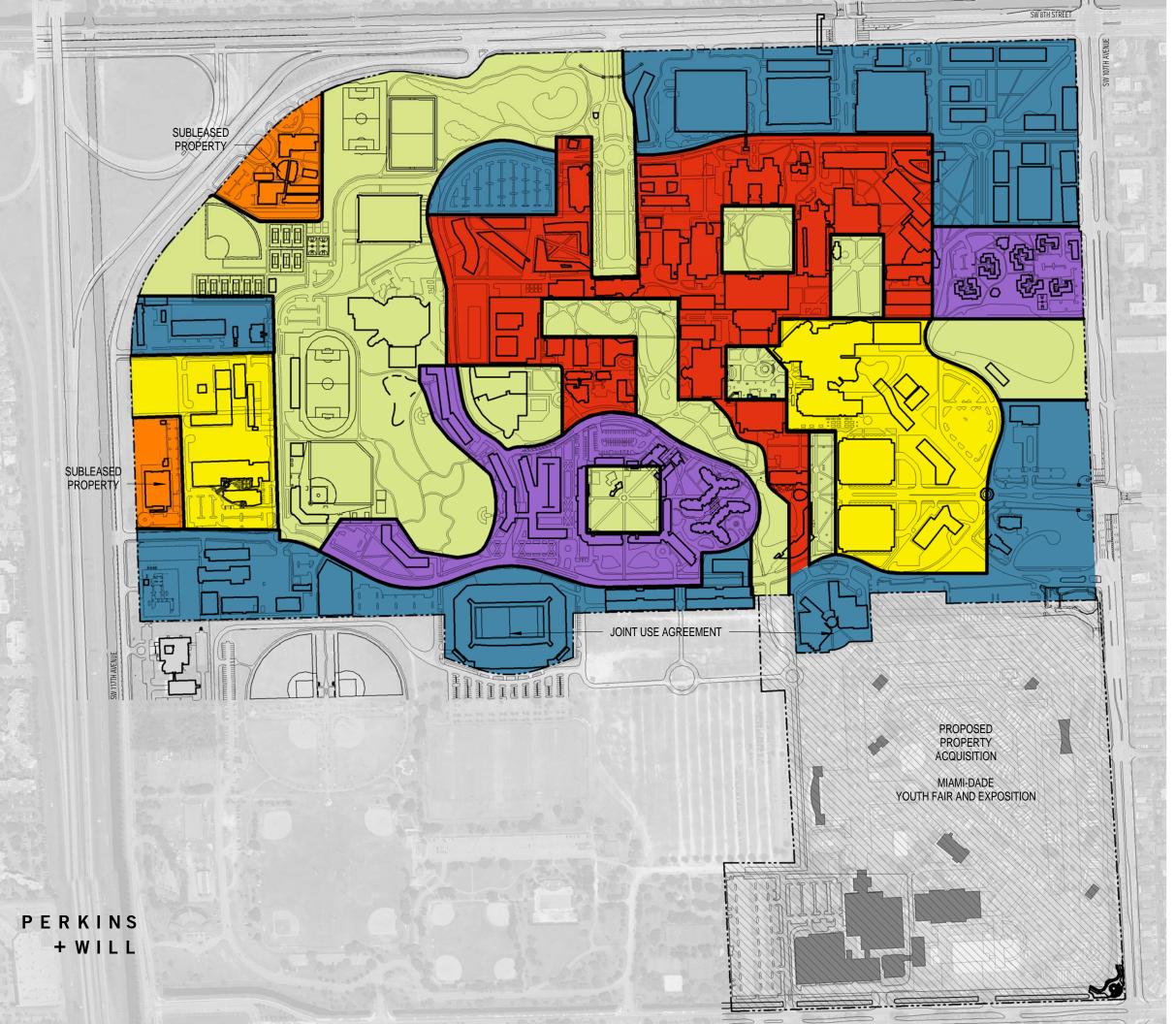
Policy 1.10.2

Pursuant to Administrative Rule 6C-21.103(3), F.A.C., plan amendments which alone, or in conjunction with other plan amendments, do not exceed the thresholds established in s.1013.30F.S., shall be consolidated into a single annual submission and submitted to the FIU Board of Trustees, Division of Colleges and Universities for review and approval. Prior to and as a part of minor plan modification requests the following review procedures shall be followed.

- Florida International University shall apply criteria for site location suitability.
- Florida International University shall assess the impact of proposed plan modifications on surface waters, wetlands, upland natural resources and historic resources.
- Florida International University shall determine impacts upon utilities, campus pedestrian and vehicular circulation patterns and confirm the ability to meet land needs for planned academic and support structures.
- Florida International University shall prepare a "Minor Plan Modification Report" as part of the "Land Management Review Process" for internal administrative review and for review and approval by the FIU Board of Trustees, Division of Colleges and Universities. FIU shall also inform Miami-Dade County, City of North Miami and the State of Florida Department of Economic Opportunity about alterations, modifications or additions to the master plan outlining current, concluded and anticipated development activity. FIU will also inform Miami-Dade County, City of North Miami and the State of Florida Department of Economic Opportunity if no changes have occurred since adoption of initial plan.
- FIU is encouraged to include submerged vegetation at Biscayne Bay Campus 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 s.1013.30, F.S., and which have the effect of changing land use designations or classifications, or impacting off-campus facilities, services, or natural resources, shall be submitted to the host and affected local governments for a courtesy review





LEGEND

ACADEMIC + RESEARCH

(CLASSROOM, LABORATORY, RESEARCH, ACADEMIC OFFICES & STUDY FACILITIES)

SUPPORT

(ADMINISTRATIVE OFFICES, AUXILIARY, CAMPUS FACILITIES & CLINICS)

HOUSING

(UNIVERSITY & NON-UNIVERSITY CONTROLLED ON-CAMPUS HOUSING FACILITIES)

ATHLETICS / RECREATION / OPEN SPACE (ATHLETIC, RECREATION & OPEN SPACE FACILITIES)

COMMUNITY INTERFACE

(UNIVERSITY PROPERTY WITH NON-UNIVERSITY CONTROLLED FACILITIES)

MULTI-PURPOSE

(INTEGRATED ACADEMIC & RESEARCH, SUPPORT, HOUSING, ATHLETICS / RECREATION / OPEN SPACE, COMMUNITY INTERFACE, AUXILIARY, TRANSIT HUB & PARKING)

ELEMENT 4.1A: LAND USE MODESTO A. MAIDIQUE CAMPUS







P1. HOTEL

KEY

A1. ACADEMIC 1 A2. ACADEMIC 2 A3. LIBRARY / STUDY ADDITION A4. ACADEMIC 4 A5. ACADEMIC 5 A6. ACADEMIC 6 A7. ACADEMIC 7 A8. ACADEMIC 8 A9. ACADEMIC 9 A10. ACADEMIC 10 A11. ACADEMIC 11 A12. SOCIAL STUDIES / HUMANITIES A13. SIPA II A14: MANGO A15: SOLAR HOUSE A16: STOCKER ASTROSCIENCE A17: SCIENCE CLASSROOM COMPLEX A18. ACADEMIC HEALTH CENTER 5 A19. HONORS COLLEGE A20. ACADEMIC HEALTH CENTER LIBRARY ADDITION FI. FACILITIES 1 F2: CENTRAL UTILITIES H1. PARKVIEW HOUSING 2 H2. GREEK HOUSING H3. MAIN STREET HOUSING

P2. MEDICAL ARTS PAVILION 4 P3. MEDICAL ARTS PAVILION 2 P4. MEDICAL ARTS PAVILION 3

P5. AMBULATORY CARE CENTER P6. MEDICAL ARTS PAVILION 1

P7. PARTNERSHIP P8. SWEETWATER

PEDESTRIAN BRIDGE PG6. PARKING GARAGE 6 /

TRANSIT HUB PG7. FACILITY SUPPORT

PG8. FACILITY SUPPORT R1. TRACK AND FIELD

R2. REC CENTER ADDITION

R3. TRAINING FACILITY ADDITION S1. SUPPORT 1

S2. SUPPORT 2

S3. CHAPEL / PRESIDENT'S

PARK PAVILION S4. ALUMNI CENTER

S5. STUDENT ACADEMIC

SUPPORT CENTER

S6. GRAHAM CENTER ADDITION S7. FROST MUSEUM ADDITION

H4. HONORS COLLEGE HOUSING

LEGEND

ACADEMIC: CLASSROOM, TEACHING LAB & STUDY

RESEARCH

SUPPORT: OFFICE, SPECIAL USE + GENERAL USE 1ST FLOOR SUPPORT:

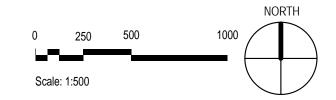
AUXILIARY, STUDY & STUDENT SERVICES HOUSING

PARTNERSHIP

SPORTS / RECREATION

FACILITY SUPPORT EXISTING BUILDING

ELEMENT 4.1B:FACILITY EXPANSION MODESTO A. MAIDIQUE CAMPUS







LEGEND

ACADEMIC + RESEARCH

(CLASSROOM, LABORATORY, RESEARCH, ACADEMIC OFFICES & STUDY FACILITIES)

SUPPORT

(ADMINISTRATIVE OFFICES, AUXILIARY, CAMPUS FACILITIES & CLINICS)

HOUSING

(UNIVERSITY & NON-UNIVERSITY CONTROLLED ON-CAMPUS HOUSING FACILITIES)

ATHLETICS / RECREATION / OPEN SPACE

(ATHLETIC, RECREATION & OPEN SPACE FACILITIES)

COMMUNITY INTERFACE

(UNIVERSITY PROPERTY WITH NON-UNIVERSITY CONTROLLED FACILITIES)

MULTI-PURPOSE
(INTEGRATED ACADEMIC & RESEARCH, SUP)

(INTEGRATED ACADEMIC & RESEARCH, SUPPORT, HOUSING, ATHLETICS / RECREATION / OPEN SPACE, COMMUNITY INTERFACE, AUXILIARY, TRANSIT HUB & PARKING)

ELEMENT 4.2A: LAND USE ENGINEERING CENTER

NORTH 0 125 250 500 1000 Scale: 1:500





KEY

- A1. ENGINEERING BUILDING
- A2. RESEARCH FIELD
- P1. TRANSIT SHELTER
- R1. RECREATION FIELDS
- S1. FIRST FLOOR INFILL / RENOVATION

LEGEND

- ACADEMIC: CLASSROOM, TEACHING LAB & STUDY
 - RESEARCH
- SUPPORT: OFFICE, SPECIAL USE + GENERAL USE
- 1ST FLOOR SUPPORT:
 - AUXILIARY, STUDY & STUDENT SERVICES
- HOUSING
- PARTNERSHIP
- SPORTS / RECREATION
- FACILITY SUPPORT
- EXISTING BUILDING

ELEMENT 4.2B: FACILITY EXPANSION ENGINEERING CENTER



