FLORIDA ATLANTIC UNIVERSITY

FAU STUDENT UNION EXPANSION

BT-686

TITLE SHEET

FAU STUDENT UNION EXPANSION

FOR

Boca Raton Campus
FLORIDA ATLANTIC UNIVERSITY

BOCA RATON, FLORIDA

PREPARED IN ACCORDANCE WITH
FM POLICY AND PROCEDURE #2
PROGRAM DEVELOPMENT

2024

Florida Atlantic University
FACILITIES PROGRAM

PREPARED BY:

Azita Dotiwala, Director of Budget & Planning

REVIEWED AND APPROVED:

DESIGN & CONSTRUCTION SERVICES:
This is to certify that this document has been reviewed for project schedule, budget and code requirements.

Fady Iskarous, Interim Assistant Director

INFORMATION RESOURCE MANAGEMENT:
This is to certify that this document meets the requirements of Information Resource Management.

Jason Ball, Associate Vice President for IT & Chief Information Officer

PROGRAM COMMITTEE:
This is to certify that this document contains the recommendations of the Program Committee.

Brian Fisher, Committee Chairperson
Associate Vice President for Student Affairs Operations

DIVISION OF STUDENT AFFAIRS:
This is to certify that this document meets the requirements of the Division of Student Affairs.

Larry Faerman, Vice President for Student Affairs

DIVISION OF ACADEMIC AFFAIRS:
This is to certify that this document meets the requirements of the Office of Academic Affairs.

Russell Ivy, Interim Provost & Vice President for Academic Affairs

DIVISION OF FINANCIAL AFFAIRS:
This is to certify that I have reviewed the funding Section XIV and the funding as set forth therein meets the requirements of the Division of Financial Affairs.

Jayson Iroff, Vice President of Strategic Initiatives &
Chief Financial Officer

DIVISION OF ADMINISTRATIVE AFFAIRS:
This is to certify that this document meets the needs of Florida Atlantic University that it is in conformance with all applicable requirements, and is hereby recommended to the President.

Stacy Volnick, Vice President for Administrative Affairs &
Chief Operating Officer

FLORIDA ATLANTIC UNIVERSITY:
This is to certify that this document has been reviewed by the administrative leadership at Florida Atlantic University and that the material contained herein is forwarded with the President's approval and recommendation.

Stacy Volnick, Interim President Date

A. PROJECT HISTORY

Florida Atlantic University is a public research university with multiple campuses along the southeast Florida coast serving a uniquely diverse community. It promotes academic and personal development, discovery, and lifelong learning. FAU fulfills its mission through excellence and innovation in teaching, outstanding research and creative activities, public engagement, and distinctive scientific and cultural alliances, all within an environment that fosters inclusiveness.

The FAU Student Union is located in the southwest portion of the Boca Raton Campus and is the center for community and leadership, facilitating student learning and involvement through a variety of programs, facilities, and services.

The Student Union (formerly University Center) opened to the University Community in 1973. There have been renovations/additions in 1974, 1980, 1985, 1995, 2002 and most recently in 2018.

The proposed project consists of a new standalone multipurpose building located north of the existing Student Union building, joined by an active/energized outdoor student gathering plaza. Additional scope includes enhancement of the existing façade to compliment and relate to the new construction as well as minor renovations within the existing Student Union

B. GENERAL PROJECT DESCRIPTION

Florida Atlantic University intends to add a new facility that coexists with the existing Student Union Facilities. This project has four primary components. These components include:

- A new one-story facility located in the north corner of the Student Union complex (northwest of Live Oak and across the street/south of Parking Garage One) that will serve as a multipurpose event center that includes one grand room that can be converted into six breakout rooms. This facility will include a warming kitchen, storage to support food service and the event spaces, and will include a small functional foyer space to support the event spaces.
- An outdoor courtyard will be developed from the middle of the Student Union complex leading back towards the library. The courtyard should help develop connectivity for all the Student Union facilities. The courtyard should also serve as an informal gathering place that has numerous small to medium size spaces for students to gather and enjoy the Student Union complex. This space should have an emphasis on natural shading, comfortable outdoor seating, and indigenous low maintenance landscaping. Wherever possible, it should incorporate already existing elements.
- The exterior façade for all existing facilities will be updated to match the new facility unifying the entire complex.

- A minor first-floor renovation of three existing spaces and a hallway/atrium to create a more open floor plan for the first floor to improve informal student usage on a day-to-day basis.

C. PROJECT GOALS

Goals for each of the specific programmatic areas is described below:

Event Facility:

The event space should allow for a total capacity of approximately 600 persons for banquet style and lecture of 950 persons. The grand room should be able to be divided into six smaller spaces and different subsets (2 and 3 spaces) as well using partition walls. The actual size of each space and the design/configuration can be considered during the design process. Additional needs include:

- Storage space needs to be sufficient to support a banquet capacity design of 600 and a lecture style design for 950, including chairs, tables, etc… Storage spaces should have access from the outside and inside of the event spaces.
- All finishes including ceiling plan, lighting, audio visual preferences can be carefully reviewed during the design process.

Warming kitchen specifications need to include the following:

- 3-4 commercial type coolers for food storage (not a walk-in cooler), 4 fryers, adequate preparation / table space to support events up to 600 persons.
- Design should also include adequate electrical support for more equipment in the future
- Adequate Storage for all dish, plate ware, sinks / garbage disposals, and other food related event equipment
- Loading area that allows for truck access for building deliveries from the northwest corner of the facility.
- Loading area should have a physical connection leading back to sidewalk that connects to western path towards Atlantic Dining Hall as this will be used to transport food/other items back and forth between the two facilities.

Outdoor Courtyard:

The outdoor space in the middle of the Student Union complex should be designed to properly manage pedestrian traffic throughout the spaces. The courtyard should also develop multiple small and medium-sized locations that allow for students to sit, gather, and enjoy the outdoor area. The design must place an emphasis on informal gathering. The intent is not to program any specific

outdoor space to support events. However, some spaces can be developed to allow for larger gatherings for students in various clubs and organizations to engage with one another for their own informal activities (e.g., rehearsing, celebrating/ceremonial activities, etc.). The space can also have a central feature (lawn, etc…) that would serve as a place for people to gather and interact. This lawn may lead to the new facility. The space should use existing pedestrian areas to create a new path towards the library. There should be an emphasis placed on creating a connection back to the campus through the north side of Live Oak and using this area to develop informal seating, etc… around existing trees. Additional design elements that should be considered include:

An interactive feature (likely water) near the middle of the courtyard. The design element(s) should consider incorporating university brand and identity. An interactive water feature can be considered along with other options that may serve as an informal tradition gathering or photo opportunity for community members and visitors.

A great emphasis should be placed on natural landscape over hardscape.

There must be an emphasis on shading, inviting outdoor seating, and natural low-maintenance landscaping.

The outdoor courtyard does need to create some screening/separation from the rear of the Life Long Learning Complex building but allow for connection using existing sidewalk / pedestrian paths.

Exterior Façade:

The main Student Union building has an older, outdated envelope that needs to be refreshed. This scope will need to include removal of existing features, resurfacing and paint throughout all locations. There is a preference to create unity between all Student Union facilities, so it is seen as one complex. A low maintenance, cost-effective solution is needed given the scale.

First Floor Renovation:

An increase in the amount of informal gathering space for students to use on a day-to-day basis in the primary area of the entry ways of the Student Union is needed. We would like to remodel the following spaces on the first floor of the Student Union to accomplish this objective:

Diamond Palm (Room 130) – remove entry door and convert into a relaxation / quiet space open to all students

The Palms (Room 128)– remove some or all glass and front door to this location and program with movable furniture conducive for studying / gathering

Tiger Palm (Room 139) – need to assess ability to remove wall with adjacent space (Room 139E) and convert to eSports Arena.

Hallway Area – update furniture and removal of genius bar

D. DESIGN OBJECTIVES

Although not central to the campus, the Student Union serves as the campus living room where students and members of the FAU community gather to study, socialize, eat, host events, attend meetings and engage in campus life. The design of this facility is to promote student life, encourage student engagement and reinforce the FAU spirit and brand.

The selected firm will provide site master planning, schematic design, design development, construction documents and construction administration for the referenced project.

The following general goals and objectives shall be considered and addressed throughout design and construction.

1. LANDSCAPING AND EXTERIOR LIGHTING

Landscaping, landscape irrigation, hardscape and exterior lighting shall be incorporated into the design for function, aesthetics, security and safety. Consideration should be given to opportunities to extend and link the exterior elements to interior public and lobby functions. Lighting and security shall be furnished to connect the proposed building expansion with the public and parking areas of the site. The use of the exterior plaza, hardscape, should be enhanced to promote overflow for pre-function activities.

2. WALKWAY AND PEDESTRIAN TRAFFIC

The project shall include walkways and plazas, adequate for connecting this facility to other facilities and parking areas to promote pedestrian access.

3. VEHICULAR TRAFFIC

Separation of service vehicular traffic and pedestrian traffic is of utmost importance. The safety of pedestrian circulation should be a first priority. For this project, attention may be given to provisions for drop off and, possibly, valet service associated with the banquet hall. The design team must consider access to various elements of the building for food service, event setup load in and maintenance vehicles. Covered walkway connections from the banquet hall to Parking Garage I is desirable to protect patrons from the elements.

4. CONTEXTUAL SITE AND BUILDING DESIGN

Site and building design shall emphasize the design of the total campus entity rather than the individual building. While each building is required to be designed as an appropriate response to its particular program, budget and site requirements, it must also be compatible with the existing fabric of the campus. The proposed expansion has a unique opportunity to provide a new façade to the original 1974 structure, while the renovation of the interior lobby space should create a bold statement promoting student spirit and the university brand.

The project should seek to create functional open space in the form of building entries, courtyards, plazas or lawns between the project and existing buildings. It is expected that two or more options will be presented to the Owner during the schematic design phase.

5. SUSTAINABLE DESIGN, GREEN ARCHITECTURE AND RECYCLING

The University promotes environmental quality and resource conservation through sustainable design, green architecture and recycling in its planning and development. This project will be designed and built to at least the U. S. Green Building Council's LEED Silver standard or equivalent.

6. PROJECT BUDGET

The University expects the architect to develop design and contract documents which will be consistent with the established project budget. This obligation is mandatory. The architect shall work with the University's construction management consultant to prepare a cost breakdown at each stage of the project design. If these estimates exceed the budget at any stage, the architect will work with the university to modify the construction documents or the program to conform to the budget at no additional costs to the University.

E. CONSTRUCTION DELIVERY METHOD

In accordance with F.A.C. 6C-14.0055.(2), the following responses are presented as justification for the selection of Construction Management as the project delivery method:

(2).(a): *Size of the project is sufficiently large and/or complex to require major emphasis on the qualification of the contractor to provide specific expertise in highly specialized cost estimating, value engineering, and scheduling during the design process with continuity of construction management through both design and construction phases.*

(2).(b): *The initial construction funding is appropriated and construction is begun with the expectation of substantial appropriation in subsequent years, thereby making it advantageous to retain a single contractor for the duration of the project.*

(2).(c): *The project is an alteration of an occupied facility which requires working around or relocating occupants while keeping the facility fully operational.*

(2).(d): *The project is a repair or renovation where the conditions requiring correction can not be determined and specified without extensive contractor involvement in the removal and examination process during the design phase.* ***Not Applicable***

(2).(e): *The timely completion of the project is critical to the University's ability to repay debt services or to meet grant obligations.* ***Not Applicable***

A. FAU STRATEGIC PLAN

Consistent with FAU's "Strategic Plan for the Race to Excellence", this facility will promote FAU's Sense of Place.

B. ACADEMIC PROGRAM REVIEWS

Not Applicable

C. RECOMMENDATIONS OF THE REVIEW CONSULTANTS

Not Applicable

D. JUSTIFICATIONS

Not Applicable

A. FACILITY DEFICIENCIES

The university does not have adequate space to accommodate large scale events for 950 attendees. The proposed event center will allow for large-scale gatherings as well as flexibility in modifying the room configuration to allow for smaller meeting rooms.

The Student Union is an ideal venue for providing such a facility to not only serve the students but provide an event center for hosting FAU and local community functions. An update and reconfiguration of the existing lobby space and additional space are all required to meet the current and future requirements.

B. ALTERNATIVE SOLUTIONS

Not Applicable

C. QUANTITATIVE ANALYSIS OF PROGRAM SPACES

Not Applicable

D. PROJECT AND SURVEY RECOMMENDATIONS

Not Applicable

A. THE ADOPTED CAMPUS MASTER PLAN

The proposed project is consistent with the Campus Master Plan (CMP) prepared and adopted in 2021.

ANALYSIS OF THE CAMPUS MASTER PLAN

1. **URBAN DESIGN ELEMENT**
   The areas associated with the proposed project will require modification of the dedicated open space located north of the Student Union as noted in the Urban Design Element. The updated Master Plan will address the offset of the open space required for the Student Union expansion

2. **FUTURE LAND USE ELEMENT**
   The Land Use Element of the CMP identifies the proposed project site as open space. Due to its proximity to the Student Union, identified as support space, this location is logical for the expansion of the Student Union. The updated Master Plan will reflect this change in land use.

3. **SUPPORT FACILITIES ELEMENT**
   In response to Objective 1A under Goal 1, the expansion of the Student Union is needed to keep pace with the demands of enrollment growth. The Student Union serves as a primary support building for the student body and in serving the campus event needs.

4. **UTILITIES ELEMENT**
   This project is within the academic core and drainage for future expansion will be within the Basin Core. The building will tie into the university main utility plant for chilled water. Facilities management will coordinate expansion of utilities services through Physical Plant and Office of Information Technology for utilities and telecommunications infrastructure provisions.

5. **TRANSPORTATION ELEMENT**
   The project will provide for necessary service drives, pedestrian and bicycle paths to provide for safe and effective modes of transportation around the facility. Primary function of this building is to serve the university community and to provide a service to the community at large, at times where the use of the space does not conflict with university activities. It is not anticipated that this facility will generate any additional traffic along perimeter roads.

6. **INTERGOVERNMENTAL COORDINATION ELEMENT**
   This element is ongoing and FAU will continue to communicate with its host community regarding this project.

7. **CAPITAL IMPROVEMENTS ELEMENT**
   This project has been included on FAU's annual Capital Improvement Plan.

A. SITE CONDITIONS

The existing facility is near the southwest corner of campus, but still within the main campus traffic loop. It is readily accessible from the academic, athletic and residential areas of the campus.

1. **Site Topography**
Site topography and soil conditions on the Boca Raton Campus are relatively uniform. The site is flat, and the soil is sandy (Flatwood soils of the Immokalee / Basinger Association).

2. **Storm Drainage**
Site water table is typically 6 to 7 feet below grade. F.I.R.M. flood hazard zone for central campus is V8, area of 100-year coastal flood with velocity (wave action), base flood elevation 10. Storm water drainage for any expansion will follow the requirements of the master South Florida Water Management District Conceptual Drainage Permit.

3. **Vehicular and Pedestrian Circulation**
Any new walks or service roads are to be implemented to enhance pedestrian flow and general safety.

4. **Site Vegetation**
The existing site vegetation consists of natural grasses or sod. This project will improve the existing site vegetation using appropriate and compatible landscaping.

5. **Archaeological History**
There are no sites of archaeological or historical significance that would be impacted by this project.

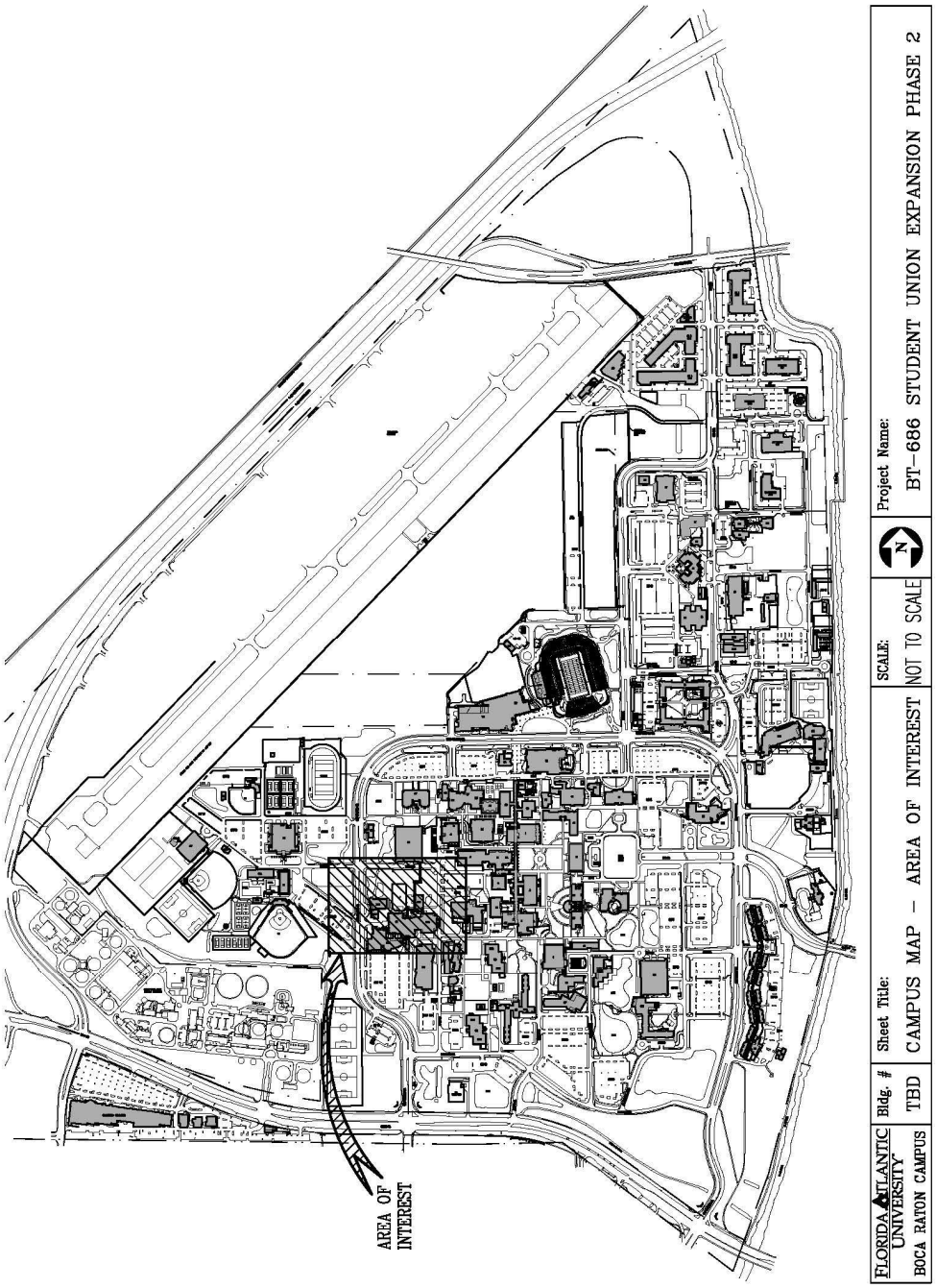
6. **Existing Utility Locations**
Refer to Section X, Utility Impact Analysis for campus utility infrastructure information.

7. **Architectural Significance of Adjacent Structures**
Although there are no significant architectural elements adjacent to this site, this project will be compatible with the overall architectural style on the FAU Boca Raton Campus.

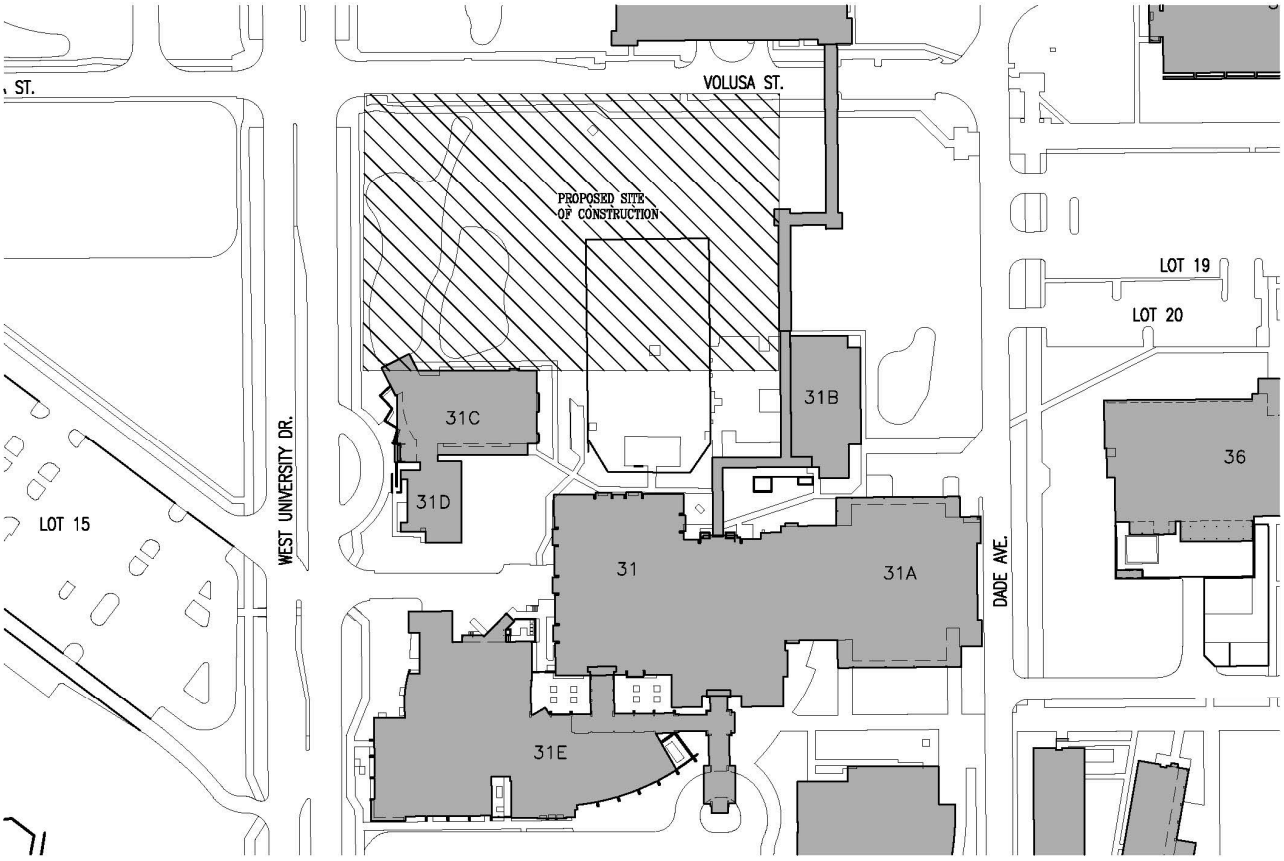
8. **Direction of Prevailing Winds**
Prevailing winds are from the Southeast.

B. CAMPUS MAP & SITE MAP

The following map of the existing Boca Raton Campus shows the proposed general location for this project. See the existing infrastructure drawings in Section X for additional existing site information.



Site Map



FLORIDA ATLANTIC UNIVERSITY BOCA RATON CAMPUS	Bldg. #	Sheet Title:	SCALE:		Project Name:
	TBD	PROPOSED SITE OF CONSTRUCTION	1"= 120'-0"	N	BT-686 STUDENT UNION EXPANSION PHASE 2

A. PROGRAM AREA TABLES

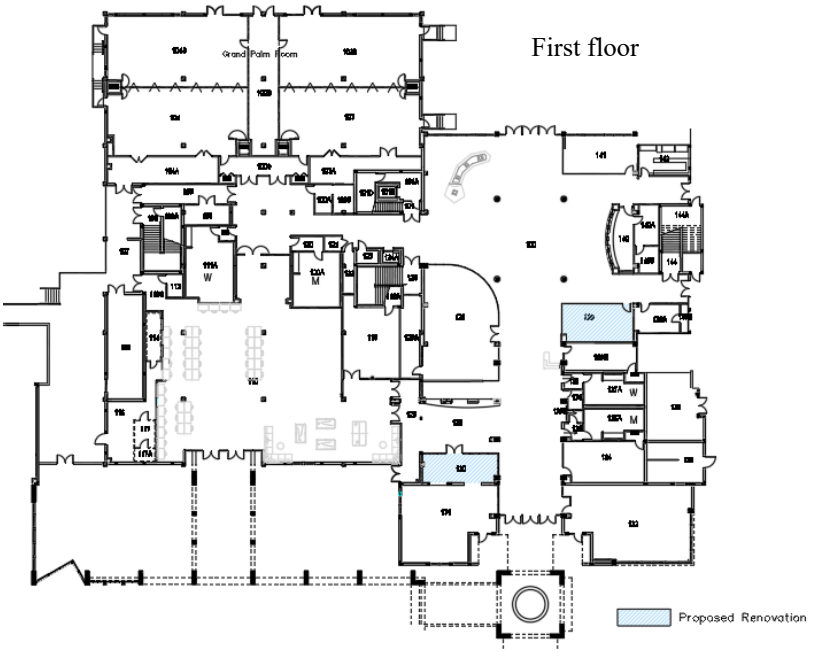
NEW SPACE:

PROGRAM AREA TABLE
Reference: State Requirements for Educational Facilities Chapter 6, Section 6.1, Size of Spaces and Occupant Criteria Table

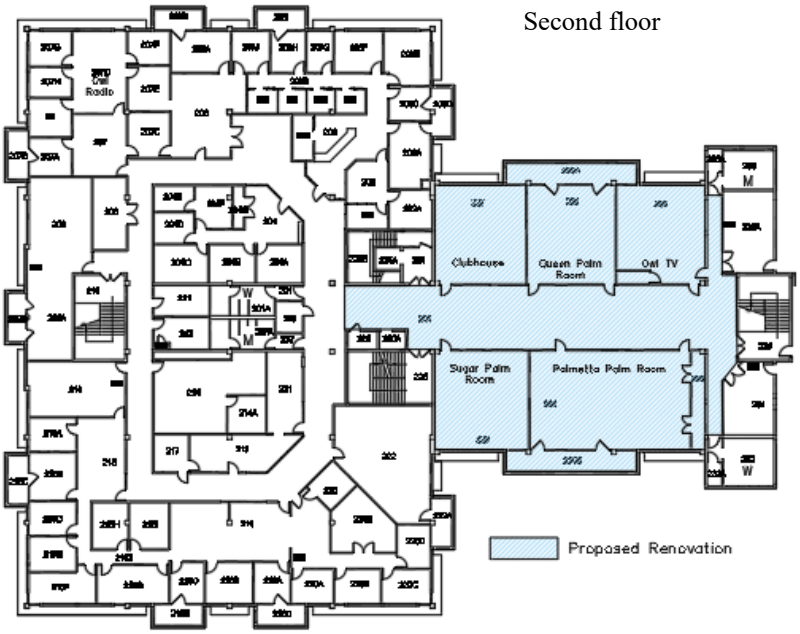
	DESCRIPTION	NO. OF STATIONS	NASF/ STATION	AREA/ SPACE	NO. OF SPACES	TOTAL NASF	TOTAL STATIONS
600	**Assembly**						
610	Banquet Room	950	14	13,300	1	13,300	950
615	Pre-Function Room	950	5	4,750	1	4,750	
615	Audio Visual Control Room	3	70	210	1	210	
615	Catering Kitchen			1,800	1	1,800	
615	Storage – Chairs / tables			3000	1	3000	
	Sub-Total					**23,060**	

RENOVATION SPACE:

DESCRIPTION	ROOM NUMBER	AREA/ SPACE	TOTAL NSF	TOTAL STATIONS
Assembly				
Diamond Room	130	299		
The Palms (Queen, Palmetto, Sugar), Clubhouse and Owl TV room	227, 228, 229, 230, 231	4,978		
Tiger Room	139	375		
Hallway	100	2,303		
Sub-Total		7,955		



First floor



B. OTHER PROGRAM ISSUES

The following important issues are to be considered by the design team. Many requirements are repeated in more detail in the FAU Cost Containment Guidelines and Professional Services Guidelines that are available for viewing at http://www.fau.edu/facilities/avp .

1) As the site is relatively flat, the building site shall be designed to assure positive drainage away from the building.
2) Telephone and data services shall be provided in accordance with the standards specified in Section XI of this program.
3) Provide meters, according to FAU standards and guidelines, for all utilities serving the building. Reference Section X for details about utility connections.
4) The building and paved site areas shall be completely accessible in strict accordance with the Americans with Disabilities Act and all other pertinent codes. This will be the sole responsibility of the design team.
5) Provide an emergency generator (with lockable screened wall) for a minimum of all life safety functions. Additional capacity to be provided for catering area and other spaces as directed by the University.
6) Provide lightning protection per University standards.
7) Energy efficient systems and lighting shall be used to the greatest extent possible, in accordance with University standards.
8) Provide conduit for voice and data connectivity to the existing campus backbone.
9) Provide for connectivity to the existing campus energy management system and life safety systems.
10) The building shall have 100% sprinkler protection.
11) Provide surge protection for the entire building.

12) Provide for screened trash storage area for recycling, etc.

13) Provide for the covered outdoor storage and charging of up to several golf carts.

14) Provide card readers at major entrances. Provide conduit and J-boxes, as required to all exterior doors for monitoring door status and automatic locking from a central police location.

A. UTILITIES IMPACT ANALYSIS – PROVIDED BY FACILITIES MANAGEMENT, ENGINEERING & UTILITIES

1. CHILLED WATER:

This (950) Seat Banquet Hall project will require approximately (262) Tons of Air Conditioning, based on the Bldg.31E Addition project P-6240 with a similar use. This space will be divided by movable partitions into a number of six smaller breakout rooms. Multiple Air Handlers may be desired for supplying these multiple areas. (419) GPM of CHW is required, given a 15F delta T. The existing 6" CHW pipes, which are within this site west boundary running North-South, supplies (198) GPM to Bldg.31C and (70) GPM to Bldg.31D. There are existing 4" valve CHW taps at this site, west boundary. In addition, As Built plans for Bldg.31B indicate existing 4" CHW taps at the Southwest corner on this site as well, but not obvious nor field verifiable. Another alternative is replacing the existing 6" branch pipes with new 8" CHW pipes, approx.. 380LF, given a new flow velocity less than 5 feet per second. The existing South Loop Pump #SCHWP-2, mfr PACO, model 1012-9/0 KP is scheduled for (4,256) GPM at (92.46) FTHD. However, the existing connected load on the South Loop is (6,042) GPM, according to the Bldgs. Design plans. This SCHWP#2 may need replacing with a larger capacity pump. The Central Utilities Plant Chillers total capacity is (6,886) Tons. The existing connected load is (6,461) Tons according to the Bldgs. Design plans. The existing Chillers seem to have capacity for covering this additional load with no redundancy.

CHW connections shall be De-Coupled. Control Valves shall be 2-Way. AHU and pump motors power circuits shall include VFDs. An FAU Excavation Permit shall be issued prior to any digging. Building Permits are required from the FAU Permit Dept. for all Trades. All Utilities shall be metered.

Rehabilitation of the Bldg.31 Lobby area shall include new A/C units.

2. HEATING:

Electric Reheat for Space Heating will be a load of approx.. (172) KW, based on Bldg.31E Addition.
The existing Elect Feeder ampacity available for this project shall be confirmed.

3. ELECTRICAL:

Electric load will be approx.. (1,980) KVA, based on Bldg.31E Addition project P-6240 excluding kitchen equipment. The existing Elect Feeder ampacity available for this project shall be confirmed. The nearest existing Feeder Manhole is located near the southwest corner of Bldg.31E, requiring approx.. 800LF of trench work.

An FAU Excavation Permit shall be issued prior to any digging. Building Permits are required from the FAU Permit Dept. for all Trades. All Utilities shall be metered.

4. POTABLE WATER:

The demand flow is approx.. (12,000) GPD, given three shifts of (1,000) seats per day, (02) flushes per seat, and (02) Gallons per flush.

The Potable Water supply is the existing 8" Water Main pipe running North-South along the western boundary of this site. Fire Sprinklers system is required, including a Reduce Pressure Backflow Preventer. Fire Hydrant locations and access shall be coordinated with the City of Boca Fire Dept. Existing Fire Hydrant #FH016 may require relocation, as well as resetting Valve Box #W187, when the Detention Area Drain Field is expanded for this project. Trenching for Potable Water will be approx.. 100LF.

This Campus Water Loop system is supplied from the City of Boca Raton Utilities with adequate supply.

An FAU Excavation Permit shall be issued prior to any digging. Building Permits are required from the FAU Permit Dept. for all Trades. All Utilities shall be metered.

5. SANITARY:

The sanitary sewage flow estimate is approx.. (12,000) GPD. The nearest Gravity Drain Sanitary Manhole is approx.. 100LF west of this site. The condition of the existing 15" sanitary sewage pipes is questionable. The existing sanitary sewage pipes downstream should be assessed to verify integrity of existing pipes prior to directing additional flow.

An FAU Excavation Permit shall be issued prior to any digging. Building Permits are required from the FAU Permit Dept. for all Trades. All Utilities shall be metered.

6. IRRIGATION:

The existing 12" RU Irrigation Main runs north-south along the west of West University Blvd. A new branch line, requiring approx.. 500LF of Trench work, is required for supplying the new Planter Area on the eastside of this new Bldg. Site Irrigation around this new Bldg. will be zoned and metered according with FAU standards. Irrigation Water supply is unlimited at this time from the City of Boca Raton Utilities.

An FAU Excavation Permit shall be issued prior to any digging. Building Permits are required from the FAU Permit Dept. for all Trades. All Utilities shall be metered.

7. STORM WATER MANAGEMENT:

Storm Water drain pipes could connect to the existing Storm Drain Catch Basins located near the western boundary of this site, approx.. 50LF trench work.

An FAU Excavation Permit shall be issued prior to any digging. Building Permits are required from the FAU Permit Dept. for all Trades. All Utilities shall be metered.

SFWMD Environmental Resource Permit is required before beginning any land use or construction activity that could affect wetlands, alter surface water flows or contribute to water pollution.

The ERP program is implemented by DEP. Environmental Resource Permits (ERPs) benefit Florida by preventing stormwater pollution to Florida's rivers, lakes and streams and helping to provide flood protection. The ERP program regulates the management and storage of surface waters, and provides protection for the vital functions of wetlands and other surface waters.

LWDD Permit is required ensuring proper stormwater drainage.

NPDES Permit is required. Florida's NPDES Stormwater Program regulates discharge of stormwater to surface waters or to a municipal separate storm sewer system (MS4) from construction activities that disturb more than one acre, or are part of certain larger projects that disturb more than one acre. Operators of construction activities that meet the criteria for coverage must obtain a NPDES stormwater permit and implement a stormwater pollution prevention plan.

8. NATURAL GAS:

Existing Natural Gas pipe runs through the proposed site for the Building expansion. Florida Public Utilities will reroute this Gas pipe around this new Bldg.at a fee. Florida Public Utilities will ensure capacity exists for this new Building, if required. It is Standard Operating Procedure for FPU providing and installing gas lines and meters to the new buildings including Gas Cocks on the Bldg. side of the meter.

The existing Gas Meter to Bldg.31 shall be recalibrated.

9. TELECOMMUNICATIONS:

Telecom will be required. Please refer to the Telecom Dept. detailed specs for descriptive narratives.

The nearest Telecom Manhole is on the southwest corner of Bldg.31E. Trench work, approx.. 800LF will be required. This may be coordinated with the Elect trench work following the same path.

10. FIRE ALARM SYSTEM:

The Fire Alarm System will be remotely monitored by the FAU Police Department.

The existing Fire Alarm system in Bldgs. 31 and 31A is semi-addressable with no additional capacity. The system shall be upgraded or replaced with audio visual devises, pull stations, elevator recall, BFP Tamper switches, and Sprinkler Flow alarms connected to the FAU Police Station through an automatic dialer.

11. ENERGY MANAGEMENT CONTROL SYSTEM:

The Energy Management System will be monitored and controllable remotely at the Central Utilities Plant Bldg#05 and compatible with the existing Campus EMS.

12. SITE LIGHTING:

Site lighting will be required and shall comply with FAU standards.

13. SURFACE IMPROVEMENTS:

Sod and Landscaping will be required.

B. UTILITIES INFRASTRUCTURE COST ESTIMATES

Cost estimate provided by Facilities Management – Engineering & Utilities

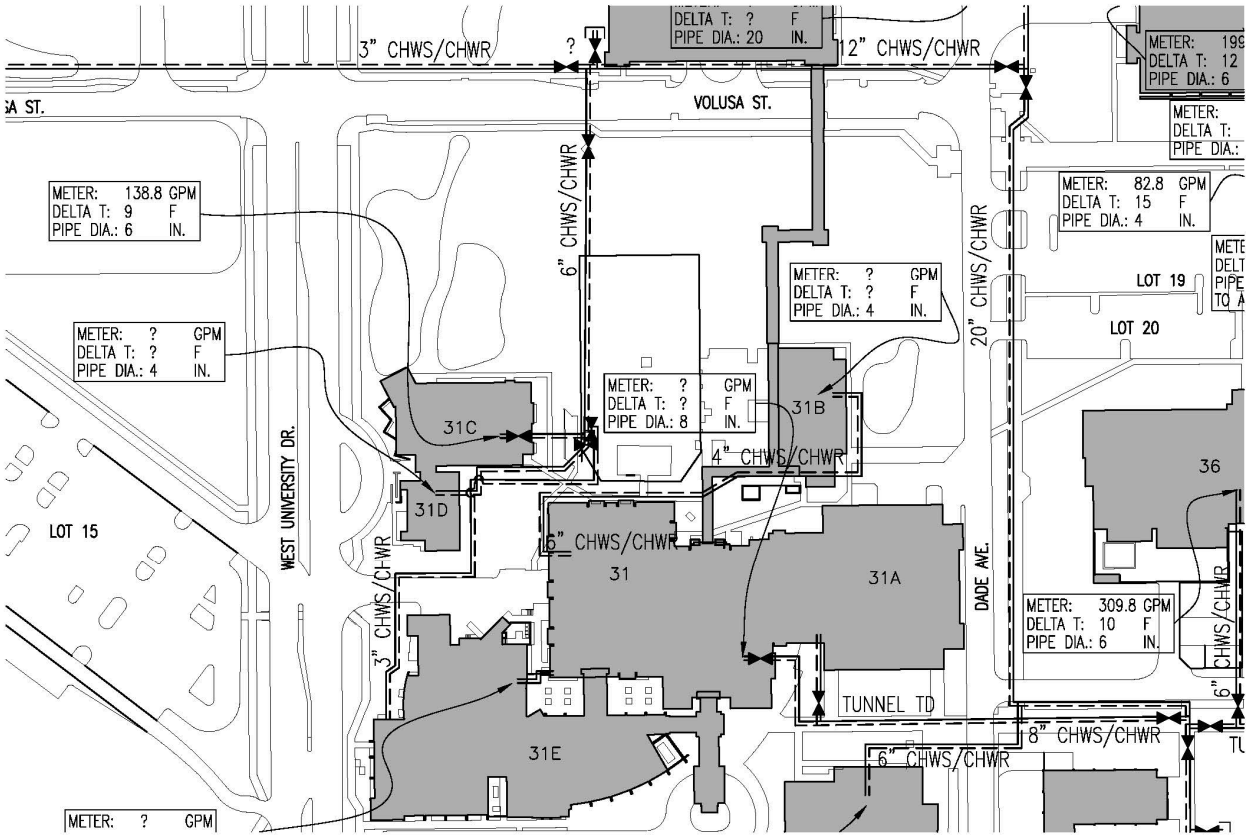
CHILLED WATER		
380LF TRENCH, 8" CWS&R	$ 40,000	
SCHWP#2	$ 60,000	
ROAD CROSSING	$ 20,000	
RECONNECT PIPES TO BLDG 11A	$ 20,000	
Sub Total		$ 140,000
ELECTRICAL		
8OOLF TRENCH, CONDUIT, CABLES, CONCRETE COVER	$160,000	
Sub Total		$ 160,000
POTABLE WATER		
100 LF TRENCH WORK	$ 5,000	
FIRE HYDRANT AND VAVLE BOX RELOCATE	$ 5,000	
Sub Total		$ 10,000
SANITARY		
100LF TRENCH WORK	$ 5,000	
CAMERA AND REPAIRS	$ 100,000	
Sub Total		$ 105,000
IRRIGATION		
500LF TRENCH WORK	$ 15,000	
SITE IRRIGARTION	$ 50,000	
Sub Total		$ 65,000
STORM WATER		
50LF TRENCH	$10,000	
Sub Total		$ 10,000
NATURAL GAS		
CALIBRATE METER, BLDG31	$ 5,000	
REROUTE GAS LINE FROM BLDG FOOTPRINT	$ 20,000	
Sub Total	Allowance	$ 25,000
TELECOMMUNICATIONS		
POINT OF CONNECTION AT TUNNEL		$100,000
		$ 0
Sub Total		$ 100,000

FIRE ALARM SYSTEM		
TBD		$ 0
		$ 0
Sub Total		$ 0
ENERGY MANAGEMENT CONTROL SYSTEM		
Remote monitoring at BLDG#05	$ 20,000	
Sub Total		$ 20,000
SITE LIGHTING		
Allowance for architectural lighting	$100,000	
Sub Total		$ 100,000
TOTAL		**$ 735,000**

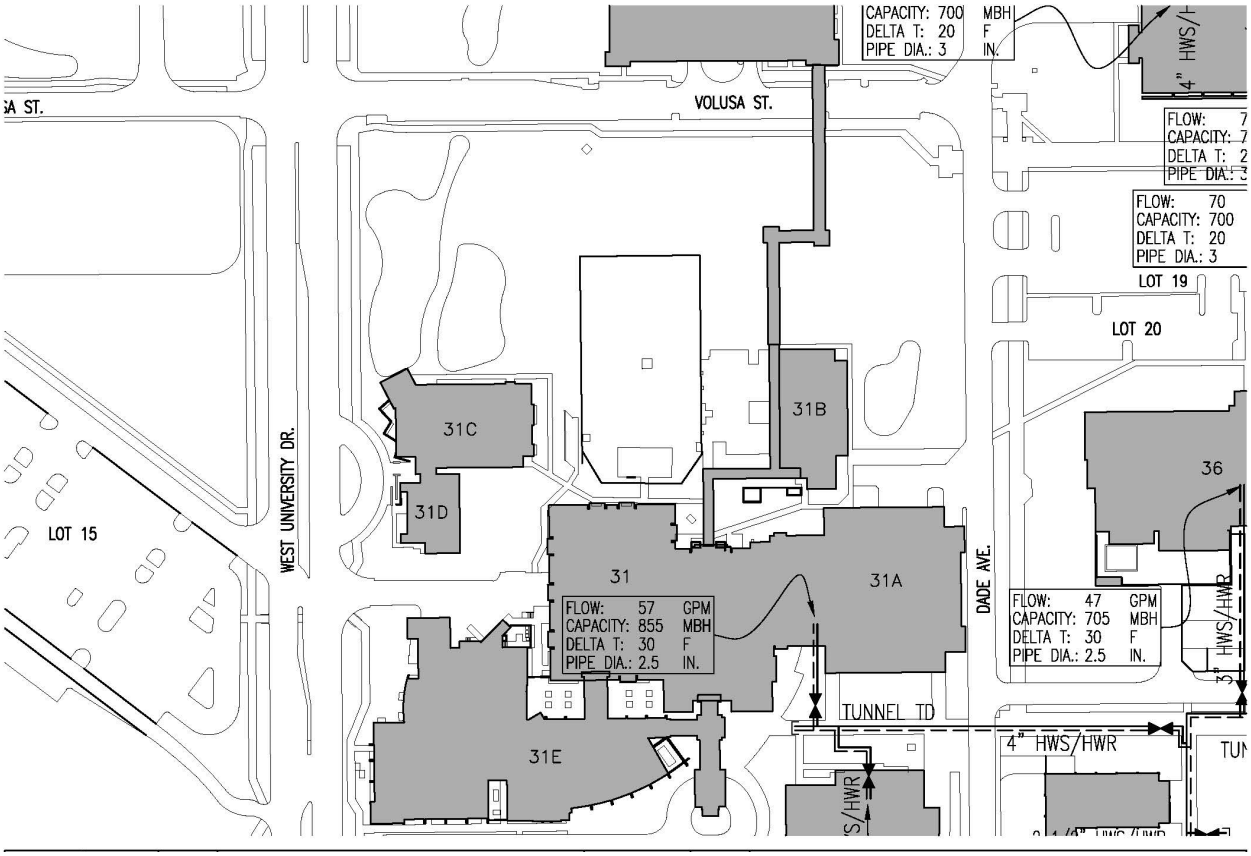
C. INFRASTRUCTURE MAPS

The following infrastructure planning drawings for the site are available from Facilities Management. All existing utilities and conditions shall be verified by the design team.

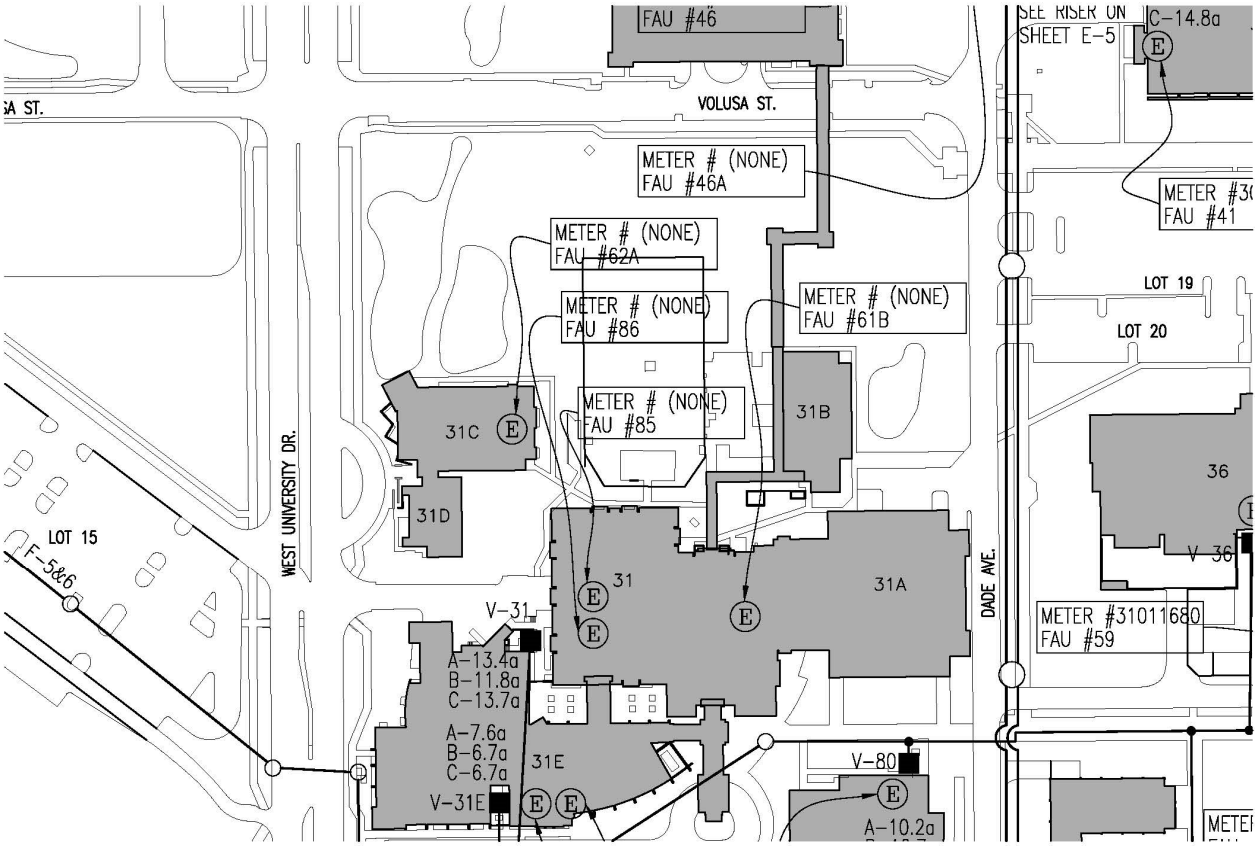
Chilled Water Distribution



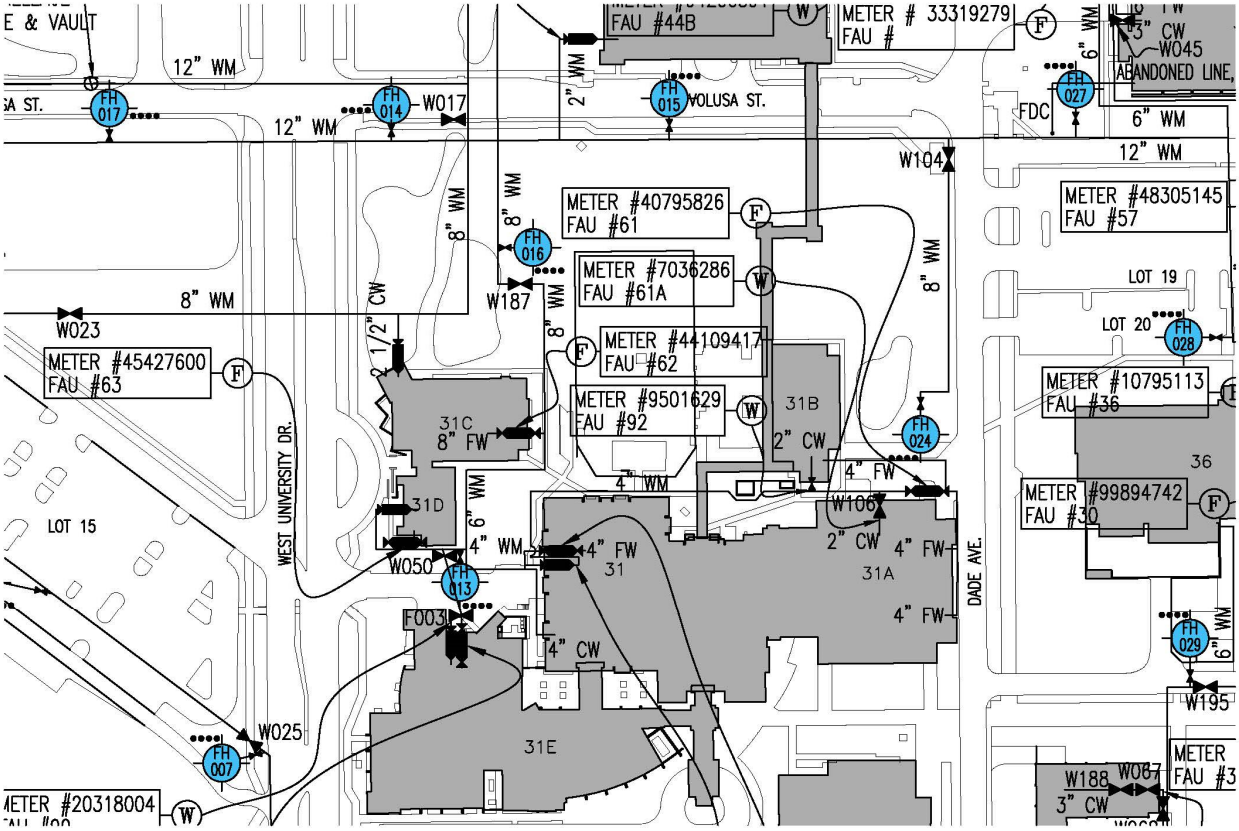
Hot Water Distribuion

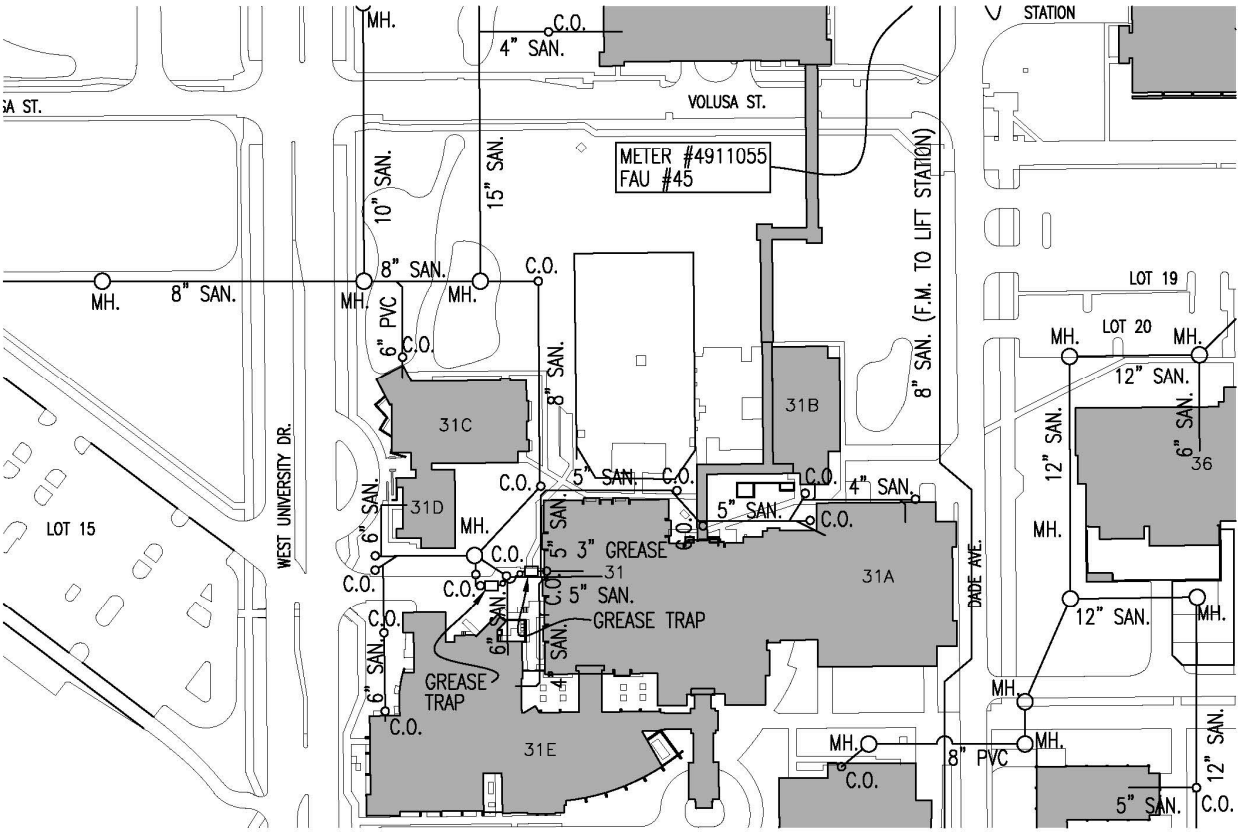


High Voltage Electrical Distribution

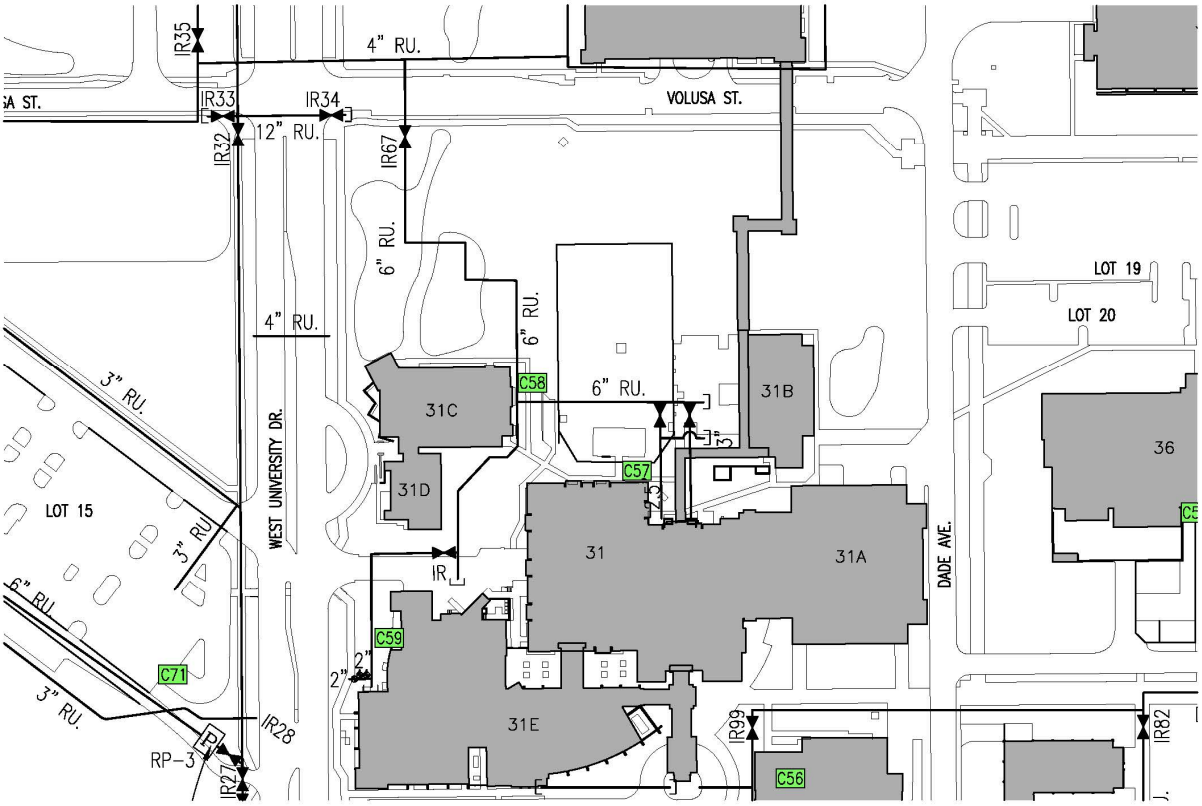

FAU #46
SEE RISER ON SHEET E-5
C-14.8a
VOLUSA ST.
METER # (NONE) FAU #46A
METER #3(FAU #41
METER # (NONE) FAU #62A
METER # (NONE) FAU #86
METER # (NONE) FAU #61B
LOT 19
LOT 20
METER # (NONE) FAU #85
31C
31B
31D
36
V-36
LOT 15
F-5&6
WEST UNIVERSITY DR.
31
31A
DADE AVE.
V-31
METER #31011680 FAU #59
A-13.4a
B-11.8a
C-13.7a
A-7.6a
B-6.7a
C-6.7a
31E
V-31E
V-80
A-10.2a

Potable Water Distribution

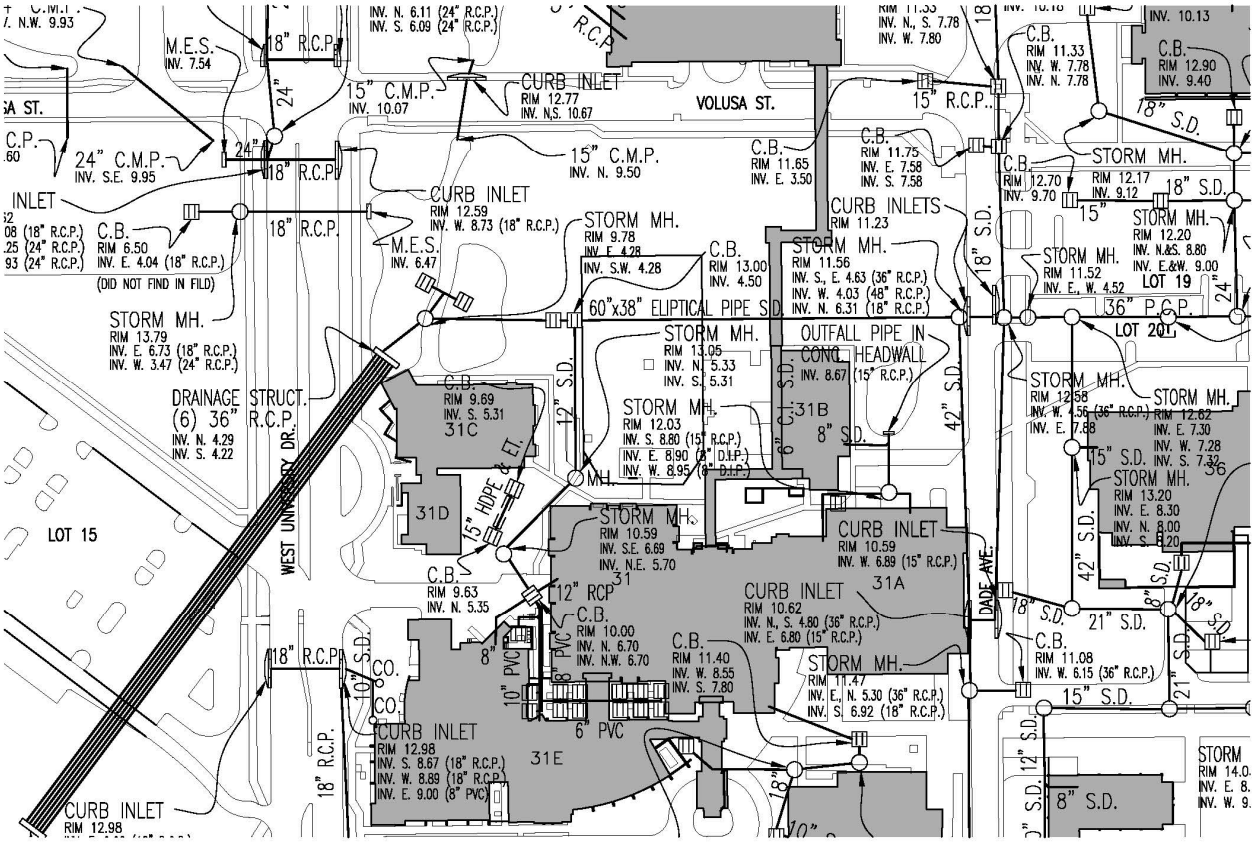



MH.
C.O.
4" SAN.
VOLUSA ST.
METER #4911055
FAU #45
10" SAN.
15" SAN.
8" SAN. (F.M. TO LIFT STATION)
STATION
LOT 19
LOT 20
MH.
8" SAN.
C.O.
6" PVC
8" SAN.
12" SAN.
6" SAN.
36
31C
31B
31D
31A
31E
5" SAN.
4" SAN.
3" GREASE
31
GREASE TRAP
LOT 15
WEST UNIVERSITY DR.
DADE AVE.
8" PVC
5" SAN.

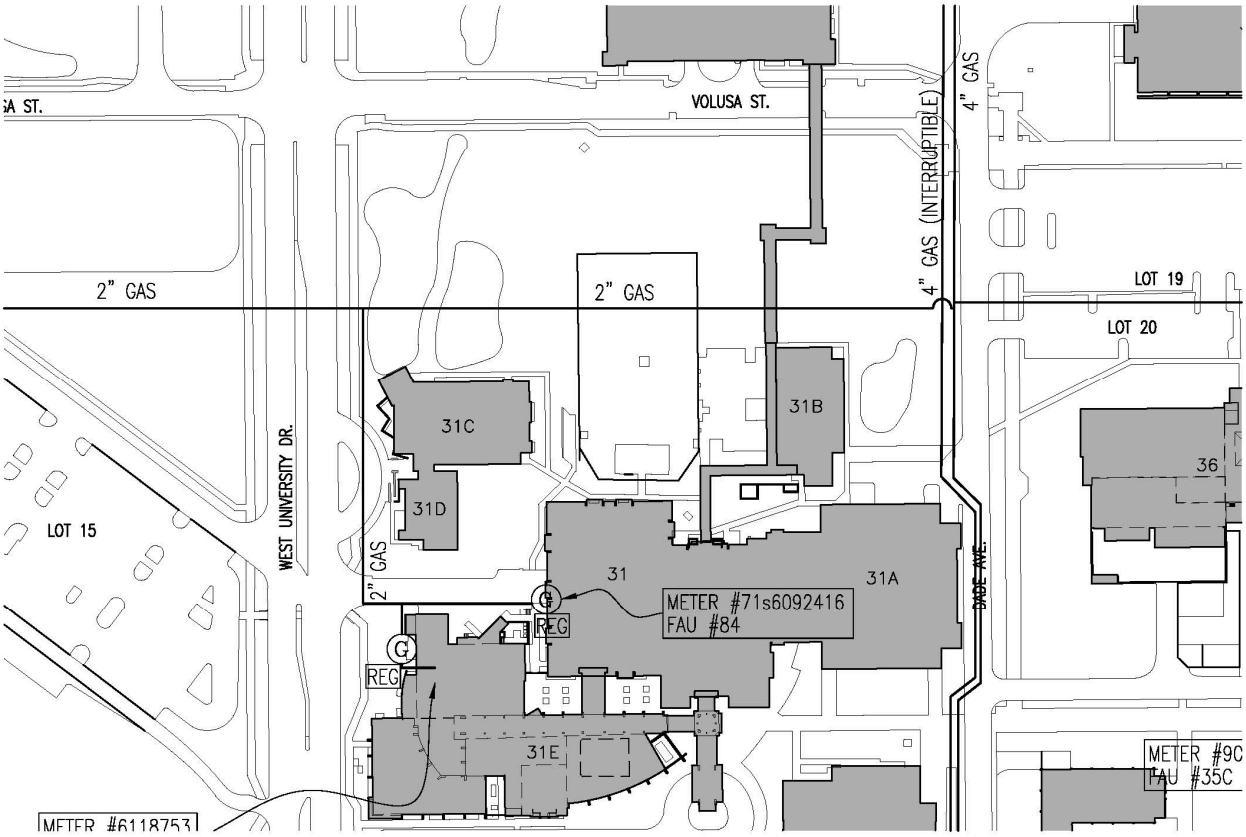
Re-use Water – Irrigation System



Storm Water Drainage System



Natural Gas Distribution



Telecommunication / Data System

TV – Cable System

A. UNIVERSITY INFORMATION / COMMUNICATION STANDARD

All voice and data systems shall comply with Florida Atlantic University's most current specifications for Information Resources Management Communication Infrastructure Specification effective on the date of the Architect/Engineer contract execution. The complete specification is located on the web at:

https://www.fau.edu/oit/about/pdf/oit-infrastructure-2023.pdf

The requirements of the University information/communications standards will be strictly enforced for the design and construction of the proposed facility.

B. UNIVERSITY INFORMATION RESOURCE MANAGER CERTIFICATION

By signature (on the signature page of this facilities program) the University Information Resource Manager certifies that a review of the University information/communication standards has been completed; and that the facilities program is developed in conformance with the Florida Atlantic University Information/Communication Standards in accordance with the Section 282, F.S.

A. CODES AND STANDARDS

The following editions of Codes and Standards (and associated review & permitting process), and University standards, where applicable, shall be followed for the design and construction of the proposed facility. Building codes which are approved at the time of building permit application shall be used for the project.

		DESCRIPTION
	Year	**Building Codes**
1.	2020 (7th Ed.)	Florida Building Code, Building
2.	2020 (7th Ed.)	Florida Building Code, Mechanical
3.	2020 (7th Ed.)	Florida Building Code, Fuel Gas
4.	2020 (7th Ed.)	Florida Building Code, Plumbing
5.	2020 (7th Ed.)	Florida building Code, Test Protocols for High Velocity Hurricane zones
		Section 4A-3.012 Standard of the National Fire Protection Association (Most commonly used Codes and Standards)
Standard	**Year**	**Title**
1	2020 (7th Ed.)	Fire Prevention Code
10	2018	Standard for Portable Fire Extinguishers
13	2016	Standard for the Installation of Sprinkler Systems
13R	2016	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and including four stories in Height
14	2016	Standard for the Installation of Standpipe and Hose systems, except 2-7 Shall be omitted
20	2016	Standard for the Installation of Centrifugal Fire Pumps
24	2016	Standard for the Installation of Private Fire Service Mains and Their Appurtenances
25	2017	Standard for the Inspection, Testing & Maintenance of Water Based Fire Protection Systems
30	2018	Flammable and Combustible Liquids Code
45	2015	Standard on Fire Protection for Laboratories Using Chemicals
70	2017	National Electrical Code
72	2016	National Fire Alarm Code
90A	2018	Standard for the installation of Air Conditioning and Ventilating Systems
96	2017	Standard for Ventilation Control and Fire Prevention of Commercial Cooking Operations
101	2018	Life Safety Code
	3.13.3	**State Fire Marshal**
		Requirements for review shall comply with PSG, Exhibit 5; (all inspections, reviews and permitting for University projects shall be coordinated through the University BCA Office)
	3.13.4-5	**Required Permits**
		All Building permits are to be issued by the Building Code Official at FAU Facilities Planning, prior to the start of construction.
	3.13.5.2	Department of Business and Professional Regulation, Division of Hotel and restaurants, Bureau of Elevator Inspection for elevator inspections and permit, Department of Health
	3.13.5.4	Department of Environmental Protection (DEP), area Branch and NPDES Permits
	3.13.5.5	Local Water Management District permit
		Florida Atlantic University Standards
		Florida Atlantic University Cost Containment Guidelines
		FAU Professional Services Guide and Project Manual
		All special requirements as identified in the pre-design conference meeting(s) with the various University agencies (the A/E consultant(s) shall record in meeting minutes).
		Miscellaneous Statutes
		Ratio of facilities for men and women public restrooms of Section 553.14 of Florida Statutes

Note: All reference to codes shall mean the latest editions adopted through legislation for use in state owned/leased buildings as described in the Florida Statues sections 471, 481 and 553s

GOALS AND MILESTONES	DURATION	START DATE	END DATE
PROGRAM APPROVAL	**13 weeks**	**01-Mar-2024**	**30-May-2024**
Facilities Program Approval & Advertisement Approval	2 weeks	16-May-2024	30-May-2024
A/E SELECTION PROCESS	**12 weeks**	**30-May-2024**	**22-Aug-2024**
Advertise for A/E in FAW	5 weeks	30-May-2024	04-Jul-2024
A/E Short-list	2 weeks	04-Jul-2024	18-Jul-2024
A/E Interviews	4 weeks	18-Jul-2024	15-Aug-2024
Contract Negotiations with A/E	1 weeks	15-Aug-2024	22-Aug-2024
C/M SELECTION PROCESS	**13 weeks**	**04-Jul-2024**	**03-Oct-2024**
Advertise for C/M in FAW	6 weeks	04-Jul-2024	15-Aug-2024
C/M Short-list	3 weeks	15-Aug-2024	05-Sep-2024
C/M Interviews	2 weeks	05-Sep-2024	19-Sep-2024
Contract negotiations with C/M	2 weeks	19-Sep-2024	03-Oct-2024
DESIGN PHASE	**38 weeks**	**22-Aug-2024**	**15-May-2025**
Program Verification, Building Analysis & Conceptual Design	2 weeks	22-Aug-2024	05-Sep-2024
University review and approval	1 weeks	05-Sep-2024	12-Sep-2024
Schematic Design	3 weeks	12-Sep-2024	03-Oct-2024
University review and approval	1 weeks	03-Oct-2024	10-Oct-2024
Design Development and Budget verification	5 weeks	10-Oct-2024	14-Nov-2024
University review and approval	2 weeks	14-Nov-2024	28-Nov-2024
50% Construction Documents and Budget update	8 weeks	28-Nov-2024	23-Jan-2025
University review and approval	2 weeks	23-Jan-2025	06-Feb-2025
100% Construction Documents and Budget update	8 weeks	06-Feb-2025	03-Apr-2025
University review and approval	2 weeks	03-Apr-2025	17-Apr-2025
Submittal of GMP	4 weeks	03-Apr-2025	01-May-2025
GMP Review & Negotiations	2 weeks	01-May-2025	15-May-2025
Design Review submittal to State Fire Marshal (SFM)	6 weeks	03-Apr-2025	15-May-2025
CONSTRUCTION PHASE	**65 weeks**	**15-May-2025**	**13-Aug-2026**
Notice to Proceed	1 weeks	15-May-2025	22-May-2025
Construction	56 weeks	22-May-2025	18-Jun-2026
Substantial Completion	2 weeks	18-Jun-2026	02-Jul-2026
Punchlist Corrective Work & Final Completion	4 weeks	02-Jul-2026	30-Jul-2026
Owner FF&E Move In	2 weeks	30-Jul-2026	13-Aug-2026
Owner Occupancy		13-Aug-2026	
Total	**128 weeks**	**01-Mar-2024**	**13-Aug-2026**

A. ESTIMATED FUNDING

CITF – FUNDING		
Balance from BT-685 FY14, FY16, & FY17	$632,062	
2017-18	$3,852,480	
2018-19	$2,107,790	
2019-20	$3,211,593	
2020-21	$4,627,605	
2021-22	$3,842,024	
2022-23	$3,807,931	
2023-24	$2,205,128	
SUBTOTAL CITF FUNDS		$24,286,613

OTHER FUNDING SOURCES (FY17-18)		
Activities & Services (A&S) Fees	$848,040	
SUBTOTAL OTHER FUNDS		$848,040

TOTAL PROJECT FUNDS		**$25,134,653**

B. ESTIMATED BUDGET

1. Construction Costs	
a. Construction Costs	$16,047,100.00
b. Additional/Extraordinary Construction Costs	$4,156,000.00
Sub Total Construction Costs	**$20,203,100.00**
2. Other Project Costs	
a. Land/existing facility acquisition	$0.00
b. Professional Fees	$1,566,100.00
c. Fire Marshal Fees	$50,500.00
d. Inspection Services	$350,000.00
e. Insurance Consultant	$12,700.00
f. Surveys and Tests	$12,000.00
g. Permit/Impact/Environmental Fees	$3,000.00
h. Art Work	$0.00
i. Movable Furnishings & Equipment	$2,020,400.00
j. Project Contingencies	$916,853.00
Sub Total Other Project Costs	**$4,931,553.00**
TOTAL PROJECT BUDGET (from Section XV of Facilities Program)	**$25,134,653.00**

PROJECT SPACE AND BUDGET SUMMARY

CONSTRUCTION BUDGET was developed using (check one):

SPACE SUMMATION (from Section IX of Facilities Program)

Program Space Type	NASF	Factor [1]	GSF	$ / GSF [2]	$
New Construction					
Auditorium/Exhibit	20,400	1.4	28,560	484.21	$ 13,829,040
Support	1,800	1.4	2,520	396.83	$ 1,000,010
Avg. Construction Cost [3]		1.4		**$ 477.12 / GSF**	
Total Construction Cost					**$ 14,829,000**
Renovation					
Offices	3,500	1.5	5,250	196.30	$ 1,030,600
Support Services	750	1.4	1,050	178.57	$ 187,500
Avg. Construction Cost [3]		1.48		**$ 193.35 / GSF**	
Total Construction Cost					**$ 1,218,100**

1. SUS recommended NASF (Net Assignable Square Feet) to GSF (Gross Square Feet) Conversion Factor.
2. Based on BOT Construction & Project, Costs & Budget Guideline

1	**CONSTRUCTION COSTS** (Reference: SUS CM-D-38.00-09/97, Attachment 1-B) Modify, add, or delete as required.					
a.	**Building Construction Cost**		**Units**		**Unit Cost**	**$**
	New Construction Cost	31,080	GSF		$477.12	$14,829,000.00
	Sub-Total Construction Costs				Round to 100	**$16,047,100.00**
b.	**Additional/Extraordinary Construction Cost**		**Units**		**Unit Cost**	**$**
	Landscaping and Irrigation	1	Allowance		$1,000,000.00	$1,000,000.00
	Plazas/Walks/Bikepaths	1	Allowance		$1,300,000.00	$1,300,000.00
	Utilities Infrastructure Cost					
	Electrical Services	1	Allowance		$160,000.00	$160,000.00
	Water Distribution System	1	Allowance		$10,000.00	$10,000.00
	Sanitary Sewer System	1	Allowance		$105,000.00	$105,000.00
	Storm Water System	1	Allowance		$10,000.00	$10,000.00
	Chilled Water System	1	Allowance		$140,000.00	$140,000.00
	Natural Gas	1	Allowance		$25,000.00	$25,000.00
	Energy Efficient Equipment	1	Allowance		$20,000.00	$20,000.00
	Sub-Total Add/Extra Construction Costs				Round to 100	**$2,770,000.00**
	Telecommunications - Internal Wiring	1	Allowance		$750,000.00	$750,000.00
	Telecommunications / External Infrastructure	1	Allowance		$100,000.00	$100,000.00
	Sub-Total Telecommunication Cost				Round to 100	**$850,000.00**
	Inflation Adjustment					**$536,000.00**
	TOTAL CONSTRUCTION COSTS				Round to 100	**$20,203,100.00**

2	**OTHER PROJECT COSTS** Add or delete following items as required.					
a.	**Land/Existing Facility Acquisition**	Purchase or Budget		$0.00	Round to 100	**$0.00**
b.	**Professional Fees**					
	A/E Fees (Curve **B**: Above Average)	0.07	%		$1,099,317.92	$1,099,300.00
	Civil & Engineering Fee (10% of A/E Fee)	10.00	%		$109,931.79	$109,900.00
	Landscape Design Fee (5% of A/E fee)	10.00	%		$109,931.79	$109,900.00
	Design Specialty Consultants (Acoustics)	1	Allowance	15 Weeks	$1,500.00	$22,500.00
	Design Specialty Consultants (Lighting)	1	Allowance	15 Weeks	$1,500.00	$22,500.00
	C/M Pre-Construction Services Fee	1.00	%		202031	$202,000.00
	Sub-Total Professional Fees				Round to 100	**$1,566,100.00**
c.	**State Fire Marshal Review and Inspection**	0.25	%		Round to 100	**$50,500.00**
d.	**Inspection Services**					
	Code Compliance Inspection (weekly)	1	Allowance		$300,000.00	$300,000.00
	Plan Review (Code Compliance Inspection)	1	Allowance		$50,000.00	$50,000.00
	Sub-Total Inspection Services				Round to 100	**$350,000.00**
e.	**Risk Management / Insurance Consultant**	0.06	%		Round to 100	**$12,700.00**
f.	**Surveys & Tests**					
	Topographical/Site Survey	1	Allowance		$7,000.00	$7,000.00
	Geotechnical Testing	1	Allowance		$5,000.00	$5,000.00
	Sub-Total Surveys & Tests				Round to 100	**$12,000.00**
g.	**Permit/Impact/Environmental Fees**					
	Environmental (SFWM)	1	Allowance		$3,000.00	$3,000.00
	Sub-Total Permits/Impact Fees				Round to 100	**$3,000.00**
h.	**Art in State Building** (Section 255.043, F.S.)	0	%		Round to 100	**$0.00**
I.	**Movable Furniture & Equipment**					
	Furniture	5	%			$1,010,200.00
	Equipment	5	%			$1,010,200.00
	Sub-Total Furniture & Equipment				Round to 100	**$2,020,400.00**
j.	**Project Contingency**	4.5	%		Round to 100	**$916,853.00**
	TOTAL OTHER PROJECT COSTS				Round to 100	**$4,931,553.00**
	TOTAL PROJECT BUDGET COST ESTIMATE					**$25,134,653.00**