A.D. HENDERSON UNIVERSITY SCHOOL & FLORIDA ATLANTIC UNIVERSITY HIGH SCHOOL

NOVEMBER - 2019

FAU™
FLORIDA ATLANTIC UNIVERSITY

TITLE SHEET

A.D. HENDERSON UNIVERSITY SCHOOL & FLORIDA ATLANTIC UNIVERSITY HIGH SCHOOL

FOR

Boca Raton Campus
FLORIDA ATLANTIC UNIVERSITY

BOCA RATON, FLORIDA

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

NOVEMBER - 2019

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.

Numa Rais, Director

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

Jason Ball, Associate Provost

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

Joel Herbst, Associate Dean – College of Education

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

Bret Danilowicz, 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.

Jeff Atwater, 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 Administrative 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.

John Kelly, President Date

Florida Atlantic University Schools has developed a new Campus Master Plan through a collaborative process based on the core beliefs and mission of the schools to continue to deliver rigorous academic standards, to provide a wide range of learning opportunities in the arts, sciences and athletics, and to develop diverse leaders committed to becoming life-long learners and citizens of the world. In partnership with the Florida Atlantic University College of Education, the Schools serve as a model for the nation in K-12 education. These partners remain committed to research, innovate, develop and implement new teaching and learning methodologies of the future.

The master planning process included an assessment of the current and future needs of the School, an analysis of the existing facilities and site constraints, including the requirements of its University partner to shape the transformative direction of campus improvements and guide the evolution of the campus. The assessment presented herein includes enhanced safety and security measures, new flexible 21st century learning spaces for the elementary and middle school grades, multi-disciplinary learning laboratories, an outdoor living laboratory with the Everglades Restoration Lab, a STEM Robotics Center, a new Center for the Visual and Performing Arts, and a new Athletic Complex.

A. PROJECT HISTORY

Alexander D. Henderson University School is a public elementary and middle school on the campus of Florida Atlantic University in Boca Raton. Students are accepted to AD Henderson as part of a lottery selection process to fulfill a representative mix of different student characteristics to match the school's student demographic profile as provided each year by the state. Founded over 50 years ago as a Development and Research School, AD Henderson provided the foundation for research and discovery in the field of education in partnership with the University. Today, that foundation is consistently built upon and improved by teachers, parents, and students. In 1966, Florida Atlantic University broke ground to construct the new development and research School with a gift of $750,000 by Lucy E. Henderson in memory of her late husband, Alexander D. Henderson. The original facility consisted of classrooms, a cafetorium, kitchen, and a library. In 2003, the school expanded the number of classes per grade to increase its capacity by 132 students. In 2004, Florida Atlantic University launched FAU High School with seven students to further connect students to the collegiate experience. AD Henderson and FAU High School are not part of a public school district but rather are a public laboratory school under the auspices of the State University System.

A. D. Henderson University School was recognized by the Florida Department of Education as a Blue-Ribbon School of Excellence in 2004 and 2018; in 2008, FAU High School was highlighted in the "America's Best High Schools" feature by U.S. News & World Report; and in 2019 A. D. Henderson University School was awarded the U.S. Department of Education Green Ribbon Schools.

B. GENERAL PROJECT DESCRIPTION

The visioning process for the campus began with identifying the needs and unique aspects of the School, recognizing its mission and aligning them with a direction for its development. The vision was then borne out of collaboration with the School community to create a single unifying goal. When visioning 21st century spaces for learning and a developing campus, the spaces created need to:

• Be **Flexible** to accommodate current and evolving pedagogies; • Provide opportunities for **Student Discovery and Interaction;** • Be **Future-Proofed** to enable space to be re-configured;
• Be **Bold** to look beyond tried and tested technologies. • Provide opportunities for **Engagement &**

Collaboration; • Be **Creative** to energize and inspire learners and tutors; Be **Supportive** to develop the potential of learners.

This master plan provides FAU AD Henderson University School and FAU High School with a powerful vision for the physical development of the campus while strengthening the School's reputation as a center of academic excellence in an increasingly competitive college preparatory environment. The outlined new facilities will be critical in facilitating student led research, engineering and development beyond the classroom. The proposed facilities will equip faculty and students to have a positive impact on the future for years to come.

The facility is planned to include:

Studio Classrooms: New classrooms / studios will be spacious, flexible, and equipped with the latest educational resources and technology. They will be designed to stoke and cultivate the imagination of all students; spaces where discovery through hands-on learning is our research-based process that provides students an opportunity to see their ideas come to life.

Multidisciplinary Teaching Laboratories (MTLs): MTLs will provide a setting where students and faculty can observe, practice, explore, and solve problems as they gain mastery through hands-on use of research tools and techniques. Laboratory experiences will enable multi-disciplinary partnerships and translational research opportunities. They will provide students with both fundamental understanding and hands-on experience in using state-of-the-art methodologies and equipment.

Genomic and Computational Laboratory: New student research facilities will enable the uncovering of novel approaches to understanding and exploring new discoveries and methods of treating the genetic causes of diseases. This lab space will provide a hub for an interdisciplinary team of student and faculty mathematicians, biologists, and computer scientists who will seek to develop mathematical approaches to interpret and understand complex biological data sets.

STEM / Robotics Lab and Arena: These new spaces will provide a venue in which student scientists can participate, create and host competitions including First Lego League, First Tech Challenge robotics, hydrogen-propelled cars, Science Olympiad, National High School Drone competitions, SEAPERCH, and MATE, enhancing the already rich tradition of excellence in robotics at the School. The new STEM Arena will be developed as a shared resource with the athletic programs.

Athletic Complex: These facilities will also continue to grow athletic programs that compete at the highest level. A new Gymnasium / STEM Arena will house a regulation-sized basketball and volleyball courts, seating for spectators, boys' and girls' home and away locker rooms, cardio and weight room, a hall-of-fame lobby, restrooms, and storage space. Exterior amenities will include exterior hardcourts, interactive play and exercise areas, and replacement of the competition, learn-to-swim and robotics pool.

Center for Visual and Performing Arts: The new Center for the Visual and Performing Arts will be a state-of-the-art facility for performing arts, lectures, film, and special events. It will provide a combination interactive lobby and art gallery, a +/- 700 seat assembly and performance auditorium, classroom studios, and a Digital Media Production Lab. The building will serve to inspire the imagination as ideas come to life through storytelling in a variety of conventional and non-conventional media such as animatronics, spatial augmented reality, and 3D printing in the digital arts.

Everglades Restoration Laboratory: This new exterior laboratory environment will be a premier research facility that will bring together students, faculty, scientists, engineers, and

environmental managers to explore restoration solutions. This outdoor research, teaching, and training laboratory will provide opportunities to explore Avian Ecology, Plant Ecology, Population and Conservation Genetics, Environmental Geophysics, and Biogeography to solve problems such as clean water, red tide and watershed ecosystem restoration.

AD HENDERSON SCHOOL / FAU HIGH SCHOOL

C. PROJECT GOALS

- Create a **Secure Entrance and Boundary** for the Campus
- Provide for a new **Compact K-8 Facility**
- Enable a new Face for the School to be Created
- Create a **Secure Central Court**
- Create a **Connected Campus**
- **Enhance the Queue** and Drop-Off
- Move Traffic out of the University Loop
- Reduce Phasing Impact to the School and University
- Minimize Impact to the **Shared Play Fields**
- Create a Campus within a Campus
- Integrate the Existing Buildings to Remain
- Connectivity to University / College of Education
- **Separate Vehicular Access** for Service

D. DESIGN OBJECTIVES

A sustainable campus seeks to be a complete community, ensuring easy access to a range of amenities and recreational opportunities. Sustainable development facilitates academic interaction, place making, community-building, and walking and can improve the quality of life for students and faculty.

Environmental health, personal well-being and community building are promoted through a well-designed and interconnected network of open spaces. These places support informal interaction and meetings and provide opportunities for recreation and enjoyment of the natural environment. A sustainable campus can only be achieved through collaboration and coordination among planners within the school and in consultation with the local community. Planning and design processes should integrate

academic programming with landscape, infrastructure, built form, and other land use and place making objectives of the plan.

Green means much more than green space. It also connotes less energy, less waste, less driving, more renewables, more re-use, more walking, and environmental stewardship. The buildings, landscapes and infrastructure of the campus will demonstrate and teach environmental sustainability. Life cycle costs will guide planning, design and construction decisions.

- Create and maintain a campus identity through planning and architectural language;
- Enhance security and safety for all students, faculty and visitors to create a safe learning environment;
- Maintain pedestrian safety while addressing parking, drop-off, pick-up, and service access conditions;
- Promote campus "neighborhoods" while fostering a sense of community;
- Build in a socially, educationally and environmentally responsible manner;
- Sustain strong community relations with surrounding neighbors and partners; and
- Optimize efficiency and density without losing open space.
- Reduce campus greenhouse gas emissions by implementing energy saving technologies, conservation programs, and green building techniques
- Minimize impact to the environment by encouraging night sky friendly exterior light fixtures
- Reduce the heat island effect of the campus by utilizing concrete and pervious hard-scape and reflective roof surfaces
- Improve natural resource conservation by integrating native landscape and storm water management strategies
- Foster civic engagement by representing sustainable principles in the built environment

The Project consists of three main buildings within the new A.D. Henderson Complex. A new K-8 Building is the major component to be designed and constructed directly north of the existing elementary school building. The first phase consists of approximately 95,000 GSF of new construction and the renovation of existing middle school building comprised of approximately 8,000 square feet. This project needs to include the necessary infrastructure, and site improvements for future expansion which will include a Gymnasium and an Auditorium.

Details of the program square footage and proposed site layout are outlined in the A.D. Henderson Site Master Plan Analysis included as Appendix to this program.

E. CONSTRUCTION DELIVERY METHOD

In accordance with Florida Board of Governors Guideline 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.* **Yes**

(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.* **Yes**

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

(2).(d): *The project is a repair or renovation where the conditions requiring correction cannot 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.D. Henderson and FAU High School is a choice Title I school serving approximately 1,200 students. There are approximately 75 faculty and instructional support staff, and 20 other staff and personnel. As a laboratory developmental school, the school's design must accommodate experimentation, exploration, research, technology, state-of-the-art equipment, and have classrooms and areas within the school that support this type of learning environment. The facility should accommodate the expansion of the research and STEM programs, including facilities that are equipped as lab space and science classrooms with appropriate plumbing, ventilation, equipment, etc. Additional expansion of workforce training and development will include space for computers and other supporting equipment; and potential expansion of the arts to include areas for music, dance and theater.

A. FAU STRATEGIC PLAN

The A.D. Henderson and FAU High School is Consistent with FAU's "Strategic Plan for the Race to Excellence".

B. ACADEMIC PROGRAM REVIEWS

http://adhus.fau.edu/documents/facility-reports/advanced-engagement-review-report.pdf

C. RECOMMENDATIONS OF THE REVIEW CONSULTANTS
Not Applicable

E. JUSTIFICATIONS
Not Applicable

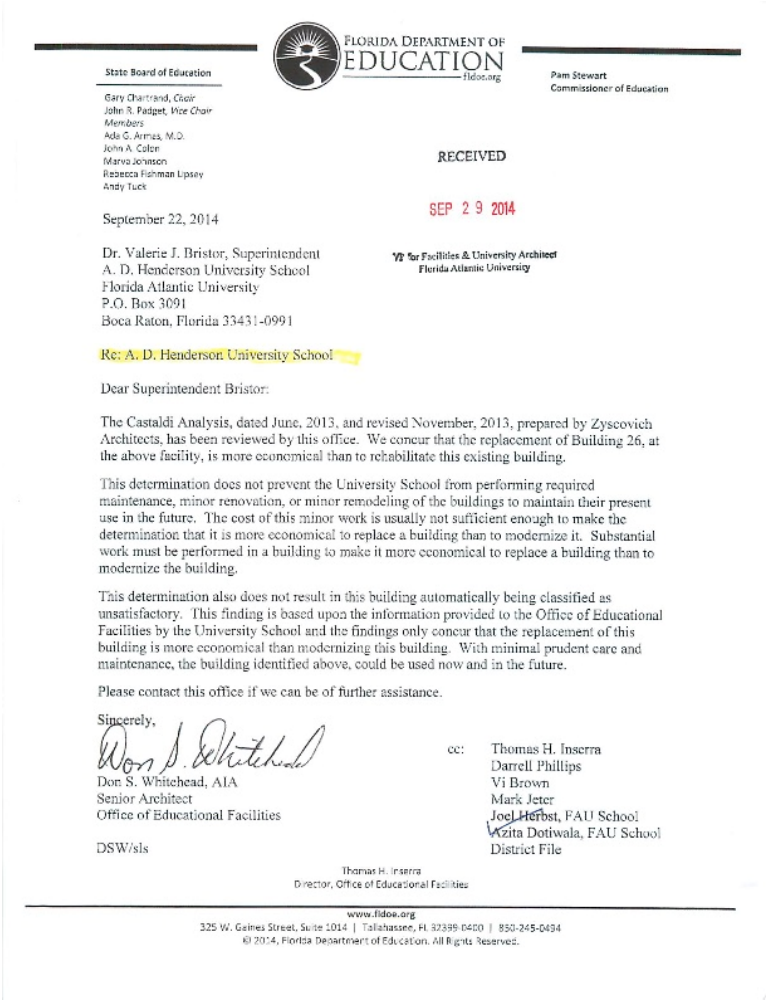
A. FACILITIES DEFICIENCIES

Facility Deficiencies

As outlined below, the facility deficiencies have been noted and recorded as appropriate to the designated program areas. We have included a facility analysis including recommendations for upgrades to facilitate the educational goals of the School. The reports provided below outline items previously recorded by the School and have been included for reference to the proposed project.

Castaldi Analysis

A current preliminary Castaldi Analysis has been performed to use as a measuring device in making a recommendation that it would be more cost effective to remove select buildings than it would be to remodel, and to upgrade these facilities.



FLORIDA DEPARTMENT OF EDUCATION
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SEP 29 2014
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Florida Atlantic University

September 22, 2014

Dr. Valerie J. Bristor, Superintendent
A. D. Henderson University School
Florida Atlantic University
P.O. Box 3091
Boca Raton, Florida 33431-0991

Re: A. D. Henderson University School

Dear Superintendent Bristor:

The Castaldi Analysis, dated June, 2013, and revised November, 2013, prepared by Zyscovich Architects, has been reviewed by this office. We concur that the replacement of Building 26, at the above facility, is more economical than to rehabilitate this existing building.

This determination does not prevent the University School from performing required maintenance, minor renovation, or minor remodeling of the buildings to maintain their present use in the future. The cost of this minor work is usually not sufficient enough to make the determination that it is more economical to replace a building than to modernize it. Substantial work must be performed in a building to make it more economical to replace a building than to modernize the building.

This determination also does not result in this building automatically being classified as unsatisfactory. This finding is based upon the information provided to the Office of Educational Facilities by the University School and the findings only concur that the replacement of this building is more economical than modernizing this building. With minimal prudent care and maintenance, the building identified above, could be used now and in the future.

Please contact this office if we can be of further assistance.

Sincerely,

Don S. Whitehead, AIA
Senior Architect
Office of Educational Facilities

DSW/sls

cc: Thomas H. Inserra
Darrell Phillips
Vi Brown
Mark Jeter
Joel Herbst, FAU School
Azita Dotiwala, FAU School
District File

Thomas H. Inserra
Director, Office of Educational Facilities

www.fldoe.org
325 W. Gaines Street, Suite 1014 | Tallahassee, FL 32399-0400 | 850-245-0494

Accessibility

The existing facility is not in compliance with current code requirements for accessibility to all spaces. These areas include providing student individual accessible toilet rooms, as well as accessible door access to and from most classroom restrooms with consideration of level and floor clearances. Interior modifications are required at select locations where sinks and fixed cabinetry are required for use and instruction. All hardware including closers and swing pressures shall be analyzed for compliance with current accessibility standards.

Security

The development of a campus security approach has been developed in coordination with the University's Police Department and in response to the Marjory Stoneman Douglas High School Public Safety Act (Chapter 2018-03, Laws of Florida). Recent upgrades have been made to the security and safety systems with the installation of a new security camera system for all areas and upgrades to exterior door card access electronic door hardware. These are significant upgrades for the campus.

Hazardous Materials

Review of the current asbestos survey, hazardous materials and site environmental are provided in the preliminary Castaldi analysis. **Building Envelope**

Per visual observation, several leak issues were apparent with the roof system based on obvious stained ceiling areas and conditions were noted in several classrooms and at select locations of the covered walk conditions per discussion with School site administration.

ADA Survey: http://adhus.fau.edu/documents/facility-reports/ada-survey.pdf
Roof Moisture: http://adhus.fau.edu/documents/facility-reports/aerial-infrared-roof-moisture-inspection.pdf
Boiler Study: http://adhus.fau.edu/documents/facility-reports/boiler-study.pdf
TRANE ESCO Project: http://adhus.fau.edu/documents/facility-reports/esco-project-audit-report-and-final-proposal.pdf
Zyscovich Facility Analysis Report: http://adhus.fau.edu/documents/facility-reports/facility-analysis-report-nov2013.pdf
MEP Equipment Assessment: http://adhus.fau.edu/documents/facility-reports/mep-equipment-assesment.pdf
Queuing, Access and Circulation Evaluation: http://adhus.fau.edu/documents/facility-reports/queing-access-and-circulation-evaluation.pdf
School Condition Assessment: http://adhus.fau.edu/documents/facility-reports/school-condition-assessment-mar2006.pdf
Water Intrusion Investigation: http://adhus.fau.edu/documents/facility-reports/water-intrusion-investigation.pdf

The proposed solution is a phased replacement of the existing site.

A variety of alternative solutions were investigated including remodeling, joint facilities utilization and off campus leasing/purchase. These solutions were vetted against State Board of Education requirements adopted pursuant to Chapter 120, F.S., to implement the State Uniform Building Code for

Public Educational Facilities Construction in Chapter 1013, F.S., are contained in Section 423 of the Florida Building Code and the Florida Department of Education publication, "State Requirements for Educational Facilities 2014" (http://www.flrules.org/Gateway/reference.asp?No=Ref-04664).

Based on the number of students served, programmatic needs, CPTED and SREF no viable solutions were found other than the replacement of the existing facility.

A. THE ADOPTED CAMPUS MASTER PLAN

The proposed academic plan comports with the Florida Atlantic University 2019 Boca Raton Campus Master Plan Update (DRAFT). The university strategic plan and corollary strategic goals are embedded in the proposed academic plan. Page 8 of the Florida Atlantic University 2019 Boca Raton Campus Master Plan Update (DRAFT) identifies A.D. Henderson School Improvements as a project currently in design or construction. Page 22, Objective 1D Policy 1D-5, of the Florida Atlantic University 2019 Boca Raton Campus Master Plan Update (DRAFT) identifies the project as "Redevelop Alexander D. Henderson University School within its current site." The master plan was developed in accordance with Page 28, Academic Facilities, of the Florida Atlantic University 2019 Boca Raton Campus Master Plan Update (DRAFT). The facility is aligned to goals and objective found on page 30 of the Florida Atlantic University 2019 Boca Raton Campus Master Plan Update (DRAFT) specifically the expansion of research capabilities as well as the conservation goal found on page 60 and the landscape design guidelines found on page 70 of the Florida Atlantic University 2019 Boca Raton Campus Master Plan Update (DRAFT) will be enhanced by the development of the Everglades Restoration Laboratory: **"**This new exterior laboratory environment will be a premier research facility that will bring together students, faculty, scientists, engineers, and environmental managers to explore restoration solutions. This outdoor research, teaching, and training laboratory will provide opportunities to explore Avian Ecology, Plant Ecology, Population and Conservation Genetics, Environmental Geophysics, and Biogeography to solve problems such as clean water, red tide and watershed ecosystem restoration." Finally, the master plan was developed using the principles of CPTED and will serve as a model of replication for K-12 school safety.

The proposed project is consistent with all elements of the Campus Master Plan (CMP) prepared and adopted pursuant to Section 240.155, F. S.

A. SITE CONDITIONS

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.

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 100-7ear coastal flood with velocity (wave action), based flood elevation 10. Storm water drainage will follow the requirements of the master South Florida Water Management District Conceptual Drainage Permit.

3. VEHICULAR AND PEDESTRIAN CIRCULATION
This project impacts the overall vehicular circulation on campus during the morning drop off and afternoon pickup associated with the school. Management of traffic, safe pedestrian and bicycle access to the site is critical during all phases of construction.

4. SITE VEGETATION
Site vegetation consists mainly of grassy area and small decorative shrubbery. The university will adhere to its policy of replanting and replacing any trees that are removed or damaged due to new construction. This project is to incorporate an outdoor educational environmental lab as part of the new development.

5. ARCHAEOLOGICAL HISTORY
There are no sites of archeological 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 maps and description of site utilities.

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.

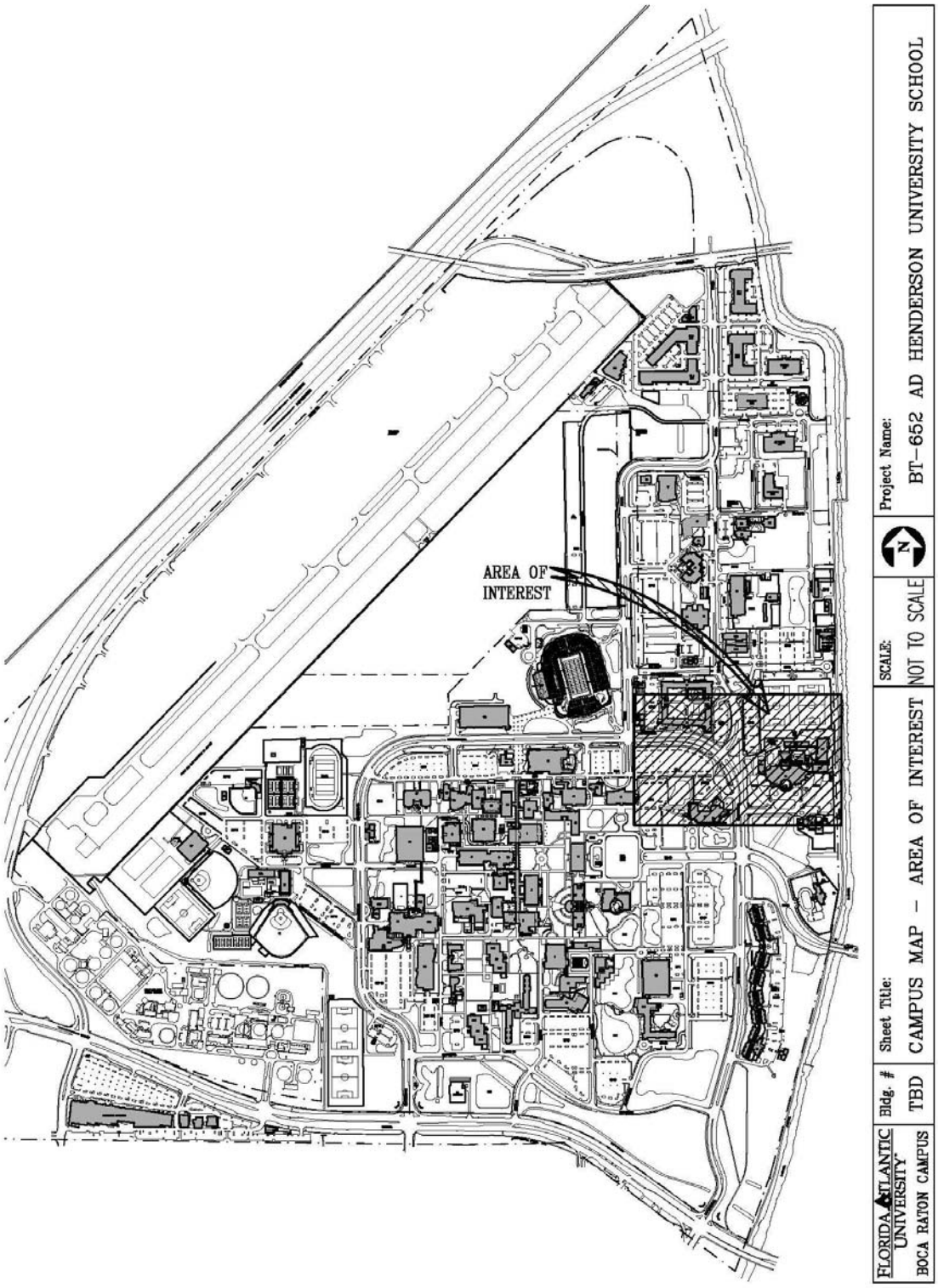
8. UNUSUAL SITE CONDITIONS
This project is to be designed in a manner to allow ongoing operation of the existing elementary school while the new K-8 building is under construction.

9. DIRECTION OF PREVAILING WINDS
There is no University wide study of the prevailing wind patterns. Prevailing winds are from the southeast.

B. CAMPUS MAP & SITE MAP

Refer to Section X, Utilities Impact Analysis for site maps.

	DESCRIPTION (Maps follow end of this SITE ANALYSIS Section)
1.	Campus and Facilities Location Map


AREA OF
INTEREST
FLORIDA ATLANTIC UNIVERSITY
BOCA RATON CAMPUS
Bldg. #
TBD
Sheet Title:
CAMPUS MAP – AREA OF INTEREST
SCALE:
NOT TO SCALE
N
Project Name:
BT-652 AD HENDERSON UNIVERSITY SCHOOL

A. PROGRAM AREA TABLE

See Appendix A – AD Henderson/FAU High School for Program Details

A. UTILITIES IMPACT ANALYSIS Utilities analysis provided by Facilities Planning Engineering.

1. CHILLED WATER:

180K SQFT Bldg / (400 SQFT / TON) = 450 TONS + AUDITORIUM, CLASSROOMS @ 400 SQFT / TON

It is understood that the new Gym and Auditorium WILL NOT be occupied by a third party during normal school hours. Therefore, Additional Cooling Load from third party occupants is excluded.

(2) 500 TON Water Cooled Chillers. If on site, then see cost deduct of CHWS /R Loop Pipes.

Controls will be remotely monitored from the existing EMS at the FAU Central Plant Bldg05.

Include updating the EMS displays and Control points to include this new work, if applicable.

"Standby" Power requirements are expected including Chiller, Pumps, el al.

Water Treatment and Management Programs are required, including ASHRAE 188 guidelines.

Life Cycle Cost Analysis, required by Florida Statutes

2. HEATING:

There are no existing Heating Water Distribution Pipes from the existing FAU Utilities Plants to anywhere near this new site. It is understood the Building Construction Cost includes this Building System.

Gas is existing on Site. Heating Loads could be satisfied with a local Gas Fired Heating Water System. The Sensible Heating Load is approx. (5,700) MBH, based on 290 CFM/Ton in Classrooms and Offices with 28F Delta Temp Rise (68F – 40F). A Water Treatment Program is required for Boilers.

New Boilers shall be registered and inspected through the State Fire Marshal.

"Stand-by" Power requirements are expected including Boilers and Pumps.

Electric for the Sensible Heating is another option, approx. (1,670) KW.

3. ELECTRICAL:

Exiting Overhead Power outages occur frequently.

Electric load may be approx. (7200) KVA, based on 40 VA/SF.

Power will be fed from the existing Feeders, west of this site along East University Dr. Provide redundancy from two Feeders (feeder #3234 & 3240)

Power Meters are required with connection to the remote monitoring system. Surge Suppressors are required on applicable panels.

"Stand-By" Power, including Generator and ATS, may be required for Kitchen Freezers and IT Servers.

"Emergency" Power is required for Life Safety Systems.

4. POTABLE WATER:

Existing Potable Water is supplied through the existing 4-inch pipe, Meter and Backflow Preventer west of this site along East University Dr. Add new Remote Read, Walk-by, RF Registers on all Water Meters including Fire Lines, Middle School, Media Center, and High School Water Meters, and new Cooling Tower Water Meters, if applicable. These new RF Registers will be compatible with Neptune Register R900i Hand Held Meter Reader. Update the Meter Reading and accounting software.

The Fire Sprinkler System is supplied through the existing 6-inch pipe and DCDA Backflow Preventer west of this site along East University Dr. Relocating Fire Lines for the Middle School and High School may be required depending on this new Site Plan and Bldg. foot prints.

Hot Water sources could include: Domestic Hot Water Boiler; and /or Heat Recovery Chillers; and /or Solar Panels.

Kitchen Dishwasher requires 180F Hot Water, via Gas Booster Heater.

Pool will require Gas Heaters, Pumps, Chlorination System, Make-Up Water with an RF Meter.

GPD estimate is (3,827) GPD based on Water bills, FY19. The new Occupancy increase of (80) may have negligible impact on Water usage.

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

5. SANITARY: (SUS CM-N-04.00-09/97 D)

Existing GPD estimate is (3,827) GPD based on Water bills, FY19 for Henderson School Bldg 26 only, excluding Middle School, High School, Media Center water usages. The additional (80) occupant count may be negligible.

NOTE FAU 27MAY2019 Master Plan Update, HANBURY, Figure 9.3 page 43 indicates Effluent Discharge North towards LS32. The existing Slattery /Baldwin Force Main transverses this site, to remain actively discharging North towards LS32. Provide Crush Protection of these existing underground FM Pipes.

LS32 Discharges easterly across the El Rio Canal to the City system. The City's excess capacity at this connection is not confirmed, if required.

Existing 6 inch Force Main Pipe along North University Dr may need up-sizing, approx. 2,200 LF from this site to existing 12 inch FM, south of the Schmidt Bldg Complex.

A new Sewer Lift Station will discharge west, connecting to existing westerly 12 inch Force Main.

6. IRRIGATION:

New Irrigation supply will be from the existing RE-Use Main. The Infrastructure Plans indicate a 4 inch RU along the El Rio Canal, east of this site. There is adequate supply from the City of Boca.

7. STORM WATER MANAGEMENT:
New Storm Water Retention Areas will be required. Storm Water Retention restriction at the South Area within Basin 5.

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 Storm Water 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.

SFWMD Permit is required ensuring proper Storm Water drainage. See Master Permit #50-03706-P.

NPDES Permit is required. Florida's NPDES Storm Water Program regulates discharge of Storm Water 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 Storm Water permit and implement a Storm Water pollution prevention plan.

8. NATURAL GAS:
Existing Natural Gas pipes supply this Campus. The gas company will ensure capacity exists for this new Building and complex. This existing Gas Meter is East of the Media Center Bldg 26C and north of Center Line Bldg 26.

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

Outside Site Security Cameras will be required.

10. FIRE ALARM SYSTEM:
The Fire Alarm System will be remotely monitored, similar to all existing Fire Alarm systems on this Campus

11. ENERGY MANAGEMENT CONTROL SYSTEM:
The Energy Management System will be monitored remotely at the Central Utilities Plant Bldg#05 at the Boca Campus and compatible with the existing Campus EMS.

12. SITE LIGHTING:
Site lighting will be required and shall comply with Campus standards.

13. SURFACE IMPROVEMENTS:
Sod and Landscaping will be required.

B: UTILITIES INFRASTRUCTURE COST ESTIMATES

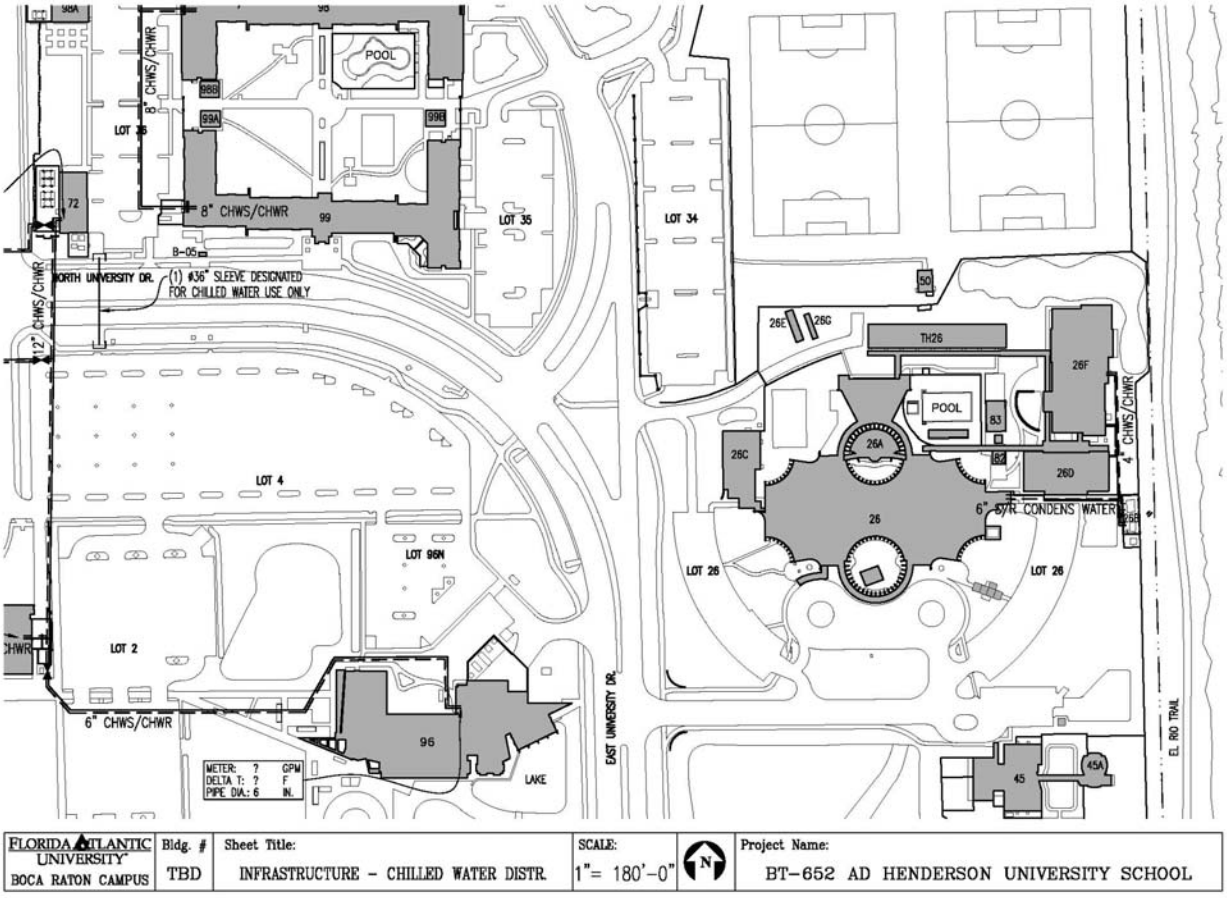
CHILLED WATER		
CHILLER SYSTEM, WATER COOLED	1000Ton@818/Ton	$ 1,000,000
STAND-ALONE	20X50@200	$ 200,000
WATER TREATMENT		$ 25,000
PUMPS	4@22000	$ 88,000
PIPES ON SITE	2200LF@100	$ 220,000
Sub Total		$ 1,533,000
HEATING		
GAS BOILERS, 2@5,700MBH		$ 300,000

WATER TREATMENT		$ 25,000
HEAT EXCHANGER		$ 25,000
PIPES		$ 50,000
PUMPS	2@15000	$ 30,000
Sub Total		$ 430,000
ELECTRICAL		
SUPPORT MECH EQUIPMENT		$ 175,000
EMERGENCY GENERATOR ET AL		$ 500,000
Sub Total		$ 675,000
POTABLE WATER		
PIPES	1000LF@100	$ 100,000
WATER HEATERS, INCL KITCHEN & DSHWSH		$ 100,000
POOL HEATERS		$ 200,000
RF METER REGISTERS		$ 1,000
METER READING SOFTWARE UPDATES		$ 20,000
Sub Total		$ 421,000
SANITARY		
LIFT STATION	(2)5HP PUMPS	$ 150,000
PIPES	2,200LF@100	$ 220,000
CRUSH PROTECT EXISTING FM		$ 50,000
Sub Total		$ 420,000
IRRIGATION		
Sub Total	Allowance	$ 125,000
STORM WATER		
PIPES	600LF@70	$ 42,000
STRUCTURES	2@5000	$ 10,000
Sub Total		$ 52,000
NATURAL GAS		
Sub Total	Allowance	$ 20,000
TELECOMMUNICATIONS		
SITE SECURITY	B&F Carry Forward, BF: 4-A	$ 11,902
Sub Total	SEE BLDG COST	$ 11,902
FIRE ALARM SYSTEM		
Sub Total	SEE BLDG COST	$ 0
ENERGY MANAGEMENT CONTROL SYSTEM		
REMOTE MONITORING AT BLDG05	Allowance	$ 100,000
Sub Total		$ 100,000
SITE LIGHTING		
Sub Total	SEE BLDG COST	$ 0
SURFACE IMPROVEMENTS		
Sub Total	SEE BLDG COST	$ 0
TOTAL		**$ 3,787,902**

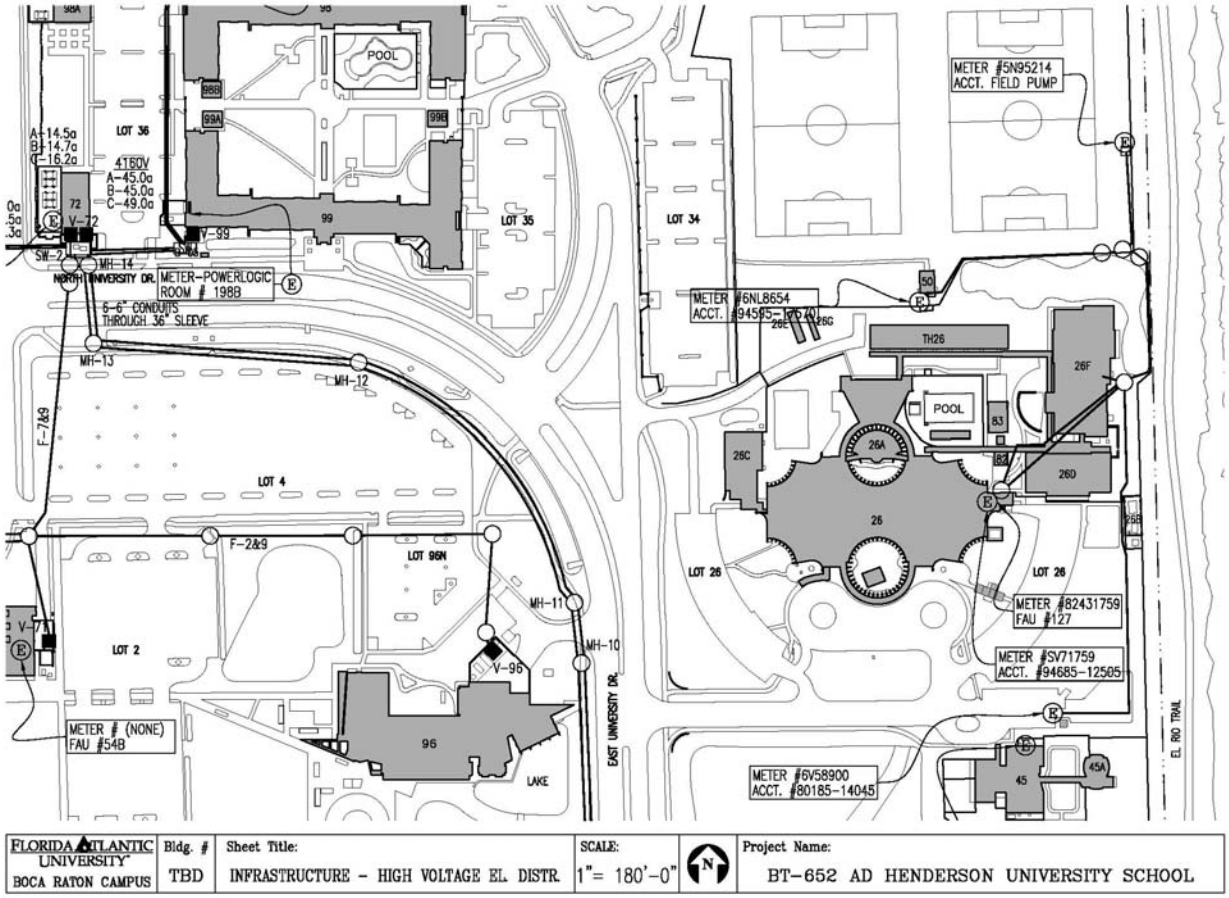
C. UTILITIES MAPS Utilities system maps provided by Facilities Planning Engineering.

	DESCRIPTION (Utilities Maps follow end of this UTILITIES IMPACT ANALYSIS Section)
1.	Chilled Water System
2.	Steam System
3.	Electrical System
4.	Potable Water System
5.	Sanitary Sewer System
6.	Irrigation / Reclaimed Water System
7.	Storm Drainage System
8.	Natural Gas System
9.	Telecommunications System
10.	Energy Management System
11.	Fuel Oil and Gas System
12.	Street and Area Lighting System
13.	Topographical Map

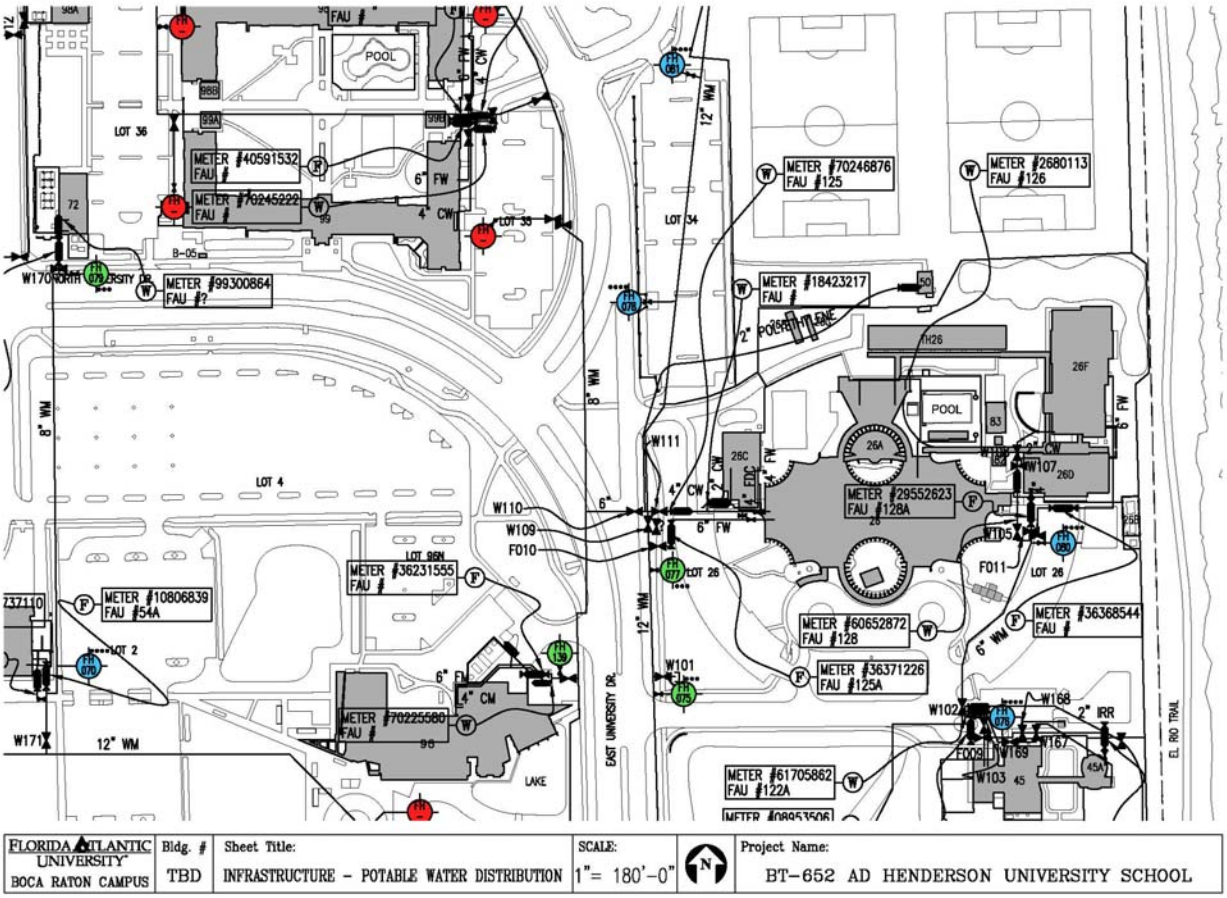
1. Chilled Water



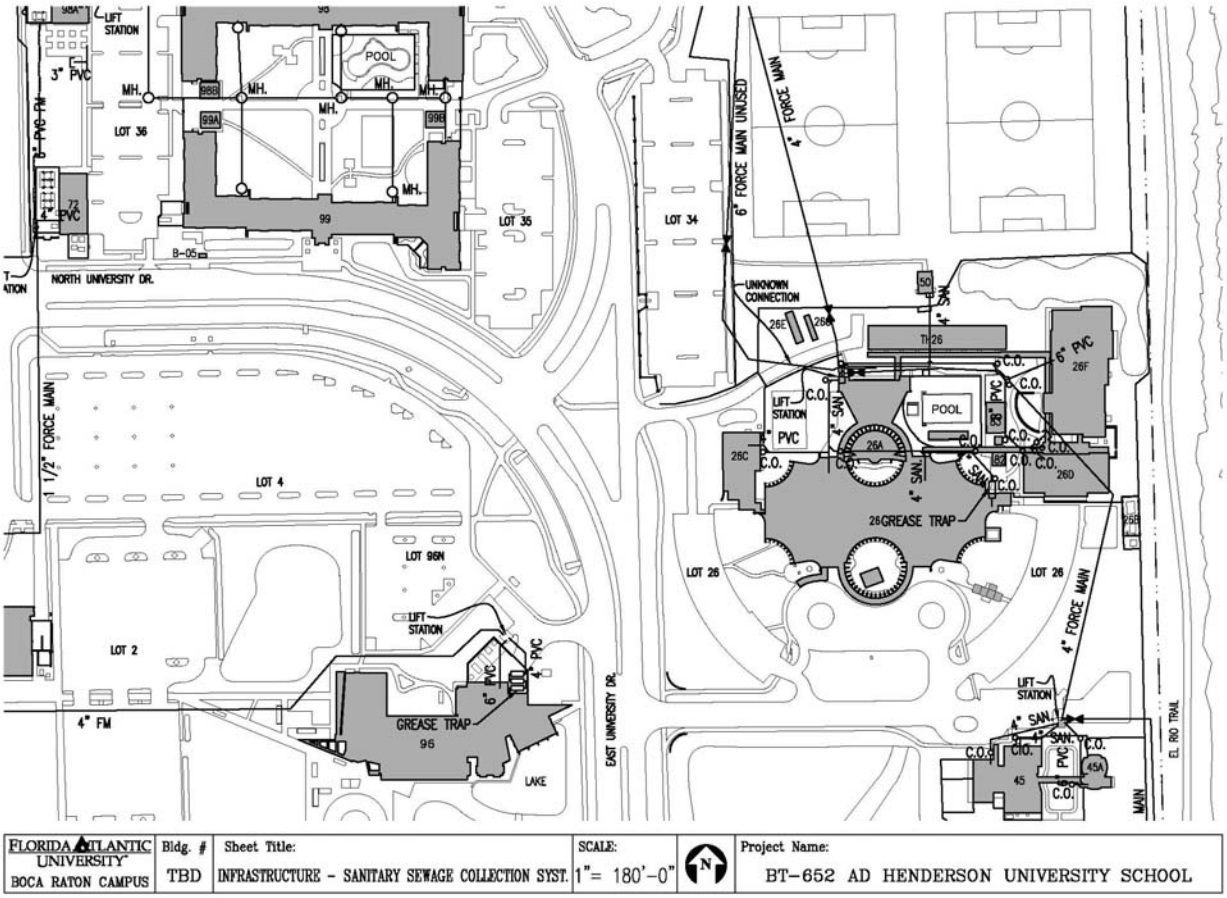
2. Electrical System



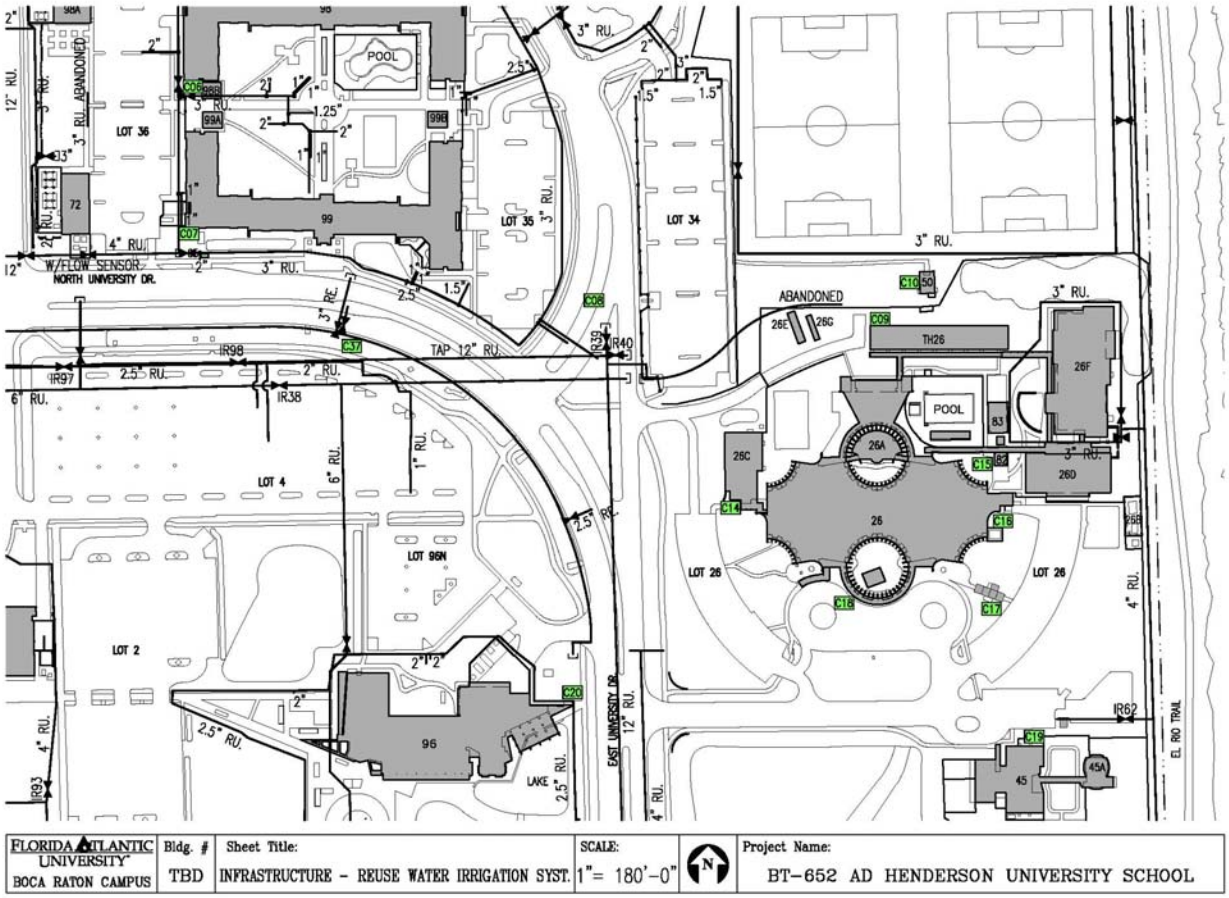
3. Potable Water System



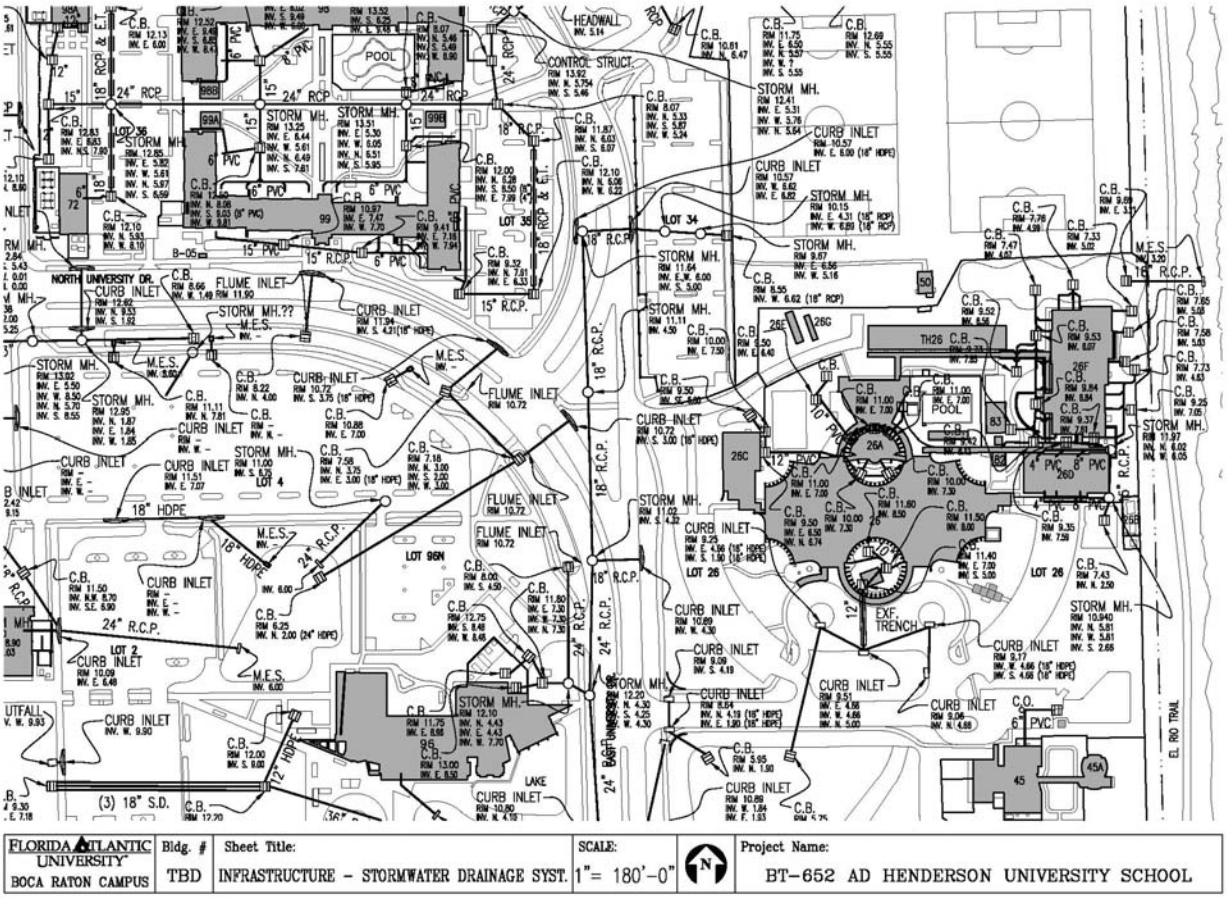
4. Sanitary Sewer System



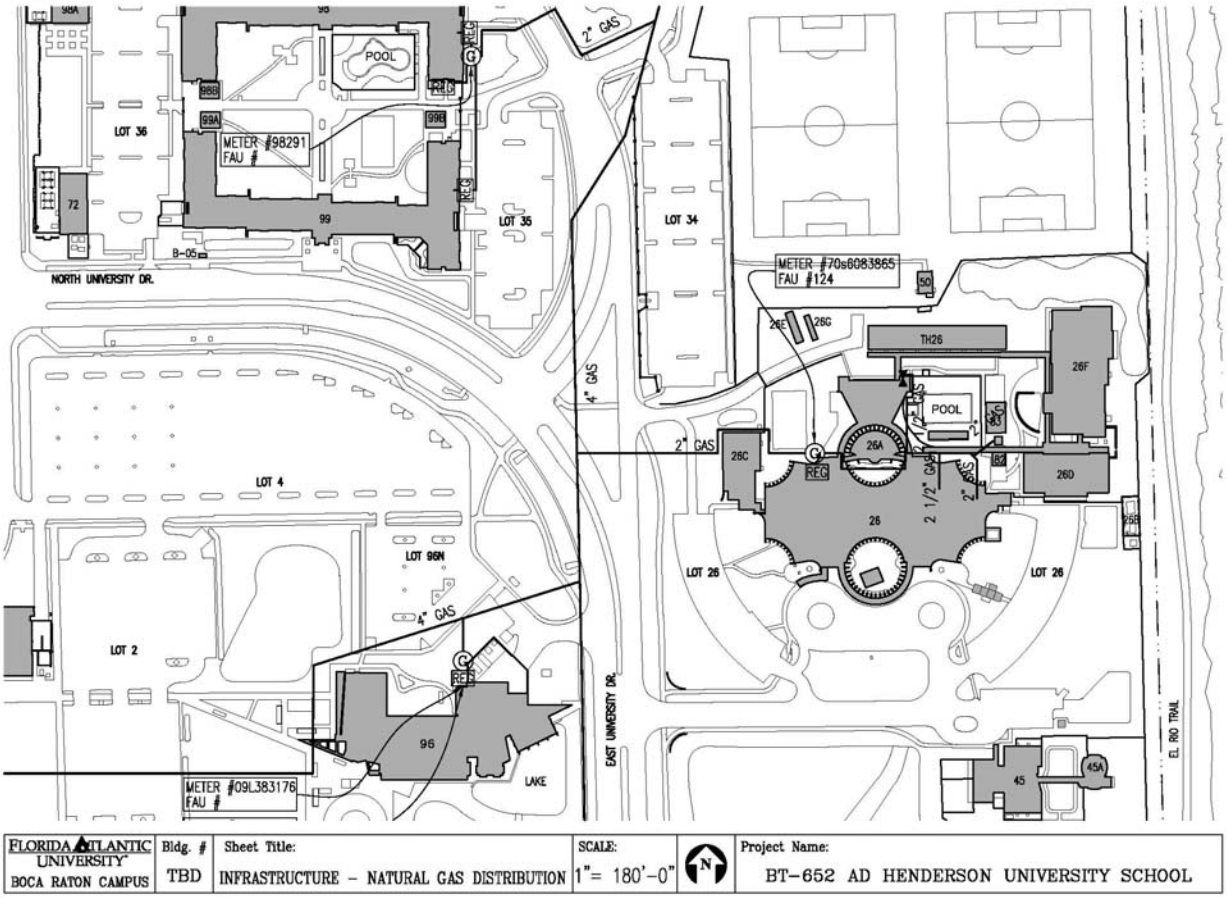
5. Irrigation / Reclaimed Water System



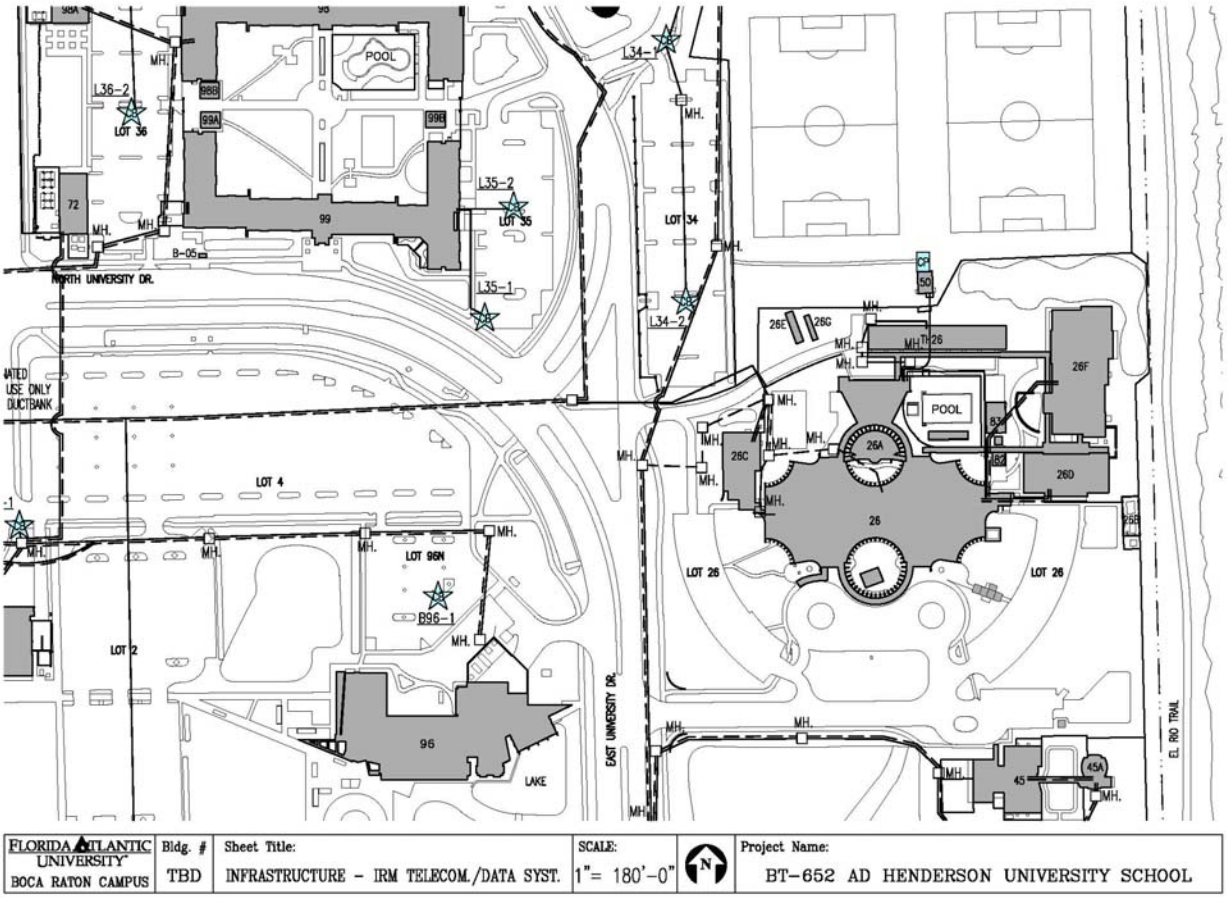
6. Storm Drainage System



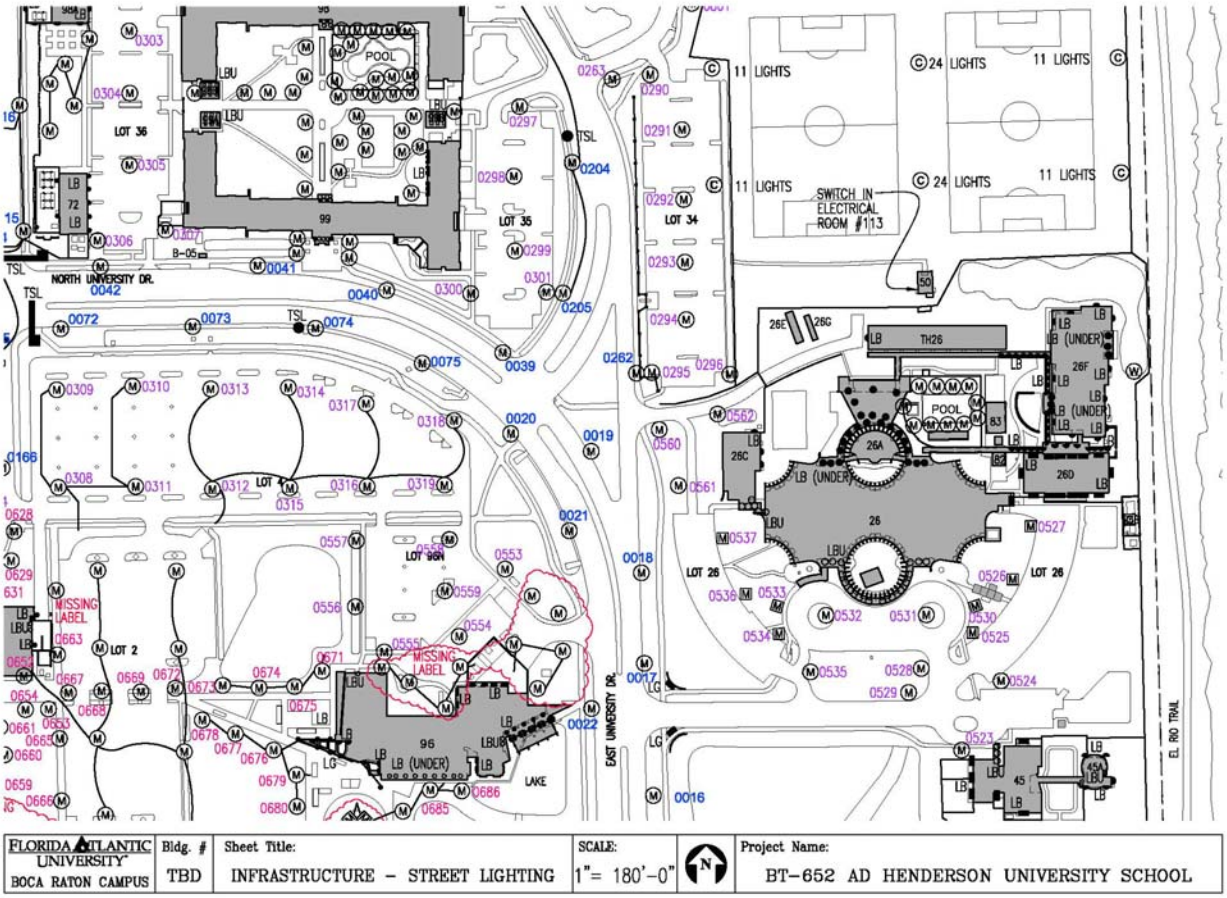
7. Natural Gas System



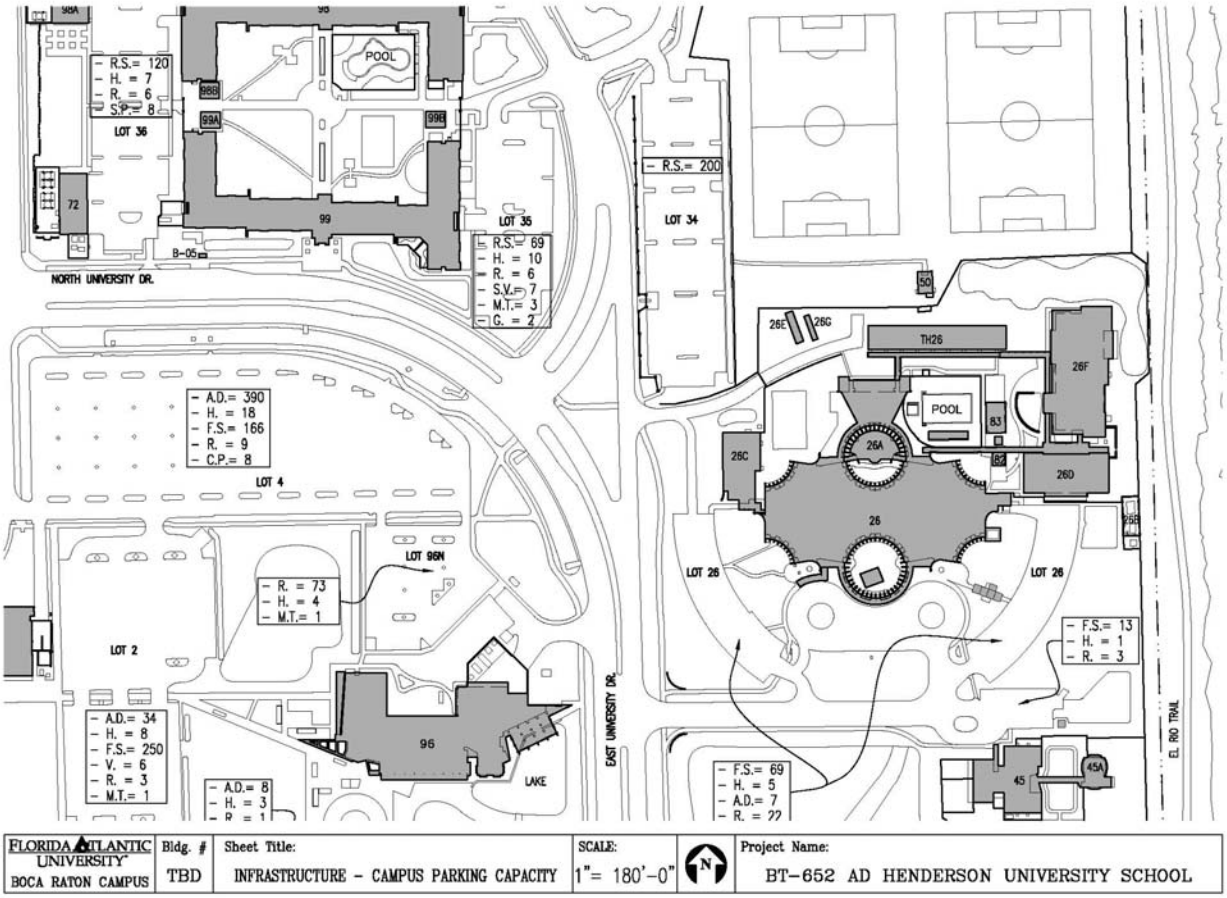
8. Telecommunication System



9. Street & Area Lighting System



10. Parking Capacity



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:

http://wise.fau.edu/irm/ts/cblspecs.htm.

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.	2014 (5th Ed.)	Florida Building Code, Building
2.	2014 (5th Ed.)	Florida Building Code, Mechanical
3.	2014 (5th Ed.)	Florida Building Code, Fuel Gas
4.	2014 (5th Ed.)	Florida Building Code, Plumbing
5.	2014 (5th 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	2014 (5th Ed.)	Fire Prevention Code
10	2010	Standard for Portable Fire Extinguishers
13	2010	Standard for the Installation of Sprinkler Systems
13R	2010	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and including four stories in Height
14	2010	Standard for the Installation of Standpipe and Hose systems, except 2-7 Shall be omitted
20	2010	Standard for the Installation of Centrifugal Fire Pumps
24	2010	Standard for the Installation of Private Fire Service Mains and Their Appurtenances
25	2011	Standard for the Inspection, Testing & Maintenance of Water Based Fire Protection Systems
30	2012	Flammable and Combustible Liquids Code
45	2011	Standard on Fire Protection for Laboratories Using Chemicals
70	2011	National Electrical Code
72	2010	National Fire Alarm Code
90A	2002	Standard for the installation of Air Conditioning and Ventilating Systems
96	2011	Standard for Ventilation Control and Fire Prevention of Commercial Cooking Operations
101	2012	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

CONSTRUCTION MANAGEMENT PROJECT DELIVERY METHOD The University preference is the CM process with a GMP submittal at the conclusion of design phase adequate for obtaining a GMP.

GOALS AND MILESTONES	DURATION	START DATE	END DATE
PROGRAM APPROVAL	**6 weeks**	**01-Oct-2019**	**12-Nov-2019**
Facilites Program Development	4 weeks	01-Oct-2019	29-Oct-2019
University Facilities Program Approval	2 weeks	29-Oct-2019	12-Nov-2019
A/E SELECTION PROCESS	**9 weeks**	**05-Nov-2019**	**07-Jan-2020**
Advertise for A/E in FAW	4 weeks	05-Nov-2019	03-Dec-2019
A/E Short-list	1 weeks	03-Dec-2019	10-Dec-2019
A/E Interviews	2 weeks	10-Dec-2019	24-Dec-2019
A/E Selection	1 weeks	24-Dec-2019	31-Dec-2019
Contract Negotiations with A/E	1 weeks	31-Dec-2019	07-Jan-2020
C/M SELECTION PROCESS	**9 weeks**	**10-Dec-2019**	**11-Feb-2020**
Advertise for C/M in FAW	4 weeks	10-Dec-2019	07-Jan-2020
C/M Short-list	1 weeks	07-Jan-2020	14-Jan-2020
C/M Interviews	2 weeks	14-Jan-2020	28-Jan-2020
C/M Selection	1 weeks	28-Jan-2020	04-Feb-2020
Contract negotiations with C/M	1 weeks	04-Feb-2020	11-Feb-2020
DESIGN PHASE	**48 weeks**	**07-Jan-2020**	**09-Dec-2020**
Conceptual Design	4 weeks	07-Jan-2020	07-Feb-2020
Conceptual Design review and approval	2 weeks	07-Feb-2020	21-Feb-2020
Schematic Design	4 weeks	21-Feb-2020	23-Mar-2020
Schematic Design review and approval	2 weeks	23-Mar-2020	06-Apr-2020
Design Development and Budget verification	7 weeks	06-Apr-2020	23-May-2020
Design Development review and approval	2 weeks	23-May-2020	06-Jun-2020
Design Review submittal to State Fire Marshal (SFM)	4 weeks	23-May-2020	20-Jun-2020
50% Construction Documents and Budget update	7 weeks	06-Jun-2020	22-Jul-2020
50% Construction Documents review and approval	3 weeks	22-Jul-2020	12-Aug-2020
100% Construction Documents and Budget update	9 weeks	12-Aug-2020	14-Oct-2020
100% Construction Documents review and approval	4 weeks	14-Oct-2020	11-Nov-2020
Submittal of GMP	4 weeks	14-Oct-2020	11-Nov-2020
Design Review submittal to State Fire Marshal (SFM)	6 weeks	14-Oct-2020	25-Nov-2020
CONSTRUCTION PHASE	**81 weeks**	**25-Nov-2020**	**18-Jun-2022**
Notice to Proceed	1 weeks	11-Nov-2020	18-Nov-2020
Bid Package Submittal and Review	2 weeks	25-Nov-2020	09-Dec-2020
Approval to advertise bid package	1 weeks		
Construction	75 weeks	25-Nov-2020	05-May-2022
Contractor Punch & Clean	4 weeks	07-Apr-2022	05-May-2022
Substantial Completion Inspection	1 weeks	05-May-2022	12-May-2022
Punchlist Corrective Work	4 weeks	12-May-2022	11-Jun-2022
Owner Occupancy	1 weeks	12-May-2022	19-May-2022
Final Completion Inspection	1 weeks	11-Jun-2022	18-Jun-2022
Total	**142 weeks**	**01-Oct-2019**	**18-Jun-2022**

A. ESTIMATED FUNDING

AVAILABLE FUNDING	
2019-2020 Public Education Capital Outlay (PECO)	$ 11,500,000.00
A.D. Henderson millage equivalent (PECO Carry forward)	$ 5,000,000.00
A.D. Henderson (FEEP Carry forward)	$ 2,300,000.00
Private Donor Funds	$ 2,000,000.00
Subtotal – Available Funding	**$ 20,800,000.00**

CURRENT FUNDING REQUEST	
2020-21 PECO	$ 15,000,000.00

TOTAL PROJECT FUND – K-8 Building	**$ 35,800,000.00**

Additional funding for Gymnasium and Auditorium may be added to the project scope as follows:

FUTURE FUNDING	
Gymnasium -	$ 7,400,000.00
Auditorium	$ 9,300,000.00

B. ESTIMATED BUDGET

1. Construction Costs	
a. Construction Costs	$23,050,100.00
b. Additional/Extraordinary Construction Costs	$6,193,000.00
Sub Total Construction Costs	$29,243,100.00
2. Other Project Costs	
a. Land/existing facility acquisition	$0.00
b. Professional Fees	$2,034,500.00
c. Fire Marshal Fees	$73,100.00
d. Inspection Services	$405,300.00
e. Insurance Consultant	$18,400.00
f. Surveys and Tests	$25,000.00
g. Permit/Impact/Environmental Fees	$500.00
h. Art Work	$100,000.00
i. Movable Furnishings & Equipment	$2,489,400.00
j. Project Contingencies	$1,410,700.00
Sub Total Other Project Costs	$6,556,900.00
TOTAL PROJECT BUDGET (from Section XV of Facilities Program)	**$35,800,000.00**

PROJECT SPACE AND BUDGET SUMMARY

CONSTRUCTION BUDGET

SPACE SUMMATION (from Section IX of Facilities Program)

Program Space Type	NASF	Factor [1]	GSF	$ / GSF [2]	$
New Construction					
Classrooms	32,532	1.35	43,918	232.95	$10,230,744.69
Teaching Laboratories	7,865	1.35	10,618	252.52	$2,681,194.23
Offices	12,710	1.35	17,159	245.45	$4,211,553.83
Support Services	17,731	1.35	23,937	232.30	$5,560,530.26
Avg. Construction Cost				237.20	
Total Construction Cost	70,838	1.35	95,631		**$22,684,000.00**
Renovation					
Classrooms	5,333	1.5	8,000	93.18	$745,440.00
Total Construction Cost	5,333	1.5	8,000		**$745,400.00**

1. SUS recommended NASF (Net Assignable Square Feet) to GSF (Gross Square Feet) Conversion Factor.
2. Based on BOG Construction & Project, Costs & Budget Guideline (2016)

1. CONSTRICTION COSTS	
a. Building Construction Cost	
New Construction Cost	$22,684,000.00
Renovation Cost	$745,400.00
Sub-Total Construction Costs	**$23,429,400.00**
b. Additional/Extraordinary Construction Cost	
Site Preparation/Demolition	$400,000.00
Parking Improvements	$450,000.00
Landscaping and Irrigation	$125,000.00
Electrical Services	$675,000.00
Water Distribution System	$421,000.00
Sanitary Sewer System	$420,000.00
Storm Water System	$52,000.00
Chilled Water System	$1,000,000.00
Heating System	$430,000.00
Natural Gas System	$20,000.00
Energy Efficient Equipment	$100,000.00
Sub-Total Additional/Extraordinary Construction Costs	**$4,093,000.00**
Telecommunications - Internal Wiring	$1,300,000.00
Telecommunications / External Infrastructure	$500,000.00
Sub-Total Telecommunication Cost	**$1,800,000.00**
TOTAL CONSTRUCTION COST	**$29,322,400.00**

2. OTHER PROJECT COSTS	
a. Land/Existing Facility Acquisition	**$ 0.00**
b. Professional Fees	
A/E Fees (6.56 % of Estimated Construction Cost based on DMS Fee Curve)	$1,537,200.00

Civil Engineering 10%of AE fees	$153,700.00
Landscape Design	$76,900.00
CM Pre-Construction Service Fee (.75% of Const. Cost)	$219,900.00
Sub-Total Professional Fees	**$1,987,700.00**
c. State Fire Marshal Review and Inspection Fee,	
SFM Fee (0.0025 x construction cost of building envelope only)	**$73,300.00**
d. Inspection Services	
Roofing Inspection	$11,700.00
Code Compliance Inspection	$ 150,000.00
Plan Review	$ 50,000.00
Subtotal Inspection Services	**$211,700.00**
e. Insurance Consultant	
Risk Management / Insurance Consultant	**$18,500.00**
f. Surveys & Tests	
Topographical / Site Survey	$17,000.00
Geotechnical Testing	$30,000.00
Subtotal Surveys & Tests	**$47,000.00**
g. Permit/Impact/Environmental Fees	**$ 3,000.00**
h. Art in State Building (Section 255.043, F.S.),	**$ 100,000.00**
i. Movable Furniture & Equipment	**$2,345,800.00**
j. OIT – Equipment (Voice, Data, Video)	**$150,000.00**
j. Project Contingency	
(5.5 % x Project Cost Sub-Total Above)	**$1,540,600.00**
TOTAL OTHER PROJECT COSTS	**$6,477,600.00**
TOTAL PROJECT BUDGET COST ESTIMATE	**$ 35,800,000.00**

Appendix A

Campus Master Plan
AD Henderson School & FAU High School

Zyscovich Architects
March – 2019

FAU

Campus Master Plan

AD HENDERSON SCHOOL / FAU HIGH SCHOOL

March 2019

ZYSCOVICH
ARCHITECTS

Table of Contents

introduction

1

1.0
Campus Master Plan

Florida Atlantic University Schools has developed a new Campus Master Plan through a collaborative process based on the core beliefs and mission of the schools to continue to deliver rigorous academic standards, to provide a wide range of learning opportunities in the arts, sciences and athletics, and to develop diverse leaders committed to becoming life-long learners and citizens of the world. In partnership with the Florida Atlantic University College of Education, the Schools serve as a model for the nation in K-12 education. These partners remain committed to research, innovate, develop and implement new teaching and learning methodologies of the future.

The master planning process included an assessment of the current and future needs of the School, an analysis of the existing facilities and site constraints, including the requirements of its University partner to shape the transformative direction of campus improvements and guide the evolution of the campus. The master plan presented herein includes enhanced safety and security measures, new flexible 21st century learning spaces for the elementary and middle school grades, multi-disciplinary learning laboratories, an outdoor living laboratory with the Everglades Restoration Lab, a STEM Robotics Center, a new Center for the Visual and Performing Arts, and a new Athletic Complex.

1.1
Purpose: Planning for Smart Growth

A competitive educational market, superior academics, an increasing emphasis on a well-rounded student life, and a growing appreciation of the importance of extracurricular engagement are the driving factors for the campus replacement and expansion. The modern campus is one which accommodates expanded arts and research programs, diverse engineering options, increased student health and wellness, and a School's ability to adapt to the rapidly changing nature of the sciences and technology. In initiating this master plan process, Florida Atlantic University and the School recognize that the right campus setting will foster lifelong learners who are successful and responsible citizens in a global society. The old pedagogic paradigm of the "standard stand and deliver lectures" has changed to that of the "open and engaged" campus, where academic work is actively connected to the outside world, culture, the arts and the sciences.

The Developmental Research School at Florida Atlantic University seeks to develop a facility to bring young people together to accelerate industry driven STEM skills, to share innovative co-working spaces, and to capitalize on their K-12 and University partnership dedicated to the ideals of innovation, technology, research, and discovery, as well as to preserve and elevate the School's role as a leader in K-12 education and increase its landmark research and impact.

1.2
How the Plan was Developed:

The process of the master plan began with the engagement of the Florida Atlantic University School community. The formation of the master planning committee included the School's administration, division directors, senior staff and the University Facilities / Planning Department. A series of meetings and interviews provided input to enable recommendations for the committee's review, selection and direction.

Early in the process, the School and the planning team observed a number of significant and unique challenges facing the campus, including a shortage of indoor dining seating, the lack of a gymnasium to support the athletics and sports program, the need for an indoor gathering space for school-wide assemblies and performances including areas for the sciences, robotics and competitions, and the need to determine a focus for campus improvements. This plan proposes developments to manage these challenges while creating dramatic opportunities to transform the experience of the campus and its surroundings. The adoption of a comprehensive master plan for the campus will:

- Ensure that the physical campus evolves to meet the academic mission of the School;
- Create a framework for strategic development decisions;
- Preserve the unique character, beauty and defining elements of the campus;
- Plan for and manage anticipated growth in a way that ensures optimal development;
- Provide a planning structure for capital projects that will enhance efficiency in timing and cost; and
- Establish an improved basis for community relations that will benefit both the School, the University and its neighbors.

A thoughtful campus design plan should express and embody an institution's defining values. For FAU AD Henderson University School and FAU High School, the campus must reinforce its commitment to be simultaneously an outstanding institution and an innovative environment to support emerging educational research.

context

2

"Know from whence you came. If you know whence you came, there are absolutely no limitations to where you can go."

- James Arthur Baldwin

2.1
Brief History of School:

Alexander D. Henderson University School is a public elementary and middle school on the campus of Florida Atlantic University in Boca Raton. Students are accepted to AD Henderson as part of a lottery selection process to fulfill a representative mix of different student characteristics to match the school's student demographic profile as provided each year by the state. Founded over 50 years ago as a Development and Research School, AD Henderson provided the foundation for research and discovery in the field of education in partnership with the University. Today, that foundation is consistently built upon and improved by teachers, parents, and students. In 1966, Florida Atlantic University broke ground to construct the new development and research School with a gift of $750,000 by Lucy E. Henderson in memory of her late husband, Alexander D. Henderson. The original facility consisted of classrooms, a cafetorium, kitchen, and a library. In 2003, the school expanded the number of classes per grade to increase its capacity by 132 students. In 2004, Florida Atlantic University launched FAU High School with seven students to further connect students to the collegiate experience. AD Henderson and FAU High School are not part of a public school district but rather are a public laboratory school under the auspices of the State University System.

A. D. Henderson University School was recognized by the Florida Department of Education as a Blue Ribbon School of Excellence in 2004 and 2018, and, in 2008, FAU High School was highlighted in the "America's Best High Schools" feature by U.S. News & World Report.

Understanding what is unique and authentic about a school and its community is the first and most important step of the master planning process. This phase included a series of meetings and interviews with select members of the AD Henderson and FAU High School community.

2.2
Mission + Vision:

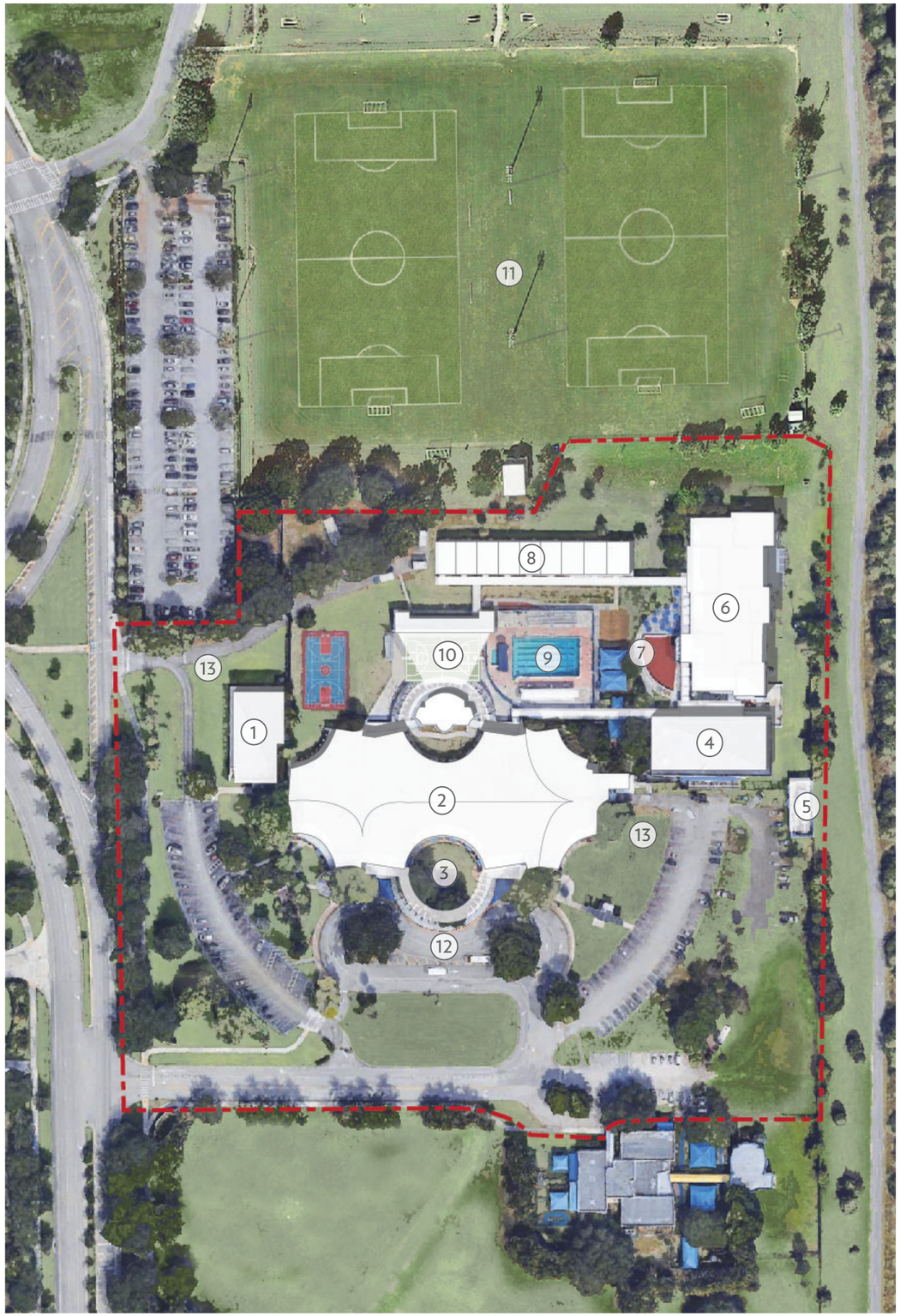
Mission:
AD Henderson University School and FAU High School endeavor to: (1) provide students a challenging curriculum, balanced with innovative academic support; (2) demonstrate best practices for university teacher education; (3) innovate, develop and disseminate curricula; and (4) conduct and support emerging educational research, currently focused on developing best practices for improving the transition from high school to the university, through high school reforms.

Vision:
A.D. Henderson University School and FAU High School are national exemplary models for school systems and teacher preparation programs improving education for diverse student populations through innovative, faculty-developed research and curriculum.

2.3
Existing Campus Site

1. Existing Media Center
2. Existing Main Campus Building (Elementary Classroom & Cafeteria)
3. K-2nd Grade Exterior Playground
4. Middle School Classroom Building
5. Existing High School Chiller Plant
6. Existing High School Classroom / Lab Building
7. Exterior Play Area
8. Existing Middle School Temporary Classrooms
9. Existing Pool
10. Existing PE Shelter
11. Existing Shared Play Fields (with University)
12. Existing Parking / Drop Off Drive
13. Existing Service Drive / Yard

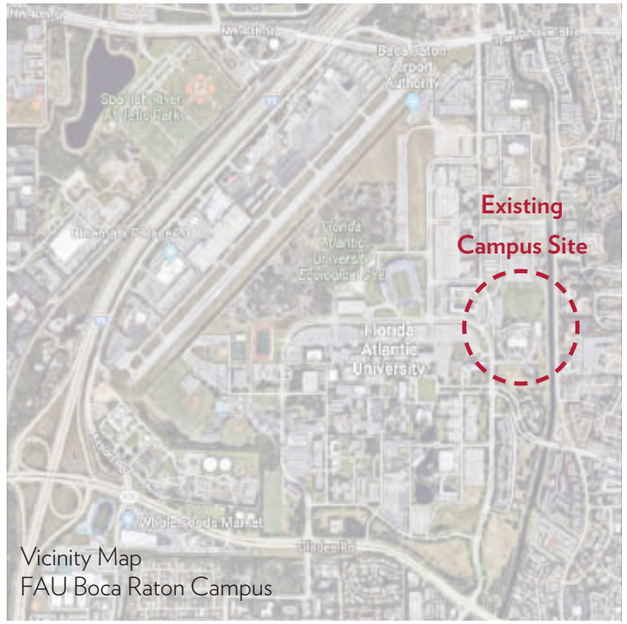
Vicinity Map/ FAU Campus



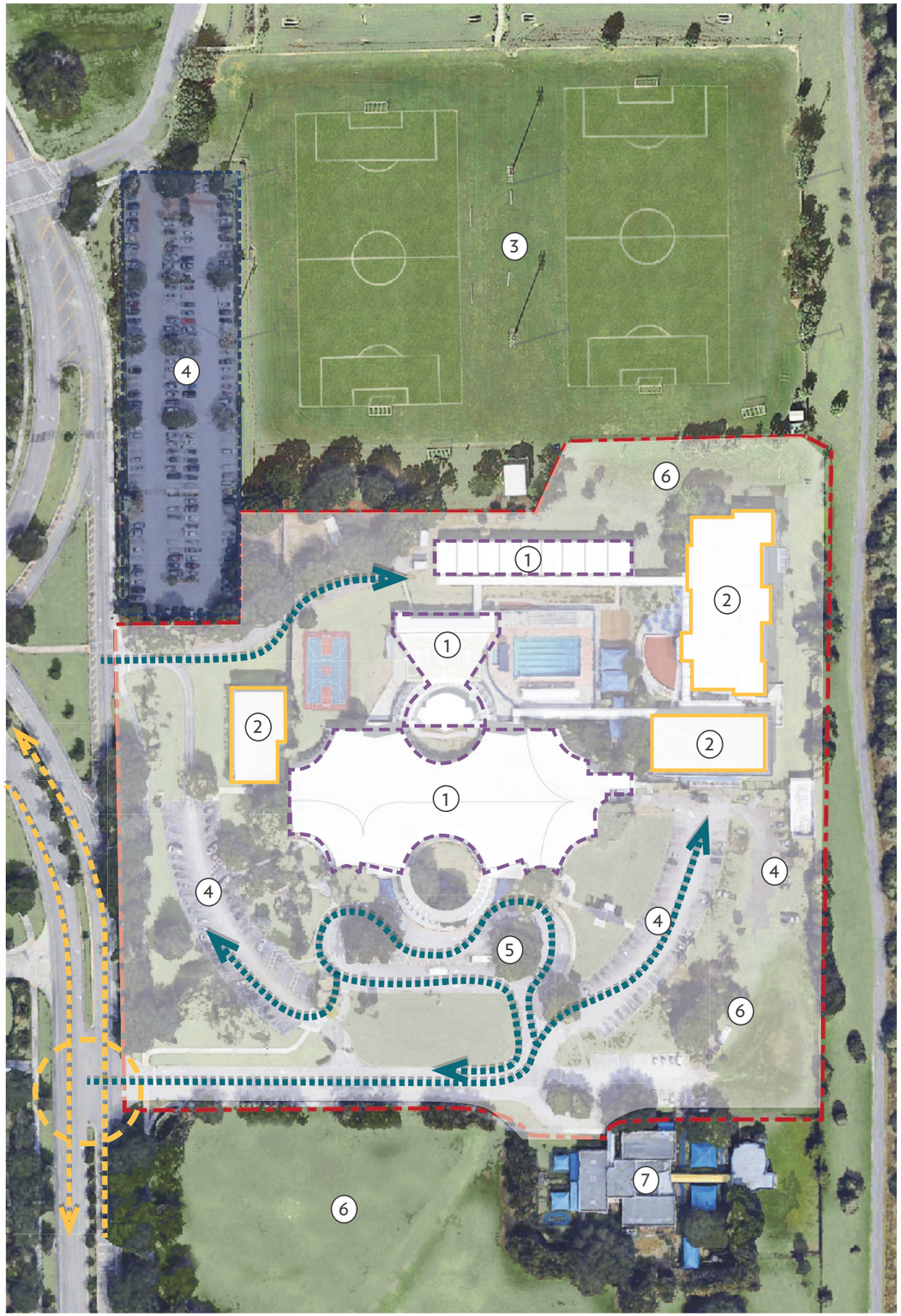
2.4
Existing Site Constraints

1. Existing Buildings to be demolished
2. Existing Buildings to remain
3. Existing Fields
4. University Parking
5. Parent Drop Off
6. Retention Area
7. Slattery Child Center

- Security is Difficult to Maintain / Porous Site
- Campus within a Campus
- Tight Occupied Site / Shared with University Fields
- Integration of Existing Buildings to Remain
- Existing Buildings to Remain (per Castaldi)
- Connectivity to University / College of Education
- Vehicular Access (All Traffic through the University)
- Queueing is Limited and Difficult to Supervise
- Parking is Limited
- Storm Water Retention Restriction at South
- Facility to Remain Operational During Re-Development



Vicinity Map
FAU Boca Raton Campus



vision

3

3.1
Visioning Summary

The visioning process for the campus began with identifying the needs and unique aspects of the School, recognizing its mission and aligning them with a direction for its development. The vision was then borne out of collaboration with the School community to create a single unifying goal. When visioning 21st century spaces for learning and a developing campus, the spaces created need to:

- Be **Flexible** to accommodate current and evolving pedagogies;
- Provide opportunities for **Student Discovery and Interaction;**
- Be **Future-Proofed** to enable space to be re-configured;
- Be **Bold** to look beyond tried and tested technologies.
- Provide opportunities for **Engagement & Collaboration;**
- Be **Creative** to energize and inspire learners and tutors;
- Be **Supportive** to develop the potential of all learners; and

This master plan provides FAU AD Henderson University School and FAU High School with a powerful vision for the physical development of the campus while strengthening the School's reputation as a center of academic excellence in an increasingly competitive college preparatory environment. The outlined new facilities will be critical in facilitating student led research, engineering and development beyond the classroom. The proposed facilities will equip faculty and students to have a positive impact on the future for years to come.

The facility is planned to include:

Studio Classrooms: New classrooms / studios will be spacious, flexible, and equipped with the latest educational resources and technology. They will be designed to stoke and cultivate the imagination of all students; spaces where discovery through hands-on learning is our research-based process that provides students an opportunity to see their ideas come to life.

Multidisciplinary Teaching Laboratories (MTLs): MTLs will provide a setting where students and faculty can observe, practice, explore, and solve problems as they gain mastery through hands-on use of research tools and techniques. Laboratory experiences will enable multi-disciplinary partnerships and translational research opportunities. They will provide students with both fundamental understanding and hands-on experience in using state-of-the-art methodologies and equipment.

Genomic and Computational Laboratory: New student research facilities will enable the uncovering of novel approaches to understanding and exploring new discoveries and methods of treating the genetic causes of diseases. This lab space will provide a hub for an interdisciplinary team of student and faculty mathematicians, biologists, and computer scientists who will seek to develop mathematical approaches to interpret and understand complex biological data sets.

STEM / Robotics Lab and Arena: These new spaces will provide a venue in which student scientists can participate, create and host competitions including First Lego League, First Tech Challenge robotics, hydrogen-propelled cars, Science Olympiad, National High School Drone competitions, SEAPERCH, and MATE, enhancing the already rich tradition of excellence in robotics at the School. The new STEM Arena will be developed as a shared resource with the athletic programs.

Athletic Complex: These facilities will also continue to grow athletic programs that compete at the highest level. A new Gymnasium / STEM Arena will house a regulation-sized basketball and volleyball courts, seating for spectators, boys' and girls' home and away locker rooms, a hall-of-fame lobby, restrooms, and storage space. Exterior amenities will include exterior hardcourts, interactive play and exercise areas, and replacement of the competition, learn-to-swim and robotics pool.

Center for Visual and Performing Arts: The new Center for the Visual and Performing Arts will be a state-of-the-art facility for performing arts, lectures, film, and special events. It will provide a combination interactive lobby and art gallery, a +/- 700 seat assembly and performance auditorium, classroom studios, and a Digital Media Production Lab. The building will serve to inspire the imagination as ideas come to life through storytelling in a variety of conventional and non-conventional media such as animatronics, spatial augmented reality, and 3D printing in the digital arts.

Everglades Restoration Laboratory: This new exterior laboratory environment will be a premier research facility that will bring together students, faculty, scientists, engineers, and environmental managers to explore restoration solutions. This outdoor research, teaching, and training laboratory will provide opportunities to explore Avian Ecology, Plant Ecology, Population and Conservation Genetics, Environmental Geophysics, and Biogeography to solve problems such as clean water, red tide and watershed ecosystem restoration.

3.2
Campus Program

SPACES	LEVEL	DESCRIPTION	SF / STUDENT	UNIT SF	TOTAL SF	STUDENTS / UNIT	TOTAL STUDENTS
ELEMENTARY / LOWER SCHOOL							
	K-3	**PRIMARY CLASSROOMS**					
16		Classrooms	46	828	13,248	18	288
16		General Storage (OS)		25	400	-	-
16		Student Toilet		45	720	-	-
4		Teacher Workroom		100	400	-	-
16		**SUBTOTAL**			**14,768**		**288**
	4-5	**INTERMEDIATE CLASSROOMS**					
9		Classroom	38	836	7,524	22	198
9		Student Toilet - Male		45	405	-	-
9		Student Toilet - Female		45	405	-	-
2		Teacher Workroom		100	200	-	-
9		**SUBTOTAL**			**8,534**		**198**
	K-3	**SKILLS LAB CLASSROOM**					
1		Classroom	46	828	828	18	18
1		General Storage (IS)		-	-	-	-
1		Student Storage		100	100	-	-
1		Student Toilet		45	45	-	-
1		**SUBTOTAL**			**973**		**18**
	4-5	**SKILLS LAB CLASSROOM**					
1		Classroom	38	836	836	22	22
1		General Storage (IS)		-	-	-	-
1		Student Storage		-	-	-	-
1		Student Toilet		45	45	-	-
1		**SUBTOTAL**			**881**		**22**
		NON-CORE CURRICULUM					
2	K-5	Resource Room	29	290	580	10	20
1		General Storage		100	100	-	-
1	K-5	Art Room		1,000	1,000	30	30
1		General Storage		100	100	-	-
1		Project Storage		150	150	-	-
1	K-5	Music Room		1,000	1,000	-	-
1		Reference		100	100	-	-
1		General Storage		100	100	-	-
1		Practice Rooms		70	70	-	-
1		ESE Itinerant	50	200	200	4	4
1		ESE Resource Room	95	475	475	5	5
1		General Storage		100	100	-	
2		Staff Resrooms-M		45	90		
2		Staff Restrooms-F		45	90		
1		Public Restroom-M/F		45	45		
		SUBTOTAL			4,200		59
	NPK-12	**FOOD SERVICE**					
1		Dining Area	15	7,500	7,500	**500**	-
1		Kitchen and Serving Area	35	3,500	3,500	100	-
1		Platform/Stage		990	990		
2		Changing Rooms (M/F)		250	500		
1		Control Room		125	125		
1		Chair Storage	4	400	400	100	-
1		Covered Patio	15	1,250	1,250	50	-
1		Auxiliary Spaces / Storage	0	600	600	-	-
		SUBTOTAL			14,865		-

SPACES	LEVEL	DESCRIPTION	SF / STUDENT	UNIT SF	TOTAL SF	STUDENTS / UNIT	TOTAL STUDENTS
	NPK-12	**ADMINISTRATION**					
1		Principal	-	250	250	-	-
3		Assistant Principal		175	525	-	-
3		Secretary Space		125	375	-	-
1		Bookeeping Office		125	125	-	-
1		Reception Area	10	440	440	44	-
2		Resource Officer Office		125	250		
2		Production Workroom	5	220	440	44	-
2		Conference Room	7	308	616	44	-
1		Clinic	6	264	264	44	-
1		Nurse Office		120	120		
1		Speech LanguageOffice		120	120		
1		School Psychologist Office		120	120		
2		Administrative Storage	5	220	440	44	-
1		Student Records	4	176	176	44	-
1		Computer Area	3	132	132	44	-
1		Teacher Planning	20	1,760	1,760	88	-
1		Teacher Lounge	4	352	352	88	-
1		ESE Coordinator	0	150	150	-	-
3		ESE Teacher Office		120	360		
6		ESE Itinerant Office		120	720		
1		Testing Coordinator Office		120	120		
2		Instructional Coach Office		120	240		
2		Technology Coordinator Office		120	240		
1		Record Storage		100	100	-	-
1		Parent Consultation		100	100	-	-
1		Office of the Superintendent of Schools (w/ Conf.)		275	275		
1		Secretary Office for Superintendent of Schools		125	125		
1		Director Office (Policy + Advocacy)		200	200		
4		Director Offices (Business Analyst, etc.)		200	800		
6		Itinerant Offices (Grants Coord. Etc.)		150	900		
1		Reception		250	250		
3		Secretary Space		100	300		
1		Records		100	100		
1		Production Workroom		200	200		
1		Conference Room		400	400		
4		Guidance Office		125	500		
1		Community Liason (Title 1)		125	125		
		SUBTOTAL			12,710		-
	NPK-12	**CUSTODIAL**					
1		Custodial Receiving	3	264	264	88	-
1		Work Area		200	200	-	-
1		Flammable Storage		155	155	-	-
1		Equipment Storage		300	300	-	-
		SUBTOTAL			919		-
	NPK-12	**TEXTBOOK STORAGE**					
1		Textbook Storage	4	176	176	44	-
		SUBTOTAL			176		-
		SUBTOTAL NET			**58,026**		
		MEP SF SUBTOTAL (6%)			**3,482**		
		TOTAL NET SF			**61,508**		
		Walls, Circ, etc. @27%			**16,607**		
		TOTAL GROSS SF			**78,115**		
		TOTAL STUDENT STATIONS					**585**

3.2
Campus Program, Cont'd.

SPACES	LEVEL	DESCRIPTION	SF / STUDENT	UNIT SF	TOTAL SF	STUDENTS / UNIT	TOTAL STUDENTS
MIDDLE SCHOOL							
	6-8	**CLASSROOMS**					
9		Classroom	38	836	7,524	22	198
3		Teacher Workroom		100	300	-	-
		SUBTOTAL			**7,824**		**198**
	6-8	**SKILLS LAB CLASSROOM**					
1		Classroom	38	836	836	22	22
		SUBTOTAL			**836**		**22**
	6-8	**ESE CLASSROOM**					
1		Classroom	38	570	570	15	15
		SUBTOTAL			**570**		**15**
	6-12	**SHARED MUSIC CLASSROOM**					
1		Classroom (Vocal)	57	1,425	1,425	25	25
1		Reference		100	100	-	-
1		General Storage		100	100	-	-
1		Practice Rooms		70	70	-	-
1		Large Equipment Storage		400	200	-	-
		SUBTOTAL			**1,895**		**25**
	6-8	**SCIENCE LAB**					
3		Lab	51	1,122	3,366	22	66
0		Classroom	37	814	-	22	-
3		General Storage (IS)		100	300	-	-
3		Project Storage		150	450	-	-
		SUBTOTAL			**4,116**		**66**
		NON-CORE CURRICULUM					
1	6-8	Resource Room	29	290	290	10	10
1		General Storage		100	100	-	-
1	6-8	Art Room	42	1,260	1,260	30	30
1		General Storage		100	100	-	-
1		Project Storage		150	150	-	-
1	6-8	Student Restroom (Group) - M		192	192		
1	6-8	Student Restroom (Group) - F		192	192		
2		Staff Resrooms-M		65	130		
2		Staff Restrooms-F		65	130		
		SUBTOTAL			**2,544**		**40**
	6-12	**STUDENT PERSONAL STORAGE**					
1		Personal Storage	5	360	360	72	-
		SUBTOTAL			**360**		**-**
		SUBTOTAL NET			**18,145**		
		MEP SF SUBTOTAL (6%)			**1,089**		
		TOTAL NET SF			**19,234**		
		Walls, Circ, etc. @32%			**6,539**		
		TOTAL GROSS SF			**25,773**		
		TOTAL STUDENT STATIONS					**366**

SPACES	LEVEL	DESCRIPTION	SF / STUDENT	UNIT SF	TOTAL SF	STUDENTS / UNIT	TOTAL STUDENTS
HIGH / UPPER SCHOOL							
	9-12	**CLASSROOMS**					
10		Classroom	30	750	7,500	25	250
1		Teacher Workroom		100	100	-	-
		SUBTOTAL			**7,600**		**250**
	9-12	**SKILLS LAB**					
1		Classroom	40	1,000	1,000	25	25
		SUBTOTAL			**1,000**		**25**
	9-12	**SCIENCE LAB (DUAL-USE)**					
1		Lab	70	1,300	1,300	22	22
		SUBTOTAL			**1,300**		**22**
		NON-CORE CURRICULUM					
1	9-12	Resource Room	29	290	290	10	10
1		General Storage		100	100	-	-
1	9-12	Student Restroom (Group) - M		255	255		
1	9-12	Student Restroom (Group) - F		255	255		
2		Staff Resrooms-M		65	130		
2		Staff Restrooms-F		65	130		
		SUBTOTAL			**1,160**		**10**
	10-12	**DUAL ENROLLED STUDENT AREA**					
1		Collaboration Area	0	2,600	2,600	-	-
		SUBTOTAL			**2,600**		-
		SUBTOTAL NET			**13,660**		
		MEP SF SUBTOTAL (6%)			**820**		
		TOTAL NET SF			**14,480**		
		Walls, Circ, etc. @34%			**4,923**		
		TOTAL GROSS SF			**19,403**		
		TOTAL STUDENT STATIONS					**307**

3.2
Campus Program, Cont'd.

SHARED SPACE ALLOCATION

SPACES	LEVEL	DESCRIPTION	SF / STUDENT	UNIT SF	TOTAL SF	STUDENTS / UNIT	TOTAL STUDENTS
	6-12	**PHYSICAL EDUCATION**					
1		Dressing Room-M	25	625	625	25	-
1		Dressing Room-F	25	625	625	25	-
2		Locker Room-M	10	250	500	25	-
2		Locker Room-F	10	250	500	25	-
2		Showers-M	10	250	500	25	-
2		Showers-F	10	250	500	25	-
2		Restrooms-M	10	250	500	25	-
2		Restrooms-F	10	250	500	25	-
2		Drying Room-M	10	250	500	25	-
2		Drying Room-F	10	250	500	25	-
2		Storage	15	375	750	25	-
1		Teacher Shower-M	0	22	22	-	-
1		Teacher Shower-F	0	22	22	-	-
1		Multi-purpose Instruction	0	800	800	-	-
1		Gymnasium	0	6,500	6,500	-	-
1		Seating	7	5,600	5,600	800	-
1		Laundry	2	50	50	25	-
1		Towels	2	50	50	25	-
1		Training Room		250	250	-	-
1		Weight Room		1,000	1,000	-	-
1		Multipurpose/Wrestling Room		1,680	1,680	-	-
1		Gymnastics/Dance		1,050	1,050	-	-
2		Office		100	200	-	-
1		Gym Storage	15	375	375	25	-
1		Lobby/Hall of Fame		450	450		
		SUBTOTAL			24,049		-
		SUBTOTAL NET			24,049		
		MEP SF SUBTOTAL (6%)			1,443		
		TOTAL NET SF			25,492		
		Walls, Circ, etc. @34%			8,667		
		TOTAL GROSS SF			34,159		
		TOTAL STUDENT STATIONS					-

AUXILIARY SPACE ALLOCATION

SPACES	LEVEL	DESCRIPTION	SF / STUDENT	UNIT SF	TOTAL SF	STUDENTS / UNIT	TOTAL STUDENTS
	NPK-12	**AUDITORIUM**					
1		Seating	16	10,080	10,080	630	-
1		Stage	0	3,000	3,000	-	-
1		Storage	5	440	440	88	-
1		Dressing-M	5	125	125	25	-
1		Dressing-F	5	125	125	25	-
1		Control Booth	0	100	100	-	-
1		Lobby	10	440	440	44	-
1		Stagecraft		1,500	1,500		
1		Concessions	0	200	200	-	-
1		Ticket Booth	0	30	30	-	-
		SUBTOTAL			16,040		-
	NPK-12	**MEDIA CENTER**					
1		Reading Room Stacks	25	1,975	1,975	79	-
1		Tech Processing	4	316	316	79	-
1		AV/CCTV Stoage	4	316	316	79	-
1		Closed Circuit TV	7	553	553	79	-
1		CCTV Storage	3	237	237	79	-
1		Media Production Lab	3	237	237	79	-
1		Copying Room	2	158	158	79	-
1		Media Maintenance	2	80	80	40	-
		SUBTOTAL			3,872		-
		SUBTOTAL NET			19,912		
		MEP SF SUBTOTAL (6%)			1,195		
		TOTAL NET SF			21,107		
		Walls, Circ, etc. @34%			7,176		
		TOTAL GROSS SF			28,283		
		TOTAL STUDENT STATIONS					-

VOCATIONAL / TECHNICAL

	9-12	**STEM PROGRAM**					
1		0	100	2,200	2,200	22	22
1		Flammable Storage		300	300		
1		Project Storage		150	150	-	-
1		Storage		100	100	-	-
		SUBTOTAL			2,750		-
		NON-CORE CURRICULUM					
1	9-12	Student Restroom (Group) - M		120	120		
1	9-12	Student Restroom (Group) - F		120	120		
1		Staff Resrooms-M		65	65		
1		Staff Restrooms-F		65	65		
		SUBTOTAL			370		-
		SUBTOTAL NET			3,120		
		MEP SF SUBTOTAL (6%)			187		
		TOTAL NET SF			3,307		
		Walls, Circ, etc. @34%			1,124		
		TOTAL GROSS SF			4,432		
		TOTAL STUDENT STATIONS					-

SUMMARY

	TOTAL		STUDENT STATIONS
ELEMENTARY / LOWER SCHOOL	78,115	SF	585
MIDDLE SCHOOL	25,773	SF	366
HIGH / UPPER SCHOOL	19,403	SF	307
SHARED SPACE ALLOCATION	34,159	SF	-
AUXILIARY SPACE ALLOCATION	28,283	SF	-
VOCATIONAL / TECHNICAL	4,432	SF	-
Total	**190,164**	**SF**	**1,258**

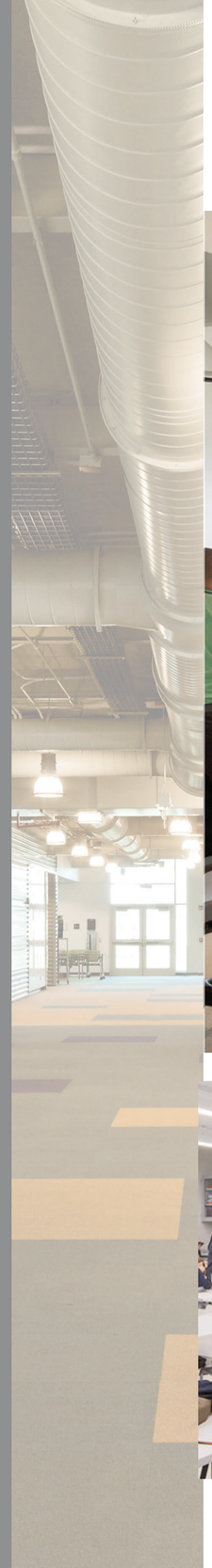
3.3
Classrooms / Studios

Elementary Studio

The kinds of skills students need to possess to be successful in the new millennium are rapidly evolving. A broader set of skills is required for a more complete understanding of the world in which we live and in the effort to create a better tomorrow. The Partnership for 21st Century Skills defines these skills as:

- Initiative and self-direction;
- Critical thinking and problem solving;
- Creativity and innovation;
- Communication and collaboration;
- Social and civic responsibility;
- Media, information, and technology literacies;
- Social and cross-cultural skills; and
- Life and career skills that support adaptability and leadership.

The 21st century classroom / studio brings new proficiencies to the forefront. Teachers will have the opportunity to connect learning more explicitly to the outside world. The learning environment will extend beyond the walls of the school building so that students can engage in real-life problem solving. Students will share what they know using a variety of electronic media and technology. Broadening the approach to learning will allow teachers to orient instruction toward engrossing hands-on, project-based, cross-departmental learning experiences. Flexible facilities with supporting furniture and technology are key elements to support this mission. Studios will have access to shared extended learning areas, as well as natural lighting. Technology rich environments, including studios, labs and presentation areas make it possible for students to invent, share and analyze the challenges and opportunities of tomorrow.



3.4
Multidisciplinary Teaching Labs

Multidisciplinary Teaching Laboratories (MTLs) will provide a setting where students can investigate, analyze, and reflect. They invent, test and apply theories to enable making abstract concepts concrete. MTL experiences are developed under the mentorship of research faculty and professors, both at the School and University level.

In these MTLs, the learning is “hands-on” and classes are designed to allow students to develop and practice a wide range of discipline-based techniques, along with personal and interpersonal skills. The labs will enable multi-disciplinary partnerships and research opportunities, allowing students’ imaginations to infuse the lab and lab findings to be realized.

MTLs accomplish all of this using state-of-the-art methodologies and equipment. The labs will allow for students to uncover the mechanisms behind important scientific principles while also providing opportunities for students to create and present research findings to peers and faculty through panel discussions and seminars. Flexibility will enable the spaces to meet the current and future demands and goals of education at the School.

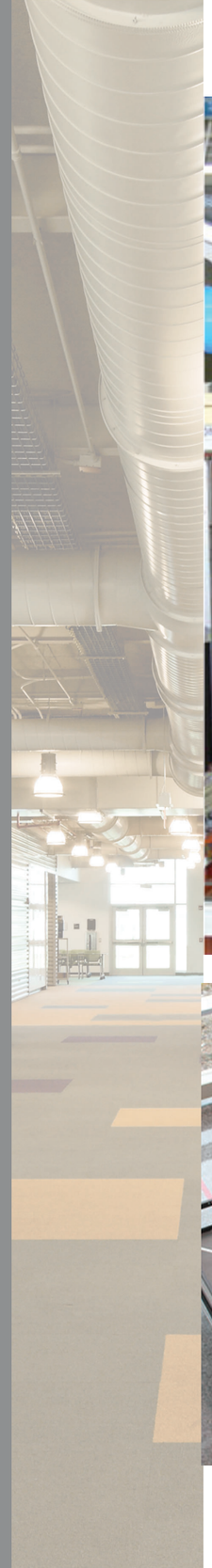
Discovery, science and creativity will be on display in all lab spaces to encourage all faculty and students by example.

3.5
Genomic and Computational Labs

Scientists are currently able to sequence genomes more quickly, accurately, and efficiently than ever. As genome sequencing becomes more routine, it also becomes more affordable, and the aim to transform genomic discoveries into novel treatments will be more easily accomplished. This new process, coupled with computational science, will provide innovative methods for solving data-intensive science challenges.

New student research facilities will enable the uncovering of novel approaches to understanding and exploring new discoveries and methods to treat the genetic causes of diseases. This lab space will provide a hub for an interdisciplinary team of student and faculty mathematicians, biologists, and computer scientists who will seek to develop mathematical approaches to interpret and understand complex biological data sets.

FAU's premier, research-intensive accelerated high school, driven by intellectual curiosity, will enable students to engage in a unique curriculum that will combine academic rigor and early research opportunities. Imaging and analysis will be a priority, given the importance of its role in the future of research. This facility will provide a springboard to these new discoveries in an environment that will foster discovery, invention and safety.



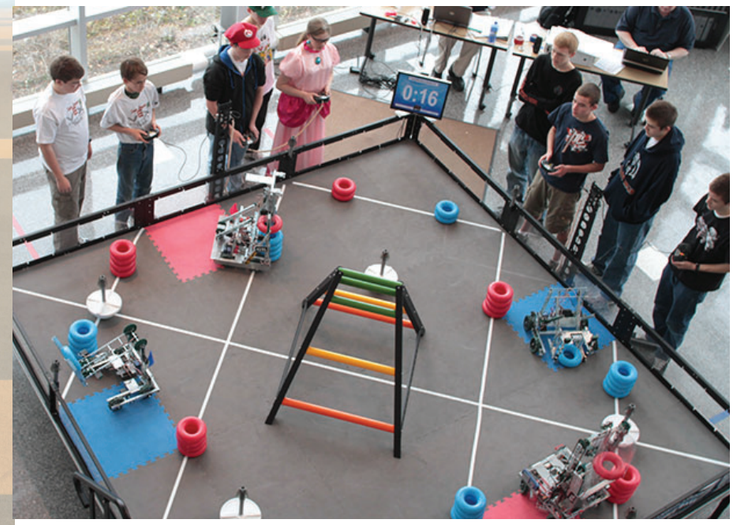
3.6
STEM Lab and Arena

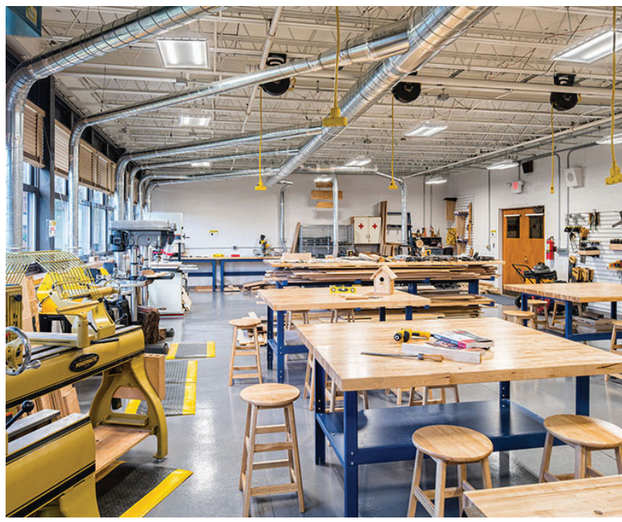
The greatest challenge to continuing the rich legacy of growth in science invention and competition for the Schools is the absence of a joint-use maker and competition space / gymnasium.

The master plan has adapted the existing media center facility into a new collaborative maker space, which will provide a venue in which faculty and student scientists are able to invent and create. The facility will be flexible to enable hosting of interactive competitions including First Lego League, First Tech Challenge robotics, hydrogen-propelled cars, Science Olympiad, National High School Drone competitions, SEAPERCH, and MATE meetings.

As funds become available, the final programming will be enabled to allow for student work areas, parts storage, project storage, collaborative meeting and invention rooms, work rooms, tool / work areas, printing areas and offices. Additionally, both the work area and competition space will enable large scale builds, such as the solar car, and large events, such as drone competitions, to be accommodated with both interior and exterior direct access.

The competition spaces, whether shared or independent, will facilitate the Schools in maintaining their leadership role in the region as a leader in robotics, invention and academic development.





3.7
Athletics Programs and Facilities

Teamwork, sportsmanship, tradition, dedication, self-esteem; these are all values fostered by the athletics program that stay with student-athletes for a lifetime. The fundamental purpose of the athletic program is: to encourage each student-athlete to appreciate the lifelong values of physical activity; to provide the opportunity to become experienced, skilled, and confident in any athletic arena; and, above all, to make the athletic experience rewarding and educational. The Schools offer a variety of options for students to challenge themselves and each other to improve and grow. Student-athletes create lifelong friendships and memories forged while developing an appreciation for health, fitness and sport.

As the limited site area has created the use of multipurpose amenities, the ability to hold simultaneous events is challenging, resulting in scheduling difficulties and extended practice days. The primary need for the athletics program is to create upgraded core facilities for physical education and additional spaces to facilitate the practices of multiple sports simultaneously on campus. The goal is to reduce the extended academic day to conclude extracurricular activities and enable faculty, coaches and students to have time for their studies and interaction with their families.

This gym will house a regulation-sized court, seating for spectators, boys' and girls' home and away locker rooms, a hall of fame lobby, restrooms, and storage space. In addition to supporting physical education and recreational and team sports activities, a new gym would become the one facility able to hold all members of the school community. The competition and "learn to swim" pool will be replaced, a core activity for both the school and camps.

3.8
Visual and Performing Arts Facilities

From the elementary through the middle school Visual and Performing Fine Arts Program, students are encouraged to explore the creative process. The goal of the Arts Department is to aid all students in developing confidence as they express themselves through a variety of art forms. Through core and extra-curricular activities, students may choose to become involved with theater productions—both on stage and behind the scenes, to join one of several singing groups, to be part of a dance team, or to be part of the band or smaller instrumental ensembles. Concerts, plays, and shows are the obvious manifestations of their work. It is through this rich process that all students find their voice and come to know the challenges and joys of the creative process.

Facilities for the arts programs enable students to have venues for creating, developing and displaying their talents. A new Visual and Performing Arts Center will facilitate whole divisions to gather for performances, lectures and celebration as a community of learners. A new gathering space will also relieve some of the scheduling conflicts with the other multipurpose assembly spaces on campus. The arts programs also create content to engage the surrounding community and University with plays, musicals, concerts, exhibits and shared teaching opportunities.

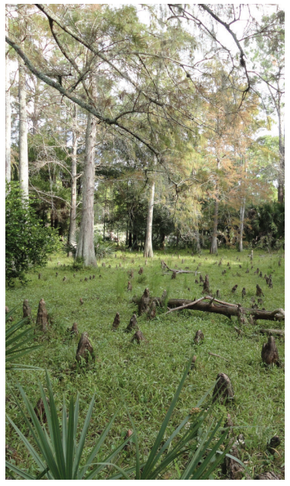
3.9
Everglades Restoration Outdoor Lab

The outdoor Everglades Restoration Laboratory will develop scientifically-based approaches for restoring the "River of Grass," one of our nation's national treasures. These critical discoveries can only be made when we understand the underlying physical, biological, and chemical mechanisms that govern watershed processes and their response to natural and human disturbances. The Everglades Restoration Lab will be a premier research facility that will bring together students, faculty, scientists, engineers, and environmental managers to explore restoration solutions in a hands-on environment to enhance water quality, to restore environmental habitats, and to address current challenges such as salt water infiltration and red tide.

This outdoor research, teaching, and training laboratory will provide opportunities to explore Avian Ecology, Plant Ecology, Population and Conservation Genetics, Environmental Geophysics, and Biogeography. Research outcomes will create generations of better stewards of the Earth's resources.

The design will employ a variety of solar devices, kinetic displays, rainwater collection systems, aquaria, exterior touch tanks, and native habitats that will be the centerpiece of teaching and learning outreach to area schools and the entire community.

A number of naming opportunities and sponsorships are available and contributions to "Let's Build This Together" will ensure that we can create a lab space that allows for community education of the national treasure that is the Everglades.



the campus master plan

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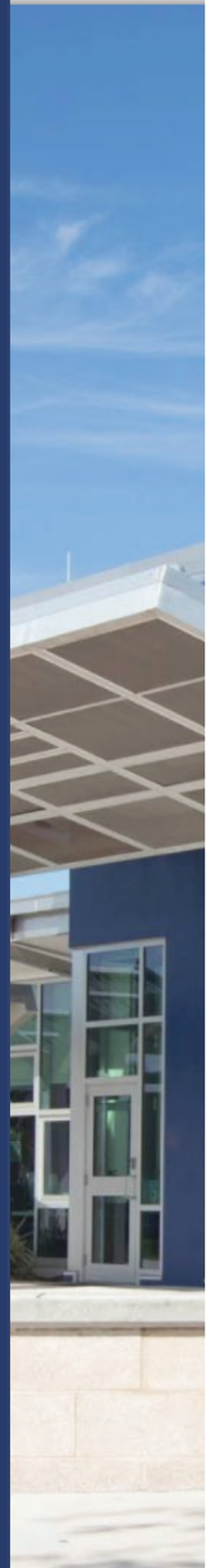


4.1
Master Plan Summary

A Master Plan is intended to be created from and to reinforce the identity of the institution it supports, based on a long term vision of what the campus can become, how it might look and feel in the future, and how it can promote sustainable growth. This campus master plan begins with seven fundamental principles and an overview of the essential features of the plan. The master plan then looks at the campus from different perspectives, recognizing that each functional layer is connected to every other layer. The framework established by the master plan will help ensure the principles and essential features of the School are supported as the campus grows and evolves. The master plan will support the academic mission of the school, promote stewardship, enhance the campus experience, reinforce community, and ensure integrative planning and design.

The Seven Guiding Principles:

- Create and maintain a campus identity through planning and architectural language;
- Enhance security and safety for all students, faculty and visitors to create a safe learning environment;
- Maintain pedestrian safety while addressing parking, drop-off, pick-up, and service access conditions;
- Promote campus “neighborhoods” while fostering a sense of community;
- Build in a socially, educationally and environmentally responsible manner;
- Sustain strong community relations with surrounding neighbors and partners; and
- Optimize efficiency and density without losing open space.

4.2
Campus Site Analysis

1. New Gymnatorium/ Tech Arena 23,673 sf
2. Remodel Tech Garage 4,432 sf
3. Admin/Science/Media
4. Cafetorium 105,135 sf
5. K-8 Classrooms
6. Renovate High School 16,420 sf
7. Renovate Athletic Lockers 8,100 sf
8. Central Plant
9. New Auditorium 22,783 sf

Parking & Queue

Parking:

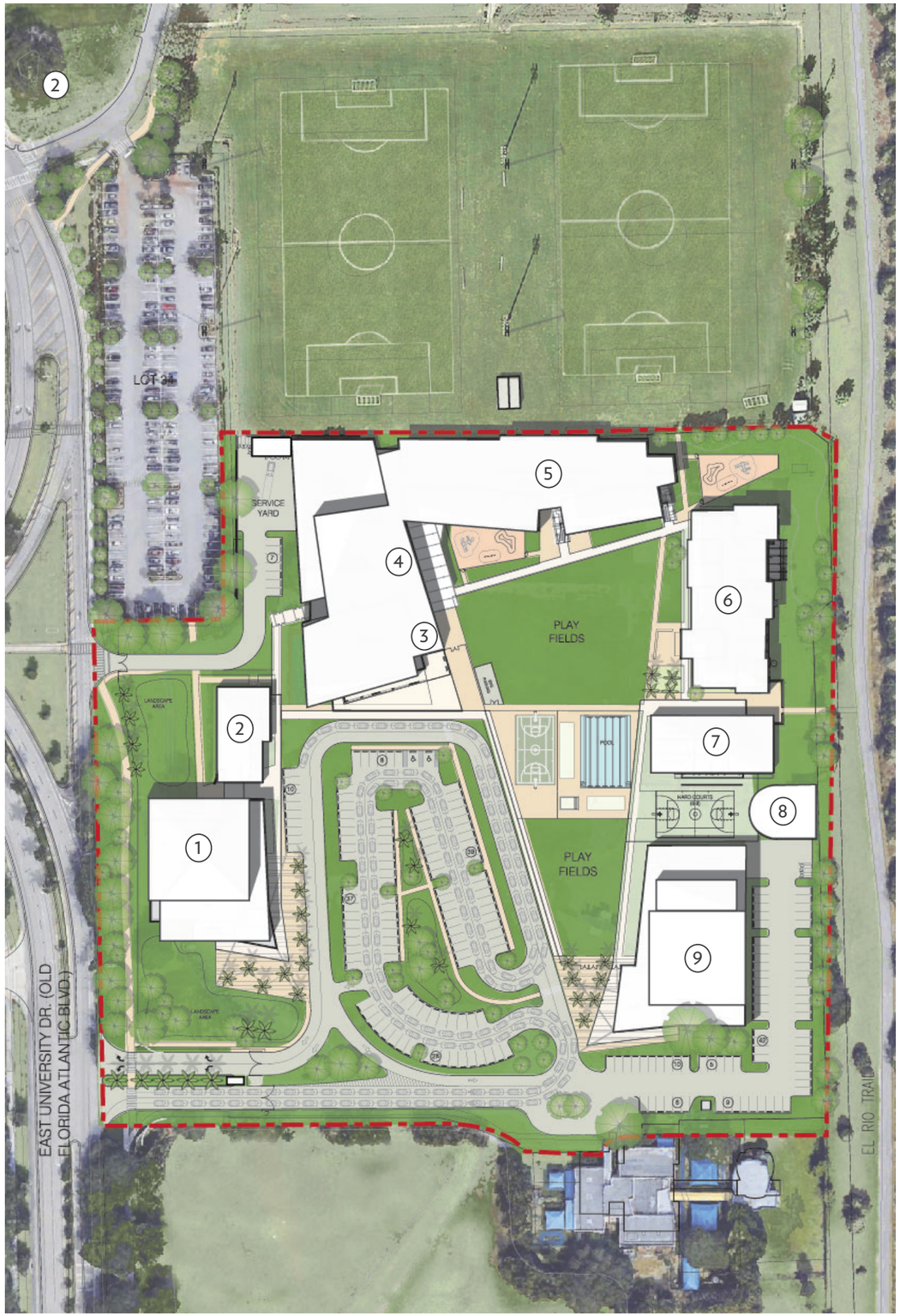
Existing: 100 Spaces

Proposed: 160 Spaces

Queue Drop-Off / Pick Up

Existing: 1,400 lf (70 Cars)

Proposed: 3,400 lf (170 Cars)

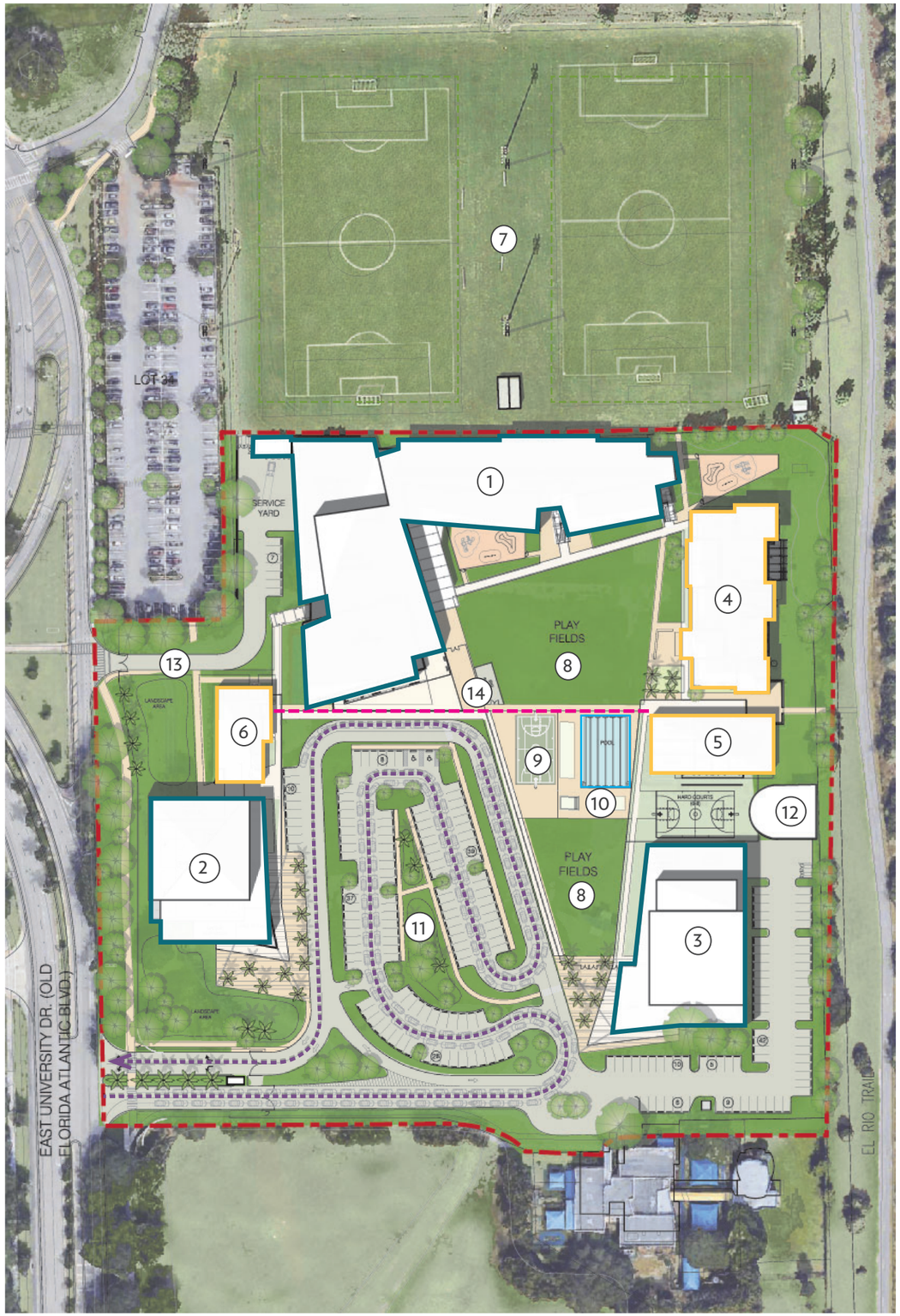


4.3
New Campus Master Plan

- Create a **Secure Entrance and Boundary** for the Campus
- Provide for a new **Compact K-8 Facility**
- Enable a new Face for the School to be Created
- Create a **Secure Central Court**
- Create a **Connected Campus**
- **Enhance the Queue** and Drop-Off
- Move Traffic out of the University Loop
- Reduce Phasing Impact to the School and University
- Minimize Impact to the **Shared Play Fields**
- Create a Campus within a Campus
- Integrate the Existing Buildings to Remain
- Connectivity to University / College of Education
- **Separate Vehicular Access** for Service

Legend

1. K-8 School
2. New Gymnasium / STEM Arena
3. Auditorium
4. High School
5. Locker Rooms
6. Tech Garage
7. Fields
8. Play Fields
9. Courts
10. Pool
11. Parent Drop-Off
12. Central Plant
13. Service Entrance

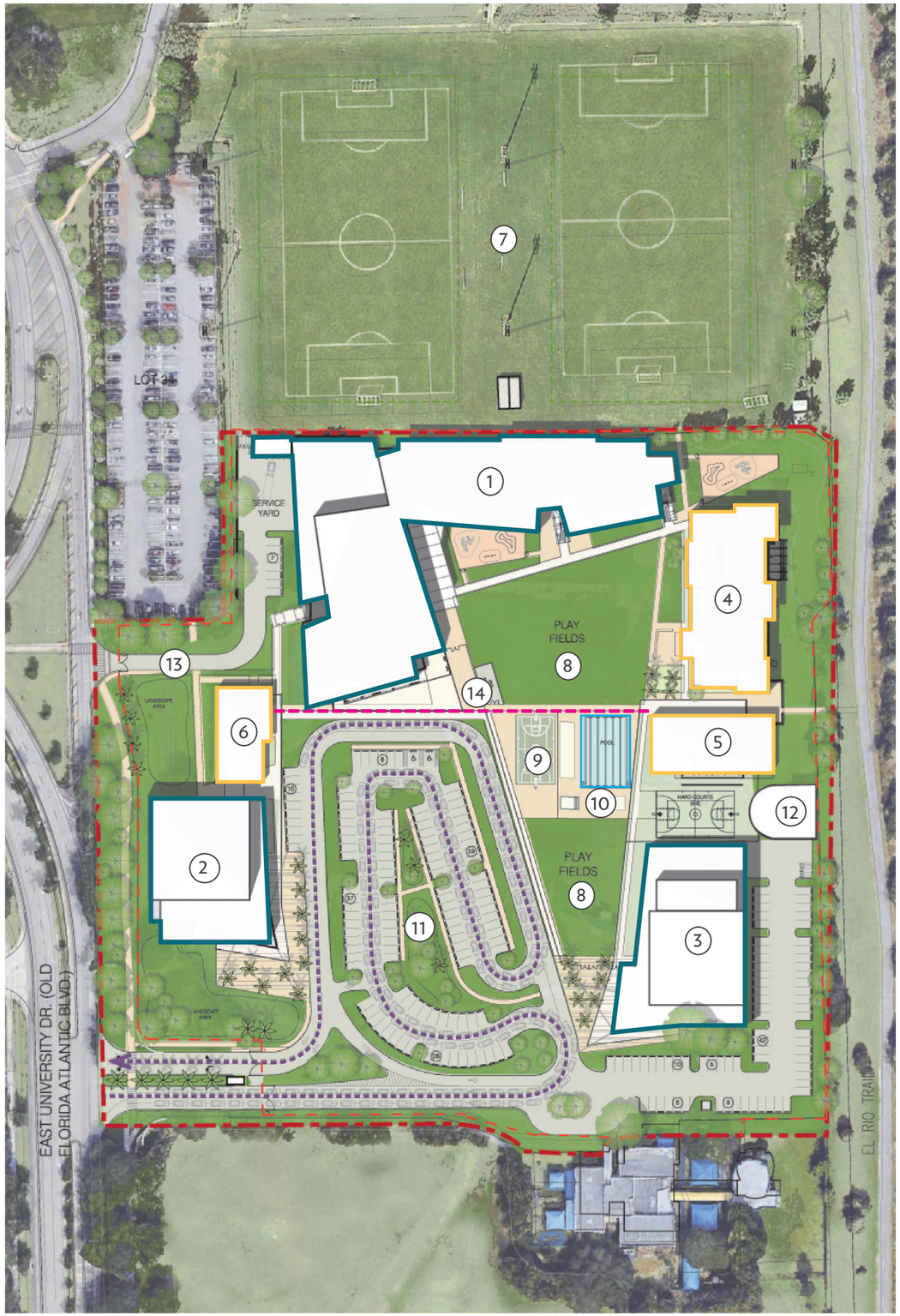


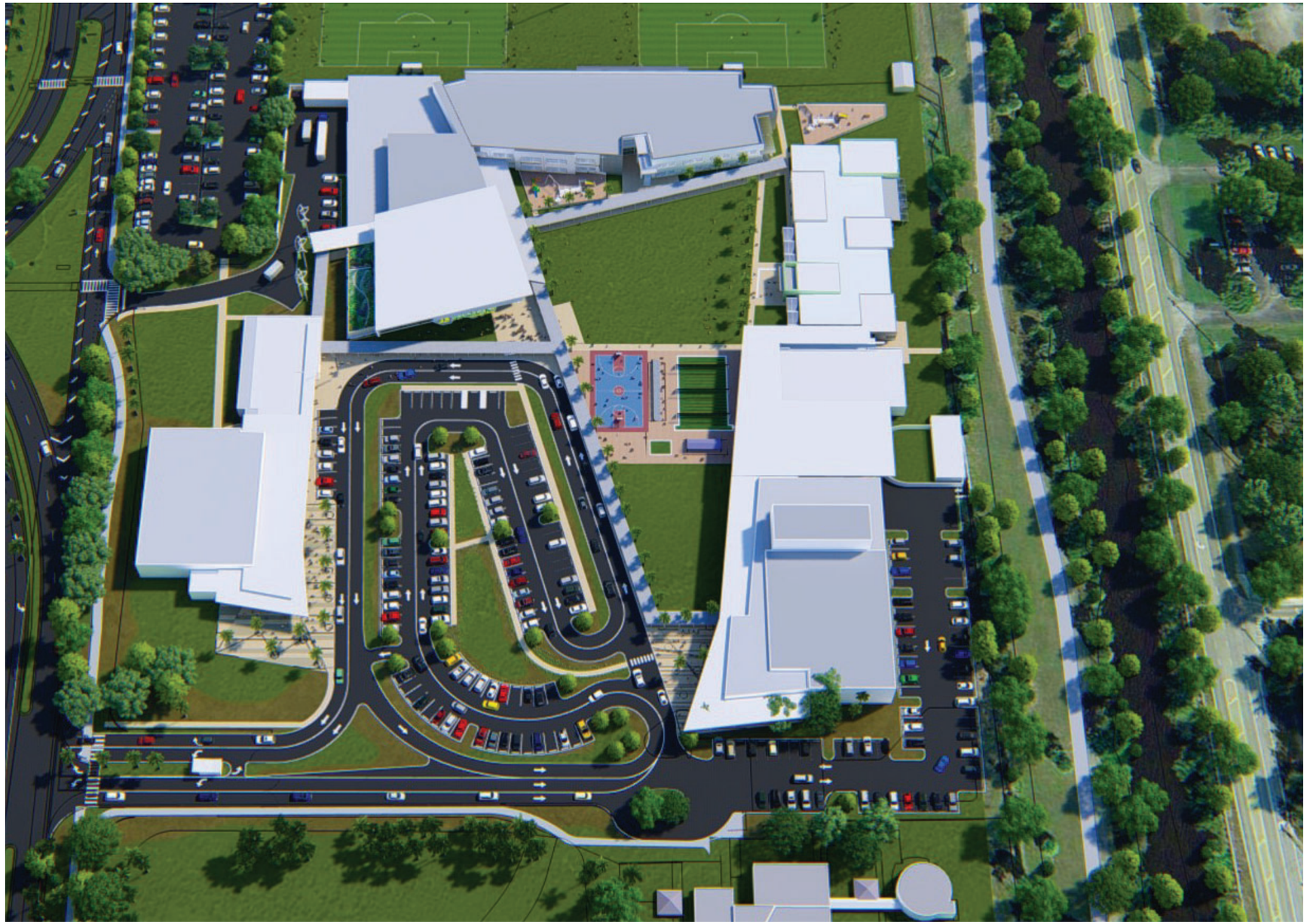
4.3
New Campus Master Plan

- Create a **Secure Entrance and Boundary** for the Campus
- Provide for a new **Compact K-8 Facility**
- Enable a new Face for the School to be Created
- Create a **Secure Central Court**
- Create a **Connected Campus**
- **Increase** number of **Parking Spaces**
  - Existing: 100 Spaces
  - Proposed: 160 Spaces
- **Enhance the Queue** and Drop-Off
  - Existing: 1,400 lf (70 Cars)
  - Proposed: 3,400 lf (170 Cars)
- Move Traffic out of the University Loop
- Reduce Phasing Impact to the School and University
- Minimize Impact to the **Shared Play Fields**
- Create a Campus within a Campus
- Integrate the Existing Buildings to Remain
- Connectivity to University / College of Education
- **Separate Vehicular Access** for service

Legend

1. New K-8 School
2. New Gymnasium
3. New Auditorium
4. Renovated High School
5. Renovated Locker Rooms
6. Remodeled Tech Garage
7. Fields
8. Play Fields
9. Courts
10. Pool
11. Parent Drop-Off
12. Central Plant
13. Service Entrance





Conceptual Rendering: Bird’s Eye View

Future Campus of Florida Atlantic University School

Conceptual Rendering

Future Campus of Florida Atlantic University School

Conceptual Rendering

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Future Campus of Florida Atlantic University School

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Conceptual Rendering

Future Campus of Florida Atlantic University School

Conceptual Rendering

Goals:

- Reduce campus greenhouse gas emissions by implementing energy saving technologies, conservation programs, and green building techniques
- Minimize impact to the environment by encouraging night sky friendly exterior light fixtures
- Reduce the heat island effect of the campus by utilizing concrete and pervious hard-scape and reflective roof surfaces
- Improve natural resource conservation by integrating native landscape and stormwater management strategies
- Foster civic engagement by representing sustainable principles in the built environment

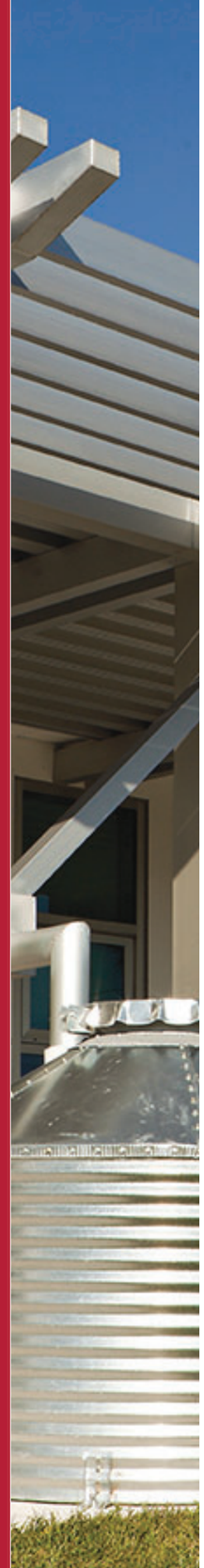
4.5
Sustainability

A sustainable campus seeks to be a complete community, ensuring easy access to a range of amenities and recreational opportunities. Sustainable development facilitates academic interaction, placemaking, community-building, and walking and can improve the quality of life for students and faculty.

Environmental health, personal well-being and community building are promoted through a well-designed and interconnected network of open spaces. These places support informal interaction and meetings and provide opportunities for recreation and enjoyment of the natural environment. A sustainable campus can only be achieved through collaboration and coordination among planners within the school and in consultation with the local community. Planning and design processes should integrate academic programming with landscape, infrastructure, built form, and other land use and placemaking objectives of the plan.

Green means much more than green space. It also connotes less energy, less waste, less driving, more renewables, more re-use, more walking, and environmental stewardship. The buildings, landscapes and infrastructure of the campus will demonstrate and teach environmental sustainability. Life cycle costs will guide planning, design and construction decisions.

5



5.1
Conclusion

The goal of AD Henderson University School and FAU High School as developmental research schools at Florida Atlantic University is to transform K-12 public education. The school is consistently ranked among the top 1% in the country for academic performance. One hundred percent of students graduate from high school and enroll in select universities throughout our nation and around the world. As the schools move from excellence to true distinction, a substantial increase in private support from both individuals and organizations will be vital. At the heart of the new facility are the world-class, state-of-the-art, joint-use student and teacher laboratories. These collaborative learning laboratories will prove to be the epicenter of the dynamic intersection between academics and application. The campus master plan and its supporting documents, when adopted by the School and University, will provide a holistic and integrated policy framework for making decisions about future development. “Enabling projects” will set the stage for new buildings and new open spaces in areas designated for future academic development; adhering to the plans will ensure that each new investment helps to achieve the objectives of the overall campus master plan.

Implementation, which is a key step in the success of a plan, is often the most difficult step to effectuate. Flexibility is necessary, as the campus continues to develop and grow based on existing and unknown future resources. The realization of the campus master plan requires commitment, community engagement, and continued efforts to build ongoing partnerships, relationships, and resources. Community partnerships and support are a key element in the success of the plan.

The new facilities at the developmental research schools at Florida Atlantic University will educate students about emerging technologies and the economic, social, and ethical rewards of sustainable design and construction. It is planned to construct and operate a facility that is highly energy-efficient and in harmony with the natural environment, exhibiting community-minded values and providing opportunities for collaborative experiential teaching and learning. Implementation of the master plan will be ongoing and evolutionary, and its implications will extend well beyond the important beginnings made possible by a fruitful capital campaign. In the end, this master plan will become, like the campus prized today, the School’s most tangible visual expression of itself, what it believes, and how it will thrive in the future.