



December 21, 2022

Bethune Cookman University  
Facilities Department  
640 Dr. Mary Bethune Cookman Boulevard  
Daytona Beach, FL 32114

Attn: Ms. Chelsea Washington, Director of Title III

RE: **Gross Science Building**  
**Statement of Findings and Conditions**

Dear Chelsea,

On December 20, 2022, I visited the Gross Science Building on the campus of Bethune Cookman University in Daytona Beach located at 621 Dr. Mary McLeod Bethune Blvd.. The building is a 3 story classroom and laboratory function building that was originally built in 1948 with a traditional central corridor and double-loaded layout and design. The structure is reinforced masonry with brick veneer with a conventionally framed roof structure. Total building square footage is 52,851.



The building has had two major renovation and additions through the years as donor funding has been available. Each of these had added to the overall usefulness of the facility and added needed lecture hall space and office space, but the primary goal of this report is to address the overall condition of the original portion of the facility as well as its systems and finishes.

The goal of this report is to identify exactly what needs to be addressed and the best methodology to get the best result for the facility and the University.

### **Existing HVAC Systems**

The HVAC systems have been replaced incrementally through the years and have various ages for different areas of the building. The building's HVAC system is run off the chiller at the Central Energy Plant. (Teco Plant). Most of the chilled water air handlers have been changed out by Trane within the past 8yrs, but there are two older air handlers that still run off of old pneumatic controls. These units are presently being run in a manual "Hand" operations and are not fully automated as a result. The resultant tactile condition inside of the building is that an occupant can walk between zones of cooling and sensibly feel the difference in temperature and humidity.

### **Recommendation:**

Complete engineering of spaces, uses, needs, and program and complete replacement of all chilled water air handling units as well as all controls, ductwork and air terminals.



### **Existing Classroom Spaces**

The existing classroom spaces are typical for 1950's construction with renovation throughout the years. There is little built in furniture and desk units are treated as mobile furniture and not permanent work station layout. There is little technology in classrooms other than typical high school style Smart



Boards and typical wireless access point wireless for student use. The finishes are dated, old and worn. VCT floors throughout look to be 12 x 12 recent renovation work. Painted walls are typical, and the acoustical ceilings have a mix of 2x2 and 2x4 grid patterns and an assortment of different acoustical tiles. The light is old T8 florescent bulb fixtures with no special task lighting or dimming capability. In general, the teaching spaces are outdated and in need of complete replacement

### **Recommendation:**

These teaching and classroom spaces should be evaluated for average class capacity and size requirements and then re-planned and repurposed to best fit the curriculum and departmental needs. Complete finish replacement and all new updated mechanical, electrical and life safety systems should be added and addressed at the same time.

One other major area needing immediate repair is the exterior windows. Some time in the past several years, the windows on the exterior of the building were replaced with vinyl windows. During their re-installation, the sealants used by the original installers were either improperly applied, or the recent storm damage from the 2022 hurricane season have compromised the sealants. Every window should be inspected and a report completed on addressing window and opening problems. At a minimum, every window should be re-sealed inside and out to prevent the further leakage of warm, moist outdoor air



## **Existing Public Areas**

The existing hallways and stairwells and bathrooms are the most original spaces to the building. The hallways have a wainscot height glazed masory tile that is thickset directly to the masonry walls and the floors are the original terrazzo. Although these finishes seem dated, they are probably the most durable aspects of the entire building, and they definitely hold the most interior architectural value of anything in the building. The existing bathrooms do not appear to be ADA compliant and are in need of repair as well.



### **Recommendation:**

These finishes need to be discussed for their architectural and historical merit within the institution. If they are to be kept, the floors will need a certified terrazzo specialist to make spot repairs and then clean and re-polish the entire building to remove years of wax buildup, abuse, and neglect. The glazed masonry units on the wall wainscoating are in remarkably good shape and could be kept as-is. The unusual color could be offset by employing an interior designer to make alternate paint and ceiling choices to compliment the earth tones.

The bathrooms need complete fixture replacement as well as new layouts to accommodate ADA and all new ceramic tile walls and floors. New bath accessories with touch free operation should be added simultaneously

## **Existing Laboratory Spaces**

There are several large rooms in the building that serve as primary teaching labs. The largest of these rooms has 12 individual fume hoods as shown below. None of the hoods have been replaced or updated recently and most look to act as storage spaces for chemicals. The laboratory casework is very dated and appears to be stained wood overlay doors and drawers with Trespa chemical resistant black tops. Although they may be functional in their current state, they definitely are not modern design nor are they the colors and materials currently used in the last 20 years either. The mechanical condition of the hoods, their exhaust, the fire protection, the utility services, and any certifications were not examined closely as part of this report.

## **Recommendations:**

These teaching and classroom spaces should be evaluated for average class capacity and size requirements and then re-planned and repurposed to best fit the curriculum and departmental needs. Reduction and consolidation of laboratory hoods could serve the space well by concentrating utilities and reducing overall service level. The casework should all be replaced as well and come from the same supplier as the hoods for a complete and streamlined modern lab. Complete replacement of all other associated and all new updated mechanical, electrical and life safety systems should be added and addressed at the same time.

There were other smaller labs throughout the 2<sup>nd</sup> and 3<sup>rd</sup> floors that may have been part of faculty research projects or other smaller lab spaces, but these should be addressed at the same time for consistency





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I appreciate the opportunity to provide you with this proposal, and I am available at your convenience to discuss this further with you and your team.

Sincerely,

*Charles Perry Partners, Inc.*

Eric Drummond  
Vice President, Regional Manager