



# HVAC SYSTEM COMMISSIONING

**PROJECT LOCATION:** Yon Hall Locker Room - Gainesville, Florida  
**EXPERIENCE OF:** Mitchell Gulledge Engineering, Inc.  
**ROLE IN PROJECT:** Commissioning Authority

## MEP CONSTRUCTION COST

\$180,000

## COMPLETION DATE

June 2018

## PROJECT STAFFING

### Cx Principal:

Andrew Mitchell, PE, CxA

### Primary CxA:

Ark Szczurowski, PE, CxA

### Project Manager:

Andrew Mitchell, PE, CxA

## PROJECT OWNER

University of Florida Athletic Association

Bill Smith

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Ben Hill Griffin Stadium

Gainesville, FL 32611

## BUILDER

WW Gay Mechanical Contractor of Gainesville

Tyler Holley

515 SE 11<sup>th</sup> Place

Gainesville, FL 32601

## BAS CONTRACTOR

Automated Controls, LLC

Keith Davis

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## PROJECT SUMMARY:

The University of Florida Athletic Association contracted with Mitchell Gulledge Engineering to design new air handling equipment for the visitor locker room in Yon Hall east of the Ben Hill Griffin Stadium. The facility was served by two chilled water fan coils in dire need of replacement. Because of a limited budget and shifting priorities, the project to replace all the aged equipment was broken into a two-phase approach that included adding supplemental cooling capacity to the football visitor locker room in advance of an impending home football game. The second phase included the consolidation of the failing steam and chilled water equipment into a new air handler with variable volume reheat for each of four zones.

Particular project challenges for equipment replacement included the analysis of current ventilation air requirements and the application of the required quantity of ventilation air. Often, older buildings are inadequately ventilated per current code requirements. In this case, the space use and occupant density were analyzed with the building exhaust make-up requirements to size a new air handler. A number of design iterations were considered for the air handler configuration and manufacturer to maximize efficiency and maintenance access in a small mechanical room.

The new AHU-5 is a 100% outdoor air unit that replaced two old units in a very crowded mechanical space. The new orientation of AHU-5 allowed for better access to all equipment. New variable air volume terminal units were equipped with steam reheat coil to serve the locker rooms. Steam coils are not normally used on UF campus, but were used in this case to reduce project construction costs by utilizing the existing steam service in the mechanical room.

Mitchell Gulledge Engineering was able to incorporate code deficiency work related to the HVAC scope into the construction documents to keep the facility operating in a state-of-the-art manner. The building mechanical space did not include fire sprinklers and our engineers made a point to discuss the planned scope of work in the building with the authority having jurisdiction (UF EH&S). The discussion confirmed our understanding that the HVAC renovation would also need to add sprinklers as part of the project. Our approach to thoroughly understanding building system services through onsite investigation kept the owner's agent informed during the design phase to minimize costly change orders during construction.

