



Project Description and Scope:

This project includes work on the steam, chilled water and power distribution systems to support existing buildings, New Residence Hall #1 and future planned development. Underutilized internal green space between residence halls in the west campus residents halls area will be reconfigured to provide: accessibility for all students, open recreation areas and landscape opportunities to integrate storm water management. In addition this project will upgrade and expand current chilled water demand shortfall, and planned future demand new building construction and building renovations. Chilled water distribution piping will be extended from the plant as a part of the utility corridor improvement portion of the project. The existing chilled water plant will undergo equipment control and metering modifications to make optimal use of equipment to minimize operational costs. Chilled water control valves, meters and electrical service will be modified as necessary for new equipment.

Project Justification:

The primary driver for this project is the age and condition of the existing infrastructure. Since it is the first link feeding steam and chilled water from the utility plant to the rest of campus, it is critical that it remain in excellent condition to support campus loads/demands. The utilities that serve this area were installed in the early to mid-1960s and have begun to show signs of failure. There are also secondary and urgent need for supporting utilities to serve a new residence hall. The utilities that serve the West Campus Residence Halls, installed during original hall construction are 50years old and are at, or nearing the end of their useful life. Utilities in this area are showing signs of damage and are already requiring repair. Relocation of utilities will facilitate increased resident accessibility and the completion of links between halls. Due to current condition the maximum chilled water output is 400 Ton less than design capacity. The system does not have capacity to air condition major buildings to be constructed nor renovated in the next six years. The provision of air conditioning is seen as a requirement to maintain attendance at overnight summer camps.

Issues/Concerns:

None at this time

Project Priority Score: n/a*

Project Benefit Score: n/a*

Estimated Project Costs:

Construction	\$22,342,000
Equipment/Other	\$20,000
Design Fees	\$1,859,000
Management Fees	\$1,028,000
Contingency	\$3,351,000
Total Project:	\$28,600,000

Operating Budget Impact:

Custodial Staff	0
Maintenance Staff/Expenses	0
Utility	0
Other	0
Annual Operational Impact:	0

Operational costs are being recalculated due to change in utility pricing and demand due to other capital projects.

Funding:

General Fund Supported Borrowing	\$16,698,000
Program Revenue Supported Borrowing	\$11,902,000
Building Trust Funds	
Gifts and Grants	
Program Revenue Cash	
Total:	\$28,600,000

Proposed Timeline:

A/E Selection:	July 2017
State Enumeration:	October 2017
Bid Date:	November 2017
Phase 1 Res Hall Utilities Construction:	Summer 2018
Phase 2 Procurement Package:	Fall 2018
Phase 3 Chiller Plant Upgrade:	Fall 2018– Spring 2019
Phase 4 West Campus Construction:	Summer 2019
Phase 5 Central Campus Construction:	Summer 2020

* Project implementation underway prior to implementation of project priority tool