- Physics
- DMSE
- Spectroscopy
- Infrastructure

PDSI

Project Overview

22 March 2005

This project begins the major renovation of the historic Bosworth Buildings providing significant infrastructure renewal and modernization – a step which can be expected to reduce future renovation costs in the area and address outstanding building obsolescence and safety issues. The project provides a long-term renewed central location for Physics, continues the Department of Material Sciences and Engineering (DMSE) renovations in the Main Group, provides major renewal of Spectroscopy Lab spaces, and constructs new, flexible high-bay research space. Additionally, this project provides the enabling infrastructure for renewal of one quarter of the Main Group.

The cornerstone of this project addresses long-standing issues for the Department of Physics which is currently spread throughout thirteen buildings on campus. The Department's greatest need is to create a contiguous space that will provide a recognizable identity and primary focus for its educational, research, and community activities. The proposed Center, named for Cecil and Ida Green who have made a leadership gift for this purpose, will be a dynamic environment where faculty and students will meet, study, and carry out research. It will reflect the vigor of the discipline as well as the commitment to the unity of research and education. The new Green Center will not only foster better collaboration but also will be instrumental in recruiting the best students and faculty in an increasingly competitive market. The Green Center will assure that members of one of the largest physics departments in the U.S. will have the advantage of contact and discussions between individual scientists, which often lead to the greatest insights.

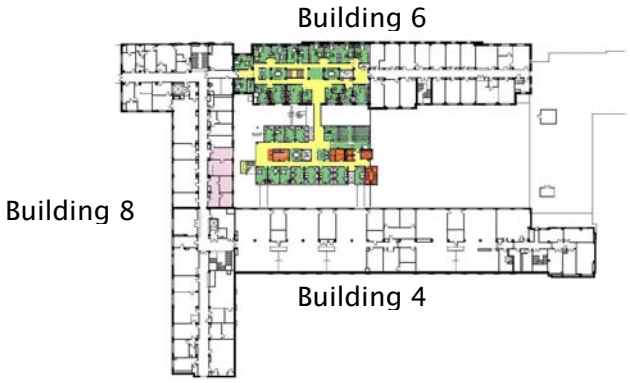
The project will construct a 49,000 SF infill of the Buildings 2, 4, 6, and 8 courtyard, as conceptually developed in the Main Group Master Plan, totally renovate 79,000 SF, provide the enabling infrastructure for an additional 127,000 SF of adjacent Main Group space, and add life safety upgrades for 90,000 SF more. The total area of influence for this project is 345,000 SF.

128,000 SF Program Area • 345,000 SF of enhanced infrastructure • Expected Occupancy: Nov. 2006

Project Features	
Physics:	• Consolidation of administrative, faculty and teaching spaces • Adjacent locations for Center for Theoretical Physics and Condensed Matter Theory • New construction and renovation for all areas, including community and student lounge areas
DMSE:	• Renovated headquarters and student study areas
Research:	• New high bay research facility in center of campus
Spectroscopy:	• Renovated facility for the Spectroscopy Lab
Infrastructure:	• Infrastructure renewed or enabled for 255,000 GSF • Life safety upgrades for 345,000 GSF
Institute	• 8,000 square feet released for other users in Buildings 12 and 26

Project Milestones	
Design Completion	**MARCH 2005**
GMP Contract	**APRIL 2005**
Construction Start	**JUNE 2005 (after commencement)**
Construction Completion	**NOVEMBER 2006**

Program Areas



4th Floor

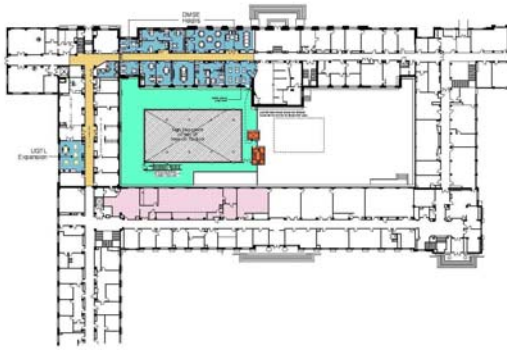
- Green Center for Physics (Center for Theoretical Physics)

3rd Floor

- Green Center for Physics (Center for Theoretical Physics, Center for Matter Theory, Administration, Junior Lab, Reading Room)

2nd Floor

- Spectroscopy offices
- Lecture demonstration



1st Floor

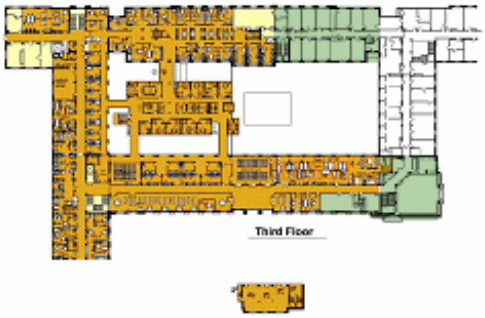
- DMSE headquarters
- High bay (upper level)
- Atrium

Basement

- Spectroscopy Lab
- High bay research
- Mechanical rooms

KEY

- PHYSICS
- DMSE
- HIGH BAY RESEARCH
- SPECTROSCOPY LAB
- ATRIUM



AREA OF INFLUENCE: INFRASTRUCTURE

- The project provides HVAC, electric, plumbing, fire protection, I/S for current program and future renovations
- The program areas for Physics and DMSE, shown as dark orange, will be fully supported by all systems. (128,000 s.f.)
- Areas shown as light orange receive mechanical upgrades because of the new atrium enclosure. (10,000 s.f.)
- Areas shown as yellow receive similar systems support when needed. (117,000 s.f.)
- The above areas, plus the remaining areas of Buildings 4, 6, 8 (shaded green) will be fully sprinklered, fire-alarmed, and receive egress stair upgrades. (345,000 s.f.)
- Program area of influence = 345,000 s.f. of 1,085,000 s.f. in the main group.

Ventilation upgrades to non-renovated areas

Renovated areas and new construction

Non-renovated areas within area of infrastructure influence

Non-renovated areas fully sprinklered, fire-alarmed, and with new egress stairs