

University of North Carolina at Pembroke - Health Science Building

34% Energy Reduction Compared to Baseline
\$67,463 Energy Savings in 2013 Compared to Baseline

PROJECT DETAILS

LOCATION..... **Pembroke, NC**
CONSTRUCTION TYPE..... **New Construction**
BUILDING TYPE..... **Classroom / Lab Building**
OWNER..... **University of North Carolina at Pembroke**
BUILDING AREA..... **87,593 Enclosed SF**
BUILDING CODE OR STANDARD..... **ASHRAE 90.1-2007**

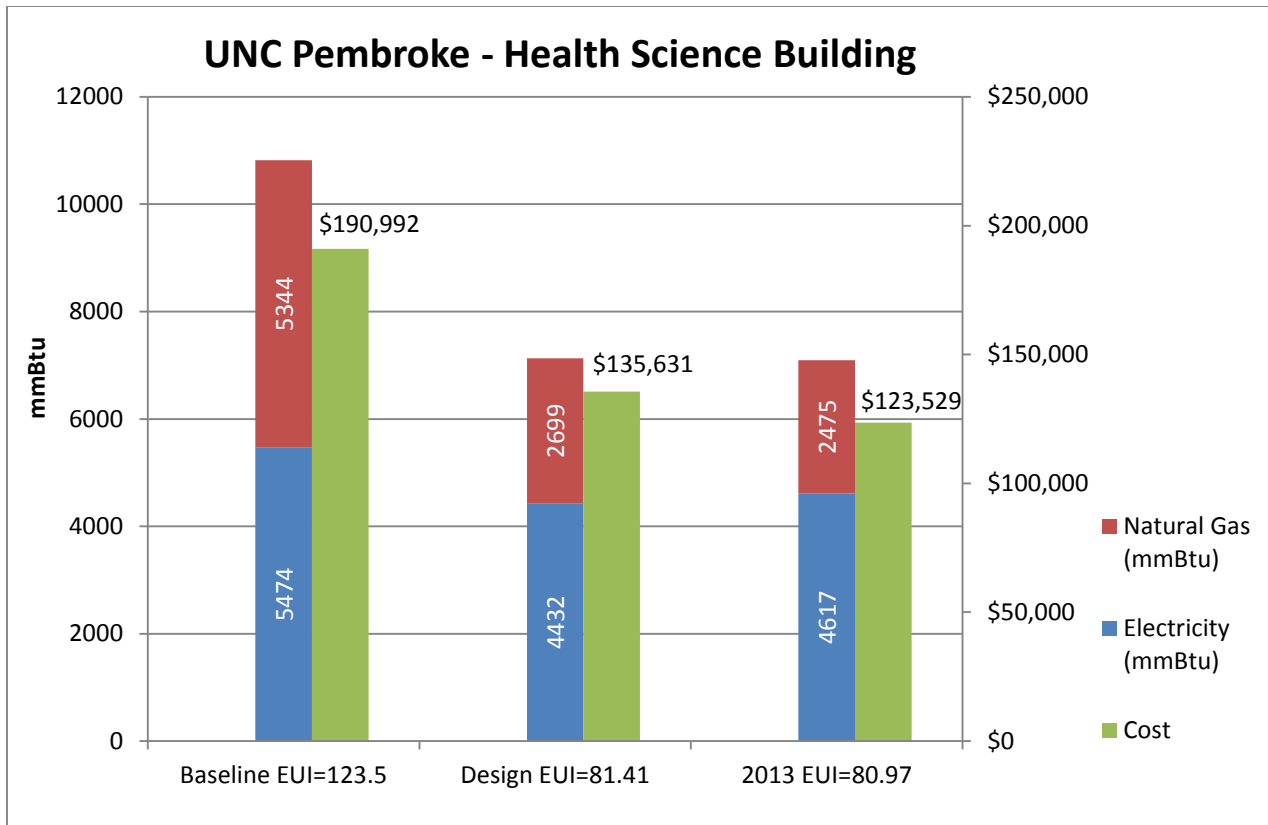
DESIGN TEAM

ARCHITECT..... **Walter Robbs Callahan & Pierce Architects, PA**
ENGINEER..... **McKnight Smith Ward Griffin Engineers, Inc.**
COMMISSIONING AGENT..... **Affiliated Engineers, Inc.**

CONTACT

Owner: W. Steve Martin, AIA, steve.martin@uncp.edu
Architect: Larry Robbs, AIA, robbs@walterrobbs.com





Project Description

- Building HVAC primary cooling system consists of a water-cooled chiller and cooling tower.
- Variable-primary pumping is utilized at the chiller to distribute chilled water to the secondary systems.
- Heating system consists of two condensing gas boilers.
- Modular air handling units with heating coils, cooling coils and variable speed fans are utilized for the secondary systems.
- Variable-secondary pumping is used to distribute hot water.
- Demand control ventilation through CO2 sensors is utilized at each AHU system.
- An airflow monitoring station is used at unit AH-3 to maintain required pressurization at the lab rooms.