

MARINE TECHNOLOGY AND LIFE SCIENCES SEAWATER RESEARCH BUILDING (MTLSS) FACT SHEET

The New Marine Technology and Life Sciences Seawater (MTLSS) Research Building at the Rosenstien School of Marine and Atmospheric Science is a unique facility which will consist of two distinct but interconnected components, the Marine Life science center and the SURgeSTRUCTure-Atmosphere Interaction research facility. The Overall goal of the research program in the MTLSS is to understand the relationship between oceans and human health. Research in the MSLC will involve aquatic animal models of toxicology and human disease, origins and effects of marine toxins from harmful algal blooms, coral biology and ecology, aquaculture technology and related topics. The SUSTAIN facility will study the physics and dynamics of land falling hurricanes and the associated impacts of severe wind-driven and wave-induced storm surges on coastal structures. The proposed elevated building to house this facility will consist of two independent cast-in-place concrete structures built adjacent to each other for contiguous use of space, but independent to eliminate the transfer of mechanical vibrations from scientific equipment. The first building, a three story structure will house the seawater and chemistry laboratories, offices, and the mechanical penthouse. The second building, a two story structure will house the SUSTAIN scientific instrumentation, lab instrument control room, and support labs which will be used to conduct atmospheric experiments. The two structures will be clad as one facility with precast concrete panels and multi-pane insulated, impact resistant windows and doors. This project will also include renovation of the existing seawater system to increase quantity, quality and reliability of seawater supplies to serve the both the MLSC and SUSTAIN, and site civil work to improve the campus landscape.

FACILITIES

Oceanographic SUSTAIN lab, sweater and bio-chemical laboratories, faculty offices and support space, emergency plant and sea water pump house, and settling tank system

GSF: 60,000

Completion: May 2014

Architect: Cambridge Seven Associates

Engineer: Moss & Associates (MEP)

McNamara/Salvia (Structural)

Contractor: Suffolk Construction

LEED Consultant: The Spinnaker Group

SUSTAINABLE HIGHLIGHTS

- Natural Daylighting
- Reflective Roof
- Energy Efficient Glazing
- High Efficiency HVAC Systems
- Daylight Dimming Controls for lighting
- Increased views
- Low VOC Materials
- High Amount of Recycled Materials
- High Usage of Regional Materials
- Native plants
- Low water usage for irrigation
- High Efficiency Plumbing Fixtures
- Eco-Friendly Refrigerants

SUSTAINABILITY FACTS

LEED – NC Rating Total	69
GOLD	41
Sustainable Sites	8
Water Efficiency	5
Energy & Atmosphere	7
Materials & Resource	4
Indoor Environmental Quality	12
Innovation & Design	5
Project Total	41