

# Bachelor Enlisted Quarters Great Lakes Training Center Great Lakes, Illinois



**Version 1.0  
Certified**



**Notes from the Project Team:** *The design team applied an early version of LEED, which offered useful guidelines for sustainable design and construction.*

## Sustainable Sites

- **Site Selection:** *Reused site of outdated barracks and recreation facilities*
- **Efficient building location:** *Pedestrian friendly environment on base*
- **Resource Protection:** *Native landscaping*
- **Alternative Transportation:** *Two bus lines 100 feet from site; train station 1.1 miles from site*

## Water Efficiency

- **Storm/Waste Water:** *Water efficient landscape, planted native trees*

## Energy and Atmosphere

- **Energy:** *Exceeds ASHRAE 90.1-1989 prescriptive envelope standards for Chicago Area by 24% through use of R-23 Wall and R-30 roof insulation and reflective roof*
- **HVAC:** *Eliminated CFCs; operable windows*
- **Controls/Monitoring:** *Meters read monthly to determine energy and water consumption and monitor building performance*
- **Power Source:** *Steam for hot water heating*
- **Lighting:** *Increased glazing for daylighting; 1 watt/sf lighting load*

## Materials and Resources

- **Local Materials:** *31% of materials by cost were produced locally, including all concrete*

## Indoor Environmental Quality

- **Low Emitting Materials:** *Minimal volatile organic compounds*
- **Controllability:** *Operable windows*

*Awards: Winner of White House Closing the Circle Award 2000 as "Model Demonstration Facility", Chicago Building Congress Finalist, DBIA Award for Sustainable Design, 2001 Federal Energy Saver Showcase Award.*

**Owner:** U.S. Department of the Navy

### Project Team:

**Architect:** *Wight & Company, Architect*  
**Design Architect:** *The Steinberg Group*  
**Engineer:** *Smith Group*  
**Contractor:** *James McHugh Construction*  
**Consultant:** *ENSAR Group, Inc.*

### Building Statistics:

**Completion Date:** *September, 1999*  
**Cost:** *\$55.2 Million*  
**Size:** *365,000 gross square feet*  
**Construction Type:** *Seven buildings, 3-5 stories*  
**Use Group:** *Residential*  
**Lot Size:** *10.2 acres*  
**Annual Energy Use:** *46 kBtu/sf/year/Building*  
**Occupancy:** *1850 sailors*