

The Green Library Experience in Portsmouth New Hampshire

LYRASIS Library Design
Symposium

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Mary Ann List, Director, Portsmouth Public Library

603-766-1710 malist@cityofportsmouth.com

In December 2006 the new Portsmouth Public Library building opened to the public as the first municipal building in New Hampshire to achieve LEED certification.



LEED Leadership in Energy and Environmental Design
Metric of *U.S. Green Building Council*

Point System for practices during design, construction and subsequent operation

1. Environmentally responsible selection and practices
2. Building healthy to occupy

<http://www.usgbc.org/>



How Green Practices Work for Libraries

General Design

Good learning environment

Healthy for staff members and visitors (and construction workers)

Acoustic considerations

Energy Conservation

Money saved—diverted to library services

Areas of “Delight”

Community gathering places

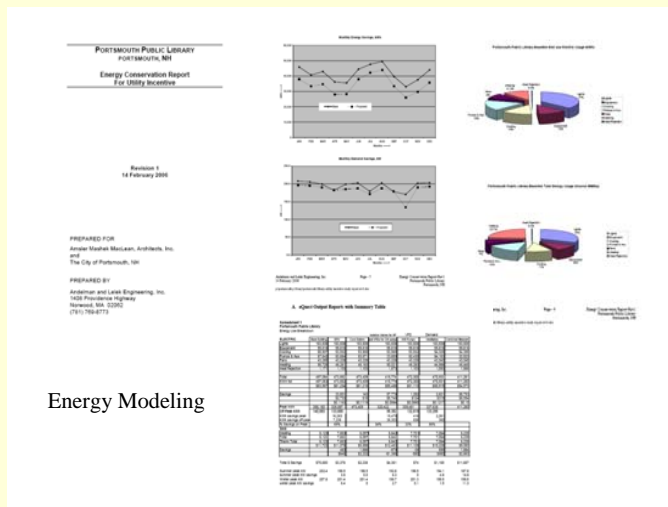
Local Products and Services

Cooperate with local businesses

Contribute to local economy

What Portsmouth Did #1

- Energy Conservation
 - Super Envelope
 - Energy Modeling



- ✓ Enhanced roof insulation
- ✓ 1/2" air space, argon filled, heat smart windows
- ✓ Multiple, decentralized point-of-use electric water heaters
- ✓ Premium efficiency motors and heat pumps
- ✓ High efficiency condensing boilers
- ✓ HVAC heat recovery units
- ✓ Variable frequency devices
- ✓ Reduced lighting/ power density fixtures/ improved lighting controls

What Portsmouth Did #2

- Daylight and Views
 - Daylight front, back, top
 - Daylight in 75%
 - Views out 90%



Large open lobby with

Welcome Desk

has windows at various heights to throw light into different parts of the building.

What Portsmouth Did #4

- **Materials**

- Wood, ash, FSC certified

- Service desks and built-in units built by local woodworkers

- Recycled materials; natural materials

- Paint, carpet, adhesives, sealants, all interior woods with no off-gassing

- **Water Conservation**

- Low-flow toilets

- Waterless urinal

- Metered faucets

- Hot water from small point-of-service units

What Portsmouth Did #5

- **Clean Air**
 - Filtered systems
 - Operable windows
 - Printing and copying sent to ventilated room
 - Green cleaning products
- **Flexibility**
systems,
but also library use
- **Recycling**
during construction,
ongoing operations



What Portsmouth Did #6

- Native, drought-resistant landscaping

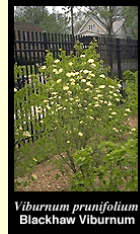
Library Landscaping

In the front planter:

Little King River Birch



Blackhaw Viburnum



Dwarf White Pine



Sweet Gale



Bearberry (groundcover)



In the Courtyard:

Serviceberry



Dwarf Alberta Spruce



Juniper



Bearberry (groundcover)

In the Back Screen

Hawthorn



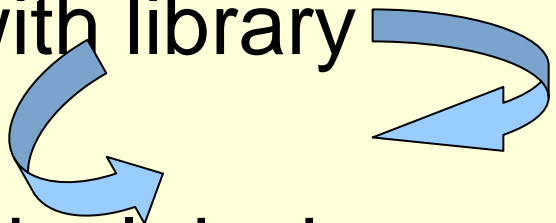


Serviceberry



Winterberry



Considerations/Thoughts/Fallout

- Integration of green goals with library goals, essential and tricky 
- Library as a leader in municipal design and ongoing operations. Librarian as part of the team 
-  Library as a contributor at budget time with energy savings
- Library as community partner 