

New Hampshire Audubon's McLane Center: Going for the Gold

Sustainable Sites

Alternative Transportation:

- Preferred parking for hybrid vehicles
- Preferred parking for carpool vehicles
- Bicycle rack to encourage biking to work (shower in existing building)

Protect Site:

- Construction fence to protect trees during construction
- Exceed zoning requirement for open space

Storm Water Management:

- Erosion control during construction (swales, hay bales)
- No increase in “quantity” storm water flowing off site (“rate” not complying)
- Half of new parking storm water to existing wetland
- Half of new parking storm water to new swales / detention ponds (no fence so it can be used for educational programs)
- Swales and detention ponds remove 80% of Total Suspended Solids (TSS) and 40% of Total Phosphorous (TP)

Heat Island Mitigation:

- Gravel parking “cooler” and more reflective than asphalt
- Landscaping to shade parking areas and walkways

Light Pollution Reduction:

- Site lighting with good uniformity (no dark spots safer)
- Did not exceed accepted lighting levels for “Suburban Zones”
- Outside lighting “full cut-off” (i.e. all light shines down – does not light night sky)
- No light trespass onto neighboring properties (very slight amount at entrance onto SPS land)

Water Efficiency

Exterior:

- No permanent irrigation installed (except grey water garden)
- Planting onto drought tolerant / native landscaping

Interior:

- Composting Toilets (waterless on first floor and foam flush (3 ounces per flush) on second floor) = 99% less water for “sewerage conveyance”)

- Sensor faucets at sinks / low flow fixtures – all grey water to filter in basement then pumped to grey water garden south of PSNH Room
- Expect entire complex to use less water than before!

Energy and Atmosphere

Energy Use:

- Exceeding Energy Code by 40% (cellulose insulation over spray foam insulation, very air-tight shell (tested with “blower door”), daylighting, efficient lighting (with occupancy sensors and daylight dimming controls), Energy Star equipment)

Ozone Depletion:

- No CFC’s, HCFC’s or Halons used in A/C (Used 407C instead – a HFC)

Renewable Energy:

- 10% of total energy used is from wood pellet boiler (for space heat and domestic hot water)

Performance Monitoring:

- Separate meters installed to measure water use, electric use, heat and cooling
- NH Audubon committed to monitoring performance regularly

Materials and Resources

Recycling:

- Recycling areas in new kitchen, utility room, copy room
- Recycling Construction and Demolition (C&D) waste – expecting 75% minimum (also salvaged doors, windows, lumber, etc...)

Recycled Content Materials:

- Concrete, steel, drywall, carpet, wheat board cabinets, etc...

Local Materials (within 500 miles)

- Pine siding, pine wainscot in PSNH Room, Atrium posts, porch posts, Ash trim (FSC certified from Northland Forest Products)

Indoor Environmental Quality

Minimum IAQ Performance:

- Fresh air to every office, classrooms, PSNH Room, Store, Atrium through ductwork (conditioned with Energy Recovery Ventilators and Air Handling Units)

Environmental Tobacco Smoke:

- No Smoking in buildings or with 25 feet of doors and windows allowed

Carbon Dioxide (CO2) Monitoring:

- CO2 sensors control fresh air dampers in ventilation system

IAQ During Construction:

- Kept absorptive materials dry during construction

IAQ Before Occupancy:

- Conducted a 2 week “flush-out” running ventilation system at 100% outside air for 2 week period just before occupancy (to flush out any out gassing from materials)

Low Emitting Materials:

- Low Volatile Organic Compound (VOC) adhesives and sealants
- Low or No VOC paints throughout
- All carpet meets Carpet and Rug Institute “Green Label IAQ Test Program”
- Formaldehyde Free wood products

Indoor Chemical and Pollutant Source Control:

- Walk off grates at entrances
- Exhaust fan in Copier Room (to remove ozone and toner dust)

Controllability of Systems:

- Operable windows and light switches at all offices

Thermal Comfort:

- Thermostats connected to Fan Coil Units provide heat and cooling

Daylight and Views:

- Minimum of 75% of “regularly occupied spaces” have 2% (or more) “Daylight Factor” (DF) - Ratio of amount of light indoors vs. outdoors
- Minimum of 90% of same spaces have view to outdoors

Innovation and Design

Sustainability Education:

- Interpretive signs

Exemplary Water Conservation:

- Expect 90% reduction over standard (LEED awards one point for 20% and second point for 30% reduction)

Green Housekeeping:

- Purchase and use only Green Seal approved products

- Educate all building users about effort

Exemplary Local Material Use:

- All pine cut from on site used to in construction of building

LEED Accredited Professional on Design Team

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