

SCHLITZ AUDUBON NATURE CENTER MISSION STATEMENT

Because the earth can't speak for itself, Schlitz Audubon Nature Center promotes an appreciation, understanding and stewardship of our natural heritage through environmental education and sanctuary preservation.

BUILDING MISSION STATEMENT

The building should be a physical manifestation of the mission of the Schlitz Audubon Nature Center.

A sustainable building does the utmost to preserve the natural sanctuary of the site.

Sustainable aspects of the building can themselves serve as educational tools to increase awareness of the issues of sustainability and its relationship to the natural world.

To this end, the focus is on building a stable, well-insulated, massive and self-shading shell that will decrease the building's reliance on both energy and technology.

SUSTAINABLE BUILDING

The idea of sustainability, when taken seriously and with commitment, can have powerful and positive effects on the built and natural world. Current building construction too often wastes resources and energy, provides unhealthy environments for work and jeopardizes the future of local and global environments.

An effort can be made to unburden future use of the Center by utilizing as many strategies for sustainability as resources will allow.

S U S T A I N A B I L I T Y I S S U E S

USE OF AVAILABLE ENERGY SOURCES ON THE SITE

Building orientation utilizes daylighting for work spaces reducing energy needed for lighting.

Building mass stores and releases energy, mitigating temperature swings.

Operable windows facilitate natural ventilation.

Geoexchange heat pumps use constant earth temperature to provide both heating and cooling, minimizing dependence on fossil fuels.

CHOICE OF BUILDING SITE

Building location uses a somewhat deteriorated portion of the site, yet provides open space for solar "window".

Building site connects to existing trails and provides for creation of adjacent "trail heads".

BUILDING MECHANICAL SYSTEMS EMPLOYED

Geoexchange heat pumps for heating and cooling.

Natural and heat recovery ventilation.

Low-flow, low water usage plumbing fixtures.

Waterless Urinals

Photovoltaic generation of electricity.

"Cool daylighting" to reduce electric lighting and associated heat loads.

CONSTRUCTION

Thicker' wall construction to allow greater insulation values.

Exposed concrete floor as finished floor eliminates the use of additional material.

Building overhangs help to control sunlight and reduce summer heatgain.

Site grading at south side of building allows use of windows at basement level for ventilation and light.

CONSTRUCTION PHASE

Complete most environmentally destructive parts of construction during winter.

Minimize impact of equipment and deliveries on site.

Contain dust and runoff to minimize effect on site.

Employ construction waste recycling program with help from Wastecap Wisconsin.

Encourage contractors to take home material cutoffs.

MATERIALS AND INDOOR AIR QUALITY

Use of locally available materials to reduce impact of transportation.

Site harvested lumber for timber frame.

Site harvested lumber for exterior decking.

Logs donated from Aldo Leopold family use as porch columns.

Use of recycled content materials to reduce dependence on virgin resources.

Use of durable materials.

Low VOC finishes.

Two week building 'flushout' before occupancy.

EXISTING BUILDING

Materials from the existing building can be harvested for re-use in the new building or sold to the recyclable building materials market.

The stable portions of the foundation will be utilized to create a useable outdoor space.

LIFE SAFETY AND ACCESSIBILITY

The building will be completely sprinklered.

The building will be designed to meet or exceed current accessibility standards.