Integrated Design

The Homer Public Library expresses a deep connection to the local cultural landscape through the siting and shape of the building, the program spaces provided within its shell, and the selection of building materials.

During the design process, a series of community workshops led to a City of Homer decision to pursue LEED® (Leadership in Energy and Environmental Design) Certification for the new library. LEED, the national standard for evaluating sustainable design, was developed by the U.S. Green Building Council to recognize outstanding projects that strive to minimize negative impacts on future generations.

within a comprehensive set of achievements that fall into one of five categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. In order to achieve even the first level of certification, the building must be designed as an integrated whole in which each component, from window to boiler, works efficiently with all other parts of the building. The first cost, energy costs, and maintenance costs of each component are balanced in order to reduce overall life-cycle costs for the building.

Ultimately, this approach to design of the library creates benefits far beyond a reduction of operating and maintenance costs. It allows the design process to be much more collaborative and inclusive, resulting in a public library emerging from the voices in the community.

The Homer Public Library will become the first grassroots building in Alaska to be LEED certified.

Sustainable Strategies

Sustainable Site: Approximately half of the project site is in a relatively natural state or has been restored to native vegetation and enhanced through careful construction of trails that connect to a broader community trail system. Site development for the library includes a series of bioretention swales to encourage natural infiltration, minimize impacts on the storm sewer system, and remediate existing drainage and glaciation problems on adjacent streets. Lighting for the site and building is designed to



Water Efficiency: New vegetation was selected from native species so that an irrigation system is not required. High efficiency water fixtures inside the building reduce water consumption by 20% below EPA standards.

Energy and Atmosphere: Emphasis was given to efficient systems that can be easily maintained by local personnel and give more individual control to the user. Passive solar techniques are used to minimize unwanted heat gain while maximizing the amount of daylight available in all occupied spaces of the building. Electric lighting is controlled by a combination of occupancy and daylight sensors to ensure that it is used only as needed. Daylight and energy strategies were developed and modeled by the design team using computer simulations to determine overall effectiveness and efficiency.

No CFC of HCFC gases are used in the project. User operated windows work in combination with motor controlled clerestory windows and simple fans to create good air flow. To ensure that mechanical ventilation operates only as needed, a variable air volume system with carbon dioxide sensors and user controlled thermostats is used.

Materials and Methods: In all areas of construction, emphasis was placed on materials and assemblies that provide maximum benefit to the local economy. The design team worked closely with local student and nonprofit groups to identify local materials that could be used in the library. Twenty percent of all building materials were locally manufactured and ten percent were harvested locally. Re-used and recycled As the design and construction progressed the contractors worked closely with the design team to identify materials and methods that met the sustainable goals of the project. Donated reclaimed wood flooring was crafted for many of the reading surfaces in the library by a local woodworker and the main circulation desk was designed and fabricated by a local artist with local materials.

Indoor Environmental Quality: A stringent quality control plan was established during construction, and all interior finish materials were selected from low-emitting choices. These included low VOC paints and sealers, linoleum flooring made with natural and renewable materials and finish plywood paneling made with no urea formaldehyde. $\overset{\mathrm{o}}{\rightarrow}$

Homer Public Library 500 Hazel Avenue Homer, Alaska 99603 907.235.3180 http://library.ci.homer.ak.us







Just Imagine...

Lisa Krebs:

Whether it is bike paths or bike stands, anything that promotes cycling as transportation should be encouraged. These artistic interpretations of sand hill cranes are made stocky to handle the rigors of cyclists heading to the library.

Ken Castner:

The fish wall suggests the movement of a stream ascending up through the inter-tidal forest. Most of the trees in the inter-tidal zone were killed in the 1964 earthquake, but many are still standing, silvered and denuded of branches. The wall posts suggest the trees are a braided stream.

Marlon Prazen/Tarri Thurman: /

Mooserun Metalsmiths created the beautiful crane door handles and accompanying arch at the entrance to the library signify the truly unique and special character of the Homer Community and the wonders to be found within the library.

Paul Rourke/Roch Duz:

Yankee Woodworks created a circulation desk that is subtle yet highly crafted. Leo Vait created the concrete counter to compliment and enhance the theme. As the circulation desk is the wheelhouse of the library, the design was kept visually gentle so the focus is on the function it serves. The "waves" reflect moods of the bay as they evolve from a gentle roll to a tumultuous boil and back again. "Curly" Alaskan Birch from the Poppert Mill in Wasilla highlights the iridescent quality of light reflection or "cat's paws" on the bay.

Suse Phillips Cushing:

At the inception of the library design effort, Suse designed the "Alice" logo that appears on the Pioneer Wall and the front cover of this brochure.

Lynn Naden:

The relief panels in the children's portion of the library is a pictorial alphabet of Kachemak Bay. Each panel took approximately 40 hours from start to finish, and is made entirely out of paper pulp cast in to plaster molds from the sculpted clay original.

Paul Dungan:

In the children's library, several birch trees extending floor to ceiling create a space where a storyteller can gather listeners and fill the grove with their story. The birch trees were salvaged locally from a residential view-clearing project and, were carefully peeled to highlight the beauty of the trees' natural grain and contours.

Lisa Krebs:

The mushroom season is extraordinary in Homer in the late summer and early fall. As they grow close to the ground, children are often drawn to their level. They make an inviting seating form for young readers.

Scott Hyson:

Local carpenter and master craftsman Scott Hyson spent countless hours transforming donated recycled gym flooring into beautifully intricate reading surfaces for the reading bar, main internet table, and other nooks. His craftsmanship and commitment to detail is evident in the delicate inlays of geometric patterns and the compass rose that compliments map storage area under the reading bar.

Rika Mouw:

Margret Pate was a much appreciated long time Homer resident who loved books, reading, and gardening—she is memorialized by the Pate Garden, visible from both inside the library and out. Rika chose and designed the southside location for people to come to enjoy a relaxed reading spot in an informal garden setting. Large boulders are placed to create different seating areas and many of the plants in the memorial garden area come directly from Margret's beloved garden.

Tamara Schmidt:

Tamara, a librarian's daughter, was raised to cherish the library as a place where people of all ages and backgrounds explore and learn. Her flying cranes, created from alder branches, soar overhead as a symbol of the freedom knowledge gives us.

Leo Vait:

As broad or large as a work may be, it is really about the details and final touches that weave a synchronicity through all the variant texture into a convincing whole presentation. It conveys the belief that this artifact made of stones, old wood, and plaster was discovered, was unearthed, and was found to resonate a fond memory of hearth and home.