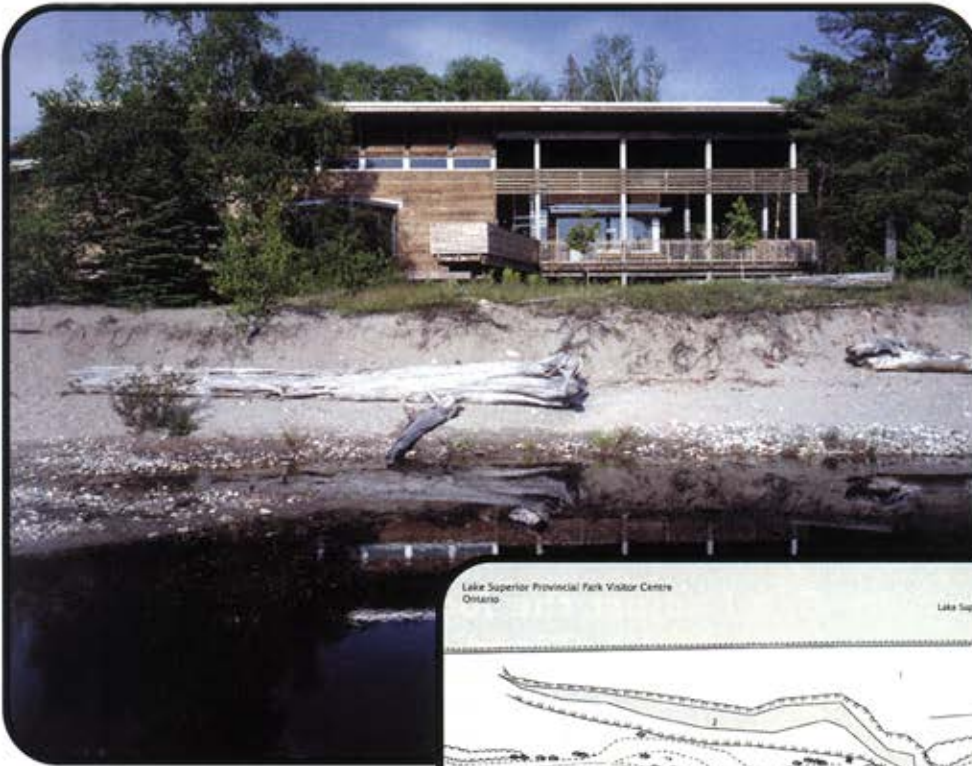


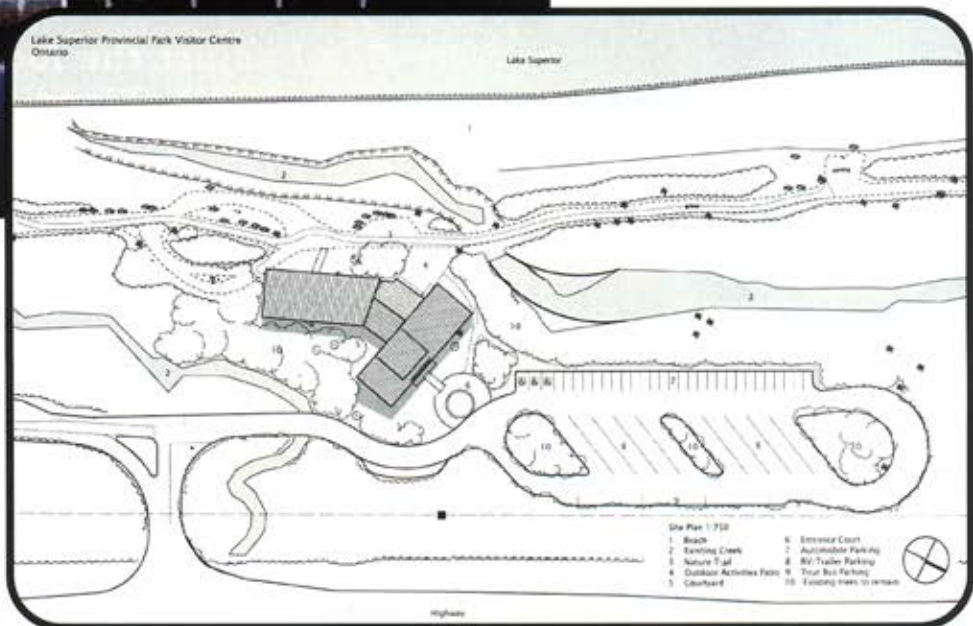
The Power of the Lake

Lake Superior Provincial Park Visitor Center

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The Visitor Center is located on the shore of Lake Superior near the south entrance of Lake Superior Provincial Park. The building is raised up above grade and is carefully nestled between two meandering creeks and the dynamic beach-front of the lake. Below: site plan.



In 2000, Reich + Petch responded to the Ontario Provincial Government proposal call for visitor centers to be constructed in provincial parks on the Great Lakes Heritage coast from Georgian Bay to Lake Superior. As project managers, architects and exhibit designers, we were excited at the prospect of utilizing our integrated design and management skills to bring about a visitor orientated design solution.

The firm was awarded the most northerly project, The Lake Superior Provincial Park Visitor Center, with a budget of around four million Canadian Dollars (\$USD3.3 million). The mandate was to "create an external design that would express the integrated interior functions of the

building giving particular attention to the interpretive functions." Because of the role the building was to have as an interpretive facility it was of particular importance that the architectural style enhanced and flowed from the interior interpretive elements. It was also important that the building was sensitive to the site with minimum environmental disturbance, complement the natural environment and be aesthetically pleasing from all vantage points,

including views from the water.

To fulfill this mandate Reich + Petch assembled a team of 10 consulting firms covering every discipline from environmental assessment and architecture to lighting and A/V design. This client brief was exemplary and the assignment was challenging. We did not want to fall short of the expectations for a building in one of Canada's most spectacular and environmentally sensitive wilderness parks. After all, how often have exhibit designers had to face the daunting task of designing exhibits or galleries in a predetermined structure, often unsuitable for its purpose or aspirations?

To achieve the client's goals we worked in a close interactive process with the client team of park superintendents, educators, interpreters and project managers. A storyline based on *The Power of Lake Superior* was established and several sites investigated to determine the best fit for the building and exhibits. A critical part of the brief became the need for flexibility, particularly in the exhibit hall and in the indoor-outdoor connections for programs created around the visitors and run by seasonal staff.

The building location and footprint was determined after a stringent environmental assessment of the greater site. The building was to be constructed with minimum impact on the extant vegetation and the dynamic beach was evaluated for active and potential impact.

Dramatic Location Informs Architecture

The Visitor Center is located on the shore of Lake Superior near the south entrance of Lake Superior Provincial Park. The building is raised up above grade and is carefully nestled between two meandering creeks and the dynamic beachfront of the lake. Minimizing environmental impact, the required parking is located on previous campground sites and utilizes existing trees and shrubs to blend in with the natural landscaping.

Visitors enter via a bridge to a grand Lobby with columns that splay upwards

The visitors encounter the beauty and panoramic vistas of the lake in a similar way to approaching it through the natural vegetation. In this way they are exposed to the dense forest interior before the awesome lakefront panorama.

to a visually floating roof and clerestory windows. A projecting window in the Shop and the floor-to-ceiling glazing in the Passage towards the exhibits open the view to the natural growth of the heavily wooded site. As visitors travel further into the building and discover its exhibits and program space, the expansive view of the lake dramatically reveals itself.

By using projecting bays, natural materials, large expanses of glass and generous outdoor deck space, the interior and the exterior spaces of the building merge. A Lookout extends from the building, placing visitors even closer to the lake's edge.

Materials were chosen carefully to reflect the site and area, and for their natural beauty, making use of a carefully orchestrated palette of cedar, stone, aluminum and dry-wall. The building is clad in a vernacular cedar siding that is articulated with an alternating rhythm and is topped with a galvanized steel roof. The building's massing, responding to the site, is also used to create a dramatic built form and allows for wonderful views from one part of the building to another.

The building bridges the area of the site from the parking lot to the beach in three orchestrated moves. Building form expresses these and their interior functions. The entry pavilion provides all of the entry/exit functions such as information counter, toilets, shop, park orientation and introduction. The 'link' building provides the introduction to the exhibit hall, an orientation theater, an indoor/outdoor multi-purpose room, and a glazed transition corridor to the hall. The exhibit hall provides an open, flexible space for a wide range of multimedia exhibits, interactives and discovery zones.



Exhibit Explores Lake Superior's Power

The building is designed around the theme of *The Power of the Lake* and the visitor is introduced to the storyline throughout the building from entry to departure. The drama is achieved by deliberately holding the view until the context is established in the Exhibit Hall. The visitors encounter the beauty and panoramic vistas of the lake in a similar way to approaching it through the natural vegetation. In this way they are exposed to the dense forest interior before the awesome lakefront panorama.

Designing around the visitor experience and exhibit storyline is paramount. The interpretive plan determines the theme and storyline and its pacing establishes the exhibits which in turn set the tone, spatial definition and design aesthetic of the building. The goals of the project – to inform and educate visitors about the climatic, geographic and social history of the park – are being met in this way. Views of the lake are deliberately related to exhibit discovery zones and their interpretive themes so that visitors can truly experience *The Power of the Lake*.

The Power of Lake Superior, the largest freshwater body on earth, is the central theme of the interpretive story told within the Visitor Center's exhibit hall. The lake's influence on the people along its shores is illustrated by the exploration of specific places in the park; a discovery zone introduces visitors to potential real life visitor experiences to be had within the park.

Within the exhibit hall the subjects are pre-

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sented in a variety of ways, as graphic panels, sculptures, models and full sized reproductions, set against a backdrop of dramatic exhibit structures and panoramic views of the lake and park. A diverse array of mechanical, electronic and audio/visual interactive displays, are employed to involve the visitor and animate the interpretive content throughout the center.

Following are some examples of exhibit techniques employed throughout the hall:

Upon entering the exhibit hall, the visitor triggers a walk through multimedia experience of a notorious Lake Superior November Storm. *The Power of the Lake* is dramatically demonstrated as the visitor is immersed in a combination of wide-angle wall and floor projected storm footage, with accompanying surround sound audio.

Following the lakeside of a centrally located spine of wave structures, the theme of the *Power of the Lake* continues.

A short video is presented of the most famous of lake shipwrecks, the sinking of the Edmund Fitzgerald.

As a demonstration of volume, the visitor is invited to tip a three-dimensional map to pour the water from Superior into the other Great Lakes. The fact that Lake Superior's volume is more than the total of the other four great lakes is revealed.

Looking down into an infinity mirror box, the visitor is presented with a simulated feel for the great depth of Lake Superior.



Set against the view, display modules of graphic panels, artifacts and three-dimensional vignettes, tell four individual stories of Agawa Bay, complemented with audio narration.

The relative clarity of the lake is revealed by sliding a *Secchi* measuring disc behind a graduated panel to compare the clarity of Lake Superior with that in Lake Erie.

The lakes' weather making properties are presented with two full-sized reflected vignettes of local plant life, made possible by the influence of the lake.

By pushing a button, to employ a Pepper's Ghost technique, superimposed maps of the modified growth regions are revealed.

To the right, a glazed area reveals a view of Agawa Bay. Set against this view, display modules of graphic panels, artifacts and three-dimensional vignettes, tell four individual stories of Agawa Bay, complemented with audio narration.

A one-third size recreation of Gargantua lighthouse soars to the ceiling. Set against its shoreline backdrop the six sides present the history of the lighthouse, its family of keepers

A series of window and counter mounted displays and discovery drawers are set along the glazed end of the Exhibition Hall.

with audio and pictorial records of local shipping and shipwrecks.

At this point the boundary of the Discovery Zone is marked by a plinth mounted procession of cast bronze indigenous birds and mammals, cast aluminum fishes complete the procession towards the lake while the inland side is anchored by a full sized Caribou. Visitors are invited at this point to step outside and experience a closer proximity to the lake from a long outdoor pier.

Occupying the inland side of the wave structure and a second glazed area is the Agawa River Valley exhibit. Here vintage footage of the early logging industry is complemented by a full size "Boom Log" supporting a scale model of a "Big Tow" Lift up log ends which delivers the answers to posed logging questions.

Set against the inland view, the Group of Seven is presented complete with video and track mounted Velocipede.

Completing a tour of the Gallery, an audio/visual interactive exhibit presented on a large format video screen is set within a diorama of Sand River complete with a model of a canoe-carrying Beaver plane. The visitor is invited to join an expedition. The on-screen experience begins with an aerial journey from Lake Superior, up Sand River to Sand Lake and continues with the adventure of the canoe journey back down the river.

Upon arrival by plane at Sand Lake and at various intervals during the canoe trip, the progress is tracked via an on-screen map; visitors using a track-ball and pad are, at several junctions, given the option of continuing their journey down stream or stopping to investigate a variety of subjects ranging from the spotting of indigenous



wildlife to the story behind the many snow shoe cabins visible along the river bank.

After completing the tour of the main part of the exhibit hall, the Discovery Zone offers a chance to investigate the natural history within the park. A series of window and counter mounted displays and discovery drawers are set along the glazed end of the Exhibition Hall. Subjects investigated include, "We found this... on the beach," "We saw this Salamander in a rock pool" (vignette), "We saw this bird sitting in a tree" (visitor selected audio and draw with feather display) and "A bear came into our camp" (Bear growl drawer).

Visitors can also, via a video monitor, share other visitor's photos of their park experiences and look out of the window through a Pepper's Ghost and call up superimposed video footage of the same view, shot at various times throughout the year.

Conservation And Other Design Features

The building's footprint directly responds to the locations of the environmentally sensitive adjacent creeks, which are natural seasonal fish habitats, and of the "dynamic beach" of Lake Superior. Care was taken to respect recommended setbacks and to avoid negatively affecting the natural surroundings. The forms of the building's three building "blocks" and the orientation of their roofs take into consideration the building's visual impact on its surroundings. It was established at the outset of the project, through modeling studies, that a series of three linked pavilions would have less impact than a larger structure.

For energy conservation, care was taken to choose multi-zone, easy to maintain, efficient heating and cooling systems to reduce the life-cycle costs of operating the building. The largest expanses of glazing are protected under deep roof overhangs thereby reducing cooling loads in the summer months. High levels of insulation keep the building warm in the winter and cooler in the summer. A heat recovery system on the make-up air supply is provided. The building utilizes smaller tank WCs and connects into the campground water supply with minimal extra capacity requirements.

Where possible, natural materials are used and a natural 'life-time' preservative has been chosen to treat exterior wood finishes. Products were chosen that require minimal finishing and maintenance. Parallam beams are specified to support wide span areas and the floor struc-

ture of the building.

More than 22,000 people visited the center between the opening at the end of May and the end of season in October 2004. The client reported that visitors found the center extremely enjoyable and exciting. The project was awarded the 2004 Canadian Wood WORKS! Award Jury's Choice selection.

Park Superintendent Bob Elliot remarked, "After our first season we've had so many favorable comments from visitors, such as, 'this is one of the best visitor centres I've ever seen,' and 'it makes you want to explore the park.'" Project Manager Greg Wake added, "The first new center to be built in 10 years, has been a great success for Ontario Parks." *eb*

Client

Ontario Parks: Paul Bewick, Greg Wake, Doug Innes, Bob Elliot, Carol Dersch, Rick Vosper, Dave Sproule
Project Managers/Exhibit, Graphics, Interior Designers
Reich + Petch Design International: Tony Reich, principal-in-charge

Architects

Reich + Petch Architects/Local Affiliate Architects/
MGP Architects

Interpretive Planners

Blue Sky Design

Civil Traffic Engineers

Totten Simms Hubicki

Structural Engineers

Yolles Partnership Inc.

Mechanical/Electrical Engineers

Crossey Engineering Ltd.

Lighting Designers

Consullux Lighting Consultants

Local Mechanical/Electrical Engineers

MET Energy Systems

Landscape Architects

EDA Collaborative

Cost Consultants

AW Hooker and Partners

Translation Consultants

Appropos Strategies and Communication

Contractors

Mike Moore and Sons

Exhibit Fabricators

Expo Zone

Audio-Visual Consultants

InVisible Media(insert)



Over 25 years, we have evolved our viewpoint about design to create extraordinary moments and opportunities for people to have experiences that change their understanding and perspective of the world they live in.

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