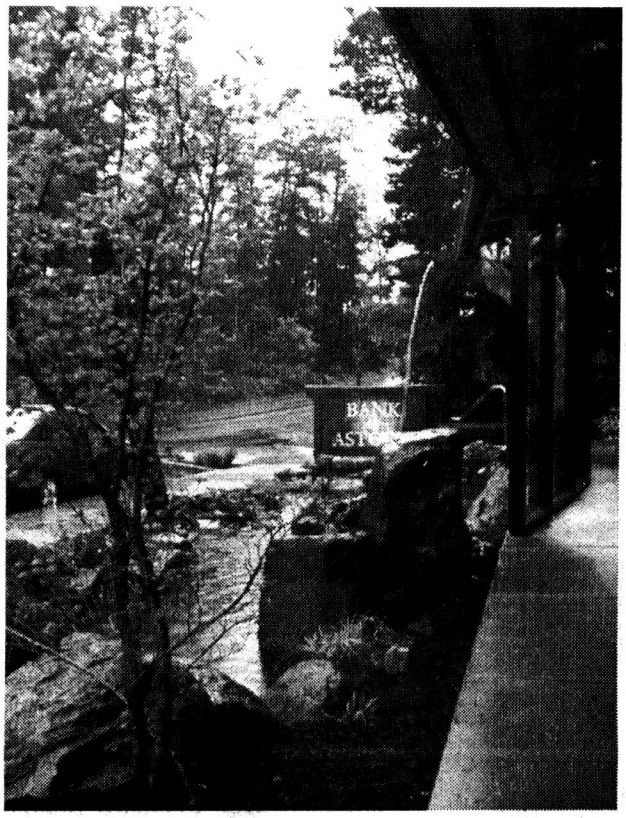
Water, light, wood and stone:

Bank of Astoria, Manzanita Branch

Dark cumulus clouds are rolling off the Pacific Ocean onto the wide, sandy beaches of Manzanita. Although it is May, the rain is pouring down on the small town as if it was the middle of winter. The tourists are all huddled beneath umbrellas as they walk up and down Laneda Avenue, Manzanita's one and only main street.



> "The worse the weather, the more beautiful it becomes."

Along this street, the Bank of Astoria stands like a true Oregon Coast native, openly relishing the downpour in all its glory. "The worse the weather, the more beautiful it becomes," said Tom Bender, the building's architect.

As the rain beats down upon the doubly curving roof, the droplets slide down a glass awning, gather into a roof spout and finally cascade like a windblown ribbon into a small pond that sits between the building and the sidewalk.

Bank patrons leave the spring storm outside and enter a luminous and expansive room. Local art and driftwood decorate walls that radiate colors ranging from ripe peach to warm pumpkin, depending on the light. From the dry interior, people can stop and watch the rain and the waterfall cascade together off the roof and into the pond.

The North Oregon Coast's weather was just one of the many factors Bender considered when he designed the Bank of Astoria, Manzanita Branch.

"You hear the sound of water, see the shadows of tree branches on the floor and the reflections of light on the pond shimmering on the ceiling," said Bender. "You remain in touch with the trees and clouds and people outside."

The building combines local resources with numerous elements of sustainable design, while promoting a sense of community.

Honoring Local Resources

The Bank of Astoria administrators wanted their building to honor and contribute to the community. This meant using local architects, builders and resources.

Eighty-five percent of Tillamook County is part of the world's most productive timber-growing area. In an effort to honor both the material and the people who work with it, Bender said, they bought the exterior wall shingles from a local cedar shingle mill. Instead of using sawn lumber, the primary wood roof framing was made of roundwood, which grew within 25 miles of the site.

The project's landscaping is composed of native coastal plants including salal, coast pine, manzanita, vine maple, evergreen huckleberry and sword ferns. A variety of wetland plants grow around

All photos courtesy of Tom Bender

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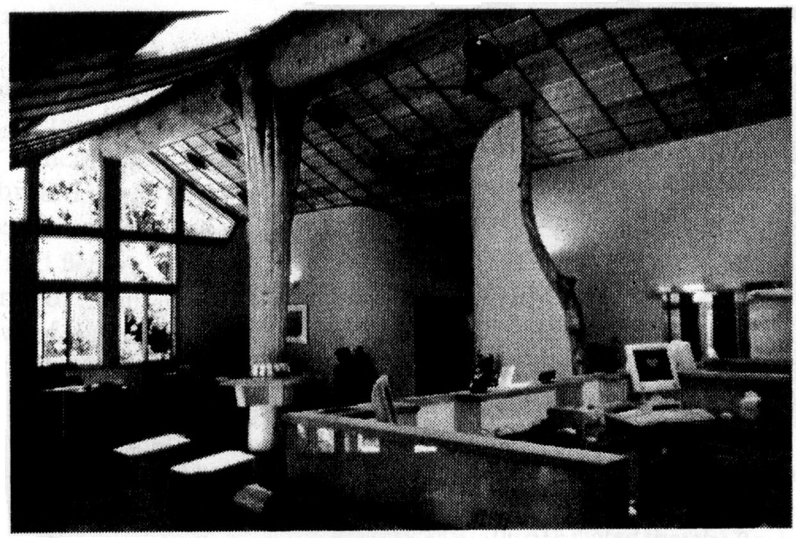
Building community sustainability with nature's elements

By Bethany Larson



the pond. All these plants will not require any irrigation after the first season.

Reducing Waste

The builders worked with CART'M, a local recycling center, to significantly reduce the construction debris. The center bundled and sold small scrapwood to campers at nearby state parks. Local artists made birdhouses with cedar shingle and exterior trim scraps.

A Sustainable Interior

Bender and the project contractor primarily used minimally processed, non-toxic and recycled materials within the building. Slate tiles, natural linoleum and recycled carpet pads cover the floors. Posts, wall trim and door handles made of driftwood express the building's proximity to the ocean.

A large cedar tree, positioned upside-down with its knarled roots reaching to the ceiling, is the central post for the ridge beam and the focal point of the interior. The main ridge beam is a 30-inch diameter, debarked and exposed roundwood log. Natural trees also form the columns and beams that support the drive-thru roof and glass canopy. After the trees were debarked on the site, local artists used the stripped bark for basket making and other art.

The building has south-facing windows and skylights that increase solar gain. Expect for the interior of the bank vault, the building is 100 percent daylit. Artificial lighting has dimming controls and occupancy sensors, which is expected to reduce lighting energy by 75 to 80 percent. Precooling the building with nighttime air eliminates the need for air conditioning. This is achieved with a night-flushing ventilation system that uses a high-level exhaust vent.

Working With the Climate

"The building is designed to incorporate a living moss-covered roof surface grown on conventional compo-

sition roof shingles," Bender said, "a uniquely appropriate form of 'living roof' for this particular climactic region."

Bender said the project included 100 percent on-site stormwater retention with two separate demonstration techniques. The first is a prefab plastic infiltration vault system installed under the drive-thru paving. In addition, water from the roof falls into the pond for storage and

Bank of Astoria, Manzanita Branch

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settling, then is allowed to naturally infiltrate into the native sand below the pond.

"With the region's high rainfall, stormwater is transformed into something to be celebrated and enjoyed, rather than hidden away in pipes," said Bender.

A Sense of Community

The Bank of Astoria has been nationally recognized for its investments in the local community. "When asked to design the bank building, I found that this bank walked their talk," said Bender. "They wanted a local architect, local builders, local resources, local artists."

True to their word: the bank's architect, general contractor and civil engineer have all lived in Tillamook County for 25 years or more. The building also houses a rotating exhibit honoring local artists.

Efforts Rewarded

On April 22, the American Institute of Architects (AIA) selected the Bank of Astoria, Manzanita Branch, as one of this year's "Top 10 Green Projects." The 10 projects are all examples of architectural design solutions that protect and enhance the environment. In a press release, the AIA stated that the Bank of Astoria "blends energy performance, local ecological fitness, community benefit and economic success."

The building also received the 2001 National Award for Sustainable Design from the AIA Architecture and Energy Program.

"Stormwater is transformed into something to be celebrated and enjoyed."

For more information on the Bank of Astoria, Manzanita Branch and Architect Tom Bender, visit http://www.tombender.org.

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