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Sant Lespwa, Center of Hope

Located in the central plateau area of Haiti, this community center is the first phase of a master plan intended to provide resources and build capacity in the region. The local economy is based largely on subsistence farming, and there are few educational opportunities. The first phase included a welcome center, community room, administrative area, social spaces, and a soccer field. Subsequent phases will include classrooms, job training workshops, a town hall, and residences.

Because the site has no utilities or infrastructure (except for a dirt road), the Center of Hope was designed to be self-sufficient. Careful planning for natural ventilation, daylighting, water collection, and sewage treatment minimized the need for utilities. The design process included participatory sessions with children, adults, and village elders and resulted in a courtyard scheme that is nestled gently into the existing topography and uses traditional Haitian building techniques. The orientation captures the prevailing winds through the courtyard and opens up views to the mountains beyond.

Sustainable design strategies were essential because there was no utility grid or clean water available. The three small buildings, gathered around a central shaded tree grove with interconnecting breezeways, were built with local materials and methods: cast concrete, river stone, chiseled aggregate, and palm weaving and thatching. Passive cooling and ventilation precluded the need for mechanical cooling/heating systems. A 15-kW PV solar array provides the annual electrical needs of the facility, including the pumps for the water treatment and reuse system.

Water collection and conservation is a way of life for Haitian families. Roof forms are shaped to collect water in a 9,000-gallon cistern, and water is treated with carbon and UV filtration systems. Sinks with clean water are used to demonstrate and educate the public about hand-washing techniques.

Other important features of the project included education and integration of earthquake/hurricane–resistant construction techniques and engineering for 150 MPH hurricane wind speeds and seismic zone design criteria.