## E W A R C H I T E C T U R E

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## **EDSA's** Crosswaters Ecolodge



## Crosswaters Ecolodge

As the first ecotourism destination and one of China's first sustainable resorts, the award-winning Crosswaters Ecolodge is a study in environmental, social, economic and even spiritual consciousness. Much preparation was done to ensure that the project was developed with minimal impact on both the physical and human environment.

Located in Nankun Mountain Reserve, the Guangdong province of South China, the site is surrounded by over 1,300 plants and 30 square kilometres of bamboo, and is also home to numerous species of birds and butterflies, many of which are nationally protected. Over 5,000 local Keija people live in the Reserve, relying on bamboo as their main income source.

To ensure that the developmental process would not upset the site's ecological balance and the harmonious relationship between the Keija people and their surroundings, the developer employed a quadruple bottom line approach: protect and enhance the existing forest biodiversity; involve and help the local people benefit from the development; channel much needed capital into the local economy and make a profit; respect and enrich the spirit of the place through sensitive sustainable planning and design.

With these objectives in mind, the team—which included EDSA, wellknown Australian Ecolodge architect Paul Pholeros, leading bamboo architect Simon Velez and BUZ Design—carried out intensive and in-depth environmental, social and metaphysical analyses. They conducted three different on-site visits, each lasting a week, during winter, spring and summer. They spent time understanding and studying the lifestyle of the Keija people—especially their internal spaces and relationships with gardens

- 1 A fine dining restaurant overlooks the Ganken River
- 2 Selective cutting of bamboo was used in the construction of the bridge and resort structures





## PROJECT DATA

Project Name Crosswaters Ecolodge Location Guangdong Province. China Completion October 2006 Site Area 25 km<sup>2</sup> Gross Floor Area 9.500 m<sup>2</sup> Number of Rooms 50 Client/Owner Longmen Mt. Nankun Zhongheng Ecotourism Development Co. Ltd Architect Paul Pholeros Bamboo Architect Simon Velez Landscape Architect FDSA Principal Architect Ken Luo Images/Photos FDSA

- **3** The main lounge overlooks the reflection pool
- 4 Local craftsmen were brought in to help with the rammed earth walls and bamboo construction
- 5 Much of the building materials are recycled and reused. The
- boardwalks are made of railway ties 6 A private villa balcony overlooks the Ganken River
- 7 Sitep lan
- 8 View from the bamboo bridge toward the main lounge

and their philosophical connections with bamboo—through site studies of authentic Keija houses. Factors such as drainage, existing agriculture, water levels, seasonal visitor traffic and industry were also taken into account. The team also involved the local people in the planning process from the start so that they could tap into the local wisdom and knowledge of the Keija tribe to develop the site into a true ecolodge.

In order to integrate the development with the surroundings, EDSA used GIS (geographic information system) to generate several layers-watershed, vegetation, hydrology and land use-based on the physical topography base map provided by the client. System add-ons Spatial Analyst and 3-D Analyst were also used to create slope, elevation, slope aspect analysis and 3-D terrain analysis layers in order to identify the optimum locations for various buildings. As feng shui beliefs are central to South China, the team consulted a local renowned feng shui master with 20 years of experience to look at the 'qi' (Chinese word for energy) of the site and offer advice

on how to maintain the area's metaphysical energy during construction.

The project was constructed with mostly organic materials found in and around the site. A lot of them are recycled materials, for instance, boardwalks are made of railway ties; clay roof tiles are from demolished buildings in the village. Local craftsmen were brought in to help with the rammed earth walls and bamboo construction. The landscape architecture, architecture and interior design of the lodge have all been based on bamboo. In fact, the ecolodge is the largest project in the world using bamboo commercially. All plant species specified for the project are native to the region; no exotic species have been used.

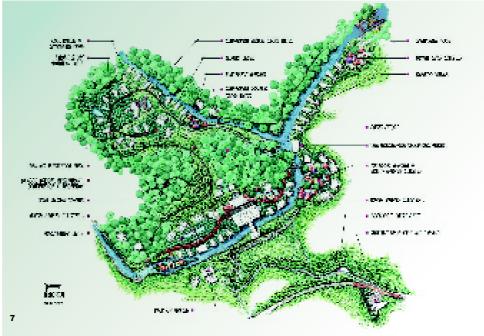
As the first phase development of a 10-year master plan for a 25-squarekilometre forested area within Nankun Mountain Reserve, the five-star, 50-room boutique ecolodge will provide a variety of experiences to tourists, including mountain climbing, hiking, boating, birding, cycling, walking, swimming, astronomy, wine tasting, fruit picking, wellness activities, and fish farming. **–Caroline Wang** 















PLANNING LANDSCAPE ARCHITECTURE URBAN DESIGN GRAPHIC DESIGN

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