

Combining traditional and new technologies

Project: Caravan Site Upgrade, Nieuwoudville, South Africa

Winner: Andrew Raymond Horn, architect.

Organisation: ECO Design Architects & Consultants, Cape Town, South Africa

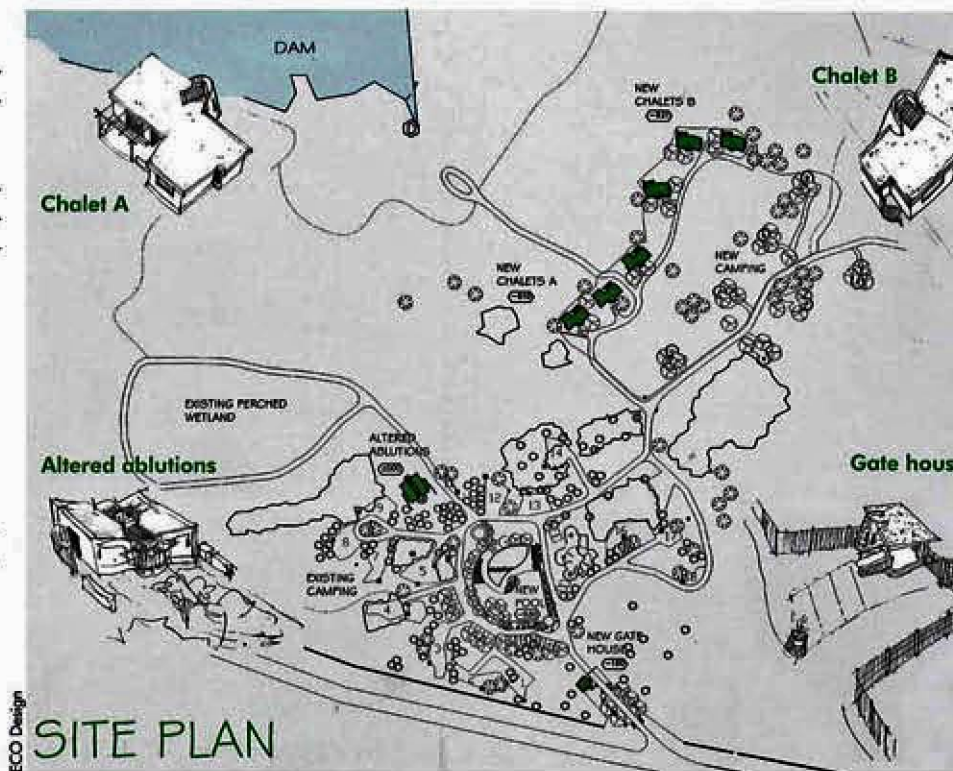
Award: Silver

Prize money: US\$50 000

The project

The architectural brief for this project included the development of a gatehouse, six chalets and renovations to the existing ablution block at a caravan site in Nieuwoudville. The project aims to support the holistic development on the Bokkeveld Plateau, known as the bulb capital of the world. According to Andy Horn, architect, five different biomes coincide in the area. Horn says the plan is truly participative and they kicked off with a week long design charrette.

Locally available natural materials are used to minimise environmental impacts while at the same time maximising community involvement and local job creation. Running costs of the caravan site is minimised through the use of renewable energy and ecological sanitation systems. Innovative



Nurturing local knowledge

Project: Design for an artisan training centre at Tamtarga, in the province of Taroudante near Marrakech, Morocco

Winner: Abdelrhni Fenjiri, architect.

Organisation: Agence d'architecture et d'urbanisme Fenjiri Abdelrhni, Rabat, Morocco

Award: Gold

Prize money: US\$100 000

The project

The training centre design forms part of a three-phased design aimed at nurturing local technical knowledge in an attempt to bring about economic growth. The project is located in a rural area in a mountainous region of Morocco. There are approximately 10 000 people living in about 18 villages and the lack of education and training is a major problem. Phase one of the pro-

ject comprises the building of a primary school, while phase two is the artisan training centre where people will be trained in the ancient arts of making carpets and doing pottery. A third phase of the project includes the construction of a rural hostel.

The verdict

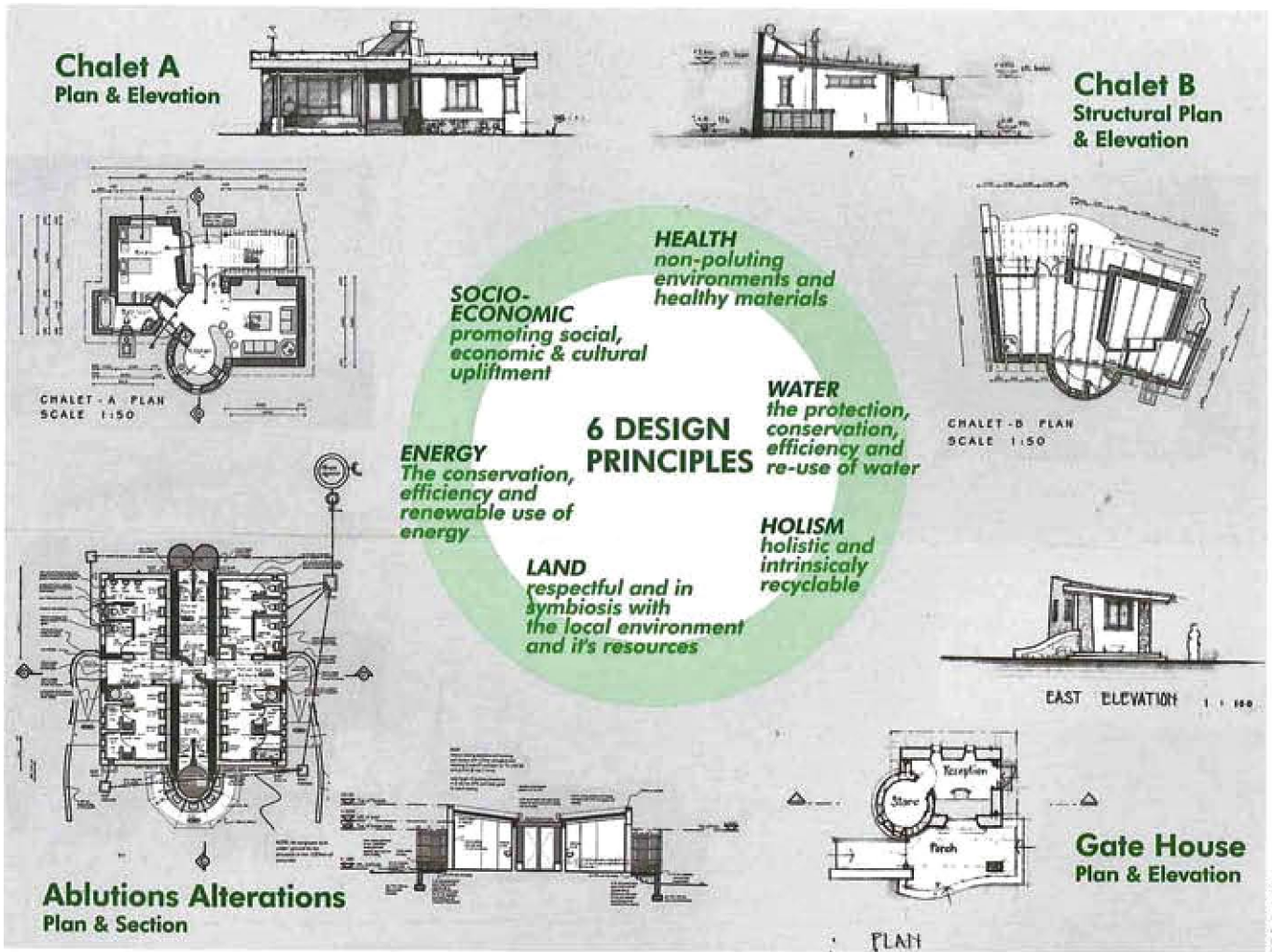
According to the jury the project earns high distinction for its skillful engagement with a mountainous region that is isolated due to difficult terrain and lack of proper roads and communication infrastructure. Although operating in a context with extremely limited resources, the jury commended the architects for respecting the vibrant and dynamic culture by adopting a community-driven approach towards the development of both the functional programme as well as a generation of the design solution. An appropriate design language is promoted in terms of the design-

ated forms, materials and construction technology. Decisions seem to be driven by sensitive responses to indigenous material resources, locally available means of implementation, local competences as well as aspirations of the native population rather than imposing ideals of the design team. A high degree of ecological and social sensibility is evident. The work is also merited for precision in selecting the site, as is the use of raw earth for construction that minimises costly structural requirements. Strong partnerships (especially with the government's Social Development Agency) also ensure the feasibility of such an undertaking and hold the promise of greatly improving the overall quality of life in the area.



Holcim

Artist's impression of the artisan training centre.



straw-bale building techniques are used for construction. The project is to go on site at the beginning of 2006.

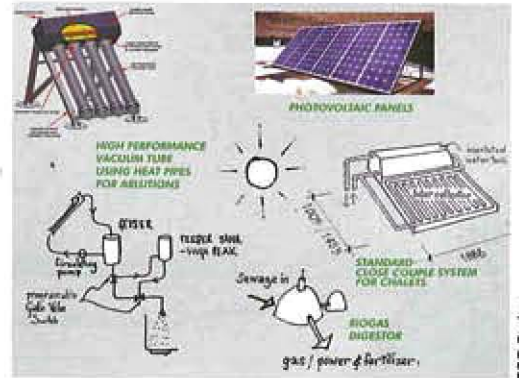
The verdict

The jury commended the project for its systematic approach to addressing the target issues in a non-invasive manner that respects the context in which it is situated. A well-considered balance is apparently applied between a selection of locally available materials and construction technology – with straw bale walls, timber structure and sod-roof as key elements – and new technologies that optimise renewable energy – vacuum-tube collectors for solar water heating as well as photovoltaic panels for low-level appliances and lighting. Equally significant is the use of composting toilets rather than water-based sewerage, thereby providing an opportunity to recycle greywater following its preliminary treatment through a constructed wetland. It is further deemed important that the aesthetically subtle and refined solu-

Left: Site plan of the Nieuwoudtville caravan park.

Above: Plan and elevations of chalets designed according to six design principles.

Right: The plan includes the utilisation of various sources of renewable energy.



tion sponsors broad-based stakeholder participation in the conservation of "biodiversity hotspots," thereby fostering committed involvement from a wide sector of the community to plan their mutual future.

Not new, but a step in the right direction

Although commendable, to be honest, these types of innovations and sustainable projects are not new. For a long time a small group of people in the design and construction professions have been designing and building according to principles of sustainability. Why is it still done at a relatively small scale? Why is it not part of the mainstream practice? How are we going to ensure that it becomes mainstream? How are we going to ensure that not only minor projects, but also major projects are done in this manner to start changing perceptions?

The Holcim Awards might be a step in the right direction. It is a grand and truly global effort and the Holcim Foundation invested a significant amount of money in it. If given the appropriate exposure, it might have a significant impact on sustainable construction and on our future.

It might also be a good idea for the Foundation to keep monitoring the implementation and maintenance of the award winning projects, if we are to compile an interactive and accessible database and network of worldwide best practices and practitioners. ■