Statement
The Pyramids Smart Village Corporation intends to develop information and communications technology in Egypt. A 1.4 million sqm site – accessible from central Cairo and the Cairo International Airport – on the Cairo-Alexandria highway has been set aside for an IT linked community.

Understanding
The company is investing in high-quality working environments, which deliver facilities and services to support the establishment, growth and development of advanced technology enterprises involved in the field of communications and information technology.

Goals and Objectives
* To provide an enabling working environment suitable for high-tech activities that require innovation
* To facilitate administrative and management functions for village occupants to support IT activities
* To make available the necessary complementary services needed for the success of the businesses operating in the Village
* Establishment of a centre of excellency that attracts foreign investment in the field of communications and information technology

General Concept
The concept of the smart village or the "technology business park" rests on the utilisation of state-of-the-art working facilities and services, for supporting the advancement of technology-based businesses.

The construction area will constitute only 10% of the site, 90% of it will be allocated to green areas, landscaping, parking lots and recreation activity centres.

Modern and world-class management systems will be implemented in order to attract potential international investors and value-added technology suppliers. These will comprise the following:

* A variety of office facilities and spaces will be available allowing options for lease or ownership
* Conference and business office facilities to serve visiting businessmen as well as the village occupants
* Land plots will be available for building by the occupants, either through direct ownership or long-term financial leasing arrangements.

Facilities
To serve its occupants, the Pyramids Smart Village will provide specialised facilities to be operated by professional companies.

* Fully equipped state-of-the-art convention centre
* Exhibition centre equipped with the latest technologies and services
* Public libraries (traditional and electronic)
* International press centre
* Printing, publishing, translation and advanced business services
* Accommodation facilities (hotel and hotel apartments)
* Commercial centre and restaurants
* Parking facilities
* Health centre and first-aid services

Modern Infrastructure
* A high-speed communications network connected to satellites for data, voice, video and TV transmission
* State-of-the-art stabilised electricity network, air-conditioning and cooling system
* Modern fresh water network and irrigation system together with a modern sanitary drainage network

Special Services
* Suitable security services catering to the needs of the village occupants
* Postal and freight services
* Transportation
* Information services (with access to data-banks)

Administration Facilities
To prevent any bureaucratic hassles and administrative delays, the Pyramid Smart Village will provide all the occupants with the following services and facilities:

* Legal and administrative services to assist in the establishment of new companies and acquiring the necessary permits, licenses, etc.
* Clearance and delivery services
* Financial and banking services

Engineering Consultants Group (ECG) - First Prize Design
The master plan development philosophy aims to create an environment conducive to scientific and intellectual activities. This is achieved through:

* A rich, informal landscape design with a natural parkland setting
* A simple curving road network relating the landscape and the undulating character of site topography
* Water areas to enrich the visual quality of the landscape and alleviate the hot, dry summer microclimate
* A clearly defined Village Centre on an ornamental lake
* Clusters of office buildings to emphasise gateways to the Village
* Legible network of roads and pedestrian ways combined with landmark buildings to simplify navigation
* A consistent, high technology architectural vocabulary, with a restrained use of natural materials contrasted with steel and glass.

The main access and distribution ring road will be a dual carriage way with a planted central median edged by formal avenue planting of evergreen canopy trees with a two-meter wide pedestrian promenade.

A formal double ring of date palms, under-planted with flowering shrubs and seasonal plants flanks the large roundabout at the main entrance. This area features decorative signage and a central sculpture, enhancing the sense of arrival.

The secondary roads from the main distributor road provide access to the office buildings and car parks. They will have a more informal character, with groupings of ornamental trees in lawns, framing views to the buildings and courtyards.

Approximately one third of the Village's car parks will be located within the landscape. Typically located to the rear of the

ECG proposal: Conference Centre, the most prominent building in the Village, is an attempt at a futuristic design, inspired by the symbolic image of communication satellites around the globe; section, ground and first floor plans.
buildings, the car parks will have a courtyard character, and will be integrated into the landscape, screened and shaded by evergreen canopy trees. Car parking for the Conference Centre and other central facilities will have a more formal character.

Although set in an informal parkland landscape, each building will feature formal forecourt entrances and drop off areas with distinctive paving designs, water features and detailed planting.

A thirty-metre wide buffer zone around the perimeter of the site allows for dense screen planting. Planting to the southwestern boundary, overlooking the Cairo-Alexandria Highway, will be more irregular, allowing framed views into the Village.

The Village Centre occupies approximately 20 hectares, about 14% of the total site area. All required central facilities, with the exclusion of major site infrastructure, are accommodated within the Centre, with associated parking, formal and informal landscaped areas, a substantial ornamental lake, linked water areas and a helicopter-landing site.

The organisation of the Centre is based upon the functional relationships between various activities – conferences, exhibitions, entertainment, business management and central services - balanced by the hotel, hotel apartments, the sports club and the shopping centre.

Four variants of buildings are designed as high performance office units, to the same standards, but in different sizes. Offices will be equipped with raised flooring to allow any possible configuration of office fit-out and furniture arrangement, and to allow for upgrading of communication and power systems.

The structural frames of all the four office types will be conventional in-situ concrete construction. This is both durable and economical and is a well-established construction technology in the region. The skin of the office is essentially curtained walling using high performance glass. All masonry external areas of the buildings would use local facing stone. The juxtaposition of traditional stone with high-tech glazing will create a unique and exciting contrast of materials.

In addition to the high performance glazing, passive solar energy features are incorporated in the design such as solar screens above the roofs in some designs, double skin for walls with large exposure, and louvers or sun shades for other designs.

Where possible, office buildings are organised in clusters, with a distinct geometric relationship between structures, which does not disturb the generally organic character of the Village.
The Exhibition Centre, adjacent to the Conference Centre, is composed of 3,000 sqm indoor exhibition space with a large outdoor exhibition terrace overlooking a central lake. The building structure is based upon a suspended roof supported by one row of external columns, allowing maximum flexibility for the sub-division of internal spaces.

The Business Centre is linked by a dramatic flying corridor to the mezzanine floor of the Exhibition Centre. The three-storey business accommodation is divided into: press centre, main library communications and data centre; and the secretarial services, photocopying and printing with two floors of rental office space.

The front elevation and typical floor plan.

The tank cafe in the lake is accessed by a footbridge.
Hisham Bahgat - Second Prize Design

In an attempt to achieve the main goal of the competition – to create an original urban environment for IT related industries – architects at Hisham Bahgat considered epistemological dimensions relating the village with technology.

Foremost, cost effectiveness and geometry drove the design. The housing modules relect on local traditions and socialisation patterns. Although environmental considerations are stated as a guiding force in the design, all structures are low-density sprawling forms.

A fundamental principal in this design is that the community is small and integrated with a homogeneous population – it is anticipated that the population would have a common culture and lifestyle. It is a closed society.

Bahgat’s design is directed by the typical Egyptian village’s street patterns – a street outlines the perimeter. The design is meant to accommodate a community that grows internally – which means the density at the core is heavy and diminishes towards the edge.

Environmental Considerations:
* Temperature, direction and intensity of wind
* The sun’s direction, its shadows
* The earth’s shape and its qualities and specifications for the urban formation.

Located five to seven kilometres from the Nile at the edge of the desert, a priority in the design is to reclaim the desert and build a landscaped village that enhances the environment by integrating gardens. Rather like examples found in other related traditions, for example in medieval Andalusia.