

The Grand Egyptian Museum Architectural Proposal

The Constellation

This proposal continues the series begun by the constellation of the three Great Pyramids of the Giza Plateau. By doing this, a vast network is mapped on the surface of the earth. The diagonal axis of the north pyramid is mapped across to the site for the new building, and forms the axis and orientation of the proposal. This locates the fourth member of the constellation - a square of 400metre width described as the Grand Surface.

The Horizontal

The building achieves monumentality through its horizontal expanse. The Grand Surface maps a footprint which is considerably larger than the ground area of the three Pyramids combined. At the same time it is considerably lower - a gently sloping pyramidal dish resting on the site and covering the building programme. This surface is only partially filled by building; the majority of it maps landscape and outdoor functions.

The resulting Grand Surface of 160,000m² forms an architectural plateau and offers a sublime relationship with the landscape of dunes beyond, and vistas of the Great Pyramids. The Grand Surface draws comparison monumental objects marked horizontality - Land Art, asteroid craters, radio telescope dishes, aircraft carriers. It follows a desire that the footprint gesture might be visible from space, and readable in its context with the Pyramids.

The walls beneath the Grand Surface are inclined at 51 degrees referring to the Pyramids, and forming a deeply sculptural façade for the building approach. These are imprinted with a constellation of relatively small openings, and a clad in a single material of shimmering golden metal.

Flexibility

Great flexibility is achieved through large open floor plates with a column grid and non-loadbearing walls.

This is especially true of the Main Gallery Level - where all collections are held on a very large single floor capable of complete re-arrangement, and allowing clear, legible programme arrangements.

The Administration and Conservation areas are similarly envisaged as open plan, flexible arrangements of space.

Expansion

Several options are provided for possible future enlargement of facilities.

1. Construction of quadrants three and four.

Programme only partially fills the Grand Surface - construction under the remaining quadrants provides greatly enlarged areas without disturbing existing spaces or the overall concept.

2. Expansion into the lower level

Parking levels are planned as double height floor directly below the Main Gallery with a removable mid-level. Collection expands into this area and carparking is relocated.

3. Expansion of the Constellation

Within the constellation concept, a future linked pavilion may be added near the Grand Surface in the Dunal Park, adding a fifth point to the constellation.



Entry and Link Sequence

Entry to the complex and travel to the Main Galleries is clear, unambiguous, and captures the monumentality of the large gesture.

Arrival is at the under the corner of the Grand Surface, and into a Ground Level Hall with vehicle drop-off.

Entering this space, one perceives the entire corner volume in a space 30m high, and perceives the direct path up to the main concourse (network link). Escalators and lifts are set adjacent and follow a linear path toward the centre of the Grand Surface.

Mid-way along this path circulation meets the parking level. Visitors and staff entering from car parks join the sequence via a lobby at this level. Travel continues up to the Main Concourse - a link and foyer hall which connects the entry corner to the centre and all the Galleries along its length. This spine contains orientation and ticketing services, as well as open access to shops and cafes.

Ticketing and information is via a series of kiosques arranged on the concourse floor, and then to controlled points of access to various halls. The lift lobbies at the end of the concourse extend to the Conservation Level. This then transfers to the Administration level via escalators. The Main Concourse extends via a ramp onto the Grand Surface, providing direct access to the outdoor spaces including outdoor exhibitions and parks.

The Grand Surface Collector

The Grand Surface, as a horizontal dish, acts as an environmental collector of Water and Sun, thus proposing the museum as a model of environmental sensitivity.

Water

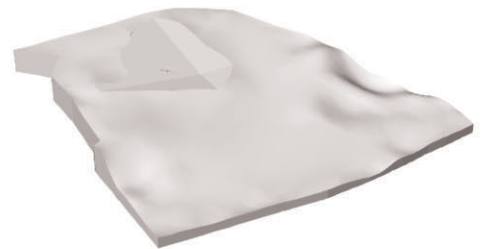
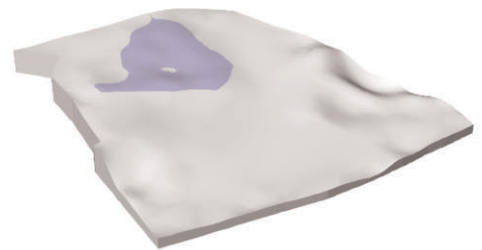
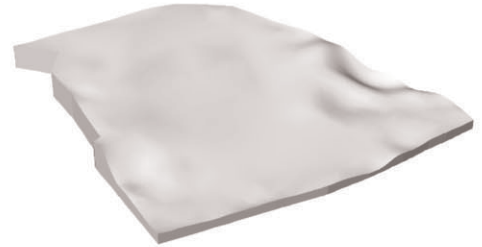
The area of 160,000m² falls to a collection point at the centre of the square. Any water on the surface will drain toward this point, being collected in tanks below the surface. The precious commodity in a low rainfall area is harvested to a maximum.

In addition a comprehensive water retention and recycling system is envisaged to link to the tanks.

Sun

The south-facing quadrant of the Grand Surface may carry a large and expandable number of solar collectors which not only contribute to the pattern of the surface, but become a future model for solar power and heat generation on an institutional scale.

The construction of the Grand Surface is conceived as a careful rearrangement of natural ground into a large geometry. The calculated volumes of earth cut and filled to construct this form are equal. The Surface may then be understood in some cases as a trafficable roof, and in others as an artificial ground.



The Cultural Message of the Museum

The future of science fiction and the pre-historic converge in this proposal. The proposal aims to carry the cultural mystery of projecting deep into the future and deep into the past.

The wonder of the ancient artifacts is intensified by trying to imagine them as awe-inspiring in their newness - as they may have been seen when first created. In the case of the pyramids this is likened to the surreal super-object landed on earth.

The display of information similarly aims to unite the power of the virtual image, and the physical presence of the artifacts. The museum's message should acknowledge the unique value - the aura, of the actual object for all its age, and state of preservation. The displays should promote close access and scrutiny of these objects.

At the same time the message of the museum is one of a culture which is successfully making artifacts accessible electronically, and understood theatrically. The architectural spaces provide opportunities for large scale projection of images relating to the exhibits. At the same time, numerous small scale spaces would be provided for individual interaction at the screen.

The Permanent Galleries are arranged in a series of five parallel strips reflecting the curated categories of the display themes, and each commencing at an entry point on the concourse. In this way any thematic area can be entered and viewed separately, or treated as a commencement to the larger collection. The five strands are separated by service walls which contain minor programme, circulation services, and small niche spaces from the main halls.

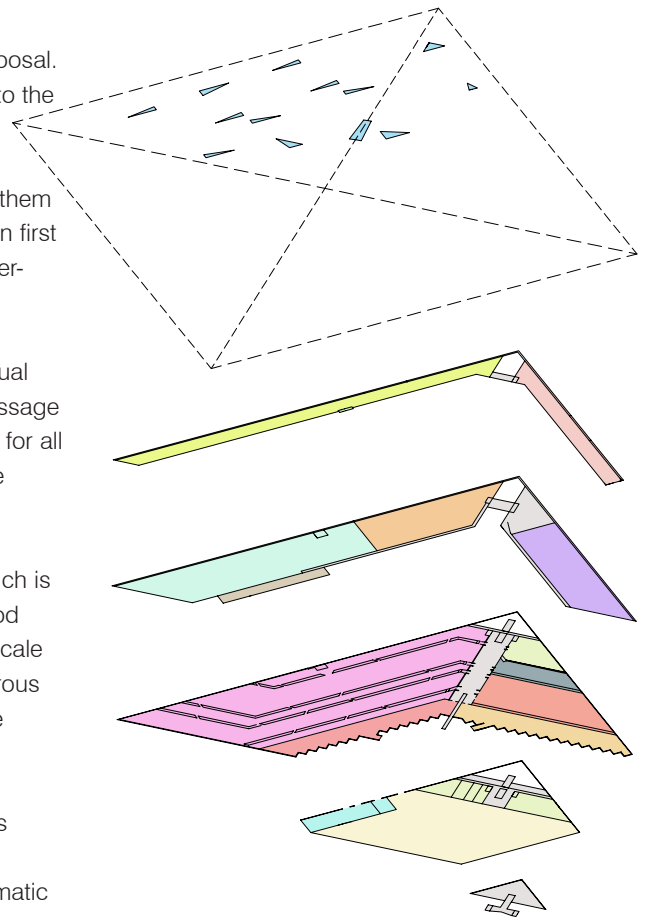
Breaks in these walls provide crossover opportunities between the five strips. It is intended that the special configuration mirror the thematic diagram of the exhibits and be readable by the user navigating the halls. This configuration enables both long and shorter routes to be taken by visitors that cross section major themes or give opportunity for in-depth exploration of them.

The museum provides a message of accessibility, openness, and diversity in a highly unified form. From a distance the gesture is singular, closer it reveals itself as modeled and complex: like a the surface of a fictional spacecraft or a coastline.

The straightforward circulation routes throughout the building provide clear visual cues to facilities.

The large open concourse is seen as a truly public space - the main street of a new precinct, for non-ticketed activities.

The Grand Surface is a gesture of generosity - a dish offering for a culture and a means of access over the site, and over the building.



The Network of Spaces

The building is organized on 6 levels

1. Undercroft Entry level (RL 34.0)
2. Parking & Service level (RL 43.0/46.5)
3. Main Gallery level (RL 50.0)
4. Conservation level (RL 57.0)
5. Administration level (RL 61.0)
6. The Grand Surface (RL 68.0 max)

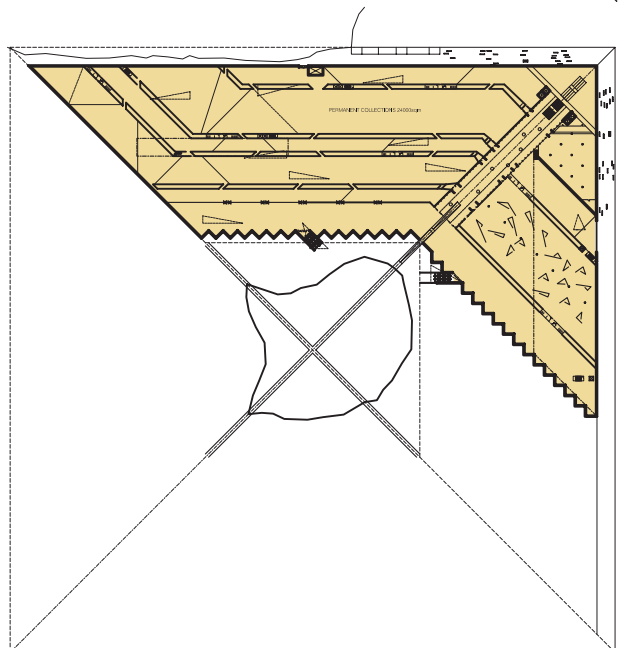
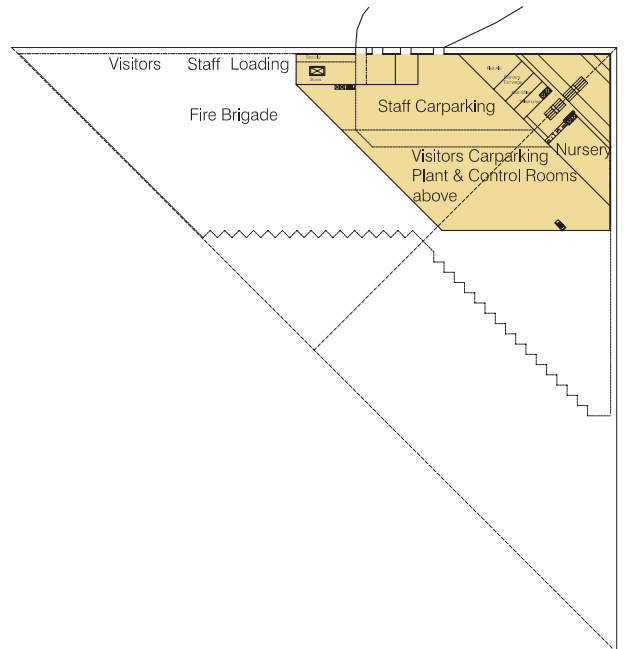
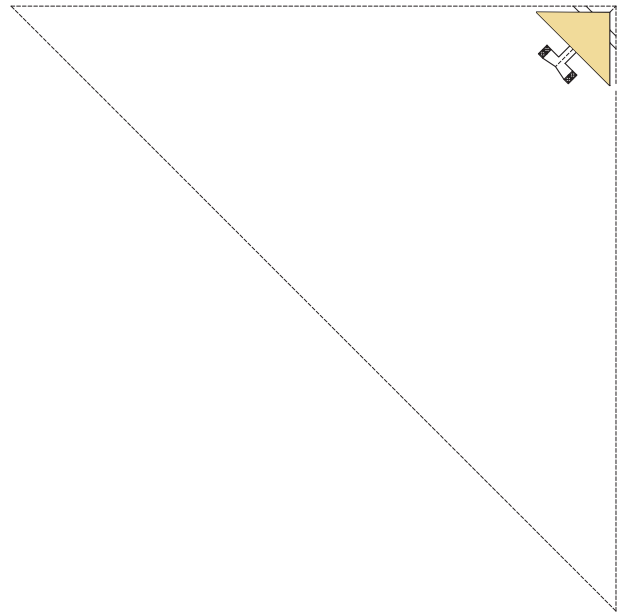
1. Undercroft Entry level
total area 1,400m²
the small corner at grade
contains at grade access to vertical circulation & vehicle drop-off.

2. Parking & Service level
total area 32,300m² (split into 2a & 2b)
2b: Staff Parking - provided undercover
Security & Services
Storage & Loading
Plant & Services rooms
Control Rooms & Security Centre
2a: Visitor Parking - provided undercover
vehicle access from north facade
Fire Brigade
Lobby access to entry & concourse containing General Services
Nursery Kindergarten
First Aid
Currency Exchange
Post Office
Telephone Booths

3. Main Gallery level
total area: 43,000m²
entire Permanent Collection
Special Collections
Temporary Collections
Museum Shop
Self Serve Cafe
Each function accessed directly from the Main Concourse

4. Conservation level
total area: 25,100m²
Conservation laboratories
Main Storage & Archaeological Storage
Library
Mediatheque
Conference Halls & Meeting Rooms
Scientific Institute
Accessible directly form Main Concourse as a mezzanine over the Main level.

5. Administration level
total area: 8,300m²



Offices Wing:
 Management
 Operations
 Temporary Exhibitions
 Computer Services

Restaurant Wing:
 Directly accessible from Main Concourse below.
 Direct access to outdoor facilities.
 Direct views to the Grand Pyramids

6. The Grand Surface - Open air areas

Dunal Park
 Formed in three areas surrounding the Grand Surface.
 Conceived as Pure, serene sand desert, following natural ground levels and shifting naturally.

Grand Surface Programmes

All other programmed areas are contained on the Grand Surface
 Accessible from within the Museum and protected due to the Surface geometry.

1. Nile Park

The area of one Quadrant of the Grand Surface
 Conceived as Delta grassland; the Nile profile is mapped onto the park.

2. Open-Air Exhibitions: flat plaza space cut into the Grand Surface slope.
 Set over research spaces and viewed from upper Restaurant.

3. Themed Park

Briefed outdoor area themed around a rocky landscape - containing rugged boulders and stones - an area for exploration and contemplation.

4. Equiped Park

Briefed outdoor area populated by seating and small shade structures, as well as play equipment. It is considered that this area will contain extension of the outdoor exhibit areas.

5. The Solarscape

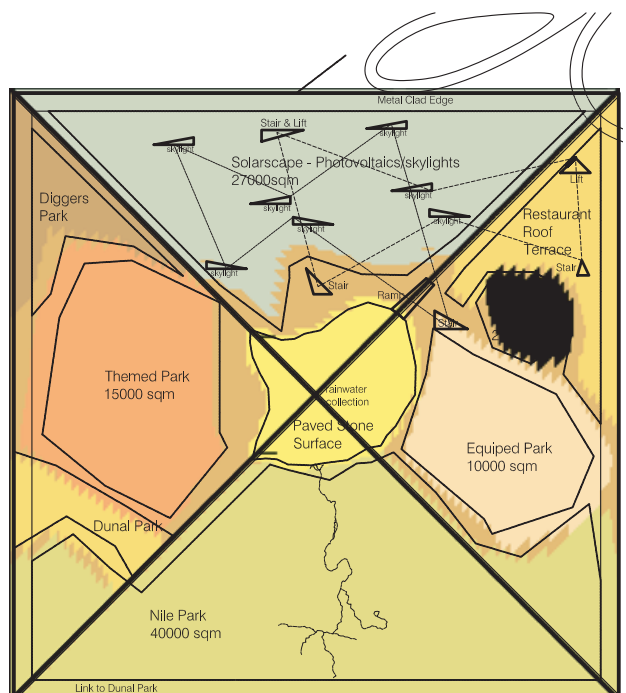
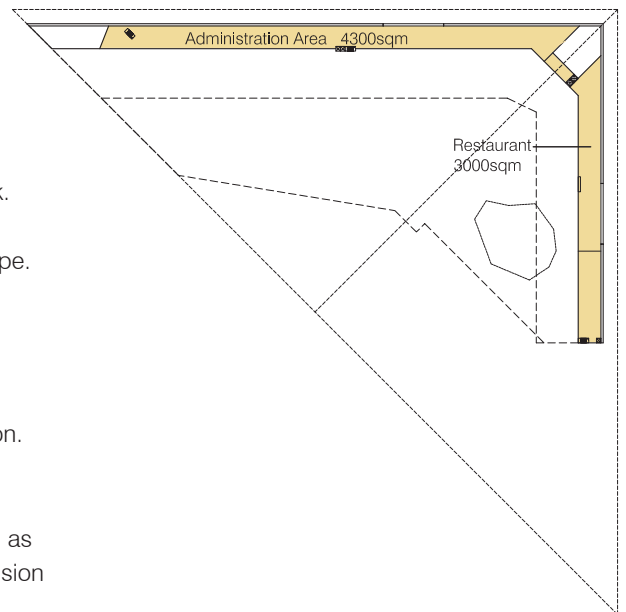
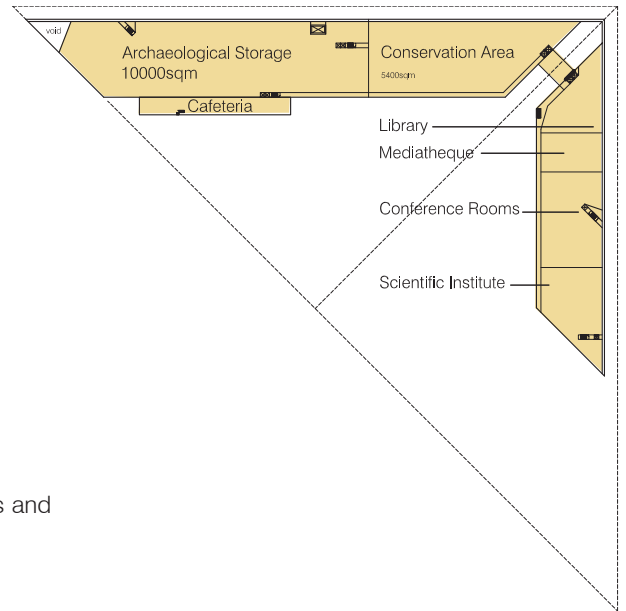
The north quadrant forms the roof over much of the internal programme. Contains solar collectors facing the sun and a series of skylights penetrating the Grand Surface, providing views of the sky from offices areas.

6. Diggers Park

Themed around the Grand movement of Earth, and providing a link to the Dunal Park.

7. The Centre

A plaza of polished stone.
 Reflects the sheer surface of the new pyramids & the existing profile of the apex.
 Contains main drainage grate into water tanks and intersection of paths at the junction between quadrants.
 These paths include the long skylight running along the Concourse spine.



400400SQ