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# Macao Science Center

client / owner  
**Macao Foundation**

architect  
**Pei Partnership Architects LLP with I.M. Pei Architect**

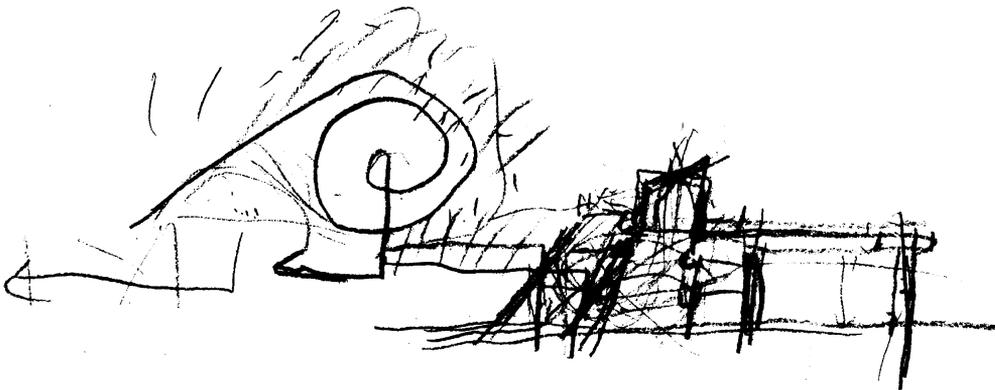
local architect  
**P & T Architects & Engineers, Ltd**

structural engineer / MEP engineer  
**P & T Architects & Engineers, Ltd**

IT / AV / security consultant / acoustic consultant  
**Arup**

signage consultant  
**Tracy Turner Designs + J.H. Consultants**

lighting designer  
**Office for Visual Interaction, Inc.**



## Design concept

The galleries are organized as trays reached by a spiral ramp that ascends around the tilted cylindrical atrium. Visitors can also circulate internally via the open staircases located at both ends of each gallery. At the top of the ramp, a glass enclosed walkway connects the cone-shaped building to a viewing platform. Visitors have the option of returning to the ground along the ramp or more directly by escalators enclosed in a 40-metre long glass tube. The escalator will operate in both directions to permit the public to start their tour from the top if preferred giving flexibility and variety to the experience of the facility.

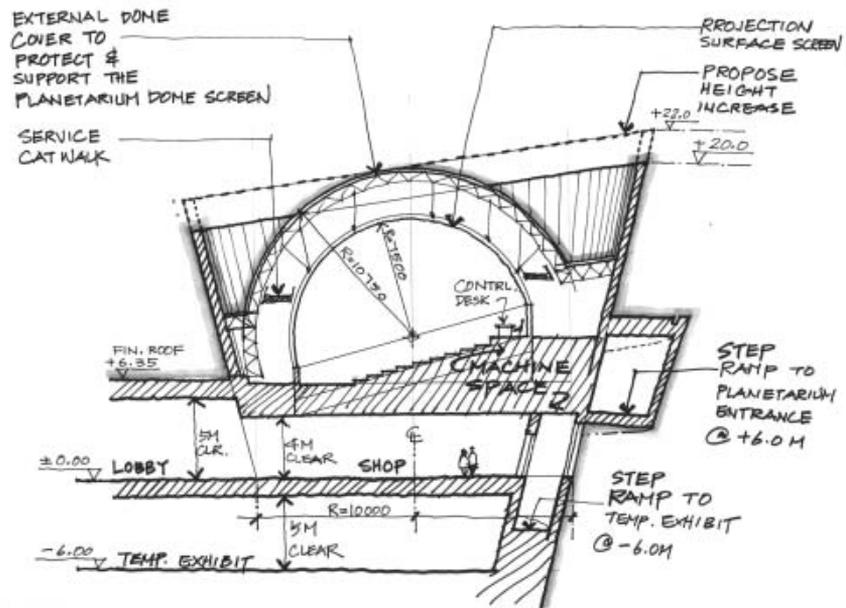


**W**orking with I.M. Pei Architect during the early conceptual stages, Pei Partnership Architects has designed a form consisting of a tilted cone, a dome and a low rhomboid. Together they compose a building that will become an instant cultural and symbolic landmark. Much of the building will be sheathed in shimmering metal giving it the presence of a distinctive geometrical form from afar. The Center is located on the

North-south axis with Avenida de Dr. Sun Yat-sen opposite Macao Cultural Center and can be reached through the provision of a new roundabout by vehicles arriving from either the north or the west or by the landscaped riverfront boardwalk.

The Science Center's volumes articulate its two basic programmatic components: exhibition galleries and conference centre. The scientific displays are housed in an asymmetrical conical form whereas the







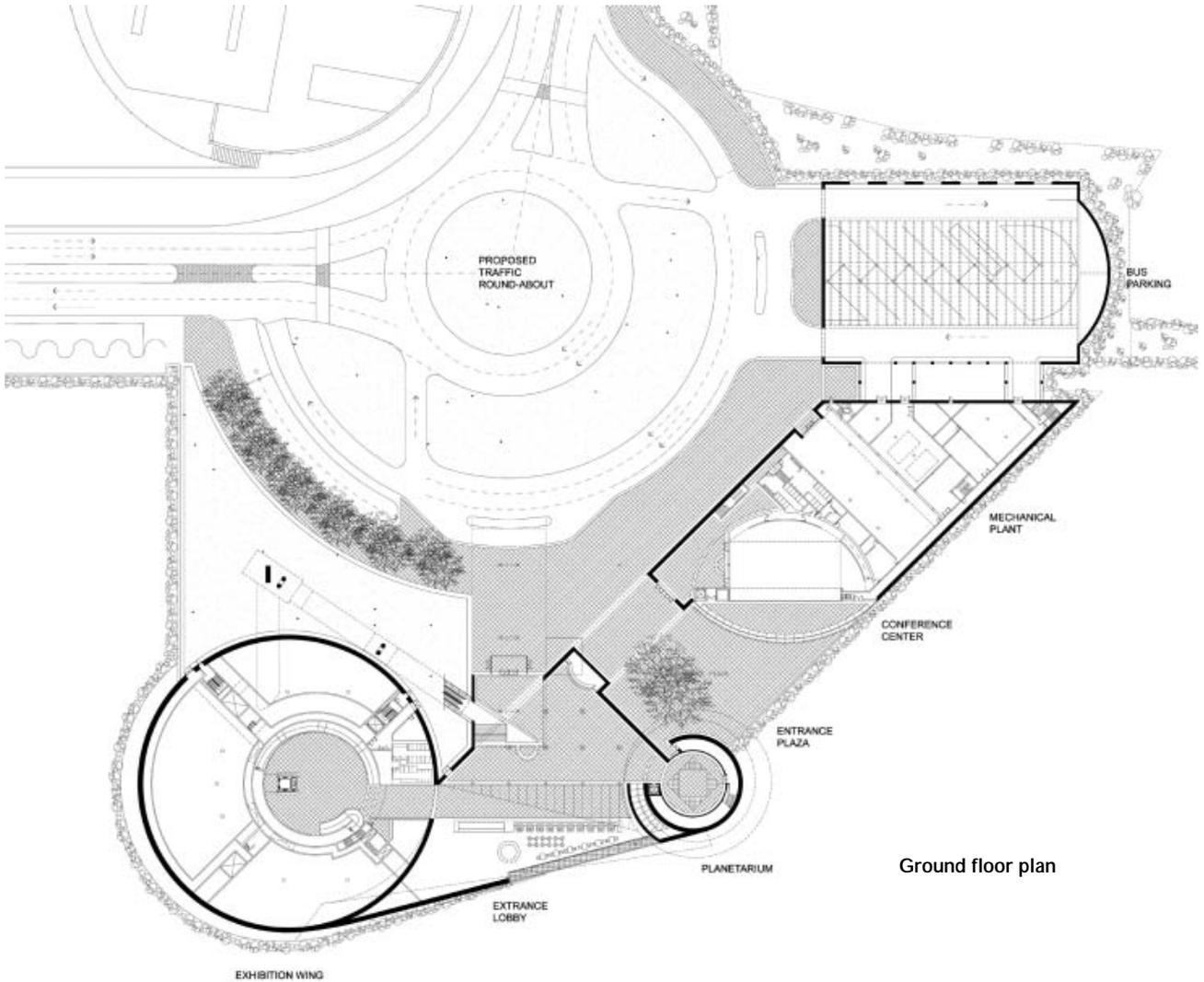
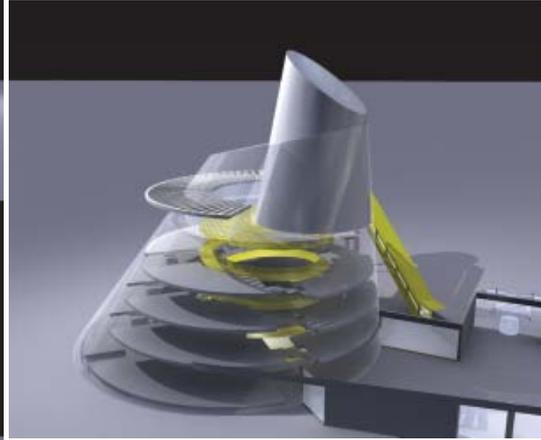
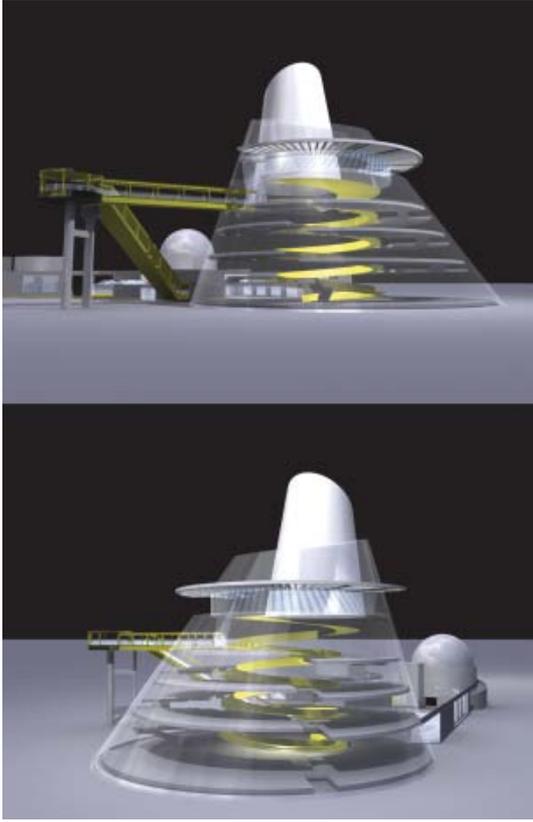
conference wing consisting of a multi-function hall, seminar rooms and administrative functions is housed in a low rhomboid form. The entire composition is clad in aluminum and is tied together with a dark honed-finished granite base.

The public will be invited to experience galleries organized as trays reached by a spiral ramp that ascends within the cone. From an observation deck 26 metres above the site, visitors can enjoy a 180-degree view

toward the water and the city. In addition to the galleries and observation platform, there is a 150-seat planetarium that is situated in a dome.

The conference centre will feature a multi-function hall that can be converted into a 500-seat auditorium or a banquet room.

An US\$42 million main contract was being awarded to Tong Lei Engineering & Construction Co Ltd and the project is scheduled to complete in 2009.



Ground floor plan



Section

#### 1. Exterior

The conical form of the Science Center gives the water front building a smooth, dynamic feel. The taut metal skin encloses a coiling programmatic layout poised with the energy of discovery and exploration.

#### 2. Cafe

At the end of the journey through the exhibition spaces, a refreshing cafe awaits offering spectacular views of the water-edged city. It is an ideal point of orientation, and place to contemplate and discuss the exhibits.

#### 3. Atrium

Through the centre of the cone, a skylit atrium with glass elevators and a helical ramping system (shown in yellow) brings the visitor through space and time as they ascend through the exhibition galleries.

#### 4. Galleries

Centrifugal galleries are arrayed around the atrium core, slowly climbing toward the conical peak along with the slope of the central ramp. A secondary circulation system of short stair flights link the galleries in succession.

#### 5. Planetarium

The spherical space observatory brings the infinite wonders of the galaxies to the viewers who enjoy a panoramic planetary experience.

#### 6. Conference centre

The facility provides meeting rooms, offices and a large lecture auditorium for scientific conferences, research and events.

