

# Sydney International Archery Park

photo courtesy of Peter Hyatt



## The Steel Solutions

Construction at the Archery Park incorporates principles of ecologically sustainable development. The buildings are naturally ventilated and naturally lit, and use recycled and recyclable materials - including all the steel work.

"We've tried to let the material do the talking. Steel can be thoughtfully employed to communicate structural loads," said Peter Stutchbury.

"The separate roof of the Archery pavilion and its inherent stresses

are expressed through the selection of steel sizes and detailing. The angle and twist of the roof - together with its metallic finish - produce a building of genuine Australian character," he said.

"Modular construction allowed the structure to be largely fabricated off-site. The building's functional qualities mean that it can be easily added to, and its assembly is such that all except the substructure can be easily recycled."



photo courtesy of Peter Hyatt

While the Archery Park pavilion is overshadowed in sheer size by other Olympic venues, the facility makes an equally impressive statement with its highly imaginative and distinctive steel roof with a twist.



# Facts and Features

■ The Sydney International Archery Park complex is the permanent home for archery in NSW, designed by architects Stutchbury and Pape. It features a 100 metre by 10 metre pavilion which is orientated on the site to provide comprehensive shelter for archers and spectators in the event of bad weather.

The roof made from BHP ZINCALUME® zinc/aluminium alloy-coated steel drops to the south-west to protect archers from the prevailing wind and rain. At the same time, it rises to the north-east to catch the cooling breezes in warmer weather.

The purpose-built pavilion reflects the precise, high-technology aspect of modern archery, with the steel rafters and columns that support the roof to create a visual symbol of the 'bow and arrow'. Architect Peter Stutchbury said the concept for the hovering, twisted blade roof grew from the brief which required a verandah under which archers could shelter in inclement weather.

"The inspiration for the twist was as much functional as it was aesthetic, and we wanted to design something that wasn't static, but dynamic like the sport itself. It takes a standard element along a non-standard path," he said.

"Our design approach embraces some of the aspects of free-standing Australian hay sheds, which have fine vertical poles into the ground and a very simple roof over the top. Depending on the weather, the roof on this building gives users a plentiful array of options to select comfort zones from one end to the other."

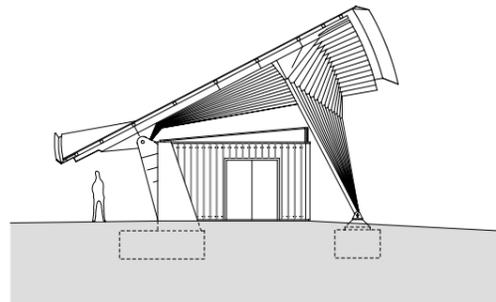
The 6.5 hectare Archery Park site is surrounded by natural mangrove wetlands and two sculptural pole forests made from 185 recycled electricity poles and designed by Peter Stutchbury's partner, Phoebe Pape.



photo courtesy of Peter Hyatt

## Featured Steel Products

- Roof structure** 250 Universal Beam rafters, Rectangular Hollow Section columns
- Roof cladding** BHP ZINCALUME® zinc/aluminium alloy-coated steel rollformed into LYSAGHT SPANDEK HI-TEN®
- Feature walling** BHP ZINCALUME® zinc/aluminium alloy-coated steel rollformed into LYSAGHT MINI ORB®
- Cost** \$3 million



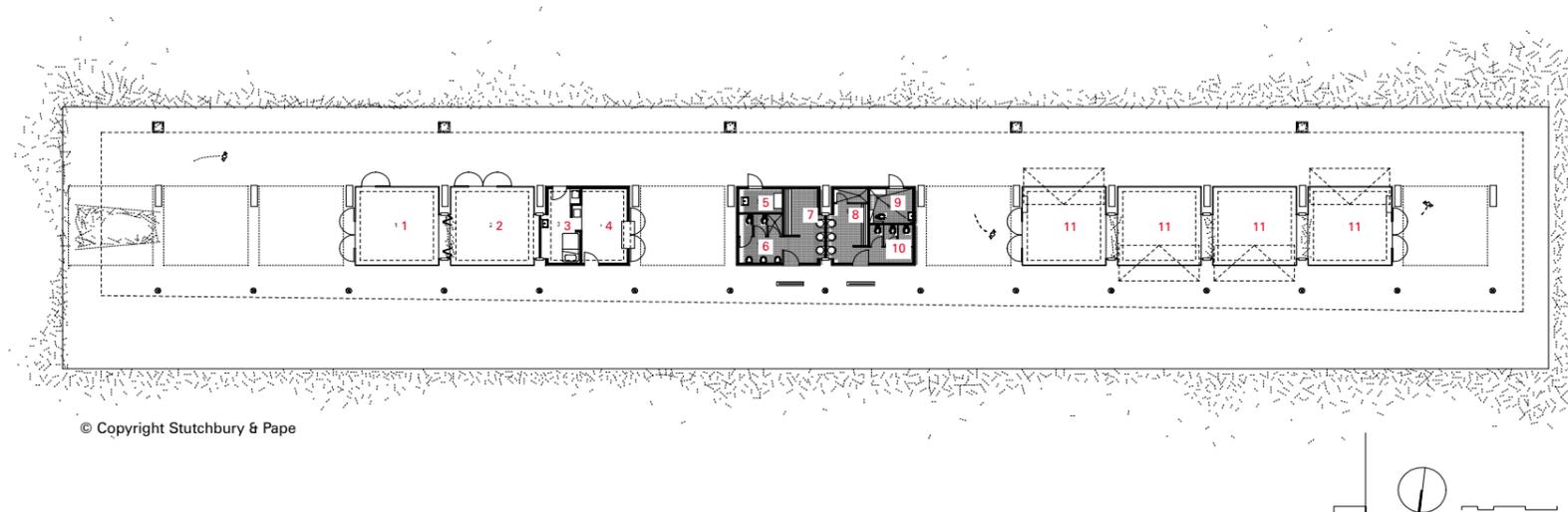
## Project Details

- Client** Olympic Co-Ordination Authority
- Architect** Stutchbury and Pape p (02) 9979 5030
- Structural Engineer** The Structural Design Group p (02) 9929 7511

## Figures

■ The 6.5 hectare Archery Park is part of the Millennium Parklands, surrounded by natural mangrove wetlands and two sculptural pole forests created from 185 recycled electricity poles. During the Olympic Games, the archery field provided a 52 x 70 metre competition area and an adjacent training and warm-up field of 88 x 70 metres. Temporary buildings were set up to provide broadcast and site operations, including a 4,000 seat temporary grandstand for spectators.

- 1 coaching workshop
- 2 coaches
- 3 first aid
- 4 canteen
- 5 baby change room
- 6 male wc
- 7 male change
- 8 female change
- 9 female wc
- 10 disabled bathroom
- 11 stores



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