Entry for :

BEST SCULPTURE/ PUBLIC ART PROJECT

Project:
Johnsons Estate Sculpture now known as 'Wurrungwuri Stone Sculpture'

Engineers:
ARUP Sydney

Sculptor:
Chris Booth

Stone Supply:
Gosford Quarries

Installation:
Traditional Stonemasonry Co

Stone Used:
Piles Creek and Wondabyne Sandstones

Wurrungwuri stone sculpture

The "Wurrungwuri Stone Sculpture" was a bequest in the will of the late Ronald Johnson. The will directed that a substantial sum should be used to provide a sculpture to be placed on the Sydney Harbour foreshore. Following an international competition the Trustees of the Estate selected Chris Booth internationally renowned sculptor from New Zealand to develop the sculpture. The site chosen for the sculpture is close to Government House in the Royal Botanical Gardens.

The initial challenge for the engineers was to work with Chris Booth's 1:50 scale 'maquette' in clay. The model became the 'contract document' that defined the intent of the sculpture. From the model Arup created a geometrical background in Rhino3D from which all individual stones and connecting bolt components were analysed and drawn.

The sculpture comprises two separate stone items

- A quartz stone 'wave form' of woven quartz pebbles incorporating an aboriginal shield design from the Sydney Gadigal community.
- An undulating sandstone wave form in three separate strata sometimes laid over each other. These stones are connected mechanically by through bolting, no stones are attached by conventional masonry means. Approximately 300 individually sawn and drilled stones up to 1.0 tonne in weight were supplied. Some stones exceeded 3m in length and half a meter in thickness. Touching faces were sawn to within 2mm tolerances, no sides are square or parallel. All intersecting drill holes are drilled in 3D space. Each stone was cut to shape and drilled from a detailed drawing generated from the 3D model supplied by Arup.

The Piles Creek and Wondabyne sandstone wave form with its undulation and separation mimics the typical Hawkesbury sandstone strata that has been subjected over millennia to weathering and movement by tectonic forces.