



Newcastle West Public Domain Stage 1
With Hunter & Central Coast Development Corp &
Glascott Landscape and Civil Pty Ltd

INNOVATIVE STRUCTURES FOR FOR UNIQUE ENVIRONMENTS

The Newcastle West Public Domain Stage 1 project situated in Newcastle West, NSW, involved the design and installation of a shade sail structure based on a sailing ship concept design by Terras Landscape Architects. The scope extended to structural design, certification, fabrication and installation.

Sydney Shade Sails selected Mehler Fr 700 PVC membrane in white for the sail material, structurally supported by galvanized structural steel painted white, for the structure. The design incorporated near-horizontal waterproof membranes with corner plates and individual tension cables, ensuring both functionality and aesthetics.

The materials and design approach perfectly aligned with the architectural concept, material specifications and added to the visual appeal of the project.

After receiving the initial architectural concept design the team at Sydney Shade Sails completed a survey of site elevations to assess the topography and dimensions of the project site.

A specialist shade structure engineer from Pattons was engaged to create a 3D model of the proposed shade sail structure, and provide a visualisation of the design to ensure it aligned with the client's and

landscape architect's vision, before transitioning into the manufacture and installation stages.

The site location, being only 4m from the Hunter River, presented inherent challenges, including sea-level elevation and tidal fluctuations. The original engineering design for the structure required review due to the high water table saturating the site. The engineer had to revise the footings, designing them wider and shallower to address the groundwater issue.

Sydney Shade Sails has undertaken over 1,500 projects to date, allowing their experience and know-how to seamlessly manage the collaboration and communication among various professionals, to ensure that the projects meet their design and safety objectives, resulting in remarkable outcomes that exceed expectations.

Currently, Sydney Shade Sails are working on a butterfly-style cantilever shade structure project at Stockland Wetherill Park, NSW, slated for completion in November 2023.

For more information contact Sydney Shade Sails (NSW) Pty Ltd, phone 02 9592 0401, email enquiries@shadesailsydney.net.au, website www.shadesailsydney.net.au