DM COMPOSITES

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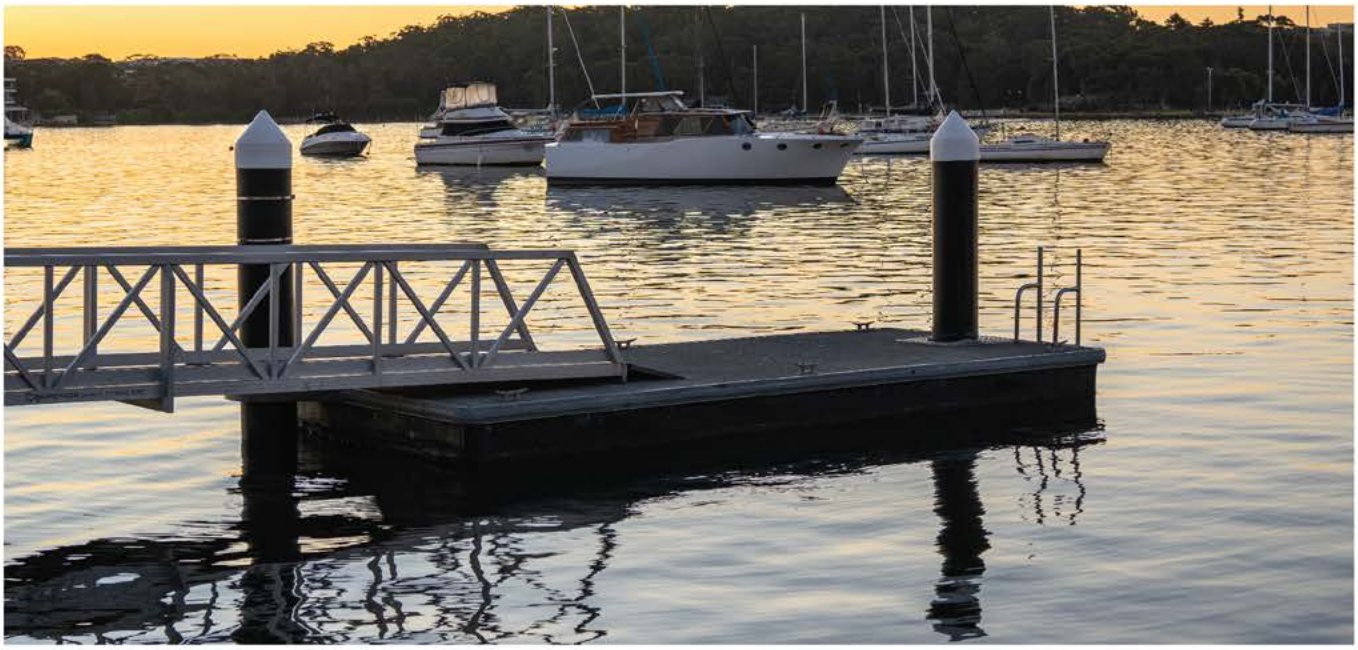
ENDEAVOUR STREET WHARF RENEWAL

PROJECT BACKGROUND

Positioned along the iconic Georges River in the suburb of Sans Souci, the Endeavour Street Wharf had long served as a cherished point of access for recreational boaters, fishers, and waterside visitors. However, after years of exposure to saltwater, weathering, and wear, the aging timber wharf was deemed structurally unsafe and closed to the public. As part of the Georges River Council's 2024/25 Capital Works Program, a major renewal initiative was launched to modernize the wharf and restore safe community access.

This revitalisation project was designed not only to replace the decaying timber platform but also to futureproof the structure for long-term, low-maintenance use. Importantly, the Council chose to retain the existing gangway and pontoon, ensuring continuity for users during and after construction.



LOCATION:
Sans Souci, NSW, Australia

CONSTRUCTION COMPLETION:
June 2025

DM COMPOSITES' ROLE

DM Composites was engaged for the design-aligned supply of FRP (Fibre Reinforced Polymer) components, playing a pivotal role in enhancing the structural resilience and environmental performance of the new wharf. Working closely with marine contractors and council engineers, we provided FRP Mini Mesh Gratings for the deck surface and FRP Structural Profiles for the supporting framework—including headstocks and girders.

This project showcases DM Composites' ability to deliver tailored composite material solutions for demanding marine infrastructure—ensuring optimal strength-to-weight ratios, corrosion resistance, and compliance with harsh coastal conditions.

TECHNICAL SOLUTION & MATERIALS SUPPLIED

1. FRP MINI MESH GRATINGS

- Application: Walking surfac
- Specs: 38mm thick mini mesh with anti-slip grit finis
- Advantages:
    - Lightweight and quick to install
    - Exceptional slip resistance, even in wet conditions
    - No rusting or delamination
    - UV-stabilized and suited for long-term marine exposure

2. FRP STRUCTURAL PROFILES

- Applications: Headstocks, girders, and cross-supports
- Profile Types: H-beams for primary load distribution
- Channel profiles for edge framing

Performance Features:

- High flexural strength to handle tidal load variability
- Zero metal corrosion in marine salt exposure
- Chemically resistant and fire retardant

Conforms to AS/NZS 1170 structural performance codes

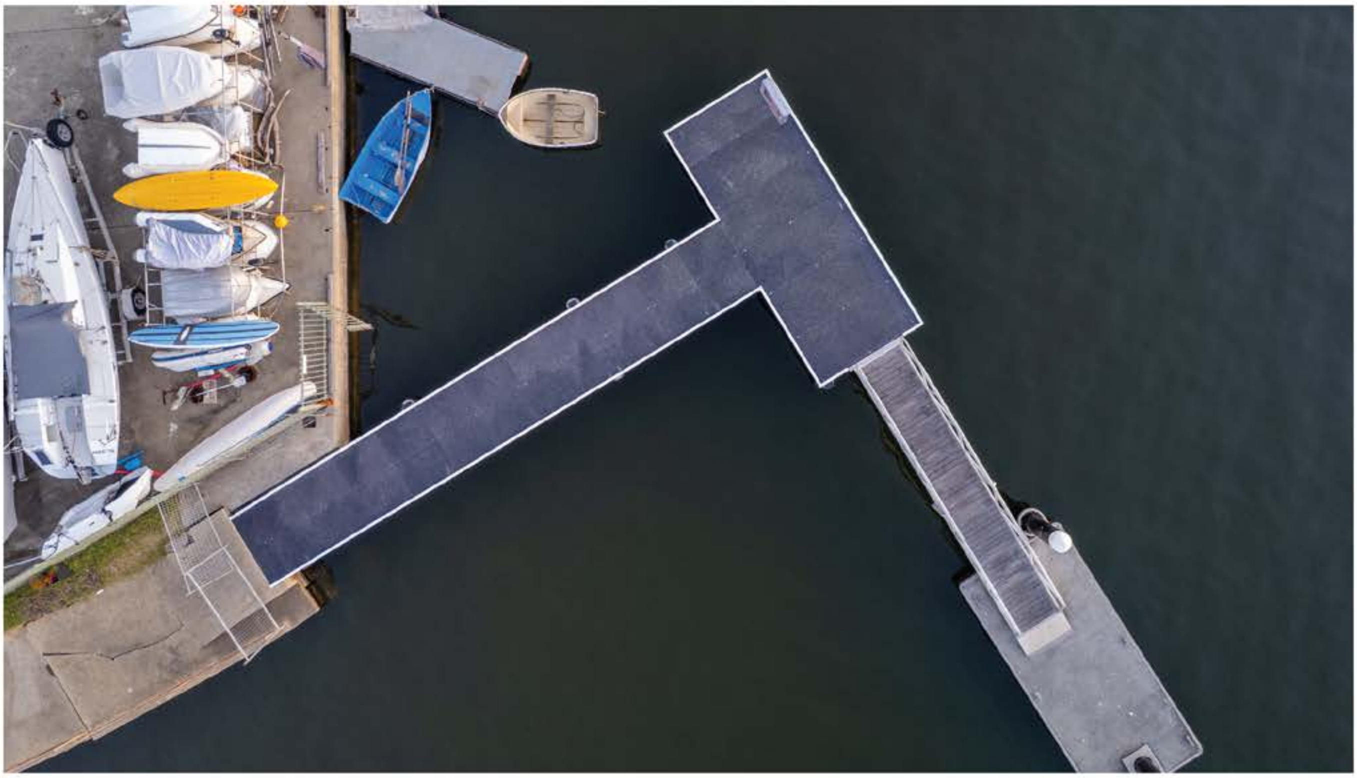
Engineering Benefit: The use of FRP profiles eliminated the need for cathodic protection, galvanizing, or repainting cycles—dramatically reducing long-term maintenance obligations for Council.

DESIGN INTEGRATION AND COMMUNITY VALUE

DM Composites ensured that all components aligned visually and functionally with the retained elements of the wharf, including the existing gangway and pontoon. This helped maintain continuity in appearance and accessibility while upgrading performance standards.

Accessibility and Safety Enhancements:

- Grit-top mini mesh ensured compliance with public slip-resistance ratings
- Profiled edges and underside drainage improved floodwater and splash-back management
- Non-conductive materials improved safety in electrically sensitive environments



SUSTAINABILITY AND LIFECYCLE VALUE

Replacing traditional timber and steel elements with FRP significantly boosted the sustainability of the project:

- No toxic leaching into the aquatic environment (unlike treated timber)
- Reduced carbon footprint during installation due to lighter material handling
- Design life exceeding 50+ years without corrosion-related degradation
- Fully recyclable at end-of-life with minimal environmental impact

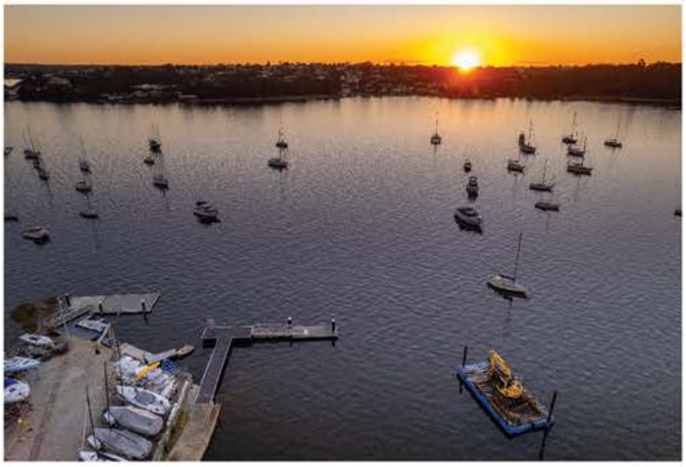
This approach aligns with Georges River Council's broader foreshore revitalisation strategy—where sustainability, resilience, and community benefit are guiding principles.

KEY OUTCOMES

- Reopened a critical community asset with improved safety and usability
- Reduced long-term operational and maintenance costs for Council
- Demonstrated FRP's viability as a first-choice material for marine asset renewal
- Delivered on Council's objectives for functionality, aesthetics, and longevity
- Reinforced DM Composites' leadership in advanced materials for waterfront infrastructure

CONCLUSION

The Endeavour Street Wharf project is a clear example of how modern infrastructure solutions — like FRP — can successfully balance environmental constraints, community needs, and long-term cost efficiency. DM Composites is proud to have contributed to this essential civic upgrade, bringing together smart materials, proven engineering, and local impact.



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