DEGNAN

# ROOTY HILL NEW TRACTION SUBSTATION

Degnan delivered a new traction substation at Rooty Hill for NovoRail Alliance, supporting the introduction of the Waratah train fleet across the Sydney rail network.









**SECTOR**
Energy

**LOCATION**
Rooty Hill, NSW
Dharug Country

**CLIENT**
NovoRail

**PROJECT COMPLETION**
August 2013

**PROJECT VALUE**
$4M approx.

**DELIVERY MODEL**
Design & Construct

The Design & Construct project included the new substation from the suspended concrete slab upwards, integrating structural steel, architectural finishes, precast blast walls, transformer-bay security, internal fit-out and associated civil works. Constructed within three metres of the operational rail corridor and within restricted work areas, the project required careful planning, coordination and controls to safely manage the interface with live rail operations.

## KEY OUTCOMES

- New traction substation delivered to support the rollout of the Waratah train fleet.
- Integrated structural, architectural, security and civil works delivered as part of the new facility.
- Works successfully delivered immediately adjacent to the operational rail corridor within restricted site conditions.
- Project-specific safety, environmental and quality controls implemented to meet stringent HSEQ requirements.

## CHALLENGES OVERCOME

- **Working adjacent to live rail operations.** Construction took place within three metres of the operational rail corridor, requiring early identification of construction risks and appropriate controls to protect the workforce and existing infrastructure.
- **Delivering within a restricted site** required careful planning and coordination of construction activities, access and site interfaces.
- **Integrating diverse construction elements.** The project brought together structural steel, concrete, blast protection, architectural finishes, security infrastructure, internal fit-out and external civil works within the completed substation facility.