

# UNSW SCIENCE & ENGINEERING BUILDING



## PROJECT DETAILS

**PROJECT LOCATION:**  
UNSW CAMPUS,  
INTERNATIONAL ROAD,  
KENSINGTON SYDNEY  
NSW 2033

**COMMENCEMENT DATE:**  
November 2015

**COMPLETION DATE:**  
November 2016

**TYPE OF CONTRACT:**  
Design & Construct

**CONTRACT VALUE:**  
\$1.4 Million +

**GROSS FLOOR AREA:**  
N/A

**PROJECT MANAGER:**  
Joel Gray

**CONSTRUCTION  
MANAGER:**  
Frank Palamara

## OVERVIEW TRADE PACKAGE

Star Electrical were engaged by Multiplex in November 2015 to carry out the electrical services associated with the Science and Engineering Building Enabling Works. The Project included the Supply and Installation of 1 x 11KV padmount substation, the decommissioning of an existing chamber substation and all associated above ground and in-ground cabling.

Services provided by the Star Group on this project included;

- Electrical high voltage
- Electrical low voltage systems, including diversion of existing consumers-mains to 5 x buildings.
- Sub-mains, electrical and communications cabling.

- Temporary lighting and power
- Communications system
- Energy monitoring systems
- Cable support systems, including in-ground HV/LV conduits and pits.

## COMMERCIAL FACTORS

- 60 Years' experience and ability to meet the tender requirements and documentation as well as achieve best industry practice
- ASP Level 1 and 3 Accredited
- Ease of use for the end user
- Ongoing ease of maintenance for the end user
- Capability of suppliers/sub-contractors to deliver the works and material and per program
- Value for money.
- Representatives attended regular bi-weekly co-ordination meetings where services were co-ordinator to ensure the service's trades were keeping pace with each other and to deliver as a combine unit.

## PROJECT CHALLENGES

Live site therefore small windows allocated for shutdown works, this required careful planning and coordination with the University.

Excavating within asbestos contaminated ground while maintaining strict environmental and QA requirements.

Relocating of existing sub-mains from redundant substation to new temporary padmount substation.

Investigating and providing a report for all supplies (affected by works) fed from redundant substation.

Providing temporary power during shutdown periods to critical services affected by the scope of works.

Working closely with the hydraulic contractor responsible civil and excavation works to a portion of the civil works. Star were responsible for providing HV spotters as the trenching was adjacent to existing live HV cabling.

Provide a 40 metre underbore beneath an existing building to cater for HV & LV conduits.

## PROJECT SPECIFICS

The supply, install and commissioning of 1 x temporary padmount substations and associated cabling.

Relocation and jointing of HV ringmain affected by redundant substation.

Supply and installation of an 800Amp temporary construction power mainswitchboard.

Relocation of an existing 400 metre fibre optic cable between a redundant and campus building to an existing building within the campus.

Decommissioning of redundant communications copper and fibre optic cabling nominated by the university.

Decommission and removal of redundant electrical private pole.

