

MAPPING AND MODELLING UNDERGROUND UTILITIES FOR BETTER DESIGN

PROJECT: Edith Cowan University City Campus - Yagan Square, Perth, Western Australia **CLIENT:** Edith Cowan University

PROJECT BACKGROUND

Edith Cowan University (ECU) is developing a \$695million creative industries, business and technology campus, to be located at Yagan Square, in the centre of Perth, Western Australia.

The campus will attract more than 9,000 students and staff to Perth's Central Business District by 2025 and is the centrepiece of the Perth City Deal - a landmark \$1.66billion investment in projects and infrastructure.

To complete pre-planning works, ECU required accurate and up-to-date underground service information within Yagan Square and surrounds. MNG was engaged to provide this support.

CHALLENGES

The 3ha site contains a multitude of subsurface services including communications, power, water,

gas, drainage, and traffic signals. The MNG Locate team was tasked with safely and efficiently locating these assets, without causing major disruptions to public areas and busy road networks.

Major roads border the site and experience extremely high-traffic flows throughout the day. Keeping traffic congestion to a minimum and maintaining road safety was critical throughout the project.

SOLUTIONS

To identify and efficiently locate the highly congested services throughout the site, MNG Locate liaised with relevant service providers to obtain information and access locked asset pits and cabinets to identify individual assets. This enabled MNG Locate to identify the precise locations of the conductive services (such as power and communications) with the use of Electromagnetic Induction tools.



MNG LOCATE WAS ABLE TO COMPLETE THE PROJECT DISCREETLY WITH NO PERMANENT MARKS MADE TO PATHWAYS OR ROADS



Once the traceable services had been eliminated from the scope, MNG Locate could identify the non-conductive services with the use of Ground Penetrating Radar equipment.

Where possible, road works were conducted during night shift hours under traffic management, which reduced the amount of traffic disruption.

To ensure the safety of pedestrians, hard barricading and warning signs were used.

MNG Locate ensured regular communication with local businesses was maintained regarding scheduled works, to minimise adverse effects on trade.

OUTCOMES

The complete dataset captured the comprehensive service network and subsurface utilities and was presented to the client in a 3D format. The information enables ECU to accurately

detect assets and avoid asset strike or damage throughout construction. It will also support design of future services and infrastructure.

MNG Locate was able to complete the project discreetly with no permanent marks made to pathways or roads, which minimised any visual impact to the site. The heavily congested underground services were located safely and efficiently, in an unobtrusive manner, and in compliance with AS5488 standards.

TALK TO US

MNG provide innovative and personalised solutions for all projects. Talk with us today to find out more. Email info@mngsurvey.com.au or visit mngsurvey.com.au