Ultramag Geophysics: DGPR defines location and depth of service infrastructure.

Ultramag Geophysics is pleased to announce that *Deep Ground Penetrating Radar* (DGPR) data acquisition works have recently been completed in Sydney's north. Ultramag worked in conjunction with *NSW Roads and Maritime Services*, to map key service infrastructure as part of scheduled road upgrades in the area.

Following the completion of several successful DGPR projects in the civil sector, Ultramag was approached to help elucidate details of the location and depth of more than 500m of an existing 250mm diameter service pipe within the area. Historical documentation showed a great level of uncertainty surrounding the exact course of services within the sandstone substrate, which was thought to be lying at depths of up to 20m.

A single day of DGPR data acquisition was undertaken over the site as a demonstration of Ultramag's DGPR capabilities. Steep terrain, thick bushland and rocky sandstone outcropping did not hinder the data capture process, due to the versatility of the DGPR antenna system, which can be deployed in almost any environment.

Nine survey transects were designed to intersect the service pipe at right angles in various locations. Results could not have been more promising, with clearly defined anomalies showing at depths of between 8m and 15m on multiple profiles over the entire site, clearly mapping the course of service infrastructure.

Highlights:

- DGPR's exclusive ability to find, image and map such targets at these depths.
- Multiple profiles completed over large survey area.
- No site preparation required.
- Completely non-destructive survey technique minimal disturbance to native bushland.
- Versatile survey equipment deployed in steep, rocky and difficult terrain.
- Discrete survey techniques undisturbed sites of cultural significance, adjacent to survey profiles.





Ultramag Geophysics has over 30 years experience customising solutions to meet our clients' specific needs. This coupled with our robust research and development department makes us world leaders in our field. We service over 500 clients across a number of industries including the resource sector.

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