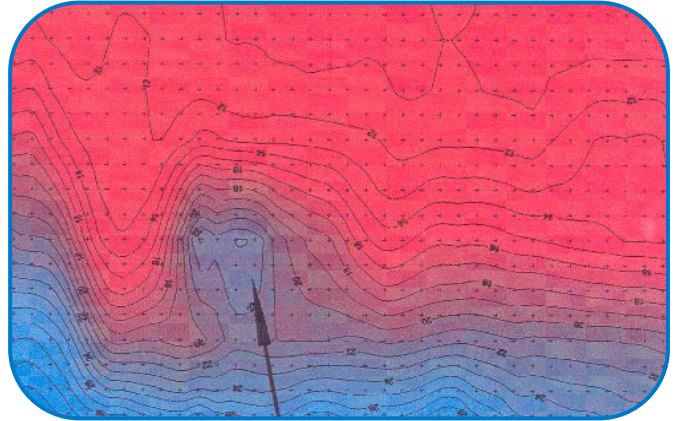


Fourstones Substation Site, Hexham, Northumberland

Our Services

- Desk Study
- Geophysical survey
- Trail pits and boreholes



Geophysical Survey to Locate Old

National Grid Plc proposed to construct an electricity substation in an area of known mineworkings.

A desk study revealed a number of shafts on and in the vicinity of the site and an investigation was undertaken to identify their location and depth. Based on desk study information the shaft locations were located on site.

Where shafts had been obscured due to agricultural activity, a geophysical survey was undertaken using electro-magnetic methods.

In order to confirm the presence of shafts at identified locations, rotary percussive boreholes were drilled from a safety platform.

At some locations suspected shafts were not revealed and further investigation was under-

taken by means of closely spaced parallel trial trenches to bedrock. This located the shaft locations, which were then drilled from surface to determine the depth to workings.

Additional boreholes were also formed which enabled the levels of workings to be determined and a risk assessment to be carried out to determine the probability and impact of void migration to surface.

Client: National Grid
Contractor: IMC Geophysics