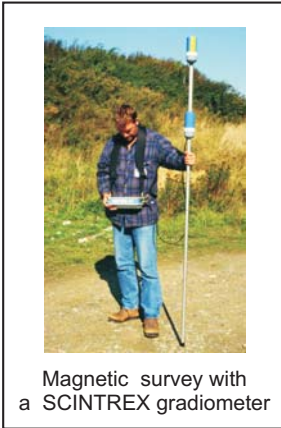







# MAGNETIC & METAL DETECTION SURVEYS








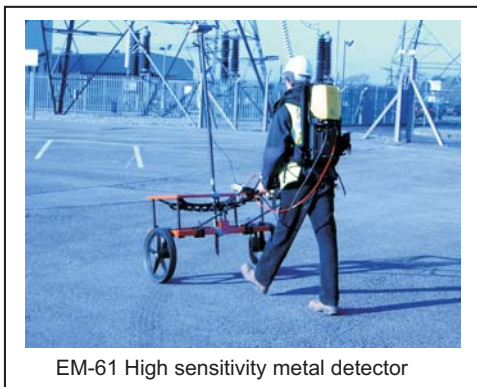
The Magnetic survey technique is based on mapping localised variations in the Earth's magnetic field caused sub-surface magnetic materials which range from naturally occurring magnetic minerals to man-made ferrous objects. This leads to a wide range of applications from small-scale archeology and engineering surveys to detect buried metallic objects, to large-scale surveys carried out to investigate regional geological trends or mineralisation.

**Target features:**

-  **Shallow archaeology**
-  **Unexploded ordnance**
-  **Hazardous metal waste**
-  **Services and foundations**
-  **Abandoned mine workings**
-  **Drums & USTs**

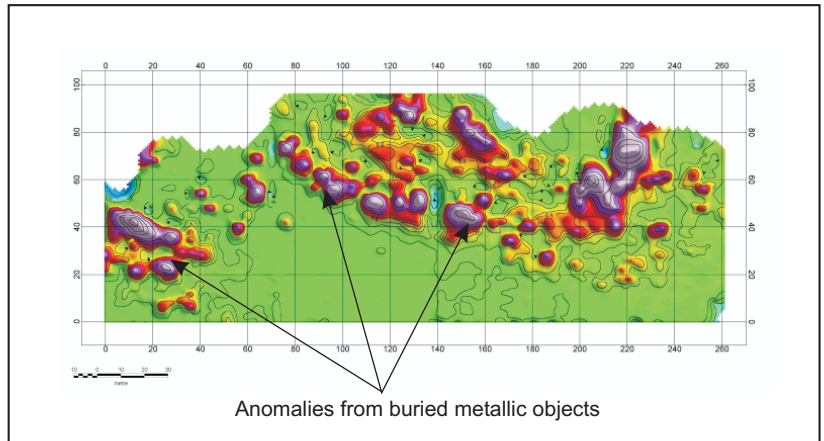
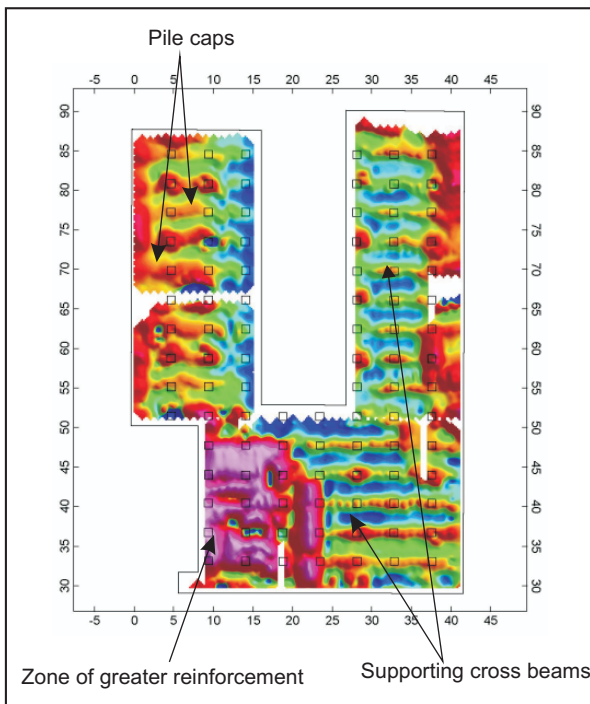
**Benefits:**

-  **Non-invasive**
-  **High resolution of targets**
-  **Complete ground coverage**
-  **Environmentally friendly**
-  **Low Cost**



(ABOVE) Processed magnetic data from a former industrial site showing linear anomalies from ferrous buried services. The isolated magnetic anomaly marked "1" was ground truthed to be an underground fuel tank. (Note the magnetic effect of the buildings).

The EM-61 is based on the time-domain electromagnetic technique which enables the instrument to discriminate between moderately conductive earth materials and very conductive metallic targets.



(ABOVE) The resulting contour plot from an EM-61 survey to locate illegally dumped drums within an old landfill site.

(LEFT) An EM-61 survey was carried out to confirm the locations of pile caps beneath an existing floor slab. The resulting contour plan clearly displays the supporting cross beams which correlate with the suspected pile locations.