

TREERADAR Root Locator

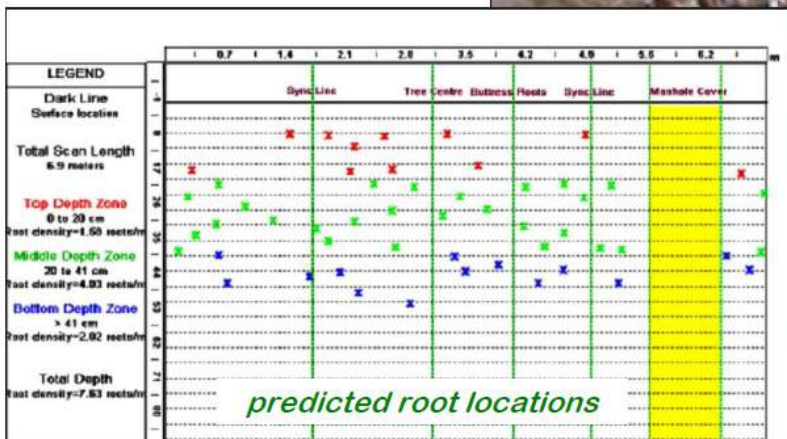


“Trenchless” Root Finder

Detects through:-

- Grass
- Tarmac
- Concrete

Locates services



“Virtual Trench” Face

Expertise from **pba** Consulting
www.pba-consulting.co.uk

Background

Ground-Penetrating Radar (GPR) has been in use for over 30 years as non-invasive sub-surface investigation technology to “see” what is underground without excavations! It is used to locate objects underground including engineering and environmental targets. It can also provide sub-surface information on historical land use including past cultivations/excavations and now, tree roots!

GPR for Tree Roots: how does it work?

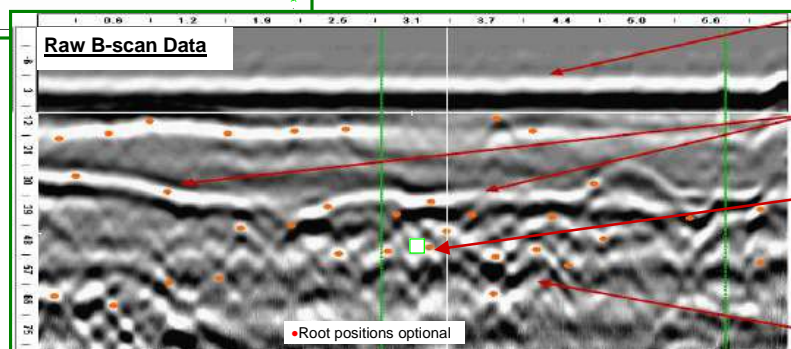
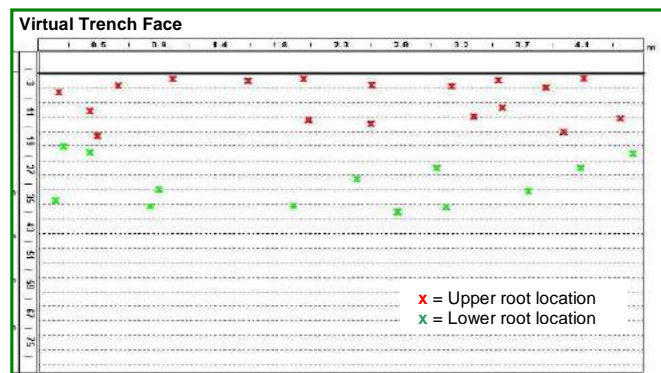
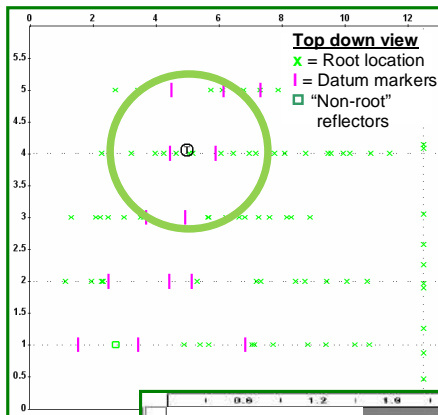
- When a GPR wave encounters a boundary between objects with different properties, it will reflect, refract, and/or diffract from the boundary in a predictable manner
- TreeRadar™ GPR instrumentation for subsurface structural root mapping is a recent innovative application; the software analyses electromagnetic differences and provides reliable data printouts on depth and location of tree roots. Roots in excess of 10mm diameter are detected.
- TreeRadar™ GPR instrumentation also detects and analyses the electromagnetic differences in buried objects and services including plastic pipes, cables, and ducts; these are recorded as “non-root” reflectors.



Hand use of GPR on banks

The quantifiable results (data) provide technical information about tree root locations and condition, and, the subsurface environment.

How is the data provided? – Typical Root data printouts:-



Surface
 Unusual strata - probably fill
 "Non-root" reflector
 Subsurface "clutter" – i.e. Builders trash