THE SURVEY SCHOOL

With

5 Day Utility Surveyor Training Course including Level 3 Certificate in Utility Mapping and Surveying (QCF) One Week with Written & Practical Exams

Course Agenda

Day 1

- Overview of utility networks - Operatives will learn about utility networks i.e. “from power station to plug”. Explanation on how electricity/gas/water/communication etc., gets to our homes/businesses. Different cable/pipe types, materials, connectivity etc – Classroom.

- Surveying Methodology & Types - How to undertake a typical utility survey, where to start and why, incorporating PAS 128 process flowchart & TSA Guidance Notes for Utility Surveys - Classroom.

- Utility (STAT’s) Plans - Conventions, variations, abbreviations & meanings - Operatives will study a wide variety of different plans. PAS 128 Survey Type D will be discussed - Classroom.

- Locating without a locator - Operatives will draw the assumed route of buried services onto a blank base plan & compare their findings with STATs plans – Site/Classroom.

Day 2

- Operatives will undertake a PAS 128 Survey Type C Site Reconnaissance/TSA Utility Survey Level 2 - Site/Classroom

- Basic Electrical Theory - Operatives will learn about electrical circuits with a “back to basics” practical approach using bulbs, wires, batteries, magnets etc - Classroom.

- Electromagnetic (EM) Theory - Understanding how an EM locator works, how to and where to apply a signal, limitations etc - Classroom.

- Legislation/Health & Safety requirements/implications – Very brief overview of HSG47 - Classroom.

Day 3

- Radiodetection RD4000/8000, Vivax v-Loc Pro specific information - Understanding correct use/application of different frequencies, distorted magnetic fields, depth, current, Current Direction CD (Signal Direction SD), deep sonde location technique, Passive signals/limitations etc - Classroom.

- Operatives will learn PAS 128 Detection Methods (Normative) Methods M1 - M4 EML/TSA Survey Level 3 EML - Classroom/Site.

- Radiodetection RD4000/8000, Vivax v-Loc Pro Operation - Operatives will use EML in active & passive modes to locate buried services at the same survey site to allow comparison between "Locating without a locator", Stats Plans and actual findings - Site.

Day 4

- Ground Penetrating Radar (GPR) Theory - Operatives will learn the theory of how GPR works, what the settings & controls do, different ground conditions and view “real world” examples - Classroom.

- Operatives will learn PAS 128 Detection Methods (Normative) Methods M1 - M4 EML/TSA Survey Level 3 GPR (Non Post Processing) - Classroom/Site.

- Ground Penetrating Radar Operation - Operatives will use the GPR to locate a variety of buried utilities in different situations - Site.

Day 5

- Practical Operational Test - Two man team to survey small site area without STATs plans but using all methods learned including - “Locating without a locator”, Surveying Methodology, RD4000/8000/v-Loc Pro & GPR, providing rough sketch of locations & depths. Operatives will show compliance with PAS 128 indicating quality level B1 - B4 (non post processing).

- Use of equipment and methodologies will be observed and proof of location will be demonstrated to the examiner(s). Any buried utilities not located which the examiner(s) can prove was locatable will equate to a 5% reduction for each occurrence in overall exam score - Site.

- Written Exam - Operatives will sit a written exam under exam conditions. The exam will include a combination of graphical and written questions - An overall pass mark of 70% is required to successfully complete the course - Classroom.

Course requirements:

- Appropriate PPE for working in quiet roads & footpaths.

- Specific Electromagnetic (EM/EML) &/or GPR equipment as required (Radiodetection RD4000/8000, Vivax v-Loc Pro & Mala Easy Locator will available for operatives to use on site). Operatives may prefer to use their own/other manufacturer’s equipment, please ensure they bring this equipment with them.

Additional:

Tea, coffee & soft drinks will be provided free of charge at the course venue, accommodation will not be provided.