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| <b>Course Title:</b>         | <b>2 Day Locator Awareness Course</b>  |
| <b>Course Identifier:</b>    | RIICCM202D - Identify, Locate and Protect Underground Services   |
| <b>Intended Audience:</b>    | Persons new to the civil construction industry and also experienced civil professionals who need accurate information on the location and alignment of buried services. This course provides essential information that will assist you to safely and confidently locate buried infrastructure.  |
| <b>Course Objective:</b>     | Raising the awareness of the presence of underground services and enabling the participant to assess their own and/or other staff and contractor's competency.<br>The course focuses on the DBYD process, plan reading and EMI Locating both known and unknown assets with a specific emphasis on increasing locating accuracy.  |
| <b>Course Description:</b>   | This course is two 8 hour days in duration, between 8.00am and 4.00pm daily. Participants are assessed on theory and practical elements.<br>A variety of strategies are employed to ensure that the most benefit to the adult learner is achieved. Lectures, demonstrations, field work, video presentations, open discussion, work scenarios.<br>A Statement of Attainment is issued upon successful completion of the course.  |
| <b>Course Content:</b>       | Prestart (Safety Documents)<br>Dial Before You Dig<br>Locating Techniques<br>Ground Penetrating Radar (GPR overview)<br>Emergency Management – Digging Dangers<br>Safe Digging Practices<br>Positive Identification<br>Special Considerations<br><b>Participants are invited to bring their own Locator to the course for use during the training.</b>   |
| <b>Student Numbers:</b>      | Minimum of 6 and maximum of 12 per class.  |
| <b>Trainers:</b>             | Our instructors are appropriately qualified industry professionals and have a minimum of a Certificate IV in Training and Assessment - TAE40110<br>Our Trainers are vocationally current, and have many years' experience working as Utility Locators. They continue to refine their skills by regularly returning to the work site.   |
| <b>General Information:</b>  | Staking U will provide a suitable training room for the theory component of the course. Additionally, the location selected will have a suitable outdoor area that will be utilised for the outdoor practical component of the training. Training can also be provided on-site at client depots or offices with minimum numbers.<br>Participants are required to wear enclosed footwear and high visibility clothing/ safety vest, bring a pen and provide their USI number.<br>Lunchtime catering will be provided. |
| <b>Method of Assessment:</b> | <ul style="list-style-type: none"> <li>• Learning Activity Workbook</li> <li>• Written Theory Assessment</li> <li>• Practical Assessment</li> </ul>  |
| <b>Entry requirements:</b>   | Participants must have the ability to read, write and understand English.  |
| <b>Attendance Policy:</b>    | Participants must attend all sessions in order to be eligible for assessment.  |
| <b>Schedule of Fees:</b>     | \$695.00 (GST exempt) per student. Price includes all course materials, all assessments and the use of locating equipment.<br>Cancellation fees apply.   |

**Course  
Content:****Prestart**

- Safety Requirements – Safety Documents
- Safe Work Method Statement
- Job Safety Analysis
- Identifying and Reporting Hazards
- Work Permit System
- Safe Operating Procedures
- Safety Data Sheets
- Site Procedures
- Project Quality Requirements
- Written Housekeeping Records
- Environmental Management Plans
- Traffic Management
- Pedestrian Management
- Signage
- Equipment Needs
- Determining Service Alignments
- Site Evaluation

**Dial Before You Dig**

- Who is Dial Before You Dig?
- The Role they Play
- Lodging a Request for Plans
- What you Get Back - What you Need to Check
- Validity
- Scope
- Terminology/glossary of terms
- Legends
- Reading Telstra Plans in Different Formats
- Basic Guide to Reading Telstra “Cable Plans”
- Basic Guide to Reading Telstra “Mains Cable Plans”
- Scale
- Interpretation

**Locating Techniques**

- Organizing Locating Work
- The Equipment - Receiver and Transmitter
- Current, Shape and End Point
- USING CURRENT
- 2 Ways to Energize Target Lines
- Frequencies
- 2 Ways to Receive the Signal
- Signal Quality
- SHAPE:
- Rock in the Pond/ Electromagnetic Field Shape/ Round EM Fields
- Not Round Electromagnetic Field Shapes
- 5 Ways to Check Field Shape
- Changing Field Shape
- ENDPOINT
- 2 Man Sweep
- Sweeping an Area

- Nulling Out Cables
- Passive Locating
- Passive Modes
- Passive Search/ Power & Radio
- Reinforcing Steel (Reo) in Concrete
- Transponders
- Locating Transponders on Optic Fibre Cables
- Optic Fibre Marker Post Symbols on Telstra Plans
- Locating Telstra Optic Fibre Cables
- Telstra Marker Posts
- Locating Optic Fibre Cables With a Locatable Trace Wire
- Locating Optic Fibre Cables Without a Locatable Trace Wire
- Australian Standard (AS5488-2013) Utility Marking Code
- Sondes
- Traceable rods
- Care of Locating Equipment
- Locating Equipment Safety

#### **Ground Penetrating Radar**

- Just Another Tool for a Locator
- Limitations
- Advantages / Disadvantages

#### **Emergency Management - Digging Dangers**

- Consequences
- Incident Notification Procedure
- Emergency Phone Numbers
- Network Protection
- Moving Underground Services

#### **Safe Digging Practices**

- Potholing
- Hand Excavation - No Crowbars
- Quality of Tools - Condition, Non-Conductive
- Orientation
- Dig Off to One Side of the Asset
- Do Not Rush - Slow and Steady
- Look for Changes in Soil Types
- Pothole Dimensions
- Tools and Equipment used for Potholing
- Vacuum Excavation
- Pressures
- Exclusion Zone

#### **Positive Identification**

- Expose the Asset
- Warning Tapes or Protective Cover
- Number of Conduits - off plan
- Size, Colour and Material of Pipe or Conduit
- Located to a Visual and Logical Endpoint
- Field Experience

**Special Considerations**

- Confined Space
- Working In Confined Spaces
- Special Work Locations
- Pits and Manholes
- Gas Detectors
- Safety Equipment Required when Accessing the Telstra Network
- Locating Equipment Required in the Telstra Network
- Using Pit Keys / Manhole Guards
- Gas Detectors
- Gas Detection process in Telstra Manholes and Pits
- Gas Reporting Process (Telstra manholes & pits)
- Safe Gas Levels
- Site Clean-up
- Clean, Check and Maintain Tools and Equipment
- Cleaning the Tools and Equipment
- Identify Environmental Requirements