



AS 5488.2019

Maintaining integrity of data
under the Australian Standard



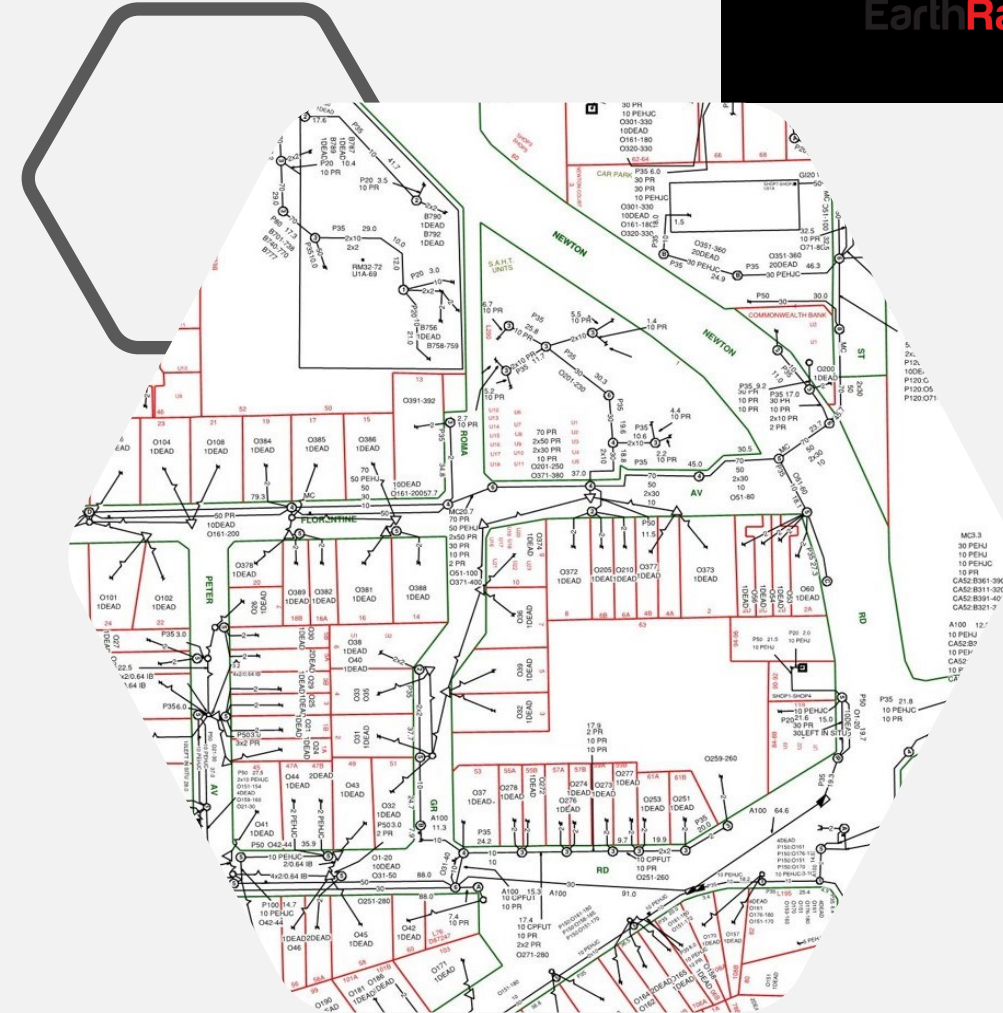
EarthRadar

AS 5488-2019



Quality Level D (QL-D) is the lowest of the four quality levels. The attribute information and metadata of a subsurface utility may be compiled from any, or a combination of –

- (a) Existing records;*
- (b) cursory site inspection; and*
- (c) anecdotal evidence*



AS 5488-2019

Quality Level C (QL-C) Is described as a surface feature correlation or an interpretation of the approximate location and attributes of a subsurface utility asset using a combination of existing records (and/or anecdotal evidence), a site survey of visible evidence, and/or

The minimum requirement for QL-C is relative spatial position.



AS 5488-2019



Quality Level B (QL-B) provides relative subsurface feature location in three dimensions by tracing (see Clause 1.4.32) or physical measurement that does not satisfy the spatial tolerance of Quality Level A. The minimum requirement for Quality Level B is relative spatial position.

1.4.32 trace

physically locate a known service by applying an electromagnetic signal along the utility to a known point/visible point, not limited to the area of interest where practical



AS 5488-2019



Quality Level A (QL-A) is the highest quality level and consists of the positive identification of the attribute and location of a subsurface utility at a point to an absolute spatial position in three dimensions. It is the only quality level that defines a subsurface utility as “validated”.

Where the whole line segment cannot be verified by line of sight, Quality Level A shall not be attributed to the line segment between validated points.



DESIGN

- QL-B (EMI) **and** QL-C (GPR) survey of entire scope
- QL-A to acquire depths where QL-B/QL-C is not possible

PLANNING

- On-site markup of QL-B **and** QL-C survey
- QL-A survey at designed utility clash points to establish potential risk/delay
- Localised design adjustments to avoid utility clashes

CONSTRUCTION

- Localised QL-B markup performed prior to excavation works
- Non-destructive excavation performed to ensure visibility of utilities during excavation
- Cable avoidance tools/techniques

Key Data Loss Points



1. Poor understanding of the definition and application of the Quality Levels
2. Insufficient depth marking during locates
3. Poor communication between locators and surveyors
4. Client misconceptions regarding QL-C and QL-D



Solutions



- Collect data at highest possible Quality Level
- Use AS 5488.2019 to classify the data
- Maintain positional data integrity
- Actively engage with professional utility locators to ensure communication pathways are maintained

