



UTILITY ASSETS LEGEND		
ELECTRICITY	— X —	EU-A-B-C-D
TELECOMMUNICATIONS	— X —	TN-A-B-C-D
OPTIC FIBRE	— X —	OU-A-B-C-D
LOW PRESSURE GAS	— X —	LG-A-B-C-D
HIGH PRESSURE GAS	— X —	HG-A-B-C-D
WATER MAIN	— X —	WM-A-B-C-D
FIRE MAIN	— X —	FM-A-B-C-D
SEWER MAIN	— X —	SM-A-B-C-D
STORMWATER	— X —	SW-A-B-C-D
UNKNOWN SERVICE	— X —	UP-A-D
PROPERTY BOUNDARY	— — —	
LIMIT OF SURVEY	— — —	
FENCE	— — —	

DENOTES DEPTH TO SERVICE	
HYDRANT	□ WH
STOP VALVE	△
WATER METER	□ WM
FIRE HYDRANT	□ FH
WATER TAP	□ WT
TELEPHONE PIT	□ TP
TELEPHONE TWIN PIT	□ TWP
TELEPHONE LARGE SUMP	□ TLP
TELEPHONE DISTRIBUTION PILLAR	□ TDP
LIGHT POLE	□ LP
POWER AND LIGHT POLE	□ PLP
POWER POLE	□ PP
CABLE MARKER	□ CM
GATIC COVER	□ GC
UNIDENTIFIED SERVICE	□ US
CABLE JUNCTION BOX	□ CJB
RMS TRAFFIC LIGHT	□ RTL
RMS SIGNAL PIT	□ RSP
SEWER LAMP HOLE	□ SLH
SEWER MANHOLE	□ SMH
GAS TEST POINT - HIGH PRESSURE	□ GTPH
GAS PIPE MARKER	□ GPM
GAS VALVE BOX	□ GV
DRAINAGE DOWN PIPE	□ DP
SMALL DRAINAGE GULLY PIT	□ SDGP
DRAINAGE JUNCTION MANHOLE	□ DJM
SIGN	□ S
END OF TRACE	□ EOT
TOP OF SERVICE	□ TOS
DEPTH TO INVERT OF PIPE	□ DIP

- NOTES
- THIS PLAN SHOWS A REPRESENTATION OF THE DWG MODEL. THIS MODEL SHOULD BE VIEWED IN A CADD ENVIRONMENT TO INTERPRET THE INFORMATION.
 - THIS UTILITY PLAN IS VALID FOR 28 DAYS STARTING FROM THE DATE OF THE ISSUE. AS UNDERGROUND UTILITY WORKS ARE OFTEN UPDATED, SURVEY PLANS MUST ABIDE BY THE DBYD REGULATIONS TO PROTECT THEIR UNDERGROUND ASSETS.
 - THIS PLAN SHOULD NOT BE USED FOR EXCAVATION PURPOSES.
 - THIS PLAN HAS BEEN DRAWN TO SCALE AND ANY REPRODUCTION OF THIS PLAN WILL NEED TO BE DRAWN IN COLOUR AND AT THIS SCALE TO ENSURE THAT ALL RELEVANT NOTES AND ENHANCEMENTS ARE SHOWN. FAILURE TO DO THIS WILL VOID ALL INFORMATION INDICATED FOR THIS JOB.
 - ALL SERVICES HAVE BEEN ELECTRONICALLY TRACED IN THE FIELD AND ARE SHOWN HERE FOR DIAGNOSTIC PURPOSES ONLY. DEPTHS SHOWN ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED PRIOR TO WORKS.
 - SERVICES SHOWN DIGITISED HAVE BEEN PLACED FROM RELEVANT AUTHORITY PLANS AND ARE SHOWN AS QL-D.
 - POTHOLING IS REQUIRED TO VERIFY UTILITY LOCATIONS AND DEPTHS ARE CORRECT. THAT IS QL-A AND IS REQUIRED TO DETERMINE AND CONFIRM UNKNOWN ASSET CONFIGURATIONS.
 - ELECTRICITY IS HIGH VOLTAGE UNLESS OTHERWISE STATED. TO CONFIRM VOLTAGES ALONG THE LINE WOULD REQUIRE OBTAINING CONFIGURATION SCHEMATIC PLANS. NOT ALL ELECTRICITY CABLES ARE ENCLOSED IN CONDUITS OR MARKED WITH INDICATORS OF THEIR PRESENCE.
 - REFER TO THE UTILITY LOCATING DISCLAIMER INCLUDED WITH THE DELIVERABLES FOR A VISUAL REPRESENTATION OF SUB-SURFACE ACCURACY TOLERANCES AND IMPLIED CONFIDENCES.
 - THE CADASTRAL BOUNDARIES HAVE BEEN DERIVED FROM THE DIGITAL CADASTRAL DATABASE (DCDB). THIS INFORMATION IS SHOWN FOR PLAN CONTEXT ONLY AND IS OF UNKNOWN ACCURACY OR QUALITY.
 - STANDBYS ARE REQUIRED FOR ALL EXCAVATIONS NEAR SECONDARY OR HIGHER GAS MAINS.
 - REFER TO CCTV FOOTAGE FOR FURTHER INFORMATION.
 - LIMIT OF SURVEY HAS BEEN SHOWN AS PER REQUESTED SCOPE. FEATURES OUTSIDE THE LIMIT OF SURVEY HAVE BEEN INCLUDED FOR CLARIFICATION PURPOSES.
 - THIS IS A RE-INVESTIGATION BY SURESEARCH. AMENDMENTS ARE HIGHLIGHTED IN RED. REVIEW CLOUDS IN THE SHEET 3 EXTENSION OF SCOPE.
 - SYDNEY METRO TUNNEL EXTENTS WERE DIGITISED AS PER DP1258400. NO PHYSICAL STRUCTURE WAS LOCATED ON SITE. NO ASSOCIATED INFRASTRUCTURE OR SERVICES WERE FOUND BELONGING TO SYDNEY METRO.

SUBSURFACE UTILITY INFORMATION (SUI) A55488 LOCATION CLASS

Labelling utility information by a classification code allows the user of this information to understand clearly how the information was collected and then place an appropriate amount of reliance on it. Project risks related to underground utilities can then be properly managed.

Line work sample: — EU-B — Quality level represented within linework, Underground Electricity (Quality Level 'B').

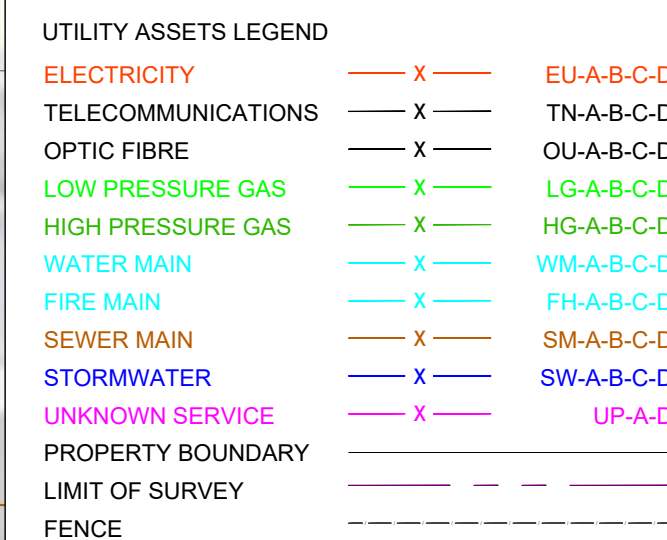
QL-A: Information is the highest possible level of accuracy and is obtained by exposing the underground utility using a non-destructive excavation (pot-holing) technique. The vertical information for this locating method is to the top or shallowest part of the located service. The 3D location is recorded by survey as an X, Y, Z coordinate.































QL-B: Information is collected by designating the horizontal and vertical location of underground utilities by using electromagnetic pipe and cable locators, sondes or free-trace, ground penetrating radar and acoustic pulse equipment. This is the most common form of utility locating and although an X, Y and Z axis can be established it is not always entirely accurate due to differing electromagnetic fields, soil conditions and multiple banks of cables affecting the locating signal.

QL-C: Information is collected by correlating the survey of visible utility surface features such as marker plates or water hydrants and acquired Dial-Before-You-Dig plans to 'draw' a string which shows the approximate position of the utility. This method does not usually show multiple banks of cables and does not always show three dimensional information. Electronically traced locate marks with poor scratchy signals are represented as QL-C.

QL-D: Information is the most basic level of utility locations using only information based on existing Dial-Before-You-Dig plans and by measuring boundary offsets etc. This method of utility locations should always be treated as an indication of the presence of a service only and should not be used for design. GPR scans are also represented as QL-D as the GPR image cannot be confirmed to its origin point. Depths on GPR scan must be treated as indicative only.

REVISION PANEL		
NO.	DATE	REVISION DESCRIPTION



HYDRANT	
STOP VALVE	
WATER METER	
FIRE HYDRANT	
WATER TAP	
TELEPHONE PIT	
TELEPHONE TWIN PIT	
TELEPHONE LARGE SUMP	
TELEPHONE DISTRIBUTION PILLAR	
LIGHT POLE	
POWER AND LIGHT POLE	
POWER POLE	
CABLE MARKER	
GATIC COVER	
UNIDENTIFIED SERVICE	
CABLE JUNCTION BOX	
RMS TRAFFIC LIGHT	
RMS SIGNAL PIT	
SEWER LAMP HOLE	
SEWER MANHOLE	
GAS TEST POINT - HIGH PRESSURE	
GAS PIPE MARKER	
GAS VALVE BOX	
DRAINAGE DOWN PIPE	
SMALL DRAINAGE GULLY PIT	
DRAINAGE JUNCTION MANHOLE	
SIGN	
END OF TRACE	
TOP OF SERVICE	
DEPTH TO INVERT OF PIPE	

NOTES

1. THIS PLAN SHOWS A REPRESENTATION OF THE DWG MODEL. THIS MODEL SHOULD BE VIEWED IN A CAD ENVIRONMENT TO INTERPRET THE INFORMATION.
2. THIS UTILITY PLAN IS VALID FOR 28 DAYS STARTING FROM THE DATE OF ISSUE. ANY WORK BEYOND THE UTILITY WORKS ARE NOT OPENED UP. SURVEY PLANS MUST BE MADE BY THE DRYD FOR THE PROJECT. ANY CHANGES TO THE PLAN MUST BE MADE BY THE DRYD.
3. THIS PLAN SHOULD NOT BE USED FOR EXCAVATION PURPOSES.
4. THIS PLAN HAS BEEN DRAWN TO SCALE, AND ANY REPRODUCTION OF THIS PLAN WILL NEED TO BE DRAWN IN COLOUR AND AT THIS SCALE TO ENSURE THAT ALL RELEVANT NOTES AND DIMENSIONS ARE SHOWN CORRECTLY. THIS PLAN WILL VOID ALL INFORMATION INDICATED FOR THIS JOB.
5. ALL SERVICES HAVE BEEN ELECTRONICALLY TRACED IN THE FIELD FOR THE LOCATION HERE SHOWN. THE DEPTHS INDICATED ARE VERIFIED, THESE SHOWN ARE APPROXIMATE ONLY AND SHOULD BE DEPTHS REFER TO WORKS.
6. SERVICES SHOWN DEPTHS HAVE BEEN PLACED FROM RELEVANT AUTHORITY PLANS AND ARE SHOWN AS G.L.O.
7. POTHOLES IS REQUIRED TO VERIFY UTILITY LOCATIONS AND DEPTHS ARE CORRECT, THAT IS G.L.O. AND IS REQUIRED TO CONFIRM THE CONFIDENCE OF THE INFORMATION SHOWN.
8. ELECTRICITY IS HIGH VOLTAGE UNLESS OTHERWISE STATED, TO CONFIRM VOLTAGES ALONG THE LINE WOULD REQUIRE OBTAINING COLOUR RATED SCHEMATIC PLANS, NOT ALL ELECTRICITY CABLES ARE ENCLOSED IN CONDUITS OR MARKED WITH INDICATORS OF THEIR PRESENCE.
9. REFER TO THE UTILITY LOCATION DISCLAMER INCLUDED WITH THE DWG MODEL FOR THE REPRESENTATION OF SUBSURFACE ACCURACY TOLERANCES AND IMPLIED CONFIDENCES.
10. THE CADASTRAL BOUNDARIES HAVE BEEN DERIVED FROM THE CURRENT CADASTRAL DATA. THE INFORMATION SHOWN IS SHOWN FOR PLAN CONTEXT ONLY AND IS OF UNKNOWN ACCURACY QUALITY.
11. STAKE MARKS ARE REQUIRED FOR ALL EXCAVATIONS NEAR SECONDARY OR HIGHER GAS MAINS.
12. REFER TO CCTV FOOTAGE FOR FURTHER INFORMATION.
13. LIMIT OF SURVEY HAS BEEN SHOWN AS PER REQUESTED SCOPE, FEATURES OUTSIDE THE LIMIT OF SURVEY HAVE BEEN INCLUDED FOR INFORMATION PURPOSES ONLY.
14. THIS IS A RE-INVESTIGATION BY SURFACE. AMENDMENTS ARE HIGHLIGHTED VIA REVIEW CLOUDS IN THE SHEET 3. EXTENSION OF SCOPE.
15. SYDNEY METRO TUNNEL ENTRIES WERE DIGITED IN AS PER DWG. STRUCTURE WAS LOCATED ON SITE, NO ASSOCIATED INFRASTRUCTURE OR SERVICES WERE FOUND BELONGING TO SYDNEY METRO.

SURFACE UTILITY INFORMATION (SUI) A55-448 LOCATION CLASS
Labeling utility information by a classification code allows the user of the map to know what type of utility is being shown. The data is collected and then placed an appropriate amount of reliance on it. Projects related to underground utilities can then be properly managed.

Line work sample: **EU-8-8** Quality level represented with 8

Q1-A: Information is the highest possible level of accuracy and is obtained by exposing the underground utility using a non-destructive (pot holing) technique. The vertical information for this service is 10' to 15' below the ground surface. The horizontal service The 3D location is recorded by survey as an X, Y, Z coordinate.

Q2-B: Information is collected by designating the horizontal and vertical location of underground utilities by using electromagnetic pipe and cable locators, sonics or flexi-trace, ground penetrating radar, etc. The horizontal location is recorded by survey as an X, Y coordinate and although an X, Y and Z axis can be established it is not always entirely accurate due to differing electromagnetic fields, conditions and multiple pipes & cables affecting the locating signal.

Q3-C: Information is collected by correlating the survey of visible underground utilities with the location of underground utilities and the acquired Data-Before-You-Dig plans to draw a string which shows the approximate position of services. This method does not usually require the use of electronic equipment. The horizontal location is 2 dimensional information. Electronically traced locate marks with poor accuracy are more reliable than hand drawn marks.

Q4-D: Information is the most basic level of utility locations using only information based on existing Data-Before-You-Dig plans and by measuring boundary offsets etc. This method of utility locations should be used for treatment of the data. The data is for reference only and should not be used for design. GPR scans are also available. Q4-D is the least accurate method of utility location as it's origin point. Depths on GPR scan must be treated as indicative only.

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