EarthRadar
1341 Elizabeth Drive
Kemps Creek NSW 2178

Subsurface Utility Information (SUI)
Photo Report

PROJECT DETAILS	
Locator: Andrew Borgstrom	Date: 10/9/2018
Job No:	DBYD No: 14891739
Site Address: 16 Cabarita Rd, Avalon	
Works Required: Locate Stormwater and Sewer	

CLIENT DETAILS
Client Name: Sue Holliday
Site Contact: Sue Holliday
Mobile No: 0412 234 944
Email: sholliday@iinet.au
Other:

UTILITY	DBYD	SUI Present	AS 5488—2013 Quality Level Comments
GAS			
Electrical HV			
Electrical LV			
Telstra			
Water			
Sewer/Storm	✔	✔	QL B and C
Other			
Unknown			

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SUI Line Colours as per AS 5488—2013

Communications/Telstra/Optic Fibre
(drafted in black when on a white/pale background)

Electricity (LV & HV)

Gas (all pressures)

Water

Fire Service

Sewer (includes sewer rising mains and vacuum sewers)

Drainage/Stormwater

Recycled Water

Unknown Service

Petroleum (includes oil, flammable and combustible materials)

Quality Level Classifications as per AS 5488—2013

Labelling utility information by a **Quality Level** 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.

Quality Level A: Information is of the highest possible level of accuracy and is obtained by exposing the underground utility using a non-destructive excavation (potholing) technique. The vertical information for this locating method is to the crown or shallowest part of the located service. The absolute 3D location is recorded by survey as an X, Y, Z coordinate along with the exposed asset type, size and material.

Quality Level A*: Information is as per a Quality Level A locate, having been exposed and verified by potholing, however the absolute location of the exposed asset has not been surveyed. The exposed asset is recorded within this Photo Report including type and depth below surface as measured by tape.

Quality Level B: Information is collected by designating the horizontal and vertical location of underground utilities by using Electro-Magnetic Induction (EMI) and/or Ground Penetrating Radar (GPR). This is the most common form of utility locating and although an X, Y and Z position can be established it is not always entirely accurate due to the effects of differing electromagnetic fields, soil conditions and multiple banks of cables.

Quality Level 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 services. This method does not usually show multiple banks of cables.

Quality Level D: Information is the most basic level of utility locations using information based on a combination of existing Dial-Before-You-Dig plans, other available existing records, cursory site inspections or anecdotal evidence. SUI shown as Quality Level D should always be treated as an indication of the potential presence of a service only and should **NOT** be used for design.

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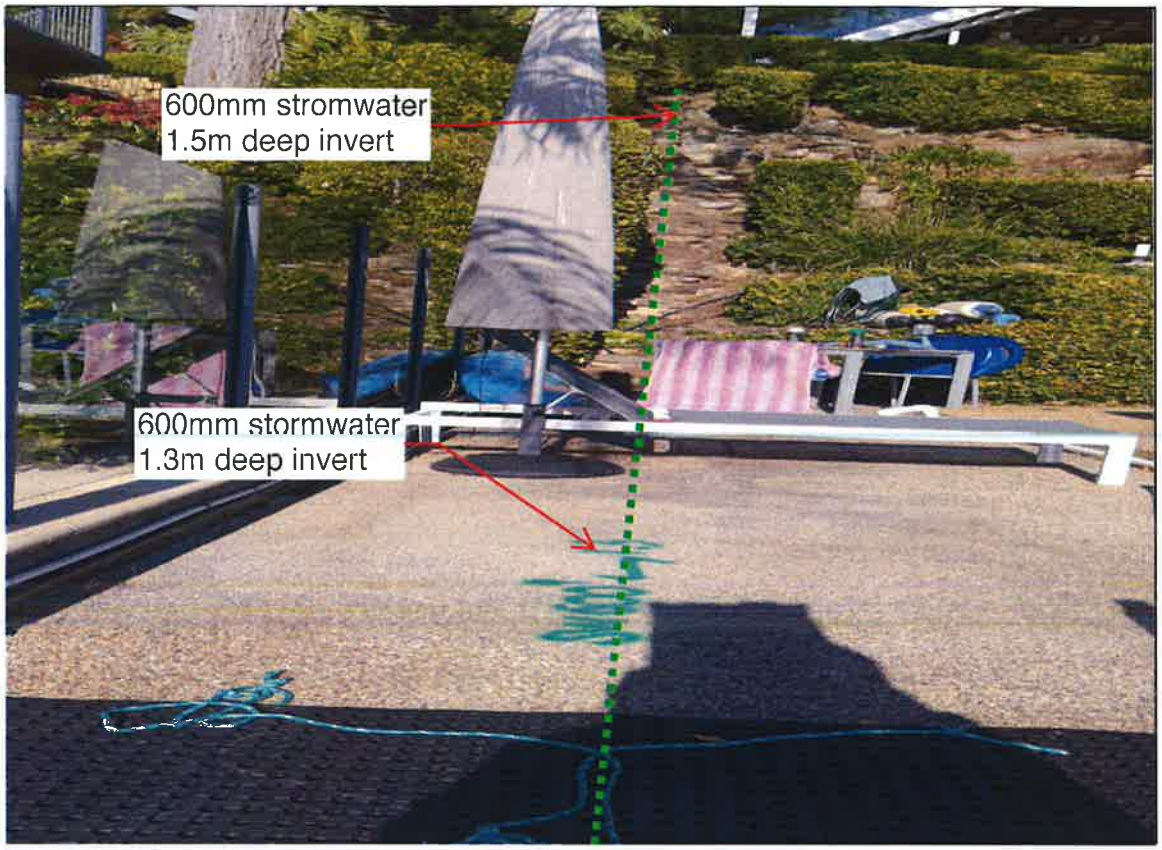
Photo 1 Location: 16 Cabarita Rd, Avalon



- ALL SERVICES SHOWN ON THE PHOTO ABOVE ARE INDICATIVE ONLY.
- All marked services should be potholed to confirm actual location and depth.
- 0.9d = 0.9 meters depth
- 0.9 Inv = 0.9 meters invert
- 0.9 TOP = 0.9 meters to top of pipe/cover to pipe

PHOTO NOTES:

This is inverted level, for estimated top of pipe add 600mm.

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Photo 2 Location: 16 Cabarita Rd, Avalon

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Photo 3 Location: **16 Cabarita Rd, Avalon**

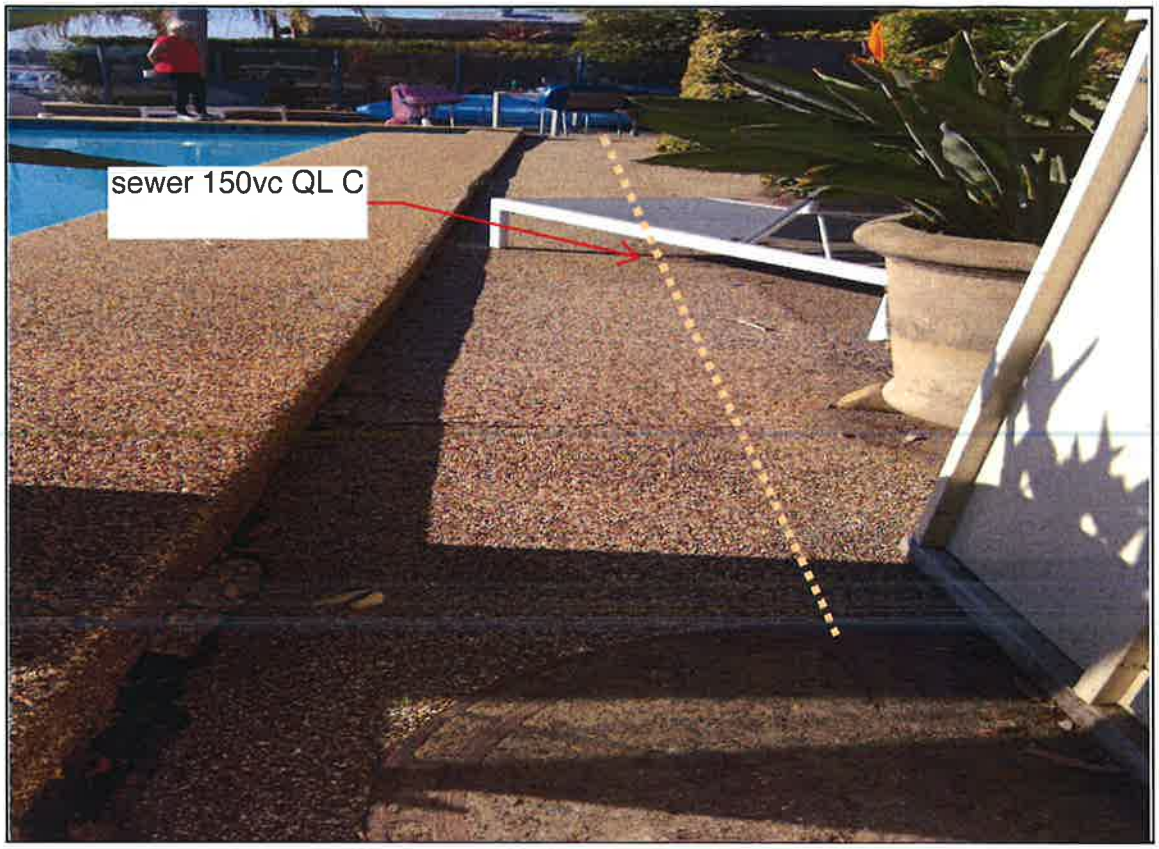

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PHOTO NOTES:

Didnt really need to locate the main sewer line, manhole lined up with lamp hole for QL C on sydney water dials had this at 0.6m invert, client requested this to be noted as we were unable to open access points

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Photo 4 Location: 16 Cabarita Rd, Avalon

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Photo 5 Location: **16 Cabarita Rd, Avalon**

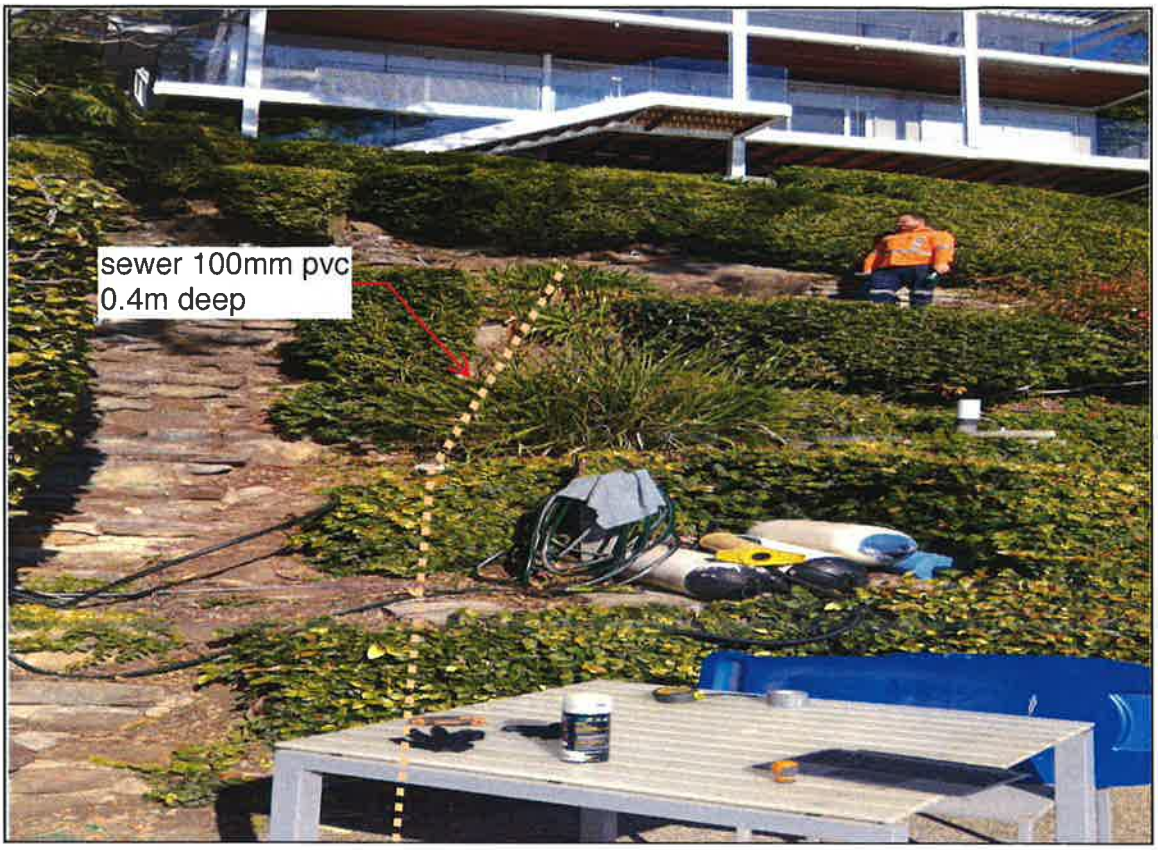

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Photo 6 Location: **16 Cabarita Rd, Avalon**

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DISCLAIMER

The locations of utilities, which were reported to exist at the time of survey, were compiled from a combination of field techniques and available data from co-operating utility authorities.

Whilst all care was taken in locating the utilities, Earth Radar cannot guarantee that the locations determined by this survey are without flaw of any kind. Therefore, Earth Radar expressly disclaims all liability for errors or omissions of any kind whatsoever or from any loss, damage or other consequences that may arise from any person relying on the locations of utilities determined by this survey.

It is recommended that the users undertake "potholing" to directly confirm locations where conflict with construction/design may occur. Due caution should also be exercised during any excavation activity in places where utilities may reasonably be expected to occur, whether located or not.

SUI may remain unmarked within the site extents if they were not part of the original scope of works.

This report DOES NOT replace the legal requirement for a current Dial Before You Dig search on site at the time of any excavation, boring or other works that may interfere with buried utilities.

Please note under new legislation "Energy Legislation Amendment (Infrastructure Protection) Act 2009 No 31" penalties for failure to have current Dial Before you Dig Plans on site when excavating include: personal and company fines. These fines are in addition to costs required to restore any damaged utilities.

If in doubt regarding any aspect of this report, contact the Earth Radar locator or office for further information/clarification.

UTILITY LOCATOR: Andrew Borgstrom DATE: 10/9/2018

SIGNED:

CHECKED BY: Bobby Friesz DATE: 10/9/2018

SIGNED: