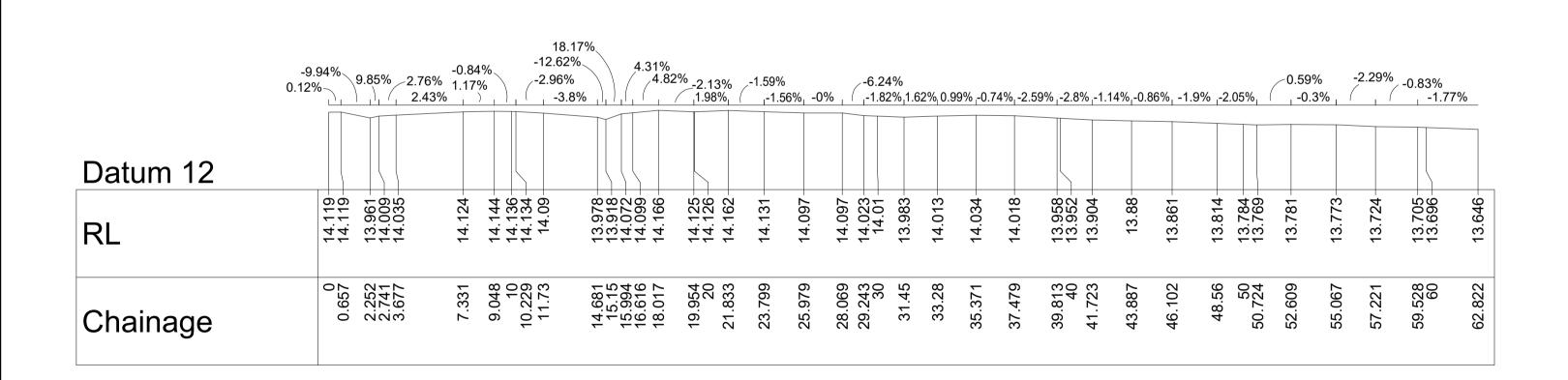


## LONG SECTION 1

VERTICAL SCALE 1:100 HORIZONTAL SCALE 1:200

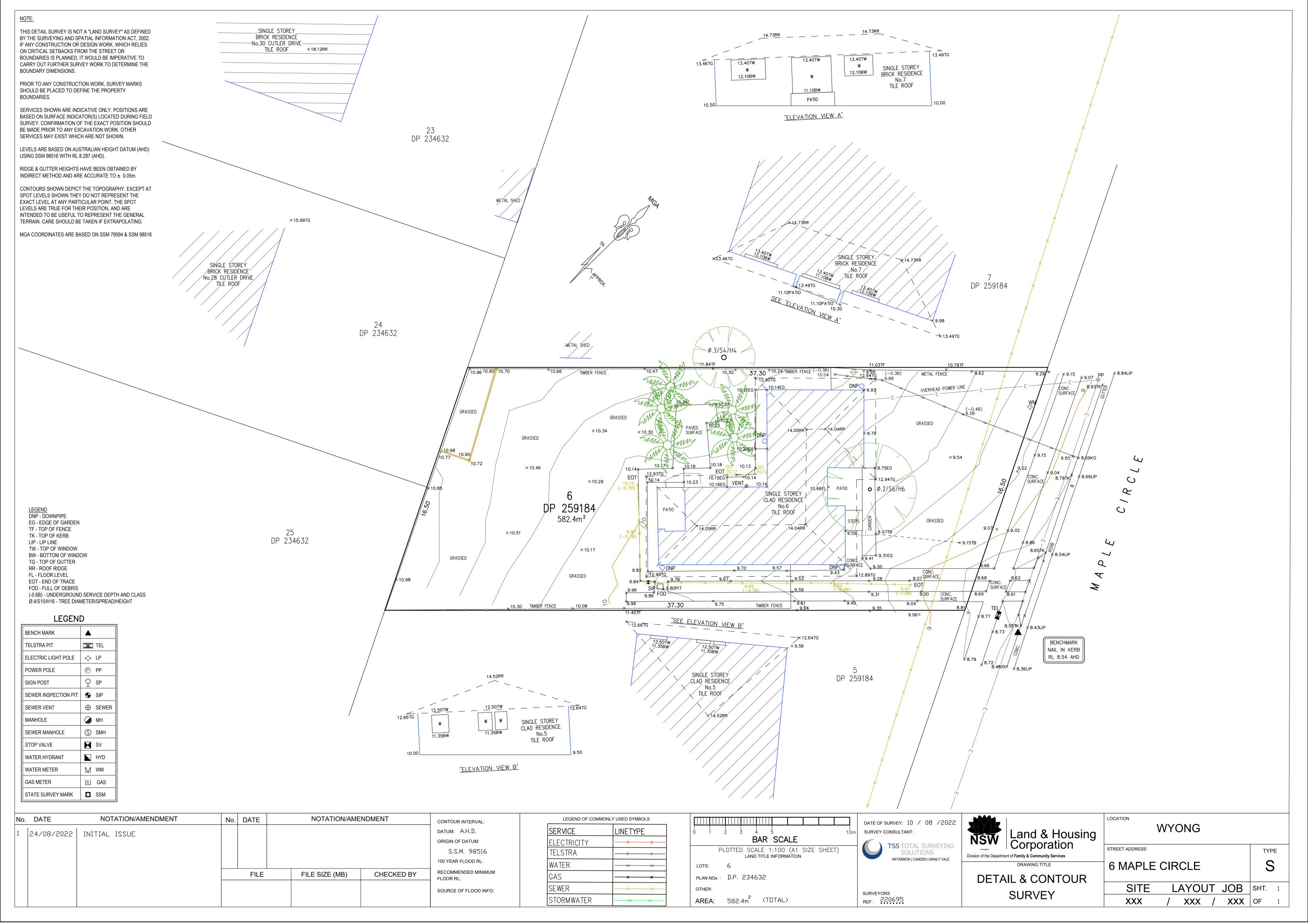


# LONG SECTION 2

VERTICAL SCALE 1:100 HORIZONTAL SCALE 1:200



No. DATE	NOTATION/AMENDMENT	No. DATE	NOTATION/AMI	ENDMENT	CONTOUR INTERVAL: 0.5		LEGEND OF COMMONLY USED SYMBOLS	REDUCTION RA	ATIO 1 : .100 @ A1 SHEET	DATE OF SURVEY: 5-7/ 11 /2021	Family &	LOCATION	
1	AA				DATUM: RL 15.637	WATER		)	200 @ A3 SHEET	20 SURVEY CONSULTANT:	Community Sorvices	WYONG, NSW	!
					ORIGIN OF DATUM: PM 17363	SEWER	Street Consumer			INDIYA T (08) 9477 4477 F (08) 9477 4499	GOVERNMENT Land & Housing Corporation		
						ELECTRICITY	O/H PP Light Connection Box U/G Distribution	LAND	TITLE INFORMATION	GEOSPATIAL F (08) 9477 4499		STREET ADDRESS	TYPE
					100 YEAR FLOOD RL: N/A	TELECOM	O/H T Pillar Pillar Identification	LOTS: 23-25		19 Brennan Way, Belmont WA 6104 PO Box 746 Belmont WA 6984	DRAWING TITLE	#26-30 CUTLER DRIVE	9
		FILE	FILE SIZE (MB)	CHECKED BY	RECOMMENDED MINIMUM FLOOR RL: N/A	GAS  DRAINAGE -	Common 150 dia Pit 1	PLAN NOs : DP 234632		E admin@indiyageospatial.com.au www.indiyageospatial.com.au		#20-30 COTELIX DIXIVE	
					SOURCE OF FLOOD INFO: N/A	-	Main πουριουριουριουριουριουριουριουριουριουρι	OTHER:			LONG SECTIONS	SITE LAYOUT JOB	3 SHT. 1
					BENCH MARK	SURVEY CONTROL MARK SSM	AREA:		SURVEYORS Registered Surveyor REF:		2104954 / 004 / A	OF 1	





# TSS Sewer Report 6 Maple Cr, Wyong



## Service Report

		Job Details					
Client Name	TSS		Client PO Number				
Job Number	6 Maple Cr,	Wyong					
Order ID			Date				
Job Location	Sewer Repo	ort					
Site Contact Name	Ryan Brown	1	-				
Site Contact Phone Number							
Site Contact Email							
Technician Name	Ricky Rennocks						
DBYD Plans Provided by	DBYD Expiry Date 12-Aug-2022						
DBYD Reference Number	32495873						
All Plans Accounted for?	Yes	Are DBYD Pl	ans Current ?	Yes			
Were Additional Plans Provided?	Yes	Do Plans Indicate S	Services in the Area?	Yes			
		Area Description		-			
Locate of sewer feed							
	Radio Freq	uency Locator	<b>✓</b>				
Equipment used on Site	Ground Pe	netrating Radar					
	Other		<b>✓</b>				
	Transmissi	on Electric (TR)					
	High Volta	ge Electric (HV)					
	Low Voltag	ge Electric (LV)					
	RMS (RMS)						
	High Press	ure Gas (HPG)					
	Medium Pr	essure Gas (MPG)					
	Low Pressu	ıre Gas (LPG)					
Services Located on this Site	Water (W)						
	Sewer (S)		V				
	Telecomm	unications (TN)					
	Stormwate	r (ST)					
	Unknown S	Service (UP)					
	No Service	s Found					
	Other						
	Quality Lev	vel A	<b>✓</b>				
Overlike I aveala	Quality Lev	vel B	<b>✓</b>				
Quality Levels	Quality Lev	vel C					
	Quality Lev	vel D					
Has the Customer been walked through the services marked on site?							
Is the Customer aw	No						
Are Site	Yes						
Comments							

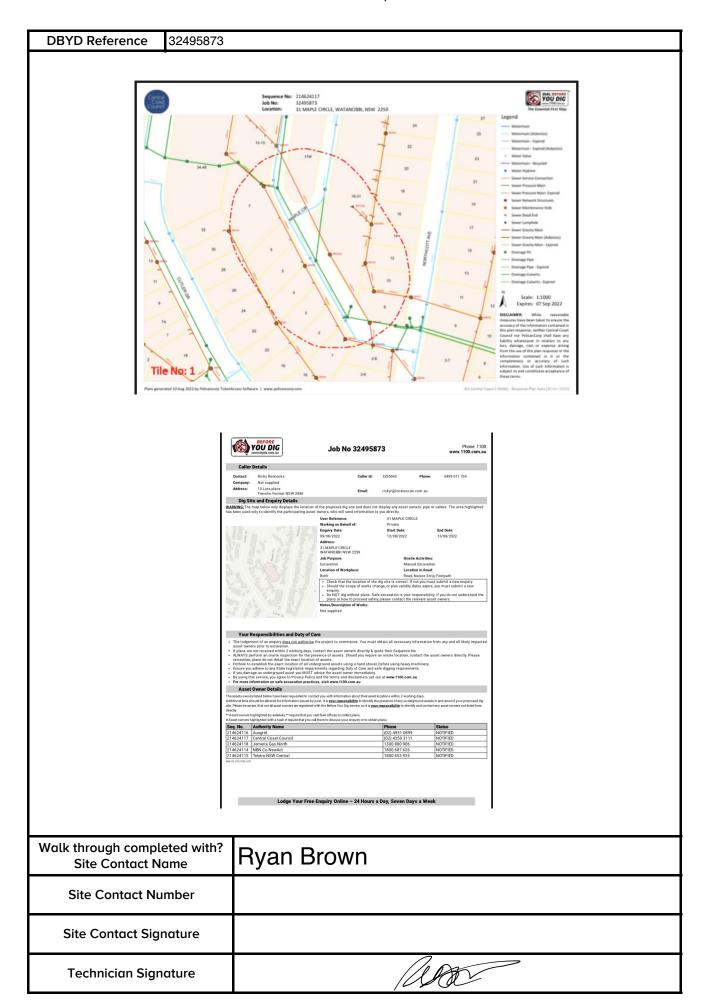
### Location 1



Area / Location Scanned

All services depicted below are representative of services located over the entirety of the area requested. QL-A potholing is always advised with all works carried out in the locate area.

GL-A politicing is diwags davised with dit works carried out in the tocate dred.								
Image L	ocation	6 maple cr						
Service ID	QL-?	Method of Location	Depth (0.0m)	Comments				
Sewer	QL-A	EML	0.90d					



#### **Definitions**

Quality Level A - (meets location accuracy standards for minimum risk when excavating)
Is the highest Quality Level accuracy and consists of 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'

Quality Level B - (significant risk reduction)

Provides relative subsurface feature locations in three dimensions. The minimum requirement for QL-B is relative spatial position, this can be achieved via an electromagnetic frequency locating device. An electronic location provided by a DBYD Certified Locator to QL-B standard would have a maximum horizontal tolerance of plus or minus 300mm and a maximum vertical tolerance of plus or minus 500mm.

Quality Level C - (low accuracy and a high risk of damage)

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 site survey of visible evidence — for example you can see the pit lids shown on the plan but the actual position of underground connection between pits is still assumed.

Quality Level D - (least accurate level and if used on its own has a high risk of damage)
QL-D information is generally obtained from existing records provided by utilities as a result of a Dial
Before You Dig enquiry being lodged. In many cases the asset depicted on the plan is in a schematic
format only and intended only to indicate its presence.

#### Potholing

All services located are a guide only and approximate locations have only been given. These services are only representative of the area located on the specific day in which the works were carried out. It is the resposibility of the person/s undertaking the works to adhere to all duties of care when working in and around the services and areas marked by Locate s&s Pty Ltd. As per the Ward Utilities protocol, potholing is strongly advised with all works carried out in the area located.

Potholing is the means to 'validate' buried assets by physically exposing them. All buried assets should be validated before commencing excavation. Validated assets (potholed and exposed) conform with AS5488-2019 Quality Level A in terms of location accuracy. Dial Before You Dig Member supplied plan information and assets located electronically (e.g. by a DBYD Certified Locator) need also to be potholed and exposed to meet Quality Level A accuracy which is required prior to any excavation.

Any reports generated by Locate s&s will be valid for 30 Days Only.

#### Disclaimer

This plan includes information describing the location of subterranean features, which were purported to exist at the time of the survey. This information was compiled from a combination of field techniques and available data from cooperating utility authorities. Whilst all care has been taken in the preparation of this plan of survey, Locate s&s cannot guarantee that the plan is without flaw of any kind. Therefore, Ward Utilities expressly disclaims all liability for errors or omissions of any kind whatsoever or from any loss, damage or other consequences, which may arise from any person relying on anything, stated on this plan. In particular, it is recommended that users satisfy themselves as to the location of subterranean features such as utilities, which may or may not be shown on this plan by deploying vacuum excavation techniques.

#### **Electro Magnetic Locacting (EML)**

Electromagnetic Locating (EML) is the cutting-edge technology used for tracing the locatable utility lines and metallic pipes as well as for clearing locations of services for any unknown metalic services. Electromagnetic Locators are usually made of two parts, a transmitter and a receiver. The transmitter emits and specified frequency into the utility and the reciever can follow and pin point the location and depth. The transmitter can do this in 3 ways. Direct Connection, Clamping and Induction. You can also use the wand on its own for what is known as a passive scan.

#### **Direct Connection**

Direct Connection is where we connect to the service with crocodile clips or through a magnet attached to the clips. This provides a connection directly to the metal in the service and allows us to emit a signal through the utility for the reciever to trace. This is commonly used on metal pipes, trace wires and earth cables.

#### **Using Tracing Rods or Sondes**

We can use tracing rods and sondes for when we are dealing with plastic conduits and non mettaliuc pipes. The tracing rod is used commonly for locating Optic Fibre and empty conduiuts, we feed the rod into the conduit until failure and we connect the DC Clips to emit the signal. Sondes are a stand alone transmitter, through the power of batteries they emit a specific signal that the reciver can read and are then attached to a larger rod which is then fed into the service in question. These are commonly used for stormwater and sewer services due to the depth of the utility. Sondes can emit a strong signal and can be read at depths much deeper than the tracing rods.

#### Clamping

We use the clmap attactment for all of our metalic cable tracing. This method uses a electro magnetic clamp that emits the signal inside the loop which is then concerntrated onto the cable that it surrounds. This method is very effective when locating cables with a copper content. This is commonly used for copper communication cables and all electrical cables that can gain access too.

#### **Passive Scan**

A passive scan can come in three different forms.

Firstly, using the transmitter laid on the ground in the approximate location of a service, you can emit a signal into the ground, the signal will then follow the closest transmittable service and the reciever can then trace that signal.

The second option is similar to the first however it is known as a Passive Sweap. This is where one person hovers the Transmitter close to the ground and a second person with the reciever stands parallel with about 30m of distance between them both, they then walk together at the same time sweaping the area for any unknown services.

And Thirdly, using what is known as Power and Radio which is through the reciever only, This is effectivly like a metal detector and can show the operator if there is a signal underground without the need for producing the signal through alternative means.

Although not the most accurate for location and depth, both are necasssary when completing a locating job. They are the last option to find any unknown metalic services.

#### **Ground Penertrating Radar (GPR)**

Ground penetrating radar (GPR) is a geophysical locating method that uses radio waves to capture images below the surface of the ground in a minimally invasive way. The huge advantage of GPR is that it allows crews to pinpoint the location of underground utilities without disturbing the ground.

#### **Tolerences**

Each of the above methods have a tolerance as a form of location.

Direct Conectting and Clamping has a maximum horizontal tolerance of plus or minus 300mm and a maximum vertical tolerance of plus or minus 500mm.

Passive Scans and GPR have a maximum horizontal tolerance of plus or minus 500mm and a maximum vertical tolerance of plus or minus 1000mm.

Ground Marking Legend (Based on AS5488)						
Asset Type	Colou	r	Service ID			
Transmission Electric	Orange		TR			
High Voltage Electric	Orange		HV / EU			
Low Voltage Electric	Orange		LV / EU			
RMS	Red		RMS			
High Pressure Gas	Yellow		HPG			
Medium Pressure Gas	Yellow		MPG			
Low Pressure Gas	Yellow		LPG			
Water	Blue		w			
Recycled Water	Blue / Purple		RW			
Fire Hydrant Water	Blue / Red		FW			
Sewer	Purple / Cream		S / SEW			
Telecommunications	White		TN			
Optic Fibre	White		ΟU			
Stormwater	Green		ST / SW			
Unknown Service	Pink		? / UP / UNK			
Redundant Service	Service Colour		Service ID + R			
	Sydney Trains	Marking Legei	nd			
Asset Type	Colou	r	Service ID			
Signalling / Communications	White		Refer to TMA 0497			
External Communication	White		Refer to TMA 0497			
All Voltage Electric	Orange		Refer to TMA 0497			
All Pressured Gas	Yellow		Refer to TMA 0497			
Water	Blue		Refer to TMA 0497			
Sewer	Cream		Refer to TMA 0497			
Drainage	Green		Refer to TMA 0497			
Compressed Air	Purple		Refer to TMA 0497			
Fuel / Flammable Liquids	Red		Refer to TMA 0497			
Unknown Service	Pink		Refer to TMA 0497			

