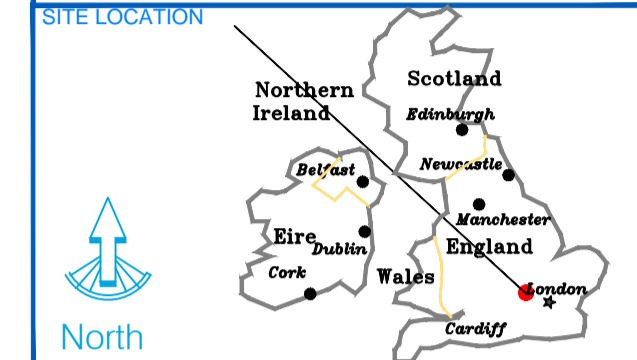
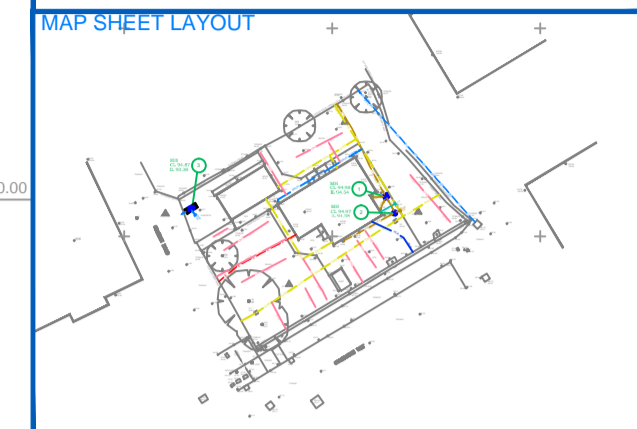


STATION	DESCRIPTION	EASTING	NORTHING	LEVEL
STN1	Control Station	110256.039	116036.644	95.497
STN2	Control Station	110256.858	116115.403	94.952
STN3	Control Station	110268.291	116122.338	94.946
STN4	Control Station	110261.213	116131.006	94.877
STN5	Control Station	110263.970	116132.100	94.960



**REVISION:**

SCALE: 1:100@A1	DATE: JAN 2018
DRAWING NO: 01	DRAWN BY: KW
SURVEYED BY: KW/BKLP	CHECKED BY: KW

**LEVELS RELATE TO:**  
To GPS DATA

**SITE ADDRESS:**  
GASWORKS COTTAGE  
STATION ROAD  
HERTFORDSHIRE  
WD6 1DB

**DRAWING TITLE:**  
UTILITY GPR SURVEY

**JOB NUMBER:**  
2018/004

**CLIENT:**  
HAMILTON COURT  
DEVELOPMENTS LTD

**XYZ LAND SURVEYS  
CHARTERED SURVEYORS**  
HEAD OFFICE  
TRIDENT COURT, UNIT ONE, OAKCROFT ROAD  
CHESINGTON, SURREY, KT9 1BD  
TEL 020 8255 4550  
E-Mail: surveyors@xyzsurveys.co.uk  
Website: www.xyzsurveys.co.uk

LEGEND		ON DETAIL SURVEY	
E	Electrical Cable	AC	AIR CONDITIONER
EL	Electrical Lighting Cable	BB	BELISHA BEACON
FS	Foul Sewer	BH	BORE HOLE
SW	Surface Water Drainage	BN	BRITISH TELECOM COVER
TEL	Telecommunications	BOX	UNIDENTIFIED BOX
W	Water Main	C-BOX	CONTROL BOX
UN	Undetermined Service	CL	COVER LEVEL
CM	Combined Sewer	CPOST	CONCRETE POST
ED	Empty Ducts	CPL	CONCRETE PAVING SLABS
G	Gas Pipe	CPS	CABLE TV COVER
C	Cable	EQ	ELECTRIC COVER
DP0.5	Depth 0.50 (Example)	ER	EARTH ROD
U.T.O.	UNABLE TO OPEN	FH	FIRE HYDRANT
		FP	FLAG POLE
		G	GULLEY
		GV	GAS VALVE
		HT	HEIGHT INSPECTION COVER
		IC	INVERT LEVEL
		IP	INSPECTION PLATE
		LB	LETTER BOX
		LC	LAMP COLUMN
		LT	LIGHT MANHOLE
		MH	MANHOLE
		MKR	MARKER
		MLP	MILEPOST MARKER
		MPT	MOORING POST
		NB	NOTICE BOARD
		OH	OVERHEAD
		PB	POST BOX
		PL	PAVEMENT LIGHT
		PP	PETROL PUMP
		RE	RODDING EYE
		RNP	ROAD NAME PLATE
		RS	ROAD SIGN
		RWP	RAIN WATER PIPE
		SB	SAND / GRIT BIN
		SP	SIGN POST
		SVP	SOIL VENT PIPE
		TGB	TELEPHONE CALL BOX
		TH	TRIAL HOLE
		TFENCE	TOP OF FENCE LEVEL
		TWALL	TOP OF WALL LEVEL
		TL	TRAFFIC LIGHT
		TLCB	TRAFFIC LIGHT CONTROL BOX
		TP	TELEGRAPH POLE
		UTL	UNABLE TO LIFT
		VP	VENT PIPE
		VR	VAPOUR RECOVERY
		WPOST	WOODEN POST
		WV	WATER VALVE

**XYZ LAND SURVEYS, Ground Penetrating Radar Disclaimer**

The survey aims to map all existing utilities and sub surface structures and provide information with respect to pipe size, material type and drainage connectivity. However GPR surveying is limited by the following guidelines and it may not be possible to accurately survey, define and locate all services and sub surface features.

- Locational accuracy is determined by referring to the manufacturers guidelines for the detectors used.
- Existing record information showing underground services is often incomplete and unknown accuracy, therefore it should be regarded only as an indication.
- In ideal conditions these spatial accuracies for the underground utilities located and mapped are +/-5% for the RD4000 and +/-10% of depth for the GPR system. Variations within the subsurface may, however, alter this estimated accuracy.
- It is not always possible to trace the entire length of each underground service.

Although all reasonable steps have been taken to locate all features, there is no guarantee that all will be shown on the drawing, as some above ground features may have obstructed the survey.

GPR surveying operates best within high resistivity material. Clay overburden can impair GPR surveying.

Due to the attenuation of the radar signal with depth, resolution is restricted, making identification of anomalies difficult with increasing depth.

The depth penetration and quality of the data depends on the ground conditions on site. Poor data may be a result of areas with high conductivity. Also, high reflective materials close to the surface. E.g. Rebar may hide deeper anomalies.

Unless otherwise stated, all services and sub surface structures shown on these drawings have been surveyed using approved detectors and the connections between manholes, if not traced, are assumed to be direct.

Where supplied prior to survey commencement, we will use utility provider's information as a guide for location purposes. However, should we not be able to locate those guided services, we shall not be held responsible for the accuracy, or otherwise, of the location of that service, as issued by the utility provider. These will be shown as "Taken From Records" on the drawing and we are not liable for any loss that may arise due to the lack of accuracy in the guided information.

Plan accuracies of the order of +/- 150mm may be achieved but this figure will depend on the depth of the service below ground level. Where similar services run on close proximity, separation may be impossible. Successful tracing of non metallic pipes may be limited.

No guarantee can be given that all services have been shown. Underground service tracing is not an exact science - Errors and omissions can occur, due to electrical fields and localised ground conditions. We advise that excavation and further investigation may be required before starting work on site.

