

By Email Only



22 February 2019

Quote Ref: 23395

Mr Daniel O'Brien  
**Hollycroft Construction Limited**  
1&2 Northwest Business Park  
Servia Hill  
Leeds  
LS6 2QH

Dear Daniel,

**RE: Underground Utilities Survey at Baildon Mills, Baildon, Bradford, BD17 6JY.**

Scope of Work

In summary, we will undertake an underground utilities survey to the area outlined in red shown below in appendix 1.

***Underground Utilities Survey***

We will undertake an underground utilities survey utilising the methodologies set out in PAS 128, type B. This will include a full electro-magnetic scan of the site using the latest technology. A full GPR scan of the site marked out in real time the standard grid will be every 5m equivalent to M1 of PAS 128, type B specification. All covers will be lifted where possible and drains will be sound checked for connectivity, if this proves inconclusive a flexi trace cobra reel will be used to prove the route of the drainage.

All utility results will be overlaid onto a topographical survey in 2D (DWG) AutoCAD format. **This must be supplied by the client if Subscan are not commissioned on the topographical element of the survey.**

Optional extras which can be included need to be made clear at planning stage but include:-

**Desktop Utilities Record Search**

- **These service records are a fundamental part of PAS 128 Utility Surveying. If they cannot be supplied, Subscan must obtain them. They include plans issued by National Grid, BT and other major service providers. These plans will be collated into a PDF report by a 3<sup>rd</sup> party and Subscan will use the information as part of the utility survey.**

**General Photographs of site:-**

- A minimum of 10 photographs showing the condition the site is in and a general view of lampposts, manholes, etc.

**A Brief word Report:-**

- A report that gives further details on how the survey was undertaken. Limitations of the survey and equipment. The time, date and survey team responsible for the work. Conclusions and recommendations for further investigation.

**AutoCAD 3D Models:-**

- AutoCAD models which have all the data at the correct Z value. These models should be easily integrated into Revit and other BIM compatible software.



**UVDB**  
empowered by Achilles



Subscan is the trading name of Subscan UDS Ltd whose registered office is  
Subscan House, 126 Whitehall Road, Leeds LS12 1AE  
Registered in England & Wales No: 8108600 VAT No. 155 8669 63

T: 0844 499 5220

F: 0844 499 5221

W: www.subscan.com

By Email Only



**Chamber Photographs:-**

- Photographs taken of manhole chambers outside and in are then collated into a word report

**Chamber Sketches:-**

- Sketches of chambers produced which includes information such as; size of chambers, number of ducts, number of cables in ducts, chamber material, types of services in chambers. All information will be collated into a word report.

Deliverable

The underground utilities information will be overlaid onto a third party topographical survey in 2D AutoCAD format.

Fee & Programme

Please find below our associated fee for each element of the survey.

Item	Description	Tender Cost
1.	Underground Utilities Survey Level B – Site Works	£1,800.00 plus VAT
2.	Desktop Utilities Record Search (if not supplied)	£500.00 plus VAT
3.	Processing / CAD / QA	£125.00 plus VAT

**Our current lead-time is approximately 8 working days and we would expect to be on site approx. 2 days. We would anticipate the completed drawing to be in your possession in approximately 5 working days from completion on site.**

Additional Information

We confirm that Subscan UDS Ltd has Public Liability, Employers' Liability and Products Liability insurance cover of £10 million, and Professional Indemnity cover of £5million. We are a CHAS accredited company and also hold a RISQS accreditation. We also adhere to a strict quality system of work and all our equipment is calibrated by a professional annually and checked at regular intervals.

We trust this meets with your approval, if we can be of any further assistance please do not hesitate to call.

Provisions

**Please state if you have the Statutory Undertaker's Plans to supply us prior to commencement on site.**

**An invoice Address and recipient must be provided before work on site commences, preferably with a Purchase Order number for the project.**

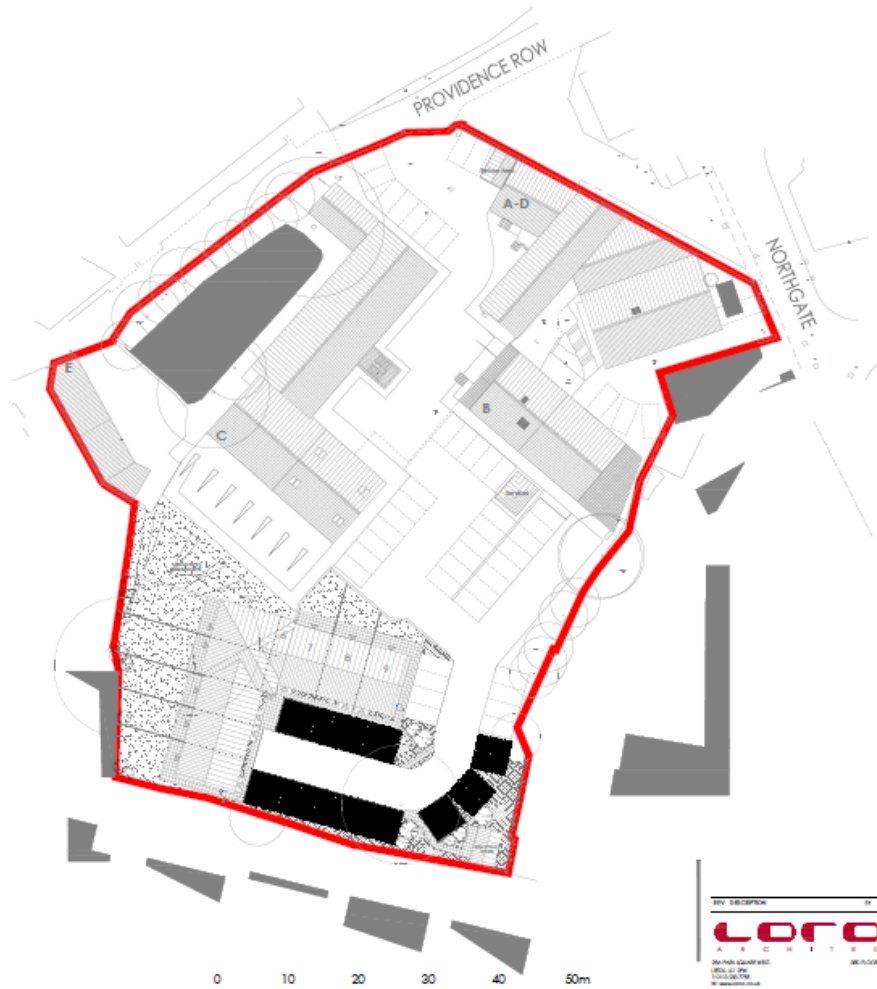


**UVDB**  
empowered by Achilles



Subscan is the trading name of Subscan UDS Ltd whose registered office is  
Subscan House, 126 Whitehall Road, Leeds LS12 1AE  
Registered in England & Wales No: 8108600 VAT No. 155 8669 63  
T: 0844 499 5220 F: 0844 499 5221 W: www.subscan.com

Appendix 1



If there are any questions regarding this quote please contact Kirk Mason, Operations Director.

Yours sincerely,

Ellie Hair  
Survey Department  
For and on behalf of Subscan



**UVDB**  
empowered by Achilles



Subscan is the trading name of Subscan UDS Ltd whose registered office is  
Subscan House, 126 Whitehall Road, Leeds LS12 1AE  
Registered in England & Wales No: 8108600 VAT No. 155 8669 63  
T: 0844 499 5220 F: 0844 499 5221 W: www.subscan.com

## Limitations for Underground Utility Surveys

Although Subscan will take every action necessary to complete the utility survey to the highest standard possible there are certain limitations to the process which Subscan cannot be held liable.

1. GPR is only useful on flat relatively smooth surfaces free from obstructions, areas of vegetation, waterlogged areas or uneven ground will often not be scanned using GPR as the data is too unreliable.
2. GPR is affected by below ground conditions, saturated ground or concrete re-enforcement bars are examples of below ground conditions that can have effects on the results of scans.
3. Magnetic fields can often distort each other when in close proximity, while Subscan will make every effort to recognise distorted fields it is not always possible to obtain accurate readings from distorted magnetic fields.
4. Magnetic fields can sometimes suffer from Destructive interference, where two magnetic fields cancel each other out and become undetectable using EML techniques, in this situation cables and services may not be located especially when added to the fact the GPR may not have been used due to the topography of the land.
5. Subscan drawings will often use statutory record information labelled on the drawing TFR. Subscan can make no assurances on service information on the drawing taken from statutory records.
6. On many occasions there are areas on site where access was not available at the time of the survey or where obstructions such as parked cars mean there are areas not scanned, Subscan will mark these areas clearly on the drawing.
7. All of the equipment used in undertaking the survey have in built error margins which can be supplied by the manufacturer of the equipment Subscan do not accept liability for errors on the drawing which fall inside the manufacturer's equipment limitations.
8. Subscan utility tracing equipment is only reliable down to 3 metres any service deeper than 3 metres may not be detectable.
9. Small plastic services may not be detectable with our equipment.
10. Services stacked directly on top of each other may not be detectable.
11. Manholes and service chambers in poor condition or too heavy to safely lift may not be lifted on site. In this instance Subscan will attempt to put as much information on the drawing relating to the cover not lifted but the information will be limited as accessing a chamber is the only way of obtaining certain information.



Subscan is the trading name of Subscan UDS Ltd whose registered office is  
Subscan House, 126 Whitehall Road, Leeds LS12 1AE  
Registered in England & Wales No: 8108600 VAT No. 155 8669 63

T: 0844 499 5220

F: 0844 499 5221

W: [www.subscan.com](http://www.subscan.com)