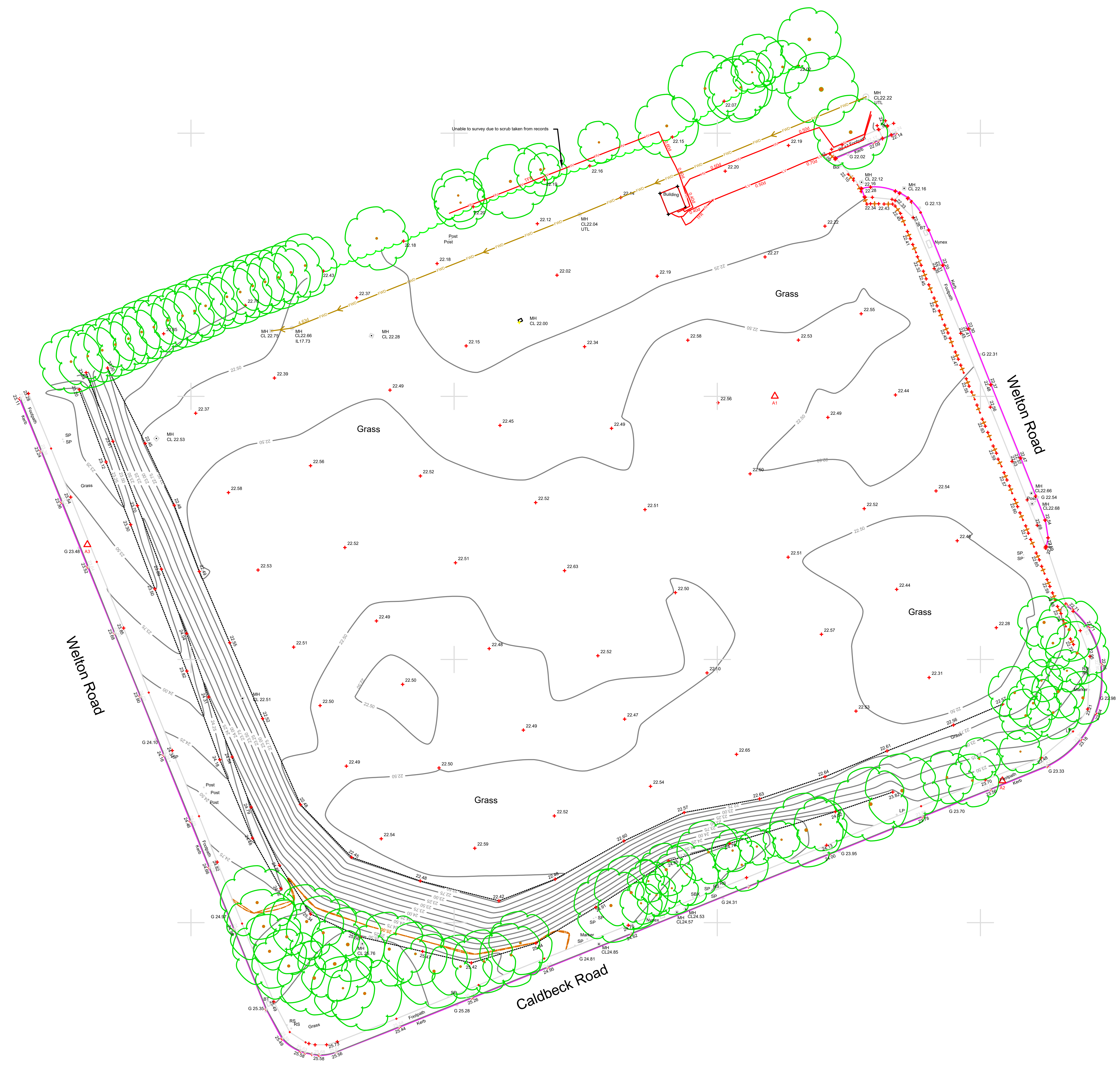

Quality Level of Utility Survey Outputs:

The drawing has been derived from the amalgamation of several data sets: utility service provider buried asset plans, visual confirmation by way of lifting manholes, and measuring depth, type and location of services, electromagnetic detection, and GPR scans.

All the data sets have been allocated a "weighting" based upon the likely accuracy and confidence. The final amalgamation is performed by polynomial rubber sheet distortion of service provider assets plans for a 'best fit' to resemble on–site survey data findings as close as possible

The accuracy of the horizontal location of each utility is defined by Table 1 'Quality level of survey outputs PAS128(normative)' for QL–B2P = +/–0.25m or +/–40% of detected depth whichever is greater.

The accuracy of the verticall location of each utility as defined by Table 1 'Quality level of survey outputs PAS128(normative)' for QL–B2P = +/–40% of detected depth.

Care should be taken by designers when utilising the findings within this drawing, and should confirm depths by visual confirmation/verification using vacuum excavation or slit trench technology if a higher degree of accuracy is required to meet the design brief specification.

Utility Survey Disclaimer:

We have endeavored to locate as many buried services as possible using the Best Available Technology (BAT) and applying the Best available Techniques as defined under guidance from the The Survey Association (TSA) and the British Standard PAS128 for Utility Surveys.

However, the user of this drawing should be aware that the results found using Best Available Technology are subject to errors and tolerances resulting from geophysical properties of the subsurface, out of the control of the operator, being surveyed/scanned. In addition survey findings are interpreted on site in real–time and thus are subject to interpretative and subjective variations.

The accuracy of the findings indicated within this drawing, cannot be guaranteed or indemnified, and should only be used as a guide as defined by the Health & Safety Executives (HSE) guideline – HSG47.

Lines on this drawing indicating the presence of buried services may actually be indicating the presence of closely bundled cables or pipelines, therefore the user of this drawing should not assume that a single line is indicative of the number of services within the area.
Metal pipes, communication cables and earth bonds can 'present' electromagnetic fields similar to that of high voltage and low voltage cables under load, if alternating electromagnetic fields are in close proximity from other power cables or sub–stations etc.

Equipment Deployed:

IDS Dual Frequency Ground Penetrating Radar (GPR) with on–site operator interpretation.

Radiodetection RD8000 & T10 Electromagnetic Generator and Precision Cable Locator.

BURIED ASSETS DETECTED ON SITE:

LINETYPE	SERVICE DESCRIPTION
—BT——BT—	TELECOMMUNICATIONS (BT)
—CATV—	TELECOMMUNICATIONS (CATV)
—TELE—	TELECOMMUNICATIONS (OTHER)
—G——G—	GAS
—TCSU—	TRAFFIC CONTROL SENSOR UNIT
—SL——SL—	STREET LIGHTING
—LV—	LOW VOLTAGE
—HV—	HIGH VOLTAGE
—W——W—	WATER
—FWD—	FOUL WATER DRAINAGE
—SWD—	SURFACE WATER DRAINAGE
—FWRM—	FOUL WATER RISING MAIN
—CS—	COMBINED SEWER
—OF—	OIL/FUEL
—U(GPR)—	UNKNOWN UTILITY (GPR)
—U(EML)—	UNKNOWN UTILITY (RADIO)

EOT END OF TRACE
A/R ASSUMED ROUTE
UTD UNABLE TO OBTAIN DEPTH DUE TO FEINT SIGNAL
TFR TRANSFERRED FROM RECORDS

DRAINAGE DISCLAIMER

ONLY DRAINAGE DISCOVERED WHILST ON SITE IS DISPLAYED ON THIS DRAWING FURTHER INVESTIGATIONS MAY NEED TO BE CARRIED OUT TO ASCERTAIN THE FULL EXTENT OF THE DRAINAGE FOR THE SITE

KEY DIMENSIONS SHOULD BE CHECKED ON SITE BEFORE COMMENCEMENT OF ANY WORKS

Amendments

	Date	Surveyor	Description of work

Meridian House
58/60 Hillside Road, Frodsham, Cheshire WA6 6AG
Tel: 01928 734473 Fax: 01928 735573
Email: mail@powerstiltman.co.uk
www.powerstiltman.co.uk

Caldbeck Road
Bromborough
Utilities Survey

Client : Redsun Developments

Surveyed By : CS	Date : 09/04/21	A1 @ 1:500
Drawn By : CS	Drawing No : 8181/02	
Checked By : SH	Amendment : ****	