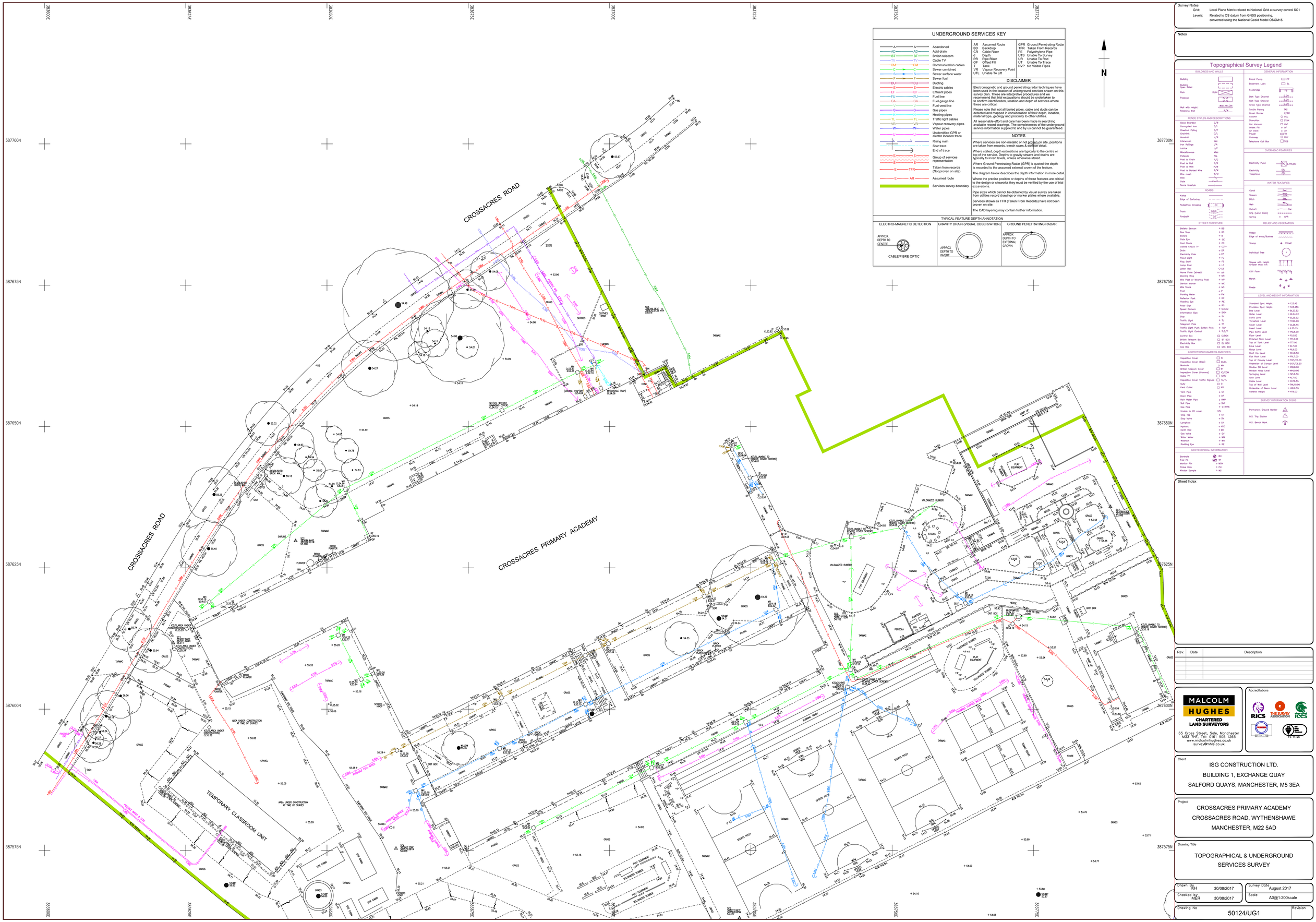

UNDERGROUND SERVICES KEY

A	Abandoned	
AD	Acid drain	
BT	British telecom	
TV	Cable TV	
CM	Communication cables	
C	Sewer combined	
S	Sewer surface water	
F	Sewer foul	
DU	Ducting	
E	Electric cables	
EF	Effluent pipes	
FU	Fuel line	
GA	Fuel gauge line	
V	Fuel vent line	
G	Gas pipes	
H	Heating pipes	
TL	Traffic light cables	
VR	Vapour recovery pipes	
W	Water pipes	
U	Unidentified GPR or electro location trace	
	Rising main	
	Soar trace	
	End of trace	
E	Group of services representation	
E		
E – TFR	Taken from records (Not proven on site)	
E – AR	Assumed route	
	Services survey boundary	

AR	Assumed Route	GPR	Ground Penetrating Radar
BD	Backdrop	TFR	Taken From Records
CR	Cable Riser	PE	Polyethylene Pipe
d	Depth	UTS	Unable To Survey
PR	Pipe Riser	UR	Unable To Rod
OF	Offset Fill	UT	Unable To Trace
T	Tank	NVP	No Visible Pipes
VR	Vapour Recovery Point		
UTL	Unable To Lift		

DISCLAIMER

Electromagnetic and ground penetrating radar techniques have been used in the location of underground services shown on this survey plan. These are interpretive procedures and we recommend that trial excavations should be undertaken to to confirm identification, location and depth of srvices where these are critical.

Please note that not all buried pipes, cable and ducts can be detected and mapped in consideration of their depth, location, material type, geology and proximity to other utilities.

All reasonable effort and care has been made in searching available record drawings. The completeness of the underground service information supplied to and by us cannot be guaranteed.

NOTES

Where services are non-metallic or not proven on site, positions are taken from records, trench scars & surface detail.

Where stated, depth estimations are typically to the centre or top of the service. Depths to gravity sewers and drains are typically to invert levels, unless otherwise stated.

Where Ground Penetrating Radar (GPR) is quoted the depth is recorded to the assumed external crown of the feature.

The diagram below describes the depth information in more detail.

Where the precise position or depths of these features are critical to the design or sitworks they must be verified by the use of trial excavations.

Pipe sizes which cannot be obtained by visual survey are taken from utilities record drawings or marker plates where available.

Services shown as TFR (Taken From Records) have not been proven on site.

The CAD layering may contain further information.

TYPICAL FEATURE DEPTH ANNOTATION

ELECTRO-MAGNETIC DETECTION	GRAVITY DRAIN (VISUAL OBSERVATION)	GROUND PENETRATING RADAR
APPROX DEPTH TO CENTRE — CABLE/FIBRE OPTIC	APPROX DEPTH TO INVERT	APPROX DEPTH TO EXTERNAL CROWN

Survey Notes

Grid: Local Plane Metric related to National Grid at survey control SC1

Levels: Related to OS datum from GNSS positioning, converted using the National Geoid Model OSGM15.

Notes

Topographical Survey Legend

BUILDINGS AND WALLS

Building; Building Open Sided; Ruin; Pineapple; Wall with Height; Retaining Wall

GENERAL INFORMATION

Petrol Pump; Basement Light; Footbridge; Dish Type Channel; Slot Type Channel; Grate Type Channel; Tactile Paving; Crash Barrier; Column; Stanchion; Car Vacuum; Offset Fill; Air Valve; Trough; Chimney; Telephone Call Box

FENCE STYLES AND DESCRIPTIONS

Close Boarded; Corrugated Iron; Chestnut Paling; Chainlink; Handrail; Interwoven; Iron Railings; Lattice; Miscellaneous; Palisade; Post & Chain; Post & Rail; Post & Wire; Post & Barbed Wire; Wire mesh; Stile; Gate; Fence linestyle

OVERHEAD FEATURES

Electricity Pylon; Electricity; Telephone

WATER FEATURES

Canal; Stream; Ditch; Weir; Culvert; Grip (Land Drain); Spring

ROADS

Kerbs; Edge of Surfacing; Pedestrian Crossing; Track; Footpath

STREET FURNITURE

Bollards Beacon; Bus Stop; Bollard; Cats Eye; Coal Chute; Closed Circuit TV; Drain; Electricity Pole; Flood Light; Flag Staff; Lamp Post; Letter Box; Name Plate (street); Mooring Ring; Mile Post or Mooring Post; Service Marker; Mile Stone; Post; Parking Meter; Reflector Post; Rodding Eye; Road Sign; Speed Camera; Information Sign; Stay; Traffic Light; Telegraph Pole; Traffic Light Push Button Post; Traffic Light Control; Control Box; British Telecom Box; Electricity Box; Gas Box

RELIEF AND VEGETATION

Hedge; Edge of wood/Bushes; Stump; Individual Tree; Slopes with Height Greater than 1m; Cliff Face; Marsh; Reeds

INSPECTION CHAMBERS AND PIPES

Inspection Cover; Inspection Cover (Elec); Manhole; British Telecom Cover; Inspection Cover (Comms); Cable TV; Inspection Cover Traffic Signals; Gully; Kerb Outlet; Vent Pipe; Down Pipe; Rain Water Pipe; Soil Pipe; Gas Pipe; Unable to lift cover; Stop Tap; Stop Valve; Lamphole; Hydrant; Earth Rod; Gas Valve; Water Meter; Washout; Rodding Eye

LEVEL AND HEIGHT INFORMATION

Standard Spot Height; Precision Spot Height; Bed Level; Water Level; Soffit Level; Threshold Level; Cover Level; Invert Level; Pipe Soffit Level; Floor Level; Finished Floor Level; Top of Tank Level; Eave Level; Ridge Level; Roof Slip Level; Flat Roof Level; Top of Canopy Level; Underside of Canopy Level; Window Sill Level; Window Head Level; Springing Level; Arch Level; Cable Level; Top of Wall Level; Underside of Beam Level; General Height

GEOTECHNICAL INFORMATION

Borehole; Trial Pit; Monitor Pin; Probe Hole; Window Sample

SURVEY INFORMATION SIGNS

Permanent Ground Marker; O.S. Trig Station; O.S. Bench Mark

Sheet Index

Rev.	Date	Description

MALCOLM HUGHES
CHARTERED LAND SURVEYORS
65 Cross Street, Sale, Manchester M33 7HF. Tel: 0161 905 1265
www.malcolmhughes.co.uk
survey@mhls.co.uk

Accreditations: RICS; The Survey Association; ISO 9001:2015; FS 711726

Client
ISG CONSTRUCTION LTD.
BUILDING 1, EXCHANGE QUAY
SALFORD QUAYS, MANCHESTER, M5 3EA

Project
CROSSACRES PRIMARY ACADEMY
CROSSACRES ROAD, WYTHENSHAWE
MANCHESTER, M22 5AD

Drawing Title
TOPOGRAPHICAL & UNDERGROUND SERVICES SURVEY

Drawn By	KH	Survey Date	August 2017
Checked by	MER 30/08/2017	Scale	A0@1:200scale
Drawing No	50124/UG1	Revision	