TOPOGRAPHICAL & MEASURED BUILDING SURVEYS

ABBREVIATIONS & SYMBOLS

AH	Arch Head Height	ER	Earth Rod	RSD	Roller Shutter Door
A/B	Air Brick	ET	EP+Transformer	RSJ	Rolled Steel Joist
AR	Assumed Route	FB	Flower Bed	SI	Sign Post
AV	Air Valve	FBD	Floor Board Direction	SP	Arch Spring Point Height
BB	Bellstha Beacon	FH	Fire Hydrant	SV	Stop Valve
BH	Bore Hole	FL	Floor Level	SW	Surface Water
BL	Bed Level	FP	Flag Pole	SY	Cable Way
BO	Bollard	FG	Foul Water	Tac	Tactile Paving
BP	Boundary Post	GG	Gas Governor	TC	Telephone Cover
BS	Box Strip	GV	Gas Valve	TH	Trial Pit
BU	Bush	HH	Head Height	THL	Threshold Level
B/W	Barbed Wire Fence	IC	Inspection Cover	TL	Traffic Light
BX	Box (Utilities)	IL	Invert Level	ToW	Top of Wall
C/B	Close Board Fence	I/R	Iron Railings	TP	Telegraph Pole
CH	Cill Height	KO	Kerb Outlet	TS	Traffic Signal Cover
CL	Cover Level	LP	Lamp Post	TV	Cable TV Cover
C/L	Chain Link Fence	MH	Manhole	UB	Universal Beam
C-Lev	Ceiling Level	MP	Marker Post	UC	Unknown Cover
Col	Column	NB	Name Board	UK	Unknown Tree
C/P	Chestnut Paling Fence	O/HL	Overhead Line (airprint)	UMG	Unmade Ground
CR	Cable Riser	Pan	Panel Fence	USB	Under Side Beam
C/W	Chicken Wire	PB	Post Box	UTL	Unable To Lift
DC	Drainage Channel	PM	Parking Meter	UTS	Unable To Survey
DH	Door Head Height	PO	Post	VP	Vent Pipe
Dis	Dilapidated	P/R	Post & Rail Fence	WB	Waste Bin
DP	Down Pipe	P/W	Post & Wire Fence	WH	Weep Hole
DR	Drain	P/Wall	Partition Wall	WL	Water Level
E/Box	Electric Box	RE	Rodding Eye	WM	Water Meter
EC	Electric Supply Cover	RL	Ridge Level	WO	Wash Out
EL	Electric Line	RP	Reflector Post	(3.5)	Floor to Ceiling Height
E/I	Electric Pole	RS	Road Sign	(3.5FC)	Floor to False Ceiling Ht

Survey Control Station

DRAWING NOTES

Topographical Surveys

Trees are drawn to scale showing the average canopy spread. Descriptions and heights should be used as a guide only.

All building names, descriptions, number of storeys, construction type including roof line details are indicative only and taken externally from ground level.

All below ground details including drainage, voids and services have been identified from above ground and therefore all details relating to these features including; sizes, depth, description etc will be approximate only. All critical dimensions and connections should be checked and verified prior to starting work.

Detail, services and features may not have been surveyed if obstructed or not reasonably visible at the time of the survey.

Surveyed physical features may not necessarily represent the legal boundary line.

Measured Building Surveys

Measurements to internal walls are taken to the wall finishes at approx 1m above the floor level and the wall assumed to be vertical.

Cill heights are measured as floor to the cill and head heights are measured from cill to the top of window.

General

The contractor must check and verify all site and building dimensions, levels, utilities and drainage details and connections prior to commencing work. Any errors or discrepancies must be notified to Survey Solutions immediately.

The accuracy of the digital data is the same as the plotting scale implies. All dimensions are in metres unless otherwise stated.

The survey control listed is only to be used for topographical surveys at the stated scale. All control must be checked and verified prior to use.

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Do not scale from this drawing.

KEY FOR UNDERGROUND SERVICES

Foul Water Drain
Foul Water 300Ø and above
Surface Water Drain
Surface Water Drain 300Ø and above
Combined Water Drain
Combined Water Drain 300Ø and above
End of trace — EOT
Electric cables
HV cables
Gas
Water
Telephone
Catv
CCTV
Comms
Fibre Optics
Pipe
Vents
Fuel
Offsets
Vapour Recovery
Gauge Lines
Unidentified GPR
Unidentified EML
Taken From Records
Assumed Routes
Empty Ducts
Earth Rod
Rising Main
Overhead
Heating Pipes
Traffic Signals
Multi User
Trench Scar
Service Duct

Where chamber extents are significantly greater than the cover size, their approximate extents are shown thus,

ABBREVIATION KEY

AS	assumed route
BD	base bend
CB	catch basin
CP	cable pit
CL	cover level
DB	distribution
DP	down pipe
EBD	external back drop
ED	end dome
EP	electricity pole
FH	fire hydrant
G	gullyed
GY	gas valve
HC	hose connection
HL	high level
IC	inspection chamber
IBD	internal back drop
IL	invert level
MH	manhole
PB	post box
PR	pipe riser
RE	rodding eye
SBD	standpipe base
SIL	silted
SL	sill level
SP	sign post
SVP	soil vent pipe
TE	trapped end
TR	trial hole records
TP	telegraph pole
UDO	unable to determine outfall
UIC	unable to lift cover
UTL	unable to lift
UTS	unable to survey
VP	vent pipe
WL	water level
WM	water meter
WO	wash out valve

UTILITY SURVEY NOTES

ELECTROMAGNETIC AND/OR GROUND PENETRATING RADAR TECHNIQUES HAVE BEEN USED TO LOCATE AND MAP UNDERGROUND UTILITIES AND FEATURES ON THIS DRAWING. NEO HAVE MADE EVERY ENDEAVOUR TO MAKE SURE THAT THE INFORMATION SHOWN IS AS ACCURATE AS POSSIBLE. HOWEVER, THE ACCURACY OF THE DATA SHOWN IS DEPENDENT ON THESE TYPES OF SURVEYS ARE NOT AVAILABLE AND SHOULD THE LOCATION OR DEPTH OF SERVICES BEFORE AND DURING EXCAVATION BE OF CRITICAL IMPORTANCE, THAT IT IS ESSENTIAL TO CONTACT THE RELEVANT UTILITY PROVIDERS DIRECTLY TO CONFIRM SURVEY RESULTS.

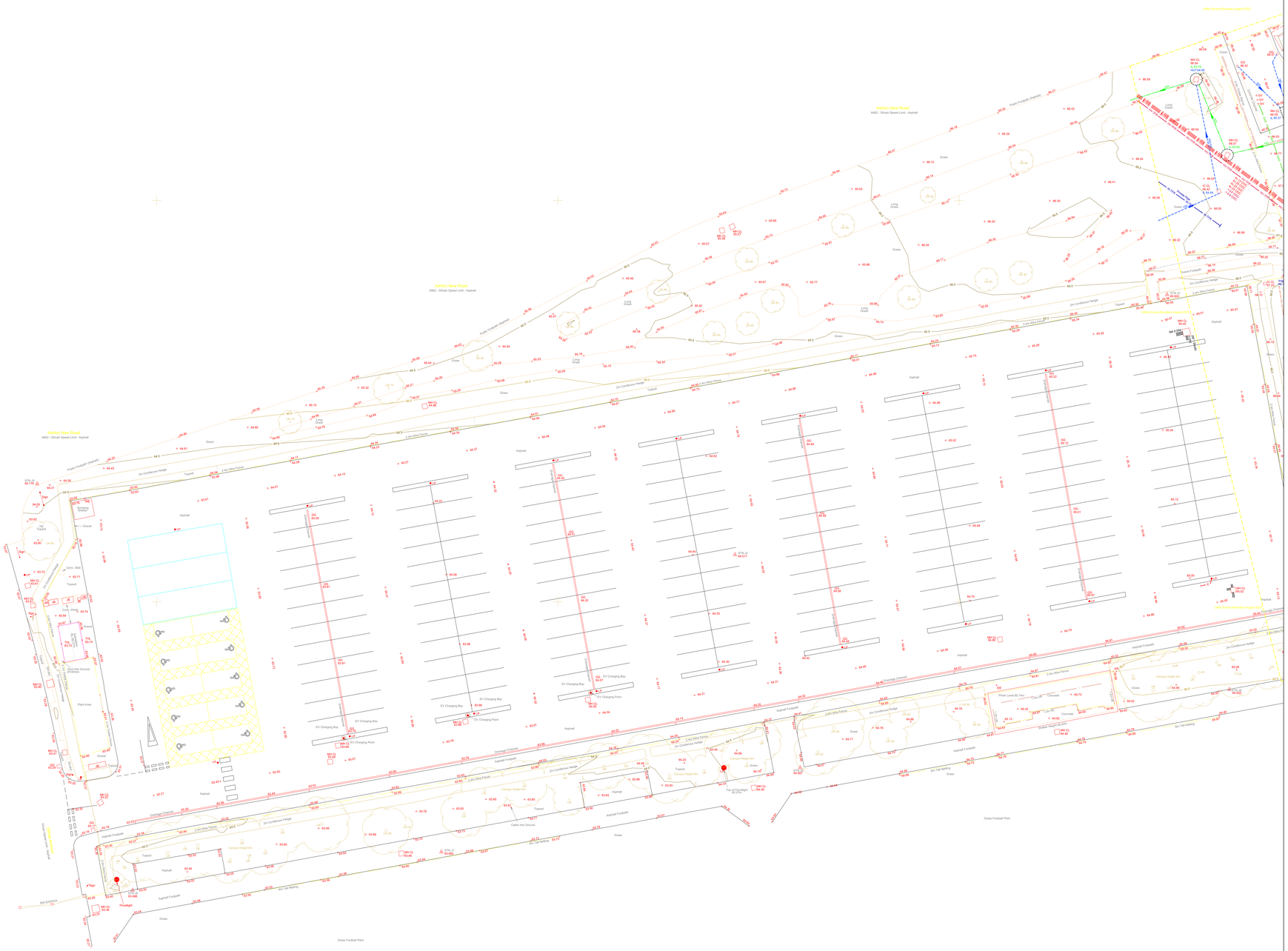
NEO HAVE USED ALL RECORD DRAWINGS THAT WERE AVAILABLE TO US BY THE CLIENT OR BY THE STATUTORY UTILITY PROVIDERS AT THE TIME OF THE SURVEY. ANY INFORMATION THEREFROM THESE DRAWINGS (E.PPE SIZES, MATERIALS) IS NOT GUARANTEED BY NEO AND ANY DEPTHS SHOWN ARE ESTIMATED FROM THESE DRAWINGS. NEO HAVE NO RELIABLE (1Y4), HISTORIC RECORD INFORMATION, IE OFTEN INCORRECT/INACCURATE AND CANNOT BE RELIED UPON.

A SINGLE LINE INDICATING A UTILITY MAY INDICATE THE PRESENCE OF MULTIPLE SERVICES WITHIN CLOSE PROXIMITY TO EACH OTHER. WHERE A SINGLE LINE TYPE IS SHOWN WE RECOMMEND HAND DIGGING WITHIN 0.5m. TO EXPOSE HIDDEN SERVICES.

WHERE QUOTED DEPTH INFORMATION OF UNDERGROUND SERVICES/FEATURES IS STATED. DEPTHS ARE GENERALLY WITHIN +/- 10% ACCURACY, BUT CANNOT BE GUARANTEED, ANY DEPTHS SHOWN ARE USUALLY THE TOP OF THE SERVICE/FEATURE. WHERE DEPTHS ARE GIVEN, THEY ARE ESTIMATED FROM THE GROUND LEVEL AT THE TIME OF THE SURVEY.

AT NEO WE USE SKILLED STAFF AND MODERN CALIBRATED EQUIPMENT TO PERFORM OUR SURVEYS. HOWEVER, THE COMPLETENESS OF ANY UNDERGROUND SURVEY CANNOT BE 100% GUARANTEED AND WE CANNOT BE HELD RESPONSIBLE FOR ANY INACCURACIES BEYOND THOSE THAT COULD BE REASONABLY EXPECTED BY A COMPETENT COMPANY.

CONTRACTORS UTILISING OUR DRAWINGS FOR INTRUSIVE WORK SHOULD TAKE ALL REASONABLE MEASURES TO WORK SAFELY IN ACCORDANCE WITH HSG47 GUIDELINES "AVOIDING DANGER FROM UNDERGROUND SERVICES".



SURVEY CONTROL CO-ORDINATES

STATIONS	EASTINGS	NORTHINGS	LEVEL	DESCRIPTION
J1	387541.201	398400.143	65.121	Mag Nail
J2	387472.085	398405.861	64.517	Mag Nail
J3	387525.934	398438.273	65.820	Mag Nail
J4	387376.020	398368.341	63.147	Mag Nail
J5	387385.126	398414.673	64.179	Mag Nail
J6	387397.031	398364.017	63.498	Mag Nail
J7	387435.493	398368.808	63.680	Mag Nail
J8	387480.205	398379.305	64.657	Mag Nail
J9	387533.697	398389.045	64.933	Mag Nail
J50	387639.826	398406.016	69.992	Peg/Nail
J51	387582.051	398421.513	70.157	Peg/Nail
J52	387609.928	398437.521	70.658	Peg/Nail
J53	387613.995	398446.414	68.502	Peg/Nail
J53A	387648.990	398417.209	69.691	Peg/Nail
J54	387607.535	398441.584	69.956	Peg/Nail
J55	387554.301	398453.991	67.605	Peg/Nail
J56	387569.132	398446.277	66.780	Peg/Nail
J57	387592.923	398443.772	66.561	Mag Nail

SURVEY GRID AND LEVEL DATUM

The coordinate system established for this survey is related to Ordnance Survey (OS) national grid at a single point using Smartnet, then orientated to grid north with a scale factor of 1.000.

The level datum established for this survey is related to Ordnance Survey (OS) using GPS Smartnet.

To avoid discrepancies any coordinated data used in conjunction with this survey must be derived directly from this control data.

REV	DESCRIPTION	DRAWN	APPR	DATE

SURVEY SOLUTIONS

LAND SURVEYING
BUILDING SURVEYING
UNDERGROUND SURVEYING
SITE ENGINEERING
MONITORING

0845 040 5969
survey-solutions.co.uk

IPSWICH BRENTWOOD COVENTRY GLASGOW NORWICH NOTTINGHAM YEOVIL

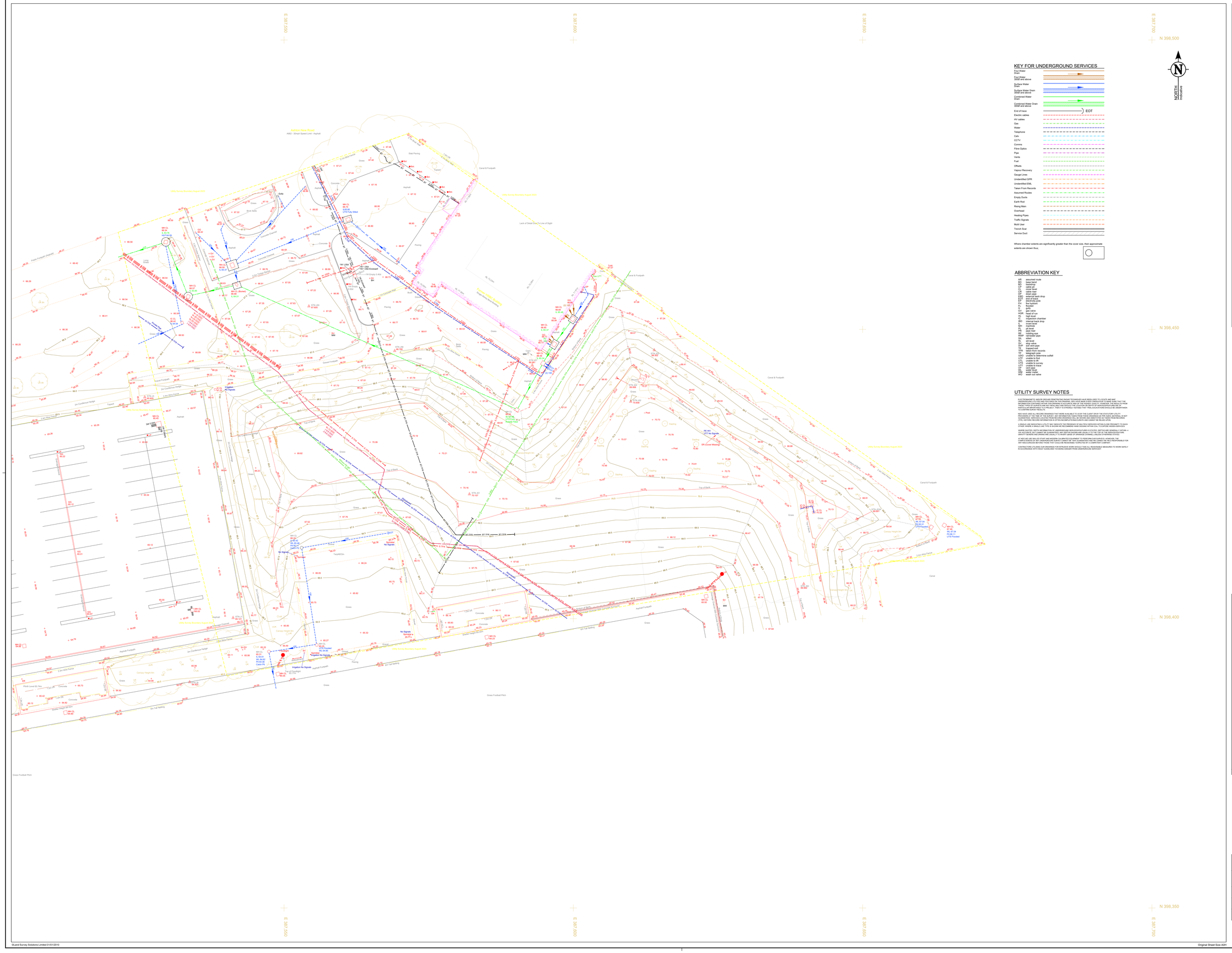
PROJECT TITLE
MANCHESTER CITY FC, ETIHAD AVENUE, EASTLANDS, MANCHESTER, M11 4BD

DRAWING DETAIL
TOPOGRAPHICAL SURVEY
SHEET 1 OF 2

CLIENT			SCALE
BOWKER SADLER ARCHITECTURE			1:200

SURVEYOR	SURVEY DATE	CHECKED BY	APPROVED BY	DWG STATUS
JH	15/06/23	SW	NC	FINAL

DRAWING NUMBER	REVISION	ISSUE DATE
46454MCLS-01		JUNE 2023



KEY FOR UNDERGROUND SERVICES

Foul Water Drain	
Foul Water 3000 and above	
Surface Water Drain	
Surface Water Drain 3000 and above	
Combined Water Drain	
Combined Water Drain 3000 and above	
End of trace	EOT
Electric cables	
HV cables	
Gas	
Water	
Telephone	
Catv	
CCTV	
Comms	
Fibre Optics	
Pipe	
Vents	
Fuel	
Offsets	
Vapour Recovery	
Gauge Lines	
Unidentified GPR	
Unidentified EML	
Taken From Records	
Assumed Routes	
Empty Ducts	
Earth Rod	
Rising Main	
Overhead	
Heating Pipes	
Traffic Signals	
Multi User	
Trench Scar	
Service Duct	

Where chamber extents are significantly greater than the cover size, their approximate extents are shown thus;

ABBREVIATION KEY

AIR	assumed inode
BCP	bend cast pipe
BD	backdrop
CP	cable pit
CR	cable riser
CS	cable chair
DP	down pipe
DROP	down pipe drop
EOT	end of trace
EP	electricity pole
FL	floor level
FL	flooded
G	gully
HOV	hand valve
HOR	head of run
HL	high level
IC	inspection chamber
IBD	internal back drop
IL	invert level
INT	intercept
PL	pit level
PR	pipe riser
RAIN	rainwater
RWP	rainwater pipe
SIL	silted
SL	soffit level
SV	stop valve
SVP	soil vent pipe
TBM	temp bench
TFR	taken from records
TP	telegraph pole
UOS	unknown outstrmline outlet
UTF	unable to find
UTL	unable to lift
UTM	unable to measure
UTT	unable to trace
VP	vent pipe
WM	water meter
WO	wash out valve

UTILITY SURVEY NOTES

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Survey Control Station

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BUILDING SURVEYING
UNDERGROUND SURVEYING
SITE ENGINEERING
MONITORING

0845 040 5969
survey-solutions.co.uk

IPSWICH BRENTWOOD COVENTRY GLASGOW NORWICH NOTTINGHAM YEOVIL

PROJECT TITLE
MANCHESTER CITY FC, ETIHAD AVENUE, EASTLANDS, MANCHESTER, M11 4BD

DRAWING DETAIL
TOPOGRAPHICAL SURVEY
SHEET 2 OF 2

CLIENT			SCALE
BOWKER SADLER ARCHITECTURE			1:200
SURVEYOR	SURVEY DATE	CHECKED BY	APPROVED BY	DWG STATUS
JH	15/06/23	SW	NC	FINAL
DRAWING NUMBER		REVISION	ISSUE DATE
46464MCLS-02			JUNE 2023

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