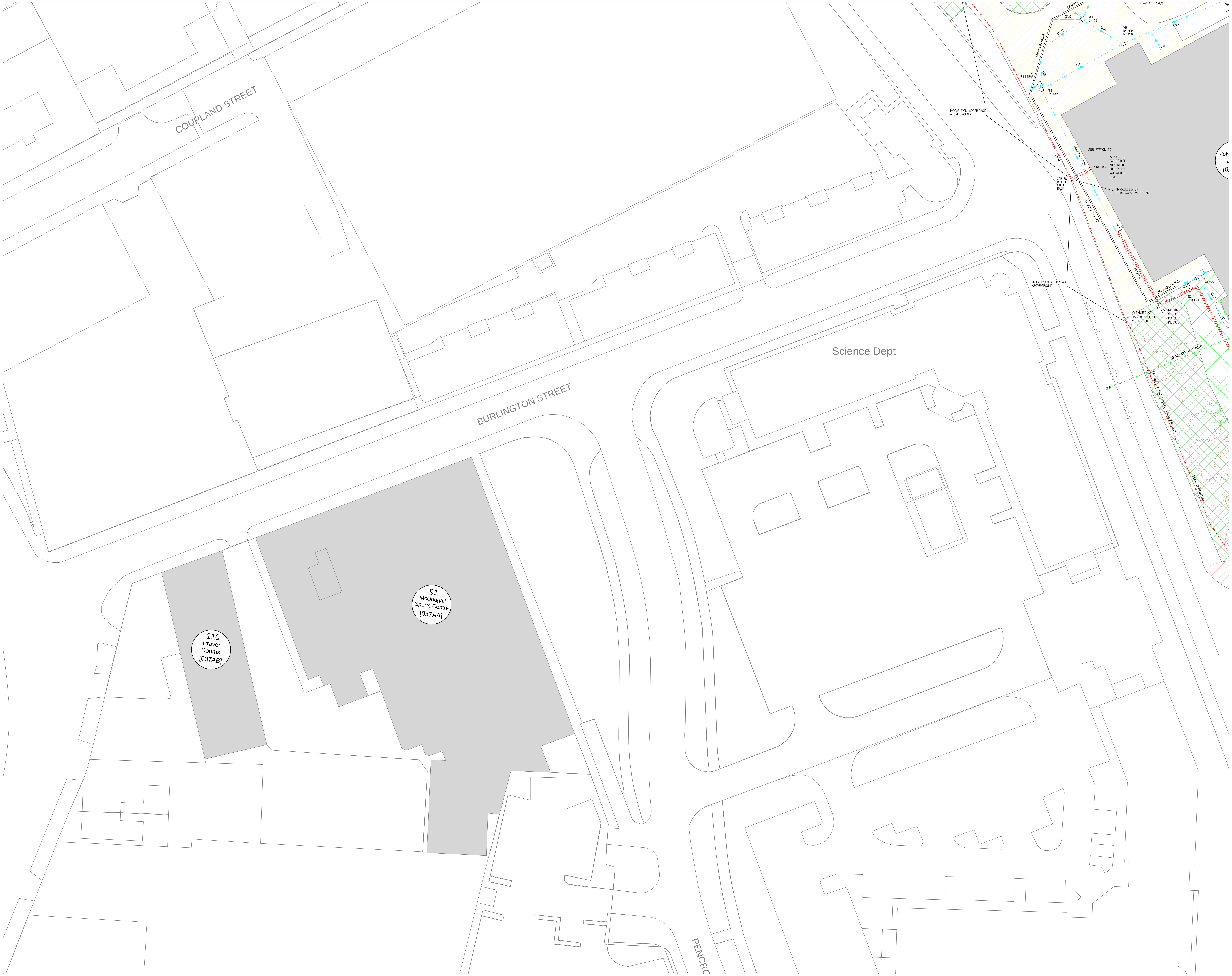
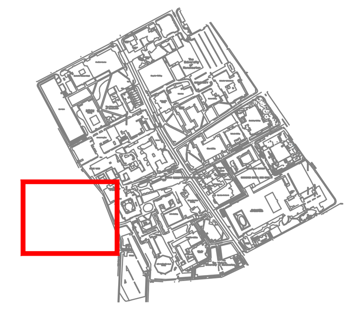


SHEET LAYOUT



LEGEND

- Foul Drainage
- Surface Drainage
- Combined Drainage
- Electricity
- HV Electricity
- UU Electricity
- Gas
- Water
- Telecommunications
- Telemetry
- Cable Television
- Close Circuit Television
- British Telecom
- Fibre Optics
- Unknown
- Fuel Line
- Gauge Line
- Offset Fill
- Liquid Nitrogen
- Fire Alarm
- Heating
- Ducting
- Newly Laid Gas
- Newly Laid HV
- Newly Laid IT Ducting
- Newly Laid Water

Bollards
- Lighting Bollard

Bicycle Parking
- Bicylce Shed
- Bicylce Hoops

Vehicular Markings
- Parking Bay
- Disabled Parking Bay
- Hatched Marking /Loading Area

Utilities
- Utilities Pole
- Utilities Box

Rising Barrier
- Rising Barrier
- Card Reader

Signage
- Monolithic

Lighting
- Metal Lighting Column
- Concrete Lighting Column
- LED in Ground

Fencing / Walls
- Brick Wall
- Concrete Wall
- Stone Wall

Ground Surface
- Concrete Paving
- Tarmac
- Grass
- Herbaceous Border
- Hedges/Bushes
- Stone Paving
- Brick Paving
- Cobbles
- Grasscrete
- Gravel
- Stone Sett
- Special Surface
- Tree
- Tree in Grille

Edges
- Concrete Kerb
- Timber Edge
- Brick Edge

ABBREVIATIONS

AV	Air Valve	MS	Mile Post/Stone
ACU	Air Conditioning Unit	MB	Mooring Bollard
AR	Assumed Route	NP	Name Plate
B/W	Barbed Wire Fence	NM	Node Marker
BB	Belisha Beacon	OHC	Overhead Cable
BD	Back Drop	OSA	Off Survey Area
BO	Bollard	PM	Parking Meter
BH	Borehole	PBM	Permanent Bench Mark
Bk	Brick	PGM	Permanent Ground Marker
BW	Brick Wall	PR	Pipe Riser
BTB	British Telecom Box	P	Post
BT	British Telecom Cover	P/R	Post and Rail Fence
BS	Bus Stop	P/W	Post and Wire Fence
CR	Cable Riser	PU	Pump
CTV	Cable TV	RWP	Rain Water Pipe
CP	Catch Pit	RP	Reflector Post
CH	Chainage	R/W	Retaining Wall
C/L	Chain Link Fence	RS	Road Sign
C/B	Close Borded Fence	RE	Rodding Eye
Co	Concrete	S/F	Safety Fence
CC	Comms Cabinet	S/A	Soakaway
C/I	Corrugated Iron Fence	SL	Soffit Level
CL	Cover Level	SC	Speed Camera
CUL	Culvert	Spr	Spring
dil	Dilapidated	ST	Stop Tap
dis	Disused	SV	Sluice Valve
DP	Down Pipe	SS	Structure Support
ER	Earth Rod	S	Stump
EB	Electricity Box	Stn	Survey Station
EC	Electricity Cover	TBC	To Be Confirmed
EP	Electricity Pole	TFR	Taken From Records
EOT	End of Trace	TP	Telegraph Pole
FC	Fuel Cover	TCB	Telephone Call Box
FFL	Finished floor Level	TBM	Temporary Bench Mark
FH	Fire Hydrant	TS	Traffic Signals
FS	Flag Staff	TH	Trail Hole / Pit
GS	Gas Valve	UTL	Unable to Locate
GP	Guide Post	UTR	Unable to Raise
G	Gully	UTS	Unable to Survey
IC	Inspection Cover	UTT	Unable to Trace
IL	Invert Level	VR	Vapour Recovery
I/R	Iron Rail Fence	VDP	Vehicle Detector Pads
KO	Kerb Outlet	VP	Vent Pipe
LP	Lamp Post	VTP	Vertical Vent Pipe
LB	Letter Box	WO	Wash Out
LC	Lighting Column	W	Water Cover
MH	Manhole Cover	WI	Water Level
MKr	Marker	WM	Water Meter
Mtr	Meter	WV	Wheel Valve

DISCLAIMER

Unless otherwise stated, all services shown on this plan have been surveyed using approved detectors and the connections between manholes, if not traced, are assumed to be direct.
Should the background, or topographical, information for the survey area be based on an Ordnance Survey tile we are not liable for any loss that may arise due to a lack of accuracy in that digital data.
Locational accuracy is determined by referring to manufacturer's guidelines for the detectors used.
In ideal conditions these spatial accuracies for the underground utilities located and mapped are +/- 5% of depth for the RD4000 and +/- 10% of depth for the Mala GeoScience Easy Locator.
Although all reasonable steps have been taken to locate all features, there is no guarantee that all have been shown on the drawing as some above ground features may have been obscured at the time of survey.
It is always our intention to use the Utility provider's details, if supplied prior to survey commencement, 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 and therefore shown as 'Taken From Records' on the drawing and we are not liable for any loss that may arise due to a lack of accuracy in that guided information.
Due to BT's policy we are not permitted to lift their inspection chamber covers. Where their services are not located by us by other means, their information has been taken from records and therefore we are not liable for any loss that may arise due to a lack of accuracy in that guided information.
No guarantee can be given that all services have been shown.
Reference should be made to the methodology used on site as detailed within the latest version of 40Seven's Site Procedures for Utility Location Surveys.
Excavations in the vicinity of services shown are to be carried out with due diligence (Ref: HS(G)47.)
The following text* is an extract from Surveys of Land, Buildings and Utility Surveys at scales of 1:500 and Larger issued by the Royal Institute of Chartered Surveyors February 1996.
*Electronic tracing is a reliable method of locating buried services. On heavy, built up sites 85% completeness is probably all that can be expected.
*Plan accuracies of the order of + or - 150mm may be achieved but this figure will depend on the depth of the service below ground level. Where similar services run in close proximity, separation may be impossible. Successful tracing of non-metallic pipes may be limited.
*Existing record information showing underground services is often incomplete and of doubtful accuracy. It should be regarded only as an indication and cannot be guaranteed.

NOTES

Read in conjunction with any existing records.
Utility routes and text shown in grey are disconnected / abandoned.

Rev	Description	By	Date	Chk'd	Auth
18.0	HV network updated to drawing. Building outlines, AMPPS and water meters added to drawing.	MB	13/07/07		

MANCHESTER 1824

The University of Manchester
Professional Services Unit
Directorate of Estates
Beyer Building
The University of
Manchester Oxford Road
Manchester
M13 9PL

Tel. 0161 275 2625
Fax. 0161 275 3880

Drawing Status
MASTER

Project
Topographical & Utility Mapping Survey (40Seven)

Building Name
Zone 2 & 3, Main Campus

Sub Site Name
Sheet 11 of 16
Site Name

Drawing Title
Utility Survey Drawing

PM	Drawn	Checked	Authorised
-	40/7	-	-
Scale	Date	Date	Date
1:250@A0	13-07-2007	-	-

Drawing No. MUT200-02-011

Revision 18