DSSR | CONSULTING ENGINEERS

PROJECT | UNIVERSITY OF MANCHESTER

THE LIMES FFU

REVITNEW BUILD

UTILITIES REPORT

DSSR Document Reference	Version
M5533-DSSR-XX-XX-RP-J-50001	P02

This Version

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date: 11.08.26

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signed:

date: 11.08.26

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Version History

Version	Date	Status and Purpose	Changes Overview
P01	23.07.26	For Information	First Issue
P02	11.08.26	For Information	Second Issue

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1.0 INTRODUCTION

DSSR have been appointed to undertake the stage 3 design for provision of a new FFU facility on the Fallowfield campus. The location for the building is on an existing carpark which is proposed to have new utility services to support the building from both existing university assets and new utilities connections.

The below details the approximate site boundary:



2.0 NEW CONNECTIONS

2.1. Mains Cold Water Supply

United Utilities Application Reference - Ref: 09567816 - The Limes, FFU Fallowfield Campus, Fallowfield, Manchester, M14 6YY

United utilities have been approached to provide a budget quotation for the provision of a new water supply to the building. This is currently proposed to be a 32mmØ barrier MDPE pipe laid from the site boundary to the mechanical plantroom within the building. United utilities is expected to provide a new utility meter at site boundary for connection by the contractor to use as a temporary supply for extension on completion of the building . The main supply is expected to connect onto the 160mmØ main located on Whitworth Lane.

2.2. LV

The proposed new building will be supplied from the adjacent Energy Centre LV distribution network via a 300 A TPN connection. The available electrical supply capacity is 1,896 kVA (approximately 1,855 kW at a power factor of 0.98). The site's recorded maximum demand is 328 kW, and the proposed new building load is estimated at 204 kW (300 A TPN), resulting in a combined demand of approximately 532 kW. This remains well within the available network capacity, and therefore no reinforcement of the incoming electrical supply is anticipated. This information has been provided by Ah-Yiu Chong Assistant Mechanical & Energy Engineer.

2.3. Comms

A new resilient fibre optic network shall be installed between Tawney Building and Honey Court via the newly constructed duct network. The installation of the new fibre infrastructure can be substantially completed as part of the enabling works package. However, the migration of existing live fibre optic services will require careful coordination with the University of Manchester IT Department and shall be undertaken during a planned outage period to minimise disruption to campus operations.

3.0 DIVERSIONS

3.1. Gas

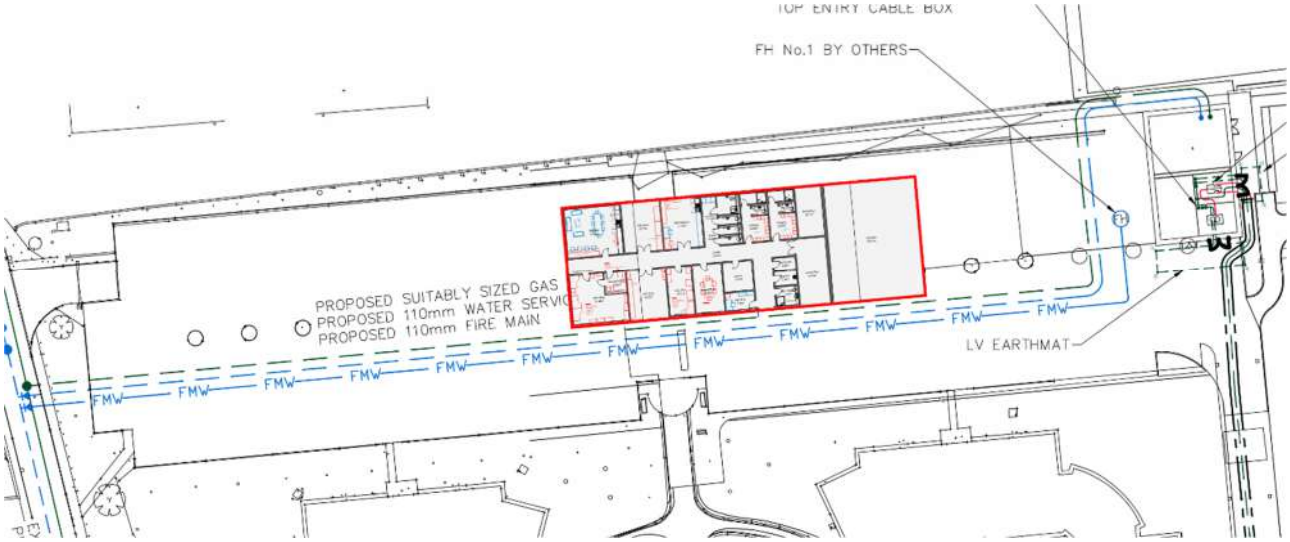
Cadent Application Reference - NW-0000197 - Fallowfield Campus, Fallowfield,, Manchester, Manchester M14 6YY

There is an existing gas main serving the energy centre which emanates from Whitworth Lane and runs west to east along the centre of the car park. The gas main currently runs directly through the building foot print and as such is proposed for diversion south.

3.2. Fire Hydrant Main and Mains Cold Water Supply

The GPR scan indicated that there is 2no. hydrant outlets located to the west of energy centre. Previous survey information indicates that there are 2no. water pipes routing below the gas main serving the energy centre. Further information provided by the UoM estates team has identified that 1no. of these supplies is serving the energy centre which subsequently serves the Unsworth Park Residential Campus.

There have been no live ground works investigations to confirm that these supplies serve the fire hydrant location and the energy centre and as such this needs to be fully validated by the contractor to understand where these pipes route from and to. Regardless of source and outlet these pipes are required to be diverted as its understood that if they run below the gas main that these will also be within the proposed footprint of the building.



The current building on existing layout drawing indicates that the building is positioned just north of the existing gas and water services however this needs to be validated on site to ascertain whether the proposed services are within the easement distances.

3.3. Existing Telecoms

New 12-core OS2 singlemode fibre optic cabling shall be installed within the new duct network between Tawney Building and Honey Court to replace communications services affected by the development works. This consist of 10 fibre cables which run through the site.

The new fibre network shall be terminated within communications cabinets at each location and fully tested prior to migration. Existing services shall remain operational until the new fibre infrastructure has been commissioned and approved by the University of Manchester IT Department.

Migration of live services shall be undertaken in a phased manner to minimise disruption to campus operations.

4.0 DISCONNECTIONS

4.1. Street Lighting

The existing street lighting is supplied from a distribution board located within the adjacent Energy Centre. This supply will be disconnected as part of the enabling works. New street lighting supplies shall be provided as part of the proposed development works, with any temporary lighting requirements to be assessed during the construction planning stage. It is proposed the new street lighting to come from the FFU. Entrance Barrier

The existing entrance barrier is currently supplied from a distribution board located within the adjacent Energy Centre. This supply will be disconnected as part of the enabling works. A temporary electrical supply may be required to maintain operation of the barrier throughout the construction period and minimise disruption to site access arrangements. The requirement for a temporary supply shall be confirmed during the detailed design and construction planning stages.

5.0 RISKS

5.1. Desktop Survey Information

This report has been produced of the basis of existing below ground survey information, information associated with previous schemes on the site and desk top review of the information available. DSSR has not undertaken any onsite intrusive surveys associated with the works and it is the responsibility of the contractor to validate these. Further on site validation is required to expose and confirm the full extent of the identified services.

5.2. Unknown Services

The survey information has highlighted unidentifiable services and excavations undertaken on previous schemes has identified further services which are not located on the below ground survey information. DSSR has highlighted these where known but the contractor shall take suitable precautions in undertaking further excavations to validate all below ground services within the scope of works area.

5.3. Barrier

It is unknow if the barrier is required to operate while remedial works is being carried out. If the barrier need to be still operational then temporary comms and supply will be required.

6.0 APPENDIX

6.1. Existing information - Ameon Incoming Multi Utility Infrastructure Drawing

6.2. Existing Information - Planit I.E Limited - Incoming Services Coordinates Points

6.3. Cadent Services Map

6.4. M5533-DSSR-LIM-00-DR-E-90000 - Electrical External Enabling Works Drawing

6.5. M5533-DSSR-LIM-00-DR-M-90001- Mechanical External Enabling Works Drawing

6.6. M5533-DSSR-LIM-00-DR-M-90002- Mechanical New Connections Drawing

6.7. M5533-DSSR-LIM-00-DR-MEP-92001 - Electrical Power External Service Layout Sheet 1 of 2

6.8. M5533-DSSR-LIM-00-DR-MEP-92002 - Electrical Power External Service Layout Sheet 2 of 2

6.9. M5533-DSSR-LIM-00-DR-MEP-92003 - Electrical Data External Service Layout Sheet 1 of 2

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6.12. M5533-DSSR-LIM-00-DR-MEP-93002 - Electrical Lighting External Service Layout Sheet 2 of 2

6.13. M5533-DSSR-LIM-00-DR-MEP-93003 - Electrical External Lighting Isoline Layout

NOTES:
All dimensions must be checked on site and not scaled from this drawing.

NOTE : FOR FURTHER DETAIL REFER TO DRAWING "AU-984-006 P1 ENERGY CENTRE INCOMING UTILITIES"

2MVA ONAN FREE BREATHING
6600/433V TRANSFORMER
TOP ENTRY CABLE BOX

FH No.1 BY OTHERS

HV CIRCUIT BREAKER

HV EARTHMAT NEEDS TO BE INSTALLED AT BOTTOM OF TRENCH BEFORE ANY SERVICES ARE LAID. CO-ORDINATION REQUIRED.

PROPOSED SUITABLY SIZED GAS SERVICE
PROPOSED 110mm WATER SERVICE
PROPOSED 110mm FIRE MAIN

FMW FMW FMW FMW FMW FMW FMW FMW FMW FMW FMW FMW

LV EARTHMAT

EXISTING GAS MAIN
PROPOSED WATER MAIN REINFORCEMENT

2No. 3 x 1c 300 SAC XLPE IN 70mm EARTH LEAD IN 150mm RED PVC DUCT

ENCLOSURE BY OTHERS

SITE LV DISTRIBUTION BY OTHERS 600AMP LUCY UNIT

LV EARTHING BY OTHERS

2No. 3 x 1c 300 SAC XLPE 70mm EARTH LEAD

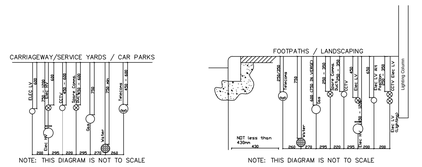
500KVA TEMPORARY SUBSTATION

HV EARTH MAT

HV POINT OF CONNECTION ONTO EXISTING ENWL NETWORK

HV POINT OF CONNECTION ONTO EXISTING ENWL NETWORK

NJUG SPEC



RECOMMENDED POSITIONING OF UTILITY APPARATUS MAXIMUM TOLERANCE IS +300mm

REVIEW OK YES/NO
REVIEWED BY
APPROVED BY
DATE

****SERVICE ROUTES***
ALL SERVICE ROUTES ARE INDICATIVE ONLY AND MUST BE CONFIRMED ON SITE BY THE AMEON UTILITIES REPRESENTATIVE. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO ENSURE THAT ALL SERVICE ROUTES ARE WITHIN THE DEMISE OF THE PROPERTY BEING SUPPLIED AND THE EXACT LOCATION OF DUCTS ARE CLEARLY IDENTIFIED.

****Planning Drawing Only****
Obtain up-to-date utility records from asset owner before commencing work.

The details supplied on this drawing are intended to be used for information only and are not representative of any binding or contractual agreement between Ameon Utilities and any other parties involved. The positions of existing mains is given for guidance only and, as such, no liability can be accepted by Ameon Utilities for any damage caused to, nor any injury sustained, as a result of interference with such apparatus. Before any onsite works commence an up to date copy of the relevant utilities records must be obtained.

CONTACT:

ELECTRICITY NORTH WEST	0800 195 4141 (24/7)
UNITED UTILITIES WATER	0800 33 0033
NATIONAL GRID GAS	0800 111 999

UTILITY KEY

= PROPOSED GAS
= PROPOSED HV
= PROPOSED WATER
FMW FMW = PROPOSED FIRE MAIN

Ref.	Date	Revisions
P5	11.12.17	Removed 2nd fire hydrant

Client

CARILLION PLC

ameon
Building Services Engineering
Ameon Utilities
Unit 9-10 Olympic Court, Boardmans Way,
Whitehills Business Park, Blackpool, FY4 5GU
Tel: 01253 760160
Fax: 01253 760150
E-mail: info@ameon.co.uk

Job Title

FALLOWFIELD CAMPUS

Drawing Title

INCOMING MULTI UTILITY INFRASTRUCTURE

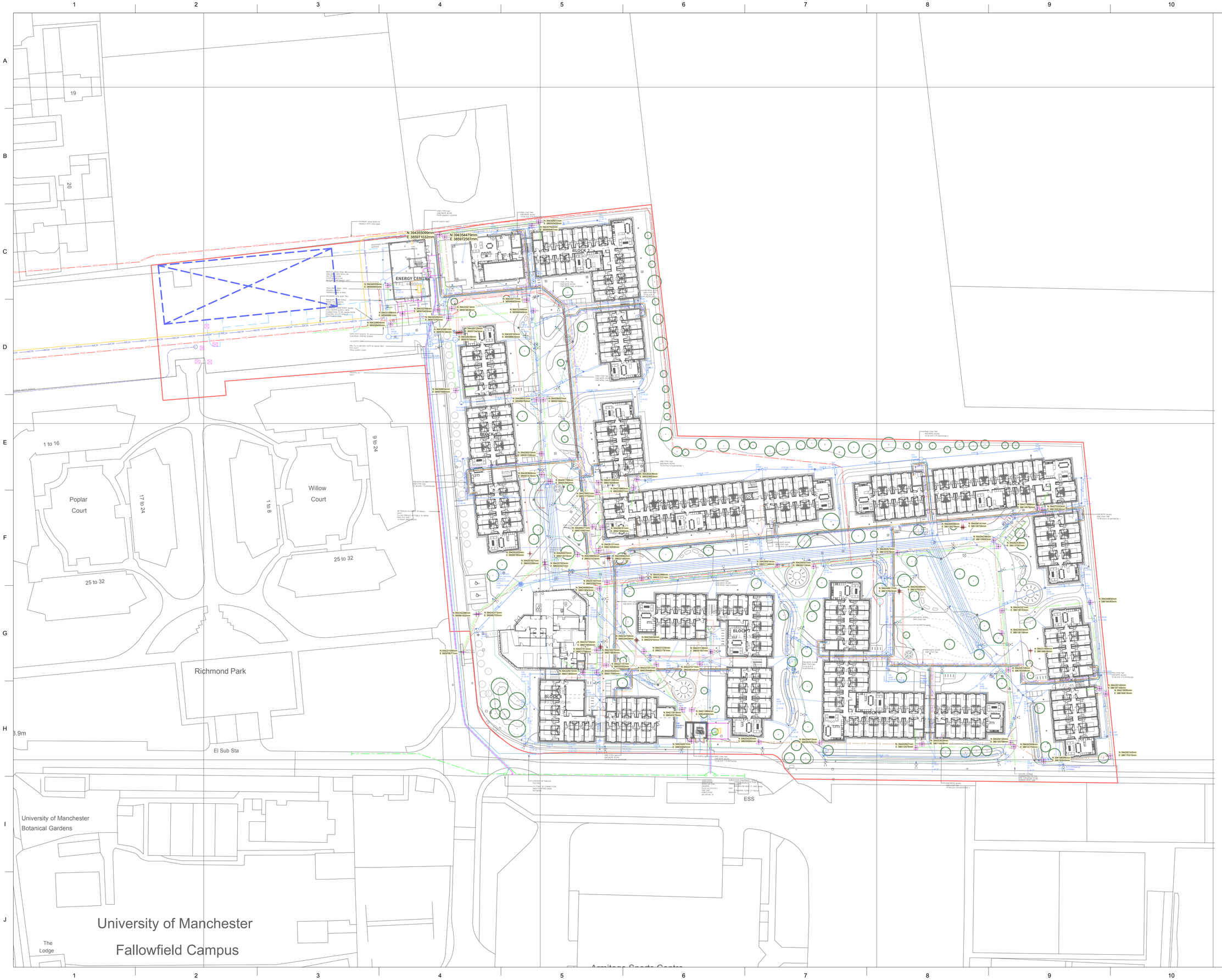
Scale
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Date
DEC 2017

Drawn by
J.D.

Drawing Number
AU/984/002

Revision
P5



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NOTE:

1. Do not scale from this drawing. Always work to noted dimensions.
2. All dimensions are in millimetres unless otherwise stated.
3. All setting out, levels and dimensions to be agreed on site.
4. The dimensions of all materials must be checked on site before being laid out.
5. This drawing must be read with the relevant specification clauses and detail drawings.
6. Order of construction and setting out to be agreed on site.

TO BE READ IN CONJUNCTION WITH DRAWINGS:

PH1-PLA-00-XX-DR-L-003-S5-P01 LANDSCAPE MASTERPLAN
PH1-PLA-00-XX-DR-L-005-S5-P01 TREE CONSTRAINTS PLAN
PH1-PLA-00-XX-DR-L-006-S5-P01 TO 010 HARDWORKS PLAN
PH1-PLA-00-XX-DR-L-013-S5-P01 TO 017 PLANTING PLANS
PH1-PLA-00-XX-DR-L-018-S5-P01 TREE PLANTING PLAN
PH1-PLA-00-XX-DR-L-021-S5-P01 TO 025 PROPOSED LEVELS PLANS
PH1-PLA-00-XX-DR-L-101-S5-P01 TO 103 LANDSCAPE SECTIONS
PH1-PLA-00-XX-DR-L-105-S5-P01 TO 107 CONSTRUCTION DETAILS
PH1-PLA-00-XX-DR-L-108-S5-P01 TYPICAL TREE PIT DETAILS
PH1-PLA-00-XX-DR-L-109-S5-P01 TYPICAL SWALE DETAILS

REFER TO LANDSCAPE SPECIFICATION PH1-ID-301

KEY

N 394245800mm
E 386164393mm COORDINATE POINTS

NOTE: PLANIT IE CANNOT ACCEPT LIABILITY FOR INFORMATION SHOWN ON THIS DRAWING THAT WAS DRAFTED BY OTHERS (HE SIMM).
Refer to drawings:
UOM-HES-XX-XX-DR-E-60-01
UOM-HES-XX-XX-DR-E-60-02
UOM-HES-XX-XX-DR-E-60-03
UOM-HES-XX-XX-DR-E-60-04
UOM-HES-XX-XX-DR-E-60-05
UOM-HES-XX-XX-DR-E-60-06

Issue	Date	Status	Drawn	Apprvd.
02	01.10.18	HESIMM services amended	AT	GB
01	30.08.18	CPU building outline added	AT	GB
00	28.08.18	FOR INFORMATION	AT	GB

Planit I.E. Limited
E: info@planit-ie.com **W:** planit-ie.com
MANCHESTER
2 Back Grafton St
Altrincham
WA14 1DY
T: 0161 928 9281
LONDON
Unit 6 Waterside
44-48 Wharf Road
London
N1 7UX
T: 0207 253 5678

Client Vinci Construction UK

Project Fallowfield Student Residences Manchester

Drg Title Incoming services coordinates points

Created on	Created by	Approved by
28.08.18	AT	GB

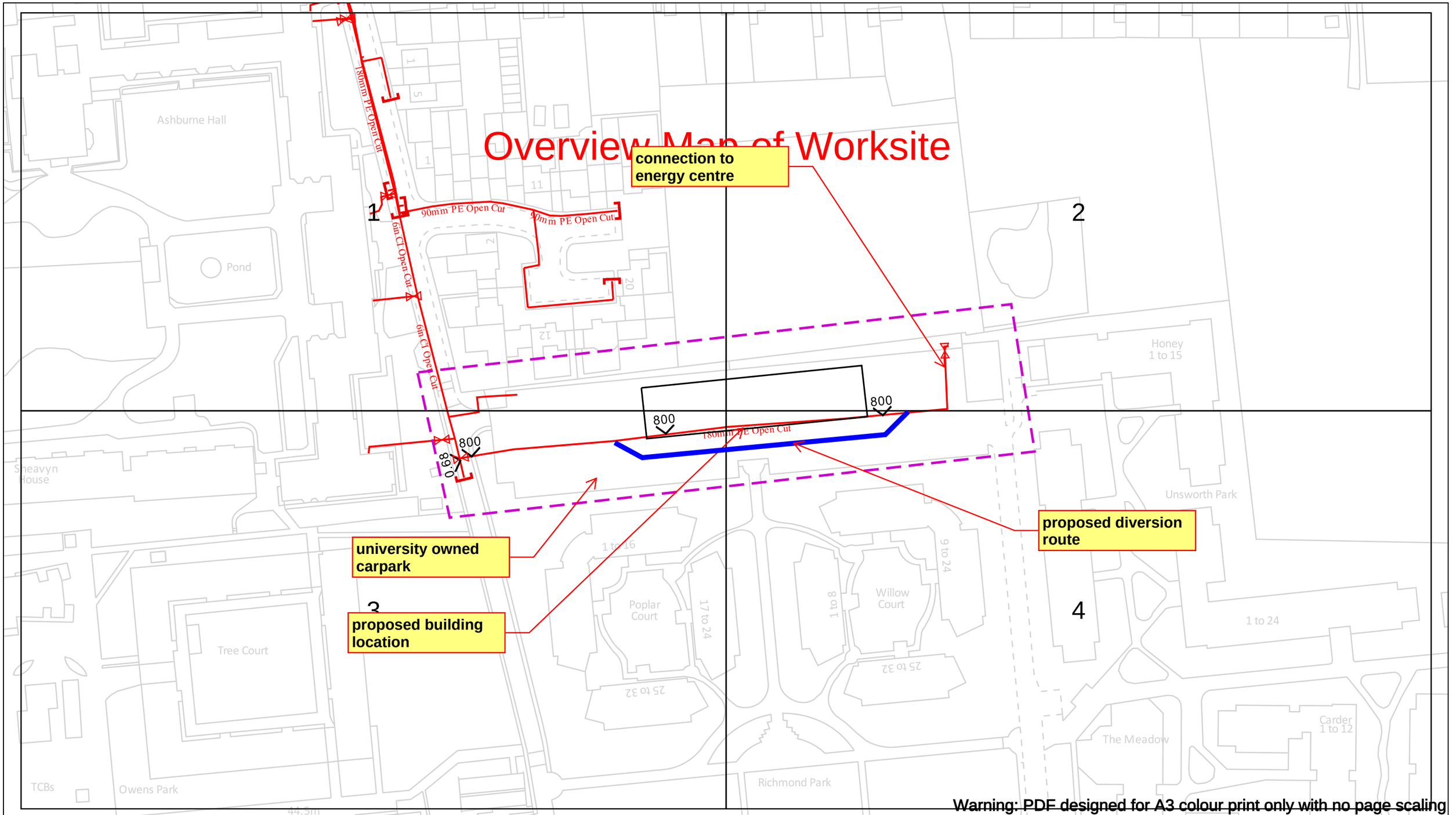
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Drg No. PH1-PLA-00-XX-DR-L-035-S5-P01

Issue No. **02**

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Overview Map of Worksite



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Date Requested: 18/05/2026
Job Reference: 41551352
Site Location: 385809 394302
Requested by:
Ged Clarkin
Your Scheme/Reference:
M5533 The Limes UOM

Scale: 1:1025 (When plotted at A3)

View extent: 200m, 115m

IMPORTANT NOTICES

This plan shows these pipes owned by Cadent Gas Limited in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GT's or otherwise privately owned may be present in this area. Information with regards to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any errors or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

In case of an emergency call 0800 111 999

Dig Sites

Area: Line:

LP Mains
MP Mains
IP Mains
LHP Mains

Valve
Depth of cover
Syphon

Diameter Change
Material Change
Out of Standard Service

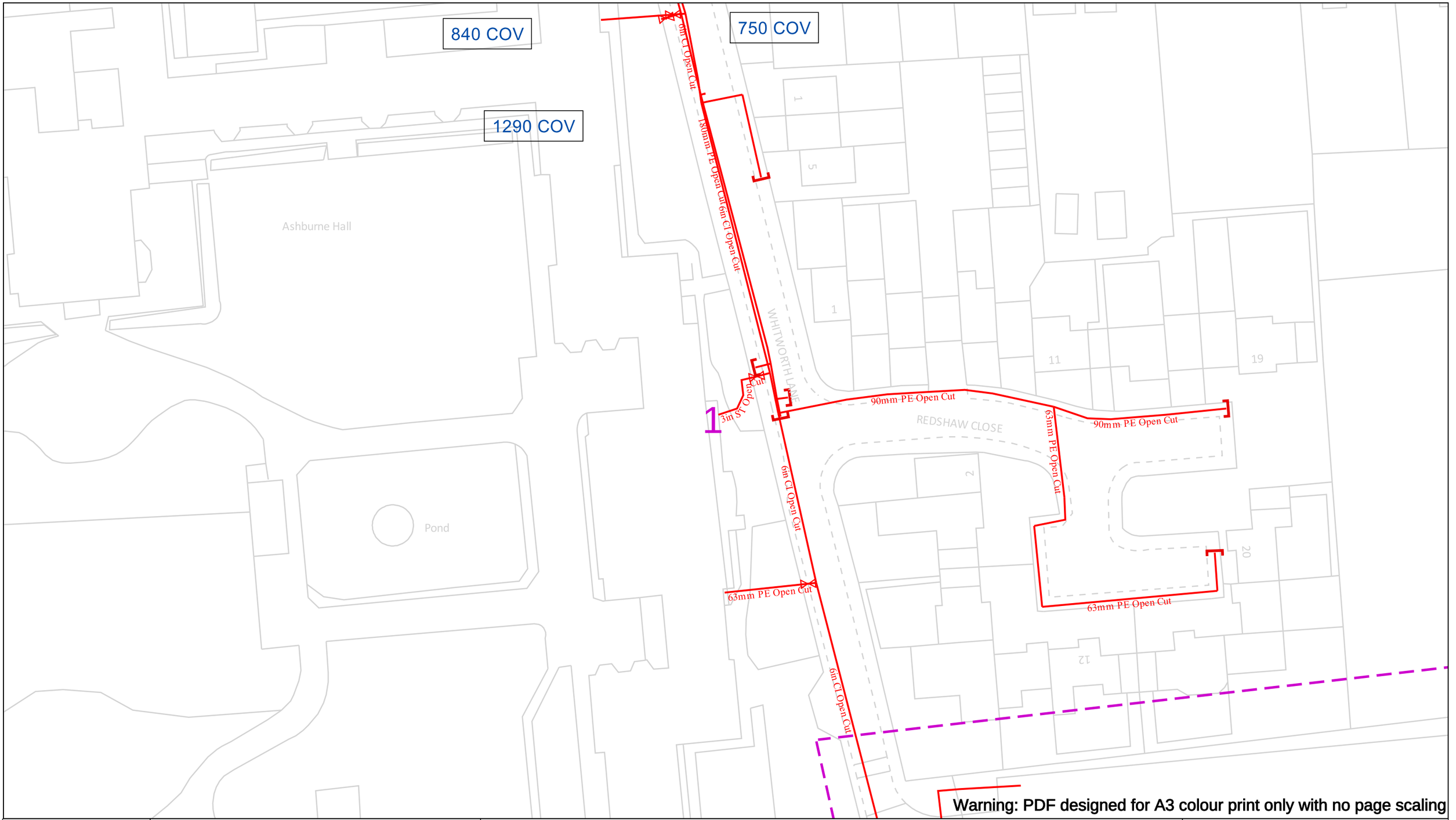
Where an out-of-standard service is present please contact plant protection 0800 688 588 for further information.
Out-of-standard service symbology may be used to indicate one or more of the following:

- Identification of shallow services
- Identification of dual services
- Recording of non-perpendicular services

A perpendicular service/connection is laid in a straight line from the entry point at the property to the connection at the main – this includes a pipe that has a perpendicular connection and is not straight but does not deviate more than 1m off centre line.

Cadent
Your Gas Network

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50m

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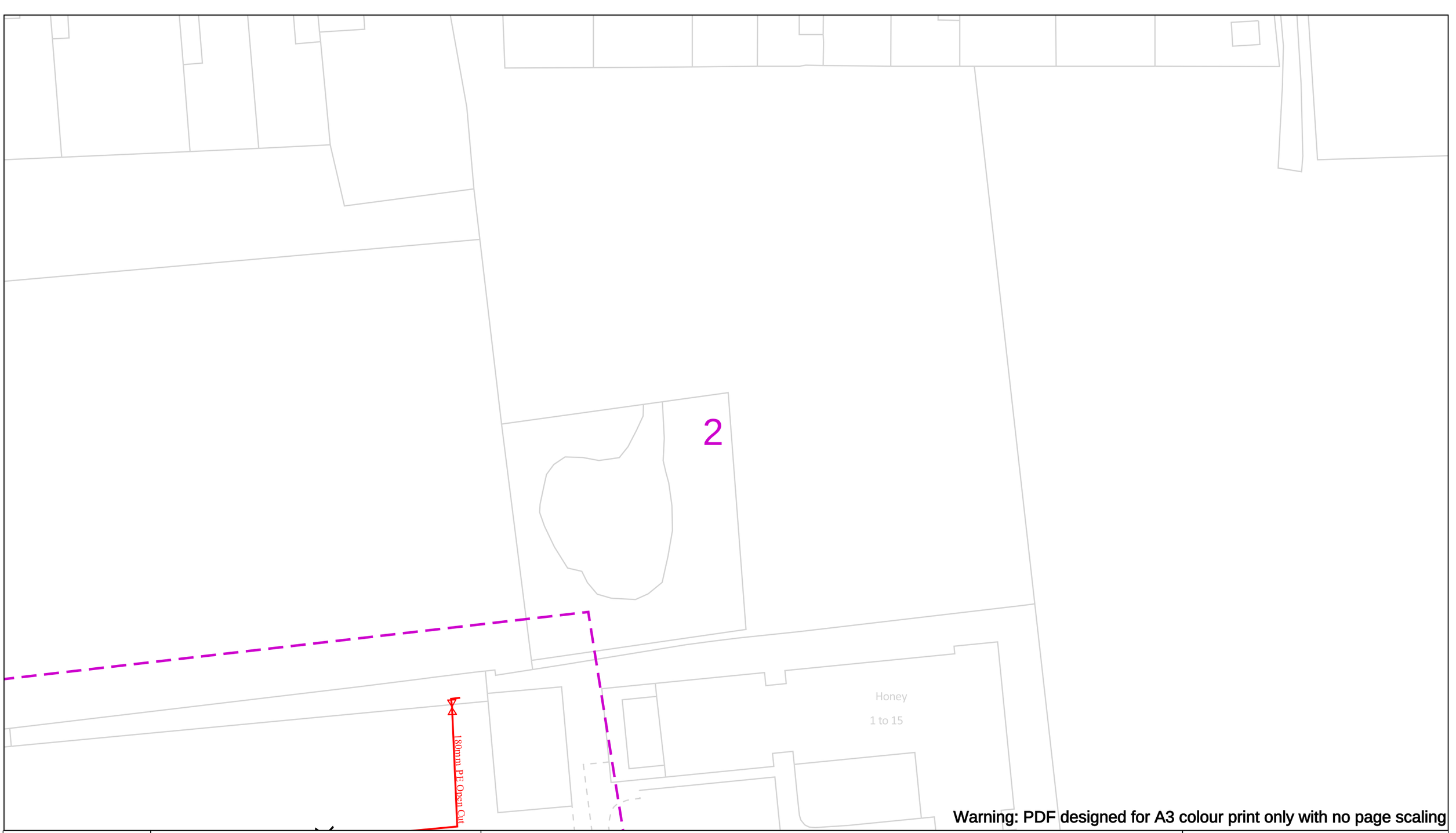
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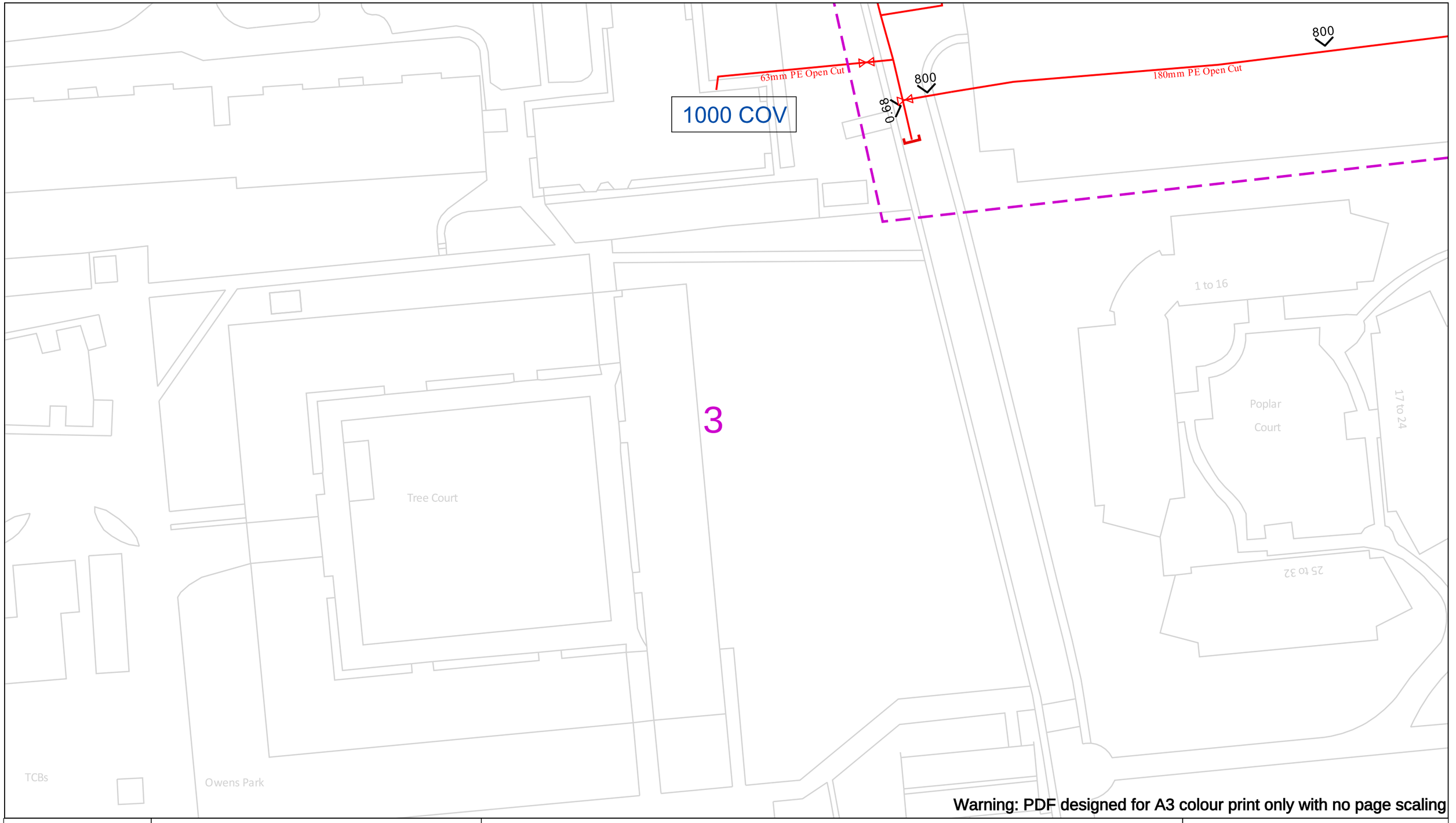
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50m

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LHP Mains

Valve
Depth of cover
Syphon

Diameter Change
Material Change
Out of Standard Service

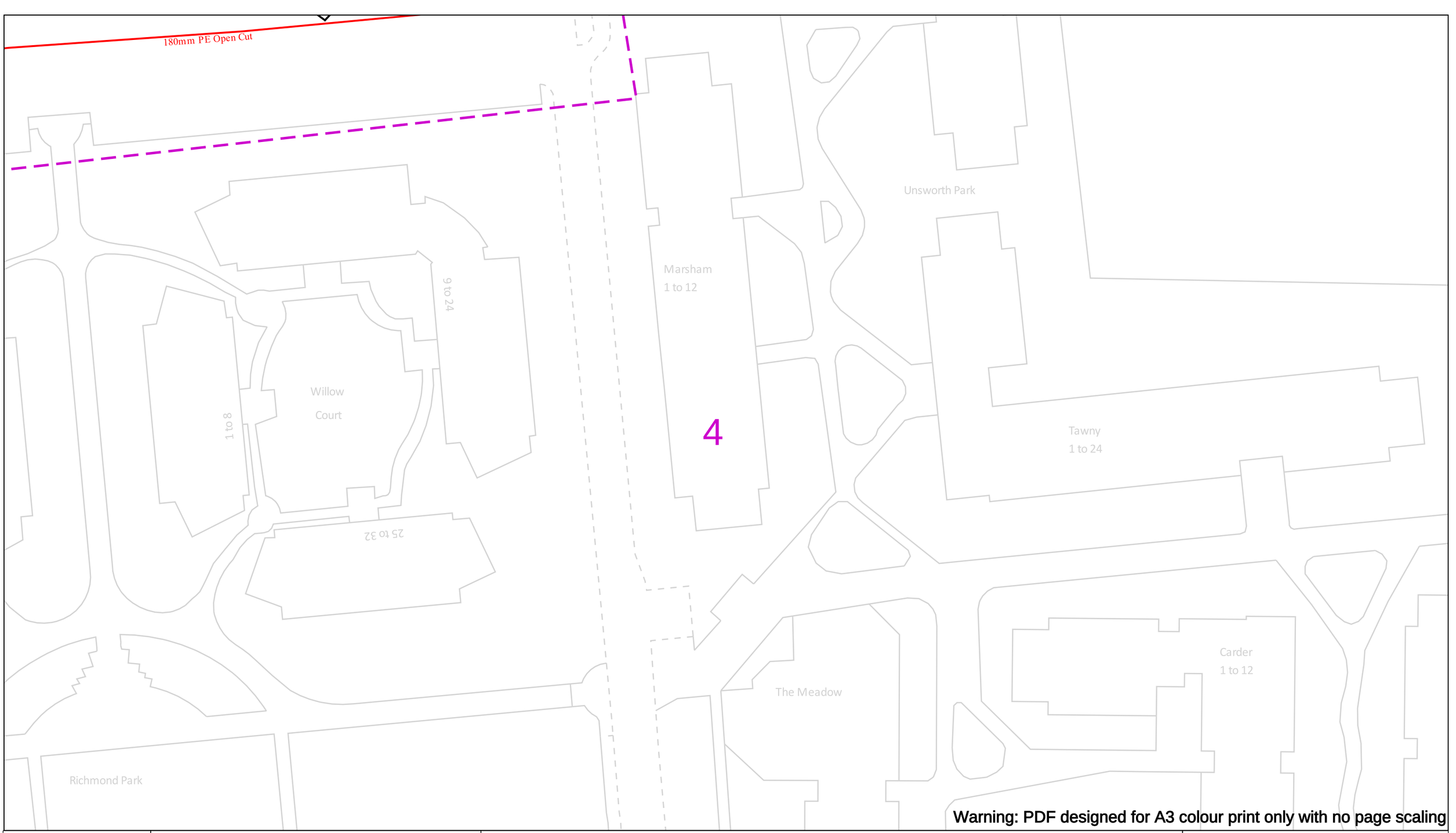
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This plan shows these pipes owned by Cadent Gas Limited in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GT's or otherwise privately owned may be present in this area. Information with regards to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Cadent Gas Limited or their agents, servants or contractors for any errors or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

In case of an emergency call 0800 111 999

50m

Dig Sites

Area:

Line:

LP Mains
MP Mains
IP Mains
LHP Mains

Valve
Depth of cover
Syphon

Diameter Change
Material Change
Out of Standard Service

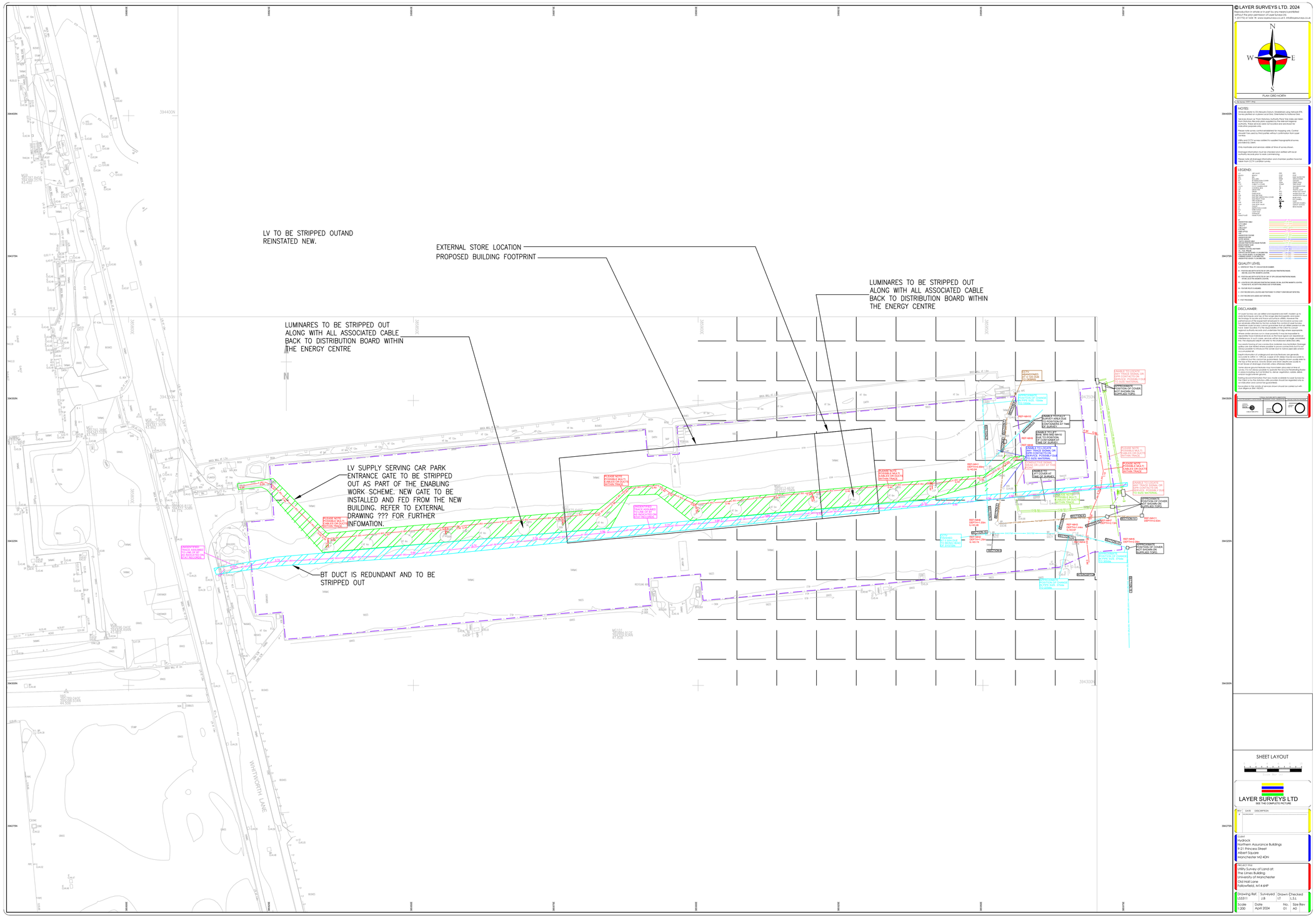
Where an out-of-standard service is present please contact plant protection 0800 688 588 for further information.
Out-of-standard service symbology may be used to indicate one or more of the following:

- Identification of shallow services
- Identification of dual services
- Recording of non-perpendicular services

A perpendicular service/connection is laid in a straight line from the entry point at the property to the connection at the main – this includes a pipe that has a perpendicular connection and is not straight but does not deviate more than 1m off centre line.

Cadent
Your Gas Network

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PLAN GRID NORTH

NOTES:
All survey details to OS (Newlyn) Datum, Established using Network RTK, survey performed on a plane Local Grid, Orientated to National Grid.

Items as shown as "Foul / Sto/Acts/ Authority Plans" line stats are taken from Utility Plans provided by the Client and / or relevant Utility Authority. These services were not located and are shown for information purposes only.

Please note survey control established for mapping only. Control should not be used for first points without confirmation from super cover.

Drain and CCTV survey added to supplied topographical survey generated by GMR.

Only manholes and services visible at time of survey shown.

Drainage information must be checked and verified with local authority records prior to work commencing.

Please note all drainage information and chamber position have be taken from CCTV Controlled survey.

LEGEND:

QUALITY LEVEL

DISCLAIMER:
At Layer Surveys we use skilled and experienced staff, modern up to date technically well fitted out fleet of the range and appropriate and latest survey equipment and software. However due to the inherent performance of the equipment employed to record invisible & concealed detail, Layer Surveys Ltd. cannot guarantee that all utilities present on site have been located. It is the responsibility of the Client to consult with the appropriate utility companies prior to any excavation work.

Where cables are seen in a chase possibly it may be impossible to determine the route of the cable from the surface due to concrete or other maintenance. In such cases, services will be shown as a single, unmodified line. Where cables are seen to rise, the point of rise will be shown.

Accurate tracing of non-conductive materials may be limited. Drainage pipes are due tracked where possible to prove connectivity but it is not always possible due to interference on the survey due to narrow pipes were not accessible.

Depth information of underground services/features are generally estimated using the Cable Avoidance Tool (CAT) and should be treated as a reference from the external as guaranteed. Depths shown usually refer to the top of the feature, unless otherwise stated. Pipe depths refer to the lower those of drainage (channel) unless otherwise stated.

Where services are in close proximity to the survey, the use of survey 3 to 4 of devices possible to operate the Ground Penetrating Radar in areas including, but not limited to, dense vegetation, rubble, debris and hard standing areas.

Existing record information that was made available to Layer Surveys by the Client or by the statutory utility provider should be regarded only as an indication of the presence of services.

Any duplication of services shown should be clarified out with Layer Surveys Ltd. (WEEE)

SHEET LAYOUT

LAYER SURVEYS LTD
SEE THE COMPLETE PICTURE

Client
Hydrock
Northern Assurance Buildings
9-21 Princess Street
Albert Square
Manchester M2 4DN

Project title
Utility Survey of Land at:
The Limes Building
University of Manchester
Old Hall Lane
Fallowfield, M14 6HP

Drawing Ref. | Surveyed | Drawn | Checked
LS3311 | JB | LT | LSJ

Scale | Date | No. | Size Rev
1:200 | April 2024 | 01 | A0

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REV	DATE	DESCRIPTION	ISSUED BY
P01	23.07.26	RIBA STAGE 3 ISSUE	JN

Drawing Status: Stage 3 — S2

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CLIENT:
Directorate of Estates and Facilities
Beyer Building
The University of Manchester
Oxford Road, Manchester, M13 9PL

PROJECT:
UOM
FFU (The Limes)

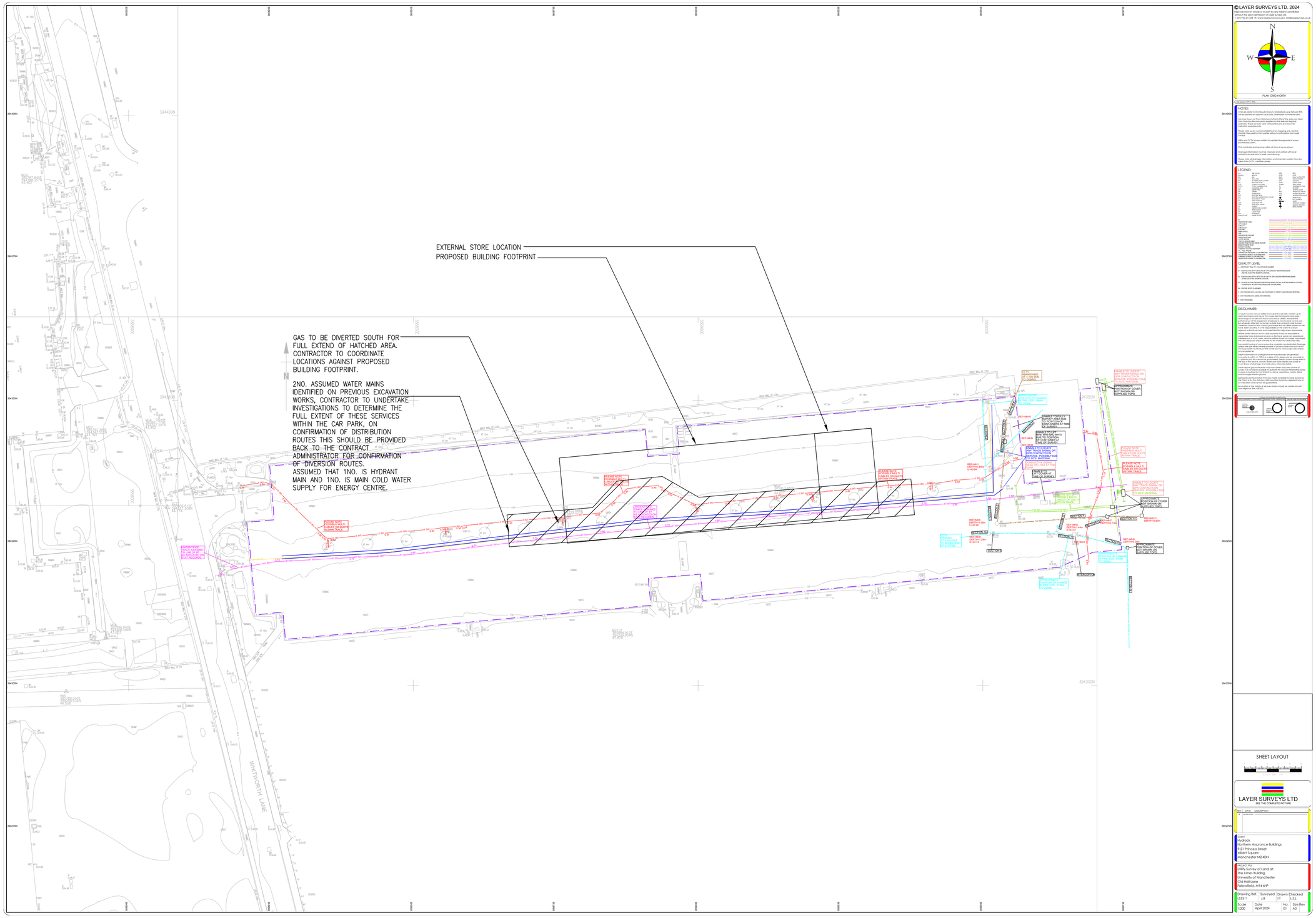
TITLE:
Electrical
Combined Services
External Below Ground Services
Enabling Works

Designed By	Checked By	DSSR Ref.
JN	JN	M5387
Drawn By	**Date**	**Size & Scale(s)**
JR	JUN 26	A1 NTS

Project - Originator - Volume - Level - Type - Role - Number

DRAWING No: M5533-DSSR-LIM-00-DR-E-90000 — REV: P01

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PLAN GIRD NORTH

NOTES:
All levels relate to OS (Newlyn) Datum, Established using Network RTK. All NH purified on a plane Local Grid, Orientated to National Grid.
Services shown as "From Visibles, Authority Plans" line styles are taken from the following sources: Surface Features, Manhole Covers and Utility Authority. Where services were not accurately and above the ground, they are approximate.
Please note survey control established for mapping only. Control shouldn't be used for first profile without confirmation from super GPS.
Drain and CCTV survey added to supplied topographical survey provided by client.
Only manholes and services visible at time of survey shown.
Drainage information must be checked and verified with local authority records prior to work commencing.
Please note all drainage information and chamber position have be taken from CCTV controlled survey.

LEGEND:

QUALITY LEVEL:
A - VISIBLE AT TIME OF SURVEY (EXCAVATION NOT REQUIRED)
B - INFERRED FROM OBSERVATIONS OF VISIBLE AND ACCESSIBLE FEATURES (E.G. MANHOLES, ELECTRIC MARKER POSTS)
C - PLOTTED FROM EXISTING RECORDS (E.G. ELECTRICITY COMPANY RECORDS, BT RECORDS, GAS COMPANY RECORDS)
D - PLOTTED BY GPR (GROUND PENETRATING RADAR) OR OTHER SUBSURFACE FEATURE DETECTION EQUIPMENT (E.G. ELECTRIC MARKER POSTS, MANHOLES, BT DISTRIBUTION BOXES, ELECTRICITY COMPANY PILLARS, GAS COMPANY MARKER POSTS, CHAMBERS, VALVES, ETC.)
X - NOT PROVIDED

DISCLAIMER:
At Layer Surveys we use skilled and experienced staff, modern up to date technically and help of the range electromagnetic and tracer location equipment. Whilst we can confirm that the accuracy and performance of the equipment employed is non-invasive current cost effective methods of detection, we cannot guarantee the accuracy and therefore Layer Surveys cannot guarantee that all utilities present on site have been located. It is the responsibility of the Client to consult appropriate authorities and obtain as much information as possible.
Where similar services run in close proximity it may be impossible to distinguish between them. Where a service is not visible at the time of maintenance or is not in use, services will be shown as a single, symbolised line. Where services are shown as a single line, their width is not to scale.
Accurate tracing of non-conductive materials may be limited. Breakage points are best tracked where possible to prove connectivity but this is not always possible. Tolerance on the survey due to narrow pipe cable service accurate ±0.
Depth information of underground services/features are generally estimated unless they are exposed. Depth information is not to be relied on for planning but for general use guidelines. Depths shown usually refer to the depth to the top of the service/feature, but may refer to the depth to the invert (base of drainage channel) unless otherwise stated.
Layer Surveys Ltd. cannot be held responsible for the accuracy of survey if no of service shown should be clarified but with due diligence shall reduce it.
Layer Surveys Ltd. cannot be held responsible for the accuracy of survey if no of service shown should be clarified but with due diligence shall reduce it.
Clarification of any survey that you may undertake may be at Risk. Breakage points are best tracked where possible to prove connectivity but this is not always possible. Tolerance on the survey due to narrow pipe cable service accurate ±0.
Depth information of underground services/features are generally estimated unless they are exposed. Depth information is not to be relied on for planning but for general use guidelines. Depths shown usually refer to the depth to the top of the service/feature, but may refer to the depth to the invert (base of drainage channel) unless otherwise stated.
Layer Surveys Ltd. cannot be held responsible for the accuracy of survey if no of service shown should be clarified but with due diligence shall reduce it.
Nothing set out in this survey is to be taken as a guarantee that any item claim or by the statutory utility provider should be regarded only as indicative and not definitive.
Extra plans or the validity of services shown should be clarified but with due diligence shall reduce it.

P01	23.07.26	RIBA STAGE 3 ISSUE	MM
REV	DATE	DESCRIPTION	ISSUED BY

Drawing Status: Stage 3 — S2

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www.dssr.co.uk

CLIENT:
Directorate of Estates and Facilities
Beyer Building
The University of Manchester
Oxford Road, Manchester, M13 9PL

PROJECT:
UOM
FFU (The Limes)

TITLE:
Mechanical
Combined Services
External Below Ground Services
Enabling Works

Designed By: MM	Checked By: JN	DSSR Ref.: M5387	
Drawn By: MM	Date: JUN 26	Size & Scale(s): A1	NTS

Project - Originator - Volume - Level - Type - Role - Number
DRAWING No: M5533-DSSR-LIM-00-DR-M-90001
REV: P01

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EXTERNAL STORE LOCATION

PROPOSED BUILDING FOOTPRINT

PROPOSED NEW 32Ø MAINS INCOMING WATER SUPPLY FROM NEW METER CONNECTION AT SITE BOUNDARY. EXACT COORDINATES AND INSTALLATION REQUIREMENTS TO BE VALIDATED BY CONTRACTOR, INLINE WITH RECOMMENDED EASEMENT DISTANCES AND DEPTHS.

APPROXIMATE LOCATION OF DIVERTED WATER AND GAS MAINS. EXACT COORDINATES AND INSTALLATION REQUIREMENTS TO BE VALIDATED BY CONTRACTOR, INLINE WITH RECOMMENDED EASEMENT DISTANCES AND DEPTHS.

WHITWORTH LANE

PLAN GRID NORTH

NOTES:
Survey Co-ords relate to OS (Newlyn) Datum, Established using Network RTK, survey performed on a plane Local Grid, Orientated to National Grid.

Services shown as 'Point Obstacle, Authority Plans' line styles are taken from Authority Plans and are shown as per the colour coding used by the authority. These services were not surveyed and are shown for indicative purposes only.

Please note survey control established for mapping only. Control shouldn't be used for first pegging without confirmation from super control.

Drain and CCTV surveys added to supplied topographical survey generated by Layer.

Only manholes and services visible at time of survey shown.

Drainage information must be checked and verified with local authority records prior to work commencing.

Please note all drainage information and chamber position have be taken from CCTV Controlled survey.

LEGEND:

QUALITY LEVEL:

DISCLAIMER:
At Layer Surveys we use skilled and registered land staff, masters up to date technically and has at the surge are thoroughly examined before use. Our surveying equipment is regularly checked to ensure the performance of the equipment employed is recommends a precise cost. Underground services are plotted from surface evidence and from records. Therefore Layer Surveys cannot guarantee that all utilities present will be here been recorded. It is the responsibility of the Client to consult with the appropriate authorities before any excavation is undertaken.

Where certain services such as cables passing it may be impossible to locate accurately, Layer Surveys will not be responsible for any damage or maintenance. In such cases, services will be shown as a single, unmodified line. Layer Surveys will not be liable for any loss or damage caused.

Accurate tracing of cast iron ductile manholes may be limited. Drainage gullies are best tackled where possible to prove connections but it is not always possible. Entrance to the surface due to narrow pipes also cannot be accurately set.

Depth information of underground services/features are generally estimated. Only those that are exposed can be measured accurately. Layer Surveys Ltd cannot be guaranteed. Depths shown usually refer to the invert level of the pipe/feature. Cover levels are usually taken to the cover/ base of drainage channel, unless otherwise stated.

Layer Surveys Ltd will not be responsible for any loss or damage caused by errors, it is not always possible to quantify the ground breaking factor in areas including, but not limited to, dense vegetation, rubble, debris, overgrown areas and the like.

Nothing and information that was made available to Layer Surveys by the Client or by the statutory utility provider should be regarded only as indicative and not definitive in any way.

Any enquiry in the validity of services shown should be carried out with the respective user/ statutory authority.

SHEET LAYOUT

LAYER SURVEYS LTD
SEE THE COMPLETE PICTURE

REV	DATE	DESCRIPTION
A	23/07/26	FOR COMMENT

Client
Hydrock
Northern Assurance Buildings
9-21 Princess Street
Albert Square
Manchester M2 4DN

Project Title
Utility Survey of Land at:
The Limes Building
University of Manchester
Old Hall Lane
Fallowfield, M14 6HP

Drawing Ref.	Surveyed	Drawn	Checked
SS511	JB	HT	LSL
Scale	Date	No.	Size Rev
1:200	April 2024	01	A0

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REV	DATE	DESCRIPTION	ISSUED BY
P01	23.07.26	RIBA STAGE 3 ISSUE	MM

Drawing Status
Stage 3 — S2

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manchester@dssr.co.uk
www.dssr.co.uk

CLIENT:
Directorate of Estates and Facilities
Beyer Building
The University of Manchester
Oxford Road, Manchester, M13 9PL

PROJECT:
UOM
FFU (The Limes)

TITLE:
Mechanical And Electrical
Combined Services
External Below Ground Services
Proposed

Designed By	Checked By	DSSR Ref.
MM	JN	M5387
Drawn By	**Date**	**Size & Scale(s)**
MM	JUN 26	A1 NTS

Project - Originator - Volume - Level - Type - Role - Number

DRAWING No:
M5533-DSSR-LIM-00-DR-MEP-90002

REV:
P01

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OUND FLOOR PLAN
LDING LAYOUT
00 FFL

G8*

DX OUTDOOR UNIT
BH 44.24
VRF OUTDOOR UNIT
CAHV HEAT PUMP UNIT
External Plant
28.7m²
IP65
16A SPN
20A SPN
45A TPN
2N° 151mm UPVC DUCTING
Refuse/Recycling Compound
20yd skip indicated
44.32
EXTERNAL DUCTING TO BE LINKED TO INTERNAL CONTAINMENT
1N° 151mm UPVC DUCTING
Roadsweeper
IC CL45.63
44.33
Portable Waste Compacter PD731
6650L x2500W
Accessibility for collections to be checked with PDE
32A SPN
LC
ELEC SUB STATION
PEDESTRIAN ACCESS ZONE TO EXTERNAL GAS CUPBOARD
MH CL44.61
MH CL44.66
MH CL44.68
MH CL44.71
MH CL44.82
MH CL44.84
MH CL44.86
MH CL44.91
MH CL44.98
MH CL45.00
MH CL45.07
MH CL45.12
MH CL45.16
IC CL45.19
IC CL45.27
IC CL45.96
IC CL45.79
IC CL45.75
IC CL45.73
IC CL45.77
IC CL45.86
IC CL46.51
FH
ER
RE
DR
GIP
CW
UR
WM1.55mH
44.47
44.55
44.61
44.53
44.23
44.73
44.57
44.75
44.83
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44.86
44.84
44.85
44.82
44.92
44.94
44.95
44.87
44.89
44.80
44.85
44.84
44.16
44.19
44.54
44.53
44.75
2N° 151mm UPVC DUCTING
TARMAC
5No. van spaces inc. 2no. EV
EV
EVC
FMC Cherry Picker
2No. accessble student spaces
Salt
Mulch
Soil
Compost
Scaffold Container
45.02
45.04
45.07
45.09
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45.15
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45.40
45.70
46.18
46.54
GRASS
WINDOW
GROUND
HL47.82
SILL46.72
FIRST
HL50.46
SILL49.35
SECOND
HL53.08
SILL51.99
THIRD
HL55.70
SILL54.61
FIRST
HL50.44
SILL49.87
SECOND
HL53.08
SILL52.51
WILLOW COURT
MC2
WSV
GSV
PT
G6

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LEGEND

- 600w x 600l x 600d CABLE DUCTWAY
- UNDERGROUND DUCTING
- EVC — ELECTRIC VEHICLE CHARGING UNIT
- LC — LIGHTING COLUMN

REV	DATE	DESCRIPTION	ISSUED BY
P02	AUG 26	RIBA STAGE 3 ISSUE	JR
P01	JUL 26	RIBA STAGE 3 ISSUE	JN

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CLIENT:
Directorate of Estates and Facilities
Beyer Building
The University of Manchester
Oxford Road, Manchester, M13 9PL

PROJECT:
UOM
FFU (The Limes)

TITLE:
Electrical
External electrical services layout
Sheet 1 of 2

Designed By	Checked By	DSSR Ref.
JN	JN	M5533
Drawn By	Date	Size & Scale(s)
JR	JUN 26	A1 1:100

Project - Originator - Volume - Level - Type - Role - Number: M5533-DSSR-LIM-00-DR-MEP-92001
REV: P02

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LEGEND

- 600w x 600l x 600d CABLE DUCTWAY
- UNDERGROUND DUCTING
- EVC — ELECTRIC VEHICLE CHARGING UNIT
- LC — LIGHTING COLUMN

REV	DATE	DESCRIPTION	ISSUED BY
P02	AUG 26	RIBA STAGE 3 ISSUE	JR
P01	JUL 26	RIBA STAGE 3 ISSUE	JN

Drawing Status: Stage 3

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CLIENT:
Directorate of Estates and Facilities
Beyer Building
The University of Manchester
Oxford Road, Manchester, M13 9PL

PROJECT:
UOM
FFU (The Limes)

TITLE:
Electrical
External electrical services layout
Sheet 2 of 2

Designed By	Checked By	DSSR Ref.
JN	JN	M5533
Drawn By	Date	Size & Scale(s)
JR	JUN 26	A1 1:1

Project - Originator - Volume - Level - Type - Role - Number: M5533-DSSR-LIM-00-DR-MEP-92002

REV: P02

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OR PLAN
UT

G7#*

G8*

EXTERNAL UNDERGROUND DUCTING TO BE LINKED TO INTERNAL DATA COMMS CONTAINMENT

2N° 151mm² ø UPVC DUCTING

BH 44.24

External Plant 20.7m²

Refuser/Recycling Compound

20yd skip indicated

44.33 Portable Waste Compacter PD731 6650L x2500W Accessibility for collections to be checked with PDE

ELEC SUB STATION

PEDESTRIAN ACCESS ZONE TO EXTERNAL GAS CUPBOARD

Roadsweeper

EXTERNAL UNDERGROUND DUCTING TO BE LINKED TO INTERNAL DATA COMMS CONTAINMENT

2N° 151mm²ø UPVC DUCTING

2N° 151mm²ø CABLE DUCTING

TARMAC

5No. van spaces inc. 2no. EV

EV

EV

FMC Cherry Picker

2No. accessble student spaces

Salt

Mulch

Soil

Compost

Scaffold Container

EXISTING DUCTING ROUTE

GRASS

CAMPUS BUILDING 'HONEY'

CAMPUS BUILDING 'TAWNY'

WINDOW

GROUND HL47.82 SILL46.72

FIRST HL50.44

MC2

WSV

GSV

DR

GIP

RE

ER

FH

CW

MH

IC

G

WM1.55mH

DO NOT SCALE

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LEGEND

1200l x 600w CABLE DUCTWAY

UNDERGROUND DUCTING MAIN DUCING 1N° 151mm² UPVC DUCT SUB DUCT 7N° 32mm² UPVC DUCT. INSTALLED WITHIN 1 MAIN DUCT.

REV	DATE	DESCRIPTION	ISSUED BY
P01	AUG 26	RIBA STAGE 3 ISSUE	JR
P01	JUL 26	RIBA STAGE 3 ISSUE	JN

Drawing Status: Stage 3

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

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PROJECT:
UOM
FFU (The Limes)

TITLE:
Electrical
External data communications

Designed By	Checked By	DSSR Ref.
JN	JN	M5533
Drawn By	**Date**	**Size & Scale(s)**
JR	JUL 26	A1 1:1

Project - Originator - Volume - Level - Type - Role - Number

DRAWING No: M5533-DSSR-LIM-00-DR-MEP-92003

REV: P02

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LEGEND

1200l x 600w CABLE DUCTWAY

UNDERGROUND DUCTING

FLOOR PLAN LAYOUT

G7#*

G8*

SUBMAIN CABLING TO ENTER BUILDING INTO SWITCHROOM

2N° 151mm² ø UPVC DUCTING

BH 44.24

External Plant 20.7m²

Refuse/Recycling Compound

20yd skip indicated

44.33 Portable Waste Compacter PD731 6650L x2500W Accessibility for collections to be checked with PDE

2N° 151mm² ø UPVC DUCTING 44.54

Roadsweeper

ELEC SUB STATION

WM 1.55mH

PEDESTRIAN ACCESS ZONE TO EXTERNAL GAS CUPBOARD

TARMAC

5No. van spaces inc. 2no. EV

Salt

Mulch

Soil

Compost

Scaffold Container

EV

EV

FMC Cherry Picker

No. accessble student spaces

2No. accessble student spaces

MC2

GRASS

WINDOW

GROUND HL47.82 SILL46.72

FIRST HL50.44

REV	DATE	DESCRIPTION	ISSUED BY
P02	AUG 26	RIBA STAGE 3 ISSUE	JR
P01	JUL 26	RIBA STAGE 3 ISSUE	JN

Drawing Status: Stage 3

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PROJECT:
UOM
FFU (The Limes)

TITLE:
Electrical
External main electrical supply route

Designed By	Checked By	DSSR Ref.
GC	JN	M5533
Drawn By	Date	Size & Scale(s)
JR	JUL 26	A1 1:1

Project - Originator - Volume - Level - Type - Role - Number

DRAWING No: M5533-DSSR-LIM-00-DR-MEP-92004

REV: P02

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GROUND FLOOR PLAN
BUILDING LAYOUT

44900 FFL

LUMINAIRE LEGEND

	TAG	QTY	Part No.	Circuit (W)	Description
	FO6	6	FO5	0 W	Columns - 6 m - Standard duty column - 76 mm shaft diameter
	FO6/89	2	FO5/89	0 W	Columns - 6 m - Medium duty column - 89 mm shaft diameter
	QARM	2	SB15897K	0 W	Quad outreach arm N-S-E-W - To fit on to 89 mm dia. - Supplied with 4 x 76-60 mm reducer kits (SB15809)
	TARM	1	SB15864	0 W	Twin outreach arm 180Â° - To fit on to 76 mm dia.
XT1	XT1	10	RL09W40S	10 W	Realta - 9 W - SmartScan External - Graphite - Wide - 4000 K
XT2	XT2	4	SB0854/40S	88 W	Starbeam - 85 W - SmartScan External - Silver (RAL 9006) - Area standard - Clear glass cover - 4000 K - Medium version
XT3	XT3	13	SB0224/40S	24 W	Starbeam - 22 W - SmartScan External - Silver (RAL 9006) - Area standard - Clear glass cover - 4000 K - Small version
XT4	XT4	4	PM0048/40GR	6 W	Prismalette 360 - 4 W - SmartScan Radar - Graphite - Satin diffuser - 4000 K - Hooded
XT5	XT5	2	PM0089/40GR	10 W	Prismalette 360 - 8 W - SmartScan Radar - Graphite - Satin diffuser - 4000 K - Hooded

External Plant
20.7m²

Refuse/Recycling Compound

20yd skip indicated

Portable Waste Compacter PD731
6650L x2500W
Accessibility for collections to be checked with PDE

PEDESTRIAN ACCESS ZONE TO EXTERNAL GAS CUPBOARD

Roadsweeper

5No. van spaces inc. 2no. EV

EV

EV

FMC Cherry Picker

2No. accessble student spaces

2No. accessble student spaces

Salt

Mulch

Soil

Compost

Scaffold Container

RWP

XT1

XT2

XT3

XT4

XT5

DO NOT SCALE

NOTES

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REV	DATE	DESCRIPTION	ISSUED BY
P01	AUG 26	RIBA STAGE 3 ISSUE	JR

Drawing Status: Stage 3

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CLIENT:
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Beyer Building
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Oxford Road, Manchester, M13 9PL

PROJECT:
UOM
FFU (The Limes)

TITLE:
Electrical
External Lighting Layout
Sheet 1 of 2

Designed By	Checked By	DSSR Ref.
JN	JN	M5533
Drawn By	**Date**	**Size & Scale(s)**
JR	JUN 26	A1 1:50

Project - Originator - Volume - Level - Type - Role - Number: M5533-DSSR-LIM-00-DR-MEP-93001

REV: P01

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LUMINAIRE LEGEND

	TAG	QTY	Part No.	Circuit (W)	Description
	FO6	8	FO6	0 W	Columns - 6 m - Standard duty column - 76 mm shaft diameter
	FO6/89	2	FO6/89	0 W	Columns - 6 m - Medium duty column - 89 mm shaft diameter
	QIARM	2	SB15897K	0 W	Quad outreach arm N-S-E-W - To fit on to 89 mm dia. - Supplied with 4 x 76-60 mm reducer kits (SB15809)
	TIARM	1	SB15864	0 W	Twin outreach arm 180Â° - To fit on to 76 mm dia.
XT1	XT1	10	RL09W40S	10 W	Realta - 9 W - SmartScan External - Graphite - Wide - 4000 K
XT2	XT2	4	SB085A40S	88 W	Starbeam - 85 W - SmartScan External - Silver (RAL 9006) - Area standard - Clear glass cover - 4000 K - Medium version
XT3	XT3	13	SB022A40S	24 W	Starbeam - 22 W - SmartScan External - Silver (RAL 9006) - Area standard - Clear glass cover - 4000 K - Small version
XT4	XT4	4	PM004HXGR	6 W	Prismalette 360 - 4 W - SmartScan Radar - Graphite - Satin diffuser - 4000 K - Hooded
XT5	XT5	2	PM008HXGR	10 W	Prismalette 360 - 8 W - SmartScan Radar - Graphite - Satin diffuser - 4000 K - Hooded

DO NOT SCALE

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REV	DATE	DESCRIPTION	ISSUED BY
P01	AUG 26	RIBA STAGE 3 ISSUE	JR

Drawing Status: Stage 3

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Oxford Road, Manchester, M13 9PL

PROJECT:
UOM
FFU (The Limes)

TITLE:
Electrical
External Lighting Layout
Sheet 2 of 2

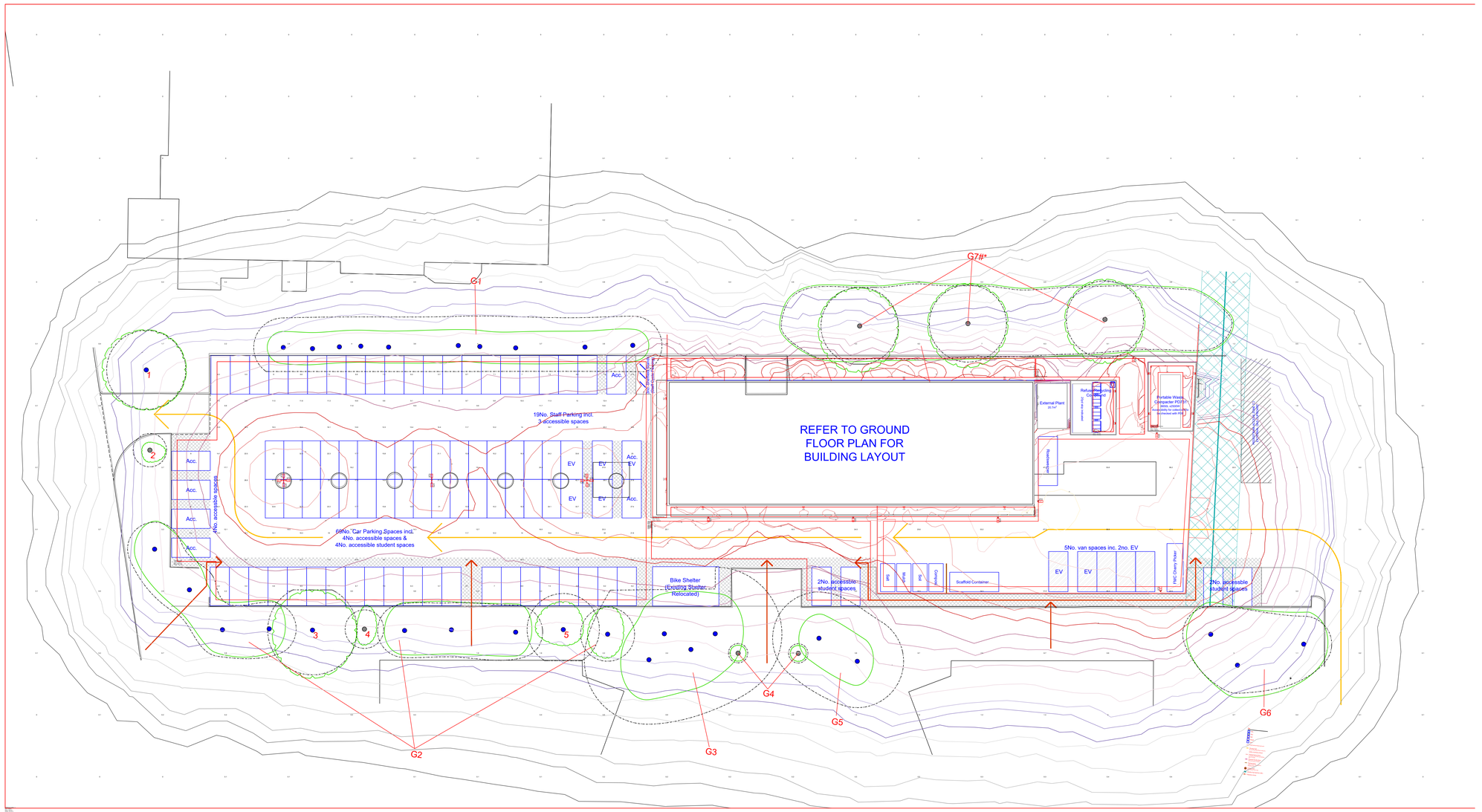
Designed By	Checked By	DSSR Ref.
JN	JN	M5533
Drawn By	**Date**	**Size & Scale(s)**
JR	AUG 26	A1 1:50

Project - Originator - Volume - Level - Type - Role - Number

DRAWING No: M5533-DSSR-LIM-00-DR-MEP-93002

REV: P01

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LUMINAIRE KEY

	TAG	QTY	Part No.	Circuit (W)	Description
FC6	FC6	8	FC6	0 W	Columns - 6 m - Standard duty column - 76 mm shaft diameter
FC6/89	FC6/89	2	FC6/89	0 W	Columns - 6 m - Medium duty column - 89 mm shaft diameter
	Q/ARM	2	SB15897K	0 W	Quad outreach arm N-S-E-W - To fit on to 89 mm dia. - Supplied with 4 x 76-60 mm reducer kits (SB15809)
	T/ARM	1	SB15864	0 W	Twin outreach arm 180Â° - To fit on to 76 mm dia.
XT1	XT1	10	RL09W40S	10 W	Realta - 9 W - SmartScan External - Graphite - Wide - 4000 K
XT2	XT2	4	SB085A40S	88 W	Starbeam - 85 W - SmartScan External - Silver (RAL 9006) - Area standard - Clear glass cover - 4000 K - Medium version
XT3	XT3	13	SB022A40S	24 W	Starbeam - 22 W - SmartScan External - Silver (RAL 9006) - Area standard - Clear glass cover - 4000 K - Small version
XT4	XT4	4	PM004HXGR	6 W	Prismalette 360 - 4 W - SmartScan Radar - Graphite - Satin diffuser - 4000 K - Hooded
XT5	XT5	2	PM008HXGR	10 W	Prismalette 360 - 8 W - SmartScan Radar - Graphite - Satin diffuser - 4000 K - Hooded

ISOLINE SPILLAGE

HOUSING ESTATE - LESS THAN 1 LUX
MOSTLY BELOW 0.5 LUX

STUDENT ACCOMMODATION - LESS THAN 0.5 LUX

POPULAR COURT - 1-1.6 LUX

WILLOW COURT - 6 LUX

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1. This drawing is for schematic purposes and installation shall fully comply with BS7671.
2. Luminaire positions are indicative only and other obstructions not taken into consideration unless shown on the layout.
3. Lighting designs will be carried out in accordance with information provided. Where no information is provided, lighting design criteria will be selected in accordance with the minimum required values as detailed within guidance provided by CIBSE/SLL or British/Irish Standards.
4. It is the installing contractors responsibility to ensure all luminaires and lighting controls are suitable for the environment and ceiling type for which they are proposed.

REV	DATE	DESCRIPTION	ISSUED BY

Drawing Status: Stage 3 — S3

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Oxford Road, Manchester, M13 9PL

PROJECT:
UOM
FFU (The Limes)

TITLE:
Electrical
Power
External Lighting
Isoline Layout

Designed By	Checked By	DSSR Ref
GC	JN	M5533
Drawn By	Date	Size & Scale(s)
JR	JUN 26	A0 1:1

Project - Originator - Volume - Level - Type - Role - Number

DRAWING No: M5533-DSSR-LIM-00-DR-MEP-93003 — REV: P01

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