PROJECT 3
architects



Lower Campfield, Manchester
Lower Byrom Street, M3 4FP

FUL Planning Application Conditions
Condition 09

FUL Planning Application Condition 09

09) Prior to the first use of the development hereby approved, details of the implementation, maintenance and management of the sustainable drainage scheme for the development shall be submitted for approval in writing by the City Council, as Local Planning Authority.

The scheme shall include the following:
- Verification report providing photographic evidence of construction; and
- Management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime.

The approved scheme shall then be implemented in accordance with the details and thereafter managed and maintained for as long as the development remains in use.

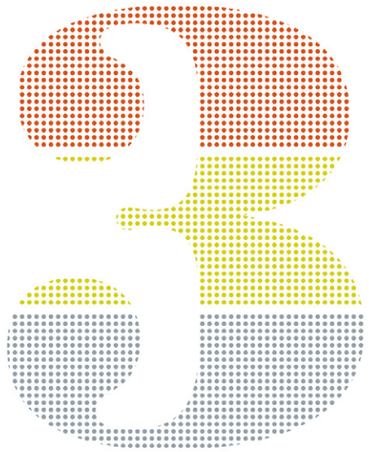
.

Attatched information to satisfy FUL Planning Condition 09

01 *- EMAIL - Civic Engineers / United Utilities - No Requirement for SUDs*

02 *- PDF - Civic Engineers - Exisitng / Proposed Drainage Plans*

03 *- PDF - Civic Engineers - Drainage Strategy Maintenance*



Section 01

The following section contains an email chain between Civic Engineers and United Utilities clarifying that the scheme has no SUD requirement.

Andrea McGee

From: seweradoptions@uuplc.co.uk
Sent: 03 October 2023 15:29
To: Mairead Power
Cc: Andrea McGee
Subject: RE: Pre Development Enquiry for: Lower Campfield Lower Byrom St, Manchester M3 4NN UU Reference Number : 04631782

Good Afternoon Mairead,

Thank you for the below, I am just picking this up on behalf of Ashleigh.

If this application is for internal refurbishment only and there are no changes to the existing drainage system then you will not require United Utilities' technical assessment.

If you are wanting to look into plans for out assets please contact our team at Property Searches ; https://www.unitedutilities.com/property-searches/

Kind regards,

Eireann Thompson
Assistant Developer Engineer
Developer Services & Metering
Customer Services
Mobex: 07553074138
unitedutilities.com

Did you know we now have a live chat facility available to you Mon to Friday 8 -5pm. You just click on the orange live chat box on our webpage and one of our advisors will be ready to chat to you and help you with your enquiry https://www.unitedutilities.com/builders-developers/ or you can email us at developerserviceswater@uuplc.co.uk

If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

---------- Original Message ----------
From: Mairead Power [mairead.power@civicengineers.com]
Sent: 26/09/2023 10:58
To: seweradoptions@uuplc.co.uk
Cc: andrea.mcgee@civicengineers.com
Subject: RE: Pre Development Enquiry for: Lower Campfield Lower Byrom St, Manchester M3 4NN UU Reference Number : 04631782

Hi Ashleigh,

Thank you for responding to our PDE regarding **Lower Campfield**. We have a few items we would like to clarify and touch upon further:

1. A 225mm combined public sewer was highlighted as preferred point of connection for foul water and surface water. It is unclear to us which combined sewer this is referring to, please see attached pdf of the existing sewer records. Can this be highlighted on such as we can't seem to locate them?

2. With it being an internal refurbishment project only and not considered a new development, no external surfaces are changing, so we do not anticipate the surface water flow rates to change. Therefore, we are proposing that the existing rates could be maintained as existing.

3. Due to Lower Campfield building being listed building, and the associated constraints and sensitive nature in preserving such buildings, it will prove difficult to provide the required attenuation if there is a necessity to reduce allowable discharge rates.

4. The proposals are for the existing drainage to remain mostly unaffected/impacted by the refurbishment of the buildings. The project is being submitted for planning as it is considered a change of use ie:
    1. Lower Campfield: Was the former Air & Space Hall for the Science & Industry Museum and the refurb will provide space for Tech workspace & retail.
    2. Therefore, we would argue that due to the nature of the existing site and the proposed development, that the drainage is to remain mostly unaffected. As per the flood vulnerability classification – we would expect the proposal to remain as "less vulnerable". See NPPF - Annex 3 Flood Risk Vulnerability Classification

5. You have said there are existing public sewers located in the site boundary and have asked for an easement of 3m either side of such (or highlighted we may wish to consider diverting or abandoning such). Can you advise if there are currently any existing easements in place for such sewers?

Hope all makes sense but let me know if not and will be happy to help where possible.

Kind Regards,

Mairead

Mairead Power
Intern

Manchester / London / Leeds / Glasgow

Please do not print this email unless it is necessary. Every unprinted email helps the environment.

Civic Engineers is a trading name of Civic Engineers Limited (registered number 06824088) which is a limited company registered in England and Wales. Registered address Carver's Warehouse, 77 Dale Street, Manchester, M1 2HG. For email disclaimer, please click here

From: seweradoptions@uuplc.co.uk <seweradoptions@uuplc.co.uk>
Sent: Thursday, September 14, 2023 1:44 PM
To: Mairead Power <mairead.power@civicengineers.com>
Cc: Andrea McGee <andrea.mcgee@civicengineers.com>
Subject: RE: Pre Development Enquiry for: Lower Campfield Lower Byrom St, Manchester M3 4NN UU Reference Number : 04631782

Good afternoon,

Apologies I had missed the information on your email originally.

Edited response..

Foul Water
Foul flow from this site will be allowed to drain into the public foul water/combined sewer system.
United Utilities would not object to the existing onsite drainage being utilised for the proposed foul flows.

Public Sewer
In accordance with the hierarchy of drainage options within the National Planning Practice Guidance, both discharge to ground via infiltration and discharge to a waterbody should be discounted prior to consideration of discharging surface water to the public sewer system. Evidence should be provided to demonstrate how these have been discounted, as outlined in the North West SuDS pro-forma.

Once evidence is provided as outlined above, United Utilities would not object to the onsite existing drainage being utilised at a pass forward flow to be agreed by the Lead Local Flood Authority. United Utilities request that any agreed rate does not exceed 5l/s, in line with the Suds Manual all previously developed sites should strive for greenfield run off rates where reasonably practical.

As a Water Company, we have no obligation to accept highway drainage into our public sewer network. However, should your proposals include runoff from highways, we would request that consideration is given to SuDS components that deliver source control are incorporated within the design of the scheme to reduce the volume and frequency of discharges of these flows to the public sewer.

Many thanks and Kind regards

Ashleigh Bellerby
Assistant Developer Engineer
Developer Services & Metering
Customer Services
T: 07826891650
unitedutilities.com

Water for the North West

If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

---------- Original Message ----------
From: seweradoptions@uuplc.co.uk [seweradoptions@uuplc.co.uk]
Sent: 14/09/2023 13:38
To: mairead.power@civicengineers.com
Cc: andrea.mcgee@civicengineers.com
Subject: Pre Development Enquiry for: Lower Campfield Lower Byrom St, Manchester M3 4NN UU Reference Number : 04631782

Good afternoon Mairead and Andrea,
Pre Development Enquiry for: Lower Campfield Lower Byrom St, Manchester M3 4NN UU Reference Number : 04631782
We have carried out an assessment of your application which is based on the information provided. This pre-development advice on your drainage strategy will be valid for 12 months. Your drainage strategy will need to be reviewed by other competent authorities as part of the planning process, and we advise that you carry out the necessary site investigations to confirm the viability of your proposals.
If your investigations require access to our public sewer network, we ask that you contact our network engineers with a request for an access certificate via our main contact telephone number 0345 6723 723 or refer to the link below:
https://www.unitedutilities.com/builders-developers/working-near-our-assets/

Foul Water
Foul flow from this site will be allowed to drain into the public foul water/combined sewer system.
Our preferred point of discharge would be to the 225mm diameter public combined sewer within the site boundary of your proposed development at an unrestricted rate.
If you are able to identify an alternative, more suitable point of discharge, we request that you contact us at your earliest convenience so that we can assess suitability.
In accordance with our infrastructure plans we may ask you to change your point of connection. Therefore please contact us when you are ready to formalise your drainage proposals, we would suggest before you submit for Full Planning.

Surface Water
All surface water flow from the proposed development should drain in-line with the drainage hierarchy, as outlined in Paragraph 80, (Reference ID: 7-080-20150323), of the National Planning Practice Guidance. We also recommend you prioritise the use of multi-functional sustainable drainage systems for the management of surface water in accordance with national planning policy.
Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable.
This is outlined as follows, in order of priority:

1. **into the ground (infiltration);**
2. **to a surface waterbody;**
3. **to a surface water sewer or highway drain;**

4. **to a combined sewer.**

For guidance, The **North West SuDS Pro-Forma** provides information on the appropriate evidence required at each stage of the hierarchy, to demonstrate how each level has been discounted.
The Lead Local Flood Authority has responsibility for all surface water drainage concerns and their input to your proposal is critical. You should also consider whether it is necessary to discuss your proposal with the Environment Agency, or Internal Drainage Board (if operating in your area).
The Local Planning Authority are the determining authority for any application for planning permission and the appropriate authority for determining cost viability of a proposed drainage scheme, such assessments are outside of the jurisdiction of United Utilities.

Infiltration
Surface water runoff generated from this development should discharge to the ground via infiltration system where feasible.
A detailed evidence based feasibility assessment must be carried out in line with Chapter 25 of the CIRIA SuDS Manual 2015 to determine whether infiltration is a suitable method of surface water disposal.
Particular attention must be paid to Ground Water Source Protection Zones to ensure that the risk of pollution to these valuable resources is not compromised. Details can be obtained from the government website:
https://www.gov.uk/guidance/groundwater-source-protection-zones-spzs#find-groundwater-spzs
If your site is in a Groundwater Source Protection Zone, you should have regard to the Environment Agency's approach to Groundwater Protection. Information on this is available via the link below:
https://www.gov.uk/government/publications/groundwater-protection-position-statements
Please note that such a location could have implications for the principle of your development and the need for additional mitigating measures to protect the groundwater environment and public water supply in the detailed design of your site.

Highway Drainage
If an evidence based assessment has been carried out and confirms that infiltration is not feasible, we recommend that you investigate the possibility of draining surface water to the highway drain where this ultimately discharges to a watercourse, by contacting the relevant Highway Authority.

Public Sewer
In accordance with the hierarchy of drainage options within the National Planning Practice Guidance, both discharge to ground via infiltration and discharge to a waterbody should be discounted prior to consideration of discharging surface water to the public sewer system. Evidence should be provided to demonstrate how these have been discounted, as outlined in the North West SuDS pro-forma.
Once evidence is provided as outlined above, United Utilities will consider a connection to the 225mm diameter public combined sewer within the site boundary of the proposed site at a pass forward flow to be agreed by the Lead Local Flood Authority. United Utilities request that any agreed rate does not exceed 5l/s.
As a Water Company, we have no obligation to accept highway drainage into our public sewer network. However, should your proposals include runoff from highways, we would request that consideration is given to SuDS components that deliver source control are incorporated within the design of the scheme to reduce the volume and frequency of discharges of these flows to the public sewer.

Levels
For low-lying sites, (where the ground level of the site or the level of a basement is below the ground level at the point where the drainage connects to the public sewer), care should be taken to ensure that the property is not at increased risk of flooding. If these circumstances exist, we recommend that you contact us to discuss further. It could affect the detailed design of your site and result in the need to incorporate appropriate mitigating measures in your drainage scheme.

Land drainage / Overland flows / track drainage
United Utilities have no obligation, and furthermore we do not accept land drainage, overland flows or track drainage into the pubic sewerage network under any circumstances

Existing Wastewater Assets Crossing the Site

According to our public sewer records there are public sewers located within your site boundary. We will require unrestricted access to the sewer for maintenance purposes, we would ask that you maintain a minimum clearance of 6m which is measured 3m from the centre line of the pipe unless there happens to be a formal easement agreement in place, in which case the specified easement width would apply. If you cannot achieve this then you may wish to consider diverting and or abandoning the public sewer.
Please be aware that any proposed diversion may require modelling. This process may take up to 6 months in order to reach an acceptable design.
Please refer to the link below to obtain full details of the processes involved with sewer diversions:
https://www.unitedutilities.com/builders-developers/larger-developments/wastewater/sewer-diversions/

Existing Water Assets Crossing the Site
It is the developer responsibility to identify utilities on-site. Where clean water assets are shown on our records, we recommend that you contact our Water Pre-Development Team, via the following email address: DeveloperServicesWater@uuplc.co.uk. Further information for this service can be found on our website via the link below:
https://www.unitedutilities.com/builders-developers/larger-developments/pre-development/water-pre-dev/

Connection Application
Although we may discuss and agree discharge points and rates in principle, please be aware that you will have to apply for a formal sewer connection. This is so that we can assess the method of construction, Health & Safety requirements and to ultimately inspect the connection when it is made. Details of the application process and the form itself can be obtained from our website by following the link below:
https://www.unitedutilities.com/builders-developers/wastewater-services/sewer-connections/sewer-connection/
We recommend that the detailed design should confirm the locations of all utilities in the area and ensure that any proposed drainage solution considers routing and clash checks where required.
If we can be of any further assistance please don't hesitate to contact us further.
Many thanks and kind regards,

United Utilities
Water for the North West

Ashleigh Bellerby
Assistant Developer Engineer
Developer Services & Metering
Customer Services
T: 07826891650
unitedutilities.com

If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

---------- Original Message ----------
From: seweradoptions@uuplc.co.uk [seweradoptions@uuplc.co.uk]
Sent: 13/09/2023 08:44
To: mairead.power@civicengineers.com
Cc: andrea.mcgee@civicengineers.com
Subject: 04631782 Lower Campfield Lower Byrom St, Manchester M3 4FP

Dear Mairead and Andrea

PRE DEVELOPMENT APPLICATION AT: – UU Ref 04631782

Please accept this email as receipt of your application received on 5.9.2023 for the above development. This has now been logged on our system and the job reference is 04631782 we would ask that you quote this reference in all

future correspondence.

I have reviewed your application (and attachments) and can confirm this is suitable to be passed to Ashleigh Bellerby for technical assessment. You will receive their response within 8 working days.

Kind regards Jill

Jill Ellis
Customer Advisor Advanced
Developer Services & Metering
Customer Services
Direct Tel: 01925 233 064
Tel: 0345 072 6067
unitedutilities.com

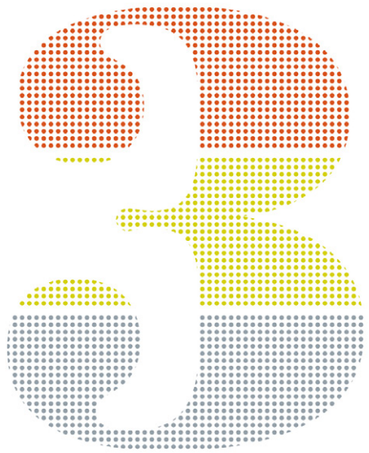
If you have received a great service today why not tell us?
Visit: unitedutilities.com/wow

Did you know we now have a live chat facility available to you Mon to Friday 8 -5pm. You just click on the orange live chat box on our webpage and one of our advisors will be ready to chat to you and help you with your enquiry https://www.unitedutilities.com/builders-developers/ or you can email us at WastewaterDeveloperServices@uuplc.co.uk

The information contained in this e-mail is intended only for the individual to whom it is addressed. It may contain legally privileged or confidential information or otherwise be exempt from disclosure. If you have received this Message in error or there are any problems, please notify the sender immediately and delete the message from your computer. You must not use, disclose, copy or alter this message for any unauthorised purpose. Neither United Utilities Group PLC nor any of its subsidiaries will be liable for any direct, special, indirect or consequential damages as a result of any virus being passed on, or arising from the alteration of the contents of this message by a third party.

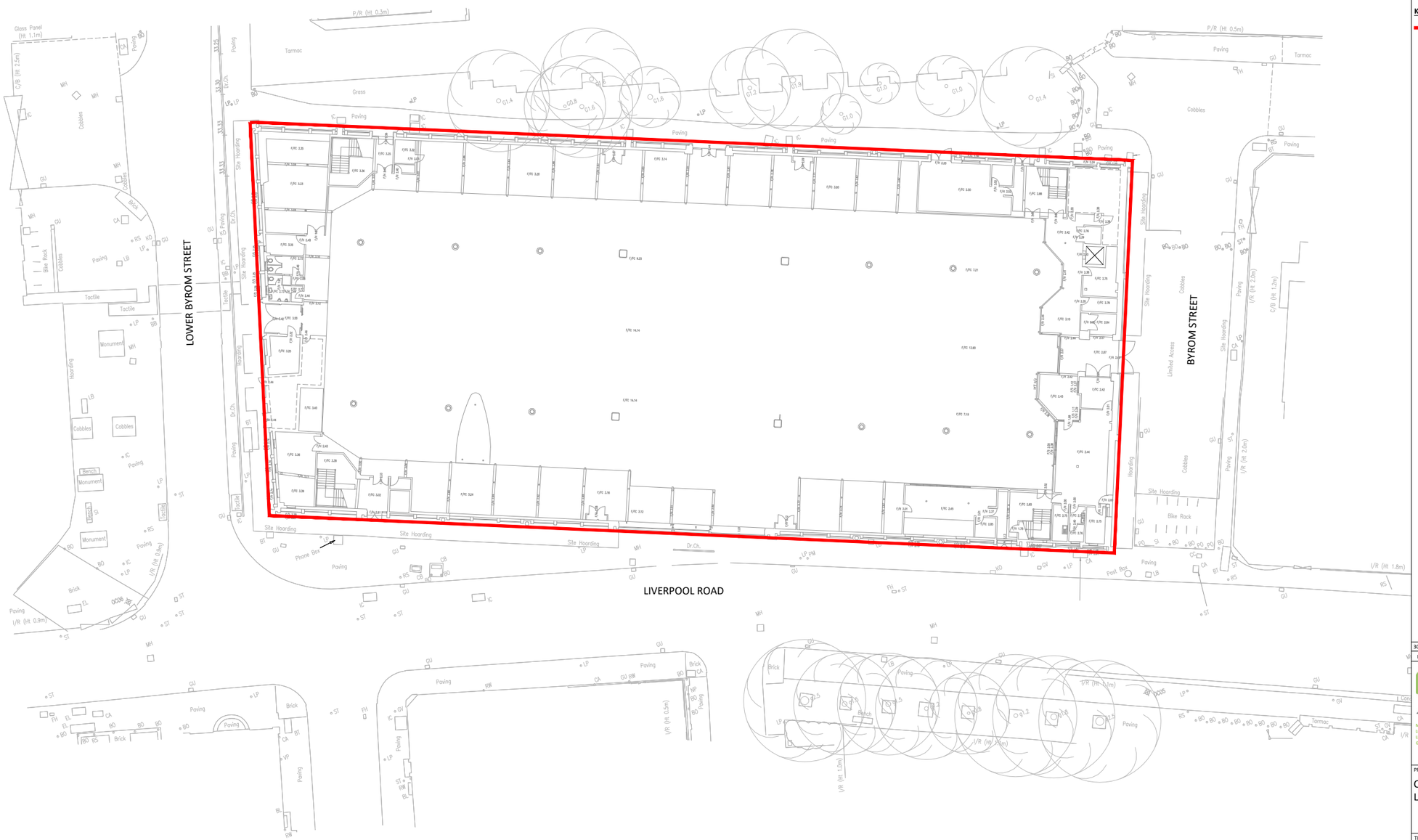
United Utilities Group PLC, Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington, WA5 3LP
Registered in England and Wales. Registered No 6559020

http://www.unitedutilities.com
http://www.unitedutilities.com/subsidiaries



Section 02 - 03

The following section contains Civic Engineers existing and proposed drainaged plans followed by their Drainage Strategy Maintenance Plan.



STANDARD NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
2. THIS DRAWING SHOULD NOT BE SCALED.
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

© CIVIC ENGINEERS LIMITED

NOTES

1. TOPOGRAPHICAL SURVEY CARRIED OUT BY ND OLIVER, DATED 21.02.22
2. INTERIOR PLAN EXTRACTED FROM GPR SURVEY CARRIED OUT BY AMETHYST SURVEYS LIMITED, DATED 24.01.23

KEY

APPROXIMATE SITE BOUNDARY

DATE	REV	DESCRIPTION	DRAWN	CHKD
30.05.24	C01	ISSUED FOR CONSTRUCTION	TC	CK

Civic Engineers
MANCHESTER Carver's Warehouse, 77 Dale Street, Manchester, M1 2HG. Tel: 0161 228 6757
LONDON Reeds Wharf, 33 Mill Street, London SE1 2AX. Tel: 020 7253 2977
LEEDS 1 Saw Mill Street, Water Lane, Leeds, LS11 5WE. Tel: 0113 2025 130
GLASGOW 36 Virginia Street, Glasgow, G1 1TN. Tel: 0141 370 1829
www.civicengineers.com

PROJECT
CAMPFIELD MARKET
LOWER CAMPFIELD

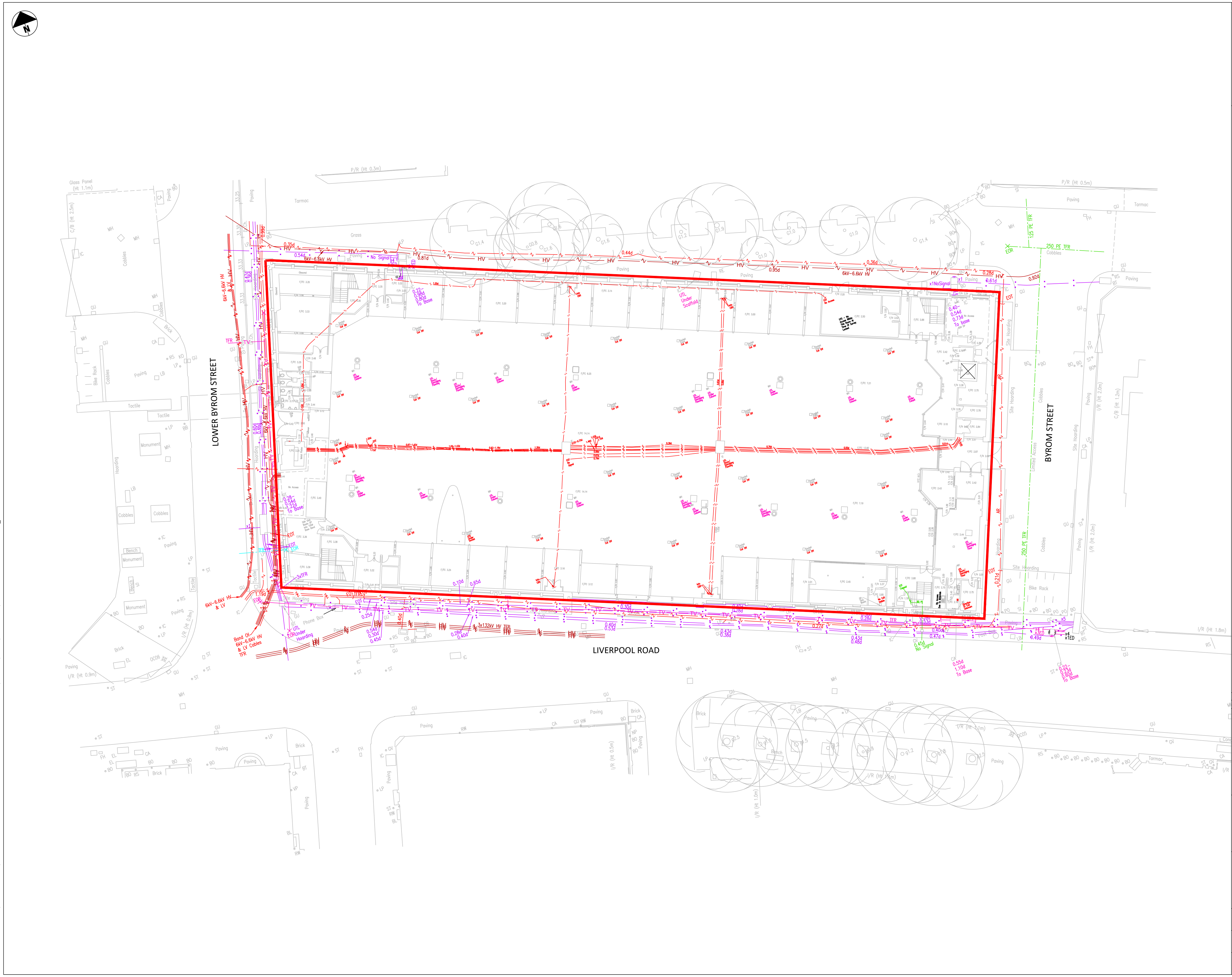
TITLE
EXISTING SITE PLAN

DRAWING STATUS	STATUS CODE
STAGE 4B	-

CE PROJECT No.	SCALE @ A1	DATE CREATED	DRAWN	CHECKED
2302-01	1:200	MAY 24	TC	CK

DRAWING No.	REV
2302-01-CIV-XX-01-D-C-10002	C01

FILE LOCATION PATH: P:\PROJECTS HOT\2302-01 LOWER CAMPFIELD MARKET - POST CONTRACT SERVICES\004 BIM\CIVILS\DRAWINGS\2302-01-CIV-XX-01-D-C-10002_EXISTING SITE PLAN.DWG



FILE LOCATION PATH: P:\PROJECTS HOT\2302-01 LOWER CAMPFIELD MARKET - POST CONTRACT SERVICES\004 BIM\CIVILS\DRAWINGS\2302-01-CIV-XX-01-D-C-10004_EXISTING UTILITY PLAN.DWG

STANDARD NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
2. THIS DRAWING SHOULD NOT BE SCALED.
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

© CIVIC ENGINEERS LIMITED

NOTES

1. TOPOGRAPHICAL SURVEY CARRIED OUT BY ND OLIVER, DATED 21.02.22
2. GPR SURVEY CARRIED OUT BY AMETHYST SURVEYS LIMITED, DATED 24.01.23

KEY

- APPROXIMATE SITE BOUNDARY
- (GPR) EXISTING ELECTRIC CABLE
- (GPR) EXISTING HIGH VOLTAGE ELECTRICAL CABLE
- (GPR) EXISTING TRAFFIC SIGNAL CABLE
- (GPR) EXISTING TELECOMS CABLE
- (GPR) EXISTING CABLE TELEVISION
- (GPR) EXISTING COMMUNICATIONS CABLE
- (GPR) EXISTING WATER MAIN
- (GPR) EXISTING GAS MAIN
- (GPR) UNKNOWN/UNIDENTIFIED

DATE	REV	DESCRIPTION	DRAWN	CHKD
30.05.24	C01	ISSUED FOR CONSTRUCTION	TC	CK

Civic Engineers

MANCHESTER Carver's Warehouse, 77 Dale Street, Manchester, M1 2HG. Tel: 0161 228 6757
LONDON Reeds Wharf, 33 Mill Street, London SE1 2AX. Tel: 020 7253 2977
LEEDS 1 Saw Mill Street, Water Lane, Leeds, LS11 5WE. Tel: 0113 2025 130
GLASGOW 35 Virginia Street, Glasgow, G1 1TN. Tel: 0141 370 1829

www.civicengineers.com

PROJECT
CAMPFIELD MARKET
LOWER CAMPFIELD

TITLE
EXISTING UTILITY PLAN

DRAWING STATUS	STATUS CODE
STAGE 4B	-

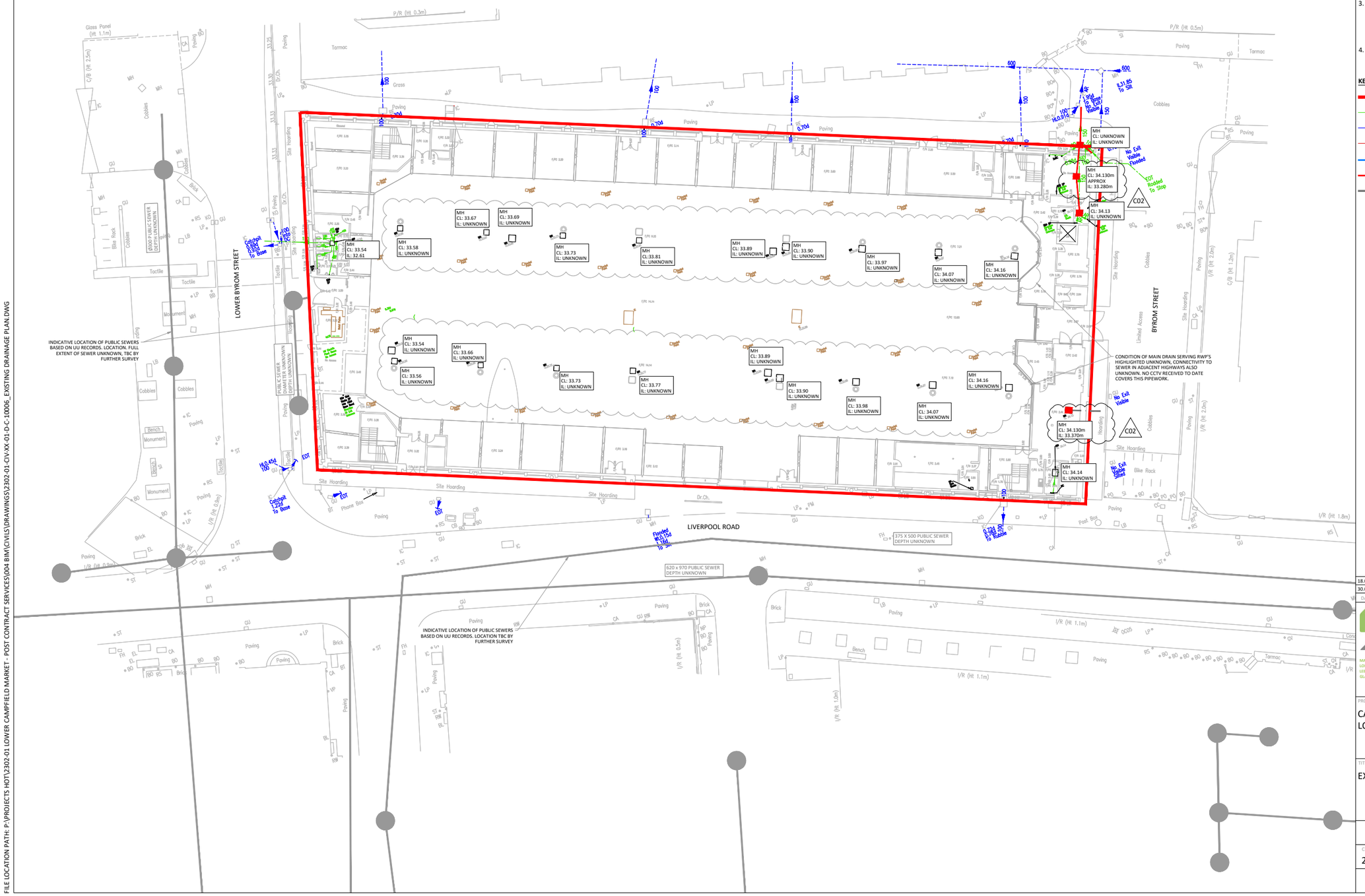
CE PROJECT No.	SCALE @ A1	DATE CREATED	DRAWN	CHECKED
2302-01	1:200	MAY 24	TC	CK

DRAWING No.	REV
2302-01-CIV-XX-01-D-C-10004	C01

NOTE
CLASHING INFORMATION AND SIGNIFICANT MISALIGNMENTS ARE PRESENT BETWEEN GPR AND CCTV SURVEYS, ADDITIONAL INFORMATION REQUIRED TO DETERMINE ACCURATE LOCATIONS, DEPTHS AND ALIGNMENTS.

NOTE
EXISTING NON-DRAINAGE SERVICE CABLES ASSUMED TO BE DISCONNECTED AND REMOVED. PROPOSED NON-DRAINAGE SERVICE STRATEGY/LAYOUT/DESIGN TO BE PROVIDED BY 3RD PARTY.

NOTE
REMEDIAL CCTV SURVEY REQUIRED TO ACCURATELY LOCATE EXISTING CONNECTION POINTS TO UU PUBLIC SEWER AND PICKUP MISSING INFORMATION AND MISSING RUNS. EXISTING CONNECTIONS SHOWN ARE ASSUMED TO BE TOO SHALLOW AND ARE NOT CURRENTLY PROPOSED TO BE REUSED. SUBJECT TO FURTHER INFORMATION, WHERE FEASIBLE AND APPROPRIATE, EXISTING CONNECTION POINTS MAY BE REUSED, SUBJECT TO UU APPROVAL.



STANDARD NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
2. THIS DRAWING SHOULD NOT BE SCALED.
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

© CIVIC ENGINEERS LIMITED

NOTES

1. TOPOGRAPHICAL SURVEY CARRIED OUT BY ND OLIVER, DATED 21.02.22
2. GPR DRAINAGE LOCATIONS EXTRACTED FROM GPR SURVEY CARRIED OUT BY AMETHYST SURVEYS LIMITED, DATED 24.01.23
3. CCTV DRAINAGE LOCATIONS AND MANHOLE REFERENCES EXTRACTED FROM SCANNED PLAN FOLLOWING CCTV SURVEY CARRIED OUT BY DRAIN ALERT, DATED 07.03.22. PLAN HAS BEEN APPROXIMATELY LOCATED AND SCALED TO WORLD COORDINATES
4. PUBLIC SEWERS APPROXIMATELY LOCATED USING THE UU PUBLIC SEWER RECORD PDF PLAN, DATED 01.09.23

KEY

- APPROXIMATE SITE BOUNDARY
- (GPR) FOUL WATER DRAINAGE
- (GPR) SURFACE WATER DRAINAGE
- (GPR) COMBINED WATER DRAINAGE
- (CCTV) SURFACE WATER DRAINAGE
- (CCTV) COMBINED WATER DRAINAGE
- (UU PLAN) PUBLIC SEWER

DATE	REV	DESCRIPTION	DRAWN	CHKD
18.06.24	C02	UPDATED FOLLOWING CONTRACTOR COMMENTS	TC	CK
30.05.24	C01	ISSUED FOR INFORMATION	TC	CK

Civic Engineers
MANCHESTER Corvet's Warehouse, 77 Dale Street, Manchester, M1 2HG, Tel: 0161 228 6757
LONDON Reeds Wharf, 33 Mill Street, London SE1 2AX, Tel: 020 7251 2977
LEEDS 3 Low Mill Street, Water Lane, Leeds, LS15 9DW, Tel: 0113 2539 130
GLASGOW 35 Virginia Street, Glasgow, G1 1TN, Tel: 0141 370 1829
www.civicengineers.com

PROJECT
CAMPFIELD MARKET
LOWER CAMPFIELD

TITLE
EXISTING DRAINAGE PLAN

DRAWING STATUS	STATUS CODE
STAGE 4B	-

CE PROJECT No.	SCALE @ A1	DATE CREATED	DRAWN	CHECKED
2302-01	1:200	MAY 24	ZH	TC

DRAWING No. 2302-01-CIV-XX-01-D-C-10006 REV C02

FILE LOCATION PATH: P:\PROJECTS HOT\2302-01 LOWER CAMPFIELD MARKET - POST CONTRACT SERVICES\004 BIM\CIVILS\DRAWINGS\2302-01-CIV-XX-01-D-C-10006_EXISTING DRAINAGE PLAN.DWG

NOTE
PROPOSED INSPECTION CHAMBERS TO BE FITTED WITH RECESSED DOUBLE SEALED COVERS TO ACCEPT FLOOR FINISHES.

ALL DOWNPIPE CONNECTIONS TO HAVE RODDABLE ACCESS FROM ABOVE GROUND TO MEP ENGINEERS DESIGN

NOTE
EXISTING NON-DRAINAGE SERVICE CABLES ASSUMED TO BE DISCONNECTED AND REMOVED. PROPOSED NON-DRAINAGE SERVICE STRATEGY/LAYOUT/DESIGN TO BE PROVIDED BY 3RD PARTY. CIVIC ENGINEERS ARE TO BE NOTIFIED OF ANY CLASHES OR COORDINATION REQUIRED

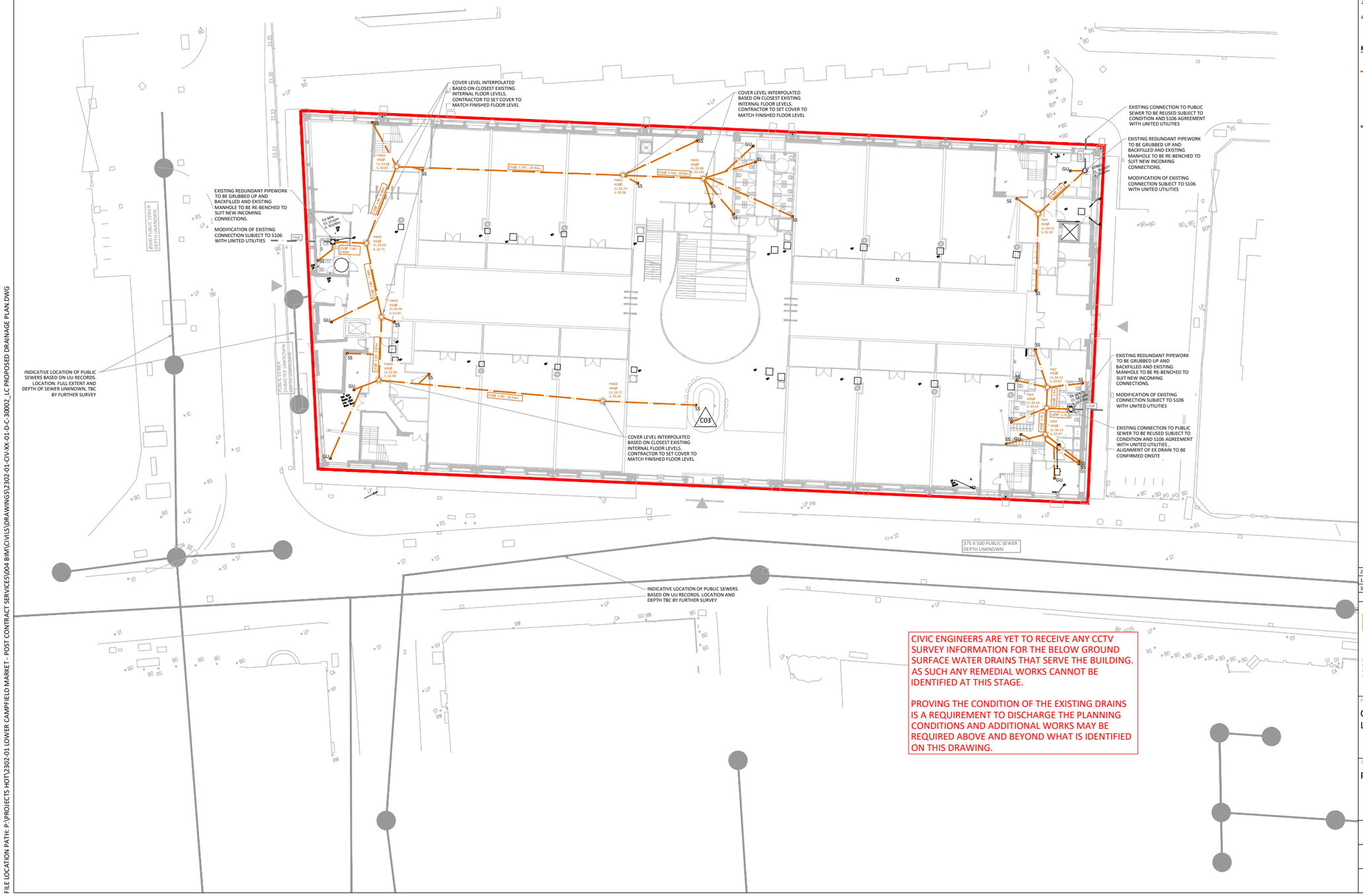
NOTE
PROPOSED INTERIOR SURFACE LEVEL/COVER LEVELS ASSUMED BASED ON LOWEST INTERNAL SURFACE LEVEL RECORDED IN GPR SURVEY.

FOUNDATIONS ASSUMED TO BE 600mm DEEP AT WALLS

NOTE
PROPOSED DRAINAGE LAYING TRENCHES TO BE REINSTATED TO ARCHITECT'S/SPECIALIST'S DAMP PROOFING SPECIFICATIONS. REFER TO CIVIC DRAWINGS 2302-CIV-LO-00-D-S-50002, 2302-CIV-UP-XX-00-D-S-50002 FOR SLAB REINSTATEMENT DETAILS

NOTE
EXISTING SURFACE WATER DRAINAGE NETWORK TO BE RETAINED AS EXISTING AND REMEDIAL WORKS UNDERTAKEN ONCE CONDITION IS KNOWN.

NOTE
REFER TO CIVIC DRAWING 2302-CIV-XX-01-D-C-31001 FOR PROPOSED DRAINAGE DETAILS



CIVIC ENGINEERS ARE YET TO RECEIVE ANY CCTV SURVEY INFORMATION FOR THE BELOW GROUND SURFACE WATER DRAINS THAT SERVE THE BUILDING. AS SUCH ANY REMEDIAL WORKS CANNOT BE IDENTIFIED AT THIS STAGE.

PROVING THE CONDITION OF THE EXISTING DRAINS IS A REQUIREMENT TO DISCHARGE THE PLANNING CONDITIONS AND ADDITIONAL WORKS MAY BE REQUIRED ABOVE AND BEYOND WHAT IS IDENTIFIED ON THIS DRAWING.

STANDARD NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
2. THIS DRAWING SHOULD NOT BE SCALED.
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

© CIVIC ENGINEERS LIMITED

NOTES

1. GROUND FLOOR LAYOUT AND INTERNAL DRAINAGE LOCATION BY P3 ARCHITECTS, RECEIVED 07.05.24.
2. CONTRACTOR ISSUED EXISTING MANHOLE LEVEL SKETCH 12.06.24 WHICH HAS BEEN USED TO CALCULATE EXISTING MANHOLE INVERT LEVELS.
3. TOPOGRAPHICAL SURVEY CARRIED OUT BY ND OLIVER, DATED 21.02.22
4. PUBLIC SEWERS APPROXIMATELY LOCATED USING THE UU PUBLIC SEWER RECORD PDF PLAN, DATED 01.09.23

KEY

- PROPOSED FOUL SEWER - 150mm DIAMETER RUNS WITH 450mm INSPECTION CHAMBERS
- SS PROPOSED STUB STACK
- GU PROPOSED TRAPPED FLOOR GULLEY
- (UU PLAN) PUBLIC SEWER

DATE	REV	DESCRIPTION	DRAWN	CHKD
25.06.24	C03	CAFE STUB STACK RELOCATED	TC	CK
18.06.24	C02	UPDATED FOLLOWING CONTRACTOR COMMENTS	TC	CK
30.05.24	C01	ISSUED FOR CONSTRUCTION	TC	CK

Civic Engineers
MANCHESTER Carver's Warehouse, 77 Dale Street, Manchester, M1 2HG. Tel: 0161 228 6757
LONDON Leeds Wharf, 58 Mill Street, London SE1 2AX. Tel: 020 7252 2872
LEEDS 1 Saw Mill Street, Water Lane, Leeds, LS11 5WE. Tel: 0113 2025 190
GLASGOW 35 Virginia Street, Glasgow, G1 1TN. Tel: 0141 370 1829
www.civicengineers.com

PROJECT
CAMPFIELD MARKET
LOWER CAMPFIELD

TITLE
PROPOSED DRAINAGE PLAN

DRAWING STATUS	STATUS CODE
STAGE 4B	-

CE PROJECT No.	SCALE @ A1	DATE CREATED	DRAWN	CHECKED
2302-01	1:200	MAY 24	TC	CK

DRAWING No. 2302-01-CIV-XX-01-D-C-30002 REV C03

FILE LOCATION PATH: P:\PROJECTS HOT\2302-01 LOWER CAMPFIELD MARKET - POST CONTRACT SERVICES\004 BIM\CIVILS\DRAWINGS\2302-01-CIV-XX-01-D-C-30002_LC PROPOSED DRAINAGE PLAN.DWG

NOTE
PROPOSED INTERIOR SURFACE LEVEL/COVER LEVELS ASSUMED BASED ON LOWEST INTERNAL SURFACE LEVEL RECORDED IN GPR SURVEY

FOUNDATIONS ASSUMED TO BE 600mm DEEP AT WALL

NOTE
EXISTING NON-DRAINAGE SERVICE CABLES ASSUMED TO BE DISCONNECTED AND REMOVED. PROPOSED NON-DRAINAGE SERVICE STRATEGY/LAYOUT/DESIGN TO BE PROVIDED BY 3RD PARTY. CIVIC ENGINEERS ARE TO BE NOTIFIED OF ANY CLASHES OR COORDINATION REQUIRED

NOTE
PROPOSED DRAINAGE LAYING TRENCHES TO BE REINSTATED TO ARCHITECT'S/SPECIALIST'S DAMP PROOFING SPECIFICATIONS. REFER TO CIVIC DRAWING2302-CIV-LO-00-D-S-50002, 2302-CIV-UP-XX-00-D-S-50002 FOR SLAB REINSTATEMENT DETAIL

NOTE
EXISTING SURFACE WATER DRAINAGE NETWORK TO BE RETAINED AS EXISTING AND REMEDIAL WORKS UNDERTAKEN ONCE CONDITION IS KNOWN.

NOTE
REMEDIAL CCTV SURVEY REQUIRED TO ACCURATELY LOCATE EXISTING CONNECTION POINTS TO UU PUBLIC SEWER AND PICKUP MISSING INFORMATION AND MISSING RUNS.

PROPOSED NEW CONNECTION TO UU PUBLIC SEWER REQUIRE S106 APPROVAL.

NOTE
REFER TO CIVIC DRAWING 2302-CIV-XX-01-D-C-31001 FOR PROPOSED DRAINAGE DETAILS

NOTE
PROPOSED INSPECTION CHAMBERS TO BE FITTED WITH RECESSED DOUBLE SEALED COVERS TO ACCEPT FLOOR FINISHES.

ALL DOWNPIPE CONNECTIONS TO HAVE RODDABLE ACCESS FROM ABOVE GROUND TO MEP ENGINEERS DESIGN



STANDARD NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
2. THIS DRAWING SHOULD NOT BE SCALED.
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

© CIVIC ENGINEERS LIMITED

NOTES

1. GROUND FLOOR LAYOUT AND INTERNAL DRAINAGE LOCATION BY P3 ARCHITECTS, RECEIVED 07.05.24
2. TOPOGRAPHICAL SURVEY CARRIED OUT BY ND OLIVER, DATED 21.02.22
3. GPR SURVEY CARRIED OUT BY AMETHYST SURVEYS LIMITED, DATED 24.01.23
3. CCTV DRAINAGE LOCATIONS EXTRACTED FROM SCANNED PLAN FOLLOWING CCTV SURVEY CARRIED OUT BY DRAIN ALERT, DATED 07.03.22. PLAN HAS BEEN APPROXIMATELY LOCATED AND SCALED TO WORLD COORDINATES
4. PUBLIC SEWERS APPROXIMATELY LOCATED USING THE UU PUBLIC SEWER RECORD PDF PLAN, DATED 01.09.23

KEY

- (GPR) EXISTING ELECTRIC CABLE
- (GPR) EXISTING HIGH VOLTAGE ELECTRICAL CABLE
- (GPR) EXISTING TRAFFIC SIGNAL CABLE
- (GPR) EXISTING TELECOMS CABLE
- (GPR) EXISTING CABLE TELEVISION
- (GPR) EXISTING COMMUNICATIONS CABLE
- (GPR) EXISTING WATER MAIN
- (GPR) EXISTING GAS MAIN
- (GPR) UNKNOWN/UNIDENTIFIED
- (GPR) EXISTING FOUL WATER DRAINAGE
- (GPR) EXISTING SURFACE WATER DRAINAGE
- (GPR) EXISTING COMBINED WATER DRAINAGE
- (CCTV) EXISTING SURFACE WATER DRAINAGE
- (CCTV) EXISTING COMBINED WATER DRAINAGE
- 750mm FOUNDATION NO-DIG ZONE
- PROPOSED FOUL SEWER - 150mm DIAMETER RUNS WITH 450mm INSPECTION CHAMBERS
- SS PROPOSED STUB STACK
- GU PROPOSED TRAPPED FLOOR GULLEY
- (UU PLAN) PUBLIC SEWER

DATE	REV	DESCRIPTION	DRAWN	CHKD
18.06.24	C02	UPDATED FOLLOWING CONTRACTOR COMMENTS	TC	CK
30.05.24	C01	ISSUED FOR CONSTRUCTION	TC	CK

Civic Engineers
MANCHESTER LONDON LEEDS GLASGOW
Calvert's Warehouse, 77 Dale Street, Manchester, M1 2HG, Tel: 0161 228 6757
Reeds Wharf, 33 Mill Street, London SE1 2AN, Tel: 020 7253 2857
1 Saw Mill Street, Water Lane, Leeds, LS11 5WE, Tel: 0113 2025 130
31 Virginia Street, Glasgow, G1 1TN, Tel: 0141 370 1850
www.civicengineers.com

PROJECT
CAMPFIELD MARKET
LOWER CAMPFIELD

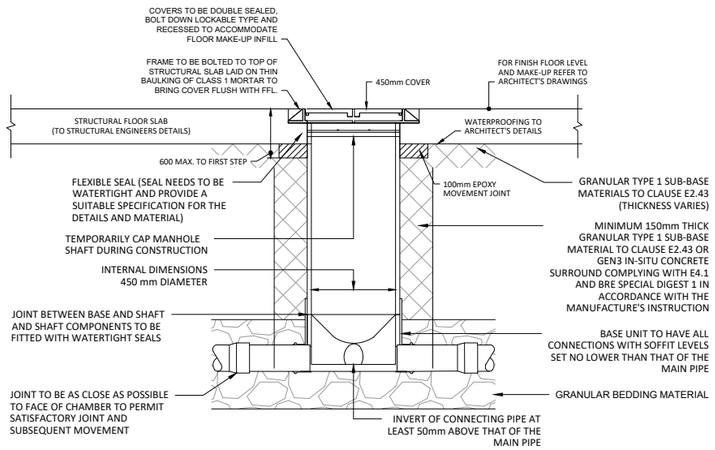
TITLE
EXISTING AND PROPOSED DRAINAGE OVERLAY PLAN

DRAWING STATUS	STATUS CODE
STAGE 4B	-

CE PROJECT No.	SCALE @ A1	DATE CREATED	DRAWN	CHECKED
2302-01	1:200	MAY 24	TC	CK

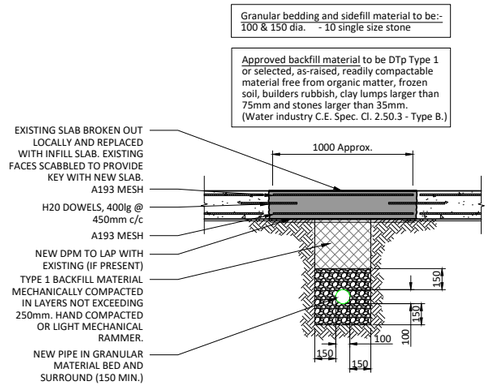
DRAWING No. 2302-01-CIV-XX-01-D-C-30004 REV C02

FILE LOCATION PATH: P:\PROJECTS HOT\2302-01 LOWER CAMPFIELD MARKET - POST CONTRACT SERVICES\004 BIM\CIVILS\DRAWINGS\2302-01-CIV-XX-01-D-C-30004_LC PROPOSED DRAINAGE CLASH DETECTION.DWG



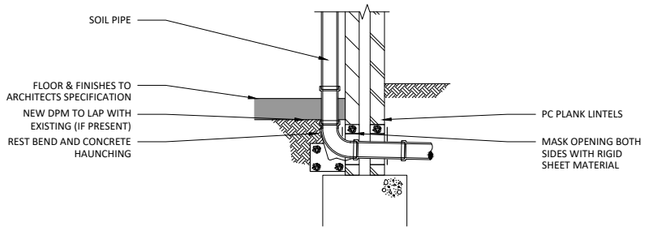
TYPICAL INTERIOR INSPECTION CHAMBER DETAIL - TYPE D

DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE UP TO 3m, DOUBLE SEALED COVER FOR INDOOR APPLICATION

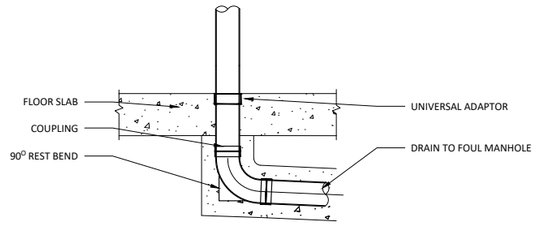


TYPICAL NEW DRAINAGE RUN DETAIL.

(SCALE 1:20)

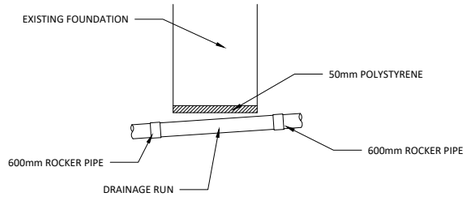


Typical Sub Stack Detail (SS)

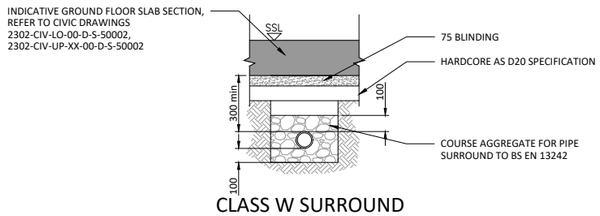


SS/RWP DETAIL THROUGH FLOOR SLAB

SCALE 1:20

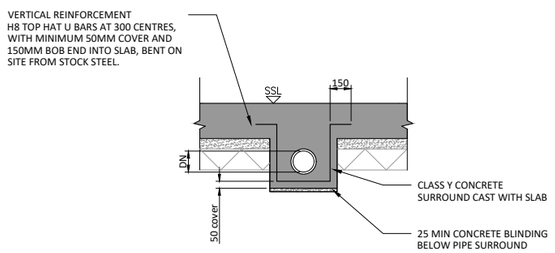


NEW DRAINAGE PASSING BELOW EXISTING FOUNDATIONS.



CLASS W SURROUND

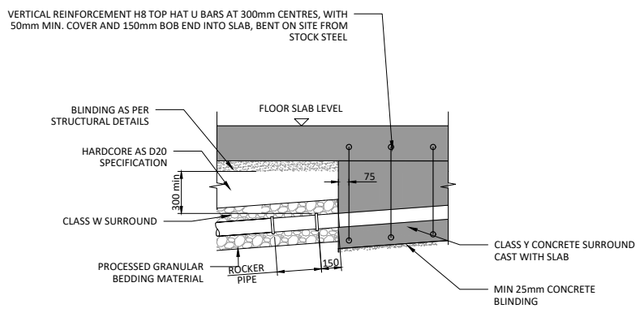
FOR PIPES WITH CROWN >300 UNDER BUILDING



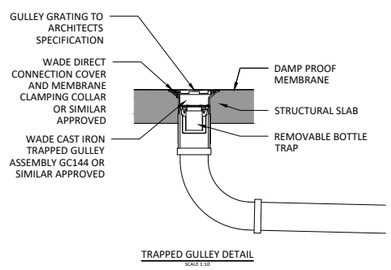
CLASS Y SURROUND

FOR PIPES WITH CROWN < 300 UNDER BUILDING

FOR PLASTIC PIPES CARE IS TO BE TAKEN IN PLACING CONCRETE TO AVOID DEFORMATION OR DISPLACEMENT OF PIPE.



TYPICAL DETAIL FOR PIPELINES UNDER SLABS: CLASS Y AND W SURROUND



TRAPPED GULLEY DETAIL

SCALE 1:10

STANDARD NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
2. THIS DRAWING SHOULD NOT BE SCALED.
3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS.

© CIVIC ENGINEERS LIMITED

DATE	REV	DESCRIPTION	DRAWN	CHKD
30.05.24	P01	ISSUED FOR CONSTRUCTION	TC	CK

Civic Engineers
MANCHESTER Carver's Warehouse, 77 Dale Street, Manchester, M1 2HG. Tel: 0161 228 6757
LONDON Reeds Wharf, 33 Mill Street, London SE1 2AX. Tel: 020 7253 2977
LEEDS 1 Saw Mill Street, Water Lane, Leeds, LS11 5WE. Tel: 0113 2025 130
GLASGOW 35 Virginia Street, Glasgow, G1 1TN. Tel: 0141 370 1829
www.civicengineers.com

PROJECT
CAMPFIELD MARKET

TITLE
PROPOSED DRAINAGE DETAILS

DRAWING STATUS	STATUS CODE
STAGE 4B	-

CE PROJECT No.	SCALE @ A1	DATE CREATED	DRAWN	CHECKED
2302-01	1:20	MAY 24	ZH	TC

DRAWING No.	REV
2302-01-CIV-XX-01-D-C-31001	C01

FILE LOCATION PATH: P:\PROJECTS HOT\2302-01 LOWER CAMPFIELD MARKET - POST CONTRACT SERVICES\004 BIM\CIVILS\DRAWINGS\2302-01-CIV-XX-01-D-C-31001_PROPOSED DRAINAGE DETAILS.DWG

Civic Engineers

Job Title
Lower Campfield Market

Prepared for
Manchester City Council

Report Type
Drainage Strategy - Maintenance

Date
29 July 2024



Civic Engineers

Contents

1. Maintenance 1
1.1 General 1
1.2 Components 1
1.3 Inspection and Manhole Chambers, and Rodding eyes 3
1.4 Pipes 3

Drainage Strategy - Maintenance

Prepared by	**Zakir Hafeji**
Reviewed by	Chris Kendrick
Civic Job No.	2302-01
Issued	29 July 2024
Revised	--

This report is the copyright of Civic Engineers and is for the sole use of the person/organisation to whom it is addressed. It may not be used or referred to in whole or in part by anyone else without the express agreement of Civic Engineers. Civic Engineers do not accept liability for any loss or damage arising from any unauthorised use of this report. Civic Engineers is a trading name of Civic Engineers (Leeds) Ltd (registered number 07879122), which is a limited company registered in England, registered address Carver's Warehouse, 77 Dale Street, Manchester M1 2HG

© Civic Engineers 2024

civicengineers.com

1. Maintenance

The following document outlines the maintenance requirements for the project site. The responsibility of the required maintenance falls to multiple authorities, the below schedules set out which organisations are responsible for the various maintenance regimes.

1.1 General

This section is intended to give an overview of the operation and maintenance for the drainage features included with the drainage strategy and in relation to typical details. Where propriety products are specified, the manufacturer's instructions and recommendations should be followed in priority to this document unless specifically noted otherwise due to project constraints.

The recommended operations and frequencies are typical only and should be more frequent initially to ensure that there are no unforeseen issues with the operation and then adjusted to suit the site requirements.

The existing surface water network has been retained. Remedial works are to be carried out to bring the existing network into serviceable condition. This includes the clearing of deposits and the remediation of cracking, holes and joint misalignments that have been discovered onsite to date, as well as any defects discovered during construction. Extents and methodology of remediation works to be scoped by Contractor and approved by Civic Engineers.

1.2 Components

The following components have been included within the drainage design for the proposed development:

- Inspection and manhole chambers, rodding eyes
- Pipes
- Trapped Floor gullies

The proposed locations of the components are indicated on Civic Engineers drawings:

- 2302-01-CIV-XX-01-D-C-10006

Table 1 below shows the maintenance responsibilities of the various components.

Table 1 - Maintenance Responsibility

Component	Maintenance responsibility
Private inspection chambers, manholes and Rodding eyes (Internal)	Maintenance company
Private inspection chambers and manholes (public domain)	Maintenance company
Pipes (Internal)	Maintenance company
Pipes (External)	Maintenance company
Trapped Floor gullies	Maintenance company
Rodding Eyes	Maintenance company

A suitable maintenance strategy should be adopted to ensure the drainage network is cleaned regularly and the routine maintenance and cleansing regime should be documented.

A copy of the final construction drainage layout should be provided in the final operations and maintenance manual.

It is recommended that the drainage system is inspected as a minimum twice a year, with the system also being inspected after any major storm event.

Long-term management practices include regular sweeping of areas served by trapped gullies. The sweeping program will remove sediment and contaminants directly from surfaces before they become mobilised and transported to the drainage system. Sand and silt must not be disposed of into the drainage network.

1.3 Inspection and Manhole Chambers, and Rodding eyes

Access points have been located at the head of each run, at a change in direction and at a change of pipe size in accordance with building Regulations Part H.

The appropriate health and safety equipment must be used when accessing manholes. Confined space certificates must be held by any personnel entering a manhole and the appropriate permits should be obtained from the maintenance manager prior to any access. Double locked and sealed manholes must be sealed and locked correctly post maintenance operation.

1.4 Pipes

Pipes are proprietary products, and the materials can vary across the site and as such where used the manufacture's recommendations should be followed. Regardless of the product used the pipes will be fully compliant with Civic Engineers drainage specification.

Existing surface water drainage network has been proposed to be remediated and retained. Inspection required 12 after the completion of remedial works to ensure no issues have arisen with the repair work that was carried out.

Pipes are intended to be the main conveyance across the development. Pipes indicated for surface water are intended to be dry except for during rainfall events. All pipes which are proposed around the site have been designed such that they are considered to be self-cleansing.

Access for maintenance is provided through rodding eyes, access chambers and manholes. Proposed foul stub stacks to be fitted with access points to allow use of cleaning equipment or the insertion of testing apparatus.

Regular inspection and maintenance are important to identify areas which may have been obstructed/clogged and may not drain correctly thus exposing the development to a flood risk.

Table 2 overleaf shows the maintenance schedule for pipes, the actions required and the frequency of which these actions need to be undertaken.

Table 2 - Maintenance Schedule for Pipes

Maintenance schedule	Required action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required).	Initial inspection should be provided as post construction CCTV survey.	N/A
Regular maintenance/inspection	Inspect for evidence of poor operation via water level in chambers. If required, take remedial action.	Quarter-Annually, 48 hours after large storms.
Remedial action	Rod through poorly performing runs as initial remediation.	As required
	If continued poor performance jet and CCTV survey poorly performing runs.	As required
	Seek advice as to remediation techniques suitable for the type of performance issue and location.	As required if above does not improve performance.

1.5 Trapped Floor Gullies

Floor gullies should be inspected and cleaned in accordance with the manufacturer's details.

Locking bolts should be replaced and sufficiently tightened, taking care that the bolt heads do not stand above the top surface of the cover or grate. If covers can move within their frame, this may cause damage to the frame or seating.

Sediment/material removal should be undertaken in consultation with the environmental regulator to confirm appropriate protocols; especially where run-off is taken from potentially contaminated areas.

Below, Table 3 shows the maintenance schedule for gullies, the actions required and the frequency of which these actions need to be undertaken.

Table 3 - Maintenance Schedule for Gullies

Maintenance schedule	Required action	Frequency
Monitoring (to be undertaken more regularly within the first year of operation and adjusted as required).	Initial inspection including inner gulley trap.	Half yearly.
Regular maintenance/inspection	Litter and debris removal	Monthly or as required.
	Inspect for evidence of poor operation and. If required, take remedial action.	Quarter Annually.
Remedial action	Inspect inner gulley trap as initial remediation.	As required.