



RED DOOR DAY CENTRE, BURY

OUTLINE DRAINAGE STRATEGY

Project No: 2405-03

December 2025

Rev: P03

RDB-REN-XX-XX-RP-C-00010

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1. INTRODUCTION

1.1 *Purpose of this report*

This Outline Surface Water Drainage Strategy has been prepared to support the planning application for the proposed Red Door, Bury development.

The assessment includes: a summary of the site, an estimate of the existing and proposed surface water discharge rates, infiltration assessment, SUDs assessment, and outline drainage proposals and performance criteria.

This report should be read in conjunction with the Flood Risk Assessment, renaissance, December 2025 and the completed North-West SuDS Pro-Forma.

The proposals within this report are intended to demonstrate the feasibility of the overarching drainage strategy to support the planning proposal.

It is noted that the application boundary includes an existing car park that will be retained as part of the proposed development. This assessment therefore only covers the area of the application boundary that is to be redeveloped.

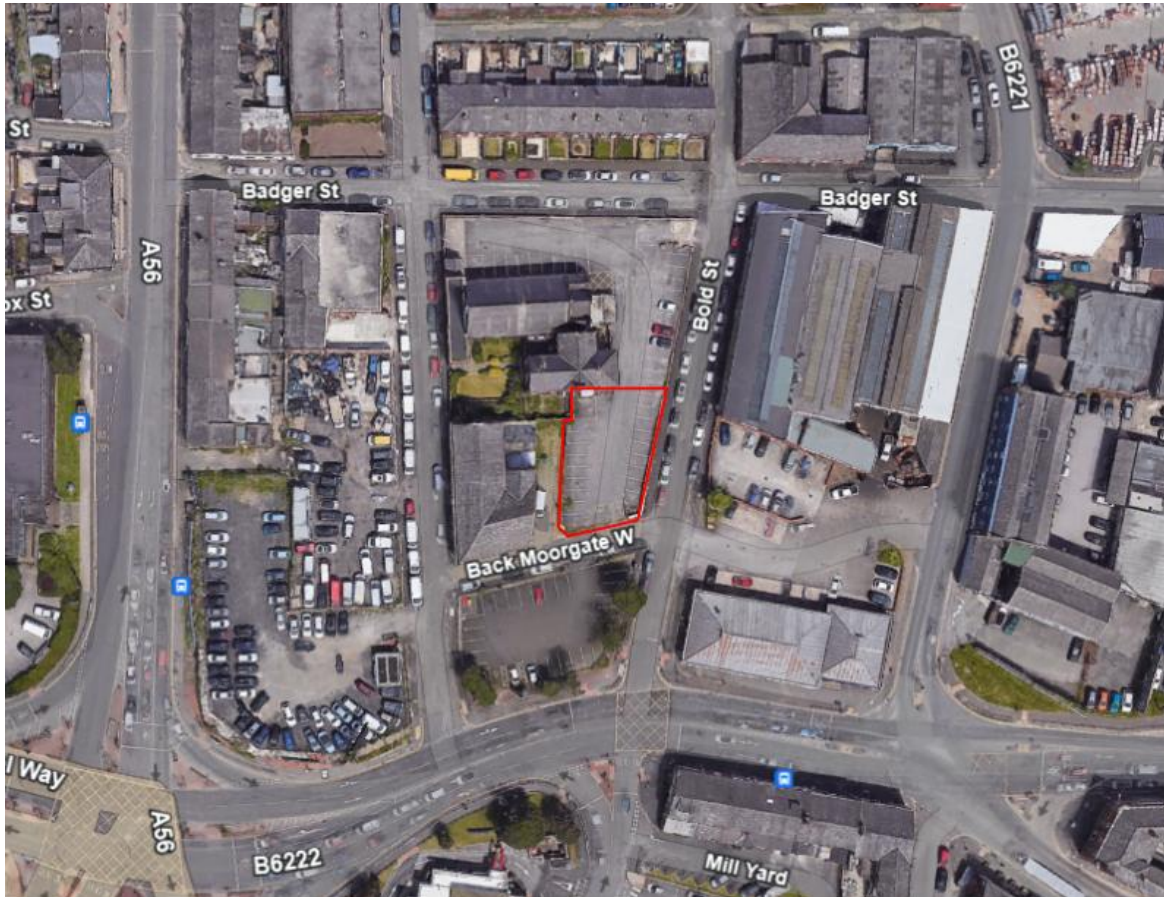
2. THE SITE

2.1 Site Location

The proposed development site is located off Bold Street, Bury.
The site location is described below:

- Post Code BL9 6AB
- OS Reference (X) 381016
- OS Reference (Y) 411258
- National Grid Reference SD810112

The site location is illustrated in Figure 2.1 below.



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Figure 2.1: Indicative Site Location

2.2 Site Description

The site (Figure 2.1) is approximately 0.046 ha and comprises part of an existing hardstanding carpark associated with a church building. There are overhead services (telecoms) crossing the south-western corner of the site.

The site is bounded to the south by Back Moorgate W, to the east by Bold Street, to the west by Back Peter Street with retail building further behind and to the north by church building and carpark.

The site gently slopes to the south, with an access ramp to the car park on the southern boundary, and one in the north-eastern corner of the site. The site sits approximately 0.5m to 1m above surrounding ground levels and a retaining wall of masonry construction is present along the boundaries in the east south, and south-west.

Refer to Appendix A for further details of the existing topography of the site.

2.3 Existing Site Drainage

The existing site is completely covered in asphalt hardstanding although there appears to be no associated drainage.

The United Utilities sewer asset maps indicates there to be combined water sewers within Bold Street and Back Moorgate W. These are indicated to be between 225 and 375 diameter.

The utility survey indicates there to be private combined water drainage within Back Peter Street. This appears to serve the adjacent buildings and road gullies and is noted to be heavily silted.

For the extent of the below ground drainage networks refer to the United Utilities asset map within Appendix B and the Utility survey within Appendix C.

2.4 Geology

The following section has been based on the Geo-Environmental report produced by renaissance (RDB-REN-ZZ-XX-RP-C-00002 dated December 2025).

BGS mapping does not display any made ground deposits on site, however based on the historical mapping and the development that has taken place, made ground deposits are likely to be present.

The site is indicated Superficial Deposits to be underlain by Devensian Till. This stratum typically comprises sandy and gravelly clays.

The deeper solid geology is indicated to be part of the Pennine Lower Coal Measures Formation which typically comprises mudstone, siltstone, sandstone and coal seams.

A fault is shown to traverse 54m south of the site in an east to west direction, downthrown to the south. However, any movements associated with this fault should now have stopped.

2.5 Hydrogeology & Hydrology

Based on BGS Mapping Data, a summary of the Environment Agency aquifer designations is presented in the table below:

Stratum	Coverage	Aquifer Designation
Devensian Till	Full Site	Secondary Aquifer (Undifferentiated). The classification is assigned where it is not possible to attribute either category A or B to the aquifer.
Pennine Lower Coal Measures Formation	Full Site	Secondary (A) Aquifer. These are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.

The nearest active groundwater abstraction point is 1996 m east.

There are no groundwater or potable water abstraction licences indicated within 2000m of the site.

The nearest watercourse to the site is Barn Brook which is 77m South East flowing from North to the South.

There are no active license discharge consents within 500m.

The British Geological Survey indicate there is a potential for groundwater flooding at the subject site, with a low risk rating.

2.6 Proposed Development

Single storey day centre (Use Class F1) with kitchen and accessible wash areas, meeting and activity rooms, staff offices, cycle and car parking, landscaping and associated works

Refer to Appendix D for the proposed development plans.

3. SURFACE WATER DRAINAGE HIERARCHY

3.1 Surface Water Discharge Assessment

In accordance with NPPF, the following hierarchy of surface water drainage options has been considered:

- priority 1: collected for non-potable use
- priority 2: infiltrated to ground
- priority 3: discharged to an above ground surface water body
- priority 4: discharged to a surface water sewer, or another piped surface water drainage system
- priority 5: discharged to a combined sewer

Rainwater Harvesting

Rainwater harvesting will be provided in the form of SuDSpods that will be used for landscape irrigation.

Infiltration Based Systems

The Phase 1 desktop study has identified the site is underlain by low permeability clays and as such infiltration is unlikely to be feasible. Also given the proximity to existing buildings and likely shallow foundation solution of the proposed building it will not be possible to locate soakaways a suitable distance away.

Surface Waterbody

There are no waterbodies within close proximity of the site.

Surface Water Sewer or Highway Drain

The asset records have been reviewed and no surface water sewers are present within sites surroundings.

Combined Sewer

As the above options have been exhausted it is proposed that surface water discharges into the combined sewer network. This rate is to be restricted to a minimum rate that does not present a blockage risk within the flow control.

4. SURFACE WATER DISCHARGE RATE ASSESSMENT

4.1 Pre-Development Surface Water Run-Off Rates

The development is considered 100% impermeable. Refer to topographical survey in Appendix A and Existing Impermeable Areas drawing RDB-REN-XX-XX-DR-C-01010 in Appendix E.

4.1.1 Existing Greenfield Run-Off Rates

The greenfield run-off for the total site area has been calculated using InfoDrainage ICP SUDS method (Appendix F). The rates presented below are what would be typical of a site with an equivalent surface area which remains undeveloped / covered in grass or vegetation. Q_{bar} has a return period of 2.3 years.

The equivalent greenfield run-off rate is tabled below: -

RETURN PERIOD	$Q_{GREENFIELD}$ (l/s)
1 in 1 year	0.3
1 in 2 year	0.3
1 in 30 year	0.6
1 in 100 year	0.7
Q_{bar}	0.3

Table 4.1 – Greenfield Run-off Rates

4.2 Proposed Surface Water Discharge Rates

The non-Statutory Technical Standards for Sustainable Drainage Systems (2025) state, where the volume of runoff discharged from the development to surface waters or sewers for the 1% AEP, 6-hour rainfall event is greater than the volume of greenfield runoff for the same rainfall event, the peak allowable discharge rate from the development for the 1% AEP event shall be limited to the 50% AEP greenfield runoff rate, which can be considered equivalent to the calculated Q_{BAR} (mean annual flood) or Q_{MED} (median annual flood) for the site, or 3l/s/ha, whichever is the greater.

Policy JP-S 5 from the Places for Everyone Joint Development Plan expects developments to manage surface water runoff through sustainable drainage systems and as close to source as possible (unless demonstrably inappropriate) so as to not exceed greenfield run-off rates or alternative rates specified in district local plans, such as those identified for areas with critical drainage issues.

As set out within the Strategic Flood Risk Assessment (SFRA) developments which have been previously developed (brownfield), should aim for a minimum reduction in surface water runoff rates of 50%, with an aim of reducing runoff to Greenfield rates up to a 1 in 100 year storm event, considering climate change. Whereas for Greenfield sites there is to be no net increase in the rate of surface water discharge.

It is not considered feasible to restrict the flow rate to Q_{BAR} due to the associated blockage risk it would pose. It is therefore proposed that the total runoff from the site is limited to 5.0 l/s to minimise the risk of blockage and overland flooding.

It is also not considered feasible to reduce the discharge volume to greenfield volume or provide long term storage for the additional runoff volume over the Greenfield volume. This is due infiltration being unviable and the limited space available over the site to provide long term storage.

5. ATTENUATION AND SUDS ASSESSMENT

5.1 Attenuation requirements

The proposed development results in circa 0.042 ha of building footprint, external hard landscaping and car parking. Refer to Appendix H for the proposed impermeable areas.

Due to the nature of the development urban creep has not been considered as it is unlikely that the percentage of impermeable area will increase during the lifetime of the development.

The post development discharge rates will include for an increase in the rainfall intensity of 40% and 45% for the 3.3% and 1% annual exceedance probability (AEP) respectively, to allow for climate change as is consistent with a design life of the development of 100 years, as outlined by the National Planning Practice Framework (NPPF).

Quick storage estimates for the above return periods, using InfoDrainage, indicate that the approximate attenuation volumes shown in table 5.1 are required to limit the peak surface water discharge to 5 l/s. The InfoDrainage calculations can be seen in Appendix J.

RETURN PERIOD	DEVELOPMENT AREA (ha)	SURFACE WATER ATTENUATION ESTIMATE (m ³)
1:30 Year 40%CC	0.042	6-13
1:100 Year +45%CC	0.042	11-19

Table 5.1 – Attenuation Volumes

5.2 Sustainable Urban Drainage

Table 5.2 below provides a summary of typical SUDs techniques outlined within CIRIA guide 753 SUDs manual. Based on a review of the suitability of the SUDs techniques it is proposed that the Red Door development may incorporate the following:

SUDS TECHNIQUE	DESCRIPTION	SUITABILITY FOR DEVELOPMENT SITE	
Rainwater Harvesting	Collection of rainwater run-off for use	Provided in the form of SuDSpods	✓
Soft Landscaping	Grassed areas that allow direct infiltration of rainwater	Soft landscaping will be utilised to limit the impermeable area	✓
Filter Drains	Granular filled Linear drains / soakaway with either granular fill and perforated pipe, or dense vegetation that treat runoff from adjacent impermeable areas	Not suitable due to known ground conditions	✗
Swales	Shallow landscape channel that can infiltrate or convey runoff.	Not suitable due to small site area	✗
Infiltration Basins	Depressions in the ground designed to store and infiltration runoff to the ground. Can be landscaped to provide amenity value.	Not suitable due to known ground conditions and limited space	✗
Wet Ponds	Basins with permanent pool of water providing water quality treatment, wildlife, and amenity benefit. Designed to provide temporary storage for additional runoff.	Not suitable due to known ground conditions and limited space	✗
Extended Detention Basins	Dry basins that are designed to temporarily store runoff providing water quality treatment.	Not suitable due to known ground conditions and limited space	✗

Constructed Wetland	Ponds and shallow wetland areas with vegetation to improve pollution removal and enhance wildlife habitat.	Not suitable due to known ground conditions and limited space	✖
Porous Paving	Granular build-up beneath permeable paving systems that can be used to either store runoff (lined system) and increase time of concentration or allow percolation into the ground.	Not suitable due to known ground conditions and limited space	✖
Trees Pits	Managed permeable paving systems around tree pits that can be used to either store runoff (lined system) and increase time of concentration or allow percolation into the ground.	Not suitable due to known ground conditions and limited space	✖
Soakaways	Infiltration device to temporarily store runoff and allow it to percolate into the ground.	Not suitable due to known ground conditions	✖
Green Roof	Vegetated roof area that reduces runoff and increases time of concentration.	Not suitable due to sloped roofs and construction details	✖
Blue Roof	Roof area designed to store and reduce peak runoff rates during intense storms.	Not suitable due to sloped roofs and construction details	✖
Underground Storage	Attenuation structures installed below ground to provide runoff storage.	Suitable beneath external areas	✓

✖ Not suitable

? Potentially suitable subject to further investigation

✓ Suitable

Table 5.2 – SUDs Techniques & Suitability for Development Site

5.3 Water Quality Assessment

Water quality is generally affected by frequent rainfall events, 1 in 1-year events or less. To assess the water quality, consideration will be given to the guidance within CIRIA Guide C753 The SuDS Manual. The pollution hazard levels for different land uses are presented in the table below.

Land Use	Pollution Hazard Level	Total Suspended Solids	Metals	Hydro-carbons
Residential Roofs	Very Low	0.2	0.2	0.05
Other roofs (typically commercial/ industrial roofs)	Low	0.3	0.2 (up to 0.8 where there is potential for metals to leach from the roof)	0.05
Individual property driveways, residential car parks, low traffic roads (eg cul de sacs, homezones and general access roads) and non-residential car parking within infrequent change (eg schools, offices) ie <300 traffic movements/day	Low	0.5	0.4	0.4
Commercial yard and delivery areas, non-residential car parking with frequent change (eg hospitals, retail), all roads	Medium	0.7	0.6	0.7

except low traffic roads and trunk roads/motorways				
Site with heavy pollution (eg haulage yards, lorry parks, highly frequented lorry approaches to industrial estates, waste sites), site where chemical and other fuels (other than domestic fuel oil) are to be delivered, handled, stored, used or manufactured, industrial sites; trunk roads and motorways	High	0.8	0.8	0.9

Table 5.3 – Pollution Hazard Levels

Given the pollution hazard level for the site is low and that the surface water runoff from the development is to discharge into the surrounding combined sewer network, no treatment is required, however, the use of silt traps and SuDS will provide inherent treatment.

5.4 SuDS Management Plan

In order to ensure the ongoing functioning of the below ground drainage networks a suitable maintenance strategy is to be adopted to ensure the drainage network is cleaned regularly and the routine maintenance and cleansing regime should be documented.

The SuDS and below ground drainage network are to be maintained by the building owners or a maintenance company employed on their behalf. They will be required to maintain the SuDS in line with the recommendations set out within the 'The SuDS Manual C753' and the suppliers' requirements.

The following tables are extracted from The SuDS Manual and provide an indication of the operation and maintenance requirements for the SuDS that are proposed. These requirements should be reviewed as part of the detailed design.

The Main Contractor delivering the development is to update the general requirements to reflect the product specific requirements of the as installed proprietary SuDS and incorporate these into the Operation & Maintenance manual for the building. A Verification Report, including photographic evidence, to demonstrate that the drainage has been constructed as per the design drawings should be produced by the Main Contractor. As-built drawings should be supplied by the Main Contractor where the construction of the drainage varies from the design drawings.

Maintenance Schedule	Required Action	Typical Frequency
Regular Maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action	Monthly for 3 months, then annually
	Remove debris from the catchment surface (where it may cause risks to performance)	Monthly
	For systems where rainfall infiltrates into the tank from above, check surface of filter for blockage by sediment, algae or other matter; remove and replace surface infiltration medium as necessary	Annually
	Remove sediment from pre-treatment structures and/ or internal forebays	Annually, or as required
Remedial Actions	Repair/ rehabilitate inlets, outlets, overflows and vents	As required
Monitoring	Inspect/ check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed	Annually
	Survey inside of tanks for sediment build-up and remove if necessary	Every 5 years or as required

Table 5.4 - Operation and Maintenance requirements for Attenuation Storage Tanks (Table 21.3 'The SuDS Manual C753)

6. OUTLINE DRAINAGE STRATEGY

Refer to Appendix K for the Below Ground Drainage General Arrangement drawing.

6.1 Surface Water System

The development will have a dedicated surface water network that is to collect the rainwater from the proposed building roof, and impermeable external areas. The system will then discharge under gravity to the 300-diameter combined public sewer within Bold Street via an existing manhole.

The new surface water drainage connection will be subject to a Section 106 application with United Utilities.

The surface water discharge from the site is to be limited to the rate detailed within Section 3.2 of this report using a flow control device within the final manhole on site prior to discharge into the public sewer. Proposed discharge rates are to be confirmed by Lead Local Flood Authority. United Utilities have provided agreement in principle via a pre-development enquiry.

Attenuation will be provided by a below ground geocellular attenuation tank.

The surface water discharging from the site will be from the building roof, and external hard landscaping into combined public sewer via an existing manhole.

The surface water drainage network is to be designed in accordance with Building Regulation Part H, BS EN 752 and Code for Adoption. In addition, the following requirements will also be adopted in accordance with the Non-Statutory Technical Standards for Sustainable Drainage: Practice Guidance and Salford City Council SuDS requirements for new developments:

- The below ground drainage system will be designed to ensure flooding does not occur on site for the 1 in 30 year and no internal flooding for the 1 in 100-year rainfall events
- The surface water system is to be designed to accommodate the 1, 2, 30 and 100 year return events with 40% and 45% climate change allowances for the 30 and 100 year events respectively. The system will be designed for a maximum storm duration of 6 hours.

InfoDrainage calculations for the proposed surface water system are available in Appendix L.

The North-West SuDS Proforma has been completed to support this application, refer to Appendix M.

6.2 Foul Water System

The site will have a dedicated foul water network that will collect the foul water associated with the development that will discharge to the 300-diameter public combined sewer within Bold Street via an existing manhole.

The new foul water drainage connection will be subject to section 106 application with United Utilities.

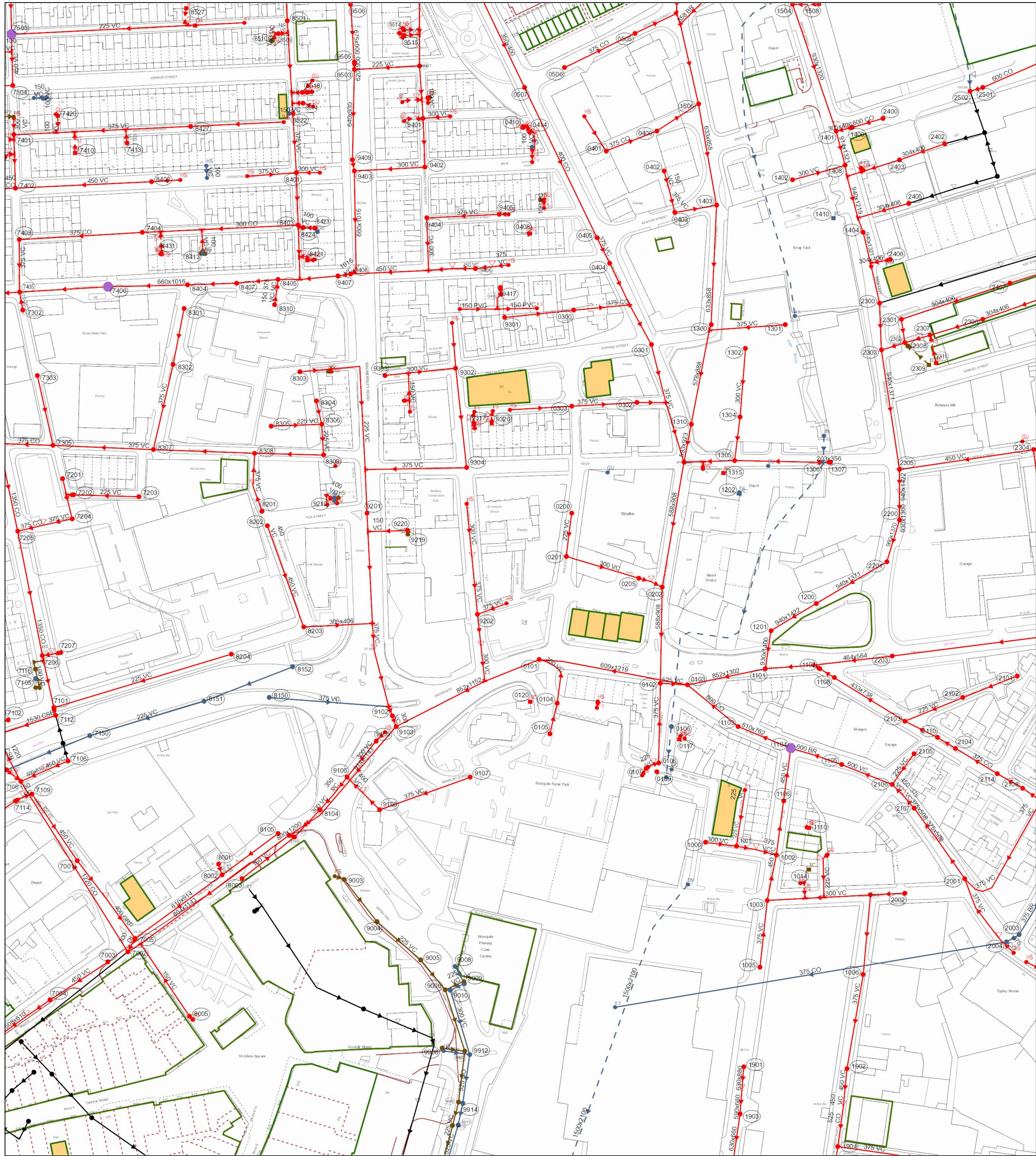
The drainage system is to be designed in accordance with Building Regulations Part H, BS EN 752 and Codes for Adoption.

APPENDIX A

EXISTING TOPOGRAPHICAL SURVEY

APPENDIX B

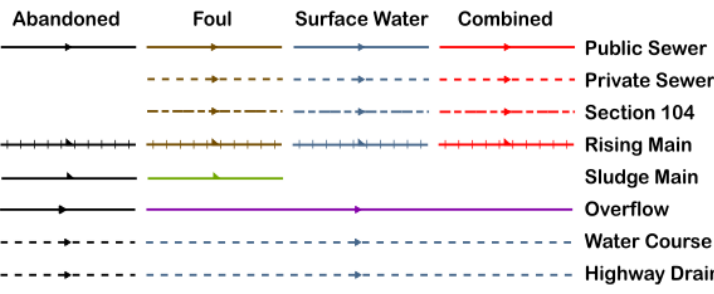
UNITED UTILITIES SEWER RECORDS



The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available. United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown.

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LEGEND



All point assets follow the standard colour convention:
red - combined
brown - foul
blue - surface water
purple - overflow

- Manhole
- Head of System
- Extent of Survey
- Rodding Eye
- Inlet
- Discharge Point
- Vortex
- Penstock
- Washout Chamber
- Valve
- Air Valve
- Non Return Valve
- Soakaway
- Gully
- Cascade
- Flow Meter
- Hatch Box
- Oil Interceptor
- Summit
- Drop Shaft
- Orifice Plate
- Side Entry Manhole
- Outfall
- Screen Chamber
- Inspection Chamber
- Bifurcation Chamber
- Lamp Hole
- T Junction / Saddle
- Catchpit
- Valve Chamber
- Vent Column
- Vortex Chamber
- Penstock Chamber
- Non Return Valve
- Network Storage Tank
- Sewer Overflow
- Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- Control Kiosk
- DNM Network Monitoring Point
- Change of Characteristic

MANHOLE FUNCTION

- FO Foul
- SW Surface Water
- CO Combined
- OV Overflow

SEWER SHAPE

- CI Circular
- TR Trapezoidal
- EG Egg
- AR Arch
- OV Oval
- BA Barrel
- FT Flat Top
- HO Horse Shoe
- RE Rectangular
- UN Unspecified
- SQ Square

SEWER MATERIAL

- AC Asbestos Cement
- BR Brick
- PE Polyethylene
- RP Reinforced Plastic Matrix
- CO Concrete
- CSB Concrete Segment Bolted
- CSU Concrete Segment Unbolted
- CC Concrete Box Culverted
- PSC Plastic / Steel Composite
- GRC Glass Reinforced Plastic
- DI Ductile Iron
- PVC Polyvinyl Chloride
- CI Cast Iron
- SI Spun Iron
- ST Steel
- VC Vitreified Clay
- PP Polypropylene
- PF Pitch Fibre
- MAC Masonry, Coursed
- MAR Masonry, Random
- U Unspecified

Address or Site Reference:

HISLOP GEDDES LTD 1-7 PETER STREET,
BURY,
BL9 6AB

Scale: 1:1250

Date: 07/06/2024

Sheet: 1 of 1

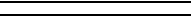
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SEWER
RECORDS

United
Utilities
Water for the North West

APPENDIX C

UTILITY SURVEY



NOTES:

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AV	AKKALVE	PIPE	PIPE
BENCH	BENCH	POST	POST

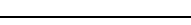
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AND EML (ELECTRIC MAGNETIC LOCATOR).

- DISCLAIMER:

date techniques and top of the range electromagnetic and radar technologies to locate and track its radiation abilities. Moreover, the

TYPICAL FEATURE DEPTH ANNOTATION		
ELECTROMAGNETIC DETECTION ID#	ORANGE AREA OBSERVATION	PERMANENTLY REMOVING BARR



PROJECT TITLE	Utility Survey of Land at:
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Drawing Ref.	Surveyed	Drawn	Checked
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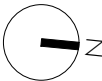
APPENDIX D

PROPOSED DEVELOPMANT PLANS



REVISION	DATE	DESCRIPTION
P01	04/11/2025	PLANNING PRE-APPLICATION ISSUE
P02	17/11/2025	PLANNING ISSUE

LEVEL 00 **GROUND FLOOR**

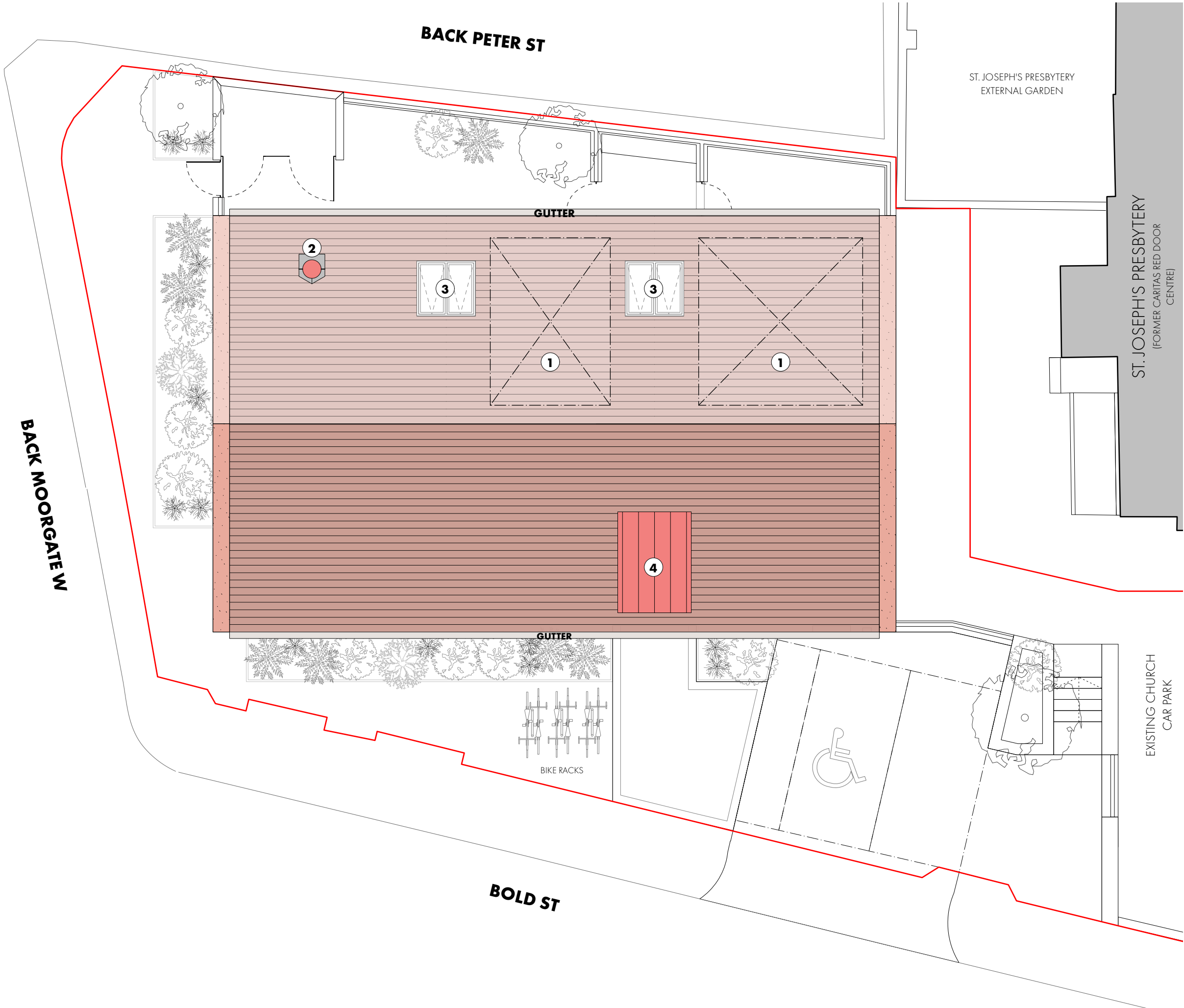


- KEY**
- 1 ENTRANCE LOBBY
 - 2 CAFE
 - 3 MEETING ROOM
 - 4 OFFICE
 - 5 ACTIVITY ROOM
 - 6 ACCESSIBLE WC
 - 7 ACCESSIBLE SHOWER & WC
 - 8 KITCHEN
 - 9 LAUNDRY / SLUICE
 - 10 STORE
 - 11 PLANT
 - 12 SMOKING AREA
 - 13 ACCESSIBLE PARKING SPACE
 - 14 PARKING SPACE

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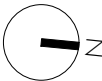
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PROJECT	CARITAS, RED DOOR BURY					
DRAWING	PROPOSED LEVEL 00 PLAN					
DATE	NOV' 2025	DRAWN BY	CAW	SCALE	1:100	@A3
JOB NO.	1454	DWG.NO.	L1000			



REVISION	DATE	DESCRIPTION
P01	04/11/2025	PLANNING PRE-APPLICATION ISSUE
P02	17/11/2025	PLANNING ISSUE

ROOF PLAN



- KEY**
- 1 PV ARRAY
 - 2 KITCHEN EXTRACT
 - 3 ROOFLIGHT
 - 4 ZINC STANDING SEAM DORMER

OMI Architects

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+44(0)161 832 3242 / info@omiarchitects.com / www.omiarchitects.com

PROJECT	CARITAS, RED DOOR BURY					
DRAWING	PROPOSED ROOF PLAN					
DATE	NOV' 2025	DRAWN BY	CAW	SCALE	1:100	@A3
JOB NO.	1454	DWG.NO.	L1001			

APPENDIX E

EXISTING IMPERMEABLE AREAS

1. THIS DRAWING IS INTENDED TO INDICATE THE EXISTING DRAINED AREAS FROM THE RED DOOR DEVELOPMENT. IT IS BASED UPON A REVIEW OF THE TOPOGRAPHICAL SURVEY AND AERIAL IMAGES OF THE SITE.
2. FOR TOPOGRAPHICAL SURVEY REFER TO LAYER SURVEYS LTD DRAWING LS2527 DATED MARCH 2024.

The diagram shows a rectangular site boundary. The top boundary is a solid red line. The bottom boundary is a dashed red line. The left and right boundaries are solid black lines. The interior of the site is divided into three areas:

- SITE BOUNDARY**
TOTAL AREA: 464.05m² (0.046 ha)
- SOFT LANDSCAPED AREAS**
AREA: 0m² (0 ha)
- HARD PAVED AREAS**
AREA: 464.05 m² (0.046 ha)

P01	ISSUED FOR STAGE 2	10.06.24	SA	JB
Rev:	Description:	Date:	By:	Chkd:
		Renaissance Associates Ltd Carvers Warehouse 77 Dale Street Manchester M1 2HG		
Project:				
RED DOOR, BURY				
Drawing Title:				
EXISTING DRAINED AREAS PLAN				
Status:				
STAGE 2				
Size:	Date:	Drawn by:	Designed by:	Checked by:
A1	JUN 24	SA	SA	JB
Scale:	Project No:			
1:100	2405-03			
Project - Originator - Volume - Level - Type - Role - Number:				Revision:
RDB-REN-XX-XX-DR-C-01010				P01

APPENDIX F

INFODRAINAGE GREENFIELD RUN-OFF RATES

Project: Red Door, Bury Greenfield Run-Off	Date: 16/12/2025			
	Designed by: JB	Checked by: PC	Approved By: PC	
	Report Title: UK and Ireland Rural Runoff Calculator			

ICP SUDS / IH 124

Details

Method	ICP SUDS
Area (ha)	0.046
SAAR (mm)	1113.0
Soil	0.45
Region	Region 10
Urban	0
Return Period (years)	2

Results

Region	QBAR Rural (L/s)	QBAR Urban (L/s)	Q 2 (years) (L/s)	Q 1 (years) (L/s)	Q 30 (years) (L/s)	Q 100 (years) (L/s)
Region 10	0.3	0.3	0.3	0.3	0.6	0.7

APPENDIX G

UNITED UTILITIES PRE-DEVELOPMENT ENQUIRY

From: seweradoptions@uuplc.co.uk
Sent: 31 May 2024 14:41
To: JoeBullough
Cc: Helen Gribbon; Selvana Ahmad; Andrew Isherwood
Subject: Pre Development Enquiry for: Back Moorgate West, Fernhill, Bury, BL9 6AB UU
Reference Number : 05809931

Good afternoon Joe,

Pre Development Enquiry for: Back Moorgate West, Fernhill, Bury, BL9 6AB UU Reference Number : 05809931

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 Bold Street located to the East 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

Thank you for discounting infiltration on this scheme.

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 Bold Street located East 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 public sewerage network under any circumstances

Existing Wastewater Assets Crossing the Site

We have reviewed our records and can confirm that there does not appear to be any charted public sewers located within the boundary of proposed development. However, due to the accuracy of the records and the public sewer transfer legislation in 2011, not all public sewers are shown on our records so we would ask that you proceed with caution and carry out your own site investigation works. If any uncharted sewers are identified while carrying out your works we would ask that you contact United Utilities at the earliest opportunity so that we can offer guidance and update our records

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.

Kind Regards



Lewis Barr

Assistant Developer Engineer
Developer Services & Metering
Customer Services
07827286541
unitedutilities.com

If you have received a great service today why not tell us?

Visit: <http://unitedutilities.thewowawards.co.uk/nominate>

----- Original Message -----

From: seweradoptions@uuplc.co.uk [seweradoptions@uuplc.co.uk]

Sent: 31/05/2024 14:19

To: joebullough@renaissance-ltd.com

Cc: helengribbon@renaissance-ltd.com; selvanaahmad@renaissance-ltd.com;
andrewisherwood@renaissance-ltd.com

Subject: RE: Red Door, Bury - Pre Development Enquiry

Good Afternoon Joe,

Please accept this email as receipt of your application received on 31/05/2024 for the above development. This has now been logged on our system and the job reference is 05809931 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 Lana Jaundrell for technical assessment. You will receive their response within 10 working days.

Kind regards



Suzanne Kearley

Team Leader
Developer Services & Metering
Customer Services
T: 01925 233146
unitedutilities.com

If you feel you have received a good service from myself, please can you take two minutes to fill in the survey below. This will be much appreciated



Visit: <https://unitedutilities.thewowawards.co.uk/nominate>

----- Original Message -----

From: JoeBullough [joebullough@renaissance-ltd.com]

Sent: 31/05/2024 13:41

To: seweradoptions@uuplc.co.uk

Cc: helengribbon@renaissance-ltd.com; selvanaahmad@renaissance-ltd.com;
andrewisherwood@renaissance-ltd.com

Subject: Red Door, Bury - Pre Development Enquiry

Good Afternoon,

Please find attached a pre-development enquiry for a development known as Red Door located in Bury. Supporting information is attached at the following link: [\[Image is no longer available\] 240531 Red Door, Bury Pre-Dev Enquiry](#)

The proposed development is for a commercial/ charitable end use comprising a single storey structure including meeting and activity rooms and an associated garden.

At this stage we have completed a high level review of the drainage hierarchy and note the following:

1. Infiltration – The Phase 1 desktop study has identified the site is underlain by low permeability clays and as such infiltration is unlikely to be feasible. Also given the proximity to existing buildings and likely shallow foundation solution of the proposed building it will not be possible to locate a soakaway a suitable distance away.
2. Discharge into a water body – There are no waterbodies within close proximity of the site
3. Discharge into a surface water sewer and or highway drain - The asset records have been reviewed and no surface water sewers are present within the site's surroundings.
4. Discharge into a combined sewer – As the above options have been exhausted it is proposed that surface water discharges into the combined sewer network. This rate is to be restricted to a minimum rate that does not present a blockage risk within the flow control.

Should you require any further information to enable you to complete your assessment please do not hesitate to get in touch.

Kind Regards,

Joe Bullough | Engineer

MEng

Carvers Warehouse, 77 Dale Street

Manchester, M1 2HG

e: joebullough@renaissance-ltd.com

t: 0161 393 6509

dd: 0161 552 1912

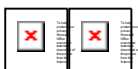
w: www.renaissance-ltd.com

[Image is no longer available] [Image is no longer available]

[Image is no longer available]

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Renaissance Associates Ltd trading as Renaissance, a company incorporated in England and Wales under Company Number: 08149019, Registered Office: Carvers Warehouse, 77 Dale Street, Manchester, M1 2HG, UK



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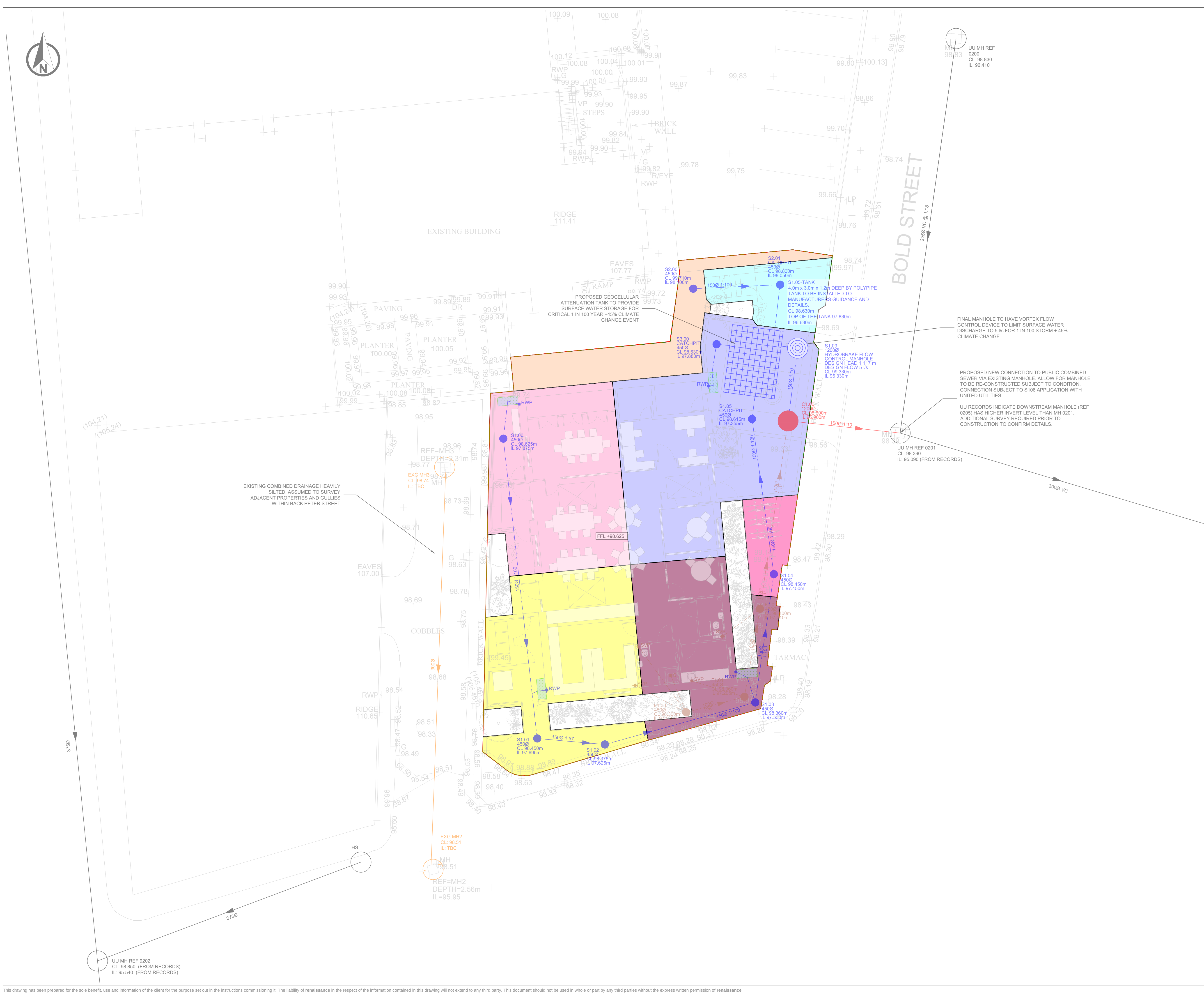
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APPENDIX H

PROPOSED IMPERMEABLE AREAS



1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH:
-EXISTING IMPERMEABLE AREA PLAN
-PROPOSED BELOW GROUND DRAINAGE DRAWING
-INFODRAINAGE MODEL AND CALCULATION OUTPUTS

PROPOSED IMPERMEABLE SUMMARY		
MANHOLE	HATCH	AREA (ha)
S1.00		0.008
S1.01		0.009
S1.03		0.006
S1.04		0.001
S2.00		0.004
S2.01		0.002
S3.00		0.012
	TOTAL	0.042

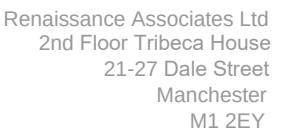
FINAL MANHOLE TO HAVE VORTEX FLOW CONTROL DEVICE TO LIMIT SURFACE WATER DISCHARGE TO 5 l/s FOR 1 IN 100 STORM + 45% CLIMATE CHANGE.

PROPOSED NEW CONNECTION TO PUBLIC COMBINED
SEWER VIA EXISTING MANHOLE. ALLOW FOR MANHOLE
TO BE RE-CONSTRUCTED SUBJECT TO CONDITION.
CONNECTION SUBJECT TO S106 APPLICATION WITH
UNITED UTILITIES.

UU RECORDS INDICATE DOWNSTREAM MANHOLE (REF 0205) HAS HIGHER INVERT LEVEL THAN MH 0201. ADDITIONAL SURVEY REQUIRED PRIOR TO CONSTRUCTION TO CONFIRM DETAILS.

UU MH REF 0201
CL: 98.390
IL: 95.090 (FROM RECORDS)

P02	UPDATED TO LATEST ARCHITECTURAL SCHEME	16.12.25	LH	PC
P01	ISSUED FOR STAGE 2	10.06.24	SA	JB
Rev:	Description:	Date:	By:	Chkd:



Project:

RED DOOR,
BURY

Drawing Title:

PROPOSED DRAINED AREAS
PLAN

Status:

STAGE 2

Size: A1	Date: JUN 24	Drawn by: SA	Designed by: SA	Checked by: JB
--------------------	------------------------	------------------------	---------------------------	--------------------------

Scale:	1:100	Project No:	2405-03
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RDB-REN-XX-FN-DR-C-01030 | P02

APPENDIX J

INFO DRAINAGE QUICK STORAGE ESTIMATE

Quick Storage Estimate

Input

Input Type

User Input

Area (ha)

0.042

Volumetric Runoff Coefficient

1.000

Discharge Rate (L/s)

5.0

Infiltration Rate (m/hr)

0.0

Safety Factor

2.0

Quick

Calculate

Create New

From Library

All

FEH

Method

FEH

Number of Storms

24

Max. Run Time (mins)

2880

Input

Results

2D Graph

OK

Cancel

Create New

Help

Quick Storage Estimate

Results

Quick Storage Estimate variables require approximate storage of between 6m³ - 13m³.

These values are estimates only and should not be used for final design purposes.

Input

Results

2D Graph

OK

Cancel

Create New

Help

Quick Storage Estimate

Input

Input Type

User Input

Area (ha)

0.042

Volumetric Runoff Coefficient

1.000

Discharge Rate (L/s)

5.0

Infiltration Rate (m/hr)

0.0

Safety Factor

2.0

Quick

Calculate

Create New

From Library

All

FEH

Method

FEH

Number of Storms

24

Max. Run Time (mins)

2880

Input

Results

2D Graph

OK

Cancel

Help

Quick Storage Estimate

Results

Quick Storage Estimate variables require approximate storage of between 11m³ - 19m³.

These values are estimates only and should not be used for final design purposes.

Input

Results

2D Graph

OK

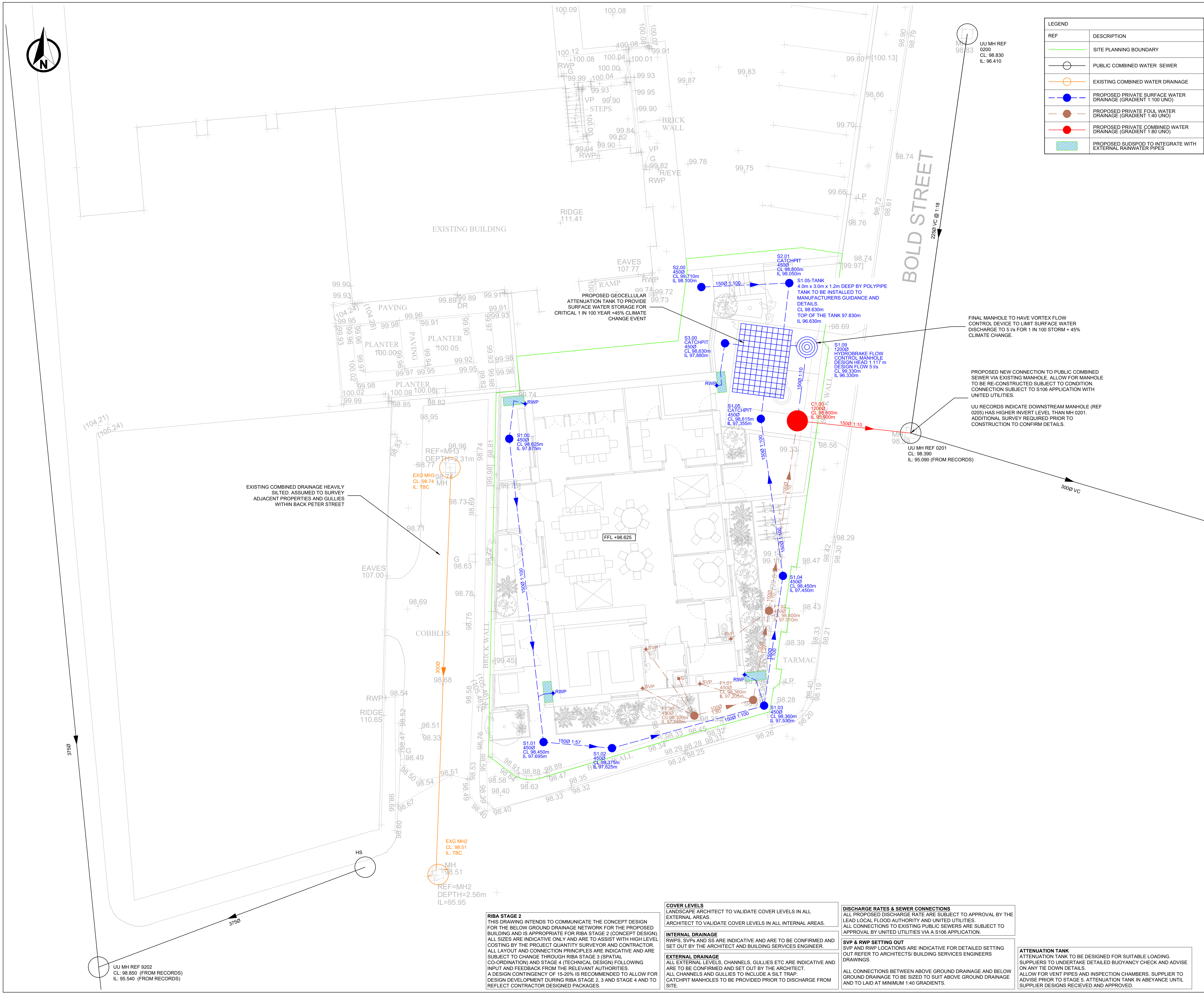
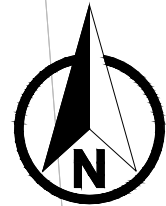
Cancel

Help

Create New

APPENDIX K

BELOW GROUND DRAINAGE GA



LEGEND	
REF	DESCRIPTION
	SITE PLANNING BOUNDARY
	PUBLIC COMBINED WATER SEWER
	EXISTING COMBINED WATER DRAINAGE
	PROPOSED PRIVATE SURFACE WATER DRAINAGE (GRADIENT 1:100 UNO)
	PROPOSED PRIVATE FOUL WATER DRAINAGE (GRADIENT 1:40 UNO)
	PROPOSED PRIVATE COMBINED WATER DRAINAGE (GRADIENT 1:80 UNO)
	PROPOSED SUDSPOD TO INTEGRATE WITH EXTERNAL RAINWATER PIPES

- NOTES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RENAISSANCE, ARCHITECTS, LANDSCAPE ARCHITECTS AND BUILDING SERVICES ENGINEERS DRAWINGS.
 - THE FINAL CONNECTION TO THE PUBLIC SEWER IS SUBJECT TO UNITED UTILITIES APPROVAL AND IS TO BE IN ACCORDANCE WITH THEIR AGREED DETAILS.
 - FOR ALL ABOVE GROUND DRAINAGE AND ASSOCIATED PUMPS REFER TO BUILDING SERVICES AND ARCHITECTS DRAWINGS.
 - ALL BELOW GROUND DRAINAGE WORKS TO BE IN ACCORDANCE WITH RELEVANT BUILDING REGULATIONS AND SEWER SECTOR GUIDANCE. APPENDIX C- DESIGN AND CONSTRUCTION GUIDANCE. IF DISCREPANCIES ARE NOTED BETWEEN SSG AND DRAWINGS THESE SHOULD BE BROUGHT TO THE ATTENTION OF RENAISSANCE FOR REVIEW.
 - RWPs, SVPs, SSs AND FLOOR GULLEYS ARE TO HAVE RODDABLE ACCESS POINTS ABOVE GROUND FLOOR TO BUILDING SERVICES DETAILS.
 - THE ATTENUATION TANK AND FLOW CONTROL ARE TO BE TO SUPPLIERS DESIGN AND DETAILS. INSTALLATION IS TO BE IN ACCORDANCE WITH THE SUPPLIERS REQUIREMENTS.
 - SEWERS T BE LAID IN CLASS S BEDDING (150mm DIA GRANULAR BED AND SURROUND), WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN; 1.2m IN HIGHWAYS OR VERGES, OR LESS THAN 0.9m IN PEDESTRIAN AREAS, THEN A 150mm DIA CONCRETE SLAB SHOULD BE PROVIDED ABOVE THE GRANULAR BED AND SURROUND REFER TO DETAILS SHEETS.
 - THE CONTRACTOR IS TO UNDERTAKE A FULL CCTV SURVEY AT COMPLETION OF THE PROJECT TO DEMONSTRATE THAT THE DRAINAGE IS CLEAN. ANY DEFECTS ARE TO BE CORRECTED BY THE CONTRACTOR PRIOR TO HANDOVER OF THE SYSTEM TO THE CLIENT.
 - THE CONTRACTOR IS TO KEEP A RECORD SET OF THE AS INSTALLED DRAINAGE ON SITE AND PROVIDE THIS TO RENAISSANCE UPON COMPLETION OF THE WORKS TO ALLOW FOR PRODUCTION OF A 'FINAL CONSTRUCTION' ISSUE DRAWING.
 - DURING THE WORKS ALTERATIONS TO THE DRAINAGE LAYOUT ARE TO BE MARKED UP BY THE CONTRACTOR AND AGREED WITH RENAISSANCE IN WRITING.
 - THE CHAMBER SIZE OF PCC MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.
 - MANHOLE COVERS ARE TO BE IN ACCORDANCE WITH BS EN 124 FOR THE RATING INDICATED IN THE MANHOLE SCHEDULE. THE CONTRACTOR IS TO SUBMIT DETAILS FOR THE PROPOSED MANHOLE COVERS TO THE ENGINEER AND LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO INSTALLATION.
 - COVER SLABS MUST CARRY THE BSI KITEMARK. WHERE THE CLEAR OPENING OF THE KITEMARKED PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME, A LOAD BEARING REDUCING SLAB SHOULD BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO REQUIRED SIZE.
 - ALL SEWERS TO BE BSI KITEMARK (CERTIFIED TO WIS 4-35-01)
 - ALL CONCRETE PIPES TO BE TO ES EN 1916 CLASS 120 (54kN/m).
 - BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENTS OF THE WATER INDUSTRY SPECIFICATION 4-08092 (TABLE A2).
 - IF PLASTIC PIPES ARE TO BE USED THEN THE FOLLOWING MUST APPLY:
A. BSI KITEMARK (CERTIFIED TO BS EN 13476-1 AND WIS 4-35-01)
B. PIPES LESS THAN OR EQUAL TO 500mm DIA
C. BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENTS OF THE WATER INDUSTRY SPECIFICATION 4-08092 (TABLE A2)
 - THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100mm DIA. 40kN/m, 150mm DIA DIA. 40kN/m, 225mm DIA. 45kN/m AND 300mm DIA. 72kN/m.
 - THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE - (CLASS 120 TO EN 1916/BS5911-1 2002). PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN13476.
 - SULPHATE RESISTANT CEMENT (C20-DC3) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY PRECAST REPORT PROVIDING THAT SUCH PRECAUTIONS ARE NOT NECESSARY.
 - SEWER PIPES TO BE LAID IN MAXIMUM 3 METER LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER PIPES, AND THIS IS AGREED BY THE CONTRACTOR WITH THE PIPE MANUFACTURER.
 - ALL FOUL AND SURFACE WATER BELOW GROUND SYSTEMS ARE TO BE VENTED WITHIN THE ABOVE GROUND DRAINAGE TO THE BUILDING SERVICES ENGINEERS DETAILS.
 - ALLOW FOR ALL THE EXISTING DRAINAGE ON SITE TO BE GRUBBED UP AND BACKFILLED. ANY CONNECTIONS FROM THE SITE TO THE PUBLIC SEWER TO THE SITE ARE TO BE CAPPED AND GROUTED.

P02	UPDATED TO LATEST ARCHITECTURAL SCHEME	16.12.25	LH	PC
P01	ISSUED FOR STAGE 2	10.06.24	SA	JB
Rev:	Description:	Date:	By:	Chkd:

Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

RED DOOR,
BURY

Drawing Title:
**BELOW GROUND DRAINAGE
GA PLAN**

Status:
STAGE 2

Size:	Date:	Drawn by:	Designed by:	Checked by:
A1	JUN 24	SA	SA	JB

Scale:	1:100	Project No:	2405-03
Project - Originator - Volume - Level - Type - Role - Number: Revision:			

RDB-REN-XX-FN-DR-C-01100 P02

RIBA STAGE 2
THIS DRAWING INTENDS TO COMMUNICATE THE CONCEPT DESIGN FOR THE BELOW GROUND DRAINAGE NETWORK FOR THE PROPOSED BUILDING AND IS APPROPRIATE FOR RIBA STAGE 2 (CONCEPT DESIGN). ALL SIZES ARE INDICATIVE ONLY AND ARE TO ASSIST WITH HIGH LEVEL COSTING BY THE PROJECT QUANTITY SURVEYOR AND CONTRACTOR. ALL LAYOUT AND CONNECTION PRINCIPLES ARE INDICATIVE AND ARE SUBJECT TO CHANGE THROUGH RIBA STAGE 3 (SPATIAL CO-ORDINATION) AND STAGE 4 (TECHNICAL DESIGN) FOLLOWING INPUT AND FEEDBACK FROM THE RELEVANT AUTHORITIES. A DESIGN CONTINGENCY OF 15-20% IS RECOMMENDED TO ALLOW FOR DESIGN DEVELOPMENT DURING RIBA STAGE 2, 3 AND STAGE 4 AND TO REFLECT CONTRACTOR DESIGNED PACKAGES.

COVER LEVELS
LANDSCAPE ARCHITECT TO VALIDATE COVER LEVELS IN ALL EXTERNAL AREAS.
ARCHITECT TO VALIDATE COVER LEVELS IN ALL INTERNAL AREAS.

INTERNAL DRAINAGE
RWPs, SVPs AND SSs ARE INDICATIVE AND ARE TO BE CONFIRMED AND SET OUT BY THE ARCHITECT AND BUILDING SERVICES ENGINEER.

EXTERNAL DRAINAGE
ALL EXTERNAL LEVELS, CHANNELS, GULLIES ETC ARE INDICATIVE AND ARE TO BE CONFIRMED AND SET OUT BY THE ARCHITECT. ALL CHANNELS AND GULLIES TO INCLUDE A SILT TRAP. CATCHPIT MANHOLES TO BE PROVIDED PRIOR TO DISCHARGE FROM SITE.

DISCHARGE RATES & SEWER CONNECTIONS
ALL PROPOSED DISCHARGE RATE ARE SUBJECT TO APPROVAL BY THE LEAD LOCAL FLOOD AUTHORITY AND UNITED UTILITIES. ALL CONNECTIONS TO EXISTING PUBLIC SEWERS ARE SUBJECT TO APPROVAL BY UNITED UTILITIES VIA A S106 APPLICATION.

SVP & RWP SETTING OUT
SVP AND RWP LOCATIONS ARE INDICATIVE FOR DETAILED SETTING OUT REFER TO ARCHITECTS/ BUILDING SERVICES ENGINEERS DRAWINGS.

ALL CONNECTIONS BETWEEN ABOVE GROUND DRAINAGE AND BELOW GROUND DRAINAGE TO BE SIZED TO SUIT ABOVE GROUND DRAINAGE AND TO LAID AT MINIMUM 1:40 GRADIENTS.

ATTENUATION TANK
ATTENUATION TANK TO BE DESIGNED FOR SUITABLE LOADING. SUPPLIERS TO UNDERTAKE DETAILED BUOYANCY CHECK AND ADVISE ON ANY TIE DOWN DETAILS. ALLOW FOR VENT PIPES AND INSPECTION CHAMBERS. SUPPLIER TO ADVISE PRIOR TO STAGE 5. ATTENUATION TANK IN ABEYANCE UNTIL SUPPLIER DESIGNS REVIEWED AND APPROVED.

APPENDIX L
PROPOSED SURFACE WATER INFODRAINAGE CALCULATIONS

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations		Date: 10/12/2025			
		Designed by: JB	Checked by: PC		Approved By: PC
Report Details: Type: Inflow Summary Storm Phase: Phase		Company Address:			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	Cellular Storage		Time of Concentration	0.042	100	0	100	0.042
TOTAL		0.0		0.042				0.042

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations	Date: 10/12/2025			
	Designed by: JB	Checked by: PC	Approved By: PC	
Report Details: Type: Outfall Details Storm Phase: Phase	Company Address:			

Outfalls

Outfall	Outfall Type	Gated	Fixed Surcharged Level (m)	Level Curve
Cellular Storage	Free Discharge			

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations	Date: 10/12/2025		
	Designed by: JB	Checked by: PC	Approved By: PC
Report Title: Rainfall Analysis Criteria	Company Address:		



Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall		
FEH		Type: FEH
Site Location	GB 381012 411251 SD 81012 11251	
Rainfall Version	2022	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	40.000
100.0	45.000

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations		Date: 10/12/2025			
		Designed by: JB	Checked by: PC		Approved By: PC
Report Details: Type: Inflows Summary Storm Phase: Phase		Company Address:			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Catchment Area	FEH: 2 years: +0 %: 15 mins: Summer	0.04	7.6	3.415

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations		Date: 10/12/2025			
		Designed by: JB	Checked by: PC		Approved By: PC
Report Details: Type: Inflows Summary Storm Phase: Phase		Company Address:			



FEH: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Catchment Area	FEH: 30 years: +40 %: 15 mins: Summer	0.04	23.1	10.422

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations		Date: 10/12/2025			
		Designed by: JB	Checked by: PC		Approved By: PC
Report Details: Type: Inflows Summary Storm Phase: Phase		Company Address:			



FEH: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Catchment Area	FEH: 100 years: +45 %: 15 mins: Summer	0.04	30.0	13.531

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations		Date: 10/12/2025			
		Designed by: JB	Checked by: PC		Approved By: PC
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address:			



FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Cellular Storage	FEH: 2 years: +0 %: 15 mins: Summer	96.755	96.755	0.125	0.125	7.6	1.426	0.000	0.000	4.2	3.154		90.155

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations	Date: 10/12/2025		
	Designed by: JB	Checked by: PC	Approved By: PC
	Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		
Company Address:			

Status
OK

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations		Date: 10/12/2025			
		Designed by: JB	Checked by: PC		Approved By: PC
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address:			



FEH: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Cellular Storage	FEH: 30 years: +40 %: 60 mins: Summer	97.351	97.351	0.721	0.721	14.8	8.230	0.000	0.000	5.0	18.381	5	43.160

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations	Date: 10/12/2025			
	Designed by: JB	Checked by: PC	Approved By: PC	
	Report Details: Type: Stormwater Controls Summary Storm Phase: Phase			
Company Address:				

Status

OK

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations		Date: 10/12/2025			
		Designed by: JB	Checked by: PC		Approved By: PC
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address:			



**FEH: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By:
Max. Avg. Depth**

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Cellular Storage	FEH: 100 years: +45 %: 60 mins: Summer	97.735	97.735	1.105	1.105	19.6	12.604	0.000	0.000	5.0	24.342	30	12.959

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations	Date: 10/12/2025		
	Designed by: JB	Checked by: PC	Approved By: PC
	Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		
Company Address:			

Status
OK

Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations	Date: 10/12/2025		
	Designed by: JB	Checked by: PC	Approved By: PC
Report Details: Type: Inflow Results Storm Phase: Phase	Company Address:		





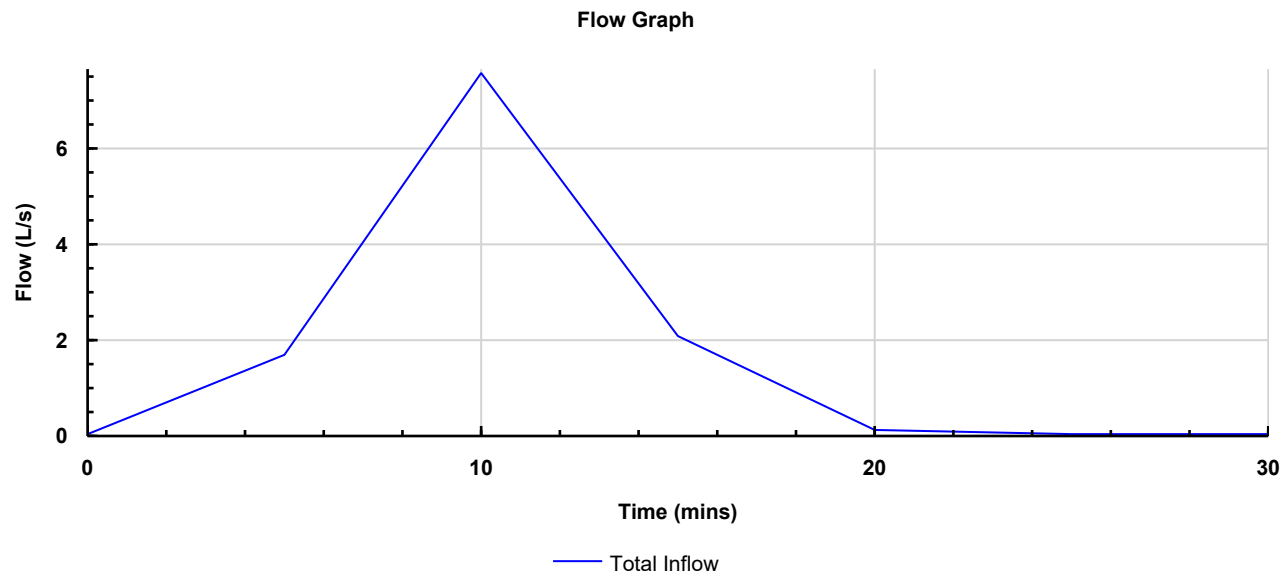
Catchment Area
Critical by Return Period: FEH: 2 years: Increase Rainfall (%): +0: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	7.6
Total Inflow Volume (m³)	3.415

Graphs



Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations	Date: 10/12/2025		
	Designed by: JB	Checked by: PC	Approved By: PC
Report Details: Type: Inflow Results Storm Phase: Phase	Company Address:		





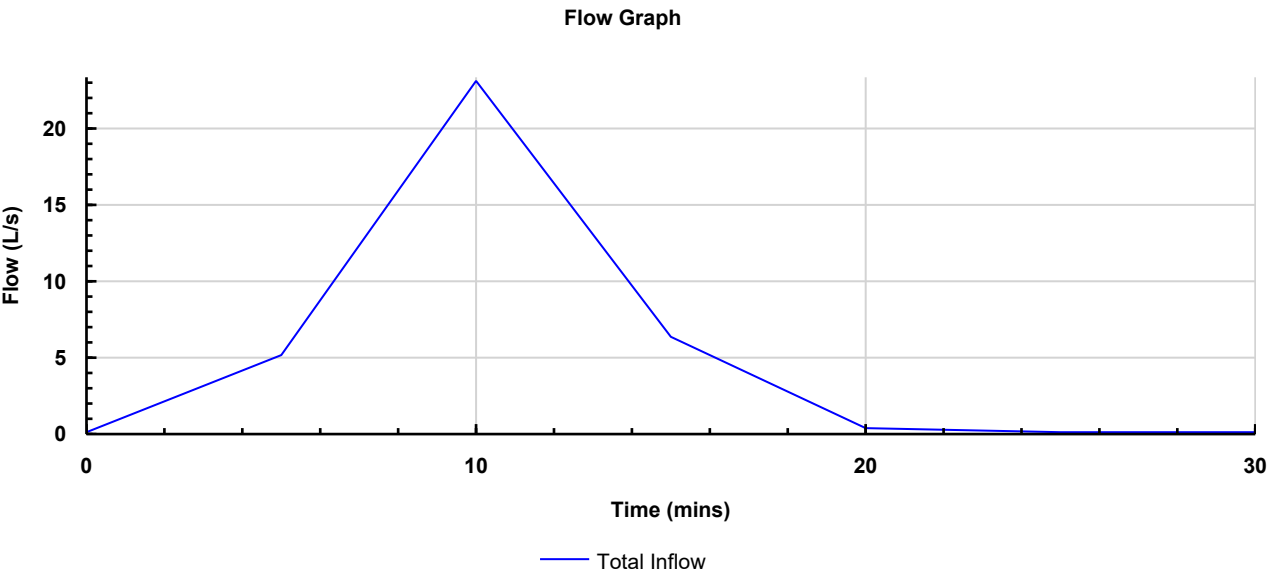
Catchment Area
Critical by Return Period: FEH: 30 years: Increase Rainfall (%): +40: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	23.1
Total Inflow Volume (m³)	10.422

Graphs



Project: Red Door, Bury Geo-cellular Attenuation Tank Calculations	Date: 10/12/2025		
	Designed by: JB	Checked by: PC	Approved By: PC
Report Details: Type: Inflow Results Storm Phase: Phase	Company Address:		





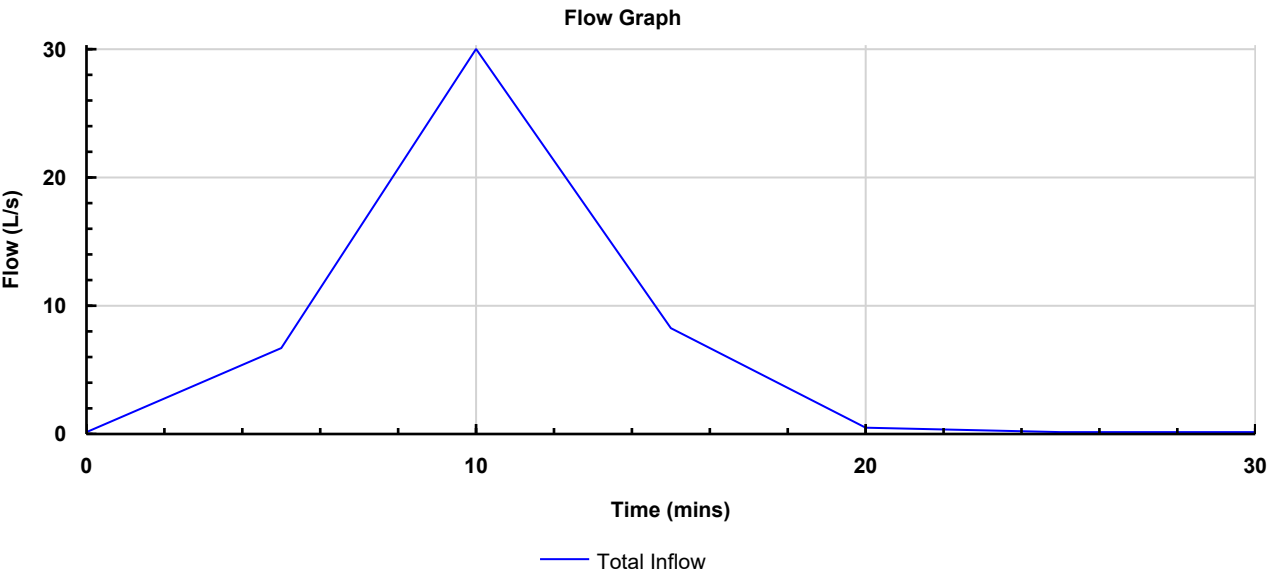
Catchment Area
Critical by Return Period: FEH: 100 years: Increase Rainfall (%): +45: 15 mins: Summer

Type : Catchment Area

Inflow

Max. Inflow (L/s)	30.0
Total Inflow Volume (m³)	13.531

Graphs



APPENDIX M

NORTH-WEST SuDS PRO-FORMA

NORTH WEST SuDS PRO-FORMA

This pro-forma is a requirement for any planning application for major development¹.

It supports applicants in summarising and confirming how surface water from a development will be managed sustainably under current and future conditions.

Your sustainable drainage system should be designed in accordance with [CIRIA The SuDS Manual C753](#) and any necessary adoption standards.

HOW TO COMPLETE

Blue Box	Instruction/ Question
Orange Box	Evidence Required
White Box	To be completed by Developer / Consultant

1. Complete ALL white boxes
2. Submit this pro-forma to the Local Planning Authority, along with:
 - Sustainable Drainage Strategy
 - Site Specific Flood Risk Assessment (if required)
 - Minimum supporting evidence, as indicated in orange boxes of this pro-forma.

GUIDANCE TO SUPPORT YOU

The pro-forma should be completed in conjunction with ‘Completing your SuDS Pro Forma Guide.’

The pro-forma can be completed using freely available tools such as [Tools for Sustainable Drainage Systems](#) or appropriate industry standard surface water management design software.

¹ as defined in Section 2 of [Statutory Instrument 2015 No. 595](#) or on sites in Critical Drainage Areas.

SECTION 1. APPLICATION & DEVELOPMENT DETAILS

Planning Application Reference <i>(if available)</i>		
State type of planning application <i>i.e. Pre-application, Outline, Full, Hybrid, Reserved Matters*</i> *Information only required if drainage is to be considered as part of reserved matters application		FULL PLANNING
Developer(s) Name:		CARITAS DIOCESE OF SALFORD
Consultant(s) Name:		RENAISSANCE ASSOCIATES LTD
Development Address <i>(including postcode)</i>		RED DOOR, BURY, BL9 6AB
Development Grid Reference <i>(Eastings/Northings)</i>		E: 381016 N: 411258
Total Development Site Area (Ha)		0.046
Drained Area (Ha)* of Development		0.042
Please indicate the flood zone that your development is in. Tick all that apply. <i>Based on the Environment Agency Flood Map for Planning and the relevant Local Authority Strategic Flood Risk Assessment (to identify Flood Zones 3a/3b).</i>		Flood Zone 1 ☒ Flood Zone 2 ☐ Flood Zone 3a ☐ Flood Zone 3b ☐
What is the surface water risk of the site? Tick all that apply. <i>Based on the Environment Agency Surface Water Flood Map.</i>		High ☐ Medium ☐ Low ☒
Have you submitted a Site Specific Flood Risk Assessment (FRA)? <i>See separate guidance notes for clarification on when a FRA is required</i>		Yes ☒ No ☐
Have you submitted a Sustainable Drainage Strategy?		Yes ☒ No ☐
Does your drainage proposal provide multi-functional benefits via SuDS?		Yes ☒ No ☐
Expected Lifetime of Development <i>(years)</i> <i>Refer to Planning Practice Guidance "Flood Risk and Coastal Change" Paragraph 026</i>		100 YEARS
Development Type:		State Proposed Number of Units
Greenfield Site • Site is wholly undeveloped, and a new drainage system will be installed		☒
Previously Developed/ Brownfield Site • Site is already developed, and the <u>entirety</u> of the existing surface water drainage system will be used to serve the new development (evidence must be provided to prove existing surface water drainage system is reusable); <u>OR</u> • Where records of the previously developed system are not available so that the hydraulic characteristics of the system cannot be determined or where the drainage system is not in reasonable working order i.e. broken, blocked or no longer operational for other reasons.		☐ 1
Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 1.		RDB-REN-XX-XX-RP-C-00010 RDB-REN-XX-XX-RP-C-00001

SECTION 2: IMPERMEABLE AREA AND EXISTING DRAINAGE

	Existing (E)	Proposed (P)	Change (P – E)
State Impermeable Area (Ha)	0.046	0.042	0.004
Evidence Required: Plans showing development layout of site with existing and proposed impermeable areas.			☒

Are there existing sewers, watercourses, water bodies, highway drains, soakaways or filter drains on the site?	Yes ☐ No ☒ Don't Know ☐
Evidence Required: Plan(s) showing existing layout to include all: - Watercourses, open and culverted - Water bodies – ponds, swales etc. - Sewers, including manholes - Highway drains, include manholes, gullies etc. - Infiltration features - soakaways, filter drains etc.	☒

Drainage Design <u>Outline planning applications</u> should be able to demonstrate that a suitable drainage system is achievable. <u>All other type of planning application</u> should provide full details or reference to previous planning application where drainage details have been submitted or approved.	
Select which design approach you are taking to manage water quantity (refer to Section 3.3 SuDS Manual)	
Approach 1 – Volume control / Long Term Storage (Technical Standards S2/3, S4/5) - The attenuated runoff volume for the 1 in 100 year 6 hour event (plus climate change allowance) is limited to the greenfield runoff volume for the 1 in 100 year 6 hour event, with any additional runoff volume utilising long term storage and either infiltrated or released at 2 l/s/ha - The discharge rate for the critical duration 1 in 1 year event is restricted to the 1 in 1 year greenfield runoff rate - The discharge rate for the critical duration 1 in 100 year event (plus climate change allowance) is restricted to the 1 in 100 year greenfield runoff rate	☐
Approach 2 – Qbar (Technical Standards S6) Justification has been provided that the provision of volume control/long term storage is not appropriate and an attenuation only approach is proposed. All events up to the critical duration 1 in 100 year event (plus climate change allowance) are limited to Qbar (1 in 2 year greenfield rate) or 2 l/s/ha, whichever is greater.	☒
Evidence Required: Plans showing: - Existing flow routes and flood risks - Modified flow routes - Contributing and impermeable areas - Current (if any) and proposed 'source control' and 'management train' locations of sustainable drainage components (C753 Chapter 7) - Details of drainage ownership - Details of exceedance routes (Technical Standards S9) - Topographic survey - Locations and number of existing and proposed discharge points	☒

Note consideration should be given to manage surface water from both impermeable and permeable surfaces (including gardens and verges) likely to enter the drainage system.

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 2.

RDB-REN-XX-XX-RP-C-00010
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SECTION 3: PEAK RUNOFF RATES – TECHNICAL STANDARDS S2, S3 AND S6 (UNLESS S1 APPLIES)

Rainfall Event	Existing Rate (l/s)	Greenfield Rate (l/s)	Proposed Rate (l/s) <i>Previously developed sites - In line with S3 should be equivalent to Greenfield runoff rates – discuss with LLFA if this is not achievable pre-application</i>
Qbar (Approach 2)	0.4	0.4	5
1 in 1 Year Event (Approach 1)			
1 in 30 Year Event			
1 in 100 Year Event* (Approach 1)			
* Total discharge at the 1 in 100 year rate should be restricted to the greenfield runoff volume for the 1 in 100 Year 6 hour event with additional volumes (long-term storage volume) released at a rate no greater than 2 l/s/ha where infiltration is not possible. The climate change allowance should only be applied to the proposed rate and not the existing or greenfield rate.			
Evidence Required: Methodology used to calculate peak runoff rate clearly stated and justified. Impermeable areas plan, supported by topographical survey confirming positive drainage. Hydraulic calculations and details of software used.			☒ ☒ ☒

State the hydraulic method used in your calculations
(Refer to Table 24.1 of The SuDS Manual)

FEH INFO DRAINAGE

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 3.

RDB-REN-XX-XX-RP-C-00010
RDB-REN-XX-XX-RP-C-00001

SECTION 4: DISCHARGE VOLUME – TECHNICAL STANDARDS S4, S5 AND S6 (UNLESS S1 APPLIES)

Rainfall Event	Existing Volume (m ³)	Greenfield Volume (m ³)	Proposed Volume (m ³)
1 in 100 Year 6 Hour Event (Approach 1)			
Does the below statement apply to your development proposal? Long term storage is not achievable on this site and, in accordance with S6 of the Non Statutory Technical Standards for SuDS, the surface water discharge rates for events up to and including the 1 in 100 year critical event are limited to Qbar (Approach 2)			Yes ☐ No ☐
Evidence Required: Approach to managing the quantity of surface water leaving the site clearly stated and justified Methodology used to calculate discharge volume clearly stated and justified. Hydraulic calculations and details of software used.			☐ ☐ ☐

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 4.	
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SECTION 5: STORAGE – TECHNICAL STANDARDS S7 AND S8

State climate change allowance used (%)	1 in 30 YEAR: 40% 1 in 100 YEAR: 45%
State housing density (houses per ha)	N/A
State urban creep allowance used (%)	0% - NOT SUITABLE DUE TO TYPE OF DEVELOPMENT
Evidence Required: State / used in appropriate industry standard surface water management design software.	☒

State storage volume required (m³) (excluding non-void spaces) <i>Must include an allowance for climate change and urban creep</i>	14
Have you incorporated interception into your design? <i>(Refer to Chapter 24 of The SuDS Manual C753)</i> <i>Where possible, infiltration or other techniques are to be used to try and achieve zero discharge to receiving waters for rainfall depths up to 5mm.</i>	Yes ☐ No ☒
Evidence Required: Drainage plans showing location of attenuation and all flow control devices and supporting calculations.	☒

Summarise how storage will be provided for 1 in 30 year event on site. <i>Storage must be designed to ensure that at no flooding occurs onsite in a 1 in 30 year event except in designed areas <u>and</u> no flooding occurs offsite in a 1 in 100 year (plus climate change allowance) event.</i>	THE BUILDING ROOF AND EXTERNAL HARD LANDSCAPING IS ATTENUATED BY A GEOCELLULA TANK. A FINAL FLOW CONTROL IS PROVIDED IN THE FINAL MANHOLE BEFORE CONNECTING TO THE COMBINED PUBLIC SEWER.
Summarise how storage will be provided for 1 in 100 year (plus climate change) event on site. <i>Where storage above the 1 in 30 year rainfall event is provided in designated areas designed to accommodate excess surface water volumes, plans showing storage locations and surface water depths and supported by calculations used in appropriate industry standard surface water management design software. It is important to run a range of duration events to ensure the worst case condition is found for each drainage element on the site</i>	THE SURFACE WATER DRAINAGE SYSTEM IS DESIGNED TO STORE WATER BELOW GROUND FOR ALL EVENTS UPTO THE 1 IN 100 YEAR + 45% CC 6 HOUR EVENT. THIS IS ACHIEVED AS DESCRIBED ABOVE.
Evidence Required: Plans showing size and location of storage and supporting calculations. Where there is controlled flooding, extents and depths must be indicated.	☒

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 5.	RDB-REN-XX-XX-RP-C-00010 RDB-REN-XX-XX-RP-C-00001
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SECTION 6: WATER QUALITY PROTECTION

Contaminated surface water run-off can have negative impacts on the quality of receiving water bodies. The potential level of contamination will influence final the design of an appropriate treatment train as part of your sustainable drainage system.

Is the proposal site known to be or potentially contaminated?	Yes ☐	No ☒
If the site is contaminated, it should be demonstrated that the sustainable drainage system will not increase the risk of pollution to controlled waters through the mobilisation of contaminants and/or creation of new pollution pathways.		

Confirm the <i>Pollution Hazard Level</i> of the proposed development - Tick <u>ALL</u> that apply <i>Refer to Pollution Hazard Indices for different Land Use Classifications in Table 26.2 of The SuDS Manual C753 for further guidance.</i>		
Pollution Hazard Level <i>Tick <u>ALL</u> that apply</i>	Surface water run-off from the proposed development will drain from:	
VERY LOW	☐	Residential roofs
LOW	☒	- Other roofs (typically commercial/industrial roofs) - Individual property driveways, residential car parks, low traffic roads (e.g. cul de sacs, home-zones and general access roads) - Non-residential car parking with infrequent change (e.g. schools, offices) i.e. < 300 traffic movements/day
MEDIUM	☐	- Commercial yard and delivery areas - Non-residential car parking with frequent change (e.g. hospitals, retail) - All roads except low traffic roads and trunk roads/motorways²
HIGH	☐	- Sites with heavy pollution (e.g. haulage yards, lorry parks, highly frequented lorry approaches to industrial estates, waste sites) - Sites where chemicals and fuels (other than domestic fuel oil) are to be delivered, handled, stored, used or manufactured - Industrial sites - Trunk roads and motorways¹

If the development's Pollution Hazard Level is 'Very Low' or 'Low', has the sustainable drainage design been risk assessed and appropriate mitigation measures included?	Yes ☒	No ☐
If the proposed development has a very low or low polluting potential, you should design your sustainable drainage system to include an appropriate treatment train in accordance with The SuDS Manual (C753).		

If the development's Pollution Hazard Level is 'Medium' or 'High', is the application supported by a detailed water quality risk assessment?	Yes ☐	No ☐
- If the proposed development has a high polluting potential, a detailed risk assessment <u>will</u> be required to identify an appropriate SuDS treatment train and ensure compliance with Paragraph 170 of the National Planning Policy Framework. - If the proposed development has a medium polluting potential, a detailed risk assessment <u>may</u> be required depending on the nature, scale and location of the development.		

Has pre-application advice on water quality been obtained from the Environment Agency?	Yes ☐	No ☒
If YES, provide details:		

² Motorways and trunk roads should follow the guidance and risk assessment process set out in Highways Agency (2009).

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 6.

SECTION 7: DETAILS OF YOUR SUSTAINABLE DRAINAGE SYSTEM

a) Function of your Sustainable Drainage System

Do your proposals store rainwater for later use (as a resource)?	Yes ☐ No ☒
Evidence Required: Please provide a brief sentence in the adjacent white box to describe how this function has been achieved.	

Do your proposals promote source control to manage rainfall close to where it falls? (e.g. promoting natural losses through soakage, infiltration and evapotranspiration)	Yes ☐ No ☒
Evidence Required: Please provide a brief sentence in the adjacent white box to describe how this function has been achieved.	

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 7a.	RDB-REN-XX-XX-RP-C-00010 RDB-REN-XX-XX-RP-C-00001
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b) Hierarchy of Drainage Options – Planning Practice Guidance

The proposed method of discharge are set out within order of priority. Generally, the aim should be to discharge surface run off as high up the following hierarchy of drainage options as reasonably practicable.

Proposed method of surface water discharge		Is this proposed?	
Hierarchy Level 1: Into the ground (via infiltration)		Yes ☐ No ☒	
If YES - Evidence Required		If NO – Evidence Required Tick ALL that apply	
☐	A. Completed Infiltration Checklist from The SuDS Manual (C753) Appendix B <i>An editable version of this form is available on SusDrain website.</i>	☒	A. Site investigation to demonstrate that the ground is not free draining. Test results to be provided in accordance with: - The methodology within BRE 365 (2016), OR - Falling head permeability tests BS EN ISO 22282-2: 2012
☐	B. British Geological Survey (BGS) Infiltration SuDS Map	☐	B. NOTE: where an applicant is unable to access a site to undertake testing, e.g. where unable to access a site for an outline application, they can submit a SuDS GeoReport or similar.
☐	C. Infiltration testing to BRE 365 (2016) or falling head permeability tests to BS EN ISO 2228-2: 2012 (optional for outline)	☒	C. Evidence to confirm that infiltration to ground would result in a risk of deterioration to ground water quality.
☐	'Plan B' sustainable drainage plan and statement of approach with an alternative discharge method, in case infiltration proposals are proven not feasible upon	☒	D. Geotechnical advice from a competent person* which determines that infiltration of water to ground would pose an unacceptable risk of geohazards to the site and/or local area.

	further site specific ground investigation e.g. to consider seasonal variations to groundwater.		<i>*Note: Competent person may include a Chartered Engineer, Chartered Geologists, Registered Ground Engineering Professionals (RoGEP).</i>
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Proposed method of surface water discharge		Is this proposed?	
Hierarchy Level 2: To a surface water body <i>(select type)</i> NOTE: Consent from LLFA or Permit from Environment Agency may be required – refer to guidance		Yes ☐ No ☒ N/A ☐	
		☐ Main river ☐ Canal ☐ Ordinary watercourse ☐ Other water body	
If YES - Evidence Required		If NO – Evidence Required Tick ALL that apply	
☐ Surface water body / watercourse survey and report	☐ Plan showing nearby watercourses and waterbodies AND ☒ Statement providing justification in your Sustainable Drainage Strategy <i>Note: Where discharge of any element in the hierarchy is discounted, an applicant should provide justification. If the reasoning for discounting a discharge of surface water to watercourse relates to issues associated with third party land or the securing of any other required consent, it may be necessary for the applicant to provide evidence to the local planning authority to support their proposed approach.</i>		

Proposed method of surface water discharge		Is this proposed?	
Hierarchy Level 3: To a surface water sewer or highway drain <i>(select type)</i>		Yes ☐ No ☒ N/A ☒	
		☐ Surface water sewer ☐ Highway drain	
If YES - Evidence Required		If NO – Evidence Required Tick ALL that apply	
☐ Written correspondence from Water and Sewerage Company/ Highway Authority regarding proposed connection.	☒ Plan showing nearby sewers and highway drains AND ☒ Statement providing justification in your Sustainable Drainage Strategy		

Proposed method of surface water discharge		Is this proposed?	
Hierarchy Level 4: To combined sewer		Yes ☒ No ☐ N/A ☐	
If YES - Evidence Required		If NO – Evidence Required	
☒ Written correspondence from Water and Sewerage Company	N/A		

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 7b.	RDB-REN-XX-XX-RP-C-00010 RDB-REN-XX-XX-RP-C-00001
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c) Proposed SuDS Component Types

	Tick ALL that apply				
Within property boundary	☐ Rainwater harvesting	☐ Green/ blue roofs	☐ Pervious pavements [Type: A ☐ B ☐ C ☐	☐ Soakaway	☐ Bio retention systems

	Tick ALL that apply				
Within development site boundary (not property)	☐ Infiltration system [Type: ☐ Surface level ☐ Below ground]		☐ Filter strips	☐ Filter drains	☐ Swales
	☐ Bio retention system	☐ Detention basins	☐ Ponds and wetlands	☒ Attenuation tanks/ Oversized pipes	☐ Other (state below)
	If 'Other' please state:				

Off site (not within the boundary of the proposed development)	Please state:
--	---------------

I confirm that the above selected components have been designed in accordance with The SuDS Manual (C753).	I confirm ☒
I confirm that the management of flows resulting from rainfall in excess of a 1 in 100 year plus climate change rainfall event, and their exceedance route(s), has been fully considered in order to minimise the risks to people, property (new and existing) and infrastructure.	I confirm ☒

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 7c.	RDB-REN-XX-XX-RP-C-00010 RDB-REN-XX-XX-RP-C-00001
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The applicant is responsible to ensure that ALL components selected in Section 7 can be maintained for the design life of the development. This information is required so the Local Planning Authority can ensure the maintenance and management of the sustainable drainage system. The Local Planning Authority will discuss how this will be secured (e.g. via planning condition or planning obligation).

[illegible]

		Information Provided?
Maintenance Schedule		Yes ☒ No ☐
Evidence Required: A copy of the maintenance schedule including: Proactive and preventative maintenance Detailing regular, occasional and remedial maintenance activities including recommendations for inspection and monitoring. This should include recommended frequencies, advice on plant/ machinery required and an explanation of the objectives for the maintenance proposed and potential implications of not meeting them. Reactive and corrective maintenance (e.g. product repair and replacement). Including advice on excavations, or similar works, in locations that could affect the SuDS components/ adjacent structures.		☒

		Information Provided?
Maintenance and Management Arrangements		Yes ☒ No ☐
Evidence Required: Evidence of formal agreement with the party responsible for undertaking maintenance. Please select any of the adopting bodies that you will be offering your sustainable drainage components for adoption. Tick all that apply. ☐ Water and Sewerage Company <i>Section 104 agreement (Water Industry Act 1991)</i> ☐ Highway Authority <i>Section 278/38 agreement (Highways Act 1980)</i> ☐ Local Authority Public Open Space <i>[Refer to Local Authority Policy]</i> Please select the arrangement(s) for all non-adopted sustainable drainage components. Tick all that apply. ☐ Management Company ☒ Property Owner <i>(for SuDS components within property boundary only)</i> ☐ Other (please state) 		☐

Please list any relevant document and or drawing numbers (including revision reference) to support your answers to Section 8.

RDB-REN-XX-XX-RP-C-00010
RDB-REN-XX-XX-RP-C-00001

DECLARATION AND SUBMISSION

This pro-forma has been completed using evidence from information which has been submitted with the planning application.

The information submitted in the Sustainable Drainage Strategy and site-specific Flood Risk Assessment (FRA), where submitted, is proportionate to the site conditions, flood risks and magnitude of development and I agree that this information can be used as evidence to this sustainable drainage approach.

Submitter Details			
Completed by	JOE BULLOUGH	Email Address	joebullough@renaissance-ltd.com
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Date (dd/mm/yyyy)	16.12.2025	Company	RENAISSANCE ASSOCIATES LTD

Client Details			
Name	N/A	Company	CARITAS DIOCESE OF SALFORD