

FLOOD RISK ASSESSMENT AND DRAINAGE STRATEGY REPORT

SITE AT CHORLTON BATHS

MANCHESTER ROAD, CHORLTON

MANCHESTER M21 9PG

for

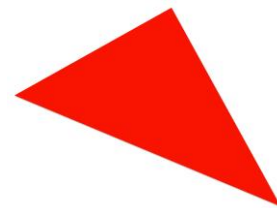
MOSSCARE ST VINCENTS HOUSING



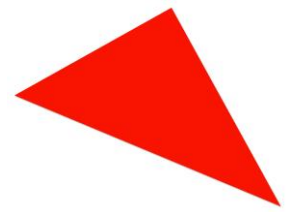
22.B.13672 REPORT REVISIONS	
MARCH 2023	Original report.
MARCH 2023	Revision A

23-B-13672/Chorlton Baths

Carley Daines And Partners Ltd
11, Bridgewater Road Walkden Worsley
mail : andrew.mulligan@carleydaines.co.uk



EXECUTIVE SUMMARY	
Site Parameters	Site Area – 3,400m ² Present Impermeable Area – 3,230m ² Post Development Impermeable Area – 2,890m ² DECREASE in Impermeable Area – 340m ² NGR of Site Centre– 381710 (E); 394520 (N) Nearest Post Code – M21 9PG
Flooding	This report has considered flooding from a variety of sources in accordance with NPPF guidelines, and it is believed that the site is not at risk of flooding, nor does the proposed development create a risk of flooding elsewhere. The site is in FZ1. The railway cutting immediately to the east is indicated as being in FZ2 but is well below (5m) site level.
Surface Water Drainage	The SuDS drainage hierarchy indicates that ground infiltration should always be the first consideration. The Phase 1 PRA indicates drift geology to be sand and gravel overlying solid geology of sandstone which forms a principal aquifer. This suggests that infiltration should be possible, subject to appropriate testing and confirmation that the future site investigation does not reveal high levels of onsite contamination. There are no watercourses near site nor are there any surface water sewers. United Utilities indicate that connection to the existing combined sewer in Manchester Road would be permitted subject to a discharge rate of 5 l/s. This is achievable with attenuation provision and will provide a significant reduction in the rate of surface water compared with the pre-development situation which is believed to generate unrestricted run-off.
Foul Drainage	United Utilities indicate that connection to the existing combined sewer in Manchester Road would be permitted at an uncontrolled rate at a convenient position.



CONTENTS

- 1. INTRODUCTION**
- 2. EXISTING SITE DETAILS**
- 3. PROPOSED DEVELOPMENT**
- 4. EFFECTS OF CLIMATE CHANGE**
- 5. SOURCES & PROBABILITY OF FLOODING**
- 6. MITIGATION MEASURES**
- 7. SW MANAGEMENT & DRAINAGE STRATEGY**
- 8. FW DRAINAGE STRATEGY**
- 9. FLOOD RISK MANAGEMENT MEASURES**
- 10. OFF-SITE IMPACTS**
- 11. STATUTORY CONSULTATIONS**
- 12. RESIDUAL RISKS**
- 13. CONCLUSIONS**
- 14. RECOMMENDATIONS**

APPENDIX A - LOCATION AND SITE PLAN

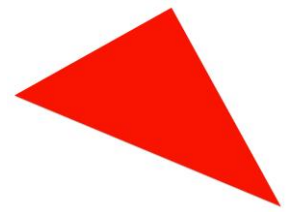
APPENDIX B - UNITED UTILITIES SEWER RECORDS

APPENDIX C - PROPOSED SITE PLAN

APPENDIX D - RAINFALL INTENSITIES

APPENDIX E - PRELIMINARY STORAGE VOLUME ESTIMATE

APPENDIX F - UNITED UTILITIES CONSULTATION RESPONSE

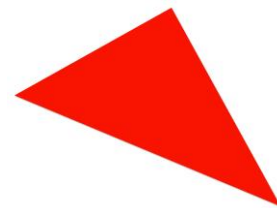


1.0 INTRODUCTION

- 1.1 Carley Daines and Partners Limited have been commissioned by Mosscafe St Vincents Housing to undertake a Flood Risk Assessment (FRA) and Drainage Strategy Report for this site in accordance with the requirements of Policies EN8, EN14, EN17 and DM1 of the Manchester Core Strategy (2012), the National Planning Policy Framework (NPPF) (2021) and National Planning Practice Guidance (NPPG) published March 2014 and last updated August 2022.

2.0 EXISTING SITE DETAILS

- 2.1 The site is located on the east side of Manchester Road, Chorlton approximately 4.5km south west of Manchester City Centre at postcode M21 9PG. The centre of site is at National Grid Reference 381710, 394520. The site has maximum dimensions of approximately 80m x 40m, narrowing to the north. The eastern boundary is formed by a railway cutting, to the west is Manchester Road and to the south is a retail building. The short northern boundary is formed by an aqueduct bridging the railway. Existing surrounding development is a mix of uses including residential and commercial. The site appears reasonably level at an elevation of approximately 27mAOD.
- 2.2 The existing site contains a former swimming baths and leisure centre, dating from the 1920's and awaiting demolition.
- 2.3 There are no obvious open watercourses in the nearby vicinity.
- 2.4 The nearest public sewer is in Manchester Road and is a 450mm combined sewer flowing to the south.
- 2.5 There are no surface water sewers in the immediate area.
- 2.6 The Lead Local Flood Authority (LLFA) is Manchester City Council.
- 2.7 The Phase 1 PRA indicates that superficial Drift deposits consist of glaciofluvial sand and gravel overlying Wilmslow sandstone (which is a principal aquifer).



3.0 PROPOSED DEVELOPMENT

- 3.1 Preliminary plans have been made available to us prepared by Buttress Architects. These indicate the proposed development to be two 5-storey residential blocks of apartments with associated access, drainage services and parking infrastructure.
- 3.2 Any residential development of this type is classified in Annex 3 of the NPPF below, as within the "More Vulnerable" category in consideration of flood risk and should be guided to Flood Zone 1 (FZ1) – an area with low risk of flooding. FZ1 has a less than 1 in 1000 year (0.1% AEP) risk of flooding.

Table 1: Flood Risk Vulnerability Classification (based on Annex 3 of the NPPF)

Essential Infrastructure • Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk. • Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood. • Wind turbines • Solar Farms
Highly Vulnerable • Police stations, ambulance stations and fire stations and command centres and telecommunications installations required to be operational during flooding. • Emergency dispersal points. • Basement dwellings. • Caravans, mobile homes and park homes intended for permanent residential use. • Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as "essential infrastructure").
More Vulnerable • Hospitals • Residential institutions such as residential care homes, children's homes, social services homes, prison and hostels. • Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels. • Non-residential uses for health services, nurseries and educational establishments. • Landfill and sites used for waste management facilities for hazardous waste. • Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.
Less Vulnerable • Police, ambulance and fire stations which are not required to be operational during flooding. • Buildings used for shops, financial, professional and other services, restaurants and cafes, hot food takeaways, offices, general industry, storage and distribution, non-residential institutions not included in "more vulnerable" and assembly and leisure. • Land and buildings used for agriculture and forestry. • Waste treatment (except landfill and hazardous waste facilities). • Minerals working and processing (except for sand and gravel working). • Water treatment works which do not need to remain operational during times of flood. • Sewage treatment works if adequate measures to control pollution and manage sewage during flooding events are in place. • Car Parks
Water-compatible development • Flood control infrastructure. • Water transmission infrastructure and pumping stations. • Sewage transmission infrastructure and pumping stations • Sand and gravel working. • Docks, marinas and wharves. • Navigation facilities. • Ministry of Defence installations. • Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location. • Water-based recreation (excluding sleeping accommodation). • Lifeguard and coastguard stations.

- Amenity open space, nature conservation and biodiversity, outdoor
- sports and recreation and essential facilities such as changing rooms.
- Essential ancillary sleeping or residential accommodation for staff required by uses in this category subject to a specific warning and evacuation plan.

3.3 Table 2 of the NPPG states that “more vulnerable” development is considered appropriate within FZ1. Therefore, any residential development such as this and located in FZ1 passes the flood risk Sequential Test & the Exception Test does not need to be applied.

Table 2: Flood Risk Vulnerability and Flood Zone "Incompatibility"

Flood risk vulnerability classification (see Table 2)		Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone (see table 1)	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	Exception Test required	✓	✓	✓
	Zone 3a	Exception Test required	✗	Exception Test required	✓	✓
	Zone 3b functional floodplain	Exception Test required	✗	✗	✗	✓

Key: ✓ Development is appropriate
✗ Development should not be permitted.

4.0 EFFECTS OF CLIMATE CHANGE

4.1 Reference is made to the Environment Agency document: Flood Risk Assessments: Climate Change Allowances dated February 2016 & updated in May 2022.

Table 3: Peak rainfall intensity uplift allowance (Greater Manchester)

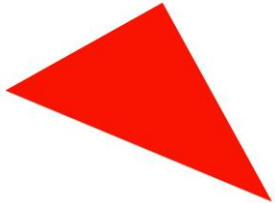
Allowance	2050's	2070's
Upper end	40%	45%
Central	25%	30%

EA data also indicates that sea levels are anticipated to rise in northwest England by up to 1.01m for the total period of 125 years from 2000 to 2125 though this development is clearly unaffected.

In view of the proposed lifetime of the development the “2070's” epoch should be used.

5.0 PROBABILITY OF FLOODING

5.1 It is a requirement of the NPPG that flooding from all possible sources should be assessed. Accordingly, consideration must be given to the possibility of flooding from the following sources:

- 
- rivers and watercourses
 - sewers
 - sea
 - overland flows
 - ground water
 - reservoirs, canals and artificial sources

Consideration must also be given to the possibility of transferring flooding to other locations off site. In consideration of the above possible flood sources, the assessed risks are as follows:

5.2 Flooding from Rivers/Watercourses

The Environment Agency Flood Map shows the site to be located in FZ1 and there are no nearby rivers or watercourses that might be a source of flooding. The nearest watercourse appears to be Chorlton Brook, over 1km to the south. The adjacent railway cutting is indicated as being in FZ2 but is 5m below site level. Flood risk from this source is considered to be VERY LOW.

5.3 Flooding from the Sea

The site is at an elevation of 27mAOD and is 55km from the sea. Flood risk is therefore ZERO.

5.4 Flooding from Land

There are no obvious overland paths of flood water, nor is there any known history of flooding in the area. Flooding from land is therefore assessed as NEGLIGIBLE.

5.5 Flooding from Groundwater

The possibility of flooding from groundwater has been considered. Near surface natural drift geology is sand and gravel which is regarded as permeable and unlikely to hold high water levels. Risk from ground water is considered VERY LOW.

5.6 Flooding from Sewers

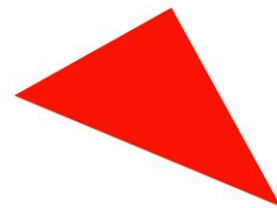
Flooding from sewers can occur when a sewer is overwhelmed by heavy rainfall, becomes blocked, is damaged or of inadequate capacity. The UU consultation does not highlight any considerations of flooding to sewers in the area and records indicate that sewers are deep (>4m) and of substantial capacity. Therefore, it may be concluded that the risk of sewer flooding is VERY LOW.

5.7 Flooding from Reservoirs, Canals and Artificial Sources

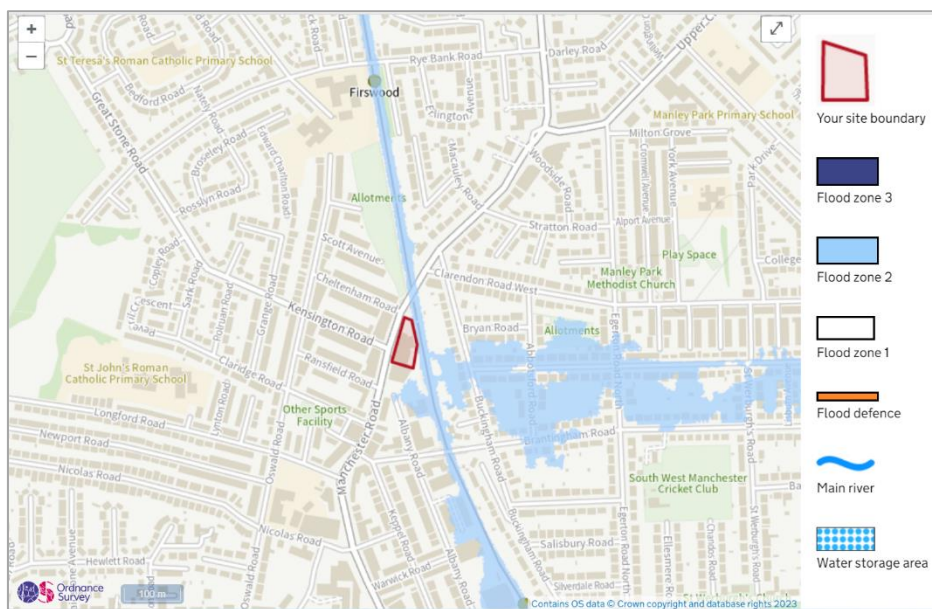
There are no reservoirs, canals or other major artificial bodies of water near the site and the risk is assessed as ZERO.

5.8 Flooding Elsewhere

This flood risk assessment also requires consideration to be given to the possibility of flooding being caused elsewhere. A properly designed and maintained site drainage system will meet the requirements of the sewerage provider, in that the pipelines will not flood at the critical 30-year rainfall event. Furthermore, NPPG guidelines require that all exceedance flows either infiltrate into the ground or are safely contained on site within underground or above ground safe storage areas



such that there will be no risk of flooding of vulnerable or critical areas on site or other nearby areas. It is proposed to mitigate any potential flooding by appropriate below ground attenuation. The risk, therefore, of transferring flooding elsewhere is VERY LOW.



Environment Agency Flood Map

6.0 MITIGATION MEASURES

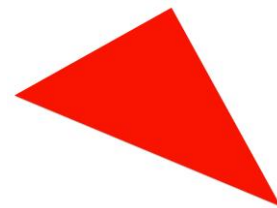
In view of the site being in FZ1 and the very low risk of causing flooding elsewhere off site (see above) there are no further major mitigating measures proposed, though placing finished floor levels a minimum of 150mm above surrounding ground levels would be prudent.

7.0 SURFACE WATER DRAINAGE STRATEGY

7.1 It is Environment Agency, United Utilities, Building Regulations, the Lead Local Flood Authority, Manchester Core Strategy and NPPF policy for all surface water systems for development sites to be designed using Sustainable Drainage Systems (SuDs) wherever possible.

7.2 Rainfall intensities, see profiles in Appendix D, are as indicated in the table below.

	YR 2	YR 30	YR 100	YR 100 + 45%
Rainfall Intensity mm/hr	80.8	153.8	200.5	290.7



The pre-development run-off rates based on an impermeable area of 3,230m² are:

	YR 2	YR 30	YR 100
Peak Run-Off Litres/sec	72.5	138.0	179.9

Post-development, with a decreased impermeable area on site of 2,890m², peak run-off rates are predicted to be as follows:

	YR 2	YR 30	YR 100	YR 100 + 45% CC
Peak Run-Off Litres/sec	64.9	123.5	161.0	233.4

7.3 Discharge Rates

Surface water discharge from this site will be governed by the maximum forward pass of 5 l/s that United Utilities are prepared to accept to the combined public sewer crossing the site. See the UU Consultation Response in Appendix F.

7.4 Discharge Method

Paragraph 056 of the NPPG: Flood Risk & Coastal Change sets out the following hierarchy of drainage options:

- Into the ground (infiltration)
- To a surface water body
- To a surface water sewer, highway drain or other drainage system
- To a combined sewer

7.5 Infiltration

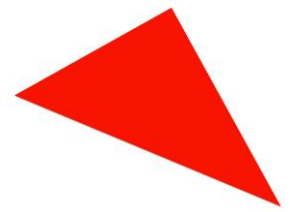
The first consideration for the disposal of surface water is infiltration via soakaway. At first sight and based on geological information, conditions appear to be favourable. However, testing in accordance with BRE Digest 365 will be needed to prove infiltration potential and the future intrusive ground investigation must demonstrate that the site does not possess significantly elevated levels of soil contamination.

7.6 Watercourse

There is no suitable nearby watercourse.

7.7 Surface Water Sewer & Combined Sewer

There are no dedicated surface water sewers in the area, therefore the sole remaining option is discharge to the combined sewer which would be permitted by United Utilities subject to acceptance of the low discharge rate and if discharge by infiltration is not possible for reasons



outlined above.

7.8 Attenuation Storage

Attenuation storage will be required, and storage estimates are included in Appendix E. In line with current best practice, storage volumes have been assessed for the 1:30yr return (the design criteria as per Sewers for Adoption) and for the exceedance event of 1:100yr + 45% cc allowance. The respective volumes are a maximum of 100m³ and 229m³. These volumes are based on a discharge rate of 5l/s. The 1:30yr volume would be in underground pipes / tanks & the exceedance (the difference between the two volumes) could either be underground or above ground if safe storage areas are available (though this is unlikely in view of the relatively dense nature of the proposed development). Further consideration should be made at detailed design stage. Attenuation volumes are indicative only and should also be verified at detailed design stage.

7.9 Sustainable Drainage Systems

Other options considered are as follows:

Swales, detention basins and ponds

These are not considered to be suitable as this is a small site with no significant area of available public open space.

Rainwater Harvesting

The attenuation benefits of rainwater harvesting have been shown to be minimal and can only be realised when the tanks are not full. Similarly, rainwater butts would only provide minor benefits.

Green Roofs

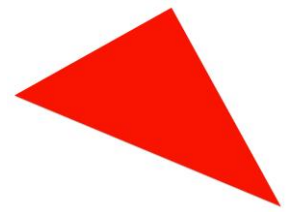
Green roofs are not identified on preliminary plans. Given the nature of residential development, the significant additional costs involved in installing and maintaining green roofing, plus the additional dead load are not considered to be a practical option. Any benefits would be disproportionate to the likely significant construction and ongoing maintenance costs involved.

Porous / Permeable Paving

This may be possible if ground conditions prove suitable for infiltration.

8.0 FOUL WATER DRAINAGE STRATEGY

- 8.1 There are existing public sewers in the area owned and maintained by United Utilities. Guidance contained within Sewers for Adoption Edition 7 states that design foul flows should be 4,000 litres per dwelling per 24-hour period. With 50 proposed apartments on the site, the design foul flow will be $4,000 \times 50 \div 24 \div 3,600 = 2.3$ l/s.
- 8.2 There is a 450mm diameter combined sewer in Manchester Road and it is believed that gravity connection is available.



9.0 FLOOD RISK MANAGEMENT MEASURES

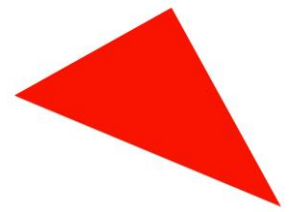
- 9.1 In the event of extreme emergency, the local authority and other emergency services have contingency plans for dealing with consequences of flooding.
- 9.2 Setting finished floor levels of the buildings at least 150mm above surrounding external ground, and shedding surface water away from the buildings, will avoid the risk of damage to buildings and contents from overland flood flows around the site.
- 9.3 The design of surface water drainage should ensure that there are no uncontrolled off-site overland flood flows created by the proposed development. Where possible, site surfaces should be modelled so that flood flows generated on site from events beyond the stipulated drainage design criteria will flow to and be contained on site within landscaped or paved areas such that there is no increased risk of flooding to buildings and other vulnerable areas. Such flood flows should not be allowed to flow from the site onto adjoining / adjacent property or highways.
- 9.4 Home owners and landlords will be responsible for the maintenance of private drainage systems on site to ensure satisfactory performance. United Utilities will be responsible for the maintenance of any public sewers on the site.
- 9.5 Any flood flows onto the site from adjoining property will either be retained on site safely or be encouraged to pass across the site such that there is no increased risk of flooding to buildings and other vulnerable areas.

10.0 OFF-SITE IMPACTS

- 10.1 Proposed on-site drainage will be designed and constructed in accordance with Part H of The Building Regulations, Sewers for Adoption, and any additional requirements of United Utilities, the LLFA, and the Environment Agency, as appropriate.
- 10.2 All on-site roofs and pavings are to drain into the design surface water drainage system, thereby ensuring there will be no off-site flood flows generated by the development.
- 10.3 The risk of flood flows entering and leaving the site will remain after development though are considered minimal. Any risk will be further reduced because the drainage design will be such that there will be no flooding during all rainfall events up to and including the critical 30 year storm, and no overland flows from the critical 100 year storm. The volume of water discharged to the public sewer system post-development will be far less than exists pre-development due to either infiltration or the attenuation to be provided.
- 10.4 By implementation of the flood procedures and by careful design of the flood protection measures as described above, all residual flood-related risks will be minimised as far as possible after the development has been completed.

11.0 UNITED UTILITIES CONSULTATION RESPONSE

- 11.1 United Utilities response dated 13th February 2023 is attached in Appendix F. In summary it states the following: -
 - 1) Foul water will be allowed to drain into the public combined sewer in Manchester Road at an



unrestricted rate, and at any convenient point.

2) In order to comply with the drainage hierarchy outlined in Building Regulations H3 and National Planning Practice Guidance (NPPG), surface water should be drained via infiltration systems / soakaways wherever possible. If this is not possible then confirming professional evidence will be required. UU also state that if infiltration is not possible due to unsuitable ground conditions, then connection to the 450mm combined sewer in Manchester Road would be permitted, with run-off restricted to 5l/s, subject also to LLFA approval.

11.2 United Utilities do not record any instances of flooding in the immediate area

12.0 RESIDUAL RISKS

12.1 This Flood Risk Assessment, prepared in accordance with relevant policies from the Manchester Core Strategy, NPPF and NPPG demonstrates that the risk of on-site flooding from all sources resulting from the proposed development can generally be regarded as being zero to negligible.

12.2 Careful design of the future drainage system suggests that any risks of flooding are likely to be minimised.

12.3 Furthermore, it is believed that the risk of transferring flooding elsewhere is negligible and on-site infiltration or attenuation will reduce this to a level far below that which currently exists.

12.4 Adoption of the new surface water system by UU should ensure satisfactory functioning and maintenance.

12.5 Accordingly, and notwithstanding any other planning issues, it is not considered that the proposed development has any adverse effects on the current site, or the surrounding area in respect of flooding. Providing the advice contained within the Flood Risk Assessment is implemented, there are no adverse residual risks to either the development or the surrounding area.

13.0 CONCLUSIONS

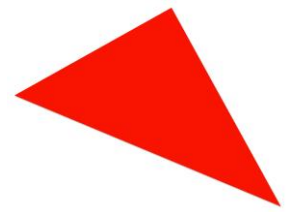
13.1 The proposed re-development of the site involves the construction of 50 new apartments in two 5 storey blocks with access road, parking, drainage and services infrastructure.

13.2 The site is in FZ1 on the EA Flood Map – an area considered to have the lowest probability of fluvial flooding.

13.3 The proposed development will lead to a decrease of impermeable area and hence surface water run-off.

13.4 If ground conditions are unsuitable for infiltration, the discharge rate will be reduced to 5 l/s as per UU guidance and attenuation provided on site to accommodate all storm events up to and including the 1 in 100yr + 45% cc event.

13.5 Positioning of attenuation / infiltration soakaways will be considered at detailed design stage though the area of proposed car parking would appear most appropriate.



- 13.6 Other SuDS systems and methods have been considered but are believed to be unsuitable or inappropriate for this development.
- 13.7 Foul water connection to the existing combined sewer in Manchester Road should be achievable by gravity.

14.0 RECOMMENDATIONS

- 14.1 Submit this Flood Risk Assessment and Drainage Strategy to the Planning Authority in support of the Planning Application.
- 14.2 Ensure that floor levels are 150mm above surrounding ground levels.
- 14.3 Undertake infiltration testing in accordance with BRE 365.
- 14.4 If attenuation is to be provided, check the attenuation volumes included in this report when undertaking the detailed drainage design.
- 14.5 Complete the detailed drainage design and offer the new drainage system to UU for adoption under a Section 104 Agreement.

SIGNED (electronically)

A Mulligan

**A Mulligan BEng
CARLEY DAINES AND PARTNERS LTD**

AUTHORISED (electronically)

C R Carley

**C R Carley JP MSc CEng MICE (Consultant)
CARLEY DAINES AND PARTNERS LTD**

APPENDIX A

SITE LOCATION PLAN

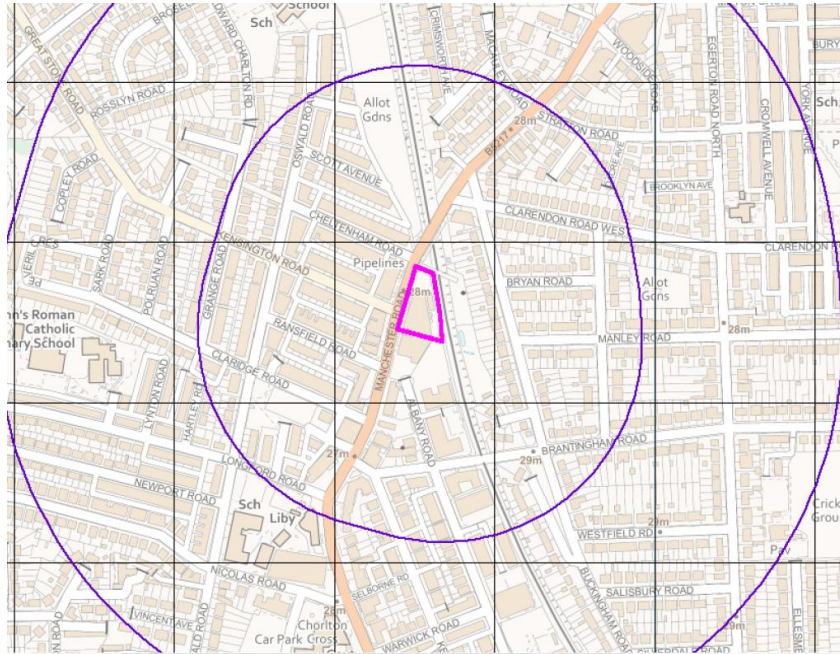
SITE AT CHORLTON BATHS, CHORLTON, MANCHESTER

National Grid Reference: 381710, 394520

Postcode: M21 9PG

Area: 3,400m²

Elevation: 27mAOD



OS Plan 2022



Google Earth

APPENDIX B

UNITED UTILITIES SEWER RECORDS

Carley Daines & Partners Ltd

**11
Bridgewater Road,
Worsley, Greater Manchester
M28 3JE**

FAO:

How to contact us:

**United Utilities Water Limited
Property Searches
Haweswater House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP**

Telephone: 0370 7510101

E-mail: propertysearches@uuplc.co.uk

**Your Ref: 13672 Chorlton Baths
Our Ref: UUPS-ORD-470300
Date: 08/03/2023**

Dear Sirs

Location: THE FONT 115-117 MANCHESTER ROAD, CHORLTON CUM HARDY, MANCHESTER, M21 9PG

I acknowledge with thanks your request dated 07/03/2023 for information on the location of our services.

Please find enclosed plans showing the approximate position of United Utilities' apparatus known to be in the vicinity of this site.

The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

If you are planning works anywhere in the North West, please read United Utilities' access statement before you start work to check how it will affect our network. <http://www.unitedutilities.com/work-near-asset.aspx>.

I trust the above meets with your requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please [contact us](#).

Yours Faithfully,



Karen McCormack
Property Searches Manager

TERMS AND CONDITIONS - WASTEWATER AND WATER DISTRIBUTION PLANS

These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

TERMS AND CONDITIONS:

- This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.
- This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.
- In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.
- The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.
- The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.
- This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.
- No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.
- If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.
- This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.

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.

Crown copyright and database rights 2017 Ordnance Survey 100022432. Unauthorised reproduction will infringe these copyrights.

Ref	Cover	Conv	Invrt	Size	X	Y	Shape	Matl	Length	Grad	Reho	Cover	Conv	Invrt	Size	X	Y	Shape	Matl	Length	Grad
9500	28.02	0	0	150	50	25.8	0	VC	69.00726	1 in 383	4807	0	0	0	25.0	25.0	0	VC	12.65874	0	
9414	0	0	0	150	50	25.8	0	VC	69.00726	1 in 383	4807	0	0	0	25.0	25.0	0	VC	12.65874	0	
9521	0	0	0	150	50	25.8	0	VC	5.889561	0	6125	0	0	0	25.0	25.0	0	VC	15.23251	0	
8800	0	0	0	150	50	25.8	0	VC	6.147519	0	6125	0	0	0	25.0	25.0	0	VC	15.5541	1 in 471	
8875	0	0	0	150	50	25.8	0	VC	8.327185	0	9810	0	0	0	25.0	25.0	0	VC	35.69332	1 in 259	
5111	27.59	0	0	150	50	25.8	0	VC	3.855551	1 in 26	6402	27.34	0	0	25.14	25.14	0	VC	46.92591	1 in 137	
6508	27.47	0	0	150	50	25.8	0	VC	6.272612	1 in 841	6503	27.25	0	0	25.71	25.71	0	VC	23.59441	1 in 37	
9409	0	0	0	150	50	25.8	0	VC	7.887348	0	5507	0	0	0	25.0	25.0	0	VC	7.495108	0	
7602	28.55	26	150	300	70	25.648	0	VC	76.25548	1 in 305	6008	26.95	0	0	25.11	25.11	0	VC	58.62399	0	
5501	27.07	25.18	225	300	70	25.624	0	VC	6.708204	1 in 18	4203	28.5	0	0	24.58	24.58	0	VC	67.62396	1 in 74	
7719	27.6	0	0	150	50	25.8	0	VC	13.34523	0	6007	26.77	0	0	25.0	25.0	0	VC	6.602325	1 in 72	
8511	0	0	0	150	50	25.8	0	VC	16.66444	0	7514	0	0	0	150	150	0	VC	9.484708	0	
8305	27.94	25.45	225	300	70	25.648	0	VC	9.484853	0	6007	26.77	0	0	25.0	25.0	0	VC	6.602325	1 in 72	
5600	27.69	25.11	225	300	70	25.618	0	VC	37.16181	1 in 155	7513	0	0	0	150	150	0	VC	32.32411	0	
6001	27.62	25.73	300	300	70	25.603	0	VC	66.00833	0	5300	27.75	0	0	25.32	25.32	0	VC	6.894949	0	
4505	26.93	24.74	225	300	70	25.567	0	VC	69.07867	1 in 256	6008	26.95	0	0	25.11	25.11	0	VC	58.62399	0	
6602	27.71	25.76	150	300	70	25.618	0	VC	5.123556	0	6603	27.72	0	0	24.68	24.68	0	VC	67.62396	1 in 74	
9606	0	0	0	150	50	25.8	0	VC	6.617556	0	6007	26.77	0	0	25.0	25.0	0	VC	6.602325	1 in 72	
4408	26.95	24.77	225	300	70	25.567	0	VC	50.12356	1 in 80	4100	28.5	0	0	24.58	24.58	0	VC	70.40884	1 in 381	
6501	29.04	23.55	450	450	70	25.618	0	VC	9.292031	0	7509	0	0	0	150	150	0	VC	9.192525	1 in 1	
8609	0	0	0	150	50	25.8	0	VC	33.84605	1 in 121	7702	28.26	0	0	26.72	26.72	0	VC	46.60051	1 in 151	
8509	0	0	0	150	50	25.8	0	VC	2.554411	0	28	27.73	0	0	25.46	25.46	0	VC	15.51139	1 in 198	
9603	0	0	0	150	50	25.8	0	VC	7.457057	0	6311	0	0	0	23.26	23.26	0	VC	42.10701	1 in 694	
7501	0	0	0	150	50	25.8	0	VC	16.772	0	6203	29.74	0	0	25.28	25.28	0	VC	12.8025	0	
5506	27.14	24.89	225	300	70	25.567	0	VC	9.413107	0	7514	0	0	0	150	150	0	VC	11.07008	0	
5814	27.1	23.95	300	300	70	25.567	0	VC	3.98474	0	1	0	0	0	150	150	0	VC	0	0	
8311	0	0	0	150	50	25.8	0	VC	26.26074	0	33	0	0	0	150	150	0	VC	0	0	
9600	28.32	26.35	225	300	70	25.567	0	VC	63.76872	0	24	0	0	0	150	150	0	VC	0	0	
5307	28.55	26.2	225	300	70	25.567	0	VC	23.4504	0	1	0	0	0	150	150	0	VC	0	0	
7305	29.91	26.34	225	300	70	25.567	0	VC	32.96484	0	1	0	0	0	150	150	0	VC	0	0	
5104	28.32	24.91	225	300	70	25.567	0	VC	1	0	1	0	0	0	150	150	0	VC	0	0	
8411	0	0	0	150	50	25.8	0	VC	8.850588	0	1	0	0	0	150	150	0	VC	0	0	
8400	27.69	26.35	300	300	70	25.618	0	VC	54.75273	0	52	0	0	0	150	150	0	VC	0	0	
7301	27.76	26.18	300	300	70	25.618	0	VC	47.12749	0	1	0	0	0	150	150	0	VC	0	0	
5507	27.05	25.55	225	300	70	25.567	0	VC	45.85139	1 in 1528	28	0	0	0	150	150	0	VC	0	0	
6307	27.31	25.62	300	300	70	25.618	0	VC	29.69848	1 in 58	28	0	0	0	150	150	0	VC	0	0	
4704	27.23	25.9	225	300	70	25.567	0	VC	77.2074	1 in 129	27	0	0	0	150	150	0	VC	0	0	
7200	28.34	25.45	375	375	70	25.618	0	VC	72.81627	1 in 260	28	0	0	0	150	150	0	VC	0	0	
8300	27.61	24.23	225	300	70	25.567	0	VC	39.05125	0	27	0	0	0	150	150	0	VC	0	0	
7503	0	0	0	150	50	25.8	0	VC	2.341468	0	64	0	0	0	150	150	0	VC	0	0	
4300	27.72	25.4	300	300	70	25.618	0	VC	64.5301	1 in 215	64	0	0	0	150	150	0	VC	0	0	
5404	26.86	25.16	225	300	70	25.567	0	VC	28.83664	1 in 260	64	0	0	0	150	150	0	VC	0	0	
8670	0	0	0	150	50	25.8	0	VC	8.505922	0	1	0	0	0	150	150	0	VC	0	0	
5406	0	0	0	150	50	25.8	0	VC	27.56498	0	1	0	0	0	150	150	0	VC	0	0	
5504	27.12	24.52	225	300	70	25.567	0	VC	8.54403	0	1	0	0	0	150	150	0	VC	0	0	
6301	28.51	25.7	450	450	70	25.618	0	VC	85.04942	1 in 3.8702256	1	0	0	0	150	150	0	VC	0	0	
5304	28.32	25.71	225	300	70	25.567	0	VC	47.85394	0	1	0	0	0	150	150	0	VC	0	0	
5003	27.61	25.77	225	300	70	25.567	0	VC	49.29568	0	1	0	0	0	150	150	0	VC	0	0	
7306	28.38	26.74	225	300	70	25.567	0	VC	22.36068	0	1	0	0	0	150	150	0	VC	0	0	
5104	27.61	25.43	225	300	70	25.567	0	VC	11.39218	0	1	0	0	0	150	150	0	VC	0	0	
4202	28.3	24.73	450	450	70	25.618	0	VC	62.96525	1 in 3.02292949	1	0	0	0	150	150	0	VC	0	0	
6414	27.07	24.63	225	300	70	25.567	0	VC	37.66616	1 in 108	1	0	0	0	150	150	0	VC	0	0	
5515	27.12	24.35	600	600	70	25.567	0	VC	5.951582	1 in 40	1	0	0	0	150	150	0	VC	0	0	
6301	27.03	23.63	300	300	70	25.618	0	VC	34.88553	1 in 125	1	0	0	0	150	150	0	VC	0	0	
5603	27.68	24.48	300	300	70	25.618	0	VC	102.45097	0	1	0	0	0	150	150	0	VC	0	0	
8674	0	0	0	150	50	25.8	0	VC	2.64399	0	1	0	0	0	150	150	0	VC	0	0	
815	0	0	0	150	50	25.8	0	VC	3.940537	0	1	0	0	0	150	150	0	VC	0	0	
4638	0	0	0	150	50	25.8	0	VC	6.54307	0	1	0	0	0	150	150	0	VC	0	0	
6405	27.11	23.49	300	300	70	25.618	0	VC	4.123106	0	1	0	0	0	150	150	0	VC	0	0	
4604	26.79	24.77	225	300	70	25.567	0	VC	2.646211	1 in 24	1	0	0	0	150	150	0	VC	0	0	
6302	29.78	26.71	225	300	70	25.567	0	VC	36.49657	0	1	0	0	0	150	150	0	VC	0	0	
6702	27.42	26.3	150	300	70	25.618	0	VC	47.85187	1 in 117	1	0	0	0	150	150	0	VC	0	0	
6510	27.44	20.57	2800	2800	70	25.618	0	VC	243.7504	1 in 530	1	0	0	0	150	150	0	VC	0	0	
513	0	0	0	150	50	25.8	0	VC	7.933148	0	1	0	0	0	150	150	0	VC	0	0	
4705	27.26	25.59	300	300	70	25.618	0	VC	77.88762	1 in 1558	1	0	0	0	150	150	0	VC	0	0	
4418	26.86	25.46	225	300	70	25.567	0	VC	24.16509	0	1	0	0	0	150	150	0	VC	0	0	
8505	0	0	0	150	50	25.8	0	VC	6.972417	1 in 62	1	0	0	0	150	150	0	VC	0	0	
5409	23.34	23.33	225	300	70	25.567	0	VC	12.31334	0	1	0	0	0	150	150	0	VC	0	0	
4801	27.13	24.48	300	300	70	25.618	0	VC	61.78304	1 in 120	1	0	0	0	150	150	0	VC	0	0	
4503	26.76	25.1	300	300	70	25.618	0	VC	86.12201	1 in 121	1	0	0	0	150	150	0	VC	0	0	
4605	26.83	24.37	300	300	70	25.618	0	VC	59.6337	1 in 59	1	0	0	0	150	150	0	VC	0	0	
7609	0	0	0	150	50	25.8	0	VC	6.234466	0	1	0	0	0	150	150	0	VC	0	0	
7506	0	0																			

LEGEND

Abandoned Foul Surface Water Combined Public Sewer
 Private Sewer
 Section 104
 Rising Main
 Studge Main
 Overflow
 Water Course
 Highway Drain

All point assets follow the standard colour convention:

brown - foul **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
- Network Storage Tank
- Sewer Overflow
- Ww Treatment Works
- Ww Pumping Station
- Septic Tank
- Control Kiosk
- Change of Characteristic

MANHOLE FUNCTION

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

SEWER SHAPE

- | | | |
|-------------|----|-------------|
| Circular | TR | Trapezoidal |
| Egg | AR | Arch |
| Oval | BA | Barrel |
| Flat Top | HO | HorseShoe |
| Rectangular | UN | Unspecified |
| 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 | Vitrified Clay |
| PP | Polypropylene |
| PF | Pitch Fibre |
| MAC | Masonry, Coursed |
| MAR | Masonry, Random |
| U | Unspecified |

Address or Site Reference:

THE FONT 115-117 MANCHESTER ROAD,
CHORLTON CUM HARDY,
MANCHESTER,
M21 9PG

Scale: 1:1250

Date: 08/03/2023

Sheet: 1 of 1

1 of 1

Printed by: Property Searches

Property Searches

SEWER RECORDS



APPENDIX C
PROPOSED SITE PLAN

APPENDIX D

RAINFALL INTENSITIES



Note:
Do Not Scale from this
Dimensions are to be checked on
Bfilm doubt please
ask.

P01 30/01/23DC Drawing issued to
Rev Date Intls team
©The moral rights of the author are hereby asserted.
This drawing and design is the sole property of Buttress Ltd and must not be reproduced without permission.
Buttress Ltd is Registered in England and Wales:
5363573

Buttress

41 Bengal Street, Manchester M4 6AF
Clockwise, Yorkshire House Greek Street, Leeds LS1 5SH

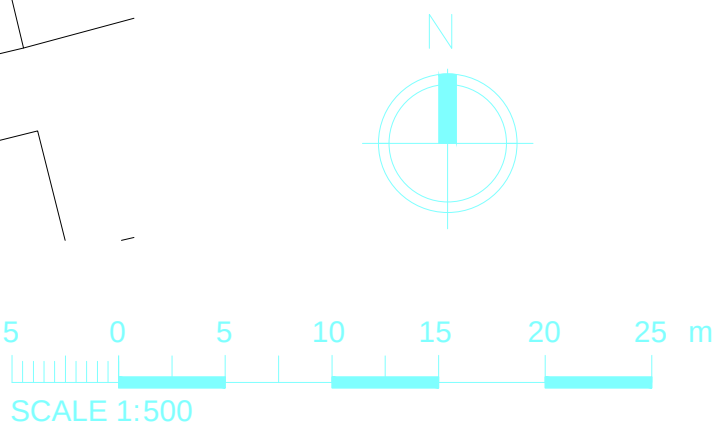
T 0161 236 3303
E contact@buttress.net
W www.buttress.net

Project Title Chorlton Baths Happi
Client Rowlinson Construction, MSV Housing
Location Manchester Road, Chorlton, Manchester

Drawing ref Location Plan

Date 01/02/2023 19:05:41 Scale 1 : 500
Checker Checker Size A2
Job No: 9136 Status S0 Initial Status

Project	Origin	Volume	Level	Type	Role	Number	Rev
CHOBA-BUT-ZZ-ZZ-DR-A-04000-P0							

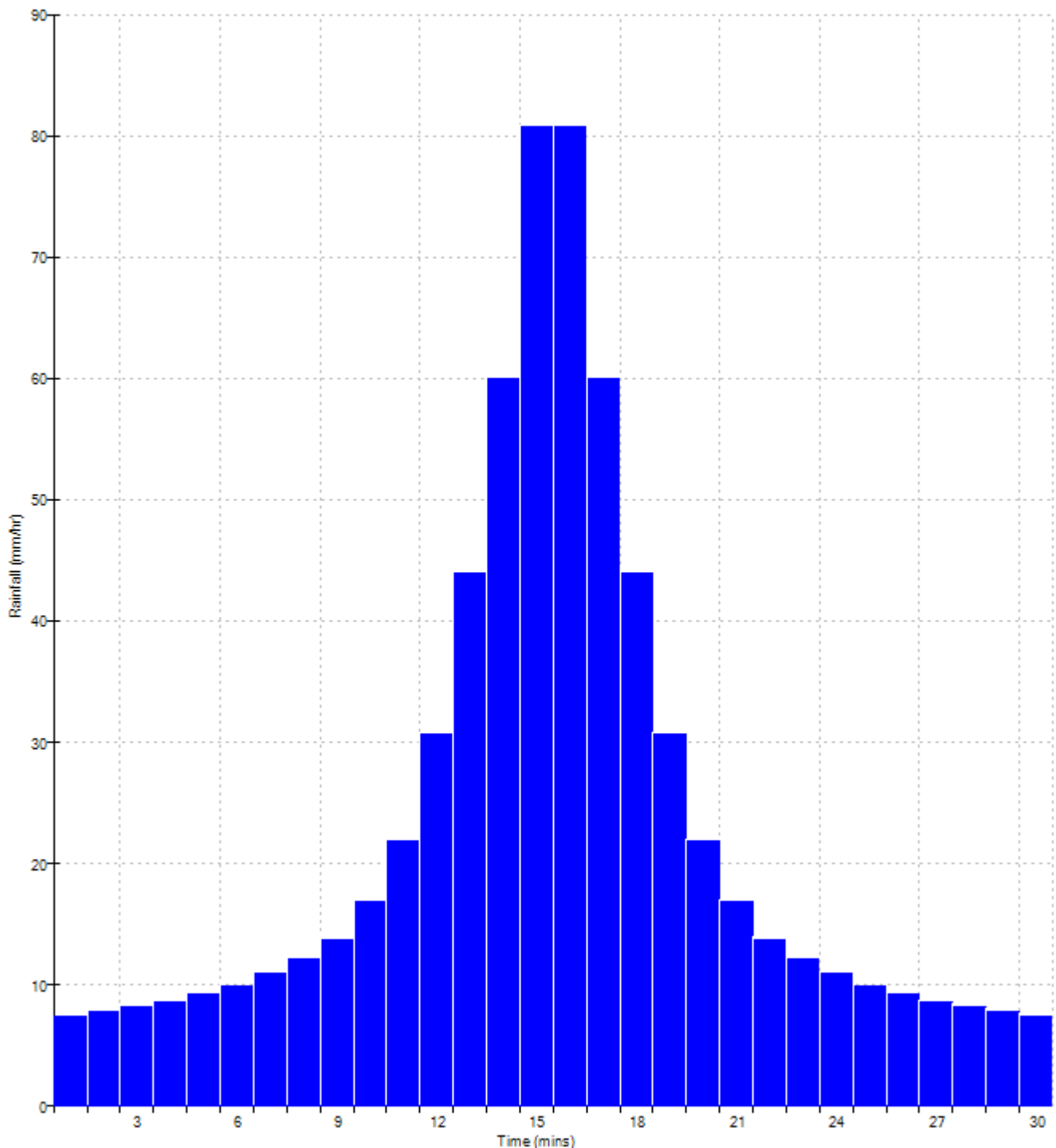


Carley Daines and Partners Limited		Page 1
11 Bridgewater Road Worsley Manchester, M28 3JE	Rainfall Profile Manchester 1 in 2 Year Storm Event	
Date 15/11/2021 File	Designed by A Mulligan Checked by A Mulligan	
Innovyze	Network 2019.1	

Rainfall profile

Storm duration (mins) 30

FSR Data
Region England and Wales
M5-60 (mm) 18.000
Ratio R 0.360
Peak Intensity (mm/hr) 80.767
Ave. Intensity (mm/hr) 22.854
Return Period (years) 2.0

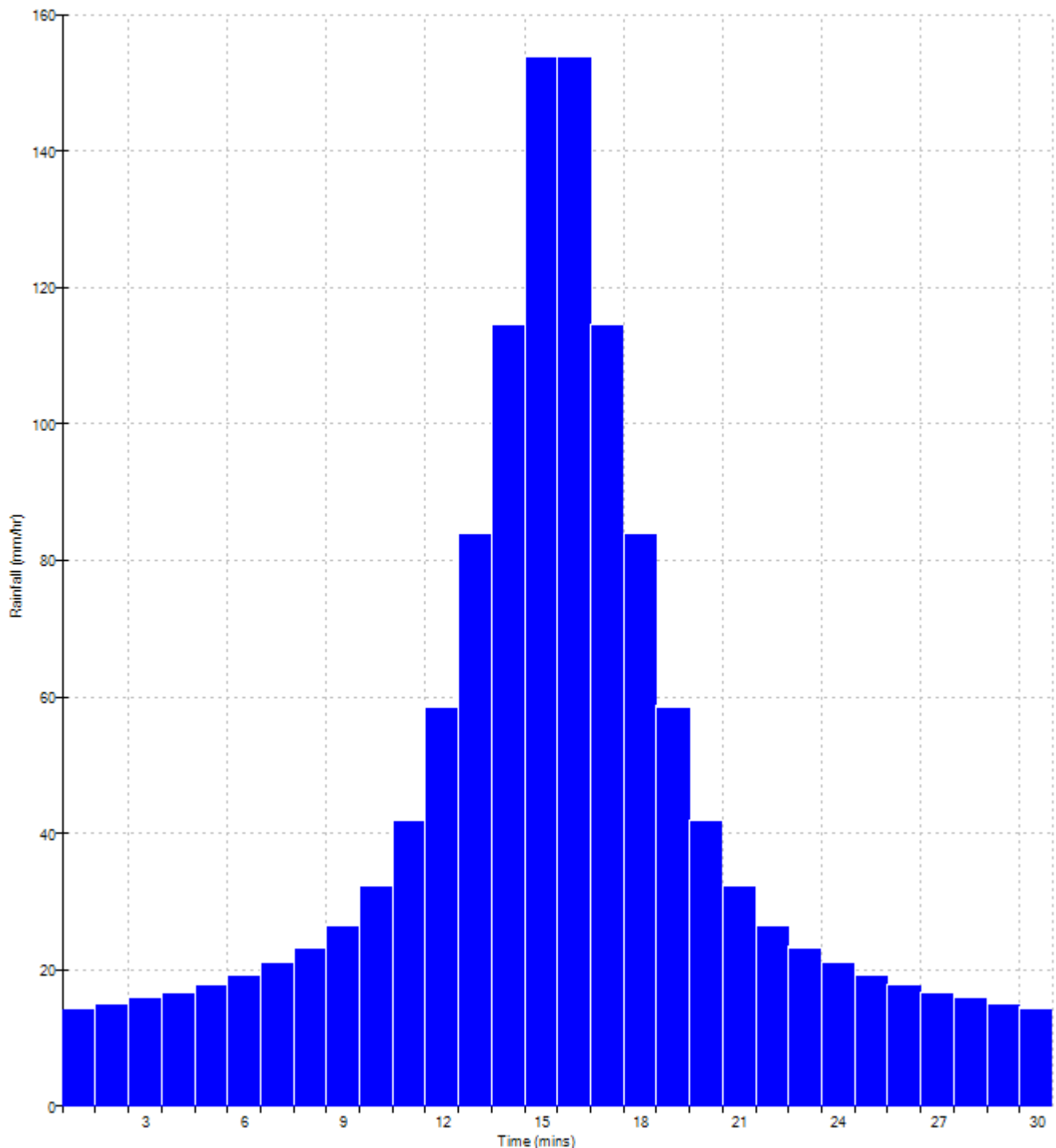


Carley Daines and Partners Limited		Page 1
11 Bridgewater Road Worsley Manchester, M28 3JE	Rainfall Profile Manchester 1 in 30 Year Storm Event	
Date 15/11/2021 File	Designed by A Mulligan Checked by A Mulligan	
Innovyze	Network 2019.1	

Rainfall profile

Storm duration (mins) 30

FSR Data
Region England and Wales
M5-60 (mm) 18.000
Ratio R 0.360
Peak Intensity (mm/hr) 153.752
Ave. Intensity (mm/hr) 43.507
Return Period (years) 30.0

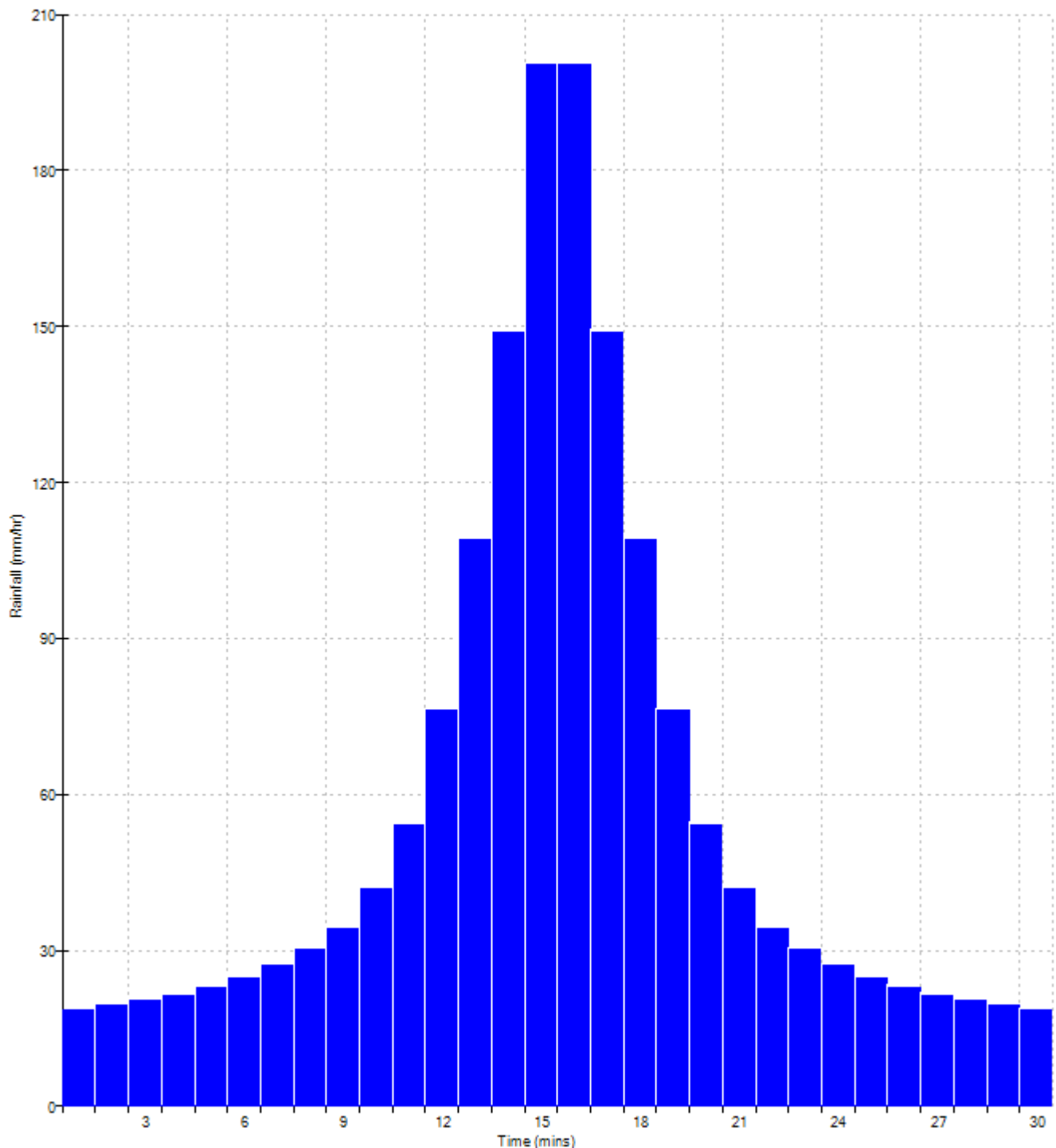


Carley Daines and Partners Limited		Page 1
11 Bridgewater Road Worsley Manchester, M28 3JE	Rainfall Profile Manchester 1 in 100 Year Storm Event	
Date 15/11/2021 File	Designed by A Mulligan Checked by A Mulligan	
Innovyze	Network 2019.1	

Rainfall profile

Storm duration (mins) 30

FSR Data
Region England and Wales
M5-60 (mm) 18.000
Ratio R 0.360
Peak Intensity (mm/hr) 200.462
Ave. Intensity (mm/hr) 56.724
Return Period (years) 100.0



APPENDIX E

PRELIMINARY STORAGE VOLUME ESTIMATES

Quick Storage Estimate

Micro Drainage

Variables

FSR Rainfall

Return Period (years) 30

Region England and Wales

Map M5-60 (mm) 18.000

Ratio R 0.360

Cv (Summer) 1.000

Cv (Winter) 1.000

Impermeable Area (ha) 0.289

Maximum Allowable Discharge (l/s) 5

Infiltration Coefficient (m/hr) 0.00000

Safety Factor 2.0

Climate Change (%) 0

Analyse OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

30 year return input data

Quick Storage Estimate

Micro Drainage

Results

Global Variables require approximate storage of between 64 m³ and 100 m³.

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

Analyse OK Cancel Help

Enter Maximum Allowable Discharge between 0.0 and 999999.0

30 year return result

Quick Storage Estimate

Micro Drainage

Variables

FSR Rainfall

Return Period (years) 100

Region England and Wales

Map M5-60 (mm) 18.000

Ratio R 0.360

Cv (Summer) 1.000

Cv (Winter) 1.000

Impermeable Area (ha) 0.289

Maximum Allowable Discharge (l/s) 5.0

Infiltration Coefficient (m/hr) 0.00000

Safety Factor 2.0

Climate Change (%) 45

Analyse OK Cancel Help

Enter Climate Change between -100 and 600

100 year + 45% cc input data

Quick Storage Estimate

Micro Drainage

Results

Global Variables require approximate storage of between 158 m³ and 229 m³.

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

Analyse OK Cancel Help

Enter Climate Change between -100 and 600

100 year + 45% cc return result

APPENDIX F

UNITED UTILITIES CONSULTATION RESPONSE

Andrew Mulligan

From: wastewaterdeveloperservices@uuplc.co.uk
Sent: 13 February 2023 10:21
To: David Middleton
Subject: RE: 03547572 Former Chorlton Leisure Centre Manchester Road Chorlton M21 0UA

Good morning David,

Pre Development Enquiry for: Former Chorlton Leisure Centre Manchester Road Chorlton M21 0UA UU Reference Number : 03547572

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 450mm diameter public combined sewer within Manchester Road located to the west of your proposed development at an unrestricted rate. Or otherwise to the 2800mm combined sewer if you are to utilise an existing connection.

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.

Waterbody

It is noted that there are no waterbodies within the vicinity of the 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 450mm diameter public combined sewer within Manchester Road located west 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 unless evidence of existing brownfield surface water can be provided to the public sewer in such circumstance we would expect 50% betterment be applied to the existing 2 year rate.

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

Sewer Adoptions

You have not indicated your application form that you intend to put the sewers forward for adoption or not (including any SuDS components that can come within the meaning of a sewer).

United Utilities assess adoption applications based on the current Design & Construction Guidance and local practices which have now replaced 'Sewers For Adoption 6th Edition'.

We recommend that you submit a pre design assessment to the sewer adoption mailbox (SewerAdoptions@uuplc.co.uk) stating pre design assessment in the title

Please refer to links below to obtain further guidance:

<https://www.unitedutilities.com/builders-developers/larger-developments/wastewater/sewer-adoptions/>

Site drainage must be designed in accordance with Building Regulations, National Planning Policy, and local flood authority guidelines, we would recommend that you speak and make suitable agreements with the relevant statutory bodies.

If you intend to put forward your wastewater assets for adoption by United Utilities, the proposed detail design will be subject to a technical appraisal by an Adoption Engineer as we need to be sure that the proposals meets the requirements set out in the Design & Construction Guidance. The proposed design should give consideration to long term operability and give United Utilities a safe and cost effective proposal for the lifetime of the assets. In these cases, we strongly recommend that no construction commences until the detailed drainage design, submitted as part of the Section 104 application, has been assessed and accepted in writing by United Utilities. Any work carried out prior to the technical assessment being approved is done entirely at the developer's own risk and could be subject to change.

SuDS

If your development proposal incorporates any SuDS component(s) which interact with a sewer network you plan on offering for adoption to United Utilities; contact should be made with our technical team at your earliest convenience, please complete the 'Section 104 pre-application form : ' and include as much relevant detail as you can. These discussions can help prevent delays later in the development process.

Section 104 Pre application form (1b)

As per the sewerage sector guidance, all SuDS should be designed in accordance with the standards within the Design & construction guidance & the CIRIA SuDS manual (C753)

Codes For Adoption

The new Codes for Adoption are outlined on the Water UK Website. The link below takes you to their webpage:

<https://www.water.org.uk/technical-guidance/developers-services/codes-for-adoption/>

A free copy of the new Design & Construction Guidance can be downloaded via the link below:

<https://www.water.org.uk/sewerage-sector-guidance-approved-documents/>

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

The Thirlmere Aqueduct does cross the northern boundary of your 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,

Shoaib.



Shoaib Tauqeer
Developer Engineer
Developer Services & Metering
M: 07876745601
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: 31/01/2023 10:51
To: david.middleton@carleydaines.co.uk
Subject: 03547572 Former Chorlton Leisure Centre Manchester Road Chorlton M21 0UA

Dear David

PRE DEVELOPMENT APPLICATION AT: – UU Ref 03547572

Please accept this email as receipt of your application received on 30.1.2023 for the above development. This has now been logged on our system and the job reference is 03547572 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 Shoaib Tauqeer 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

www.unitedutilities.com
www.unitedutilities.com/subsidiaries