

Trammell Crow Company

Heywood Stores Manchester Road

Flood Risk Assessment and Drainage Strategy
October 2022



Heywood Stores

Flood Risk Assessment and Drainage Strategy

for

**Trammell Crow Company Logistics
(Heywood) Ltd**

Ref: 21194-BGL-XX-XX-RP-D-00001

Version 2
20.10.2022

DOCUMENT CONTROL SHEET

Issued by: Burrows Graham Limited
5 Ambassador Place
Stockport Road
Altrincham
WA15 8DB

Tel: +44 (0)161 804 8046

Client: Trammell Crow Company Logistics (Heywood) Ltd

Project: Heywood Stores

Document No: 21194-BGL-XX-XX-RP-D-00001

Title: Flood Risk Assessment and Drainage Strategy

Status: Final

Date: 20/10/2022

Document Production Record

Version Number:	2	Name	Signature
Prepared		Alexa Abbot MEng – Graduate Engineer	
Checked		Jordan McGlacken MEng – Senior Engineer	
Approved		Jack Williams CEng MICE – Civils Director	

Document Revision Record

Version Number	Date	Revision Details
1	14.10.2022	First Issue
2	20.10.2022	Front page added and appendix updated

Burrows Graham Limited has prepared this report in accordance with the instructions of the above-named Client for their sole and specific use. Any third parties who may use the information contained herein do so at their own risk.

CONTENTS

- 1.0 PROJECT BACKGROUND**
- 2.0 SITE DETAILS**
- 3.0 FLOOD RISK STATEMENT**
- 4.0 SURFACE WATER DRAINAGE STRATEGY**
- 5.0 FOUL WATER DRAINAGE STRATEGY**
- 6.0 MITIGATION / MANAGEMENT OF FLOOD RISK**

APPENDICES

- APPENDIX A – PROPOSED SITE PLAN**
- APPENDIX B – STATUTORY CONSULTATIONS**
- APPENDIX C – TOPOGRAPHICAL SURVEY**
- APPENDIX D - EXISTING DRAINAGE INFORMATION**
- APPENDIX E – DRAINAGE STRATEGY**
- APPENDIX F – HYDRAULIC CALCULATIONS**
- APPENDIX G – DRAINAGE INSPECTION AND MAINTENANCE SCHEDULE**

FIGURES

- FIGURE 1 – SITE LOCATION PLAN**
- FIGURE 2 – PUBLIC SEWER RECORDS EXTRACT**
- FIGURE 3 – FLOOD MAPS FOR PLANNING EXTRACT**
- FIGURE 4 – FLOOD MAPS FOR SURFACE WATER FLOODING EXTRACT**
- FIGURE 5 – RISK OF FLOODING FROM GROUNDWATER EXTRACT**

TABLES

- TABLE 1 – SITE CHARECTERISTICS**
- TABLE 2 – TOTAL AREA**
- TABLE 3 – HYDROLOGICAL CHARECTERISTICS FOR THE SITE**
- TABLE 4 – GREENFIELD RUNOFF RATES**

1.0 - PROJECT BACKGROUND

1.1 - Appointment

Burrows Graham Limited have been commissioned by Trammell Crow Company Logistics (Heywood) Ltd (referred to as 'the applicant' hereafter) to undertake a flood risk assessment and drainage strategy of suitable scope to support a planning application for a proposed commercial development at Heywood Stores, Heywood.

1.2 - Aim of study

This FRA and Drainage Strategy has been developed in due cognisance of all relevant available policy information. It is anticipated that this report will satisfy the requirements of the National Planning Policy Framework (NPPF) and all relevant flood risk planning policies.

1.3 - Relevant policy and strategy documents

The following documents were reviewed as part of this Flood Risk Assessment:

- Defra Sustainable Drainage Systems Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015)
- Environment Agency Climate Change Guidance (February 2016)
- Flood and Water Management Act (April 2010)
- National Planning Policy Framework (Updated July 2021) and Planning Practice Guidance (March 2014)
- Sustainable Drainage Systems Written Statement HCWS161 (December 2014)
- Bury, Rochdale, and Oldham Strategic Flood Risk Assessment (SFRA) Level 2 (November 2009)
- Rochdale Borough's Strategy for Flood Risk Management 2014-2024 (March 2014)
- Rochdale Metropolitan Borough Council Preliminary Flood Risk Assessment (PFRA) (May 2011)

1.4 - Proposed development

A summary of the proposed works is as follows:

- Demolition of the 9 existing units totalling circa 31,900 sq m;
- Erection of 3 new units (Use Class B8), totalling 45,755 sqm;
- Provision of parking for approximately 398 spaces in total, including 20 EV charging spaces, 26 accessible spaces and 18 car sharing spaces;
- Provision of cycle parking for approximately 60 spaces;
- New areas of green space, tree planting and habitat creation; and
- SuDS, including surface water attenuation features.

Reference should be made to the 'Proposed Site Plan' included in Appendix A.

The development can be classified as 'less vulnerable' in accordance with guidance set out on the 'gov.uk' website, namely 'Table 2: Flood vulnerability classification'.

1.5 – Statutory consultation

A copy of all correspondence with United Utilities and Rochdale Council Flood Risk Management Team (LLFA) has been included in Appendix B of this report.

2.0 - SITE DETAILS

2.1 – Site description

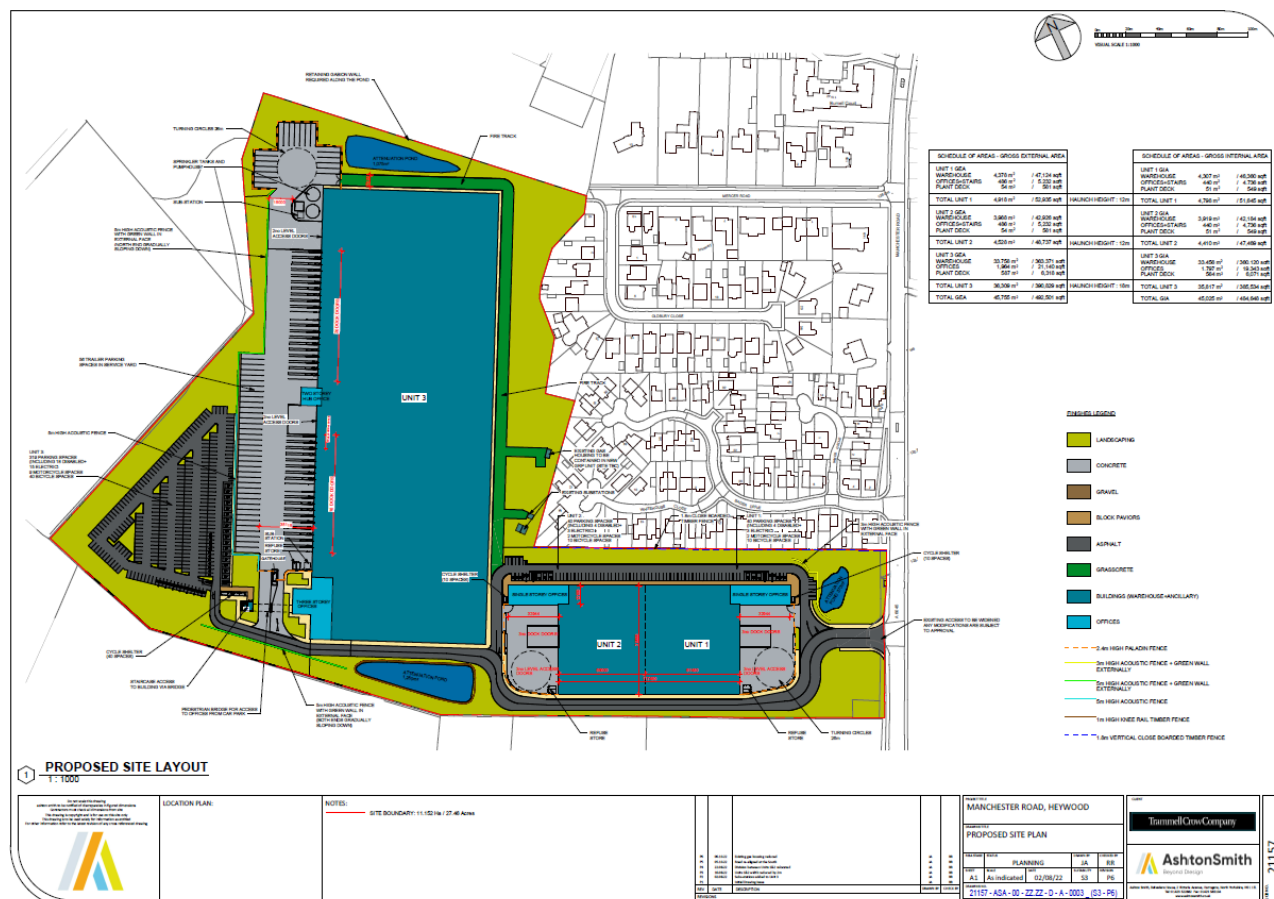


Figure 1 – Site Plan

Table 1 - Site characteristics

Site address	Manchester Road, Heywood OL10 2QU
Grid reference	385527, 409246
Area (hectares)	11.1 hectares
Current use	A Lawful Development Certificate was granted on 14 December 2021 (ref: 21/01298/CPE) which confirmed that the site's existing lawful use is Use Class B8 (storage and distribution).
Surroundings	South – The new M62 Link Road is currently being constructed on land south of the site. Further south is Hareshill Road, beyond which lies agricultural land. East – A housing estate and Manchester Road form the eastern site boundary. West – A farmers field delineates the western site boundary. North – A housing estate and school form the northern site boundary.
Topography	Site levels generally fall to the West corner of the site to a low level of approximately 125m AOD. The highest area of the site is located on the North-Eastern edge at a level of around 131m AOD. A copy of the topographical survey has been included in Appendix C of this report.

2.2 - Existing drainage

Public sewers

Reference should be made to the UU Public Sewer Records contained in Appendix D of this report.

The Public Sewer Records show there to be no public sewers within the site.

The records show a 300mm diameter public surface water sewer in Hareshill Road, which connects into a 600mm diameter private / highway drain that outfalls to an unnamed watercourse south of Hareshill Road.

The records show a public foul and surface water network serving the housing estate to the north of the site. A public foul pumping station is shown immediately outside the north-easternmost site boundary.

Figure 2 - Public sewer records extract



Private Drainage

Reference should be made to the EDI Surveys Ltd Buried Utilities Survey, which has been included in Appendix D of this report.

With respect to surface water drainage, the Buried Utilities Survey shows 1 no. 225mm diameter surface water pipe, 1 no. 300mm diameter surface water pipe, and 1 no. 675mm diameter surface water pipe, to discharge runoff from the site to an unknown outfall along the north-western site boundary. Based on the lay of the land, this drainage system is anticipated discharge to the ordinary watercourse to the south of Hareshill Road.

The LLFA were consulted and advised that Hareshill Road has been widened, and that a 600mm diameter pipe passes under the road as is shown in figure 2. The LLFA indicated that the private drain serving the site connects into this 600mm diameter pipe that passes under Hareshill Road, as per the drawing they provided which is contained in Appendix B.

Appendix B contains a copy of all correspondence with the Rochdale Flood Risk Management Team to date.

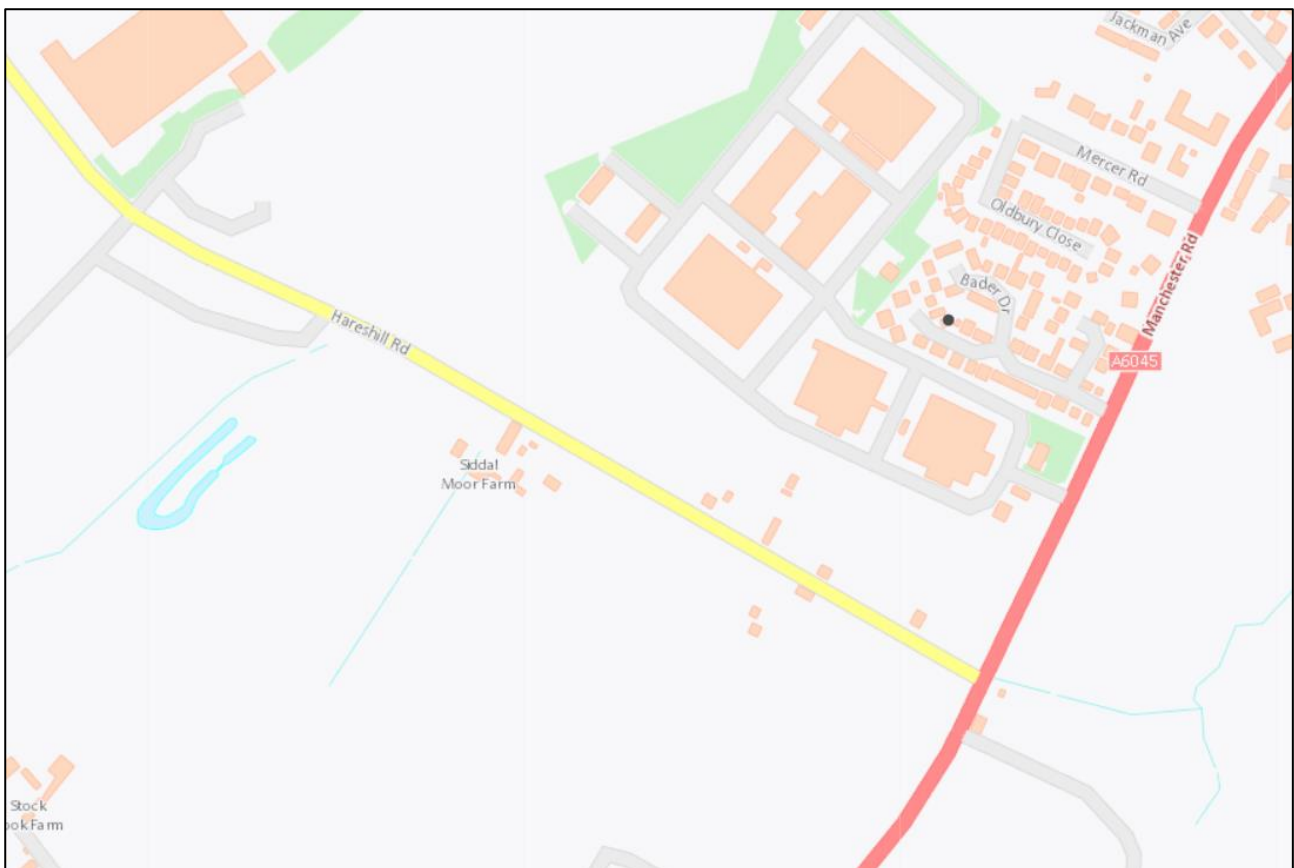
The Buried Utilities Survey also shows a 300mm diameter surface water pipe leaving the site at the south eastern boundary.

A drainage survey is currently being arranged to verify the location and ultimate outfalls of the surface water drain leaving the site.

With respect to foul drainage, the current system discharges via a pumping station to the south-west edge of the site. This picks up all the foul drainage from the nine warehouse buildings on site.

2.3 - Existing watercourses

Whittle Brook is located south of Hareshill Road, circa. 400m south-east of the site at it's on the other side of Manchester Road. There is an unnamed watercourse approximately 150m to the West of the site which becomes Brightley Brook.



2.4 - Geology and hydrogeology

Reference should be made to the Coal Mining Risk Assessment by RSK Geosciences, which has been included in Appendix D of this report, and the key findings of which have been summarised below.

- A review of available geological records was made which found that the site is underlain by superficial deposits of Devensian till which is made up of clay, silt and sand. The bedrock of the site comprises of mudstone of the Pennine Lower Coal Measures which is predominantly Mudstone, Siltstone and Sandstone

- BGS GeoIndex mapping shows the site is located on a moderately productive aquifer which is described as regional, cyclic and multi-layers with moderate yields from sandstones and springs
- The site is in a zone of low groundwater vulnerability.

3.0 – FLOOD RISK STATEMENT

3.1 - Fluvial flood risk

The National Planning Policy Framework (NPPF) categorises flood risk as follows:

- Zone 1 (low probability) – Land assessed as having less than a 1 in 1,000 annual probability of river or sea flooding (<0.1%);
- Zone 2 (medium probability) – Land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% – 0.1%) in any year; and
- Zone 3a (high probability) - Land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year.
- Zone 3b The Functional Floodplain - This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the EA. (Not separately distinguished from Zone 3a on the Flood Map).

The EA flood maps for planning show that the of the site to be located within Flood Zone 1, with no Main Rivers in the vicinity.

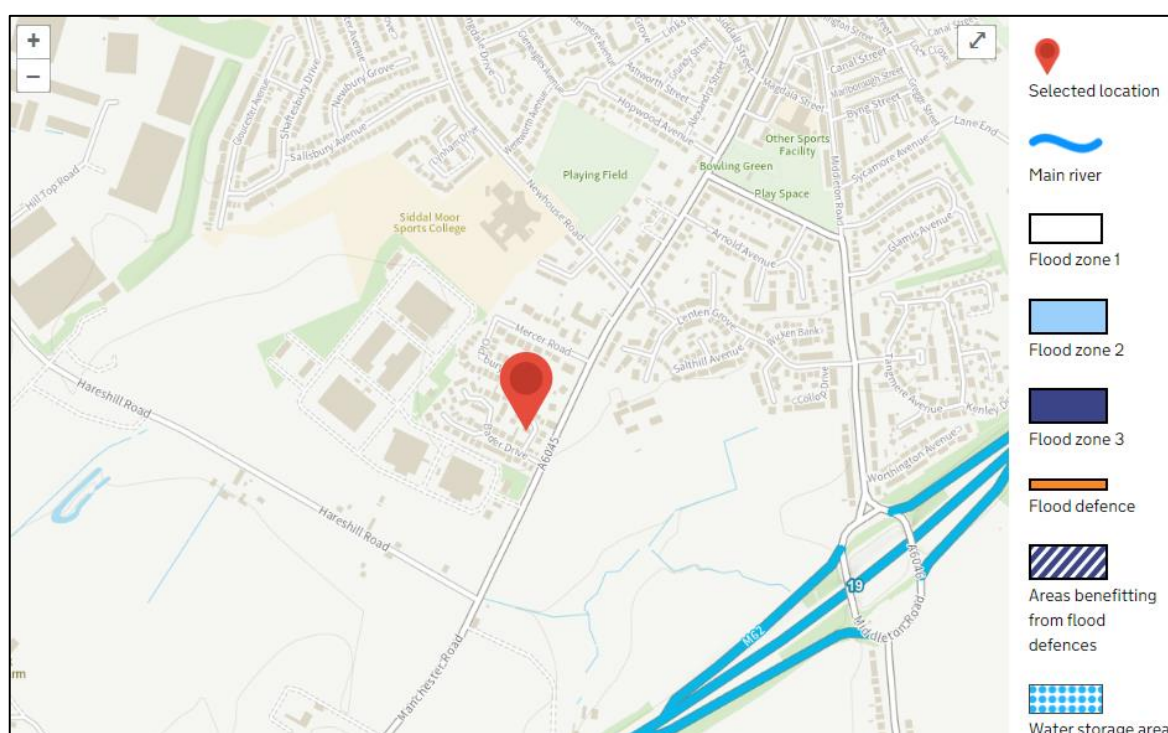


Figure 3 – EA Flood Map for Planning

Based on the above, the site considered to be at low risk of flooding from rivers or sea.

3.2 - Surface water flooding

The EA descriptions for the High, Medium and Low risk scenarios for surface water flooding are as

21194, Trammell Heywood, Heywood
Flood Risk Assessment and Drainage Strategy

follows:

- High risk means that each year this area has a chance of flooding of greater than 3.3%.
- Medium risk means that each year this area has a chance of flooding of between 1% and 3.3%.
- Low risk means that each year this area has a chance of flooding of between 0.1% and 1%.
- Very Low risk means that each year this area has a chance of flooding of less than 0.1%.

The EA Map of long-term flood risk from surface water indicates that the site is mostly at very low risk of flooding. There are some localised areas at low to high risk of surface water flooding associated with low lying parts of the site. The development will include provision of a new site wide drainage system as set out in sections 4 & 5 of this report, which will mitigate against these areas of surface water flooding. As such, the risk is considered to be low.'

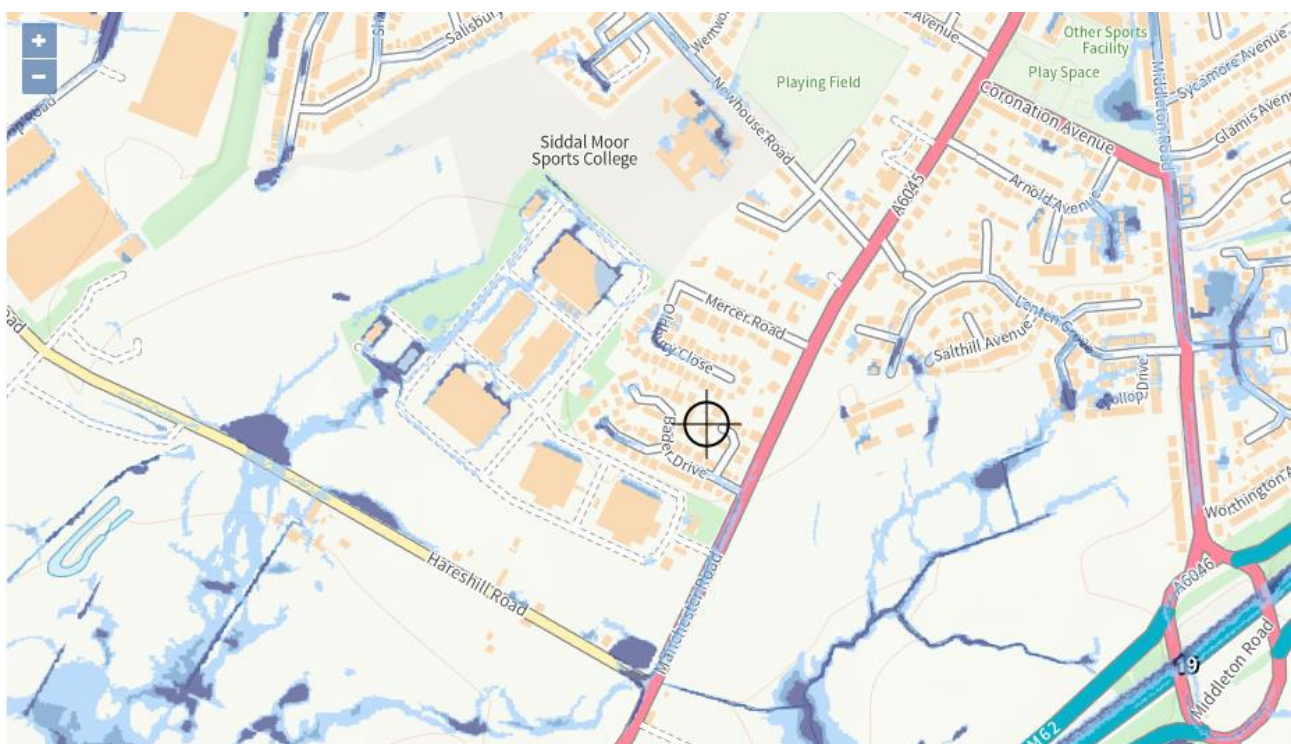


Figure 4 – EA Flood Map for Surface Water

3.3 - Groundwater flood risk

Groundwater flooding occurs when the water table, the level of water below the ground, rises above the ground surface or into cellars and basements. Groundwater flooding is most likely to occur in low lying areas underlain by permeable rocks (aquifers). These may be extensive, regional aquifers, such as chalk or sandstone, or may be localised sands or river gravels in valley bottoms underlain by less permeable rocks.

Based on the ground conditions outlined in Section 2.4, the risk of flooding from groundwater cannot be ruled out.

Based on the SFRA produced by Rochdale Borough Council there is no significant risk of groundwater flooding on the site or in the surrounding areas. Heywood and the wider area consists of geology predominantly made up of sand and gravel which is highly permeable.

Based on the groundwater flood maps contained in the Bury, Rochdale and Oldham SFRA, the presence of deep groundwater and no basements forming part of the development proposals, the risk of groundwater flooding is considered to be low.

3.4 - Sewer flooding

There are no existing public sewers within the vicinity of the site. Therefore, the site is at low of risk of flooding from sewers.

3.5 - Tidal flooding

The site is remote from tidal influences and is therefore not at risk of tidal or coastal flooding.

3.6 - Reservoir flooding

Based on the EA Flood Risk from Reservoirs Map, the site is not at risk of flooding from reservoirs.

4.0– SURFACE WATER DRAINAGE STRATEGY

4.1 – Disposal of surface water

The method for removal of surface water from the site has been selected in accordance with the hierarchy outlined in Building Regulations Part H as summarised below:

- Infiltration to the ground
- Discharge to a watercourse
- Connection to a surface water sewer
- Connection to a combined sewer

Based on the ground conditions summarised in section 2.4, and the site investigation report carried out by RSK we consider infiltration to not be feasible due to the presence of made ground underlying clay and areas of high ground water across the site.

Where infiltration is not possible, the next best option is to discharge to a watercourse. As described in section 2.22 of this report. it is anticipated that most of the site currently discharges surface water to the unnamed watercourse to the south of Hareshill Road via 600mm diameter pipe. A small part of the site discharges to an unknown outfall in Manchester Road. This strategy is based on the site draining surface water as existing, with the relevant betterments and climate change allowances applied – see below.

4.2 – Sustainable Drainage Systems

Sustainable Drainage Systems (SuDS) will be utilised in line with The SuDS Manual (C753) guidance and aim to minimise the impact a development has on the runoff quantity and quality and maximise amenity and biodiversity opportunities.

The management train approach is a fundamental principle of SuDS, it aims to primarily reduce pollution, flow rates and volume of runoff from the site. The main objective is to treat the runoff as close to the source as possible and it is imperative that at least two of the following should be included within the drainage strategy.

- **Prevention** – The use of good site design and rainwater re-use measures to prevent runoff.
- **Source Control** – Controlling the runoff as close to source as possible by using; green roofs, porous pavements and soakaways.
- **Site Control** – Use of water management techniques within local area, i.e. detention basins and geo-cellular storage.
- **Regional Control** – Management of water from a number of sites in a specific location, i.e. balancing ponds and wetlands.

The drainage strategy for this development will incorporate prevention by using rainwater harvesting systems where possible and site control in the form of flow control and associated attenuation ponds and below ground tanks.

4.3 – General strategy

For details of the outline drainage proposals for the site, reference should be made to drawing ref: 21192-BGL-XX-XX-DR-S-00250, which has been included in Appendix E of this report.

4.4 – Total site area and impermeable areas

The total site area is 11.1 hectares.

The existing impermeable area of the site has been measured to be 5.836 hectares.

The total drained impermeable area of the proposed development has been measured to be 8.325 hectares.

4.5 – Discharge rates

The site is a brownfield development. Rochdale LLFA have been contacted to confirm the approach in terms of discharge rates and betterments.

Using the runoff calculations tool provided by the LLFA, the maximum permitted future discharge from the developed site should be no greater than 241 l/s. This is based on providing a 50% betterment for the Qbar (2.3 year return period) for all storm events. This maximum discharge rate will be split across two proposed surface water outfall. The majority of the site will discharge to the watercourse south of Hareshill Road via the 600mm diameter drain at a rate no greater than 236 l/s.

A small part of the site is proposed to discharge to an unknown outfall through re-using the existing 300mm connection within the site. Since the ultimate outfall of the 300mm drain is unknown, flows will be restricted to 5 l/s, which meets the requirements of the LLFA and United Utilities, the latter of which have indicated that they *'will consider a surface water connection to the 225mm diameter public surface combined sewer within Manchester Road located South 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 this would be new connection for site that currently has a more sustainable point of discharge'*.

All correspondence and calculations have been included in Appendix B and Appendix F of this report respectively.

4.6 – Attenuation storage

In order to achieve the restriction in peak rate of surface water runoff from the developed site as described above, on site surface water attenuation storage will be required in order to temporarily store the residual volume of surface water for rainfall events resulting in a peak runoff rate over those set out in table.

Attenuation will be provided in the form of attenuation ponds and below ground storage (where required).

The attenuation storage will be designed to ensure that there is no surface water flooding on site for rainfall events up to and including the 1 in 30 year storm event. The attenuation storage will be designed to ensure that surface water runoff for storm events up to and including the 100 year storm plus a 30% allowance will not cause a risk of flooding to properties or increase the flood risk outside of the site.

A 30% climate change allowance is proposed in line with the latest DEFRA climate change allowances.

A hydraulic modelling exercise of the proposed drainage system has been undertaken and the results have been included in Appendix F of this report.

4.7 – Water quality

Water quality has been considered and the following measures have been included within the surface water drainage proposals:

- All drainage from car park areas, which are considered low risk, will pass through either a Class 1 by-pass separator.
- All drainage from service yards, which are considered high risk, will pass through a Class 1 full retention separator.
- All drainage from the unit 1, unit 2 and the site road will pass through one of the attenuation ponds, which will provide treatment for runoff from these areas.
- Silt will be prevented from entering the system by the use of channels with silt traps and catch pits where required.

4.8 – Maintenance

Reference should be made to the Drainage Inspection and Maintenance Schedule in Appendix G, which includes required actions and typical frequencies for all drainage infrastructure serving the development.

The drainage will be managed and maintained by an appointed Management Company.

5.0 – Foul water drainage strategy

A pre-development enquiry was submitted to United Utilities who stated the following in their response, a copy of which has been included in Appendix B of this report:

'Our preferred point of discharge would be to the 225mm diameter public combined sewer within Manchester Road located to the South of your proposed development at an unrestricted rate the same as the current brownfield arrangement'.

The public sewer records do not show a 225mm diameter public combined sewer in Manchester Road to the south of the site, but does show a 225mm diameter combined sewer in Manchester Road further north. As such, it is currently proposed to discharge foul drainage generated from the development to the 225mm foul sewer (upstream of existing pumping station immediately outside the north-eastern site boundary). It is anticipated that a pumped foul drainage is required.

Where a 225mm combined sewer in Manchester Road to the south of the site is verified, foul drainage from the development will be discharged to it. Based on an anticipated gross internal floor space of 42,985 square metres, it is anticipated that the average foul flow from the development will be 0.5 l/s and the peak flow will be 3 l/s. This has been calculated using the following formula:

$$6DWF = 6PG + I + 3E$$

Where:

6DWF = foul drainage design flow (l/d)

P = population = 30 litres per person per day

G = water consumption = 30 l/person/day

I = dry weather infiltration = 10%

E = trade effluent = 0.2 l/s/ha

6.0 MITIGATION / MANAGEMENT OF FLOOD RISK

6.1 – Access and egress

Access to and egress from the site will be provided by a site access road that ties into Manchester Road.

Manchester Road and the proposed site access road are located within flood zone 1. Therefore, a safe means of access / egress is available to the site at all times.

6.2 - Drainage & exceedance flow routes

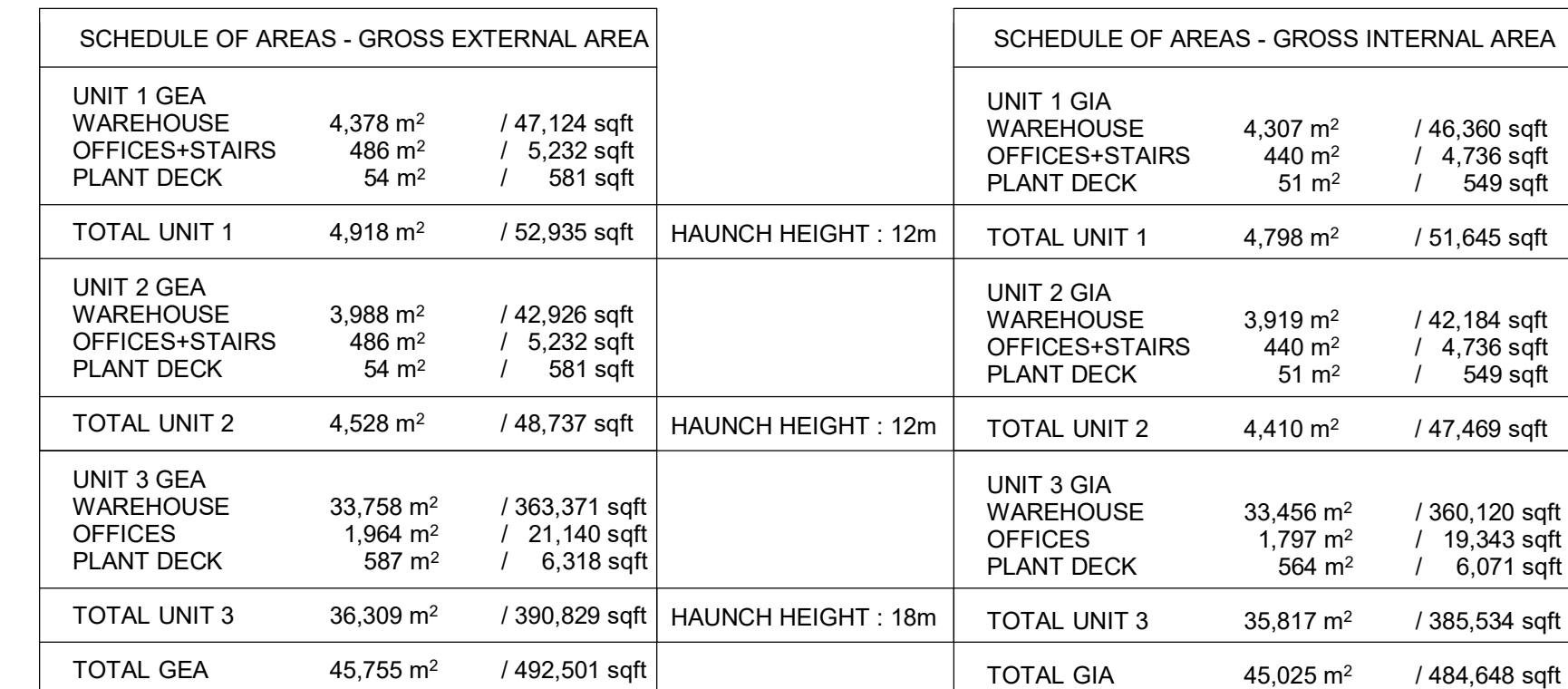
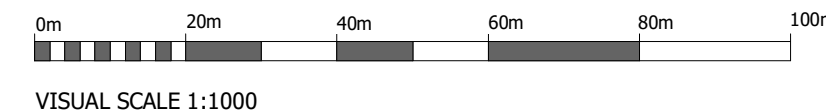
The proposed surface water drainage system will be designed in accordance with the drainage strategy set out in Section 4 of this report. This will ensure that there is no increase in flood risk to the site or elsewhere in the local catchment for all storm events up to and including the 100 year storm plus 30% climate change.

It should be noted that if storm events in excess of the 100 year storm plus 30% climate change or blockages occur, this will result in flood water arising from the site drainage system. If the site drainage system were to flood, it is considered that any surface water arising from the site drainage system would be contained within the area of dock levellers which are below ground.

6.3 - Conclusion

This Flood Risk Assessment and Drainage Strategy has concluded that the development is appropriate and can be occupied safely subject to implementation of the flood risk mitigation described in this report being carried out.

APPENDIX A – PROPOSED SITE PLAN



LANDSCAPING
 CONCRETE
 GRAVEL
 BLOCK PAVIORS
 ASPHALT
 GRASSCRETE
 BUILDINGS (WAREHOUSE+ANCILLARY)
 OFFICES
 2.4m HIGH PALADIN FENCE
 3m HIGH ACOUSTIC FENCE + GREEN WALL EXTERNALLY
 5m HIGH ACOUSTIC FENCE + GREEN WALL EXTERNALLY
 5m HIGH ACOUSTIC FENCE
 1m HIGH KNEE RAIL TIMBER FENCE
 1.8m VERTICAL CLOSE BOARDED TIMBER FENCE

1 : 1000

SITE BOUNDARY: 11.152 Ha / 27.46 Acres

REV	DATE	DESCRIPTION
REVISIONS		

CLIENT

Trammell Crow Company

 **AshtonSmith**
Beyond Design

Ashton Smith, Belvedere House, 2 Victoria Avenue, Harrogate, North Yorkshire, HG1 1EJ
Tel: 01423 522882 Fax: 01423 565104
www.ashtonsmith.co.uk

21157

JOB NC

APPENDIX B – STATUTORY CONSULTATIONS

From: Stephen McCann <Stephen.McCann@Rochdale.Gov.UK>
Sent: 04 March 2022 13:50
To: Jordan McGlacken <jordanmcglacken@burrowsgraham.com>
Subject: RE: Brownfield sites & maximum allowable discharge rates [Filed 04 Mar 2022 13:58]

Hello Jordan,

The Council as LLFA & UU look for the developer to provide at least 50% brownfield runoff rate betterment for the Qbar (2.3 yr return period).
I have appended an excel sheet as an example.

Stephen McCann
Drainage & Flooding Engineer
Highways, Property & Strategic Housing



☎ 01706 924606
📱 07552 570262
✉ stephen.mccann@rochdale.gov.uk

Rochdale Borough Council
Floor 2, Number One Riverside
Smith Street, Rochdale, OL16 1XU

To access our services go to www.rochdale.gov.uk
For news and social media updates go to www.rochdale.gov.uk/news

Please consider the environment before printing this email.

From: Jordan McGlacken <jordanmcglacken@burrowsgraham.com>
Sent: 04 March 2022 13:18
To: Stephen McCann <Stephen.McCann@Rochdale.Gov.UK>

Cc: Jack Williams <jackwilliams@burrowsgraham.com>

Subject: Brownfield sites & maximum allowable discharge rates

:CAUTION: This email originated from outside of the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Steven,

I hope you're well.

We are currently carrying out some due diligence work for a brownfield site in Heywood and have been asked to provide estimates of the attenuation requirements for the developed site. The site is brownfield and currently discharges to an existing culverted watercourse. We have a drainage survey proving the existing drainage arrangements on site, which show some large diameter pipes leaving the site and discharging to the culverted watercourse.

My question to you is, for brownfield sites in the Rochdale area, does the LLFA accept a betterment to existing rates (where proven by means of modelling or otherwise) and what % betterment is usually requested? I've looked at the SFRA and couldn't find any advice regarding this matter.

Kind regards,

Jordan McGlacken *MEng (Hons)*
Senior Civil Engineer

Burrows Graham
5 Ambassador Place, Stockport Road, Altrincham WA15 8DB
E: jordanmcglacken@burrowsgraham.com
M: +44(0)7988 047 401
T: +44 (0)161 804 8046
www.burrowsgraham.com



This email may contain information which is confidential and is intended only for use of the recipient/s named above. If you are not an intended recipient, you are hereby notified that any copying, distribution, disclosure, reliance upon or other use of the contents of this email is strictly prohibited. If you have received this email in error, please notify the sender and destroy it. 'Think before you print' - please do not print this email unless you really need to. Burrows Graham Limited is a privately owned company, registered in England and Wales, with registered number 12414515. Our registered office is 5 Ambassador Place, Stockport Road, Altrincham WA15 8DB.

This email, its contents and any attachments are intended only for the above named. As the email may contain confidential and/or legally privileged information, if you are not, or suspect that you are not, the above named or the person responsible for delivery of the message to the above named, please delete or destroy the email and any attachments immediately and inform the sender of the error. Unauthorised access, use, disclosure, storage or copying is not permitted and may be unlawful. The views of the author may not necessarily reflect those of Rochdale Borough Council.

Rochdale Borough Council undertakes monitoring of both incoming and outgoing e-mails. You should therefore be aware that if you send an e-mail to a person within Rochdale Borough Council it may be subject to any monitoring deemed necessary by Rochdale Borough Council from time to time. Rochdale Borough Council cannot guarantee that this message or any attachment is virus free or has not been intercepted and amended.

As a public body, Rochdale Borough Council may be required to disclose this email (or any response to it) under the Freedom of Information Act 2000, unless the information in it is covered by one of the exemptions within the Act.

Alexa Abbot

From: Graham, Alistair <Alistair.Graham@uuplc.co.uk>
Sent: 10 January 2022 14:40
To: Jordan McGlacken
Cc: Wastewater Developer Services; Sarah Burrows
Subject: Pre Development Enquiry for: Heywood Stores, Heywood, OL10 2QR UU
Reference Number : 4200046030

Good afternoon Jordan,

Pre Development Enquiry for: Heywood Stores, Heywood, OL10 2QR UU Reference Number : 4200046030

For future reference we now have a new wastewater pre-development enquiry form designed to be easier and more user friendly which is available on our website via the following link:

<https://www.unitedutilities.com/builders-developers/larger-developments/pre-development/wastewater-pre-dev/>

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 3723223 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 Manchester Road located to the South of your proposed development at an unrestricted rate the same as the current brownfield arrangement.

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.

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

If an evidence based assessment has been carried out and confirms that infiltration is not feasible, we recommend that you contact the Lead Local Flood Authority and/or Environment Agency to discuss a point of discharge to the watercourse located to the south west of the proposed site. As mentioned in your email our records do show a 600mm pipe in this area, this is recorded as a watercourse so you will need to discuss the discharge to this with the Lead Local Flood Authority

We would encourage you to identify and engage with any third party landowner and riparian owner to agree access and discharge rights to the water body if this is not in your ownership.

Highway Drainage

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

Public Sewer

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

Once evidence is provided as outlined above, United Utilities will consider a connection to the 225mm diameter public surface combined sewer within Manchester Road located South 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 this would be new connection for site that currently has a more sustainable point of discharge.

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

If you intend to put the sewers forward for adoption (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/wp-content/uploads/2020/03/SSG-App-C-Des-Con-Guide-v-2-100320-C.pdf>

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/larger-developments/wastewater/sewer-connections/>

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,



Alistair Graham

Wastewater Developer Engineer
Developer Services & Metering
Customer Services
M: 07765941555
unitedutilities.com

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

Visit: [unitedutilities.com/wow](https://www.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

Coronavirus

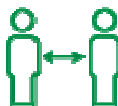
Prevent the spread



**Wash your
hands**



**Disinfect
common surfaces**



**Practise social
distancing**



**FEVER +
COUGH**

**Stay home if you
have symptoms**

[Click for our message to customers](#)

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

Wastewater pre-development enquiry

Getting water for your new development initial planning stage



This form is for all first time enquiries you may have when planning your development.

If your enquiry relates to advice on **connection points and discharge rates**, please complete all sections, providing as much information as you have available. You will notice some fields are marked as optional, all other fields are mandatory.

For **all other enquiries**, please complete Sections 1, 2, 7 and 8.

When answering the yes/no questions please mark an 'x' in the appropriate box.

All enquiries must be accompanied by a site location plan, clearly identifying the site boundary.

Once completed, please return this form by email to **WastewaterDeveloperServices@uuplc.co.uk** or post to United Utilities, Developer Services and Planning, Warrington North Wastewater Treatment Works, Gatewarth Industrial Estate, Off Liverpool Road, Warrington, WA5 1DS.

We aim to respond to enquiries within 15 working days from receipt of your completed enquiry form.

Section 1: About you					
	Applicant			Agent (if applicable)	
Name	Jordan McGlacken				
Company's name	Burrows Graham Limited				
Home or company address (including postcode)	Arden Hall, 66 Brooklands Road, Sale, Cheshire M33 3SJ				
Contact telephone number (a mobile number is fine)	07988047401				
Email	jordanmcglacken@burrowsgraham.com				
What is your enquiry	Confirm foul point of connection for development				
Who should we send the enquiry response to?	Applicant ☒	Agent ☐	Both ☐		
Section 2: About your site					
Site name	Heywood Stores, Heywood				
Site Address (or nearest main road)	White House Close, Siddal Moor, Heywood, Rochdale, Greater Manchester (Manchester Road nearest road)				
Site grid reference (mid point)	X:	385660	Y:	40902	
Approx. number of dwellings	4 units				
Total site area (hectares)	11.1				
Site name					
Development area (hectares) (Optional)					
Estimated onsite date (Optional)					
Estimated first occupation (Optional)					
Does the site have planning permission	Full	Yes ☐ No ☒	Application submitted	☐	Planning ref (if applicable)
	Outline	Yes ☐ No ☒	Application submitted	☐	Planning ref (if applicable)
Have you approached us about this site previously?	Yes ☐ No ☒		If yes, please provide Ref No. and/or contact details		

Section 3: Your site drainage strategy							
Type of site	GREENFIELD (Go to Q 3.1) ☐ BROWNFIELD (Go to Q 3.2) ☒						
3.1 Greenfield site (Optional)						Confirmed attachment:	
Please provide full calculations to show existing greenfield run off rates						Yes ☐ No ☐	
3.2 Brownfield site (Optional)						Confirmed attachment:	
Please provide a plan showing existing foul water drainage from this site to the public sewer network (including location of existing drains, pipe sizes and points of connection)						Yes ☐ No ☒	
Please provide a plan showing the existing surface water drainage from this site to the public sewer network, including location of existing drains, pipe sizes and points of connection						Yes ☐ No ☒	
Will this development produce trade effluent?						Yes ☐ No ☒	
If yes, have you applied for a trade effluent consent from United Utilities?						Yes ☐ No ☒	
Do you intend to discharge highways drainage to the public sewer network?						Yes ☐ No ☐	
If yes, to which sewer?							
Section 4: Foul water connection							
Are you proposing to use an existing connection to the public sewer?						Yes ☒ No ☐	
If Yes , please provide manhole number or grid reference number If no , please provide the proposed flow rate and connection points (litres per second)						Refer to cover email.	
Is the foul water discharge to be pumped?						Yes ☒ No ☐	
Section 5: Surface water connection							
If you are proposing to connect surface water to a public sewer, please attach evidence that all options for Sustainable Urban Drainage Systems (SUDs) have been explored in accordance with part H of the Building Regulations 2010.							
Details of SUDs can be found at http://www.ciria.com/sudsdesign_guidance.htm							
How do you propose to drain surface water from the site?				SUDs (Go to Section 6) ☐ Discharge to public sewer (Go to Q5.1) ☐			
5.1 Does the site have existing surface water connections to the public sewer?				Yes (Go to Q5.2) ☐ No (Go to Q5.3) ☐			
5.2 Proposed surface water discharging to public sewer via existing connection							
Are you proposing to use an existing connection?				Yes ☐ No (Go to Q5.3) ☐			
If yes , please provide manhole number or grid reference number & proposed flow rates							
5.3 Proposed surface water discharging to public sewer via a new connection							
Have you completed a flood risk assessment in support of your planning application?						Yes ☐ No ☐	
Is the surface water to be controlled? (Optional)						Yes ☐ No ☐	
Is the surface water to be pumped?(Optional)						Yes ☐ No ☐	
Section 6: Development details (Optional)							
Is the development part of a larger site that will be developed in phases or will be subject to separate planning applications? If yes , please provide details below.						Yes ☐ No ☐	
Phase number	1	2	3	4	5	6	7
Start date on site							
Anticipated date of first occupation							
Anticipated completion date							
No. of dwellings							
Sustainability code for dwellings							
Public houses and/or restaurants	No. of seats						
	Floor space (m²)						
Hotels: Total No. of beds							
Schools: Total No. of pupils							
Hospitals: Total No. of beds							
Retail units: Total No. of units							
Office space: Total No. of units							
Industrial / manufacturing: Total No. of units							
Other: Foul water (litres per second)							

Section 7: Supporting information

Please confirm you have included all supporting information in relation to your enquiry

Site location plan	☒ Yes ☐ No
Site boundary	☒ Yes ☐ No
Proposed drainage layout plan (<i>optional</i>)	☐ Yes ☒ No
Indicative layout plan (<i>optional</i>)	☐ Yes ☒ No
Calculations in support of proposed flow rates or run off rates (<i>optional</i>)	☒ Yes ☐ No
Flood risk assessment (<i>if appropriate</i>)	☐ Yes ☒ No

Section 8: Declaration

I understand that the submission of this form is to be treated as a preliminary enquiry and the information may be subject to change. In particular, I understand that the information United Utilities Water Limited provides in response is valid only in conjunction with the information provided in relation to this enquiry, any changes to regulation or development layout will invalidate our response.

Name	Jordan McGlacken	Signature	
Company	Burrows Graham Limited	Date	24/12/2021

UU use only

Date received	DDMMYYYY	UUW Ref No	\
---------------	----------	------------	---



About us

United Utilities is the North West's water company. We keep the taps flowing and toilets flushing for seven million customers every day. From Crewe to Carlisle, we work hard behind the scenes to help your life flow smoothly.

APPENDIX C – TOPOGRAPHICAL SURVEY

