

Supporting documents to discharge Condition 4:

Condition 4 officer response below to re-submission made in Jan 23:

Officer Response: The following advice has been received by the Council's drainage engineer:

"Until the following details are submitted, I do not recommend the discharging of the Drainage Condition.

- a) Details of permeable paving, including cross-section; suppliers details can be included. Dimensions of the driveway entrance shall be included, to demonstrate whether a vehicle can reverse out of the driveway.
- b) Accurate plan details of how the dwellings connections to public sewer will be made. In accordance with Building Regulations H (Drainage) foul and surface water shall be separated until the final connection chamber."

Making a new connection to public sewer

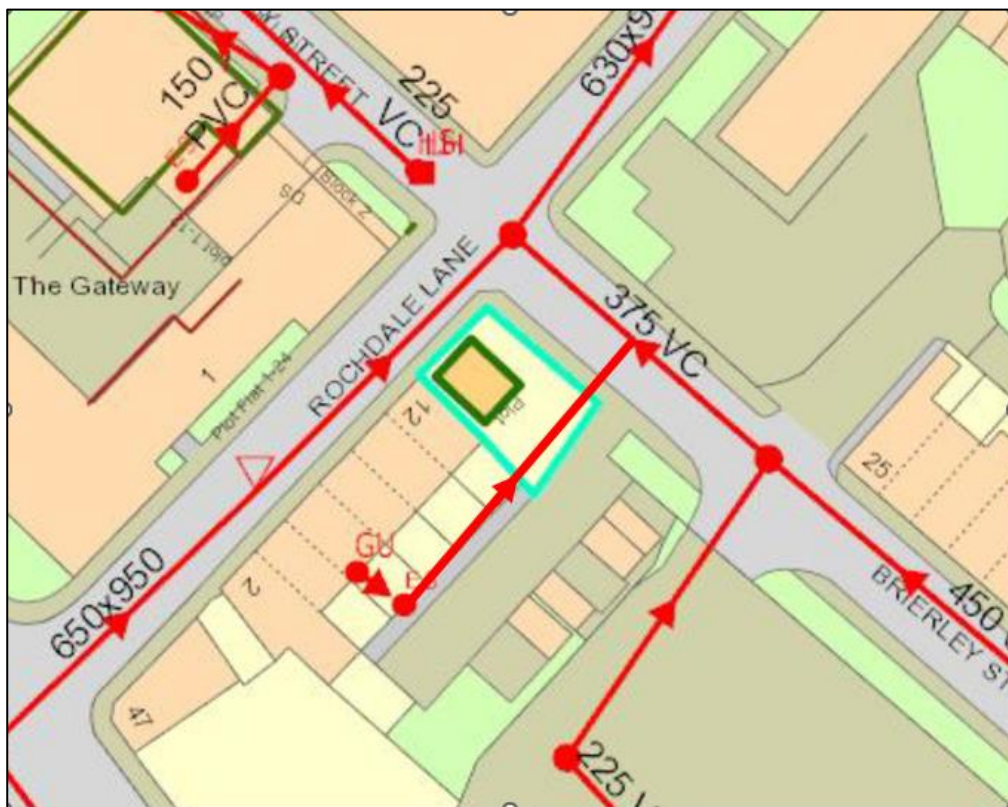
Land Adjacent to No 12, Rochdale Lane, Heywood



1. Locating Existing Sewers and Services

Below shows the map of sewers within Brierley St and Rochdale Lane. The sewerage undertaker only provides combined sewers in the area. There is no surface water sewer offered in the area, neither any plans to construct a separate conveyance of surface water by sewerage undertake or others.

The proposed location for the connection is at the rear of the proposed property to the existing Transfer Asset sewer. We have liaised with United Utilities PLC of the connection point as shown in the plan view below, and UUPLC is satisfied with the drainage plan and proposed connection.

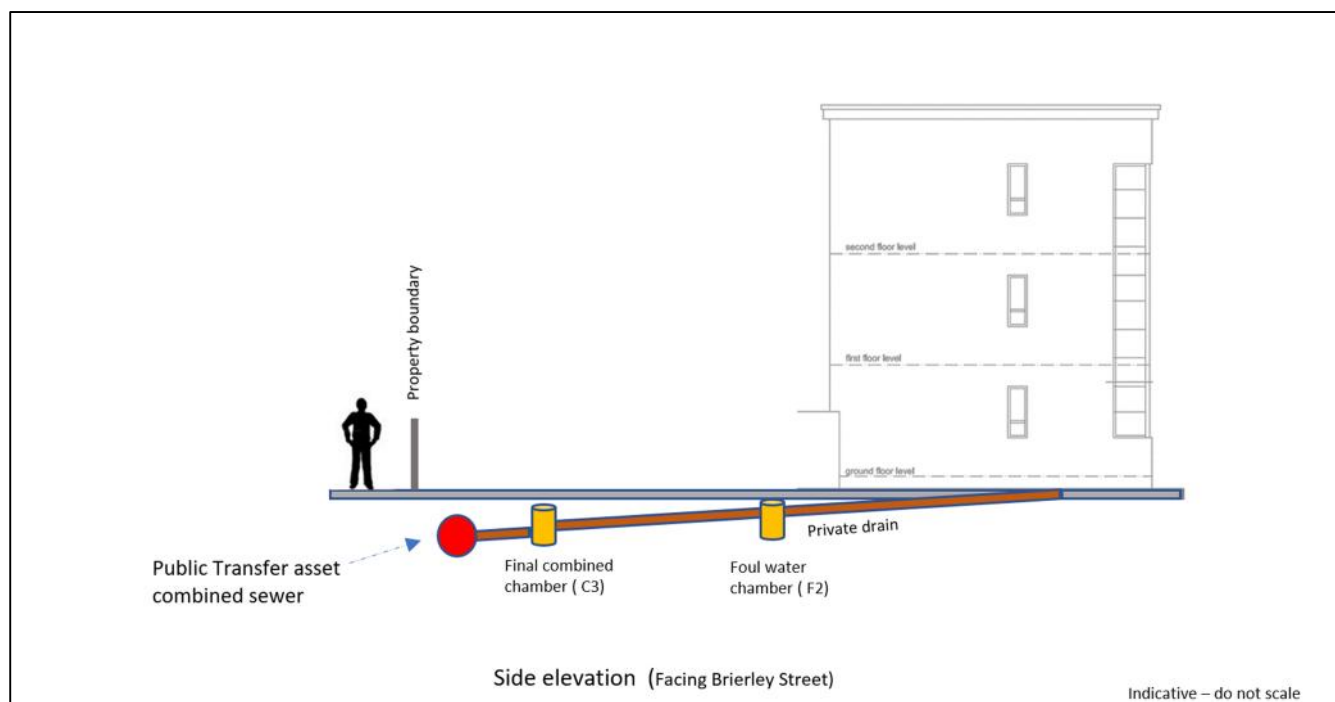
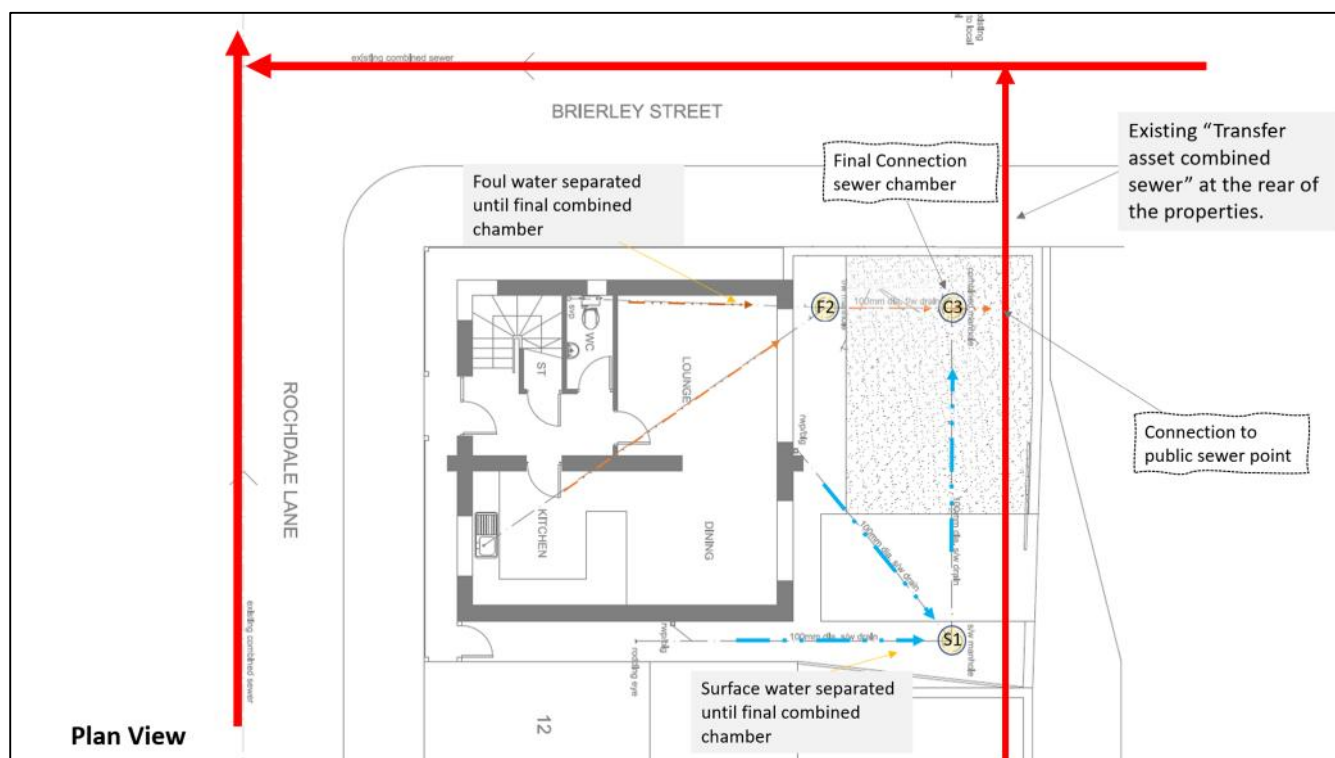


2. Application

Approval Permission (s106 application) must be obtained from United Utilities for any new direct or indirect connection to the public sewer. We have issued the proposed connection point to United Utilities PLC (UUPLC) for a connection point at the rear of the proposed property. The service provider (UUPLC) is satisfied with the connection point to the to the combined sewer, at a rate that does not exceed 5 l/s, subject to Section 106 application.

We have provided the surface water run off calculation and discharge strategy to UUPLC and the undertaker is satisfied for the surface water to be drained into the combined sewer, as the volume of the run off from roof is minimal. (Please see appendix 1 & 2).

Also, in accordance with Building Regulations H (Drainage) foul and surface water is kept separated until the final connection chamber C3 as shown below.



3. Methods of Connection

a) Connection to Public Sewer Pipe by Oblique (Y-Piece) Junction

As per UUPLC recommendation for connection to public sewer, the connections to the public sewer should generally be made using oblique junctions. A junction is inserted into the line of the public sewer after a section of the existing pipework has been cut out and removed. Jointing is by means of a repair coupling at each side of the junction pipe.

The type of connection will generally be in accordance with the existing network, for example a separate or combined system of drainage. The dimension and type of the material of the transfer asset public sewer to be determined on site. As part of the Section 106, the UUPLC inspector will be required to inspect the connection works upon connection work completion and prior to backfilling and use.

Oblique junctions shall be the same material as the existing public sewer and be placed in the direction of flow at a 2/10 o'clock position on the existing public sewer.

b) Connection to Public Sewer Pipe by Saddle

The use of saddles to clay or concrete sewers is acceptable. The use of saddle connections will only be permitted where the existing sewer is 375mm or greater in diameter, and the new connection must be at least 150mm smaller in diameter than the sewer pipe to which you propose to connect. Saddle (see table below).

Saddle connections must be positioned at 10 o'clock or 2 o'clock and at an angle of 45 degrees to the direction of flow. A single hole in the Public Sewer must be made by diamond core drilling.

Saddles shall be the same material as the existing public sewer and positioned at 2/10 o'clock position on the existing sewer section clock face. However, the existing sewer at the rear of the land is expected to be less than 300 mm diameter, therefore Y Piece connection is to be used.



Hole core drilled
ready for saddle



Saddle in Place

Junction or Saddle?

United Utilities only allows the use of a saddle connection where existing sewer is 375mm or greater in diameter, and the new connection must be at least 150mm smaller in diameter than the sewer pipe to which you propose to connect. In all other circumstances a junction should be used. The table below shows if a junction or saddle may be used for various public sewer and lateral combinations:

		Public Sewer (dia in mm)									
		100	150	225	300	375	450	525	600	675	750
Lateral (dia in mm)	100	JN	JN	JN	SA	SA	SA	SA	SA	SA	SA
	150		JN	JN	JN	SA	SA	SA	SA	SA	SA
	225			JN	JN	JN	SA	SA	SA	SA	SA
	300				JN	JN	JN	SA	SA	SA	SA
	375					JN	JN	JN	SA	SA	SA
	450						JN	JN	JN	SA	SA

4. Health and Safety

If the works require entering an existing manhole for connection works, then no person should enter a manhole on the public sewerage system without having had the appropriate Confined Space entry training. They must have all necessary safety equipment and ensure that they comply with all relevant health and safety requirements. In the proposed drainage scheme, it is not required to access any existing manholes.

Appendix 1



wastewaterdeveloperservices@uuplc.co.uk

to me ▾

Good morning Nima,

Thank you for your email.

Subject to section 106 application and approval I am happy for the surface water from this site to drain to the combined sewer.

Below is the link to the section 106 application form, once this is completed please submit this to wastewaterdeveloperservices@uuplc.co.uk.

<https://www.unitedutilities.com/builders-developers/wastewater-services/sewer-connections/sewer-connection/>

If I can be of any further assistance please do get in touch.

Kind regards



cid:image001.png@01D6A0A4.98957260

Ashleigh Bellerby

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Customer Services

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The surface water drainage scheme assessment

Land Adjacent to 12 Rochdale lane OL10 1PF

Summary:

We have requested Con 29 drawings from United Utilities and the record shows there is only *combined sewer* servicing the area. Therefore, any runoff from rain fall from the land at its current state is discharging to highway gullies which is then discharged to combined sewer.

The proposed development **does not** introduce any additional rain run off area. The roof is a flat roof approx. 45m² of the total land area 128m². Therefore, the volume of discharge form the roof is not significant.

The proposed development benefits from a new garden area with permeable subbase which will capture the runoff from the back yard area. Which in effect, the proposed development will be reducing the volume of the runoff in comparison to its current state.

A surface water drainage scheme assessment is undertaken to identify the most practical option for a minor development and ensuring consideration given to all drainage options in accord with the Non-Statutory Technical Standards for Sustainable Drainage Systems and National Planning Practice Guidance.

Rainfall Calculatuion:

Proposed Roof area which captures rainfall: 45 m²

Average Rain fall Rochdale in a year: 1197mm

Rain fall in Worst month; 139mm falls in **1 Month** (in December):
Total Rain run off volume: = $0.139 \times 45 = 6,210$ L/month
(equivalent to 0.005 L/S)

Event 1 in 100 years: One month of Rainfall (139 mm) falls in **1 Day**
6,210 Lter in 1 day (equivalent to 0.07 L/S)

Extreme rare case : One month of Rainfall (139 mm) falls in **1 Hour**
6,210 Lter in 1 Hour (equivalent to 1.7 L/S)

In all cases the limit is less than 5 L/S

Average tables

Average graphs

Location comparison

Average maps

Climate period:

1991-2020

Station: Rochdale

Month	Maximum temperature (°C)	Minimum temperature (°C)	Days of air frost (days)	Sunshine (hours)	Rainfall (mm)	Days of rainfall ≥1 mm (days)	Monthly mean wind speed at 10 m (knots)
January	6.93	1.50	10.16	32.16	119.19	17.05	4.54
February	7.45	1.41	9.32	49.83	97.11	13.69	4.67
March	9.57	2.51	6.06	98.86	89.91	13.41	5.10
April	12.47	4.55	2.33	152.72	68.36	11.75	5.14
May	15.60	7.19	0.28	175.45	65.67	10.95	4.82
June	18.24	10.13	0.00	152.85	82.87	12.59	4.18
July	20.01	11.94	0.00	170.77	96.90	13.11	3.61
August	19.55	11.77	0.00	153.52	100.22	14.77	3.36
September	17.11	9.55	0.00	116.33	97.80	13.23	3.44
October	13.39	6.85	1.07	78.66	116.78	15.35	3.88
November	9.70	3.86	5.05	41.64	123.53	17.22	4.18
December	7.18	1.50	10.10	42.69	138.88	17.63	3.99
Annual	13.13	6.09	44.37	1265.48	1197.22	170.75	4.24

* Source Met office website: <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/gcw2ymd6s>

The surface water drainage scheme assessment for Land Adjacent to 12 Rochdale lane OL101PF as per hierarchy of drainage options in the National Planning Practice Guidance and an assessment of the site conditions and accord with the Non-Statutory Technical Standards for Sustainable Drainage Systems.

Priority Level 1: Surface water runoff is collected for use;

Priority Level 2: Surface water runoff is infiltrated to ground;

Priority Level 3: Surface water runoff is discharged to a surface water body;

Priority Level 4: Surface water runoff is discharged to a surface water sewer, highway drain, or another drainage system;

Priority Level 5: Surface water runoff is discharged to a combined sewer.

Surface Water Discharge destination assessment In accordance with the hierarchy of drainage options

Priority level	Description	Assessment
Level 1	Rainwater collected for use	Discounted. No Negative impact. 1- Worst rainfall is in Winter with 139mm in Dec. The runoff volume from such small roof is considered negligible in a month. 2-There is no foreseeable demand for non-potable water for the development. The size of the Garden is approx. 4.5 x6 m which does not require watering throughout the year as the rain fall in Rochdale is ample for a such small garden area.
Level 2	Surface water runoff is infiltrated to ground	Discounted. No Negative impact. 1- Worst rainfall is in Winter with 139mm in Dec. The runoff volume from such small roof is considered negligible in a month. 2- The development ground, under the roof will be compacted to provide ground stability and prevent future settlement. As a result, the use of infiltration drainage is not practicable due to the lack of permeability of the soil for disposing of runoff. The garden area only has sufficient capacity to capture any runoff from the back yard.
Level 3	Discharge to a surface water body	Discounted. Not applicable. No nearby water body. It is not reasonably practicable to convey the surface runoff to the water body. (please refer to page 5 for con27 drainage drwg)
Level 4	Discharge to a surface water sewer or highway drain	Discounted. Not applicable. Access: It is not reasonably practicable to convey the surface runoff to a surface water sewer as United utilities do not have highways drainage in the area. Adjacent properties discharge to the road gullies on Rochdale lane. United utilities to advise if this is an acceptable discharge method. (please refer to page 5 for con27 drainage drwg)
Level 5	Discharge to a combined sewer	Preferred option. The risks associated with surface water runoff entering the combined sewer considered very low due to volume of the expected run off water from the roof. 1 in 100 year, 6 hour rainfall event does not exceed the site runoff volume for the same event. The proposed development is reducing the risk of excessive water runoff compared to its current state by introducing a permeable garden.