

006_4230334_KJ

11th July 2025Rochdale Borough Council
By e-mail

Dear Sirs,

Planning Ref. 25/00312/FUL Water Street/Molesworth Street, Rochdale

We have reviewed the comments made by Rochdale Borough Council's Drainage and Flood Officer (DFO) and respond as follows:

1. We addressed the SuDS hierarchy in Section 5.3 - 5.5 of the Drainage Statement (001_4230334_KJ_DS page 11). Appendix A included the SI information.
2. We always aim to use the preferred pillars of SuDS ahead of discharge to sewer.
 - The site is underlain with a substantial depth of made ground and unsuitability for infiltration as water levels did not fall below 25% of the original water depth as required by the BRE3265 test.
 - The site is steep and constrained with no suitable location for an on-site basin of sufficient size to treat the surfaced area.
 - The immediate area itself is heavily developed with no local or regional treatment options.
 - We explored the option of a connection to the watercourse (River Roch), but this would require passing through third party lands to the north of Water Street.
 - There are no Surface Water sewers adjacent to site.
 - We proposed a connection to the combined sewer (the situation that currently exists on site). The surface water discharge from the site will be restricted to the greenfield rate Q_{bar} of 3.10 l/s for all events up to and including the 1in100-year + climate change event. Using the rational equation, the car park currently discharges at 39.2 l/s for the 1in100 year event (without climate change allowance). In summary, the combined discharge from site will be 3.10 l/s (surface water) plus 3.0 l/s (peak foul water) which amounts to 6.10 l/s – this is 16% of the current discharge from site ensuring that there is no additional risk of flooding to those properties downstream of the connection point. Refer to section 5.12 and 5.13 of the Drainage Statement.
3. The restaurant is classed as 'Less Vulnerable' in accordance with Annex 3 of the NPPF, compatible with FZ's 1, 2 or 3a. The site is within FZ1 and is not subject to flooding from fluvial or surface water events. It is, however, flooded from a reservoir breach while river levels are both normal and in flood. We contend that a 30% increase on rainfall rates is valid for this site, with the building designed for a 70-year life putting the development between 2061 and 2100 where the guidance is to use the central allowance for the 2070s epoch (2061 to 2125).

4. A Phase 2 investigation has been carried out following the preparation of this report, the response on soakaways and infiltration is included below –

17 Soakaways

Preliminary falling head soakage testing was carried out in borehole WLS05 only. No further soakage testing was carried out within other boreholes due to the depth of the Made Ground encountered.

17.1 Soakage Test Results

The preliminary falling head soakage testing is based on the BRE paper DG365, Ref [8] which describes a method for site testing to determine soil infiltration rates at the proposed site of a soakaway. The in-situ test method is described in Appendix B.

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One soakage tests were carried out across the site, at the location shown on the attached site plan Figure 3, in Appendix A. The full results of the soakage tests are presented within Appendix B.

The DG365 Ref [8], states that each pit should be allowed to drain three times to near empty, with filling on the same or consecutive days.

The infiltration rate from each trial hole is summarised in the table below. The soakage rate in this report is expressed as l/m²/minute, which is a convenient rate to use. The BRE use a unit of m/sec, which is the value in l/m²/minute divided by 60,000.

Test ID	Test Depth (mbgl)	Design Infiltration Rate		Notes
		l/m ² /minute	m/sec	
WLS05	3.0m	0.21	3.45x10 ⁻⁶	Water at 2.35m at start of test.
		0.15	2.41x10 ⁻⁶	Water at 2.34m at start of test.
		0.17	2.83x10 ⁻⁶	Water at 2.4m at start of test.

*Water levels did not fall below 25% the max water depth. Calculations based on actual fall of water level achieved.

Note: The Design Infiltration Rate is the lowest of the three tests (0.15 l/m²/minute / 2.41x10⁻⁶ m/sec).

Full BRE 365 soakage testing, carried out within trial pits, may be required for formal soakaway design.

Given the depth of potentially unstable made ground encountered across the site, shallow soakage may not be suitable at the site and a positive drainage system may need to be considered

5. Our initial report looked at the potential of discharging directly to the River Roch but the northern side of Water Street is continuously developed with no obvious route through to the river. The suggestion of a gravity or rising main down Molesworth Street has been reviewed. There are a number of existing utilities in the footway, with two LV electric cables, gas and Virgin Media cables below the footway. Further investigation would be required, but it should be possible to get a 100mm dia. surface water pipe in the footway. However, the bank to the rear of the Kia garage is relatively steep and the garage site extends to the top of the bank. Any connection would need to penetrate the bridge structure to get through to the river bank – this is heavily vegetated with substantial and healthy trees at this point which would be impacted by any works to install a drainage connection to the river. We do not think this route is viable, given the difficulty in gaining the final connection through the river bank – there would be no access from the garage side to allow this to be constructed meaning access would need to be negotiated with the car park on the north of the river.

There is also the very high risk that drainage works would negatively impact on the trees at this location with works potentially weakening the root systems.

6. We have used this type of attenuation across the UK, as the sites tend to be very restricted to achieve the required parking numbers and drive thru lane. Maintenance is carried out primarily by trained staff and calling in specialist contractors to clear inspection chamber sumps of silts etc. when half full to ensure the volume within the tank itself is not reduced. CCTV inspections are also arranged, with jet cleaning if/when required to ensure the system works as designed.

We trust the above and references to the previously submitted report address the concerns of the DFO and remove the proposed conditions from planning approval if this application is granted.

Yours sincerely

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