

Level 2 Strategic Flood Risk Assessment - Sewer Flood Risk Assessment

A1-C01

24 March 2025

**Prepared for:
Newcastle-under-Lyme Borough Council**

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1 Site-specific sewer flooding information

Sewer flood risk was not included within the initial site screening as no suitable sewer flooding datasets were made available. However, United Utilities provided site-specific comments on sewer flood risk as part of the Regulation 19 consultation and Severn Trent Water were consulted as part of the preparation of this Level 2 Strategic Flood Risk Assessment (SFRA) to provide site-specific comments.

This appendix provide more detail on the identified risks. As sewer flood risk data is not publicly available, the SFRA should be considered a tool to identify a need for further detailed assessment at the planning application stage. Where the SFRA indicates a risk of sewer flooding a detailed assessment should be undertaken to confirm the risk to the site as part of any planning application in liaison with the statutory wastewater undertaker.

Consultation with the wastewater undertaker should confirm:

- if there are any sewer surcharge levels at the point of connection that could influence site design;
- whether there is an incident of sewer flooding at, or in the vicinity of, the proposed development site; and
- if sewer modelling data indicates that existing sewers that pass through or near to the site present a modelled risk of sewer flooding.

This information will help to inform whether to apply the sequential approach in respect of sewer flood risk. This risk of sewer flooding could affect the developable area, the layout, and the detail of site design. Development should not be located in an area at risk of sewer flooding. Applicants must demonstrate that proposals do not increase flood risk and are safe. Applicants should not assume that changes in levels or that changes to the public sewer (including diversion), will be acceptable as such proposals could increase / displace flood risk. Applicants should consider site topography and any exceedance flow paths. Resultant layouts and levels should take account of such existing circumstances.

It may be necessary to incorporate mitigating measures subject to the detail of the development proposal. Careful consideration will need to be given to the approach to drainage including the management of surface water; the point of connection; whether the proposal will be gravity or pumped; the proposed finished floor and ground levels; the management of exceedance paths from existing and proposed drainage systems and any appropriate mitigating measures to manage any risk of sewer flooding. Surface water drainage from a site should be discharged according to the hierarchy of drainage options, as described in Planning Practice Guidance (PPG) Flood Risk and Coastal Change Paragraph 056:

1. into the ground (infiltration);
2. to a surface water body;
3. to a surface water sewer, highway drain, or another drainage system;
4. to a combined sewer.

1.1 United Utilities

The following sites were identified by United Utilities to have a modelled risk of sewer flooding:

- AB12 - Land East of Diglake Street
- NC13 - Land West of Bullockhouse Road, Harriseahead
- BL18 - Land at Clough Hall

Hydraulic flooding incidents from the public sewer have been recorded in the wider vicinity of the following sites:

- AB15 - Land north of Vernon Avenue
- AB33 - Land off Nantwich Road/Park Lane, Audley
- NC13 - Land West of Bullockhouse Road, Harriseahead
- BL18 - Land at Clough Hall

1.2 Severn Trent Water

Severn Trent Water provided a review of the sites in relation to their impact to the existing public sewerage system ranking the sites as high, medium, or low risk. Table 1-1 provides an overview of sites which have been identified as either medium or high risk with reasoning provided where available. Severn Trent Water also provided information on potential surface water disposal options for the site, ranking these as either low, medium, or high risk based on the size of the development and potential options. These have not been included within this SFRA but have been shared with Newcastle-under-Lyme Borough Council (NULBC) to consider as part of the Local Plan process and developers should consult with the sewerage company to discuss surface water drainage as early as possible in the development process.

Table 1-1: Description of potential sewerage issues identified at proposed development sites by Severn Trent Water.

Site code	Impact to existing public sewerage system
CT20	HIGH - due to the size of the development and historical reports of sewer flooding nearby.
KL13	MEDIUM - due to the size of the development.
TB23	MEDIUM - due to the size of the development in context with the adjacent sewage pumping station.
CT1	MEDIUM - due to the size of the development.
SP23	MEDIUM - due to the size of the development.
KL15	MEDIUM - due to the size of the development and potential requirement for a pumped connection.
BW1	MEDIUM - due to the size of the development.
SP11 (3)	MEDIUM - due to the size of the development.
SP11 (2)	MEDIUM - due to the size of the development.
SP11 (4)	MEDIUM - due to the size of the development.

Site code	Impact to existing public sewerage system
SP11 (1)	MEDIUM - due to the size of the development.
KS3	MEDIUM - due to the size of the development.
SB12	HIGH - due to the potential for sewer flooding nearby.
TB19	MEDIUM - due to the size of the development.

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