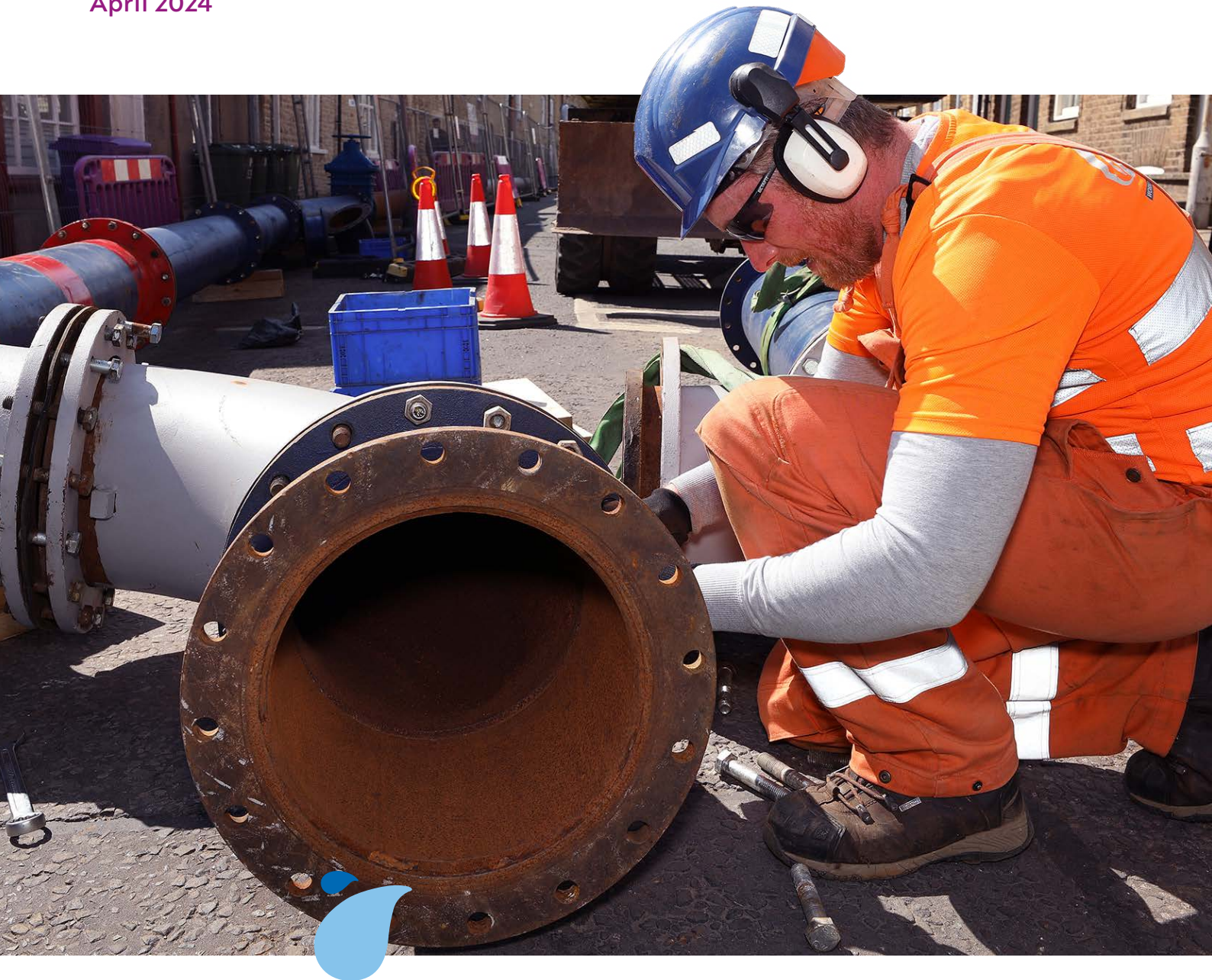


# Vacuum Sewerage Systems

## Customer guidance notes

April 2024



**Vacuum sewerage systems** are different to conventional gravity systems in that connections can only be made to a vacuum pot (the chambers on the vacuum system) and not directly to the vacuum pipework. Vacuum pots have limited capacity and are only able to accept connections from 4 properties.

Rider sewers in vacuum system areas are conventional gravity sewers that discharge flows to an existing vacuum pot. If there is a rider sewer available, you may be able to make a gravity connection to the rider sewer providing there is available spare capacity within the vacuum pot that the rider sewer is connected to. A maximum of 4 properties are permitted to connect to a rider sewer.

For developments comprising residential dwellings only, the flow restriction to the pot and rider sewer is stated as 4 properties. For developments comprising non-household buildings, or a combination of residential and non-household buildings we apply a 0.5 litres per second flow restriction to the pot and the rider sewer.

The connection/flow restrictions outlined above apply to both the rider sewer and the pot. Therefore, the maximum number of connections permitted to a pot and its upstream rider sewer is 4 and the maximum discharge rate to a pot and its rider sewer is 0.5 litres per second.

Connections into vacuum pots and rider sewers are only permitted via gravity; pumped connections are not permitted to a vacuum sewerage system.

Surface water must not under any circumstances be discharged to a vacuum sewer. Alternative arrangements for surface water disposal would need to be explored in accordance with Anglian Water's [Surface Water Drainage Policy](#).

Vacuum sewerage systems also include feeder pillars which are located above ground and adjacent to the vacuum pots. These pillars are a part of the public sewerage network and may under some circumstances need to be moved to accommodate new development. Should the relocation of a feeder pillar (or any other part of the vacuum system) be necessary you will be required to make an application for a Sewer Diversion and enter into a legal agreement with Anglian Water before any works take place. You will be required to fund the works and employ the appropriate Vacuum contractor (we will advise who this is) to design and undertake the works on your behalf.

Each vacuum sewerage system is bespoke and designed only for the dwellings it was built to serve. Due to the very nature of the system, there may be mitigation required to ensure there is enough pressure to accommodate the development and to ensure there is no detriment to the existing network and the properties connected. In addition, if there is insufficient capacity downstream of your point of connection, which is to a minimum 125mm vacuum sewer, it is Anglian Water's responsibility to undertake the necessary work to provide this. Please be aware that any upgrade works may need to be delivered as part of Anglian Water's capital programme and therefore delivery timescales may not be immediately available. If funding has not been allocated in the current 5 year funding period, we may be required to seek funding for a subsequent funding period e.g., 2025-2030. Please note that we are unable to commence the delivery process until 1) you have made us aware of your development, and 2) you have been granted planning permission.

If we are unable to deliver the required upgrade works in time for your development, you may wish to provide a stand-alone treatment plant to serve your development. This would require approval from the Environment Agency and the Building Control Body.

If you have a development within a vacuum sewerage area, we strongly recommend that you make use of our pre-development enquiry service at the earliest opportunity, which will help in the following ways:

- We will understand available capacity
- We will provide you with the location of your connection point
- We will advise you of any capacity or pressure constraints which may impact the timescales of your development
- We will advise you whether any mitigation work is required
- We will undertake a pressure monitor assessment to understand the impact on the network. This assessment may change the location of your connection point or identify additional mitigation measures. If there are any changes following the completion of the assessment, we will discuss these with you.

In order to allow time for all necessary assessments to be completed, it may take up to 2 months for a response to be provided to your pre-development enquiry.

A list of areas where we currently have vacuum sewerage systems is available on our [website](#).

If you have planning permission and are ready to connect, you can apply to connect to the public sewer. All applications can be made via our online portal Inflow which you can register for/log on to via our website – [anglianwater.co.uk](http://anglianwater.co.uk) – developing – Inflow icon in the top right hand corner.

### **Connecting to a Vacuum Sewerage System**

When we receive your application to connect to the public sewer, we will undertake an initial site assessment to establish whether a vacuum pot exists with spare capacity to accept a gravity connection from your development. Once we have undertaken our initial assessment, we will let you know how to progress your application.

If there is a vacuum pot or rider sewer with the spare capacity to serve your development that can be connected to by gravity, this will be your designated point of connection. You will be required to undertake all works necessary to connect the property(s) to the vacuum pot or rider sewer.

If there is no existing pot or rider sewer available with the spare capacity to accept a gravity connection, it will be your responsibility to engage the appropriate vacuum contractor (which Anglian Water will confirm) to design and construct a vacuum main extension, including the requisite number of new pots. Alternatively, you have the option to requisition the provision of a vacuum main extension by Anglian Water. For both options the works required to provide the vacuum main extension and all other works required to connect the property(s) will be funded by you.

Please be aware that it could take up to 24 months for a vacuum main extension to be delivered via a requisition.

Should you decide to engage with an appropriate vacuum contractor we will advise you which part of the existing network the vacuum main extension needs to be laid from and this will generally be a section of main that is 125mm diameter or greater. In some cases, we may consider an extension being laid from a section of main that is smaller than 125mm diameter. However, this will require a further assessment, which you will be required to fund.

Please also be aware that for a vacuum main extension to be viable, your development will need to be situated within a certain distance of the vacuum pumping station. Each vacuum system is different and therefore we will need to make an assessment for each development. There may be additional mitigation required if your conveyance exceeds the maximum distance from a vacuum pumping station or alternative methods of foul water disposal may be required.

A vacuum main cannot be extended from a rider sewer.

Should you decide to engage a vacuum contractor directly you must also apply to have the new vacuum main extension adopted by Anglian Water. To do this you will need to apply for the adoption of a new sewer via our online portal Inflow as outlined above. You will be required to provide full design details from the vacuum contractor with your application.



**Scan the QR code to visit the InFlow section of our website.**

