

Guide to the adoption of new sewers

Section 104

This document provides information on how to apply to have new sewers adopted under Section 104 of the Water Industry Act 1991. It also gives technical guidance to help with your application.

1.0 Sewer adoptions process

1.1 The application

The applicant must complete a **'S104 application form'**. This should be completed in full and returned along with the requested supporting documents and appropriate application fee. We will usually respond within 48 hrs with a unique reference number which the applicant should quote on all future correspondence.

If your submission is complete, we will respond to you within 20 working days to advise if your proposals are technically satisfactory or which aspects do not comply with our requirements.

If your submission is not complete, we will provide you with a list of the missing information within 10 working days.

Once the submission is confirmed as technically acceptable, we will confirm to you the appropriate section 104 fee, which is 2.5% of the estimated construction cost of the agreed design based on United Utilities contract rates, this fee covers the processing, assessment and inspection of the works.

The Developer is also required to provide surety (a list of our approved sureties can be provided on request) or a cash deposit which is 10% of the estimated construction cost. This value will be confirmed following design acceptance.

Please note that United Utilities can charge for additional time spent carrying out assessments of submissions which are incomplete or unsatisfactory.

If the design is substantially changed and requires re assessment, you will be charged the minimum application fee.

1.2 Section 104 agreement

The S104 Agreement, prepared in accordance with *'Sewers for Adoption'* will be sent once the submission is confirmed technically satisfactory and you will also be advised of the supporting information, drawings etc. that must be included with the signed agreement.

A separate legal fee (for the preparation of the agreement) must be paid before the agreement is signed.

Please note clauses in the S104 Agreement cannot be renegotiated or amended.

1.3 Starting work before the S104 Agreement is signed

Construction work should not begin until the S104 Agreement is signed. However, as we recognise this may cause delay to some developments and so in certain circumstances and with prior agreement from United Utilities, we may allow work to begin as long as;

- The S104 submission has been assessed as technically satisfactory, and all relevant supporting documentation (as detailed on the approval documentation) has been provided.
- The S104 fees have been paid. Payments can be made by cheque or BACS.
- The 'pre-start' form has been signed (this will be supplied when required).

Any contractor who wishes to connect to the public sewer must complete a 'Request for permission to work on the public sewer form' and receive written approval from United Utilities before work can begin.

1.4 Inspecting the new sewers

During construction we will carry out inspections to check compliance with the S104 Agreement. If improper work, materials or variations are found we will notify the site contact and any defects should be remedied without delay.

Once the site is constructed and around 50% occupied, the developer should apply for the site to

For further information



unitedutilities.com/builders-developers
SewerAdoptions@uuplc.co.uk



United Utilities Developer Services and Planning Team,
Warrington North Wastewater Treatment Works,
Barnard Street Off Old Liverpool Road,
Gatewarth Industrial Estate,
Warrington WA5 1DS.

be put on 12 month maintenance. To do this we need an 'as built' plan and O and M Manuals (if there is a pumping station).

We will inspect all sewer lengths that are being offered for adoption. This could be either a CCTV survey and/or a Light Line survey depending on the pipe material.

We will not adopt any sewers where the survey reveals structural defects or pipe deformation outside the specification for the material used. In the case of structured wall plastic pipes this deformation limit is 5%.

If any structural defects or deformation is discovered, the developer will be asked to carry out remedial works and provide another CCTV or Light Line survey as evidence the remedial works have been carried out satisfactorily.

If work is not completed within an agreed timescale, we can use our own contractors to remedy the work and recharge the developer under the terms of the section 104 agreement.

1.5 Final certificates and adoption

Once our field staff are happy with the condition of the sewers and any outstanding remedial works are completed, we will issue the Provisional Certificate of completion.

The Developer will remain responsible for the maintenance and repair of the works for a period of 12 months from the date of issue of the Provisional Certificate.

If emergency works to the sewer are required during the 12 month maintenance period United Utilities reserves the right to undertake the works required and re-charge the cost to the Developer.

Once requested by the developer and following the maintenance period, we will carry out a final inspection of the works and advise the developer of any remedial works that are required.

Once all remedial works have been completed to our satisfaction, our field staff will issue the Final Certificate of completion.

The legal vesting/adoption of the sewers will take place shortly after the Final Certificate has been issued and once any outstanding legal issues have been completed.

This will conclude the Developers obligation under the Legal Agreement and the bond will be released.

2.0 Technical guidance

All submissions for new sewers being offered for adoption should be made in accordance with United Utilities standard details and 'Sewers for Adoption 6th Edition - a design and construction guide for developers' published by the Water Research Centre.

If the proposed development contains a pumping station, the pumping station should be designed in accordance with Sewers for Adoption 7th Edition and the latest United Utilities Addenda document.

2.1 Pre-development enquiry

We recommend that when you begin to plan your development, you contact us to agree your site drainage strategy, points of connection to the wastewater network and discharge rates.

Early discussion with our Pre development Engineers can avoid delays at a later in the sewer adoption process.

The team can also provide advice around solutions to potential drainage problems such as requisitioning a new public sewer and how to divert a public sewer that might be in the way of your development.

All predevelopment enquiries should be made using the **wastewater predevelopment enquiry form**.

2.2 Surface water

Options for Sustainable Drainage Systems (SuDS) should be explored prior to any application to connect to the public sewerage system. The discharge of surface water to the public sewer should only be considered where SuDS have been discounted.

United Utilities do not currently adopt SuDS features but in certain circumstances may adopt networks that discharge to SuDS features. Early discussion is recommended to secure agreement from us.

Any new adoptable system should be designed to achieve no surcharging in a design storm (1 in 2 year event), and no flooding from any part of the site in a 1 in 30 year event. For simulations to satisfy protection against flooding a freely discharging outfall may be assumed only if it can be proven that the outfall will not be surcharged in the 1 in 30 year storm.

If a connection to the public sewer is permitted, we will usually ask for the discharge to be limited and therefore surface water flows may need to be stored on site. The usual preference for underground storage is online oversized pipes.

The design of the storage should be on a basis of the worst duration for a 1 in 30 year return period storm unless otherwise specified by the Environment Agency. Sometimes there are planning requirements to store above the 30 year storm, we do not have to adopt the additional storage, however you can make an application for us to adopt and we will look at these requests on a site by site basis.

The options for flow attenuation should be discussed with the Developer Services and Planning team as early as possible, as we will have to assess the proposals to determine if they are adoptable.

Combined storage facilities will not be adopted. The developer will need to provide a system whereby surface water flows are stored before combining with any foul flows.

2.2.1 Discharge to sewer

During a 1 in 30 year storm, the existing public sewerage network will rarely accept free discharge from a new development. Therefore we will require hydraulic simulations for a 1 in 30 year storm taken against a surcharged outfall level of 1 metre above the soffit level of the receiving sewer, unless we stipulate otherwise (based on more accurate modelling information).

For information on how to connect to the public sewer, please see our '**Sewer connections guide**' on the website.

If you are offering new sewers for adoption, you do not need to complete an '**Application to connect to the public sewer**'; however your contractor must still apply for permission to make the connection. This is using the form '**Request for permission to work on the public sewer**' which is available on our website.

No work can be carried out on the public sewer without written approval from United Utilities prior to the start of the work.

2.3 Discharge to watercourse

It is recommended that you discuss your proposals as early as possible and agree a suitable outfall level with us.

You should establish the typical top water level in the watercourse and the outfall level should be set above this level. Simulations for the 1 in 30 year event should be run against a surcharged level to coincide with the 30 year water level in the watercourse. If this water level is not known then we will ask for a surcharge level of at least 1m above the soffit of the outfall sewer.

For discharges to culverted watercourses, the outfall should be set to achieve a soffits level connection.

The developer is responsible for obtaining appropriate approval to construct the outfall structure along with any necessary discharge consents.

If a sewer that is being offered for adoption discharges to a water course, a protected strip must be attached to the deeds of the land/property to protect our rights of access to the public sewer. The protected strip or 'easement' is normally a minimum of 3 metres either side of the sewer but can differ according to size and depth of the sewer (see Sewers for Adoption 6th Edition for further information). The easement will need to be entered into and completed on or before completion of the S104 Agreement.

We must be provided with a 'Deed of Grant' to discharge to the watercourse in perpetuity.

2.2.3 Discharge to attenuation pond

As with watercourse discharges we would ideally want the outfall to be set above a top water level, this is to prevent the pond surcharging back into the sewers, if this cannot be achieved early discussion with us is recommended.

Before we can adopt surface water sewers that drain to a pond, we need confirmation that the Local Authority or a management company has taken responsibility for the maintenance of the pond.

We also must be provided with a 'Deed of Grant of Rights' to discharge into the pond in perpetuity.

The pond must have an outfall to a watercourse and suitable discharge rights secured, we would not usually adopt the pipework downstream of the pond.

This is not an exclusive list of our requirements and therefore, if you intend to offer sewers for adoption that drain into a pond, you should contact us at your earliest opportunity.

2.3 Highway and land drainage

We have no legal duty to accept highway drainage from new developments into the public sewerage system, however in some cases highway drainage will be considered as part of the overall surface water drainage of the site.

We will not accept land drainage discharges to the public sewer network.

2.4 Existing sewer connections

If the site was previously developed, there may be existing connections to the public sewer network.

In some circumstances you may be able to re-use existing connections to serve private drainage. Existing connections will

not normally be considered for adoption as part of your new sewerage system.

You should make a reasonable attempt to find and seal any connections that are not going to be re-used as part of your new drainage system.

2.5 Sewer diversions (constructed by a developer)

A developer must receive approval from United Utilities and have a legal agreement in place before diverting any existing public sewer.

Please see our '[Guide to sewer diversions](#)' on the website for further information.

2.6 Sewer requisitions

If you cannot connect your development to an existing public sewer without crossing land in third party ownership, and you cannot agree an easement with that third party landowner, you can request that we 'requisition' a sewer using our powers under Sections 98-101 of the Water Industry Act 1991.

If the requisition is agreed, we will construct a public sewer to serve your site. You will be liable for the construction costs and be required to enter into a S98 Agreement with United Utilities to enable a sewer to be requisitioned.

Please see our '[Guide to sewer requisitions](#)' on the website for further information.

2.7 Guidance on abandonment of public sewers

Subject to the conditions found within Section 116 of the Water Industry Act 1991 we have the power to restrict or close the use of the public sewer. In order to facilitate new development we recognise that there is in occasion circumstances that arise which lead to a developer requesting the abandonment of a sewer. Before an existing public sewer can be closed, we need to check that there are no other legal users connected to the sewer and understand the impact that a closure of a sewer may have on the rest of the sewer network.

The usual method of abandonment are to be consistent with good engineering practice and should be one of the following:

- Grouting up
- Grubbing up or digging out
- Demolition (in case of structures)

2.7.1 Abandonment drawings

You will need to provide us with drawings that include all of the existing sewers and manholes that need to be abandoned for the development proposals. The location of the pipework needs to be confirmed by CCTV Survey which also needs to be included in your submission.

These drawings are in addition to the Section 104 layout plans.

The abandonment plan should show the following:

- The sewers and manholes which the developer is applying to abandon need to be clearly labelled and referenced with details of the pipe diameters, pipe material and also include survey numbers.
- The reference locations shall correspond with the respective CCTV survey footage.

- The sewers which are being considered for abandonment shall be identified by using black crosses with notes confirming details of the proposed method of abandonment, e.g. grubbing out, or grouting. Information should be included confirming where the grouting operation will commence, with the location where the air release will be required for this operation to be carried out.
- Detail of how any manholes will be abandoned should also be included on the drawing with separate sections or details to support.
- Drawings showing the position and levels of all sewers and manholes.

2.7.2 CCTV surveys

A hard copy of the CCTV survey on DVD and a condition report is required. Please send these to:

Warrington North WwTW, Sankey House, Barnard Street, Off Old Liverpool Road, Gatewarth Industrial Estate, Warrington, WA5 1DS

The lengths surveyed shall be in order and correspond with those details noted on the abandonment drawing.

The DVD will only contain those surveys which are identified for abandonment. If any additional surveys have been included which are not relevant to the abandonment proposals, the survey will be returned, and a resubmission of the survey will be required.

Please Note: Part-submissions will not be viewed and classed as an 'incomplete submission'.

The survey shall be in colour with clear definition. Any submerged footage will not be accepted and in those cases the survey will be returned.

All incoming connections into the line which is proposed for abandonment, shall be included. The developer shall establish the operational status of these connections with supporting evidence.

The developer may need to establish the connectivity of surrounding areas in order to confirm no drainage from them passes into the site.

2.7.3 Approval of sewer closure

Once we have agreed your proposal in writing, we have received your fees and we are satisfied with your proposals you must give us at least 72hours notice of when you intend to start work on site. This is so we can arrange for one of our Developer Support Technicians to attend site during the abandonment work and ensure the abandonment has been completed to a satisfactory standard.

2.7.4 Summary of costs associated with closing sewers

In all cases you are responsible for the following:

Designing your proposal

- Your contractors costs in demolishing manholes, removing any pipework and backfilling the trench
- Capping off the sewer
- Any compensation that may be required for third parties
- Processing the application
- Our engineering assessment and technical site visit
- The cost of CCTV survey and any other drainage investigations that may be required

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.