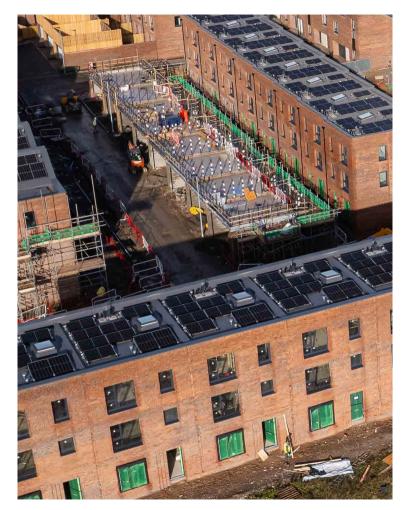


Water connections

Guidance for service connections to existing mains





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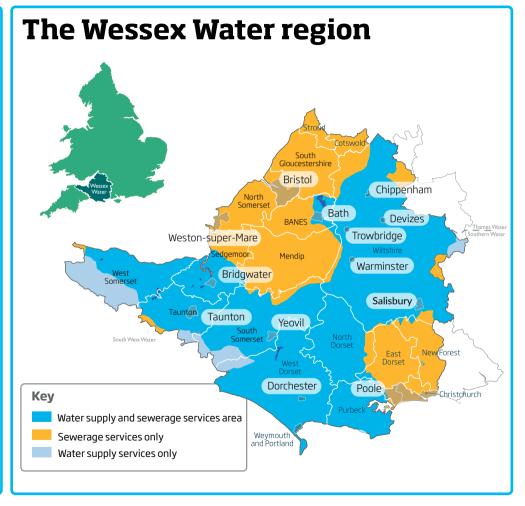
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Introduction

Whether you are a homeowner or a contractor, this document outlines the crucial steps and considerations to ensure a seamless connection to the water supply network.

From regulatory requirements to technical specifications, we've compiled everything you need to know to facilitate a smooth and compliant process for laying your private supply pipe and preparing for connection.

In some circumstances it is possible for those who require a new supply to arrange for someone other than Wessex Water to connect the service pipe; this is known as self-lay. Information on the self-lay process is not included in this guidance document, but if you require further information on this option, please read our Self Lay Policy – which is available on our website.



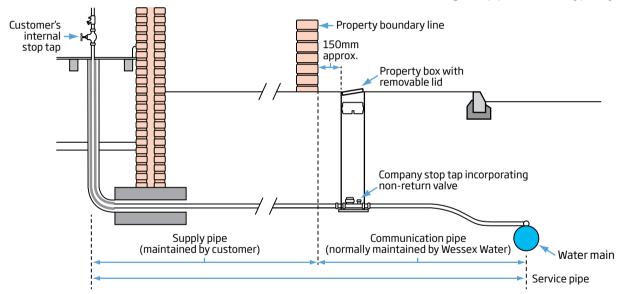
Pipe responsibility

Supply pipe

The supply pipe is your responsibility. This includes the internal stop tap, pipework and fittings. You or your contractor would install this.

The Communication pipe

This part of the pipe is our responsibility and runs from our water main to the boundary of the highway in which the main is laid. This is the length of pipe we would typically install.



Important information

In some cases, you will be responsible for the full length of the pipe up to the point at which it connects to our main. We will advise you if this applies to your site.

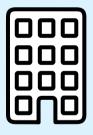
Do I need a new water connection?

Under the Water Industry Act 1991, water companies require all newly constructed buildings (or those converting existing properties) to have their own independent service pipes directly connected to the network. This will include the following entities:

Newly constructed properties that can be occupied separately.



Each section (such as a flat or commercial unit) of a recently converted property that can be occupied separately.



Parcels of land that are separately occupied due to the recent sale of sections from a larger premise. It is not permissible for properties or water fittings (such as animal troughs) on either side of the boundary to remain connected to the same water supply after the sale.



Important information

Section 174 of the Water Industry Act 1991 prohibits secondary connections to private supply pipes without the water company's authorisation, which we cannot grant.

What type of connection do I need?

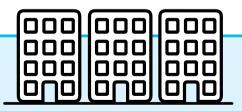
When filling out our online application, It's important that you choose the right water connection type for your development. This would be based on the end use of the supply connection, for example: If you are building a new house, you would select a 25mm/32mm connection.

Туре	Description	Typical pipe size (per connection)
Small developments	New build house, shops, and domestic fire sprinklers	25mm/32mm
Landlord supplies	Water to serve a bin store or communal area in a block of flats or larger development	25mm/32mm
Standpipe	Water for staff facilities or construction work on building sites	25mm/32mm
Trough	Animal drinking water or other agricultural use including stables/paddock and communal garden watering	25mm/32mm
Large developments	Domestic flats and fire sprinklers. Commercial or industrial development	63mm

Important information

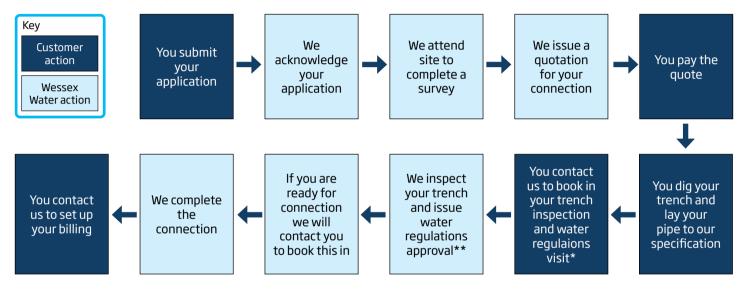
For large developments, we advise that you contact our planning team before submitting your application for a water connection.

You can submit your pre-planning enquiry by visiting our website at: **developerservices.wessexwater.co.uk/planning-and-capacity**



Typical application process

Here is a quick step by step guide to the application process



Note

- *If you use a contractor from the WaterSafe approved contractor scheme to install your pipework, then they are qualified to undertake the works to your private supply pipe, and we will not need to attend site to complete a trench inspection. However, we will require them to provide us with a certificate which details the works.
- **Not all applications will require a site visit for Water Regulations. In many cases, we will issue you with a letter confirming the requirements

How long does the process take?

Application acknowledgement

During the online application process, you will be asked for the following:

- To upload a site location plan which clearly shows the site boundary, nearby street names, proposed connection point and any plots.
- To pay an upfront administration fee (you will be quoted separately for the connection once we've completed our site survey). Administration fees are non-refundable.
- Information regarding your site, such as private pipe size, number of connections, and type of development.

We will aim to acknowledge your application within 5 calendar days of receiving it.



Site survey and quotation

Once we have a full application, we will arrange for a site survey to take place.

We will price up the work and issue your quotation within 28 calendar days.

The quotation validity period will be stated on your quote. If this expires prior to you making payment, then a re-quote will be required, and the overall price may change. There will also be an additional administrative charge.

Once payment has been made, the price for connection(s) will remain valid for a further 3 months. If your site isn't connected within this timeframe then a re-quote will be required, and the overall price may change.



Connection

Once we have received payment for your quote, and your new pipe work has been laid to our specification and passed our trench inspection, we can arrange your connection date.

We will aim to complete your connection within 21 calendar days.

However, if a road closure is required, we need to provide the local highway authority notice of our work and be granted a permit to close the road, which can take 3 months. More information on traffic management and road closures can be found on page 13.



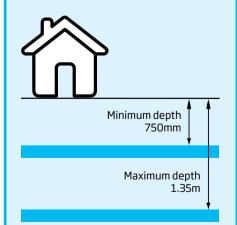
or 3

Technical requirements

Trench excavation

Your trench should be between 750mm and 1.35m deep.

The trench should be free from any debris that may damage the pipe and should be wide enough (350mm) to accommodate the pipework.



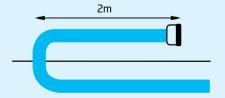
Laying your pipe

Service pipes and ducts shall be laid in straight runs to the agreed location. They should not cross neighbouring building plots.

The correctly sized pipe/duct should be laid to the agreed connection point and have 1m or 2m of tail ends exposed ready for connection. They should also be plugged to prevent debris from entering the pipe.

All properties should have internal stop taps installed and turned off, prior to the meter being fitted.

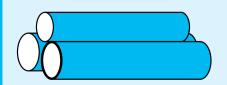
If your pipework or the connection is due to take place within private land, you will need to liaise with the landowner and obtain their written consent for excavating/laying your pipe. We will also need a copy of this consent prior to us making the connection.



Pipe material

Barrier pipe must be used for all new private service pipes unless specifically agreed with Wessex Water If you would like to use a standard MDPE pipe, you will need to submit a Site Assessment Report meeting the specifications of Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites (UKWIR ref.10/ WM/03/21) which can be found at www.ukwir.org.

This information must be sufficient to allow Wessex Water to confirm the appropriate pipe or mitigation method. As a minimum, a desk study will need to be provided, that sets out whether the land through which the pipes are to be laid may be affected by contamination.



Shared trench

We support the principle of sharing a trench with other utilities and will work with you to do so, including facilitating the placement of ducting in a Wessex Water trench for other utilities, where possible.

Any ducting placed in a Wessex Water trench shall be entirely at your risk. Trenching and placement of ducting or other services in a shared trench must be NJUG compliant and meet Wessex Water standards.

Where you excavate and reinstate a trench outside your property boundary, you are responsible for employing a suitably licensed contractor. You would also be responsible for the quality of the reinstatement for a period of 24 months

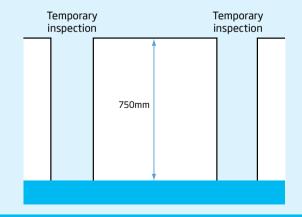
Positions of utility services 200 100 100 mm mm mm Not less than 300mm radius Gas Water

Backfilling your trench

The pipe should be surrounded by sand or fine material. The trench can then be backfilled with soil, which must be free from rubble and domestic or commercial waste.

If you plan on backfilling your trench prior to inspection, you must leave inspection pits along the length of pipework, especially at the start, middle and end.

You should also take photographs of the trench and pipework prior to any backfilling.



Labelling your pipework

Where you are installing multiple connections, the service pipes must be clearly labelled at the boundary with the correct plot number/property number.

If you are installing a fire supply, this will also be labelled so we can clearly identify it.

This is necessary to ensure that each property is correctly billed.

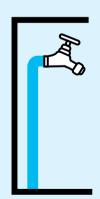


Standpipe/trough

Where installing a standpipe or trough, you will need to install this prior to us attending site to complete the trench inspection.

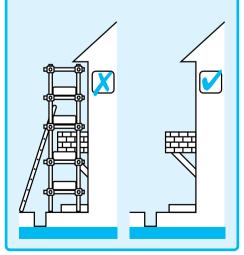
This will also need approval from our Water Regulations team before connection is complete. Standpipes can only be used to provide water for staff facilities or construction work on building sites

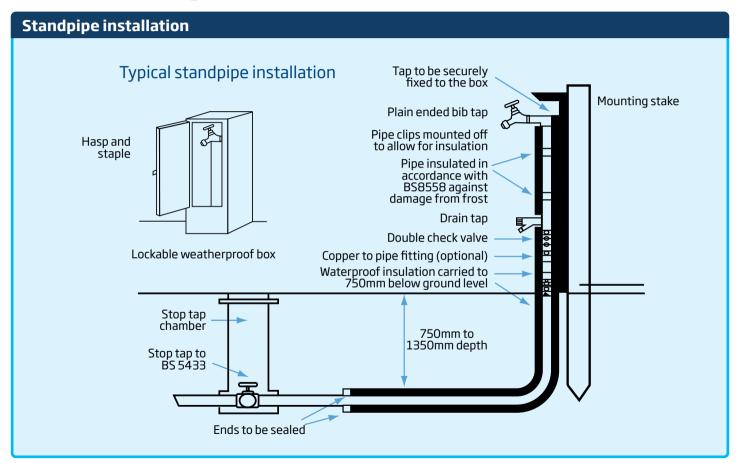
You will need to ensure the installation complies with the requirements set out on pages 12 and 13.

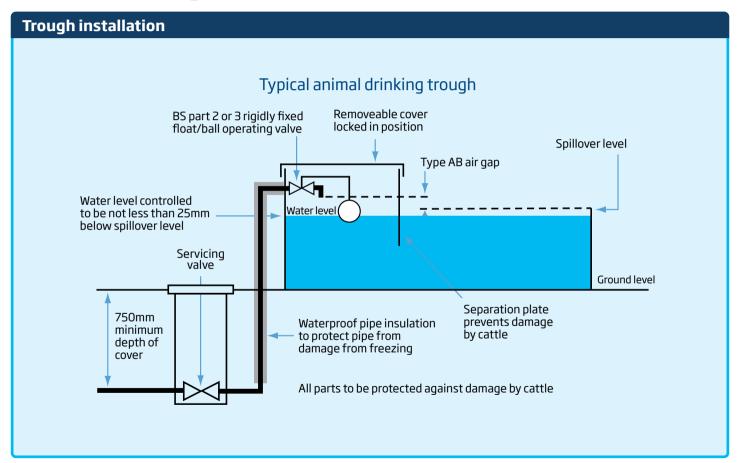


Access requirements

Your site must be free of any obstructions and easy to access. In particular, all scaffolding on site must be removed before requesting your connection.

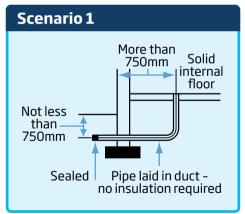


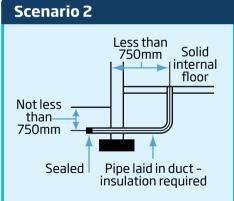


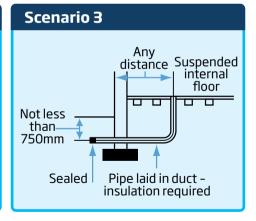


Ducting and insultation

- Pipework must be ducted and suitably insulated as it enters the property.
- Pipes entering buildings at the approved depth should be passed through a duct and the ends of the duct sealed, to prevent the ingress of gas, fluids, insects or vermin into the building.
- Pipes shall be insulated where necessary with a minimum of 19mm rubberised foam.
- Ducts should be sized to allow pipes to be readily removable for maintenance and repair.
- Requirements may vary due to differing wall designs and construction methods.







Protect your drinking water

Why all the technical requirements?

All these checks and technical requirements are to make sure your drinking water is protected from contamination before it is used. Water is a natural product and can be affected by the materials and plumbing fittings it passes through.

It's the law

The Water Supply (Water Fittings) Regulations 1999 exist and describe how plumbing should be installed and maintained to protect water quality. This is national legislation enforced by the water company providing the water supply to the premises.

Where do the regulations apply?

It applies to all connections to the mains water supply including new installations to be connected. This is why we ask for details about your installation to check it

will meet the regulations.

Their purpose is to prevent the contamination, wastage, misuse, undue consumption and erroneous measurement of drinking water. We proactively enforce these regulations across our supply region. It is the responsibility of owners, occupiers and installers to ensure the plumbing complies with these regulations.

Installations that do not meet these regulations will not be permitted connection to the mains water network.

Who can help?

There is a directory of water industry approved plumbing contractors whose work is certified as meeting the regulations. These can be found by visiting www.watersafe.org.uk. Their work is checked by the water industry to meet the water fittings regulations, and any issues identified will be the plumber's responsibility to fix.

If you use a confirmed approved plumber, schematic plans will not be required for new domestic premises. However, schematics will still be required for any non-household premises (eg, industrial, commercial, agricultural, etc.)

We can help guide you

Some installations must be inspected to check they meet the regulations before we can authorise a connection to our drinking water mains. This will be due to the presence of fittings or installations at higher risk of contaminating the drinking water supply.

Make sure you arrange a visit or discussion with the team early to not delay your connection date.

Our contact details are below. You do not have to pay for this advice and is part of our legal duty as a water company.

Please note: We do not advise on plumbing design, we can only advise on compliance with the regulations.

Please get in touch!

To arrange your water regulations, visit or discussion please email the team directly at: **Water.Regulations@wessexwater.co.uk** or call: **01202 643111** (Monday to Friday, 8am to 4pm)



Large connections

For connections exceeding 32mm, we advise that you contact our planning team before submitting your application for a water connection. This discussion will enable us to better understand your proposal and offer a timely, cost-effective and integrated solution tailored to your development requirements.

You can submit your pre-planning enquiry via our website: developerservices.wessexwater.co.uk/planning-and-capacity

Storage and boosters

We aim to deliver a minimum pressure of 10 metres head at a flow rate of 9 litres per minute.

You will need to consider this when either the characteristics of your development (eg, multi storey), or the nature of the internal fixtures and fittings that you plan to install within it, will require a greater pressure or flow. Where this is the case, you should amend your design accordingly (storage facilities, booster pump etc.)

It is essential that storage cisterns are properly sized and installed to maintain the quality of the water they contain. You will need to liaise with your private plumber to discuss what size tank is required for your development

Please note

Where storage is being used, we will also need to know the fill rate (litres per second). If the fill rate will vary, we will also require those figures.

Large connections (continued)

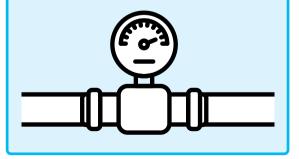
Flow rates

Where you require a large connection, we will need to review flow rates for your development. Please include:

- Maximum flow rate in litres per second
- Minimum flow rate in litres per second
- Average flow rates in litres per second

Important

To work out the maximum flow rate, you should calculate the required flow at your busiest time of day, based on realistic appliance usage at that time. To assist with this, we have provided a table below which lists the typical maximum flow rate for different types of development.



Development Type	Litres per second (maximum flow)
Regional hospital	5
Cottage hospital	2
Leisure centres	2
Schools	2
Food manufacturer	2
Holiday park	5
Hotel (100+ rooms)	2
>60 bed	1
Restaurant	1
<30 apartments/beds	0.5
30-60 apartments/beds	1
60-100 apartments	1.5l/s
>100 apartments/beds*	1.5l/s
*Increase per 50 apartments/ beds thereafter	0.5l/s

Chlorination

Hygienic installation of the new pipework is vital to ensure the suitability and safety of the supply of drinking water.

Chlorination, water quality sampling and testing is required in the following scenarios:

- When you install a new private supply pipe with an outside diameter greater than 50mm
- Where the pipework has been buried for more than 6 months

This process must be carried out by a certified contractor and should be completed within 10 calendar days before the date of connection. Therefore, once you have received your connection date from Wessex Water, it is important that you plan and arrange for the chlorination, water quality sampling and testing to be completed (and sent to us) during this time window.

Please ensure that the chlorination certificate and laboratory results are sent to water.connection@wessexwater.co.uk at least one day prior to the scheduled connection.

Please ensure your water sample contains the following test results:

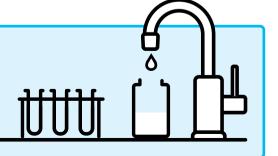
Name	Units
Coliform bacteria	/100ml
E.coli	/100ml
Turbidity	NTU
Odour	Dilution number
Taste	Dilution number

Free and total chlorination residuals at the time of sampling also need to be provided on the chlorination certificate.

Important

If the results are not compliant or fall outside of the 10-calendar day window, the pipework will need to be re-chlorinated, and another sample taken.

This will result in additional costs and delays to your connection being made.



Working in the highway

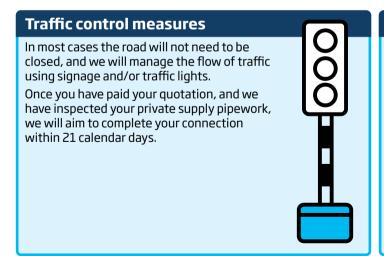
We have a responsibility to follow all applicable health and safety laws in accordance with the Local Highway Authority's regulations.

When a new supply connection is planned, it's likely that traffic control measures will be needed, and in some instances a full road closure. We work with the Local Highway Authority to keep disruption to traffic and public inconvenience to a minimum.

Traffic control can often be complex particularly on busy routes and where schools or businesses may be affected. On some occasions the Local Highway Authority may require that we complete your connection outside of normal working hours. Where this is the case there will be an additional charge.

In most cases the costs associated with working in the highway will be clearly shown on your quotation. However, as these requirements are not within our control, the charges may be subject to change. Where this is the case, you will be invoiced separately for any additional items, or refunded where items are no longer required, as applicable.

Please be aware that the new connection will not be available to use until any outstanding balance has been paid.



Road closure

If your connection requires a road closure, the timescales associated with this are set by the Local Highways Authority, and the closure will take a minimum of 3 months to arrange.

It is important to note that this 3-month period can only start once you have paid your quotation, and we have inspected your new private supply pipework.

If you need to get connected quickly, you should begin work on your site and have it ready for inspection as soon as possible, to minimise any further delay to the process.

Infrastructure charges

As part of your quotation for a new water connection, you may also be charged for water and sewerage infrastructure charges.

What are infrastructure charges?

Infrastructure charges cover the cost of improving our existing network to cope with extra capacity associated with new development.



When are these charges applicable?

The charge will apply if you are:

- Building new premises including houses, flats, commercial premises, institutions and permanent caravans.
- Converting existing premises, eg, a house into flats.
- Connecting existing premises to our network for the first time.
- Connections can be direct to our systems or via private mains, drains or sewers.

Domestic premises

The total amount payable would be calculated by multiplying the number of additional units by the relevant unit rate charge.

Commercial premises

In the case of commercial premises, the amount payable would be calculated by using the 'Relevant Multiplier'. This takes the number and type of water fittings that will be used within the premises which is then multiplied by the load unit (see example on the next page)

Existing site use

Where a live connection to the site existed within the five years preceding redevelopment, you will only pay for the net increase, eg, where a single house is converted into four flats, you'll pay for three flats.

Infrastructure charges (continued)

Relevant Multiplier

Water fitting / appliance	Loading units
WC flushing cistern	2
Wash basin in a house	1.5
Wash basin elsewhere	3
Urinal	3
Bath (tap nominal size 3/4"/20mm)	10
Bath (tap nominal size >3/4"/20mm)	22
Shower	3
Sink (tap nominal size ³ / ₄ "/20mm)	3
Sink (tap nominal size >3/4"/20mm)	5
Spray tap	0.5
Bidet	1.5
Domestic appliance (subject to a minimum allowance of six loading units per accommodation unit)	3
Communal or commercial appliance not listed in table	10
Any other water fitting or outlet (including a tap - but excluding a urinal or water softener)	3
Swimming pool	24

Please note

Relevant Multiplier is to only be used for commercial premises

Contact us

If you need help with your water connection, our experienced team are on hand:

Email Water.Connection@Wessexwater.co.uk

Call 01225 526222

(Phone lines are open Mon-Thurs: 08:00-16:30 and Fri: 08.00-16.00)

Write New Supply Connections

Wessex Water Claverton Down

Bath BA2 7WW

Visit wessexwater.co.uk/developers

