

Building over (or close to) a public sewer or lateral drain

What you should do, and how we can help





Before you start

If you're thinking of improving your home by extending, adding a conservatory, annexe or attached garage, you need to let us know.

While planning your extension, you should have obtained Planning Permission or Building Regulations approval from your Local Authority. Or perhaps you're carrying out work which falls under 'homeowners' permitted development rights', or doesn't need Building Regulations (things like conservatories, car ports and porches sometimes fall into this category).

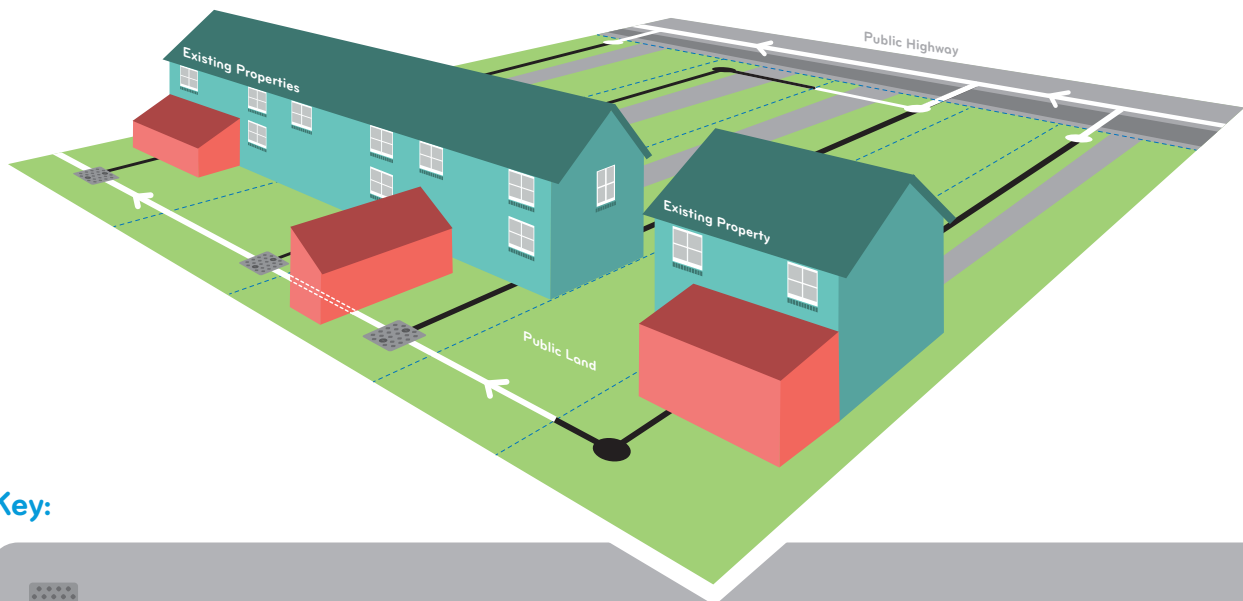
However, these permits do not give you consent to build over, or close to, Welsh Water's lateral drains and sewers.

We recommend you find out where the lateral drains and sewers are well in advance of starting any building work, at the design stage of your project. This will help to avoid unnecessary delays, damage to pipes or additional costs further down the line. Your architect or builder may be able to help you find out if there's a public sewer or lateral drain within your property boundary.

If you need help with locating pipes on your land, we can provide you with a sewer trace or you can contact a Safe Schemes in Procurement (SSIP) accredited contractor. Building over or near a pipe could damage the pipe or your home in the long term, so it's important we work together to find out what pipework is underground. If there is pipework on your land it could affect the position, size and design of your extension.

Larger and deeper sewers and larger developments

This booklet deals with alterations to existing residential properties – typically, where a homeowner is planning to build an extension either over or very close to small public sewers and lateral drains, with a maximum diameter of 225mm. If you're building a new house or extending an industrial or commercial premises, we will not provide consent to build over or close to a public sewer or lateral drain. If your build falls outside of this scope then please contact us to discuss your options on developer.services@dwrcymru.com or **0800 917 2652**.



Key:



Public Manhole



Private Drain - the drainage system within your property boundary which only serves your property



Public Sewer - the pipe which flows into the public sewer network from more than one property



Who's responsible for what?

As a property owner, you are responsible for drains that serve only your property and are within your property boundary. This includes underground pipes, gutters and downpipes attached to your property.

Welsh Water is responsible for public sewers serving only your property which are outside of your boundary and connect to the existing public sewer network, as well as sewers serving multiple properties that are within your boundary.

There's a good chance that there are some pipes within your property boundary which are owned by Welsh Water. There may be more than one sewer pipe within your property boundary, i.e a foul sewer and a surface water sewer.

If you're building over or close to sewers and drains owned by Welsh Water, you need our permission first. If you have carried out an investigation and confirmed all pipes you intend to build over/near are private, you do not need any consent from us.

The diagram below shows some examples of who owns what:





Before you begin

If you're not sure whether there's a public sewer where you want to build:

- Your architect or builder may be able to help you find out if there is one
- Details of drainage arrangements may be included within the legal documentation related to your property
- If you want us to help you locate the sewer, contact us on planandprotect@dwrcymru.com or **0800 917 2652**. There is a charge for this service that can be found within the Developer Services Schedule of Charges on our website.

In order to locate a sewer, you can either do this by arranging a sewer trace (we can do this at a charge or you can choose your own SSIP accredited contractor) or simply by digging down to expose the pipe. Any evidence you find should be stored with the deeds of your house, along with a copy of our Build over Sewer consent.

If you find damage to the sewer or lateral drain, get in touch with us in advance of starting any works.

We also recommend that you keep evidence of the condition of your sewers after your work has been completed, so you can show that the sewer has not been affected. If there is a problem in the future with our sewer or lateral drain because of your building work, we may look to recover costs from you.

How does a sewer trace work?

A crew will visit and will explain to you the location of the sewer while they're on site. The crew will also leave a calling card which will give you all the information you need to support your application, such as the size, depth, material and condition of the sewer. It's really important that you or your builder is present when the survey is being undertaken, so that you can understand the location of the main. Please keep your calling card safe as you will not receive any further information after this visit.

How much is it going to cost?

There are different types of application, explained later in this guidance, and these have different application fees which are set out on our website.

Can I start work before consent is received?

No. If your proposal does not meet with our criteria, we may need to agree amendments to your design. If you have already started work, this could prove costly and difficult to do and will cause delays. On rare occasions, we may not be able to allow you to build over our sewer. This is in the interest of protecting both our pipes and your property. Don't forget, our consent is required not only for buildings directly over our public sewers and lateral drains but also buildings within 3 metres of the sewer. If you do not gain consent and continue with your build, you may not be able to get the Building Regulations Completion Certificate that signs off your building as complete from the Local Authority or approved inspector, and this could affect the sale of your home in the future.

How soon will I be able to start work?

In most cases, we can give our consent within 14 days. In some cases, we may need further information from you before being able to decide if the project can go ahead, or if it needs to be changed.

Exposed pipe



Broken pipe





Do I need consent?

There are some situations where you do not need our consent. If you meet all the below criteria then you will likely be exempt from needing our consent:

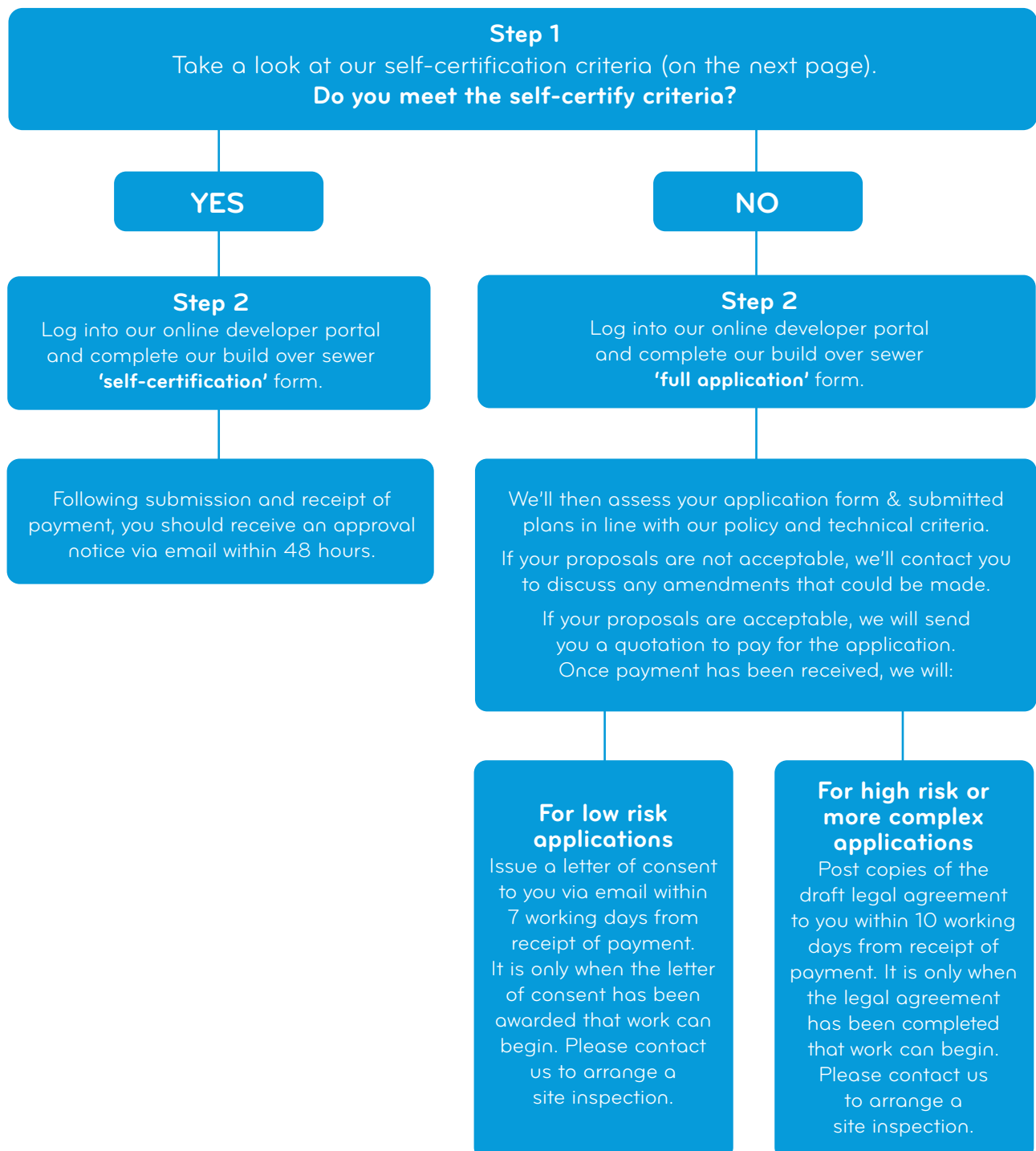
- 1 The public sewer is 150mm or less in diameter
- 2 The public sewer is less than 2m in depth
- 3 Your proposal will be 1.2m or more away from the public sewer
- 4 You are using strip/trench foundations that will be brought 150mm below the invert level of the public sewer
- 5 You are not proposing to alter any of the public manhole/public sewer

However, we'd still recommend getting in touch with our team who can confirm that you are exempt and therefore do not need a build over agreement.



What type of consent do I need?

Once you've identified that you do need our consent, here's how to identify which type of consent you need to build over, or within 3 metres of, a public sewer or drain:





Self-certified build over agreements

To qualify for a self-certified build over agreement your proposal will need to meet all of the following criteria:

- Your development involves a single or double storey residential extension, conservatory, annexe or garage which is attached to the existing property.
- The sewer must be made of clay or plastic.
- The internal diameter of the sewer must not be greater than 150mm.
- The sewer must be a gravity flow pipe – it freely flows and is not pressurised.
- The sewer must be no deeper than two metres below ground.
- Your building will have traditional strip/trench fill foundations.
- You're not aware of any easements or restrictive covenants which relate to the pipework which you proposed to build over/close to.
- You're not aware of any historic blockages, flooding odour or other operational issues with the sewer that have not been resolved.
- Your proposal does not involve altering any public assets (i.e. manhole removal/relocation or pipe renewal).
- Access points such as manholes, inspection chambers and rodding eyes will be outside your new building and at least 500mm away.
- The foundations within one metre horizontally of the sewer must be taken at least 150mm deeper than the underside of the pipe.
- A horizontal clearance of 500mm must be maintained between the sewer and the new parallel foundations.
- The sewer must not change in diameter/direction/material or gradient beneath your planned building.
- The sewer must be in good condition – this should be checked before construction either by exposing the full length of pipe you'll be building over or getting a CCTV survey.
- Your building won't extend over the sewer across the full width of your garden where both adjacent neighbours have already done the same.
- Sewers passing through load-bearing walls must be protected in line with H1 2.24b (Building Regulations 2000) and Welsh Water requirements.
- Your building must –achieve a minimum cover of 300mm between the top of the sewer and the underside of the new floor.

If you're unsure about any of the above points we suggest you seek assistance from your architect or builder.

If you're still unclear, or your proposal is unable to achieve these points you should submit a full application.



Frequently asked questions

What if I need to alter a sewer or lateral drain in order to secure a build over sewer agreement?

If you need to undertake any alterations to a public sewer or lateral drain, such as repositioning an existing inspection chamber, or replacing a defective pipe, the scope of the work will need to be agreed in advance with us. Please include the detail of your proposed alterations when you make your application within the application form.

If I can't meet the criteria what do I do?

In some cases, extra work may be required to your property or you may need to amend your design, before you meet the consent criteria. For instance, you might need to move an inspection chamber or replace some pipework.

In other cases, it may be that you need to divert the sewer to go ahead with your build.

Contact us to discuss these alternative arrangements.

What if I encounter damaged or defective pipework while building?

This is likely to need to be replaced. Contact us to discuss this further.

How can I or my contractor work on the public sewerage network safely?

You and your contractor will also need to take account of the following requirements prior to any works:

- Any work undertaken on the public sewerage network needs to take account of a host of hazards including, but not limited to: confined spaces, working at depth and the potential presence of toxic/explosive gases. We need to be satisfied your appointed contractor undertaking works to our sewers or drains, is both competent and suitably qualified in respect of current Health and Safety Legislation.

- Contractors wishing to access the public sewer network must first demonstrate they have the appropriate health and safety systems and processes in place which ensure their staff are able to safely access our networks. We will undertake checks to ensure that the contractor is a member of one of the organisations which form part of the Health and Safety Executive (HSE) endorsed, Safe Schemes in Procurement (SSIP), accreditation process. The HSE has brought together numerous existing Health and Safety accreditation bodies under the Safe Schemes in Procurement (SSIP) umbrella. Further information on this scheme and its member organisations can be found by visiting www.ssip.org.uk
- We will check the pre-qualification status of your chosen contractor with the approving organisation during the application process. In addition to the SSIP requirements, your contractor will also have to secure Access to Assets approval ahead of making the physical sewer connection.

What is the Access to Assets process?

The contractor who is planning to access our network will be provided with details of known location specific sewer network risks and hazards via the AF02 process.

A copy of Access to Asset Form AF02 can be found on our website and must be submitted with a minimum notice period of 10 working days to secure Access to Assets approval.

Contractors will be asked for their Access to Asset Consent reference number when they provide us with 48 hours' notice ahead of the work. Contact details can be found on the AF02 form. In the event of an operational issue within the sewage network which we are aware of during the period of the planned works, the contractor will be notified to cease works and leave the sewer network.

Appendix 1: Our consent criteria

You will need to establish and confirm:	We'll say yes, if...	We'll say no, if...	Further advice:
<p>1. The type of building works</p>	<p>Your development involves a single or double storey residential extension, conservatory, annexe or garage which is attached to the existing property</p>	<p>Your development involves the construction of a new residential property, the extension of industrial and commercial property or any detached ancillary buildings or structure</p>	<p>We cannot permit a build over/close to for the following:</p> <ul style="list-style-type: none"> ✘ New residential properties ✘ Extensions of industrial and commercial properties ✘ Detached ancillary buildings or structure ✘ If the pipe to be built over/close to is found to be defective and not repaired ✘ The size of the pipe is greater than 225mm in diameter ✘ The pipe diameter, direction, material or gradient changes beneath the area of the proposed build and cannot be replaced/removed. ✘ If you are unable to relocate the access point, i.e. access is on junction of sewers or a change of direction ✘ Your proposal involves an infill structure from one boundary to another where there are already structures on both sides ✘ Pressurised pipes such as rising mains and water mains.
<p>2. I/we are not aware of any historic blockages, flooding, odour or other operational issues with the sewer/lateral drain</p>	<p>You are not aware of any historic blockages, flooding, odour or other operational issues with the sewer/lateral drain</p>	<p>You have had reason to contact Welsh Water or another drainage professional as a result of problems with the sewers or lateral drains within your property within the last 12 months and these have not been repaired</p>	
<p>3. Are you aware of the presence of an easement or restrictive covenants which prohibit building?</p>	<p>You are not aware of easements or covenants which relate to the pipework which you propose to build over/close to</p>	<p>You are aware of easement/ covenants which relate to the pipework which you propose to be built over/close to</p>	
<p>4. The sewer or lateral drain is a gravity flow pipe</p>	<p>The pipe freely flows and is not pressurised</p>	<p>The pipe is a pressurised main</p>	<p>This can potentially be resolved if the sewer can be diverted and you are prepared to enter into Sewer Diversion Agreement in accordance with S.185 Water Industry Act 1991. Please see the Developer Services Section of our website for more details.</p>
<p>5. The depth of the pipe from the existing ground level to the pipe channel (invert)</p>	<p>3m or less</p>	<p>Greater than 3m</p>	<p>This can potentially be resolved if it can be demonstrated that the development does not place any additional load on the pipe.</p>
<p>6. The pipe's internal diameter. These typically relate to standard sizes, 100, 150, 225mm or the equivalent 4, 6, 9 inches</p>	<p>If the pipe has an internal diameter of 225mm (9 inch) or less.</p>	<p>If the pipe's internal diameter is larger than 225mm (9 inch)</p>	<p>This can potentially be resolved if the sewer is diverted using the Diversion process. Please see the Developer Services section of our website for more details.</p>

...continued

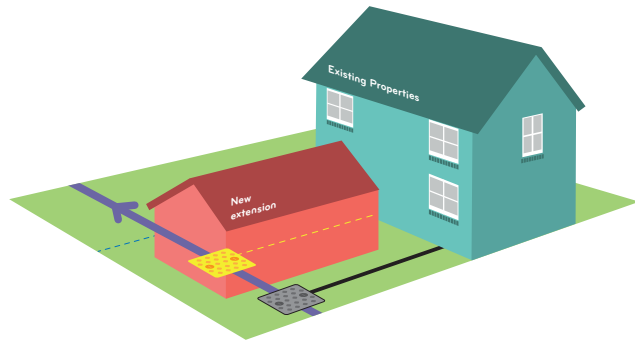
You will need to establish and confirm:	We'll say yes, if...	We'll say no, if...	Further advice:
7. The pipe material	Clay, plastic	Pitch fibre, brick, asbestos cement	This can potentially be resolved if the pipework is replaced before building works begin
8. Access points This relates to manholes, inspection chambers and rodding eyes	Your building will not be positioned over the existing access point and is a minimum of 500mm from the new build	You are unable to meet the minimum 500mm clearance requirement, or the existing access will be under the new building	This can potentially be resolved if the affected access can be relocated to achieve the minimum clearance, or the shape of the extension is adjusted to meet this requirement. See Detail A below
9. The type of foundation which you intend to use	You're seeking self-certification and your building relies on traditional strip or trench fill foundations. See Detail C below. For all other foundation types, you must complete our full application	- You are proposing to use a raft foundation over a sewer which is less than 2m deep - You are proposing to use piles which are positioned within 1m horizontally of the sewer	This can potentially be resolved; a detailed assessment of the site, the foundation and its impact may be needed
10. Depth of your strip/pad/trench fill foundation in relation to the pipe	Your foundations are designed to be at least 150mm below the pipe when located within 1m (horizontally) of the pipe or, where outside of 1m, the public sewer is located above the 45° zone of influence	Required foundation depth cannot be achieved	This can potentially be resolved if alternative foundation proposals are submitted and agreed.
11. That you need to move/replace access (inspection chamber or manhole) or pipework within your proposed areas of work.	You provide details of your proposal and we deem them acceptable and you agree to adhere to our policy – (see our Frequently asked questions section).	The details submitted do not enable us to properly assess your proposals or you are not prepared to adhere to policy.	Please ensure that you submit details confirming the materials/type of access chamber you intend to install. You will also need to provide the name of the nominated SSIP accredited contractor
12. The pipes condition (unless you plan to replace the full length of pipework you're building over)	Pipe is in good condition. This can be established by exposing the length of pipe which will be built over or the completion of an internal CCTV survey	The pipework is found to be defective and is not repaired	This can potentially be resolved if the pipe is replaced. For further information please contact us

...continued

You will need to establish and confirm:	We'll say yes, if...	We'll say no, if...	Further advice:
<p>13. The foundation positioning Distance between the pipe and foundations</p>	<p>The foundation design protects the pipe where it passes nearby. See Detail D The foundations which support the wall which do not cross the sewer, must have a minimum 500mm horizontal clearance between the edge of the new foundations and pipe</p>	<p>Your foundation design cannot achieve 500mm clearance from the pipe.</p>	<p>This can potentially be resolved after a detailed assessment of the foundation and its impact on the pipe.</p>
<p>14. The pipe continuity under the new building</p>	<p>The pipe does not change in diameter, direction, material or gradient beneath the proposed new building</p>	<p>Diameter, direction, material or gradient clearly changes beneath (or close to) the area of proposed build</p>	<p>This can potentially be resolved if the pipework is replaced and/or realigned before building works begin. Please note, this may need to be agreed under a Diversion agreement.</p>
<p>15. Overall length of pipe (sewer) with no external access. This is only applicable for properties where building works over a sewer are proposed across the whole width of the garden</p>	<p>You do not intend to build across the full width of your garden. Or you do intend to build across the full width of your garden but external access is available to the sewer via the adjacent neighbours garden</p>	<p>You intend to build across the full width of your garden and both neighbours adjacent to you have also done the same. This will result in a situation where there is no external access to the sewer across three or more adjoining properties</p>	<p>This can potentially be resolved if suitable alternative access arrangements to the public sewer network can be provided by amending the shape of your building. See Detail B below</p>
<p>16. Protecting the pipe where walls/ foundation are built and cross over.</p>	<p>Your foundation design complies with the Standards set out within H1 Building Regulations and Welsh Water. See Detail E</p>	<p>The minimum lintel requirements cannot be achieved</p>	
<p>17. Distance between the floor of the new building and pipe</p>	<p>Your design incorporates a minimum of 300mm headroom between the underside of the new floor slab and the pipe. See Detail D below</p>	<p>Your design cannot provide 300mm of headroom between the underside of the new floor and the pipe.</p>	<p>This can potentially be resolved if the sewer can be diverted and you are prepared to enter into Section 185 Sewer Diversion Agreement Water Industry Act 1991</p>

Appendix 2: Our technical diagrams

Detail A



Key:



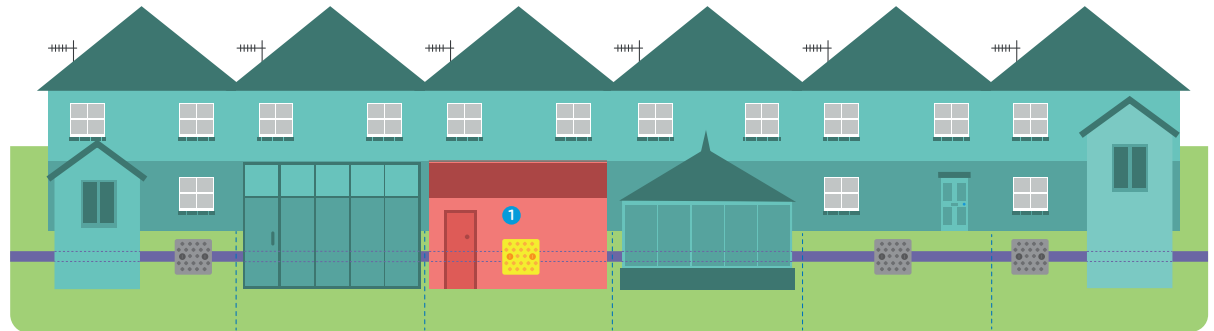
Existing inspection chamber on the public sewer



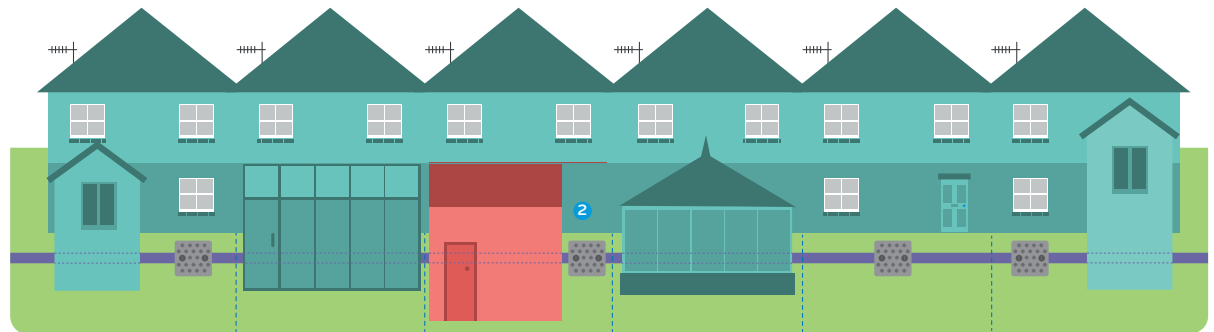
Repositioned inspection chamber on the public sewer

Detail B

NOT ACCEPTABLE



ACCEPTABLE



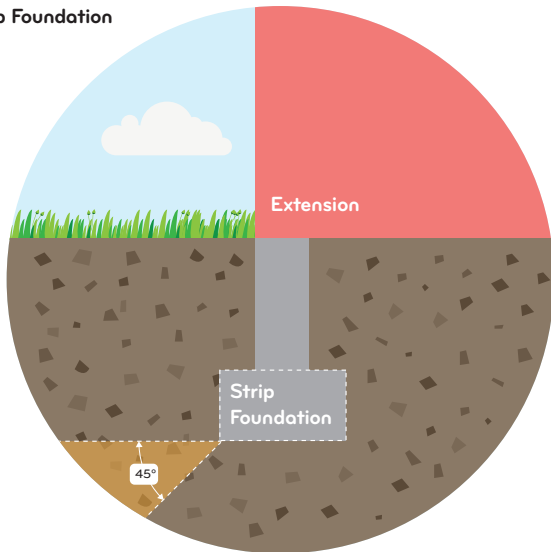
Key:

- 1 Length of pipe built over not acceptable as it leaves no space for access.
- 2 This can be overcome by amending the shape of the building and repositioning the existing access

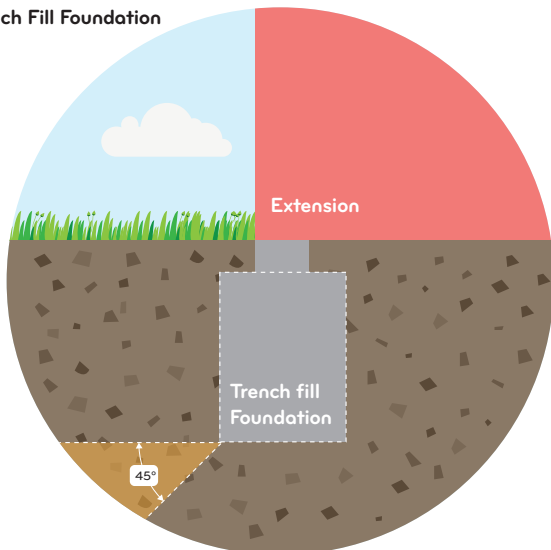
Please note:
Diagrams not to scale

Detail C

Strip Foundation






Trench Fill Foundation

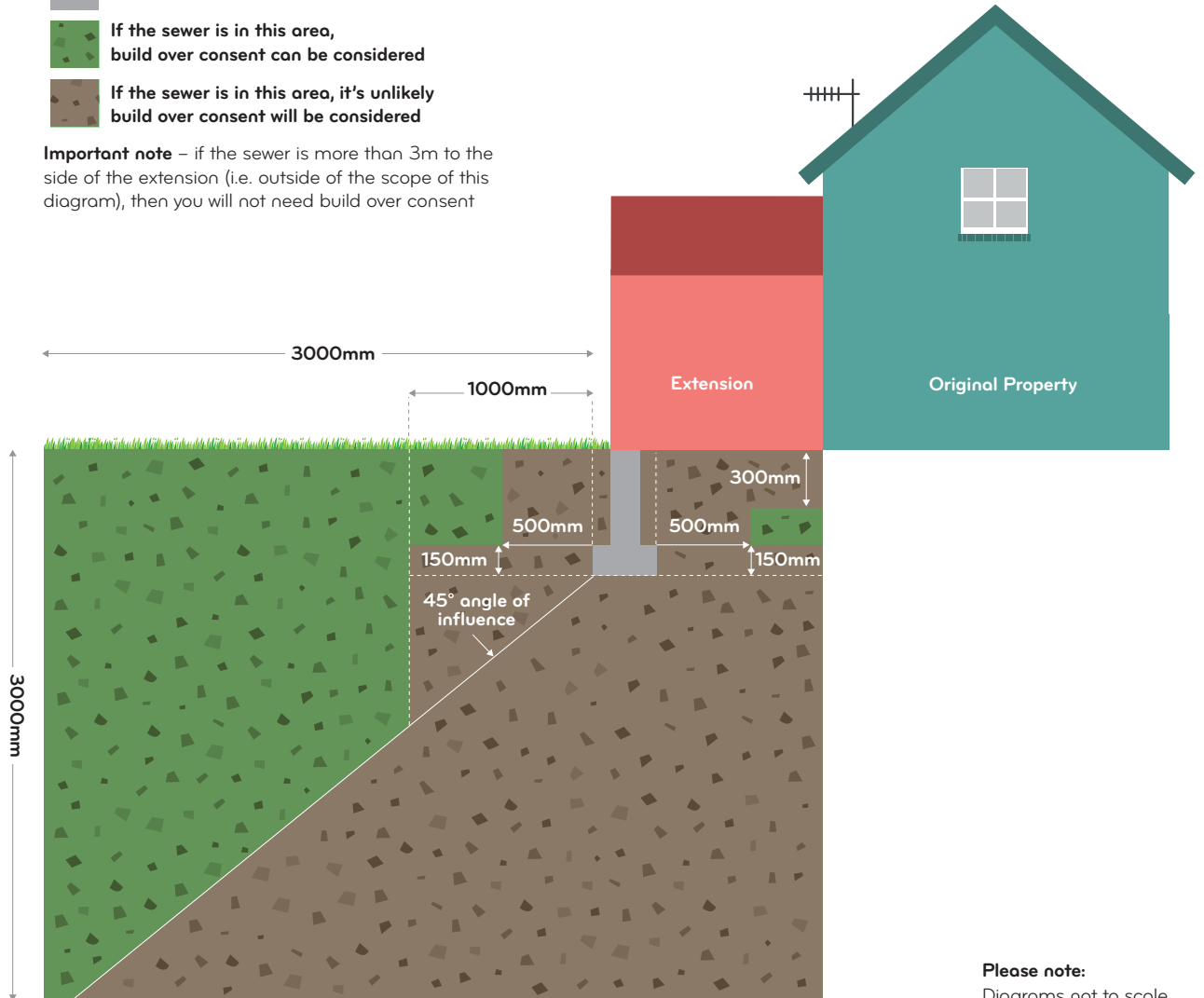


Detail D

Key

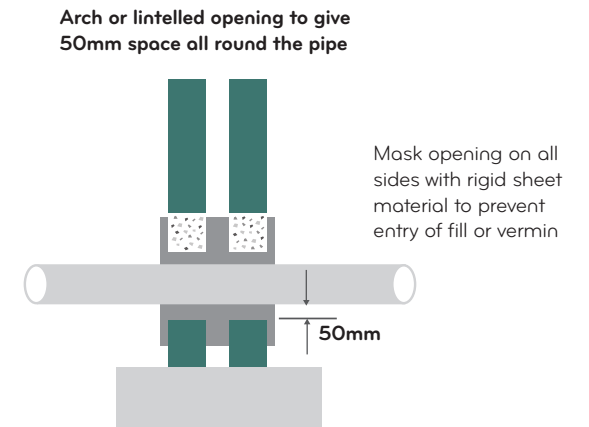
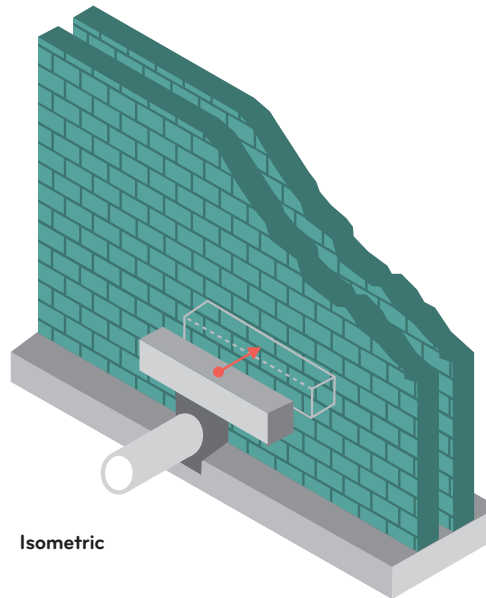
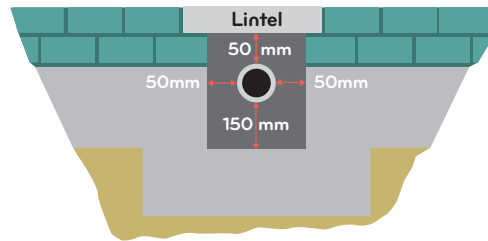
-  Building foundations
-  If the sewer is in this area, build over consent can be considered
-  If the sewer is in this area, it's unlikely build over consent will be considered

Important note – if the sewer is more than 3m to the side of the extension (i.e. outside of the scope of this diagram), then you will not need build over consent



Please note:
Diagrams not to scale

Detail E Protecting the pipe where walls/
foundations are built and cross over



Please note:
Diagrams not to scale