

Charging Arrangements for New Connection Services

1 April 2022 to 31 March 2023

New development and infrastructure charges

DRAFT FOR CONSULTATION



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CHARGING ARRANGEMENTS FOR NEW CONNECTION SERVICES

1st April 2022 – 31st March 2023

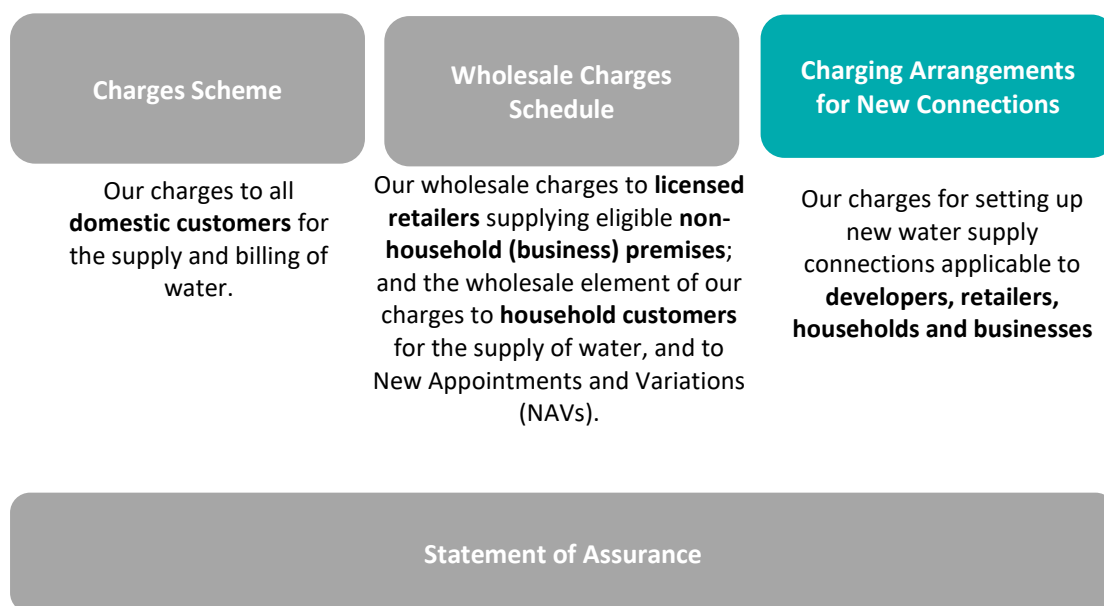
1 Introduction

This charging arrangements document contains the proposed new connection service charges applicable to all customers, developers, retailers, Self Lay Providers (SLPs) and New Appointments and Variations (NAVs) for the year commencing 1st April 2022.

This is published for consultation with Developers, Self-Lay Providers and other interested parties. Any feedback is welcome and should be provided by 30th November 2021 to inform our final version of this charges scheme, which will be published in January 2022.

This document for new connection services incorporates the Charges Scheme for infrastructure charges. A summary of the publications accompanying this Charging Arrangements for New Connection Services is provided below:

Annual Charges Publications



A statement of assurance provided by the Bristol Water plc. Board that our Charges Scheme, Wholesale Charges Schedule and Charging Arrangements for New Connection Service are compliant with the Ofwat charging rules.

This charging arrangement document reflects the current regulatory approach to charging for new connection services. The Water Act 2014 has allowed Ofwat to change the current charging framework to a new framework. Ofwat published its “Charging Rules for New Connection Services (English Undertakers)” in August 2017, with the latest version issued in March 2020.

Ofwat's latest published rules are available at:

www.ofwat.gov.uk/publication/charging-rules-for-new-connection-services-english-undertakers-from-april-2020/

These rules expect us to follow four overarching principles:-

- Fairness and affordability;
- Environmental protection;
- Stability and predictability; and
- Transparency and customer-focused service

In preparing these indicative charges we have taken steps to ensure that the present balance of charges between developers and other customers (bill payers) prior to implementation of these charges is broadly maintained.

Under the powers of the Water Industry Act 1991 Ofwat initiated a Code for Adoption Agreements effective from November 2017. Under this code Water Companies are required to Produce standard procedures and agreements to enable infrastructure provided by others to be adopted by the water company. The Design and Construction Specification Document (DCS) can be found here:--

<https://f.hubspotusercontent30.net/hubfs/7850638/Design-Construction-Specification.pdf>

The code document was developed by water companies in consultation with self lay providers and with approval from Ofwat.

The Document will be reviewed on an annual basis together with the Annual Contestable Summary (ACS), which highlights the types of work that a Self Lay Provider is permitted to undertake. The next review is due before January 2022.

Self Lay Providers are required to be registered with Lloyds Register EMEA under the Water Industry Registration Scheme (WIRS). The contractor undertaking equivalent work for Bristol Water is expected to maintain the same accreditation.

Self Lay Providers are required to comply with the Company DCS with the infrastructure subsequently adopted by Bristol Water.

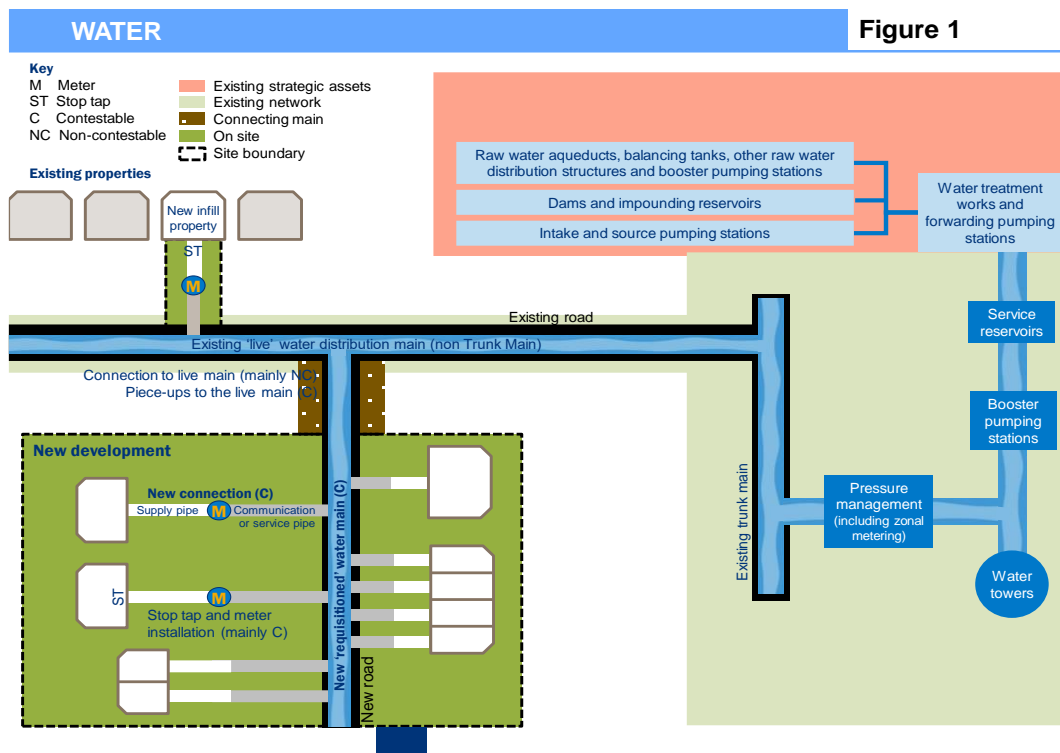
There is currently no Bristol Water requirement for Developers (or their representatives) who install private supply pipes and fit boundary boxes to be accredited. However the decision to permit a connection is based on inspection/approval of these installations.

Consultation

We are considering introducing a self certification scheme for developers whereby an accredited third party inspects, checks and certifies installations for internal and external pipework up to the and including the installation of the boundary box.

2 Our Charging Approach

Figure 1 below identifies the different elements of work that are required to provide a new water supply



C - Contestable Works which are able to be undertaken by others

NC – Non-Contestable Works which are to be undertaken by Water Company only

Where relevant through this document we identify which charges are contestable.

Areas of costs we incur are split into three categories:

- **Site – Specific (green and brown shaded areas above)**

Site specific works refers to work on, or the provision of, water structures or facilities located on a development up to a point on the existing network where the connecting pipework is of nominal bore internal diameter no larger than that of our existing network.

The costs of the water mains installed for these works are recovered from developers.

Site costs includes mains application fees that cover the non-design costs of administering and checking designs (whether produced by Bristol Water, Self Lay Providers or their design partners) These are charged on a sliding scale depending on development size.. Design Fees are payable where a Developer/Self Lay Provider requests Bristol Water to undertake a design. This is a contestable activity in this market. These are also paid on a sliding scale depending on Development size.

- **Network Reinforcement Works (grey area shaded above)**

Network reinforcement works refers to works upstream of the development that is required as a consequence of the development and not to address any existing deficiencies in the network. The costs of these works are recovered by means of infrastructure charges payable by developers for each domestic connection.

- **Resources and Treatment (pink area shaded above)**

Resources and Treatment costs are funded through general charges to customers and are not recovered through new connection charges.

3 General Information

For information relating to development enquiries, please see our developer's charter on our website: www.bristolwater.co.uk/business-developers/charges-regulations/#developer-charter

Charges incurred for development sites can be a combination of charges.

As a minimum all sites will require either a connection to an existing or a newly provided main. Additional requirements may be new mains, major connections and diversions.

3.1 Record Plans (free)

The provision of a copy of our mains record plan in Geographical Information System (GIS) format for proposed developments is free of charge.

3.2 New Mains and Major Connections

There are three options available to developers, new mains can either be laid by Bristol Water (requisitioned) or a Self-Lay Provider. The decision lies with the developer. The third option for developers is to service the site by a licensed NAV (New Appointment and Variation). This is where the onsite mains and connections (infrastructure) for a site not previously served by Bristol Water is designed, provided, owned and maintained by a NAV, and with a bulk supply of water provided to the NAV by Bristol Water.

Further information on the options available to customers for new connections infrastructure is on our website: <https://www.bristolwater.co.uk/business-developers/>

Initial feasibility checks, to determine how a development can be supplied, are free of charge unless significant investigation is required, in which case the fees in table 1 apply.

Enquiries requiring the design and costing of new mains installations or major service connections for non-domestic purposes including self lay mains and requisitioned mains applications as well as preliminary designs produced for budget purposes only, are also subject to the fees in table 1. A mains application fee is a non-contestable activity.

Table 1 Mains Application Fees (Previously Design Administration Fee)

Mains application Fees	Previous Fee 2021/22	New Fee 2022/23
Residential		
<10 houses	£300+VAT	£300+VAT
11-25 houses	£400+VAT	£400+VAT
26-75 houses	£600 +VAT	£600 +VAT
76-150 houses	£900+VAT	£900+VAT
151-300 houses	£1,200+VAT	£1,200+VAT
>300 houses	£1,500+VAT	£1,500+VAT
Commercial		
< 0.5 litres/sec	£300+VAT	£300+VAT
0.6-2 litres/sec	£500+VAT	£500+VAT
2.1-5 litres/sec	£800+VAT	£800+VAT
5.1-10 litres/sec	£1,000+VAT	£1,000+VAT
10.1-15 litres/sec	£1,500+VAT	£1,500+VAT
>15 litres/sec	£2,000+VAT	£2,000+VAT

If the site is a combination of residential and commercial/industrial only a single fee is payable: whichever is the greater out of the fee that corresponds to the residential element of the development and the fee that corresponds to the commercial/industrial element of the development. Fees may be taken into account when calculating the payments required in relation to any resulting main laying. These fees are due at the time of application

3.3 Mains Application Fee (Previously Design Administration Fee) – FOR CONSULTATION

Previously we charged Design administration fees on a sliding scale depending on development size, refunded if a project proceeds within 12 months of application. In previous discussions and consultation on charges, some respondents expressed concerns about what the design administration fee covers and whether a separate fee for design services is also applied to requisitions. We undertook to review our approach in this area for 2022/23.

As a result, for 2022/23 we propose to introduce a new “Mains Application Fee” in place of the Design Administration Fee/Design checking fee for self lay design submissions. This will be a new, non-refundable fee charged for all applications, requisition or self-lay on the same sliding scale as before as set out in table 1

An alternative option could be that this fee would be £550 for 2022/23, which is based on the average level of cost incurred by us for each application. We believe the banded approach is better, as it more closely reflects the costs we incur. We are interested in your views. As we now propose this charge is non-refundable, the equivalent value has been deducted from the overheads that we allocate to main laying activities in calculating the relevant proposed charges elsewhere in this document.

3.4 Design Fees – FOR CONSULTATION

Design fees are currently charged separately to a Self-Lay Provider where the Self-Lay Provider requests that a design is undertaken by Bristol Water. This is because Self-Lay Providers have the option to undertake the design themselves. The fee is currently charged at a set rate of **£415+VAT**, is non-refundable, and is in addition to the Mains Application Fee. The fee covers the technical element of producing a design for on-site mains up to 300mm internal diameter and only applies where Bristol Water produces a design. The design fee for the exceptional circumstances where larger mains are required will be on a quotation basis. Design is a contestable activity.

We are reviewing this fee as previous consultation identify that some respondents felt that it was not clear whether an equivalent fee was charged to requisitions. Whilst this fee was charged to requisitions within the overall connection charge overheads, to improve clarity, we propose that this fee is now separately identified and charged for requisitions as well as self-lay. Therefore this charge will apply to all applications that require a mains design. The activity of design is contestable and therefore Self-Lay Providers will only be charged if they ask us to undertake the design activity.

The equivalent value of our work has been deducted from the overheads that we allocate to main laying activities elsewhere in this document

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We are proposing to introduce this fee based on a sliding scale reflecting the amount of work required to design each scheme as follows

Table 2: Design Fees

Design Fees	New Fee 2022/23
Residential	
<10 houses	£260+VAT
11-25 houses	£310+VAT
26-75 houses	£430 +VAT
76-150 houses	£490+VAT
151-300 houses	£750+VAT
>300 houses	£990+VAT
Commercial	
< 0.5 litres/sec	£490+VAT
0.6-2 litres/sec	£490+VAT
2.1-5 litres/sec	£750+VAT
5.1-10 litres/sec	£990+VAT
10.1-15 litres/sec	£990+VAT
>15 litres/sec	£990+VAT

3.5 Requisition Charges and Income Offset Payments

The requisition charge is the fee levied for mains that are requisitioned for a development site, i.e. the Developer pays Bristol Water to lay mains on the development site. Up to 31st March 2018 the requisition charge was calculated based on the cost of mains to be installed on the site together with the expected water charges income to be recovered over a 12 year period. The level of charge was calculated using the DAD's (Discounted Aggregate Deficit) calculation. This "discount" is commonly known as the income offset and was offset against mains installations only.

Charges for site specific mains (requisitioned) and other charges are now based on the schedule of rates shown in section 4 below.

The average recovered charges from developers in 15/16 and 16/17 showed we recovered 15% requisition charges (using DAD calculations) after deducting the income offset, this meant we provided developers with an 85% discount to the cost of on-site mains calculated up until 31st March 2020.

Income Offset payments were introduced from 1st April 2020, and in 2022/23 the Income Offset will continue to apply to all new Bristol Water customers. This means that the level of Income Offset is payable back to the new customer once the new connection is made. The net amount represents the Requisition Charges. We show the two elements separately as the income offset is available irrespective of the competitive option that developers may choose, including where Bristol Water does not undertake on-site work (and under the legislation there is no requisition).

The benefit of this approach is that all new customers will benefit from the income offset. This will provide developers with greater certainty and shorten the time necessary for all, including self lay providers, to understand development costs.

This approach is available to New Appointments and Variations (NAVs) and self lay providers (SLPs) on an equivalent basis as other developments. Our approach benefits the development of competition in the developer services market, compared to the alternatives of retaining the previous requisition “DAD” calculation.

Where Bristol Water adopts on site assets in respect to an agreement under section 51A of the Water Industry Act 1991, previously an Asset Payment was made, calculated on the same basis as the income offset, however from 1st April 2020 these site assets are adopted at nil cost with an Income Offset applied on connection of properties. Requisition agreements reached before 1st April 2020 will continue. For NAVs the income offset was deducted from the bulk supply charges in the first year of supply. We will require information from self lay providers and NAVs on the characteristics of the development.

The income offset is applied as a payment that offsets the infrastructure charge that applies to each newly connected property. There will be an income offset payment to each newly connected property, whether we carry out the connection, an SLP makes the connection, or a property is added according to the build schedule of a NAV. The income offset payment will be made when the infrastructure charge is due on connection, and the income offset payment less the infrastructure charge will result in a net infrastructure payment.

Developers and SLPs can choose to fix the value of the infrastructure charge/income offset and net infrastructure payment at the time of the development / adoption agreement.

For 2022/23 our proposed income offset payment is **£691**. This is slightly higher than the payment of £686 applied in 2021/22, reflecting that the balance of charges remains broadly the same.

3.6 Developer Payments

These fees are levied on Self Lay Providers (SLPs) for Non Contestable (work which has to be undertaken by Bristol Water) or Contestable work (work which can be undertaken by an SLP) that an SLP chooses not to do and is undertaken by Bristol Water. Developers' payments are to be paid prior to works being undertaken by Bristol Water.

The fees are based on fixed rates as set out in this document.

3.7 Asset Payments

Asset payments no longer exist from any scheme started from 1st April 2020 but will continue for all existing schemes whereby an existing Self Lay Agreement is in place. Upstream reinforcing mains as a consequence of a development are recovered through Infrastructure Charges which apply to all new developments, including where a Self Lay Provider has been engaged by the Developer. See figure 1 on page 6 for illustration of these components.

Where a scheme provides for an upsized main for future development the apportioned cost of upsizing will be funded from Infrastructure Charges and not borne by the Developer through other new development charges. Where an SLP is required to lay these mains the upsizing cost of providing the main will be paid in full to the SLP.

3.8 Diversions

Diversions are required whereby works proposed affect Bristol Water existing infrastructure and there is a requirement to divert the infrastructure.

Bristol Water's preference is to avoid diversions where possible and for designs to be amended to avoid the requirement for a diversion.

Basic advice on the requirement for a mains diversion is provided free of charge.

The design and costing of simple mains diversions (internal diameter <300mm) are subject to a fee of **£360+VAT**. This cost is based on our cost of providing this service. A mains diversion is a non-contestable activity.

Payment should be included with the enquiry. Further charges may be payable if certain investigations are required.

Fees relating to the provision of a preliminary design and budget estimate for the diversion of larger mains (generally those over 300mm in internal diameter) are determined on a case by case basis, following receipt of the request and relevant details from the developer. Such fees start at **£2,500+VAT**, but an estimate will be provided at enquiry stage.

Diversion of mains and services are charged at full cost with the estimated cost paid as a deposit and adjusted once the final account has been calculated.

Diversions below an estimated **£10,000** are offered at a fixed cost and only revisited if the scope of work required changes substantially.

4 Site - Specific Water Mains Charges

As shown in figure 1 these charges apply to new site - specific water mains. These mains are installed to serve a site and are dependent on pipe material, size and surface type. The mains costs below are per metre and include labour, plant, materials and overheads and before any income offset is applied.

4.1 Mains

All charges for Mains are contestable activities.

Description	Diameter (mm)	Excavation by others (£/metre)	Verge/Unmade Ground/Field (£/metre)	Unmade / Development Site (£/metre)	Footway (Rigid) (£/metre)	Road (Type 3/4) (£/metre)
PE Pipe Standard	63	£19.53	£61.79	£59.48	£155.22	£207.74
PE pipe Barrier	63	£27.40	£69.65	£67.35	£163.08	£215.61
PE Pipe Standard	90	£20.64	£62.89	£60.59	£156.32	£208.85
PE pipe Barrier	90	£22.89	£65.15	£62.84	£158.58	£211.10
PE pipe Standard	125	£24.27	£73.52	£71.09	£175.30	£233.26
PE pipe Barrier	125	£30.18	£79.44	£77.00	£181.21	£239.17
PE pipe Standard	180	£34.56	£89.98	£87.30	£210.59	£275.80
PE pipe Barrier	180	£42.26	£97.68	£95.01	£218.29	£283.51
PE pipe Standard	250	£51.04	£126.99	£124.02	£281.98	£355.17
PE pipe Barrier	250	£64.12	£140.08	£137.11	£295.06	£368.26

Type 3/4 road is the vast majority of roads, for example side streets etc.

The above rates will cover the vast majority of scenarios. Any work not covered above will be priced on a case by case basis. For example, type 1/2 roads with reinforced concrete road construction and whereby existing surfacing material contains coal tar with increased disposal costs.

4.2 Thrust Blocks

Thrust block charges are contestable activities.

Description (Concrete)	Diameter (mm)	Excavation by Others (each block)
Thrust Blocks	63/90	£157.99
Thrust Blocks	125	£189.97
Thrust Blocks	180	£317.88
Thrust Blocks	250	£509.86

Thrust blocks are required where restraint is required on mains connections to prevent movement of the pressurised mains prior to backfilling and reinstatement. These are total costs.

4.3 Connections to Existing Site Mains (diameter is existing main)

Charges for connection to existing mains are contestable activities.

Description	Diameter (mm)	Excavation by others Required (each connection)	Unmade Ground (each connection)
In-Line Connection	63/90	£666.57	£1,565.16
In-Line Connection	125	£675.16	£1,576.15
In-Line Connection	180	£686.59	£1,591.32
In-Line Connection	250	£742.86	£1,468.16

This is where a connection to an existing site main is required and will consist of a fused connection to the main. Total cost includes up to 2 metres of pipe. Additional cost of pipe will be charged under section 4.1.

4.4 Connections to Existing Mains where cut out or under pressure connection

Charges for connection to existing mains are contestable activities.

Description	Diameter (mm)	Excavation by others (each connection)	Verge/Unmade Ground/Field (each connection)	Footway (Rigid) (each connection)	Road (Type 3/4) (each connection)
Connection	63/90	£586.70	£941.52	£1,564.12	£1,882.30
Connection	125	£606.05	£961.50	£1,613.62	£1,935.07
Connection	180	£695.60	£1,052.09	£1,737.63	£2,068.91
Connection	250	£941.13	£1,775.90	£2,673.80	£3,105.46

This is where a connection to an existing off-site main is required and will include either an under-pressure connection or a cut out. Total cost includes up to 2 metres of pipe. Additional cost of pipe will be charged under section 4.1.

4.5 Fittings

Charges for fittings are contestable activities.

Description	Diameter (mm)	Excavation by others Required (fitting)	Verge/Unmade Ground/Field (fitting)	Footway (Rigid) (fitting)	Road (Type 3/4) (fitting)
Fittings	63/90	£233.56	£339.59	£458.97	£557.02
Fittings	125	£244.51	£350.45	£486.05	£569.10
Fittings	180	£283.71	£391.69	£530.74	£614.29
Fittings	250	£347.47	£468.14	£622.35	£708.09

Fittings includes Air Valves, Hydrants, Washouts, Valves or Meters and includes chamber and cover.

These are total costs.

4.6 Mains Pressure Test including third party verification

Mains Pressure Tests are contestable activities.

Description	Diameter (mm)	Excavation by others (pressure test)
Pressure Test	63/90	£346.55
Pressure Test	125	£346.55
Pressure Test	180	£418.10
Pressure Test	250	£531.22

All mains that are laid by Bristol Water or adopted by Bristol Water require pressure testing. Third Party verification is not undertaken by Bristol Water but by an accredited company. These are total costs per test.

4.7 Mains Chlorination including flushing, sampling and analysis

Chlorination is a contestable activity.

Description	Diameter (mm)	Excavation (Chlorination)
Chlorination	63/90	£685.53
Chlorination	125	£685.53

Description	Diameter (mm)	Excavation (Chlorination)
Chlorination	180	£685.53
Chlorination	250	£685.53
Sampling and analysis where not carried out as part of chlorination per sample		£168.35

All mains that are laid by Bristol Water or adopted by Bristol Water require to be chlorinated. Analysis of samples is to be undertaken by an accredited testing house. These are total costs per chlorination.

4.8 Trial Holes

Digging trial holes is a contestable activity.

Description	Verge/Unmade Ground/Field	Footway (Rigid)	Road (Type 3/4)
Trial Hole < 1 m3	£342.59	£546.63	£674.40
Trial Hole > 1 m3	£276.98*	£481.67*	£602.89*

* Price is per cubic metre.

These are total costs

4.9 Other Charges

All of the charges listed below are contestable.

Activity	Unit	Price (£/unit)
Excavating in Rock/Concrete	Cubic metre	£122.58
Granular Fill E/O	Cubic metre	£75.72
Traffic lights 2 way	Day	£28.08
Traffic lights 3 way	Day	£39.44
Traffic lights 4 way	Day	£66.91
Traffic Plan	Number	£148.05
2 Man Stop and Go	Day	£676.01
Lane Closure up to 40 mph 1 day	Day	£462.78
Lane Closure up to 40 mph additional days	Day	£80.30
Lane Closure up to 50 mph 1 day	Day	POA
Lane Closure up to 50 mph additional days	Day	POA

Activity	Unit	Price (£/unit)
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 20 signs	Week	£544.50
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 20 signs additional week	Week	£206.20
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 40 signs	Week	£836.30
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 40 signs additional week	Week	£386.31
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 60 signs	Week	£1106.40
Road Closure Diversions advance warning notices (site specific) including installation and maintenance checks - up to 60 signs additional week	Week	£566.41
Topsoil Strip including store and reseed	Square metre	£4.53
Temporary stockproof fencing	Metre	£9.78
3 Strand Post and wire fencing	Metre	£7.50
Post and Rail Fencing	Metre	£17.03
Pin and Tape Demarcation	Metre	£4.82
Crossing point including gate	Number	£519.47
In Situ Grade C20 or C30 concrete	Cubic metre	£203.56
Foam Concrete Grade C4	Cubic metre	£172.26
E/O Coloured Tarmac	Square metre	£43.33
E/O Anti Skid Surfacing	Square metre	£235.03
Continuous road marking lines	metre	£17.06
Intermittent road marking lines	metre	£17.06
Road marking letters and shapes	Number	£161.58
Road studs	Number	£35.36

Activity	Unit	Price (£/unit)
Re-lay kerb	metre	£49.00
Re-lay edging	metre	£37.36
Marker post and plate	Number	£67.20
Reinstatement of land drains	Number	£234.11

Traffic lights will be required for works in existing highway and will be in agreement with the Local Highway Authority.

Traffic Plans are required to be submitted to the Local Highway Authority where complicated works or a road closure is required.

The type of fencing required will be dependent on the land where main-laying is required.

4.10 Watercourse crossing including reinstatement

This is a contestable activity.

Description	Diameter (mm)	Price (crossing)
Watercourse Crossing	63/90	£2,546.78
Watercourse Crossing	125	£2,732.13
Watercourse Crossing	180	£2,825.96
Watercourse Crossing	250	£3,073.00

These are total costs.

4.11 Road Closure Fees & Highway Permits

Where mains of services are required to cross the public highway the local Highway Authority may dictate that the work will require a road closure to ensure the safety of the general public and the workforce undertaking the work. Road closure charges vary from each local authority. In certain circumstances if there is a road closure in the location we may be able to undertake the work at the same time. We will advise in advance if a road closure is required and the minimum notice period that the local authorities require is 3 months. A list of road closure fees by council is as follows, which we will update as necessary for the final version of this document:-

Bath & North East Somerset Council

Temporary Orders (up to 18 months) = Minimum £1,326 including advertising

Bristol City Council

Temporary Traffic Regulation Order = £2040

(Plus £801 per additional street)

Includes extra cost if legal/advertising cost amount to more. E.g. Large Road Closure.

Somerset County Council

Temporary Full Order (up to 18 months) = £1250

Cost includes administration and production of signing schedule and diversion route.

For placing adverts in local paper.

North Somerset Council

Temporary Order (up to 18 months) = £1250

Urgent Notice (5 day or 21 day maximum) = £550

Cancellation fee = £250

South Gloucestershire Council

Temporary Order (Up to 28 Days) = £1914.50

Temporary Order (Over 28 Days) = £3190.40

5day notice = £253.30

Wiltshire Council

Temporary Traffic Order = £1473

Gloucestershire County Council

Temporary Traffic Order = £1129.50

Include these costs below if:

- £287 for deferral of start date
- £287 for any extension to closure
- £150 per any additional road on same application

In addition to road closure fees, all of the Councils listed above were due to implement Permit schemes under the Traffic Management Act by 1 April 2020. Developers will also pay the costs of us obtaining the Highways Permits, and any additional costs that arise where this is driven by developer requirements.

The Schedule of fees for each council are listed below. These rates are liable to change.

South Gloucestershire / North Somerset Permit Scheme Fees Table

	Main Roads			Minor Roads
Reinstatement category of street	0, 1 and 2	3 and 4		3 and 4
Street designated as traffic sensitive or not	All streets	Traffic sensitive at some times/locations		Non traffic sensitive at any time or location
Time and location of activity	Any time and location	Any part within traffic sensitive times / locations	Wholly within non traffic sensitive times / locations	Any time and location
Provisional Advance Authorisation	£105*	£105	£75	£75
Major Works - over 10 days and all major works requiring a traffic regulation order	£240*	£240	£150	£150
Major works - 4 to 10 days	£130*	£130	£75	£75
Major works - up to 3 days	£65*	£65	£45	£45
Standard Activity	£130*	£130	£75	£75
Minor Activity	£65*	£65	£45	£45
Immediate Activity	£60*	£60	£40	£40
Permit Variation	£45	£45	£35	£35

* A discount (30%) will be applied where works are undertaken wholly outside of traffic sensitive times on Traffic Sensitive Streets. See Above. Note: That in line with the Permit Authorities policies and procedures, the above fees will be reviewed on an annual basis.

Lower fees or discounted fees will be given in the following circumstances:

- i. Where several Permit applications for works that are of part of the same project but which are carried out on more than one street, but on a scale comparative to one street, are submitted at the same time.

- ii. Where several Promoters are working within the same site submit applications at the same time. Where the Highway Authority Promoter is collaborating with Statutory Undertakers, those Undertakers will be eligible for the discount.
- iii. Where works are undertaken wholly outside of traffic sensitive times on Traffic Sensitive Streets.
- iv. A discount may be applied where it is demonstrated that an activity provides significant economic benefit to the local authority or Council. For instance supplies for a new development, or where it is demonstrated that a network investment programme is being undertaken to meet customer demand.

PERMIT VARIATION FEES

£45 for activities on category 0, 1 & 2 streets, and on 3 & 4 traffic sensitive streets.

£35 for activities on category 3 and 4 non traffic sensitive streets.

If a Permit variation moves an activity into a higher fee category, the Promoter will be required to pay the difference in Permit fee.

No fee is payable if a Permit variation is initiated by the Permit Authority.

The review will take into account the on-going Scheme costs and inflationary rates.

The fees will not exceed the maximum charges as set by the DFT.

All Promoters will be notified of any changes to the fees.

Gloucestershire County Council

Reinstatement category of street	Road category	
	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive
Provisional Advance Authorisation	£90	£59
Major Works - over 10 days and all major works requiring a traffic regulation order	£183	£97
Major works - 4 to 10 days	£92	£49
Major works - up to 3 days	£46	£25

	Road category	
Standard Activity	£112	£56
Minor Activity	£57	£29
Immediate Activity	£52	£25
Permit Variation	Not Published	Not Published

Bristol City Council

	Road category	
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive
Provisional Advance Authorisation	£49	£35
Major Works	£111	£69
Standard Activity	£60	£35
Minor Activity	£30	£21
Immediate Activity	£28	£19
Permit Variation	£21	£17

Bath & North East Somerset Council

	Road category	
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive
Provisional Advance Authorisation	£32	£23
Major Works	£72	£45
Standard Activity	£39	£23
Minor Activity	£20	£14
Immediate Activity	£18	£12
Permit Variation	£14	£11

Somerset County Council

	Road category	
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive
Provisional Advance Authorisation	£92	£60
Major Works - over 10 days and all major works requiring a traffic regulation order	£186	£98
Major works - 4 to 10 days	£114	£57

	Road category	
Major works - up to 3 days	£58	£30
Standard Activity	£114	£57
Minor Activity	£58	£30
Immediate Activity	£54	£25
Permit Variation	£45	£35

Wiltshire Council

	Road category	
Reinstatement category of street	0, 1 and 2 or traffic sensitive	3 and 4 and non-traffic sensitive
Provisional Advance Authorisation	£32	£23
Major Works - over 10 days and all major works requiring a traffic regulation order	£72	£45
Major works - 4 to 10 days	£72	£45
Major works - up to 3 days	£72	£45
Standard Activity	£39	£23
Minor Activity	£20	£14
Immediate Activity	£18	£12

	Road category	
Permit Variation	£14	£11

4.12 Land Entry Costs

These may apply where mains and/or services are required to be laid in third party land. These costs would include potential compensation costs to land owners for loss of crops etc. We estimate a value of £10/metre for mains and services laid. The charge levied will be the actual costs incurred.

4.13 Archaeological/Ecological Charges

These fees become payable when mains and/or services are due to be laid in land that is of Archaeological/Ecological importance. At the design stage we investigate any potential route issues and engage Archaeologists/Ecologists as necessary. Reports start at around £1,000 but could include recommendations that require a watching brief etc. Whilst excavation is on-going we have an obligation to report any Archaeological finds. Both reports could have an impact on the timing of the works and increase the costs payable to Archaeologists/Ecologists.

4.14 Exceptional Items

These are items that are priced on a case by case basis as there are too many variables involved to give standard charges, some examples are below:

Rail Crossings – Mains to be laid either over or under railways.

Bridge Crossings- Mains to be laid in bridge decks

Archaeological Areas – Mains laid through Archaeological sites where excavation maybe required by hand under a watching brief.

Ecological Areas – Mains laid in ecological areas where protection of species maybe required.

Motorway Crossings – Mains laid either over or under motorways, Possibility to lay in existing culverts.

River Crossings – Mains laid either under rivers or over on pipe bridges.

Large Diameter Mains Connections – Mains connections to large diameter trunk mains depending on work required to isolate main.

Non Open Cut Mains Installation – Drilling long lengths of mains, improving efficiency of main laying and reducing costs.

5 Site-specific Connection Charges (Services)

These charges apply to new connections except where customers are replacing existing lead or galvanised pipes. In these two cases the connection to the company's mains may be free. Further explanation can be found in the booklet. Copies of the booklet explaining these schemes can be obtained by calling the number below or it is also on our website at www.bristolwater.co.uk/about-service-connections On site connection charges are due prior to connection being made.

The procedure for new connections is described in detail in our New Connections Information pack, copies of which can be obtained by contacting the New Supplies Department on 0345 602 8022 or at www.bristolwater.co.uk/new-supplies-new-mains/ .

Payment must be received before a connection can be made. The following prices will apply for most new 25mm or 32mm outside diameter pipes, connected to mains up to 200mm internal diameter. However, for connection sizes out of this range, not included in the listed examples at the end of this document we will provide an estimate, and if below £10,000 will be as a fixed cost.

All charges include the cost of the Company supplying and fitting the meter. VAT at the current rate will be added to charges where applicable. All the charges have been calculated based on the cost of the Company supplying these services.

A maximum of six separate connections are allowed in any one trench.

Inspection visits due to work not being up to standard or work not being ready when an inspection has been booked will incur an extra charge of £94. Charges will also be payable in the event that connection work cannot be made on the scheduled date due to the development site not being sufficiently prepared (abortive visit charge of £94). This may be levied for each connection, which cannot be completed on this date.

The preferred method of providing a new connection is via a boundary box (housing the stoptap and meter) installed in the footpath or, alternatively, on private property, less than one metre inside the boundary with the highway in which the main is laid. In some circumstances, but only with the prior agreement of the Company, boundary boxes may be acceptable in other locations. The alternative method is via a wall mounted box at the front of the property. It should be in a position which gives a meter reader unimpeded access, otherwise it will require a remote radio meter to be fitted by Bristol Water. In all cases, the meter must be in a location which can be safely accessed at all times by a meter reader or Company employee.

Bristol Water does not accept internal meters. However, when circumstances dictate, at the Company's discretion, meters may be provided at a location other than outside the property at a cost to be determined at the time.

There are three common examples of new connections, tapping only (whereby a connection to the main only is required), tapping plus service pipe, and tapping plus service pipe and boundary box. The requirements and costs associated with each option as follows. The full charging schedule for mains and services is contained in the charging spreadsheet available on the Bristol Water website www.bristolwater.co.uk/business-developers/charges-regulations/

All Service connections are contestable activities.

5.1 Tapping only

Tapping only applies principally to connections to mains in site roads and in private land such as fields and other un-surfaced areas.

The Customer provides and fits a boundary box or wall mounted box and excavates and lays the service pipe¹ and trace wire to a point 150mm above the main. The company exposes and taps the main and fits the meter. The customer then backfills and reinstates the surface as appropriate.

Costs:	£
Basic cost	£138.93
Each additional service in same trench (Maximum 6)	£97.88
Additional Charge if wall mounted box not readily accessible	£32.37

5.2 Tapping plus service pipe

Tapping plus service pipe applies principally to connections to mains in adopted and other existing surfaced roads (including footpaths, verges etc) where a boundary or wall mounted box is to be installed on private land. **The customer** provides and fits a boundary box or wall mounted box and excavated and lays the service pipe and trace wire to the highway boundary leaving sufficient pipe and trace wire to be connected to the main. **The Company** excavates to the main, lays the service pipe and trace wire, taps the main, backfills, reinstates and fits the meter.

Costs:	£
Basic Cost including first metre of excavation and pipe	£704.93
Each additional service in same trench (maximum 6 in total)	£97.88
Additional cost per metre of standard pipe	£127.82
Additional cost per metre of barrier pipe	£129.24
Additional cost per metre for each additional standard PE service in same trench	£5.78
Additional cost per metre for each additional barrier pipe service in same trench	£7.19
Additional charge if wall mounted box not readily accessible	£32.37

¹ Service Pipe – this is the length of pipe between the Company’s main and the property. It is usually in two parts: the Company service pipe (known as the communication pipe), which normally runs from the main to the highway boundary, and the customer service pipe (known as the supply pipe) which is the remainder.

5.3 Tapping plus service pipe and boundary box

Tapping plus service pipe and boundary box applies principally to connections in adopted and other surfaced roads (including footpaths, verges etc). **The customer** excavates and lays the service pipe and trace wire to the highway boundary, leaving at least one metre of pipe and trace wire to be connected to the main. **The Company** provides and fits a boundary box, excavates to the main, lays the service pipe and trace wire, taps the main, backfills, reinstates and fits the meter.

Costs:	£
BW fits box and taps main, including first metre of pipe	£954.56
BW fits box and taps main in contaminated land, including first metre of pipe	£985.46
Each additional service in same trench (maximum 6 in total)	£109.96
Each additional service in same trench in contaminated land (maximum 6 in total)	£171.56
Additional cost per metre of standard PE pipe	£132.90
Additional cost per metre of barrier pipe	£134.31
Additional cost per metre for each additional standard PE service in same trench	£6.23
Additional cost per metre for each additional barrier pipe service in same trench	£7.64
BW fits box and taps main in one excavation (surfaced road, footpath, verge)	£953.28
BW fits box and taps main in one excavation (private unsurfaced land)	£494.46

5.4 Ancillary Charges

Costs:	£
Fee for additional inspection visit	£94.00
Abortive installation charge (to be paid if installation not ready for connection to be made)	£162.12

5.5 Service pipe disconnection charge **£713.72**

This fee may be incurred for lead or galvanised iron service pipe replacements up to 1" diameter where the new connection and disconnection require separate excavations.

In certain other situation, removal of apparatus may be charged for at cost.

5.6 Non-Standard Costs

Where possible we offer fixed costs. By exception, where there are elements of the work that are unusual or of high risk, we will price then individually on a site-specific basis.

Railway and river crossings are typical examples where site specific pricing will be appropriate.

5.7 Non-Physical Connection Charges – FOR CONSULTATION

These fees were previously levied on Self-Lay Providers as an administrative fee for processing self laid service connections undertaken by them and represents the amount of work that Bristol Water is required to do to process these connections. This charge is due once the connection has been made. Our previous charge was based on a determination made in 2017, which defined the structure and level of these charges. This is a non-contestable activity.

As part of previous new connection charging consultations, some respondents suggested it was not clear that our tiered charging structure for this charge (for example, calling off batches of connections) was equivalent between Self-Lay Providers and other development applications. It was felt that, as a result, developers might consider the requisition option to be more flexible and/or a cheaper service than self-lay.

We are therefore consulting with this document on applying a non-physical connection charge to all service connections. We have reduced the overheads we apply to our service connection charges by the equivalent value, reflecting that currently the equivalent costs are included in the service connection charges for developers who do not choose a Self-Lay option.

These fees are levied as an administrative fee for processing service connections undertaken and represents the amount of work that Bristol Water is required to do to process these connections. This charge is due once the connection has been made. It is a non-contestable activity because it reflects our cost of processing the connection request, registering the connection on our GIS system, invoicing for the activity and other new connection overhead activities for this stage of the new connection process.

Charge	First Connection on site	First Connection of a batch of connections	Subsequent Connections in a batch
2022/23	£31.51	£22.90	£17.22
2021/22	£28.70	£20.86	£15.69

We would welcome your views on this changed approach. We have reviewed the costs to reflect the activities that we now undertake. These have broadly remained unaltered and therefore costs have increased with inflation.

There is an alternative option to the above to charge an average application fee of £18. We prefer the banded approach above as it is more cost reflective, and allows applicants who send us a group of connections at the same time to benefit from these cost savings. However, this is a low cost activity and therefore the cost differences are not significant. A

single fee for each connection would be simpler. We would welcome your views on whether you think we should charge an averaged rate rather than a banded charge.

5.8 New appointments and variations (NAV) boundary metering

We do not charge for boundary metering for the bulk supply to NAVs.

6 Infrastructure Charges

6.1 General

The purpose of the charge is a contribution to the cost of providing the infrastructure of pipes, pumping stations and treatment works necessary for the provision of water services as a direct consequence of developments.

When water is first made available for domestic purposes (including such properties as hotels or offices) then an infrastructure charge is due. This charge is in addition to any charges for connections or site-specific mains and must be paid by the person who pays for the connection. The charge is due as soon as the connection to the main has been made and it is capable of providing water for domestic purposes.

Infrastructure charges do not apply where the water is required solely for process needs i.e. a manufacturing process.

The level of Infrastructure Charge is set on a yearly basis and adjusted to ensure that expenditure costs are recovered over a five year period. This means that the infrastructure charge set every year will be based on the latest estimate of the predicted investment required and the number of new connections expected over the next 5 years, plus any correction from previous years' charges.

We apply a single level of Infrastructure Charge across our supply area, as we plan our water supplies as a single Water Resource zone and have the ability to supply much of the supply area from more than one treatment works.

We previously consulted on whether we should vary Infrastructure Charges according to the water efficiency and sustainability of the development. We did not identify through our consultation any specific options for water efficiency that were not already requirements of Part G of the Building Regulations to use water efficient fittings which apply to all developments. We remain open to further options from our customers, developers and stakeholders to introduce efficiency incentives within infrastructure charges in future years. If you would like to contact us to discuss water efficiency of developments please contact our Senior Project Manager Development Services on tim.stjohn@bristolwater.co.uk.

For non-domestic use the charge will be based on loading units (for each water use fittings) and the relevant multiplier of the standard charge. For each application with more than 24 loading units the loading units are totalled to calculate the relevant multiplier of standard charges. Infrastructure Charges are payable once the property is capable of taking water.

Appendix A to this document gives the value of loading units and examples.

Costs:	2021/22	2022/23
Infrastructure Charge	£273	£309
Income offset payment	-£686	-£691
Net Infrastructure Payment	-£413	-£382

The £309 charge per property is the average infrastructure charge expected for the next five years based on forecast new property numbers, any adjustments between the balance of network reinforcement expenditure and past infrastructure charges, and an assessment of off-site mains required together with known growth mains required, and growth mains already provided but not paid for (as an estimate of equivalent expenditure required over the next 5 years). It is increasing compared to previous years, as new developments in the Fishpool Hill area requires us to upgrade infrastructure which was not in the previous five year forecast.

Full details of the calculation are shown in Appendix B.

6.2 Income Offset Payments

As shown above, an income Offset payment is due once a connection is made to mains and an Infrastructure Charge has been paid. For 2022/23 the Income Offset payment is £691 per eligible property. To maintain the balance between developers and other customers, this has been calculated based on an 85% discount to the cost of requisitioned mains, SLP mains and NAV connection cost (both based on the costs we would have incurred per property if we had undertaken the work).

The balance between income and cost is shown in the table below:

Contribution	2022/23 £k
Design Administration Fees	31
Requisition Charges	2,319
SLP non-contestable work	341
Design fees	24
Non-Physical Connection Fees	83
Connection Charges	2,362
Infrastructure Charges	1,627
Mains diversions revenue	350
Income offset	-3,638
Total net of income offset	7,136
Total gross of income offset	3,498
Number of properties connecting	6,141
Number of properties which infra charges apply to	5,265
Value of income offset per property based on 85% discount to requisition charges	-£691
Infrastructure charge	£309
Net infrastructure payment per connection	£382

The payment and infrastructure charge will vary from year to year and will apply at the rates at the point they become due.

6.3 Domestic housing

For domestic housing developments, a single standard charge is made on each separate dwelling. For the domestic element of a commercial property the minimum is one standard charge.

6.4 Redevelopment

For sites being redeveloped, provided a live connection has existed at any time in the five years before redevelopment started, infrastructure credits will be given for the maximum number of premises connected to our network within that period. This means that the overall infrastructure charge payable will reduce by the number of credits applicable. Alternatively, meter records may be used to determine previous consumption. If the existing connection is less than 20mm or 3/4" internal diameter, only one standard infrastructure charge credit will be given, irrespective of the number of existing fittings.

An infrastructure charge is also payable if a service connection is "up-sized" to supply redevelopment, for example an extension to a hotel or nursing home.

7 Summary - Timing of Payment of Charges and Payments

- a. Mains Application fees are payable at the time of application.
- b. Design Fees for Bristol Water designs are payable on application.
- c. Infrastructure Charges are due once the property is capable of taking water. This does not affect the timing of reinforcing mains laid to service the site. Income Offset Payments are due when connection to mains are made, and will offset the infrastructure charge to arrive at a net infrastructure payment to be paid at the point the property connects.
- d. Developers and SLPs can choose to fix the value of the infrastructure charge/income offset and net infrastructure payment at the time of the development / adoption agreement.
- e. On-site connection Charges are due prior to requisition connection being made.
- f. Non-Physical Connection Charge is payable once the connection is made.
- g. Developers Payment to be paid prior to any necessary “Non-Contestable” or “Contestable” works that a Self-Lay Provider chooses not to do. The Developers Payment will be reduced by the expected final Income Offset Asset Payment.
- h. Asset Payments to be paid by Bristol Water within 5 weeks of invoice. For medium to large schemes we offer to assess and pay a monthly valuation based on work completed within a particular month. This is intended to reduce the upfront financial burden to Self-Lay Providers. (This only applies to existing schemes as of 1st April 2020)
- i. Diversion Costs to be paid upfront as a deposit and adjusted on scheme completion unless value is less than £10,000 in which case is an upfront fixed cost.
- j. Payments to be made electronically where possible although we do have a facility to take payments over the phone and accept cheques.
- k. Standard Traffic Management is assumed (Standard two-way lights and signing lighting and guarding), with actual traffic management costs recovered if different.
- l. No additional security deposits other than for specific aspects set out above which reflect the commitment risk of Bristol Water are required.

8 Costed Examples

a. Ofwat specific scenarios

Ofwat's new connection charges requirements require us to provide worked examples for the following six scenarios. These are presented in the standardised format required by the Charging Rules for New Connection Services (English Undertakers).

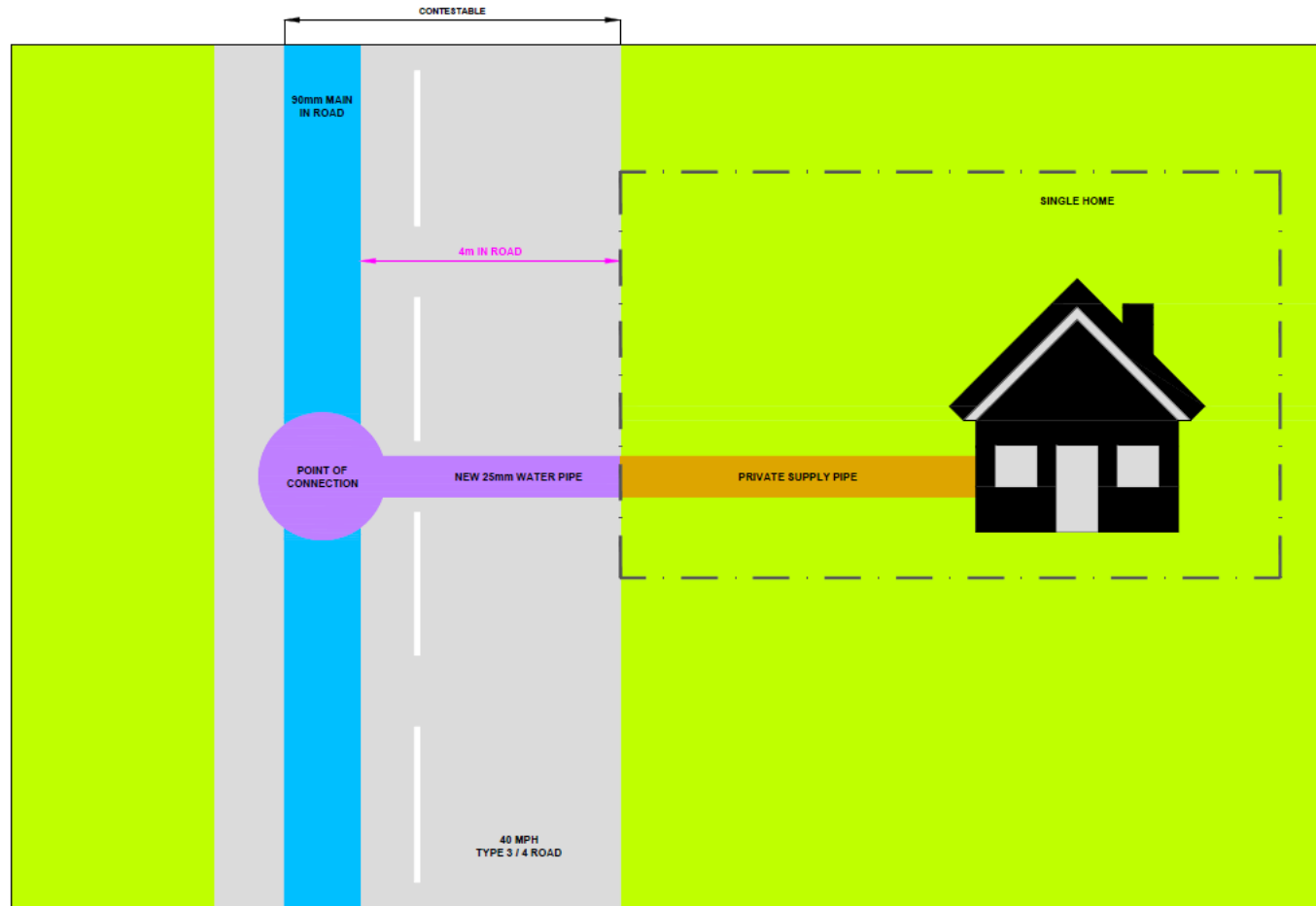
Scenario 1: Single connection to a house from an existing main

This worked example provides charges for a single connection to an existing water main of 90mm diameter polyethylene (PE).

Within construction costs, this includes:

- Service pipe installation
- Boundary box fitting
- Meter installation
- Excavation
- Reinstatement
- Pipework
 - 25 – 32mm diameter PE pipe
 - 4m pipework in road

Traffic management assumes the road (Type 3-4) is 40mph, has two lanes and does not require a road closure or lane closure. Two-way automated lights are required. There is also an assumption that the only payable council charges are for permitting.



EXAMPLE ONE

Scenario 1: Single connection to a house from an existing main									Alternative Delivery Method	
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (£)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)
	Pre-Construction Charges									
	Application Fee	per application	0	300	0	N/A	N/A	N	0	0
Y	Administration Fee	per application	1	31.51	31.51	N/A	N/A	N	31.51	31.51
	Design Fee	per application	0	0	0	N/A	N/A	N	0	0
	Construction Charges									
Y	Connection	per connection	1	£954.56	£954.56	£30.90	£30.90	Y	£0.00	£0.00
	Connection sub-charge 1									
	Connection sub-charge 2									
	Connection sub-charge 3									
Y	Pipework - Road	per metre (25-32mm PE)	3	£132.90	£398.70	£1.41	£4.23	Y	£0.00	£0.00
	Traffic Management	Per TM usage	4	£28.08	£112.30			Y	0	0
	Meters	Per connection	included							
	Other Charges									
Y	Permit Fee		1	£45.00	£45.00			N	£45.00	£45.00
Y	Infrastructure Charge - Water	per property	1	£309	£309.00			N	£309.00	£309.00
Y	Income Offset - Water	per property	1	-£691	-£691.00			N	- £691.00	-£691.00
	Total				£1,160.07					-£305.49

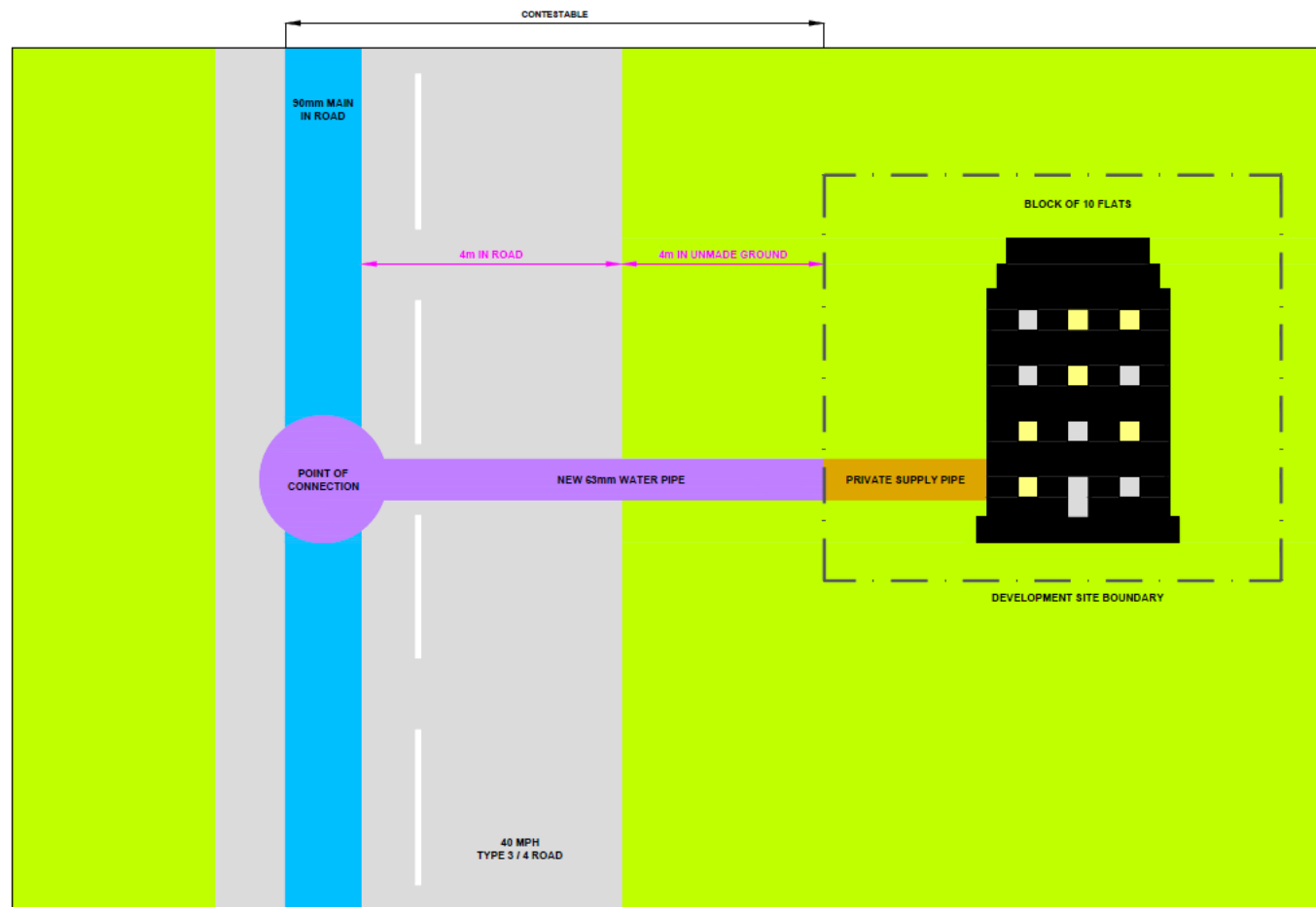
Scenario 2 - Single connection to block of flats from an existing main

This worked example provides charges for a block of 10 flats to be connected to an existing main of 90mm diameter PE. Each flat would be individually metered.

Within construction costs, this includes:

- Service pipe installation
- Boundary box fitting
- Meter installation
- Excavation
- Reinstatement:
- Pipework
 - 63mm diameter PE pipe
 - 4m pipework in road, 4m pipework in unmade ground

Traffic management assumes the road (Type 3-4) is 40mph, has two lanes and does not require a road closure or lane closure. Two-way automated lights are required. There is also an assumption that the only payable council charges are for permitting



EXAMPLE TWO

Scenario 2: Single connection to a block of flats from an existing main									Alternative Delivery Method	
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (£)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)
	Pre-Construction Charges									
	Application Fee	per application	0	300	0	N/A	N/A	N	0	0
Y	Administration Fee	per application	1	186.52	186.52	N/A	N/A	N	31.51	186.52
	Design Fee	per application	0	0	0	N/A	N/A	N	0	0
	Construction Charges									
Y	Connection	per connection	1	£1,882.30	£1,882.30	N/A	N/A	Y	£0.00	0
Y	Connection sub-charge 1	per chamber	2	£307.89	£615.78	N/A	N/A	Y	0	0
Y	Pipework - Road	per metre (63mm PE)	3	£207.74	£623.23	£7.87	£23.60	Y	£0.00	0
Y	Pipework - Unmade Ground	per metre (63mm PE)	4	£59.48	£237.93	£7.87	£31.46	Y	£0.00	0
Y	Traffic Management	Per TM usage	4	£28.08	£112.30			Y	0	0
Y	Meters	Per connection	10	£13.85	£138.50			Y	0	0
	Other Charges									
Y	Permit Fee	per application	1	£45	£45.00			N	£45.00	£45.00
Y	Infrastructure Charge - Water	per property	10	£309	£3,090.00			N	£3,090.00	£3,090.00
Y	Income Offset - Water	per property	10	-£691	-£6,910.00			N	-£6,910.00	-£6,910.00
	Total				£21.57					-£3588.48

Scenario 3 - Medium house development (50 new connections) – Mains and Services

This worked example provided charges associated with the provision of new water mains and individual connections from them for each of 50 new houses. Excavation and reinstatement are completed by others, except for the excavation leading to the connection to the existing water main.

Within construction costs, this includes:

- Mains laying
- Service pipe installation
- Boundary box fitting
- Meter installation

Technical Specification (Connection) Pipework: <ul style="list-style-type: none">• Connection to Existing Main of 180mm diameter PE• 3m pipework laying (per communication pipe)	Technical Specification (Mains) Pipework: Total length 300m, consisting of: <ul style="list-style-type: none">• 125mm diameter PE – 10m road type 3-4 road (leading to the point of connection to an existing water main)• 125mm diameter PE – 190m• 90mm diameter PE – 100m
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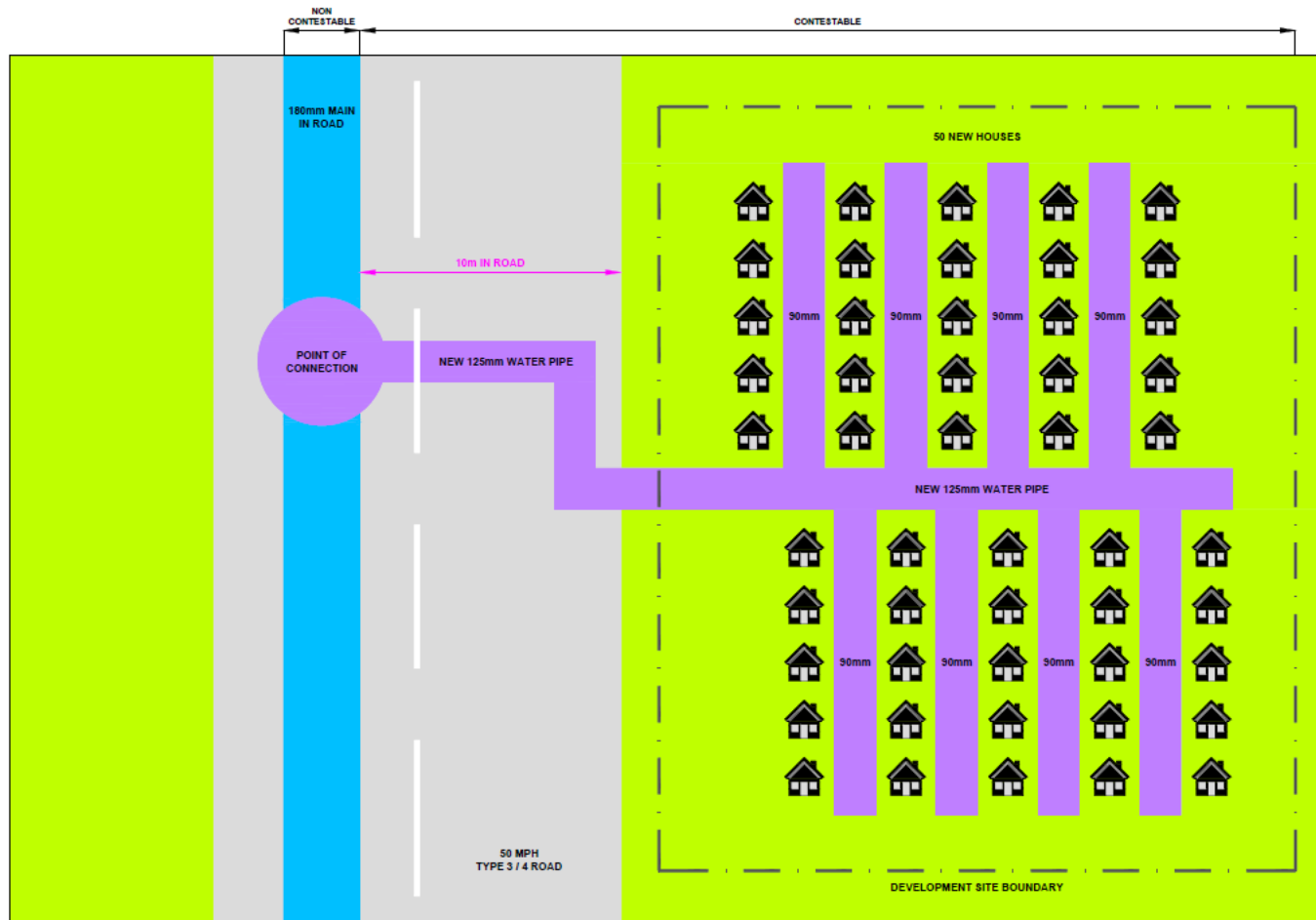
Design Considerations:

- 180mm diameter existing main, serving 150 existing customers
- Three commissioning phases
- Three sample chlorination and connections – footpath
- Four washouts - unmade ground
- Five valves (1 x 150mm, 3 x 100mm, 1 x 80mm) - unmade ground

- One trial hole - unmade ground

Traffic management assumes the road (Type 3-4) is 50mph, has two lanes and requires a road closure and eight parking pay suspensions.

Any additional council charges for permitting should be included.



EXAMPLE THREE

Scenario 3: Medium housing development requiring new mains and communication pipe (excavation and reinstatement by others)									Alternative Delivery Method			
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (£)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)	NAV Rate (£)	NAV Total Charge (£)
	Pre-Construction Charges - connection											
	Application Fee	per application	0	600				N	0	0		
Y	Administration Fee	per application	1	903.87	903.87			N	31.51	£903.87		
	Design Fee	per application	0	430				N	0			
	Pre-Construction Charges - mains											
Y	Application Fee	per application	1	600	600			N	600	£600.00		
	Administration Fee	per application						N	31.51	£0		
Y	Design Fee	per application	1	430	430			Y	£0	£0		
	Construction Charges - connection											
Y	Service connection	per connection	50	277.86	£13,892.90	£30.90	£1,545.03	Y	£0.00	£0.00		
Y	Pipework	per metre	150	£6.23	£934.52	£1.41	£212.17	Y	£0.00	£0		
	Meter installation	per meter	included									
	Construction Charges - mains											
Y	Mains Connection	per connection	1	£1,935.07	£1,935.07	N/A	N/A	N	£1,935.07	£1,935.07	£1,935.07	£1,935.07
Y	Pipework	per metre of 125mm HPPE main in type 3/4 road	8	£233.26	£1,866.09	£5.91	£47.29	Y	£0.00	£0.00		
Y	Pipework	per metre of 125mm HPPE main in unmade surface	190	£24.27	£4,612.04	£5.91	£1,123.09	Y	£0.00	£0.00		
Y	Pipework	90mm PE	100	£20.64	£2,063.68	£2.25	£225.40	Y	£0.00	£0.00		
Y	Traffic Management	Per TM usage	1	£2,968.00	£2,968.00			N	£2,968.00	£2,968.00	£2,968.00	£2,968.00
	Other Charges											
Y	permit fee	per application	1	£45	£45.00			N	£45.00	£45.00		

Scenario 3: Medium housing development requiring new mains and communication pipe (excavation and reinstatement by others)									Alternative Delivery Method			
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (£)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)	NAV Rate (£)	NAV Total Charge (£)
Y	washout		4	£320.49	£1,281.98	N/A	N/A	Y	£0.00	£0.00		
Y	pressure test		3	£347	£1,039.64	N/A	N/A	Y	0	£0.00		
Y	chlorination		3	£686	£2,056.60	N/A	N/A	Y	0	£0.00		
Y	Infrastructure Charge - Water	per property	50	£309	£15,450.00			N		£15,450		
Y	Income Offset - Water	per property	50	-£691	-£34,550.00			N		-£34,550		
	Total				£15,529.39					-£12,648.06		

Scenario 4: Medium housing development requiring new mains and communication pipes (excavation and reinstatement by Water Company)

This worked example provided charges associated with the provision of new water mains and individual connections from them for each of 50 new houses. This worked example assumes that the excavation and reinstatement activities are carried out by the Water Company. However, should the Developer appoint an SLP or NAV, this worked example assumes these would be carried out by the SLP or NAV.

Within construction costs, this includes:

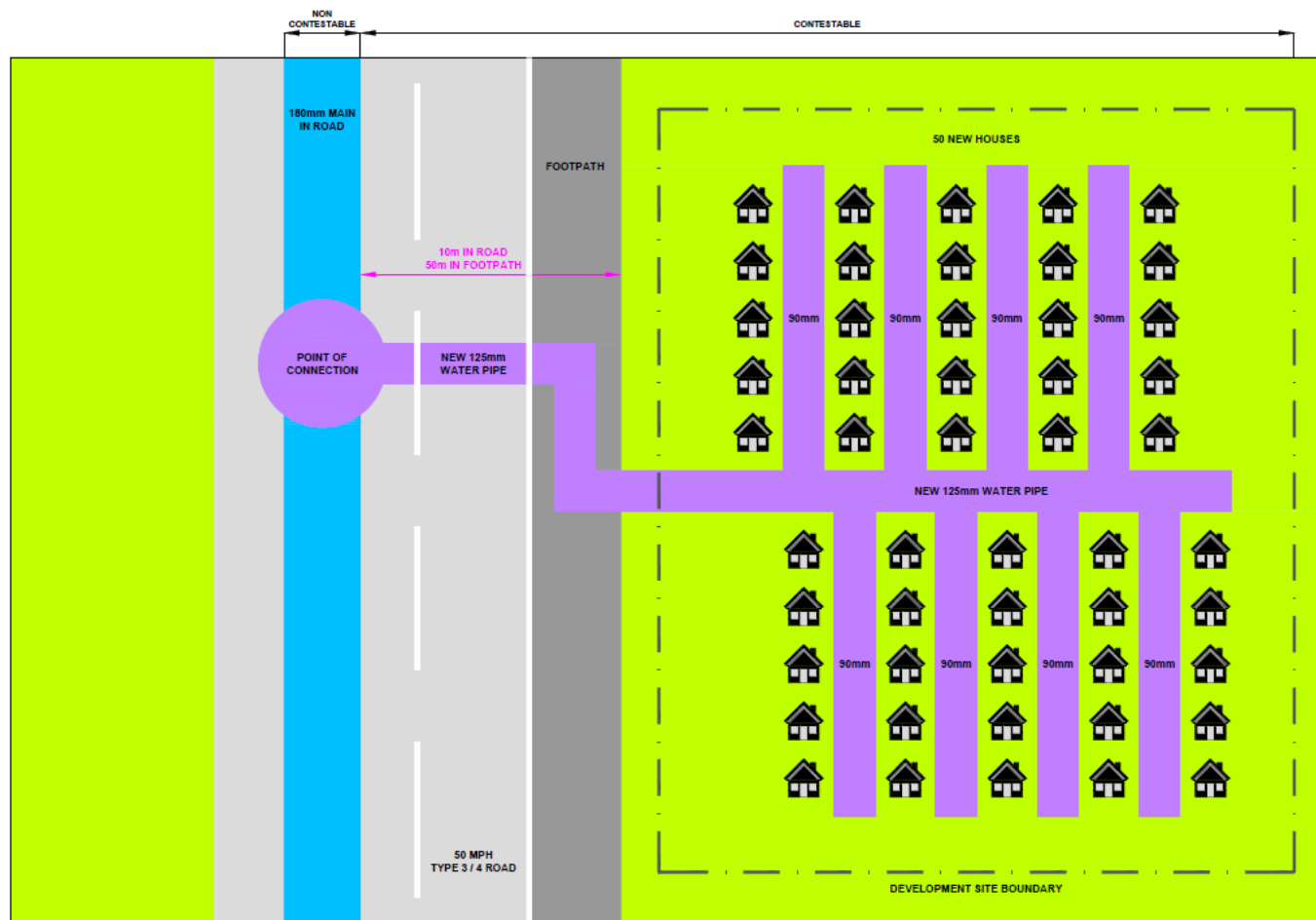
- Mains laying
- Service pipe installation
- Boundary box fitting
- Meter installation
- Excavation
- Reinstatement

Technical Specification (Connection) Pipework: <ul style="list-style-type: none">• Connection to existing main of 180mm diameter PE• 3m pipe laying (per communication pipe)	Technical Specification (Mains) Pipework: Total length 300m, consisting of: <ul style="list-style-type: none">• 125mm diameter PE – 10m pipework in road (including connection to existing 180mm PE Main)• 125mm diameter PE – 50m pipework in footpath• 125mm diameter PE – 140m pipework in Unmade ground• 90mm diameter PE – 100m pipework Unmade ground
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Design Considerations:

- 180mm diameter existing main, serving 150 existing customers
- Three commissioning phases

- Three sample chlorination and connections - footpath
- Four washouts - unmade ground
- Five valves (1 x 150mm, 3 x 100mm, 1 x 80mm) - unmade ground
- One trial hole - unmade ground Traffic management assumes the road (Type 3-4) is 50mph, has two lanes and requires a road closure and eight parking pay suspensions. Any additional council charges for permitting should be included.



EXAMPLE FOUR

Scenario 4: Medium housing development requiring new mains and communication pipe (excavation and reinstatement by Water Company)									Alternative Delivery Method			
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (£)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)	NAV Rate (£)	NAV Total Charge (£)
	Pre-Construction Charges - connection											
	Application Fee	per application		600				N	0	0		
Y	Administration Fee	per application	1	903.87	903.87			N	£31.51	£903.87		
	Design Fee	per application		430				N				
	Pre-Construction Charges - mains											
Y	Application Fee	per application	1	£600.00	£600.00			N	£600.00	£600.00		
	Administration Fee	per application	0	£0.00	£0			N	£31.51	£0.00		
Y	Design Fee	per application	1	£430.00	£430.00			Y	£0.00	£0		
	Construction Charges - connection											
Y	Service connection	per connection	50	954.56	£47,728.20	£30.90	£1,545.03	Y	£0.00	£0.00		
Y	Pipework	per metre	100	£127.82	£12,782.11	£1.41	£141.45	Y	£0.00	£0.00		
	Meter installation	per meter	included									
	Construction Charges - mains											
Y	Mains Connection	per connection	1	£1,935.07	£1,935.07	N/A	N/A	N	£1,935.07	£1,935.07	£1,935.07	£1,935.07
Y	Pipework - 3/4 road	per metre of 125mm HPPE main	8	£233.26	£1,866.09	£5.91	£47.29	Y	£0.00	£0.00		
Y	Pipework - footpath	per metre of 125mm HPPE main	50	£175.30	£8,764.97	£5.91	£295.55	Y	£0.00	£0.00		
Y	Pipework - Unmade	per metre of 125mm HPPE main	140	£71.09	£9,952.85	£5.91	£827.54	Y	£0.00	£0.00		
Y	Pipework - Unmade	per metre of 90mm HPPE main	100	£60.59	£6,058.70	£2.25	£225.40	Y	£0.00	£0.00		

Scenario 4: Medium housing development requiring new mains and communication pipe (excavation and reinstatement by Water Company)									Alternative Delivery Method			
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (£)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contes table (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)	NAV Rate (£)	NAV Total Charge (£)
	Traffic Management	Per TM usage	1	£2,968.00	£2,968.00	N/A	N/A	N	£2,968.00	£2,968.00	£2,968.00	£2,968.00
	Other Charges											
Y	permit fee		1	£45.00	£45.00	N/A	N/A	N	£45	£45		
Y	valves		5	£320.49	£1,602.47	N/A	N/A	Y	£0	£0		
Y	washout		4	£320.49	£1,281.98	N/A	N/A	Y	0	£0		
Y	Trial Hole		1	£342.59	£342.59	N/A	N/A	Y	0	£0		
Y	pressure test		3	£347	£1,039.64	N/A	N/A	Y	0	£0		
Y	chlorination		3	£686	£2,056.60	N/A	N/A	Y	0	£0		
Y	Infrastructure Charge - Water	per property	50	£309	£15,450.00			N		£15,450.00		
Y	Income Offset - Water	per property	50	-£691	-£34,550.00			N		-£34,550.00		
	Total				81258.16					-£12,648.06		

Scenario 5: Large housing development requiring new mains and communication pipes (excavation and reinstatement completed by others)

This worked example provided charges associated with the provision of new water mains and individual connections from them for each of 200 new houses. Excavation and reinstatement are completed by others, except for the excavation leading to the point of connection to the existing water main.

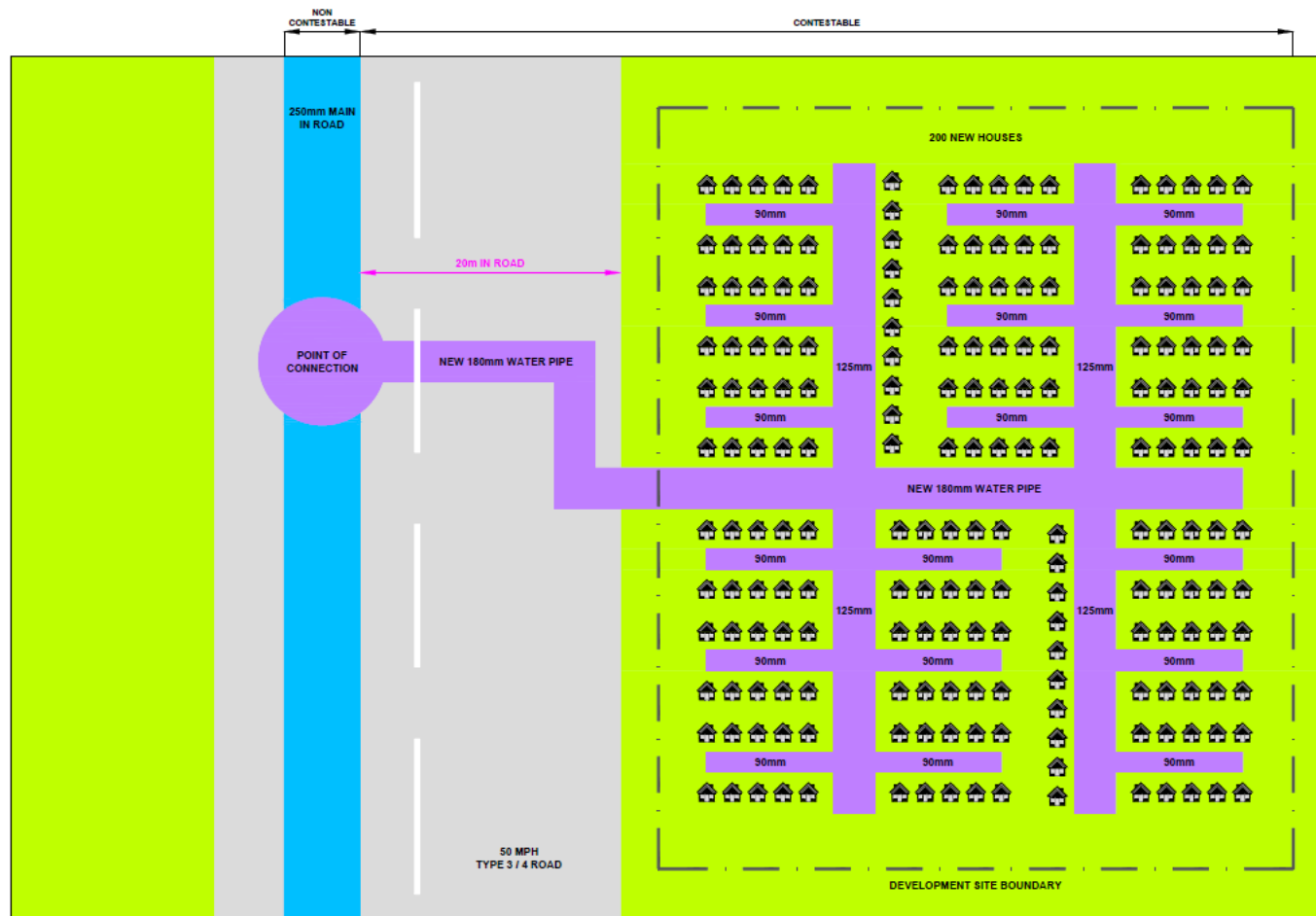
Within construction costs, this includes:

- Mains laying
- Service pipe installation
- Boundary box fitting
- Meter installation

Technical Specification (Connection) Pipework: <ul style="list-style-type: none">• Connection to existing main of 180mm diameter PE• 3m pipe laying (per communication pipe)	Technical Specification (Mains) Pipework: Total length 1000m, consisting of: <ul style="list-style-type: none">• 180mm diameter PE – 20m pipework in type 3-4 road (leading to point of connection• 180mm diameter PE – 10m pipework• 125mm diameter PE – 480m pipework• 90mm diameter PE – 400m pipework
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Design Considerations:

- 250mm diameter existing main, serving 150 existing customers
- Six commissioning phases
- Six sample chlorination and connections - footpath
- Ten washouts – unmade ground
- Eight valves (1 x 150mm, 5 x 100mm, 2 x 80mm) - unmade ground
- Two trial holes - unmade ground Traffic management assumes the road (Type 3-4) is 50mph, has two lanes and requires a road closure and eight parking pay suspensions. Any additional council charges for permitting should be included



EXAMPLE FIVE

Scenario 5: Large housing development requiring new mains and communication pipe (excavation and reinstatement by others)									Alternative Delivery Method			
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (£)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)	NAV Rate (£)	NAV Total Charge (£)
	Pre-Construction Charges - connection											
	Application Fee	per application		0				N	0	0		
Y	Administration Fee	per application	200	3572.62	3572.62			N	31.51	3572.62		
	Design Fee	per application						N				
	Pre-Construction Charges - mains											
Y	Application Fee	per application	1	1200	1200			N	1200	1200		
	Administration Fee	per application	0	£0	£0			N	£0	£0		
Y	Design Fee	per application	1	750	750			Y	£0	£0		
	Construction Charges - connection											
Y	Service connection	per connection	200	£138.93	£27785.80	£30.90	£6,180.10	Y	0	£0.00		
Y	Pipework	per metre	600	£6.23	£3,738.07	£1.41	£848.70	Y	0	£0.00		
	Meter installation	per meter										
	Construction Charges - mains											
Y	Mains Connection	per connection	1	£3105.46	£3105.46	N/A	N/A	N		£3105.46	£3105.46	£3105.46
Y	Pipework - road	per metre of 180mm HPPE main	18	£275.80	£4,964.41	£7.70	£138.69	Y	0	£0.00		
Y	Pipework - road	per metre of 180mm HPPE main	10	£87.30	£873.05	£7.70	£77.05	Y	0	£0.00		
Y	Pipework - road	per metre of 125mm HPPE main	480	£71.09	£34,124.07	£5.91	£2,837.28	Y	0	£0.00		
Y	Pipework - road	per metre of 90mm HPPE main	400	£60.59	£24,234.82	£2.25	£901.60	Y	0	£0.00		

Scenario 5: Large housing development requiring new mains and communication pipe (excavation and reinstatement by others)									Alternative Delivery Method			
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (£)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)	NAV Rate (£)	NAV Total Charge (£)
	Pipework - footpath	per metre										
	Pipework - road	per metre										
Y	Traffic Management	Per TM usage	1	£2,968.00	£2,968.00	N/A	N/A	N	£2,968.00	£2,968.00	£2,968.00	£2,968.00
	Other Charges											
Y	permit fee		1	£45.00	£45.00	N/A	N/A	N	£45.00	£45.00		
Y	washout		10	£320.49	£3,204.94	N/A	N/A	Y	0	0		
Y	pressure test		6	£347	£2,079.29	N/A	N/A	Y	0	0		
Y	chlorination		6	£685.53	£4,113.20	N/A	N/A	Y	0	0		
Y	valves		8	£320.49	£2,563.95	N/A	N/A	Y	0	0		
Y	Trial Holes		2	£342.59	£685.19	N/A	N/A	Y	£0.00	£0.00		
Y	Infrastructure Charge - Water	per property	200	£309	£61,800.00			N	£309	£61,800		
Y	Income Offset - Water	per property	200	-£691	-£138,200.00			N	-£691	-£138,200		
	Total				£46,307.88					- £65,508.93		

Scenario 6: Large housing development requiring new mains and communication pipes (excavation and reinstatement completed by Water Company)

This worked example provided charges associated with the provision of new water mains and individual connections from them for each of 200 new houses. This worked example assumes that the excavation and reinstatement activities are carried out by the Water Company, however, should the Developer appoint an SLP or NAV, this worked example assumes these would be carried out by the SLP or NAV.

Within construction costs, this includes:

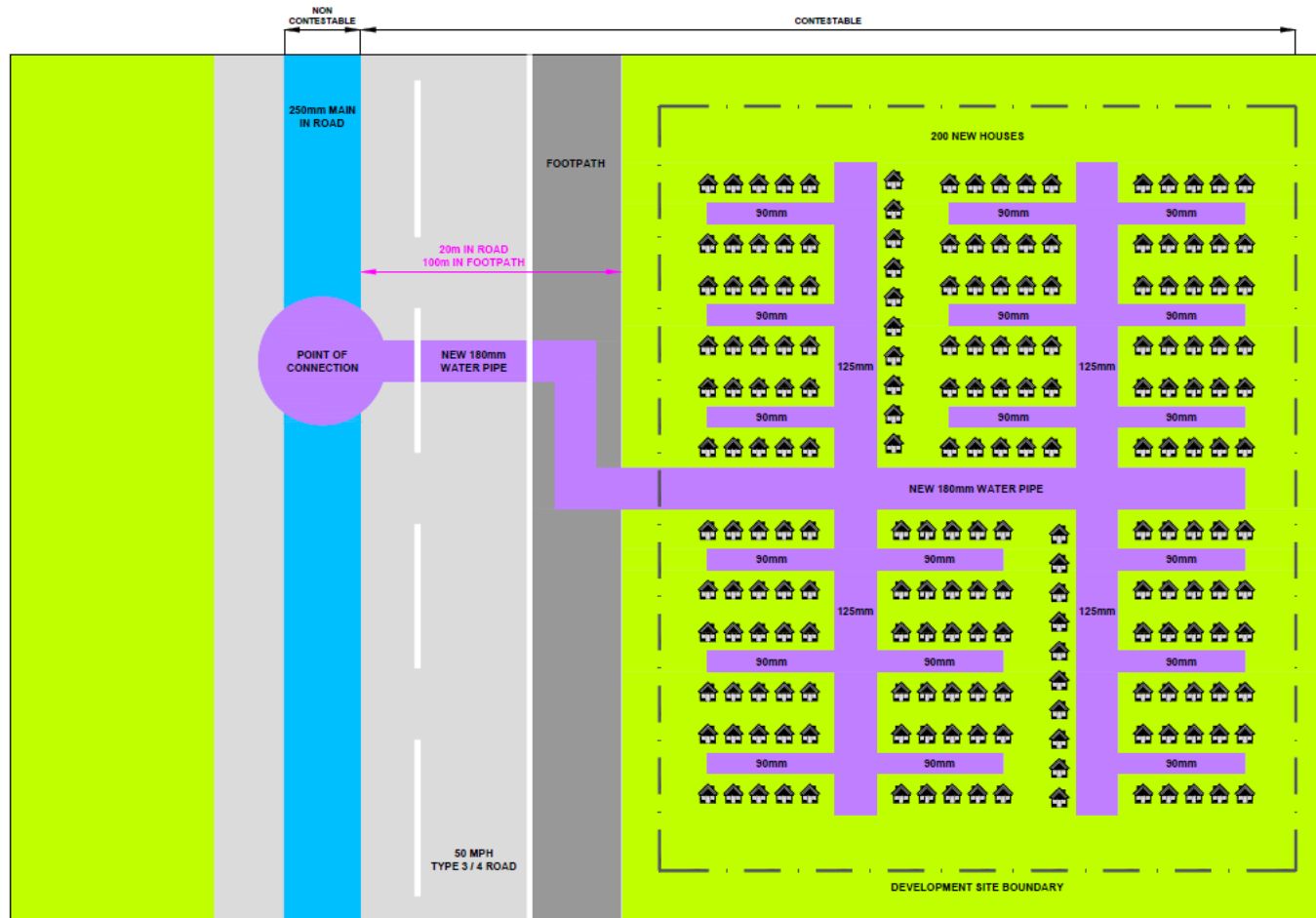
- Service pipe installation
- Boundary box fitting
- Meter installation
- Excavation
- Reinstatement

Technical Specification (Connection) Pipework: <ul style="list-style-type: none">• Connection to existing main of 180mm diameter PE• 3m pipe laying (per communication pipe)	Technical Specification (Mains) Pipework: Total length 1000m, consisting of: <ul style="list-style-type: none">• 180mm diameter PE – 20m pipework in type 3-4 road (leading to point of connection)• 180mm diameter PE – 100m pipework in footpath• 125mm diameter PE – 480m pipework in unmade ground• 90mm diameter PE – 400m pipework in unmade ground
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Design Considerations:

- 250mm diameter parent Main, serving 150 existing customers
- Six commissioning phases
- Six sample chlorination and connections - Footpath
- Ten washouts - Unmade Ground

- Eight valves (1 x 150mm, 5 x 100mm, 2 x 80mm) - Unmade Ground
- Two trial holes - Unmade Ground Traffic management assumes the road (Type 3-4) is 50mph, has two lanes and requires a road closure and eight parking pay suspensions. Any additional council charges for permitting should be included.



EXAMPLE SIX

Scenario 6: Large housing development requiring new mains and communication pipe (excavation and reinstatement by Water Company)											Alternative Delivery Method	
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (3)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)	NAV Rate (£)	NAV Total Charge (£)
	Pre-Construction Charges - connection											
	Application Fee	per application		0				N	£0.00	£0.00		
Y	Administration Fee	per application	200	3686.16	3686.14			N	£0.00	3686.14		
	Design Fee	per application		0				N	£0.00			
	Pre-Construction Charges - mains											
Y	Application Fee	per application	1	£1,200.00	£1,200.00			N	£0.00	£0.00		
	Administration Fee	per application	0	£0	£0			N	£0	£0		
Y	Design Fee	per application	1	£750.00	£750.00			Y	£0	£0		
	Construction Charges - connection											
Y	Service connection	per connection	200	954.56	£190,912.80	£30.90	£6,180.10	Y	£0.00	£0.00		
Y	Pipework	per metre	400	£127.82	£51,128.44	£1.41	£565.80	Y	£0.00	£0.00		
	Meter installation	per meter	Included									
	Construction Charges - mains											
Y	Mains Connection	per connection	1	£2,068.91	£2,068.91	N/A	N/A	Y	£0.00	£0.00		
Y	Pipework - road	per metre of 180mm HPPE main	20	£275.80	£5,516.02	£7.70	£154.10	Y	£0.00	£0.00		
Y	Pipework - road	per metre of 180mm HPPE main	10	£210.59	£2,105.90	£7.70	£77.05	Y	£0.00	£0.00		
Y	Pipework - road	per metre of 125mm HPPE main	480	£71.09	£34,124.07	£5.91	£2,837.28	Y	£0.00	£0.00		
Y	Pipework - road	per metre of 90mm HPPE main	400	£60.59	£24,234.82	£2.25	£901.60	Y	£0.00	£0.00		
	Traffic Management	Per TM usage	1	£2,968.00	£2,968.00	N/A	N/A	N	£2,968.00	£2,968.00	£2,968.00	£2,968.00

Scenario 6: Large housing development requiring new mains and communication pipe (excavation and reinstatement by Water Company)										Alternative Delivery Method		
Applicable Charge?	Item	Unit	Qty	Rate (£)	Total Charge (3)	Barrier Pipe Uplift/Rate	Barrier Pipe Total Charge (£)	Contestable (Y/N)	Self-Lay Rate (£)	Self-Lay Total Charge (£)	NAV Rate (£)	NAV Total Charge (£)
	Other Charges											
Y	permit fee		1	£45.00	£45.00	N/A	N/A	N	£45.00	£45.00		
Y	washout		10	£320.49	£3,204.94	N/A	N/A	Y	0	0		
Y	pressure test		6	£347	£2,079.29	N/A	N/A	Y	0	0		
Y	chlorination		6	£685.53	£4,113.20	N/A	N/A	Y	0	0		
Y	valves		8	£320.49	£2,563.95	N/A	N/A	Y	0	0		
Y	Trial Holes		2	£342.59	£685.19	N/A	N/A	Y	£685.19	£685.19		
Y	Infrastructure Charge - Water	per property	200	£309	£61,800.00			N	£309	£61,800		
Y	Income Offset - Water	per property	200	-£691	-£138,200.00			N	-£691	-£138,200		
	Total				£254,986.67					- £69015.67		

b. Bristol Water scenarios

In previous new connection charges documents we have provided worked examples against a set of scenarios we defined. We retain these scenarios in addition to those required by Ofwat's charges rules to provide consistency and additional transparency.

The following examples set out the costs for different types of connection in 2022/23, based on the costs set out in this document. These costs are compared for reference to the equivalent charges in 2021/22, prior to the implementation of changes in the charges structure.

Example One

Single Householder connection, with capacity in mains outside property (i.e. no upstream reinforcement required and no previous use) i.e. single service connection.

Description	Mains	Services	Infrastructure Charges	Income Offset Payment	Mains Application Fee	Design Fee	Non-Physical Connection Charge	Total	increase from prev year
Short Side service Connection 21/22	£ -	929.54	273.00	-686.00				516.54	
Short Side service Connection 22/23	£ -	954.56	309.00	-691.00	0.00	0.00	31.51	604.07	17%
Long Side service Connection 21/22	£ -	1736.01	273.00	-686.00				1323.01	
Long Side service Connection 22/23	£ -	1751.96	309.00	-691.00	0.00	0.00	31.51	1401.47	5.9%
								total	9%

Short side service consists of connection to existing main in footpath outside of property, installation of 1 metre of service pipe and provision of boundary box with meter and stoptap.

Cost breakdown – short side

1 x £954.56 = £954.56– as shown in Section 5.3

Long Side service consists of connection to existing main in footpath on far side of road from property excavation of 1 metre footpath, 5 metres road crossing and 2 metres of footpath and installation of boundary box with meter and stoptap.

Cost breakdown – long side

1 x (£954.56+ 6 x £132.90 as shown in Section 5.3) = £1,751.96

In both cases 1 x property infrastructure charge of £309 applies.

Example Two

Small development site - 10 houses – Capacity in mains at site entrance, on-site mains and services required. On-site mains required consisting of 63mm diameter x 35 metres standard pipe.

Description	Mains	Services	Infrastructure Charges	Income Offset Payment	Mains Application Fee	Design Fee	Non-Physical Connection Charge	Total
Small development site 21/22	£3,436.67	£13,327.77	£2,730.00	-£6,860.00				£12,634.45
Small development site 22/23	£3,513.41	£13,532.62	£3,090.00	-£6,910.00	£300.00	260.00	£186.52	£13,972.55

Services cost includes 50% short side and 50% long side. (i.e. 5 short services and 5 long services).

Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

Cost breakdown 2022/23

Mains Application Fee - £300

Mains

Connection (In footway) – as shown in Section 4.4	£1,564.12
Mainlaying in trench provided by Developer (as shown in Section 4.1) xs 35	£683.65
End Washout – as shown in Section 4.5	£233.56
Pressure Test – as shown in Section 4.6	£346.55
Chlorination – as shown in Section 4.7	£685.53
Mains application fee	£300.00
Design Fee	260.00
Total	£4,073.41

Services

Short Services – 5 x £954.56 (as shown in Section 5.3)	£4,772.82
Long Services – 5 x (£954.56+ 6 x £132.90 (as shown in Section 5.3))	£8,759.80

Non-Physical Connection Charge £186.52

Total £13,719.14

Infrastructure charges

10 properties x £309 £3,090.00

In this example, there is a increase in charges compared to 21/22

Example Three

Medium Development Site – 50 houses, 25 built in year 1 – Capacity in mains at site entrance, on-site mains and services required. On-site mains 70metres of 63mm diameter, 105 metres 90mm diameter standard pipe.

Description	Mains	Services	Infrastructure Charges	Income Offset Payment	Total
Medium development site 21/22	£6,120.18	£66,638.86	£13,650.00	-£34,300.00	£52,109.04
Medium development site 22/23	£6,248.00	£67,663.09	£15,450.00	-£34,550.00	£54,811.10

Service cost includes 50% short side and 50% long side.

Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

Cost breakdown 2022/23

Mains Application Fee - £600

Mains

Connection (In footway) - as shown in Section 4.4	£1,564.12
Mainlaying in trench provided by Developer (as shown in Section 4.1)	£3,418.24
End Washout – as shown in Section 4.5	£233.56
Pressure Test – as shown in Section 4.6	£346.55
Chlorination – as shown in Section 4.7	£685.53
Design Fee	£430.00
Total	£6,678.00

Services

Short Services (as shown in Section 5.3)	£23,864.10
Long Services – 25 x (£954.56+ 6 x £132.90 (as shown in Section 5.3))	£43,798.99
Total =	£67,663.09

Infrastructure charges

50 houses x £309	15450
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In this example, there is a increase in charges compared to 21/22

Example Four

Medium Development Site – 50 houses, 25 built in year 1 – Insufficient capacity at site entrance, 200 metres of upstream reinforcement required 90mm diameter standard pipe, on- site mains and services required. On-site mains required 70metres of 63mm diameter, 105metres of 90mm diameter standard pipe.

Example Five

Large Development Site – 500 houses phasing over ten years 50 houses/year, 25 in year 1 – Capacity in mains at site entrance, on-site mains and services required. On-site mains 960metres of 63mm diameter, 30metres of 90mm diameter, 90 metres of 125mm diameter and 390metres of 180mm diameter standard pipe.

Description	Mains	Services	Infrastructure Charges	Income Offset Payment	Mains Application Fee	Design Fee	Non-Physical Connection Charge	Total
Large development site 21/22	£48,397.42	£666,388.61	£136,500	- £343,000				£508,286.03
Large development site 22/23	£49,569.71	£676,631	£154,500	- £345,500	£1,500	990.00	£8,910	£546,600.77

Service cost includes 50% short side and 50% long side.

Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

Cost breakdown 2022/23

Mains Application Fee -
£1,500

Mains

Mainlaying in trench provided by Developer (as shown in Section 4.1):

PE Pipe Standard 63mm x 960	£18,751.50
PE Pipe Standard 90mm x 30	£619.10
PE Pipe Standard 125mm x 90	£2,184.65
PE Pipe Standard 180mm x 390	£13,477.36
Washouts x 10 as shown in Section 4.5	£2,335.56
Pressure Test x 2 as shown in Section 4.6	£836.19
Pressure Test x 8 as shown in Section 4.6	£2,772.38
Chlorination x10 as shown in Section 4.7	£6,855.34
Connection (In footway) -as shown in Section 4.4	£1,737.63
Mains application fee	£1,500
Design Fee	£990.00
Total	£51,069.71

Services

Short Services – 250 x
£954.56 as shown in Section 5.3 =

£238,641.00

£954.56

£132.90

Long Services – 250 x
(£954.56 + 6 x £132.90 as
shown in Section 5.3) £437,989.93

Non-Physical Connection
Charge £8,910.12

Total £686,531.05

Infrastructure charges

500 houses x £309 £154,500.00

In this example, there is a increase in charges compared to 21/22

Example Six

Large Development Site – 500 houses phasing over ten years 50 houses/year, 25 in year 1 – insufficient Capacity in mains at site entrance, 1km of mains reinforcement required 180mm standard pipe, on-site mains and services required. On-site mains 960metres of 63mm diameter, 30metres of 90mm diameter, 90 metres of 125mm diameter and 390metres of 180mm diameter standard pipe.

Description	Mains	Services	Infrastructure Charges	Income Offset Payment	Mains Application Fee	Design Fee	Non-Physical Connection Charge	Total
Large development site 21/22	£48,397.42	£666,389	£136,500	- £343,000				£508,286.03

Large development site 22/23	£49,569.71	£676,631	£154,500	- £345,500	£1,500	£990	£8,910	£546,600.77
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Service cost includes 50% short side and 50% long side.

Cost of mains includes charge of full cost of mains after new charging mechanism whereby income offset applied against Infrastructure Charges.

In this case the insufficient capacity at the site entrance results does not result in additional charges compared to Example Five as would currently be the case as these work will be funded through Infrastructure Charges.

Cost breakdown 2022/23

Mains Application Fee - £1,500

Mains

Mainlaying in trench provided by Developer (as shown in Section 4.1):

PE Pipe Standard 63mm x 960	£18,751.50
PE Pipe Standard 90mm x 30	£619.10
PE Pipe Standard 125mm x 90	£2,184.65
PE Pipe Standard 180mm x 390	£13,477.36
Washouts x 10 as shown in Section 4.5	£2,335.56
Pressure Test x 2 as shown in Section 4.6	£836.19
Pressure Test x 8 as shown in Section 4.6	£2,772.38
Chlorination x10 as shown in Section 4.7	£6,855.34

Connection (In footway) -as shown in Section 4.4	£1,737.63
Mains application fee	£1,500
Design Fee	£990.00
Total	£51,069.71

Services

Short Services – 250 x £954.56 as shown in Section 5.3 =	£238,641.00	£954.56	£132.90
Long Services – 250 x (£954.56 + 6 x £132.90 as shown in Section 5.3) =	£437,989.93		

Non-Physical Connection Charge	£8,910.12
Total	£686,531.05

Infrastructure charges

500 houses x £309 = £136,500	£154,500.00
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In this example, there is a increase in charges compared to 21/22

Appendix A - Examples of calculation of infrastructure charges incorporating a Relevant Multiplier (RM)

New Development

Fitting	No. of Fittings (Proposed)	Loading units per fitting (see table below)	Total Loading Units
WC flushing cistern	25	2	50
Wash basin (not in a house)	20	3	60
Shower	15	3	45
Sink (tap nominal size ½" or 15mm)	15	3	45
Communal or commercial appliance	3	10	30
		Total	230

Relevant Multiplier (RM) = Total loading units (230)/24 = **9.58**

Infrastructure charge = Standard Domestic Infrastructure Charge x RM
 (£351) x (9.58) = **£3,362.58**

Redevelopment of offices into housing

Fitting	No. of Fittings (Proposed)	Loading units per fitting (see table below)	Total Loading Units
WC flushing cistern	21	2	42

Wash basin (not in a house)	20	3	60
Shower	2	3	6
Sink (tap nominal size ½" or 15mm)	4	3	12
		Total	120

Relevant Multiplier (RM) = Total loading units (120)/24 = **5**

Credit is given for existing use on a specific site. Thus there would be no infrastructure charge payable on the first five dwellings on the development. A standard infrastructure charge would be payable on all subsequent dwellings.

Loading units for calculating the Relevant Multiplier

Water fitting/appliance	Loading unit
WC flushing cistern	2
Wash basin in a house (see note 2)	1.5
Wash basin elsewhere	3
Bath (tap nominal size $\frac{3}{4}$ " or 20mm)(see note 3)	10
Bath (tap nominal size larger than $\frac{3}{4}$ " or 20mm)(see note 3)	22
Shower	3
Sink (tap nominal size $\frac{1}{2}$ " or 15mm)	3
Sink (tap nominal size larger than $\frac{1}{2}$ " or 15mm)	5
Spray tap	0.5
Bidet	1.5
Domestic appliance (subject to minimum allowance of six loading units per house)(see notes 4 and 5)	3
Communal or commercial appliance (see note 4)	10
Any other water fitting or outlet including a tap but excluding a urinal or water softener	3

Notes for Appendix A

1. Any fitting includes any plumbing =, dedicated space or planning or other provision for that fitting.
2. "House" means any building or part of building which is or will be occupied as a private dwelling.
This includes a flat, boat or caravan connected to the water supply.
3. "Bath" includes a whirlpool or Jacuzzi.
4. "Domestic appliance" means any water-using appliance including a dishwasher, washing machine and waste disposal unit other than in a house, including communal facilities.
5. A minimum of six loading units shall be included for each house for domestic appliances whether or not the dwelling has any such appliances. This does not apply where neither a washing machine nor a dishwasher can be provided and there is no plumbing outlet, dedicated space or planning or other provision for either appliance in the house.

Appendix B: Five Year Calculation and Reconciliation of Infrastructure Charges

The table below shows forecast and incurrent network reinforcement schemes, which together with the forecast of new properties eligible to pay infrastructure charges, contributes to the calculation of the rate shown of £267

Scheme	22/23	23/24	24/25	25/26	26/27
Known Schemes for growth					
200mm ID Main to reinforce 10" in Frampton Cotterell	£274,039				
North Chase main	£178,735				
Almondsbury Reservoir to Fishpool Hill	£750,000	£750,000			
Churchill Reservoir	£205,145	£1,173,795	£1,115,932		
Known Developer Driven Mains	£500,000	£500,000	£500,000	£500,000	£500,000
AMP 8 initial assumption on specific schemes				£500,000	£500,000
Total expenditure after targeted programme efficiencies	£1,727,659	£2,194,795	£1,463,259	£905,520	£905,520

2022-27 projected expenditure	£7,196,752
plus timing from previous years	£682,000
	£7,878,752
2022-27 property numbers	25,537
Infrastructure Charge	£309

9 Appendix C – Common Terms

The following common terms have been provided by Ofwat as part of its consultation on charging rules for 2022/23. As far as possible we use these terms through our document.

Administration Fee	means the fee associated with general administration activities, after the cost advice stage, relating to the construction phase, which can include processing any payments, scheduling the works, supervision and project management, and processing information into relevant billing/management systems. This would not include site-based activities
Adoption	means the process whereby assets are vested in the water company and subsequently maintained at its expense
Alternative Point of Connection	means another location indicated by the Water Company which is neither i) a practical location indicated by the Developer Customer, nor ii) the nearest practical location where the existing Water Main or Sewer is the same size or larger than the new connecting Water Main or Sewer
Annual Contestability Summary	means the standard format document published annually (or more frequently) by the Undertaker on its website setting out which work and services are Contestable Work and Services and which are Non-contestable Work and Services as described in section 3 of the Water Sector Guidance (see www.water.org.uk/water-sector-guidance-approved-documents/).
Application Fee	means the fee levied at point of application, which is associated with upfront application processing, which can include reviewing and acknowledging an application, checking that all relevant information has been received, preparing a cost advice, an agreement or the acceptance for the proposed works
Barrier Pipe	means a polyethylene (PE) pipe with an aluminium barrier layer conforming to water industry specification 4-32-19
Bond or Surety	means a financial guarantee underwritten by an appropriate warranty provider, bank or insurance company, which is accepted by the Water Company
Branch Connection	means the connection of new pipework to an existing Water Main such to provide a supply of water to a Development
Communication Pipe	means any part of a Service Pipe which a Water Company could be, or have been, required to lay under section 46 of the Water Industry Act 1991. It consists of a pipe laid from an existing or newly laid Water Main to the boundary of a property and may include a meter housing and / or external stop valve
Contaminated Land	means land by which a water company will install or request the installation of barrier pipe, following review of the previous use of site, or where proven necessary, in accordance with section 78A of the Environmental Protection Act 1990
Contestable Work	means the work or services that can be completed by either a Water Company or an Accredited Third Party, with the work and services relating to the provision of water supplies defined in each Water Company's Annual Contestability Summary. For work related to new sewerage services, the majority of work is considered contestable, excluding diversions and requisitions
Design Checking Fee	means the cost of checking a design submitted by an Accredited Third Party

Design Fee	means the cost of designing against the application, providing a detailed site drawing and design, specification and cost advice. This may also include activities identified in the Administration Fee if that charge is not levied by the particular Water Company.
Domestic Use	means water used primarily for domestic purposes, including for drinking, washing, cooking, central heating and sanitary purposes.
Excavation by Others	means any work undertaken by someone other than the Water Company in excavation, backfilling or reinstatement
Excavation by Water Company	means any work undertaken by the Water Company in excavation, backfilling or reinstatement
Existing Main	means a Water Main or Sewer that was commissioned independently of development commencing
Far Side Connection	means a connection between premises and an existing water main on the opposite side of the street to those premises, to a maximum communication pipe length of distance of 18 metres, for which a straight linear meterage rate is not applied. Beyond 18 metres, a linear meterage will apply. Where the water main is located in the centre line of the street then the connection will be considered a Far Side Connection
Fire Supplies	means supplies provided solely for fire safety provision
Fixed Charges	means charges which are fixed in amount or which are calculated by reference to a predetermined methodology set out in a Water Company's Charging Arrangements, the application of which allows calculation at the outset of the total amount owing in a given Charging Year in respect of the charges in question. For the avoidance of doubt, a Water Company may impose Fixed Charges by reference to a unit measurement (for example, per megalitre). Furthermore, a Water Company may offer more than one Fixed Charge in charging for a service provided in accordance with the present rules (for example, by differentiating between different geographic areas)
Footpath	means a hard-surfaced area intended for use by pedestrian or cyclists
Household Premises	means any premises used principally as a domestic dwelling or intended for such use, such as a house or flat
Infrastructure Credit	means a credit which may be applied when there has previously been a billable account on the same site/address. The eligibility criteria and method of calculating Infrastructure Credits is defined by the Water Company in its Charging Arrangements. This term is autonomous from any incentives applied against the infrastructure charge, for water efficiency for example. These are defined in the term Water Efficiency Incentive
Infrastructure Charge	means the charges described in section 146(2) of the Water Industry Act 1991. That is, a charge paid by the Developer Customer to the Water Company when a property is connected to the company's water supply or sewer network for the first time. The charges fund wider network reinforcement to meet the increased demand arising from the new connections
Manifold Connection	means where a Communication Pipe connects with a manifold to which separate Supply Pipes are connected and meters may be fitted
NAV	means a company appointed by Ofwat through the new appointments and variations process to provide water and/or sewerage services to customers in an area previously served by the incumbent Water Company. A new appointment is made

	when Ofwat appoints a company for the first time to provide services for specific geographic area. A variation occurs where an existing appointment is varied to amend the area served
Near Side Connection	means a connection between premises and an existing Water Main on the same side of a street to those premises. Where the Water Main is in the centre line of the street then the connection will be considered a Far Side Connection
Network Assembly	means components such as sluice valves or washouts, including associated chambers, needed to operate and maintain a water network
Network Reinforcement	means work to provide or modify such other specified types of infrastructure (mains and tanks, service reservoirs, pumping stations, or sewers) as is necessary in consequence of the need to either provide adequate water supply and/or sewerage capacity to a development mains, service pipes, public sewers and/or lateral drains have been installed or connected by the company imposing the charge or by a company with whom the company has entered into an agreement for bulk supply or bulk discharge.
Non-contestable Work	means work or services that can only be completed by the Water Company (or an agent acting on their behalf) and, in the case of work or services associated with the provision of water supplies, is defined in each Water Company's Annual Contestability Summary
Non-domestic Use	means water used primarily for non-domestic purposes, including anything not for Domestic Use, such as water for industrial or business use (including manufacturing processes, washing and cleaning and cooling), agricultural use and filling swimming pools.
Non-household Premises	means any premises not a household premises, being used principally for industrial, business, recreational or community purposes and not as a dwelling, or intended for such use
Non-standard Connection	means a service sized above the standard size as defined by the Water Company
Phase	means a discrete part of a Development which the Developer Customer chooses to separately progress
Pre-Development Enquiry	means an enquiry submitted by a Developer Customer to understand the infrastructure requirements or considerations for proposed developments
Pre-Development Enquiry Response	means a report by the Water Company in response to a Pre-Development Enquiry that will confirm i) if the development can be supplied with water, ii) capacity within the wastewater network, iii) if any reinforcement work will be required to supply the site together, iv) and, if applicable, identify any existing assets crossing the site which may require diverting or protecting, and v) if Network Reinforcement is required to supply the site, what indicative capital cost or range of costs is likely for these works
Relevant Multiplier	means a calculation to determine the Infrastructure Charges payable relating to Non-household Premises or Household Premises subject to a common billing agreement and is based on the number and type of water fittings proposed for those premises
Road	means a hard-surfaced area intended for vehicles

Self-certification	means the activity whereby an Accredited Third Party inspects, checks and certifies installations, both internal and external to a premise, as being compliant with relevant standards and requirements
Service Connection	means the joining of a Service Pipe to a Water Main which is provided under section 45 and 46 of the Water Industry Act 1991
Service Pipe	means a pipe, which is, or is to be, connected with a Water Main for supplying water from that main to any premise.
Sewerage Sector Guidance	means guidance documents published in accordance with Ofwat's Code for adoption agreements, relating to the adoption of sewerage assets and available at www.water.org.uk/sewerage-sector-guidance-approveddocuments/ .
Supply Pipe	means the part of the Service Pipe that is not the Communication Pipe, and which remains the customer's responsibility
Sustainable Drainage Incentive	means, where offered, a reduction in infrastructure charges to a Developer Customer where they evidence that a Development will or does meet a stipulated threshold for use of a sustainable drainage solution, as defined in the Water Company's Charging Arrangements and/or specific environmental policies
Traffic Management Fees	means charges to cover the cost of working in the highway safely as a result of compliance with the Traffic Management Act 2004
Trial hole	means exploratory excavation to identify the location of apparatus, prior to works commencing
Unmade Ground	means ground which does not have a man-made surface, and may feature grass and topsoil.
Upsizing	means where the Water Company instructs that new Water Mains and/or Sewers are increased in size beyond that required to satisfy the minimum design for a specific Development. This may be to facilitate future development and is deemed Network Reinforcement
Water Company	means a company holding an appointment as a water or sewerage undertaker under the Water Industry Act 1991
Water Efficiency Incentive	means, where offered, a reduction in infrastructure charges to a Developer Customer where they evidence that a Development will or does meet a stipulated threshold for reduced water consumption, as defined in the Water Company's Charging Arrangements and/or specific environmental policies
Water Industry Registration Scheme (WIRS)	means the scheme operated by Lloyd's Register EMEA on behalf of Water UK and its members, which certifies the competence of companies undertaking Self-Lay, or such other scheme as replaces it from time to time
Water Regs UK	means the company responsible for running the Water Industry Approved Plumber Scheme (WIAPS) on behalf of the water industry in England and Wales, formerly provided under the Water Regulations Advisory Scheme. The company promotes compliance with the Water Fitting Regulations 1999 and other relevant standards across the UK to protect customers
Water Regulations Advisory Scheme (WRAS)	means a compliance mark that demonstrates that an item or product complies with standards set out by Water Supply (Water Fittings) Regulations 1999

Water Sector Guidance	means guidance documents published in accordance with Ofwat's Code for adoption agreements, relating to the adoption of water assets and available at www.water.org.uk/water-sector-guidance-approved-documents/
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