Affinity Water

Bulk Supply Charges for New Appointments and Variations 2025/26

1st February 2025

Contents

1. Background

1.1 Context

The New Appointments and Variations (NAVs) mechanism in England and Wales supports new entrants into the wholesale water and sewerage sector and allows incumbent water and/or sewerage companies to expand into other geographic areas. Typically, NAV operations relate to new housing developments where instead of the incumbent, a NAV constructs, operates and maintains the local 'on-site' infrastructure necessary to supply new homes. The NAV, rather than the incumbent, supplies water and bills the occupants. NAVs are licensed by Ofwat to carry out these activities.

To operate within Affinity Water Limited's (AWL) region a NAV company may require a bulk supply of water from us. In this context a bulk supply is the supply of water services from us as the incumbent appointed company, to a NAV company. To facilitate the bulk supply, we construct and charge for a connection from our existing network to the agreed point(s) of connection with the NAV's on-site infrastructure.

Where we provide bulk supplies, we make charges for those services, as part of bulk supply agreements in place between ourselves and NAVs. The charges we make have a significant bearing on the operating margin the NAV may achieve to allow it to finance, maintain and operate its assets and carry out its appointed activities on its site or sites.

In May 2018, after consultation, Ofwat published guidance[1] on bulk charges for NAVs. Accordingly, we revised our approach to bulk charges for charges effective from 1st April 2019 to meet those requirements. We made minor refinements to our approach for charges effective from 1st April 2020, for example updating the return on capital for the PR19 outcome.

On 14th July 2020 Ofwat published a consultation[2] on updating the guidance alongside a report[3] by its consultants, Cambridge Economic Policy Associates (CEPA). This report studied the industry's application of guidance and made suggestions for further development of charges. Ofwat published on 10th November 2020 the conclusions[4] of its July 2020 consultation and its final proposals[5] for revising guidance, with a further update[6] on guidance in January 2021.

Ofwat expects that incumbent companies introduce necessary changes in charges taking effect from 1st April 2021, whilst also acknowledging that in some areas further engagement is necessary and it may take some time to transition from current approaches to meet the new requirements. Following engagement and industry work, Ofwat published a NAV minus

[1] See https://www.ofwat.gov.uk/publication/bulk-charges-for-navs-final-guidance/
[2] See https://www.ofwat.gov.uk/consultation/consultation-on-bulk-charges-for-new-appointments-and-variations-navs/
[3] See https://www.ofwat.gov.uk/wp-content/uploads/2020/07/200610-Ofwat-CEPA-NAVs-FinalReport-redacted.pdf
[4] See https://www.ofwat.gov.uk/publication/bulk-charges-for-new-appointees-our-conclusions/
[5] See https://www.ofwat.gov.uk/consultation/bulk-charges-for-new-appointees-a-consultation-on-revising-our-guidance/
[6] See Bulk charges for new appointees – guidance on our approach and expectations (ofwat.gov.uk)

framework[7] to promote completeness and consistency across companies in avoided costs and our framework document for the charges in this report is reproduced in Appendix 4.

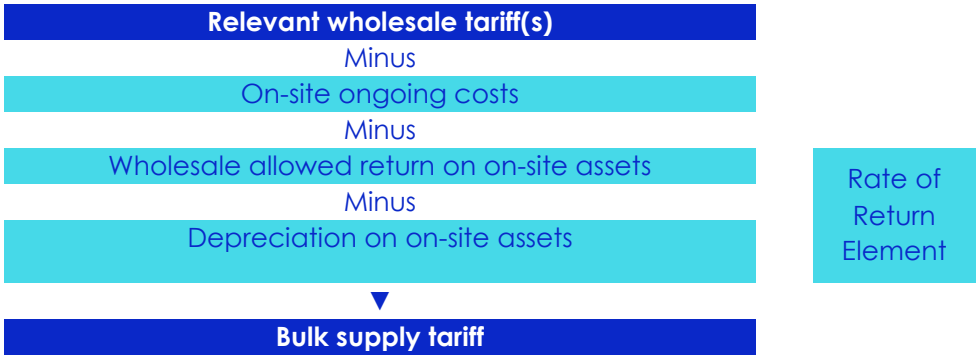
We have produced this document and the charges contained within to be in alignment with the published guidance, to provide NAVs with the charges information they need and to improve the transparency of our approach for stakeholders.

Ofwat operates a working group to promote more consistent approaches across incumbents and sharing of best practice, for example in cost estimation methods and furthering environmental objectives. As the work of this group evolves, we may need to refine and further develop our approaches in future years.

1.2 Overall approach

Central to Ofwat's guidance is the 'wholesale-minus' approach to bulk supply pricing (Figure 1). This approach starts with the relevant wholesale tariff(s) for the NAV's site(s) and deducts the costs avoided by the incumbent because of NAVs carrying out certain appointed activities instead of the incumbent. As well as avoided costs, the approach also includes a return on on-site assets element and depreciation. We apply this approach to set our bulk supply charges.

Figure 1: 'Wholesale-minus' approach



Source: Ofwat: Bulk Charges for NAVs Final Guidance, May 2018

The following sections of this document provide more detail on our assessments of each of the components of this approach alongside other relevant NAV bulk supply pricing considerations. We include in the Appendices worked examples showing how we calculate the relevant starting point, how we apply the deductions to produce bulk supply tariffs, our assessment of how we meet Ofwat's guidance and in Appendix 4, our completed Wholesale NAV Minus Framework table.

2. Relevant wholesale tariffs

2.1 The relevant starting point

The relevant starting point is the wholesale charge that we would make to the properties within a NAV appointment if we, rather than the NAV were the supplier. It is called the starting point

[7] See Wholesale minus framework https://www.ofwat.gov.uk/wp-content/uploads/2022/08/Sub-Group-3-NAV-Wholesale-minus-framework.xlsx

because it establishes the base value of wholesale charges from which the deductions required by the wholesale minus methodology are made.

2.2 Menu-based approach

To derive the relevant starting point (2.1 above), we use the 'menu-based approach.' In other words, we apply our published wholesale charges to the actual mix of properties (residential and business) and actual volumes used on each NAV site. We determine the actual mix of properties by collecting information from each NAV about the number, type and consumption of properties within their appointments.

Where NAVs have more than one site serviced by a bulk supply from us, we calculate the starting point for each site according to its actual mix of properties and add all the sites together to produce a total for that NAV. We show a worked example in Appendix 1 to describe how the weighted average calculation is accomplished.

2.3 Our wholesale charges

Our published wholesale charges are made of two parts[8]:

- a £/year fixed charge that varies according to meter size
- a volumetric charge per cubic metre, which varies by region

2.4 Fixed charges

Table 1 below shows the prior years and current year 2023/24 wholesale fixed charges, in £/year, which increase with meter size. Residential properties typically have 12/15mm meters, whilst larger business customers that may be included in a NAV appointment (e.g. schools) may have larger sized meters.

Table 1: Wholesale Fixed Tariff

Wholesale Fixed Tariff	Units	2022/23	2023/24	2024/25	2025/26
Fixed Charge12/15mm meter	£/year	16.80	16.80	17.76	20.88
Fixed Charge19/21mm meter	£/year	27.36	30.20	32.04	37.68
Fixed Charge 25mm meter	£/year	29.40	30.20	32.04	37.68
Fixed Charge 30mm meter	£/year	32.52	30.20	32.04	37.68
Fixed Charge 40mm meter	£/year	34.44	30.20	32.04	37.68
Fixed Charge 50mm meter	£/year	42.00	30.20	32.04	37.68
Fixed Charge 75/80mm and larger	£/year	108.12	120.00	127.20	149.52

2.5 Volumetric charges

[8] Whilst we also publish a large user wholesale tariff for the largest customers using more than 50,000m3/year, this tariff is not generally applicable to NAVs as in new developments, properties are predominantly residential with some small business customers. If a customer inside a NAV appointment would qualify for large user tariff, we would reflect the large user tariff in the relevant starting point as part of the menu-based approach

As noted above, our volumetric charges differ according to the region in which the NAV appointment is located. We operate three charging regions the boundaries of which are shown in the diagram below, along with the volumetric rates applicable in each region.

Figure 2: The three charging regions

Table 2: Volumetric Wholesale Tariff

Volumetric Wholesale Tariff	Units	2022/23	2023/24	2024/25	2025/26
Volumetric Charge Central Region	£/m3	0.9844	1.0926	1.1583	1.3618
Volumetric Charge East Region	£/m3	1.6777	1.8622	1.9405	2.2813
Volumetric Charge Southeast Region	£/m3	1.7854	1.9817	2.0651	2.2813

3. On-site ongoing costs

3.1 Overall approach

The wholesale minus method requires that we deduct on-site ongoing costs, sometimes called 'last-mile' costs from the relevant starting point. On-site ongoing costs are the operating costs that we avoid because NAVs are carrying out certain activities in the water supply chain instead of us. We analyse our on-site ongoing costs across three categories:

- Direct operating costs
- Indirect operating costs - 'common costs'
- Capital maintenance costs

For direct operating costs, Ofwat's 26th January 2021 guidance creates an expectation that incumbents estimate avoided costs using 'bottom-up' approaches. Bottom-up means using specific estimates of the typical costs incurred for different on-site activities. This contrasts with potentially less accurate 'top-down' approaches that use company-level data to derive unit costs for on-site ongoing costs. Ofwat further say that estimates do not necessarily need to be site-specific but incumbents should aim to accurately reflect all relevant on-site costs, including using appropriate cost modelling drivers to avoid excessive averaging.

In addition to direct operational costs, we include indirect costs in our on-site ongoing costs calculation, which we assess as being avoidable because of NAV entry. Indirect costs are the costs that cannot be directly attributed to the provision of a single product or service (e.g. shared head office functions). Within indirect costs, there is a distinction to be made between 'common costs' and 'joint costs. Unlike joint costs, which are fixed, common costs usually vary by the quantity of a product or service. Ofwat's guidance expects incumbents to allocate a portion of common costs when estimating their avoided costs.

Regarding capital maintenance we use a bottom-up approach to estimate capital maintenance and replacement expenditure. Recognising that capital maintenance requirements vary over time; we reflect maintenance requirements in on-site ongoing costs as an annuity.

3.2 Direct operating costs

We manage our operating costs by setting annual budgets for cost centre codes that are broadly either activity based or departmental. We estimate avoided costs by detailed study of the expenditures allocated to each cost centre to determine which are avoidable because of NAV entry. This contrasts with a fully top-down approach that would make use of high level, aggregated cost information, for example from our published accounts.

Our wholesale operating costs arise from the activities we carry out across four business segments:

- Water resources
- Water treatment
- Raw water distribution
- Treated water distribution

The diagram below shows the proportions of our wholesale operating expenditure accounted for by each segment. For typical NAV developments, served by bulk supplies, avoided costs arise in the treated water distribution activity, which makes up about two-thirds of our operating expenditure. Therefore, we consider avoided costs from that business segment.

Figure 3: Proportions of our wholesale operating expenditure

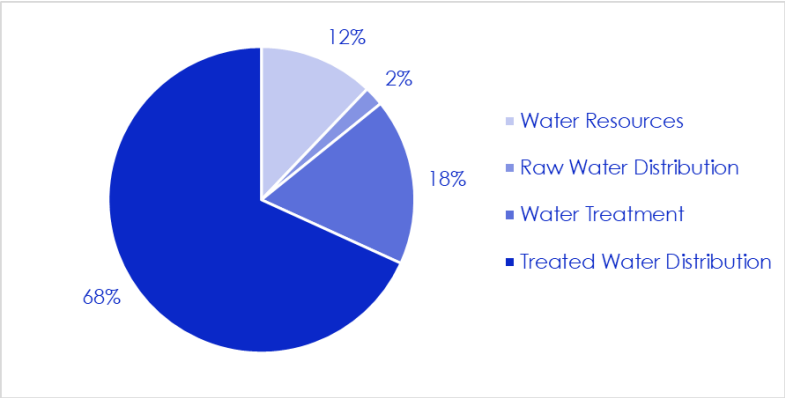


Table 3 summarises direct operating costs in the treated water distribution segment that we assess as being avoidable. Our approach is to extract the expenditures in our cost centre codes that relate to these activities and express these as a unit cost, using the cost driver indicated (£ per property, £ per metre of pipe and so on). In this way we produce estimates of representative unit costs for the different on-site activities. These estimates are not site-specific to an individual NAV or NAVs but instead reflect the unit costs we typically incur when we carry out the on-site activities indicated. The unit avoided cost estimates are shown in the right hand column of the table.

Table 3: Direct operating costs

Activity / Service	Description	Cost driver	Avoided cost 2025/26 £/property
Drinking Water Quality & Regulatory Compliance	Regulatory water quality sampling, DW Safety Planning, quality assurance of laboratory, regulatory reporting and stakeholder / public health liaison	Number of properties	1.69
	Enforcement / operation of Network Regulations	Number of properties	0.36
Network Maintenance	Unplanned maintenance - Costs associated with the inspection, cleaning, repair and reactive renewal of on-site water distribution mains and costs associated with the repair and reactive renewal of pipes that connect the water main with each property incl. emergency response PLUS Costs of detecting and solving on-site leakages	Length of main	18.60
Total			**20.65**

3.3 Indirect costs

Indirect costs are the costs that cannot be directly attributed to the provision of a single product or service. Within indirect costs, there is a distinction between 'common costs' and 'joint costs' where common costs are a subset of indirect costs. Unlike 'joint costs,' which are fixed, common costs vary by the quantity of a product or service. Ofwat's guidance expects incumbents to allocate a portion of common costs when estimating their avoided costs.

Our indirect costs tend to be head office functions such as legal and human resources. It is not always possible to find an appropriate cost driver for these activities as they do not obviously change with the volume of water supplied, with the number of properties or with network length. In most cases we have chosen to express them as £/property figures.

As with direct costs, we budget for and monitor indirect costs through a system of cost centre codes. However, our cost centres for indirect costs tend to be organised at departmental level as opposed to being activity based, (because of the nature of indirect costs.) We can extract indirect costs according to the principal activity or service accounted for in each of our indirect cost centres to identify common costs for inclusion in on-site ongoing costs.

Most of our indirect costs are labour costs. Therefore, we have allocated costs to each business segment (retail, water resources, raw water distribution, water treatment and treated water distribution) according to the number of Full Time Equivalent employees (FTEs) in each segment to determine the share of indirect costs that could be included within the on-site ongoing costs. Based on this approach to indirect cost allocation, 51% of indirect costs can be associated with treated water distribution. Expressed as a £ per property figure, we estimate indirect common costs as £20.92 per property. The derivation of our result is provided in Table 4.

Table 4: Indirect operating costs

Activity / Service	Cost driver	Avoided cost 2025/26 £/property
Human resources, legal , finance/procurement + other head office functions	Number of FTEs treated water distribution	7.86
Regulatory reporting and compliance , Ofwat licence fees	Number of FTEs treated water distribution	1.02
Management costs (not included elsewhere)	Number of FTEs treated water distribution	2.28
External consultancy (not included elsewhere)	Number of FTEs treated water distribution	0.00
IT systems & development	Number of FTEs treated water distribution	3.54
Health and safety	Number of FTEs treated water distribution	0.36
Insurance	Number of FTEs treated water distribution	1.96
Premises & Utilities + Estates management	Number of FTEs treated water distribution	2.43
External audit / accountancy costs	Number of FTEs treated water distribution	0.00
Working Capital	Average bill size	1.47

Total	Number of properties	**20.92**

3.4 Capital maintenance costs

Capital maintenance expenditure relating to capital assets and infrastructure on NAV sites is the investment needed to renew and replace on-site assets as they come to the end of their useful lives. As NAVs, rather than us, carry out and finance these replacements, it represents an avoided cost for us.

Since NAV sites are typically new housing developments with newly constructed infrastructure assets, those assets are not likely to need replacement for some years because the assets are new and have their service life ahead of them. Replacement needs are only likely to materialise over time as assets begin to deteriorate. The future profile of capital maintenance expenditure for any individual NAV site is likely to be uneven with replacement outlay in future years, but little in the years immediately ahead. Therefore our approach to reflecting avoided on-site ongoing costs for capital maintenance needs is to annualise the effects of uneven replacement requirements upon bulk supply charges, as follows.

We determine the on-site assets that we would have constructed to supply NAV sites, based on our usual design and service standards[9]. We estimate the replacement costs for on-site assets from our published schedules of new connection charges. Our published schedules are reflective of our costs as they are built from the competitively tendered and procured rates we pay our contractors, plus our overheads. We assume that on-site assets depreciate in a straight line until the end of their useful lives, at which time they will be replaced, like for like, with modern equivalents. We use our normal depreciation lives to estimate the expected useful life of the assets. In this way it is possible to project the long term capital maintenance requirements of the on-site assets.

We calculate an annuity by working out what series of equal annual payments would have the same present value as the series of future replacement expenditures expected. We measure this over the period up to the longest asset life. In other words, we are converting the expected profile of future maintenance expenditures into a series of equal annual charges over the period up to the service lifetime of the longest-lived asset. In this way, as shown in Table 5, we estimate that the annual avoided cost for capital maintenance is £8.25 per property.

Table 5: Capital Maintenance - Annuity

Activity / Service	Capital Maintenance Annuity 2022/23 £/property/year	Capital Maintenance Annuity 2023/24 £/property/year	Capital Maintenance Annuity 2024/25 £/property/year	Capital Maintenance Annuity 2025/26 £/property/year
Communication pipes	0.14	0.20	0.20	0.16
On site mains	0.41	0.88	1.18	0.82
Customer meters	2.01	2.01	2.52	2.31

[9] NAVs may actually construct different assets to serve the site than the ones we would have constructed. However for our calculation of avoided costs, we consider it correct to build into the deduction for capital maintenance costs, the costs that we would have expected to incur based on our engineering solution, because these are reflective of the costs being avoided by us.

Customer boundary boxes	2.05	2.05	2.40	1.78
Bulk meter & space[10]	0.00	0.00	0.00	0.00
Other	2.35	2.14	3.16	3.30
Total	**6.97**	**7.28**	**9.47**	**8.39**

3.5 Discount rate

As our calculation of avoided capital maintenance costs is based on annuitising expected capital maintenance expenditures over the lifetime of the assets, we need to set a discount rate for this purpose. The starting point for our discount rate is the wholesale weighted average cost of capital determined[11] for our 2025-30 price controls, 4.03% (real CPIH basis). We adjust this by making the same modifications to the incumbent WACC as published by Ofwat in its 2018 guidance on bulk charges for NAVs, as follows:

- Notional gearing of 50%
- Uplift to asset beta of 15bp
- A tax rate of 10%

With these adjustments, we calculate an adjusted discount rate, 4.65% real, on a CPIH stripped basis. We use this rate to discount capital maintenance expenditures and calculate the appropriate annuity for on-site ongoing cost deduction. The derivation of our 4.65% result is provided in Table 6.

Table 6: Derived NAV Weighted Average Cost of Capital

Item	Final Determination 2024 Incumbent WACC	Derived NAV WACC
Total market return	6.83%	6.83%
Real risk-free rate	1.52%	1.52%
Equity risk premium	5.31%	5.31%
Notional gearing	55%	50%
Asset beta	0.335	0.486
Debt beta	0.10	0.10
Equity beta	0.59	0.59
Cost of equity	5.10%	6.15%
Ratio embedded/new debt	76%	76%
Cost of new debt	3.74%	3.74%
Cost of embedded debt	2.77%	2.77%
Allowance for fees	0.15%	0.15%
Cost of debt	3.15%	3.15%
WACC/Discount rate	**4.03%**	**4.65%**

4. Return on capital

[10] This is zero as we provide and maintain the bulk meter, so there is no avoided cost for this asset
[11] PR24 final determinations: Aligning risk and return - allowed return appendix - Ofwat

4.1 Regulatory considerations

In its May 2018 guidance, Ofwat suggested that incumbents should deduct an appropriate level of return on on-site assets, and depreciation of the on-site assets, to reflect the financing costs that incumbents have avoided due to NAV entry. In its report, CEPA notes that with changes to the income offset for English incumbents from 1st April 2020, which mean incumbents' on-site assets are funded by developers, and if maintenance costs are incorporated into the avoided ongoing costs element, the rate of return element will no longer apply to these incumbents. CEPA also suggests an additional allowance could be made to ensure a NAV that is equally efficient is able to earn a profit margin, and to reflect wholesale operating risks to which it is exposed.

Ofwat confirm that changes to the income offset for English incumbents mean that developers now fully fund the cost of on-site assets. They go on to say that for this reason, English incumbents should no longer include a deduction through the rate of return element because the incumbent no longer avoids these costs. Regarding the additional allowance suggested by CEPA, Ofwat expect that in principle, this should reflect the operational risk experienced by NAVs to operate on-site assets which the incumbent has avoided. Ofwat also say that use of a discounted cash flow approach where an adjusted return is used as the discount rate for an average annuity, may be an appropriate way to reflect this.

4.2 Our approach

As we are incorporating capital maintenance costs in our avoided on-site ongoing costs elements (see 3.4 and 3,5 above), and in accordance with regulatory guidance, we are no longer including the rate of return element in our bulk supply charges calculations[12].

However, in our NAV bulk supply charges effective from 1st April 2022 onward we are also using the adjusted discount rate, 4.65% in the average annuity for avoided capital maintenance costs, to reflect operational risks, over and above the return available to incumbents.

5. Other considerations

5.1 Leakage adjustment

Usually, we measure the water we supply to NAVs at the boundary of the NAV site using a bulk meter. We used to charge NAVs for the provision of the bulk meter(s) however we have now discontinued this and we provide, maintain and operate bulk meters at our expense. As we charge for bulk water based on bulk meter readings, we need to account for the difference in the billable volume at the bulk meter compared to the aggregate billable volume at NAV customers' meters. The difference arises due to losses on the NAV network, such as leakage, and other items such as unbilled water use and water used for fire-fighting.

Our approach is to evaluate the difference as a percentage leakage adjustment, applying this to the bulk supply tariff as a percentage reduction in volumetric wholesale charges. As well as accounting for water losses between the bulk meter and customers' meters, this approach

[12] The rate of return element was included in our NAV bulk supply charges in 2019/20 and 2020/21.

also provides incentives to NAVs towards leakage control since it exposes NAVs to the costs of losses in excess of our leakage adjustment factor.

To estimate the leakage adjustment factor, we have estimated losses on new developments that we operate and have benchmarked against other water companies' who have published their estimates of percentage losses in their NAV charging documents. Accordingly, we estimate percentage losses to be 3% and note that this is similar to the typical rate, 2-3% published in the CEPA report.

We apply the leakage cost adjustment factor to the volumetric rate component of our tariff, as we consider the appropriate cost driver for distribution losses to be the volume of water delivered.

5.2 Site specific considerations

The charges and information we publish relate to the typical case where we provide a bulk supply at the NAV site boundary. It is possible that NAV projects may differ from the typical case. Some examples include:

- Where there is no bulk meter at the NAV boundary, in which case we would not need to apply the leakage adjustment as NAVs would be billed on the aggregate volume recorded on customers' meters, not based on a bulk meter reading
- Where the NAV installs infrastructure that results in materially lower consumption per property than usual, for example because the site features on-site resources, grey water recycling, or rainwater harvesting systems. In this case (and provided the water efficiency systems remain in working order) it may be appropriate to reflect in NAV bulk supply charges the avoided long-run incremental costs of water resources in addition to the usual deductions for on-site ongoing costs.

Where there are unusual site-specific circumstances, we would consider those circumstances and if necessary, produce a bespoke bulk supply price reflecting the differences in avoidable costs between the unusual site and a more typical site.

5.3 VAT

All charges are subject to the addition of any Value Added Tax chargeable.

6. Bulk supply tariffs

6.1 Overall

This section describes how we structure our bulk supply tariffs. Ofwat's guidance requires that incumbents consider the right balance of fixed and volumetric elements in their bulk charges for new appointees. They must also consider the impact of their bulk charges on environmental outcomes. Ofwat say that this might be addressed through greater reliance on volumetric charges and that it may be appropriate for the avoided cost element to be estimated on a per property basis to set the right environmental incentives for new appointees.

6.1 Our approach

As noted in the sections above, to estimate avoided costs we have used appropriate cost drivers, typically £/property and £ per metre of main. We must consider how to structure our NAV tariff as between fixed charges and volumetric charges, considering the need to be cost reflective in application of avoided costs alongside meeting environmental objectives.

We have concluded that the best way to achieve these dual objectives simultaneously is to set a two-part tariff.

The first part is a credit against fixed charges, effectively a negative fixed charge made by deducting from annual fixed charges, the £/property avoided costs (where avoided costs are estimated as described in section 3 above). The negative fixed charge guarantees that the NAV is credited with the value for avoided costs based on the number of properties within its sites, no matter how much water is used. If avoided costs were reflected instead in the per cubic metre rate, this could disincentivise NAVs from water efficiency as the total benefit from avoided costs would shrink as the amount of water being used diminished.

The second part of the tariff is the volumetric rate. We set this equal to our standard published volumetric rates, after applying the percentage reduction for leakage adjustment factor (see 5.1 above). The volumetric part ensures that NAVs incur increments to their total bill for each successive unit of water used, retaining environmental incentives. Table 7 sets out the tariffs for 2025/26.

Table 7: Affinity Water NAV Bulk Supply Tariff 2025/26

Fixed Charge NAV Tariff	Units	2023/24	2024/25	2025/26
Fixed Charge12/15mm meter	£/year	16.80	17.76	20.88
Fixed Charge19/21mm meter	£/year	30.20	32.04	37.68
Fixed Charge 25mm meter	£/year	30.20	32.04	37.68
Fixed Charge 30mm meter	£/year	30.20	32.04	37.68
Fixed Charge 40mm meter	£/year	30.20	32.04	37.68
Fixed Charge 50mm meter	£/year	30.20	32.04	37.68
Fixed Charge 75/80mm and larger	£/year	120.00	127.20	149.52
Fixed Charge Credit per NAV property (Credit per property)	£/prop	38.86	44.35	49.96
Volumetric NAV Tariff	**Units**	**2023/24**	**2024/25**	**2025/26**
Volumetric Charge Central Region	£/m3	1.0608	1.1236	1.3209
Volumetric Charge East Region	£/m3	1.8080	1.8823	2.2129
Volumetric Charge Southeast Region	£/m3	1.9240	2.0031	2.2129

7. Charges for New Infrastructure

Where a NAV requires us to make a connection from our existing mains to the agreed point(s) of connection with the NAV's infrastructure, we may make charges for this new infrastructure. We reflect new infrastructure charges in the bulk supply agreements we enter with NAVs in two broad categories:

- capital contributions that NAVs must make in respect of site-specific infrastructure and,
- infrastructure charges, which are capital contributions in respect of network reinforcement.

7.1 Site Specific Charges

Site specific charges are payable where we incur capital costs to carry out site-specific work for the purposes of providing new or additional water supply. We charge NAVs for site-specific works that we undertake at their request, using the same charges as are set for such works under our New Connection Charging Arrangements (NCCA) new connections charging. Site specific charges are concerned with the costs to us of providing site specific infrastructure, usually pipes and fittings that take water from our existing water mains to the point of connection to the NAV's infrastructure, typically at the NAV site boundary.

7.1.1 Pre-Development Enquiries

We want to engage with our developer customers at the earliest opportunity, to understand how we can support growth in the Affinity Water region and ensure we have the infrastructure and supply available at the right time for any given development.

We therefore actively encourage developer customers to request a pre-development or point of connection enquiry prior to any requisition for new mains, self-lay and / or diversions. Further information on the benefits of such can be found in our latest new connection charging arrangements. To encourage the use of these services, both the pre-development and point of connection enquiries are free of charge (FOC).

For NAV customers, we encourage applications to be made under 'NAV SSL & Pre-Development' on our portal. This is a specifically designed and tailored application for NAV customers who wish to understand a budget estimate for their connection. To encourage the use of this service and align it to our latest new connection charges arrangements, this also is free of charge.

Upon receipt of a NAV SSL and Pre-Development application, we will review your enquiry and assess the point of connection into our existing network. We will prepare a site status letter and a report outlining the estimated cost of constructing the connection and offsite water mains for your development. This report can be referenced when converting your application to a NAV Bulk Supply which will subsequently incur fees as outlined in this document.

Table 7.1.1: NAV SSL & Pre-Development Fee			
Ref	**Item**	**Unit**	**£ Excluding VAT**
7.1.1	NAV SSL & Pre-Development Fee	per enquiry	0

7.1.2 Application Fee

Table 7.1.2: NAV Bulk Supply Fees			
Ref	**Item**	**Unit**	**£ Excluding VAT**
7.1.2	NAV Bulk Supply Application Fee	per application	485

The application fee covers the costs we incur to review and acknowledge the NAV's request, checking to ensure we have all the relevant information, preparing a cost advice and issuing a response.

When a NAV requests us to provide a new bulk supply connection, an application charge is incurred and liable to pay by the applicant upon completion and submission of the application.

Please note that this does not cover the cost of design which is charged in addition to the application fee. If you have previously submitted a NAV SSL and Pre-Development enquiry for your development, we will review any relevant documentation associated with that enquiry.

7.1.3 Design Fee

Table 7.1.3: Design Fees					
Ref	**Item**	**Unit**	**£ Excluding VAT**		
			Design Fee	**Minor Design Change**	**Major Design Change**
7.1.3	NAV Design Fee	per connection	983	0	492

To provide a cost advice for the new bulk supply connection, we will need to prepare a design of the infrastructure needed to take water from our existing mains to the point of connection to the NAV's infrastructure.

The NAV design fee is payable at the time you submit your application. We will start work on your design when we have received payment of the applicable design fee(s).

We understand that your requirements may change after we issue a design and cost advice to you. If we have prepared the design(s) for your development and you inform us of a change in your requirements for the development, we may need to issue you with a revised design and there may be a charge for this, depending on whether it is a minor change or major change. This is defined below.

A minor design change is:

a. a change to the site boundary; or
b. a change to the size of the water main; or
c. adding, removing or changing the location of the communication pipes.

We understand the complexities and nature of the work involved with managing development sites, therefore as outlined in Table 8.3 above, these changes are completed free of charge.

A major design change is:

a. a change of route or layout of the water mains on site; or
b. a change to the point of connection of new water mains to the existing network; or
c. a change to the overall water demand of the site; or
d. changing the phasing plan.

For the above changes, we will request a re-design fee which equates to 50% of the initial design fee, as outlined in Table 7.1.3 above.

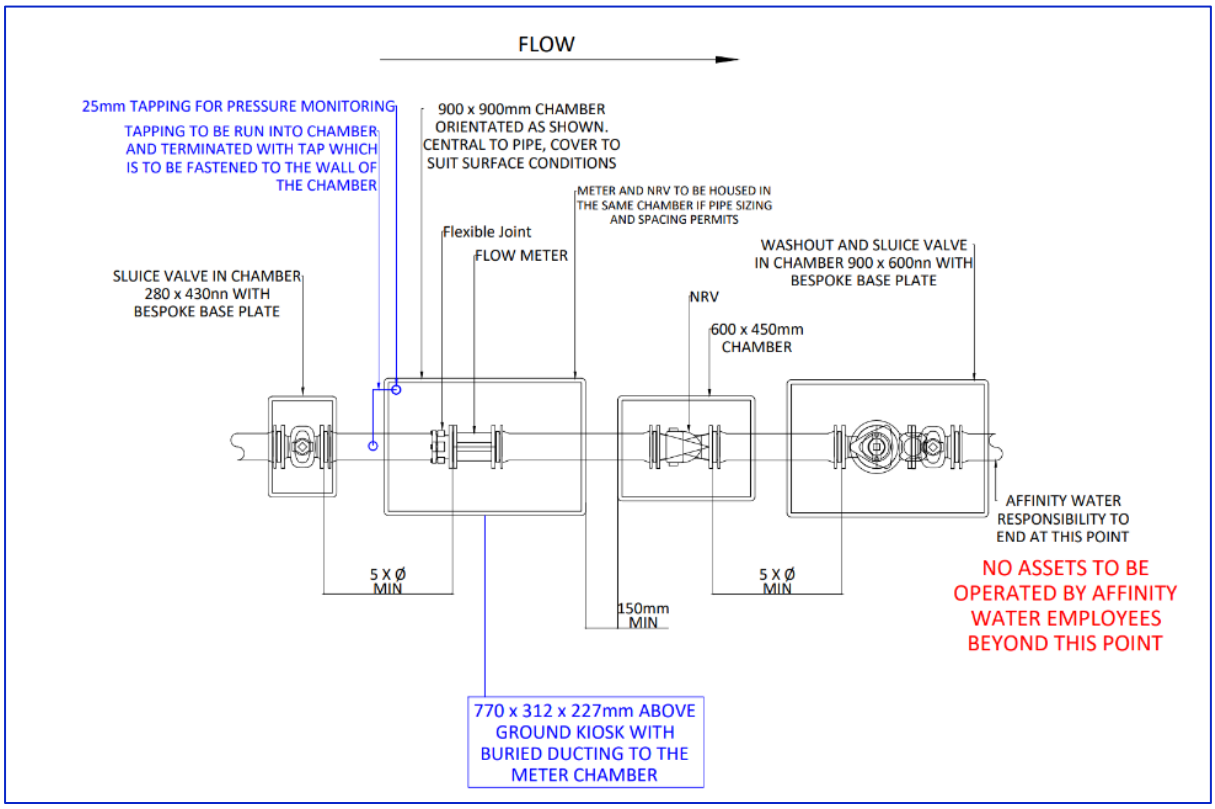
Where requirements of the development change once we have begun construction, the NAV is required to submit a capacity check request. Upon request, the cost of a redesign fee, as outlined above, will be charged and is due prior to us completing additional works. We will start work on your capacity check when we have received payment. This fee covers the cost for triage, modelling and an updated Bulk Supply Agreement, where required.

If the capacity check results in no required change to the initial connection designed for your development, we will issue you an updated Bulk Supply Agreement. No change will be required to the under or completed construction of your bulk supply connection.

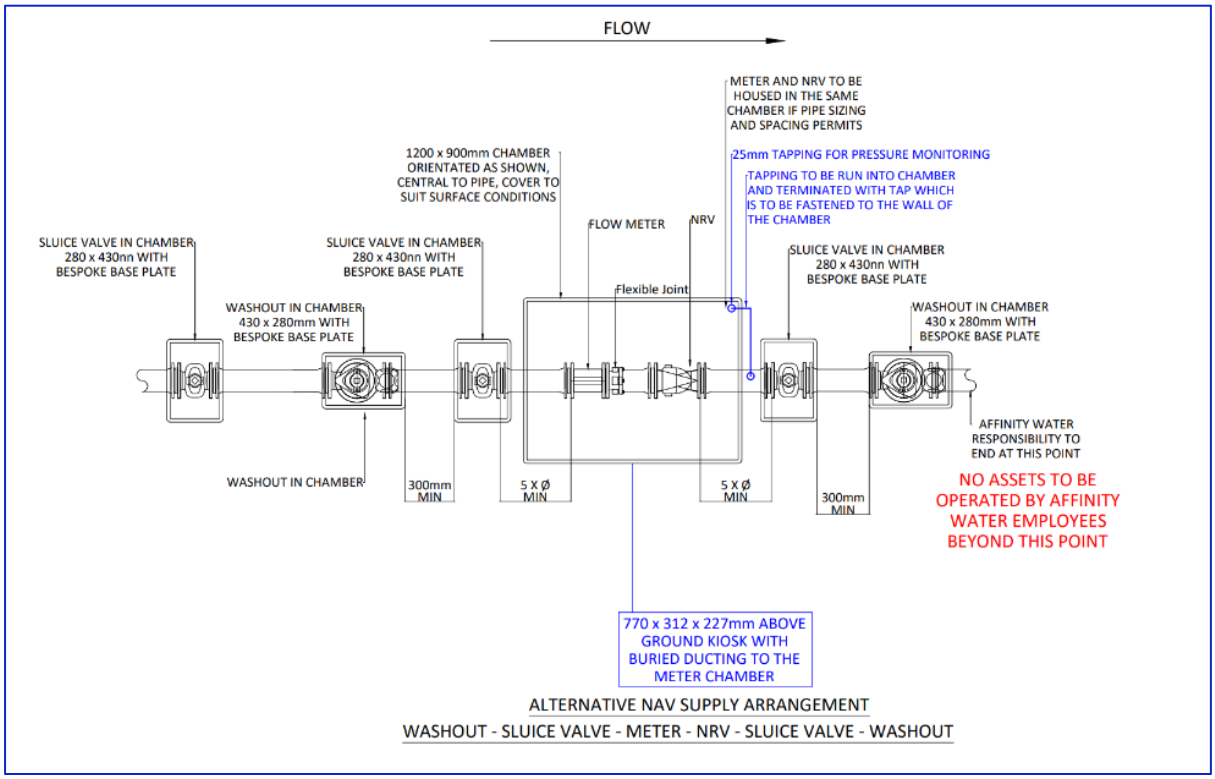
Where the capacity check results in the under or completed construction of your bulk supply connection not suitable to supply the additional load, we will require the NAV to make a new NAV application. This application will incur a standard application fee, as outlined above, and a redesign fee. This is different from a standalone application, as we understand a redesign fee will already have been paid under the original application.

We include below a view of our standard NAV Bulk Supply arrangements, dependant on the size and requirements of the applied development.

NAV Bulk Supply Standard Arrangement - For NAVs which have up to 100 plots.

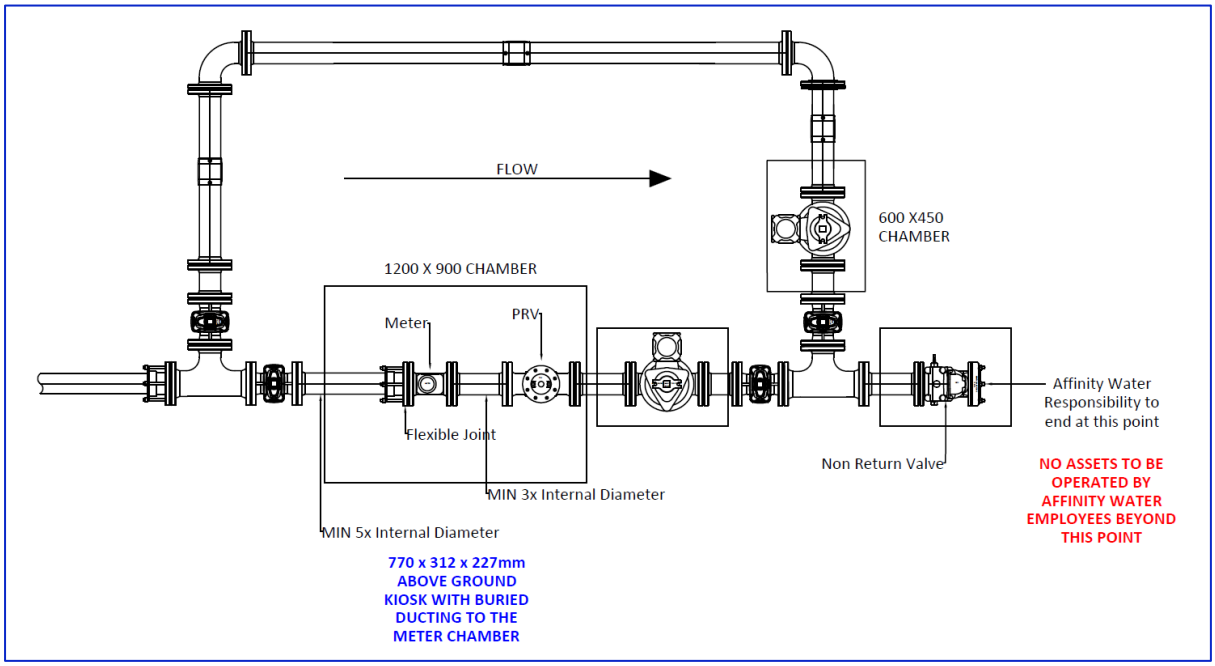


Alternative NAV Bulk Supply Standard Arrangement
For NAVs which have 101-599 plots and do not require a pressure reducing valve.



NAV Meter Bypass Standard Arrangement

For NAVs which have over 600 plots or require a pressure reducing valve.



7.1.4 Administration Fee

Table 7.1.4: NAV Administration Fees			
Ref	**Item**	**Unit**	**£ Excluding VAT**
7.1.4	NAV Administration Fee	per application	1,087

When a NAV requests us to provide a bulk supply, it is liable to pay a NAV administration fee.

The mains administration fee recovers our costs of planning, organising, project managing, inspecting and commissioning of the water main and works necessary to connect to our water main.

7.1.5 Charges for Laying Water Mains

Our charges for laying mains between our existing water network and the point of connection to the NAV's infrastructure, are reflected in Table 8.5 of the new connection charging arrangements.

7.1.6 Charges for Installing Accessories

Our charges for installing additional accessories such as valves, fire hydrants and washouts for NAVs are reflected in Tables 8.5 and 8.6 of the new connection charging arrangements. Affinity Water do not pass the cost of bulk meters onto NAV customers.

As a standard approach, we design washouts to be constructed every 100m, however, this is subject to change upon our review of your development.

7.1.7 Charges for Connecting Mains to Our Network

Our charges for connecting the mains we have constructed between our existing water network and the point of connection to the NAV's infrastructure, to our existing water supply system, are reflected in Table 8.7 of the new connection charging arrangements.

Where required and relevant, additional charges under Section 8.8 pertaining to trial holes and linestops may also be charged.

Where other charges may be relevant to the undertaking of construction and delivery of works against a NAV Bulk Supply, we will refer to the latest new connection charging arrangements. Liable charges may include but are not limited to traffic management and miscellaneous charges.

7.2 Infrastructure charges

Infrastructure charges recover contributions towards network reinforcement costs that we incur when additional demands are placed on our network by new connections. Infrastructure charges do not relate to the costs of reinforcing, upgrading or otherwise developing existing infrastructure to address pre-existing deficiencies in capability or capacity.

Infrastructure charges are payable for the connection (whether directly or indirectly) of any premises (not previously connected to a supply of water, provided by us or another water undertaker) using water for domestic purposes, to our existing network or mains.

This will include cases where a site is being developed or redeveloped by means of conversion or extension of an existing building or buildings, resulting in a significant increase in demand. The infrastructure charge is additional to any charges for site specific works, for example providing a water main to take water from our existing mains to the NAV site boundary.

We will recover infrastructure charges from the NAV. The infrastructure charges will be calculated in the same way as infrastructure charges payable by other new connection customers. Typically, for NAV developments the standard water infrastructure charge will apply.

The infrastructure charge is a £ per property charge based on dividing our network reinforcement costs over a five-year period, by the total number of new properties connected over the same period. The 2024/25 charge can be found in the table below.

Table 7.2: Infrastructure Charge	£ Excluding VAT

Charging period	2023/24	2024/25	2025/26
Standard water infrastructure charge	434	589	601

Further details of our infrastructure charge can be found in Section 17 of our new connections charging arrangements.

7.3 Water Efficiency

We will apply a discount to the infrastructure charge for new homes where there is evidence of water efficiency design to a standard of 110 litres (or less) per person per day. The discount will be -**£589** per infrastructure charge.

Qualification for this discount will only be approved on review and acceptance of the submission of accurate water efficiency form(s) illustrating the intention to install water efficient fittings. These must be provided at the time of application submission and must be representative of all plots anticipated to be water efficient.

From 1 April 2025, the Water Efficient credit will no longer be available. Applications accepted during the 2024/25 charging year, or applications under our transitional arrangements will be honoured, provided that the criteria are met. Any applications accepted under the 2025-26 charging arrangements will not qualify for the Water Efficient credit but may be eligible for the Environmental Incentive payment (section 7.4).

For more information, please refer to our latest new connections charging arrangements.

7.4 Environmental Incentives Common Framework

Effective from 1 April 2025, Ofwat has introduced the Environmental Incentives Common Framework (EICF) to promote water efficiency in new developments.

Customers accepting a cost advice in the 2025-26 charging year will pay the Environmental Component charge, for each water service provided to a household property connected to the network, set at **£127**.

We will provide the Environmental Incentive payment to customers demonstrating compliance with our relevant qualifying criteria of water efficiency. Our payment mechanism is based on a three-tier system, alongside a bespoke incentive, shown in table 7.5. Payment will be paid to those qualifying in the relevant charging year when the connections are made to our network.

Table 7.4: Environmental Incentives	£ Excluding VAT
Charging Period	**2025/26**
Environmental Incentive Basic - Water	-127
Environmental Incentive Enhanced - Water	-590

Environmental Incentive Premium - Water	-2,163
Environmental Incentive Water Neutral - Water	-2,880

For more information, please refer to our latest new connections charging arrangements[13] in section 18.

[13] https://www.affinitywater.co.uk/docs/developer/2025/2025-26-New-Connections-Charging-Arrangements.pdf

Appendix 1 Worked Example of Relevant Wholesale Tariff

This example assumes a NAV has 351 properties over two sites in our area of operation:

- A site in our Central region, consisting of 250 residential properties and one business property (with a 25mm meter) Each residential property has an average annual demand 120 m^3/year, and the business property 500m^3/year.
- A site in our East region with 100 residential properties, each using 85m^3/year.

The relevant wholesale tariff is the wholesale charge, built up from our published wholesale tariff rates (see section 2), that would apply if we, rather than the NAV supplied the end customers.

Appendix 1 Table 1 – Relevant wholesale tariff

Item	Charge Multiplier	Fixed Charge (£/year)	Revenue (£)
No. of residential sites (Central)	250	20.88	5,220.00
No. of businesses sites (Central)	1	37.68	37.68
No. of residential sites (East)	100	20.88	2,088.00
Subtotal fixed charges			7,345.68
Item	**Charge Multiplier**	**Volumetric rate (£/m^3)**	**Revenue (£)**
Volumetric demand residential (Central) (m^3)	30,000 (250 properties @ 120m3 each)	1.3618	40,854.00
Volumetric demand business (Central) (m^3)	500	1.3618	680.90
Volumetric demand residential(East) (m^3)	8,500 (100 properties @ 85m3 each)	2.2813	19,391.05
Subtotal volumetric charges	-	-	60,655.95
Total			**68,001.63**

Appendix 2 Worked Example of Bulk Supply Tariff

Using the same example as Appendix 1, we consider a NAV with 351 properties, over two sites in our area of operations:

- A site in our Central region, consisting of 250 residential properties and one business property (with a 25mm meter) Each residential property has an average annual demand 120m³/year, and the business property 500m³/year.
- A site in our East region with 100 residential properties, each using 85m³/year.

Our approach to setting bulk tariffs, based on setting a negative fixed charge (to credit avoided on-site ongoing costs), and a volumetric rate (to recover our costs and preserve environmental incentives) is described in part 6. Table 1 below sets out a worked example.

Appendix 2 Table 1 – Bulk supply tariff

Item	Charge Multiplier	Fixed Charge (£/year)	Revenue (£)
Subtotal fixed charges (Worked example 1)	351	20.88	7,328.88
Deduction for avoided direct operating costs (£/prop)	351	-20.65	-7,248.15
Deduction for avoided indirect operating costs (£/prop)	351	-20.92	-7,342.92
Deduction for avoided capital maintenance costs (£/prop)	351	-8.39	-2,944.89
Negative Fixed Charge		**-29.08**	**-10,207.08**

Item	Charge Multiplier	Volumetric rate (£/m³)	Revenue (£)
Volumetric demand residential (Central) (m³)	30,000 (250 properties @ 120m3 each)	1.3209	39,627.00
Volumetric demand business (Central) (m³)	500	1.3209	660.45
Volumetric demand residential (East) (m³)	8,500 (100 properties @ 85m3 each)	2.2129	18,809.65
NAV Volumetric Charge	**39,000**		**59,097.10**
Total NAV Charge			**48,890.02**

In this example, the NAV bulk supply tariff would comprise a negative fixed charge -£10,207.08 per year, and a positive volumetric rate £59,097.10 so the bulk supply charges are £48,890.02. This is 28.1% lower than the relevant wholesale starting point, £68,001.63 from worked example 1.

Appendix 3: Consistency with Bulk Supply Guidance

Considering Ofwat's guidance published in January 2021, we provide information below on how we have updated our approach to achieve consistency with each relevant guideline.

Guidance	How we meet the guidance
an expectation that incumbents use **menu-based approaches** so that charges reflect the actual mix of properties in the relevant starting point, making bulk charges for new appointees more cost reflective and accessible to new appointees;	We use the menu-based approach, by reflecting the actual number and mix of properties within NAV appointments where we are the bulk supplier. We approach NAVs to obtain accurate estimates of the number, types of properties and estimated consumption for this purpose
a clarified approach to **large user tariffs**, ensuring all incumbents adopt the wholesale minus approach for at least all new sites while recognising transitional arrangements may be needed for existing sites;	We do not use the large user tariff for the relevant wholesale tariff for any sites. We would only do so in the case where a NAV site contained large customers that would qualify for our large user tariff.
a preference for **bottom-up cost estimation approaches** when incumbents calculate their avoided costs to promote the development of more cost-reflective charges;	We have built our estimates of avoided costs by studying our costs at cost centre level. Whilst this may not represent a fully bottom-up approach we are actively participating in industry working groups to develop bottom-up costing approaches. When this work is concluded we will review our approach and adjust it as needed. We have used the CEPA report and industry template to identify costs that are capable of being avoided and have re-considered the appropriateness of cost drivers. In all cases we are now using the number of properties and the length of mains as cost drivers, in line with CEPA's recommendations.
a clarification that **indirect costs** that are avoided by incumbents due to the entry of a new appointee should be included in the estimation of avoided costs;	We have included a proportion of our indirect costs, as allocated to the treated water distribution activity. We have allocated indirect costs according to proportions of FTEs employed in each business segment (retail, water resources, raw water transport, treatment and treated water distribution).

Guidance	How we meet the guidance
a revised approach to the **rate of return element**, reducing the level of prescription on providing an appropriate allowance for new appointees, which may include the use of an adjusted rate of return when estimating average annuities;	We have used an adjusted rate of return approach to estimating the annuities required to finance capital maintenance expenditures.
a new principle which sets out that we expect incumbents to consider the impact of how they structure their bulk charges on **environmental outcomes**;	We re-considered the structure of our bulk supply charges and from 2021/22 charges, moved to an approach where we credit NAV bills with avoided costs, to ensure that they receive the avoided costs in full even if through water efficiency, they can limit consumption within their appointments. We combine this 'negative fixed charge' with volumetric charging on usage to retain environmental incentives.
additional detail on the approach to avoided surface water drainage and highway charges.	Not applicable, as we are not a wastewater company

Appendix 4: Wholesale NAV Minus Framework

New Appointments and Variations Minus Framework - Affinity Water Charges February 2025

NAV SUB-GROUP COSTS CHECKLIST		LIST OF ACTIVITIES AVOIDED		2025/26 TOP DOWN, MIDDLE UP/DOWN AND JOB COST BASIS								
				Operating Costs	Capital Maintenance	Return	Rates	Total	Distribution System Element	Cost Type	Cost Driver	Customer Allocation
	Water Direct Costs	**WATER**		£41.57	£8.39	£0.00	£0.00	£49.95				
		Direct Costs		£20.65	£8.39	£0.00	£0.00	£29.04				
		Network Maintenance		£18.60	£8.39	£0.00	£0.00	£26.99				
WD1	Routine and adhoc water quality sampling. Regulatory monitoring at every site irrespective of size	Unplanned maintenance - Costs associated with the inspection, cleaning, repair and reactive renewal of on-site water distribution mains and costs associated with the repair and reactive renewal of pipes that connect the water main with each property incl. emergency response PLUS Costs of detecting and solving on-site leakages	WD9, WD10, WD18, WD20	£18.60				£18.60	Both	Middle up/down	Pipe length - average mains per connection	per property
WD2	DWI - Drinking Water Safety Planning (Water Supply (Water Quality) Regulations 2016 - Regs 27 & 28). Monthly water quality reporting, submission of annual data returns.	On-site planned maintenance of revenue meters and meter spaces	WD11, WD14		£4.10			£4.10	Downstream	Bottom up / Job Cost	No of properties	per property
WD3	Monitoring and auditing of Laboratory performance - Water Supply (Water Quality) Regulations 2016 - Regulation 16	On-site planned maintenance of on site mains & communication pipes	WD8		£0.99			£0.99	Downstream	Bottom up / Job Cost	Pipe length	per property
WD4	Water Fittings inspections - enforcement of Water Supply (Water Fittings) Regulations 1999	On site planned maintenance other	WD8		£3.30			£3.30	Downstream	Bottom up / Job Cost	No of properties	per property
WD5	Supplementary water quality monitoring e.g. Response to customer contacts.	Drinking Water Quality & Regulatory Compliance		£2.05	£0.00	£0.00	£0.00	£2.05				
WD6	Additional flushing/sampling due to poor performance and/or condition of assets owned and maintained by the upstream incumbent	Regulatory water quality sampling, DW Safety Planning, quality assurance of laboratory, regulatory reporting and stakeholder / public health liaison	WD1, WD2, WD3, WD5,WD7	£1.69				£1.69	Both	Middle up/down	No of properties	per property
WD7	Local Authority and Public Health England Liaison and updates.	Enforcement / operation of Network Regulations	WD4	£0.36				£0.36	Both	Middle up/down	No of properties	per property
WD8	Planned Maintenance - e.g. flushing activities											
WD9	Unplanned Maintenance											
		Indirect Costs		£20.92	£0.00	£0.00	£0.00	£20.92				
WD10	Emergency Response	Human resources, legal , finance/procurement + other head office functions	C1	£7.86				£7.86	Both	Middle up / down	No of FTEs	per property
WD11	Meter maintenance / replacement	Regulatory reporting and compliance , Ofwat licence fee	C2	£1.02				£1.02	Both	Middle up / down	No of FTEs	per property
WD12	Meter accuracy testing costs	Management costs (not included elsewhere)	C5	£2.28				£2.28	Both	Middle up / down	No of FTEs	per property
WD13	Meter reading	External consultancy (not included elsewhere)	C6	£0.00				£0.00	Both	Middle up / down	No of FTEs	per property
WD14	Battery replacement	IT systems & development	C7	£3.54				£3.54	Both	Middle up / down	No of FTEs	per property
WD15	Arrangements for sharing meter data	Health and safety	C11	£0.36				£0.36	Both	Middle up / down	No of FTEs	per property
WD16	Standby arrangements	Insurance	C12	£1.96				£1.96	Both	Middle up / down	No of FTEs	per property
WD17	Incumbent bulk metering costs	Premises & Utilities + Estates management	C15	£2.43				£2.43	Both	Middle up / down	No of FTEs	per property
WD18	Financial penalties for GSS failure - Also GSS payments made to customers as a consequence of upstream incumbent failure.	External audit / accountancy costs	C23	£0.00				£0.00	Both	Middle up / down	No of FTEs	per property
WD19	Network losses / unaccounted for water at a direct wholesale cost.	Working Capital	C25 & C26	£1.47				£1.47	Both	Bottom up / Job Cost	Average bill size, cost of debt and period of credit	per property
WD20	Activities to monitor and control leakage/unaccounted for water											
WD21	Wholesale cost for 'free' water provided under social tariffs											
WD22	Offsite network maintenance / repair (No income if NAV tariff assumes connection at boundary)											
WD23	Water resource planning and drought plans											
		Other		£0.00	£0.00	£0.00	£0.00	£0.00				
								£0.00				
		Network Losses				**Volumetric Tariff abated**						
		Adjustment factor to volumetric rates for leakage between bulk meters and customers' meters						3%	Downstream	Top down	per m3	Adjustment to volumetric rate

	Central Costs
C1	Finance/ HR / Legal and IT staff resource costs
C2	Regulatory Costs - Licence fees, regulatory reporting and compliance
C3	NAV application and administration costs.
C4	End customer billing and customer service costs
C5	Management costs
C6	External consultancy
C7	IT systems and development
C8	Travel and subsistence
C9	Vehicle fleet costs
C10	Plant, tools and equipment
C11	Health and Safety
C12	Insurance
C13	Employer pension
C14	Employer NI
C15	Premises and utilities
C16	Telecommunication costs
C17	Business Rates
C18	Recruitment
C19	Training and Development
C20	Bank charges incl. those relating to customer income collection
C21	Customer bad debt and debt recovery costs.
C22	Revenue protection and vaids management.
C23	External audit / accountancy costs
C24	Asset Financing Costs
C25	Working Capital
C26	Incumbent Working Capital
C27	Marketing, Branding and Customer Relations
C28	Billing systems costs
C29	Billing and other postage / stationery costs
C30	Cost of Debt

	Colour Code
	Direct Allocation
	Grouped Allocation
	Grouped Allocation
	Grouped Allocation
	Grouped Allocation
	Costs included in activities
	Activities not included in analysis