

9 March 2017

Trust in water

Redrow Homes and Bristol Water

Dispute determined under sections 42 and 30A of the Water Industry Act 1991

Provision of infrastructure to provide a water supply to the former Hewlett Packard site in Bristol

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1. Introduction

A. The complaint

- 1.1 This determination concerns a dispute referred to us on 21 November 2006 under section 42(6) and section 30A of the Water Industry Act 1991 (**the Act**). The dispute is between Redrow Homes (**Redrow**) and Bristol Water Plc (**Bristol Water**) (together **the Parties**) in respect of the amounts that Bristol Water is entitled to recover from Redrow for the provision of requisitioned infrastructure to deliver a water supply to the former Hewlett Packard development in Bristol (**the Site**).
- 1.2 The requisitioned infrastructure consists of:
- a. two water mains which are located outside the boundary of the Site (**the Coldharbour Lane and Filton Road mains**), which feed directly into the Site to provide a water supply from either side of it;
 - b. network reinforcement works (**the Augmentation Works**) constructed to create additional capacity within Bristol Water's water supply network in response to the increase in demand generated from multiple new developments in the north Bristol area (including from the Site);
 - c. a water main that runs through the Site (**the On-Site Spine Main**); and
 - d. several mains that are located on different parts of the Site to which premises on the Site directly connect (**the On-Site Distribution Mains**).
- 1.3 Where appropriate in this determination we refer to the first two sets of requisitioned infrastructure above (the Coldharbour Lane and Filton Road mains and the Augmentation Works) collectively as **the Off-Site Works**, since this infrastructure sits outside of the boundary of the Site. We refer to the final two sets of requisitioned infrastructure above (the On-Site Spine Main and the On-Site Distribution Mains) collectively as **the On-Site Works**.
- 1.4 Redrow has challenged the reasonableness of the various payments that Bristol Water recovered from Redrow prior to the provision of the requisitioned infrastructure (**the Security Deposits**) and the amounts now payable following provision of the requisitioned infrastructure (**the Requisition Charge(s)**).
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1.5 In this document we have determined:

- i. the proportion of overall costs incurred in providing the Coldharbour Lane and Filton Road mains that are attributable to the Site (**Costs of the Coldharbour Lane and Filton Road mains attributable to the Site**);
- ii. the proportion of overall costs incurred in providing the Augmentation Works that are attributable to the Site (**Costs of the Augmentation Works that are attributable to the Site**);
- iii. the reasonableness of the approach taken by Bristol Water in recovering the Security Deposits (**Reasonableness of approach taken to calculate the Security Deposits**);
- iv. the approach that Bristol Water should follow in calculating the level of the Requisition Charge(s) (**Calculation of the Requisition Charge(s)**);
- v. whether Bristol Water is entitled to recover infrastructure charges¹ in addition to the Requisition Charge(s) (**Infrastructure Charges**); and
- vi. the interest rate payable to Redrow on the Security Deposits held by Bristol Water (**Interest payable**).

¹ Described in [Chapter 3](#) of this determination

B. Purpose of this document

- 1.6 This is our final determination of this dispute and it is binding and enforceable in accordance with the provisions of section 30A of the Act.
- 1.7 Before making this final determination we have issued a number of requests for information to gather information necessary for our investigation. We also issued two draft determinations of this dispute, the first on 14 July 2015. Redrow responded to this on 13 August 2015 and Bristol Water responded to this on 28 August 2015.
- 1.8 After reviewing representations from the Parties and receiving further information, we decided to modify our conclusions on certain aspects. As a result, and given the nature of the changes we made, we issued a second draft determination in order to give the Parties an opportunity to comment. Redrow responded to our second draft determination on 1 November 2016 and Bristol Water responded on 18 November 2016.
- 1.9 Details of the Parties' representations on our second draft determination and, where necessary, our response to those representations, are set out in [Chapter 4](#) of this document.

C. Overview of our determination

- 1.10 Our determination, and reasoning, are set out in full in [Chapter 4](#) of this document, but an overview of our main conclusions is set out below.

Costs of the Coldharbour Lane and Filton Road mains attributable to the Site

- 1.11 We determine that Bristol Water acted reasonably in providing the Coldharbour Lane and Filton Road mains as Redrow had requested the provision of two mains, one on each side of the Site.
- 1.12 Although there is additional capacity in the Coldharbour Lane and Filton Road mains which exceeds the Site's actual water demand requirements, all of the capacity provided is nonetheless attributable to the Site and therefore payable by Redrow. This is because the additional capacity cannot be used to serve other sites (and hence the costs of providing it could not be recovered from other developers) and because it is as a consequence of using standard-sized mains.

Costs of the Augmentation Works that are attributable to the Site

- 1.13 We determine that it was reasonable for Bristol Water to seek a contribution from Redrow towards the Augmentation Works since they were, in part, necessary to serve the Site. Moreover, the allocation of costs between new developments (including the Site) and existing customers, is reasonable. We also determine that it is reasonable for Bristol Water to base Redrow's contribution towards the Augmentation Works on the original forecast peak demand requirement from the Site of 28.5 litres per second (l/s). Although the forecast demand has changed over time there does not appear to have been any additional works carried out to cater for any increase in forecast demand.

Reasonableness of approach taken to calculate the Security Deposits

- 1.14 We conclude that it was not unreasonable for Bristol Water to have sought separate Security Deposits for the Off-site Works and the On-site Works given the information available to the company.

Calculation of the Requisition Charge(s)

- 1.15 We determine that Bristol Water should calculate a Requisition Charge for each On-Site Distribution Main separately but the total costs used to calculate each charge should include a proportion of the costs of the Off-Site Works and the On-Site Spine Main, since these elements of requisitioned infrastructure were necessary in consequence of each of the On-Site Distribution Mains.
- 1.16 We determine the combined total of the Requisition Charges payable by Redrow is £267,848 and this is based on the latest cost information available to us. Redrow paid Security Deposit's amounting to £902,855 in total. Therefore a refund of £635,007 is owed to Redrow and should be made within 20 working days of the date of our final determination of this matter.

Infrastructure Charges

- 1.17 Bristol Water is entitled, under sections 142 and 146 of the Act, to recover Infrastructure Charges for the Site in addition to recovering Requisition Charges.

Interest payable

- 1.18 In accordance with section 42(4) of the Act, interest is payable on all of the Security Deposits made by Redrow for every three months for which these security payments have been held by Bristol Water. In calculating any interest due, Bristol Water should apply interest rate(s) in accordance with [Ofwat's webpage on interest rates](#). Bristol Water should pay the refunds and interest due to Redrow within 20 working days of the date of our final determination. Any dispute about the total amount of any interest payable is for the Courts to determine, if Bristol Water and Redrow are unable to agree this amount.

2. Factual background

A. The Parties

Bristol Water

- 2.1 Bristol Water is appointed under the Act to provide water supply services to customers in south-west England. It serves a population of 1.1 million people in an area centred on Bristol.

Redrow

- 2.2 Redrow is a large developer who specialises in constructing residential and mixed use premises. Redrow operates across much of the UK with nine divisions in England, Scotland and Wales.

B. The Site

- 2.3 The Site is located on the Bristol / South Gloucestershire boundary and previously formed part of the Hewlett Packard estate.
- 2.4 In 2004, the then owners of the Site (Hewlett Packard) submitted an application for a development scheme comprising approximately 1,200 dwellings, a district centre including retail and commercial floor space, community facilities and a primary school.
- 2.5 Hewlett Packard sold the Site to Redrow in 2006. Redrow initially proposed to build 1,250 dwellings (1,061 houses and 189 apartments), a commercial/retail area and a school on the Site. The number of premises expected to be constructed on the Site then increased to 1,383 dwellings in autumn 2007 following approval from the relevant planning authority and increased further to 1,400 dwellings in spring 2008. All water demand from the Site was expected to be for domestic usage, including for the proposed areas of business development.

- 2.6 Since acquiring the Site and requisitioning water supply infrastructure from Bristol Water, Redrow has sold parcels of land on the Site to other housing developers. The Site has been split into 8 areas, with the On-Site Distribution Mains requisitioned separately for each area.
- 2.7 The latest total number of premises on the Site (including a nursing home, school, business premises and retirement flats) totals 1039 of which 930 have been constructed by Redrow.

C. The Requisitions

- 2.8 In July 2004, consultants acting on behalf of Hewlett Packard (the owners of the Site at that time) contacted Bristol Water regarding the development of the Site. The consultants submitted preliminary calculations showing that the proposed development on the Site would lead to a peak domestic water demand of 28.5 l/s. This was based on a peak water demand of 18.75 l/s in relation to the 1,250 housing units to be constructed on the Site, and 9.75 l/s in relation to a potential future office development by Hewlett Packard adjacent to the Site².
- 2.9 In March 2005, Bristol Water prepared a document entitled the 'North Bristol Development Strategic Study – Final Appraisal Report' which looked at three options for dealing with increased water demand in the areas of North Bristol and Avonmouth. The report estimated that a wide range of proposed and potential developments in the areas (including the Site) would generate an additional peak demand of 347 l/s by 2015. The report also concluded that the extensive property development in North Bristol would put 30,000 customers at a high risk of low pressure or no water if no reinforcements to the system were made. To meet the additional forecast demand, and ensure security of supply for its customers, Bristol Water proposed three phases of network reinforcement works together with related ancillary works (collectively referred to as the Augmentation Works).

² The inclusion of the flow rate for this adjacent land for the purpose of the requisition was a contractual obligation for Redrow as part of it buying the Site from Hewlett Packard.

- 2.10 On 23 June 2006, Redrow, as the new owner of the Site, wrote to Bristol Water asking for terms and layouts for "off-site/phase 1 main laying" and stated that it wanted to secure terms and commence main laying to points 'X' and 'Y'³.
- 2.11 On 8 September 2006, Bristol Water provided a quotation to Redrow for the provision of mains for the Site. Bristol Water estimated that it would cost £437,950 to provide the Coldharbour Lane and Filton Road mains (one at either end of the Site) and that Redrow's contribution towards the Augmentation Works would be £355,450 plus Value Added Tax (VAT⁴). This meant that Redrow needed to make a total contribution towards the Off-Site Works of £793,400 plus VAT.
- 2.12 On 12 September 2006, Redrow wrote to Bristol Water confirming that the Site was to include 1250 premises, which were to be developed over 6 years. A copy of the masterplan of the Site was provided.
- 2.13 On 20 September 2006, Redrow wrote to Bristol Water again, this time asking for details about how the costs cited in the quotation had been derived and querying why it had not been offered a discount in recognition of the scale of its development.
- 2.14 On 26 September 2006, Bristol Water contacted Redrow stating that to initiate main laying it needed confirmation that the Site layout had been granted full and formal planning permission.
- 2.15 On 2 October 2006, Redrow wrote to Bristol Water and:
- noted that the quotation for the Off-Site Works provided had failed to include any allowance for the charges income that Bristol Water would recover from premises on the Site, which it estimated to be around £150,000 from 1,250 houses;
 - requested off-site mains laying to commence, with the on-site mains laying to follow in Spring 2007;

³ Points X and Y relate to the eastern and western sides of the Site.

⁴ For the purposes of our determination all figures should be taken as pre-VAT figures (unless otherwise stated) as consideration of VAT is outside the scope of our determination

- asked for a breakdown to show how the contribution of £355,450 towards the Augmentation Works had been calculated; and
- queried the scope of work to provide the Coldharbour Lane and Filton Road mains for which the amount of £437,950 was being sought, including whether this included an estimate of costs for any On-Site Works.

2.16 On 19 October 2006, Bristol Water responded to Redrow and:

- confirmed that the £437,950 figure quoted did not include an estimate for any On-Site Works that would be required;
- explained that when calculating the contribution for requisitioned mains it had taken into account the income it expected to receive from the premises connected to those mains and noted that Redrow had not provided details of any premises that would be directly attached to the Off-Site mains which were to be provided for the Site; and
- stated that the total estimated cost of the Augmentation Works was £5,000,000 and that Bristol Water's share of this was £672,200 with the remaining £4,327,800⁵ attributable to the developers proposing new developments in the North Bristol area (**the Developers**), which included Redrow. Bristol Water confirmed that the total contribution required from the Developers was based on all new developments collectively requiring 347 l/s of water, which amounted to a contribution from each developer of £12,472.05 per l/s of demand i.e. £4,327,800 / 347. This figure was multiplied by the demand from the Site of 28.5 l/s to calculate the contribution required from Redrow of £355,450⁶.

⁵ Figures are quoted directly from Bristol Water's letter dated 19 October 2006. In later correspondence, Bristol Water explained that the figure of £672,000 may have been based on an initial estimate of the total scheme cost when it was considering installing an 800mm trunk main for part of the Augmentation Works. Bristol Water noted that it had subsequently decided to lay a 600mm pipe and thus the total estimated cost of the proposed Augmentation Works was £4,327,800.

⁶ £12, 472.05 * 28.5 actually amounts to £355,453, but this appears to have been rounded down to £355,450 by Bristol Water when requesting a contribution from Redrow.

- 2.17 On 17 November 2006, Redrow paid £793,400 plus VAT as security to Bristol Water for the provision of the Off-Site Works which was the estimated costs of those works. Redrow told Bristol Water that it was making this payment on a “without prejudice basis” because it remained concerned about the amount of the contribution and was taking advice on whether to refer the matter for determination by Ofwat. It added, however, that it wished works to commence in the meantime.
- 2.18 On 31 October 2007, Bristol Water provided a quotation for the On-Site Spine Main which would run through the site and link the Coldharbour Lane and Filton Road mains. This was estimated to cost £112,750 plus VAT.
- 2.19 On 29 November 2007, Redrow sent a cheque for £112,750 plus VAT to Bristol Water for the provision of the On-Site Spine Main.
- 2.20 In addition to the On-Site Spine Main, the On-Site Distribution Mains were requisitioned and Security Deposits towards the costs of these mains were recovered from Redrow between 2008 and 2012. This is shown in table 3 further below.

D. The Off-Site Works

The Coldharbour Lane and Filton Road mains

2.21 Table 1 below sets out details of the Coldharbour Lane and Filton Road mains.

Table 1 Coldharbour Lane main and Filton Road main details

Infrastructure	Description of actual work	Date provided	Estimated costs	Actual costs	Security paid
Coldharbour Lane main	1.2km of 250mm pipe	June 2008	£277,350	£213,945	
Filton Road main	254m of 250mm pipe and 711m of 180mm pipe	June 2008	£82,000	£116,266	
Total			£359,350⁷	£330,211	£359,350

2.22 The Coldharbour Lane main has a capacity of approximately 40 l/s. The Filton Road main has a capacity of approximately 16 l/s. Bristol Water has stated that collectively the Coldharbour Lane and Filton Road mains have a capacity of 54 l/s, not 56 l/s, because of the hydraulics of the system.

2.23 Table 1 above shows that Bristol Water issued a refund of £78,600 in July 2007 because Redrow excavated the trench for one of the mains reducing its total contribution towards the Off-Site Works to £714,800 plus VAT from £793,400 plus VAT. Table 1 also shows that the actual cost for provision of the Coldharbour Lane and Filton Road mains was lower than the estimated cost.

⁷ Represents revised estimate following £78,600 refund paid by Bristol Water to Redrow

The Augmentation Works

- 2.24 The Developers, including Redrow, were each requested to contribute a proportion of the costs of the Augmentation Works, calculated on the basis of their forecast demand as a percentage of the total forecast demand. In Bristol Water's view, this avoided any single development having to bear the cost for substantial reinforcement work which would have been out of proportion to the demand requirement for any single site.
- 2.25 The Augmentation Works were originally to be comprised of six different elements of infrastructure: three phases of trunk mains, some smaller distribution mains, replacement pumps and some ancillary works. However, the replacement pumps were ultimately considered unnecessary. Of the remaining elements of the Augmentation Works only the smaller distribution mains are yet to be provided and so the latest costs attributed to this element are based on estimates.
- 2.26 Following changes in the projected number of properties to be constructed on the Site, an additional payment of £24,320 was sought towards the Augmentation Works in November 2007. Redrow paid this amount followed by a further payment of £3,741 in April 2008. Combined, these payments mean that Redrow has paid £383,511 as security to Bristol Water in connection with the provision of the Augmentation Works.
- 2.27 Unlike the Coldharbour and Filton Road mains, the overall costs of the different elements of the Augmentation Works carried out were, in some cases, split between new development and existing customers. Therefore, the estimated and actual cost columns in Table 2 below represent the proportion of the costs attributed to new development.

Table 2 Augmentation Works details

Infrastructure	Description of actual work	Date provided	Estimated costs allocated to new development	Actual costs allocated to new development	Security paid by Redrow
Phase 1 trunk main	3.4km x 600mm	October 2007	£1,404,872	£2,041,260	
Phase 2 trunk main	1.3km x 500mm	November 2011	£522,500	£701,019	
Phase 3 trunk main	3.3km x 600mm	April 2013	£1,154,003	£1,976,057	
Smaller mains	1.5km x 200mm 675m x 250mm	Demand dependent	£535,563	£650,330	
Replacement pumps at pumping station	As per previous column	n/a	£618,750	£0	
Ancillary works	Cross connection between existing mains	May 2014	£92,125	£22,143	
Total			£4,327,813⁸	£5,390,809	£383,511⁹

⁸ This was rounded down to £4,327,800 to calculate the security payable by Redrow as this represents the proportion of the total costs attributed to new development with the remaining costs attributed to existing customers.

⁹ See paragraph 2.26

E. The On-Site Works

- 2.28 As noted earlier, Bristol Water recovered a separate amount towards the On-Site Spine Main of £112,750 plus VAT in November 2007. This main runs through the Site and links together the Coldharbour Lane and Filton Road mains.
- 2.29 Bristol Water then recovered separate Security Deposits towards the provision of each of the On-Site Distribution Mains. Unlike the approach taken to the Off-Site Works and the On-Site Spine Main, the Security Deposits for the On-Site Distribution Mains were based on an estimate of the costs of each main and an estimate of the income to be received from premises connected to each main over 12 years following provision of the main. This contrasts with the calculations for the Off-Site Works and the On-Site Spine Main where only the estimated costs of those works was used to derive the amount of the relevant Security Deposits sought and recovered.
- 2.30 Table 3 below sets out details of the On-Site Works, including the scope and dates of the works and estimated and actual costs.

Table 3 On-Site Works details

Infrastructure	Description	Date main provided	Estimated costs	Actual costs	Security paid
On Site Spine Main	611m x 250mm 291m x 180mm 22m x 125mm	June 2008	£112,750	£107,760	£112,750
Main ref: 1428880 ¹⁰	151m x 125mm 194m x 90mm 190.5m x 63mm	July 2009	£26,500	£21,741	£5,998
Main ref: 1596921	435m x 125mm 297m x 90mm 277m x 63mm	February 2012	£40,950	£39,913	£8,269
Main ref: 1596179	141m x 180mm 119m x 90mm 222m x 63mm	March 2010	£23,650	£18,006	£1,903
Main ref: 1640502	167m x 125mm 269m x 90mm 303m x 63mm	August 2013	£28,500	£26,444	£6,784
Main ref: 1704962	85m x 180mm 87m x 125mm 68m x 9mm 508m x 63mm	April 2013	£39,250	£33,128	£5,570
Main ref: 1797283	63m x 180mm 45m x 125mm 219m x 90mm 302m x 63mm	April 2014	£38,500	£27,111	£8,503
Main ref: 1824187	320m x 180mm 66m x 125mm 186m x 90mm 472m x 63mm	February 2014	£40,250	£23,268	£10,217
Total			£350,620	£297,371	£159,994

¹⁰ For the purposes of this determination each On-Site Distribution Main is referenced according to the reference number provided and used by Bristol Water

F. The request for a determination

- 2.31 On 30 October 2006, Redrow alerted us to a potential dispute between itself and Bristol Water in respect of the Security that had been sought by Bristol Water.
- 2.32 On 21 November 2006, Redrow referred the matter to us formally for determination.
- 2.33 After attempting to resolve the matter with Bristol Water directly, on 1 March 2007 Redrow submitted a second determination request.

G. Our investigation and consultancy advice

- 2.34 Since 2007 we have exchanged correspondence with Bristol Water and Redrow to gather further information about the Off-Site Works and the On-Site Works so we could make our determination. This included sending formal requests for information (**RFIs**) to the Parties.
- 2.35 In addition to gathering information directly from the Parties, in September 2009 we commissioned an external expert engineering consultant (**the Consultant**) as part our investigation in order to assist our understanding of the technical aspects of this dispute. The Consultant was asked to advise on:
- a. the requirement for network reinforcement¹¹ as a result of the development on the Site;
 - b. whether the work carried out by Bristol Water was an appropriate means of providing the network reinforcement;
 - c. the proportion of reinforcement that could reasonably be attributed to the Site; and
 - d. the reasonable costs of that reinforcement work.
- 2.36 The Parties were given the opportunity to comment on the Consultant's draft findings and after taking into account the Parties' comments, the Consultant produced a final report on 25 February 2010.

¹¹ Reference to the Augmentation Works

2.37 We have taken account of the Consultant's final report in making our determination in this case. Details of our determination, including the conclusions from the Consultant, are set out in the relevant sections within [Chapter 4](#) of this determination.

H. Our draft determinations

2.38 On 14 July 2015, we issued our first draft determination of this dispute. Redrow responded on 13 August 2015 and Bristol Water responded on 28 August 2015.

2.39 After reviewing representations from the Parties, and receiving further information, we decided to modify our conclusions on certain aspects. In particular, we revised our determination of the costs of the Coldharbour Lane and Filton Road mains that are attributable to the Site and the calculation of the Requisition Charge(s). We also took the opportunity to update the structure and appearance of our determination document to bring it into line with our new house style. As a result, we gave the Parties an opportunity to see where we had made changes and to comment on these changes by issuing a second draft determination on 24 October 2016. Redrow responded to our second draft determination on 1 November 2016 and Bristol Water responded on 18 November 2016.

3. Legal framework

3.1 This chapter outlines the key legislative provisions relevant to this case.

A. Section 41 – Duty to comply with a water main requisition

3.2 Under section 41(2) of the Act, an owner or occupier of premises may require a water company to provide a water main to provide a supply of water to the premises to be used for domestic purposes (a requisition). Subject to the conditions set out in section 41 of the Act being fulfilled, the water company is under a duty to provide the water main.

3.3 Under section 41(1)(c) and section 42(1) of the Act, as part of the duty to comply with a water main requisition, a water company can recover a contribution (a requisition charge) from the owner or occupier of the premises towards the costs of providing the water main.

B. Requisition charge

3.4 Sections 42 – 43A of the Act set out the financial conditions for complying with a water main requisition. A requisition charge that a water company is allowed to recover is calculated by reference to:

- i. the annual borrowing costs of a loan of an amount that would be required to cover the costs reasonably incurred in providing the main; and
- ii. the revenue which will be recovered by the water company by means of the new main (i.e. the bills paid by customers connected to that main, which is in turn derived from the occupancy rates of the premises connecting) over each of the 12 years following the provision of the water main.

3.5 Where, in any of those years, the revenue exceeds the borrowing costs, the owner or occupier of the premises will not be required to make any payment. Where the borrowing costs exceed the revenue, the water company is entitled to require the owner or occupier of the premises to pay the difference to the water company.

- 3.6 Section 42(2)(a) of the Act provides for the owner or occupier of the premises to pay the water company a requisition charge either by way of an annual amount over each of the 12 years following provision of the water main (known as the relevant deficit), or a single lump sum payment made following provision of the water main, which is referred to as the discounted aggregate deficit (known as the **DAD**) or the statutory commuted sum. The relevant deficit is calculated in accordance with section 43 of the Act and the DAD is calculated in accordance with section 43A of the Act.

C. Costs that can be included the calculation of a requisition charge

- 3.7 The calculation of a requisition charge relies on establishing the costs reasonably incurred in providing a new water main. Section 43(4) of the Act states that the costs reasonably incurred in providing a water main shall include:
- a) “the costs reasonably incurred in providing such other water mains and such tanks, service reservoirs and pumping stations as it is necessary to provide in consequence of the provision of the new main”.
 - b) “such proportion (if any) as is reasonable of the costs reasonably incurred in providing or procuring the provision of any such additional capacity in an earlier main as falls to be used in consequence of the provision of the new main”.
- 3.8 Section 43(2) of the Act states that costs incurred in the provision of additional capacity *beyond* that required by the person requisitioning the main (i.e. not required “in consequence of the provision of the new main”) cannot be considered “costs reasonably incurred” when calculating a requisition charge:
- “The annual borrowing costs of a loan of the amount required for the provision of a water main is the aggregate amount which would fall to be paid in any year by way of payments of interest and repayments of capital if an amount equal to so much of the costs reasonably incurred in providing that main as were not incurred in the provision of additional capacity had been borrowed...”

3.9 This is expanded on by section 43(6) of the Act, which states:

“Any reference in this section to the provision of additional capacity in a water main provided in pursuance of a requirement under any enactment is a reference to such works carried out or other things done in connection with the provision of that main as are carried out or done for the purpose of enabling that main to be used for the purposes in addition to those for which it is necessary to provide the main in order to comply with the requirement”.

3.10 In summary, the costs of additional capacity that is not required “in consequence of the provision of the new main” are excluded from those to which the requisitioner is required to contribute.

D. Security

3.11 A final requisition charge can only be calculated once the water main has been provided, albeit security can be requested in advance by the water undertaker under section 42(1)(b) of the Act.

3.12 Section 42(4) of the Act provides for interest to be paid on any sums deposited with a water company as security for provision of a water main. This is calculated on the basis of every sum of 50p deposited for every three months in which it remains in the hands of the company.

E. Infrastructure charges

3.13 Infrastructure charges are charges that a water or sewerage company is entitled to raise pursuant to a charges scheme and sections 142 and 146 of the Act. They are payable when connecting premises to a public water supply or public sewer for the first time for domestic purposes. They are charged separately for water and sewerage services.

3.14 The methods for calculating the amount of infrastructure charges a company can recover are set out in Condition C of their instrument of appointment (i.e. their licence). Depending on the type of premises being connected, charges are applied on the basis of either the standard infrastructure charge method (where a standard rate is applied per property) or the relevant multiplier method (where the standard rate is adjusted for certain property types to reflect the number and type of water fittings used in the premises, e.g. premises subject to a common billing agreement).

- 3.15 Ofwat has specific powers to make determinations on disputes. As set out in Condition C of a water company's instrument of appointment, in terms of infrastructure charges these determination powers are limited to disputes relating to the calculation of the relevant multiplier (how it has been calculated and/or the number or type of fittings on which this calculation has been based).

F. Disputes

- 3.16 Section 42(6) of the Act provides that any dispute between a water company and any other person regarding the undertakings or security required for the purposes of section 42 of the Act or the amount required to be paid in pursuance of any such undertakings can be referred by either party to Ofwat for determination under section 30A of the Act.
- 3.17 We do not have jurisdiction to make a determination regarding a water company's ability to levy infrastructure charges, although we do provide comments on the interaction between infrastructure charges and requisition charges.

4. Ofwat's determination

- 4.1 This chapter sets out our determination of the disputed issues referred to us by Redrow and is split into the following sections:
- A. Costs of the Coldharbour Lane and Filton Road mains that are attributable to the Site;
 - B. Costs of the Augmentation Works that are attributable to the Site;
 - C. Reasonableness of approach taken to calculate the Security Deposits;
 - D. Calculation of the Requisition Charge(s);
 - E. Infrastructure Charges; and
 - F. Interest payable.
- 4.2 In each section we start by briefly setting out the provisional conclusion that was set out in our second draft determination, followed by the views of each of the Parties on those conclusions. We then set out our final determination of the particular issue under consideration.
- 4.3 In summary, Redrow accepted the overall conclusion in our second draft determination, although it made some points on certain issues that are covered under the relevant sections below. It also proposed some amendments to the wording used in our determination to improve the clarity of the document and which we have taken on board. Bristol Water disagreed with the overall conclusion in our second draft determination; its arguments are also presented under the relevant sections below.
- 4.4 In addition to the specific issues listed above, the Parties also raised a general point about the relevance of historic policy guidance in this matter. Specifically, Bristol Water cited certain points that we have made about some of the issues in earlier correspondence. Redrow highlighted that our determination should be made in accordance with the relevant guidance that existed at the time this matter was referred to us, i.e. in 2007.
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- 4.5 In response to the above we recognise that this dispute has taken a considerable length of time to resolve. However, as an independent economic regulator we have discretion to issue guidance and, when appropriate, to withdraw it. Our previous guidance on self-lay and requisitioning did not replace the legislation and had no statutory force. Water companies must comply with the legislation, as must Ofwat in making a determination. Whilst we have reviewed guidance previously issued in making this determination, we consider that it is proper for us to base our decision on our current policy position, taking account of recent determinations made.

A. Costs of the Coldharbour Lane and Filton Road mains attributable to the Site

- 4.6 In our second draft determination we provisionally determined that Redrow should pay a contribution to Bristol Water which is based on the total costs of providing the two mains at Coldharbour Lane and Filton Road.

Redrow's view

- 4.7 Redrow did not comment specifically on the provisional conclusion we set out above. However, prior to issuing our second draft determination, it had argued that the Coldharbour Lane and Filton Road mains were both oversized and have more capacity than is necessary to serve the Site.
- 4.8 In particular, Redrow claimed that the Coldharbour Lane main alone, with a capacity of 40 l/s, would have sufficed to supply the Site and was all that Redrow should have been required to pay for under the terms of the Act. In addition, it has previously stated that the direct cost to be charged to Redrow for the Filton Road main should be zero and that the whole cost of this main should form part of the Augmentation Works and thus be recovered pro rata from the Developers in the North Bristol area (including Redrow).
- 4.9 Redrow's view was that Bristol Water, in requiring Redrow to pay for mains which are well in excess of its needs, was acting inconsistently with section 43(2) of the Act which refers to 'costs reasonably incurred in providing that main as were not incurred in the provision of additional capacity'.

Bristol Water's view

- 4.10 Bristol Water agreed with our provisional conclusion on this issue as it does not agree that any refund should be made to Redrow.
- 4.11 It said that the requirement for mains to be laid to each end of the Site was confirmed in a letter to it from Redrow dated 23 June 2006. In this letter, Redrow confirmed it wanted to commence main laying to points 'X' and 'Y' as shown on its drawing. These two points were at the western and eastern extremities of the Site.

- 4.12 Bristol Water noted that when the request for the two mains was made, details of how the Site was going to be developed and split into phases was unknown. Therefore, two mains were provided to enable Redrow to develop from both ends of the Site at the same time, and to ensure a security of supply for the completed development.
- 4.13 In respect of security of supply, Bristol Water explained that the Filton Road main (a 180/250mm main) has a capacity of 16 l/s, but that it was designed and provided on the basis that it did not need to be able to give a full supply to the Site since it was considered to be an emergency “back-up supply” for customers on the Site. In Bristol Water’s view, based on the size of the proposed development on the Site, it was prudent to install a secondary emergency back-up supply, acknowledging that the back-up main would have less than full capacity to supply the Site at peak demand.
- 4.14 In addition, Bristol Water has stated that the Coldharbour Lane main (a 250mm main) has 'spare' capacity of approximately 8 l/s, on the basis that it provides a capacity of about 40 l/s compared to the required peak demand from the Site of “nearly 32 l/s”. However, according to Bristol Water the next smallest standard pipe size (i.e. less than 250mm) would not have provided sufficient capacity.
- 4.15 Collectively, the Coldharbour Lane and Filton Road mains are said by Bristol Water to have a capacity of 54 l/s (and not 56 l/s for hydraulic reasons) compared to the Site’s original demand of 28.5 l/s, giving a spare capacity of 25.5 l/s. Bristol Water considers that the whole of the capacity provided by the Coldharbour Lane and Filton Road mains is exclusively related to the Redrow site since no other sites are able to benefit from the additional capacity.
- 4.16 In summary, according to Bristol Water the capacity of the mains provided is greater than that required because of Redrow’s requirements, the need to provide security of supply and because the minimum standard pipe size required to provide sufficient water to the Site had more capacity than required.

Our determination

4.17 As noted above, in response to our second draft determination Redrow did not make any specific comments on this issue and the views outlined above were those it made earlier in our investigation. Bristol Water agreed with the conclusion in our second draft determination and also did not provide any new comments; its views were also made earlier in our investigation. Our determination of this issue, therefore, remains unchanged and our rationale is set out in the following paragraphs.

4.18 As set out in [Chapter 3](#), section 43(2) of the Act requires that the requisition charge calculation includes

“...an amount equal to so much of the costs reasonably incurred in providing the main as were not incurred in the provision of additional capacity”.

4.19 Where infrastructure is provided solely to meet the requisition requirement of a developer, we generally consider it proper to conclude that the whole cost amounts to “the costs reasonably incurred in providing the main”. In contrast, where the infrastructure provided will also serve existing customers and/or potential future development(s), we consider that any “additional capacity” can properly be identified for the purposes of calculating charges, as that additional capacity is being provided “for the purpose of enabling that main to be used for purposes in addition to those for which it is necessary to provide the main to comply with the requirement [in section 41 of the Act]”.

4.20 As noted in [Chapter 2](#), in September 2009 we commissioned the Consultant to assist us in our investigation of this matter. In respect of the Coldharbour Lane and Filton Road mains the Consultant’s report stated that:

“The Redrow development was supplied by two new site-specific mains, one to each side of the site. Under normal circumstances we do not believe that it would be necessary to supply a site of this size through two mains, although we appreciate that a dual supply gives increased security.

However, in this case we understand that Redrow wished to carry out construction on the western and eastern sides of the site at a time when the need for, or route of, the spine road was not established.

Under these circumstances we do not believe that it was unreasonable for Bristol Water to provide two separate supplies.”

- 4.21 After consideration of the points made by the Parties, and the advice of the Consultant, we determine that Bristol Water acted reasonably in providing both the Coldharbour Lane and Filton Road mains as Redrow had requested the provision of two mains in its letter of 23 June 2006 to Bristol Water, one on each side of the Site.
- 4.22 As for the dispute over the size of the mains proposed and that actually provided, we have concluded that Redrow should pay for all of the capacity provided in the Coldharbour and Filton Road mains since the capacity above the demand requirements of the Site cannot be utilised elsewhere. To use the statutory language, it is not capacity provided “for the purpose of enabling that main to be used for purposes in addition to those for which it is necessary to provide the main to comply with the requirement [in section 41 of the Act]”.
- 4.23 In addition, we note that Bristol Water was unable to provide mains with a smaller capacity since the next standard size mains available would have provided insufficient capacity.
- 4.24 For these reasons, we determine that the total costs of providing the two mains at Coldharbour Lane and Filton Road were “costs reasonably incurred in providing that main as were not incurred in the provision of additional capacity” and, therefore, Redrow should pay a contribution based on those total costs.

B. Costs of the Augmentation Works that are attributable to the Site

4.25 In our second draft determination we provisionally determined that it was reasonable for Bristol Water to seek a contribution from Redrow towards the Augmentation Works and that the costs of the separate elements of the Augmentation Works, as allocated between new development (including the Site) and existing customers, were also reasonable. We also provisionally determined that it was reasonable for Bristol Water to base Redrow's contribution towards the Augmentation Works on the original forecast peak demand requirement from the Site of 28.5 l/s.

Redrow's view

4.26 Redrow did not comment specifically on our provisional conclusion above. However, it has previously argued that a large proportion of the Augmentation Works will also provide benefit to existing customers and, therefore, a greater proportion of the costs of this work should be paid for by those customers compared to the Developers.

4.27 In addition, Redrow has queried whether the peak demand figure that Bristol Water used to calculate the proportion of costs attributable to the Site was appropriate. The figures relied on by Bristol Water were provided by a third party consultant acting on behalf of Hewlett Packard.

4.28 According to Redrow, the average annual domestic consumption in Bristol Water's supply area is approximately 160 litres per head per day (l/h/d). Assuming 2.5 persons per property, this would amount to approximately 400 litres per day (l/d) per property which, in turn, would equate to a figure of 0.0046 l/s per property and 0.0110 l/s of peak demand (multiplying 0.0046 by a peak demand factor of 2.38¹²). Redrow has, therefore, argued that the peak demand figure used to apportion costs should instead have been calculated by multiplying the peak demand figure of 0.0110 l/s by the number of premises on the Site to arrive at the total peak demand requirements of the Site.

¹² This peak demand factor is referred to by both Redrow and Bristol Water in setting out their own calculations of what they believe the appropriate peak demand figure for the Site should be.

Bristol Water's view

- 4.29 Bristol Water agreed with part of our provisional conclusion in respect of the apportionment of costs. It has previously argued that the Augmentation Works were carried out to provide greater capacity and sustain the required pressure in its water supply network in response to new developments in the north Bristol area (which included the development on the Site). Bristol Water says that its customers would otherwise have suffered from low pressure due to the increased development in the area.
- 4.30 Bristol Water has previously “re-run” its original network modelling to investigate what would have been the implications on its network had it not undertaken the Augmentation Works to provide additional capacity for:
- a. all known development in the area; and
 - b. Redrow's development on the Site.
- 4.31 In Bristol Water's view this modelling work shows that, without the Augmentation Works for the purpose of scenario (a) above, this would have resulted in approximately 95,000 premises in its area receiving water below the required pressure level of 15 meters.
- 4.32 Under scenario (b) above, the number of premises in Bristol Water's area receiving water at a pressure below 15 meters would have been approximately 23,000.
- 4.33 As the Augmentation Works have taken place over a number of years, the total costs associated with the works have changed, particularly as actual costs have become known following provision of the works. In addition to changes in total costs there have also been changes to the method and proportion of those total costs allocated to new development. Table 4 below illustrates how the proportion of the total costs of the Augmentation Works allocated to new development (and specifically to Redrow) has changed, comparing the original cost allocation in 2006, the cost allocation in 2008 (following provision of the Phase 1 trunk main element) and the latest cost allocation.
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Table 4 Proportion of Augmentation Works attributable to new development at different times

Infrastructure	Original cost allocation to new development	2008 cost allocation to new development	Current allocation to new development	Details
Phase 1 trunk main	£1,404,872	£2,041,260 ¹³	£2,041,260	Each cost represents approx. 84% of total Phase 1 trunk main cost
Phase 2 trunk main	£522,500	£522,500	£701,019	Original (estimated) costs allocated fully to new development but subsequently confirmed that 30% of costs funded through 2009 price determination (PR09)
Phase 3 trunk main	£1,154,003	£1,154,003	£1,976,057	Original estimated costs allocated as per Phase 1 trunk main but proportion revised following addition of resilience scheme and confirmation that 30% of costs funded through PR09 price review.
Smaller mains	£535,563	£535,563	£650,330	All to new development
Replacement pumps	£618,750	£618,750	£0	n/a
Ancillary works	£92,125	£92,125	£22,143	All to new development
Total	£4,327,813	£4,964,201	£5,390,809	
New development contribution per l/s (total / 347)	£12,472.08	£14,306.05	£15,535.47	
Redrow contribution (28.5 l/s)	£355,454	£407,722	£442,761	

¹³ Bristol Water has suggested that at the time of commissioning these mains the total actual cost was £2,472,139 (£2,076,696 of which was allocated to new development). However it is unclear why this cost is higher than the now confirmed actual cost of the work and so we have therefore used the current actual known costs.

- 4.34 Table 4 above shows that the total costs of the Augmentation Works have increased over time and a greater proportion of the original estimated costs of the Augmentation Works was allocated to new development. However, following our price determination process in 2009 (known as PR09) it has been confirmed that a significant proportion of the costs of the Phase 2 and Phase 3 trunk mains were recovered from existing customers.
- 4.35 In response to Redrow's challenge to the peak demand estimate used to derive the amount of the Security Deposits sought by Bristol Water towards the Augmentation Works, Bristol Water has stated that it cross-checked the figure provided with its own calculations. It has highlighted that its own calculations would have been based on a peak demand figure of 0.0157 l/s per premises arriving at a total peak demand estimate of 19.6 l/s for the Site. This, combined with the peak demand requirement (9.75 l/s) for the Hewlett Packard land adjacent to the Site, would have resulted in a total peak demand of approximately 29.3 l/s. Since this was close to the original figure of 28.5 l/s provided on behalf of Hewlett Packard in 2005, Bristol Water said it considered it appropriate to use this figure. It also noted that it did not allow anything for the proposed commercial demand within Redrow's new development, which would have increased the peak demand figure used.
- 4.36 In addition, Bristol Water has suggested that at the time of the requisition for the Off-Site Works, the estimate of average annual demand in its area would have been around 570 litres per day (l/d) rather than 400 l/d as suggested by Redrow. Bristol Water has noted that the 400 l/d figure would have been based on an amount of 160 l/h/d which was the estimate of demand in 2010 rather than in 2006 at the time when the Security was calculated.
- 4.37 Bristol Water's view is that it is reasonable to require contributions towards requisitioned works based upon the demand actually needed by a developer, and not to cap that contribution at the level of demand which happened to be the last figure stated prior to work starting. It adds that if this were not the case, it would be in a developer's interest to requisition mains quoting a low demand before works have been designed, only then to ask to be allocated more capacity without having to pay any further contributions. In Bristol Water's view if contributions are to be recalculated following provision of a requisitioned main, then it is only right to use the demand being requested by the developer at that time.
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Our determination

- 4.38 In the light of the responses to our second draft determination, our final determination of this issue has not changed and our rationale is set out in the following paragraphs.
- 4.39 In its final report of 25 February 2010 the Consultant concluded the following in respect of the Augmentation Works:
- “It is clear that the existing 18” trunk main in north Bristol could not supply the expected development in the area and that network reinforcement¹⁴ was required.
- It is our opinion that the scope of the three phases of network reinforcement proposed by Bristol Water was reasonable.”
- 4.40 In 2004/05 the Redrow development was one of a number being planned for the north Bristol area. The associated increase in water demand was deemed to be considerable and this led Bristol Water to carry out a study to identify an appropriate solution.
- 4.41 Bristol Water’s study concluded that the existing trunk main in the area was fully committed and was not capable of meeting any significant increase in demand. Bristol Water chose to meet this demand through the Augmentation Works.
- 4.42 We note that the Site alone did not necessarily require the full Augmentation Works proposed and carried out by Bristol Water, and that it could have been supplied, for example, by a dedicated main laid from a suitable point on Bristol Water’s existing network. However, based on the information provided by Bristol Water and the Consultant’s report, we understand that, had this occurred, Redrow would then have had to bear the full cost of this dedicated main which would probably have been a higher sum than they were actually charged.
- 4.43 Based on the above, we determine that it was reasonable for Bristol Water to seek a contribution from Redrow towards the costs of the Augmentation Works, since the Site (in addition to other developments in the area) contributed directly to the need for these works in the first place.

¹⁴ Reference to the Augmentation Works

- 4.44 In response to Bristol Water's earlier point about the demand forecast used to derive the proportion of the costs of the Augmentation Works payable by Redrow, we determine that this should be the demand forecast at the time of the requisition.
- 4.45 Redrow subsequently revised its forecast of the number of premises to be built on the Site, which as a consequence increased its demand forecast. Bristol Water, however, chose to re-allocate the existing capacity available in the Augmentation Works to cater for this extra demand rather than expand the scope of the Augmentation Works to provide more capacity overall. Bristol Water also chose to recover additional payments following its re-allocation of existing capacity.
- 4.46 In our view, it would not be correct to base our calculation of the contribution that Redrow should make towards the Augmentation Works on the revised demand forecast of 30.75l/s (established from Redrow's revised estimate of 1400 properties to be constructed on the Site). Rather, we consider that the figure of 28.5 l/s, calculated using the original construction estimate of 1250 properties, is the correct figure to use on the basis that no additional works were carried out to cater for the increase in forecast demand and given the number of premises actually constructed.
- 4.47 With regards to the level of costs charged to Redrow, we are satisfied with Bristol Water's approach to allocating costs to new development, as set out in Table 4 above. While it previously contended that the full costs of the Phase 2 trunk main were recoverable in full from the Developers, Bristol Water has subsequently confirmed that 30% of the cost of this main had been funded through our PR09 price review. Similarly it has confirmed that the costs of the Phase 1 and Phase 3 trunk mains have also been split between existing customers and new development. While the costs of the smaller mains and ancillary works have not been split, given the information available to us, we have concluded that Bristol Water has reasonably attributed the costs of the different elements of the Augmentation Works between existing customers and new development to reflect the requirements of these different customers.

4.48 In respect of whether the original forecast peak demand figure of 28.5 l/s was itself reasonable given that it was derived from a third party consultant, we determine that it was. We note that the Consultant concluded that there was no compelling evidence that 28.5 l/s was unreasonably high and Bristol Water itself has noted, based on its own calculations at the time, that it was likely to have come up with a figure slightly (but not materially) higher than 28.5 l/s had it provided the figure itself.

C. Reasonableness of approach taken to calculate the Security Deposits

4.49 In our second draft determination we provisionally determined that it was reasonable for Bristol Water to have waited until detailed plans and information were received for the various phases of the development construction on the Site, before it sought separate Security Deposits for the On-Site Works.

Redrow's view

4.50 Redrow did not comment specifically on our provisional conclusion above but has previously argued that Bristol Water is in breach of the Act because it did not include the cost of the On-Site Works together with the Off-Site Works when providing a quotation for the amount it was seeking to recover from Redrow when approached for a quotation in 2006. In Redrow's view, Bristol Water had sufficient information to provide a single quotation for the On-Site Works and Off-Site Works and the Off-Site Works were of no use by themselves without the provision of the On-Site Works.

4.51 Redrow has also argued that Bristol Water is in breach of the Act because it did not allow for any estimated charges income from premises on the Site in the calculation of the security for the Off-Site Works and instead sought the security based solely on the costs of the Off-Site Works.

4.52 In respect of the calculation of the contribution payable, Redrow has argued that:

- because Redrow sold parcels of land on the Site to other developers that paid for their own on-site mains, Redrow should not be charged for the full capacity of the Off-Site Works and the On-Site Spine Main, since these other developers on the Site will benefit from these; and

- the adjacent Hewlett Packard site should be excluded from the calculation of the Requisition Charge payable by Redrow for the Site i.e. the Requisition Charge should exclude the 9.75 l/s peak demand that was requested and provided for the land adjacent to the Site owned by Hewlett Packard. This is, according to Redrow, appropriate since charges under a requisition can only be levied against the owners of the site and a water company cannot levy charges under a requisition against an owner (such as Redrow) that relate to another development i.e. the adjacent Hewlett Packard site.

Bristol Water's view

- 4.53 Bristol Water agreed with our provisional conclusion in respect of this issue. It has previously explained that when it was first approached by Redrow only outline planning permission had been granted for the Site. For this reason Bristol Water has said that it was unable to provide a quotation for the provision of the On-Site Works as it did not have a confirmed layout for the Site or detailed planning permission.
- 4.54 Bristol Water has also previously stated that it did not make any allowance for charges income when calculating the Security provided for the Off-Site Works because it was not provided with details of premises to be directly supplied by the Off-Site Works and, therefore, it requested a contribution which was solely based on the estimated costs of these works.
- 4.55 Bristol Water has also confirmed that Redrow has sold parcels of land on the Site to two other developers and that these developers have requisitioned on-site mains separately, meaning that payments for those on-site mains were calculated and recovered separately by Bristol Water. Bristol Water has noted that no contribution towards the Off-Site Works has been sought from other developers on the Site (other than Redrow).

- 4.56 Bristol Water has noted that if a mains requisition for both the On-Site Works and Off-Site Works had been accepted in 2006, and terms had been offered taking possible future income into account, it would then have run into difficulty when parcels of land on the Site were sold off to other developers or if there was a new water undertaker appointed for parts of the Site (new appointee).¹⁵
- 4.57 Bristol Water has asserted that it would have been unable to allow other developers or new appointees to benefit from the future income generated by premises to be connected directly to the on-site mains, as this allowance would already have been given to Redrow. As it is, the income has been offset against the cost of providing all the On-Site Distribution Mains, which in Bristol Water's view is to the benefit of Redrow or whichever developer now owns the relevant part of the Site.
- 4.58 Although it accepted our provisional conclusion on this issue, in its representations on our second draft determination, Bristol Water suggested that we had mischaracterised the company's reasoning by suggesting that it had argued that income from premises can only be offset against the costs of mains to which those premises directly connect. Bristol Water has asserted that it does agree that income can be offset against the cost of mains to which they are indirectly connected and its main justification for not offsetting any income against the security requested for the Off-Site Works was that at the time those works were requisitioned, the necessary information was not available.

Our determination

- 4.59 As noted above, in response to our second draft determination, Redrow did not make any comments on this issue and the views outlined above were those it made earlier in our investigation. Bristol Water agreed with our conclusion. Our determination of this issue, therefore, remains the same as that outlined in our second draft determination. Our rationale is explained in more detail below.

¹⁵ Under section 7 of the Act, companies may apply for a licence from Ofwat to replace the existing water and / or sewerage company at a particular site.

- 4.60 Since the vast majority of the infrastructure (the On-Site Works and the Off-Site Works) for which the Security Deposits were recovered has now been provided by Bristol Water, our determination has focussed on the approach to calculating the Requisition Charge(s) that Bristol Water can recover from Redrow rather than on the Security Deposits.
- 4.61 However, Redrow has made a number of points about the reasonableness of the Security Deposits that were recovered by Bristol Water.
- 4.62 We would generally expect that the income from premises will be offset against the costs of both on and off-site requisitioned works, since off-site works are only necessary in consequence of the on-site works in accordance with section 43(4) of the Act. Therefore, the premises supplied, are supplied both directly and indirectly from on-site and off-site mains.
- 4.63 The Parties have both highlighted that developers and water companies communicate informally when requisitioning infrastructure. The informal nature of the discussions between Bristol Water and Redrow, and the lack of clarity in written correspondence, has made it difficult for us to identify exactly what was requisitioned, and when.
- 4.64 We understand, however, that Bristol Water was provided with a masterplan and details of the total number of premises to be built on the Site in 2006, but it is not clear from the information we hold that Bristol Water had details of the phasing of the Site development and the premises to be included in each phase at the time that it calculated the Security Deposit for the Off-Site Works.
- 4.65 Therefore, whilst it may have been possible for Bristol Water to have requested Security Deposits in a manner different to that which it actually did, we do not consider that it was unreasonable for it to have requested separate Security Deposits for the On-Site Works and Off-Site Works. This is because Bristol Water does not appear to have been provided with sufficient information to have been able to provide an accurate single quotation for both the Off-Site and On-Site Works at the outset – specifically information that would have enabled it to have designed and sized all of the required On-Site Works.

- 4.66 We note Bristol Water's concern that the text in our second draft determination covering this issue was a mischaracterisation of the company's reasoning. However, at the time that the relevant Security Deposit was sought from Redrow, it is our understanding that one of the drivers in Bristol Water's decision not to include any revenue in its calculation of the Security sought for the Off-Site Works was its view that income can only be offset against the costs of mains to which they directly connect. In any event, this issue is not material to our decision.
- 4.67 In terms of whether Redrow's contribution towards the On-Site Spine Main and the Off-Site Works should be reduced because it subsequently sold parcels of land on the Site to other developers, we consider that at the time of calculating the Security, it was unknown whether Redrow would subsequently sell any of the land on the Site, and thus we consider it was reasonable for Bristol Water to charge based on the peak demand requirements of the whole site.
- 4.68 When Redrow sold parcels of land on the Site to other developers, it had the option to reflect the fact that it had paid for the Off-Site Works (which those developers would benefit from) in the price it charged for the land.
- 4.69 We consider that where developers have paid a contribution towards works which they no longer require as a result of commercial decisions taken to sell land, then the onus is on those developers to ensure that they can recover the costs they have paid to a water company from other developers – either up front or at a later date as part of the terms of any land sale.
- 4.70 Similarly, we determine that it is reasonable for Bristol Water to recover the costs of the Off-Site Works from Redrow based on the capacity in those works that was provided to serve the adjacent Hewlett Packard site, since Redrow asked Bristol Water for this additional capacity.

D. Calculation of the Requisition Charges

4.71 In our second draft determination we provisionally determined that Bristol Water should calculate a Requisition Charge for each On-Site Distribution Main separately but that the total costs used to calculate each charge should include a proportion of the costs of the Off-Site Works and the On-Site Spine Main. Based on this approach we calculated that the combined total of the Requisition Charges that were payable by Redrow based on the latest cost information available to us amounted to £267,848. As this was lower than the total of the original Security Deposits that were recovered by Bristol Water we provisionally determined that a refund of £635,007 was owed to Redrow and should be made within 20 working days of the date of our final determination of this matter.

Redrow's view

- 4.72 In response to our second draft determination Redrow did not make any specific comments in relation to this issue. Previously, however, Redrow's view has been that Bristol Water should calculate the Requisition Charge as a single amount, by combining the costs of all the On-Site Works and the Off-Site Works, taking account of the income from all of the premises built by Redrow on the Site based on the latest cost and income information it holds.
- 4.73 As part of its earlier submissions to us, Redrow emphasised the importance of the starting date of the Requisition Charge calculation. It noted that although the starting date of such a calculation would, in accordance with the Act, be the date when mains have been provided, this would be unfair to the water company on any large site (being developed in phases) where mains to serve the last phase of a development will not be laid for many years after the initial mains have been laid. Redrow also considered that it would be an incorrect/unfair interpretation of the Act to use the date when the first batch of mains was laid as being the starting point for the requisition calculation.
- 4.74 Instead, Redrow has suggested that the fairest way of calculating the Requisition Charge in this case is to use a phased approach based on a succession of separate calculations (one for each phase) linking the cost of the mains on each phase with the charges income from the houses on that same phase and then totalling the amounts from each individual calculation to produce a single amount, including adding the costs of the Off-Site Works and On-Site Spine Main.
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- 4.75 Redrow has argued that unless such a phased requisition calculation is carried out, a pragmatic decision would need to be taken on the starting date and has suggested that this could be made by looking at the period over which the mains were laid and then taking a weighted average or, in this case, when a substantial part of the Augmentation Works (but not all of it) had been completed.
- 4.76 Finally, in response to our original draft determination, Redrow expressed disappointment that we had not checked the reasonableness of the costs of the On-Site Works and, in particular, the reasonableness of the overheads included by Bristol Water as part of those costs.

Bristol Water's view

- 4.77 Bristol Water disagreed with, and made a number of comments on, our provisional conclusions of this issue.
- 4.78 It said that it did not think the Act establishes a clear legal basis for our approach of treating the requisition of the Off-Site Works and On-Site Spine Main as part of subsequent requisitions of the On-Site Distribution Mains for the purposes of calculating the final Requisition Charges.
- 4.79 In support of the above Bristol Water argued that:
- it is inconsistent from a process perspective to find that there is no connection between each of the On-Site Distribution Mains but that there is a connection between the Off-Site Mains and On-Site Spine Main requisitions and each of the On-Site Distribution Mains;
 - the Off-Site Mains and On-Site Spine Main were provided regardless of the potential future requisition of any On-Site Distribution Mains, as opposed to being provided in consequence of them; and
 - where a main is requisitioned that will not be connected to any premises it must be treated as the 'main' that is the subject of the requisition and in respect of which a contribution can be recovered from the developer.

4.80 In addition to the above Bristol Water also:

- asked what would be the consequence of our approach if the Site had been abandoned prior to the requisition of any On-Site Distribution Mains;
- asserted that it is neither feasible nor reasonable for a water company to simply hold on to a security deposit indefinitely just in case future phases are eventually built; and
- queried why we had attributed 100% of the costs of the Off-Site Mains and On-Site Spine Main to the On-Site Distribution Mains requisitioned by Redrow but not to the On-Site Distribution Mains requisitioned by other developers.

4.81 On the specifics of our proposed calculation, Bristol Water said that our calculation could only work if we delay calculating the final Requisition Charge for each individual On-Site Distribution Main until all such mains on the Site have been provided otherwise it necessitates a re-opening of the calculation of the final Requisition Charge for each phase at the end of development of the entire site.

4.82 At the time that the Off-Site Mains and On-Site Spine Main were provided in 2008, information was not available to estimate the total number of properties on the Site that would be connected to these mains indirectly. In Bristol Water's view this is why it was appropriate to apply a final Requisition Charge in relation to both the Off-Site Mains and On-Site Spine Main that did not take into account any future income. Bristol Water suggested that this risk was made clear by Bristol Water in correspondence to Redrow dated 19 October 2006 before Redrow chose to make the requisition on the commuted sum basis or DAD basis.

4.83 Finally, Bristol Water provided an alternative scenario in which one or more of the phases on the Site was self-laid to argue why, in its view, our provisional calculation was inappropriate and added that Redrow chose to take the DAD option for the Off-Site Mains and On-Site Spine Main for this Site, but could have taken the relevant deficit option since the two options were presented to Redrow at the relevant time.¹⁶

¹⁶ See Bristol Water's letter dated 8 September 2006 in which the two options were given to Redrow.

Our determination

- 4.84 After careful consideration of the responses to our second draft determination on this issue we have not been persuaded of the need to reach a different conclusion for the purposes of making this final determination. Our rationale is explained in more detail below.
- 4.85 As per our second draft determination in order to make a determination of this issue we have considered the following questions:
- Were the On-Site Works and Off-Site Works requisitioned separately?
 - Can the calculation of the Security Deposits and final Requisition Charge(s) follow different approaches?
 - At what point should the final Requisition Charge be calculated and recovered? I.e. when should the Security Deposits cease to be held as security and become final charges?
- 4.86 On the first question, as noted earlier in this determination, there is a lack of clarity around what was requisitioned and when. In particular, there remains some uncertainty around Redrow's exact requirements at the time it first contacted Bristol Water for a quotation in 2006. This is due to the extent of On-Site Works required for the Site and the fact that the Site was developed in phases, some of which have subsequently been sold to other developers.
- 4.87 In our view, the phasing of the Site means that it is reasonable to conclude that the various On-Site Distribution Mains were requisitioned separately from each other, particularly since for one of the phases a developer other than Redrow requested an on-site distribution main, i.e. there is no connection between each On-Site Distribution Main (because each main is not as a consequence of another) other than they were provided for the same development. This is consistent with our understanding of other phased developments where on-site mains can be requisitioned separately for each phase.
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- 4.88 However, we consider that each On-Site Distribution Main requisition cannot be separated from the requirement for the Off-Site Works and the On-Site Spine Main. This is because those mains were requisitioned in order to provide supplies of water to each phase of the Site (section 41(1) of the Act). Without the Off-Site Works and On-Site Spine Main, each On-Site Distribution Main could not be used to supply water.
- 4.89 We therefore consider that for the purposes of calculating the final Requisition Charges, the Off-Site Works and On-Site Spine Main should be considered as part of the requisition of each On-Site Distribution Main. Crucially this means that each On-Site Distribution Main would be considered as the '(new) main' in each calculation, with the other elements of infrastructure classed as 'other mains' that were necessary in consequence of the (new) main.
- 4.90 This means applying a different approach to calculating the final Requisition Charges from the approach used to calculate the Security Deposits. As acknowledged by Bristol Water, the Act does not specify how security in the context of requisitioned mains should be calculated nor does it require the security and requisition charge calculations to follow the same approach. Although typically the security will be based on an estimate of the final requisition charge, we consider that the underlying approaches can differ where this is appropriate, particularly in the absence of clear documentation or agreements between parties, as we consider to be the case in this matter.
- 4.91 We therefore conclude that, while Bristol Water recovered separate Security Deposits for the Off-Site Works, the On-Site Spine Main and each individual On-Site Distribution Main, for the purposes of calculating the Requisition Charges, the costs of the On-Site Spine Main and Off-Site Works should be included in the calculations for each of the eight On-Site Distribution Mains requisitioned by Redrow.
- 4.92 We also consider that in providing for revenue to be offset against annual borrowing costs, the Act does not distinguish between premises which connect directly or indirectly to a main.
- 4.93 This leads to the final question, which relates to exactly how and when the final Requisition Charges should be calculated.
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- 4.94 We determine that a proportion of the Off-Site Works and On-Site Spine Main costs be included in each On-Site Distribution Main calculation, with this proportion adjusted in each calculation to reflect the number of premises attached to each On-Site Distribution Main. This approach acknowledges that some phases require more water than other phases and, therefore, should pay a greater proportion of the costs of the Off-Site Works and On-Site Spine Main compared to those phases requiring less water.
- 4.95 At the time of this determination, the final costs incurred in providing the Augmentation Works are not fully known. However, only a small proportion of the Augmentation Works remain outstanding. In this particular case we consider that it is reasonable to use the relatively small proportion of remaining estimated costs of this outstanding work together with the known actual costs of the On-Site Works and Off-Site Works for the purposes of calculating the final Requisition Charges that we consider Bristol Water can reasonably recover from Redrow.
- 4.96 As noted in Table 4 above, the latest known total cost of the Augmentation Works amounts to £5,390,809 of which £442,761 is the proportion attributable to Redrow based on its original demand estimate of 28.5 l/s¹⁷.
- 4.97 The actual cost of the Coldharbour and Filton Road mains is £330,211 and these mains were provided in 2008. The actual costs of the On-Site Spine main is £107,760 and this main was also provided in 2008. Adding £442,761 to these figures would bring the combined total known actual and estimated cost of the Off-Site Works and On-Site Spine Main attributable to Redrow to £880,732. Under our determined approach to calculating the Requisition Charges payable by Redrow, this amount must be apportioned in the calculation of each On-Site Distribution Main Requisition Charge calculation.

¹⁷ As covered earlier, this demand figure was derived from the number of premises originally to be constructed (1,250). Although this figure subsequently increased and more monies were recovered from Redrow to cater for the increase in demand, we consider that it was not appropriate for Bristol Water to seek additional payments from Redrow since the actual scope of works did not change as a result of the changes to forecast build rates i.e. mains were not resized. In our view, therefore, it is appropriate to use the figure of 1250 as the basis for determining the amount of contribution payable by Redrow as this was the amount originally forecast and used to size the works provided.

- 4.98 In response to Redrow's concerns about the cost of the On-Site Works we firstly inflated them to the same price base as our in-house cost model using Retail Price Index (**RPI**) indexation factors that took account of the dates at which the various component mains were provided. We then used our model to generate minimum, mean and maximum estimates of an 'all-in' cost based on the length, diameter and material of pipes and the fact that the work requisitioned was for 'lay only' rather than full provision. To these costs we added an allowance for such overheads as we assumed would not be included in the 'all-in' cost i.e. Bristol Water's costs. This allowance was based on the average of similar overhead costs from cost estimates for other schemes across different companies for which we have detailed information.
- 4.99 The overall total cost as reported by Bristol Water was 15% above the resulting Ofwat mean estimate but 22% below the Ofwat maximum estimate. On this basis we are of the view that Bristol Water's actual costs for the On-Site Works were not unreasonable. Table 5 below provides a breakdown of the costs of the On-Site Works.

Table 5 Cost breakdown of On-Site Works

Infrastructure	Contractor costs		Material (incl. Handling)	Bristol Water Costs	On- Costs	Actual installation costs - total
	Direct	Overheads				
Main 1428880	£13,237	£1,721	£3,347	£935	£2,501	£21,741
Main 1596921	£18,258	£2,739	£11,769	£1,642	£5,505	£39,913
Main 1596179	£9,354	£1,403	£4,380	£385	£2,484	£18,006
Main 1595868 ¹⁸	£4,944	£742	£2,019	£164	£1,259	£9,128
Main 1640502	£14,132	£2,120	£5,768	£901	£3,523	£26,444
Main 1704962	£18,015	£2,702	£6,807	£1,034	£4,570	£33,128
Main 1797283	£12,713	£1,907	£7,731	£1,020	£3,740	£27,111
Main 1824187	£11,917	£1,788	£6,354	£107	£3,102	£23,268
Spine Main (ref: 1419574)	£52,678	£6,848	£30,396	£4,604	£13,234	£107,760

¹⁸ Main requisitioned by Elan Homes for area of Site that was subsequently sold by Redrow.

- 4.100 In addition to the question around what costs should be included in each Requisition Charge calculation, the other key element of a Requisition Charge calculation is the amount of estimated revenue. For the purposes of this determination we have used Bristol Water's estimates of the number of premises to be connected to each On-Site Distribution Main at the time each main was provided as we consider this to be consistent with the Act.
- 4.101 For each Requisition Charge calculation, we used the assumptions and values set out in Bristol Water's own calculations and simply increased the amount of the requisition cost to reflect the inclusion of a proportion of the Off-Site Works and On-Site Spine Main costs in addition to the cost of each On-Site Distribution Main. Table 6 below shows the outcome of our proposed approach i.e. the Requisition Charge payable for each On-Site Distribution Main based on our determined approach of including the costs of the On-Site Spine Main and Off-Site Works.

Table 6 Inputs to and determined amounts of Requisition Charges compared to Bristol Water calculations

Main	Estimated number of properties linked to main (at requisition date)	Estimated cost to provide main	Actual cost to provide main	% of in consequence works ¹⁹ attributable to main	£ of in consequence works attributable to main	Combined on-site and in consequence costs	Requisition Charges based solely on On-Site Distribution Main costs	Determined Requisition Charges
1428880	57	£26,500	£21,741	8.03% ²⁰	£70,707 ²¹	£92,448	£3,481	£47,188
1596921	144	£40,950	£39,913	20.28%	£178,627	£218,540	£2,672	£49,003
1596179	46	£23,650	£18,006	6.48%	£57,062	£75,068	£1,297	£30,871
1640502	140	£28,500	£26,444	19.72%	£173,665	£200,109	£1,050	£53,553
1704962	87	£39,250	£33,128	12.25%	£107,921	£141,049	£2,519	£25,741
1797283	139	£38,500	£27,111	19.58%	£172,425	£199,536	£2,179	£48,926
1824187	97	£40,250	£23,268	13.66%	£120,325	£143,593	£0	£12,566
Totals	710	£237,600	£189,611	100%	880,732	£1,070,343	£13,198	£267,848

¹⁹ In consequence works used to collectively refer to the Off-Site Works and On-Site Spine Main

²⁰ Calculated by dividing the estimated number of properties connected to each relevant main (e.g. in this case 57) by the total estimated number of properties to be connected (710)

²¹ Calculated by multiplying the percentage in the earlier column (i.e. 8.03%) by the total cost of the in consequence works (£880,732)

- 4.102 The outcome of the above is that, in total, Redrow is required to pay £267,848 to Bristol Water. This reflects the sum of all the different Requisition Charges.
- 4.103 This is lower than the total of the Security Deposits that were recovered (£902,855) and so a refund of £635,007 is owed to Redrow and should be made within 20 working days of this final determination of this matter.
- 4.104 In reaching our conclusion above we have been mindful of the arguments made by Bristol Water. However, we are not convinced that it is reasonable for Bristol Water to seek a final contribution from Redrow towards the Off-Site Works or the On-Site Spine Main without reflecting any revenue to be recovered by the company from premises constructed on the Site. We are also not convinced that it is appropriate to separate the Off-Site Works and the On-Site Spine Main from the provision of each of the individual On-Site Distribution Mains provided for Redrow.
- 4.105 To assist the Parties in understanding our rationale further we deal with each of the points made by Bristol Water in response to our second draft determination below.
- 4.106 In respect of the argument that the Off-Site Mains and On-Site Mains were standalone requisitions we consider that there remains a lack of clarity around what was requisitioned and when. However, given Redrow was concerned from the start about the lack of revenue included in the calculation of the Security contribution sought towards the Off-Site Works, and that no on-site mains were included as part of the same Security, we maintain our earlier conclusion that we do not think it is possible to separate the requirement for the Off-Site Works and the On-Site Spine Main from the subsequent provision of each of the On-Site Distribution Mains sought by Redrow.
- 4.107 In response to Bristol Water's view that it is inconsistent from a process perspective to find that there is no connection between each of the On-Site Distribution Mains but that there is a connection between the Off-Site Mains and On-Site Spine Main requisitions and each of the On-Site Distribution Mains, we disagree. Bristol Water has provided correspondence to show that the On-Site Distribution Mains were requisitioned separately from each other given that the Site was developed in phases. However, since the Off-Site Works and the On-Site Spine Main were provided to serve the whole Site we consider that it is reasonable to include a proportion of the costs of those mains in the calculation of each of the On-Site Distribution Mains.
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- 4.108 Bristol Water has stated that the Off-Site Mains and On-Site Spine Main were provided regardless of the potential future requisition of any On-Site Distribution Mains, as opposed to being provided in consequence of them.
- 4.109 In dealing with this point we think it is helpful to consider a scenario whereby no Off-Site Works and no On-Site Spine Main had been provided but where On-Site Distribution Mains had been requisitioned first. In this event Bristol Water would have had to have provided Off-Site Works and an On-Site Spine Main in consequence of the requisition of the On-Site Distribution Mains to provide a water supply to the Site as the On-Site Distribution Mains would not have been capable of supplying any premises in the absence of those consequential mains.
- 4.110 Although in this case the provision of the Off-Site Works and On-Site Spine Main took place prior to the provision of the On-Site Distribution Mains they are nevertheless connected in the sense that the Site, or individual phases of the Site, cannot be used without both sets of mains in place and, therefore, must be considered as part of a single requisition in the absence of clear evidence to suggest otherwise.
- 4.111 Bristol Water has asked what would be the consequence of our approach if the Site had been abandoned prior to the requisition of any On-Site Distribution Mains. Had this happened then we agree that there would have been no revenue to include as part of the final Requisition Charge calculation. However, the chronology in this case shows that mains were being constructed every year between 2007 and 2014, including On-Site Distribution Mains. Therefore, Bristol Water would have known that it was not Redrow's intention to abandon the Site at an early stage.
- 4.112 Whilst Bristol Water may not have had sufficiently detailed information at the start to construct the On-Site Distribution Mains it would have been in dialogue with Redrow during this period and would have known about Redrow's intention to develop the Site – as evidenced by the subsequent provision of on-site mains in 2008 and 2009. Bristol Water would, therefore, have had to have had some idea of properties to be constructed on the Site in order to have sized and provided the Off-Site Works and On-Site Spine Main.

4.113 We agree that it may not be reasonable for a water company to simply hold on to a security deposit indefinitely. In cases where development is uncertain we consider it is essential that parties have clear channels of communication between each other to communicate the impacts of the approaches they are taking. This is particularly important where multiple elements of linked infrastructure are requisitioned but provided at different times.

4.114 The information presented to us in this case shows that both Parties have not communicated clearly about the impacts of the approaches that were taken and in some cases the correspondence is confusing. In the absence of clear written correspondence between the Parties we have had to make some judgements based on the correspondence that is available to us.

4.115 In respect of our decision to attribute 100% of the costs of the Off-Site Works and On-Site Spine main to the On-Site Distribution Mains requisitioned by Redrow and not the other developers we consider that this is reasonable on the basis that it was Redrow not those other developers who requested the Off-Site Works and On-Site Spine Main and who should therefore contribute to those mains.

4.116 From the correspondence between the Parties in 2006 (see [Chapter 2](#)) we consider that there is no evidence to suggest that Redrow saw the Off-Site Works and On-Site Spine main as standalone requisitions. In addition, we consider that the duty on an undertaker to comply with a requisition only arises if the purpose of that requisition is to provide such supplies to premises as are sufficient for domestic purposes (section 41(1) of the Act).

4.117 Bristol Water has cited a letter it issued to Redrow dated 19 October 2006 to argue that at the time that the Off-Site Mains and On-Site Spine Main were provided in 2008, information was not available to calculate a final Requisition Charge that took into account any future income and that this risk was made clear to Redrow by Bristol Water in this letter.

4.118 In the above letter Bristol Water states that:

“When calculating the commuted sum for onsite water mains we take into account the income we expect to receive from the properties connected to the main for a twelve-year period. However, there are no premises that you have detailed that will be directly connected to this new main. The houses you mention will be attached to the onsite mains that will feed off the new mains you have requested.”

- 4.119 We consider that the last sentence of the paragraph above shows that Bristol Water was anticipating receipt of revenue from premises and the provision of on-site mains to serve those premises. In our view this supports our conclusion that the Off-Site Works and On-Site Spine Main cannot be separated from the On-Site Distribution mains requisitioned by Redrow.
- 4.120 Bristol Water has also cited a letter it sent to Redrow dated 8 September 2006 in which it set out the two statutory charging options available to Redrow (i.e. the DAD option or the relevant deficit option). Having considered this letter it is not clear that the pros and cons of each option, and the implications of taking each option in the context of this case, were made clear to Redrow.
- 4.121 In any case, although Redrow chose the DAD option it clearly stated that it remained concerned about the calculations underpinning this option as presented by Bristol Water and it was, therefore, paying on a without prejudice basis.
- 4.122 It is important to note that our determination above reflects the specific facts of this case and the information available to us. Different facts in another case might warrant a different approach. This determination is limited to this matter.

E. Infrastructure Charges

4.123 In our second draft determination we determined that Bristol Water is entitled, under sections 142 and 146 of the Act, to recover Infrastructure Charges for the Site in addition to recovering Requisition Charges.

Redrow's view

4.124 Redrow did not comment on our provisional conclusion on this issue. It has, however, previously asked that we determine the appropriate/reasonable amount that Bristol Water should have deducted from the Security Deposits to take account of the Infrastructure Charges it will receive.

4.125 Redrow has also argued that the Infrastructure Charges which Bristol Water will recover for the Site should also be deducted from the Requisition Charge so that Redrow are not paying for the same works twice.

Bristol Water's view

4.126 Bristol Water agreed with our provisional conclusion in respect of this issue as it has previously stated that it is entitled to recover Infrastructure Charges as well as recovering costs for certain specific works which are necessary as a consequence of proposed developments.

Our determination

4.127 Sections 142 and 146 of the Act provide for raising an infrastructure charge and these provisions are separate from and independent of those relating to providing and charging for a main requisition under sections 41- 43A of the Act.

4.128 Infrastructure charges were originally established to help enable water companies to invest in general network improvements required to meet increasing demand from new customers. The infrastructure charge is a flat-rate, indexed figure recoverable against premises that are supplied with water for domestic purposes that are connected to the water supply for the first time. This figure originally sought to reflect the average cost of a new connection over time. As such it does not relate directly to the actual costs of a specific scheme of improvement or reinforcement works, but rather becomes a source of funding for such works as and when the need for them arises. In this way infrastructure charges are distinct from requisition charges applied under sections 42- 43A of the Act, which directly link to works needed to provide a specific main, both in terms of the main itself and wider works required in consequence of providing that main.

F. Interest payable

4.129 In our second draft determination we determined that in accordance with section 42(4) of the Act, interest is payable on all of the Security Deposits made by Redrow for every three months for which these security payments have been held by Bristol Water. In addition, we stated that in calculating any interest due, Bristol Water should apply interest rate(s) in accordance with [Ofwat's webpage on interest rates](#) and should pay the refunds and interest due to Redrow within 20 working days of the date of our final determination.

Redrow's view

4.130 In response to our second draft determination Redrow argued that we should determine that Bristol Water should pay interest in accordance with our earlier information notice on interest rates on the Security Deposits it sought up until the mains or infrastructure relating to those Security Deposits was provided. However, it has suggested that the period after the relevant mains were provided is outside of our jurisdiction and as such is a matter for agreement between Bristol Water and Redrow failing which it would have to be determined by the Courts.

4.131 For the periods where Redrow does consider we have jurisdiction it has requested a table of our interest rates over the past 10 years.

Bristol Water's view

4.132 Based on our provisional conclusion on this issue Bristol Water calculated the interest payable to Redrow to amount to £79,936.29.

Our determination

- 4.133 Interest is payable on the Security Deposits received by Bristol Water in relation to the Off-Site Works and the On-Site Works, in accordance with section 42(4) of the Act. Interest should be paid for every three months in the period for which each security instalment was held by Bristol Water. In calculating any interest due, Bristol Water should apply interest rate(s) in accordance with [Ofwat's webpage on interest rates](#). Any dispute about the total amount of any interest payable would have to be determined by the Courts.
- 4.134 We have set out in Table 7 below details of the amounts on which interest is payable and the period for which that interest is payable. Given our determination on the calculation of Requisition Charges, we determine that Bristol Water should pay interest on the Security Deposits it recovered up until the infrastructure relating to those Security Deposits was provided, with any further interest payable on any refunds owing up until those refunds are paid.
- 4.135 We disagree with Redrow that our jurisdiction does not extend to setting interest rates for periods after the relevant infrastructure has been provided. Section 42(4) of the Act makes no such distinction, providing instead that interest is paid on any security held by an undertaker for so long as the money remains in the hands of the undertaker.
- 4.136 In response to Redrow's request for a table of historic interest rates our view is that our webpage already provides for the calculation of interest rates and as such we do not consider the provision of a table is necessary. In any case the Parties themselves have already worked out the interest payable in responding to our second draft determination and we would expect them to share this with each other following the issuing of this document.

Table 7 Amounts and periods for which interest is payable

Infrastructure	Amounts on which interest is payable	Periods for which interest is payable
Coldharbour Lane and Filton Road mains	£437,950	From: November 2006 to July 2007
Coldharbour Lane and Filton Road mains	£359,350	From: July 2007 to June 2008
Coldharbour Lane and Filton Road mains	£29,139 (refund based on difference between Security Deposit above and actual costs (£330,211))	From: June 2008 to date refund is paid to Redrow
Augmentation Works	£355,450	From: November 2006 to October 2007
Augmentation Works	£212,117 (amount in row above less actual costs of Phase 1 trunk main attributable to Redrow (£167,653 ²²) plus £24,320)	From November 2007 to April 2008
Augmentation Works	£215,858 (amount in row above plus £3,741)	From: April 2008 to November 2011
Augmentation Works	£158,282 (amount in row above less actual costs of Phase 2 trunk main attributable to Redrow (£57,576))	From: November 2011 to April 2013

²² Based on total cost of main attributed to new development (£2,041,260) divided by total demand of new developments (347 l/s) multiplied by demand from the Site (28.5 l/s)

Infrastructure	Amounts on which interest is payable	Periods for which interest is payable
On-Site Spine Main	£112,750	From: November 2007 to June 2008
On-Site Spine Main	£4,990 (amount in row above less actual costs of main (£107,760))	From: June 2008 to date refund is paid to Redrow
Main ref: 1428880	£5,998 (see table 3)	From: Jan 2008 to July 2009
Main ref: 1428880	£2,517 (amount in row above less £3,481 (see table 6 above))	From: July 2009 to date refund is paid to Redrow
Main ref: 1596921	£8,269 (see table 3)	From: Jan 2009 to February 2012
Main ref: 1596921	£5,597 (amount in row above less £2,672 (see table 6 above))	From: February 2012 to date refund is paid to Redrow
Main ref: 1596179	£1,903 (see table 3)	From: November 2009 to March 2010
Main ref: 1596179	£606 (amount in row above less £1,297 (see table 6 above))	From: March 2010 to date refund is paid to Redrow
Main ref: 1640502	£6,784 (see table 3)	From: October 2011 to August 2013

Infrastructure	Amounts on which interest is payable	Periods for which interest is payable
Main ref: 1640502	£5,734 (amount in row above less £1,050 (see table 6 above))	From: August 2013 to date refund is paid to Redrow
Main ref: 1704962	£5,570 (see table 3)	From: Jan 2011 to April 2013
Main ref: 1704962	£3,051 (amount in row above less £2,519 (see table 6 above))	From: April 2013 to date refund is paid to Redrow
Main ref: 1797283	£8,503 (see table 3)	From: Mar 2012 to April 2014
Main ref: 1797283	£6,324 (amount in row above less £2,179 (see table 6 above))	From: April 2014 to date refund is paid to Redrow
Main ref: 1824187	£10,217 (see table 3)	From: Dec 2012 February 2014
Main ref: 1824187	£10,217 (see table 6 above)	From: February 2014 to date refund is paid

5. Conclusion

- 5.1. In light of the legal framework of the Act, and the evidence we have gathered from the Parties, we determine that:
- a. Bristol Water acted reasonably in providing both the Coldharbour Lane and Filton Road mains as Redrow had requested the provision of two mains, one on each side of the Site;
 - b. the total capacity in the Coldharbour Lane and Filton Road mains is attributable to the Site and therefore payable by Redrow because it cannot be used to serve other sites and because it is as a consequence of using standard-sized mains;
 - c. Bristol Water is entitled to seek a contribution from Redrow towards the Augmentation Works since they were, in part, necessary, to serve the Site;
 - d. it is reasonable for Bristol Water to base Redrow's contribution towards the Augmentation Works on the original forecast peak demand requirement from the Site of 28.5 l/s since there does not appear to have been any additional works carried out to cater for any increase in forecast demand;
 - e. it was not unreasonable for Bristol Water to have sought separate Security Deposits for the Off-site Works;
 - f. Bristol Water should calculate a Requisition Charge for each On-Site Distribution Main separately but include a proportion of the Off-Site Works and the On-Site Spine Main in each calculation. The combined total of the Requisition Charges based on the information available to us at this time amounts to £267,848;
 - g. A refund of £635,007 is owed to Redrow and should be made within 20 working days of our final determination of this matter in addition to interest payable;
 - h. Bristol Water is entitled under sections 142 and 146 of the Act to recover Infrastructure Charges for the Site in addition to recovering Requisition Charges;
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- i. In accordance with section 42(4) of the Act, interest is payable on all of the Security Deposits made by Redrow for every three months for which these security payments have been held by Bristol Water.