

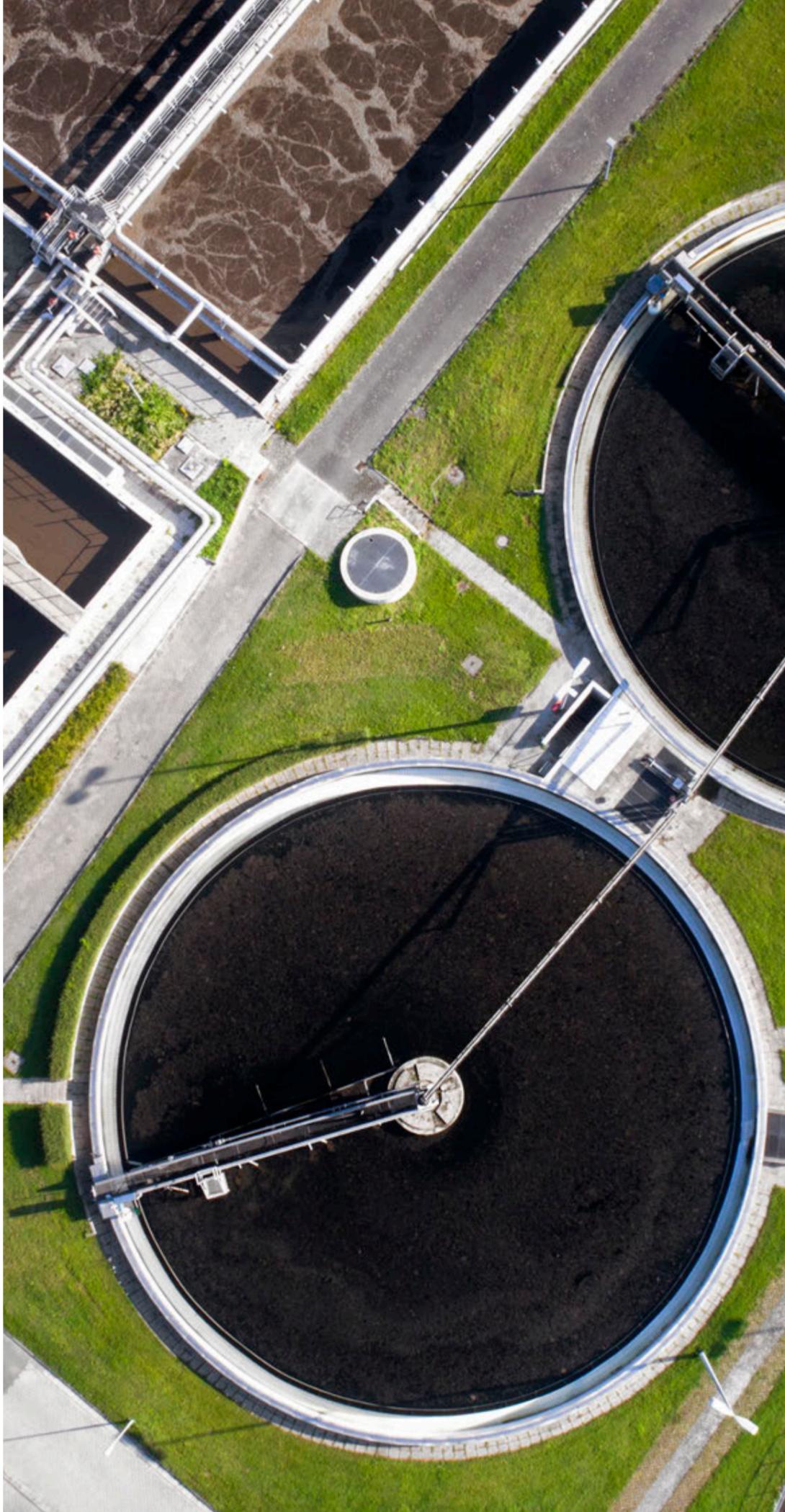
WHY THE WATER AND SEWERAGE SECTOR REFORMS WILL COST HOUSE BUILDERS SIGNIFICANTLY MORE

AN INDEPENDENT REPORT



This Report is the product of research conducted by W A Consultancy and Technical Development Services. It relies on information disclosed under the Freedom of Information Act in addition to evidence that exists in the public domain. It is further informed by the outcome of related discussions over the last four years involving Defra, Ofwat, CCWater, Water UK, individual Water and Sewerage Companies, and Developers/House Builders.

This is not an official publication. The views expressed in this Report are those of respective authors, several peer group Consultants and Developer Clients.



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EXECUTIVE SUMMARY

“From 1st April 2020, House Builders can expect to be paying somewhere in the region of an additional £1000/dwelling for their water and sewerage infrastructure”.

(Water & Sewerage Company wishing not to be named – 4th October 2019)

“This will result in a significant increase the charges Developers pay us in relation to new water mains and requisitioned sewers from 1st April 2020 compared to the last two years”.

(Northumbrian Water Charging Arrangement website – June 2020)

From April 2020, this will be the stark reality confronting many House Builders in England. The £1,000 per dwelling will, in some instances, be a conservative figure.

Ironically, this was never the expected outcome and overall, House Builders should have started to experience a reduction in the cost per dwelling for the provision of water and sewerage infrastructure. So why is this not happening? The answer is simple - what is being instigated under the banner of “Water and Sewerage Sector Reform” has been allowed to have a distinct bias towards the commercial interest(s) of Water and Sewerage Companies.

Reforms proposed by Government and introduced/imposed by the Industry Regulator, Ofwat, had simple and easily understood objectives - to provide House Builders and

Developers with fair and transparent costs and charges. Nine years on from when issues of ‘Charging’ in the Sector were justifiably questioned, neither objective has been realised. Coupled with further ‘Sector Reforms’, the outlook for House Builders and Developers is not looking good.

This Independent Report endeavours to explore and explain why this is the case. Moreover, whilst a large part of the responsibility lies with Ofwat, it must also be said that the Developer Community have demonstrated a degree of ambivalence towards these ‘Reforms’ as though they were a fait accompli - this was never the case.

Surprisingly, certain Developers have, on occasions, articulated to Ofwat, and other ‘sectoral’ external bodies, as well as the co-authors of this Report, that:

“... it does not really matter what Water and Sewerage Company infrastructure and connection costs are as they are likely to be deducted from the land price.”

However, for such an approach to succeed, two fundamental requirements must be in place, namely, that there is an underlying level of trust and confidence that Water and Sewerage costs/charges agreed in principle are unlikely to change, in addition to their being fair and reasonable. Secondly, that the Landowner/Vendor is prepared to accept a compensating reduction in land value. With regard to the former, the evidence disclosed in this Report says otherwise

At a time when land value offsets are being expected to pay for so much, typically, S106 planning obligations, the Community Infrastructure Levy, Affordable Housing, Electric Vehicle Charging Infrastructure, Near Zero Energy Performance of New Homes (Part ‘L’ Building Regulations), Superfast Broadband, Biodiversity Enhancement and/or Offsetting, Contaminated Land Remediation, S278 Highway Improvement Works, Flood Defence Contributions, Commuted Sum Payments, etc., such a mindset defies both logic and an appreciation of commercial reality in terms of the potential impact on land availability. Moreover, the inability or unwillingness to challenge the monopoly of Water and Sewerage Companies, either at the outset, when presented with inequitable terms and conditions, or retrospectively, is at times difficult to understand but there are compelling reasons as to why this is the case.

Any challenge of Water and Sewerage Company terms and conditions often results in Company vacillation, leading to considerable delay, exacerbated by the fact no effective, expedient dispute resolution process exists. For House Building businesses that must continue to operate as a dynamic and responsive entity, the underlying ethos of the Water and Sewerage Sector provides a primary disincentive for House Builders to mount any challenge of costs and charges. But challenge can have its successes.

One of the authors of this Report has recently challenged a Water and Sewerage Company’s demand for payment for network reinforcement and secured a reduction in the payment demanded from the House Builder just short of £500,000.

Challenging any off-site water and/or sewerage network reinforcement cost prior 1st April 2018 constitutes an opportunity for House Builders and Developers to recover from Water and Sewerage Companies previously paid contributions that were either inappropriate or inequitable. It is an opportunity rarely exercised or even explored.

The issue specific to the Water and Sewerage Sector is that House Builders and Developers just want to pay for what is fair and reasonable for on-site and off-site water and sewerage infrastructure that is so vital to new housing.

In simple terms, if the cost to service and construct a development becomes too high, it has the resultant effect of making the site unviable to purchase. Moreover, as we have seen in the past, for example, the imposition of Development Land Tax in 1976, land value capture as a business and social engineering concept can be counter-intuitive as it carries the risk of land for housing being deliberately withheld from the marketplace by land owners and/or their retained agents.

More importantly, it is SME house building businesses that suffer the most acute impact of land value capture, in addition to difficulties securing sufficient capital for investment in land purchase and subsequent work in progress. This may begin to explain why SME House Builders are in decline, in addition to their being disincentivised to challenge Water and Sewerage Company charges.

Whether by design or a lack of understanding of the Industry

they regulate, Ofwat’s drive to inflict more costs on developments, is for others to consider and conclude from this Report.

Ofwat’s attempts to increase competition in the Sector cannot be considered to have been successful. Crucial to the Reforms they have introduced, is Ofwat’s readily identifiable failure not just to understand why water and sewerage infrastructure costs vary considerably, but their total lack of scrutiny and audit of Water and Sewerage Company charges per se. This is evidenced by the confusion Ofwat has created by not fully explaining, in a practical way, what they see as “cost reflective charges” and more specifically, what exactly are “the balance of charges.” As will be seen later in this Report, the variation in charges across the Sector when comparing Company costs and charges, on a strict like for like basis, is staggering.

As with many things over the last four years this is perhaps one of those issues that has been a victim of ‘Brexit paralysis’. Responses to Freedom of Information requests has revealed that the Government has effectively taken its eye off the ball.

One pertinent FOIA request has revealed Defra totally failed to challenge Ofwat to explain why their requirement for evidence-based costs, robustly defined and justified in Regulatory Impact Assessment(s), had not been provided. The critical importance of this monetarised analysis, and specific to each element of the Water and Sewerage Sector Reform(s), is conspicuous by its continued absence. Had questions been raised by Defra at the appropriate time, alarm bells would surely have started ringing. Many would say that hindsight is a wonderful thing but to the authors of this Report, it was very evident that critical and substantive issues needed to be addressed before the Charging Reforms were introduced.

As a trade association but more so as a policy directorate, the pivotal role Water UK has played in the introduction of these Reforms is commendable, especially the way it has managed the interests of Water and Sewerage Companies. Ofwat devolved responsibility to Water UK to oversee and manage key aspects of the Reforms – action that has raised serious questions on several occasions. At first glance, the approach taken by Water UK appears collaborative. However, what was allowed to take place, largely through selective and/or limited engagement, coupled with an unwillingness to listen to important customer feedback, effectively meant that the engagement process became nothing more than a veneer that ensured what best suited the commercial and procedural interests of Water and Sewerage Companies prevailed. As a simple comparison, Government would not let trade associations like the HBF or HBA decide on changes to the Building Regulations. However, the role and influence of Water UK continues.

each Company that demonstrated where and how they were actively supporting markets. A second letter, effectively dealing with the same issue in addition to seeking evidence that Company Charging Arrangements had been robustly defined, followed later in the year. Two key statements made by Ofwat flow from this August 2020 'Review':

"A common theme was incumbent companies, in our view wrongly, using competition law as reason not to collaborate or as reason not to be more responsive of the needs and specific circumstances of individual market participants".

Whilst on matters specific to Developer/House Builder charges:

"... we are proposing that a working group on New Connection Charges is established to improve consistency and terminology and presentation of charging arrangements and to develop common charging methodologies, to be led by Water UK".

(Ofwat: Review of Incumbent Company Support for Effective Markets – August 2020).

"We are concerned, however, that incumbents are not ensuring that their charges are cost-reflective. This can act as a barrier to competition in some markets in some incumbent areas".

"We explain in our May 2020 consultation on new connection services that we are concerned that the differences in levels of new connection charges are so marked that they are unlikely to be a function of cost alone".

In their August 2020 publication referred to previously, the Review in question followed Ofwat's May 2019 letter to the 15 English Water Companies seeking evidence from

This latest Ofwat Review and the consultation referred to above stand testimony to the fact that the authors of this Report identified these very issues (and others specific to charging in general) close on 5 years ago. It therefore begs the most compelling of questions - **why has it taken so long for Ofwat to recognise that reform to date has still not addressed key issues first raised in the Gray Review of 2011?**

Reflecting upon the outcome of the authors challenge of a Water and Sewerage Company referred to earlier in this summary, it contextualises the extent to which Ofwat has failed to drill down into how Water and Sewerage Company charges have been determined. Likewise, the paucity of qualitative and quantitative evidence that supports

the justification for each Company's costs and charges. Clearly, light touch regulator management and control of monopoly businesses, who are also allowed to self-certify compliance with a loosely applied set of rules, is not proving to be an effective way forward. But the more compelling question for House Builders and Developers is how much they have overpaid for water and sewerage infrastructure before and after the introduction of the April 2018 reforms? **On several counts, the construct of Ofwat's 27th May 2020 Consultation and the above Ofwat Review represents an acceptance that the underlying policy and Charging Rules have failed to adequately address so many key issues.**

What was allowed to pass before the onset of the 2018 Reforms was frequently shown to be manifestly

inequitable for House Builders – **What has taken place from 1st April 2020 heralds even greater confusion and increased cost in a regulatory environment that is not delivering to the Development Community value for money.**

What will happen next beyond the publication of this Report really depends on the input and requirements of the Developer Community. The authors of the Report have provided the evidence-based facts, but if Developers and House Builders are prepared to accept the substantial increases in costs identified for the provision of water and sewerage infrastructure, at the very least they will have been forewarned what they can expect.



INTRODUCTION

“From 1st April 2020, House Builders can expect to be paying somewhere in the region of an additional £1000/dwelling for their water and sewerage infrastructure”.

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“This will result in a significant increase the charges Developers pay us in relation to new water mains and requisitioned sewers from 1st April 2020 compared to the last two years”.

(Northumbrian Water Charging Arrangement website – June 2020)

These two statements lay bare the reality of the recent Water and Sewerage Sector Reforms. The ‘Reforms’ were meant to herald the introduction of fair and transparent costs and charges for the provision of water and sewerage infrastructure, especially when it came to the vexed issue of off-site infrastructure works and/or improvement(s) to existing networks. The two Companies concerned are not alone in making such comments – almost all Water and Sewerage Companies have made the same comment but insisted they were not to be cited.

In terms of housing delivery, Reform of the Water and Sewerage Sector has been long overdue. However, despite new charging arrangements having been progressively introduced since April 2018, the Sector continues to be the **most expensive of all utility service providers, and by a factor of 3 or more**. The consequences of the Reforms, intended or otherwise, are imposing significant additional cost(s) on House Builders and Developers. This evidence-based Report explains why.

The evidence accumulated, tested, and reflected in this Report points to a strategic and opportunistic commercial shift orchestrated by Ofwat. House Builders are not only paying significantly more for essential infrastructure but are subsidising

Water and Sewerage Company businesses, and therefore existing customers, to a far greater degree. Furthermore, the raft of Reform(s) introduced to date are not just specific to costs but other key aspects that have an adverse impact on housing delivery. In the round, they have radically changed the charging and procedural dynamics in addition to having struck a blow against much needed sector competition.

Ofwat, Developers and House Builders were warned of these outcomes nearly four years ago⁽¹⁾ – commercial reality and the imposition of significant additional cost for House Builders is about to bite. More importantly, the prospect of Government housing policy being dealt a serious body blow cannot be ruled out without urgent, high level corrective intervention.

Ofwat’s attempts to introduce much needed sector competition, i.e. New Appointments and Variations (NAV)s together with an increase in Self-lay providers (SLPs), are failing to gain the necessary traction to meet the needs of the House Building Industry. Typically, increased sector competition (with sufficient critical mass across all Water Companies), fair and equitable charging, and much improved performance/response times.

Fundamental sectoral change was first advocated in the Cave Review (April 2009) and in the subsequent Gray Review of July 2011. The latter recognised the need not just for charging transparency and Sector consistency but the essential requirement to introduce increased competition in a part of the utility sector with a monopoly position that continues to raise many concerns. Seven years on from the Gray Review and following the onset of the Water Act 2014, Reform finally became a reality but not without raising far more questions than it answered.

From a House Builder perspective, the seminal Water Bill, which eventually became the Water Act 2014, did not appear to advocate radical change to earlier and related legislation, namely, the Water Industry Act 1991. However, Sections 16 and 17 of the 2014 ‘Act’ handed to the Regulator, Ofwat, unprecedented and unaudited power to introduce a completely new charging regime for the provision of water and sewerage infrastructure. **Unfortunately, the Judicial Review process remains the only effective way to challenge the substance and legitimacy of the Reforms introduced by Ofwat.**

Importantly, the 2014 ‘Act’ also required Defra to issue Statutory Guidance on New Charging before Ofwat considered and subsequently introduced any Charging Rules. These ‘rules’ were meant to define how Water and Sewerage Companies determined and justified their respective charges. Importantly, Defra’s declared expectation was that costs to House Builders would either reduce or at worst, cost neutrality would prevail. This statement provided the required reassurance that Ofwat would not seek to use the Reforms to enhance the commercial interests of Water and Sewerage Companies. Robust evidence, much of which is contained in this Report confirms the complete opposite.

The Reforms have not stopped at New Charging Rules and Company Charging Arrangements, nor attempts to introduce much needed competition. Ofwat has gone much further having introduced Reforms that have sought to improve the response and delivery performance of Water and Sewerage Companies – this has since become known as D-MeX. In addition, it has introduced Adoption Codes for newly constructed water and sewerage assets, supported by re-written and amended design and construction standards and guidance. These documents, prepared by Water UK on behalf of Ofwat, also include model Adoption Agreements that continue to contain impractical provisions. However, at the intended introduction date of 1st April 2020, only the ‘Code’ and supporting guidance for the adoption of sewerage assets is in place. It has been suggested there are serious, but undisclosed issues with the water asset adoption ‘Code’ and/or its supporting guidance and procedures thereby preventing its introduction. Ofwat have yet to confirm a likely date for introduction and/or accompanying transition arrangements.

The Developer Community, naturally embraced the principles behind these Reforms but how costs, technical guidance and procedures came to be formulated and crystallised has raised many concerns; not least, the influential role Water UK has played as an Ofwat retained organisation. This is despite Water UK being a trade association and policy directorate for Water and Sewerage Companies. Questions have therefore been raised regarding sector commercial bias – in reality, evidence has shown these questions to have been fully justified.

Any proposed Reforms were expected to be underpinned by robust evidence, especially when it came to costs and their justification. More importantly, Ofwat were required to include a Regulatory Impact Assessment as part of any consultation they undertook relating to their Charging Rules – **this never transpired**. In addition, no Water or Sewerage Company included in their own Charging Arrangement consultation any evidence relating to costs and charges and most importantly, how they had been determined. **This evidential vacuum has persisted up to the date of this Report.**



Transparency and consistency in both costs and charges, likewise newly introduced asset adoption arrangements, were further expected outcomes. But as the evidence presented in this Report identifies, these basic requirements have not been met. Moreover, any consistency in the application of national design and construction standards for the adoption of sewerage infrastructure has been lost following the imposition of individual Sewerage Company standards and variations. Some of these **Company-specific demands have significant cost and procedural implications for House Builders.**

As for D-MeX and levels of service, what has evolved is unlikely to deliver any real-time improvement where it is needed, needed (i.e., service delivery on-site), but it remains early days. That said, Ofwat and Water UK continue to ignore the growing importance of MMC and the off-site manufacture of new homes, especially the significantly reduced construction time-scales that result. Despite raising the issue with Water UK and Ofwat many times over, there is an underlying reluctance to engage on this matter. At present, D-Mex takes no account of the need for much improved and shorter response times. (It also remains absent in Ofwat's July 2020 consultation regarding the extension of D-MeX to include adoption procedure performance KPIs - **another missed opportunity or a repeated disregard of customer needs?**)

In terms of delivery performance, fining a Company a percentage of its annual Developer Services revenue for failing to deliver a service to an agreed KPI is counter intuitive. Likewise, paying an additional percentage for a Company that is deemed successful. A failing business will either keep failing or look at the potential to increase its costs to House Builders to make up any shortfall. More importantly, any House Builder subjected to poor performance and/or resultant delay must still absorb the costs arising but more importantly, be left to deal with the consequences of new home owners conceivably not being able to move into their new home on an agreed contractual completion date. It is also of some concern that final performance KPIs have been allowed to be set by Water UK, whilst not necessarily taking cognisance of disclosed House Builder needs and expectations.

It has been suggested several times that D-MeX should follow a similar 'fine' system as applied by Ofgem in the Energy Sector and which has proved to be a great success. Not unsurprisingly, this has been dismissed by Ofwat, despite concerns being raised that some Water Companies are not meeting their obligations when a House Builder is contemplating the appointment of a NAV.

In summary, the Reforms instituted by Ofwat can best described as regressive rather than progressive. They are confusing, complex, and disproportionately expensive for House Builders.

(1) E-mail exchange with Ofwat 26th September 2016



1 THE EVOLUTION IN WATER AND SEWERAGE INFRASTRUCTURE CHARGING

1.1 Following an extended period of research and evaluation, this Report exposes the commercial consequence(s) of the Reforms introduced into the Water & Sewerage Sector and which started to take effect from the 1st April 2018. It summarises the cost implications for those House Builders operating in England. Legislation in Wales is different and as such these notes do not necessarily apply to Dwr Cymru (Welsh Water). However, evidence in the public domain confirms House Builders operating in the Dwr Cymru area are also experiencing the imposition of inequitable terms and conditions for the provision of water and sewerage infrastructure.

1.2 As a result of the Reforms introduced by Ofwat, the increase in cost(s) for water and sewerage infrastructure, so vital to the expedient provision of new homes, has far exceeded the underlying level of inflation. Moreover, these cost increases come at a time when the economic impact of Covid-19 is likely to take the House Building Industry back to an environment of rigorous cost control and business challenge synonymous with the financial crash of 2008. As housing and construction represents around 15% of national GDP/GVA (and likely to rise) it is hardly surprising the No10 Business Unit has issued a call for industry-based recommendations to reduce both cost and regulatory burden in what is likely to be a challenging business environment for house building from here on.

1.3 The Reforms introduced by Ofwat in April 2018 were first considered by Defra in 2012, the year Defra published their 'call for comments' on proposed Water and Sewerage Sector Reforms⁽²⁾.

In many respects, the Reforms under consideration stemmed from a series of recommendations made to Government in the earlier Gray Review. In addition, there had been considerable house builder concern in terms of 'paying twice for the same thing', (i.e., infrastructure charges), accompanied by Water and Sewerage Company demands for House Builders to fund spurious and subjectively determined network reinforcement.

1.4 The Gray Review was highly critical of Ofwat as a statutory regulator. Likewise, the sector per se, especially when it came to infrastructure cost legitimacy and transparency. Whilst few House Builders took note of Defra's call for evidence and comments, the HBF provided a comprehensive response⁽⁴⁾ - this can be found on the Parliamentary website.

1.5 An informative evidence-based appendix, containing several recommendations and which accompanied the HBF submission, does not appear to have been referenced in the summary of responses returned to Defra but this too highlighted many concerns raised by both House Builders and consultants and specific to the Water and Sewerage Sector.

1.6 The 'Bill' subsequently received Royal Assent and passed into UK law on 14th May 2014 to become the Water Act 2014.

1.7 A fundamental part of the 2014 'Act' required Defra to prepare and issue 'statutory guidance' in advance of Ofwat issuing a series of Charging Rules - Defra's final guidance having been issued in January 2016.



1.8 Amongst other important parts of the 2014 'Act', Sections 16 and 17 were of crucial concern for House Builders as they handed to Ofwat unprecedented and unaudited power to introduce an entirely different charging regime. The *raison d'être* was for the Water and Sewerage Sector to be responsively and proactively managed through a series of 'controlling' Charging Rules. Fairness, cost transparency, consistency, confidence, and trust in a monopoly part the 'Utility Sector' being primary 'rule' objectives.

1.9 Sector consistency was one of the expected outcomes both in terms of the approach taken by each Company, and how they in turn arrived at their subsequent charges/costs, supported by robust evidence. Fundamentally, one of **Defra's keynote expectations was that any 'rules' introduced by Ofwat would yield cost reductions for House Builders, or at their worst, maintain cost neutrality.**

1.10 Evidence gathered over the last 3 years in particular, identifies the complete opposite, accompanied by staggering differences in company approaches to determining respective 'charges' and cost(s). This begs a compelling question, namely, in nearly three years how much have House Builders paid to Water and Sewerage Companies that has not been justified? **On a de minimis basis, crude estimates put this figure in the region of £200m** - in reality, the lack of any investigation and/or audit by Ofwat, accompanied by full disclosure, means we may never know.

1.11 The new charging regime was meant to bring these inconsistencies to an end. But other than better articulating the rationale, purpose and cost components that define water and sewerage infrastructure charges, and how they will be reconciled against future infrastructure investment specific to new housing, the Reforms have not met the requirements and objectives set by Defra.

1.12 Whilst there may be a better understanding and justification for the imposition of infrastructure charges, how the network reinforcement component has been determined remains one of those aspects where there is a total lack of credible evidence. This is accompanied by an underlying reluctance by Companies to disclose how network capacity and any subsequent cost(s) for network improvement have been determined.

1.13 The widest possible Developer Community engagement was a further principle enshrined in Defra's statutory guidance, but evidence points to less than 2% of the Developer Community having been consulted. In e-mail correspondence concerning another reform-related matter, Water UK (April 2020) advised that the 'developer' customer base is too large for wholesome consultation. It therefore opted for selective and potentially unrepresentative engagement⁽⁵⁾.

1.14 In fact, how the 'Sector', especially Ofwat, has chosen to engage with House Builders and the Developer Community in general has been a cause for concern. A tactical approach to Developer Community involvement has been quite evident throughout the Reform process.

"... the range of initiatives underway are intended to improve the developer services experience by providing improved customer service, increased competition, more choice and transparency in the market. These in turn are expected to lead to cheaper, better, and more innovative services to all developers".

(Sarah Hendry - Director of Floods & Water, Defra - 7th November 2017)

1.15 The following statement(s), repeated from an Independent Report for Citizens Advice⁽⁶⁾, and relating to Ofwat's approach to Company business plans for the next five years, provides corroborative evidence of Ofwat's selective and at times self-determinative approach, i.e. **we know what the customer wants without necessarily listening to what they say:**

- "The Competition and Market Authority (CMA) may want to ... explore how certain 'discretionary' decisions have been made. Greater transparency around the values, assumptions, methodologies, and wider approaches informing any evaluations would be useful. In particular: how Ofwat has defined and valued consumer ... needs and preferences; how the requirements of current and future consumers have been balanced; and regional variations in views".

- "The CMA is encouraged to explain for each company business plan how it has considered customer and

stakeholder views and to provide a clear line of sight between the outcome(s) customers say they want Greater transparency in this area would be welcome. This will be important for trust and legitimacy".

- "Northumbrian Water (NWL) highlights that the Gray Report in 2011 "cautioned" that while the final decision in a price control should sit with the regulator "Ofwat should be careful about substituting its own views for those expressed by or through the consumer representative". (Our underlining for emphasis).

1.16 Partner and stakeholder developer interests reading this Report are left to consider if (a) they had been properly advised of these Reforms by the Regulator, (b) whether they were effectively involved in the engagement process and (c) as a key customer of the Water and Sewerage Sector, they were listened to.



(2) Draft Water Bill Pre-legislative scrutiny - call for submissions

(3) Review of Ofwat and consumer representation in the water sector (Gray Review - 14th July 2011)

(4) [www.http://publications.parliament.uk/pa/cm201213/cmselect/cmenvfru/witev/draftwater/m25.htm](http://publications.parliament.uk/pa/cm201213/cmselect/cmenvfru/witev/draftwater/m25.htm) (September 2012)

(5) Throughout the Reform process, Ofwat has regularly retained Water UK to either prepare written sector guidance or undertake the customer engagement process on Ofwat's behalf. This has raised several concerns from House Builders and consultants regarding 'Sector' bias.

(6) Water companies' use of customer engagement in their PR19 redetermination statements to the CMA - Sustainability First on behalf of Citizens Advice. (July 2020)

2 THE BACKGROUND AND SUBSEQUENT APPROACH BY OFWAT IN SETTING DOWN THE NEW CHARGING REGIME

This is summarised as follows:

2.1 Despite the need for effective management and control of a monopoly part of the utility sector, Ofwat's preference has been for a 'light touch', non-prescriptive regulatory approach, the shortcomings of which have since been exposed, as evidenced by Ofwat's 27th May 2020 consultation⁽⁷⁾.

2.2 Ofwat consider their charging rules – first introduced in December 2016 – to be nothing more than a series of overarching 'principles' but weakly enforced. They have been set by an 'economic regulator' that appears to have the ability to randomly select what areas of jurisdiction it has. Evidence to this effect can be found in Ofwat's response to several disputes referred to them for formal determination. Final determinations issued by Ofwat have also contained contradictory directions/decisions. For example, Ofwat have said they have no powers to determine issues relating to infrastructure charges, other than matters concerning the 'relevant multiplier', i.e. the sum of the loading units of all the water fittings in a building. This can hardly be construed as effective regulatory control or intervention given the importance and inherent costs associated with infrastructure charges.

2.3 Defra required that Ofwat include a Regulatory Impact Assessment (RIA) in any consultation regarding their intended 'charging rules' – this was never done.

What supposedly passed as an 'RIA' fell a long way short of the

requirements normally associated with critical changes in legislation. Similarly, statutory guidance under consideration either by Central Government or a body with statutory responsibility. What was presented, and the way sector Reforms continue to be presented, has been done in an evidential vacuum lacking in both representative monetised data and supporting information.

2.3 In taking cognisance of Ofwat's 'rules' it was left to each company to interpret how its new charges and costs (the new charging arrangements) met each of Ofwat's charging rules. An approach that guaranteed undermining any attempt to introduce consistency.

2.4 Further principles embodied in Defra's statutory guidance required any subsequent charging regime to be 'cost reflective', and that the 'balance of costs' between existing and new customers was to be maintained. Here lies a fundamental dichotomy, Ofwat has never provided a sufficiently clear definition of what constitutes any so called 'balance', including associated monetary costs and/or contributions. Similarly, the component parts that are expected to constitute the make-up of cost reflective charges. On several counts the 'sector', by its' own admission, has never undertaken an effective enough audit of developer services income and expenditure to adequately define the term 'balance' or cost-reflective charging.

It therefore remains questionable if sufficient and credible evidence ever existed that could accurately and responsively inform any new charging regime.

2.5 This lack of definition has created confusion, whilst undermining any attempt to provide transparency. Ultimately, it has introduced unnecessary complexity for house builder customers, and by their own admission, many Water and Sewerage Companies find themselves in the same confused position.

Numerous partner and stakeholder interests had wished Ofwat would take a far more prescriptive approach when it came to charging arrangement policy. The 'light touch' approach did not and has not made the policy either workable or manageable, with the outcome best described as a 'sectoral free for all' in terms of how to interpret Ofwat's charging rules. Likewise, how costs are to be determined and justified. The consequences are frighteningly clear – significant variation in what are supposedly identical elements of cost, coupled with a disproportionate increase in house builder costs but conversely, betterment for a monopoly Water and Sewerage Sector.

"Monopolies are anathema to competition, free trade and the application of equitable costs and charges".
(Adam Smith Wealth of Nations – 1776)

2.6 One of the primary difficulties in trying to understand the concept of balance and cost reflectivity lies in the fact that water and sewerage infrastructure charges (ICs) have never been audited by Ofwat since sector privatisation in 1989. Cumulatively, House Builders have paid over to Water and Sewerage Companies around £2.7bn up to April 2018. Twice in the last five years Ofwat has confirmed this income stream and the infrastructure it was meant to provide has never been accounted for. In the absence of audit and/or any meaningful reconciliation of IC income versus expenditure, it is difficult to understand how 'balance' and 'cost reflectivity' can have any meaningful part to play in terms informing and subsequently defining any intended charging Reforms.

2.7 The original intention was for the new charging regime to come into force on 1st April 2017 leaving water and sewerage companies just two months to, (a) crystallise charging principles/costs and (b) consult on their finalised charging arrangements. As a result of numerous concerns relating to transitional provisions, and with just 2 months for Companies to prepare and/or finalise their charging arrangements, Ofwat delayed the introduction of any new charging regime until 1st April 2018. This supposedly allowed each company to complete an evidence-based due diligence process that would provide accurate, representative, and cost-reflective costs and charges, supported by robust evidence. This has not been the outcome.

2.8 Company charging arrangements were the subject of individual Company consultation(s) – around 19 in total and in excess of 1100 pages of narrative, most of which was 'principle' based – no Water & Sewerage Company provided any supporting

evidence as to how costs had been determined or what legitimate monetary value would be attributed to each area of cost. In reality, there was no elemental breakdown of any key cost, including the vexed issue of infrastructure charges, which from 1st April 2018, included undisclosed costs for committed water and sewerage network reinforcement deemed to be in 'direct consequence' of new housing provision. Such an ambivalent approach by the sector has persisted up to and including the introduction of further revised charging arrangements in April 2020.

2.9 Legitimacy of costs and their compliance with Ofwat's charging rules was and continues to be left to sector/individual company self-certification, with Ofwat having relied exclusively on Company Board Assurance Statements. There has been no independent audit, with CCWater, defined as having some form of customer protection role, generally accepting respective company charging arrangements without any serious challenge.

2.10 All Water and Sewerage Companies unilaterally disclosed their respective charges and costs on a sector agreed date of 1st February 2018 (originally scheduled for April 2017) – a fait accompli disclosure of unchallenged costs, not scrutinised by effective consultation, and which applied from 1st April 2018. This procedure, sanctioned by Ofwat, raised several comments and concerns at the time.

2.11 Part of the pre-introductory discussions with the Water and Sewerage Sector focused on how water and sewerage network capacity would be determined and how this in turn would inform the network reinforcement cost to be included in respective infrastructure charges. Agreement in principle was struck in the early stages of the Reform discussions, i.e. 2015/16, and involving Defra, Ofwat and Developer/House Builder customers, that this was a matter of such intrinsic importance that an appropriate and consistent methodology for network capacity assessment would form part of Ofwat's Charging Rules. Largely influenced by Water UK, the trade body (but also the policy author/directorate) for the Water and Sewerage Sector, it never transpired. Serious questions regarding just how representative network reinforcement costs really are, continue to dominate – see Part 7 of this Report.

(7) Charging Arrangements for New Connection Services for English Companies: Comparative Analysis and Consultation – (May 2020)

3 CONSULTATION MAY 2020 – OFWAT’S REASONS AND RATIONALE

3.1 Before summarising the financial impact for House Builders arising from the new water and sewerage charging arrangements, it is perhaps helpful and informative to first put the Ofwat 27th May 2020 consultation into its rightful context. In many respects, it can be construed as ‘closing the stable door after the horse has bolted’. It is also symptomatic of a Regulator failing to listen to house builder customers for the last four years.

3.2 In the opening preamble to their 27th May 2020 consultation Ofwat state:

“Since publishing the rules, we have received feedback that the differences between companies arrangements can be confusing and that the difference in levels of charges are so marked that they are unlikely to be a function of cost alone”.

3.3 Whilst under the heading of ‘cost reflectivity’ Ofwat concede:

“Such problems may undermine key principles of our rules, including that the charges are predictable, transparent and fair. While we expect charges to reflect costs, we feel our charging rules could have more explicit requirements to this effect”.

3.4 The irony of these two statements lies in the fact they were first articulated in a similar context in the Gray Review of 2011 and latterly (February 2018) by House Builders, the Home Builders Federation (HBF) and the Home Builders Association (HBA). With the house building industry having disclosed to Ofwat evidence of significant and disturbing sector disparity in Company charging arrangements/costs and prior to the onset of new charging arrangements in April 2018, it afforded Ofwat sufficient time to reconsider what they were about to impose. **Not for the first time they choose to ignore crucial customer feedback.**

3.5 Sensibly, a deferral until the commencement of PR19 in April 2020 (the start of the next 5-year investment period for the Water and Sewerage Sector) and which would have allowed time for Ofwat to investigate and to take stock, was clearly there for the taking. Albeit somewhat late in the process, it was also an opportunity for Ofwat to undertake the much-needed Regulatory Impact Assessment, as required by Defra at the outset. **Ofwat chose to press on regardless.**

3.6 Until their May 2020 consultation, Ofwat had continued to ignore the many concerns raised by the Developer Community, despite earlier disclosure of robust evidence identifying unfair and inequitable charges. In addition, the evidence provided identified ‘Sector’ variations in ‘like for like’ cost that have continued to defy both logic and explanation. On several counts, it can be argued **the evidence disclosed in February 2018, crystallised the need for urgent intervention by Ofwat - this never transpired.**

3.7 The revised Company charging arrangements introduced with effect from 1st April 2020 has continued the theme of inequitable charges, whilst also repeating significant and inexplicable variations in cost. Evidence to this effect, complied once again by the Developer Community, including Self-lay providers (SLPs), has been shared with Ofwat. Regrettably, this was the second occasion when there should have been effective intervention rather than commit to a disingenuous consultation in May 2020 and one that contains far too many omissions and deficiencies to be considered meaningful.

3.8 **Importantly, the outcome of this latest consultation, and therefore any correction or refund in payments that may be due to House Builders that previously were not justified, will not be addressed by Ofwat until 2022/23. This is some 6 years after their charging rules were first published.** It therefore brings into question Ofwat’s role as an effective regulator, in addition to raising questions about their declared commitment to facilitate the increased provision of much needed new housing.



4 WHAT DID THE WATER ACT 2014 AND OFWAT'S CHARGING RULES CHANGE?

The Water Act 2014 repealed key sections of the Water Industry Act 1991, as amended by the Water Act 2003, especially those parts that had previously defined how requisitioned water and sewerage infrastructure was to be paid for by House Builders. The key changes are summarised as follows:

Note: The House Builder has always been required to secure a bond equivalent to the cost of any requisitioned infrastructure works.

In simple terms what these statutory provisions defined was that House Builders would only contribute a small and equitable percentage to the cost

i. Requisitioned Sewers

“For the purposes of section 99 the discounted aggregate deficit on a public sewer is the amount equal to the sum of the estimated relevant deficits for each of the twelve years following the provision of the sewer, in each case discounted in accordance with subsection⁽⁶⁾.”

The estimated relevant deficit for any year is the amount (if any) by which the estimated drainage charges payable for the use during that year of that sewer would be exceeded by the annual borrowing costs of a loan of the amount required for the provision of that sewer”.

ii. Requisitioned Water Mains

“For the purposes of section 42 the discounted aggregate deficit on a water main is the amount equal to the sum of the estimated relevant deficits for each of the twelve years following the provision of the main, in each case discounted in accordance with subsection⁽⁶⁾.”

The estimated relevant deficit for any year is the amount (if any) by which the estimated revenue in respect of the water main for that year would be exceeded by the annual borrowing costs of a loan of the amount required for the provision of that main”.

4.1 REQUISITIONS

With effect from 1st April 2018, House Builders are now required to fully fund any requisitioned off-site water and/or sewerage infrastructure. Previously, off-site requisitions were part funded by House Builders as defined by S42 and S43 (water mains) and S99 and S100 (sewers) of the 1991/2003 legislation - given their importance, the main provisions of the earlier legislation are repeated below.

of requisitioned infrastructure (i.e., the difference between the interest cost relating to the Water/Sewerage Company's capital borrowings to fund the works, less the domestic water/sewerage rate income from new homeowners). This was known as the relevant deficit and had to be guaranteed by the house builder for a maximum of 12 years, or until the income exceeded the deficit.

It was also possible to commute the 12 years of guaranteed deficit payment into a single one-off payment, known as the discounted aggregate deficit or DADs calculation. In July 2018, the average domestic water and sewerage bill was £415/dwelling, (ref. Water UK) with the payment generally split 45% water charge (£187), 55% sewerage charge (£228).

In percentage terms, prior to the introduction of the 1st April 2018 reforms, the house builder was generally required to contribute no more than 15% - 20% to the cost of any requisitioned off-site infrastructure works. To put this into a monetary perspective, if requisitioned off-site water or sewerage infrastructure cost £0.5M, the house builder contribution would be in the order of a cumulative £75k (@15%) over the 12 year guarantee period, or slightly less if commuted to single one-off payment, i.e. once the works were certified complete and the first connection from an occupied new home became active. (See (b) below which explains the justification why House Builders only contributed in part).

Evidence collated prior to 1st April 2018, i.e. February 2016, and specific to 21 actual sites, under construction in 8 different Water Companies, and involving a cumulative 2,477 dwellings, identified house builder costs/contributions for requisitioned water mains that ranged from 0% to 39% of the total scheme cost. The average contribution across the 21 sites in question was 8% of total cost, i.e. around £84/dwelling. Based on the analysis of these 21 actual sites it is quite clear that the market reforms introduced by Ofwat have imposed significant increases in cost on House Builders.

Importantly, in the context of requisitioned infrastructure, the construct and intent of the Water Industry Act 1991, (as amended by the Water Act 2003) and which carried forward identical provisions from the Water Act 1973, accounted for two established, fundamental principles:

a) The need for a fair and equitable contribution from House Builders, (i.e. the sharing of costs on a proportionate and representative basis, but recognising that recourse

to requisition was often as a result of Water and Sewerage Companies not fulfilling their statutory obligations to provide the required infrastructure under S37 et al, and S94 of the '1991 Act').

b) That the land acquisition investment made by all House Builders, leading to the provision of new homes/customers, provided Water and Sewerage Companies with new assets, usually built to much higher standards, that remained income generating in perpetuity. (In the case of newly constructed adoptable sewers, these continue to be transferred to Sewerage Companies for nil consideration). The entrepreneurial risk and investment by House Builders and which continues to create a commercial advantage for Water and Sewerage Companies, together with their existing customers, was therefore fully and intentionally recognised in legislation.

Under the new charging regime, the benefit that previously accrued to House Builders has either been removed altogether or dramatically reduced.



However, the rationale and fiscal/commercial justification for this fundamental change has never been articulated by Ofwat. This is despite the significant commercial repercussions it has for house builder businesses, project viability and ultimately, housing delivery.

To emphasise the significance of this unilateral change, by way of an example using the previously referred to arbitrary requisition cost of £0.5M for an off-site sewer requisition, if a site had been unconditionally contracted and/or acquired immediately prior to the 1st April 2018, but the requisition process did not commence or crystallise until after this date, the house builder risked incurring an additional cost of circa £425k, unless the land purchase contract was conditioned accordingly, i.e. conditions that allowed for a compensating reduction in land value.

This not only results in a significant increase in house builder costs, it also has an adverse impact on cash flow and results in increased levels of 'work in progress (WIP), for which additional interest-bearing borrowed capital may be required. (In 2019, a major UK house builder cited one such project in this category and advised they are likely to be confronted with an additional, unbudgeted cost of £2.7M for off-site requisitioned sewerage infrastructure).

4.2 REDUCTION IN INCOME OFFSET⁽⁸⁾ Without explanation, Ofwat's new charging regime has removed the income off-set⁽⁸⁾ for requisitioned sewerage infrastructure (i.e., the revenue from connected new homeowner customers). This is a significant change that increases infrastructure cost and therefore house construction cost. In the present business climate this cost can neither be recovered from a compensating reduction in land value, nor increases in selling prices. In the latter case the Water & Sewerage Sector has little understanding of the valuation process applied by

mortgage lenders. Simply increasing the selling price for a new home to compensate for increases in cost leaves all House Builders exposed to potential down valuations and loss of sales.

The lack of any understanding of the commercial dynamics that underpin any house building business was amply demonstrated in the naivety of the rationale cited by both Ofwat and Water UK that additional costs can be simply offset by increasing selling prices. An attitude that has clearly influenced other key aspects of the Sector's approach to developer costs and charges.

4.3 INCOME OFFSETS - WHAT IS ON OFFER TO HOUSE BUILDERS FROM 1st APRIL 2020? Five Sewerage Companies are offering nominal income off-sets against new homes constructed but this offset is not mandatory and remains at the discretion of the Sewerage Company.

Variation in offset ranges from £0 to £225/dwelling. As can be seen from the schedule attached at Appendix 1, the average across all companies is significantly less than one year's income from the domestic wastewater bill for a new home.

As an average, income offsets from Water Companies, who are obliged to offer an income offset, are somewhat greater at £354/dwelling and vary from £0 to £751, accompanied by little consistency in calculation.

Three Water Companies offer no income offset. Using the 'average figures referred to, across all 19 water companies, the income offset is £354/dwelling - the equivalent of just 1.9 years of income from average domestic water bills from new homes.

4.4 WHO GETS THE INCOME OFFSET? The Reforms introduced in April 2020 result in only the House Builder having the benefit of receiving any income offset, as nominal as this offset currently stands.



Above ground SuDS infrastructure on a large residential development constructed by George Wimpey in the late 1970's

4.5 SUDS AND REDUCED SEWERAGE INFRASTRUCTURE CHARGE If SuDS infrastructure is being constructed some Sewerage Companies are prepared to offer a reduction in the infrastructure charge but this is again both nominal and discretionary. Currently, four out of nine Sewerage Companies offer no reduction, one Company offers a nominal reduction of £28/dwelling. It could be argued that 50% of sewerage companies are only rhetorically committed to sustainable construction and sewerage asset resilience.

4.6 SECTION 104 - A LUCRATIVE INCOME STREAM FOR SEWERAGE COMPANIES It remains a requirement that all sewerage infrastructure constructed by House Builders and put forward for adoption under S104, must continue to be 'gifted' to the Sewerage Company at nil cost. As water and sewerage assets are income generating in perpetuity, this income stream has the potential to yield

around £100M in annual revenue to Water and Sewerage Companies with little if any reciprocal financial benefit for House Builders.

4.7 REPERCUSSIONS FOR SELF-LAY PROVIDERS (SLPs) AND HOUSE BUILDERS If water infrastructure is provided by a self-lay company (SLP), as of April 2020, the SLP no longer receives an asset payment. Prior to this date, the asset payment was around 80% of the capital cost of the works, including the cost of any non-contestable works⁽⁹⁾ to be undertaken by the Water Company. The commercial dynamic of this fundamental change by Ofwat is now threatening the commercial viability and critical mass of SLP businesses, who are meant to be an effective competing alternative to incumbent water companies. Several companies have reduced their income offsets since April 2018. A reduced reciprocal benefit can only mean an indirect increase in cost for House Builders.

Moreover, during the 2-year period to April 2020, there is evidence of SLPs receiving much reduced asset payments with the house builder having to make-up the shortfall. For one ongoing development of around 70 dwellings, this pass-through cost to the developer was in the region of £56k and unbudgeted.

4.8 WATER & SEWERAGE ASSET DIVERSIONS - INCREASED HOUSE BUILDER COSTS As of 1st April 2018, House Builders are now required to meet the full cost of any water or sewerage infrastructure diversions. Previously, a handful of Companies recognised the asset betterment that diversions provided and agreed to a notional offset in the cost of the diversion. This has now ceased altogether. It is now questionable whether Water and Sewerage Companies will honour their obligations under 'lift and shift' provisions that may be contained in existing formal easement documents.

4.9 NAVs - IMPLICATIONS & CONSTRAINTS FOR HOUSE BUILDERS

The Water Act 2014 included provisions to stimulate much need 'sector' competition from NAVs. However, in the last 18 months Ofwat records (accessed on 28th July 2020) show just 76 licence applications had been granted up to 9th July 2020. (This stands comparison to the energy sector where tens of thousands of licences have been issued).

The issue in the Water and Sewerage Sector is that it takes around 4 months for Ofwat to issue a licence by which time House Builders have been unable to reflect any commercial benefit arising from a NAV appointment. This is a highly relevant commercial consideration at the crucial land acquisition due diligence stage. Ofwat continue to refuse to engage in any discussions to explore how the licence approval process can be significantly shortened to facilitate increased competition from NAVs. Conversely, Ofwat complain that too many NAV

applications fall away (ironically for the time-scale reason identified) and that it wastes their time and resources.

On several occasions, the Developer Community has suggested that a 'national licence arrangement' would go a long way to resolving the current administrative hiatus and thereby help facilitate increased competition. Ofwat has shown no willingness to engage on this issue preferring instead to rely on their staccato interpretation of the legislative requirements underpinning the appointment of NAVs.

An issue of primary concern relates to Bulk Supplies and Discharge Agreements, entered into by the NAV and the Incumbent Water and Sewerage Company. At present, these appear to fall 'out of scope' for Ofwat to intervene when inequitable terms and conditions are being imposed by the Incumbent Water and Sewerage Company. This is a further contributing factor undermining much needed competition in the 'Sector'.

(8) Income offsets are meant to recognise the revenue water companies will receive from new homeowners. Under the requisition process this was capped at a 12-year period. However, a recent inter-company comparison of income offsets has confirmed these have been drastically reduced and at best reflect less than 2-years revenue from new homeowner customers. In addition, evidence is available to show that water companies are progressively reducing these offsets at each annual review of their charges.

(9) Non-contestable costs relate to those works that only the Incumbent Water and/or Sewerage Company can undertake. They mostly affect the provision of water distribution mains and typically involve the actual connection to existing water mains or where maintaining water quality is of paramount importance.



5 FURTHER FALLOUT FROM THE NEW CHARGING RULES & ARRANGEMENTS

5.1 Attached to this Report is an abridged version of a February 2020 summary of an inter-company comparison covering headline cost and charges items - see Appendix 1. One of the most noteworthy outcomes of this comparison is the significant variation in Company costs when compared on a strict 'like for like' basis. In recent correspondence, CCWater has commented that they do not consider these dramatic variations in cost to be either representative or significant, despite being taken from each Company's disclosed charging arrangements/disclosed costs.

5.2 Note for example, the significant variation in material cost per metre for barrier pipe. This is a solus product, (Protecta-Line) manufactured to a specific Water Sector specification to counter the potential ingress of contaminants (VOCs) from contaminated land. The extra over cost associated with this pipeline material should be consistent across all water companies. However, costs vary from £11/metre to £124/metre, a variation that defies logic, justification, and explanation, especially when excavation/backfill costs, labour, plant, and overhead costs are identical irrespective of pipe material specified.

5.3 An earlier inter-company comparison of costs (March/April 2018) had already identified a litany of significant cost differences. However, these differences have been repeated in Company revisions to their respective charges issued in February 2020. Despite drawing Ofwat's attention to these differences on both occasions, complete disinterest had been shown by Ofwat, that is until their consultation

of 27th May 2020 entered the public domain. That said, the consultation was not widely publicised by Ofwat, with non-HBF/HBA members and consultants oblivious to its existence, other than by indirect means.

5.4 In its guidance to Ofwat, Defra recognised the importance of initiatives to reduce personal water use. The expectation was that all water companies would play their part by incentivising House Builders to go beyond the requirements of Part G of the Building Regulations (i.e., maximum daily per capita consumption of 125 litres/person. The incentive was to be delivered through a reduction in the water infrastructure charge). The benchmark for any incentive having been set at around 110 litres/person/day by little more than a handful of water companies. As of April 2020, a third of all water companies (6No.) offered no IC reduction incentive. Other companies have continued to offer a nominal reduction. Water UK have waxed lyrical about the initiatives that are in place throughout the Sector to reduce water consumption, but the evidence says otherwise. In addition, potable water leakage at around 120 litres/dwelling/day has remained almost static for 5 years and continues to be a factor reflected in most water asset capacity assessments. (Leakage figure of 120 litres/dwelling/day based on evidence presented to the *Government's Public Accounts Committee in 2020*). There is credible evidence in place that supports the prospect of House Builders funding the consequences of Ofwat's, and the Sectors, ambivalence towards drinking water leakage - see *Parts 6 and 7 of this Report*.

5.5 A comparison of water company costs for the provision of water infrastructure has again shown significant variations in the cost of connections and main laying - see *Appendix 1*.

Water Company Term Contractor rates apply in these instances, but the house builder has no confidence or reassurance that the rates and costs quoted are representative, in addition to providing value for money not just in a new housing context but for existing customers through annual water and sewer charges.

5.6 In their Information Notice 19/05⁽¹⁰⁾ Ofwat asked Water Companies to provide worked examples of the cost of installing water mains on two representative/typical sites, i.e. one comprising 50 dwellings, the other 200 dwellings. The outcome was staggering:

5.7 Of the responses requested in Ofwat's Information Notice 19/05 and subsequently returned by Water and Sewerage Companies, the following can be reported:

In the 50-dwelling example, the range in Water Company costs to install the water mains varied from £5,983 to £81,300. A difference in cost of £1507/dwelling or at a normal plotting density of 42 dwellings/hectare - £63,294/hectare

In the 200-dwelling example, the range in Water Companies costs to install the water mains varied from £45,034 to £274,300. A difference of £1146/dwelling. In terms of the impact on land value, this difference equates to around £229,200 for a 4.76 Hectare site (i.e., 200/42 = 4.76 Hectares).

In their instructions, Ofwat stated that the worked examples should include all relevant new connection and developer service charges for water and wastewater (as applicable)

relevant to each example and to include, requisition charges, infrastructure charges, connection charges and any income offset. As evidenced in this Report, the inclusions referred to introduce even more cost/charging complexity and confusion, together with discrepancies and disparities that do not assist in creating consistency and confidence in any charging regime.

Moreover, differences of the magnitude of cost identified make commercial decisions unnecessarily difficult but more importantly, can be the difference between successfully securing a site or losing out. In addition, CC Water again consider such variances as being acceptable.



(10) Expectations, assurance, and information requirements for water company charges for 2020-21 (Ofwat - October 2019)

6 OFWAT & LAND USE PLANNING - A SERIOUS DISCONNECT

6.1 Ofwat's Charging rules require Water and Sewerage Companies to objectively consider investment in new/improved water and sewerage network improvement and reinforcement, especially in the context of housing provision - a principal requirement of the Government's Strategy for all parts of the Utility Sector. Moreover, how water and sewerage infrastructure is funded must be balanced against a Company's statutory obligations under the provisions of S37/S94 of the Water Industry Act 1991. In addition to cost, the location and timing in response to Adopted Local Plan housing commitments is a de-minimis requirement.

6.2 Water and Sewerage Company participation in Local Plan decisions is also part of the 'Sector's' statutory remit - see SI 2012 No 767 (The Town & Country Planning (Local Planning) Regulations 2012). That said, Water UK and Ofwat have gone on record to say that they do not put much faith in the local plan process when it comes to housing allocations. There is a perceptible preference in certain companies to approach infrastructure provision on a risk-based investment decision basis rather than follow the required concept of predict, plan, provide. The start of the risk-based approach is usually when the house builder makes a planning application.

6.3 A Supreme Court decision in December 2009 (Barratt versus Welsh Water) was critical of Ofwat's non-existent role in land-use planning, suggesting that this should change. That said, in 2019, and despite major S94 issues involving Southern Water, Ofwat reiterated their position of remaining outside of the planning process. Conversely, in correspondence dated 7th November 2019, Defra confirmed:

"We have asked Ofwat to keep under review what it can do to make sure that company planning and delivery keeps pace with housebuilding and supports development across the country"

(Sarah Hendry, Director of Floods and Water - Defra)

6.4 Ofwat's recent PR19 Final Determinations have gone against Defra's expectation by imposing on water and sewerage companies Ofwat's own under-forecast of new housing completions for the next 5 years, i.e. a shortfall of around 409,000 new homes. This is accompanied by a shortfall in Water and Sewerage Company investment in related, 'in consequence' infrastructure of around £208 million over the same period.

6.5 In addition, when determining their forecast of new connections, and following a related FOIA request, Ofwat subsequently confirmed that their **forecast was for all connections, including non-residential**. Therefore, both the number of new residential connections and the related investment in water and sewerage infrastructure is likely to be even less. The only compensating alternative to any funding shortfall is to increase house builder costs by progressive increases in water and sewerage infrastructure charges and charges in general.

This is clearly implied in Section 8.1.1 of a Frontier Economics Report⁽¹¹⁾ prepared on behalf of Ofwat:

"... if the proposed new charging rule regarding setting the income offset against the infrastructure charge is put in place from 2020, then any cost variation on onsite cost would become irrelevant as the entirety of onsite cost would be borne by the developer ..."

In short, the House Builder/Developer will make up any shortfall.

6.6 This brings into question, what cognisance Ofwat has taken of the Government's Strategic Priorities and Objectives for the Regulator, as issued by Defra in September 2017. Moreover, Ofwat's Final Determination for each Water and Sewerage Company's business plan for the next 5 years, (PR19) and starting April 2020, has been rejected by four Companies on the grounds of inadequate funding for infrastructure investment. Under existing protocols, the matter has now been referred to the Competition and Markets Authority (CMA) for resolution. To a degree, the authors of this Report have supported the position taken by the four companies concerned.

6.7 Given the direct linkage(s) between PR19 and Company Charging Arrangements, together with the gravity of the concerns relating to Ofwat's Charging Rules and Company Charging Arrangements, the authors have used the CMA's involvement as the means to submit a separate and detailed response to the CMA relating to the many issues articulated in this Report. In

our opinion, the potential impact on housing project viability and therefore future housing delivery justifies such a submission.

6.8 There are tangible benefits in Ofwat taking a more responsive approach to planning matters if nothing more than that it will expose them to what reality looks like. This is especially so when developers are confronted with Sewerage Company recommendations to Local Planning Authorities to condition planning consents that either delay a start on site or restrict the number of new home completions on the grounds of inadequate capacity in existing public foul sewer networks. Moreover, network capacity and how this is determined has been exposed as being highly 'questionable' on several occasions. Typically, when high levels of leakage⁽¹²⁾ are being factored in water network capacity assessments, accompanied by significant/excessive allowances for infiltration into foul sewers.

6.9 In addition, Ofwat would see at first-hand how House Builders have been placed under duress to accept inequitable terms and conditions from monopoly Water and Sewerage Companies, especially those that have failed to discharge their statutory obligations primarily under S94 of the Water Industry Act 1991

6.10 The tactic of certain Water and Sewerage Companies objecting to planning applications on the grounds of limited capacity in existing public foul sewer networks, perceived or otherwise, is continuing. The reforms introduced by Ofwat were meant to put an end to such practice, especially given the fact that sewerage infrastructure charges now include a cost for 'in-consequence'

network reinforcement/improvement specific to new housing. Southern Water has been the most profligate of Companies in this regard having gone on record that housing should be delivered in a time frame that corresponds with their own infrastructure investment plans.

6.11 In response, House Builders have attempted to rely on NAVs, but this too has not been without procedural frustrations involving both Southern Water and Ofwat, evidenced in correspondence between a major house builder and Ofwat. The relevance and importance in terms of how network reinforcement is determined is dealt with in more detail in Part 7.

6.12 Whether Ofwat will respond effectively to the Government's recent announcements and policy direction to facilitate increased and expedited housing provision, will be an interesting aspect to keep on the radar. Now more than ever, there is a fundamental need for Ofwat and the Sector as a whole, to work far more closely with Local Planning Authorities to ensure water and sewerage infrastructure is readily available.



(11) NAVs and Adoption of Sewerage Assets - Frontier Economics on behalf of Ofwat May 2017

(12) Reported levels of potable water leakage currently stand at an average of 120 litres/dwelling/day - how much of this volume is contributing to reduced foul sewer capacity is unknown. Leakage volumes have remained static for the last 5 years. If Water Companies could reduce their annual cumulative water leakage by just 1%, they could serve the water needs of a little under 100,000 new homes each year. In addition, research conducted by Sheffield University and released in June 2015 has identified the potential for contaminants to be drawn back into the water distribution network through leaking water mains/infrastructure. Ofwat appear to have ignored such import research outcomes.

7 NETWORK REINFORCEMENT - ITS IMPORTANCE IN DETERMINING INFRASTRUCTURE CHARGES

7.1 It is a known fact that until the onset of the Reforms, there was little sector commitment to collate evidence of in-consequence, housing-related infrastructure investment. In many respects this was the only evidence that could properly inform and determine any network reinforcement element of the new infrastructure charge(s). At best, certain Companies, for example, United Utilities, had some evidence, but for the majority, any attempts to determine a reflective representation of fair and equitable reinforcement costs was effectively an exercise in guesswork and/or subjective perception. It therefore may begin to explain why robust evidence to this effect has never been disclosed as part of any 'Sector' consultation relating to network reinforcement costs/charges.

7.2 Capacity in existing public foul sewers and how it is assessed has been a concern for House Builders and developers for several years, especially when it comes to the input parameters used for assessing existing/available capacity. The same issues apply when determining the capacity of existing water distribution networks but not to the same extent.

That said, there is justification in putting this issue into its correct context:

- 5 out of 10 Sewerage Companies fully understand and deliver on their statutory obligations under Section 94 of the Water Industry Act 1991. (The obligations under S94 are set out in more detail in Part 9 of this Report).

- The remaining Sewerage Companies, mostly operating in the South of England and Wales, take a slightly different and more spurious approach that relies on assessing network capacity to determine what

contribution a house builder is to make to network reinforcement as part of the sewerage infrastructure charge. This where the core of concern lies, (i.e., the assessment parameter used).

- Prior to the 1st April 2018, House Builders were put under commercial pressure if not duress to accept significant additional contributions for questionably determined network reinforcement and/or un-called for off-site foul sewer requisitions. In several instances this situation arose due to the House Builder having been denied the right to connect to the nearest public foul sewer on the grounds of inadequate capacity. This is despite established case law dating back to the 1950's and the Supreme Court decision in December 2009 upholding the absolute right to connect to the public sewerage system, irrespective of its underlying condition. Typically, Southern Water have a disproportionately high number of imposed off-site sewer requisitions, some of which, for the reasons articulated in this Report are being challenged through the formal determination process involving Ofwat. **The quantum aspect of these formal determinations runs into many millions of pounds unnecessarily paid by House Builders.**

- Following the Supreme Court decision in 2009 all Sewerage Companies now accept (some reluctantly) the absolute right for House Builders to connect to the public sewerage system by virtue of Section 106 of the 1991'Act'.

- Most if not all Water Companies accept their statutory responsibility to provide adequate water infrastructure to serve new development - Ref: S37 of the Water Industry Act 1991. How network capacity is determined remains a vexed issue.

- Repeated requests for Water and Sewerage Company disclosure of asset capacity modelling input parameters has been met with staunch resistance. Only through persistence, using the determination process and FOIA requests for disclosure, has relevant information been disclosed but it remains far from being adequate in terms quantitative and qualitative evidence.

7.3 What Has Been Revealed to Date For simplicity and ease of understanding the evidence obtained to date can be summarised as follows:

Water Network Capacity Assessments

- High levels of potable water leakage are being factored into water network capacity assessments for new residential developments - see earlier footnote 12 defining the current levels of leakage.

- Imposed reductions in personal water consumption (per capita consumption or pcc) to meet the requirements of the current Building Regulations (i.e., 125 litres/person/day) are not being reflected in network capacity assessments. Likewise, the Water Sector's average pcc of around 135 - 140litres/person/day. Evidence held by respective authors identifies water usage input parameters ranging from 400 litres/dwelling/day to a high of 13,000 litres/dwelling/day are being factored into network capacity assessments for new residential developments. The latter figure having been used for determining existing public foul sewer capacity.

- MHCLG has confirmed average household numbers are around 2.15 persons/dwelling. Several Water Companies are using higher occupancy rates, and in some cases, up to 3 persons/dwelling for network capacity assessments.

Existing Foul Sewer Capacity Assessments

- Significant levels of infiltration are being factored into foul sewer capacity assessments. Evidence shows the level of infiltration, due to

underlying poor asset condition, is so high in some companies that foul sewers are being modelled as surface water/combined sewers.

- Sources of infiltration are groundwater, water from leaking domestic water supply infrastructure, illicit connections (i.e., surface water from domestic extensions inappropriately connected to foul drainage systems, and possibly, SuDS infiltration infrastructure). (Informative: In July 2020 British Geological Survey advised that water main leakage was so prominent in those parts of the UK where soluble rock formations exist that dissolution due to potable water leakage was now causing serious ground instability).

- An inter-company comparison of modelling parameters has revealed a litany of variation that bears little resemblance to being either consistent or reflective/representative:

- Modelling foul sewers as surface water sewers based on 1 in 30-year rainfall events.

- Including in the assessment model significant allowances for urban creep, (i.e., extensions, and/or additional hard standings/driveways wholly discharging into the foul drainage network). In several instances, Sewerage Companies have assumed 100% of any surface water run-off associated with urban creep discharges directly into the foul system - in reality, this is never going to be the case. In addition, Sewerage Companies are ignoring

the urban creep allowances factored into the design of surface water/SuDS infrastructure. Therefore, introducing an element of double counting. Likewise, that Building Regulations allow up to 6m² of roof area to have no positive drainage outlet to underground drainage systems and that most driveways and extensions thereto are constructed with permeable paving as a planning requirement.

- In December 2015, a review of each Sewerage Company's approach to infiltration produced the following outcomes - **actual Company disclosed data:**

a. Household occupancy rate - **2.13 to 3.0 persons/dwelling**

b. **Maximum infiltration rates based on a %age of total catchment - range 10% to 50%**

c. **Maximum infiltration rate based on capacity 40 to 55 litres/head/day**

d. **Approximate household potable water consumption 330 to 1350 litres/dwelling/day**

- There is an underlying reliance on high and unrepresentative levels of potable water use - see previous. (It is an accepted engineering fact that around 95% of all water supplied reaches the foul drainage network - this is not factored into any assessment).

- There is little evidence of diversity of flow and natural flow attenuation being factored into existing foul sewer capacity assessments.



7.4 Sewerage Companies are applying different permutations and values identified in 7.3 to arrive at overly conservative network capacity assessments. Moreover, whilst the Sector would argue that modelling guidance is in place, this needs to be put into its correct context, i.e. it has been prepared by the Sector, without key partner and stakeholder involvement and has not been subjected to any form of external evaluation or consultation. Evidence presented by the authors was also ignored at the time the guidance was being prepared.

7.5 Significantly, on 1st October 2011, Sewerage Companies became responsible for private domestic sewers serving 2 or more properties. This put each Company in a unique position to monitor and manage their newly acquired assets by working alongside Local Planning Authorities, and more so Building Control Bodies, to ensure domestic extensions were properly drained. Excepting United Utilities, most Companies appear to have abandoned effective control over these assets.

7.6 By applying unrepresentative and overly conservative assessment criteria, the impact on water and sewerage network capacity and therefore the resultant infrastructure charge, is considerable.

7.7 In engineering terms, assessing a network based on its existing condition is a sensible way forward. However, what is not taking place is a re-run of any hydraulic model that accounts/removes those adverse conditions that fall to the Water and Sewerage Company to deal with (at their entire cost) as part of its statutory obligations under S37/S94 i.e. leakage, excessive infiltration into foul sewers, urban creep and misconnections etc, associated with existing urban areas/

sewer catchments. By following this methodology, the impact of new development on any existing network can be determined on a more accurate and cost reflective basis, in addition to maintaining the existing balance of responsibilities relative to network reinforcement. Regrettably, Ofwat, as part of its' Charging Rules, has offered no direction or guidance in this respect.

7.8 Consequently, for most Water and Sewerage Companies, how they have arrived at their infrastructure charges, remains highly questionable, compounded by the fact that evidential disclosure is conspicuous by its absence.

7.9 For these reasons, the approach to determining asset capacity modelling, especially when it comes to existing public foul sewers, formed an integral part of House Building Industry discussions involving Defra, Ofwat and at least two Water and Sewerage Companies.

These discussions commenced in November 2015 and continued into January 2016 and beyond - Ref: minutes of Defra Task and Finish Group meetings. More importantly, the variations in modelling parameters and the impact that these can and do have in determining the network reinforcement element of the infrastructure charge, was such that the collective view was that any future charging consultation should include mutually agreed guidance on the approach to asset capacity. **This never happened, leaving House Builders with little to no confidence in the justification and/or the quantum aspects that make up in the cost of infrastructure charges. Moreover, having to wait five years for any form of income versus expenditure reconciliation is far from ideal.**



8 WATER AND SEWERAGE ASSET ADOPTION CODES

8.1 As part of the Reform process, Ofwat retained Water UK to prepare design and construction guidance, inclusive of 'Model Agreements', for the adoption of water and sewerage assets constructed on new residential developments. This suite of documents is meant to support the formal 'Adoption Codes' that have been produced by Ofwat. **The primary objective of the 'Codes' being to introduce improved consistency and adoption certainty. However, as the new process gains traction, the outcome has been the reverse.**

8.2 Both 'Codes' and supporting documentation were to become active from 1st April 2020. However, it is understood legal issues have prevented the coming into force of the Water Asset Adoption Code and its supporting guidance and procedures. Evidence points to this delay being largely due to Ofwat and Water UK not listening to the Developer Community per se, especially Self-lay businesses.

8.3 Only the Code and related documents specific to the adoption of sewerage assets became live with effect from the 1st April 2020. (These replaced Sewers for Adoption 6th Edition, albeit some Sewerage Companies had previously insisted on imposing the 7th Edition version, despite it having no national agreement and/or material standing).

8.4 As for any legitimate changes to the documentation introduced by Water UK, these are to be considered by two separate Guidance Panels, both conceived by Water UK. As a quorum under independent chairmanship, they include representation from Developers, SLPs and Water and Sewerage Companies. However, House Builder

and Developer representatives were effectively selected and vetted by Water UK before being allowed to sit on the 'panel' - Water UK has imposed restrictions on who can be a 'panel' member.

8.5 The current house builder representatives do not have a mandate to represent the house building industry per se. Furthermore, unless a house builder and/or any retained consultant is a member of the Home Builders Federation (HBF) or Home Builders Association (HBA), they have no means of referral to the panel. This denies a substantial part of the Developer Community from having access to the only forum where issues specific to the Adoption Codes, the Design/Construction Guidance and Model Agreements, can be referred. In addition, there is nothing in the public domain that identifies the date(s) on which the panel are to meet. Similarly, there is no notification when panel meeting outcomes and minutes are available, and what actions have been recommended to Ofwat by the 'panel'. The process is far from satisfactory and denies many partner and stakeholder interests the means to raise any concerns and/or recommendations that they may have.

8.6 How the documents supporting the Sewerage Asset Adoption Code were conceived provides no better example of Ofwat's disconnect with the planning process. Clause B5.1.14, from the Design and Construction Guidance for adoptable sewerage assets, and which is repeated below, has attracted a particularly interesting and counter-intuitive interpretation by at least one Sewerage Company:

"Where foul sewers are laid under some types of SuDS components (e.g., a swale or a rill), this can require decommissioning and reconstruction of the SuDS component if excavation is required to repair the foul sewer. The layout of both foul sewers and surface water drainage should minimise the length of foul sewer under SuDS components, for example, by ensuring that any crossings are at as near as possible to a right angle and are positioned under narrow SuDS components. Foul sewers should not be laid under infiltration components. If necessary, a short section of an infiltration component may be modified so that the foul sewer passes through a section where no infiltration takes place".

The highlighted section of text is of fundamental importance to house building businesses given the uncertainty that it introduces, especially after receipt of LLFA approval to the surface water drainage strategy for site and crystallised by virtue of the detailed planning consent.

8.7 The Sewerage Company concerned has taken this part of the guidance to the extreme by stating it will not adopt foul sewers located under adoptable residential roads constructed with permeable paving, irrespective of prevailing Local Planning Authority/LLFA policy. Prior to the 1st April 2020, this was never an issue.

8.8 In just over 3 months, since coming into force, at least four Sewerage Companies have departed from what was supposedly an agreed national standard for England and introduced their own preferred standards and/or infrastructure adoption exclusions.

8.9 In the example cited, the reason(s) for the exclusion lack any practical engineering and/or legal rationale. Neither does the Company concerned offer any evidence-based justification in support of the stance it has taken.

8.10 The process leading up to the introduction of the design and

construction guidance, together with the model adoption agreement(s) is also worthy of reporting. **The final versions of respective documents were never subjected to Developer Community consultation.** Having been produced by a Water UK conceived Independent Steering Group, and which excluded the HBF in any capacity, the final documents were effectively presented as a fait accompli in October 2019.

8.11 Water UK effectively 'managed' the Steering Group' membership, selecting six house builder/SLP representatives who had no mandate to represent the house building industry in any capacity. Moreover, when eventually disclosed, the final version of the design and construction guidance, once formally approved by Ofwat, included subtle variations and additions - clause B5 1.14 fell into this category. It was never subjected to any form of house builder/developer scrutiny unless Water UK and/or Ofwat can demonstrate otherwise.

8.12 The position taken by the Sewerage Companies, Water UK and Ofwat demonstrates, (a) the lack of effective engagement across the Developer Community as a whole, and (b) the lack of experience and a sufficient working knowledge of the planning and development process per se.



8.13 In the context of the stance taken by the Sewerage Company cited previously, the consequences of clause B5 1.14 can be summarised as follows:

- The house builder is likely to have secured detailed planning consent for their proposals before submitting a detailed sewerage infrastructure design for S104 Technical Approval - this was a key process requirement imposed by Water UK as part of the guidance they produced. The importance in crystallising the drainage strategy and adoption principles at the crucial land acquisition stage was ignored by Water UK when consolidating the procedural guidance.

- The drainage strategy for the site will likely have been agreed in principle with the LLFA/LPA during the land acquisition due diligence process, when all costs will have been crystallised in the land purchase appraisal/land purchase contract. Water UK have been reluctant to accept the importance of the critical due diligence stage.

- Confronted with potential non-adoption of sewerage infrastructure, the only solutions available to the house builder would be:

- i. Relocate the foul sewer into a separate dedicated service strip - footpaths would be excluded due to utility service congestion

- ii. If proposed dwellings are too close to the back of footpath or designed to the 'Home Zone' concept, this is not a workable solution without the loss of a significant number of dwellings. This in turn could affect project viability.

- iii. Any material changes to the planning layout, including a change in development scope would require a return to the planning process with no guarantee of planning approval. It

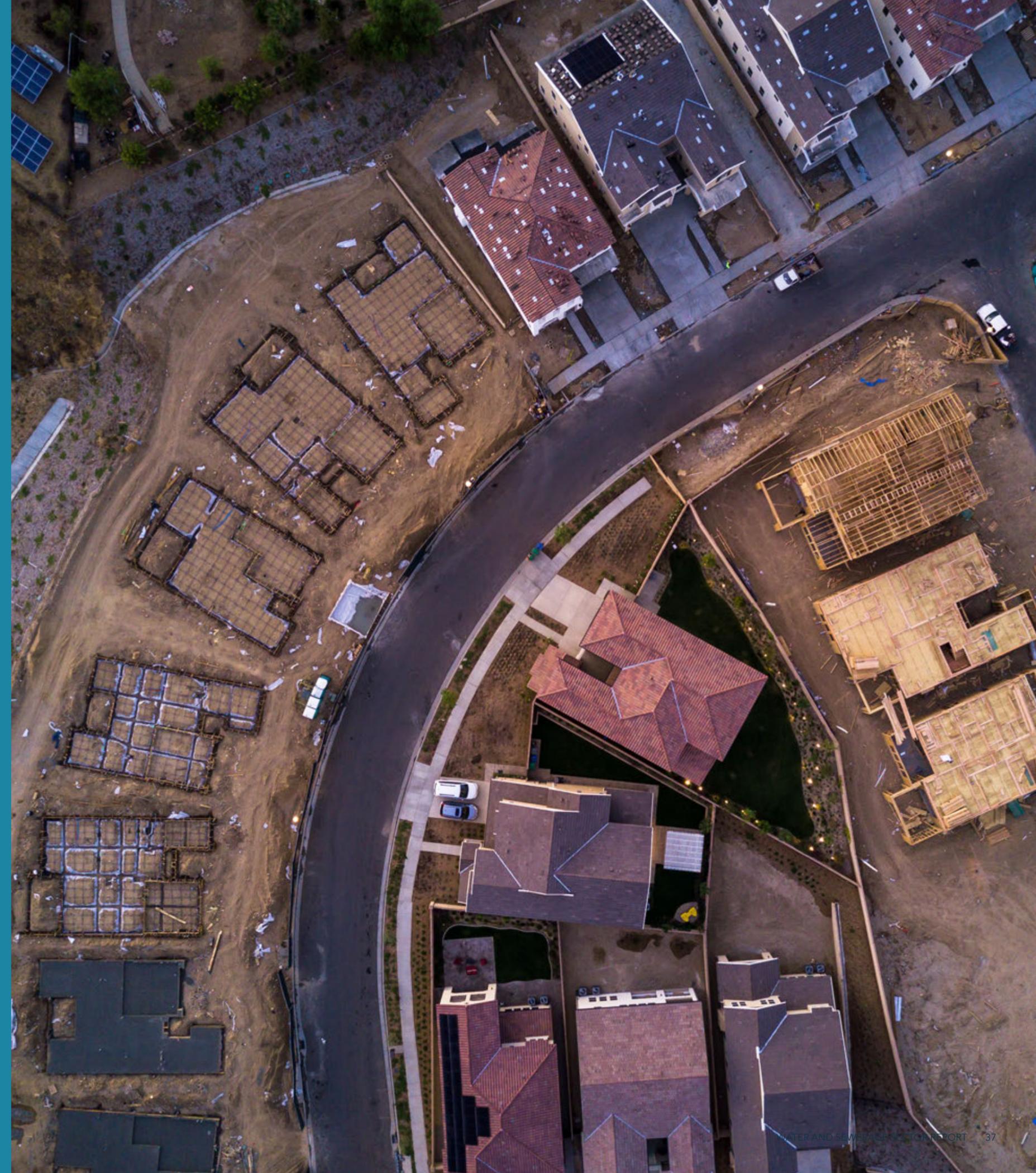
would also introduce additional costs, (i.e., interest on capital and holding costs, pending receipt of a new planning consent). These would be in addition to the commercial losses accruing from the loss of dwellings.

- iv. The house builder could consider adoption via a NAV, but the NAV licence approval process is not conducive to effective commercial decision making and may result in delay and uncertainty. How water and sewerage infrastructure is to be managed/maintained in the future is a material consideration when preparing any marketing material supporting the sale of a new home.

- v. The on-site sewers could remain unadopted and subsequently managed/maintained by a nominated management company, but this may necessitate a further return to the planning process for LLFA/LPA approval given drainage matters can be a material planning consideration. Notwithstanding, this is far from being a satisfactory outcome, especially for new homeowners, given the pariah status of having to pay additional management fees, i.e. not providing customers with truly freehold homes.

8.14 Whatever the solution to appease the demands of the Sewerage Company, it will result in both delays and additional costs for the House Builder. Ultimately, project viability could be compromised, with housing delivery clearly placed at risk.

8.15 Ofwat, Water UK and Water and Sewerage Companies appear reluctant to begin to understand and appreciate just what the planning and development process really does entail. This requires much closer engagement with House Builder customers and their Consultants - a key requirement of Defra's charging rule guidance issued to Ofwat in January 2016.



9 SOUTHERN WATER, OFWAT AND THE SOUTH COAST NITRATE ISSUE

9.1 The section of the Report that follows provides more specific detail relating to a concerning issue involving Southern Water, the Environment Agency, Natural England, Local Planning Authorities in the South of England and, Ofwat.

9.2 For over a year, a moratorium on determining/issuing planning consent(s) has been imposed by several planning authorities operating along the south coast. On the limited occasions that planning consent may have been granted, these consents usually contain Grampian Planning Conditions that seek to delay a start on site, usually for an indeterminate period (i.e., until the condition relating to proving the development proposals are nitrate neutral can be satisfied/discharged).

9.3 The principal reason for the present hiatus is elevated nitrate concentrations adversely impacting water quality in the Solent to the extent that excessive eutrophication⁽¹³⁾ is resulting. The underlying levels of nitrate pollution being contrary to a series of existing EU water quality

directives. That said, it is a known and accepted fact that the primary source of nitrate pollution is the agricultural industry. By comparison, the nitrate loading attributable to normal domestic sewage is comparatively low.

9.4 At present, across several Planning Authorities, the construction and handover of some 10,000 to 12,000 new homes remain in stasis. Moreover, the advice from Natural England to the Planning Authorities concerned is that no planning consent for residential development should be granted unless the proposed development can be shown to be nitrate neutral – a difficult task in its own right, outside of the long-established, statutory wastewater treatment process undertaken by Sewerage Authorities.

9.5 To be perfectly clear, and to any avoid dispute about the statutory obligations placed on all Sewerage Companies pursuant to Section 94 of the Water Industry Act 1991, it is worth reiterating this important strand of legislation:

Section 94 - (1) "It shall be the duty of every sewerage undertaker -

(a) Provide, improve and extend such a system of public sewers and so to cleanse and maintain those sewers as to ensure that area is and continues to be effectually drained; and

(b) to make provision for the emptying of those sewers and such further provision as is necessary from time to time for effectually dealing, by means of sewage disposal works or otherwise, with the contents of those sewers"



9.6 Responsibility for ensuring there is adequate treatment capacity at any wastewater treatment works (WwTW) falls exclusively to the incumbent Sewerage Company and at their entire cost – a principle not just upheld in the Supreme Court but reiterated many times over by Ofwat. This includes ensuring treated effluent quality meets the required standard(s), inclusive of ensuring levels of nitrate set by the Environment Agency are not exceeded.

9.7 As a result of fundamental breaches of this statutory obligation, in October 2019, Ofwat imposed a financial penalty on Southern Water for falsifying its wastewater treatment records – the penalty imposed was around £123M, with an agreement to refund this amount to existing customers over a 5-year period – House Builders and Developers having been excluded.

9.8 In their supporting determination, Ofwat conceded that Southern Water had failed in its S94 obligations but, perversely, concluded that Southern Water should not address the nitrate issue in a manner that would quickly return the status quo so that House Builders were not prevented from continuing to deliver much needed new homes in line with adopted Local Plan policy.

9.9 Regrettably, Ofwat's avoidance of any form of effective intervention, including sufficient funding in Southern Water's final PR19 determination so as to address the issue as a matter of urgency, has left House Builders facing significant increases in cost whilst new home completions stagnate.

9.10 Some progress is being made but on a grossly inequitable basis with House Builders now being put under severe commercial pressure if not duress to pay around £6000/dwelling to a local Wildlife Trust as part of a nitrate off-setting scheme.

9.11 House Builders are therefore paying for the failure of Ofwat and Southern Water to resolve a matter that falls to their statutory jurisdiction. Moreover, the House Building Industry is now subsidising the errant ways of the agricultural industry, while Southern Water escape any financial consequence. Furthermore, as a gesture and acceptance of their responsibilities, neither Southern Water nor Ofwat have offered any compensating reduction in sewerage charges or agreed to accept any element of the £6000 offset payment.

(13) Eutrophication - excessive concentration of nutrients in a body of water, frequently due to run-off from the land, which causes a dense growth of plant life.

10 WATER SECTOR ATTITUDE TO MODERN METHODS OF CONSTRUCTION

10.1 For over two years, the authors have continued to try and encourage both Water UK and Ofwat to engage in meaningful discussions with the house building industry regarding Modern Method of Construction (MMC) and the benefit that accrues in terms of significant reductions in construction time-scales.

10.2 Despite repeatedly identifying the traction that MMC is gaining within Government, including the financial resource that is being provided, Ofwat and Water UK have effectively turned away from such important discussions.

10.3 When crystallising the key performance indicators that underpin D-MeX*, (a further strand of Water and Sewerage Sector Reform), both organisations took no cognisance of the need to provide water and sewerage infrastructure in response to construction time-scales that can be as short as 4 weeks.

10.4 It is noted that Water UK have again been retained by Ofwat to

determine acceptable levels of service for infrastructure delivery. Here again is an example of sector management and control that works against the needs and expectations of House Building Businesses/Customers.

10.5 From previous evaluation work, we have identified that Water Companies take an average of 30 weeks from formal application for mains and services to the point when water infrastructure provision is sufficient to allow the occupation of a new home. This period must be drastically reduced if the ability to accelerate new home construction using MMC is to be a viable option.

10.6 The commercial dynamics of any house building business must begin to be better understood by Ofwat and Water UK. MMC is of fundamental importance to the future delivery of new housing but the positives that accrue will be lost if the Water and Sewerage Sector continues to ignore the construction programme needs of house builder customers.

NOTE(*) D-MeX is a financial and reputational incentive mechanism designed to provide customers in the Water Sector with improved levels of service. In April 2020 D-MeX replaced the Service Incentive Mechanism (SIM), which had been in place since 2010. D-MeX has a quantitative component, being a measure of compliance against a set of Water UK developer services level of metrics. Unlike the Energy Sector, House Builders get no financial compensation on those occasions Water Companies fail to deliver as agreed.



11 CONCLUDING COMMENTS

11.1 The eventual Reforms, albeit first considered in 2012, were welcomed as they provided a unique opportunity for the Water and Sewerage Sector to work collaboratively with an experienced House Building Industry. One of the primary and mutual objectives being to address historic subjective and inequitable charging, in addition to introducing evidence-based charging transparency.

11.2 Regrettably, this opportunity has been lost and House Builders are now confronted with a far more complex charging regime than the one that previously existed. In many respects, the Reforms have been regressive rather than progressive, responsive, and effective. This is not just a comment made by the authors of this Report but one repeated many times by Developers, House Builders, Consultants and other partner/stakeholder interests including almost all Water and Sewerage Companies the authors have met with over the last three years.

11.3 What is now in place clearly provides commercial betterment for all Water and Sewerage Companies at the House Builders expense. More importantly, the current charging regime and Ofwat's role as an effective Regulator has been identified as being far from satisfactory. Our opinion and that of our clients and peer group consultants, is that both aspects require urgent, independent scrutiny by a Government appointed Select Committee.

11.4 Reflecting upon Defra's statement of their expectations, i.e. reduced costs for House Builders, this paper closes by reflecting on the opening comments from the two Water and Sewerage Companies concerned. Perhaps more telling is

that in recent meetings with several Water and Sewerage Companies, and attended by both authors of this Report, the message has been quite clear - House Builders can expect to pay significantly more for water and sewerage infrastructure, with little improvement in Sector performance.

11.5 The evidence presented in this Report shows the statements made by respective Companies to be a true expression of reality. More importantly, it begs the following questions:

1. With Ofwat, having been handed the power that it now has, has it met the required test of impartiality when introducing these Reforms, or has it been captured by a Water and Sewerage Sector anxious to preserve or enhance its commercial position when confronted with the prospect of increased competition?

2. Why has the position taken by the Regulator resulted in such significant increases in costs for House Builders?

3. Why have charges and costs, including their make-up and underlying justification never been part of any consultation? The defence from the Sector has been such disclosure could be deemed to be a breach of the competition laws - but there is considerable disagreement on this front, especially from a customer perspective.

In addition, no legal opinion and/or explanation has been offered by any part of the Water and Sewerage Sector as to why proper and wholesome disclosure constitutes a breach of competition law. Withholding key evidence and information must surely be more akin to a breach of the rules relating to competition?

4. How do these Reforms meet Defra's expectation of reduced cost or cost neutrality for House Builders?

5. In the context of increased housing provision, how do Ofwat's Reforms and the Water and Sewerage Sector per se align with the Government's Strategic Planning Policy and infrastructure delivery?

6. What comparisons have been undertaken by Ofwat to ensure the charging Reforms disclosed by each Company align with the Sector's business plan (PR19) for the period 2020 to 2025?

7. What justifies the significant variation in Water and Sewerage Company costs and charges for identical infrastructure provision, as identified in Appendix 1?

11.6 If we are to achieve the Government's ambition of delivering 300,000+ new homes each year and far more expeditiously, it is essential for Ofwat to take cognisance of:

a) Government housing policy (existing and emerging) and the primacy of adopted local plans and their supporting policies specific to housing delivery.

b) The planning and infrastructure issues confronting House Builders and ensuring the Water and Sewerage

Sector meets its statutory obligations under Sections 37 and 94 of the Water Industry Act 1991 when it comes to water and sewerage infrastructure provision.

c) How the Water and Sewerage Sector can better respond to the needs of House Builder customers on a fair, equitable and transparent basis. Likewise, recognise and respond to the increased traction taking place when it comes to MMC.

d) The necessity for all water and sewerage Infrastructure costs to be evidence-based and subjected to far more rigorous and regular audit to ensure value for money and to build trust in part of the utility sector that is disproportionately more expensive than any other.

11.7 As highlighted in this Report, the situation in Southern Water is far from acceptable and adds further weight to the question as to whether Ofwat is the effective regulatory body it needs to be. The 'nitrate' issue in Southern Water is a case for urgent interventionist leadership by a Regulator that has already recognised the failings of this Sewerage Company.

Continued ambivalence to a major issue that is restricting housing delivery is not effective leadership, whilst being contrary to Government policy - a policy that has been reinforced by

the initiatives and legislation that the Government is introducing to facilitate its latest mantra and commitment to 'build, build, build'.

11.8 In addition, the needs, and expectations of the House Building industry as a major customer in the Utility Sector must be listened to. Whether it's water and sewerage charges, procedural mechanics, infrastructure design/construction guidance, asset adoption, delivery performance, MMC or Regulatory intervention to address serious Sector shortcomings, Ofwat, Water UK and the Companies themselves must begin to respect the knowledge and experience of House Builder customers, inclusive of their retained consultants.

11.9 If we are to achieve the Government's housing objectives it is essential that the Water and Sewerage Sector begin to recognise that it has an important part to play and that it must be prepared to listen to major customer and allow itself to be challenged on all aspects of its monopoly position.

11.10 The Water and Sewerage Sector may not necessarily agree with the entire content of the Report but if aspects are to be rebutted then the Sector is challenged to provide the robust evidence in this regard.

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12 APPENDIX 1

SUMMARY OF COMPANIES CHARGES - 2018/2019

The summary that follows relies on data extracted from Company Charging Arrangements for the year 2018/2019. Wherever possible all charges have been compared on a strict "like for like" basis.

ASSET PAYMENTS/INCOME OFFSETS

Contribution given to a developer or self-lay provider to lay on-site water mains. These are calculated by each Company where they can use one of three options in terms of how they want to calculate the contribution:

- Calculated as a percentage of the total on-site water mains cost - **range 15% - 91%**
- As an allowance of a contribution per plot - **range £415 - £839**
- DADS - **It is not possible to undertake a comparison of the third option**

WATER COMPANY SERVICE CONNECTION COSTS

Connection of a 25mm Service Pipe in Unmade Ground by the Company as a Standard Charge - this was only applicable to 12 Companies. Other Companies determined the Charge based on two separate connection cost criteria

- Connection only by the Company - **range £146 - £498**
- Excavate & connect by the Company - **range £363 - £651**

WATER COMPANY MAINS COST - (Quoted Costs per linear metre for Companies to lay a Water Main)

- 90mm pipe - **range £30 - £80**
- 125mm pipe - **range £32 - £90**
- 180mm pipe - **range £37 - £120**

A Company's Administration and Design Charge to a Developer for a Water Main on a 100 Property Development where the Water Main Cost is £50,000.

- Admin & Design Charge - **range of charges £325 - £7,500**

SUMMARY OF COMPANIES CHARGES - 2020/2021

The following summary again relies on data extracted from Company Charging Arrangements for the year 2020/2021. For consistency and wherever possible all charges have been compared on a strict "like for like" basis.

ASSET PAYMENTS/INCOME OFFSET FROM 1ST APRIL 2020

With effect from 1st April 2020, asset payments were no longer paid to Self-lay Providers, but under the updated Charging Rules, income off-sets continue to be made to developers/House Builders. The range in contributions given to a developer, who is still free to use a self-lay provider to lay on-site water mains, if they choose to do so, is as follows:

- Contribution per plot - **range £0 - £751**

WATER COMPANY SERVICE CONNECTION COSTS

Connection of a 25mm Service Pipe in Unmade Ground by the Company

- Connection only by the Company - range £116 - £893 (When comparing the average connection cost across all companies with the cost in 2018/19, the increase in cost is 56.7%).
- Excavate & connect by the Company - range £290 - £893 (Applying the same calculation as previous - the resultant percentage increase is 17%)

WATER COMPANY MAINS COSTS

These on-site water mains costs are based those costs from the Worked Examples each Water Company was required to submit to Ofwat. They relate to two example sites, namely, 50 and 200 dwelling developments, and use the costs identified in each Company's disclosed Charging Arrangements

- 50 dwelling development - **range £5,983 - £81,300 (£120 to £1626/dwelling)**
- 200 dwelling development - **range £45,034 - £274,300 (£225 to £1372/dwelling)**

SEWERAGE COMPANY SEWER CONSTRUCTION COSTS

Sewerage Companies Costs to lay a 150mm diameter sewer pipe per linear metre at a depth of 2.5m

- Lay 150mm sewer pipe - **range of charges £321 - £641/ linear metre**

Comparison of per plot Asset Payments/Income Offsets for Companies that stated contributions in 2018/2019 in comparison with those in 2020/2021 as required by the new Charging Rules

Company	2018/2019	2021/2021	Reduction in Contribution per plot
South West	£620	£439	£181 (29%)
United Utilities	£839	£751	£88 (10.5%)
Northumbrian	£415	£0	£415 (100%)
Essex & Suffolk	£480	£0	£480 (100%)
Cambridge	£612	£599	£13 (2%)
South Staffs	£612	£599	£13 (2%)
Bournemouth	£620	£439	£181 (29%)

Note:

The change in costs exceeds 10% in all but two companies. Developers are now having to fund additional water main costs for developments in each of the Company areas identified.

INTER-COMPANY COMPARISON OF COSTS & CHARGES - 2020/2021

Charge	Northumbria Water (111)	Yorkshire Water (119)	United Utilities (93)	Severn Trent (62)	Anglian Water (73)	Thames Water (63) (V2)	Southern Water (48)	Wessex Water (60)	South West Water (85)
Water connection App Fee	£115	£122	£34	£95		£50	£110	£0	£96
25mm Service Connection inc Meter (unsurfaced)	@297(PE) & £359 (BP)	£893?	£454	≤5m-£649	≤5m-£483	Up to 1m - £500	≤3m - £290-£348	£719	Exc Excav £166
25mm Service Connection inc Meter (surfaced)	Not Stated	?	£637	≤5m-£1,036	≤5m-£483	Up to 1m - £1,250	≤3m - £737		?
E/O Cost over 2.0 (Polyethylene) - U/S	£9/m	£29/m	£61/m	Not Stated	£32	£100/m	£29/m	£146/Connex	?
E/O Cost over 2.0 (Barrier Pipe) - U/S	£11/m	?	£68/m	£109/Conn	?	£110/m	£122/m	Not Stated	?
Building Water/Dwelling	Inc Sewage disposal £32	£43	£27.50	£84	?	Not Stated	Not Stated	£82	?
Water Infrastructure Network Reinf Capex (5yrs)	Not Stated	Not Stated	£40.7M	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated
Total New Connections (5yrs)	Not Stated	Not Stated	139,223	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated
Infrastructure Charge/Connection	£135	£70	£302	£395	£340	£140	£0	£160	£91
Legacy Water Infrastructure Charge	Not Applied	Not Applied	£302	£401	Not Applied	Not Applied	£397	Not Applied	£396
I/C for Dwelling Water Use of 110lp/d	£0 @ 105lp/d	Yes - Variable	£30	100%	£0	£0	-£230	£0	£0
Water I/C Credits	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Income Offset per Dwelling	£0	£0	£751 WO	£479	£400 WO	£200	£335	£74	£439
As set Payment to SLP	£0	£0	£0	£0	£0	£0	£0	£0	£0
Sewerage									
S107 Sewer Connection by WaSC		Variable			£17,388	≤5m-£16,000	Not Stated	Not Stated	Variable
S104 Inspection Fee	2.50%	2.50%	2.50%	2.50%	2.50%?	2.50%?	2.50%?	2.50%?	Variable
S104 Surety	10%	10%	10%	10%	10%	10%	10%	10%?	10%
S104 Surety (Pumping Stations)	10%	10%	10%	10%	10%	10%	10%	10%?	10%
Pumping Station Telemetry	Not Stated	Not Stated	£6,755	£5,430	Not Stated	Not Stated	Not Stated	Adoption only - £1842	£3,320 or £5,314
Sewage Infrastructure Network Reinf. Capex (5yrs)	Not Stated	Not Stated	£29.6M	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated
Total New Connections (5yrs)	Not Stated	Not Stated	136,439	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated
Infrastructure Charge/Dwelling	£235	£190	£279	£292	£570	£210	£790	£250	£683
Legacy Sewerage Infrastructure Charge	Not Applied	Not Applied	£279	£401	Not Applied	Not Applied	£397	Not Applied	£396
Income Offset per Dwelling	£0		£0	£90	£0	£40	£225	£80	£67
Sewerage I/C Credits	Yes	Yes	Not Defined	Yes	Yes	Yes	Yes	Yes	Yes
Discounts on I/C's for SuDS	Yes - £185 if no SW to Sewer	Max - £145	£28	75-100%	£0	£0	£0	Yes - IC Reduced to £126	£0
								Reduced to £25 if no SW to Sewer	
Water Only Companies									
	Bristol Water (51)	Bournemouth Water SWW	South Staffs & Cambs (54)	South East Water (78)	Essex & Suffolk	Portsmouth Water	Affinity Water (55)	SE S Water (33)	Hartlepool Water
Water connection App Fee	£0	See South West Water	£90	Variable	£115	£65?	£157	£212	See Anglian Water
25mm Service Connection inc Meter (unsurfaced)	£452	-	£301	£472	£243	£359	≤1m-£556?	£341	-
25mm Service Connection inc Meter (surfaced)	?	-	£837	£645	Not Stated	£435?	≤1m - £1,058?	£625	-
E/O Cost over 2.0 (Polyethylene) - U/S	£103/m	-	£156/m	£29/m	£9/m	Not Stated	Not Stated	£61/m	-
E/O Cost over 2.0 (Barrier Pipe) - U/S	£124/m	-	£159/m	£38/m?	£11/m	Not Stated	Not Stated	£65/m	-
Building Water/Dwelling	?	-	Not Stated	Not Stated	Not Stated	£152?	Not Stated	Not Stated	-
Water Infrastructure Network Reinf Capex (5yrs)	Not Stated	-	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	-
Total New Connections (5yrs)	Not Stated	-	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	Not Stated	-
Infrastructure Charge/Connection	£256	-	£381	£521	£140	£322	£375	£369	-
Legacy Water Infrastructure Charge	Not Applied	-	Not Applied	£400	Not Applied	Not Applied	Not Applied	Not Applied	-
I/C for Dwelling Water Use of 110lp/d	No	-	Yes - £229 - If 100l p/d	??	£0 @ 105l p/d	£161 if ≤100l p/d	£295	105l p/d - £314; 80l p/d - £258	-
Water I/C Credits	Yes	-	Yes	Yes	Yes	No	Yes	Yes	-
Income Offset per Dwelling	£706	-	£599	£0	£0	£467	£420	£165	-
As set Payment to SLP	£0	See South West Water	£0	£0	£0	£0	£0	£0	See Anglian Water

INFORMATIVE - TO BE READ IN CONJUNCTION WITH THE SCHEDULES PROVIDED

1. Those figures and/or cost areas accompanied by a question mark have been difficult to accurately ascertain. Within the main body of the related Water and Sewerage Company charging arrangement narrative there is a lack of clarity and consistency.
2. Every effort has been taken to ensure cost/charging arrangement comparisons are based on a strict like for like basis.
3. When compared to the pre-April 2018 charging arrangements/costs there has been a significant change in any so called 'balance' and one that favours the commercial interest of all Water & Sewerage Companies. Note the significant reduction in income offsets and the recession of asset payments to SLPs.
4. Only United Utilities have disclosed their intended in-consequence infrastructure investment over the next 5 years, Likewise, the anticipated number of related 'connections'. Reference to Ofwat's PR19 Final Determinations for the next 5-year business plan for Water and Sewerage Companies identifies a shortfall of over 400,000 residential connections and an accompanying infrastructure investment shortfall exceeding £200 million.
5. One of the first observations is the significant variation in and lack of consistency when reporting costs under each cost heading.
6. South Staffs factor a 3% water leakage allowance into their network capacity assessment and reflect this in their eventual infrastructure specification/cost. Other water companies are known to have factored significantly higher levels of leakage into their network analyses for determining the network reinforcement element of the infrastructure charge.
7. Wessex Water will not accept attenuation ponds for adoption under S104 - this is contrary to the guidance issued by Water UK on behalf of Ofwat as part of the Adoption Codes. Wessex have also introduced a further charge heading, namely, network enhancement. It is implied that developers will be expected to make further contributions under this heading, in addition to ICs.
8. Wessex Water have also retained the right to restrict development and the timing thereof through the planning process.
9. Southern Water have introduced caveats relating to the point of connection that will result in developers incurring significant additional off-site costs.
10. Severn Trent have introduced caveats regarding SuDS infrastructure - this is a departure from what is supposedly national agreed design and construction guidance. United Utilities have also introduced exemptions in terms of what they are prepared to adopt as SuDS infrastructure.
11. Northumbrian Water have confirmed in their charging arrangement documentation that from April 2020 Developers will experience a considerable increase in cost - See para 1 page 4.
12. United Utilities have capped their IC credits at zero.

13 BIOGRAPHICAL DETAILS

STEPHEN WIELEBSKI

CEnv; MSc; C Build E; FCIOB
FCABE; MIET; ACI Arb; FRSA
PRINCIPAL PARTNER - WA CONSULTANCY LTD

Stephen has extensive experience in the house building industry having entered the construction industry in June 1969.

As a Civil Engineer/Technical Director, he has worked at a Senior Executive level for major House Builders since 1978 until the creation of WA Consultancy in 2015. Stephen is a Chartered Environmentalist and Chartered Building Engineer and has a Master of Science degree, with Distinction, in Environmental Geotechnics. His considerable experience includes the investigation and remediation of contaminated land, geotechnics, earthworks, foundations the design and construction of highways, water/sewerage infrastructure and utility services, with specialist skills in all aspects of land acquisition due diligence.

Stephen also has experience in land purchase contract law/conveyancing. From 2008 until 2018, Stephen was a member of the Government's Building Regulations Advisory Committee.

His significant contribution to the Construction Industry has been recognised by the Chartered Institute of Building, who in April 2011 conferred upon Stephen the rare honour of an Honorary Life Membership of the Institute. Seven years earlier, (July 2004) Stephen attended the Queen's Garden Party, having been nominated by the Royal Society for Arts Manufacture and Commerce in recognition of his achievements and contribution.

More recently, WA Consultancy provides technical advice and guidance to house builder clients, mostly SMEs, together with several peer group consultants on matters specific to water and sewerage sector legislation and reforms.

From March 2015 until June 2020, Stephen was one of the HBF's Senior Consultants providing guidance in each of the areas identified previously, in addition to representing the house building Industry at Senior Government level.

RAY FARROW

CEO - TECHNICAL DEVELOPMENT SERVICES

Ray, having qualified in 1977 with a Diploma in Engineering Surveying from Trent Polytechnic, embarked on a career in the Civil Engineering Sector.

After over seven years of working on a number of major Civil Engineering projects in the UK including the Flotta Oil Terminal in the Orkneys, the Humber Bridge and the reconstruction of Twickenham Rugby Stadium in 1983, he decided to change the direction of his career and take up the role of an Engineer with a House Builder.

Over the next seventeen years, he held several senior positions including a Building Director and Technical Director with Westbury Homes.

In November 1999, he left Westbury Homes to start Technical and Development Services an Engineering Consultancy focusing on the utility issues and project managing post development issues for developers. This is now a National business operating from four Regional Offices where Ray holds the position of Chief Executive.

Over the last twenty years, Ray has acted as a Senior Consultant for the Home Builders Federation on Infrastructure issues ranging from the formulation of policy and legislation with various Governments as well as providing practical guidance to developers on the legislative changes that are taking place.

In light of the work he undertook in relation to the Flood and Water Management Act, he was invited to attend the Queens Garden Party in May 2015.



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