Gladman Developments Limited

UTILITY LAW SOLUTIONS

Proposed Development of Land off Rampton Road, Cottenham

Foul Drainage Analysis

May 2016
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Proposed Development of Land off Rampton Road, Cottenham - Foul Drainage Analysis

A. Executive Summary

Utility Law Solutions (ULS) specialises in the application of water and sewerage law in relation to the housebuilding industry and has been appointed by Gladman Developments Ltd to advise on foul drainage matters relevant to its proposed development of land off Rampton Road, Cottenham. This report has been prepared in support of a resubmission of application S/1818/15/OL which was refused by the Planning Committee on the 11th May 2016.

The purpose of this report is to outline how the proposed development can be effectually drained without causing detriment to the existing public sewerage network and also to set out the legislative framework which governs the water and sewerage industry. Sewerage undertakers have statutory duties and powers designed to ensure they manage the public sewerage system in a way which can accommodate new development and a defined funding mechanism through which this can be achieved. Foul drainage does not represent a planning constraint for the proposed development and it would be unnecessary and unreasonable to impose a planning condition relating to foul drainage.

It is proposed that once developed the site will comprise of up to 200 residential units and 70 apartments with care (C2) and that a foul water drainage system will be constructed and connected to the existing public sewerage network. This network is owned and operated by Anglian Water (the Sewerage Undertaker).

The Sewerage Undertaker has carried out an assessment of its local sewerage network in order to understand the likely impact of introducing new foul flows from this development. While the foul flows from the proposed development could be accommodated in dry weather conditions and during normal rainfall, existing capacity inadequacies may be exacerbated during extreme rainfall events. It has been determined by the Sewerage Undertaker that the development's foul flows can be connected to the adjacent public sewerage network with improvement works carried out downstream to ensure no detriment occurs. The Sewerage Undertaker has confirmed that sufficient capacity is available to treat the foul flows from this development at the receiving sewage treatment works. The report confirming the findings of the Sewerage Undertaker's investigations is included at Appendix 1.

A sewerage undertaker will typically submit representations to local planning authorities requesting that planning conditions are imposed which, as demonstrated by this report and its appendices, are unnecessary and/or unreasonable. A detailed analysis of the duties and responsibilities of sewerage undertakers prescribed by the water industry statutory framework is set out in Appendix 5 of this report. The effect
of these duties and responsibilities on whether it is necessary or reasonable to impose planning conditions in relation to foul drainage is also examined.

The necessity or otherwise of foul drainage planning conditions has been tested in recent planning appeals in which ULS has been involved. Decisions from two of these cases are outlined below:

**Appeal Decision APP/Y2810/A/14/2228921**

The Planning Inspector received an analysis from ULS based on the same principles detailed in this report and also representations from a sewerage undertaker requesting that a foul drainage planning condition was imposed. The Inspector stated that a condition relating to the completion of off-site public sewer improvement works would be unreasonable as it would be at least 2 years before any houses would be occupied and discharging foul flows to the public sewerage network. The Inspector determined that these timescales gave the sewerage undertaker adequate time to implement any necessary improvement measures to the public sewerage network pursuant to the statutory framework that applies to the water and sewerage industry. The Inspector’s full comments are set out in Appendix 5.

**Appeal Decision APP/F1610/A/14/2228762**

The Planning Inspector made the following comment at paragraph 56:-

*The foul sewage and the water supply systems involve infrastructure elements that are inadequate. The consultation response from Thames Water suggests that conditions should be imposed to require an assessment of the additional capacity that might be required and to indicate suitable connection points. However, there is a statutory duty to provide such connections under the requirements of the Water Industry Act 1991. Hence, there would be no need for planning conditions to duplicate powers available under other legislation, as the submitted notes confirm.*

Case law has set a precedent relating to the consistency of decision making by planning authorities or inspectors, confirming that whilst a decision maker can depart from a previous decision which considered the same or similar facts, they must fully justify the reasons for doing so. (Fox Vs SoS [2012] EWCA Civ 1198).

Considering the timescales associated with this development site (as was the case with the Appeal sites referred to above where no foul drainage condition was imposed), it is clear that a foul drainage planning condition would fail the tests in paragraph 206 of the National Planning Policy Framework (NPPF) and explained in the Planning Practice Guidance (PPG). There is sufficient time for the Sewerage Undertaker to carry out any necessary measures to accommodate the foul flows from the development in the public sewerage system. The Sewerage Undertaker is
already aware of the nature of improvement works that may be required to accommodate this development and it is clear that these can be implemented prior to new foul flows being discharged to the public sewerage network.

In summary, this report clearly demonstrates how the proposed development can be effectually drained without causing any detriment to the public sewerage system. Matters relating to foul drainage have been properly assessed and are comprehensively addressed in other primary legislation, meaning there is no impact which would make the development unacceptable in planning terms in the absence of a condition. Adopting the tests at NPPF paragraph 206, any condition related to foul drainage is unnecessary, irrelevant to planning and unreasonable.
B. Drainage Strategy for the Development

B.1 There are public foul sewers to which a connection from the development can be made in Rampton Road directly adjacent to the site. The new onsite foul sewerage system built to drain the proposed development can be linked to these sewers via an offsite sewer constructed in public highway. The developer will be required to serve a notice on the Sewerage Undertaker under section 106 of the Water Industry Act 1991 to facilitate a connection to this public sewer.

B.2 In order for foul water from the proposed development to be effectually drained, a new network of foul sewers as well as a pumping station will be constructed and connected to the existing public foul sewer network. All sewers will be constructed in accordance with the national industry guidance entitled “Sewers for Adoption” and will be offered for adoption to the Sewerage Undertaker under an agreement pursuant to section 104 of the Water Industry Act 1991. This will ensure the long term maintenance of all new sewers and is the standard practice for new development.

B.3 The site is relatively flat across the area proposed for development. Given the distances to the public sewerage system and need to cross an existing public sewer which runs within the site, a pumping station will need to be constructed as part of the new onsite sewerage system in order to convey foul flows to the public sewerage network through a rising main (a pipe under pressure). To facilitate a physical connection, a short length of new gravity sewer is typically constructed between the rising main and the public sewer to which connection is made. The developer of the site will liaise with the Sewerage Undertaker as part of an application for an agreement under Section 104 of the Water Industry Act to determine the required pumping regime and final drainage strategy for the development.

B.4 The Sewerage Undertaker has carried out a hydraulic analysis of the public sewerage networks in the vicinity of the proposed development. An option has been presented which will allow the development to be connected to the public sewerage system without causing any detriment to capacity levels or overall performance. The report received from the Sewerage Undertaker is included at Appendix 1 and its recommendation can be summarised as follows:

- Upsize 250 metres of 150mm diameter sewer to 225mm along Rampton Road. Provide 4 new manholes to allow for the sewer upsize.
- Upsize 93 metres of 150mm diameter sewer to 300mm along Rampton Road. Provide 1 new manhole to allow for the sewer upsize.
The Sewerage Undertakers report was prepared on the basis that the development was to consist of up to 300 residential dwellings. As the extent of proposed development has since been reduced to up to 270 residential dwellings, the extent of public sewer upsizing downstream of the connection point may need to be reduced to reflect the lesser volume of new foul flows produced.

B.5 The indicative extent of the development is shown edged red on the plan in Appendix 3. The potential connection points on the public sewer network are indicated in Appendix 2. These can be referenced against the Development Framework Plan that forms part of the planning application.

B.6 Should outline planning permission for the proposed development be granted, Gladman Developments will be marketing and selling the site to a housebuilder, who will then submit the necessary reserved matters application once detailed design for the development has been completed. The following future timescales are envisaged:

- Upon receipt of a valid planning approval, Gladman Developments will begin to market the site towards the end of 2016.
- Sale of the site is likely to be completed by mid-2017.
- The developer will then complete detailed designs for the site and is likely to make a reserved matters application in late 2017.
- Determination of reserved matters may take approximately 3-6 months, i.e. by early to mid-2018.
- Initial on-site works could therefore commence by the end of 2018 after allowing a few months for enabling works etc.
- Initial occupations (excluding show homes) may commence during early to mid-2019 i.e. by the end of the first full year from when the development commences.
- Development will continue over approximately a 6 to 7 year period with sales/occupations at around 40 dwellings per annum.
- Site completion estimated in 2022/2023

B.7 It is important to note with reference to the above timescales that foul flows from the development are not likely to enter the existing public sewerage network until early to mid-2019. This allows more than two years following the grant of outline planning permission for the Sewerage Undertaker to implement the measures detailed in its hydraulic modelling report (or any other it deems more suitable) to ensure the new foul flows can be accommodated in both the short and longer terms. Furthermore, given that development will increase on a slow, gradual basis, it is probable that any works found to be necessary would not need to be complete within the next 3 to 4 years. As the foul flows from this development will be pumped to the
public sewerage network, the timing and level of foul flows from a pumping station can be precisely controlled. The ability to pump out foul flows at rates agreed with the Sewerage Undertaker and at off peak times if necessary could be utilised on a temporary basis if the need arises, until the Sewerage Undertaker makes any necessary changes to its network.

B.8 It is also worth bearing in mind that the need for extra homes is primarily not caused by inward migration, but by providing homes for people currently living as two households in one property. Inward migration only tends to account for between 30% and 40% of the need for extra homes. In assessing the impact of a development on the local foul sewerage system, the Sewerage Undertaker should not view this development as generating entirely new additional foul flows, but rather a case of most of the foul flows being existing foul flows simply continuing to discharge within the same local network but from a different home.

B.9 The timescales for implementation of this development (as demonstrated in section B.6 above) afford sufficient time to the Sewerage Undertaker to improve its sewerage network, to accommodate the associated foul flows. Given the fact that the Sewerage Undertaker has a responsibility to carry out such actions under its statutory duties and that it is funded to do so, it would be inappropriate to prevent this development from proceeding on the grounds of sewerage capacity or indeed to apply any restrictive planning condition which conflicts with the tests in paragraph 206 of the NPPF and explained in the PPG. Planning Appeal Decision APP/Y2810/A/14/2228921 determined that a foul drainage planning condition was unreasonable as the sewerage undertaker had sufficient available time to implement any necessary improvement measures to the public sewerage network. It is clear in this case that there will be no new foul flows discharging from the development into the public sewerage system for at least 2 years. A planning condition which prevented the occupation of premises until such works were in place would therefore be unreasonable. Planning Appeal Decision APP/F1610/A/14/2228762 further confirmed that foul drainage planning conditions are unnecessary as they duplicate matters covered under separate primary legislation. The responsibilities for any improvements to the sewerage and sewage treatment networks is a matter for the Sewerage Undertaker to manage in line with its statutory duties and do not need to be considered further during this planning application.

B.10 As set out above, the foul drainage strategy is to connect to existing local public sewers with improvement works (if necessary) carried out by the Sewerage Undertaker as part of its responsibility to manage the public sewerage network.
C. Water Industry Legislative Framework, Duties, Funding and the Planning Regime – ULS Analysis

C.1 ULS has consistently maintained that planning conditions relating to foul drainage are unnecessary for new residential development. The recent planning appeal decisions highlighted in this report and detailed in paragraph C.6 below support this view. The actual impact of foul drainage from a proposed development on the environment must always be evaluated with due regard to the statutory provisions set out in the Water Industry Act 1991 (WIA1991). In this case it will be over two years before any foul flows from the development will be discharged to the public sewerage network. Given that the Sewerage Undertaker is already aware of the steps it needs to take to ensure that the foul flows from this development can be accommodated in the public sewerage system, a foul drainage planning condition is clearly not required in light of the duties and powers conferred on the Sewerage Undertaker by the legislation that governs these matters.

C.2 A summary of the relevant sections of the WIA1991 is set out in Appendix 4 together with the full wording of those sections.

C.3 ULS has set out its detailed analysis of the interaction between the water industry statutory framework and the planning regime in Appendix 5.

C.4 When considering the drainage related aspects of a planning application, the correct approach in law is as follows:

- To have due regard to the rights which the developer would have to connect the development to the public sewerage system and what impact to the environment that would have but also taking into account the general duty imposed on sewerage undertakers under section 94 together with the charging provisions of the WIA1991.
- To consider carefully whether those impacts would be such as to justify refusing permission, and if so whether they could be mitigated by a planning condition.
- To consider carefully whether any such condition would meet the policy tests in the NPPF and PPG.

C.5 Conditions relating to sewerage and sewage treatment must be considered and justified against the tests set out in the NPPF and the PPG. In particular, given the rights and duties in the WIA1991, careful consideration is required as to the time-scales involved in implementing a permission for residential development. It is reasonable to expect the Sewerage Undertaker to make provision for the necessary infrastructure so as to avoid adverse effects, and to fund this through the normal means of charges. On the basis:-
that the Sewerage is already aware of the steps it needs to take to ensure that the foul flows from this development can be accommodated in the public sewerage system; and

given the timescales for the ultimate discharge of foul flows from this development to the public sewerage network, as explained in more detail in Appendix 5;

a foul drainage condition is unnecessary and would therefore fail the test of reasonableness laid out in the NPPF.

C.6 The necessity or otherwise of foul drainage planning conditions has been tested in recent planning appeals in which ULS has been involved. Decisions from two of these cases are outlined below:

**Appeal Decision APP/Y2810/A/14/2228921**

The Planning Inspector received an analysis from ULS based on the same principles detailed in this report and also representations from a sewerage undertaker requesting that a foul drainage planning condition was imposed. The Inspector stated that a condition relating to the completion of off-site public sewer improvement works would be unreasonable as it would be at least 2 years before any houses would be occupied and discharging foul flows to the public sewerage network. The Inspector determined that these timescales gave the sewerage undertaker adequate time to implement any necessary improvement measures to the public sewerage network pursuant to the statutory framework that applies to the water and sewerage industry. The Inspector’s full comments are set out in Appendix 5.

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Case law has set a precedent relating to the consistency of decision making by planning authorities or inspectors, confirming that whilst a decision maker
can depart from a previous decision which considered the same or similar facts, they must fully justify the reasons for doing so. (Fox Vs SoS [2012] EWCA Civ 1198).

C.7 As indicated above, sewerage undertakers are funded to meet their obligations under the provisions of the WIA1991. On this specific development, the addition of 270 new customer households will provide additional annual income to the Sewerage Undertaker. The current average sewerage charge in the Sewerage Undertaker’s area is £229.00 per property giving the Sewerage Undertaker an annual income of £61,830.00. Each new dwelling constructed on this development will also be subject to a sewerage infrastructure charge (current rate £354.00 per property). This will generate a further one off payment to the Sewerage Undertaker of £95,580.00. A full explanation of how sewerage undertakers are funded is included in Appendix 5.
D. Summary

D.1 It is clear from the above analysis of both the legal and technical aspects relating to foul drainage, that this development can be effectually drained without causing detriment to the existing public sewerage network.

D.2 In summary:

- The Sewerage Undertaker is already aware of the steps it needs to take to ensure that the foul flows from this development can be accommodated in the public sewerage system;
- The developer has a right to connect to the public sewerage network at a point of its choosing and the Sewerage Undertaker has a duty to carry out any works necessary to accommodate any resulting foul flows (s106 and s94 of the WIA1991).
- If the Sewerage Undertaker requires construction of foul drainage works for this site to be carried out in an alternative manner or connect at a different location to that proposed by the developer, it can compel the developer (through s112 of the WIA1991) to carry out the additional works to achieve this and reimburse to the developer any costs over and above those that would have been incurred.
- Foul flows from new developments increase gradually over an extended period of time. This affords more time to the Sewerage Undertaker to ensure that public sewers can be upgraded to accommodate a level of new foul flows if necessary.
- Foul drainage matters relating to this development can be satisfactorily dealt with without any requirement for a planning condition which would conflict with the tests in paragraph 206 of the NPPF and explained in the PPG.

D.3 We have highlighted the separate legislative regimes that operate within the planning system and the water industry which demonstrate that it would be unreasonable to refuse planning permission for this development on sewerage capacity or sewage treatment grounds and that a foul drainage condition is not required. Matters pertaining to foul drainage and sewage treatment for this development are fully addressed by water industry legislation.

D.4 Many sewerage undertakers have indicated to ULS that until they have sufficient certainty that development will take place in a particular area, it is unlikely that any investment in sewerage or sewage treatment will be allocated. It is therefore illogical to refuse planning permission on the grounds that no sewerage or sewage treatment improvement works are planned for systems to which a development will connect. Only granting planning
permission for developments without planning conditions relating to foul
drainage will ensure that sewerage undertakers fully consider drainage
networks and systems in line with their statutory duties. Crucially, this will
provide a benefit not only to new development, but also the existing
settlement.

D.5 Recent planning appeal decisions (as detailed in C.6 above) have confirmed
that conditions relating to foul drainage are unnecessary and/or unreasonable.
Case law has set precedent relating to the consistency of decision making by
planning authorities or inspectors, confirming that whilst a decision maker can
depart from a previous decision which considered the same or similar facts,
they must fully justify the reasons for doing so. (Fox Vs SoS [2012] EWCA Civ
1198).

D.6 Applying the tests at NPPF paragraph 206 and following the approaches
taken in the planning appeal decisions detailed in C.6 above, any condition
relating to foul drainage is unnecessary and/or unreasonable. Despite this, a
sewerage undertaker will often suggest that a development may cause
detriment to the public sewerage system unless a condition is imposed. It is
understandable that this would be of concern to a planning authority and this
is no doubt the reason that planning authorities have tended to routinely apply
planning conditions put forward by sewerage undertakers. However, in reality,
the “risk” is not created by the development itself and would only occur if a
sewerage undertaker failed to undertake its statutory obligations as detailed in
this report to fund and carry out improvements to the sewer and/or sewage
treatment systems if any are required, in a timely manner. The fact that a
sewerage undertaker requests development to be delayed until it is prepared
to make the necessary investment (for which it is already funded), means that
a private company is in effect seeking to dictate when homes which are
required to meet housing need, can be delivered. The casual imposition of
unnecessary/unreasonable foul drainage conditions on planning permissions,
requiring prior approval of drainage schemes or hydraulic modelling, can add
considerable delay to the implementation of permissions and the delivery of
new homes. This is not a practice that should be perpetuated within the
planning system.

D.7 The grant of planning permission for this development will give the Sewerage
Undertaker sufficient certainty that it will go ahead and its planning to ensure
that its systems can meet the demands of this particular development can
continue.

D.8 In summary, this report clearly demonstrates how the proposed development
can be effectually drained without causing any detriment to the public
sewerage system. Matters relating to foul drainage have been properly
assessed and are comprehensively addressed in other primary legislation, meaning there is no impact which would make the development unacceptable in planning terms in the absence of a condition. Adopting the tests at NPPF paragraph 206, any condition related to foul drainage is unnecessary, irrelevant to planning and unreasonable.
Utility Law Solutions – Company Overview

ULS is owned and operated by Philip Day and Alex Day and was incorporated in 2007. Since its inception, ULS has provided advice and assistance to developers, landowners and other bodies operating in the house building sector on issues relating to foul drainage, sewage treatment and associated infrastructure matters.

Prior to the formation of ULS Philip Day and Alex Day were both employed in the Water & Sewerage Industry by Severn Trent Water, being one of the largest sewerage undertakers in the UK. Philip and Alex therefore have first-hand knowledge of the operation of sewerage undertakers and how they interact with developers and others in the house building industry.

Before leaving Severn Trent Water to set up Utility Law Solutions, Philip was their Principal Legal Advisor for Asset Management matters. In this role Philip’s responsibilities were wide ranging and included the provision of legal advice and support to the business in relation to all asset management issues arising out of the company activities in sewage treatment, water supply and networks (water main and sewerage systems). During his time with Severn Trent Water, Philip was inter alia directly responsible for all legal aspects relating to:

- Advice on the effects of the Water Industry Act 1991 and related legislation
- Obligations of sewerage undertakers in relation to the section 94 duty
- Formulation of policies and procedures in relation to the connection of infrastructure to new developments including resolution of development related problems/disputes
- Sustainable Drainage Systems (SuDS) - Member of the National SuDS Working Group providing legal support which culminated in the Interim Code of Practice for Sustainable Drainage Systems
- Sewers for Adoption – Provision of legal support for Sewers for Adoption 5 and 6, including creating a new national agreement

Alex was employed by Severn Trent Water in its Developer Services and New Connections department with duties including assessing and communicating the impact of new developments on existing sewerage networks and evaluating sewer designs proposed by developers in accordance with industry standards. Alex worked in close collaboration with the Asset Protection and the Legal departments in Severn Trent providing an important link for his own team to ensure that all activities relating to new development complied with both statutory provisions and protected the technical requirements of the company. Alex also spent 4 years prior to joining ULS working as a consultant to developers providing advice on matters including the impact of proposed developments on sewerage networks and acting as an agent in communicating with sewerage undertakers.
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Appendix 1
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Addendum to the Pre-planning Report dated 9\textsuperscript{th} March 2015

Project Title:
Rampton Road, Cottenham, Cambridge

Anglian Water Services contact:
Rob Morris
Senior Growth Planning Engineer
Thorpe Wood House
Thorpe Wood
Peterborough
PE3 6WT
Mobile Number: 07702341018
Our reference number: 5707
10 July 2015
1. Summary

This report has been undertaken in response to an enquiry by Utility Law Solutions to determine the impact of flows from the site at Rampton Road, Cottenham, Cambridge on the performance of the existing foul sewer network and develop a feasible foul drainage solution. It should be read in conjunction with the pre-planning report dated 9th March 2015, which states that a direct connection to the public foul sewerage system is likely to have a detrimental effect on the existing sewerage network and that further hydraulic modelling is required to enable Anglian Water to provide a solution for draining the foul flows from the proposed development.

The analysis has been performed on the foul system only. The development comprises of 300 residential dwellings on a 14.2ha site.

The additional flows from the development site were modelled connecting to manhole reference no. TL44670501 (grid ref: TL4408667574) located along Rampton Road.

The study concludes that the development will cause detriment to the capacity of the sewer system and will result in increased flood risk.

In order to mitigate the impact of the proposed development upon the network the following option is recommended:

- Upsize 250m of 150mm diameter sewer to 225mm along Rampton Road. Provide 4 new manholes to allow for the sewer upsize.
- Upsize 93m of 150mm diameter sewer to 300mm along Rampton Road. Provide 1 new manhole to allow for the sewer upsize.

The predicted total capital scheme cost for the required mitigation only for this proposal is £259,767 with an indicative developer contribution of £29,187 as a commuted sum (see Table 1). The predicted total embodied carbon (tCO₂e) is 70.86. The predicted water footprint (m³H₂Oe) is 72.82.

The topography of the site indicates that a pumped regime is required. Due to the proximity of the site to the connection point it is assumed that the developer will provide the necessary infrastructure to convey flows from the site to the network.

The contents of this report and costs supplied are an estimate based on a solution generated by a desktop hydraulic model. These are estimated figures which are not to be relied upon without further detailed investigations.
2. Hydraulic Modelling and Solutions

The proposed development site is located in the village of Cottenham which sits in the northern area of the Cambridge Catchment. The development comprises of 300 residential dwellings across a 14.2 ha site.

To enable the analysis to be performed the existing hydraulic model for Cambridge was used. No model upgrades were undertaken as part of this study. In order to establish the baseline from which to make the assessment the hydraulic model was run firstly without the impact of the proposed development and then with the proposed development.

The modelling assumptions are presented in Appendix 1.

![Figure 1. Development location and proximity to the WRC showing downstream trace](image)

**Proposed connection point**

The proposed connection point for the development is considered to be manhole TL44670501 (grid ref: TL4408667574) located along Rampton Road. The diameter of
the sewer to which the proposed development will connect is 150 mm. The connection will be via a pumped regime.

![Proposed development site showing modelled connection point](image)

**Figure 2. Proposed development site showing modelled connection point**

**Hydraulic modelling**

The hydraulic model was run to determine the existing sewer performance during 1 in 20 year storm event. The model was then re-run with the assumed flows from the site connecting to manhole TL44970501.

The detriment analysis showed that the local network is unable to accommodate the proposed flows from the development. Increase in surcharge and flooding downstream of the proposed connection points is predicted as a direct impact of the development. An increase in flooding of 0.7m$^3$ of new flooding in a 20 year storm event is predicted (Figure 3). The increase in surcharge is shown on Figure 4. There is no detriment to the hydraulically connected overflows.
Figure 3. Locations of predicted flooding increase (1 in 20yr storm event) shown in red

Figure 4. Locations of predicted surcharge increase (1 in 20yr storm event) shown in red
The level of detriment predicted due to the additional flows from the development means that the mitigation solution will be required to allow the site to connect to the existing sewage system.

**Mitigation Solution**

Mitigation solutions are designed to prevent the risk of flooding increasing in a 1 in 30 year storm event.

The proposed mitigation solution (Figure 5) comprises:

1 – Upsize 250m of 150mm diameter sewer to 225mm along Rampton Road. Provide 4 new manholes to allow for the sewer upsize.

2 – Upsize 93m of 150mm diameter sewer to 300mm along Rampton Road. Provide 1 new manhole to allow for the sewer upsize.

![Figure 5. Location of infrastructure requirements for proposed solution](image)

This is considered to be a feasible solution for planning application purposes. A detailed design would be required to investigate the solution further.
Alternative Solutions
At detailed design stage the following alternative solutions may also be considered:

- An offline storage tank located along Rampton Road may be considered should the online solution not be feasible. This option however requires extra maintenance costs.
- There is also an option to either reduce or restrict the amount of flow from the development during storm events through the use of network monitoring however this may require additional storage within the development site as well as associated ancillary equipment.

Neither of these options have been considered as part of this study due to the effectiveness of the online storage option

Existing Sewer Capacity
No properties could be connected without the need of off-site reinforcements due to connection regime being pumped.
3. Summary of Cost Estimates

The estimated capital scheme cost for the proposed off-site reinforcement solution is £259,767.

The Water Industry Act enables the developer to benefit from any wastewater revenue generated from the houses they have built. In simplified terms, future revenue from the new dwellings is offset from the developer’s contribution. Instead of paying the full contribution the developer pays the difference between their capital contribution and the future revenue. This is calculated on an annual basis for 12 years (see Appendix 2). The developer has the option of paying this annually (relevant deficit) or upfront as a commuted sum (discounted aggregate deficit).

The predicted capital scheme cost for the proposed off-site mitigation only is £259,767. The indicative cost chargeable to the developer for the required mitigation following the offsetting of expected future revenue is predicted to be £29,187. This future revenue has been calculated based on constructing 50 residential dwellings in year 1 followed by 100 dwellings in subsequent years (see Table 1).

The indicative cost to the developer, as a commuted sum, for the off-site mitigation only, is therefore £29,187.

A detailed breakdown of the relevant deficit and discounted aggregate deficit is provided in Appendix 2.

Conveyancing costs

The modelling has identified that a pumped connection will be required. The connection point is close to the site boundary and it has been assumed that the developer will provide the infrastructure to convey the flows from the site to the connection point. Consequently, this report does not include any costs for the conveyance of flows.

The contents of this report and costs supplied are an estimate based on a solution generated by a desktop hydraulic model. These are estimated figures which are not to be relied upon without further detailed investigations.

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<td>£48,813</td>
<td>£52,109</td>
<td>£52,109</td>
<td>£26,488</td>
<td>£0</td>
<td>0.8799</td>
<td>£0</td>
</tr>
<tr>
<td>5</td>
<td>300</td>
<td>300</td>
<td>£53,250</td>
<td>£58,105</td>
<td>£58,105</td>
<td>£26,488</td>
<td>£0</td>
<td>0.8522</td>
<td>£0</td>
</tr>
<tr>
<td>6</td>
<td>300</td>
<td>300</td>
<td>£53,250</td>
<td>£59,396</td>
<td>£59,396</td>
<td>£26,488</td>
<td>£0</td>
<td>0.8254</td>
<td>£0</td>
</tr>
<tr>
<td>7</td>
<td>300</td>
<td>300</td>
<td>£53,250</td>
<td>£60,718</td>
<td>£60,718</td>
<td>£26,488</td>
<td>£0</td>
<td>0.7984</td>
<td>£0</td>
</tr>
<tr>
<td>8</td>
<td>300</td>
<td>300</td>
<td>£53,250</td>
<td>£62,074</td>
<td>£62,074</td>
<td>£26,488</td>
<td>£0</td>
<td>0.7742</td>
<td>£0</td>
</tr>
<tr>
<td>9</td>
<td>300</td>
<td>300</td>
<td>£53,250</td>
<td>£63,464</td>
<td>£63,464</td>
<td>£26,488</td>
<td>£0</td>
<td>0.7499</td>
<td>£0</td>
</tr>
<tr>
<td>10</td>
<td>300</td>
<td>300</td>
<td>£53,250</td>
<td>£64,889</td>
<td>£64,889</td>
<td>£26,488</td>
<td>£0</td>
<td>0.7263</td>
<td>£0</td>
</tr>
<tr>
<td>11</td>
<td>300</td>
<td>300</td>
<td>£53,250</td>
<td>£66,349</td>
<td>£66,349</td>
<td>£26,488</td>
<td>£0</td>
<td>0.7034</td>
<td>£0</td>
</tr>
<tr>
<td>12</td>
<td>300</td>
<td>300</td>
<td>£53,250</td>
<td>£67,845</td>
<td>£67,845</td>
<td>£26,488</td>
<td>£0</td>
<td>0.6813</td>
<td>£0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>£532,500</td>
<td>£614,604</td>
<td>£614,604</td>
<td>£317,853</td>
<td>£29,187</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Summary and recommendation

The hydraulic modelling undertaken for this report has predicted that without reinforcement to the existing sewer network, the flows from the proposed development will cause a risk of flooding downstream. The assessment has developed a feasible drainage solution to satisfy planning purposes. It has been assessed that no residential dwellings can be connected prior to mitigation being implemented.

The proposed mitigation comprises:

- Upsize 250m of 150mm diameter sewer to 225mm along Rampton Road. Provide 4 new manholes to allow for the sewer upsize.
- Upsize 93m of 150mm diameter sewer to 300mm along Rampton Road. Provide 1 new manhole to allow for the sewer upsize.

**Embodied carbon cost**

The embodied carbon predicted in this solution is 70.86TCO$_2$e (see Table 2).

**Water footprinting**

The predicted water footprint for this solution is 72.82m$^3$H$_2$O (see Appendix 3).

**Conveyance of flows**

It is assumed that the developer will provide the infrastructure to convey flows to the network.

<table>
<thead>
<tr>
<th>Description</th>
<th>Predicted Capital Cost</th>
<th>Indicative Developer Contribution</th>
<th>Predicted Total Embodied Carbon (tCO$_2$e)</th>
<th>Predicted Total Water footprint (m$^3$H$_2$Oe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>mitigation only</td>
<td>£259,767</td>
<td>£29,187</td>
<td>70.86</td>
<td>72.82</td>
</tr>
</tbody>
</table>

This strategy is considered to be a feasible proposal for planning application purposes.
5. Next steps

To proceed with this option, it is recommended that an application is made under Section 98 of the Water Industry Act. This will enable a detailed design and robust cost to be generated and the scheme to be delivered. An application form is available on our web site at www.anglianwater.co.uk/developers/sewer-connection/new-sewer.aspx.

Underwriting detailed design

Detailed design commences on receipt of an underwriting agreement. Payment is only sought from the developer if it chooses to abort the work. Otherwise, it is incorporated into the total scheme cost. For this scheme, an underwriting of £20,000 will provide detailed options from which a preferred option may be chosen. A cumulative underwriting of £41,000 will take the preferred option to a level of design where it is ready for construction. Typically this takes an estimated 44-52 weeks but may increase depending on the complexity of the scheme. At this stage a robust cost for the scheme can be provided.

Further work required for a section 104 or section 106 applications

Please note, it would be deemed premature by Anglian Water to submit a Section 106 or Section 104 application under the Water Industry Act 1991 to Developer Services prior to a Legal Agreement being signed under Section 98 of the same act ensuring the provision of the necessary upgrade works as identified within this report. The costs provided within this report are an estimate and these estimated figures are not to be relied upon without further detailed investigations.

Anglian Water supports sustainable development as set out in the NPPF

The responses made in this report are based on the presumption that your proposed development obtains planning permission. Whilst this report has been prepared to help assess the viability of your proposal, it must not be considered in isolation. Anglian Water supports the plan led approach to sustainable development that is set out in the National Planning Policy Framework (NPPF). As a spatial planning statutory consultee, we assist planning authorities in the preparation of a sustainable local plan on the basis of capacity within our water and water recycling (formerly referred to as wastewater) infrastructure. Consequently, any infrastructure needs identified in this report must only be considered in the context of up to date, adopted or emerging local plans. Where local plans are absent, silent or out of date these needs should be considered against the definition of sustainability set out in the NPPF as a whole.
APPENDIX 1. - Development details

Proposed Connection

<table>
<thead>
<tr>
<th>Proposed connection location</th>
<th>Rampton Road</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection sewer or node reference (incl. X&amp;Y)</td>
<td>TL44970501 (X= 544086, Y= 267574)</td>
</tr>
<tr>
<td>Connection sewer diameter</td>
<td>150mm (modelled as 152mm)</td>
</tr>
<tr>
<td>Connection relative to the development</td>
<td>North-east</td>
</tr>
<tr>
<td>Discharge regime</td>
<td>Pumped</td>
</tr>
<tr>
<td>Pump discharge rate</td>
<td>5 l/s</td>
</tr>
</tbody>
</table>

Creep & Storage

<table>
<thead>
<tr>
<th>Total creep (Sm² per property)</th>
<th>1500m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total development storage (m³)</td>
<td>180m³</td>
</tr>
<tr>
<td>Pump storage volume, m³</td>
<td>23.5m³</td>
</tr>
</tbody>
</table>

Highest Point of development (mAOD) | 13.918mAOD |

Lowest Point of development (mAOD)  | 7.638mAOD |

DWF Calculations

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
<th>Unit / Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development size</td>
<td>14.12</td>
<td>Ha (Digitised Sub-catchment area)</td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Residential dwellings</td>
<td>300</td>
<td>No.</td>
</tr>
<tr>
<td>B Residential occupancy</td>
<td>2.3</td>
<td>No.</td>
</tr>
<tr>
<td>C Residential population (P)</td>
<td>690</td>
<td>No. (A x B)</td>
</tr>
<tr>
<td>D Residential PCC (G)</td>
<td>131</td>
<td>l/h/d</td>
</tr>
<tr>
<td>E(avg) Residential demand - Average</td>
<td>1.05</td>
<td>l/s (C x D)/86400</td>
</tr>
<tr>
<td>E(peak) Residential demand - Peak</td>
<td>2.22</td>
<td>l/s (E(avg) x 2.12)</td>
</tr>
<tr>
<td>F Infiltration</td>
<td>0.26</td>
<td>l/s (0.25 x E(avg))</td>
</tr>
<tr>
<td>Industrial/Trade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Industrial/trade area</td>
<td>0</td>
<td>Ha</td>
</tr>
<tr>
<td>H Industrial/trade discharge per ha</td>
<td>0</td>
<td>l/s</td>
</tr>
<tr>
<td>I Industrial/trade domestic element per ha</td>
<td>0</td>
<td>l/s</td>
</tr>
<tr>
<td>J(avg) Commercial/trade - Average</td>
<td>0</td>
<td>l/s (GxH+GxI)</td>
</tr>
<tr>
<td>J(peak) Commercial/trade- Peak</td>
<td>0</td>
<td>l/s (J(avg)*3)</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K School PCC</td>
<td>0</td>
<td>l/h/d</td>
</tr>
<tr>
<td>L School occupancy</td>
<td>0</td>
<td>No.</td>
</tr>
<tr>
<td>M(avg) School demand - Average</td>
<td>0</td>
<td>l/s (K x L)/86400</td>
</tr>
<tr>
<td>M(peak) School demand - Peak</td>
<td>0</td>
<td>l/s (M(avg) x 3)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N(avg) Other demand - Average</td>
<td>0</td>
<td>l/s</td>
</tr>
<tr>
<td>N(peak) Other demand - Peak</td>
<td>0</td>
<td>l/s</td>
</tr>
<tr>
<td>O(avg) Total Discharge - Average</td>
<td>1.05</td>
<td>l/s (E(avg)+J(avg)+M(avg)+N(avg))</td>
</tr>
<tr>
<td>O(peak) Total Discharge - Peak</td>
<td>2.22</td>
<td>l/s (O(avg)+J(peak)+M(peak)+N(peak))</td>
</tr>
<tr>
<td>DWF Total - Average</td>
<td>1.31</td>
<td>l/s (O(avg)+ F)</td>
</tr>
<tr>
<td>DWF Total - Peak</td>
<td>2.48</td>
<td>l/s (O(peak) + F)</td>
</tr>
</tbody>
</table>
APPENDIX 2.- Calculation of relevant deficit and discounted aggregate deficit.

The financial propositions that are available in the Water Industry Act (WIA) are:

- Relevant Deficit (WIA section 100)
- Discounted Aggregate Deficit (WIA section 100A)

Under each option, the cost of installing the required infrastructure is calculated. This cost is then translated into a notional ‘loan’ to fund the installation. The revenue is then offset over a period of 12 years, taking into account inflation. If the cost of financing the loan exceeds the revenue in any year, then this deficit is charged to the developer.

A2.1 Relevant Deficit

This option takes the actual cost of providing the infrastructure as the basis for a notional loan. On an annual basis (for 12 years) the actual revenue we receive in respect of the infrastructure is then offset against the cost of the annual repayments of the notional loan. The deficit is paid annually by the developer for a period of up to 12 years. This is shown in Figure A2.1 below.

The developer will need to provide an undertaking to pay the deficit each year and also provide security for the estimated annual deficits either in the form of a cash deposit or a bond.

![Graphical imagery of a typical Relevant Deficit over 12 years](image-url)
**A2.2 Discounted Aggregate Deficit**

This follows the same principles as the Relevant Deficit payment method, except that the deficit will be paid as a single payment and the revenue is estimated from the build rate rather than from the actual revenue.

The yearly relevant deficit is calculated across the 12 years and a discount factor is applied to bring the deficit to its net present value. The deficit is normally reconciled against the security (see below) within 12 months of completing the infrastructure and is payable as a single commuted sum. This can be seen in Figure A2.2.

The developer will need to provide an undertaking to pay the full deficit after reconciliation and a security amount for the estimated deficit either in the form of a cash deposit or a bond. The deficit itself is payable on completion of the water mains following the reconciliation.

![Graphical imagery of a typical Discounted Aggregate Deficit over 12 years](image)

**Figure A2.2 – Graphical imagery of a typical Discounted Aggregate Deficit over 12 years**
APPENDIX 3. – Embodied carbon and water footprinting

Carbon footprint

In 2006 Anglian Water recognised the impacts of changing climate as one of the most significant challenges facing the organisation. In response we have developed and implemented a strategy of measure, manage and reduce our carbon emissions. We have set ourselves goals to halve our overall greenhouse emissions by 2035 (from 2010 levels) and to halve the embodied carbon in all new assets we build in 2015, compared to those that were built in 2010.

Water footprinting

Water is our most precious resource and at present we do not fully understand how sustainable each litre of water we supply to our customers is over our full supply chain. In response, we are implementing a strategy of ‘water footprinting’.

Primarily water footprinting assesses the impact of human activity on the water environment. The process measures the volumes and scarcity of freshwater consumption including geographical and temporal components in producing a product or service. This is followed by an assessment defining actions required to achieve sustainable and equitable water use especially in water scarcity ‘hot spots’.
Section 1: Proposed Development

Thank you for submitting a pre-planning enquiry. This has been produced for Utility Law Solutions. Your reference number is 00005707. If you have any questions upon receipt of this report, please contact Olivia Powter on 01733 414690 or email planningliaison@anglianwater.co.uk.

The response within this report has been based on the following information which was submitted as part of your application:

<table>
<thead>
<tr>
<th>Type of Development</th>
<th>No. Of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3 Dwellings</td>
<td>300</td>
</tr>
</tbody>
</table>

The anticipated residential build rate is:

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build Rate</td>
<td>50</td>
<td>100</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

- The grid reference for the site is TL4408267394.
- The site currently does not have planning permission and is located on a Greenfield site.

Figure 1: Location of proposed development

The comments contained within this report relate to the public water mains and sewers indicated on our records. Your attention is drawn to the disclaimer in the useful information section of this report.
**Section 2: Assets Affected**

In addition to any private assets that may be located on your site, there are public assets, owned and maintained by Anglian Water, located next to your site. The statutory easement of these assets overlap into your development site. The following table confirms the easement that will need needs to be taken into consideration when designing your layout.

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Pipe Size (mm)</th>
<th>Total Easement Required (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Foul Sewer</td>
<td>350</td>
<td>3.0 m either side of the centre line</td>
</tr>
</tbody>
</table>

If it is not possible to avoid our assets then the water main/sewer may need to be diverted in accordance with Section 185 of the Water Industry Act (1991). We have a duty to divert our sewerage infrastructure if requested to do so although this would be at your expense. You will need to make a formal application if you would like a diversion to be considered. A copy of the section 185 diversion application form can be found at www.anglianwater.co.uk/developers

Due to the private sewer transfer in October 2011 many newly adopted public used water assets and their history are not indicated on our records. You also need to be aware that your development site may contain private water mains, drains or other assets not shown on our records. These are private assets and not the responsibility of Anglian Water but that of the landowner.
Section 3: Water Recycling Services

In examining the used water system we assess the ability for your site to connect to the public sewerage network without causing a detriment to the operation of the system. We also assess the receiving water recycling centre and determine whether the water recycling centre can cope with the increased flow and influent quality arising from your development.

Water Recycling Centre
The foul drainage from the proposed development is in the catchment of Cambridge Water Recycling Centre, which currently has capacity to treat the flows from your development site. Anglian Water cannot reserve capacity and the available capacity at the water recycling centre can be reduced at any time due to growth and due to environmental and regulation driven changes.

Used Water Network
Anglian Water has assessed your proposals and a desktop study has indicated that a direct connection to the public foul sewerage system is likely to have a detrimental effect on the existing sewerage network. Therefore further hydraulic modelling work is required to enable Anglian Water to provide you with a solution for draining the foul flows from the proposed development. There is no additional charge for this work.

Rob Morris, our Senior Growth Planning Engineer for this area, will be responsible for undertaking this additional work. Rob will contact you shortly to discuss the timescales and to obtain any further information required. For your reference, Rob can be contacted on 07702 341018 or at rmorris2@anglianwater.co.uk.

If this modelling work confirms your development will have a detrimental effect on the existing sewerage network, the drainage strategy will be detailed within the pre-planning addendum report. This will be issued to you under separate cover within the timescales advised by Rob. This will include a no detriment foul drainage solution which will encompass a connection point, details of any upgrades or work required and indicative budgetary costs.

If an alternative drainage solution is required following the work undertaken for the pre-planning addendum report, any additional hydraulic modelling work will be at the cost of the developer. A cost and timescale is available upon request.

Please note that Anglian Water will request a suitably worded condition at planning application stage to ensure the strategy is implemented to mitigate the risk of flooding.

Surface Water Disposal
We note that you have not requested a surface water connection therefore an assessment has not been made on this occasion.
As you may be aware, Anglian Water will consider the adoption of SuDs provided that they meet the criteria outlined in our SuDs adoption manual. This can be found on our website at www.anglianwater.co.uk/developers/sewer-connection/suds.aspx. We will adopt features located in public open space that are designed and constructed, in conjunction with the future SuDs Approving Body, to the criteria within our SuDs adoption manual. Specifically, developers must be able to demonstrate:

1. Effective upstream source control,
2. Effective exceedance design, and
3. Effective maintenance schedule demonstrating that the assets can be maintained both now and in the future with adequate access.

Our preference is that the Local Authority is requested to adopt in the first instance as duty will pass to them in future legislation. Consequently as part of your submission, evidence will need to be provided to show that you have approached the local authority. If you wish to look at the adoption of any SuDs then an expression of interest form can be found on our website at: http://www.anglianwater.co.uk/_assets/media/SuDS_Adoption_Form_2012.pdf

The proposed method of surface water disposal is not relevant to Anglian Water; we suggest that you contact the future SuDS Approving Body for the area, the Environment Agency, the Internal Drainage Board.

**Trade Effluent**
We note that you do not have any trade effluent requirements. Should this be required in the future you will need our written formal consent. This is in accordance with Section 118 of the Water Industry Act (1991).

**Used Water Budget Costs**
It has been assumed that the onsite used water network will be provided under a section 104 Water Industry Act application. It is recommended that you also budget for both infrastructure charges and connection costs. The 2014/15 charges are:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Charge</td>
<td>£345.00 per connection</td>
</tr>
<tr>
<td>S104 Supervision and inspection costs</td>
<td>2.5% of estimated construction costs</td>
</tr>
<tr>
<td>S104 Survey costs</td>
<td>10% of estimated construction costs</td>
</tr>
</tbody>
</table>
Section 4: Useful Information

Water

Water Industry Act – Key Water Sections:

- **Section 41**: This provides you with the right to requisition a new water main for domestic purposes to connect your site to the public water network.
- **Section 45**: This provides you with the right to have a connection for domestic purposes from a building or part of a building to the public water main.
- **Section 51A**: This provides you with the right to provide the water main or service connection yourself and for us to vest them into our company.
- **Section 55**: This applies where you request a supply of water for non domestic premises.
- **Section 185**: This provides you with the right to make a reasonable request to have a public water main, sewer or public lateral drain removed or altered, at your expense. Details on how to make an application and the s185 form is available on our website at [http://www.anglianwater.co.uk/20/developers](http://www.anglianwater.co.uk/20/developers) or via our Developer Services team on 08457 60 66 087.

Details on how you can make a formal application for a new water main, new connection or diversion are available on from our Developer Services team on 08457 60 66 087 or via our website at [www.anglianwater.co.uk/developers](http://www.anglianwater.co.uk/developers).

If you have any other queries on the rights to requisition or connect your housing to the public water and sewerage infrastructure then please contact our developer services team at: Developer Services, Anglian Water, PO Box 495, Huntingdon, PE29 6YY or Telephone: 0845 60 66 087 or Email: developerservices@anglianwater.co.uk

**Water pressure and flow rate**: The water pressure and consistency that we must meet for your site is laid out in the Water Industry Act (1991). This states that we must supply a flow rate of 9 litres per minute at a pressure of 10 metres of head to the external stop tap. If your water pressure requirements exceed this then you will need to provide and maintain any booster requirements to the development site.

**Self Lay of Water Mains**: A list of accredited Self Lay Organisations can be found at [www.lloydsregister.co.uk/schemes/WIRS/providers-list.aspx](http://www.lloydsregister.co.uk/schemes/WIRS/providers-list.aspx).

**Used Water**

Water Industry Act – Key Used Water Sections:

- **Section 98**: This provides you with the right to requisition a new public sewer. The new public sewer can be constructed by Anglian Water on your behalf. Alternatively, you can construct the sewer yourself under section 30 of the Anglian Water Authority Act 1977.
• **Section 102**: This provides you with the right to have an existing sewerage asset vested by us. It is your responsibility to bring the infrastructure to an adoptable condition ahead of the asset being vested.

• **Section 104**: This provides you with the right to have a design technically vetted and an agreement reached that will see us adopt your assets following their satisfactory construction and connection to the public sewer.

• **Section 106**: This provides you with the right to have your constructed sewer connected to the public sewer.

• **Section 185**: This provides you with the right to have a public sewerage asset diverted.

Details on how to make a formal application for a new sewer, new connection or diversion are available on our website at [www.anglianwater.co.uk/developers](http://www.anglianwater.co.uk/developers) or via our Developer Services team on 08457 60 66 087.

**Sustainable Drainage Systems:**
Many existing urban drainage systems can cause problems of flooding, pollution or damage to the environment and are not resilient to climate change in the long term. Therefore our preferred method of surface water disposal is through the use of Sustainable Drainage Systems (SuDS). SuDS are a range of techniques that aim to mimic the way surface water drains in natural systems within urban areas. For more information on SuDS, please visit our website at [http://anglianwater.co.uk/developers/sewer-connection/suds.aspx](http://anglianwater.co.uk/developers/sewer-connection/suds.aspx). We also recommend that you contact the future SuDS Approving Body (SAB) for the area to discuss your application.

**Private Sewer Transfers**: Sewers and lateral drains connected to the public sewer on the 1 July 2011 transferred into Water Company ownership on the 1 October 2011. This follows the implementation of the Floods and Water Management Act (FWMA). This included sewers and lateral drains that were subject to an existing Section 104 Adoption Agreement and those that were not. There were exemptions and the main non-transferable assets were as follows:

- Surface water sewers and lateral drains that did not discharge to the public sewer, e.g. those that discharged to a watercourse.
- Foul sewers and lateral drains that discharged to a privately owned sewage treatment/collection facility.
- Pumping stations and rising mains will transfer between 1 October 2011 and 1 October 2016.

The implementation of Section 42 of the FWMA will ensure that future private sewers will not be created. It is anticipated that all new sewer applications will need to have an approved section 104 application ahead of a section 106 connection.

**Encroachment**: Anglian Water operates a risk based approach to development encroaching close to our used water infrastructure. We assess the issue of encroachment if you are
planning to build within 400 metres of a water recycling centre or, within 15 metres to 100 metres of a pumping station. We have more information available on our website at http://anglianwater.co.uk/developers/encroachment.aspx

**Locating our assets:** Maps detailing the location of our water and used water infrastructure including both underground assets and above ground assets such as pumping stations and recycling centres are available from www.digdat.co.uk. All requests from members of the public or non-statutory bodies for maps showing the location of our assets will be subject to an appropriate administrative charge. We have more information on our website at: www.anglianwater.co.uk/developers/our-assets/

**Summary of charges:** A summary of this year’s water and used water connection and infrastructure charges can be found at http://www.anglianwater.co.uk/developers/charges/

**Disclaimer:** The information provided within this report is based on the best data currently recorded, recorded within the last 12 months or provided by a third party. The position must be regarded as approximate. If there is further development in the area or for other reasons the position may change.

The accuracy of this report is therefore not guaranteed and does not obviate the need to make additional appropriate searches, inspections and enquiries. You are advised therefore to renew your enquiry should there be a delay in submitting your application for water supply/sewer connection to re-confirm the situation.

Any cost calculations provided within the report are estimated only and may be subject to change.

The responses made in this report are based on the presumption that your proposed development obtains planning permission. Whilst this report has been prepared to help assess the viability of your proposal, it must not be considered in isolation. Anglian Water supports the plan led approach to sustainable development that is set out in the National Planning Policy Framework (NPPF). As a spatial planning statutory consultee, we assist planning authorities in the preparation of a sustainable local plan on the basis of capacity within our water and water recycling (formerly referred to as wastewater) infrastructure. Consequently, any infrastructure needs identified in this report must only be considered in the context of up to date, adopted or emerging local plans. Where local plans are absent, silent or out of date these needs should be considered against the definition of sustainability set out in the NPPF as a whole.

No liability whatsoever including liability for negligence is accepted by Anglian Water Services Limited for any error or inaccuracy or omission including the failure to accurately record or record at all, the location of any water main, discharge pipe, sewer, or drain or disposal main or any item of apparatus.
Appendix 2
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Potential connections to the public sewer in Rampton Road
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Appendix 4
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Water Industry Legislation

Summary

The Water Industry Act 1991 (WIA 1991) provides a full legislative framework which incorporates provisions to ensure that new developments can be effectually drained through the adoption of the new onsite sewers and connection to the existing public sewerage network or, in the case of surface water, discharge into an available watercourse. The WIA1991 also contains sufficient safeguards to ensure that foul flows resulting from new development do not cause detriment to the existing public sewerage network. A duty is imposed on sewerage undertakers by the WIA1991 to take action to carry out any necessary works to accommodate new foul flows into their networks. Where it is perceived that new flows may cause detriment to existing public sewer networks, in addition to its duty to improve/upgrade, a sewerage undertaker also has the ability to compel a developer to connect at a point of adequacy on its system or otherwise alter the proposed drainage arrangements.

It should also be noted that the Water Industry Act provides for the water industry regulator to arbitrate on disputes between developers and sewerage undertakers on sewer connections and the provision of sewerage infrastructure in the event that such a dispute cannot be resolved between the parties. Involving the planning system in such matters is both unnecessary and has the potential to cause conflicts between the two legislative regimes.

The relevant sections of the WIA1991 which confirm the above statements are set out in full below but for convenience are summarised as follows:

Section 104 – Sewer Adoption Agreements

Section 104 of the WIA 1991 provides for developers to enter into a section 104 sewer adoption agreements in conjunction with exercising rights to connect to the public sewerage network under section 106(1) WIA 1991.

Section 106 – Right to Communicate with Public Sewers.

Developers enjoy a statutory right to connect new sewers to existing public sewers under section 106 (1) of the WIA1991 and sewerage undertakers do not have the ability to refuse a connection on the grounds of capacity in the local sewerage network and/or sewage treatment works.

Section 107 entitles the sewerage undertaker to give notice within 14 days of receipt of a notice under section 106(3) that the undertaker intends to make the communication himself. In that event the developer has to pay the reasonable cost of the work.
The Supreme Court in its recent judgment against a sewerage undertaker upheld this long-standing automatic right of connection to available public sewers (Barratt Homes Limited (Respondents) v Dwr Cymru Cyfyngedig (Welsh Water) (Appellants) – paragraphs 23-26, 41, 55).

The following extract from the judgment highlights some of the issues that were considered (with the key parts underlined):

41. The real problem that is demonstrated by the facts of this case arises out of the “absolute right” conferred by section 106 of the 1991 Act on the owner or occupier of premises to connect those premises to a public sewer without any requirement to give more than 21 days notice. While this might create no problem in the case of an individual dwelling house, it is manifestly unsatisfactory in relation to a development that may, as in the present case, add 25% or more to the load on the public sewer. The public sewer may well not have surplus capacity capable of accommodating the increased load without the risk of flooding unless the undertaker has received sufficient advance notice of the increase and has been able to take the necessary measures to increase its capacity.

57. As OFWAT has pointed out, although the 1991 Act affords no such right, there is a case for deferring the right to connect to a public sewer in order to give a sewerage undertaker a reasonable opportunity to make sure that the public sewer will be able to accommodate the increased loading that the connection will bring. The only way of achieving such a deferral would appear to be through the planning process. Some difficult issues of principle arise however:

☐ Is it reasonable to expect the sewerage undertaker to upgrade a public sewerage system to accommodate linkage with a proposed development regardless of the expenditure that this will involve?

☐ How long is it reasonable to allow a sewerage undertaker to upgrade the public sewerage system?

☐ Is it reasonable to allow the sewerage undertaker to delay planned upgrading of a public sewer in the hope or expectation that this will put pressure on the developer himself to fund the upgrading?

A 21 day notice is only exercisable when the sewer that is required to connect foul flows from a new development has actually been constructed (as confirmed by Ofwat in a formal Determination). The development timescales set out in Section B above demonstrate that in reality sewerage undertakers always have significant periods of notice before new foul flows need to be accommodated in the public system.

Section 94 – A Sewerage Undertaker’s General Duty to Provide a Sewerage and Sewage Disposal System

Under section 94 (1) of the WIA1991, sewerage undertakers have a duty to provide, improve, extend and make provision for the emptying of their sewerage systems by effectually dealing, by means of sewage disposal works or otherwise, with the contents of those sewers that comprise the public sewerage system. The provisions of this section of the WIA1991 relate not only to long term capital works to improve
the sewerage system generally, but also place a duty on the sewerage undertaker to react to changes in the level of discharges into its networks.

Section 94(1) places a duty on sewerage undertakers to plan and implement any works they feel are necessary to ensure their network of sewers (and sewage treatment facilities) continue to operate satisfactorily once they have received notification that a developer intends to exercise the right to connect under section 106(1). In reality, a sewerage undertaker has sufficient certainty (and time as a result of the advance notice they receive) that a development will be proceeding on the grant of planning permission (outline or full) and should consider any necessary actions to comply with its section 94 duty at that stage. Conversely, until a sewerage undertaker has certainty that sufficient development will take place in a particular area, it is unlikely that any investment in sewerage or sewage treatment will be allocated. It is therefore illogical to refuse to grant planning permission for developments on the grounds that no improvement works are planned for a particular area.

**Section 112 – An Alternative to Works Under the Section 94 Duty**

Whilst all developers and landowners have an absolute right to connect to the public sewer nearest to their premises, in some circumstances it may be the case that the sewerage undertaker requires drainage systems to be constructed in a manner which better protects the existing public sewerage and/or sewage treatment systems. It may for example be beneficial for a sewerage undertaker to require that a developer connects at an alternative location which constitutes a point of adequacy or provide onsite attenuation to ensure that new flows are only discharged at a specific rate or during certain times until any deficiencies in its systems have been resolved. Given the rights and duties under section 106 and 94 of the WIA1991, it would not however be appropriate to expect a developer to pay for any additional works. Section 112 of the WIA1991 provides a mechanism for sewerage undertakers to compel a developer to carry out alternative works (s112 (1)), but with the difference of cost being met by the sewerage undertaker (s112 (6)).

Clearly if compelling alternative works would be more cost effective for a sewerage undertaker than implementing sewer or sewage treatment improvement works under its section 94 duty or would allow extra time to carry out such works, this option is both viable and useful to ensure that a development can be effectually drained.
Section 104 - Agreements to adopt sewer, drain or sewage disposal works, at future date

(1) Subject to subsection (7) and section 146(3) below, a sewerage undertaker may agree with—

(a) any person constructing or proposing to construct -

(i) any sewer;

(ii) any drain which is intended to communicate with a public sewer vested in that undertaker; or

(iii) any sewage disposal works; or

(b) any person at whose expense the undertaker is, by virtue of an agreement under section 160 below, to carry out work in connection with the construction of such a drain or sewer,

that, if the sewer, drain or sewage disposal works is or are constructed in accordance with the terms of the agreement, the undertaker will, upon completion of the work, at some specified date or on the happening of some future event, declare the sewer or such part of the drain as constitutes the lateral drain or the works (as the case may be) to be vested in that undertaker.

(2) A person mentioned in paragraph (a) or (b) of subsection (1) above may make an application to a sewerage undertaker requesting the undertaker to make an agreement under this section.
Section 106 – Right to Communicate with Public Sewers

(1) Subject to the provisions of this section -

(a) the owner or occupier of any premises, or
(b) the owner of any private sewer which drains premises,

shall be entitled to have his drains or sewer communicate with the public sewer of any sewerage undertaker and thereby to discharge foul water and surface water from those premises or that private sewer.

(1A) In this section, and in sections 107 to 109, 111, 113 to 116, 118, 119, 124, 127, 139 and 146 below -

(a) references (however expressed) to a public sewer include a public lateral drain which satisfies sewer standards; and
(b) for the purposes of paragraph (a) above

(i) a “public lateral drain” is a lateral drain which either belongs to the sewerage undertaker or is vested in the sewerage undertaker by virtue of a declaration made under section 102 above or under an agreement made under section 104 above; and
(ii) “sewer standards” means such standards of construction and repair as the undertaker would require if the public lateral drain or part of it were to become a public sewer.

(2) Subject to the provisions of Chapter III of this Part, nothing in subsection (1) above shall entitle any person -

(a) to discharge directly or indirectly into any public sewer -

(i) any liquid from a factory, other than domestic sewage or surface or storm water, or any liquid from a manufacturing process; or
(ii) any liquid or other matter the discharge of which into public sewers is prohibited by or under any enactment; or

(b) where separate public sewers are provided for foul water and for surface water, to discharge directly or indirectly -

(i) foul water into a sewer provided for surface water; or
(ii) except with the approval of the undertaker, surface water into a sewer provided for foul water; or

(c) to have his drains or sewer made to communicate directly with a storm-water overflow sewer.

(3) A person desirous of availing himself of his entitlement under this section shall give notice of his proposals to the sewerage undertaker in question.

(4) At any time within twenty-one days after a sewerage undertaker receives a notice under subsection (3) above, the undertaker may by notice to the person who gave the notice refuse to permit the communication to be made, if it appears to the undertaker that the mode of construction or condition of the drain or sewer –
(a) does not satisfy the standards reasonably required by the undertaker; or
(b) is such that the making of the communication would be prejudicial to the undertaker's sewerage system.

(5) For the purpose of examining the mode of construction and condition of a drain or sewer to which a notice under subsection (3) above relates a sewerage undertaker may, if necessary, require it to be laid open for inspection.

(5A) Where the sewer or drain satisfies the standards reasonably required by it, a sewerage undertaker may, as a condition of permitting the communication to be made, require that the sewer or that part of the drain forming the lateral drain be vested in it by virtue of a declaration under section 102 above.

(6) Any question arising under subsections (3) to (5A) above between a sewerage undertaker and a person proposing to make a communication as to -

(a) the reasonableness of the undertaker’s refusal to permit a communication to be made; or
(b) as to the reasonableness of any requirement under subsection (5) [or (5A) above, may, on the application of that person, be determined by the Authority under section 30A above (and, accordingly, section 105 above shall not apply to any requirement under subsection (5A) above).

(7) . . . . . . . . . .

(8) Where a person proposes under this section to make a communication between a drain or sewer and such a public sewer in Greater London as is used for the general reception of sewage from other public sewers and is not substantially used for the reception of sewage from private sewers and drains -

(a) the grounds on which a sewerage undertaker may refuse to permit the communication shall be such grounds as the undertaker thinks fit; and
(b) no application to the Authority may be made under subsection (6) above in respect of any refusal under this subsection.

(9) In this section “factory” has the same meaning as in the Factories Act 1961.
Section 94 - General Duty to Provide Sewerage System

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

(a) to provide, improve and extend such a system of public sewers (whether inside its area or elsewhere) and so to cleanse and maintain those sewers and any lateral drains which belong to or vest in the undertaker as to ensure that that area is and continues to be effectually drained; and

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

(2) It shall be the duty of a sewerage undertaker in performing its duty under subsection (1) above to have regard -

(a) to its existing and likely future obligations to allow for the discharge of trade effluent into its public sewers; and

(b) to the need to provide for the disposal of trade effluent which is so discharged.

(3) The duty of a sewerage undertaker under subsection (1) above shall be enforceable under section 18 above -

(a) by the Secretary of State; or

(b) with the consent of or in accordance with a general authorisation given by the Secretary of State, by the Authority.

(4) The obligations imposed on a sewerage undertaker by the following Chapters of this Part, and the remedies available in respect of contraventions of those obligations, shall be in addition to any duty imposed or remedy available by virtue of any provision of this section or section 95 below and shall not be in any way qualified by any such provision.

(5) In this section “trade effluent” has the same meaning as in Chapter III of this Part; and, accordingly, section 139 below shall have effect for the purposes of this section as it has effect for the purposes of Chapter 3 of this Part.
Section 112 – Requirement that Proposed Drain or Sewer be Constructed so as to Form Part of General System.

(1) Where -

(a) a person proposes to construct a drain or sewer; and
(b) a sewerage undertaker considers that the proposed drain or sewer is, or is likely to be, needed to form part of a general sewerage system which that undertaker provides or proposes to provide, the undertaker may require that person to construct the drain or sewer in a manner differing, as regards material or size of pipes, depth, fall, direction or outfall or otherwise, from the manner in which that person proposes, or could otherwise be required by the undertaker, to construct it.

(2) If any person on whom requirements are imposed under this section by a sewerage undertaker is aggrieved by the requirements, he may within twenty-eight days appeal to the Authority.

(3) On an appeal under subsection (2) above with respect to any requirements, the Authority may either disallow the requirements or allow them with or without modification.

(4) It shall be the duty of a person on whom requirements are imposed by a sewerage undertaker under this section to comply with those requirements.

(5) The duty of any person by virtue of subsection (4) above to comply with the requirements of a sewerage undertaker shall be owed to the undertaker; and any breach of that duty which causes the undertaker to sustain loss or damage shall be actionable at the suit of the undertaker.

(6) A sewerage undertaker which exercises the powers conferred on it by this section shall -

(a) repay to the person constructing the drain or sewer the extra expenses reasonably incurred by that person in complying with the undertaker's requirements; and
(b) until the drain or sewer becomes a public sewer, from time to time repay to that person so much of any expenses reasonably incurred by him in repairing or maintaining the drain or sewer as may be attributable to the undertaker's requirements having been imposed and complied with.

(7) Nothing in this section shall apply in relation to so much of any drain or sewer as is proposed to be constructed by any railway undertakers or dock undertakers in or on land which -

(a) belongs to them; and
(b) is held or used by them for the purposes of their undertaking.
Appendix 5
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Water Industry Legislative Framework, Duties, Funding and the Planning Regime – ULS Analysis

The Planning Tests

The following statements are pertinent and should be applied by the local planning authority when considering proposed development in conjunction with the six tests set out in the National Planning Policy Framework (NPPF) and expanded on in the Planning Practice Guidance (PPG):

1. The actual impact of foul and wastewater drainage from a proposed development on the environment must always be evaluated with due regard to statutory provisions set out in the Water Industry Act 1991 and the duties of sewerage undertakers contained therein.

2. In considering any foul and wastewater drainage matters, the planning authority must take into consideration the fact that the developer has an absolute right to connect to the public sewerage system under section 106 of the Water Industry Act 1991 (the WIA1991), whether or not this would give rise to adverse effects e.g. increased flooding or environmental harm due to a restricted capacity in the sewerage and sewage treatment system.

3. The planning authority must also consider the following matters:
   a) Section 94 of the WIA1991 imposes a continuing duty on all sewerage undertakers to provide, maintain and where necessary improve its systems for collecting and treating foul and wastewater drainage so as to effectually drain its area and effectually deal with the contents of its sewers;
   b) a sewerage undertaker is provided with the means of funding the cost of fulfilling the above duty within the WIA1991 through sewerage and infrastructure charges; and
   c) the WIA1991 clearly sets out that the costs of meeting the above duty are required to be borne by the sewerage undertaker, not the developer, save in one limited case where a new sewer is requisitioned by the developer (normally in cases where access to a public sewer is across intervening third party land) and where the charges for its use would not cover the cost of borrowing to provide it.

4. ULS does not believe that foul drainage related planning conditions are necessary for new residential development. In order for any such condition to be justified in terms of the guidance in the NPPF and PPG, the condition would also have to be shown to be necessary and reasonable. It would not be reasonable if it imposes an unjustifiable burden on the developer. Nor would it
be reasonable if the condition had the practical effect of forcing the developer to fund any inadequacies in sewerage or sewage treatment because the sewerage undertaker was not prepared to fulfil its statutory obligations in a timely manner i.e. within the reasonable timescales indicated within this report which estimate when the development would start to produce meaningful foul flows. In theory a negative “Grampian” style condition could as a matter of law be imposed to restrain the occupation of development until satisfactory arrangements are made to deal with the sewage and wastewater generated. However, in practice it is clear that such a condition would fail when set against the tests in para. 206 of the NPPF and explained in the PPG on the basis that there is normally sufficient time for the sewerage undertaker to fulfil its statutory duties as set out below or there is manifestly negligible impact on the sewerage and sewage treatment system.

5. When considered properly in the light of the structure and intentions of the WIA1991, current deficiencies in sewerage and sewage treatment provision would not in themselves justify refusal of permission or a Grampian condition. A planning authority must take into account the reasonable timescale when foul flows from the development would start to discharge into the public sewerage and sewage treatment system, the undertaker’s duties and whether such deficiencies would reasonably be expected to be addressed by the time the development imposes an additional burden on the system.

6. As alluded to in 4. above, the precise potential effect of a drainage condition needs to be clearly addressed. In particular, whether the practical effect would be to impose pressure on a developer to contribute to the cost of works which should properly be funded by the undertaker through the charging system contained within the WIA1991, or to give the undertaker an incentive to delay in the hope that the developer will do so. Such a condition would be unreasonable.

7. The same applies to a condition which has the effect of compelling the developer to undertake attenuation works on site or elsewhere to alleviate the impact of foul flows from the development on the sewerage and sewage treatment system. This is because section 112 of the WIA1991 provides a means for the sewerage undertaker to require such works as part of the private sewerage system serving the development, but on condition that the additional cost is borne by the undertaker, not the developer.

8. Finally, it is important to consider the differences between the provision of sewerage and sewage treatment and other infrastructure such as roads, schools, GP surgeries etc. It is clear that a development may need to be phased to ensure that such infrastructure is available with the necessary contributions made by developers to the cost of its provision. This is not the
case with sewerage and sewage treatment provision as there is a statutory duty and statutory mechanism for financing it. Conversely no person has a statutory duty to provide roads, schools, GP surgeries etc. to serve developments and there is no means of covering its cost by charging users.

Given this analysis, planning authorities should not be refusing planning permission or imposing foul drainage conditions on developers as a matter of course or routinely, without addressing the above.

It is possible to interpret some passages in the PPG as if they were suggesting that foul drainage conditions should be imposed routinely, or that it is acceptable for a developer to be required to fund or to contribute to the cost of new sewerage infrastructure. This is misleading as conditions relating to sewerage and sewage treatment must be considered and justified against the tests in para. 206 of the NPPF and explained in the PPG. In particular, given the provisions laid down by Parliament in the WIA1991, careful consideration will be required as to whether such a condition is necessary and whether it is reasonable. Having regard to the nature of the plan-led system and the time-scales involved in implementing a permission for residential development, it is entirely reasonable to expect a sewerage undertaker to make provision for the necessary sewerage and sewage treatment infrastructure so as to avoid the adverse effects that may or may not be caused by new development and to fund this through the normal means of charges.

The analysis outlined above has recently been supported during the course of a planning appeal (Appeal Decision APP/Y2810/A/14/2228921). Although the planning authority concerned has subsequently challenged the decision of the Inspector, the subject of the challenge is in respect of planning policy and is not related to foul drainage.

The Planning Inspector considered both positons on this matter, having received the analysis of ULS as set out in this section and also representations from a sewerage undertaker requesting that a foul drainage planning condition was imposed. The full comments of the Inspector are set out below:-

Appeal Decision APP/Y2810/A/14/2228921

77. Anglian Water sought a condition requiring on- and off-site mains foul sewage infrastructure works prior to occupation. This would prevent any new connection overloading the sewer. However, the appellant has argued that this would be unreasonable, citing case law that: *a sewerage undertaker has no right to ... refuse a developer the right to connect with a public sewer *...8. I acknowledge that if only 21 days’ notice was given (being all that is required under the Water Industries Act 1991) then there would be the potential for a serious problem. However, as Anglian Water replied to statutory consultation
in July 2014, and as it is likely to be at least 2 more years before any houses would be occupied, it would have adequate time to take the necessary measures. The proposed condition would therefore be unreasonable.

8 Barratt Homes Limited v Dwr Cymru [2010] Env. L. R. 14, 253, paragraph 59

This decision is clearly a material consideration in the planning authority’s determination of planning applications, due to the potential requirement for the Sewerage Undertaker to provide additional sewerage and/or sewage treatment capacity to accommodate foul flows from developments. Case law has set a precedent relating to the consistency of decision making by planning authorities or inspectors, confirming that whilst a decision maker can depart from a previous decision which considered the same or similar facts, they must fully justify the reasons for doing so. (Fox Vs SoS [2012] EWCA Civ 1198).

Adopting the tests at NPPF para. 206 and following the approach taken in Appeal Decision APP/Y2810/A/14/2228921, conditions relating to foul drainage would be unnecessary and/or unreasonable. A sewerage undertaker (and occasionally the Environment Agency) will often suggest that detriment may be caused to the public sewerage system by the foul flows from a development unless a condition is imposed. It is understandable that this would be of concern to a planning authority and this is no doubt the reason that planning authorities have tended to routinely apply planning conditions put forward by sewerage undertakers. However, in reality, the “risk” is not created by the development itself and would only occur if a sewerage undertaker failed to undertake its statutory obligations as detailed in this report to fund and carry out improvements to the sewer and/or sewage treatment systems if any are required, in a timely manner. The fact that a sewerage undertaker requests development to be delayed until it is prepared to make the necessary investment (for which it is already funded), means that a private company is in effect seeking to dictate when homes which are required to meet housing need, can be delivered. This is not a practice that should be perpetuated within the planning system.

In a second recent Planning Appeal (Appeal Decision APP/F1610/A/14/2228762), the Planning Inspector made the following comment at paragraph 56:-

The foul sewage and the water supply systems involve infrastructure elements that are inadequate. The consultation response from Thames Water suggests that conditions should be imposed to require an assessment of the additional capacity that might be required and to indicate suitable connection points. However, there is a statutory duty to provide such connections under the requirements of the Water Industry Act 1991. Hence, there would be no need for planning conditions to duplicate powers available under other legislation, as the submitted notes confirm.
The imposition of unnecessary/unreasonable foul drainage conditions on planning permissions requiring prior approval of drainage schemes or hydraulic modelling, can add considerable expense and delay to the implementation of permissions and the delivery of new homes.

The legal position in respect of a developer's right to connect to the public sewer is set out in the Barratt Homes v Welsh Water case (Barratt Homes Limited v Dwr Cymru [2010] Env. L. R. 14, 253, paragraph 59). In that case the Supreme Court confirmed that development has a right to connect to the public sewer network, but in some circumstances (principally when time is required for the sewerage undertaker to put in place additional drainage capacity) it may be appropriate to impose a Grampian condition.

The Sewerage Undertaker's Duties

It is the opinion of ULS that sewerage (the piped network) or waste water treatment capacity for a development should be made available by the incumbent sewerage undertaker on the basis that reasonable notice of a proposed development has been provided by a developer or landowner. Where the impact on the sewerage system is negligible no additional capacity will be required and no action by the sewerage undertaker would be necessary. As such, foul drainage does not generally represent a constraint in planning terms to development. There is a separate statutory regime in place which adequately addresses foul drainage matters. Should a development, such as the one proposed, be granted outline planning permission, the Sewerage Undertaker has sufficient time and has the knowledge and expertise to fully assess the potential impact on its sewerage network and implement any necessary improvement works that may be required to accommodate new foul flows.

If following further investigation the Sewerage Undertaker considers that improvement works are required to its sewerage network or sewage treatment works, the Sewerage Undertaker is funded to ensure that such improvements are made in order to comply with its statutory duty to “provide, improve and extend” its network. It would therefore be unreasonable to delay the start or progress of this development once planning permission has been granted. Imposition of a foul drainage planning condition, the effect of which is to impose pressure on a developer to contribute to the cost of works which should properly be funded by the sewerage undertaker, would be unreasonable and consequently conflict with some or all the six tests as set out in the PPG.

With regard to sewage treatment, each Waste Water Treatment Works (WWTW) in a sewerage undertakers operating area has a consent to discharge treated effluent to a body of water (typically a watercourse/river). Such consents are issued by the Environment Agency (EA) and incorporate a number of parameters in relation to
both biological load (quality of effluent discharge) and dry weather flow (quantity of discharge). A WWTW is required by the EA to operate within these consent parameters.

The quality and quantity of effluent discharged from a WWTW is measured by the sewerage undertaker responsible against its consent parameters, typically on a monthly basis giving 12 reports per year to the EA confirming whether or not the WWTW is operating within its consent. Clearly as a particular works approaches the limits of its consent parameters, a sewerage undertaker must give regard to the likely level of growth in the catchment area of the WWTW and look at what investment may be required, either by installing new plant or altering the operation of existing plant, to ensure any new flows can be accommodated without exceeding the limits imposed by the EA. Any sewerage undertaker which does not take such action for works approaching capacity is failing in its statutory duty under section 94 as outlined above. How the quality and quantity of discharge from a WWTW is measured varies from specific monitoring devices within a works to estimates based on the size of the population for the contributing catchment area.

Should a particular WWTW fail to meet its consent parameters on two or more occasions within a twelve month period, discussions will be held between the EA and the sewerage undertaker as to what improvements can be made to bring discharges back within the set limits. During such discussions, the consent parameters may be tightened or amended to suit the facts of the case and to ensure water quality in the receiving body is protected. In reality, because of the gradual nature of growth in any particular area, even where a works is deemed to have failed against its consent parameters, this is only likely to be by a very small amount and provided appropriate action is taken by the sewerage undertaker, an agreement can be made with the EA as to how the WWTW can be managed to ensure it operates within its consent (whether or not this is amended).

Where a WWTW is close to or has failed to meet its consent parameters, it is often possible to implement temporary measures (in operational procedures or provision of additional storage/treatment apparatus) to mitigate against the immediate small exceedance in quality or quantity while funding is allocated and feasibility studies carried out to allow a long term solution to be implemented to ensure that future additional growth can be catered for.

It is a matter for any sewerage undertaker to manage its consents with the EA and ensure that its WWTW’s stay within their consent parameters. This is an ongoing process and it is unreasonable to suggest that a specific development, particularly one which is modestly sized in comparison to overall catchment population, will have a significant and unmanageable influence on a WWTW and its ability to operate within limits set by the EA. This is not a matter which can be influenced by a developer and as such to prevent or delay a development from proceeding because
a sewerage undertaker may be forced to take action and fund improvement works to comply with its statutory duties is unreasonable.

**The Sewerage Undertaker’s Funding**

In order to fund its obligations under the WIA1991 as set out above, sewerage undertakers have two basic funding streams which are summarised below.

- **General Sewerage Charge** - An annual charge levied by the sewerage undertaker whilst ever a property remains connected to the public sewerage system.

- **Sewerage Infrastructure Charges** – Each new dwelling constructed on a development, together with any associated commercial/social/educational premises, which connect to a sewerage undertakers’ sewer for the first time have a charge levied upon them by the relevant sewerage undertaker (i.e. one sewerage infrastructure charge is paid by the developer for each new property constructed and connected or the equivalent number of charges in the case of commercial/social/educational premises). Infrastructure charges are designed to meet the costs of local system enhancements that are incurred by sewerage undertakers when new developments are connected to their network. The water industry regulator, Ofwat, has issued guidance to this effect (in - RD 2/95).

Funding for improvements to the sewerage network and the sewage treatment activity, including improvement works required to accommodate new foul flows from a development is funded through general sewerage charges.

Sewerage Undertakers are financed in 5 yearly cycles (AMP periods) and have flexibility in the way that such funding is applied. It is clearly not possible at the beginning of a 5 year period to plan for all works which may be required for its duration, particularly given the changing nature of development activities and the planning process. Therefore, in addition to funding for individual capital projects identified in a sewerage undertaker’s business plan, Ofwat, in determining price reviews at the start of an AMP period, also allows an amount for general funding to spend on non–specific growth. This general growth pot is clearly intended to cater for new developments where potential upgrades may be required.

Sewerage Undertakers have flexibility in how they allocate the funding they receive for general growth and need to apply it to areas in which improvement works are required on a priority basis. How any sewerage undertaker allocates funding within its business is a matter for it to manage, but it must do so in a manner which allows it to comply with its statutory duties at all times. It is not appropriate for a sewerage undertaker to use the planning system to seek additional income from developers because it has either failed to secure sufficient funding in its current AMP period, or
is unwilling to allocate sufficient funds to carry out duties it is required to perform under its governing legislation.

In addition to the general sewerage charge, each new dwelling constructed on this development will be subject to a sewerage infrastructure charge. Infrastructure charges are designed to meet any costs that are incurred by sewerage undertakers in relation to local system enhancements required to sewerage networks when new developments are connected to its network. It is also important to note that while in all cases infrastructure charges are levied for properties constructed on new developments, not all sites will give rise to the need for local system enhancements. The result being that all sewerage undertakers have a funding pot of collected infrastructure charges which can be allocated to where spending is required within its operating area.

Where connection is made to a public sewer under section 106 of the WIA1991, there is no statutory mechanism within the WIA1991 to allow sewerage undertakers to secure additional funding from developers to supplement their general sewerage and infrastructure charges and to do so would be inappropriate.

In light of the above analysis which evidences that sewerage undertakers are funded to improve public sewer networks and sewage treatment facilities, it is inappropriate to seek any further financial contributions from developers through use of the planning system. To do so would result in a form of double charging. It is for this reason that any condition which could specify that a development is not commenced or occupied for a certain period of time unless additional funding is secured from a developer is inappropriate, unreasonable and in direct conflict with the water industry’s governing legislation.

Summary

Unless sewerage undertakers have certainty that sufficient development will take place in a particular area, it is unlikely that any investment in sewerage or sewage treatment will be allocated. In the event that the Sewerage Undertaker considers that it has hydraulic or capacity issues with its sewerage and sewage treatment systems for this and other development in the area, it would be unreasonable and illogical to refuse planning permission on the grounds that no sewerage or sewage treatment improvement works are planned for the network to which this development will discharge foul flows. Only granting planning permission for developments without foul drainage planning conditions will ensure that the Sewerage Undertaker fully considers the current drainage network and systems in line with its statutory duties. This will provide a benefit not only to this new development, but also potentially the existing settlement.
Because of the rights and duties outlined above, where a sewerage undertaker perceives there to be a potential inadequacy in its sewerage or sewage treatment systems to accommodate new foul flows, it will often make representations to planning authorities recommending that planning conditions relating to foul drainage are imposed. The typical conditions suggested by many sewerage undertakers commonly have the effect of compelling the developer to meet the cost of improving the public sewerage system or sewage treatment works or else face a long (sometimes indefinite) delay before the sewerage undertaker itself will carry out any necessary work.

The point of principle is that as a matter of law, the WIA1991 expressly places a duty on sewerage undertakers to provide, improve, extend and maintain a system of sewers and sewage treatment facilities so as to ensure that their area is and continues to be effectually drained. The WIA1991 then gives domestic owners and occupiers an absolute right to connect into the public system (subject only to their private drains being of proper construction and condition). To apply planning policy so as to relieve the undertakers of that duty and negate the rights of owners and occupiers conflicts with primary legislation which already protects both new developments and existing property owners. This is unreasonable where matters relating to foul drainage can be suitably addressed through the appropriate statutory regime which governs the water and sewerage industry.

In our experience, planning authorities often impose a planning condition in relation to foul drainage on the advice of sewerage undertakers without proper consideration of not only how this impacts on effective and economic development, but also whether it conflicts with statutory rights and duties imposed by water and sewerage industry primary legislation.

When considering the drainage related aspects of a planning application, the correct approach in law is as follows:

- To have due regard to the rights which the developer would have to connect the development to the public sewerage system and what impact to the environment that would have but also taking into account the general duty imposed on sewerage undertakers under section 94 together with the charging provisions of the WIA1991.
- To carefully consider whether those impacts would be such as to justify refusing permission, and if so whether they could be mitigated by a planning condition.
- To carefully consider whether any such condition would meet the policy tests in the NPPF and PPG.

Sewerage undertakers often claim that funding cannot be allocated to plan and implement improvement works (and in some cases to assess whether such works
are required) to ensure new foul flows can be accommodated in the public sewer network/treatment facilities. It is important to bear in mind that sewerage undertakers are commercial organisations (and not statutory consultees for planning applications). Imposing a planning condition allowing one commercial operator (the sewerage undertaker) to compel another (the developer) to meet the cost of providing the infrastructure the sewerage undertaker has a statutory duty to provide is unreasonable. It also has the potential to impose unnecessary costs on an industry (house building) which is important to the economy of the United Kingdom and does not promote effective and economic development. If the cost of upgrades to the public sewerage network, which in any case should not be met by the developer, is disproportionate to the proposed development, the effect is to prevent that development from proceeding, even though in planning terms it is otherwise acceptable, and may be highly desirable.

It is also important to note that at least three out of the ten sewerage undertakers do not currently seek financial contributions from developers and will work with them to ensure that any necessary upgrades to their networks are implemented in a timescale to suit the development regardless of whether it was in a local plan or not. This evidences that sewerage undertakers are funded to enable them to carry out their statutory duties outlined above, but many are unwilling to allocate the necessary funds to support house building in this country.

It is clear that any planning condition relating to foul drainage is unnecessary and unreasonable as it would duplicate matters which are already satisfactorily dealt with under a separate statutory regime. Unless there is clear evidence that to fail to impose a condition would have a detrimental effect which cannot be avoided through appropriate action by a sewerage undertaker in a reasonable timeframe, connections to the local public sewerage system should be dealt with via the legislative framework contained in the Water Industry Act 1991 (as amended) rather than planning legislation. Imposing a condition without proof that detriment would be caused which cannot be mitigated against through action by the sewerage undertaker in pursuance of its statutory duties is unreasonable and would fail some or all of the 6 tests in the NPPF. The corresponding advice in the PPG explains in more detail these six tests. The detail included in para. 206 of the NPPF and explained in the PPG verifies that most foul drainage planning conditions fail the following tests:

- **Necessity** – There is no definite planning reason for such drainage conditions to make for acceptability in planning terms. All relevant matters are suitably addressed by water and sewerage industry legislation.
- **Relevance to planning** – Again all foul drainage matters are already addressed by separate primary legislation
- **Enforceability** – The upgrade of a sewerage undertaker’s sewerage network or sewage treatment works is a matter over which the applicant has no control.
Reasonability – A foul drainage condition could place an unjustifiable and disproportionate burden on the applicant, by either delaying the development due to a lack of action by a sewerage undertaker (by failing to comply with its statutory duties), or by forcing the applicant to provide funding for works which the sewerage undertaker is already suitably funded by statutory provisions.

Conditions relating to sewerage and sewage treatment must be considered and justified against the tests set out in the NPPF and the PPG. In particular, given the rights and duties in the Water Industry Act 1991, careful consideration is required as to the time-scales involved in implementing a permission for residential development. It is reasonable to expect the sewerage undertaker to make provision for the necessary infrastructure so as to avoid adverse effects, and to fund this through the normal means of charges. A foul drainage condition for developments would therefore fail the test of reasonableness laid out in the NPPF, given the timescales for the ultimate discharge of foul flows from the development to the public sewerage and sewage treatment system.
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