

United Utilities Water Limited

Supporting Information and Recommended Policies for Local Plan Preparation

Spatial Strategy

We request that sustainability is a 'golden thread' running through the local plan strategy. Noting the nature of this consultation, we do not have the information that we require on potential allocations in order to be able to begin to initially assess the potential cumulative impact on our water and wastewater infrastructure in any settlement.

We wish to note that smaller settlements are often supported by infrastructure which is proportionate to their size, often in rural locations. UUW wishes to highlight that disproportionate growth in any settlement, especially small settlements, has the potential to place a strain on existing water and wastewater infrastructure. Therefore, when considering your spatial strategy options, we recommend that any strategy which you bring forward delivers growth that is proportionate to the size of each settlement.

With regards to growth in all settlements, UUW requests information on anticipated delivery rates as soon as they become available. We would welcome sight of a housing trajectory in a GIS format.

If you are to pursue a new settlement or a major urban extension, this will need careful consideration and a co-ordinated approach to delivery. If this evolves into your preferred strategy, we would welcome early discussion given our experiences in the wider region where a new settlement is being promoted.

Investment in Future Infrastructure

Investment associated with our water and wastewater infrastructure is influenced by a number of drivers including the construction of new facilities to take account of new environmental requirements, growth, the need to respond to the carbon challenge, or the need to invest in new updated infrastructure. In our current investment period (2025-30), we are proposing the biggest investment in water and wastewater services across the North West in over 100 years. The total expenditure by UUW for the period 2025-2030 is approximately £13 billion. This includes various enhancements and improvements to infrastructure, resilience, and environmental standards

The drivers for investment include the Environment Act 2021, which has set a requirement to progressively reduce storm spills into the environment. Such investment will be constrained by engineering circumstances to determine the most appropriate location for additional storage to reduce spills. This may necessitate investment in constrained locations in our urban and rural environments such as in/on land in protected locations (green belt, local green space and open countryside). Consistent with meeting this obligation, UUW requests that the future local plan includes support for investment in water and wastewater infrastructure that is ultimately beneficial to the environment, biodiversity and our watercourses so it can be delivered in the most timely and effective manner. Specifically, we request that policy supports investment in our infrastructure in constrained locations such as local green space, open countryside and green belt.

With regard to sites which may be situated in the Green Belt, National policy within the NPPF allows for:

- the extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building;
- limited infilling or the partial or complete redevelopment of previously developed land (brownfield land), whether redundant or in continuing use (excluding temporary buildings), which would not cause substantial harm to the openness of the green belt; and
- the development of grey belt land.

On this basis, National Policy is broadly supportive of investment at existing operational sites in the Green Belt. However, we ask for this to be specifically referred to in your future planning policies. UUW requests the's support for investment in infrastructure in order to be able to expeditiously respond to the needs of the borough. The following policy wording is recommended:

Recommended Policy

The Council will support water and wastewater infrastructure investment including development proposals for water and wastewater infrastructure in protected areas such as the Green Belt, open countryside or in existing green spaces, where the investment is needed to respond to future growth and environmental needs.

Explanatory Text

Infrastructure is key to the delivery of sustainable development, economic growth and environmental improvement. The council will support infrastructure investment which facilitates the delivery of wider sustainable development and the meeting of environmental objectives by water and sewerage providers.

In relation to existing water and wastewater infrastructure sites, we request that these are identified on your proposals map and covered by the following policy.

Recommended Policy

Development proposals at existing utility sites in the green belt or open countryside either in the form of infilling or redevelopment, will be supported where they are needed to respond to future growth and environmental needs.

We can provide plans of sites which are located in open countryside / green belt by separate cover.

We request that such sites are specifically identified on the proposals map where investment in future water and wastewater needs would be acceptable.

These policies would enable us to ensure we can continue to meet the growth and development aspirations of the borough, and current / future environmental drivers.

Our Assets

It is important to outline to the local planning authority (LPA) the need for our assets to be fully considered in development proposals. We will not permit development over or in close proximity to our assets. Our assets will need to be afforded access for maintenance, repair and replacement

and be fully considered in the design and masterplanning process for a site. This should include careful consideration of landscaping proposals in the vicinity of our assets and any changes in levels.

We strongly recommend that the LPA advises future applicants of the importance of fully understanding site constraints as soon as possible, ideally before any land transaction is negotiated, so that the implications of our assets on development can be fully understood. Where our assets exist on a site, we ask site promoters to contact U UW to understand any implications using the above contact details.

Please note:

- **U UW will not allow building over or in close proximity to a water main.**
- **U UW will not allow a new building to be erected over or in close proximity to a public sewer or any other wastewater pipeline. This will only be reviewed in exceptional circumstances.**
- **Site promoters should not assume that our assets can be diverted.**
- **On occasion, an asset protection matter within a site can preclude delivery.**

Site-Specific Policies for Allocations

When considering the format of your emerging development plan, we request that your site allocations are guided by detailed site-specific policies / site-specific development requirements. This can be critical to ensuring that the issues which are identified via the site selection process are clear to applicants. When you have sites available for assessment, U UW will be able to highlight any issues for consideration as part of an initial site assessment. For example, large on-site infrastructure which is material to site layout, or the location of a site in a groundwater source protection zone, which may mean that a site needs to be further assessed so that any potential impact on the groundwater environment and public water supply can be appropriately reduced / mitigated. We believe that the identification of such site-specific constraints is critical and therefore, we recommend that your development plan includes these details as site-specific policy / development considerations for all new allocations.

U UW also wishes to note a preference to see specific allocations identified as part of the new local plan in preference to a reliance on windfall sites. This helps to add certainty for infrastructure providers.

Co-ordinated Infrastructure Provision

We wish to note that any growth needs to be carefully planned to ensure new infrastructure provision does not cause any unexpected delays to development delivery. The full detail of the development proposals are not yet known. For example, the detail of the drainage proposals, the points of connection or the water supply requirements. As a result, it is important that we highlight that in the absence of such detail, we cannot fully conclude the impact on our infrastructure over a number of 5-year investment periods and therefore as more detail becomes available, it may be

necessary to co-ordinate the timing for the delivery of development with the timing for delivery of infrastructure.

Once more information is available with respect to specific development sites, which is often only at the planning application stage, we will be able to better understand the potential impacts of development on infrastructure and, as a result, it may be necessary to coordinate the delivery of development with the timing for the delivery of infrastructure improvements. We recommend that you include a development management policy in your draft plan to this effect. Our recommended policy is below.

Recommended Policy

Once more details are known on development sites, it may be necessary to coordinate the delivery of development with timing for the delivery of infrastructure improvements.

Sites in Multiple Ownership

UUW has concerns regarding any site allocations which are in multiple land ownerships. The experience of UUW is that where sites are in multiple ownership, the achievement of sustainable development can be compromised by developers/applicants working independently. We therefore encourage you to make early contact with all landowners/site promoters and challenge those landowners on how they intend to work together, preferably as part of a legally binding delivery framework and/or masterplan. You should give early consideration to the extent to which land ownership is fragmented on sites and whether this will be likely to compromise a co-ordinated approach to the delivery of sustainable development. We believe that raising this point at this early stage is in the best interest of achieving challenging delivery targets from allocated sites in the most sustainable and co-ordinated manner.

We recommend that future policy requires applicants to provide drainage strategies for foul and surface water. For larger sites, we recommend that policy requires applicants to prepare an infrastructure phasing and delivery strategy. For strategic sites, we recommend that early consideration is given to the infrastructure strategy as part of the preparation of the local plan and to ensure a co-ordinated approach to the delivery of new development and infrastructure. We would recommend the following policy is considered for inclusion in any future local plan:

Recommended Policy

Where applications are submitted on land which is part of a wider allocation / development, applicants will be required to submit allocation/development wide infrastructure strategies to demonstrate how the site will be brought forward in a co-ordinated manner.

Explanatory text

The infrastructure strategies shall be prepared in liaison with infrastructure providers and demonstrate how each phase interacts with other phases and ensure coordination between phases of the development over lengthy time periods and by numerous developers. The strategy must be updated to reflect any changing circumstances between phases during the delivery of the development.

Climate Change Policy

UW wishes to highlight its support for any climate change policy. Sustainable surface water management and the efficient use of water must be critical elements of any such policy. We also encourage the policy on climate change to be intrinsically linked to wider policies in the local plan including those relating to the detailed design of new developments and the provision of green and blue infrastructure.

We are keen to ensure that any climate change policy gives appropriate emphasis to green and blue infrastructure, natural flood management techniques, multi-functional sustainable drainage, designing new development so that it is resilient to the challenges of future climate change and the incorporation of water supply efficiency measures.

As the LPA will be aware, green infrastructure can help to mitigate the impacts of high temperatures, combat emissions, maintain or enhance biodiversity and **reduce flood risk**. Green / blue infrastructure and landscape provision play an important role in managing water close to its source. If the necessary link between green/blue infrastructure, surface water management and landscape design is outlined as a strategic requirement, it will help ensure that sustainable surface water management is at the forefront of the design process.

General Flood Risk

When considering flood risk and the location of development, we believe it is important to highlight that the preparation of the local plan must give sufficient emphasis to all forms of flood risk. It will be important that any flood risk is referenced in your Strategic Flood Risk Assessment and fully understood as part of any development at the site. We recommend that any flood risk is better understood as soon as possible and prior to allocation so that the principle of development and the impact on any developable area can be confirmed.

The NPPG defines flood risk as follows (the underlined sections identify our emphasis):

What is “flood risk”?

“Flood risk” is a combination of the probability and the potential consequences of flooding. Areas at risk of flooding are those at risk of flooding from any source, now or in the future. Sources include rivers and the sea, direct rainfall on the ground surface, rising groundwater, overwhelmed sewers and drainage systems, reservoirs, canals and lakes and other artificial sources. Flood risk also accounts for the interactions between these different sources. This term is key to the application of the presumption in favour of sustainable development in paragraph 11 of the National Planning Policy Framework.

For areas at risk of river and sea flooding, this is principally land within Flood Zones 2 and 3 or where a Strategic Flood Risk Assessment shows it will be at risk of flooding in the future. It can also include an area within Flood Zone 1 which the Environment Agency has notified the local planning authority as having critical drainage problems.

Table 1 provides definitions of the Flood Zones, from low to high probability of river and sea flooding. A map showing river and sea flooding is available from the Environment Agency’s Flood Map for Planning. The Environment Agency has also set out who is responsible for flood and coastal erosion risk management in its National flood and coastal erosion risk

management strategy. Government has also published a Flood and coastal erosion risk management policy statement. Strategic flood risk assessments show all sources of flood risk, now and in the future.

Paragraph: 001 Reference ID: 7-001-20220825

Having regard to the above definition, Paragraph 172 of the National Planning Policy Framework is clear that:

‘All plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – so as to avoid, where possible, flood risk to people and property.’

When considering potential new development sites, it will be important to identify where there are existing public sewers within or near to the site, which are predicted to be at risk from flooding and/or sites where there is a record of previous flooding from the public sewer. We wish to note that we now have sewer flood risk modelling data which we can use to advise you on the risk of sewer flooding to potential site allocations. It is important that you have regard to this information in the preparation of your strategic flood risk assessments and in your site selection process and ensure that flood risk is avoided where possible. We would welcome the opportunity to liaise with you further on this matter as part of the site selection process.

In addition, we recommend that you include the following wording in your flood risk policy.

Recommended Policy

The risk of flooding from any source must be considered.

Applicants will be required to consult with the water and sewerage undertaker to confirm the nature and extent of any flood risk from sewers and reservoirs.

For sewers, the consultation must confirm:

a) if there are any sewer surcharge levels at the point of connection that could influence site design;

b) whether there is an incident of sewer flooding at, or in the vicinity of, the proposed development site; and

c) if sewer modelling data indicates that existing sewers that pass through or near to the site present a modelled risk of sewer flooding.

This information will help to inform whether to apply the sequential approach. Development must not be located in an area at risk of flooding. Applicants must demonstrate that proposals do not increase flood risk and are safe. Applicants must not assume that changes in levels or that changes to the public sewer (including diversion), will be acceptable as such proposals could increase / displace flood risk.

On-site Flood Risk

When considering potential new development sites, it is important to identify where there are existing public sewers within or near to the site, which are predicted to be at risk from flooding and/or sites where there is a record of previous flooding from the public sewer. Proposals could also be affected by overland flows from nearby off-site public sewers. Policy should be clear that existing flood risk must not be displaced and that any flood risk needs to be considered early in the design process. This can be better understood once more details become available on specific sites, for example, topographic information, which will inform where exceedance paths flow.

The strong preference of UUW is for development to take place outside of any identified flood risk in accordance with the sequential approach. In instances where sites are affected by sewer flood risk and it is your decision to continue to allocate the site, we suggest the following additional site-specific policy wording for each site. Where there is a modelled flood risk, we would recommend the following wording:

Recommended Policy

Modelled Sewer Flood Risk

Existing public sewers pass through and near to this site which modelling data (and / or flooding incident data) identifies as being at risk of sewer flooding. This will need careful assessment and consideration in the detailed design, masterplanning and drainage details for the site. The risk of sewer flooding could affect the developable area of the site and the detail of the design.

Where there is a record of flooding on-site, or in the vicinity of the site, we would recommend the following wording:

Recommended Policy

Sewer Flooding Incidents

There are flood incidents from the public sewer on-site / in the wider area. Applicants must engage with United Utilities to consider the detailed design of the site and drainage details. The risk of sewer flooding could affect the developable area of the site and the detail of the design.

We also recommend the following explanatory text in respect of sewer flood risk matters:

Explanatory Text

A range of sites have been identified as at risk of sewer flooding or in the wider vicinity of sewer flooding. In respect of these sites, the applicant must engage with United Utilities prior to any masterplanning to assess the flood risk and ensure development is not located in an area at risk of flooding from the public sewer. Applicants must consider site topography and any exceedance flow paths. Resultant layouts and levels must take account of such existing circumstances. Applicants must demonstrate that the proposed development would be safe and not lead to increased flood risk. Applicants must not assume that changes in levels or changes to the public sewer, including diversion, will be acceptable as such proposals could increase / displace flood risk. It may be necessary to apply the sequential approach and incorporate mitigating measures subject to the detail of the development proposal. Careful consideration will need to be given to the approach to drainage including the management of surface water; the point of connection; whether the proposal

will be gravity or pumped; the proposed finished floor and ground levels; the management of exceedance paths from existing and proposed drainage systems and any appropriate mitigating measures to manage any risk of sewer surcharge.'

Reservoir Flooding

Reservoirs have their own reservoir flood zone showing how far flood water would spread from the reservoir in the unlikely event that a reservoir failed. In your site selection process, you should have regard to this risk. In the event that your local authority is affected by reservoir flood risk, we would request the opportunity to liaise with you regarding any sites that are downstream of reservoir flood risk so that they can be appropriately considered against the above guidance.

When looking at possible future development allocations within a reservoir flood zone, we draw your attention to the advice within the National Planning Practice Guidance on Flood Risk and Coastal Change. This states that the local planning authority will need to evaluate the potential damage to buildings or loss of life in the event of dam failure, compared to other risks, when considering development downstream of a reservoir. We have extracted some relevant paragraphs below.

What emergency planning considerations are there in relation to reservoirs?

The failure of a reservoir has the potential to cause catastrophic damage due to the sudden release of large volumes of water. The local planning authority will need to evaluate the potential damage to buildings or loss of life in the event of dam failure, compared to other risks, when considering development downstream of a reservoir. Local planning authorities are also advised to consult with the owners/operators of raised reservoirs, to establish constraints upon safe development.

Local planning authorities should also consider any implications for reservoir safety and reservoir owners and operators caused by new development located downstream of a reservoir, such as the cost of measures to improve the design of the dam to reduce flood risk, the operation of the reservoir, and general maintenance costs, by consulting with reservoir owners and operators on plan and development proposals. Local authorities, as category 1 responders, can access more information about reservoir risk and reservoir owners using the Resilience Direct system. Developers should be expected to cover any additional costs incurred, as required by the National Planning Policy Framework's 'agent of change' policy (paragraph 200). This could be through Community Infrastructure Levy or section 106 obligations for example.

Applications will need to include any evidence Local Planning Authorities need to understand the impact of individual developments on reservoirs. In doing so, they need to refer to relevant guidance in the Institution of Civil Engineers publication 'Floods and Reservoir Safety' (4th edition) and the Environment Agency's 'Guide to risk assessment for reservoir safety management'. It may be necessary to seek expert advice such as from an All Reservoirs Panel Engineer from the government accredited list under 'How to appoint a panel engineer'.

Consideration should also be given to the potential impacts of development on the operation of reservoirs. This is particularly important where impacts could affect the management of flood risk or the supply of water.

Paragraph: 046 Reference ID: 7-046-20220825

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Local planning authorities will need to evaluate in the Strategic Flood Risk Assessments (and when applying the Sequential Test) how an impounding reservoir will modify existing flood risk in the event of a flood in the catchment it is located within, and/or whether emergency draw-down of the reservoir will add to the extent of flooding.

If considering allocating land for development within a reservoir flood zone, local planning authorities should discuss their proposed site allocations with reservoir undertakers (such as U UW) at the earliest opportunity to:

- avoid intensification of development within areas at risk from reservoir failure; and
- ensure that reservoir undertakers can assess the cost implications of any reservoir safety improvements required due to changes in land use downstream of their assets.

Developers should be expected to cover any additional costs incurred, as required by the National Planning Policy Framework's '*agent of change*' policy (paragraph 200). This could be through Community Infrastructure Levy or section 106 obligations for example.

If you are minded to allocate any sites in a reservoir flood risk zone, further consideration of the implications of being located downstream of the reservoir exceedance path will be required through liaison with the reservoir operator as the cost of any mitigation measures could be material to the deliverability of the site. Thereafter, if the sites are allocated, you will need to clearly reflect the need for the implications for the reservoir exceedance risk to be addressed and mitigated where necessary in the site-specific policy / site-specific development considerations for the site.

Sustainable Drainage – Foul and Surface Water

It is important to explain that the existing drainage systems are often dominated by combined sewers. This method of sewer infrastructure is as a result of the time that it was constructed, with combined sewers taking both foul and surface water.

The Environment Act 2021 places a clear obligation on sewerage undertakers in England to secure a progressive reduction in the adverse impacts of discharges from storm overflows to reduce the impacts on the environment and public health. Consistent with this obligation, we request that every effort is made to ensure that new development avoids discharging surface water to the existing public sewerage system. Surface water should instead discharge to more sustainable alternatives as outlined in the surface water management hierarchy. This will ensure the impact of development on public wastewater infrastructure, both in terms of the wastewater network and wastewater treatment works, is minimised. We adopt this position as surface water flows are very large when compared with foul flows. If there is a consistent approach to surface water management as part of new development, it will help to manage and reduce surface water entering the sewer network, decreasing the likelihood of flooding from sewers, whilst also minimising the impact on residents and businesses, and the impact on the environment.

New development must manage foul and surface water in the most sustainable way in accordance with national planning policy. We wish to emphasise the importance of any future policy setting out the need to follow the hierarchy of drainage options for surface water in the NPPG which clearly identifies the public combined sewer as the least preferable option for the discharge of surface water and the need for priority to be given to the implementation of sustainable drainage systems,

especially multi-functional sustainable drainage systems, in accordance with the latest guidance in the NPPF and NPPG.

UUW recommends that the issues of flood risk and surface water management are dealt with as **two separate policies**. It is our view that a separate planning policy for each matter sets a clear process in relation to surface water management for **all** new development.

Paragraph 181 of the National Planning Policy Framework (NPPF) outlines that:

‘When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment.’

Noting that not all applications are required to submit a flood risk assessment, UUW wishes to outline that emerging policy should set an expectation that all applications will be required to submit clear evidence that the hierarchy for surface water management has been fully investigated to ensure that flood risk is not increased elsewhere. We wish to recommend that policy requires applicants to submit a foul and surface water drainage strategy that fully investigates the surface water hierarchy to minimise the risk of flooding and ensures that future development sites are drained in the most sustainable way whilst also being resilient to the challenges of climate change. We wish to recommend the following wording for inclusion as policy in any future local plan.

Recommended Policy

Where required by the local planning authority, applications must be supported by a strategy for foul and surface water management. Surface water must be discharged in accordance with the hierarchy of runoff destinations in the national standards for sustainable drainage systems (SuDS).

Proposals must be designed to maximise the retention of surface water on-site and minimise the volume, and rate of, surface water discharge off-site. The design of drainage systems shall be in accordance with the national standards for SuDS or any replacement national standards. To demonstrate any reduction in discharge rates, applicants must submit clear evidence of existing operational connections from the site with associated calculations on rates of discharge. Where clear evidence of existing connections is not provided, applicants will be required to discharge at a greenfield rate of run-off.

The design of proposals must assess and respond to the existing hydrological characteristics of a site to ensure a flood resilient design is achieved and water / flooding is not deflected or constricted.

Applications will be required to incorporate sustainable drainage which is proportionate to the nature and scale of the proposal. The sustainable drainage must be multi-functional wherever possible, and designed in accordance with the four pillars of sustainable drainage, in preference to underground piped and tanked storage systems, unless, there is clear evidence why such techniques are not possible. The sustainable drainage should be integrated with the landscaped environment and the strategy for biodiversity net gain.

For any development proposal which is part of a wider development / allocation, foul and surface water strategies must be part of a holistic site-wide strategy. Pumped drainage

systems must be minimised and a proliferation of pumping stations on a phased development will not be acceptable.

Applications must be accompanied by drainage management and maintenance plans including a plan for any watercourse within the application site or an adjacent watercourse where the application site is afforded riparian rights.

Explanatory Text

Application of the hierarchy for managing surface water will be a key requirement for all development sites to reduce flood risk and the impact on the environment. Clear evidence must be submitted to demonstrate why alternative preferable options in the surface water hierarchy are not available.

Foul and surface water drainage must be considered early in the design process. Sustainable drainage must be integrated with the landscaped environment and designed in accordance with the four pillars of sustainable drainage (water quantity, water quality, amenity and biodiversity). It should identify SuDS opportunities, including retrofit SuDS opportunities, such as green roofs; permeable surfacing; soakaways; filter drainage; swales; bioretention tree pits; rain gardens; basins; ponds; reedbeds and wetlands. Any drainage should be designed in accordance with 'Ciria C753 The SuDS Manual', sewerage sector guidance, or any subsequent replacement guidance.

The hydrological assessment of the site must consider site topography, naturally occurring flow paths, ephemeral watercourses and any low lying areas where water naturally accumulates. Resultant layouts must take account of such circumstances. Applications will be required to consider exceedance / overland flow paths from existing and proposed drainage features and confirm ground levels, finished floor levels and drainage details. Drainage details, ground levels and finished floor levels are critical to ensure the proposal is resilient to flood risk and climate change. It is good practice to ensure the external levels fall away from the ground floor level of the proposed buildings (following any regrade), to allow for safe overland flow routes within the development and minimise any associated flood risk from overland flows. In addition, where the ground level of the site is below the ground level at the point where the drainage connects to the public sewer, care must be taken to ensure that the proposed development is not at an increased risk of sewer surcharge. It is good practice for the finished floor levels and manhole cover levels (including those that serve private drainage runs) to be higher than the manhole cover level at the point of connection to the receiving sewer.

Holistic site-wide drainage strategies will be required to ensure a coordinated approach to drainage between phases, between developers, and over a number of years of construction. Applicants must demonstrate how the approach to drainage on any phase of development has regard to interconnecting phases within a larger site with infrastructure sized to accommodate interconnecting phases. When necessary, the holistic drainage strategy must be updated to reflect any changing circumstances between each phase. The strategy shall be prepared in liaison with infrastructure providers and outline how each phase interacts with other phases.

In addition to the above general policy relating to drainage, we request that you include site-specific policies regarding the approach to drainage when allocating a site, preferably informed by a flood risk assessment / drainage strategy. When allocating new major development sites, we request that your site-specific policy clearly states that applicants must make space available in their proposals for multi-functional sustainable drainage. We recommend the following wording.

Recommended Policy

Applicants must identify land at the site that ensures the delivery of multi-functional sustainable drainage in accordance with the four pillars of sustainable drainage which is integrated with the landscaped environment.

It is important that the new local plan and associated design guidance includes clarity in relation to the requirement for sustainable drainage systems on sites. This clarity is critical to avoid regulatory / policy uncertainty and ensure a level playing to developers operating in a competitive setting when acquiring a site (see Sustainable drainage and new housing developments, Payne, Walker, Illman and Sharp, 2023). We strongly recommend that policy and design guidance clearly identifies the need for major developments to make space for multi-functional sustainable drainage systems. As evidenced in the aforementioned research, clarity of policy requirements will help to secure better sustainable drainage results in the final design of the development. We believe that adding this clarity to site-specific policy helps to remove uncertainty, which in turn helps to contribute to a level playing field during the land acquisition process.

Landscaping

We wish to emphasise that the evaluation of surface water management opportunities should be undertaken early in the design process. It is imperative that the approach to design including site analysis is intrinsically linked to *'making space for water'*. Sustainable surface water management will be particularly important to consider in the context of the requirement for new streets to be tree lined. It is a national policy requirement that new streets are tree lined as stated in paragraph 136 of the NPPF. Therefore, Uuw wishes to recommend the following wording for inclusion within the Local Plan:

Recommended Policy

Landscaping proposals must evaluate and identify opportunities for sustainable surface water management. Landscaping proposals, including proposals for tree-lined streets, must be integrated with the strategy for sustainable surface water management.

We also support encouragement for water re-use opportunities in redevelopment proposals such as grey water recycling.

Any approach to planting new trees must give due consideration to the impact on utility services noting the implications that can arise as a result of planting too close to utility services. This can result in root ingress, which in turn increases the risk of drainage system failure and increases flood risk. It will be important that applicants refer to our *'Standard Conditions for Works Adjacent to Pipelines'* (a copy of which can be found on our website) and consult with us when implementing the delivery of landscaping proposals. The approach to any planting must have regard to the proximity to existing or proposed utility assets to ensure there is no impact on these assets such as root ingress. Trees should not be planted directly over water and wastewater assets or where excavation onto the asset would require removal of the tree.

Water Efficiency

We recommend that the local plan includes a policy requirement for new development to be built to the optional water efficiency standard prescribed in Building Regulations. A tighter water efficiency standard in new development has multiple benefits including a reduction in water and energy use, as well as helping to reduce customer bills. Building Regulations includes a requirement for all new dwellings to achieve a water efficiency standard of 125 litres of water per person per day (l/p/d).

At the current time, Building Regulations includes a requirement for all new dwellings to achieve a water efficiency standard of 125 litres of water per person per day (l/p/d). In 2015 an ‘optional’ requirement was introduced which is currently set at 110 l/p/day for new residential development. This can be implemented through local planning policy where there is a clear need based on evidence. We have enclosed evidence to justify this approach. As you will see from the evidence, we believe that the optional standard can be achieved at no additional cost¹. We therefore recommend the local plan includes the following water efficiency policy:

Recommended Policy

All new residential developments must achieve, as a minimum, the optional requirement set through Building Regulations Requirement G2: Water Efficiency or any future updates.

All major non-residential development shall incorporate water efficiency measures so that predicted per capita consumption does not exceed the levels set out in the applicable BREEAM ‘Excellent’ standard.

As mentioned below, surface water should be managed as close to its source as possible. There are opportunities such as rainwater recycling, green roofs and water butts and we encourage the LPA to embrace all water efficiency measures. Modern design techniques can promote measures for water recycling to reduce the impact on infrastructure requirements.

Groundwater Source Protection Zones

The Environment Agency has defined Groundwater Source Protection Zones (SPZs) for groundwater sources, which are often used for public drinking water supply purposes. **The prevention of pollution to drinking water supplies is critical.** The SPZs signify where there may be a particular risk from activities on or below the land surface. Such activities include construction. The details of SPZs can be viewed on the website of the Environment Agency. We would also be happy to provide details if that would be helpful.

With respect to the site selection process, we wish to highlight that new development sites are **more appropriately located away** from locations which are identified as sensitive groundwater protection areas especially within and adjacent to Groundwater Source Protection Zone 1 (SPZ1) which is closest to the water abstraction point and the most sensitive. This is of relevance if there are SPZs in the local authority. The location of SPZs can be found on gov.uk and we request that you refer to these in your approach to site selection. The position of UUW is that when considering a range of sites to meet housing needs, it would be more appropriate to identify new development sites, which do not encroach on SPZ1.

¹ See Table 3 of Future Homes Hub Water Ready A report to inform HM Government’s roadmap for water efficient new homes (April 2024)

The preference of U UW would be to have a standalone policy in the local plan relating to water quality. Our recommended policy is below.

Recommended Policy

In consultation with the Council and relevant statutory bodies, applicants must consider the potential impacts on water quality resulting from the design, construction and operation of proposed development. Where necessary, development proposals must include measures to reduce any risk to the water environment and aim to protect and improve water quality.

Development proposals within Groundwater Source Protection Zones must accord with the latest national guidance on Groundwater Protection. Applications for new development within Groundwater Source Protection Zones will be required to be supported by:

- i) A risk assessment and mitigation strategy;***
- ii) Masterplanning which mitigates the risk to the water environment; and***
- iii) A development management plan relating to construction and activities that will take place during the operation / lifecycle of any permitted development.***

Explanatory Text

Any risk assessment will be expected to comprise a quantitative and qualitative risk assessment and mitigation strategy to manage the risk of pollution to public water supply and the groundwater / water environment. The risk assessment should be based on the source-pathway-receptor methodology and provide detailed information on ground conditions. It shall identify all possible contaminant sources and pathways for the life of the development and provide details of measures required to mitigate any risks to groundwater and public water supply during all phases of the development. Subject to the outcome of the risk assessment, the mitigation measures may include the highest specification design for the new foul and surface water sewerage systems (pipework, trenches, manholes, pumping stations and attenuation features). It may also identify that the principle of development is not acceptable.

Careful masterplanning will be required to mitigate the risk of pollution to public water supply and the water environment. For example, open space should be located so that it is closest to the boreholes in order to minimise the potential impact on groundwater.

A development management plan will be required to identify the potential impacts from all activities related to the development both during construction and during the operational life of the proposal. The management plan shall address how activities on both groundwater, public water supply and surface water will be managed through the identification and implementation of appropriate mitigation measures necessary to protect and prevent pollution of these waters. For example, an appropriate management regime may be required for open space features in a groundwater source protection zone.

In the event that sites are allocated in a SPZ, we request site-specific policy that identifies the constraint and the need for development to be appropriately mitigated / managed.

Water Catchment Land

Development proposals on water catchment land can have an impact on water supply resources and therefore we recommend that you include a policy which identifies the need to engage with the statutory undertaker for water to determine whether any proposal is on land used for public water supply catchment purposes. Please get in touch to confirm if there is any water catchment land in your administrative area.

In cases of wind energy proposals on water catchment land, the applicant should seek to locate development so that the impact on public water supply is minimised through the location of the development and through the undertaking of appropriate risk assessments and inclusion of mitigation measures in the design and construction process. It is particularly important to avoid the location of new wind turbines on deep peat land. We recommend you include the following policy relating to water catchment land.

Recommended Policy

Development proposals on land used for public water supply catchment purposes will be required to consult with the relevant water undertaker. The first preference will be for proposals to be located away from land used for public water supply purposes. Where proposals are located on catchment land used for public water supply, careful consideration must be given to the location of the proposed development and a risk assessment of the impact on public water supply may be required with the identification and implementation of any required mitigation measures including a management plan.

For any site-specific allocations that you may identify which fall in such locations, such as renewable energy sites, it will be important that adequate information is presented to justify the principle of the development in advance of allocation and that the proposal is covered by site-specific policy which clearly identifies this constraint and the need for proposals to be undertaken in accordance with the above recommended policy.

Development next to Water and Wastewater Treatment Works, Wastewater Tanks, Pumping Stations, Overflows and Other Wastewater Assets

During the site-selection process, we would urge you to carefully consider our existing treatment works, pumping stations and other assets. It is important to explain that:

1. Treatment works are key infrastructure for the borough which may need to expand in the future to meet growth needs or respond to new environmental drivers. Maintaining a space around a treatment works is therefore desirable to respond to any future investment requirements.
2. As a waste management facility, a wastewater treatment works is an industrial operation which can result in emissions. These emissions include odour and noise. A wastewater treatment works can also attract flies. A wastewater treatment works is also subject to vehicle movements from large tankers which need to access the site.
3. Water and wastewater treatment works can include the storage or processing of hazardous materials such as biogas or chlorine, where there may be safety concerns.

The position of UUW is that when considering a range of sites to meet development needs, it would be more appropriate to identify new development sites, especially sensitive uses, such as housing, which are not close to a treatment works, where amenity could be a concern, or where there are process issues which could represent a safety risk. This position is in line with the 'agent of change' principle set out at paragraph 200 of the NPPF. Paragraph 200 states:

'Planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities (such as places of worship, pubs, music venues and sports clubs). Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed.'

Paragraph: 009 Reference ID: 30-009-20190722 of the NPPG expands on this by stating:

Development proposed in the vicinity of existing businesses, community facilities or other activities may need to put suitable mitigation measures in place to avoid those activities having a significant adverse effect on residents or users of the proposed scheme.

In these circumstances the applicant (or 'agent of change') will need to clearly identify the effects of existing businesses that may cause a nuisance (including noise, but also dust, odours, vibration and other sources of pollution) and the likelihood that they could have a significant adverse effect on new residents/users. In doing so, the agent of change will need to take into account not only the current activities that may cause a nuisance, but also those activities that businesses or other facilities are permitted to carry out, even if they are not occurring at the time of the application being made.

The agent of change will also need to define clearly the mitigation being proposed to address any potential significant adverse effects that are identified. Adopting this approach may not prevent all complaints from the new residents/users about noise or other effects, but can help to achieve a satisfactory living or working environment, and help to mitigate the risk of a statutory nuisance being found if the new development is used as designed (for example, keeping windows closed and using alternative ventilation systems when the noise or other effects are occurring).

It can be helpful for developers to provide information to prospective purchasers or occupants about mitigation measures that have been put in place, to raise awareness and reduce the risk of post-purchase/occupancy complaints.

Similarly Paragraph: 005 Reference ID: 34-005-20140306 of the NPPG states:

Plan-making may need to consider:

- *whether new development is appropriate near to sites used (or proposed) for water and wastewater infrastructure (for example, odour may be a concern).*

On the basis of the above, we wish to recommend the following policy for inclusion in any new local plan.

Recommended Policy

New development must ensure that the occupiers of new developments will enjoy an appropriate standard of amenity and safety and will not be adversely affected by nearby uses and vice versa. When applicable, applicants will be required to submit the relevant impact assessments, outlining any adverse effects from the nearby site, and any required mitigation.

We also request the opportunity to liaise closely with the Council on potential site allocations so we can advise you of any concerns associated with proximity to such wastewater assets. UUW wishes to emphasise its strong preference to avoid development in the vicinity of such assets. We can provide plans of our wastewater treatment works by separate cover.

Providing Self and Custom Build Housing Plots

When making provision for self and custom build housing plots we request that you include specific policy that ensures a co-ordinated approach to the delivery of on-site infrastructure. There is a risk that such sites can be delivered in a fragmented manner if not carefully controlled. We request that any development of such sites is governed by policy that requires a site-wide infrastructure strategy for foul, surface water and clean water. This will help to ensure that such sites are delivery sustainably.

Encouraging Small and Medium-sized Builders

When making provision for small and medium sized builders, we wish to highlight that such small to medium sized sites often discharge surface water to the public combined sewer which is the least sustainable option for the management of surface water. We request that your site selection process for such sites ascertains the proposed approach to managing surface water from landowners so that sites which have more sustainable alternatives than the public combined sewer are prioritised for allocation.

Biodiversity Net Gain

As part of our response to the Environment Act and the delivery of biodiversity net gain (BNG), we are currently reaching out to local authorities to ensure we develop a BNG strategy that, wherever possible, supports local biodiversity and nature recovery needs. Although the land we own is primarily operational land, we are currently evaluating all land owned by UUW within local authorities that could be used for habitat creation or enhancement works and developing a list of candidate sites. In identifying land, we clearly recognise the strategic importance of aligning our site selection process with local, regional and national policies and objectives on biodiversity and nature recovery.

As part of the preparation of your new local plan, we would welcome the opportunity to further discuss your approach to the delivery of BNG and the identification of strategic opportunities to support local nature recovery. We are keen to ensure that BNG is delivered in the most appropriate locations and without restricting the potential future expansion and operation of key operational infrastructure which is often very geographically restricted and critical to meeting future growth and environmental drivers. We request that your policy includes sufficient flexibility to allow for off-site provision. This is particularly in respect of existing and new infrastructure sites. On-site provision

may not be the most appropriate long-term solution for the delivery of BNG when investing in key infrastructure such as water and wastewater assets. BNG should be resilient to future pressures from further development. It is critical that land at and around our key infrastructure sites is not sterilised to ensure that we are able to flexibly and most appropriately respond to future growth and environmental drivers.

We also wish to note that biodiversity mitigation / enhancement should not be located directly over water and wastewater assets or where excavation onto the asset would require removal of the biodiversity.

Property Interests of U UW

We would wish to assess any possible future development sites to determine whether we have any land interests such as easements and rights of access which are in addition to our statutory rights for inspection, maintenance and repair. These land interests may have restrictions that must be adhered to. It is the responsibility of the developer to obtain a copy of the associated legal document, available from our Legal Services department or Land Registry and to comply with the provisions stated within the document. We would request that these matters are addressed in site-specific policy / development considerations if you allocate the sites.

We recommend that landowners/developers contact our Property Services team at PropertyGeneralEnquiries@uuplc.co.uk to discuss how any proposals may interact with our land interests. Our easements, pipe structures and access rights should not be affected by the design and construction of new development.

New Renewal Energy Opportunities

We are currently evaluating all land owned by U UW within local authorities that could be used for renewable energy and developing a list of candidate sites. In identifying land, we recognise the strategic importance of aligning our site selection process with local, regional and national policies and objectives on renewable energy and net zero. As part of the preparation of your new local plan, we would welcome the opportunity to further discuss your approach to the delivery of renewable energy sites and the identification of new opportunities.