creating a better place

Environment Agency

Jenny Pierce
East Herts District Council
Development Control
Wallfields Pegs Lane
Hertford
Hertfordshire
SG13 8EQ

Our ref: NE/2019/131180/04-L01
Your ref: 3/19/2124/OUT

Date: 24 February 2023

Dear Jenny,

Outline planning application for development including demolition of existing structures, refurbishment and change of use of existing Grade II Listed Brickhouse Farm Barn and structures and erection of a residential led mixed use development comprising: up to 1,500 residential market and affordable homes; a mixed use local village centre; retail, business, commercial and community uses; primary school, early years and nursery facilities; leisure and sports facilities including a football hub; provision for 8 no. pitches for Gypsies & Travellers; open spaces, ecological areas, woodlands and public realm; pedestrian, cycle and vehicular accesses and network within the site; associated drainage, utilities, energy and waste facilities and infrastructure; works to and realignment of the existing highway; other supporting works, facilities and infrastructure; together with associated temporary enabling works or structures. With all matters reserved apart from detailed works to the A414 Church Lane junction (phased development). Application accompanied by an Environmental Statement. Re-consultation.

Gilston Village 7 Land Off Church Lane A414 Hunsdon and Eastwick Hertfordshire.

Thank you for re-consulting us on the planning application in outline for 1,500 new homes to be provided surrounded by open space and green infrastructure. We appreciate the opportunity to comment. We aim to protect and improve the water environment when commenting on proposed development. We have made edits to our previous response (NE/2019/131180/03), including the addition of planning conditions.

The development site is located in Flood Zone 1 (land with a low probability of flooding from rivers). The western and southern boundaries are in close proximity to Flood Zone 2 and 3 (land with a medium and high probability of flooding from rivers) associated with the Hunsdon Brook and River Stort floodplains. There are a couple of unnamed ordinary watercourses within the site, the western boundary runs adjacent to the Hunsdon Brook corridor, and the southern boundary lies adjacent to the Stort Valley. The site is located within a Groundwater Source Protection Zone 3. These are the main environmental constraints we have considered in our assessment of the application.

Having reviewed the information submitted, we have **no objections** to the outline application. In order to safeguard the water environment, we have recommended planning conditions to protect biodiversity and controlled waters, which will be required as the scheme progresses through reserved matters stages. Without these conditions we would object to the proposal due to its potential adverse impact on the environment. A list of recommended planning conditions has been provided in Appendix 1.

Flood Risk

The outlines as represented on the illustrative masterplan for the village development indicate that the development is proposed to be located in Flood Zone 1 (low probability of river flooding). However, as the Village 7 plans develop further, we would encourage the applicant to provide the following assessments to supplement the existing Flood Risk Assessment:

- A detailed model assessment of the 1 in 100 year plus appropriate climate change allowances for the Hunsdon Brook. Climate Change should be assessed as a minimum in line with our peak river flow climate change allowances guidance, although we would encourage a conservative approach to be taken in line with Villages 1-6. We are open to further discussions on this. Currently the Environment Agency do not hold any modelling for the Hunsdon Brook.
- A strategic overview of flooding incorporating both fluvial and pluvial flooding and how they interact. Detail on expected flow rates for any new connections (surface water, sewer etc.) to the main river network will need to be provided.

The lake area to the northwest of the site that the Hunsdon Brook runs through borders the site, and we note that Flood Zone 3 extends into the red line boundary here, however only minimally and this space is currently proposed to be green space or otherwise undeveloped which we welcome. Please note however that as the site borders this online lake, riparian ownership and responsibilities will apply. Due to the current nature of the land use, we do not currently maintain this area. Increased population and changing land use would warrant the requirement for channel maintenance to mitigate flood risk which we do not have the budget or resource for. Therefore, the developers will need to create and carry out a maintenance plan for this part of the site which extends up to the edge of the Hunsdon Brook main river. This is reflected in Condition 3.

Increased run-off from the additional hard standing/impermeable surfaces has the potential to significantly increase discharge into ditches and drains, and subsequently main rivers in the vicinity e.g., the Hunsdon Brook and Stort. It’s important that Sustainable Drainage Systems (SuDS) are implemented wherever possible to increase lag time and prevent rivers becoming overwhelmed due to high run-off. Permeable surfaces would help absorb some surface water, reducing the amount of run-off into ditches. Other elements such as rainwater gardens could help retain water at a property level, allowing rivers more time to adjust to high rainfall events. A holistic approach to water should be taken throughout, inclusive of the impacts and opportunities with regards to flood risk, ecology, and water quality and quantity.

Exploratory boreholes and trial pits are mentioned in the Development Specification Statement although the location of these is currently unknown. We remind the applicant for the need to apply for a Flood Risk Activity Permit for any development and/or temporary works within 8 metres of the top of the bank of main rivers. We include the Flood Risk Activity Permit informative in Appendix 2 for further clarity on this.

Biodiversity

We support the green buffers provided around the edge of the site and within the site as shown on Parameter Plans 2 and 3, where they are associated with the water features such as ponds and watercourses, as well as protections for hedgerow and woodlands.

Although there are no main rivers within the development site itself, we believe the site and the immediate surrounding area is sensitive in terms of biodiversity. Despite being mainly arable land, there are some highly valuable habitats within this area. The biodiversity value of the Hunsdon Brook and Eastwick Valley Stream although beyond the boundary of the site is partly recognised by the fact that many of the Local Wildlife Sites are associated with them. The Stone Basin Spring located along the eastern boundary of the site is unique. It has been assessed as having County Wildlife Value on account of its calcium-rich seepages and the presence of a rare moss species. Eastwick Mead is one of the finest surviving wetland meadows in Hertfordshire, where orchids and wildflowers thrive. Changes to the hydrological characteristics of the riverine, spring/seepage waters, including to flow volume, periodicity and chemistry, could have a significant impact on the nature conservation value of these wetland features. A network of seasonally wet shallow ditches that run alongside hedgerows also provide important habitat and wildlife corridors within the project area and should be retained and protected.

With reference to Chapter 13 ‘Biodiversity’ of the Environmental Statement (ES), there is a present and established population of Otters on the River Stort after a reintroduction program in the early 1990s. Disturbance from building and subsequent occupation will likely impact them, and therefore they need to be safeguarded. We note that species surveys were updated in 2022 but surveys for Otter and Water Vole were not included in these. We wish to see updated surveys completed for these species too and this will be an expectation at the reserved matters stages. We disagree with Water Voles being scoped out of the ES due to their absence. There has been an increase in population and range on the Stort following a reintroduction program at Thorley Wash. Eastwick Mead could provide potential habitat for Water Vole if managed appropriately and access was viable in the future. The development itself could prevent future colonisation so we think consideration should be given to this in the detailed design stages. In terms of Great Crested Newts (GCN), we would like to see culvert pipes incorporated into the road at suitable points (e.g., National Grid Reference TL4227711714) to facilitate GCN passage from the newly created SuDS ponds below and adjacent to the habitats within the site. This would improve connectivity and hopefully enable a larger population of GCN to establish in the longer term.

Section 3.2 of the Outline Ecological Management Plan (Objective 5) states ‘Restore existing watercourses’. However, this doesn’t provide any details on which

watercourses are being referred to, the condition of those watercourses or what will be done. In addition to the above, Objective 2 should be amended to read ‘native’ species rich grassland/wildflower meadow. We are supportive of Objective 4 and encourage the planting of native aquatic and marginal plants and the creation of ‘overdeep’ SuDS to hold water for longer and to act as ephemeral ponds. These areas should have relaxed maintenance and mowing regimes, and we recommend that native planting is prioritised.

The Outline Ecological Management Plan aims for all newly created and enhanced habitat to be retained to mitigate and compensate for the impacts of the proposed development. We note the biodiversity net gain submissions, however it appears that rivers/streams/ditches have been omitted from the calculations which is an oversight as these habitat types are present within the red line site boundary. Please note that we wish to see up-to-date biodiversity net gain assessments completed (and the River Metric applied where appropriate for a more accurate representation of these linear habitat types), as reserved matters progress. The wording of condition 2 reflects this. We would like to see any newly created/enhanced habitat quantified using the most up to date biodiversity metric, to be assured that net gain is being provided in line with East Herts District Plan Policy NE2. A minimum 10% uplift is required, as this figure will be mandatory under updated legislation in the near future. As part of these net gain provisions the applicant could explore de-culverting the 100-metre length of culvert at Stone Basin Spring. This would help the development to achieve their aims of biodiversity net gain and meet the vision laid out in East Herts District Plan Policy GA1: enhances the natural environment, providing a comprehensive green infrastructure network and net biodiversity gains. This would also increase the amenity value. We would welcome further discussions with the applicant on this.

The provision of adequate buffer zones for ancient and veteran trees should apply to watercourse channels/corridors, ditches and ponds. Buffer zones around the ponds and watercourses are important to protect against construction traffic, siltation and spills. Appropriate long-term management of these buffer zones should be undertaken. We would like to see these buffers consist of undeveloped, native vegetation. Within the Outline Ecological Management Plan, the Proposed Landscape Plan shows that amenity grassland will be planted along the watercourses. We would like this to be changed to native species rich grassland mix, and for it to be managed accordingly.

We would also like to see an increased resilience against changes in surface runoff quality and quantity. This could be achieved through tree planting, increasing hedgerow density and other Natural Flood Management techniques that work with natural processes to improve the environment.

Water resources and quality

We are pleased to see that 110 litres per head per day is set as the minimum for the designs of the buildings but with an aspirational target of 105 litres per head per day (Page 30, Sustainability Strategy). We would certainly support and encourage the applicant to implement the 105 litres per head per day target wherever possible. We also recommend that all new non-residential development of 1000sqm gross floor area

or more should meet the BREEAM ‘excellent’ standards for water consumption. The local authority may wish to consider whether any of these aspects could be conditioned to secure their implementation.

The availability of water for licensing in the Hertfordshire area can be classed as restricted, and there are no new sources of water available in this location. This is detailed within our Abstraction Licensing Strategies. If you intend to abstract more than 20 cubic metres of water per day from a surface water source e.g., a stream or from underground strata (via borehole or well) for any particular purpose then you will need an abstraction license from us. There is no guarantee that a license will be granted as this is dependent on available water resources and existing protected rights.

Potable water in this area is supplied by Affinity Water. They operate in an area classified as areas of ‘Serious’ Water Stress by us. ‘Serious’ water stress is identified as an area where the current or future demand for household water is, or is likely to be, a high proportion of the effective rainfall which is available to meet that demand. Our document ‘Water Stressed Areas – final classification 2021’ can be viewed using the link or by visiting gov.uk. This highlights the proportion of resource which is required for public water supply. This document indicates that there is a need to use water resources efficiently. The water companies acknowledge the importance of water efficiency in meeting future water demand, with demand management programmes featuring within their Revised draft Water Resources Management Plans.

The SuDS design has followed the CIRIA C753 SuDS manual and thus advocates more natural SuDS mitigation measures. We support the use of the Simple Index Approach, however we think there is potential to consider green roofing on the larger scale residential buildings in addition to public buildings which will further help to mitigate surface water run-off rates and pollution. There is a need to ensure the quality of drainage leaving the site is suitable to ensure no deterioration of the water environment including no impacts on WFD designated waterbodies. Further information on this is required under Condition 5.

As outlined for application 3/19/1045/OUT we understand there is capacity at Rye Meads to take foul drainage from the Gilston developments and provide treatment up until 2036, after which capacity will need to be increased and further upgrades may be required before this date. We have no concerns on the understanding that the Rye Meads future improvement works are completed, and Thames Water have the ability to take the increased foul water without deterioration to watercourses receiving the discharges from Rye Meads. It is vital that the village developments are phased appropriately to ensure any upgrades to foul infrastructure can take place to serve the development in time. This is a requirement of Policy WAT6 of East Hertfordshire’s District Plan (2018).

Land contamination

We have reviewed the Preliminary Risk Assessment submitted as part of the ES appendices. Controlled waters are particularly sensitive in this location because the proposed development site is located upon a secondary aquifer and within a Source

Protection Zone 3. Further detailed information will be required before built development is undertaken.

Please note, that if surface water disposal via infiltration into the ground is considered a solution, when designing the surface water drainage strategy we advise the applicant to follow our guidance -The Environment Agency's approach to groundwater protection. This is a report that highlights the importance of groundwater and encourages industry and other organisations to act responsibly and improve their practices. The design of the drainage systems should be in line with chapter G position statements.

The following points should be considered wherever infiltration systems are proposed:

- Appropriate pollution control methods (such as trapped gullies/interceptors or swale & infiltration basin systems) should be used for drainage from access roads, made ground, hardstanding and car parking areas to reduce the risk of hydrocarbons from entering groundwater.
- Only clean uncontaminated water should drain to the proposed infiltration system. Roof drainage shall drain directly to the surface water system (entering after the pollution prevention measures).
- No infiltration system should be sited in or allowed to discharge into made ground, land impacted by contamination or land previously identified as being contaminated.
- There must be no direct discharge to groundwater, a controlled water. An unsaturated zone must be maintained throughout the year between the base of infiltration system and the water table.
- A series of shallow infiltration systems are preferable to deep bored systems, as deep bored systems can act as conduits for rapid transport of contaminants to groundwater.

To reduce the risk of water pollution we have recommended planning conditions in line with the National Planning Policy Framework paragraph 174, Policy WAT3 of the East Herts District Plan (2018) and the Thames River Basin Management Plan.

Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me on the number below.

Yours sincerely,

Becki Ingram
Planning Specialist

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Appendix 1 - Planning conditions

These are a listed of recommended planning conditions for agreement with the applicant and local authority.

Condition 1: supplementary assessment of flood risk and climate change
Prior to the implementation of village masterplans and/or appropriate reserved matters stage no development approved by this planning permission shall commence until such time as a supplementary assessment of flood risk and climate change has been submitted to, and approved in writing by, the local planning authority. This should include the following elements:

- An assessment of the 1 in 100 year plus climate change allowances for the Hunsdon Brook and Stort.
- A sequential approach to the development to avoid any less to highly vulnerable land uses being located within the design flood event. Submission of the village masterplans with the flood outlines overlaid will help to demonstrate that this has been achieved.
- Submission of detailed plans relating to floodplain compensation where appropriate (must be area-for-area, level-for-level and volume-for-volume, as well as hydraulically and hydrologically linked to, but located outside of, the floodplain). Floodplain compensation should be safeguarded for the lifetime of the development.
- Ensure no net loss in floodplain at any point during the construction works.
- Ensure that any built development which occurs within the design flood event is designed to the 1 in 100 year plus an appropriate allowance for climate change.
- A strategic overview of flooding incorporating both fluvial and pluvial flooding and how they interact, including consideration of reduced permeability/infiltration rates from additional proposed hardstanding and how this may affect those areas further down the catchment.
- Further detail on expected flow rates for any new connections (surface water, sewer etc.) to the main river network.
- Demonstrate how further detailed flood risk assessments will align with the approved Outline Flood Risk Assessment (Gilson Area Village 7 Flood Risk Assessment and Drainage Strategy Report, Doc Ref 44361/4001/001I, dated 7/7/2021).

The development shall be fully implemented in accordance with the village masterplans/reserved matters applications as informed by the supplementary assessment of flood risk and climate change or as may subsequently be agreed, in writing, by the local planning authority.

Reason
Although we are satisfied at this stage that the proposed development could be allowed in principle, the applicant will need to provide further information to ensure that the proposed development can go ahead without posing an unacceptable flood risk to the future communities of the Gilston Park Estate Village Development Site and

surrounding communities. This condition is necessary to reduce the risk of flooding and vulnerability to climate change to the proposed development and its future users in accordance with Paragraph 167 of the National Planning Policy Framework and Policy WAT1 ‘Flood Risk Management’ of the East Herts District Plan (2018).

Condition 2: landscape and ecological management plan
Prior to the implementation of village masterplans and/or appropriate reserved matters stage no development approved by this planning permission shall commence until a detailed landscape and ecological management plan, including the following elements, has been submitted to, and approved in writing by, the local planning authority. The landscape and ecological management plan shall be carried out as approved and any subsequent variations shall be agreed in writing by the local planning authority.

The scheme shall include the following elements:

- Details of ecological enhancements and how these will achieve a minimum 10% biodiversity net gain. A detailed biodiversity net gain assessment should be undertaken using the most up-to-date DEFRA Biodiversity Metric (including the River Metric where appropriate) detailing what the site will achieve and how these gains feed into wider overarching site wide projections for biodiversity and environmental net gain.
- Details of mitigation and/or compensation to account for any impacts to species and/or habitats.
- Details of any proposed planting schemes.
- Details of any existing habitat/new habitat created and their maintenance regimes.
- Details of treatment of site boundaries and/or buffers around watercourses.
- Details of management responsibilities over the long-term including adequate financial provision, a detailed management plan and a named body responsible for management.

Reason
To ensure the protection of wildlife and supporting habitat and to secure opportunities for enhancing the site’s nature conservation value. This approach is supported by 174 and 179 of the National Planning Policy Framework, Policies WAT3 ‘Water Quality and Water Environment’, NE3 ‘Species and Habitats’ and NE4 ‘Green Infrastructure’ of the East Herts District Plan (2018) and the Thames River Basin Management Plan. This condition is also supported by legislation set out in the Natural Environment and Rural Communities Act 2006 and Article 10 of the Habitats Directive which stresses the importance of natural networks of linked corridors to allow movement of species between suitable habitats, and promote the expansion of biodiversity.

Condition 3: scheme for 20 metre buffer to main river
Prior to the implementation of village masterplans and/or appropriate reserved matters stage, the development hereby permitted must not be commenced until such time as a scheme for the provision and management of a 20 metre wide buffer to the Hunsdon Brook watercourse has been submitted to, and approved in writing by, the local

planning authority. Thereafter, the development shall be carried out in accordance with the approved scheme. Any subsequent variations shall be agreed in writing by the local planning authority, in which case the development shall be carried out in accordance with the amended scheme. The scheme shall include:

- Plans showing the extent and layout of the buffer zone.
- Details of any proposed planting scheme.
- Details demonstrating how the buffer zone will be protected during the construction phase and managed/maintained over the longer term, including adequate financial provision, a named body responsible for management and the provision of a detailed management plan.
- Details of any proposed footpaths, fencing, furniture, lighting, etc. Provision of undisturbed habitat with native vegetation will be maximised and the 8 metres closest to the river kept clear of built development. Where footpaths and furniture are required, these will be kept as natural as possible, making use of natural materials.
- Details of how access to the watercourse will be maintained for flood management inspection and maintenance.
- Details of any SuDS measures (including any proposed outfalls), natural flood management or flood storage measures to reduce the risk of flooding.

Reason
The red line site boundary extends, in part, up to the edge of the Hunsdon main river. Land alongside this main river is particularly valuable for wildlife and it is essential this is protected. This condition ensures a joined-up approach with Villages 1-6. This approach is supported by paragraphs 174 and 179 of the National Planning Policy Framework, Policies WAT3 ‘Water Quality and Water Environment’, NE3 ‘Species and Habitats’ and NE4 ‘Green Infrastructure’ of the East Herts District Plan (2018) and the Thames River Basin Management Plan. This condition is also supported by legislation set out in the Natural Environment and Rural Communities Act 2006 and Article 10 of the Habitats Directive which stresses the importance of natural networks of linked corridors to allow movement of species between suitable habitats, and promote the expansion of biodiversity.

Condition 4: scheme for strategic green corridors
Prior to the implementation of village masterplans and/or appropriate reserved matters stage, no development approved by this planning permission shall commence until such time as a scheme for the strategic green corridor adjacent to the Hunsdon Brook has been submitted to, and approved in writing by, the local planning authority. This should include the following elements:

- Details of how this area will be landscaped for the benefit of biodiversity, including planting and any soft and hard landscaping.
- Details of how lighting designs will minimise and avoid light spill onto trees, hedgerows, woodland edges, watercourses, and other light sensitive ecological areas to avoid disturbance impacts.
- Details of any SuDS (including any proposed outfalls), natural flood management or flood storage measures to reduce the risk of flooding.

- Details demonstrating how this strategic green corridor will be protected during the construction phase and managed over the longer term, including adequate financial provision, a named body responsible for management and the provision of (a) detailed management plan(s).

Thereafter, the strategic green corridor shall be implemented in accordance with the approved scheme.

Reason

Parameter Plan 3 identifies a strategic green corridor strategic green corridor which extends along part of the Hunsdon Brook to the northwest of the site. Land alongside this main river is particularly valuable for wildlife and it is essential this is protected. This approach is supported by paragraphs 174 and 179 of the National Planning Policy Framework, Policies WAT3 'Water Quality and Water Environment', NE3 'Species and Habitats' and NE4 'Green Infrastructure' of the East Herts District Plan (2018), and the Thames River Basin Management Plan. This condition is also supported by legislation set out in the Natural Environment and Rural Communities Act 2006 and Article 10 of the Habitats Directive which stresses the importance of natural networks of linked corridors to allow movement of species between suitable habitats, and promote the expansion of biodiversity.

Condition 5: Water Framework Directive Assessment

Prior to the implementation of village masterplans and/or appropriate reserved matters stage, no development shall take place until a detailed water framework directive assessment has been submitted to, and approved in writing by, the local planning authority. The assessment shall be carried out as approved and any subsequent variations shall be agreed in writing by the local planning authority.

The assessment shall include the following elements:

- Use of up-to-date Water Framework Directive classification data.
- Provide evidence that the development will cause no deterioration of Water Body status of the associated Water Body/Waterbodies in the Upper Lee Catchment, nor prevent future improvement to these waterbodies.
- Detail both alone and in combination impacts which could lead to cumulative deterioration of these waterbodies.
- Provision of a detailed mitigation and enhancement strategy which specifically contributes toward the objectives of the Thames River Basin Management Plan.
- Provide details of long-term objectives, management responsibilities and maintenance schedules.

Reason

To ensure compliance with the Thames River Basin Management Plan and the protection of wildlife and supporting habitat and to secure opportunities for enhancing the site's nature conservation value. The WFD Regulations require that all waterbodies are protected from deterioration and pollution. This approach is supported by paragraphs 174 and 179 of the National Planning Policy Framework, Policies WAT3 'Water Quality and Water Environment', NE3 'Species and Habitats' and NE4 'Green

Infrastructure' of the East Herts District Plan (2018), and the Thames River Basin Management Plan.

Condition 6: land contamination investigation & remediation
Prior to each phase of development approved by this planning permission no development shall commence until a remediation strategy to deal with the risks associated with contamination of the site in respect of the development hereby permitted, has been submitted to, and approved in writing by, the local planning authority. This strategy will include the following components:

1. A site investigation scheme, based on the preliminary risk assessment/desk studies to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off-site.
2. The results of the site investigation and the detailed risk assessment referred to in (1) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
3. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (2) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Any changes to these components require the written consent of the local planning authority. The scheme shall be implemented as approved.

Reason
To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of water pollution in line with paragraphs 174 of the National Planning Policy Framework Policy, Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and the Thames River Basin Management Plan.

Condition 7: land contamination verification report
Prior to each phase of development being occupied/brought into use, a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to, and approved in writing, by the local planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Reason
To ensure that the site does not pose any further risk to human health or the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with paragraphs 174 of the National Planning Policy Framework Policy, Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and the Thames River Basin Management Plan.

Condition 8: contamination monitoring and maintenance plan
The development hereby permitted shall not commence until a monitoring and maintenance plan in respect of contamination, including a timetable of monitoring and submission of reports to the local planning authority, has been submitted to, and approved in writing by, the local planning authority. Reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to, and approved in writing by, the local planning authority.

Reason
To ensure that the site does not pose any further risk to human health or the water environment by managing any ongoing contamination issues and completing all necessary long-term remediation measures. This is in line with paragraphs 174 of the National Planning Policy Framework Policy, Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and the Thames River Basin Management Plan.

Condition 9: unsuspected contamination
If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to, and approved in writing by, the local planning authority. The remediation strategy shall be implemented as approved.

Reason
To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of water pollution from previously unidentified contamination sources at the development site. No site investigation can fully characterise a site. This is in line with paragraphs 174 of the National Planning Policy Framework Policy, Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and the Thames River Basin Management Plan.

Condition 10: infiltration drainage
No drainage systems for the infiltration of surface water to the ground are permitted other than with the written consent of the local planning authority. Any proposals for such systems must be supported by an assessment of the risks to controlled waters. The development shall be carried out in accordance with the approved details.

Reason
This condition relates to areas where contamination is present and may be mobilised due to the infiltration of surface water or where contaminated surface water may result in an input of contaminants to groundwater.

To ensure that the development does not contribute to, and is not put at unacceptable risk from or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants. This is in line with paragraphs 174 of the National Planning

Policy Framework Policy, Policy WAT3 ‘Water Quality and Water Environment’ of the East Herts District Plan (2018) and the Thames River Basin Management Plan.

Advice to applicant on condition 10
Where SuDS are proposed; infiltration SuDS should not be located in unsuitable and unstable ground conditions such as land affected by contamination or solution features. Where infiltration SuDS are to be used for surface run-off from roads, car parking and public or amenity areas, they should have a suitable series of treatment steps to prevent the pollution of groundwater. For the immediate drainage catchment areas used for handling and storage of chemicals and fuel, handling and storage of waste and lorry, bus and coach parking or turning areas, infiltration SuDS are not permitted without an environmental permit. Further advice is available in the updated CIRIA SuDS manual http://www.ciria.org/Resources/Free_publications/SuDS_manual_C753.aspx

Condition 11: piling/deep foundations
Piling, deep foundations or other intrusive groundworks (investigation boreholes/tunnel shafts/ground source heating and cooling systems) using penetrative methods shall not be carried out other than with the written consent of the local planning authority. The development shall be carried out in accordance with the approved details.

Reason
To ensure that the proposed Piling, deep foundations or other intrusive groundworks (investigation boreholes/tunnel shafts/ground source heating and cooling systems) using does not harm groundwater resources in line with paragraphs 174 of the National Planning Policy Framework Policy, Policy WAT3 ‘Water Quality and Water Environment’ of the East Herts District Plan (2018) and the Thames River Basin Management Plan.

Advice to applicant on condition 11
With respect to any proposals for piling through made ground, we would refer the applicant to the EA guidance document "Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention” (NGWCL Centre Project NC/99/73). We suggest that approval of piling methodology is further discussed with the EA when the guidance has been utilised to design appropriate piling regimes at the site. We will not permit piling activities on parts of a site where an unacceptable risk is posed to controlled waters.

Condition 12: scheme for managing borehole investigation
A scheme for managing any borehole installed for the investigation of soils, groundwater or geotechnical purposes shall be submitted to and approved in writing by the local planning authority. The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes that need to be retained, post-development, for monitoring purposes will be secured, protected and inspected. The scheme as approved shall be implemented prior to the occupation of each phase of development.

Reason
To ensure that a sufficient monitoring network is maintained to allow for the completion any monitoring required to demonstrate as part of any verification plan, to demonstrate “betterment” or that no deterioration has occurred. No boreholes should be decommission until it has been agreed in writing that they are no longer required.

To ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in line with paragraphs 174 of the National Planning Policy Framework Policy, Policy WAT3 ‘Water Quality and Water Environment’ of the East Herts District Plan (2018) and the Thames River Basin Management Plan.

Advice to Applicant

Good Practice Procedures for Land Contamination
We recommend that developers should:

- Follow the risk management framework provided in Land contamination: risk management, when dealing with land affected by contamination.
- Refer to our Guiding principles for land contamination for the type of information that we require in order to assess risks to controlled waters from the site - the local authority can advise on risk to other receptors, such as human health.
- Consider using the National Quality Mark Scheme for Land Contamination Management which involves the use of competent persons to ensure that land contamination risks are appropriately managed.

Refer to the contaminated land pages on gov.uk for more information.

Appendix 2 - Informative

Flood Risk Activity Permit

The Environmental Permitting (England and Wales) Regulations 2016 require a permit to be obtained for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culvert (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- in a floodplain more than 8 metres from the riverbank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission.

For further guidance please visit https://www.gov.uk/guidance/flood-risk-activities-environmental-permits or contact our National Customer Contact Centre on 03702 422 549. The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.