Application 3/19/2124/OUT

Appendix A

Screening and Appropriate Assessment under the Habitat Regulations 2017: 2023

1. Introduction

- 1.1 This Habitat Regulations Assessment Screening and Appropriate Assessment (AA) is prepared for the Village 7 application, taking into account the in-combination effects of the Villages 1-6 Outline Application and the Central and Eastern Stort Crossing approved schemes. It therefore incorporates all previous updates presented in February 2023 as part of the Village 1-6 committee report.
- 1.2 Please note that the two Crossings applications were approved by East Herts and Harlow Councils in March 2022 and the Villages 1-6 outline application received resolution to grant permission subject to the completion of a S.106 Agreement on 28th February 2023.
- 1.3 This report comprises East Herts Council's analysis, findings and conclusions in relation to the Council's duties, as the local planning authority and competent authority in relation to the Directive 92/43/EEC of 12 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive'), and the European Parliament and Council Directive 2009/147/EC on the conservation of wild birds (the 'Birds Directive'), as transposed into UK law through the Conservation of Habitats and Species Regulations 2017 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019) (the 'Habitats Regulations'). Therefore, the Habitats Regulations for England and Wales have become part of retained EU law with limited amendments which reflect that the UK has left the EU and ensure that they remain legally operative.
- 1.4 The Council, as Local Planning Authority is a competent authority in relation to the Directive 92/43/EEC of 12 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive'), and the European Parliament and Council Directive 2009/147/EC on the conservation of wild birds (the 'Birds Directive'), as transposed into UK law through the Conservation of Habitats and Species Regulations 2017 (as amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019) (the 'Habitats Regulations'). As such, the Council has undertaken a Habitats Regulations Assessment of the planning applications submitted by the Applicant Taylor Wimpey. It is noted that for HRA purposes:

- East Herts Council is the competent authority for the outline applications for Village
 7 (referred to as "the Council throughout the HRA which is annexed to the Officer Reports at Appendix A); and
- b. Natural England is the statutory nature conservation body (SNCB) under the Habitats Regulations.
- 1.5 This report constitutes the Council's Screening and Appropriate Assessment (AA) pursuant to the Habitats Regulations and has been prepared in relation to the following application.
 - 3/19/2124/OUT Village 7 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).
- 1.6 For the purposes of screening and identifying individual and in-combination likely effects on National Network (or European) Sites the report also considers the following applications:
 - 3/19/1045/OUT (East Herts Council Reference) Outline planning application for 8,500 homes and community infrastructure as part of the Gilston Area strategic allocation (resolution to grant 28th February 2023).
 - 3/19/1046/FUL (East Herts Council Reference) / HW/CRB/19/00220 (Harlow Council Reference) – Application for the widening of the existing Fifth Avenue crossing including works to the Eastwick Lodge junction, the provision of a new northbound carriageway and a dedicated pedestrian and cycle bridge. Also known as the "Central Stort Crossing". – Application approved March 2022
 - 3/19/1051/FUL (East Herts Council Reference) / HW/CRB/19/00221 (Harlow Council Reference) Application for a new road and bridge structures between the Eastwick Lodge junction and River Way in Harlow, providing new junctions into Village 1/ Terlings Park, Pye Corner and Village 2. Also known as "the Eastern Stort Crossing" ("the Villages 1-6 Applications"). Application approved March 2022
- 1.7 Planning permission for the proposed development should only be granted if, the Competent Authority considers that it meets the requirements set out by the Habitats

Regulations. The National Network comprises Special Protection Areas (SPAs), Special Areas of Conservation (SACs) designated under the EU Birds and Habitats Directives respectively) and, as a matter of Government policy, Wetlands of International Importance (or Ramsar sites).

- 1.8 The Applicant (Taylor Wimpey formerly Briggens Estate) prepared and submitted to the Council in October 2019 an Environmental Statement which included Information for Habitats Regulations Assessment ("2019 IHRA"). In August 2021 the Applicant submitted an ES Addendum which contained Appendix 4: Transport and Access Technical Note and Transport Assessment Addendum and Appendix 5: Air Quality Technical Note. The purpose of these two particular appendices was to consider the traffic and transport related impacts arising from a scenario in which Village 7 came forward as a stand-alone proposal absent of Villages 1-6, i.e. without the linked sustainable transport benefits, in addition to a cumulative assessment. Addendum are referred to in this AA as "2021 IHRA". This Habitats Information (the 2019 IHRA and 2021 IHRA) comprised an assessment of the Development alone and incombination with other plans and projects, including the adjacent Outline Application For completeness, the Council has also considered the Information for Villages 1-6). for Habitats Regulations Assessment (Appendix 14.4 as amended of the Environmental Statement) for Villages 1-6 (application 3/19/1045/OUT) ("the Villages 1-6 Habitats Information").
- 1.9 The Council consider the Habitats Information to be sufficient and has used both Environmental Statements, together with consultation response/s from Natural England, to inform its own independent screening and appropriate assessment, known as the Habitat Regulations Assessment ("HRA")) pursuant to Regulation 63 of the Habitats Regulations 2017 (as amended). Engagement has been carried out with and inputs have been made to this HRA from chartered ecologists at Hertfordshire Ecology (as advisors to East Herts Council), Barton Willmore (as advisors to East Herts Council), chartered ecologists at EPR Consulting (as advisors to both Applicants) and Weightmans LLP (as legal advisors to the Council). Furthermore, Natural England has been consulted during the preparation of this HRA.
- 1.10 Whilst there is no prescribed methodology, the HRA processes involves an assessment process of up to four stages depending on the outcomes of each before a competent authority can determine that planning permission or any other consent may be granted for development where, following appropriate assessment, no adverse effects on the integrity of the protected National Network sites are found. Those four stages each being a distinct stage involve:
 - a. *Stage 1: Screening* identification of likely significant effects of plans or projects, alone or in combination with others, on National Network Sites with key designations (i.e. Special Protection Areas, Special Areas of Conservation and Sites of Community Importance). At this stage, drawing on case law (People Over Wind), no mitigation measures can be factored in;

- b. *Stage 2: Appropriate Assessment* consideration of the impacts on the integrity of National Network Sites, either alone or in combination with other plans and projects, including, consideration of mitigation options;
- c. Stage 3: Alternative Solutions where adverse effects on the integrity of a site cannot be ruled out, an assessment of alternative ways of achieving the objectives of the project to establish whether there are solutions that would avoid, or have a lesser effect on National Network Sites;
- d. Stage 4: Imperative reasons of overriding public interest (IROPI) and compensation If the authority assesses that no alternative solution exists, and adverse impacts remain, imperative reasons of overriding public interest must be proven. If achieved, compensation must also be shown to be deliverable.
- 1.11 It is important to recognise that although sequential, stage 3 is only engaged where any adverse effects on the integrity of a site cannot be ruled out (with no reasonable scientific doubt) and stage 4 is very much a last resort and must satisfy strict tests. The HRA process required and undertaken is described in further detail in section 5.5 in this report. The National Network Sites which are the subject of the HRA are: -
 - Lee Valley Special Protection Area (SPA) and Ramsar
 - Wormley-Hoddesdonpark Woods Special Area of Conservation (SAC)
 - Epping Forest SAC

2. Executive Summary

- 2.1 This Screening and Appropriate Assessment (AA) applies to the Village 7 planning application ("the Development") in combination with the Villages 1-6 planning applications (including two Crossings applications) for the purpose of robustly understanding and screening likely significant effects of the Development alone or incombination with other applications in the Gilston Area. The resultant HRA therefore considers the potential adverse effects arising from the Development alone and the combined delivery of these four schemes, i.e. the development of the Gilston Area as a whole on the integrity of National Network Sites of nature conservation importance as defined by the Habitats Regulations, 2017 (as amended).
- 2.2 These Applications were made pursuant to Policies GA1 and GA2 of the East Herts District Plan which designates land at the Gilston Area for the development of 10,000 homes and supporting infrastructure. The two full applications for transport infrastructure schemes (the Central and Eastern Stort Crossings) are also identified in the Harlow Local Development Plan as essential transport infrastructure. The Village 7 application was, in combination with the Villages 1-6 applications also factored into the Habitat Regulations Assessments carried out in relation to each local plan for both East Herts Council and Harlow District Council which were subject to a full Examination in Public before adoption.

- 2.3 Natural England as Statutory National Competent Body has been engaged through the multiple planning application stages. Natural England, as well as the Habitats Information supplied by the Applicant, identified three potential sources of impact which the Council considers properly reflect the relevant sources, pathways and receptors:
 - recreational pressure arising from increased visitation of publicly accessible sites;
 - air quality changes arising from traffic generated by the proposed development; and
 - changes in water quality or quantity.
- 2.4 This HRA has been undertaken for the Village 7 Development taking account of the other Gilston Area Developments. At the Screening stage, the HRA does not consider or rely on any mitigation measures proposed as part of any one of the Applications or in combination.
- 2.5 Likely significant effects arising from recreational pressure on the Lee Valley SPA/Ramsar and Epping Forest SAC National Network Sites were screened out due to the existing active management of the Sites which already restricts and controls recreational access, and were not therefore considered further as part of the second stage, the Appropriate Assessment. However, following a precautionary approach, likely significant effects could not be ruled out from recreational pressure on Wormley-Hoddesdonpark Woods SAC as there is currently no active recreation management strategy in place and was therefore considered further in the Appropriate Assessment.
- 2.6 Likely significant effects could not be ruled out at the screening stage due to the anticipated impact of air pollution on the Lee Valley SPA/Ramsar. Consequently, an Appropriate Assessment was undertaken to assess the impact from the number of vehicle movements in the vicinity of the Rye Meads SSSI component of the Lee Valley SPA/Ramsar Site arising from the Development alone and in combination with the Villages 1-6 Development once operational.
- 2.7 In terms of water quality and quantity, the HRA screened out the potential for likely significant effects on the Wormley-Hoddesdonpark Woods SAC and Epping Forest SAC. However, potential water quality effects on the Lee Valley SPA/Ramsar are considered further through the Appropriate Assessment because potential impacts on water quality on the Rye Meads SSSI component of the Lee Valley SPA/Ramsar could not be ruled out without the need for mitigation associated with the Village 7 Development when considered in combination with the Villages 1-6 Development.
- 2.8 Potential Air Quality effects on the Epping Forest SAC are considered further through the Appropriate Assessment due to the number of vehicle movements in the vicinity of the Epping Forest SAC from the Development in-combination with other plans and projects.

- 2.9 Following the appropriate assessment the Council was able to ascertain that the Development, alone, and in combination with the Villages 1-6 proposal, and in combination with other plans and projects, would avoid adverse effects on the integrity of the National Network sites in the zone of influence of the Development as a result of recreational demand, air quality effects and water quality and quantity effects.
- 2.10 When considered independently, the two Crossings applications would not result in additional vehicle movements which would increase air quality impacts upon the Lee Valley SPA/Ramsar Site, Wormley-Hoddesdonpark Woods SAC, and Epping Forest SAC. However, the two Crossings Applications combined will change the distribution of vehicle movements associated with the Village 7 and Village 1-6 application, providing options for trips to be taken on routes not in the vicinity of the National Network Sites. By considering the four Applications together as the Gilston Area Development a 'worst-case' HRA assessment has been undertaken on a precautionary basis.
- 2.11 The Appropriate Assessment takes into account the proposed mitigation and conditions associated with construction management processes, timing and phasing of delivery which will be applied to each of the Applications in the Development.
- 2.12 The Local Planning Authorities consider that with mitigation secured through planning conditions (as set out in Appendix B), the Village 7 Application alone and in combination with the Villages 1-6 Application comprising the Gilston Area Development as a whole will not have an adverse effect on the integrity of the Lee Valley SPA/Ramsar Site, Wormley-Hoddesdonpark Woods SAC, or Epping Forest SAC, either alone or in combination with other plans and projects, and that the proposed Development can therefore be consented in compliance with the Habitats Regulations and applicable guidance and case law.

3. Regulatory Requirements & Case Law

- 3.1 The Habitats Regulations 2017 (as amended) transposed the land and marine aspects of the Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC) (known as the Habitats Directives) into domestic law. They have been updated by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
- 3.2 Regulation 63 of the Habitats Regulations 2017 imposes a requirement upon a competent authority (including local planning authorities) to carry out a Habitats Regulations Assessment to protect National Network sites ("HRA") as follows:
 - "(1) A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which—

- (a) is likely to have a significant effect on a site or a European offshore marine site (either alone or in combination with other plans or projects), and
- (b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives.
- (2) A person applying for any such consent, permission or other authorisation must provide such information as the competent authority may reasonably require for the purposes of the assessment or to enable it to determine whether an appropriate assessment is required".

Regulation 63 (5) provides that:

"in the light of the conclusions of the assessment, and subject to regulation 64, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site."

Regulation 63 (6) states that:

"in considering whether a plan or project will adversely affect the integrity of the site, the competent authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given."

Relevant Case Law

- 3.3 The European Court of Justice in *Case C-127/02 of the European Court of Justice* (ECJ) ("the Wadenzee Case") clarified significant points as to the interpretation of the Habitats Directive, in particular as to the approach to 'likely significant effects' and that an appropriate assessment is necessary: -
 - "...if it cannot be excluded, <u>on the basis of objective information</u>, that it will have a significant effect on that site, either alone or in combination with other plans and projects..." (Paragraph 44) and
 - "...where such a plan or project <u>has an effect on that site but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned..."</u> (paragraph 47)
- 3.4 The ECJ in Waddenzee also confirmed that a plan or project can only be authorised where it will not have an adverse effect on the integrity of a European Site and "...that is the case where no reasonable scientific doubt remains as to the absence of such effects" (paragraph 59).

- In the case of *Ireland v An Bord Pleanala* [2013] EUECJ (Case C-258/11) ("Sweetman case"), the ECJ considered the meaning of "adversely affect the integrity" of an SAC or SCI under Article 6(3) of the Habitats Directive (now transposed in Regulation 63). The case related to a road scheme that would permanently destroy 1.47 hectares of a 270 hectare SCI in Ireland that was protected as a priority habitat for its limestone pavement. The ECJ noted that the *precautionary approach* to assessment of impacts "applies all the more" where the affected habitat is a priority habitat type and if a project will lead to the lasting and irreparable loss of the whole or part of a priority natural habitat type (whose conservation was the objective that justified the designation of the site), the competent authority must conclude that such a plan or project will adversely affect the integrity of that site. It must therefore prevent the development.
- The April 2018 judgment in the Court of Justice of the European Union in People Over Wind & Peter Sweetman v Coillte Teoranta, (Case C-323/17) EU:C:2018:244 ('People over Wind') decided that when making screening decisions for the purposes of deciding whether an appropriate assessment is required of the impacts of a proposed plan or project on a protected site, competent authorities should not take into account any mitigation measures.
- In 2019, the government amended the National Planning Policy Framework guidance to clarify the impact of the People Over Wind judgement on the HRA process and regulations were introduced from 28 December 2018 to clarify certain "planning tools" (i.e in the Habitats (Amendment) Regulations 2018). Thus, the NPPF presumption in favour of sustainable development does not apply if the plan or project is likely to have a significant effect on a European, now National Network Site (either alone or in combination with other plans or projects), unless an appropriate assessment concludes that there will be no adverse effect from the plan or project on the integrity of a European / National Network site.
- 3.8 As a result, a competent authority must not take account of mitigation measures at Screening Stage 1 and may only take account of such mitigation measures intended to avoid or reduce the harmful effects of a plan or project as part of an appropriate assessment itself.

2019 Regulations

3.9 Post Brexit, the 2019 Regulations involved the transfer of functions from the European Commission to the appropriate authorities in England and Wales to ensure that the Habitats Regulations 2017 could continue to operate effectively. All other processes, including the HRA process prescribed by Regulation 63, under the Habitats Regulations 2017 remain the same and existing guidance applies. The 2019 Regulations established a 'national site network' on land and at sea, including both the inshore and offshore marine areas in the UK. Effectively, the 'national site network' now applicable in the UK includes:

- a. existing SACs and SPAs which were already designated under the Habitats Directives (and previously referred to as Natura or European Sites), and
- b. any new SACs and SPAs designated under the UK Habitats Regulations.
- 3.10 The 'network objectives' established for the national site network are to: -
 - maintain or, where appropriate, restore habitats and species listed in Annexes I and
 II of the Habitats Directive to a favourable conservation status (FCS); and
 - contribute to ensuring, in their area of distribution, the survival and reproduction
 of wild birds and securing compliance with the overarching aims of the Wild Birds
 Directive.
- 3.11 A HRA refers to the several distinct and sequential stages of Assessment which to be undertaken in accordance with the Habitats Regulations 2017 (as amended) to determine if a plan or project may affect the protected features of a habitats site before deciding whether to undertake, permit or authorise it. European Sites identified under these regulations are referred to as 'habitats sites' in the National Planning Policy Framework.
- 3.12 All plans and projects (including planning applications) which are not directly connected with, or necessary for, the conservation management of a habitat site, require consideration of whether the plan or project is likely to have significant effects on a European site (now 'a National Network site'). This consideration typically referred to as the 'Habitats Regulations Assessment' should take into account the likely significant effects both of the plan or project by itself and in combination with other plans or projects. Where the potential for likely significant effects cannot be excluded at Screening (Stage 1), a competent authority must make an Appropriate Assessment of the implications of the plan or project for that site, in view the site's structure, function and conservation objectives (Stage 2). Where there are adverse impacts identified at Stage 2, the competent authority must assess mitigation options to determine the adverse effect on the integrity of a National Network site.
- 3.13 If mitigation options cannot avoid adverse effects, then development consent can only be given if Stages 3 and / or 4 are followed. The competent authority may grant permission or consent to the plan or project only after having ruled out adverse effects on the integrity of the habitats site following application of appropriate mitigation if necessary at the Appropriate Assessment stage. Where an adverse effect on the site's integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured.

4. Objectives and Process of a Habitats Regulations Assessment

4.1 The process of HRA involves an initial 'Screening' stage, which requires an Appropriate Assessment (AA), if a plan or project is likely to have significant effects on a National

Network Site (either individually or in combination with other plans or projects) which cannot be ruled out without having regard to mitigation measures. The Habitat Regulations do not set out a specific methodology; rather they place obligations on the competent authority (i.e. a local planning authority) which are fulfilled by a four stage HRA process involving:

- a. Stage 1: Screening to identify the likely impacts of a project on a relevant protected National Network Site, either alone or in combination with other plans and projects. Case law has determined that at this stage mitigation measures should not be considered in determining whether it is necessary to carry out an appropriate assessment of the impact of a proposed plan or project on a protected site. Planning Practice Guidance expects assessments to be undertaken using a precautionary approach, i.e. taking into account the worst case scenario. This Report has followed this guidance.
- b. Stage 2: Appropriate Assessment The competent authority considers the impacts on the integrity of a protected site, either alone or in combination with other plans and projects, with regard to the site's structure, function and its conservation objectives. Where there are adverse impacts, an assessment of mitigation options is undertaken to determine the adverse effect on the integrity of the site. If at this stage adverse effects cannot be avoided or mitigated, then the third stage follows.
- c. Stage 3: Assessment of alternative solutions the competent authority is required to assess alternative ways of achieving the objectives of the project to establish whether there are solutions that would avoid, or have a lesser effect on a protected National Network site.
- d. Stage 4: Imperative reasons of overriding public interest (IROPI) If the competent authority assesses that no alternative solution exists and adverse impacts remain an IROPI assessment must be undertaken. This stage assesses whether the development is necessary by reason of IROPI. If yes, the potential compensatory measures necessary to maintain the overall coherence of the site or integrity of the site network.

5. Stage 1: Screening

5.1 Screening and the Precautionary Approach

5.1.1 As detailed above the screening stage of the HRA is designed to consider whether the plan or project is likely to have a significant effect on the integrity of National Network Sites either alone or in combination with other plans and projects without taking into account mitigation. Screening is the process that addresses and records the reasoning and conclusions in relation to Regulation 63 (1) of the Conservation of Habitats Regulations 2017, which requires that before deciding to give permission for a plan or project which:

- "(a) is likely to have a significant effect on a European Site or a European offshore marine site (either alone or in combination with other plans or projects, and
- (b) is not directly connected with or necessary to the management of that site'

[the competent authority] must make an appropriate assessment of the implications of the plan or project in view of that site's conservation objectives."

- 5.1.2 If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (Appropriate Assessment) on a precautionary basis. In undertaking an assessment of 'likely significant effects' under the Habitats Regulations, authoritative case law has established that:
 - An effect is <u>likely</u> if it 'cannot be excluded on the basis of objective information'¹
 - An effect is significant if it 'is likely to undermine the conservation objectives'²
 - In undertaking a screening assessment for likely significant effects 'it is not that significant effects are probable, a risk is sufficient'...but there must be credible evidence that there is 'a real, rather than a hypothetical risk³.
- 5.1.3 The Advocate General's opinion in <u>Sweetman</u> also offers some simple guidance that the screening step 'operates merely as a trigger' which asks 'should we bother to check?".
- 5.1.4 More guidance on the approach to screening and appropriate assessments is contained in the recently published Joint Nature Conservation Committee (JNCC) Report 696: Guidance on Decision-making Thresholds for Air Pollution⁵, December 2021. This guidance provides a summary of relevant case law and precedents that now frame how assessments are carried out. As such the guidance is not just relevant to air pollution considerations but informs a decision-maker on how to take account of individual and combined effects on National Network Sites.
- 5.1.5 In terms of the precautionary approach, the guidance explains the following:

"Decision-making is informed by best available scientific information. In some cases, the available science provides a decision maker with clear and precise information capable of removing any doubt as to the consequences of a proposed activity. In other areas the available science is subject to limitations meaning that decision makers must use their

¹ Case C127-02 Waddenzee (refer para 45)

² Case C127-02 Waddenzee (refer para 48)

³ Boggis v Natural England and Waveney DC [2009] EWCA Civ 1061 (refer paras 36-37)

⁴ Case C 258/11 Sweetman Advocate General Opinion (refer paras 49-50)

⁵ https://data.jncc.gov.uk/data/6cce4f2e-e481-4ec2-b369-2b4026c88447/JNCC-Report-696-Main-FINAL-WEB.pdf Joint Nature Conservation Committee (JNCC) Report 696: Guidance on Decision-making Thresholds for Air Pollution

professional judgement and consider the available evidence in light of the decision-making framework, and specific legal tests, which apply.

Decisions are therefore constrained by the evidence which is available at the time a decision is taken. The extent to which uncertainty in the evidence base influences decision-making will depend upon the underpinning legislative framework. The most precautionary approach to decision-making for designated sites is required under the Habitats Regulations where it is established case law that:

- In screening for likely significant effects, an effect is 'likely' if it cannot be excluded on the basis of objective information. An effect is 'significant' if it undermines the conservation objectives.
- In applying the integrity test (after an appropriate assessment), decision makers must be satisfied that no reasonable scientific doubt remains as to the absence of adverse effects to site integrity."

5.1.6 Furthermore, the guidance states:

"whilst a precautionary approach may be required to an assessment of air pollution effects, no legislative framework requires the exclusion of all doubt. The Habitats Regulations requires the exclusion of reasonable scientific doubt. Doubt which is unscientific or unreasonable need not constrain decision-making. The Courts have also recognised that there is no such thing as absolute certainty. Instead, decision makers need to identify reasonably foreseeable risks, on the basis of information that can reasonably be obtained and put in place a legally enforceable framework with a view to preventing those risks from materialising. Furthermore, the Courts have also established that, whilst a risk is sufficient to constrain development under the Habitats Regulations, there must be credible evidence that there is a real, rather than a purely hypothetical, risk which must be considered."

5.2 The Development Screened

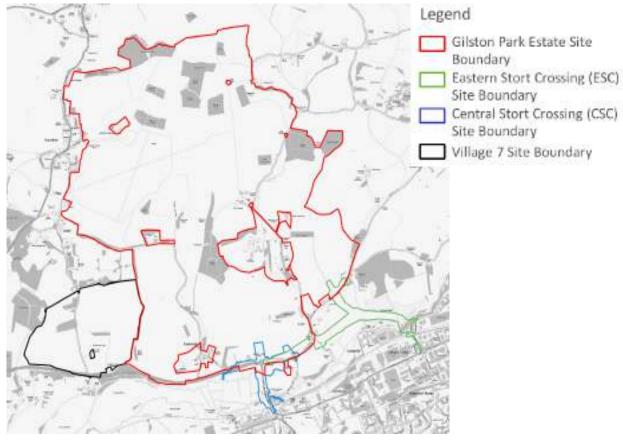
- 5.2.1 The Development subject to this screening comprises the Application submitted by Taylor Wimpey ("the Applicants"). In carrying out this screening regard was had to the information supplied by the Applicant and the consultation response/s from Natural England. By considering this application in combination with all three Applications comprising the Villages 1-6 Development a robust comprehensive Screening and HRA can be undertaken of the effects of each of the Application individually and 'incombination' for the Gilston Area development as a whole. The Development comprises the following:
 - 3/19/2124/OUT Village 7 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).

- 5.2.2 The 'in combination' applications also considered comprise the separate applications for 8,500 homes through an Outline Application known as Villages 1-6 and two road and bridge infrastructure applications known as the Central Stort Crossing (CSC) and Eastern Stort Crossing (ESC) with the following descriptions of development: -
 - 3/19/1045/OUT Outline planning with all matters reserved apart from external vehicular access for the redevelopment of the site through the demolition of existing buildings and erection of a residential led mixed use development comprising up to 8,500 residential homes including market and affordable homes; retirement homes and extra care facilities; a range of community uses including primary and secondary schools, health centres and nursery facilities; retail and related uses; leisure facilities; business and commercial uses; open space and public realm; sustainable urban drainage systems; utility and energy facilities and infrastructure; waste management facilities; vehicular bridge links; creation of new vehicular and pedestrian accesses into the site, and creation of a new vehicular, pedestrian and cycle network within the site; improvements to the existing highway and local road network; undergrounding and diversion of power lines; lighting; engineering works, infrastructure and associated facilities; together with temporary works or structures required by the development.
 - 3/19/1046/FUL Alterations to the existing Fifth Avenue road/rail bridge, and creation
 of new bridges to support the widened highway to west of the existing structure to create
 the Central Stort Crossing, including embankment works, pedestrian and cycle facilities,
 a pedestrian and cycle bridge over Eastwick Road, lighting and landscaping works and
 other associated works.
 - 3/19/1051/FUL Erection of a new road, pedestrian and cycle bridge; replacement of an existing rail bridge at River Way; alterations to the existing local highway network; lighting and landscaping works; listed building works to Fiddlers Brook Bridge; and other associated works.
 - 3/19/1049/LBC Repair works and replacement white post and 3-rail balustrade to bridge.

- 5.2.3 The Village 7 Development site comprises an area of land of 117.4ha, of which 66ha is proposed as developable area for the development of a village of 1,500 homes.
- 5.2.4 The Villages 1-6 Development site as a whole covers approximately 993Ha, of which 407.5Ha is proposed as developable area for the creation of six new villages. The Central Stort Crossing and Eastern Stort Crossing proposals comprise a further 19Ha and 26.9Ha respectively.
- 5.2.5 The Village 7 Development represents 15% of the total Gilston Area allocation of 10,000 homes. The remaining 8,500 homes comprised in the Gilston Area allocation are the subject of a separate outline planning application known as "Villages 1-6" (promoted by the developer Places for People) which received resolution to grant permission subject to a S.106 Agreement on 28th February 2023 by East Herts Council. The Villages 1-6 Environmental Statement and Information for Habitats Regulations Assessment has been taken into account in this assessment and the 'in-combination' likely significant effects of Villages 1-6 have been assessed together with the Development. The Gilston Area allocation is the largest single allocation in the East Herts District Plan, with development planned to extend beyond the Plan period of 2033. Approximately 3,000 homes are anticipated to be delivered by 2033 with the remaining 7,000 being delivered Figure 1 below illustrates the application areas of each of the applications as well as the site area for Village 7. Figure 2 illustrates the Village Developable Area as proposed in the Village 7 development alongside the Villages 1-6 Outline Application.

Figure 1: Site Area for Village Development Applications plus Central Stort Crossing and Eastern Stort Crossing



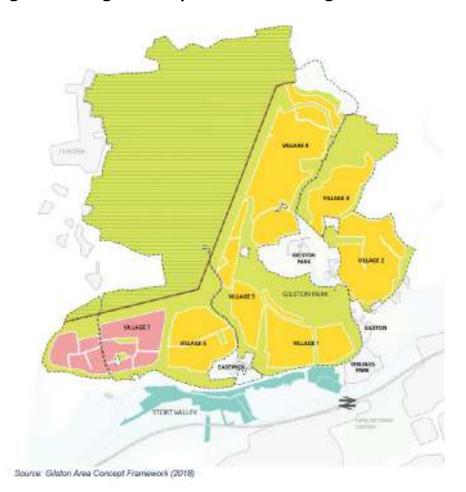


Figure 2: Village Developable Areas - Village 1-6 Element of the Development

5.3 Wider Context

- 5.3.1 The Gilston Area is also part of the wider Harlow and Gilston Garden Town (HGGT), which was designated in 2017. The HGGT involves partnership working between a number of local authorities including East Herts, Epping Forest and Harlow District Councils (being local planning authorities for land comprised in the Garden Town) and Essex and Hertfordshire County Councils (being the highways and education authorities) to deliver transformational growth in and around Harlow according to Garden City principles, to ensure that growth plans for the Garden Town support sustainable living and a healthy economy, provide a good quality of life for existing and future residents and to respond to local landscape and character.
- 5.3.2 The HGGT comprises new and existing communities in and around Harlow as defined in the East Herts District Plan, Harlow Local Development Plan and Epping Forest Local Plan. These allocated strategic sites which form part of the HGGT are planned on Garden City principles and comprise 23,500 to 24,500 new homes: 10,000 in the Gilston Area; East Harlow (3,350 homes in Harlow and Epping Forest Districts); Latton Priory (1,050 homes south of Harlow in Epping Forest District); and the Water Lane Area (2,100 homes west of Harlow in Epping Forest District). A further 7,000-8,000 homes are to be

delivered within Harlow during the plan period to 2033. These sites are currently at pre-application stage with the respective Local Planning Authorities. Figure 3 below indicates the locations of each of these strategic sites ("the Strategic Sites").

5.3.3 Because the Development comprises part of the wider HGGT area, the local plans of each local authority has been taken into account during this HRA. In doing so, the HRAs undertaken to support the three local plans of East Herts, Harlow and Epping Forest Districts have also been taken into account, thereby capturing the 'in-combination effects of the wider growth planned in the vicinity of the Development site and its Zone of Influence. The Applicant's IHRA 2019 includes a list of each known development site taken into account as part of the cumulative considerations in the Environmental Statement, and Appendix D to this report lists the plans and projects taken into account as part of the in-combination assessment for this HRA.

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Figure 3: Strategic Development within the HGGT Vision

5.4 Applicant EIA and HRA Information

- 5.4.1 The proposed development is considered an 'EIA development' as it falls within the description and thresholds in Schedule 2 Category 10 (b) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) as an 'urban development project' likely to have significant effects on the environment by virtue of its nature, size or location.
- 5.4.2 An ES was submitted by Briggens Estate prior to selling the site to Taylor Wimpey with the application 3/19/2124/OUT in October 2019 (the "2019 ES"). The 2019 ES included an Information for Habitat Regulations Assessment Report ("2019 IHRA"). England advised that further consideration be given in the 2019 IHRA to air quality and water quality effects specifically on the Lee Valley SPA/Ramsar. Natural England also advised that the 2019 IHRA be revised to consider the effects of the development in the absence of proposed mitigation to ensure compliance with the recent European Court of Justice case C323/17, commonly referred to as 'People over Wind' judgement. The ES Addendum submitted in August 2021 included information relevant to the HRA/AA in Appendix 4: Transport and Access Technical Note and Transport Assessment Addendum and Appendix 5: Air Quality Technical Note. The purpose of these two particular appendices was to consider the traffic and transport related impacts of a scenario in which Village 7 came forward as a stand-alone proposal absent of Villages 1-6 by way of comparison. This therefore allowed an understanding of the scheme absent of the various sustainable transport mitigation measures provided through the larger Villages 1-6 Development. The ES Addendum are referred to in this AA as "2021 IHRA". The ES Addendum was subject to further consultation, including with Natural England.
- 5.4.3 The 2019 IHRA considered in detail the nature of each protected site, the detail of the proposed Development and a cumulative consideration of the Development project in combination with other known plans and projects, including Villages 1-6 and the Strategic Sites and development plans of adjacent districts. Consultation with Natural England was sought from the former applicant in 2018 but no advice was received prior to the submission of the Village 7 application. However, consultation was undertaken through the planning application and copies of the Natural England responses to the 2019 IHRA and subsequent application amendment consultations are contained in Appendix A to this report. The 2019 IHRA for Village 7, subsequent ES Addendum documents, combined with information submitted in respect of the Villages 1-6 applications are considered to provide sufficient information to inform the Appropriate Assessment in respect of the Development alone and in combination with other plans or projects.

5.5 Stage 1: Screening – Zone of Influence

5.5.1 In carrying out an assessment of the potential effects of a development proposal on an International Site, the 'source-pathway-receptor' concept provides a useful model for

framing and objectively evaluating the mechanisms through which potential effects may occur. Table 1 below sets out the various parts of the model and how they relate to each other.

Table 1: Conceptual Impact Assessment Model

Source	Pathway	Receptor
Elements of the	Changes in environmental	The interest features/
development proposals	conditions caused by	conservation objectives of
that are likely to generate	aspects of the	the International Site
or contribute towards	development proposals	concerned, and the
certain environmental	that have the potential to	environmental conditions
effects.	affect an identified impact	required to support it.
	receptor.	

- 5.5.2 The Guidelines for Ecological Impact Assessment, 2018 (the "EcIA Guidelines") define a Zone of Influence as:
 - "...the area over which ecological features may be affected by the biophysical changes caused by the proposed project and associated activities".
- 5.5.3 In this case, the ZoI of the proposed Development will encompass different areas, and thus potentially impact upon different ecological receptors, depending upon the spatial extent of the relevant biophysical change. Natural England advised in their advice to the Villages 1-6 applicant in 2013 and 2017 (which are included in annexes to the Villages 1-6 2020 IHRA) that the proposed Development could have the potential, during its operational phase, to cause the following biophysical changes, which could result in ecological effects on National Network sites:
 - recreational pressure arising from increased visitation of publicly accessible sites;
 - air quality changes arising from traffic generated by the proposed development;
 and
 - changes in water quality or quantity.
- 5.5.4 This advice is considered relevant to the Village 7 proposal, and as the same ecological consultant was appointed to represent both applicants, the same advice was used to inform the Village 7 2019 IHRA.
- 5.5.5 The recent JNCC guidance on Decision-Making Thresholds for Air Pollution⁶ advises that only National Network Sites within the zone of influence should be included within the scope of the HRA and that "for the purpose of decision-making, unless local circumstances support a wider zone, plan HRA should take account of the potential effects of traffic emissions on European Sites located within 10km of the plan boundary. This zone is based

⁶ JNCC Report 696: Guidance on Decision-making Thresholds for Air Pollution (JNCC, December, 2021) https://data.jncc.gov.uk/data/6cce4f2e-e481-4ec2-b369-2b4026c88447/JNCC-Report-696-Main-FINAL-WEB.pdf

on professional judgement recognising that the effects of growth from development beyond 10km will have been accounted for in the Nitrogen Futures⁷ modelling work business as usual scenario." It is considered that the 10km distance threshold is appropriate for this HRA given the scale of the Development.

5.5.6 Natural England advised that the three National Network Sites closest to the Development should be considered as being within the ZoI of the Development due to the potential to exert the above changes either alone, or in combination with other plans and projects, namely the development plans of neighbouring authorities. This concurs with the 10km distance threshold advised by the JNCC advice above as illustrated in Figure 4 below which shows 5km and 15km from the Village 7 site and Figure 4a which shows 5km and 10km from the Villages 1-6 site. The National Network Sites which are considered to fall within the ZoI of Village 7 and Villages 1-6 are included in Table 2.

Table 2: European Sites in Zone of Influence Village 7 and Villages 1-6

Site	Linear Distance from the Site Boundary	Linear Distance from the Villages 1-6 Site Boundary	Direction from the Site Boundary
Lee Valley SPA and Ramsar Site	2.5km	3.6km	West
Wormley-Hoddesdonpark Woods SAC	6.4km	7.4km	South-west
Epping Forest SAC	10.8km	10km	South

⁷ https://jncc.gov.uk/our-work/nitrogen-futures/

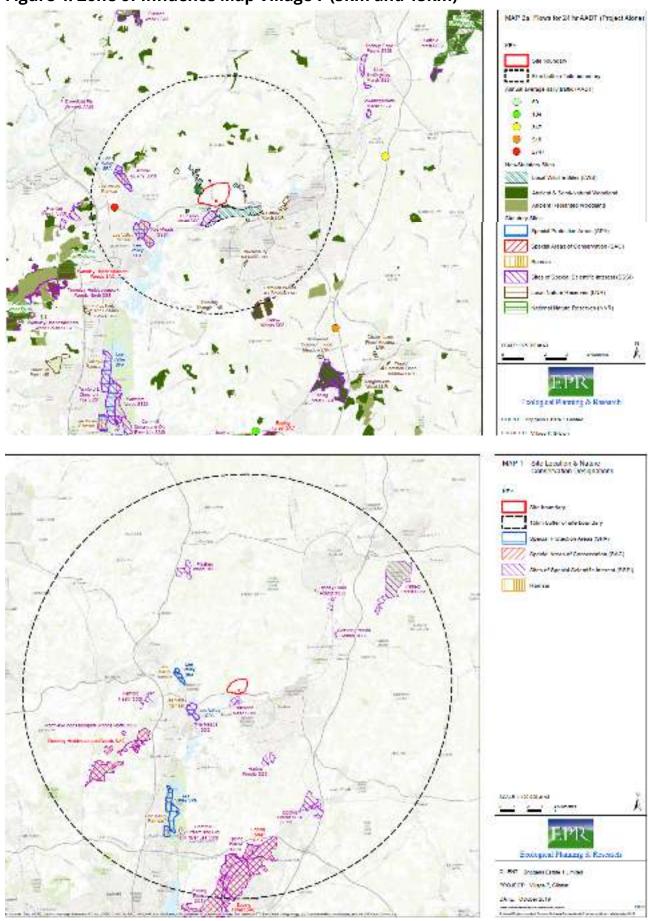


Figure 4: Zone of Influence Map Village 7 (5km and 15km)

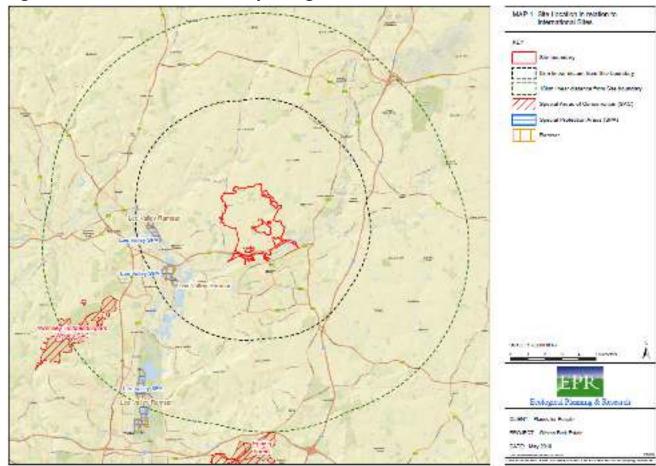


Figure 4a: Zone of Influence Map Villages 1-6 (5km and 10km)

- 5.5.7 Given the distance of the National Network Sites from the Development site (as a whole) and the particular functions of the proposed Development, it is considered that the Development is not directly connected to or necessary for the management of the National Network sites within the Zol. This conclusion is in line with HRA undertaken for the East Herts District Plan 2018.
- 5.5.8 In order to assess whether the proposed development, alone or in combination with other plans and projects, is likely to have significant effects on a National Site Network Site in view of its conservation objectives, each of these sites must be characterised.

5.6 Stage 1: Screening - National Network Site Characterisation

5.6.1 Site characterisation details are informed by the applicant's 2019 IHRA undertaken by consultants Ecological Planning and Research (EPR) and confirmed using the Natural England information database which provides details for each designated site. It is noted that the most up to date information recorded on the Natural England databases have been used to inform this screening. Natural England has been consulted during the preparation of this HRA and has raised no concerns regarding the use of the Natural England data being the best available data. Links to relevant National Network Site data

sources are included throughout the text where necessary and included in the Bibliography.

Lee Valley SPA and Ramsar Site

- 5.6.2 The Lee Valley SPA covers an area of 447.87 ha, comprising a series of embanked water supply reservoirs, sewage treatment lagoons and former gravel pits that display a range of man-made and semi-natural wetland and valley bottom habitats. The Lee Valley SPA is comprised of 4 separate Sites of Special Scientific Interest (SSSIs), Amwell Quarry SSSI, Rye Meads SSSI, Turnford and Cheshunt Pits SSSI and Walthamstow Reservoirs.
- 5.6.3 The SPA/Ramsar stretches over a distance of 16 miles northward along the River Lea to the north of London and is within the North Thames Basin National Character Area. Lee Valley SPA lies roughly parallel and to the east of the A10 between Finsbury Park, London and Ware in Hertfordshire. Walthamstow Reservoirs are situated to the south of the M25 motorway which cuts across the SPA/Ramsar site. The SPA crosses both the East Anglian Plain and London Basin Natural Areas. All of the component SSSIs lie within the Lee Valley Regional Park. Parts of the SPA are managed as nature reserves by the Herts and Middlesex Wildlife Trust (HMWT) and the RSPB.
- 5.6.4 All the habitats within the SPA are man-made. Walthamstow Reservoir, constructed in the latter half of the nineteenth century, comprises of ten relatively small and shallow water storage basins. Several of these are fringed by sloping earth banks and together with the presence of wooded islands form distinctive habitat features. In recent years Thames Water, in partnership with London Borough of Waltham Forest and London Wildlife Trust, have enhanced the Reservoirs for wildlife. In 2017 they were opened to the general public as the Walthamstow Wetlands.
- 5.6.5 Rye Meads SSSI comprises of wet meadows, disused and operational effluent lagoons and Rye House marsh. These three areas provide a variety of different habitats including open water habitats swamp communities, tall fen communities, marshy grassland and scrub. The meadows are the last substantial remnants of ancient floodplain on the rich alluvial soils of the Lee Valley. The site supports one of the largest areas of tall fen vegetation in the county and provides a valuable habitat for birds and locally uncommon plants.
- 5.6.6 Amwell Quarry SSSI is a former gravel pit site in the Lee Valley near Ware, which supports nationally important numbers of wintering wildfowl, along with outstanding assemblages of breeding birds and of dragonflies and damselflies. The site includes two large lakes which were excavated between 1973 and 1990, and a variety of associated wetland, grassland and woodland habitats.
- 5.6.7 The Turnford and Cheshunt Pits SSSI include ten former gravel pits ranging in age from North Metropolitan Pit which is among the oldest pits in the Lee Valley to Hooks Marsh Lake which was not excavated until the 1970s, and cover a span of over 40 years. Because of the profusion of pits and islands, several of the pits have extensive

shorelines; North Metropolitan Pit alone having an estimated shoreline of about 7.2km. Also included in the site are all the associated areas of marsh, grassland, ruderal herbs, scrub and woodland; part of the Small River Lee; and a further water body, Hall Marsh Scrape, which was constructed specifically for use by waterfowl. The pits are of national importance for wintering gadwall and shoveler.

- 5.6.8 The Lee Valley is designated as an SPA and Ramsar site (see Figure 4 for location) due to the presence of overwintering populations of the following Birds Directive Annex I species:
 - Bittern Botaurus stellaris (6% of the wintering population of Great Britain);
 - Gadwall Anas strepera (2.6% of the wintering population of Great Britain); and
 - Shoveler *Anas clypeta* (1.9% of the wintering population of Great Britain).
- 5.6.9 The Bittern, Gadwall and Shoveler are recorded on the amber list of the Birds of Conservation Concern 5 list⁸, a status unchanged since the previous list. While the site is not designated due to the presence of Tufted Duck *Aythya fuligula* or Common Tern *Sterna hirundo*, it is noted that the Common Tern is also listed on the amber list and is considered threatened in Europe. The Tufted Duck is now listed on the green list as being vulnerable in Europe, with its status moved to a higher threat status than in previous lists.
- 5.6.10 In addition to these qualifying bird species, the site qualifies as a Ramsar site under criterion 2 by supporting the nationally scarce plant species Whorled Water-milfoil *Mytiophyllum verticillatum* and the rare and vulnerable invertebrate *Micronecta minutissima* a water-boatman, though this water boatman is cited as being of least concern in the Red List Excluding Birds⁹.
- 5.6.11 A Site Improvement Plan for the SPA has been published, dated 2014. Table 3 below summarises the issues identified, the threats and measures/ actions to be taken. Of the eight issues identified, water pollution, hydrological changes, public disturbance and air pollution are of most relevance to this assessment.

Table 3: Summary of Issues, Threats and Measures/ Actions for Lee Valley SPA and Ramsar

Issue Threat Measures/ Action

⁸ https://britishbirds.co.uk/content/status-our-bird-populations The Fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List Assessment of Extinction Risk for Great Britain, December 2021.

⁹ https://lists.nbnatlas.org/speciesListItem/list Red List for Great Britain Post 2001 – Red list conservation status of Great Britain species excluding birds, based on IUCN guidelines.

Water pollution	Changes in water quality need to be managed to prevent loss of suitable habitat and food sources.	Define the appropriate water quality standards for significant water bodies to inform management of changes in water quality. Agree water quality management for significant water bodies with key stakeholders. Develop and implement a Diffuse Water Pollution Plan
Hydrological changes	Reservoir levels linked to operational requirements and all water bodies subject to natural fluctuations accounting for abstraction and climatic change.	Define more clearly the water level requirements for the habitats supporting the SPA bird features. Agree the necessary water level management with key stakeholders for significant water bodies
Public access/ disturbance	Areas of the SPA are subject to a range of recreational pressures including water sports, angling and dog walking. This has the potential to affect SPA populations directly or indirectly.	Investigate whether there is a need for change to access management. Agree appropriate management measures with stakeholders to align with best practice.
Inappropriate scrub control	The reedbed habitats, muddy fringes, and bankside all provide habitat as part of the mosaic for the SPA birds. Scrub control is necessary to ensure these habitats are maintained.	Secure resources to target management delivery.
Fisheries: fish stocking	Fish population and species composition needs to be appropriate to ensure suitable habitats including food resource and water quality are maintained for SPA bird species.	Define the appropriate fish community targets for significant water bodies. Action a plan to agree necessary fisheries management for significant water bodies.
Invasive species	Azolla and/or invasive aquatic blanket weeds will adversely affect aquatic habitat (food sources).	Review and update management control of invasive aquatic plant species, and agree regular review process. This needs a more strategic approach that is more planned and less reactive to outbreaks.

Inappropriate cutting/mowing	The reedbed requires rotational management for	Secure resources to target
cutting/mowing	Bittern.	management delivery.
Air pollution:	Nitrogen deposition exceeds	Further investigate potential
risk of	site relevant critical loads.	atmospheric nitrogen impacts on
atmospheric		the site based on application of
nitrogen		guidance from Chief Scientist
deposition		Group Nitrogen Task and Finish
		Group.

- 5.6.12 The Conservation Objectives for the SPA published in February 2019¹⁰ are to ensure that the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Birds Directive, by maintaining or restoring:
 - The extent and distribution of the habitats of the qualifying features
 - The structure and function of the habitats of the qualifying features
 - The supporting processes on which the habitats of the qualifying features rely
 - The population of each of the qualifying features; and,
 - The distribution of the qualifying features within the site.

Lee Valley SPA and Ramsar Site - Current Condition

5.6.13 The condition of the SSSI units is provided in Table 4. Open water extent and depth, water quality, edge treatments, reed bed coverage and connections between parts of the SPA are key to maintaining the integrity of the SPA as a whole and each SSSI component has particular functions within the network.

Table 4: Condition of Lee Valley SPA and Ramsar SSSI Units

Unit	Condition	Reason for below Favourable Condition	
No.			
Amwe	Amwell Quarry SSSI – Assessed in 2007		
1	Favourable		
2	Favourable		
Rye M	Rye Meads SSSI – Assessed in 2013		
1	Favourable		
2	Favourable		
3	Unfavourable - recovering	The open water habitats are regarded as favourable supporting populations of overwintering gadwall, shoveler; breeding tufted duck. However, the non-breeding population of tufted duck (unit 3-5) and breeding pairs of common tern are currently unfavourable and	

¹⁰ http://publications.naturalengland.org.uk/file/6516586265706496 Lee Valley SPA and Ramsar Conservation Objectives, 2019

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4 Unfavourable - recovering			there is a need for an ongoing investigation with action to
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bittern. Furthermore, the open water habitats support favourable populations of the listed overwintering wetland ducks (gadwall, shoveler); breeding tufted duck. However, the non-breeding population of tufted duck (unit 3-5) and breeding pairs of common tern are currently unfavourable and there is a need for an ongoing investigation with action to seek to adequately address this. 5	-		·
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7	Unfavourable –	As above
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8	Unfavourable –	As above
	recovering	
9	Unfavourable –	As above
	recovering	
10	Unfavourable –	As above
	recovering	

Wormley-Hoddesdonpark Woods SAC

- 5.6.14 Wormley-Hoddesdonpark Woods SAC covers an area of 336.47ha and is comprised of two SSSIs: Wormley-Hoddesdonpark Woods South SSSI and Wormley-Hoddesdonpark Woods North SSSI. The SAC is located within Broxbourne borough west of the A10 junction with Hoddesdon. The SAC is part of a wider complex of woodlands that run east-west between Broxbourne and Welwyn Garden City.
- 5.6.15 This site covers a series of woods lying mainly on London clay, with some gravel deposits and areas of chalky boulder clay. Most woodlands are ancient with associated areas of secondary woodland which have grown up on old fields and glades. The varied geology combines with the former land uses to produce a mosaic of vegetation. The largest part of the site is oak-bracken-bramble woodland, dominated by sessile oak *Quercus petraea* and hornbeam *Carpinus betulus*, with areas of pedunculate oak *Quercus robur* and hornbeam. Further there are large stands of almost pure hornbeam (former coppice).
- 5.6.16 There are also marshy areas with alder *Alnus glutinosa*, pendulous sedge Carex pendula and yellow pimpernel *Lysimachia nemorum* as well as areas with higher proportions of ash *Fraxinus excelsior*, Dogs Mercury *Mercurialis perennis* and Yellow Archangel *Lamium galeobdolon* on the chalky boulder clay. Areas dominated by bluebell *Hyacinthoides non-scripta* do occur, but elsewhere there are stands of great wood-rush *Luzula sylvatica* with carpets of the mosses *Dicranum majus* and *Leucobryum glaucum*. Locally, a bryophyte community more typical of continental Europe occurs, including the mosses *Dicranum montanum*, *D. flagellare* and *D. tauricum*. Nationally the woods are regarded as the best remaining example of the south eastern sessile oak hornbeam woods.
- 5.6.17 The qualifying feature for Wormley-Hoddesdonpark Woods SAC (see Figure 4 for location) is Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*.

"Wormley-Hoddesdonpark Woods in south-east England has large stands of almost pure hornbeam *Carpinus betulus* (former coppice), with sessile oak *Quercus petraea* standards. Areas dominated by bluebell *Hyacinthoides non-scripta* do occur, but elsewhere there are stands of great wood-rush *Luzula sylvatica* with carpets of the mosses *Dicranum majus* and *Leucobryum glaucum*. Locally, a bryophyte

community more typical of continental Europe occurs, including the mosses *Dicranum montanum*, *D. flagellare* and *D. tauricum*."¹¹

5.6.18 A Site Improvement Plan for the SAC has been published, dated 2015¹². Table 5 below summarises the issues identified, the threats and measures/ actions to be taken. Of the seven issues identified, air pollution and public access/ disturbance are of most relevance to this assessment.

Table 5: Summary of Issues, Threats and Measures/ Actions for Wormley-Hoddesdonpark Woods SAC

Hoddesdonpark woods SAC			
Issue	Threat	Measures/ Action	
Disease	Acute Oak Decline is present in at least two parts of the site and affects both native Oak <i>Quercus</i> species, which are key components of this woodland type. Oaks can be killed by Acute Oak Decline within 5 years of symptoms appearing. Research is underway on the causal agents and spread of the disease. Based on current knowledge Acute Oak Decline has the potential in the long-term to cause high Oak mortality right across the site.	Carry out a comprehensive survey for Acute Oak Decline, including privately-owned land and woods outside but close to the SAC boundary. Inform all owners/ managers of the local distribution and symptoms of Acute Oak Decline and, where necessary, of control recommendations.	
Invasive species	Several tree and shrub species not native to the site are present. Where they are not being actively controlled, they are gradually spreading. The more invasive of these include Sycamore Acer peudoplatanus, Turkey Oak Quercus cerris, Rhododendron Rhododendron ponticum and Snowberry Symphoricarpos albus.	Carry out a comprehensive survey of non-native invasive plant species, including privately-owned land and woods outside but close to the SAC boundary. Inform all owners/ managers of the local distribution and identification of the main invasive species and, where necessary, of control recommendations and funding options under Countryside Stewardship.	
	Nitrogen deposition exceeds the site-relevant critical load for	Further investigate the impacts of atmospheric nitrogen	

¹¹ http://publications.naturalengland.org.uk/file/6742166290563072 Conservation Objectives Supplementary Advice on Conserving and Restoring Site Features for Wormley-Hoddesdonpark Woods SAC, 2019

¹² http://publications.naturalengland.org.uk/publication/6314181103976448 Wormley-Hoddesdonpark Woods Site Improvement Plan

Air pollution: risk of atmospheric nitrogen deposition	ecosystem protection and hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site. This requires further investigation.	deposition, based on the application of guidance from the Chief Scientist's Group Nitrogen Task and Finish Group. Establish a 'lightweight' monitoring system for species or other site features likely to be sensitive to N deposition (e.g. N-sensitive bryophytes at selected locations).
Deer	Browsing and grazing by deer can reduce tree regeneration (from seedlings or coppice stools) and damage the woodland understorey and ground flora. At this site, deer damage levels are currently only moderate and do not appear to be affecting tree regeneration, habitat structure or species composition greatly. However, subtle damaging effects can be difficult to identify and monitor, and deer populations can increase rapidly.	Establish more small (4m x 4m) deer exclosures to monitor effects of deer on ground flora and tree/shrub regeneration. Improve monitoring of deer numbers and damage, extending it to include privately-owned land and woods outside but close to the SAC boundary. Identify and focus on locations, species and other site features likely to be particularly sensitive to deer damage (e.g. recently coppiced areas or those with scarce, palatable ground flora species). Monitor impacts of other potentially damaging species such as squirrels, if initial findings suggest they may also be reducing natural regeneration significantly. Use monitoring results to identify areas adversely affected by deer and advise owners/managers on deer management and funding opportunities under Countryside Stewardship.
Vehicles: illicit	Illegal use of restricted byways and bridleways by off-road vehicles causes localised but sometimes severe rutting and soil compaction, damaging the woodland ground flora, shrubs and trees. Fly-tipping damages	Identify areas still being damaged and the access points/routes used. Where necessary, construct or repair barriers to prevent illicit access by vehicles, install more signage and CCTV cameras, and pursue prosecutions.

	the ground flora directly and can introduce toxins and alien	
	species.	
Forestry and woodland management	The larger woodland units with public access are under appropriate management but some of the smaller, privately owned units are not. Though it is quite acceptable for a significant proportion of the site to be left as 'minimum intervention' high forest, in some circumstances a lack of active management can lead to adverse effects. These include a reduction in structural and species diversity (particularly in previously coppiced areas), the loss of temporary and permanent open space, the overshading and deterioration of veteran pollards, and the spread of invasive species.	For units adversely affected by lack of recent management or inappropriate management, encourage production of Woodland Management Plans compatible with the SAC's conservation objectives and entry into new Countryside Stewardship Scheme agreements. Use results of surveys addressing other issues to refine priorities.
Public access/ disturbance	The site is a large, attractive area of ancient woodland with extensive public access and close to large urban centres, so it is heavily used by the public for recreational purposes. Sensitive management of access points and routes by the site's main owners has been largely successful in mitigating the potential adverse effects of this high level of use. However, visitor numbers continue to increase, the types of use can change unpredictably and less obvious adverse effects on important flora and fauna could be missed during routine, 'general purpose' monitoring.	Establish a 'light-weight' monitoring system for species or other site features likely to be sensitive to effects of public access (e.g. vulnerable ground flora or veteran pollards close to main access points/routes). Regularly review monitoring results and where feasible, modify access arrangements, signage etc to remedy adverse effects.

5.6.19 The Conservation Objectives of the SAC published in January 2019 are to ensure that the integrity of the site is maintained or restored as appropriate, and that the site

Appendix A: Habitats Regulations Assessment - Screening and Appropriate Assessment

contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats;
- The structure and function (including typical species) of qualifying natural habitats;
 and
- The supporting processes on which qualifying natural habitats rely.

Wormley-Hoddesdonpark Woods SAC – Current Condition

5.6.20 The condition of the SSSI units is provided in Table 6. The Conservation Objectives indicate that in terms of the structure and function of the SAC, the qualifying feature of the woodland (*quercus robur* (European Oak) covers approximately 75% of the SAC area, often mixed with other woodland species. The Conservation Objectives include maintaining at least 3 age classes (as well as dead wood) and tree canopy cover in order to maintain species diversity for habitat purposes and to create the necessary microclimate and woodland structure. These factors are monitored and are achieved through a pollarding and coppicing management regime. The woodland structure and quantity of the European Oak is key to maintaining the integrity of the SAC.

Table 6: Condition of Wormley-Hoddesdonpark Woods SAC SSSI Units

Unit	Condition	Reason for below Favourable Condition
No.		
Worm	ley-Hoddesdonparl	k Woods South SSSI – Assessed in 2017
1	Favourable	
2	Favourable	
3	Favourable	
4	Favourable	
5	Favourable	
6	Favourable	
7	Favourable	
8	Favourable	
Worm		k Woods North SSSI – Assessed in 2009, 2012, 2017 and 2021
1	Favourable 2017	
2	Unfavourable – recovering 2017	The owners are currently restoring this unit to a more open, wood-pasture structure by removing most of the non-native conifers planted on the unit in the mid-twentieth century. The cover of non-native tree species on the unit has been substantially reduced as a result and acid grassland/heathland plant communities will be able to colonise the cleared area from the adjacent glades over the next few years. The unit currently fails to reach the targets set for open space, canopy cover and cover of non-native species but this is all addressed by the current management regime and phased removal of conifer and there has been a noticeable improvement as a result of the recent management and the unit should achieve favourable condition in a few years
3	Favourable 2009	
4	Favourable 2009	
5	Favourable 2017	
6	Favourable 2017	
7	Favourable 2017	
8	Unfavourable declining 2017	The common was assessed against wood pasture targets. Though it was assessed as Favourable in 2012, it was felt that the issues raised at the time hadn't been addressed and this reflects in the Unfavourable declining condition. It is felt that the unit could quickly return to Favourable condition once these issues

		have been addressed. The woodland shows signs of under-management and management operations are needed:- Removing by pulling or cutting non-native species such as Sycamore and conifers that are encroaching from the neighbouring plantation. The bigger Sycamores will need felling. Regular pulling might be necessary Selective thinning (young trees, saplings, some scrub) to restore the right balance of open space and canopy cover as required by wood pasture targets Possible re-pollarding of selected trees to create new pollards that will replace the old pollards eventually. The ground flora and the amount of dead wood (both standing and lying) was appropriate.
9	Favourable 2017	
10	Unfavourable recovering 2017	This is a stretch of the old Roman Road, Ermine Street. It is lined by veteran Hornbeam pollards and the width of the former roman road is still marked by ditches, though the full width of the road is now mainly wooded. Pollards are overshaded but regeneration occurs in gaps and on ride edges. The canopy cover is dense overall and the main recommendations from 2012 still are true: • selective thinning around some of the veteran hornbeam pollards (which are an important feature of the unit) will be needed soon to prevent them from becoming too heavily shaded by younger standard trees • many of the veterans are in a fragile condition due to their age and the amount of decay in their trunks, so it is important to create more young pollards within the next few years • if such a category existed I would classify the unit as in `favourable declining' condition because of the problem of it gradually becoming less open and the veteran pollards becoming more heavily shaded • it would be worth implementing zoned ride edge management and phased maintenance of the boundary ditches along the length of the unit. There are no signs of off-roading but fly tipping still occurs near the car park. The unit was assessed as Unfavourable declining as the old Hornbeam pollards are over-shaded by younger trees need careful thinning around them to survive and new pollards should be created to replace the ones that will inevitably be lost. The roman road could also benefit from general thinning to open up the canopy and restoring the roman road.
11	Favourable 2017	
12	Favourable 2017	
13	Unfavourable – no change 2012	Viewed from just beyond the unit's boundary during visits to nearby units in July 2011 and January 2012. This small unit is a pasture providing open space for the adjacent woodland units. Since it was last assessed
		in 2009, excessive scrub encroachment has been cleared, a new fence has been erected and old hornbeam stubs along the southern boundary have been pollarded and are regrowing well. However there appear

Appendix A: Habitats Regulations Assessment – Screening and Appropriate Assessment

		to be heaps of imported waste material in the field including some rubble and metal. Until these are removed the unit cannot be considered to be in recovering condition. If this material was removed and some grazing was reintroduced it should be possible to get this unit into favourable condition within a few years.
14	Favourable 2017	
15	Favourable 2021	
16	Favourable 2017	

Epping Forest SAC

- 5.6.21 Epping Forest is a former royal forest and ancient wood-pasture owned and managed by the City of London Corporation. The entire forest is 2,400 ha, approximately 19km long situated between Epping in the north and Wanstead to the south. Over two-thirds of the Forest area is classified as SAC. Epping Forest is one of only a few remaining large-scale examples of ancient wood-pasture in lowland Britain and has retained habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains and scattered wetland. The semi-natural woodland is particularly extensive, forming one of the largest coherent blocks in the country. Most is characterised by groves of over-mature pollards and these exemplify all three of the main wood-pasture types found in Britain: beech-oak, hornbeam-oak and mixed oak. The Forest plains are also a major feature and contain a variety of unimproved acid grasslands which have become uncommon elsewhere in Essex and the London area. In addition, Epping Forest supports a nationally outstanding assemblage of invertebrates, a major amphibian interest and an exceptional breeding bird community.
- 5.6.22 The Forest lies on a ridge of London clay overlain in places by Claygate Beds and in the highest areas by Bagshot Sand and Pebble Gravel. In some of the southernmost areas, the sands and gravels on which the Forest lies are glacial in origin. This varied geology gives rise to a mosaic of soil types from neutral soils to acidic loams and from impervious clays to well-drained gravels. To a large extent these soil patterns have dictated the pattern of vegetation in Epping Forest.
- 5.6.23 Epping Forest was traditionally managed as wood-pasture in which the trees were lopped or 'pollarded' above the reach of browsing animals to produce a crop of wood. This practice also prolonged the life of individual trees and has created a distinctive woodland structure markedly different from that found under other forms of woodland management. During the 19th century this traditional system of wood management declined and eventually ceased in 1878 under the Epping Forest Act. However, recently pollarding has been reinstated by the Conservators of Epping Forest in certain places. Owing to this history much of the woodland is dominated by pollards of considerable age, with some of coppice origin indicating an even older system of management. Pedunculate oak pollards are scattered throughout and occasionally dominate forming areas of oak wood-pasture but are less frequent in the vicinity of beech pollards.
- 5.6.24 The understorey frequently consists of holly *llex aquifolium*; hazel *Corylus avellana* is rare. Dead and rotting wood in the old pollards, particularly those which are still standing, is of considerable value to many invertebrates and in particular to beetles (*Coleoptera*). The pollards also add to the structural diversity of the woodland which is important to birds, many of which feed on the rich invertebrate fauna.
- 5.6.25 The site supports a mosaic of habitats of high nature conservation value characteristic of ancient wood-pasture including ancient semi-natural woodland, old grassland plains,

wet and dry heathland and scattered wetlands, including rivers, streams and bogs. The semi-natural woodland is particularly extensive but the Forest plains are also a major feature and contain a variety of unimproved acid grasslands.

- 5.6.26 The semi-natural woodlands of Epping Forest include important beech *Fagus sylvatica* forests on acid soils, which are important for a range of rare epiphytic communities, including the Knothole moss *Zygodon forsteri*. The long history of pollarding, and resultant large number of veteran trees, ensures that the site is also nationally important for its fungi and dead wood (saproxylic) invertebrates. Records of stag beetle *Lucanus cervus* are also widespread and frequent. Areas of acidic grassland transitional with heathland are generally dominated by a mixture of fine-leaved grasses. In marshier areas, purple moor-grass *Molinia caerulea* frequently becomes dominant. Broad-leaved herbs typical of acidic grassland and heathland are frequent, including heather *Calluna vulgaris*. The site also contains an example of wet dwarf-shrub heath with both heather and cross-leaved heath *Erica tetralix*. In total, over 360 Red Data Book and nationally notable invertebrate species, 177 bryophyte flora species, and 700 basidiomycete and at least 20 ascomycete fungi species have been recorded from the forest that thrive on the varied flora, fauna and wetland and wet bog habitats dispersed across the forest.
- 5.6.27 The qualifying features for Epping Forest SAC (see Figure 4 for location) are the Habitats Directive Annex II species Stag Beetle, *Lucanus cervus*, and the following Annex I habitats:
 - Atlantic acidophilous beech forests with *llex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *llici-Fagenion*);
 - Northern Atlantic wet heaths with Erica tetralix; and
 - European Dry heaths.
- 5.6.28 A Site Improvement Plan for the SPA has been published, dated 2014¹³. Table 7 below summarises the issues identified, the threats and measures/ actions to be taken. Of the eight issues identified, water pollution, hydrological changes, public disturbance and air pollution are of most relevance to this assessment.

Table 7: Summary of Issues, Threats and Measures/ Actions for Epping Forest SAC

Issue	Threat	Measures/ Action
Air pollution:	Nitrogen deposition exceeds	Control, reduce and ameliorate
impact of	site-relevant critical loads for	atmospheric nitrogen impacts.
atmospheric	ecosystem protection. Some	
nitrogen	parts of the site are assessed	
deposition		

¹³ http://publications.naturalengland.org.uk/publication/6663446854631424 Epping Forest SAC Site Improvement Plan, 2014

	as in unfavourable condition for reasons linked to air pollution impacts.	
Undergrazing	The quality and diversity of the SAC features requires targeted management best achieved through grazing to: minimise scrub invasion; minimise robust grass domination, and maximise the species diversity of heathland plant communities.	Ensure that sufficient resources are available for appropriate grazing levels to achieve and maintain favourable conservation status for SAC features. This requires funding and stock management.
Public access/	Epping Forest is subject to high recreational pressure. There is	Identify key areas that are subject to recreational impacts.
disturbance	a high general level of footfall in Epping Forest throughout the year, including periods of significant use, and resulting in a diverse range of impacts which include mountain biking and unmanaged fires. Population and visitor numbers are likely to continue to increase.	Agree and implement a site- specific recreational management plan to ensure SAC features are protected and maintained.
Changes in species distributions	Beech tree health and recruitment may not be coping sufficiently with environmental conditions to sustain its presence and representation within the SAC feature. This may be linked to climate change as well as other factors such as air quality, recreational pressure and water availability.	Investigate Beech tree health and Beech sapling recruitment in core areas to establish a baseline for monitoring and consider adequacy for community sustainability. Agree and implement a management plan to promote Beech tree conservation and sapling recruitment, review conservation objectives and/or a plan for different tree species to be able to take the place of Beech if necessary.
Inappropriate water levels	Wet heath is dependent on suitable ground water levels. There is a threat of prolonged	Implement a hydrological investigation for key wet heathland areas.
	drying out through climate change.	Agree and implement a ground water level management plan for wet heathland areas, if necessary.

Water pollution	Surface run-off of poor quality water from roads with elevated levels of pollutants, nutrients and salinity may be affecting wet heath, probably mostly around the edges.	Investigate the impact of poor quality water run-off from roads on wet heath communities. Agree and implement a surface runoff management plan for wet heathland areas, if necessary.
Invasive species	Heather Beetle Lochmaea suturalis has locally impacted on some heathland areas. Vigilance is required to survey it and increase awareness of its likely effects and signs of impact.	Investigate how significant the impact of the spread of Heather Beetle has been on the wet and dry heathland areas of Epping Forest.
Disease	Tree diseases such as Phytopthora present a real threat to Beech.	Investigate whether the current monitoring programme of tree diseases is adequate. Following the study agree and implement appropriate management measures for core areas supporting Beech SAC communities.
Invasive species	Grey Squirrel <i>Sciurus carolinensis</i> is not currently known to be significantly affecting tree health or regeneration, but there is a need to retain vigilance and perhaps consider increased awareness of the likely effects and signs of impact.	Investigate what impact Grey Squirrels have on tree health and/or regeneration and its possible further impact on the Atlantic acidophilous Beech woodland feature. Following study, agree appropriate management measures and implement.

- 5.6.29 The Conservation Objectives for the SAC published in January 2019¹⁴ are to ensure that the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:
 - The extent and distribution of qualifying natural habitats and habitats of qualifying species;
 - The structure and function (including typical species) of qualifying natural habitats;
 - The structure and function of the habitats of qualifying species;
 - The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;

¹⁴ https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012720.pdf Conservation Objectives Supplementary Advice on Conserving and Restoring Site Features for Epping Forest SAC, 2019

- The populations of qualifying species; and,
- The distribution of qualifying species within the site.

Epping Forest - Current Condition

- 5.6.30 Condition assessments of the SSSI units that make up the SAC were carried out by Natural England in 2010 and 2017 (NE, 2017). Of the 41 units within Epping Forest SSSI, 35.48% were in a 'favourable' condition, 48.17% 'unfavourable recovering', 14.53% 'unfavourable no change', and 1.83% 'declining'. Table 8 below lists the SSSI units assessed as either 'unfavourable no change' or 'unfavourable declining'. In all cases the broad habitat type is 'lowland broadleaved, mixed and yew woodland'.
- 5.6.31 Given the scale, extent and variety of landscape and habitats present in the forest, the structure and function of the SAC is also very varied across the site. As such, a variety of plant and animal species (or related groups of such species) make particularly important contributions to the necessary structure, function and or quality of the different habitats that influence the integrity of the site as a whole. It is noted however, that air quality is considered a threat as this affects a number of areas of the forest due to the network of busy roads through the forest itself.

Table 8: Condition of Epping Forest SAC SSSI units

Unit	Condition	Reason for below Favourable Condition
No.		
105	Favourable 2010	
106	Unfavourable – Recovering 2010	Unit 106 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works:- habitats and veteran trees assessed during field visit, 8 September 2009;- invertebrate assemblage data, reviewed 2004-07;- bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit;- fungi data from British Mycological Society, 1980-2002;- (no recent breeding bird assemblage data was available). However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots), there is excessive growth of bramble, and there are dense stands of nettles along roadsides and ride edges. Recent oak regeneration is poor, but this is believed to be primarily due to severe knopper gall infestation.
107	Favourable 2010	11 0
108	Favourable 2010	
109	Unfavourable – Recovering 2010	Unit 109 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 7 September 2009; - invertebrate assemblage data, reviewed 2004-07; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available). However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots), there is excessive growth of bramble, and there are dense stands of nettles along roadsides and ride edges. In addition, the anticipated recovery in the condition of the grassland areas will not take place unless an extensive grazing regime is reintroduced as planned. Recent oak regeneration is poor, but this is believed to be primarily due to severe knopper gall infestation.

110	Unfavourable- Recovering 2017	Area supports a mosaic of Oak, Hornbeam, Beech woodland/Wood pasture with wetland features (streams and ponds), heathland and small grassland areas. Wood pasture areas with higher canopy cover than optimal albeit pollarding, crown reduction and halo work to be undertaken on a rolling programme throughout SSSI in line with CoL Management Plan (UnfRec)Veteran trees, moss & Samp; fungi assemblage – favourable Wetland features - Borderline favourable – suggest targeted tree management around subsidiary ponds may be beneficial to open out and promote submerged vegetation cover for benefit of amphibians and dragonfly assemblage. Heathland and acid grassland – excessive cover of tussock grass species and sub-optimal for positive herbs indicates targeted grazing and grassland management would
	- II 0010	be beneficial (Unf Rec). Overall assessed as Unfavourable Recovering.
111	Favourable 2010	
112	Unfavourable – no change 2010	Unit 112 has been assessed as UNFAVOURABLE NO CHANGE on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 13 August 2009; - invertebrate assemblage data, reviewed 2004-07; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - knothole yoke-moss (Zygodon forsteri) survey data, 2008; - fungi data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available). The heathland area of Dulsmead has not been managed recently and is being invaded by bracken and birch seedlings. In addition, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots), heathland areas show excessive growth of grass compared to broad-leaved species, and there are dense stands of nettles along roadsides and ride edges.
113	Unfavourable – Recovering 2017	Overall unfavourable recovering. Units supports wood pasture/pasture woodland W14,15,16, 10 mosaic (with distribution broadly indicated on FCT Maps), bog and stream, scattered temporary and permanent open areas supporting patches of acid grassland and localised dry heath. The wood pasture areas have a canopy range of 20-90% with some areas notably in Jack's Hill recently subject to halo work and repollarding. Regeneration of Hornbeam and Beech appears adequate. New Oak, Beech pollards created also doing well in spite of mildew on Oak leaves. The Beech areas have some significant sized veterans and areas of character cushion moss. Areas with more Oak/Hornbeam include pollards but also more standards on western side. The unit would benefit from more areas of varied age temporary open space through

		wood pasture management to increase ground flora, invertebrate habitats and forage for birds, so overall unfavourable recovering. Some good areas for bryophytes on trees and woodland habitats although many areas near roads and Debden Camp with sub-optimal diversity, so borderline favourable. Range of fungi present, including bracket, boletes and various associated with dead wood logs etc, so favourable. Tree composition and character all favourable, with a watching brief required for Rhododendron cover. Good range of veteran trees – favourable. Oak Hill Bog appeared drier than ideal, although some Sphagnum moss present and sedges, rushes in evidence. Some recent management noted but also some encroachment by bracken and rhododendron on SE bankside ideally could be removed. Birch wood plain supports a 5-20cm sward in the main grassland areas with some marginal rushes etc. Bramble has been cut back but along with bracken is encroaching from the margins. Some character plants, eg wood sage, heath speedwell but otherwise limited evidence of abundant character species so assessed as unfavourable recovering.
114	Unfavourable - Recovering 2017	Overall Unfavourable recovering. Units supports wood pasture/pasture woodland mosaic of characteristic W14,15,16,10 tree composition and ground flora; seasonally wet streams and open areas (temporary and permanent) supporting acid grassland of variable quality. The Pillow Mounds and surrounding area provide the largest grassland expanse and although are characteristically rabbit grazed short turf the sward is currently sub-optimal for species diversity. Despite this, the presence of sheep's sorrel, health bedstraw and the continued presence of ant hills are positive signs and evidence of rabbit grazing, bramble/bracken clearance on the slopes and recent recreational management activities enable an unfavourable recovering assessment for this feature. The wood pasture areas have a canopy cover range of 20-90% with some areas notably in the East of Comical Corner recently subject to halo work and re-pollarding, Regeneration of hornbeam pollards and seedlings appears adequate. There are less Beech saplings but adequately represented at young tree stage. New pollards of Oak & Dak Beech performing well, in spite of vigorous leaf mildew on the former. The Beech areas have some significant sized veterans, mostly pollards, whereas Oak-Hornbeam areas include pollards and Oak standards. Shrub layer of Holly still excessive in areas and canopy cover dominated by the 70-90% range, however the unit will continue to benefit from the ongoing wood pasture restoration works to create more areas of temporary open space of varied ages and increasing the diversity of the ground flora, invertebrate habitats and forage for birds, so assessed as unfavourable recovering. The unit is sub-optimal for bryophytes with reduced diversity on trees notably

		Appendix A. Habitats Regulations Assessment Selecting and Appropriate Assessment
		close to high recreational areas or roads, however does support a reasonable diversity of lichens and fungi. This includes bracket, boletus, russula's and dead wood species. Tree composition and character favourable with only small patches of sycamore and turkey oak mainly on the west and north-west sides. Good range of veterans with characteristic features so favourable.
116	Favourable 2010	
117	Unfavourable – no change 2017	This SSSI unit supports a mosaic of Beech and Oak, Hornbeam wood pasture/woodland with wetland features (ponds and stream). Wood pasture stands with higher canopy cover (80-95%) than optimal and Sycamore locally frequent and competing with Beech regeneration in some areas. Pollarding, crown reduction and selective thinning with sycamore removal to be undertaken on a rolling programme throughout the SSSI in line with Col Management Plan, so assessed as unfavourable recovering. Veteran trees, moss and fungi assemblage – favourable Wetland features, notably Speakman's Pond is unfavourable due to Crassula dominance currently suppressing other aquatic and marginal vegetation. Cover of submerged and marginal vegetation is low due to excessive over-shading and smothering by Crassula dominance. Recommend targeting management to significantly reduce Crassula and promote submerged and marginal vegetation through silt excavation and tree works.
118	Favourable 2010	
119	Favourable 2010	
120	Unfavourable – Recovering 2010	Unit 121 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 27 August 2009; - invertebrate assemblage data, reviewed 2004-07; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available).Mortality of veteran beech trees along the ridgeline was considered to be excessive, but this is probably due to their exposed location and does not constitute a significant problem. However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots), and there are dense stands of nettles along roadsides and ride edges.
121	Unfavourable – Recovering 2010	Unit 121 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees

		assessed during field visit, 27 August 2009; - invertebrate assemblage data, reviewed 2004-07; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available). Mortality of veteran beech trees along the ridgeline was considered to be excessive, but this is probably due to their exposed location and does not constitute a significant problem. However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots), and there are dense stands of nettles along roadsides and ride edges.
122	Unfavourable – Recovering 2010	Unit 122 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 28 July 2009; - invertebrate assemblage data, reviewed 2004-07; - Odonata assemblage data, 1996-2007; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent amphibian assemblage data was available); - (no recent breeding bird assemblage data was available). However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots), grassland areas show excessive growth of grasses compared to broad-leaved species, and there are dense stands of nettles along roadsides and ride edges. In addition, the anticipated recovery in the condition of the grassland areas is reliant upon continuation of the extensive grazing regime.
123	Unfavourable – Recovering 2010	Unit 123 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 5 August 2009; - invertebrate assemblage data, reviewed 2004-07; - stag beetle (<i>Lucanus cervus</i>) data from Peoples Trust for Endangered Species via National Biodiversity Network, 2000-09; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent amphibian assemblage data was available); - (no recent breeding bird assemblage data was available). However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading

	l .	Appendix A. Habitats Regulations Assessment Servering and Appropriate Assessment
		shoots), there is excessive growth of bramble, grassland and heathland areas show excessive growth of
		grasses compared to broad-leaved species, and there are dense stands of nettles along roadsides and ride
ļ		edges. In addition, the anticipated recovery in the condition of the grassland and heathland areas will not
		take place unless management continues to take place as planned. Some of the water bodies within the
ļ		unit are also in a sub-optimal condition, which may affect the unit's long-term ability to provide supporting
		habitat for the assemblages of Odonata and of amphibians.
124	Favourable 2010	Unit 124 has been assessed as FAVOURABLE on the basis of the following data, and having taken into
ļ		account the effect of all ongoing and planned management works: - habitats and veteran trees assessed
		during field visit, 28 July 2009; - invertebrate assemblage data, reviewed 2004-07; - bryophyte assemblage
ļ		data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological
		Society, 1980-2002; - (no recent breeding bird assemblage data was available). However, notwithstanding
		this assessment, there remains a very significant issue relating to air quality and the related deposition of
ļ		acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy
		and die-back of leading shoots) and grassland areas show excessive growth of grass compared to broad-
		leaved species. In addition, the anticipated recovery in the condition of the grassland areas is reliant upon
		continuation of the extensive grazing regime.
125	Unfavourable –	Unit 125 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having
ļ	Recovering 2010	taken into account the effect of all ongoing and planned management works: - habitats and veteran trees
		assessed during field visit, 14 July 2009; - invertebrate assemblage data, reviewed 2004-07; - bryophyte
		assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British
ļ		Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available).However,
		notwithstanding this assessment, there remains a very significant issue relating to air quality and the
ļ		related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of
		stress (eg thin canopy and die-back of leading shoots), there is excessive growth of bramble, and grassland
		areas show excessive growth of grasses compared to broad-leaved species. In addition, the anticipated
		recovery in the condition of the grassland/heathland areas will not take place unless an extensive grazing
ļ		regime is re-introduced as planned.
126	Unfavourable –	Unit 126 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having
0	Recovering 2010	taken into account the effect of all ongoing and planned management works: - habitats and veteran trees
	1112201011110 2010	tantan material and a material and an another management was a management with a contract and vector and vecto

		assessed during field visit, 14 July 2009; - invertebrate assemblage data, reviewed 2004-07; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available). However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots) and grassland areas show excessive growth of grasses compared to broad-leaved species. In addition, the anticipated recovery in the condition of the grassland areas is reliant upon continuation of the extensive grazing regime. Some of the water bodies within the unit are also in a sub-optimal condition, which may affect the unit's long-term ability to provide
		supporting habitat for the assemblages of Odonata and of amphibians.
127	Favourable	
128	Unfavourable – Recovering 2010	Unit 128 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 20 April 2009; - invertebrate assemblage data, reviewed 2004-07; - stag beetle (<i>Lucanus cervus</i>) data from Peoples Trust for Endangered Species via National Biodiversity Network, 2000-09; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available).Die-back of heather is believed to be the result of an outbreak of heather beetle and is, therefore, a natural occurrence. However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots), and grassland and heathland areas show excessive growth of grasses compared to broad-leaved species. In addition, the anticipated recovery in the condition of the grassland and heathland areas will not take place unless management continues to take place as planned.
129	Unfavourable – Recovering 2010	Unit 129 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 4 August 2009; - invertebrate assemblage data, reviewed 2004-07; - stag beetle (<i>Lucanus cervus</i>) data from Peoples Trust for Endangered Species via National Biodiversity Network, 2000-09; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi

		data from British Mycological Society, 1980-2002; - (no recent amphibian assemblage data was available); - (no recent breeding bird assemblage data was available). However, notwithstanding this assessment, there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots) and grassland areas show excessive growth of grasses compared to broad-leaved species. In addition, the anticipated recovery in the condition of the grassland/heathland areas will not take place unless an extensive grazing regime is re-introduced as planned. Warren Pond is also in a sub-optimal condition, which may affect the unit's long-term ability to provide supporting habitat for the assemblages of Odonata and of amphibians.
130	Unfavourable – no change 2010	Unit 130 has been assessed as UNFAVOURABLE NO CHANGE on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 22 July 2009; - invertebrate assemblage data, reviewed 2004-07; - stag beetle (<i>Lucanus cervus</i>) data from Peoples Trust for Endangered Species via National Biodiversity Network, 2000-09; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available). The primary reason for unfavourability of this unit is believed to be air pollution and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back of leading shoots), bryophytes are sparse and only a few species are present, and there is excessive growth of bramble. A second reason for unfavourability is considered to be the level of recreational pressure to which this unit is exposed. However, in the absence of the air pollution, the habitats would probably be in a better condition to be able to cope with this pressure. In addition, although not directly affecting the favourability of the unit, the River Ching appeared to be polluted, possibly as a result of leakage or overflow from the sewer which passes through the unit.
131	Unfavourable – Recovering 2010	Unit 131 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having taken into account the effect of all ongoing and planned management works: - habitats and veteran trees assessed during field visit, 14 May 2009; - invertebrate assemblage data, reviewed 2004-07; - stag beetle (<i>Lucanus cervus</i>) data from Peoples Trust for Endangered Species via National Biodiversity Network, 2000-09; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent amphibian assemblage data was available); -

	Appendix 7. Habitats Regulations 7.55e55ment Servering and Appropriate 7.55e55ment
	(no recent breeding bird assemblage data was available). The Rhododendron within this unit has been
	assessed by an expert, in order to differentiate between valuable horticultural varieties for retention and
	R. ponticum which will be removed. However, notwithstanding this assessment, there remains a significant
	issue relating to air quality and the related deposition of acidity and of nitrogen. In addition, the anticipated
	recovery in the condition of the unit will not take place unless management continues to take place as
	planned. Some of the water bodies within the unit are also in a sub-optimal condition, which may affect the
	unit's long-term ability to provide supporting habitat for the assemblages of Odonata and of amphibians.
Unfavourable –	Unit 132 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having
Recovering 2010	taken into account the effect of all ongoing and planned management works: - habitats and veteran trees
	assessed during field visit, 14 May 2009; - invertebrate assemblage data, reviewed 2004-07; - stag beetle
	(Lucanus cervus) data from Peoples Trust for Endangered Species via National Biodiversity Network, 2000-
	09; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi
	data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was available).
	However, notwithstanding this assessment, there remains a significant issue relating to air quality and the
	related deposition of acidity and of nitrogen. In addition, the anticipated recovery in the condition of the
	unit will not take place unless management continues to take place as planned.
Unfavourable –	Unit 133 has been assessed as UNFAVOURABLE DECLINING on the basis of the following data: - habitats
declining 2010	and veteran trees assessed during field visit, 24 and 29 September 2009; - invertebrate assemblage data,
	reviewed 2004-07; - Odonata assemblage data, 1996-2007; - stag beetle (<i>Lucanus cervus</i>) data from Peoples
	Trust for Endangered Species via National Biodiversity Network, 2000-09; - bryophyte assemblage data,
	1992, plus cover and certain species assessed during field visit; - fungi data from British Mycological Society,
	1980-2002; - (no recent amphibian assemblage data was available); - (no recent breeding bird assemblage
	data was available). The primary reason for unfavourability of this unit is believed to be air pollution and, in
	particular, the effects of excessive levels of oxides of nitrogen and other pollutants, and the related
	deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress
	(eg thin canopy and die-back of leading shoots), bryophytes are sparse and only a few species are present,
	there is excessive growth of bramble, grassland areas show excessive growth of grasses compared to
	broad-leaved species, and there are dense stands of nettles along roadsides and ride edges. Some of the
	Recovering 2010 Unfavourable -

		water bodies within the unit are also in a sub-optimal condition, which may affect the unit's long-term ability
		to provide supporting habitat for the assemblages of Odonata and of amphibians.
134	Unfavourable –	Unit 134 has been assessed as UNFAVOURABLE NO CHANGE on the basis of the following data: - habitats
	no change 2010	and veteran trees assessed during field visit, 24 September 2009; - invertebrate assemblage data, reviewed
		2004-07; - stag beetle (<i>Lucanus cervus</i>) data from Peoples Trust for Endangered Species via National
		Biodiversity Network, 2000-09; - bryophyte assemblage data, 1992, plus cover and certain species assessed
		during field visit; - fungi data from British Mycological Society, 1980-2002; - (no recent amphibian
		assemblage data was available); - (no recent breeding bird assemblage data was available).The primary
		reason for unfavourability of this unit is believed to be air pollution and, in particular, the effects of
		excessive levels of oxides of nitrogen and other pollutants, and the related deposition of acidity and of
		nitrogen. Many veteran trees within the unit display clear symptoms of stress (eg thin canopy and die-back
		of leading shoots), bryophytes are sparse and only a few species are present, there is excessive growth of
		bramble, grassland areas show excessive growth of grasses compared to broad-leaved species, and there
		are dense stands of nettles along roadsides and ride edges. Some of the water bodies within the unit are
		also in a sub-optimal condition, which may affect the unit's long-term ability to provide supporting habitat
		for the assemblages of Odonata and of amphibians.
135	Unfavourable –	Unit 135 has been assessed as UNFAVOURABLE RECOVERING on the basis of the following data, and having
	Recovering 2010	taken into account the effect of all ongoing and planned management works: - habitats and veteran trees
		assessed during field visit, 7 July 2009; - invertebrate assemblage data, reviewed 2004-07; - stag beetle
		(<i>Lucanus cervus</i>) data from Peoples Trust for Endangered Species via National Biodiversity Network, 2000-
		09; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field visit; - fungi
		data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data was
		available). However, notwithstanding this assessment, there remains a very significant issue relating to air
		quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display
		clear symptoms of stress (eg thin canopy and die-back of leading shoots), bryophytes are sparse and only
		a few species are present, grassland areas show excessive growth of grasses compared to broad-leaved species, and there are dense stands of nettles along roadsides and ride edges. In addition, the anticipated
		recovery in the condition of the grassland areas will not take place unless management continues to take place as planned.
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Appendix A: Habitats Regulations Assessment – Screening and Appropriate Assessment

136	Unfavourable –	Unit 136 has been assessed as UNFAVOURABLE NO CHANGE on the basis of the following data: - habitats
	no change	and veteran trees assessed during field visit, 7 July 2009; - invertebrate assemblage data, reviewed 2004-
	_	07; - stag beetle (<i>Lucanus cervus</i>) data from Peoples Trust for Endangered Species via National Biodiversity
		Network, 2000-09; - bryophyte assemblage data, 1992, plus cover and certain species assessed during field
		visit; - fungi data from British Mycological Society, 1980-2002; - (no recent breeding bird assemblage data
		was available). The primary reason for unfavourability of this unit is believed to be air pollution and, in
		particular, the effects of excessive levels of oxides of nitrogen and other pollutants, and the related
		deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress
		(eg thin canopy and die-back of leading shoots), bryophytes are sparse and only a few species are present,
		there is excessive growth of bramble, grassland areas show excessive growth of grasses compared to
		broad-leaved species, and there are dense stands of nettles along roadsides and ride edges. A second
		reason for unfavourability is considered to be the level of recreational pressure to which this unit is
		exposed. However, in the absence of the air pollution, the habitats would probably be in a better condition
		to be able to cope with this pressure.
203	Unfavourable –	Unit 203 has been assessed as UNFAVOURABLE NO CHANGE on the basis of the following data: - habitats
	no change 2010	and veteran trees assessed during field visit, 28 September 2009; - stag beetle (Lucanus cervus) data from
		Peoples Trust for Endangered Species via National Biodiversity Network, 2000-09; - bryophyte cover and
		certain species assessed during field visit; The primary reason for unfavourability of this unit is believed to
		be air pollution and, in particular, the effects of excessive levels of oxides of nitrogen and other pollutants,
		and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear
		symptoms of stress (eg thin canopy and die-back of leading shoots), bryophytes are sparse and only a few
		species are present, and there is excessive growth of bramble.

5.7 Stage 1: Screening - Assessment of Potential Recreational Effects

- 5.7.1 This section of the screening is informed by the screening forming part of the Habitats Information (Village 7 2019 IHRA, 2021 IHRA and Villages 1-6 2019 IHRA, 2020 IHRA and 2022 IHRA) submitted as part of the Applications. It takes account of the Conservation Objectives listed in the Natural England information database on designated sites, existing information regarding the respective sensitivity of the National Network Sites to effects arising from recreational pressure, including review of site management plans, SSSI unit condition assessments, and strategic level mitigation frameworks.
- 5.7.2 Consideration was also given to the HRAs undertaken for the East Herts District Plan (EHDP) and Harlow Local Development Plan (HLDP). Those HRAs explain that if unchecked, recreational use of an internationally designated site has potential to:
 - cause damage through mechanical/abrasive damage and nutrient enrichment;
 - cause disturbance to sensitive species, particularly ground-nesting birds and wintering wildfowl; and
 - prevent appropriate management or exacerbate existing management difficulties.
- 5.7.3 This section considers the potential for the proposed Development to generate effects arising from recreational pressure on the Lee Valley SPA and Ramsar site, Wormley-Hoddesdonpark Woods SAC and Epping Forest SAC, either alone or in combination with other plans and projects. Recreational demand and pressures arise as a result of the occupation of new homes and businesses. As such, the screening does not consider that recreational impacts would arise during the construction phase of the three applications comprising the Development.

Lee Valley SPA and Ramsar

- 5.7.4 The HRA undertaken for the Lee Valley Park Development Framework (Lepus Consulting, 2019)¹⁵ considered the threats and pressures at the Lee Valley SPA taking into account the in-combination effects of planned developments identified in the local plans for East Herts, Epping Forest and Harlow District Councils. The assessment identified at the screening stage that all qualifying features of the Lee Valley SPA and Ramsar would be vulnerable to impacts arising from public access and disturbance.
- 5.7.5 Two components of Lee Valley SPA and Ramsar site Rye Meads SSSI and Amwell Quarry SSSI lie within 2.5km of the Village 7 Development and 3.7km of the proposed Villages 1-6 Development. Both sites are actively managed by Hertfordshire and Middlesex Wildlife Trust and the RSPB to promote nature conservation alongside responsible public access. Both reserves are laid out in considerable detail with a network of hides (ten at Rye Meads, three at Amwell) and clearly marked footpaths/boardwalks with screening vegetation that are specifically laid out and

<u>62634050a65d.filesusr.com/ugd/8d76d7_b18e84350f1240cda3b2735fa4de489a.pdf</u> Lee Valley Regional Park Authority Strategic Policies Appropriate Assessment, Lepus Consulting, 2019

¹⁵ https://4a7cf0de-56b5-46b2-8640-

designed to route people away from the sensitive areas and minimise disturbance while at the same time accommodating high numbers of visitors.

- 5.7.6 Moreover, no dogs are allowed (except registered assistance dogs) and the wet and marshy/open water nature of the habitats on site inherently limits off-track recreational activity, rendering it difficult to accomplish and unappealing. For these reasons it is considered that the vulnerability of Amwell Quarry SSSI and Rye Meads SSSI to the potential adverse effects of recreational activity that can affect other less well-managed sites is very low. Within Turnford and Cheshunt Pits SSSI, recreational activity is similarly regulated through zoning of water bodies. The majority of the site is already managed in accordance with agreed management plans in which nature conservation is a high or sole priority. It is therefore considered that these management regimes protect the sensitive habitats that support the qualifying features, retaining the structural and functional integrity of the SPA.
- 5.7.7 In view of the prohibition of dogs from these sites; the relatively limited parking opportunities within their vicinity; the presence of well-defined and screened walking routes and viewing areas; and the marshy or aquatic character of the principal habitats, which is likely to preclude 'off-path' recreation, and in accordance with conclusions presented in the Habitat Regulations Assessment of the East Herts District Plan and Harlow Local Development Plan, no viable pathway to a significant recreational effect upon the SPA and Ramsar site is considered to exist.
- 5.7.8 It is noted that the HRA of the Lee Valley Regional Park Development Framework (Lepus Consulting, 2019) was able to conclude that likely significant effects from increased public access and disturbance at the Lee Valley SPA and Ramsar were unlikely (taking account of in-combination effects from relevant plans, policies and programmes). The Regional Park Authority has extensive experience of managing visitor access while protecting the vulnerable habitats that contribute to the integrity of the SPA/Ramsar and have plans and programmes in place to manage increased visitor demands associated with the local development plans. Indeed, the policies within the Lee Valley Regional Park Development Framework are specifically designed to manage visitor demand in a way that prevents harm to vulnerable habitats and species.
- 5.7.9 The Applicant's Habitats Information (2019 IHRA) did not anticipate that any 'likely significant effects' would occur to the Lee Valley SPA/Ramsar site overall as a result of recreational pressure, and in particular on the Rye Meads SSSI and Amwell Quarry SSSI elements of the SPA and Ramsar. This conclusion was not disputed by Natural England and having reviewed the 2019 IHRA and the Lee Valley Regional Park Development Framework HRA, East Herts District Council (as competent authority and local planning authority) agree with the Applicant's conclusion that there would be no 'likely significant effects' to the Lee Valley SPA/Ramsar site as a result of recreational pressure from the proposed Development, alone and/or in combination with other plans and projects such as Villages 1-6. This conclusion was also reached in the Screening Assessment for

the Villages 1-6 applications. Therefore, no Appropriate Assessment of recreational impacts on the Lee Valley SPA/Ramsar is required.

5.7.10 Recreational activity is therefore not considered further as an impact pathway with regard to the application site. Currently, the SPA/Ramsar remains in favourable condition. However, for completeness, the HRA undertaken for the East Herts District Plan recommended that all new residential development deliver greenspace in-line with the Natural England Accessible Natural Greenspace standard to ensure that it is self-sufficient. Policy GA1 (The Gilston Area) of the EHDP therefore included this requirement. This policy requirement does not however affect the conclusion reached above with regard to screening in respect of this pathway and has not been taken into account for screening purposes.

Wormley-Hoddesdonpark Woods SAC

- 5.7.11 Wormley-Hoddesdonpark Woods SAC is a large, attractive area of ancient woodland with extensive public access and close to large urban centres. As such, the SAC woodlands are subject to a relatively high level of baseline recreational use, the effects of which, according to the respective Site Improvement Plan, have been largely successfully managed through restricted on-site access, the provision of laid out routes and limited car parking areas. It is noted that the Site Improvement Plan connected with this SAC, which is referenced in the HRA for the District Plan (submission 2016) has been superseded in part by the Natural England Supplementary Advice on achieving its Conservation Objectives. However, neither the Site Improvement Plan or the Conservation Objectives Supplementary Advice indicate recreational pressure as being a current or future obstacle to achieving or maintaining favourable conservation status and preserving the integrity of the SAC.
- 5.7.12 The Habitat Regulations Assessment undertaken for the East Herts District Plan¹⁷ describes the 'worst case' recreational catchment for the SAC being 7km based on the maximal catchments ascribed to large woodland sites. The distance from the Application area comprising the Development from the Wormley-Hoddesdonpark Woods SAC is approximately 6.4km and it is therefore not considered likely that the operational phase of the Development (alone or in combination with Villages 1-6 and other HGGT Strategic Sites, plans and programmes) will exert recreational pressure on the Wormley-Hoddesdonpark Woods SAC. This view has also been reached in the HRA undertaken for the Broxbourne Local Plan, which along with East Herts District Plan contains allocations and policies that would have a more direct pathway to potential impacts on the SAC.

¹⁶ http://publications.naturalengland.org.uk/publication/4919819195383808 European Site Conservation Objectives: Supplementary Advice on Conserving and Restoring Site Features.

¹⁷ East Herts District Plan Submission Habitat Regulations Assessment 2016: https://cdn-eastherts.onwebcurl.com/s3fs-public/documents/Habitats Regulations Assessment 2016.pdf

5.7.13 The Applicant's Habitats Information (2019 IHRA) found that no likely significant effects were expected to occur upon Wormley-Hoddesdonpark Woods SAC. This conclusion was not disputed by Natural England and having reviewed the 2019 IHRA, the Council agree with the Applicant's Habitats Information (2019 IHRA) that there would be no 'likely significant effects' to Wormley-Hoddesdonpark Woods SAC as a result of recreational pressure from the proposed Applications comprising the Development, alone and in combination with each other and with other plans and projects, which also include Villages 1-6. However, Herts Ecology have advised that despite the conclusions in the relevant HRAs, which are undisputed by Natural England, there is a 'credible risk' that the Development may increase visitor numbers in the SAC such that likely significant effects from recreational demand cannot be ruled out and an Appropriate Assessment should be carried out on this basis. This conclusion was also reached in the Screening Assessment for the Villages 1-6 applications. This is therefore carried through into the Appropriate Assessment in section 6.1 of this report.

Epping Forest SAC

- 5.7.14 Epping Forest SAC is subject to a high level of baseline recreational use, the effects of which upon its qualifying and other ecological features present a source of longstanding concern. The Interim Mitigation Strategy (EFDC, 2018) attributes the SAC with a ZoI in respect of recreational access extending to 6.2km while acknowledging that this figure is unduly influenced by visits originating from North London to the particularly well-frequented south of the SAC.
- 5.7.15 As the proposed Development lies 10.8km to the north of the SAC, on the distal side of Harlow, a significant effect arising from recreational pressure is not considered likely, even in the absence of mitigation. The Applicant's Habitats Information (2019 IHRA) did not anticipate likely significant effects upon Epping Forest SAC by virtue of recreational use. This conclusion was not disputed by Natural England and having reviewed the 2019 IHRA, East Herts District Council agrees with the Applicant's findings that there would be no likely significant effect to this site as a result of recreational pressure from the proposed Development, alone and/ or in combination with other plans and projects including the combined effects of Villages 1-6. This conclusion was also reached in the Screening Assessment for the Villages 1-6 applications. Therefore, no further Appropriate Assessment of recreational impacts is required.

5.8 Stage 1: Screening – Assessment of Potential Air Quality Effects

5.8.1 This section of the screening is informed by the Applicant's Habitats Information (2019 IHRA, 2021 IHRA) and the Villages 1-6 2019 IHRA, 2020 IHRA and 2022 IHRA, and considers the potential for the proposed Applications comprising the Development either alone or in combination with each other and with other plans and projects (in particular the combined effects with Villages 1-6), to generate effects arising from air quality changes on the Lee Valley SPA and Ramsar site, Wormley-Hoddesdonpark Woods SAC and Epping Forest SAC.

- 5.8.2 The assessment takes account of the Conservation Objectives listed in the Natural England information database on designated sites, existing information regarding the respective sensitivity of the National Network Sites to effects arising from changes in air quality, including review of site management plans and Natural England Supplementary Advice where available 18, SSSI unit condition assessments, and strategic level mitigation frameworks. Consideration was also given to the HRAs undertaken for the East Herts District Plan (EHDP), Harlow Local Development Plan (HLDP), Epping Forest Local Plan (EFLP), Broxbourne Local Plan (BLP) and the Lee Valley Regional Park Development Framework.
- 5.8.3 The assessment also takes into account Natural England Guidance on Advising Competent Authorities on the Assessment of Road Traffic Emissions under the Habitats Regulations, June 2018. As noted in section 5 above, the JNCC has recently been published Guidance on Decision-making Thresholds for Air Pollution, December 2021. The new guidance introduces potential new Decision-making Thresholds and levels of environmental change which will not undermine the achievement of the conservation objectives for air quality that can be applied to individual sites, known as Objective Compliant Change and Site-Relevant Thresholds. The guidance also proposes different thresholds for on-site sources of emissions from development and emissions from roads as a result of forecast increases in road traffic. However, it should be noted that as the JNCC guidance is newly published, these new thresholds have not yet been applied to the relevant SACs in the Zone of Influence for the Development (Lee Valley SPA and Ramsar, Wormley-Hoddesdonpark Woods and Epping Forest SAC), and therefore the Natural England guidance from June 2018 is applied in this assessment.
- 5.8.4 Information regarding wetland bird species is informed by The British Trust for Ornithology (BTO) Wetland Bird Survey interactive website¹⁹ and the MAGIC mapping database hosted by the Department for Food and Rural Affairs (Defra).
- 5.8.5 Information regarding site-specific baseline conditions and environmental thresholds was taken from the Air Pollution Information System (APIS)²⁰, a continually updated web-based data resource on pollutant levels in the UK and the sensitivity of designated nature conservation sites and their component habitats.

¹⁸ http://publications.naturalengland.org.uk/publication/4919819195383808 Wormley-Hoddesdonpark Woods SAC Conservation Objectives Supplementary Advice;

http://publications.naturalengland.org.uk/publication/5670650798669824 Lee Valley SPA Conservation Objectives Supplementary Advice; http://publication/5670650798669824 Lee Valley SPA Conservation Objectives Supplementary Advice Supplementary Advice

¹⁹ https://app.bto.org/webs-reporting/numbers.jsp British Trust for Ornithology Wetland Bird Survey Interactive Website.

5.8.6 APIS defines the relevant respective environmental standards for particular habitats and pollutant types. 'Critical levels' identify the environmental standard for airborne gaseous pollutants (nitrogen oxides (NOx) and ammonia) and are defined as:

"concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge²¹"

5.8.7 'Critical loads' identify the environmental standard for deposited pollutants (nitrogen and acid deposition) and are defined as:

"a quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge" (APIS).

- 5.8.8 For NOx, a non-specific critical level of 30µg/m3 is applied to all habitats. For other pollutants, the critical load or level is receptor specific, with lower and upper critical loads cited for application in different circumstances, such as differing hydrological or management regimes. In this assessment, the more precautionary threshold (i.e. the lower critical load/level number) is applied unless contraindicated by specific evidence.
- 5.8.9 In order to assess whether the Development has the potential to cause effects that exceed this precautionary critical threshold it is necessary to consider the traffic modelling that supports the proposals of not just Village 7, but the adjacent Villages 1-6 development as the two schemes are connected by shared mode share objectives and sustainable transport corridors and shared infrastructure that reduces the need to travel. Likewise, the strategic planned growth cumulatively in the wider HGGT identified in Figure 3 above, plus background growth in traffic that results in increased vehicular trips are necessary to take into account.
- 5.8.10 Chapter 8 of the ES and ES Addendum describes the traffic modelling in detail. Traffic flows from within the ZoI of the Development which lie within 200m of the National Network Sites were modelled; looking at 'Do minimum' and 'Do Something' scenarios:
 - Do Minimum (DM) future baseline (to account for background growth) with other committed development within the HGGT area, including Villages 1-6 and development plans of East Herts, Harlow and Epping Forest Districts, but no proposed Development;
 - Do Something (DS) future baseline with other committed development as above, plus the proposed Development (Village 7).
- 5.8.11 The two DM and DS scenarios were also considered over three time horizons:

²¹ http://www.apis.ac.uk/critical-loads-and-critical-levels-guide-data-provided-apis

- The intermediate year of 2027 to factor in construction impacts
- The intermediate year of 2033 (end of Plan period) to factor in completion of the Crossings and an intermediate level of development i.e. completion of up to 3,050 homes in the Gilston Area
- Completion (post-development) year of 2040 to factor in impacts of occupation.
- 5.8.12 Alternate DM and DS scenarios were also modelled for the 2033 time horizon to reflect potential different levels of completion in Village 7 which included:
 - DM1 and DS1 with 750 dwellings in Village 7
 - DM2 and DS2 with 1,250 dwellings in Village 7.
- 5.8.13 In addition, the Village 7 2021 IHRA contained two additional scenarios to assess the impacts of the proposed Development in isolation, i.e. without Villages 1-6, the associated A414/Eastwick Junction changes and Eastern Stort Crossing:
 - Scenario 10 Future year 2033, Full Local Plan
 - Scenario 11 Future year 2033, Full Local Plan, Full Village 7: 1,500 homes
- 5.8.14 This range of scenario testing is considered to provide a comprehensive consideration of the different levels of traffic generated by the Applications comprising the Gilston Area Development in combination with other known plans and projects, including the planned strategic sites within the wider HGGT area. It also means that both construction and operational phases of the Development can be considered comprehensively as the intermediate year of 2027 scenario assesses construction impacts with limited occupation of new homes; during the intermediate year of 2033 both Crossings schemes would be completed along with approximately 3,000 new homes in the Gilston Area plus all the allocated Development Plan sites across the HGGT area; and the completion year of 2040 scenario assesses the impacts of occupation once all Gilston Area construction activities are complete.
- 5.8.15 The traffic modelling above was used to inform the air quality modelling, as described in detail in Chapter 9 of the ES and ES Addendum in respect of the Development. The pollutant modelling considered NOx and ammonia concentrations, nitrogen deposition and acidification for each traffic growth scenario.
- 5.8.16 To assess whether pollution from traffic is likely to have an effect on a National Network Site, Natural England's current guidance (2018²²) explains that Natural England and Highways England agree that protected sites falling within 200 metres of the edge of a road affected by a plan or project need to be considered further as it is within 200m of a road that road emissions are likely to have an effect on the vegetation within a

²² http://publications.naturalengland.org.uk/publication/4720542048845824 Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitat Regulations, NEA001, July 2018

protected site. Protected sites beyond 200m of a road are likely to need no further assessment and a screening conclusion of no likely significant effect on the protected site can be advised with regard to the risk of road traffic emissions affecting air quality.

- 5.8.17 The next part of the assessment is to establish whether the qualifying features of a protected site is present within 200m of the edge of a road on which a plan or project will generate traffic, and whether these qualifying species are vulnerable to air pollution effects. If there is a credible risk or uncertainty that qualifying features may be located within the 200m distance, then a precautionary approach should be taken using the predicted average annual daily traffic flow as a proxy for emissions, or the predicted emissions themselves, the threshold is exceeded and more detailed empirical data should be used. The use of the AADT screening threshold is advocated by Highways England in their Design Manual for Roads and Bridges (DMRB) to check whether more detailed evidence should be used. The Natural England guidance provides two screening thresholds for Appropriate Assessment:
 - A change in traffic flow of, or exceeding, 1,000 Average Annual Daily Traffic flow (AADT) (or 200 or more heavy duty vehicle AADT flows on motorways); and
 - A change in emissions of, or exceeding 1% of the critical load or level, on the basis that lower contributions are "widely considered to be imperceptible".
- 5.8.18 These thresholds should be considered in a stepwise manner:
 - 1) Apply the threshold alone taking the Development (Village 7) on its own, consider whether emissions exceed 1% of the critical load or results in a change in traffic flow of more than 1,000 Average Annual Daily Traffic flow (or 200 or more heavy duty vehicle AADT flows on motorways);
 - 2) Apply the threshold taking the Development Proposal in combination with emissions from other plans and projects. Consider whether collectively they could exceed 1% of the critical load or result in a change in traffic flow of more than 1,000 Average Annual Daily Traffic flow (or 200 or more heavy duty vehicle AADT flows on motorways);
 - 3) If steps one and two do not result in exceedance of the screening threshold then the potential for likely significant effects either alone or in combination with other plans and projects can be screened out, and further investigation as part of an Appropriate Assessment is not required;
 - 4) If steps 1 and/or 2 result in exceedance of the screening threshold, then the need for Appropriate Assessment is triggered. This is because the development either alone or in combination is predicted to contribute pollutants to a site at a level above which harm could occur, irrespective of whether background levels already exceed the Critical Loads.
- 5.8.19 For the purpose of this modelling, the 'in-combination' schemes considered include the Strategic Sites within the HGGT area, including Villages 1-6 and Village 7, plus the developments identified in the development plans of East Herts, Harlow and Epping

Forest Districts, also taking into account known and agreed transport and highway improvement schemes within the wider HGGT area.

Wormley-Hoddesdonpark Woods SAC

5.8.20 In terms of Wormley-Hoddesdonpark Woods SAC, its distance from the proposed Development is approximately 6.4km. The nearest major road to the SAC is the A10 and the only part of the Wormley-Hoddesdonpark Woods SAC that lies within 200m of the A10 is an access farm track and so there is no sensitive qualifying feature of the SAC within 200m of the A10. The Natural England Guidance on air quality assessments²³ advises that for road traffic emissions the distance criteria applied is 200m. Paragraph 4.12 of the Natural England guidance states that:

"If the [Application] does not fall within the distance criterion for designated sites (i.e. 200m for road traffic proposals), no further steps of the assessment are necessary. Such proposals are likely to have no effect on sites at all and so do not need to be subject to assessment in-combination with other plans and projects. A screening conclusion of no likely significant effect on the site can be advised with regard to the risk of road traffic emissions affecting air quality."

- 5.8.21 It is therefore considered that no viable impact pathway exists between the Development and any sensitive qualifying feature within the SAC, and as such it is considered that no likely significant effects will occur on the SAC in terms of air quality associated with the Applications alone, or in combination with other plans and or projects. This conclusion applies to both construction and operational phases of the Development.
- 5.8.22 This conclusion has also been reached in the HRAs for the Broxbourne Local Plan and East Herts District Plan, that both allocate development sites or contain policies that directly relate to the SAC, and also the HRAs for the Lee Valley Park Development and Epping Forest Local Plan, both of which considered the potential for 'in-combination' effects associated with those development plans.

Lee Valley SPA/Ramsar

5.8.23 In terms of the Lee Valley SPA/Ramsar, as it is the most proximate National Network Site to the Development at 2.5km, and part of the SAC is within 200m of the A414 which is the main arterial road serving the Development, it is considered necessary to assess the likely significant effects of traffic flows associated with the Village 7 Development, alone or in combination with other plans and projects, upon the Lee Valley SPA/Ramsar as a result of changes in air quality.

²³ NEA001 Advising CAs on Road Traffic and HRA June 2018,

- 5.8.24 The Applicant's Habitats Information (2019 IHRA) demonstrates that the threshold of 1,000 Average Annual Daily Traffic flow (AADT) in the vicinity of the Rye Meads SSSI component of the Lee Valley SPA/Ramsar is exceeded by the Development alone, thereby triggering the need for an Appropriate Assessment. A Village 7 only scenario increases AADT by 2,199 vehicles in 2033 on the A414 in the vicinity of the Rye Meads SSSI.
- 5.8.25 While the Applicant's 2021 IHRA considers outputs from Village 7 as a stand-alone proposal, the development can only proceed alongside the Villages 1-6 proposal. This is because there is a reliance on the delivery of infrastructure provided through the Villages 1-6 scheme, including on-site secondary education, to reduce the need to travel off-site. This contributes to the site's ability to meet the mode share objectives set out in the HGGT Transport Strategy. The Villages 1-6 Development also provides the opportunity to link to a sustainable transport corridor which connects Village 7 to the wider Gilston Area Development; it will deliver improvements to the Central Stort Crossing and the Eastern Stort Crossing, both of which facilitate wider sustainable transport infrastructure delivery.
- 5.8.26 This HRA Screening and Appropriate Assessment therefore uses the information previously presented in the HRA/AA accompanying the Villages 1-6 committee report as the data includes both Villages 1-6 and Village 7 development related traffic flow information. The transport assessment traffic forecast model outputs are summarised in Table 9 below. The 'do minimum (DM)' scenario shows future traffic flows of other plans and projects, but without the Village 7 and Villages 1-6 Development, while the 'do something (DS)' scenario shows future traffic flows with the Development in combination with other plans and projects including Villages 1-6. The table indicates that even without other development the Average annual Daily Traffic along the A414 in 2040 compared to the 2020 baseline is greater than 1,000 AADT (comparing the DM and DS outputs).

Table 9: A414 Two-way Traffic Flow Forecasts (AADT)

2020	2027	2027	2033	2033	2033	2033	2040	2040 DS
Base	DM	DS	DM1	DS1	DM2	DS2	DM	Table 14
Table 1	Table 2	Table 8	Table 3	Table 10	Table 4	Table 12	Table 5	
41,093	43,113	46,911	44,032	49,732	44,473	51,895	45,158	54,491

5.8.27 Taking into account the stepwise assessment of thresholds advised in the Natural England Guidance, this increase in vehicles along the A414 within 200m of the Rye Meads SSSI component of the Lee Valley SPA/Ramsar, from the Development alone exceeds 1,000 AADT and therefore triggers the requirement for an Appropriate Assessment as it cannot be discounted at the screening stage that likely significant effects will occur from air quality from this Development alone on the SPA/Ramsar.

Epping Forest SAC

- 5.8.28 In terms of Epping Forest SAC, the Applicant's Habitats Information (2019 IHRA and 2021 IHRA) did not anticipate likely significant effects on the Epping Forest SAC by virtue of air quality impacts given the conclusions of the HRA undertaken for the Epping Forest Local Plan that the impacts on the SAC arise primarily as a result of the planned development within Epping Forest district, and which also indicates that appropriate mitigation measures secured through the Epping Forest Local Plan reduces impacts such that the integrity of the SAC is not adversely affected. This conclusion was not disputed by Natural England, however, when discussing the Council's draft Appropriate Assessment for Villages 1-6, Natural England requested confirmation that the impacts of the total Development (post Plan period) were considered. This same consideration has therefore been applied in this AA.
- 5.8.29 The SAC has been subject to significant scrutiny throughout the Plan-making process of the Epping Forest Local Plan, the Harlow Local Development Plan and East Herts District Plan. As part of this work, the HRAs for the District Plans, which included 'incombination' traffic modelling, demonstrated that the planned growth within Epping Forest was the primary source of additional ammonia and NOx emissions and that all other plans and projects make a negligible contribution to the in-combination effects. It is noted that the HRAs for the District Plans assessed development levels and their respective transport impacts up to 2033 only, and as such only 3,050 homes in the Gilston Area were modelled as part of the air quality assessments for the Epping Forest SAC. However, it should be noted that the air quality modelling undertaken for the Epping Forest Local Plan HRA took into account the planned residential and employment growth set out in the Development Plans of Uttlesford, East Herts, Harlow, Epping Forest districts (the West Essex and East Herts Housing Market Area authorities) plus Broxbourne, Chelmsford, Brentwood, Havering, Redbridge, Waltham Forest and Enfield Councils, all of which are within the zone of influence of Epping Forest (as set out in Table 1 of the HRA²⁴).
- 5.8.30 The Applicant's 2019 IHRA included transport modelling up to 2040, by which time the Village 7 (and Villages 1-6) Development is planned to be fully complete and as such takes account of the Plan period growth up to 2033 and beyond to 2040. The Council is satisfied that this data is a reasonable and reliable source of information to inform the consideration of effects on the Epping Forest SAC.
- 5.8.31 This HRA focuses on the part of the SAC that is closest to the Development. This is the SSSI 105 component known as Epping Thicks. This is considered reasonable as this is most proximate component of SAC to the main transport route, the B1393, running from Harlow towards Epping and the Epping Forest SAC and the M25, and as such is the component of the SAC that will be most impacted by traffic flows from the HGGT area. The traffic link within the Transport Assessment Model closest to the Epping

²⁴ https://www.efdclocalplan.org/wp-content/uploads/2019/01/EB209-Epping-Forest-Local-Plan-HRA-2019-FINAL.pdf Epping Forest Local Plan HRA

Forest SAC is Link 96, which models traffic along the B1393 south of the M11 Junction 7. It is noted however, that this traffic link is some 7km from the nearest SSSI Unit Epping Thicks and as such, it is highly likely that the Development traffic will dissipate between this traffic link and the SAC. Therefore, while traffic data is available at Link 96, it is not fully representative of traffic that would be using the B1393 road through the Epping Forest SAC. The transport assessment traffic forecast model outputs are summarised in Table 10 below. The 'do minimum (DM)' scenario shows future traffic flows of other plans and projects, but without the Village 7 and Villages 1-6 Development, while the 'do something (DS)' scenario shows future traffic flows with the Development in combination with other plans and projects.

Table 10: B1393 Link 96 Traffic Flow Forecasts (AADT)

2020	2027	2027	2033	2033	2033	2033	2040	2040
Base	DM	DS	DM1	DS1	DM2	DS2	DM	DS
Table 1	Table 2	Table 8	Table 3	Table	Table 4	Table	Table 5	Table
				10		12		14
22,479	23,410	23,502	24,549	24,601	24,061	24,162	23,919	24,113

5.8.32 The Villages 1-6 Applicant's updated 2022 IHRA update has provided traffic data for the same section of the B1393 running from south of the M25 to the Wake Arms Roundabout. As explained above, this road runs alongside and to the west of the SAC and is the road where any additional traffic generated by the Gilston Area development would be greatest in the SAC. The data in Table 10.a provided in the Villages 1-6 2022 IHRA below is only marginally different from the traffic counts assessed in the council's 2022 AA and therefore confirms the Council's previous assessment of traffic flow on this link.

Table 10.a B1393 Traffic Flow Forecasts (AADT) (Villages 1-6 2022 IHRA)

2019	2027	2027	Increase	2033	2033	Increase	2040	2040	Increase
Base	DM	DS	DM-DS	DM2	DS2	DM-DS	DM	DS	DM-DS
22,479	23,410	23,485	75	24,061	24,128	67	23,918	24,061	

- 5.8.33 The modelling indicates that the Village7 Development traffic alone and with the Villages 1-6 Development does not exceed 1,000 Average Annual Daily Traffic flow on Link 96, but in combination with other plans and projects the threshold of 1,000 AADT is exceeded, and therefore triggers the requirement for an Appropriate Assessment, as it cannot be discounted at the screening stage that likely significant effects will occur from air quality from this Development when considered in combination with other plans and projects on Epping Forest SAC.
- 5.8.34 The Applicant's 2019 IHRA modelled the traffic flow on the M25, being the main road closest to the Epping Forest SAC. Table 11 below summarises the AADT forecasts using

the 2018 Transport Assessment Model baseline. By the completion of the Development there is no forecast difference between the 'with Development' and 'no Development' scenario, but the effect of the Development in combination with other sources of traffic is an exceedance of the 1,000 ADT threshold, which would trigger the need for an Appropriate Assessment. Given that the growth of traffic on the M25 is considerably greater than that forecast at Link 96, it is this data that is modelled in the Transport Assessment Model tables in the Appropriate Assessment.

Table 11: M25 Traffic Flow Forecasts (AADT)

	2018	2027	2027 DS	2033	2033	2033	2033	2040	2040 DS
	Base	DM		DM2a	DS2a	DM2b	DS2b	DM	
Ī	131,148	146,559	146,956	152,571	152,911	153,058	152,571	158,968	158,968

5.8.35 The Appropriate Assessment therefore considers the current and future nutrient critical loads associated with the SAC qualifying features, and whether the traffic flow generated by the Development alone and in-combination with other plans and projects, including Villages 1-6 will have an adverse effect on the integrity of the SAC as a result of changes in air quality.

5.9 Stage 1: Screening – Assessment of Potential Water Quality and Water Abstraction Effects

- 5.9.1 This section of the screening is informed by the Applicant's Habitats Information (2019 IHRA) and considers the potential effects of the proposed Development, alone and in combination with other plans and projects, on water quality and from water abstraction. This screening takes account of the Affinity Water Resources Management Plan 2020-2080²⁵ and it's supporting Habitats Regulations Assessment²⁶ as well as the Rye Meads Water Cycle Strategy Review, 2015²⁷. This is to ensure that the water supply needs of the Village 7 Development for 1,500 homes, in combination with the adjacent proposal for 8,500 homes in Villages 1-6 can be met in a way that does not cause adverse effects on the Lee Valley SPA/Ramsar downstream of the application site as a result of abstraction processes.
- 5.9.2 The screening also takes account of the Conservation Objectives listed in the Natural England information database on designated sites, existing information regarding the respective sensitivity of the National Network Sites to effects arising from changes in

²⁵ <u>https://www.affinitywater.co.uk/corporate/plans/water-resources-plan</u> Affinity Water Resource Management Plan 2020-2080

²⁶ https://www.affinitywater.co.uk/docs/4.12 Habitat Regulations Assessment Final WRMP19.pdf Affinity Water, Water Resource Management Plan HRA

²⁷ https://www.north-

water quality and quantity, including review of site management plans, SSSI unit condition assessments, and strategic level mitigation frameworks. Consideration was also given to the HRAs undertaken for the East Herts District Plan, Harlow Local Development Plan and Epping Forest Local Plan.

- 5.9.3 As is described in Tables 5 and 6 above, water quantity and quality are not cited as threats in the Site Improvement Plan for the Wormley-Hoddesdonpark Woods SAC, nor as being a reason for any of the SSSIs with unfavourable condition. As described in Table 7 above, inappropriate water levels within wet heath areas of the Epping Forest SAC is a threat as is water pollution from highway surface run-off. It should be noted however, that the most proximate component of the SAC to the Development, SSSI Unit 105 is listed as being in favourable condition and comprises broad-leaved, mixed and Yew woodland lowland, and therefore these threats are not applicable to this component of the SAC. Neighbouring SSSI Unit 106 contains no water dependant habitats, and SSSI Units 107 and 108 are considered in favourable condition.
- 5.9.4 Given the above, the Applications comprised in the Gilston Area Development are not considered to have any ecological effects on water-dependant features of the National Network Sites of the Wormley-Hoddesdonpark Woods SAC and Epping Forest SAC. This accords with the conclusion in the HRAs for the Broxbourne Local Plan, East Herts District Plan, Harlow Local Development Plan and Epping Forest Local Plan, and this conclusion is agreed with Natural England. The Council considers this to be reasonable and appropriate, particularly as the two SACs are not reliant upon, or are designated because they contain water-dependant habitats.
- 5.9.5 However, habitats within the Lee Valley SPA/Ramsar site that support the bird species identified in the Birds Directive Annex I, for which the site is designated, could be affected by changes in water quality, as indicated in Table 12 below. In addition, the Lee Valley qualifies as a Ramsar site because it supports the nationally scarce plant species Whorled Water-milfoil *Mytiophyllum verticullatum* and the rare and vulnerable invertebrate *Micronecta miutissima* a water-boatman, both of which are vulnerable to changes in water quality.

Table 12: Water-dependant Species and Habitats in the Lee Valley SPA/Ramsar

Bird Directive Annex I Species and Ramsar	Wintering Population of Great Britain (%)	Supporting Habitat	
Citation			
Great Bittern, <i>Botaurus</i> stellaris stellaris	6%	Fen, marsh and swamp	
Gadwall, Anus strepera	2.6%	Standing open water and canals	
Shoveler, Anas clypeata	1.9%	Standing open water and canals	
Noteworthy flora			

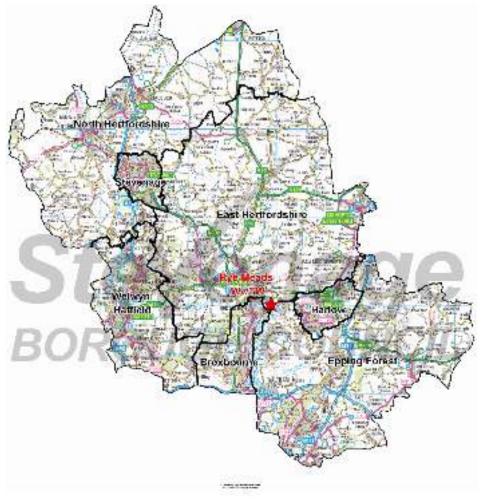
Whorled Water-milfoil, Mytiophyllum	Nationally scarce	Freshwater wetland
verticullatum		
Noteworthy fauna		
Great Cormorant,	Peak counts in Spring/	Standing open water and
Phalacrocorax carbo	Autumn	canals
carbo	1.8%	
Tufted Duck, Aythya	Peak counts in Spring/	Standing open water
fuligula	Autumn	
	2.3%	
Common Coot, Fulica	Peak counts in Spring/	Standing open water and
atra atra	Autumn	canals
	1.1%	
Great Bittern, <i>Botaurus</i>	Peak counts in winter	Fen, marsh and swamp
stellaris stellaris	1%	
Smew, Mergellus albellus	Peak counts in winter	Standing open water
	3.7%	
Water Rail, <i>Rallus</i>	Peak counts in winter	Fen, marsh and swamp
aquaticus	3.7%	
Water-Boatman,	Nationally important	Standing open water
Micronecta miutissima	invertebrate	

- 5.9.6 The Applicant's Habitats Information (2019 IHRA) considered that because construction activities associated with the Applications are tightly controlled and regulated by codes of construction practice, those controls will ensure water quality is not affected. Therefore, the Applicant considers that construction related activities could be 'screened-out' of further appropriate assessment of adverse effects upon the integrity of a National Network site. The LPAs have nonetheless reached the conclusion that it is inappropriate to screen out at the screening stage the potential for the construction stages of the Applications comprised in the Development, alone or in combination, to have any likely significant effects on the water quality of the Lee Valley SPA/Ramsar.
- 5.9.7 All construction activities can create risks to the environment through pollution incidents like fuel or chemical spillages, inappropriate storage or handling of construction materials and dust escape for example, which can fall on the surrounding environment. Therefore, without appropriate mitigation the construction phases of any component of the Development alone could result in harm to water quality within the River Stort, which flows towards the confluence of the River Lee and River Stort, which is located downstream of the Rye Meads SSSI element of the Lee Valley SPA/Ramsar. As such, potential effects from the construction of the Development are therefore assessed further as part of the Appropriate Assessment, which goes on to consider the impacts on the integrity of the National Network site, either alone or in combination with other plans and projects, with regard to the site's structure and function and its Conservation Objectives.

- 5.9.8 In terms of the operational phase of the Development, in particular the Outline Application for Village 7, there is a potential impact pathway between new homes and the potential for changes in water quality as a result of the requirement to treat waste water from new homes and non-residential buildings. The closest parts of the SPA to the proposed Development are the Rye Meads SSSI (approximately 2.6km west), Amwell Quarry SSSI (3.3km west) and Turnford and Cheshunt Pitts (7.8km south-west). The Rye Meads SSSI and Turnford and Cheshunt Pitts SSSI components of the Lee Valley SPA/Ramsar may be affected by changes in water quality through the discharge of treated waste water effluent into the water catchment from Rye Meads Waste Water Treatment Works (WwTW). This effect would arise from the Village 7 and Villages 1-6 Application element of the Gilston Area Development rather than the Crossings. The Applicant's Habitats Information (2019 IHRA) screened out the potential for the Development to affect the Lee Valley SPA/Ramsar directly and indirectly, alone and in combination as a result of changes to water quality. However, for consistency with the approach taken for Villages 1-6, this element is considered further in the Appropriate Assessment.
- 5.9.9 The Rye Meads SSSI component of the SPA/Ramsar is upstream of where the Rye Meads Waste Water Treatment Works discharges in to the River Lee via Tollhouse Stream. However, because this connection is upstream of the confluence of the River Stort and River Lee, in periods of high water flow, Tollhouse Stream has on occasion backed up into the marsh grassland areas of the SSSI. The Amwell Quarry SSSI is further upstream of the Rye Meads Waste Water Treatment Works and is therefore not affected.
- 5.9.10 The Turnford and Cheshunt Pitts SSSI component of the SPA/Ramsar lies downstream of the Rye Meads Waste Water Treatment Works and despite being affected by urbanisation and sewage discharge from local industrial, urban and agricultural sources rather than the Rye Meads Waste Water Treatment Works, the conservation status for the extent of habitats and their supported species of Gadwall, Shoveler and Bittern are considered to be favourable. For the purpose of this assessment therefore, it is considered that no pathway exists in terms of water quality impacts between the Development and the Turnford and Cheshunt Pitts component of the Lee Valley SPA/Ramsar, and as such are screened out.
- 5.9.11 The presence of the Rye Meads Waste Water Treatment Works and its ability to cope with additional growth, not only from the Development but from its wider catchment, is an important consideration. This is because high levels of nutrients like phosphorous and nitrogen can unbalance plant growth and vegetation composition leading to oxygen depletion which affects the species reliant upon the watercourses. The Rye Meads Waste Water Treatment Works catchment extends from North Hertfordshire to Epping Forest as illustrated in Figure 5 below, taken from the Rye Meads Water Cycle Strategy Review, 2015. The Water Cycle Strategy Review considers the demand for, and use of, water as part of its continuous circulation on, above and below the earth. It

looks at the engineered use of water for domestic consumption and disposal alongside the natural cycle through watercourses and aquifers. The Review examined the likely demands of growth within the catchment of the Waste Water Treatment Works, and has fed into more up to date models undertaken by Thames Water, which therefore take account of the in-combination demands from the development plans of authorities in the catchment as illustrated.

Figure 5: Water Cycle Strategy Study Area – Rye Meads Waste Water Treatment Works Catchment



5.9.12 Thames Water and the Environment Agency have been consulted upon throughout the Plan-making process of the East Herts District Plan, Harlow Local Development Plan and through the pre-application and applications stages of the proposed Applications comprised in the Development. Thames Water manage the Rye Meads Waste Water Treatment Works and the Environment Agency manage the licencing regime which controls levels of discharge associated with the Rye Meads Waste Water Treatment Works. Recent Discharge Consents have increased the treatment capacity of the Rye Meads Waste Water Treatment Works and improved discharge quality, however, recent engagement with Thames Water on the Villages 1-6 Outline Application and the Village 7 Outline Application has confirmed that the Rye Meads Waste Water Treatment Works has capacity to accommodate growth within the catchment to 2036 and Thames Water

has programmes in place to plan for upgrades as necessary. The Village 7 Development will be completed prior to 2036. However, as the construction of the adjacent Villages 1-6 Development comprising 8,500 homes will extend beyond 2036, Thames Water have requested that a condition be attached to the planning permission for the Outline Application, if granted, to limit the number of homes occupied until such time that upgrades occur. As such, it is necessary to consider further in the Appropriate Assessment the need to mitigate the potential adverse effects of the discharge of treated wastewater effluent from the Outline Application, alone or in combination, upon the integrity of the Rye Meads SSSI element of the Lee Valley SPA/Ramsar having regard to the site's structure, function and its Conservation Objectives²⁸.

- 5.9.13 In terms of water abstraction, approximately 60% of water supply in East Herts comes from groundwater sources and 40% from surface water sources with boreholes abstracting from chalk and gravel aquifers. The Rye Meads SSSI component of the SPA/Ramsar has been identified as being sensitive to high levels of abstraction. However, Affinity Water, who manage water supplies to homes and businesses in the area has identified through their own modelling that there is sufficient water supply for estimated growth such that adverse effects on National Network Sites can be avoided. The Affinity Water Resources Management Plan 2020-2080 is supported by its own Habitat Regulations Assessment which identifies that there are no likely significant effects on the National Network Sites within the Zone of Influence of the Gilston Area applications, taking into account the planned growth identified within the East Herts District Plan and Harlow Local Development Plan (along with other statutory Plans and Projects within the Zone of Influence of the Water Management Plan which also covers the water supply catchment within the Zone of Influence of the Development).
- 5.9.14 The Council is satisfied that the HRA for the Affinity Water Resources Management Plan takes account of the relevant plans and programmes in combination, considers how the demands arising from planned growth within the Affinity Water Supply Catchments will be accommodated and whether these demands will adversely affect the water sensitive environments of National Network Sites, including the Lee Valley SPA. The Water Resources Management Plan HRA identifies that a number of plans and strategies will be required to meet demands up to 2080. For the Stort Catchment the Plan identifies the need for a long-term strategy of moving water into the catchment; comprising abstracting water from the River Ouzel at Leighton Buzzard, storing it at a new fully bunded raw water reservoir at Honeywick Rye, and discharging flow to the Upper Lee at Dunstable. Since the reservoir scheme is intended to augment the River Lee 30km of the Lee Valley SPA/Ramsar site, and to enable increased abstraction in the Upper Lee, without any net change in downstream flow or volume, its effect on the Lee Valley SPA/Ramsar site will be neutral. The Development, alone and in combination with other plans and programmes will require water supply and the Water Supply Company has a plan in place to accommodate water supply demands for new growth.

²⁸ Maintain the overall depth of swamp and marginal water and ensure water quality and quantity is maintained to a standard which provides the necessary conditions to support the qualifying species.

These plans have been assessed on an in-combination basis and the HRA identified that they are not considered likely to have a significant effect on the Lee Valley SPA/Ramsar. It is considered therefore that likely significant effects on the Lee Valley SPA/Ramsar as a result of excessive water drawdown and therefore water quantity effects can be screened out for the operational and construction phase of the Development alone and in combination with the Villages 1-6 Development.

5.10 Stage 1: Screening - Conclusion

5.10.1 The screening assessment above considered the potential for the Village 7 Development to be likely to have significant effects on National Network Sites the Lee Valley SPA/Ramsar, the Wormley-Hoddesdonpark Woods SAC and Epping Forest SAC when considered in combination with the Villages 1-6 Development. In line with the 'Sweetman' case, the screening assessment does not take into account mitigation. The screening assessment firstly considers whether the Development alone and incombination with the Villages 1-6 Development (the Gilston Area Development as a whole) are likely to have significant effects, and then whether the Development as a whole in combination with other plans and projects are likely to have significant effects.

Lee Valley SPA/Ramsar

- 5.10.2 The screening assessment identified before considering mitigation that the Development alone would have the potential, during its operational and/or construction phases, to cause the following biophysical changes, which could result in ecological effects on the Lee Valley SPA/Ramsar site.
 - A delay to the improvement of air quality changes arising from traffic generated by the operational phase of the proposed development; and
 - A change in water quality as a result of the operational and construction phase of the Development.
- 5.10.3 Given that the screening identified that it could not be ruled out that likely significant effects will occur on the Lee Valley SPA/Ramsar in relation to air quality and water quality as a result of the Applications comprising the Development in combination with the Villages 1-6 Development, an Appropriate Assessment is required.

Wormley-Hoddesdon Park Woods

5.10.4 The screening assessment concluded that no likely significant effects were likely to occur on Wormley-Hoddesdonpark Woods as a result of changes in water quality, water quantity or air quality. However, taking a precautionary approach Herts Ecology advise that there is a credible risk of recreational demand on the SAC from the Gilston Area Developments once operational, and therefore an Appropriate Assessment should be carried out on this potential impact.

Epping Forest SAC

5.10.5 The screening assessment concluded that no likely significant effects were likely to occur on the Epping Forest SAC as a result of changes in recreational demand, water quality or water quantity. However, the screening assessment indicated that it could not be ruled out that likely significant effects will occur on the Epping Forest SAC in relation to air quality as a result of the Development when considered in combination with other plans and projects, namely the other Strategic Sites allocated within the Epping Forest Local Plan and Harlow Local Development Plan, and therefore an Appropriate Assessment is required on this potential impact.

Table 13: Screening Conclusion Summary

National Network Site	Impact Pathway	Screened Out - No Likely Significant Effects	Appropriate Assessment Needed
Lee Valley	Recreational	No Likely Significant	
SPA/Ramsar	Impacts	Effects	
	Air Quality Impacts		Yes
	Water Quality/		Yes
	Quantity Impacts		
Wormley-	Recreational		Yes
Hoddesdonpark	Impacts		
Woods SAC	Air Quality Impacts	No Likely Significant	
		Effects	
	Water Quality/	No Likely Significant	
	Quantity Impacts	Effects	
Epping Forest	Recreational	No Likely Significant	
SAC	Impacts	Effects	
	Air Quality Impacts		Yes
	Water Quality/	No Likely Significant	
	Quantity Impacts	Effects	

6. Stage 2: Appropriate Assessment

6.1 Assessment of Potential Recreational Effects

- 6.1.1 The screening stage identified that no likely significant effects were predicted to occur on the Lee Valley SPA/Ramsar and on the Epping Forest SAC National Network Sites, from the Development either alone or in combination with other plans and projects as described in the screening assessment as a result of increased recreational demand. However, it could not be ruled out that there is a potential for recreational demand to occur in Wormley-Hoddesdonpark Woods from the Development once operational.
- 6.1.2 The Site Improvement Plan for Wormley-Hoddesdonpark Woods considers recreational demand stating that sensitive management of access points and routes has been

largely successful in mitigating the potential adverse effects of recreational demand. However, recreational demand is considered a threat against being able to achieve Conservation Objectives because visitor number increases and use of the site can change unpredictably and less obvious adverse effects on important flora and fauna could be missed. Therefore a 'lightweight' monitoring system for species or other site features likely to be sensitive to the effects of public access close to access points should be established.

- 6.1.3 It should be noted however, that no monitoring or visitor surveys appear to have been carried out for the SAC and therefore no data exists on the recreational catchment of the woods. As a result, a proxy of a 7km catchment is considered reasonable based on the HRAs of the East Herts District Plan, Broxbourne Local Plan and Epping Forest Local Plan, which use 7km as a 'worst case' catchment based on existing data for other large woodland National Network Sites including Epping Forest SAC and Ashdown Forest SAC and SPA. The Development is 6.4km from the Wormley-Hoddesdonpark Woods.
- 6.1.4 The Gilston Area allocation requires that a large proportion of the site be safeguarded against development and transferred to the community through a stewardship arrangement to ensure the provision and long term management of significant areas of open space and parklands. Of the overall Village 7 outline application site area of 117.4ha, approximately 51.4ha is proposed as strategic landscape, which is 43.78% of the outline site area, leaving a net developable area of approximately 66ha. The Village 7 proposal will therefore deliver a large amount of accessible natural green space for sport and recreation within the site including woodland and grassland areas. In addition, the adjacent Villages 1-6 Development will deliver considerable areas of accessible natural green space taking the form of open meadow grassland, newly planted woodland areas connecting existing woodland blocks, wild woodland spaces and defined woodland trails, green corridors between villages and pedestrian and cycle links down to the River Stort which comprises a number of managed nature reserves and recreational routes through the valley, such as the Harcamlow Way, with all such assets serving the whole Gilston Area as well as existing communities in the vicinity of the Development.
- 6.1.5 Each Village in the Gilston Area will provide local green spaces of different scale and function providing door-step play, sports areas and formal and informal parkland. Tree lined streets and routes will run through the villages connecting homes to these recreational spaces. The Parameter Plans and Development Specification set the framework for these principles and they are being demonstrated through masterplanning activities related to Village 7 along with the Strategic Landscape Masterplan which covers the whole of the Gilston Area allocation.
- 6.1.6 The two Crossing proposals comprise items of transport infrastructure designed to convey pedestrians, cyclists, public transport and private vehicles over the Stort Valley landscape. The Central Stort Crossing proposes to improve connections from the existing and proposed crossing down into the Stort Valley, connecting the bridge above

to the Stort Navigation Towpath and also to the Parndon Moat Marsh Local Wildlife Site/Local Nature Reserve, which is a managed environment, though is not a National Network Site. The Eastern Stort Crossing retains and improves sections of the current Public Rights of Way into the Stort Valley. These connections will provide direct and convenient routes from new and existing communities into the valley for recreational purposes, thus reducing the likelihood of travel by vehicle to the more ecologically sensitive Lee Valley SPA/Ramsar site downstream of the Development.

- 6.1.7 It is therefore considered that appropriate on site recreational opportunities provided and secured through the Development alone will provide suitable on-site natural greenspace sufficient to avoid recreational impacts on National Network Sites. When considered alongside the Villages 1-6 Development (including conditions or Section 106 obligations) the Development will provide Strategic Accessible Natural Greenspace within walking distance of new homes within Village 7 and Villages 1-6 and existing communities around the Gilston Area in line with Natural England's approach to reducing recreational demand on locations less capable of accommodating increased visitor numbers. Given the variety of green infrastructure proposals within walking distance of the new homes, which include ancient and new woodland areas, it is considered that the Development will provide sufficient alternative natural greenspace on-site such that new residents will not need to, and will be unlikely to, travel by private vehicle to the Wormley-Hoddesdonpark Woods SAC, which is the only way of accessing the SAC unless one is a competent cyclist.
- 6.1.8 While the screening stage suggests that there is a credible risk that the Development will increase visitor numbers to the Wormley-Hoddesdonpark Woods, given the above distance and provision of alternative on-site accessible natural greenspace and opportunities for recreation, it is considered that recreational demands on the SAC would be insignificant. Recreational effects are not cited in the reasons for the four SSSIs with unfavourable status, and the Conservation Objectives are concerned with maintaining and restoring species diversity, woodland structure and canopy, rather than preventing or controlling public access. Taking account of the Conservation Objectives, structure and function of the SAC the Council considers that there will be no adverse impact on the integrity of the Wormley-Hoddesdonpark Woods from recreational demands associated with the Development alone and in combination with Villages 1-6 and other plans and projects. This Appropriate Assessment therefore considers that there will be no impact on the integrity of the National Network Sites or the achievement of their Conservation Objectives in this regard.

6.2 Assessment of Potential Effects on Air Quality on the Lee Valley SPA/Ramsar and the Epping Forest SAC

6.2.1 The screening identified that no air pollution pathways were considered to exist between the Development and the Wormley-Hoddesdonpark Woods SAC and as such

further consideration of air quality impacts on the SAC is not necessary to be carried forward into the Appropriate Assessment.

- 6.2.2 However, the screening stage concludes that the Development alone, will result in a change in traffic flow of more than 1,000 average annual daily trips in the vicinity of the Lee Valley SPA/Ramsar, thereby triggering the need for an appropriate assessment of air quality impacts on the Lee Valley SPA/Ramsar.
- 6.2.3 In terms of the Epping Forest SAC, the transport modelling undertaken for the Applicant's Habitats Information (2019 IHRA) takes into account the in-combination effects arising from the development plan growth identified in the East Herts District Plan, the Harlow Local Development Plan and Epping Forest Local Plan, as each of these plans allocates development sites in the HGGT area. The Transport Modelling described in section 5.8 and Table 10 above identifies that while the Development alone does not exceed the 1,000 AADT threshold, when considered in combination with vehicle movements associated with each of the Strategic Sites within the HGGT area, the AADT threshold is exceeded along the B1393 in the vicinity of the Epping Thicks SSSI component of the Epping Forest SAC, and as such an Appropriate Assessment is required. This is confirmed in the transport modelling undertaken for the Development and for the Villages 1-6 Outline Application, which has been validated by the two Highway Authorities of Hertfordshire and Essex County Councils. These sites are detailed in the two Applicants' Environmental Statements and the Council agrees that the list of sites informing the cumulative and in-combination considerations is comprehensive and suitable for this purpose.

Lee Valley SPA/Ramsar

- 6.2.4 The Site Improvement Plan²⁹ for the Lee Valley SPA/Ramsar indicates that the only feature of the SPA vulnerable to the threat of air pollution is the Bittern, likely due to the impact of excess nitrogen on their habitats. The Bittern is a wading bird restricted almost entirely to reed dominated wetlands where they feed on fish, amphibians and other small mammals or water animals. They are also regularly found in small wetlands with relatively small areas of common reed (Phragmites).
- 6.2.5 The HRA of the Lee Valley Regional Park Development Framework³⁰ (Lepus Consulting, 2019) ("the Park Development Framework HRA") screened out likely significant effects from air quality on the Lee Valley SPA/Ramsar. In addition to the strategic policies in the Park Development Framework, which include policies to manage visitation to and management of the Lee Valley SPA/Ramsar, the HRA took into account the incombination effects of growth identified in the surrounding development plans,

 $^{^{29}}$ <u>http://publications.naturalengland.org.uk/publication/5864999960444928</u> Lee Valley SPA and Ramsar Site Improvement Plan

³⁰ https://www.leevalleypark.org.uk/_files/ugd/8d76d7_b18e84350f1240cda3b2735fa4de489a.pdf Lee Valley Regional Park Authority Strategic Policies Appropriate Assessment, Lepus Consulting, 2019

including the Development. While the Park Development Framework HRA was undertaken to assess the strategic policies in the Park Development Framework in combination with other plans and projects, the technical information is useful for this HRA of the Development as it considers the air quality effects of the same relevant development plans in-combination.

- 6.2.6 Paragraphs 4.4.7 to 4.4.13 and Figures 4.1 and 4.2 of the Park Development Framework HRA describe how despite the proximity of the Rye Meads SSSI component of the SAC to the A414, the Wetland Bird Survey currently offers no indication of the presence of bittern at the SSSI and that the extent of reedbed upon which the bittern relies is located at least 280 metres from the A414. This is beyond the 200m distance advised by Natural England as being the distance within which impacts from road transport emissions may have a detrimental impact on vegetation. Therefore, road transport related emissions from traffic flows along the A414 would be unlikely to adversely impact the reedbed habitat at Rye Meads SSSI, and in turn would not impact the qualifying species. The screening report in the Park Development Framework HRA concluded that likely significant effects on the Lee Valley SPA as a result of air pollution caused by the strategic policies of the Park Development Framework can be ruled out of the assessment, when considered alone as well as in-combination with other plans In considering the in-combination effects, the Park Development Framework HRA took into account the Development Plans of East Herts, Harlow, Broxbourne and Epping Forest, including the growth planned for the Gilston Area, which is now comprised in the Development, amongst others.
- 6.2.7 Given the date of the HRA of the Lee Valley Regional Park Development Framework (2019), the Council has checked whether there is any change to the technical data that informed the HRA and if so, if this would result in a different conclusion for this Development HRA by referring to the British Trust for Ornithology Wetland Bird Survey interactive website and the MAGIC website. The extent of reedbed remains as described in the Park Development Framework HRA, however the recorded number of Bittern across the SPA/Ramsar as a whole has dropped from 5 in 2015/16 to 1 in 2019/20, resulting in the average count for the previous 5 year period dropping from 4 to 2 bitterns.
- 6.2.8 Given that the extent of reedbed has remained unchanged and remains outside the 200m transect from the road it is considered that the integrity of the site in terms of the extent of habitat that supports the qualifying species is also unchanged.
- 6.2.9 Despite the drop in numbers of Bittern recorded, the conclusion that no bittern would be impacted by road transport related air pollution impacts would also remain and that no likely significant effects on the Lee Valley SPA are considered to occur from changes in air quality associated with road transport.
- 6.2.10 While the Council has no reason to dispute this conclusion, this Appropriate Assessment has taken a precautionary approach and has also considered the potential

impacts of road transport on air quality in relation to the detail of the transport-related air quality modelling and also in relation to the other habitat types present that support the qualifying species of Bittern, Gadwall and Shoveler, that of open water, canal, fen, marsh and swamp. This is in line with the precautionary approach given that the Site Improvement Plan only identifies that air quality may affect the Bittern.

- 6.2.11 Given the scale of the proposed Village 7 Development, when considered alone and in combination with the Villages 1-6 Application element of the Gilston Area Development, the traffic flow modelling demonstrates that in each scenario, traffic flows past the SPA/Ramsar increase by more than 1,000 Average Annual Daily Traffic flow. As such, in terms of the first step above, the Development alone will exceed the threshold and trigger the need for an Appropriate Assessment. When considering the Crossing elements of the wider Gilston Area Development alone they do not generate the traffic, rather they distribute the traffic associated from the Outline Village 7 and Villages 1-6 elements of the Gilston Area Development as well as that arising from other plans and projects within the wider HGGT area. On their own therefore the Crossings do not result in air quality effects associated with Average Annual Daily Traffic flow, but as the screening test is to consider the in-combination effects of the Village 7 Development with the Crossings Applications and the Outline Villages 1-6 element of the Gilston Area Development together with other plans and projects, the same conclusion is reached.
- 6.2.12 In order to assess whether the Applications comprising the Development exceeds the Critical Load thresholds as detailed above, the Applicant's Habitats Information (2019 IHRA) explores what the current baseline conditions are for the Lee Valley SPA/Ramsar. Table 14 below identifies the qualifying species and habitat that warrant the SPA/Ramsar designation and the critical levels and loads i.e their tolerance to different pollutant levels, above which harm can occur to the habitat such that it no longer maintains the conservation status of the species. This data was taken from the Air Pollution Information System, a regularly updated interactive website record. The Council has accessed the website data and confirm that the critical load data is as recorded on the Information System and the most up to date data has been used.

Table 14: Baseline Critical Loads and Levels - Lee Valley SPA/Ramsar

Qualifying	Broad Habitat	NOx	N dep	Acid dep	NH ³
Feature		(µg/m³)	(kg/ha/yr)	(keq/ha/yr)	(µg/m³)
Great	Fen, marsh and	30	15-30	Not sensitive	3 (2-4)
Bittern	swamp				
Gadwall	Standing open		No CL		
Northern	water and canals		assigned		
Shoveler					

- 6.2.13 Taking the main vehicular route from the Development, the A414, the modelling takes a 200m transect southwards from the road towards the Rye Meads SSSI, which is the most proximate component of the Lee Valley SPA/Ramsar. The broad habitat which occurs within 200m of the A414 is wet meadow, and although this type of habitat is unlikely to be critical to maintaining the conservation status of the qualifying bird species, the SSSI unit assessment suggests that some parts of the wet grassland habitat resource provides "additional swamp fen habitat" for overwintering bitterns.
- 6.2.14 The Applicant's air quality transport modelling data indicates that within the 200m distance (transect) of the road, the NOx critical level is marginally exceeded at the roadside boundary of the Rye Meads SSSI component of the SPA only, but the lower level of the critical load for nitrogen deposition is exceeded by a minor amount at all distances. The critical level for ammonia concentration is not exceeded. Since the submission of the Applicant's 2019 IHRA, new air pollution data was published and this was used to inform the 2020 IHRA submitted with the ES Addendum for Villages 1-6. For consistency, the data previously presented for Villages 1-6 is used below. This is considered robust because the Villages 1-6 data included traffic flows from Village 7 in the cumulative scenarios and therefore represents the worst-case scenario whereby Village 7 comes forward only in combination with Villages 1-6 and not as a stand-alone The Council considers that the Villages 1-6 2020 IHRA baseline data of 2019 is appropriate to use for this Appropriate Assessment because the Applicants' traffic modelling data was also updated to a 2019 baseline for the wider Environmental Statement Addendum submitted for the Villages 1-6 Development which considered the cumulative data for Village 7. The updated baseline showed an improvement in NOx levels such that even at the roadside boundary of the Rye Meads SSSI, the NOx critical level is not exceed; the lower level of the critical load for nitrogen deposition is exceeded by a minor amount; and the critical level for ammonia concentration is not exceeded. Percentage of Critical Load is only provided where there is an exceedance.

Table 15: Lee Valley SPA Air Quality Baseline (2018) versus Development Plus Other Plans and Projects - Completion (2040)

Distance	Annual M	ean NOx	Total Nitr	ogen Depo	sition	Annual M	ean NH³
from road	Concentr	ation	(kg/ha/yr)		(µg	/m³)
	(µg/m³)						
	Baseline	2040	Baseline	2040	PC/CL ³¹	Baseline	2040
35m	30.7	25.5	16.5	16.2	0.53%	1.34	1.37
40m	29.0	24.5	16.4	16.2	0.47%	1.33	1.35
45m	27.7	23.7	16.3	16.1	0.40%	1.32	1.34
50m	26.6	23.1	16.2	16.1	0.33%	1.32	1.33
55m	25.7	22.5	16.2	16.0	0.33%	1.31	1.33
65m	24.4	21.8	16.1	16.0	0.27%	1.30	1.32
75m	23.5	21.2	16.0	15.9	0.20%	1.30	1.31
85m	22.8	20.8	16.0	15.9	0.20%	1.29	1.30
95m	22.2	20.5	16.0	15.9	0.20%	1.29	1.30
105m	21.7	20.2	15.9	15.8	0.13%	1.29	1.29
115m	21.4	20.0	15.9	15.8	0.13%	1.28	1.29
125m	21.1	19.8	15.9	15.8	0.13%	1.28	1.29
135m	20.8	19.6	15.9	15.8	0.13%	1.28	1.28
160m	20.3	19.3	15.8	15.8	0.07%	1.28	1.28
185m	19.9	19.1	15.8	15.8	0.07%	1.27	1.28
210m	19.6	18.9	15.8	15.8	0.07%	1.27	1.27
235m	19.4	18.8	15.8	15.7	0.07%	1.27	1.27

³¹ Percentage (2040 DS – 2040 DM) of Lower Critical Load for Fen, Marsh and Swamp (15kg/Ha/year)

Table 16: Lee Valley SPA Air Quality Baseline (2019) versus Development Plus Other Plans and Projects - Completion (2040)

Distance	Annual M	lean NOx	Total Ni	trogen D	eposition	Annual M	ean NH³
from road	(µg/m³)		(kg/ha/yr)		(µg	/m³)
	Baseline	2040	Baseline	2040	PC/CL ³²	Baseline	2040
35m	30.6	25.6	17.25	16.88	0.36%	1.96	2.20
40m	29.1	24.8	17.15	16.82	0.32%	1.90	2.11
45m	28.0	24.1	17.07	16.77	0.28%	1.86	2.04
50m	27.1	23.6	17.00	16.74	0.25%	1.82	1.99
55m	26.4	23.2	16.95	16.71	0.22%	1.80	1.94
65m	25.2	22.6	16.87	16.67	0.19%	1.75	1.88
75m	24.4	22.2	16.81	16.63	0.17%	1.72	1.83
85m	23.8	21.8	16.76	16.61	0.14%	1.69	1.79
95m	23.3	21.5	16.72	16.59	0.13%	1.67	1.76
105m	22.9	21.3	16.69	16.57	0.12%	1.66	1.73
115m	22.5	21.1	16.67	16.56	0.10%	1.64	1.71
125m	22.3	21.0	16.65	16.55	0.09%	1.63	1.70
135m	22.0	20.8	16.63	16.54	0.08%	1.62	1.68
160m	21.6	20.6	16.60	16.52	0.07%	1.61	1.65
185m	21.2	20.4	16.57	16.51	0.06%	1.59	1.63
210m	21.0	20.3	16.55	16.50	0.06%	1.58	1.62
235m	20.7	20.1	16.54	16.49	0.05%	1.57	1.60

³² Percentage (2040 DS – 2040 DM) of Lower Critical Load for Fen, Marsh and Swamp (15kg/Ha/year)

- 6.2.15 Table 15 above shows the 2020 air quality baseline (taken from the Air Pollution Information System using co-ordinates relative to the 200m transect from the road into the Rye Meads SSSI component of the Lee Valley SPA) compared against the forecast pollutant deposition. This is based on the 'do something' transport model, which includes the 10,000 homes in the Gilston area (comprised in the Outline Applications for Villages 1-6 and Village 7), plus the in-combination traffic effects of the allocated and known development sites within the wider HGGT area and developments plans in East Herts, Harlow and Epping Forest districts.
- 6.2.16 The modelling undertaken for pollutants following the completion of Gilston Area Development at 2040, indicates that NOx levels will remain below the critical load levels for all distances and scenarios. Nitrogen deposition will fall below the lower critical load threshold for fen, marsh and swamp at all distances and scenarios, and for standing open water and canals. However, the forecasting indicates that at the roadside, there is a minor increase in ammonia at the closest two transect distances, but a reduction from the third transect distance of 45m. It is noted however that the lower critical level for ammonia concentration is not exceeded at any distance. This is likely due to a number of factors which include improvements to transport technology and an increase in the use of zero and low emission vehicles.
- 6.2.17 Natural England states within their guidance regarding air quality assessment³³ that "if a sensitive feature is not assigned to a unit (or intended to be restored to the unit) within the distance criterion the effects can be screened out" during the screening stage. Natural England guidance further states that "if there is already detailed, locally-based modelling available about the plan or project that shows the 1% of the environmental benchmark is not exceeded, even if the 1,000 AADT is, then this level of precision is sufficient to override the use of the very generic 1,000 AADT guideline threshold" in determining whether the potential for likely significant effects either alone or in-combination can be screened out.
- 6.2.18 Furthermore, when taking into account the HRA undertaken for the Lee Valley Regional Park Development Framework³⁴, the National Network site currently successfully supports the habitats (reed bed) that in turn support the qualifying wintering bird species (Bittern *Botaurus stellaris*) for which the site is designated. These reed beds are beyond the 200m transect from the A414 and as such would not be impacted by air pollutants arising from road transport, thereby retaining the integrity of the Lee Valley SPA/Ramsar in terms of the structure and function of the site. It is also noteworthy that the trend indicated in the forecast is for the reduction of nutrient loads of all types across all distances once the Development (in combination with other relevant plans

³³ http://publications.naturalengland.org.uk/publication/4720542048845824 Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitat Regulations, NEA001, July 2018

³⁴ https://4a7cf0de-56b5-46b2-8640-

<u>62634050a65d.filesusr.com/ugd/8d76d7_b18e84350f1240cda3b2735fa4de489a.pdf</u> Lee Valley Regional Park Authority Strategic Policies Appropriate Assessment, Lepus Consulting, 2019

and programmes) is complete in 2040. As such, the improving trend in nutrient levels will have a positive effect on the standing open water and canal habitats that support the qualifying species of Gadwall *Anas strepera* and Northern Shoveler *Anas clypeta*, as well as other species that are important to the SAC including the tufted duck *Aythya fuligula*, Common Tern *Sterna hirundo* and Whorled Water-milfoil *Mytiophyllum verticillatum*, and Water boatman *Micronecta minutissima*, and no further mitigation is required. It is therefore considered that this is in accordance with the Conservation Objectives of the SPA/Ramsar and the Development will not adversely affect the integrity of the Lee Valley SPA/Ramsar³⁵.

6.2.19 When considering the two transport infrastructure components of the Gilston Area Development, the two crossings will change the distribution of vehicle flows associated with the outline Village 7 and Villages 1-6 proposal and other planned developments, but they do not generate the growth in vehicle movements. Therefore, this Appropriate Assessment concludes that no adverse effects will occur on the Lee Valley SPA/Ramsar site arising from the two transport infrastructure proposals when considered alone, and in combination with the Village 7 and Villages 1-6 Outline Application elements of the Gilston Area Development, and in combination with the other development sites within the relevant plans and projects.

Epping Forest SAC

- 6.2.20 As is described in the screening stage, Epping Forest SAC has been the subject of considerable investigation through the Epping Forest Local Plan Examination in Public and through the Habitat Regulations Assessments of each of the local plans governing development within the HGGT area. The HRA for the Epping Forest Local Plan concluded that the impacts on the SAC arise primarily as a result of the planned development within Epping Forest district. This view concurred with those taken for the East Herts District Plan and Harlow Local Development Plan.
- 6.2.21 While the Development in combination with other plans and projects will result in Average Annual Traffic Trip flows that exceed the screening threshold of 1,000 AADT, the contribution that the Development makes to the overall number of trips on the M25 and through the Epping Forest SAC is nugatory. The HRA for the Epping Forest Local Plan determined that:

"growth in Epping Forest District between 2014 and 2033 is the primary source of additional ammonia and NOx emissions on the modelled road sections and all other plans and projects make a negligible contribution to the in combination effect [our emphasis]. This is most probably because the average daily traffic flow on all the modelled sections of road is dominated by people who either live or work in Epping

³⁵ Maintain concentrations and deposition of air pollutants to, at, or below the site-relevant Critical Load or Level values given for the feature of the site on the Air Pollution Information System.

Forest District, particularly the settlements that surround the SAC, including Epping itself".

- 6.2.22 This view was articulated by Natural England in their formal consultation response to the Villages 1-6 Outline Application component of the Development (2nd September 2019) confirming that, aside from development within Epping Forest District. "all other plans and projects make a negligible contribution to the in combination effect", and consequently advises that "it would not be inappropriate to conclude that responsibility for mitigating air quality impacts on Epping Forest SAC should fall on Epping Forest District Council and developments within that district."
- 6.2.23 Natural England asked the Council to confirm that the potential impacts from the full extent of the Gilston Area Development beyond the Plan period has been considered. Of the 10,000 homes allocated in the Gilston Area allocation, circa 3,000 homes are expected to be delivered within the Plan period to 2033, with the remaining circa 7,000 being delivered by 2040. The Council has considered the Environmental Statements of both the Development and the Villages 1-6 Outline Application and are satisfied that the traffic modelling which has informed the air quality modelling does indeed take into account the full extent of the delivery of the Gilston Area beyond the Plan period of 2033, by which time Village 7 plus the other development sites allocated within the relevant development plans are expected to be complete, and also beyond to 2040 when the remainder of the Villages 1-6 component of the Development is expected to be complete.
- 6.2.24 As described in the screening stage, the traffic generated by the Development alone that passes the nearest SSSI component of the Epping Forest SAC does not exceed 1,000 Average Annual Daily Traffic trips, but when considered in-combination with other plans and projects, including Villages 1-6, the AADT of 1,000 is exceeded. This is sufficient to trigger the need for an appropriate assessment in respect of air quality effects on the Epping Forest SAC. Firstly, the current critical loads and levels for the SAC are established along with the baseline forecasts for a 200m transect across the relevant component of the SAC. The forecast traffic flows from the Development in combination with other plans and projects are then fed into an air quality traffic model that forecasts future levels of pollutants.
- 6.2.25 The critical levels and loads for Epping Forest SAC qualifying habitat types and broad habitats which support qualifying species are presented in Table 17 below. This data was taken from the Air Pollution Information System, a regularly updated interactive website record. The Council has accessed the website data³⁶ and confirm that the critical load data is as recorded on the Information System and the most up to date data has been used.

³⁶ 01.02.2023

Table 17: Baseline Critical Loads and Levels - Epping Forest SAC

Qualifying	Broad Habitat	NOx (µg/m³)	N deposition	NH ³ (µg/m ³)			
Feature			(kg/ha/yr)				
Northern Atla	antic wet heaths with	30	10-20	1			
Erica tetralix							
European dry	y heaths			1			
Atlantic ad	cidophilous Beech			No critical level/			
forests				load assigned			
Stage	Broadleaved	Not sensitive					
Beetle	woodland						

- 6.2.26 As explained in paragraph 5.8.34 above, the closest main traffic link to the SAC is the M25. The area of Epping Forest SAC which lies adjacent to the B1393, south of the M25 near the Bell Common Tunnel is occupied by woodland (SSSI unit 105, 'Epping Thicks') and is considered in the Applicant's 2019 IHRA as being the most relevant for this HRA/AA. Further south, the SAC is crossed by multiple roads and therefore transport model results are skewed by local traffic and that of north London Boroughs, reducing the ability to disseminate the impacts arising from the Development from wider traffic sources. Taking the main vehicular route from the Development, the B1393, the modelling takes a 200m transect southwards from the M25 across the SSSI unit. Table 18 below shows the 2018 air quality baseline provided in the Villages 1-6 2019 IHRA (taken from the Air Pollution Information System using co-ordinates relative to the 200m transect from the M25 into the Epping Thicks SSSI component of the Epping Forest SAC) compared against the forecast pollutant deposition, based on the 'do something' transport model, which includes the 10,000 homes in the Gilston Area (comprised in the Outline Applications for Villages 1-6 and Village 7, plus the incombination effects of the allocated Strategic Sites within the wider HGGT area and development plans in East Herts, Harlow and Epping Forest districts. The Villages 1-6 Applicant has also recently³⁷ provided updated modelling data, which has been submitted to Natural England, and this is reported for transparency at Table 19 below.
- 6.2.27 The 2022 IHRA provides data for a transect of the Epping Thicks SSSI unit 105 from the B1393. Table 19a below shows the 2019 air quality baseline provided in the Villages 1-6 Applicant's 2022 IHRA, taken from the Air Pollution Information System using the 1km grid square containing the 200m transect from the B1393 compared against the forecast pollutant deposition, based on the 'do something' transport model, which includes the 10,000 homes in the Gilston Area (comprised in the Outline Applications for Villages 1-6 and Village 7, plus the in-combination effects of the allocated Strategic Sites within the wider HGGT area and development plans in East Herts, Harlow and Epping Forest districts.
- 6.2.28 The modelling undertaken for pollutants following the completion of Development at 2040 (at Tables 18 and 19 below) indicates that NOx levels will remain above the critical

³⁷ February 2022

load levels for all distances except the furthest transect point from the road (241m), however the modelling shows a significant improvement between the 2018 baseline and the 2040 do something year of 23.5 $\mu g/m^3$ at the nearest transect point to the road. The 10kg/ha/year lower critical load for Nitrogen Deposition is exceeded at the 2018 baseline and remains exceeded at all distances across the transect, but there is a small reduction of less than 0.5kg/Ha/year at the 2040 do something year. For Acid Deposition, the critical load remains below 1.73keq/Ha/year across all distances and there is a minor improvement of 0.04keq/Ha/year) between the baseline and 2040 do something year. In terms of Ammonia, the critical load is exceeded at the baseline and remains exceeded at the 2040 do something year, with an increase of 0.24 $\mu g/m^3$. It is noted however, that for each pollutant, the contribution that the Development makes to the critical load relevant, in terms of a percentage is less than 1%. Similar results are evident for the updated 2019 baseline and therefore there is no change to the assessment in this respect.

- 6.2.20 The modelling data undertaken for the Development in combination with other plans and projects indicate that for NOx, Nitrogen and Acid Deposition there is an improving trend in air quality over time in the absence of mitigation, however, there is a slight worsening of Ammonia. Taking a precautionary approach, it is considered that while the additional vehicle trips associated with the Development makes a negligible impact, when considered in combination with other strategic growth that will result in vehicle trips along the M25, B1393 and through the Epping Forest SAC, will to an extent delay and possibly slow the rate at which pollution levels decrease, which means that progress towards the restoration of qualifying features will take longer. However, the magnitude of this in-combination effect is considered to be negligible and imperceptible and will not cause an adverse effect on integrity of the SAC. This position is consistent with the 2019 consultation response of Natural England referred to above in respect of the Villages 1-6 application, namely, that the in-combination effects of developments outside of Epping will be negligible and also the in-combination assessment undertaken for the HRA for the Epping Forest Local Plan. It should also be noted however, that the Epping Thicks SSSI Unit is considered to be in favourable condition now.
- 6.2.21 It is noted that as shown in Tables 18 and 19 below, the increase in nutrient Nitrogen arising from the Gilston Area Development (Village 7 and Villages 1-6) accounts for less than 1% of the critical load at the nearest point of the SSSI to the M25, this is considered imperceptible. However, Table 19a below shows that there is a 0.1% above the 1% critical load threshold at the nearest point of the SSSI to the B1393. Taking advice from Natural England, this exceedance is in itself imperceptible, is experienced only at the roadside edge of the transect diminishing well below the critical load by the next transect point, and is not considered to change the overall evaluation based on Natural

England's current guidance³⁸ which states that a change in emissions of less than 1% of the critical load or level is widely considered to be imperceptible and as such would not result in changes to nutrient loads within the SSSI to a level that would be detrimental to the three qualifying woodland habitats for which the SAC is designated and therefore would not adversely affect the integrity of the National Network Site. The Village 7 site, being 15% of the overall Gilston Area Development will have even less of an impact when considered alone. As the qualifying species of Stag Beetle is not sensitive to changes in air quality it is considered that there is no adverse effect on this qualifying species.

- 6.2.22 The Conservation Objectives for the SAC indicate that the epiphytes on the site have declined largely as a result of air pollution, though they remain important for a large range of rare species, including the knothole moss *Zygodon forsteri*. This moss has very precise habitat requirements; it grows only in the rain tracks on beech trees growing on acid soils in open, well-lit sites. As the moss is dependent upon Beech trees, NOx levels and Nitrogen deposition are key factors. Tables 18 and 19 and 19a below shows that pollutant levels for NOx and Nitrogen are forecast to reduce across all distances on the transect, although critical loads for Atlantic acidophilous Beech forests remain exceeded. Notwithstanding this, the Epping Thicks SSSI is not recorded to contain this particular species of moss and the SSSI unit is recorded as being in favourable status.
- 6.2.23 The APIS website records a Critical Level for Ammonia as 1 or 3 $\mu g/m^3$ for the Atlantic acidophilous Beech forest. 1 $\mu g/m^3$ is relevant to lichens and bryophytes while 3 $\mu g/m^3$ is relevant to higher plants. The 3 $\mu g/m^3$ threshold is exceeded at the edge of the SAC transect but falls below the critical level within 10m of the roadside. There remains an exceedance above the critical level for ammonia (1 $\mu g/m^3$) due to background concentrations, and at the roadside location the development will result in a 1.1% increase in ammonia quickly falling to below 1% within 10m into the transect. This would be considered as imperceptible. The Villages 1-6 2022 IHRA Table 7 shows that in the interim 2027 and 2033 forecasts the contribution of the Gilston Area Development is less than 1% at the roadside location.

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³⁸ http://publications.naturalengland.org.uk/publication/4720542048845824 Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitat Regulations, NEA001, July 2018

Table 18: Epping Forest SAC Air Quality Baseline (2018) versus Development Plus Other Plans and Projects - Completion (2040) – M25 transect of Epping Thicks SSSI unit 105

Distance from		Mean NO։ ration (µչ		Total Nit	trogen on (kg/ha	ı/yr)		Mean NH [։] :ration (µչ		Total Nitrogen Acid (keq/Ha/year)		
road	Base- line	2040	PC/CL %	Base- line	2040	PC/CL ³⁹ %	Base- line	2040	PC/CL ⁴⁰ %	Base- line	2040	PC/CL ⁴¹ %
41m	71.8	48.3	0.27%	19.6	19.0	0.15%	2.27	2.51	0.45%	1.46	1.43	0.06%
46m	68.0	46.4	0.25%	19.2	18.7	0.14%	2.19	2.40	0.42%	1.44	1.40	0.06%
51m	64.8	44.8	0.23%	18.9	18.4	0.12%	2.11	2.31	0.39%	1.42	1.38	0.05%
56m	62.0	43.4	0.21%	18.6	18.2	0.11%	2.05	2.24	0.36%	1.40	1.36	0.05%
61m	59.6	42.2	0.20%	18.4	18.0	0.11%	2.00	2.17	0.33%	1.38	1.35	0.04%
71m	55.6	40.2	0.17%	18.0	17.6	0.10%	1.90	2.06	0.30%	1.35	1.32	0.04%
81m	52.4	38.7	0.16%	17.7	17.3	0.08%	1.83	1.97	0.26%	1.33	1.30	0.03%
91m	49.8	37.4	0.14%	17.4	17.1	0.08%	1.77	1.90	0.24%	1.31	1.29	0.03%
101m	47.6	36.3	0.13%	17.2	16.9	0.07%	1.72	1.84	0.22%	1.29	1.27	0.03%
111m	45.8	35.4	0.12%	17.0	16.7	0.07%	1.68	1.79	0.20%	1.28	1.26	0.03%
121m	44.2	34.6	0.11%	16.8	16.6	0.06%	1.65	1.74	0.18%	1.27	1.25	0.03%
131m	42.9	34.0	0.10%	16.7	16.5	0.05%	1.62	1.70	0.17%	1.26	1.24	0.02%
141m	41.7	33.4	0.09%	16.6	16.4	0.06%	1.59	1.67	0.16%	1.25	1.23	0.02%
166m	39.2	32.2	0.08%	16.3	16.1	0.05%	1.53	1.60	0.14%	1.23	1.22	0.02%
191m	37.4	31.3	0.07%	16.1	16.0	0.04%	1.49	1.55	0.12%	1.22	1.21	0.02%
216m	35.9	30.6	0.06%	16.0	15.8	0.03%	1.46	1.51	0.10%	1.21	1.20	0.01%
241m	34.7	30.0	0.05%	15.9	15.7	0.03%	1.43	1.48	0.09%	1.20	1.19	0.01%

³⁹ percentage (2040 DS - 2040 DM) of Lower Critical Load for Atlantic acidophilous beech forests (10kg/Ha/year)

⁴⁰ percentage (2040 DS - 2040 DM) of Critical Load for lower plants (1 μg/m³ 3 μg/m³ for higher plants)

⁴¹ percentage (2040 DS - 2040 DM) of minCLmaxN value for Atlantic acidophilous beech forests (1.73keg/Ha/year)

Table 19: Epping Forest SAC Air Quality Baseline (2019) versus Development Plus Other Plans and Projects - Completion (2040) – M25 transect of Epping Thicks SSSI unit 105

Distance from	Annual (µg/m³)	Mean NO	х	Total Ni onto He	trogen (k athland	(g/ha/yr)	Total Ni	itrogen (k oodland	g/ha/yr)	Annual Mean NH³ (μg/m³)		
road	Base- line	2040	PC/CL %	Base- line	2040	PC/CL %	Base- line	2040	PC/CL %	Base- line	2040	PC/CL %
41m	60.6	42.3	0.20%	18.7	17.4	0.03%	32.5	29.9	0.06%	2.59	3.16	0.06%
46m	55.3	38.4	0.18%	18.5	17.3	0.04%	32.2	29.8	0.09%	2.50	3.03	0.06%
51m	53.0	37.3	0.17%	18.4	17.3	0.03%	31.9	29.6	0.06%	2.42	2.91	0.05%
56m	51.0	36.4	0.16%	18.2	17.2	0.03%	31.6	29.5	0.06%	2.36	2.81	0.05%
61m	49.2	35.6	0.15%	18.1	17.2	0.03%	31.4	29.4	0.06%	2.30	2.72	0.04%
71m	46.4	34.3	0.13%	17.9	17.1	0.03%	31.0	29.2	0.06%	2.21	2.58	0.04%
81m	44.1	33.3	0.12%	17.8	17.0	0.03%	30.6	29.0	0.06%	2.13	2.47	0.03%
91m	42.2	32.4	0.11%	17.6	16.9	0.01%	30.4	28.9	0.03%	2.07	2.37	0.03%
101m	40.7	31.7	0.10%	17.5	16.9	0.01%	30.2	28.8	0.03%	2.02	2.29	0.03%
111m	39.4	31.1	0.09%	17.4	16.9	0.01%	30.0	28.7	0.03%	1.97	2.23	0.03%
121m	38.2	30.6	0.08%	17.4	16.8	0.03%	29.8	28.7	0.06%	1.94	2.17	0.03%
131m	37.3	30.2	0.08%	17.3	16.8	0.03%	29.7	28.6	0.06%	1.90	2.12	0.02%
141m	36.4	29.8	0.07%	17.2	16.8	0.01%	29.5	28.5	0.03%	1.88	2.08	0.02%
166m	34.7	29.0	0.06%	17.1	16.7	0.01%	29.3	28.4	0.03%	1.82	1.99	0.02%
191m	33.3	28.4	0.05%	17.0	16.7	0.01%	29.1	28.3	0.03%	1.77	1.93	0.02%
216m	32.3	27.9	0.05%	17.0	16.6	0.01%	29.0	28.3	0.03%	1.74	1.87	0.01%
241m	31.4	27.5	0.04%	16.9	16.6	0.01%	28.8	28.2	0.03%	1.71	1.83	0.01%

Table 19a: Epping Forest SAC Air Quality Baseline (2019) versus Development Plus Other Plans and Projects - Completion (2040) – B1393 Transect of Epping Thicks SSSI unit 105

Distance	Annual	Mean NO	x	Total N	itrogen (k	(g/ha/yr)	Total N	itrogen (l	kg/ha/yr)	Annual	Mean NH	³ (µg/m³)
from	(µg/m³)			onto He	athland		onto Wo	odland				
road	Base-	2040	PC/CL	Base-	2040	PC/CL	Base-	2040	PC/CL	Base-	2040	PC/CL
	line		%	line		%	line		%	line		%
SAC edge	60.4	30.8	0.28%	22.33	20.16	0.06%	40.15	35.66	0.12%	3.25	3.70	1.11%
10m	45.7	24.5	0.17%	21.39	19.73	0.04%	38.20	34.76	0.09%	2.62	2.89	0.67%
20m	38.8	21.5	0.12%	20.92	19.52	0.03%	27.23	34.32	0.06%	2.33	2.51	0.47%
30m	35.5	20.1	0.09%	20.69	19.42	0.01%	36.75	34.11	0.03%	2.19	2.33	0.37%
40m	33.5	19.2	0.08%	20.55	19.35	0.01%	36.45	33.98	0.03%	2.10	2.21	0.30%
50m	32.1	18.6	0.07%	20.45	19.31	0.01%	36.25	33.89	0.03%	2.04	2.14	0.26%
60m	31.1	18.2	0.06%	20.38	19.28	0.01%	36.10	33.82	0.03%	2.00	2.08	0.23%
70m	30.3	17.8	0.05%	20.32	19.25	0.00%	35.99	33.77	0.00%	1.96	2.04	0.21%
80m	29.7	17.6	0.05%	20.28	19.23	0.01%	35.89	33.73	0.03%	1.94	2.00	0.19%
90m	29.2	17.3	0.04%	20.24	19.22	0.01%	35.82	33.70	0.03%	1.91	1.98	0.17%
100m	28.7	17.2	0.04%	20.21	19.20	0.00%	35.75	33.67	0.00%	1.90	1.95	0.15%
110m	28.4	17.0	0.04%	20.18	19.19	0.00%	35.70	33.65	0.00%	1.88	1.93	0.14%
120m	28.1	16.9	0.03%	20.16	19.18	0.00%	35.65	33.63	0.00%	1.87	1.92	0.13%
130m	27.8	16.7	0.03%	20.14	19.17	0.01%	35.61	33.61	0.03%	1.85	1.90	0.12%
140m	27.5	16.6	0.03%	20.12	19.17	0.01%	35.57	33.60	0.03%	1.84	1.89	0.11%
150m	27.3	16.6	0.03%	20.11	19.16	0.01%	35.54	33.58	0.03%	1.84	1.88	0.11%
160m	27.1	16.5	0.03%	20.09	19.15	0.01%	35.52	33.57	0.03%	1.83	1.86	0.10%
170m	27.0	16.4	0.02%	20.08	19.15	0.01%	35.49	33.56	0.03%	1.82	1.86	0.09%
180m	26.8	16.3	0.02%	20.07	19.14	0.00%	35.47	33.55	0.00%	1.81	1.85	0.09%
190m	26.7	16.3	0.02%	20.06	19.14	0.00%	35.45	33.54	0.00%	1.81	1.84	0.08%
200m	26.6	16.2	0.02%	20.05	19.14	0.01%	35.43	33.53	0.03%	1.80	1.83	0.08%

- 6.2.24 The results of the air quality modelling demonstrate that the Development proposals on their own do not exceed 1% the critical levels for NOx, and nitrogen deposition, but there is an imperceptible exceedance of Ammonia when considered in combination with Villages 1-6. The results of the in-combination air quality modelling indicate that, with or without the proposed Development, that part of Epping Forest SAC which could be affected by increased traffic flows along the M25 and B1393 is predicted to experience a reduction in NOx concentrations and nitrogen deposition. However, Ammonia concentrations are predicted to increase in line with growth with or without the Development. In relation to these pollutants, the net effect of the proposed Development would be a retardation of the overall trajectory of air quality improvement. The magnitude of this effect is predicted to be miniscule and effectively imperceptible; in all cases except the (in-combination) imperceptible exceedance of Ammonia, the process contribution falls short of the applicable 1% critical load or level threshold.
- 6.2.25 Given that the forecast pollutant levels represent an improvement over time, and that the contribution the Development alone makes to the total forecast pollutant levels is less than 1% of the critical load for each nutrient except for the imperceptible exceedance of Ammonia (when considered in combination with Villages 1-6) it is considered that the change to critical load from the Development alone is imperceptible, in line with Natural England guidance on air quality. This is considered in the context of the in-combination traffic and pollutant modelling undertaken to inform the HRA of the EFDC Local Plan, which determined that: "growth in Epping Forest District between 2014 and 2033 is the primary source of additional ammonia and NOx emissions on the modelled road sections and all other plans and projects make a negligible contribution to the in combination effect. This is most probably because the average daily traffic flow on all the modelled sections of road is dominated by people who either live or work in Epping Forest District, particularly the settlements that surround the SAC, including Epping itself." It is therefore considered that there will be no adverse effect on the integrity of the SAC as a result of air quality impacts from the Development alone and in combination with other plans and projects, and no further mitigation is required.
- 6.2.26 Following earlier consultation with Natural England, including their response to consultation in an email of 21st December 2021, the Council's 2022 HRA/AA was updated to reflect comments of Natural England. Having already provided informal advice to Officers through the preparation of the HRA/AA, the final comments of Natural England had focussed primarily on the air quality impacts of the Gilston Area Development alone and in combination with other plans and projects including the other planned development within the Harlow and Gilston Garden Town ("HGGT"). In this regard, the Council's 2022 HRA/AA concluded that there will be no adverse impact on the integrity of Epping Forest SAC as a consequence of the Gilston Area Development alone (Village 7 and Villages 1-6) or in combination with other relevant development.

- 6.2.27 Natural England responded to consultation in respect of the Council's HRA/AA on 10 February 2022 and they welcomed the revised approach in the amended Appropriate Assessment (AA) in that likely significant effects due to potential air quality impacts upon Epping Forest SAC are no longer screened out at Stage 1 and are taken through to AA. Natural England also stated that:
 - i. Natural England accepts that it cannot reasonably require any further analysis of available relevant evidence in order to fully rule out any remaining doubts about the conclusions reached in your amended AA.
 - ii. Natural England agrees that the Interim Air Pollution Mitigation Strategy for Epping Forest SAC (2020), could in principle deliver the air quality mitigation required to allow an in combination adverse effect upon Epping Forest SAC to be ruled out.
 - iii. Natural England accepts that there is no additional mitigation that could be readily secured through this development which would have an equivalent benefit.
 - iv. Natural England have advised that it recognises that the growth in Epping Forest District between 2014 and 2033 is the primary source of ammonia and NOx emissions on the Epping Forest Special Area of Conservation and Natural England takes the view that in this case it is "not inappropriate for the competent authority to conclude that responsibility for mitigating air quality impacts on Epping Forest SAC should fall on Epping Forest District Council and developments within that district".
- 6.2.28 Notwithstanding the conclusions above, the Natural England response points to NE guidance (NEA001) Advising Competent Authorities on Road Traffic and HRA (June 2018) paragraphs 5.25 to 5.28 which relates to scenarios where there is already an exceedance of relevant air quality benchmarks. The inference of this signposting is that the Council should ensure consideration has been given to the question of whether further emissions from a Development will undermine Conservation Objectives that are to 'restore the concentrations and deposition of air pollutants to within benchmarks'.
- 6.2.29 Paragraph 5.25 of Natural England's guidance notes that "Where the conservation objectives are to 'restore the concentrations and deposition of air pollutants to within benchmarks' (i.e. where the relevant benchmarks such as Critical Loads/Levels are already exceeded) they will be undermined by any proposals for which there is credible evidence that further emissions will compromise the ability of other national or local measures and initiatives to reduce background levels".
- 6.2.30 Paragraph 5.26 notes that an exceedance alone is insufficient to determine the acceptability or otherwise of a project. But because exceedance will represent a threat to the condition and integrity of a site, the guidance notes that hypothetically it could be argued that any increase above a currently exceeded state compromises the extent to which improvements from other initiatives will deliver the restoration aims of the conservation objectives, as additional pollution could slow the rate at which progress is made towards meeting the relevant air quality benchmarks.

6.2.31 Natural England's guidance goes on to provide practical advice for how this issue should be approached by the competent authority and states at paragraph 5.28:

"In practice, where a site is already exceeding a relevant benchmark, the extent to which additional increments from plans and projects would undermine a conservation objective to 'restore' will involve further consideration of whether there is credible evidence that the emissions represent a real risk that the ability of other national or local measures and initiatives to otherwise reduce background levels will be compromised in a meaningful manner. This is a judgement to be taken by the competent authority which should be informed by, amongst others, the extent to which any declining national trends in air pollution or strategic work to tackle emissions affecting the site more locally might otherwise lead to improvements, the rate at which such improvement are anticipated to be delivered, any credible evidence on the extent of the impacts of a plan or project and whether those impacts can properly be considered temporary and reversible."

6.2.32 The retardation, or delay, of improvements in terms of air quality is acknowledged in the Council's 2022 HRA (paragraph 6.2.23).

"The results of the air quality modelling demonstrate that the Development proposals on their own do not exceed 1% the critical levels for NOx, NH3 and nitrogen deposition. The results of the in-combination air quality modelling indicate that, with or without the proposed Development, that part of Epping Forest SAC which could be affected by increased traffic flows along the M25 is predicted to experience a reduction in NOx concentrations and nitrogen deposition. However, Ammonia concentrations are predicted to increase in line with growth with or without the Development. In relation to these pollutants, the net effect of the proposed Development would be a retardation of the overall trajectory of air quality improvement. The magnitude of this effect is predicted to be miniscule and effectively imperceptible; in all cases, the process contribution falls short of the applicable 1% critical load or level threshold."

- 6.2.33 The HRA concluded, and Natural England do not disagree, that the magnitude of the effect of the Development (alone and in combination with Villages 1-6) in terms of retardation are imperceptible and no adverse effects on the integrity of the Epping Forest SAC will occur. This updated 2023 Appropriate Assessment also concludes that notwithstanding the imperceptible exceedance of Ammonia at the roadside transect point in the updated assessment data, the conclusion reached previously remains extant, that the magnitude of the effect of the Development in terms of retardation are imperceptible and no adverse effects on the integrity of the Epping Forest SAC will occur.
- 6.2.34 However, Natural England advised that because in their view the Epping Forest Air Pollution Mitigation Strategy ("APMS") prepared in support of the Epping Forest Local Plan was not yet secured and therefore is considered by Natural England to be uncertain, that the Council seek legal advice. It is understood that Natural England's

position is that until the Epping Forest Local Plan has been adopted that the APMS will be considered by Natural England to be "unsecured". This point is relevant to the predicted levels of improvement in the future air quality for the Epping Forest SAC through the APMS and other measures, and the question of whether the imperceptible level of retardation by the Development (in combination with other developments) on future improvements will undermine the ability of the APMS and other national and local measures to reduce background levels.

6.2.35 Due to the assessed imperceptible level of impact of the Development (both alone and in-combination), the Council as competent authority remains satisfied that there will be no impact on integrity and that the data and overall conclusions contained within the HRA annexed to the report are robust. The Council also considers that the Gilston Area Village 7 and Villages 1-6 and Crossings Development does not rely upon the adoption of the Epping Forest Local Plan and the Council is satisfied that there is no credible evidence that the emissions represent a real risk such that the ability of other national or local measures and initiatives to otherwise reduce background levels will be compromised in a meaningful manner. Natural England has also not suggested there is credible evidence that the Development will compromise such measures and has instead stated in its consultation response to the applications that:

"...all other plans and projects make a negligible contribution to the in-combination effect.... it would not be inappropriate to conclude that responsibility for mitigating air quality impacts on Epping Forest SAC should fall on Epping Forest District Council and developments within that district."

- 6.2.36 The APMS is principally designed to address the impacts of, and to accommodate the growth from, the emerging Epping Forest Local Plan on the Epping Forest SAC (in combination with other plans and projects) and there will only be an imperceptible impact from the Development.
- 6.2.37 However, for completeness, this HRA/AA explores the nature of the APMS in more detail and has considered in further detail whether the retardation to the overall trajectory of air quality improvement will undermine the ability of local or national mitigation measures designed to improve air quality in the Epping Forest SAC.
- 6.2.38 The Epping Forest Air Pollution Mitigation Strategy has been prepared as part of the Epping Forest Local Plan ("EFLP") Examination in Public in order to ensure that the Local Plan (in combination with other plans and projects) can demonstrate that there will be no adverse effect on the integrity of the Epping Forest SAC. The HRA undertaken on the proposed Main Modifications to the Local Plan including the APMS concludes that with the proposed Mitigation Strategy and Local Plan Policies there will be no adverse effect on the integrity of the Epping Forest SAC. Natural England was consulted during the preparation of the APMS and in its response to the Local Plan Main Modifications Consultation states "The Epping Forest District Council Air Pollution Mitigation Strategy (APMS) has now been adopted. Natural England remain satisfied that, in principle, the measures to be delivered reflect those identified as necessary in the Council's HRA of the

Local Plan to avoid an adverse effect to the integrity of the Epping Forest SAC." The Inspector has now finalised her Report to the Council and the Epping Forest District Local Plan and EFAPMS was adopted on 6th March 2023.

- 6.2.39 Following the adoption of the APMS by Epping Forest District Council (January 2021), a Portfolio Holder Advisory Group has been established to implement and monitor the effectiveness of the Strategy and there is a strong policy framework in place in the emerging Local Plan to support the measures set out in it. Despite the fact that at the time the EFLP had not been adopted, Epping Forest District Council has been successfully applying the APMS to applications within the District and relying on this for site specific Appropriate Assessments under the Habitat Regulations, including windfall development, with conditions being imposed that require site-specific modelling and mitigation where necessary. The APMS has also been supported in a number of appeal decisions by Inspectors where Appropriate Assessments have been undertaken by an Applicant which has relied in part on the APMS⁴².
- 6.2.40 The measures in the Strategy include:
 - The introduction of a Clean Air Zone in September 2025 (essentially a road user charging scheme which financially penalises polluting vehicles)
 - Increasing the percentage of the vehicle fleet that constitutes ultra-low emission vehicles to 12-15% of vehicles using the routes in the SAC by 2033 (with incremental targets in 2025, 2029 and 2033)
 - Provision of Electric Vehicle Charging Points
 - Awareness Raising Campaign
 - Right-hand turn ban at junction off A121 (Honey Lane) into Forest side
 - Site-specific initiatives to support species and veteran tree resilience
 - Initiatives to support walking, cycling and increased public transport use
 - HGV Route Management Strategies
 - Provision of Digital Communications Infrastructure
 - Trialling new technologies
 - Monitoring and review
 - Wider activities being undertaken or proposed to be undertaken by the Council
- 6.2.41 Of these measures, the most significant is the implementation of a Clean Air Zone. This is the measure which is most likely to have a wider than local impact given that it will affect all journeys travelling through the Forest, not just local traffic. For example, Officers in Epping Forest District Council have advised Officers that the implementation of the London Low Emission Zone (March 2021) and London Ultra-Low Emission Zone (October 2021) have already started to have a beneficial impact in Epping Forest District through increased requests for electric vehicle charging points in private properties and public spaces, primarily from taxis and fleets that regularly travel between Epping and London. This demonstrates the beneficial impacts of clean air zone programmes in incentivising the change to low emission vehicles.

⁴² APP/J1535/W/20/3258787 and APP/J1535/W/20/3263876

6.2.42 In advising on this updated Appropriate Assessment Natural England advise that their recent representation to the Further Main Modifications of the emerging Epping Forest District Plan have raised concern about the efficacy of the proposed Clean Air Zone which is part of the APMS. However, the final Inspector's Report published on 16th February 2023⁴³ (paras 136-137) state:

"136. It is noteworthy that the HRA states that "a Clean Air Zone will be required, but it is possible that improvements to air quality may proceed more quickly than has been assumed in the modelling underlying the HRA and in that eventuality the need for a Clean Air Zone can be reviewed in response to air quality monitoring data". In this regard it is worth observing that since the plan was submitted there has been a period of dynamic change in electronic communications and home working, electric vehicle development, manufacture and registration, and national policy and regulation towards vehicle emissions. In November 2020, the Government announced a commitment to end the sale of new petrol and diesel vehicles by 2030, and to require all new cars and vans to be fully "zero emission" at the tailpipe by 2035; its related Delivery Plan contains a series of commitments towards improving charging experience, rolling out more charging points, and encouraging the take-up of zero emission vehicles by individuals and business fleets. The Building Regulations now require the provision of electric vehicle charging points for new homes.

137. Most of these initiatives and regulatory changes are very recent indeed, and their impacts are not fully accounted for in the methodological background to the plan and HRA. For example, the HRA points out that at the time the modelling was updated in 2021, the latest mid-year 3-year averages available in respect of NOx concentrations dated from 2016. They showed that average NOx concentrations across the 1km grid square within which the Epping Forest SAC is situated had fallen substantially from 2003 to 2016. But as the latest and most stringent emissions standards only became mandatory in 2014 (for heavy duty vehicles) and 2015 (for cars) their influence over the 2016 figures would have been limited. It is therefore reasonable to expect (as the HRA's authors state) that the improving trend shown in the most recent data can be expected to continue, and indeed steepen, as drivers continue to replace older cars with newer vehicles and as further improvements in vehicle NOx emissions technology are introduced, progressing towards the government's target of ending the sale of all new petrol and diesel cars and vans by 2030. Along with changes in energy costs and individual and societal behaviours, the national and local measures will influence the proportion of ULEVs being newly registered, but there will be a time lapse before any trends appear in air quality data. It is clear then that continued air quality monitoring and assessment in Epping Forest are essential, but it is also imperative that decisions involving measures to protect the SAC are informed by data which is as up to date as possible."

⁴³https://www.eppingforestdc.gov.uk/wp-content/uploads/2023/02/Inspectors-Report-on-the-Examination-of-the-EFDLP-2011-2033.pdf

- 6.2.43 It is therefore noted that the Air Quality Transport Modelling undertaken by the Applicant that informs the HRA/AA takes no account of more recent national policy changes such as the ban on the sale of petrol and diesel vehicles by 2030, the London Low Emission Zone, the London Ultra-Low Emission Zone, or of the proposed Air Pollution Mitigation Strategy accompanying the emerging Epping Forest Local Plan, which was prepared after the modelling was undertaken. Without these measures the modelling (which considers the Gilston Area and HGGT development cumulatively) demonstrates an improvement in pollutant emissions at the modelled SSSI component of the SAC (SSSI 105 Epping Thicks), before the national and local mitigation strategies are accounted for and therefore it considers the worst-case scenario with no mitigation in place. Albeit the critical loads/levels are still at exceedance as described in the full HRA/AA.
- 6.2.44 Given that the modelling demonstrates that the Development alone and incombination with other plans and projects would have a negligible impact in air quality terms on the Epping Forest SAC, being that the contribution to critical loads for each pollutant is less than 1% except for the (in-combination) imperceptible exceedance of Ammonia at 1.1%, no further mitigation is required. The HRA/AA demonstrates that the Development's contribution to the levels of exceedance are so small as to be imperceptible by 2040, i.e. following the completion of the Development and other planned HGGT developments. Given that the total contribution by the completion of the Development by 2040 is imperceptible, the incremental increases over time in line with the growing development will likewise be imperceptible. The impact that such small contributions will make in terms of the retardation of achieving benchmark pollutant levels are also therefore imperceptible.
- 6.2.45 The modelling undertaken for the Epping Forest Local Plan HRA⁴⁴ demonstrates that the mitigation scenario (the introduction of the Clean Air Zone in 2025 and 30% of vehicles being electric vehicles (combined) by 2033) will bring NOx pollutants to within critical load benchmarks. However, total Nitrogen and Ammonia will remain above critical loads by 2033 in every scenario, albeit the mitigation scenario is the best performing. The modelling demonstrates that with planned growth in Epping Forest and surrounding areas the contribution of planned growth to critical loads and levels was also imperceptible (being less than 1% except for the cited imperceptible exceedance) and that this "growth in the 2033 mitigated scenario does not materially interfere with the achievement of that target"; that target being to restore concentrations and depositions of air pollutants to at or below critical load or level values given for the feature of the site⁴⁵. By 2033 99% of the SAC would be below the critical level of NOx under the mitigated scenarios compared to 85% in the 2017 baseline⁴⁶. By 2033, 82% of the SAC would be below the critical level of ammonia compared to 81% in the 2017

⁴⁴ https://www.efdclocalplan.org/wp-content/uploads/2021/07/EB211A-Epping-Forest-Local-Plan-HRA-June-2021-final-for-issue Optimized-1.pdf

⁴⁵ Epping Forest District Local Plan 2021 HRA paragraph 6.21

⁴⁶ Epping Forest District Local Plan 2021 HRA paragraph 6.21 (NOx)

baseline⁴⁷. By 2033, 5% of the SAC would experience a net reduction in Nitrogen deposition rates compared to the 2017 baseline⁴⁸.

Appendix A: Habitats Regulations Assessment – Screening and Appropriate Assessment

- 6.2.46 As indicated above, the need for the Clean Air Zone will be kept under review and modifications have been made to the Epping Forest District Plan, which was adopted on 6th March 2023. Based on best understanding available to East Herts at this time of this update, the Clean Air Zone in Epping Forest will be implemented in September 2025 and public awareness campaigns and democratic reporting activities will be occurring in the lead up to its implementation, including a consultation exercise in January 2024 (Appendix 3 of the APMS). The Clean Air Zone will be in active preparation by the time the first homes in the Gilston Area are occupied and will be implemented soon after. Based on the current expected housing delivery trajectory (as reported in the Officer Report to which this HRA/AA is appended), there will be no homes in the Villages 1-6 site in 2025 and approximately 100 in the Village 7 site by 2025 due to delays to the consideration of the outline applications.
- 6.2.47 The Development will therefore not undermine the adopted APMS which is designed to ensure that developments within the Epping Forest Local Plan (in combination with other plans and projects) will not have an adverse effect on the integrity of the Epping Forest SAC, nor conflict with the Conservation Objectives of restoring the concentrations and deposition of air pollutants to within benchmark levels.
- 6.2.48 It is the opinion of the Council (as competent authority) that the Development does not rely on the Epping Forest Local Plan being adopted as the in-combination effects of the Development is imperceptible in the absence of mitigation, and there is also no credible evidence that the emissions represent a real risk that the ability of national or local measures to reduce background levels of pollutants at Epping Forest SAC will be compromised in a meaningful manner.
- In any event, this updated HRA/AA has considered the APMS for completeness. As noted above, the APMS is already being relied upon by Epping and Inspectors relating to Appropriate Assessments when consenting major developments within Epping Forest despite the Epping Forest District Local Plan not being adopted; there would only be a modest amount of development undertaken at the Gilston Area when key measures such as the Epping Forest Clean Air Zone are expected to be implemented and the Development will not compromise the adopted APMS or other national or local measures for reasons set out above.

6.3 Assessment of Potential Effects on Water Quality or Quantity on the Lee Valley SPA/Ramsar

⁴⁷ Epping Forest District Local Plan 2021 HRA paragraph 6.32 (Ammonia)

⁴⁸ Epping Forest District Local Plan 2021 HRA paragraph 6.57 (Nitrogen)

Water quality - operational phases

- 6.3.1 The screening assessment concludes that in the absence of mitigation it is not possible to conclude that no likely significant effects will occur in terms of water quality on the Lee Valley SPA/Ramsar as a result of the Development when considered in combination with Villages 1-6. requiring connections to the Rye Meads Waste Water Treatment Works (WwTW).
- 6.3.2 Two parts of the Lee Valley SPA/Ramsar site lie within East Herts: Amwell Quarry and Rye Meads. The nearest proposed development site to a part of the Lee Valley SPA/Ramsar site is 760m distant from the nearest allocated development site⁴⁹ and is 2.5km distant from the Development, so direct surface water runoff effects on water quality from the Development alone and in-combination with other plans and projects will not arise. Parts of the Lee Valley SPA/Ramsar consist of open water but other parts consist of fen or marsh vegetation that would theoretically be susceptible to nutrient enrichment from treated wastewater.
- 6.3.3 High levels of nutrients like phosphorous and nitrogen can unbalance plant growth and vegetation composition. Essentially, too much nitrogen and phosphorus in the water causes algae to grow faster than ecosystems can handle and significant increases in algae can harm water quality, food resources and habitats, and decrease the oxygen that fish and other aquatic life need to survive which, in turn, affect the bird species that rely on those food sources and habitats. The Lee Valley SPA/Ramsar are designated in view of the presence of overwintering populations of birds listed in the Birds Directive Annex I, that in turn rely on habitats that are sensitive to changes in water quality or quantity. In addition, the SPA/Ramsar supports nationally scarce plant species Whorled Water-milfoil and the rare and vulnerable invertebrate water-boatman.
- 6.3.4 'Poor fens' (i.e. acidic fens) are strongly nitrogen limited. In other words, nitrogen availability is the factor which ultimately controls vegetation response to other nutrients and a small change in nitrogen inputs can result in a major change in the vegetation composition. In contrast, other types of fen with a relatively alkaline pH (called 'rich' fens) such as those at Rye Meads are phosphorus-limited, meaning that phosphorus availability is the factor which ultimately controls vegetation response to other nutrients. This also applies to fluvial flood-plain grasslands like those at Rye Meads SSSI. In a phosphorus limited system, high nitrogen availability will not result in a deleterious effect on vegetation provided that phosphorus availability is controlled⁵⁰. That is not to say that nitrogen inputs would therefore be irrelevant, but it does mean

⁴⁹ Policy HOD4, Turnford Surfacing Site, Broxbourne Local Plan

⁵⁰ 'In a nutrient limited system, excess of the non-limiting nutrient may not result in any signs of enrichment in the vegetation as the plants are unable to make use of one nutrient without sufficient amounts of the other'. Source: The Fen Management Handbook, A. McBride *et al*, Scottish Natural Heritage, 2011 https://www.nature.scot/sites/default/files/Publication%202011%20-%20Fen%20Management%20Handbook.pdf

that when nitrogen is already in excess (and phosphorus inputs can be controlled) a proportionate response must be made to the risk posed by small additional nitrogen inputs.

- 6.3.5 Effluent discharges from Rye Meads Sewage Treatment Works (STW) into Tollhouse Stream. The Rye Meads SSSI component of the SPA/Ramsar is upstream of where the Rye Meads Waste Water Treatment Works discharges in to the River Lee via Tollhouse Stream. However, because this connection is upstream of the confluence of the River Stort and River Lee, in periods of high water flow, Tollhouse Stream has on occasion backed up into the marsh grassland areas of the SSSI.
- 6.3.6 The Amwell Quarry SSSI is further upstream of the Rye Meads Waste Water Treatment Works and is therefore not affected by discharge from the works. The Turnford and Cheshunt Pitts SSSI component of the SPA/Ramsar lies downstream of the Rye Meads Waste Water Treatment Works and despite being affected by urbanisation and sewage discharge from point source rather than the Rye Meads Waste Water Treatment Works, the conservation status for the extent of habitats and their supported species of Gadwall, Shoveler and Bittern are considered to be favourable.
- 6.3.7 Thames Water and the Environment Agency have been consulted upon throughout the Plan-making process of the East Herts District Plan, Harlow Local Development Plan and through the pre-application and applications stages of the proposed Applications comprised in the Development. Thames Water manage the Rye Meads Waste Water Treatment Works and the Environment Agency manage the licencing regime which controls levels of discharge associated with the Rye Meads Waste Water Treatment Works. The current discharge consent for Rye Meads WwTW has been recently subjected to a review by the Environment Agency and Thames Water (Review of Consents) specifically for the purpose of determining whether the current consented phosphorus limits on the discharge are leading to an adverse effect on the Lee Valley SPA/Ramsar site, and amendments were made to the consent and to improve discharge quality (2020) in order to avoid such an effect. Recent engagement with Thames Water on the Villages 1-6 and the Village 7 Outline Applications has confirmed that the Rye Meads Waste Water Treatment Works has capacity to accommodate growth to 2036. As such, it can be concluded with confidence that an adverse effect on the SPA/Ramsar site is unlikely to occur from this pathway for development within the catchment of the Rye Meads Waste Water Treatment Works up to 2036. This therefore includes the in-combination development identified within the development plans of the authorities⁵¹ within the Rye Meads Waste Water Treatment Works catchment which run to 2033.
- 6.3.8 The Village 7 Development is anticipated to be completed prior to 2036, and when considered alone, there will be capacity to accommodate the Development. However,

⁵¹ Broxbourne, East Herts, Epping Forest, Harlow, North Hertfordshire, Stevenage and Welwyn-Hatfield districts and boroughs.

when considering Village 7 in combination with Villages 1-6, as the construction of the Gilston Area Development as a whole will extend approximately four years beyond 2036 to 2040, Thames Water have requested conditions be attached to the planning permission for the Outline Applications, if granted, to limit the number of homes occupied until such time that upgrades occur. Without upgrades to the Rye Meads Waste Water Treatment Works, post-treatment discharges may not meet the required water quality standard, which could have an adverse effect on water quality at the adjacent Rye Meads SSSI element of the Lee Valley SPA/Ramsar.

- 6.3.9 Once the Rye Meads Waste Water Treatment Works ceases to have capacity within its existing discharge consent for effluent from additional dwellings (2036) it will be necessary for Thames Water to apply to the Environment Agency to increase the consented discharge volume, or direct flows to an alternative treatment facility. The Environment Agency is very unlikely to consent to an increase in discharge volume from the WwTW unless the phosphate concentration within the effluent can be further tightened to ensure no deterioration in water quality in Tollhouse Stream. There is a technical limit (known as the limit of Best Available Technology) to how much phosphorus removal a WwTW can incorporate. If this situation arises, there is a risk that discharge flows from future dwellings within the catchment, which in this case will affect the delivery of homes within the Gilston Area Development beyond 2036, could not be accommodated at Rye Meads WwTW, requiring an alternative treatment solution that does not as yet exist before that additional development takes place. This could include the use of new treatment technologies, expansion or the creation of new treatment works within the Rye Meads Waste Water Treatment Works catchment.
- 6.3.10 Thames Water has a regular programme of review which allows them to model growth occurring and to prioritise upgrades as and when required as part of their normal growth and business plan process. It is necessary to note that Thames Water has a statutory duty to carry out upgrades as required without recourse to developer contributions. Notwithstanding this, the Council proposes to impose a condition in order to ensure that the applicant is incentivised to engage with Thames Water to ensure the necessary interventions and upgrades are planned and prioritised by Thames Water and that the Applicants have entered into the appropriate arrangements with Thames Water so that they are carried out at the appropriate time. Table 20 below details the anticipated housing trajectory for the combined delivery of homes in the Gilston Area (Outline Applications for Villages 1-6 and Village 7). 6,100 homes are anticipated by 2036, with the remaining 3,250 homes delivered up to 2040/41.

Table 20: Combined Expected Annual Dwelling Completions

2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
0	0	0	200	250	450	650	650	650	650
2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/2040	2040/41	2041/42
650	650	650	650	650	650	650	650	650	650

	Total by				Total	10,000
	2036	6,100			by	
					2041/42	

- 6.3.11 Based on this trajectory and the need to ensure that sufficient time is available for the delivery of any upgrades required, the condition proposes that there is a two stage approach that requires a scheme to be submitted detailing how sufficient capacity and upgrades to the waste water network will be secured to support the Development, followed by a restriction on development beyond 6,100 units until the necessary upgrades have been delivered or the Local Planning Authority is satisfied that there is sufficient certainty that the upgrades will come forward at the appropriate time (e.g. by evidencing that the Developers have entered into appropriate arrangements for the delivery of the upgrades), or that there is sufficient capacity to accommodate the Development, having regard to the progress of delivery on other strategic growth sites. Other schemes which have projected delivery post 2036 are anticipated to be subject to an equivalent form of condition or S.106 obligation.
- 6.3.12 The Council is satisfied that the proposed condition or S.106 obligation can be relied on as to control any adverse changes in water quality, will provide the necessary controls and deliver future mitigation required in the form of upgrades to the waste water treatment network, including to the Rye Meads Waste Water Treatment Works, such that effluent discharge will be treated to appropriate standards in order to prevent impacts on the water quality within the Rye Meads SSSI component of the Lee Valley SPA/Ramsar. This will prevent harm to the food sources and habitats that support the flora and fauna species for which the SPA/Ramsar is designated with no adverse effect to the integrity of the National Network Site in this regard.
- 6.3.13 When considering the two transport infrastructure components of the Gilston Area Development, they comprise roads and bridges requiring no connection to the Rye Meads WwTW network. This Appropriate Assessment concludes that the two transport infrastructure proposals will have no adverse effect on the integrity of the Lee Valley SPA/Ramsar as a result of changes to water quality from the treatment of effluent.
- 6.3.14 Furthermore, the Gilston Area Development will result in a number of enhancements to the River Stort tributaries that in turn will improve water quality in general terms in the Stort River and Stort Navigation, to the Rye Meads SSSI through the pathway of Tollhouse Stream and downstream to the Turnford and Cheshunt Pitts SSSI components of the Lee Valley SPA/Ramsar. The vast majority of the proposed Village 7 developable area is in agricultural use. Studies in the Environmental Statement indicate that agricultural run-off is responsible for nutrient pollution within the Eastwick Brook and Fiddlers' Brook, both being a tributary of the Stort. The proposed residential-led development will result in a reduction in agricultural run-off and an increase in plant diversity through the creation of parks and gardens in the new neighbourhoods. Further enhancements are proposed within the Fiddlers' Brook tributary that are

- Appendix A: Habitats Regulations Assessment Screening and Appropriate Assessment designed to improve water quality such as the creation of new river banks and scrub clearance.
- 6.3.15 Likewise, the Village 7 Development, the outline Villages 1-6 and the two transport infrastructure components of the Gilston Area Development will create new sustainable drainage networks that will not only assist in controlling surface water but will also comprise natural treatment processes to ensure that surface water, including surface water associated with highway infrastructure is treated appropriately before entering the watercourse and drainage network. This will ensure that no changes to water quality occur within the River Stort before it meets the confluence of the River Lee downstream of the Rye Meads SSSI component of the Lee Valley SPA/Ramsar.

Water quality - construction phases

- 6.3.16 The 2019 IHRA submitted with the application originally 'screened out' effects on water quality arising during the construction phase of the Development due to the use of standard construction methods and codes of conduct set out in Construction Environment Plans to be required by condition. However, the Council considers it appropriate to consider this aspect of the Development in this Appropriate Assessment on a precautionary basis, because such conditions are a form of mitigation. The Village 7 Development site will be connected to the River Lee through the River Stort and its tributaries (which flow to the east of the outline site area). As is explained above, where the River Stort is joined by the Tollhouse Stream at the confluence of the River Lee, in periods of high water flow, incidents have occurred where flow backs up into the SSSI upstream of the confluence. Therefore, there is a risk that a pollution incident arising during construction that affects the River Stort could adversely affect the integrity of the Rye Meads SSSI component of the Lee Valley SPA/Ramsar via this pathway.
- 6.3.17 Therefore, a series of conditions will be imposed upon the grant of any planning permission for each of the Applications comprised in the Gilston Area Development to manage each stage and method of construction-related activities that could otherwise create impacts affecting water quality. Standard Codes of Construction Practice and the preparation of Construction Environment Management Plans will ensure the developer identifies likely risks and puts in place measures to prevent pollution incidents from occurring throughout all stages of construction. Requirements to monitor each stage of construction will ensure that measures will be put in place and agreed before works commence to manage known pollution risks and to have plans in place to quickly manage unforeseen incidents. These mitigation plans to control and prevent pollution of watercourses and groundwater will be submitted to and approved by the Local Planning Authority prior to the commencement of each phase of the development, the process of which involves approval by relevant statutory or regulatory bodies as appropriate.
- 6.3.18 Industry standard practices will be secured through conditions to manage and minimise pollution risks caused by construction of the Village 7 Development and

thereby avoid pollutants entering watercourses and groundwater, which might otherwise result in the deterioration of water quality. It is common practice to impose such conditions on developments where the potential for pollution of watercourses and groundwater might occur and it is considered reasonable to conclude that other developments will provide similar suitable mitigation such that in-combination effects are avoided and prevented.

- 6.3.19 In terms of the construction phase of the Development, where the new homes require connections to the existing trunk sewer, site-specific or connection-specific upgrades are likely to be required which will be delivered in line with the statutory right to connect under the provisions of the Water Industry Act 1991 in due course. The Council has consulted with Thames Water and the Environment Agency, and a number of standard conditions have been requested by the statutory bodies to ensure that upgrades and connections which they are responsible for undertaking, have been undertaken to the appropriate standard before homes are occupied. This will ensure that no significant adverse effects occur on the Lee Valley SPA/Ramsar as a result of the construction phase of the Development alone.
- 6.3.20 Considering the in-combination effect of the wider Gilston Area Development, as the two Crossings providing the transport infrastructure components of the Development will involve construction directly over and adjacent to the Stort Navigation, the River Stort and its floodplain, the conditions proposed recognise the enhanced risks of pollution of watercourses or groundwater and provide a framework for identifying and managing such risks. In relation to the potential risk of pollution of watercourses or groundwater, the conclusion of this Appropriate Assessment is that with these conditions in place there will be no adverse effect on the integrity of the Lee Valley SPA/Ramsar, or conflict with the Conservation Objectives⁵², from the Crossings, either alone or in combination with other plans or projects (including the Development).

Water quantity

- 6.3.21 In terms of water quantity, the screening assessment indicates that there will be no likely significant effects on the Lee Valley SPA/Ramsar either alone or in combination given that Affinity Water has a Water Resources Management Plan covering the period beyond the completion of the Development. The abstraction of water to supply the proposed Village 7 Development will therefore not have any likely significant effects on the SPA/Ramsar as a result of excessive water drawdown, either alone or in combination with other plans and programmes.
- 6.3.22 Notwithstanding this, as a precautionary measure, various conditions have been requested (as listed in Appendix B) by statutory bodies such as the Lead Local Flood Authority, Environment Agency and Thames Water for example, which are considered

⁵² Maintain the overall depth of swamp and marginal water and ensure water quality and quantity is maintained to a standard which provides the necessary conditions to support the qualifying species.

appropriate. These include conditions to manage drainage strategies to achieve greenfield run-off rates through the integration of sustainable drainage features, which will include the attenuation and management of water flow and discharge as well as floodplain compensation areas for the two river crossing elements of the Development, and also to manage water use during construction related activities. For example, the Construction Environment Management Plan condition requires the submission of a water management strategy for construction phases of each component of the Development. Modern methods of construction are managed by codes of construction practice that require the minimisation of water usage during construction activities. Details of the various construction management methods are included in the Applicant's Environmental Statement⁵³.

6.4 Stage 2: Appropriate Assessment Conclusion

- 6.4.1 The Local Planning Authority has carefully considered the information provided by the applicant in the form of the 2019 IHRA, 2021 IHRA and the Villages 1-6 2019 IHRA, 2020 IHRA and 2022 IHRA update and is satisfied that the information is sufficient to inform this Appropriate Assessment. The Council has considered a wide variety of sources of data and verified information (as detailed throughout the report), including engagement with consultants Barton Willmore, Aecom, EPR Consulting, Herts Ecology, Affinity Water and Thames Water. The Council is satisfied beyond reasonable scientific doubt that the Village 7 Development, alone or in combination with other plans and projects would not have an adverse effect on the integrity of National Network Site once mitigations have been considered.
- 6.4.2 Appropriate consultation has occurred with relevant statutory bodies in informing the two Applicants' IHRAs and the Council's Appropriate Assessment, including Natural England. No objections to the proposed Development were made by the statutory bodies subject to the imposition of conditions. These conditions and any others deemed appropriate by the LPA to mitigate any likely significant effects in order to avoid adverse effects on the integrity of National Network Sites, namely the Lee Valley SPA/Ramsar were detailed in each of the committee reports for the two Crossing applications and are included in the approved Decision Notices for both Crossings.
- 6.4.3 The Applicant's 2021 IHRA includes a 'Mitigation Route Map', a list of mitigation measures that are either proposed to be delivered through the Development, or agreed as additional forms of mitigation to be controlled through condition in Chapter 22 of the Environmental Statement. These are included in Appendix C to this Report. Having taken account of the information received and considering that mitigation measures will be adequately secured as part of any planning permissions or associated Section 106 agreement (to the extent necessary), and are expected to be effective beyond

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⁵³ Villages 1-6 Environmental Statement Volume 3, Appendix 6.2: Code of Construction Practice; Appendix 17.4: Preliminary Water Framework Directive Assessment; and Appendix 17.5: Water Risk Assessment for the River Stort/ Stort Navigation Road Crossings.

reasonable scientific doubt, the Council is satisfied that the proposed Development, either alone or in combination with other plans and projects, would not lead to any adverse effects on the integrity of any National Network Site nor conflict with relevant Conservation Objectives for the National Network sites.

6.4.4 For clarity, the same conclusions apply in respect of the Outline Village 7 application individually, the Villages 1-6 application individually and the two approved Crossings, as the likely significant effects of each individually and in combination with the each other and with other plans and projects have been established and validated in this HRA and it can be concluded beyond reasonable scientific doubt that the Outline application for Village 7 will not have adverse effects on the integrity of any National Network Site alone or in combination with other projects.

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Appendix A - Natural England Representations 2019

- Natural England Representation to Original Submission Outline Application
- Natural England Representation to Amended Outline Application

Appendix B - Proposed Conditions Relevant to HRA Matters

- Village 7 Outline Application Proposed Draft Conditions
- Villages 1-6 Outline Application Approved Draft Conditions
- CSC Application Agreed Conditions
- ESC Application Agreed Conditions

Appendix C - Mitigation Route Map

ES Addendum, Chapter 22 Assessment Summary and Mitigation Implementation

Appendix D - Cumulative Schemes

ES Addendum, Volume II, Appendix 5.4 Schedule of Committed Schemes

In addition to the cumulative schemes listed in Appendix D, which are taken into account in the Applicant's Environmental Statement, the following plans and programmes have also been taken into account in this Habitats Regulations Assessment

- Affinity Water Drought Management Plan, Consultation Draft 2022
- Affinity Water Resource Management Plan 2020-2080
- Affinity Water Resource Management Plan Habitats Regulations Assessment (Affinity Water, 2019)
- Broxbourne Local Plan 2018-2033
- Broxbourne Local Plan Emerging Draft Appropriate Assessment (Lepus Consulting, 2018)
- Broxbourne Local Plan Emerging Draft Screening Assessment (Lepus Consulting, 2016)
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- Epping Forest Local Plan Habitats Regulations Assessment (Aecom, 2021)
- Epping Forest Local Plan Habitats Regulations Assessment (Aecom, 2019)
- Harlow Local Development Plan, 2020
- Harlow Local Development Plan HRA Adoption Statement (Aecom, 2020)

Appendix A: Habitats Regulations Assessment – Screening and Appropriate Assessment

- Harlow Local Development Plan Submission HRA (Aecom, 2018)
- Lee Valley Regional Park Authority Strategic Policies, 2019
- Lee Valley Regional Park Authority Strategic Policies Appropriate Assessment (Lepus Consulting, 2019)

Appendix A - Natural England Representations 2019

- Natural England Representation to Original Submission Outline Application
- Natural England Representation to Amended Outline Application

Date: 05 March 2020

Our ref: 302346

Your ref: 3/19/2124/OUT

FAO East Hertfordshire Council

BY EMAIL ONLY



Customer Services Hombeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 060 3900

Dear Sir / Madam,

Planning consultation: 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 and community uses; primary school, early years and nursery facilities; leisure and sports facilities; 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 Location: Land Off Church Lane. North of the A414. Hunsdon and Eastwick, Hertfordshire

Thank you for your consultation on the above dated 29 November 2019 which was received by Natural England on the same date

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

FUTHER INFORMATION REQUIRED SUMMARY OF NATURAL ENGLAND'S ADVICE:

- We consider that without appropriate mitigation the application has potential to damage or destroy the interest features for which Hatfield Forest Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR) has been notified. Appropriate measures to address this at the outline stage are highlighted in the main text, this includes the need to secure a financial contribution towards mitigation measures within the designated site, and the incorporation of appropriate avoidance measures into the development (which we believe would be suitable to agree via suitable worded conditions). Note, that all areas of the Gilston Village developments will need to go through similar procedure.
- We advise that a suitable planning conditions are put in place to ensure that the conservation status of Hunsdon Mead SSSI are not harmed via recreational pressure as a result of the proposals.
- We advise that the provision of GI should not be confused with public open space within the consultation documents, and instances where it is should be clarified.
- We advise that clarity is provided on how this project will deliver a biodiversity net gain.
- We advise that suitable measures are put in place via planning condition to ensure that the proposed development does not contribute any increase in phosphate levels that could harm the Favourable Conservation Status at Rye Meads SSSI.
- We provide advice on air quality impacts and Epping Forest SAC.

Hatfield Forest SSSI/NNR

Hatfield Forest is a National Nature Reserve (NNR) and nationally designated as a Site of Special Scientific Interest (SSSI), regarded to be of international importance for its ancient wood pasture-forest habitats. The interest features of these habitats are vulnerable to recreational impacts and there are concerns regarding the contribution of nearby residential development to the significant increase in visitor numbers over recent years. Both Natural England and the National Trust therefore have concerns regarding the impacts of increasing visitor pressure on the designated site and it is apparent that the current number of visitors is exceeding carrying capacity of some important SSSI habitats and features.

Natural England is working alongside the National Trust in carrying out research into visitor patterns, impacts and mitigation measures to Hatfield Forest SSSI/NNR. To date, this work has included winter and summer visitor surveys which have identified a Zone of Influence (ZoI) of 14.6km from the designated site – please note Natural England's Impact Risk Zones have since been updated to reflect this ZoI. New residential housing within this ZoI therefore is likely to damage the interest features of Hatfield Forest SSSI/NNR and consequently requires further assessment in the context of this development which is circa 10.3km from the designated site (within the ZoI).

The evidence in relation to these joint concerns have been shared with your authority and we wrote to all Local Planning Authorities identified as falling within the ZoI to confirm Natural England's position via the letter dated 5th April 2019. We would direct you to this letter for further information on Natural England's recommended approach. Whilst we are working towards a strategic solution with the relevant Local Planning Authorities Natural England advises that for the purposes of addressing the interim situation, a bespoke mitigation package should be sought for this application, which we suggest is designed in consultation with the National Trust as site managers.

In order to mitigate these adverse effects and make the development acceptable, the following mitigation measures are required / or the following mitigation options should be secured:

- discussion in correspondence with the National Trust as site managers to determine appropriate and proportionate mitigation measures within Hatfield Forest SSSI/NNR for this application, to be secured via an appropriate planning obligation;
- an appropriately worded planning condition or obligation to ensure suitable avoidance measures are incorporated into the development (such as the use of green infrastructure)

The unique draw of Hatfield Forest means that even well-designated, 'on-site' provisions are unlikely to fully mitigate impacts. Natural England therefore agrees that it is appropriate to consider the agreement of 'off-site' mitigation measures (outside of the red line boundary). As stated, the development of a strategic solution is currently underway which will include a mitigation package, though this has not yet been finalised. A draft <u>package of mitigation measures</u> has been submitted towards the recent Uttlesford Local Plan Examination and we would invite your Authority to consider these measures, in consultation with the National Trust to determine an appropriate bespoke suite of measures for this planning application (to be agreed via a suitably worded planning condition or obligation)

In the absence of a strategic solution, Natural England would not want to see any permissions granted that would create a precedent of acceptability for additional housing developments close to Hatfield Forest SSSI, NNR without adequate and suitable consideration of necessary avoidance and mitigation measures. Natural England therefore advises that permission should not be granted until such time as these mitigation measures have been assessed and secured through the appropriate means. We would be happy to comment further as the need arises.

Within red-line requirements regarding bespoke mitigation for Hatfield Forest SSSI

In this instance, due to the 'outline' nature of the application, Natural England acknowledges that further details are likely to come through the subsequent phases of planning permission (i.e.

Reserved Matters). It is therefore anticipated that an assessment will be made as to the capacity of the site to provide adequate mitigation and that confirmation of these details will be sought through the appropriate method, such as an appropriately worded planning condition or obligation.

For areas of green infrastructure, we would generally advise that these should include elements, such as the following:

- High-quality, informal, semi-natural areas
- Circular dog walking routes of >2.7 km and/or with links to surrounding public rights of way (PRoW)
- Dedicated 'dogs-off-lead' areas
- Signage/leaflets to householders to promote these areas for recreation
- Dog waste bins etc.

Please see further comments on green infrastructure below.

Further recreational pressure comments

The development falls within 1km of Hunsdon Mead SSSI and we note that 13.6.100 of ES suggests that the open space provision by the Gilston villages will divert any potential recreational impacts from sites such as Hunsdon Mead (210m from the proposal).

We advise that your authority ensures that measures are provided to ensure that the conservation status of the site is not harmed by recreational pressure. As such, we advise that a suitable planning condition is put in place.

Further comments re: environmental provision

Green Infrastructure

Policy GA1 within the Local Plan states that Gilston Village will be "providing a comprehensive green infrastructure network and net biodiversity gains". We are pleased that this proposal is being developed with garden city principles in mind.

Overall "the Proposed Development includes the substantial delivery of <u>76.68 hectares of green infrastructure and public open space</u>, including the retention and enhancement of existing historic hedgerows and ancient woodlands." And we note (section 6.131) "For Village 7, this will be achieved through a strategic green corridor along the northern extent of the Site, a community park and natural and semi-natural public open space distributed across the Village to include the retained woodland and hedgerows."

The distinction between Public Open Space, and space specifically designed as green infrastructure is unclear. Specifically, in section 6.93, onsite GI is described as comprising natural and seminatural public open space. However, the two concepts seem to be distinguished on page 11 of the open space, landscape and public realm strategy assessment, and we note that they do have separate masterplan strategies. We advise that the provision of GI should not be confused with public open space.

We welcome that the GI provided by Gilston Village will link into the Stort Valley feasibility access links and open space concept, the Harlow District GI Vision and the East Hertfordshire District Council Green Infrastructure Strategy, 2011. We also welcome the scale of the Masterplan, in the sense that it has plenty of opportunity to provide GI on an appropriate scale to deliver multifunctional benefits e.g. access to nature and educational value for local communities, air quality regulation, water management, water quality, noise regulation, carbon storage and pollination.

Within the GI Masterplan it is stated that "retention and enhancement of existing and valued landscape features such as designated wildlife sites, ancient woodlands, watercourses and the provision of large areas of open space to the benefit of the wider ecological gain of the surrounding area and the enjoyment of the landscape for all.". Please note that retention cannot count towards a

biodiversity net gain, and further that the mitigation hierarchy has to be followed as described within the National Planning Policy Framework, where mitigation precedes compensation.

Biodiversity Net Gain

We are pleased to read (13.10.7 of ES) that "the Project will minimise negative ecological effects, protect designated sites and provide enhancements for biodiversity such that there will be a biodiversity net gain". Although we note that "The biodiversity calculator confirms that the development will result in 72.14 Habitat Biodiversity Units gain and 25.54 Hedgerow Units gain", it is not clear from the consultation documents where the net gains will be delivered.

For example, the Ecological Management Plan (EMP) states how "measures detailed in the ES" (para 3.1) will mitigate, compensate and provide biodiversity net gains, however the specific measures that will deliver a biodiversity net gain are not detailed in the ES or the EMP. We advise that clarity is sought on how this project will deliver a biodiversity net gain.

Water and Air Quality

1. Rye Meads SSSI (part of Lee Valley SPA and RAMSAR)

Please note that any increases in sewerage outflow from Rye Meads Sewerage Works into waterways connected to Rye Meads SSSI has the potential to harm its Favourable Conservation Status through increases in phosphate levels, which are already high at the site.

As a result, Natural England advises that suitable measures are put in place via planning condition to ensure that the proposed development does not contribute any increase in phosphate levels that could harm the Favourable Conservation Status at Rye Meads SSSI.

2. Epping Forest SSSI and SAC

The issue of air quality impacts on Epping Forest SAC is a complex one. The SAC is an internationally important site with ancient trees and heathland which are particularly sensitive to air quality. Natural England has been working with East Hertfordshire District Council, Epping Forest District Council, the City of London and the other Local Authorities for some time to look for legally compliant solutions allowing proposed housing allocations to be delivered without harming the SAC.

We note that this application is anticipated to have contributions of nitrogen at 0.13% of the lower critical load and ammonia at 0.36% of the critical level, by completion. As Competent Authority, you need to consider the impact of this both alone and in combination with other plans and projects within the framework of a Habitats Regulations Assessment. With regards to the in combination assessment Epping Forest Local Plan has gone through examination by an independent Planning Inspector, who has found that the submitted HRA does not provide sufficient certainty for her to conclude that there would be no adverse effects; – please see http://www.efdclocalplan.org/wp-content/uploads/2019/08/ED98-Epping-Forest-Post-hearing-Advice-Aug-2019-V1-final.pdf.

Your Authority should consider what implications this might have for planning applications in your district which identify a deterioration in air quality within the SAC or an increase in traffic movements along forest roads and where appropriate seek your own independent legal advice.

This concludes Natural England's advice at this stage which we hope you will find helpful. Our additional advice can be found in Appendix A.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. Should the developer wish to discuss the detail of measures to mitigate the effects described above with Natural England, we recommend that they seek advice through our <u>Discretionary Advice Service</u>.

If you have any queries relating to the advice in this letter please contact me on 02080263523. For

matters relating to Epping Forest SAC please contact Jamie Melvin on 020 802 61025.

Please consult us again once the information requested above, has been provided.

Yours sincerely

Anna Bush Lead Planning Adviser

Appendix A

Please also note that if your authority is minded to grant planning permission contrary to the advice in this letter, you are required under Section 28I (6) of the Wildlife and Countryside Act 1981 (as amended) to notify Natural England of the permission, the terms on which it is proposed to grant it and how, if at all, your authority has taken account of Natural England's advice. You must also allow a further period of 21 days before the operation can commence.

Local authorities have responsibilities towards the conservation of SSSIs under s28g of the Wildlife
& Countryside Act (1981 as amended), and your biodiversity duties under s40 of the NERC Act
2006. If you have not already done so, we recommend that you ensure that sufficient information in the form of an SSSI impact assessment report or equivalent is built into the planning application validation process. Please note that Natural England is preparing additional standard advice to cover a range of development scenarios, but as these do not yet cover this planning application we are unable to provide further comments.

Natural England has not assessed this application for impacts on protected species. Natural England has published <u>Standing Advice</u> which you can use to assess impacts on protected species or you may wish to consult your own ecology services for advice.

We would expect the Local Planning Authority (LPA) to assess and consider the other possible impacts resulting from this proposal on the following when determining this application:

- local sites (biodiversity and geodiversity)
- local landscape character
- local or national biodiversity priority habitats and species.

Natural England does not hold locally specific information relating to the above. These remain material considerations in the determination of this planning application and we recommend that you seek further information from the appropriate bodies (which may include the local records centre, your local wildlife trust, local geoconservation group or other recording society and a local landscape characterisation document in order to ensure the LPA has sufficient information to fully understand the impact of the proposal before it determines the application. A more comprehensive list of local groups can be found at Wildlife and Countryside link.

Protected Species

Natural England has produced <u>standing advice</u>¹ to help planning authorities understand the impact of particular developments on protected species. We advise you to refer to this advice. Natural England will only provide bespoke advice on protected species where they form part of a SSSI or in exceptional circumstances.

We note the proposals have potential to impact bats, water voles and GCN's, as well as reptiles.

Biodiversity duty

¹ https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals

Your authority has a <u>duty</u> to have regard to conserving biodiversity as part of your decision making. Conserving biodiversity can also include restoration or enhancement to a population or habitat. Further information is available <u>here</u>

Date: 05 March 2020

Our ref: 302346

Your ref: 3/19/2124/OUT

FAO East Hertfordshire Council

BY EMAIL ONLY



Customer Services Hombeam House Crewe Business Park Electra Way Crewe Cheshire CW1 6GJ

T 0300 060 3900

Dear Sir / Madam,

Planning consultation: 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 and community uses; primary school, early years and nursery facilities; leisure and sports facilities; 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 Location: Land Off Church Lane. North of the A414. Hunsdon and Eastwick, Hertfordshire

Thank you for your consultation on the above dated 29 November 2019 which was received by Natural England on the same date

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

FUTHER INFORMATION REQUIRED SUMMARY OF NATURAL ENGLAND'S ADVICE:

- We consider that without appropriate mitigation the application has potential to damage or destroy the interest features for which Hatfield Forest Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR) has been notified. Appropriate measures to address this at the outline stage are highlighted in the main text, this includes the need to secure a financial contribution towards mitigation measures within the designated site, and the incorporation of appropriate avoidance measures into the development (which we believe would be suitable to agree via suitable worded conditions). Note, that all areas of the Gilston Village developments will need to go through similar procedure.
- We advise that a suitable planning conditions are put in place to ensure that the conservation status of Hunsdon Mead SSSI are not harmed via recreational pressure as a result of the proposals.
- We advise that the provision of GI should not be confused with public open space within the consultation documents, and instances where it is should be clarified.
- We advise that clarity is provided on how this project will deliver a biodiversity net gain.
- We advise that suitable measures are put in place via planning condition to ensure that the proposed development does not contribute any increase in phosphate levels that could harm the Favourable Conservation Status at Rye Meads SSSI.
- We provide advice on air quality impacts and Epping Forest SAC.

Hatfield Forest SSSI/NNR

Hatfield Forest is a National Nature Reserve (NNR) and nationally designated as a Site of Special Scientific Interest (SSSI), regarded to be of international importance for its ancient wood pasture-forest habitats. The interest features of these habitats are vulnerable to recreational impacts and there are concerns regarding the contribution of nearby residential development to the significant increase in visitor numbers over recent years. Both Natural England and the National Trust therefore have concerns regarding the impacts of increasing visitor pressure on the designated site and it is apparent that the current number of visitors is exceeding carrying capacity of some important SSSI habitats and features.

Natural England is working alongside the National Trust in carrying out research into visitor patterns, impacts and mitigation measures to Hatfield Forest SSSI/NNR. To date, this work has included winter and summer visitor surveys which have identified a Zone of Influence (ZoI) of 14.6km from the designated site – please note Natural England's Impact Risk Zones have since been updated to reflect this ZoI. New residential housing within this ZoI therefore is likely to damage the interest features of Hatfield Forest SSSI/NNR and consequently requires further assessment in the context of this development which is circa 10.3km from the designated site (within the ZoI).

The evidence in relation to these joint concerns have been shared with your authority and we wrote to all Local Planning Authorities identified as falling within the ZoI to confirm Natural England's position via the letter dated 5th April 2019. We would direct you to this letter for further information on Natural England's recommended approach. Whilst we are working towards a strategic solution with the relevant Local Planning Authorities Natural England advises that for the purposes of addressing the interim situation, a bespoke mitigation package should be sought for this application, which we suggest is designed in consultation with the National Trust as site managers.

In order to mitigate these adverse effects and make the development acceptable, the following mitigation measures are required / or the following mitigation options should be secured:

- discussion in correspondence with the National Trust as site managers to determine appropriate and proportionate mitigation measures within Hatfield Forest SSSI/NNR for this application, to be secured via an appropriate planning obligation;
- an appropriately worded planning condition or obligation to ensure suitable avoidance measures are incorporated into the development (such as the use of green infrastructure)

The unique draw of Hatfield Forest means that even well-designated, 'on-site' provisions are unlikely to fully mitigate impacts. Natural England therefore agrees that it is appropriate to consider the agreement of 'off-site' mitigation measures (outside of the red line boundary). As stated, the development of a strategic solution is currently underway which will include a mitigation package, though this has not yet been finalised. A draft <u>package of mitigation measures</u> has been submitted towards the recent Uttlesford Local Plan Examination and we would invite your Authority to consider these measures, in consultation with the National Trust to determine an appropriate bespoke suite of measures for this planning application (to be agreed via a suitably worded planning condition or obligation)

In the absence of a strategic solution, Natural England would not want to see any permissions granted that would create a precedent of acceptability for additional housing developments close to Hatfield Forest SSSI, NNR without adequate and suitable consideration of necessary avoidance and mitigation measures. Natural England therefore advises that permission should not be granted until such time as these mitigation measures have been assessed and secured through the appropriate means. We would be happy to comment further as the need arises.

Within red-line requirements regarding bespoke mitigation for Hatfield Forest SSSI

In this instance, due to the 'outline' nature of the application, Natural England acknowledges that further details are likely to come through the subsequent phases of planning permission (i.e.

Reserved Matters). It is therefore anticipated that an assessment will be made as to the capacity of the site to provide adequate mitigation and that confirmation of these details will be sought through the appropriate method, such as an appropriately worded planning condition or obligation.

For areas of green infrastructure, we would generally advise that these should include elements, such as the following:

- High-quality, informal, semi-natural areas
- Circular dog walking routes of >2.7 km and/or with links to surrounding public rights of way (PRoW)
- Dedicated 'dogs-off-lead' areas
- Signage/leaflets to householders to promote these areas for recreation
- Dog waste bins etc.

Please see further comments on green infrastructure below.

Further recreational pressure comments

The development falls within 1km of Hunsdon Mead SSSI and we note that 13.6.100 of ES suggests that the open space provision by the Gilston villages will divert any potential recreational impacts from sites such as Hunsdon Mead (210m from the proposal).

We advise that your authority ensures that measures are provided to ensure that the conservation status of the site is not harmed by recreational pressure. As such, we advise that a suitable planning condition is put in place.

Further comments re: environmental provision

Green Infrastructure

Policy GA1 within the Local Plan states that Gilston Village will be "providing a comprehensive green infrastructure network and net biodiversity gains". We are pleased that this proposal is being developed with garden city principles in mind.

Overall "the Proposed Development includes the substantial delivery of <u>76.68 hectares of green infrastructure and public open space</u>, including the retention and enhancement of existing historic hedgerows and ancient woodlands." And we note (section 6.131) "For Village 7, this will be achieved through a strategic green corridor along the northern extent of the Site, a community park and natural and semi-natural public open space distributed across the Village to include the retained woodland and hedgerows."

The distinction between Public Open Space, and space specifically designed as green infrastructure is unclear. Specifically, in section 6.93, onsite GI is described as comprising natural and seminatural public open space. However, the two concepts seem to be distinguished on page 11 of the open space, landscape and public realm strategy assessment, and we note that they do have separate masterplan strategies. We advise that the provision of GI should not be confused with public open space.

We welcome that the GI provided by Gilston Village will link into the Stort Valley feasibility access links and open space concept, the Harlow District GI Vision and the East Hertfordshire District Council Green Infrastructure Strategy, 2011. We also welcome the scale of the Masterplan, in the sense that it has plenty of opportunity to provide GI on an appropriate scale to deliver multifunctional benefits e.g. access to nature and educational value for local communities, air quality regulation, water management, water quality, noise regulation, carbon storage and pollination.

Within the GI Masterplan it is stated that "retention and enhancement of existing and valued landscape features such as designated wildlife sites, ancient woodlands, watercourses and the provision of large areas of open space to the benefit of the wider ecological gain of the surrounding area and the enjoyment of the landscape for all.". Please note that retention cannot count towards a

biodiversity net gain, and further that the mitigation hierarchy has to be followed as described within the National Planning Policy Framework, where mitigation precedes compensation.

Biodiversity Net Gain

We are pleased to read (13.10.7 of ES) that "the Project will minimise negative ecological effects, protect designated sites and provide enhancements for biodiversity such that there will be a biodiversity net gain". Although we note that "The biodiversity calculator confirms that the development will result in 72.14 Habitat Biodiversity Units gain and 25.54 Hedgerow Units gain", it is not clear from the consultation documents where the net gains will be delivered.

For example, the Ecological Management Plan (EMP) states how "measures detailed in the ES" (para 3.1) will mitigate, compensate and provide biodiversity net gains, however the specific measures that will deliver a biodiversity net gain are not detailed in the ES or the EMP. We advise that clarity is sought on how this project will deliver a biodiversity net gain.

Water and Air Quality

1. Rye Meads SSSI (part of Lee Valley SPA and RAMSAR)

Please note that any increases in sewerage outflow from Rye Meads Sewerage Works into waterways connected to Rye Meads SSSI has the potential to harm its Favourable Conservation Status through increases in phosphate levels, which are already high at the site.

As a result, Natural England advises that suitable measures are put in place via planning condition to ensure that the proposed development does not contribute any increase in phosphate levels that could harm the Favourable Conservation Status at Rye Meads SSSI.

2. Epping Forest SSSI and SAC

The issue of air quality impacts on Epping Forest SAC is a complex one. The SAC is an internationally important site with ancient trees and heathland which are particularly sensitive to air quality. Natural England has been working with East Hertfordshire District Council, Epping Forest District Council, the City of London and the other Local Authorities for some time to look for legally compliant solutions allowing proposed housing allocations to be delivered without harming the SAC.

We note that this application is anticipated to have contributions of nitrogen at 0.13% of the lower critical load and ammonia at 0.36% of the critical level, by completion. As Competent Authority, you need to consider the impact of this both alone and in combination with other plans and projects within the framework of a Habitats Regulations Assessment. With regards to the in combination assessment Epping Forest Local Plan has gone through examination by an independent Planning Inspector, who has found that the submitted HRA does not provide sufficient certainty for her to conclude that there would be no adverse effects; – please see http://www.efdclocalplan.org/wp-content/uploads/2019/08/ED98-Epping-Forest-Post-hearing-Advice-Aug-2019-V1-final.pdf.

Your Authority should consider what implications this might have for planning applications in your district which identify a deterioration in air quality within the SAC or an increase in traffic movements along forest roads and where appropriate seek your own independent legal advice.

This concludes Natural England's advice at this stage which we hope you will find helpful. Our additional advice can be found in Appendix A.

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us. Should the developer wish to discuss the detail of measures to mitigate the effects described above with Natural England, we recommend that they seek advice through our <u>Discretionary Advice Service</u>.

If you have any queries relating to the advice in this letter please contact me on 02080263523. For

matters relating to Epping Forest SAC please contact Jamie Melvin on 020 802 61025.

Please consult us again once the information requested above, has been provided.

Yours sincerely

Anna Bush Lead Planning Adviser

Appendix A

Please also note that if your authority is minded to grant planning permission contrary to the advice in this letter, you are required under Section 28I (6) of the Wildlife and Countryside Act 1981 (as amended) to notify Natural England of the permission, the terms on which it is proposed to grant it and how, if at all, your authority has taken account of Natural England's advice. You must also allow a further period of 21 days before the operation can commence.

Local authorities have responsibilities towards the conservation of SSSIs under s28g of the Wildlife
& Countryside Act (1981 as amended), and your biodiversity duties under s40 of the NERC Act
2006. If you have not already done so, we recommend that you ensure that sufficient information in the form of an SSSI impact assessment report or equivalent is built into the planning application validation process. Please note that Natural England is preparing additional standard advice to cover a range of development scenarios, but as these do not yet cover this planning application we are unable to provide further comments.

Natural England has not assessed this application for impacts on protected species. Natural England has published <u>Standing Advice</u> which you can use to assess impacts on protected species or you may wish to consult your own ecology services for advice.

We would expect the Local Planning Authority (LPA) to assess and consider the other possible impacts resulting from this proposal on the following when determining this application:

- local sites (biodiversity and geodiversity)
- local landscape character
- local or national biodiversity priority habitats and species.

Natural England does not hold locally specific information relating to the above. These remain material considerations in the determination of this planning application and we recommend that you seek further information from the appropriate bodies (which may include the local records centre, your local wildlife trust, local geoconservation group or other recording society and a local landscape characterisation document in order to ensure the LPA has sufficient information to fully understand the impact of the proposal before it determines the application. A more comprehensive list of local groups can be found at Wildlife and Countryside link.

Protected Species

Natural England has produced <u>standing advice</u>¹ to help planning authorities understand the impact of particular developments on protected species. We advise you to refer to this advice. Natural England will only provide bespoke advice on protected species where they form part of a SSSI or in exceptional circumstances.

We note the proposals have potential to impact bats, water voles and GCN's, as well as reptiles.

Biodiversity duty

¹ https://www.gov.uk/protected-species-and-sites-how-to-review-planning-proposals

Your authority has a <u>duty</u> to have regard to conserving biodiversity as part of your decision making. Conserving biodiversity can also include restoration or enhancement to a population or habitat. Further information is available <u>here</u>

Appendix B - Proposed Conditions Relevant to HRA Matters

- Village 7 Outline Application Proposed Draft Conditions
- Villages 1-6 Outline Application Approved Draft Conditions
- CSC Application Agreed Conditions
- ESC Application Agreed Conditions

DRAFT CONDITIONS

Condition Reference / Name	Condition Wording
A Time Limits / Re	eserved Matters
A1 - Submission of Reserved Matters	No development (other than Preliminary Works) within any Phase, Sub-Phase or Development plot (as set out in the approved Phasing Plan required by condition C2) shall be begun until Reserved Matters approval for that Phase, Sub-phase or Development plot has been obtained from the local planning authority in writing. The development shall be carried out fully in accordance with the details as approved.
	Reason: The application as submitted does not give particulars sufficient for consideration of the Reserved Matters.
A2 - Timescales for RM Submission	Applications for approval of Reserved Matters, namely details of layout, scale, appearance and landscaping (hereinafter called "the Reserved Matters") shall be made to the Local Planning Authority no later than 10 (ten) years from the date of this permission. The first Reserved Matters application shall be submitted within three years of the date of this permission.
	Reason: To comply with the requirements of Section 92(2) of the Town & Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.
A3 - Time limits for Commencement of Development in Village 7	The development hereby permitted shall be begun before the expiration of 10 (ten) years from the date of this permission or 2 (two) years from the date of approval of the last Reserved Matters whichever is the later [for the relevant Phases, Sub-phase or Development plot].

	Reason: To comply with the requirements of Section 92(2) of the Town & Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.
A4 – Time limit for Commencement of Development alongside Village 1	 The development (save Preliminary Works) shall not commence, and no further works may be undertaken unless and until after: planning permission has been granted pursuant to application reference: 3/19/1045/OUT for Villages 1 to 6 of the Gilston Area; and expiration of at least 6 months following the commencement of initial enabling works at Village 1 of the Gilston Area (application reference: 3/19/1045/OUT); and a Village 7 & Village 1 Phasing Scheme has been submitted and approved by the Council. The development shall not be carried out or occupied other than in accordance the approved Village 7 & Village 1 Phasing Scheme
	Reason: For timely and coordinated phased delivery of early development and associated infrastructure and facilities across the Gilston Area allocation.
A5 - Reserved Matters	Each application for the approval of Reserved Matters shall contain the information and other details specified in the Reserved Matters Specification and shall accord with the approved plans listed in Condition B1. The development shall thereafter be carried out in accordance with the approved details.
	Reason: The application as submitted does not give particulars sufficient for the consideration of the Reserved Matters and to accord with Section 92 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004. To ensure the development is undertaken on the basis of the development proposed and accompanying assessments which has been advanced with this outline permission.
B Approved Plans	/ Extent of Permission
B1 - Approved Drawings and	The approved development shall be carried out in accordance with the following approved parameter plans, detailed access drawings and other approved documents:

Other Approved Documents

- Parameter Plan 1 Site Location Plan (ref. V7_01_1001)
- Parameter Plan 2 Buffers and Development Zones (ref. V7_01_1002)
- Parameter Plan 3 Green Infrastructure and Open Space (ref. V7_01_1003)
- Parameter Plan 4 Vehicular Access and Movement (ref. V7_01_1004)
- Parameter Plan 5 Land Uses (ref. V7_01_1005)
- Parameter Plan 6 Building Heights Plan (ref. V7_01_1006)
- Proposed A414/Church Lane Signalised Junction (ref. 110042/A/64)
- Development Specification Statement (December 2022)
- Strategic Design Guide for the Gilston Area (July 2022)

Reason: For the avoidance of and to ensure that the development is carried out in accordance with the details as approved with regard to Development Plan Policies GA1 and DPS4 and to restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance.

C - Phasing and Parameters for Development

C1 Development Parameters

The development herby permitted shall not exceed 1,500 Residential Units (Use Class C3) and 11,510 square metres of non-residential land uses (as defined in Table 4 of the approved Development Specification Statement) and shall be built pursuant to this outline planning permission, as follows:

- a) Up to 3,850 square metres of Learning and Non-Residential Institutional Uses (Class F.1)
- b) Up to 1,060 square metres of Local Community Uses (Class F2)
- c) Up to 4,120 square metres of Commercial, Business and Service Uses (Class E)
- d) Up to 2,100 square metres of Light Industrial (Class E(g)) / General Industrial (Class B2) / Storage or Distribution (Class B8)
- e) Up to of 380 square metres of Sui Generis Uses

	Reason: In order to comply with the provisions of the outline planning permission including the parameters assessed, considered and established by this permission.
C2 - Phasing Plan	Site-wide phasing proposals (hereinafter called the "Phasing Plan") for the development shall be submitted for approval by the local planning authority on or before submission of the first application for approval of Reserved Matters. The Phasing Plan shall include the following:
	 a) A plan of the site showing the extent of each proposed Phase and Sub-Phase of the development; b) A timetable for the delivery of the development and associated infrastructure; and, c) Mechanisms for monitoring the implementation of and delivery of the development and its associated infrastructure
	No development (except Preliminary Works) shall be begun until the Phasing Plan has been approved in writing by the local planning authority.
	Reason: To ensure that the development is delivered and develop in a manner which is coherent and compliant with Development Plan policies.
C3 - Schedule of Residential	Each application for the approval of Reserved Matters incorporating residential units shall be accompanied by:
Accommodation	I. a schedule of residential accommodation (to include details of the amount and size of residential units) proposed within that Phase, Sub-Phase or Development plot;
	II. a plan and schedule (including tenure mix) showing the proposed distribution of affordable housing within that Phase, Sub-Phase or Development plot; and,
	Reason: To ensure that the development is implemented in accordance with the principles assessed, considered and established by this permission.
D – Masterplanni	 ng

Village edge treatmentsResponse to heritage

D1 - Strategic	No development (with the exception of Preliminary Works) shall take place, nor shall any Village Masterplan pursuant
Landscape Masterplan	to condition D4 or Reserved Matters application for commercial or residential floorspace pursuant to condition C1 be approved for any part of the site, until a Strategic Landscape Masterplan (SLMP) for the site (which shall include a Design Code and associated Regulatory Plan) has first been submitted to and approved in writing by the Local Planning Authority.
	Reason: To ensure a coordinated and comprehensive approach to development in accordance with Policies GA1, DES1 and DES4 of the East Herts District Plan and Policies AG1, AG2, AG3, AG4, AG5, AG7, BU4, TRA1, TRA2, and D1 of the Gilston Area Neighbourhood Plan.
D2 - Strategic Landscape Design Code	The Strategic Landscape Masterplan pursuant to condition D1, shall be supported by a Strategic Landscape Design Code and associated Regulatory Plan which shall be produced in general accordance with the provisions of the Gilston Area Charter Supplementary Planning Document (July 2020) and the plans and documents approved in Condition B1.
	The Strategic Landscape Design Code will provide a set of simple, concise, illustrated design requirements to provide specific, detailed parameters for the physical development of the strategic landscape area.
	As a minimum the code shall include principles for the following:
	1. Design:
	SuDS and drainage
	Community food growingSport and recreation
	Play spaces
	Planting

- Ancillary buildings within landscape areas
- Ecological enhancements
- Gypsy and Traveller and Travelling Show People provision
- Public realm areas
- Pedestrian and cycle routes hierarchy
- Sustainable Transport Corridor
- Sustainable Transport Hub
- Wayfinding and legibility
- Street hierarchy
- All modes parking
- Street furniture
- Boundary treatments
- Utilities
- Lighting
- Waste and recycling
- Materials palette for different forms of built development and hard landscaping
- 2. A scalable Regulatory Plan to assist users in navigating where the provisions of the code will apply.
- 3. Reporting of the Design Code Testing process including how the outcomes have informed the final Design Code.
- 4. Design Code Compliance Checklist.

The subsequent Village Masterplan, Village Design Code and Reserved Matters Applications shall accord with the approved Strategic Landscape Design Code and Regulatory Plan and be accompanied by a completed Compliance Checklist which demonstrates compliance with the Code.

	Reason: In order to achieve a coordinated approach to development and high quality design outcomes in accordance with policies GA1, DES1 and DES4 of the East Herts District Plan and Policies AG1, AG2, AG3, AG4, AG5, AG7, BU4, TRA1, TRA2, and D1 of the Gilston Area Neighbourhood Plan.
D3 - Buffers to Existing Waterways	No development shall commence adjacent to an existing waterway alongside the main river watercourses or an ordinary watercourse waterway until such time as a scheme, for that specific waterway, for the provision and management of 20 metre wide buffers (from bottom of bank for the Hunsdon Brook) and 8m buffers to an ordinary watercourse for built development (3m buffer maintained for maintenance purposes) (unless it is demonstrated that development is sited outside the 1 in 100 year plus climate change allowance flood envelope) has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include for that relevant waterway: • Plans showing the extent and layout of the buffer zone
	 Plans showing the extent and layout of the buffer zone Design principles for any proposed planting scheme (for example, native species) Design principles demonstrating how the buffer zone will be protected during development and managed over the longer term including adequate financial provision and named body responsible for management plus production of a detailed management plan Design principles of any proposed footpaths, fencing, furniture, lighting etc. This should aim to maximise undisturbed habitat with native vegetation and minimise any footpaths or furniture within the 8 metres zone closest to the top of the riverbank. Where footpaths or furniture are required, these will be kept as natural as possible, making use of natural materials and information provide on how impermeable areas will be drained. Design principles of how access to watercourses will be maintained for flood management inspection and maintenance by both vehicular (large, heavy vehicles) and pedestrian access Details of any SuDS, natural flood management or flood storage measures to reduce the risk of flooding. All Reserved Matters Applications relating to these buffers shall be in accordance with the approved details.

	Reason: This approach is supported by paragraphs 174 and 180 of the NPPF which recognise that the planning system should conserve and enhance the environment by minimising impacts on and providing net gains in biodiversity and policy WAT3 of the East Herts District Plan (2018).
D4 - Village 7 Masterplan	No Reserved Matters applications pursuant to condition A5 shall be approved by the local planning authority until a Village Masterplan has first been approved by the local planning authority. The Village Masterplan shall be produced in accordance with the provisions of the Gilston Area Charter Supplementary Planning Document and comply with the principles established in the documents hereby approved under this application, reference 3/19/2124/OUT. All subsequent Reserved Matters shall accord with the approved Village Masterplan. The development shall thereafter be carried out in accordance with the approved details. There shall be no amendment of the Village 7 Masterplan unless otherwise agreed in writing with the local planning authority. Reason: To ensure a coordinated and comprehensive approach to development in accordance with Policies GA1, DES1 and DES4 of the East Herts District Plan.
D5 - Scope of the Masterplans	The production of the Strategic Landscape Masterplan (pursuant to condition D1) and Village Masterplan (pursuant to condition D4), shall not commence until the scope for that masterplan, including confirmation of its boundary, has first been submitted to and approved in writing by the local planning authority. Reason: To ensure a coordinated and comprehensive approach to development in accordance with Policies DES1, DES2 and DES4 of the East Herts District Plan.
D6 – Village Design Code	The Village Masterplan (pursuant to condition D4) shall be supported by a Village Design Code and associated Regulatory Plan which shall be produced in general accordance with the provisions of the Gilston Area Charter Supplementary Planning Document (July 2020), the Strategic Landscape Design Code and Regulatory Plan, and the plans and documents approved in Conditions B1 and D4.

The Village Design Code and Regulatory Plan will provide a set of simple, concise, illustrated design requirements to provide specific, detailed parameters for the physical development of the village.

As a minimum the code shall include principles for the following:

- 1. Village design principles for:
 - Block structure
 - Public Realm
 - Green and blue infrastructure including multifunctional SuDS plus consideration for groundwater and watercourse safeguarding zones (flooding and pollution)
 - Maintenance strips for SuDS and all watercourses or water features (springs)
 - Biodiversity and amenity benefits SUDS
 - Response to heritage
 - Routes and movement network, integrating with the wider movement network
 - All modes parking typologies
 - Street hierarchy and character types
 - Sustainable Transport Hub (and bus parking)
 - The chosen delineation of the route for the Roydon Commuter Link route (inclusive of high level specification along the route) to include confirmation of footbridge works.
 - Land uses
 - Density ranges
 - Building heights
 - Edges, nodes and gateways
 - Frontage, access and servicing
 - Built form
 - Identity
 - Climate Change Measures
 - Areas that will be publicly lit, including streets, recreation areas and other public spaces in accordance with the lighting design principles in the Development Specification.

- Indicative village materials palette
- Indicative Planting strategy
- 2. A scalable Regulatory Plan to assist users in navigating where the provisions of the code will apply.
- 3. Reporting of the Design Code Testing process including how the outcomes have informed the final Design Code.
- 4. Design Code Compliance Checklist.

All subsequent Reserved Matters shall accord with the approved Village Design Code and Regulatory Plan and shall be accompanied by a completed Compliance Checklist which demonstrates compliance with the Code.

Reason: In order to achieve a coordinated approach to development and high quality design outcomes in accordance with policies GA1, DES1 and DES4 of the East Herts District Plan Policies AG1, AG5, AG6, LA1, BU1, BU2, BU3, BU4, H1 and D1 Gilston Area Neighbourhood Plan.

E - Flood Risk and Drainage

E1 - Strategic SuDS Strategy

Prior to or in conjunction with the submission of the **Strategic** Landscape Masterplan (pursuant to condition D1), a **Strategic** Sustainable Drainage System Strategy shall be submitted to and approved in writing by the Local Planning Authority in consultation with Hertfordshire County Council as Lead Local Flood Authority. Notwithstanding the details contained in the Development Specification hereby approved as part of outline application 3/19/2124/OUT relating to surface water management and drainage, the Strategy shall follow and include the following details:

- Evidence to show that any SuDS will not become overwhelmed by any source of flood risk including surface water or groundwater.
- A strategy following the SuDS discharge hierarchy including potential use of rainwater reuse systems as a first step on the hierarchy prior to going to infiltration prior to going by gravity to a surface watercourse.

- Desk based information and preliminary ground investigations, including some site wide infiltration testing undertaken to BRE 365 specification in broad approximations of **strategic** attenuation features.
- If infiltration drainage is proved viable, identification of areas where infiltration or part infiltration is likely to be located.
- If infiltration drainage is unfavourable, surface water greenfield runoff rates and volumes should be provided for each pre-development sub catchment and all post-development scenarios will be limited to Qbar or the equivalent 100% AEP (1 in 1 year), 3.33% AEP (1 in 30 year) and 1% AEP (1 in 100 year) for the corresponding critical storm durations (without an allowance for future climate change, but with appropriate long-term storage). Appropriate feasible discharge locations should be provided to the closest ordinary watercourses or main river by gravity for any of the developed areas. Any discharge outfall to a watercourse should be assumed to be surcharged.
- Provision of supporting calculations to show how much post development storage is required across the site (assuming the worst infiltration rate as a worst-case scenario) and how this will be achieved across the development. Where infiltration is not feasible, post development runoff rates and volumes will be limited to Qbar (or 2l/s/ha, whichever is the greater) or the equivalent greenfield scenarios (with long term storage for the 1% AEP plus climate change event limited to 2l/s/ha or less). Include interception and source control within the development area, prior to utilising site control and regional (**strategic**) control. Overarching supporting modelling for the drainage network to demonstrate how the system could operate at the 100% Annual Exceedance Probability rainfall event, 3.33% AEP plus climate change and 1% AEP plus climate change allowance, to be provided, half drain down times for infiltration storage features should be included as will urban creep on any assumed impermeable areas. Any **strategic** road networks may need to be considered as separate SuDS networks depending on the adoptable or approval authority requirements. Any large sports fields will also need to be included in the drainage scheme (assuming they will be built to operate 365 days a year)
- High level drawings of any SuDS, surface water storage or conveyance feature including cross and long sections, location, size, volume, depth and any inlet and outlet features. This should be supported by a clearly labelled high level drainage layout drawing which relates to the landscaping and blue green infrastructure layouts. Total storage volumes provided within each future sub-catchment should be identified.
- The usage of above ground surface water conveyance and storage SuDS features unless otherwise shown to be unsuitable

- Demonstrate an appropriate SuDS management and treatment train accounting for any sensitive discharge locations such as ecological protection areas, groundwater source protections zones, surface drinking water safeguarding zones or areas previously used for landfill.
- Integration of SuDS to enhance any proposed amenity space and link to any climate change mitigation such as urban cooling and social wellbeing.
- Provision of biodiversity enhancement within SuDS provision.
- Compliance with the agreed **Strategic** Design Code.
- Indicative phasing plan for the cumulative provision of SuDS and drainage infrastructure within the green infrastructure and high-level details.
- A high level assessment of overland exceedance routes in the event of a failure of the drainage system or storm event in excess of the 1 in 100 year return period including an appropriate allowance for climate change
- A high-level management and maintenance plan. It should include maintenance and operational activities and who will be adopting which parts of the SuDS infrastructure.

Reason: To ensure the development appropriately addresses climate change and the risk of flooding in accordance with Paragraphs 167 and 169 of NPPF and its accompanying Practice Guide, to improve and protect water quality, to protect natural habitats and the amenity of residents and ensure the future maintenance of the Sustainable Drainage System in perpetuity and to comply with the requirements of Policy GA1 V (y) of the East Herts Local Plan 2018.

E2 - Village Sustainable Urban Drainage System Strategy

Village Prior to or in conjunction with the submission of the Village Masterplan (pursuant to condition D4), a **Strategic** Village Sustainable Drainage System scheme shall be submitted to and approved in writing by the Local Planning Authority in consultation with Hertfordshire County Council as Lead Local Flood Authority. Notwithstanding the details contained in the Development Specification hereby approved as part of outline application 3/19/2124/OUT relating to surface water management and drainage, the Strategy shall follow and include the following details:

- Evidence to show the location of any SuDS will not become overwhelmed by any source of flood risk including surface water or groundwater.
- A strategy following the SuDS discharge hierarchy including potential use of rainwater reuse systems as a first step on the hierarchy prior to going to infiltration prior to going by gravity to a surface watercourse.

- Desk based information and preliminary ground investigations, including some site wide infiltration testing undertaken to BRE 365 specification in broad approximations of proposed SuDS features.
- If infiltration drainage is proved viable, identification of areas where infiltration or part infiltration is likely to be located within developable areas of the village.
- If infiltration drainage is unfavourable, surface water greenfield runoff rates and volumes should be provided for each pre-development sub catchment and all post-development scenarios will be limited to Qbar or the equivalent 100% AEP (1 in 1 year), 3.33% AEP (1 in 30 year) and 1% AEP (1 in 100 year) for the corresponding critical storm durations (without an allowance for future climate change, but with appropriate long-term storage). Appropriate feasible discharge locations should be provided to the closest ordinary watercourses or main river by gravity for any of the developed areas. No pumping of surface water drainage will be acceptable. Any discharge outfall to a watercourse should be assumed to be surcharged.
- Provision of supporting calculations to show how much post development storage is required across the site (assuming the worst infiltration rate as a worst-case scenario) and how this will be achieved across the development. Where infiltration is not feasible, post development runoff rates and volumes will be limited to Qbar (or 2l/s/ha, whichever is the greater) or the equivalent greenfield scenarios (with long term storage for the 1% AEP plus climate change event limited to 2l/s/ha or less). Include interception and source control within the development area, prior to utilising site control and regional (**strategic**) control. Overarching supporting modelling for the drainage network to demonstrate on test plots how the system could operate at the 100% Annual Exceedance Probability rainfall event, 3.33% AEP plus climate change and 1% AEP plus climate change allowance, to be provided, half drain down times for infiltration storage features should be included as will urban creep on any assumed impermeable areas. Any **strategic** road networks may need to be considered as separate SuDS networks depending on the adoptable or approval authority requirements. Any large sports fields will also need to be included in the drainage scheme (assuming they will be built to operate 365 days a year).
- High level drawings of any SuDS, surface water storage or conveyance feature including cross and long sections, location, size, volume, depth and any inlet and outlet features. This should be supported by a clearly labelled high level drainage layout drawing showing and SuDS storage and conveyance networks Total storage volumes will be provided within each sub-catchment.
- The usage of above ground surface water storage and conveyance features unless otherwise shown to be unsuitable, with a priority focused on rainwater reuse, interception and source control. Any above ground

management of surface water (approximate extent and depth) not in a drainage feature will be clearly shown on a drawing along with appropriate mitigation measures and flood resistance and resilience to vulnerable parts of the development included.

- Demonstrate an appropriate SuDS management and treatment train accounting for any sensitive discharge locations such as ecological protection areas, groundwater source protections zones, surface drinking water safeguarding zones or areas previously used for landfill.
- Integration of SuDS to enhance any proposed amenity space.
- Provision of biodiversity enhancement within SuDS provision.
- Compliance with the agreed Village Design Code.
- Indicative phasing plan for the cumulative provision of SuDS and drainage infrastructure within the village masterplan.
- A high level assessment of overland exceedance routes in the event of a failure of the drainage system or storm event in excess of the 1 in 100 year return period including an appropriate allowance for climate change.

Reason: To ensure the development appropriately addresses climate change and the risk of flooding in accordance with Paragraphs 167 and 169 of NPPF and its accompanying Practice Guide, to improve and protect water quality, to protect natural habitats and the amenity of residents and ensure the future maintenance of the Sustainable Drainage System in perpetuity and in order to comply with the requirements of Policy GA1 V (y) of the East Herts Local Plan 2018.

E3 - Sustainable Urban Drainage System Details

Prior to or in conjunction with the submission of each Reserved Matters application for individual development Phases, Sub-phases or Plots, details and construction drawings of the sustainable drainage components, flow control mechanisms and a construction method statement shall be submitted to and approved in writing by the Local Planning Authority in consultation with Hertfordshire County Council as Lead Local Flood Authority. The details submitted must accord with the Village Sustainable Drainage System Strategy (pursuant to condition E2) and Village Design Code, the scheme shall then be constructed in accordance with the approved drawings, method statement and modelling calculations prior to the first use of the development, phase, sub-phase or plot hereby approved. No alteration to the approved drainage scheme shall occur without prior written approval of the Local Planning Authority. and shall include the following:

- **Detailed** design of all drainage following the SuDS discharge hierarchy with rainwater reuse systems as a first step on the hierarchy prior to going to infiltration prior to going by gravity to a surface watercourse.
- Specific **detailed** evidence of areas where infiltration drainage is favourable, for either full infiltration or part infiltration design. Infiltration testing will be to BRE 365 standard (or equivalent) and undertaken and the location and depth of proposed SuDS features. With additional groundwater monitoring data to show that there is at least 1m between the base of any proposed infiltration feature and seasonally high groundwater level.
- Where infiltration is not favourable, sub catchments and appropriate locations where surface water discharge can outfall to a watercourse shall be confirmed (in line with the strategic and village masterplan). Each SuDS sub catchment shall be able to be delivered in full alongside the appropriate development phase it falls within and shown on a phasing drawing and plan.
- Pre-development greenfield runoff rates and volumes will be confirmed for each sub catchment and all post-development scenarios be limited to Qbar (or 2l/s/ha, whichever is the greater) or the equivalent 100% AEP (1 in 1 year), 3.33% AEP (1 in 30 Year) and 1% AEP (1 in 100 year) rainfall event (with long term storage for the 1% AEP plus climate change event limited to 2l/s/ha or less).
- Full, **detailed** drainage modelling for the SuDS drainage network (and specifically Village 7 access road) to demonstrate how the system operates during up to and including the 100% AEP, 3.33% AEP including an allowance for climate change and the 1%AEP critical storm events including an allowance for climate change ensuring discharge rates do not exceed the agreed greenfield discharge rates for the corresponding storm durations. Half drain down times for all infiltration storage features should be included. Urban creep will be included within any assumptions of impermeable area. Any sports pitches shall be included within the drainage network.
- Full **detailed** engineering drawings of any SuDS, surface water storage or conveyance feature including cross and long sections, location, size, volume, depth and any inlet and outlet features. This should be supported by a clearly labelled drainage layout drawing showing any SuDS storage and conveyance networks. The drawings should show any 'node numbers' that have been referred to in drainage modelling supporting calculations and it also show invert and cover levels, finished floor levels and proposed external ground levels. Total storage volumes will be provided within each sub-catchment.

- The usage of above ground and other surface water storage and conveyance features with a priority focused on rainwater reuse, interception and source control. Any above ground management of surface water (extent and depth) not in a drainage feature will be clearly shown on a drawing along with appropriate mitigation measures and flood resistance and resilience to vulnerable parts of the development included.
- Provision of appropriate water quality assessment including specific requirements for sensitive discharge locations such as ecological designations, groundwater source protections zones, surface drinking water protection zones or areas previously used for landfill. Specific water quality assessments may be required for runoff from main roads.
- The use of flood resistance and resilience measures included in the design. A minimum of 300mm must be provided between the design flood event and the finished floor level. A minimum of 150mm is recommended above external ground levels that are sloping away from vulnerable areas such as doorways.
- Integration of SuDS to enhance any proposed amenity space.
- Provision of biodiversity enhancement within SuDS provision.
- Identify opportunities to address surface water flooding in the immediate vicinity of the development site and within the area of the central watercourse.
- Review of the potential to de-culvert Stone Basin Spring culvert to provide betterment to flood risk and provide biodiversity enhancement.
- Compliance with the agreed SuDS principles within the approved Design Code.
- Phasing plan for the provision of SuDS and drainage infrastructure within each part of the development to show that any strategic SuDS features are in place and operational prior to the commission of the proposed development.
- Details of final exceedance routes, including those for an event which exceeds the 1% AEP rainfall event including climate change event or blockage of the drainage network.
- A management and maintenance plan including maintenance and operational activities.
- Confirmation of how the measures proposed will integrate appropriately and cumulatively with any wider SuDS infrastructure already approved and/or implemented. In addition to a Construction Environmental Management Plan there will be a SuDS implementation strategy with appropriate timescales the required temporary measures required to implement village, phased or plot SuDS which may include temporary discharge rates and volumes at control structures which will increase during overall build out phase to the final proposals.

• The development shall be fully implemented and subsequently maintained, in accordance with the timing / phasing arrangements embodied within the development, or within any other period as may subsequently be agreed, in writing, by the Local Planning Authority. Therefore, the development shall not be carried out otherwise than in accordance with the details thus approved.

Reason: To prevent flooding in accordance with National Planning Policy Framework paragraph 167, 169 and 174 by ensuring the satisfactory management of local flood risk, surface water flow paths, storage, and disposal of surface water from the site in a range of rainfall events and ensuring the SuDS proposed operates as designed for the lifetime of the development. To ensure the development appropriately addresses climate change and the risk of surface water flooding, to improve and protect water quality and to protect natural habitats (paragraphs 174 and 180 of NPPF) and the amenity of residents and ensure the future maintenance of the Sustainable Drainage System in perpetuity.

E4 –Sustainable urban Drainage System Verification Report

Prior to the first use of each corresponding agreed phase, sub-phase or plot a final Completion and Verification Report to a specification agreed and defined by the Local Planning Authority, signed off by an appropriate, qualified person or body which demonstrates that the sustainable drainage measures have been implemented as per the details approved under Condition E2 and or E3; shall be submitted to and approved in writing by the Local Planning Authority in consultation with Hertfordshire County Council as Lead Local Flood Authority. It shall include the following:

- Provision of a Completion and Verification Report appended with substantiating evidence demonstrating the approved construction details and specifications have been implemented in accordance with the surface water drainage scheme. The verification shall include photographs of excavations and soil profiles/horizons, installation of any surface water structure, during construction and final make up, and the control mechanism.
- Provision of a complete set of as built drawings for site drainage.
- Post-construction surveys including a CCTV survey for any underground features and piped networks.
- A management and maintenance plan for the SuDS features and drainage network.
- Final arrangements for adoption and any other measures to secure the operation of the scheme throughout its lifetime.

Reason: To prevent the increased risk of surface water flooding, to improve and protect water quality, protect natura habitats and the amenity of residents, ensure the future maintenance of the Sustainable Drainage System in perpetuity and comply with the requirements of Policy GA1 V (y) of the adopted East Herts Local Plan 2018.
No drainage systems for the infiltration of surface water to the ground are permitted other than where a scheme for infiltration drainage has first been submitted to and approved in writing by the Local Planning Authority. Any proposals for such infiltration drainage that are submitted for approval must be supported by an assessment of the
risks to controlled waters. The development shall thereafter 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.
No development shall commence until a full planning application/s has been submitted to and approved by the local planning authority for the development of Off-Site Drainage Outfalls required at Locations A, B, and C, as annotated on the Surface Water Management Strategy Plan (reference 44361/4002/001/P10) in the form of a headwall and outfall pipe, or other such development as may be required for operational purposes. The approved development shall thereafter be carried out and completed in accordance with the approved details prior to the occupation of the development.
Reason: To prevent flooding by ensuring the satisfactory discharge of surface water from the site in accordance with Policies WAT5 and WAT6 of the East Herts District Plan (2019).
Piling, deep foundations or other intrusive groundworks (investigation boreholes/tunnel shafts/ground source heating and cooling systems) using penetrative methods shall not be carried other than where a scheme has first been submitted to and approved in writing by the Local Planning Authority. The scheme shall include an assessment of impacts on noise and vibration as well as details of the measures to be taken to mitigate any adverse effects. The groundworks shall thereafter 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 paragraph 170 and 178 of the NPPF and Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and does not have an adverse impact on the local amenity in accordance with policy EQ2 of the East Herts District Local Plan.
E8 – Borehole Investigation	Prior to the installation of any boreholes at the site for the investigation of soils, groundwater or geotechnical purposes, a scheme for managing borehole investigations 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 thereafter be implemented in complete accordance with the approved details.
	Reason: To ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in line with paragraph 170 and 178 of the NPPF and Policies EQ2 and WAT3 'Water of the East Herts District Plan (2018).
F - Archaeology	
F1 –	Prior to the commencement of development of the relevant Phase, an Archaeological Written Scheme of
Archaeological	Investigation (WSI) shall be submitted to and approved in writing by the Local Planning Authority. The WSI shall
Written Scheme	include an assessment of archaeological significance and research questions; and
of Investigation	
	i. The programme and methodology of site investigation and recording;
	ii. The programme and methodology of site investigation and recording as suggested by the evaluation;
	iii. The programme for post investigation assessment;
	iv. The provision to be made for analysis of the site investigation and recording;
	v. The provision to be made for publication and dissemination of the analysis and records of the site investigation;

- vi. The provision to be made for archive deposition of the analysis and records of the site investigation; and,
- vii. The nomination of a competent person or person/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation.

No development of the relevant Phase shall be carried out other than in accordance with the approved WSI.

Reason: to ensure the appropriate investigation for presence /recording of heritage assets and to comply with the requirements of Policy GA1 V (o) of the adopted East Herts Local Plan 2018.

G - Construction

G1 - Construction Traffic and Environmental Management Plan

Prior to the commencement of development (excluding Preliminary Works) within the relevant Phase, a Construction Traffic and Environmental Management Plan (CTEMP) shall be submitted to and approved in writing by the local planning authority. The CTEMP shall include the following:

- a) The construction programme and phasing (including for any temporary development), including details of measures to be taken to coordinate construction activities to manage and reduce environmental effects;
- b) Access and routeing arrangements for construction vehicles, including numbers and types of vehicles, haul routes into and through the development site and construction accesses from the local highway network including the method of segregating construction traffic from general traffic, pedestrians and cyclists and measures to be taken to reduce congestion and avoid peak periods such as school pick up/drop off times;
- c) Hours of operation for construction, demolition, and delivery of materials;
- d) Details of any highway works necessary to enable construction to take place including temporary construction accesses, haul routes, highway signage strategy, and approach to monitoring and enforcement;

- e) Details of servicing and delivery, including details of site access, compound, hoarding, construction related parking, loading, unloading, turning areas and materials storage areas;
- f) Details of any works to Public Rights of Way, footways, bridleways and cycle ways to enable construction to take place;
- g) A scheme of chassis and wheel cleaning for construction vehicles and cleaning of affected public highways. The access roads shall be hard surfaced between the cleaning facility and the highway and must be kept free of mud and debris at all times;
- h) Details of dust mitigation and monitoring scheme to be in accordance with the best practice measures outlined in 'the control of dust and emissions during construction and demolition' 2014;
- i) Details of measures to minimise noise and vibration;
- j) Mechanisms to deal with other environmental impacts including light and odour;
- k) Details of community liaison, communication and consultation arrangements with local residents and businesses, including details of how complaints will be managed;
- l) Measures to protect existing vegetation and landscape features, any tree works, and vegetation removal to accommodate construction activity;
- m) Post construction restoration/reinstatement measures for the working areas and any temporary access arrangements;
- n) Measures to be implemented to ensure wayfinding for both occupiers of the site and for those travelling through it;
- o) A surface water management scheme to outline construction related drainage control measures to protect watercourses and sources, including the River Stort;
- p) Measures for the protection of identified archaeological and built heritage assets;
- q) Details of ecological protection and supervision; and,
- r) Measures to be taken to seek approval from the local highway authority that the highway extent has been marked out accurately prior to construction.

Thereafter, the construction of the development shall only be carried out in complete accordance with the approved CTEMP.

There shall be no amendment of the CTEMP unless otherwise agreed in writing with the local planning authority.

Reason: In the interests of highway safety and the control of environmental impacts on existing and future residents in accordance with policies TRA2, CFLR3, EQ2, EQ3 and EQ4 of the adopted East Herts District Plan 2018.

G2 - Construction Environmental Management Plan - Surface Water Drainage

No preliminary works shall take place until a temporary drainage strategy demonstrating the preliminary works will not increase flood risk or pollution has been submitted as part of a wider Construction Environmental Management Plan to and approved in writing by the Local Planning Authority.

Reason: To ensure the development appropriately manages appropriate risk of flooding in accordance with Paragraphs 167 and 169 of NPPF and its accompanying Practice Guide, to protect water quality, to protect natural habitats and the amenity of residents and in order to comply with the requirements of Policy GA1 V (y) of the East Herts Local Plan 2018.

H - Landscaping

H1 – Landscape and Ecological Management Plan No development shall take place (excluding Preliminary Works) until a detailed landscape and ecological management plan of the relevant Phase 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 Biodiversity Net Gain calculations, including use of the river metric where appropriate;
- details of mitigation and compensation to account for any biodiversity losses;
- details of any proposed planting schemes;
- details of any new habitat created on site;
- details of treatment of site boundaries and/or buffers around water bodies;
- details of maintenance regimes;

	details of management responsibilities over the long term including adequate financial provision, a detailed management plan and a named body responsible for management.
	There shall be no amendment of the Landscape and Ecological Management Plan unless otherwise agreed in writing with the local planning authority.
	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 paragraphs 174 of the NPPF as well as Policy WAT3, Policy NE2 and Policy GA1 of the East Herts District Plan.
H2 – Existing Trees, Hedgerows & Woodlands	Prior to or at the same time as the submission of each Reserved Matters Application for the relevant Phase, Subphase or Plot, a tree survey and impact assessment, tree protection plan and arboricultural method statement shall be submitted to and approved in writing by the local planning authority. The development of the Phase, Sub-phase or Plot shall thereafter be carried out in accordance with the approved details.
	Reason: To secure the retention of the trees within the site in the interests of visual amenity and the character of the area in accordance with Policy NE3 of the East Herts District Plan.
H3 – Landscape Scheme	Prior to or at the same time as the submission of each Reserved Matters application for the relevant Phase, Sub- Phase or Plot, a composite hard and soft landscaping scheme shall be submitted to and approved in writing by the local planning authority. The landscaping scheme shall include the following:
	 Details of the extent and type of new planting Details of maintenance regimes
	Details of any new habitat created on site
	 Details of treatment of site boundaries and/or buffers around waterbodies and woodlands, hedgerows and trees Details of brown and green roofs
	Planting Plans that show the location of proposed plant species

- Written specifications (including cultivation and other operations associated with the establishment of grassland and planting)
- Schedules of plants, noting species, planting sizes and proposed numbers / densities
- Implementation timetables
- Landscape Management Plan
- Surface treatment of SuDS maintenance access routes
- Fencing/gates to culvert openings

The development of the Phase, Sub-Phase or Plot shall thereafter be carried out in accordance with the approved details.

There shall be no amendment of a Landscape Scheme unless otherwise agreed in writing with the local planning authority.

Reason: To ensure that the proposed development is satisfactorily integrated with its immediate surroundings, enables high quality design, incorporates measures to promote biodiversity.

H4 - Strategic Green Space

Prior to or in conjunction with the submission of the Strategic Landscape Masterplan (pursuant to condition D1), a scheme for the strategic green corridors (main rivers, tributaries, ordinary watercourses or surface water flow paths) shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall include the following elements:

- Design principles for ecological enhancement and achieving net gains in biodiversity
- Design principles for how the watercourses (river channel and riparian habitat) will be restored and enhanced, informed by the Water Framework Directive Mitigation and Enhancement Strategy)
- Design principles for how these areas will be landscaped for the benefit of biodiversity including planting and any soft and hard landscaping
- Design principles for how lighting designs will minimise and avoid light spill to trees, hedgerows, woodland edges, watercourses and other light sensitive ecological areas to avoid disturbance impacts

- Design principles for how access to the watercourses will be maintained for flood management inspection and maintenance; and
- All watercourses, ordinary or main river will be retained (but for the avoidance of doubt may be modified or enhanced), with only culverting for access proposed and any works that require consent will be applied for from the relevant authority.
- Design principles for how proposed changes to watercourses will not adversely affect flood risk in the site boundary or elsewhere.
- Design principles for surface water management or natural flood management or flood storage measures to reduce the risk of flooding
- Design principles for demonstrating how these blue green corridors will be protected during development and managed over the longer term including adequate financial provision and named body responsible for management plus production of detailed management plan.

Reserved Matter Applications relating to the strategic green corridors and the area adjacent to Fiddlers Brook in the Gilston Community Park shall be prepared in accordance with the approved details.

Reason: It is essential that the detailed designs for these corridors in future masterplans and reserved matters applications protect and enhance the ecological value of the main rivers, some of which may require improvement and restoration. This approach is supported by paragraphs 159, 167 and 179 of the NPPF which recognise that the planning system should conserve and enhance the environment by minimising impacts on and providing net gains in biodiversity. This is also supported by policy WAT3 of the East Herts District Plan (2018).

I - Contamination

I1 -Contamination Investigation & Remediation No development (excluding Preliminary Works) within the relevant Phase 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 thereafter be implemented as approved.

There shall be no amendment of remediation strategies unless otherwise agreed in writing with the local planning authority.

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 170 and 178 of the NPPF and Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018).

I2 – Land Contamination Verification Report

Prior to occupation of each relevant Phase, Sub-phase or Plot, 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, land 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 paragraph 170 and 178 of the NPPF and Policies EQ1 and WAT3 of the East Herts District Plan (2018).
I3 – Contamination Monitoring & Maintenance Plan	No development in relation to each relevant Phase shall commence (save Preliminary Works) 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.
	There shall be no amendment of Contamination Monitoring & Maintenance Plans unless otherwise agreed in writing with 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 170 and 178 of the National Planning Policy Framework and Policy WAT3 of the East Herts District Plan.
I4 – Unsuspected	
Contamination	If, during development of relevant Phase, 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 170 and 178 of the National Planning Policy Framework and Policy WAT3 of the East Herts District Plan.

L – Limitations	
L1 – Phase Waste Management Plan	No development within any Phase, or part of a Phase shall be commenced (save Preliminary Works) until a Phase Waste Management Plan (PWMP) for operational waste for that Phase, or part of a Phase has been submitted to and approved in writing by the local planning authority in consultation with the waste planning authority. The Phase Waste Management Plan shall thereafter be implemented in accordance with the approved details. There shall be no amendment of Phase Waste Management Plans unless otherwise agreed in writing with the local planning authority. Reason: To identify, reuse, manage and reduce the amount of waste produced on site in accordance with Policy 12
L2 Noise Assessment	Each application for reserved matters including buildings shall include a noise assessment, which demonstrates the noise control measures, including through the design, layout and materials, will achieve compliance with the levels set out in the Development Specification and British Standards BS8233 and BS4142 and/or prevailing best practice guidance as agreed with the LPA. The development shall thereafter be carried out and maintained in accordance with the approved details.
	Reason: To ensure an adequate level of amenity for residents of the new dwellings in accordance with policy EQ2 of the adopted East Herts District Plan 2018.
L3 – Lighting	Prior to or at the same time as the submission of each reserved matters application, details of a lighting strategy shall be submitted for approval to the local planning authority. The strategy shall demonstrate how a balance can be achieved between ensuring safety for pedestrians, cyclists and users of the highway whilst also ensuring that the lighting proposals would not cause an unacceptable impact on amenity, biodiversity or landscape and visual effects. The strategy shall demonstrate how consideration has been given to new and alternative technologies and innovate approaches to securing appropriate levels of light.

	Reason: To ensure an adequate level of amenity for residents of the new dwellings in accordance with policies TRA2, WAT3 and EQ3 of the adopted East Herts District Plan 2018.
L4 - Water Framework Directive Mitigation & Enhancement Strategy	No development shall take place until a water framework directive mitigation and enhancement strategy has been submitted to and approved in writing by the Local Planning Authority. The strategy shall include the following elements: • Evidence that the final development would cause no deterioration of waterbody status of the River Stort and Stort Navigation and associated waterbodies, not prevent future improvement to the waterbody, not contribute to cumulative deterioration, using up to date Water Framework Directive classification data • Long term objectives, management responsibilities and maintenance schedules
	Details of suitable mitigation and/or compensation as required. The strategy shall thereafter be carried out in accordance with the approved details unless otherwise approved in writing by the Local Planning Authority. Reason: To ensure compliance with the Water Framework Directive and the protection of wildlife and supporting habitat and to secure opportunities for enhancing the site's nature conservation value. This approach is supported by paragraphs 170 and 175 of the NPPF and Policy WAT3 of the East Herts District Local Plan (2018). Reason: To ensure compliance with the Water Framework Directive and the protection of wildlife and supporting habitat and to secure opportunities for enhancing the site's nature conservation value. This approach is supported by paragraphs 170 and 175 of the NPPF and Policy WAT3 of the East Herts District Local Plan (2018).
L5 – Noise Bund Noise Impact	Prior to commencement of development (save Preliminary Works) within the relevant Phase, the applicant shall submit in writing for the approval of the Local Planning Authority, modelling which demonstrates that the creation of a noise bund for the development would not increase the noise levels for the existing residents of Hunsdon Pound either internally or externally.

Reason: To ensure an adequate level of amenity for existing occupiers of the proposed development in accordance with Policy EQ2 Noise Pollution and DES4 Design of Development of the adopted East Herts District Plan 2018

M - Flood Risk and Drainage

M1 – Supplementary Flood Risk Assessment

Prior to or in conjunction with the submission of the Strategic Landscape Masterplan (pursuant to condition D1) a supplementary assessment of flood risk and climate change shall be submitted to, and approved in writing by, the Local Planning Authority. This should include the following elements:

- Additional investigations, surveys and appropriate modelling to establish the detailed areas at risk of flooding from ordinary watercourses, surface water flooding and groundwater flooding (including spring fed watercourses). This would include definition of functional floodplain and flood levels that may be required to input to drainage modelling of surcharged outfalls of ordinary watercourses.
- The retention of all watercourses, ordinary or main river (but may be modified and enhanced), with only crossings to facilitate access proposed and any works that require consent will be applied for from the relevant authority.
- A sequential approach shall be taken to the development in order to avoid any less to highly vulnerable land uses being located within the design flood (1 in 100 year plus appropriate climate change allowance for each source of flooding) extent. The submitted village masterplan shall include, where relevant, the flood outlines overlaid to help demonstrate that this has been achieved.
- That any compatible development which occurs within the design flood is designed to the 1 in 100 year, plus an appropriate allowance for climate change allowance, event.
- 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.
- Consideration for an emergency flood evacuation plan if it has been demonstrated that there is any residual risk from any source of flooding, as required.

Should additional investigations, surveys and appropriate modelling show a potential risk from flooding within the development area, the following points are required:

- Detailed Analysis of baseline flow conditions of receiving watercourses. Requires full surveys of all watercourses including any culverted structures impacting a watercourse.
- Full condition survey of all existing structures on all watercourses within the development boundary with an assessment on how any culverts can be daylighted and open naturalised watercourses reinstated without adverse effects on flood risk.
- A modelling assessment of the functional floodplain and 1 in 100 year plus climate change allowances for all surface water flow paths and ordinary watercourses.

The development shall thereafter be fully implemented in accordance with the Village Masterplans 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. 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 Policy WAT1 'Flood Risk Management' of the East Herts District Plan (2018).

N - Sustainability and Energy Efficiency

N1 – Energy Statement

Each application for reserved matters including buildings, shall be accompanied by an Energy Statement.

No Development (excluding Preliminary Works) shall Commence pursuant to the relevant Reserved Matters approval until the corresponding Energy Statement has also been approved in writing by the local planning authority. The details and measures contained in each approved Energy Statement shall be implemented and operational upon the first use or occupation of the buildings permitted by the Reserved Matters approval to which the Energy Statement relates and shall thereafter be retained in the approved form unless otherwise agreed in writing by the local planning authority.

	Reason: In order that the development appropriately mitigates and adapts to the impact of climate change, minimises the impact of pollution and reduces pressure on natural resources in accordance with policies CC2, CC3 and DES4 of the East Herts District Plan.
N2 – Electric Vehicles at Residential	No residential dwelling of the relevant Planning Permission shall be occupied unless and until a domestic Electric Vehicle ready charging point has been installed at the dwelling.
Dwellings	Reason: In order that the development appropriately mitigates and adapts to the impact of climate change, minimises the impact of pollution and reduces pressure on natural resources in accordance with policies CC2, CC3 and DES4 of the East Herts District Plan.
O – Education	
O1 – Community Use Agreement	Any sports facility identified for shared school/community use within the relevant Phase shall not commence until a Community Use Agreement prepared in consultation with Sport England has been submitted to and approved in writing by the Local Planning Authority. The agreement shall confirm the facility will be used by a range of community/voluntary clubs/users, include details of the programme for community use, pricing policy, hours of use, access arrangements for non-educational establishment users, management responsibilities and a mechanism for review. The facility shall not be used otherwise than in strict compliance with the approved agreement.
	There shall be no amendment of the Community Use Agreement unless otherwise agreed in writing with the local planning authority.
	Reason: To secure well managed and safe access to the sports facility for all users in accordance with District Plan policies GA1, GA1, CFLR1, CFLR7 and CFLR10.
P - Ecology	

P1 - Protected Species Surveys/Ecological Appraisal	The plans and particulars for each Reserved Matters application for each relevant Phase, Sub-Phase or Plot shall include an ecological appraisal based on up-to-date ecological surveys to demonstrate the effects of the development on protected species and habitats and the measures to be taken to avoid, reduce, mitigate and, as a last resort, offset adverse impacts. The appraisal shall also include details of biodiversity enhancements and shall demonstrate how the application contributes towards achieving the minimum 10% biodiversity net gain across the village area. Reason: To ensure that the development maintains, enhances and contributes appropriately to the local and wider ecological network in accordance with Policy NE2 of the East Herts District Plan.
P2 – Village Ecological Strategy	 Prior to or at the same time as the submission of the Village 7 Village Masterplan (pursuant to condition D4), a Village 7 Ecology Strategy informed by up to date ecology surveys shall be submitted to and approved in writing by the local planning authority and shall include the following: Identification of existing ecology assets and assessment of impacts to those assets following the NPPF mitigation hierarchy; Measures to protect and enhance retained assets (noting commitments secured at the outline application stage);
	 Measures to mitigate the impact of uncontrolled public access to Lords Wood as Ancient Woodland; Identify opportunities to create new biodiversity assets and links to wider on and off site ecological networks; Demonstration of how the above measures contribute to achievement of 10% min net gain target based on an up to date Biodiversity Net Gain metric or alternative methodology as agreed by the LPA; Village Framework Management and Maintenance Strategy.
	All Reserved Matters applications shall accord with the Village Ecological Strategy, which shall be implemented as approved and there shall be no amendment of the Village Ecological Strategy unless otherwise agreed in writing with the local planning authority.
	Reason: To ensure that the development maintains, enhances and contributes appropriately to the local and wider ecological network in accordance with Policy NE2 of the East Herts District Plan.

P3 - Rye Meads SSSI	Prior to the occupation of the development, an assessment of phosphate levels arising from the development that could harm the Favourable Conservation Status at Rye Meads SSSI shall be submitted to and approved in writing by the local planning authority. Where impacts are identified that could harm the favourable conservation status of Rye Meads SSSI, the assessment shall also propose measures for mitigation of these impacts. Reason: To safeguard and protect the favourable conservation status of the Rye Meads SSSI in accordance with policy NE1 of the adopted East Herts Local Plan (2018)."
T - Transport	
T1 – Framework Travel Plan	Prior to or at the same time as the submission of the first Reserved Matters Application containing residential uses, a Framework Travel Plan shall be submitted to and approved in writing by the local planning authority in consultation with the Transport Review Group. The Framework Travel Plan shall be based on the Hertfordshire County Council document 'Hertfordshire's Travel Plan Guidance'. The Framework Travel Plan shall thereafter inform the Village 7 Masterplan (pursuant to condition D4) and reserved matters applications on a site-wide basis. There shall be no amendment of the Framework Travel Plan unless otherwise agreed in writing with the local planning authority. Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision
T2 – Car Parking Statement	Each reserved matters application including buildings shall include a Car Parking Statement that accords with the Village Parking Strategy approved pursuant to Condition T5.
	Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision

T3 - Travel Plan	Any reserved matters application pertaining to the uses and thresholds identified in Appendix A of the Hertfordshire Council document 'Hertfordshire's Travel Plan Guidance' shall include a Full Travel Plan or Travel Plan Statement in accordance with the guidance. The travel plan or statement shall accord with the Framework Travel Plan and shall thereafter be implemented in accordance with the approved details throughout the duration of the development. Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision
T4 – School Travel Plan	Within three months of the first use of each individual school on the development site, a Modeshift STARS School Travel Plan shall be submitted to and approved in writing by the local planning authority in consultation with Hertfordshire County Council. Thereafter the approved Travel Plan shall be implemented in full throughout the life of the school. Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision
T5 – Village Access, Movement and Parking Strategy to include Management and	Prior to or at the same time as the submission of the Village 7 Masterplan (pursuant to condition D4) and notwithstanding the details shown on approved Parameter Plans, an Access and Movement Statement shall be submitted to and approved in writing by the local planning authority in consultation with the local highway authority. The movement strategy shall set out the following: • Details of proposed leisure and commuter routes for pedestrian, cyclists, equestrians and other active travel
Maintenance of Streets	 Details of proposed festire and commuter routes for pedestrian, cyclists, equestrians and other active travel modes including intra and inter village routes and connections to routes beyond the site boundary Details of proposed designated Public Rights of Way and improvement or modifications to existing Public Rights of Way Details of proposed public transport infrastructure

- Details of proposed infrastructure for cyclists, including cycle hire facilities
- Measures to be taken to give priority to active and sustainable modes, including public transport, in accordance with the movement hierarchy.

A parking strategy of all vehicle modes. The parking strategy shall include the following details:

- Parking ratios, including allocated and unallocated spaces
- Electric vehicle parking
- Off-plot solutions
- Zero parking/car-free zones
- Bus parking
- Cycle parking
- Solutions to support walkable neighbourhoods
- Car clubs
- Mobility impaired spaces
- Motorcycle parking

Full details of the proposed roles and responsibilities for future management and maintenance of all streets within the masterplan area, including a highway adoptions plan (to show that Internal STCs, Primary Roads and Secondary Roads will be adopted) shall be submitted to and approved in writing by the local planning authority in consultation with the local highway authority. The streets shall thereafter be maintained in accordance with the approved details until such time as an agreement has been entered into under Section 38 of the Highways Act 1980 or a Private Management and Maintenance Company has been established.

Reserved matters applications shall thereafter demonstrate how they have been informed by the approved strategy.

There shall be no amendment of the Village Access, Movement and Parking Strategy unless otherwise agreed in writing with the local planning authority.

	Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.
T6 – Roydon Commuter Link	Prior to the occupation of 350 Residential Units, a scheme for the Roydon Commuter Link shall be submitted to and approved in writing by the local planning authority in consultation with the local highway authorities. The scheme shall include:
	i. An Ordnance Survey based plan at 1:5,000 scale to show the proposed alignment of the Roydon Commuter Link edged green;
	ii. Plans at 1:500 scale to show details of the layout of the Roydon Commuter Link, including details of lighting, hard and soft landscaped materials and planting;
	iii. Details of specific elements to be provided at 1:100 scale where appropriate;
	iv. Sections at 1:50 scale to show details of the Roydon Commuter Link including hard and soft landscaped materials and planting corresponding to the submitted to show the layout of the Roydon Commuter Link;v. Written details of the proposals for management and maintenance of the Roydon Commuter Link.
	No more than 1,000 Residential Units shall be occupied until the Roydon Commuter Link has been constructed and implemented in accordance with the approved Roydon Commuter Link scheme.
	Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.
T7 - Eastwick Commuter Link	Prior to the commencement of development (excluding Preliminary Works), a scheme for the Eastwick Link shall be submitted to and approved in writing by the local planning authority in consultation with the local highway authorities. The scheme shall include:

- i. An Ordnance Survey based plan at 1:5,000 scale to show the proposed alignment of the Eastwick Commuter Link edged green;
- ii. Plans at 1:500 scale to show details of the layout of the Eastwick Commuter Link, including hard and soft landscaped materials and planting;
- iii. Sections at 1:50 scale to show details of the Eastwick Commuter Link including hard and soft landscaped materials and planting corresponding to the submitted to show the layout of the Eastwick Commuter Link;
- iv. Written details of the proposals for management and maintenance of the Eastwick Commuter Link.

There shall be no occupations of Residential Units until the Eastwick Commuter Link has been constructed and implemented in accordance with the approved Eastwick Commuter Link scheme.

Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.

T8 - Hunsdon Lock Link

Prior to the occupation of any residential units details for the Hunsdon Lock Link shall be submitted to and approved in writing by the local planning authority in consultation with the local highway authorities.

The submitted details shall comprise an Ordnance Survey based plan to 1;1250 or 1:2,500 scale to show the proposed alignment of the Hunsdon Lock Link edged green.

No more than 200 Residential Units shall be occupied until the Hunsdon Lock Link has been constructed and implemented in accordance with the approved details.

Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.

T9 - V1-V7 Sustainable Transport Corridor ("STC") – Road Works Phase 1	No residential units shall be occupied at Village 7 until details of an Interim A414/Church Lane means of access and the Primary Vehicular Route towards the Interim STC Hub and the Interim STC Hub has been submitted to and approved in writing by the local planning authority and implemented (including being open to traffic) in accordance with the approved details. In the circumstances where approval of the Interim A414/Church Lane means of access is not forthcoming, the Full improved means of Access from the A414 onto Church Lane and the Interim Primary Vehicular Route shall be implemented in accordance with the approved Details of A414 Church Lane Access to Village 7 (ref 110042/A/130 Rev A) prior to the occupation of any residential units in Village 7. Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4
	and the HGGT Vision.
T10 - V1-V7 Sustainable Transport Corridor ("STC") –	No more than 150 residential shall be occupied at Village 7 until the Full A414/ Church Lane Junction upgrade and upgrade of Interim Primary Vehicular Route to STC standard alongside Full STC Transport Hub are completed and open to traffic.
Road Works Phase 2	Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.
T11 - V1-V7 Sustainable Transport Corridor ("STC") –	No more than 350 residential units shall be occupied at Village 7 Development until highway works associated with Primary Vehicular Route from Full V7 STC Transport Hub to join Church Lane towards Hunsdon are completed and open to traffic.
Road Works Phase 3a	Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.

T12 - V1-V7 Sustainable Transport Corridor ("STC") – Road Works Phase 3b	No more than 350 residential units at Village 7 shall be occupied until highway works associated with STC inclusive of Primary Vehicular Route from Full V7 STC Transport Hub to V6/V7 boundary, are completed and open to traffic. Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.
T13 - Supplemental V7 STC Bus Route Inclusive of Bus Gate – Road Works Phase 4	No more than 1,200 residential units at Village 7 shall be occupied until highway works associated with the construction of the Supplemental STC Bus Route Inclusive of Bus Gate, are completed. Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.
T14 - V1-V7 Sustainable Transport Corridor Link Road	 Prior to the occupation of any Residential Units within Village 7, details for the V1-V7 Sustainable Transport Corridor Link shall be submitted to and approved in writing by the local planning authority. The details shall: i. Include plans at 1:500 scale to show the appearance, landscaping and layout of the V1-V7 Sustainable Transport Corridor Link, including hard and soft landscaped materials and planting; ii. Include sections at 1:50 scale to show appearance, landscaping, layout and scale of the V1-V7 Sustainable Transport Corridor Link including hard and soft landscaped materials and planting; iii. Include written details of the proposals for future management and maintenance of the V1-V7 Sustainable Transport Corridor Link; and iv. Be in accordance with the V1-V7 Sustainable Transport Corridor Link Proving Study No more than 350 Residential Units shall be occupied until the V1-V7 Sustainable Transport Corridor Link has been constructed in accordance with the approved details.

	Reason: To give priority to active and sustainable travel modes over private car use and achievement of the 60% mode share target in accordance with the transport user hierarchy Policy GA1 of the East Herts District Plan, LTP4 and the HGGT Vision.
T15 – A414/Church Lane Junction – A414 Speed Limit Review	No development (excluding Preliminary Works) shall commence until the A414 Speed Limit Review has been submitted to and approved in writing by the local planning authority in consultation with the local highway authority. Any recommendations contained in the approved A414 Speed Limit Review shall thereafter be implemented prior to the completion of the Full A414 / Church Lane Junction Upgrade work".
T16 - A414/Church Lane Junction – Road Safety Audit	Reason: In the interests of highway safety. "No development (excluding Preliminary Works) shall commence until a Stage 1 Road Safety Audit has been submitted to and approved in writing by the local planning authority in consultation with the local highway authority. Any recommendations contained in the Stage 1 Road Safety Audit shall thereafter be incorporated at Stage 2 of the design process for the Full A414 / Church Lane Junction Upgrade work". Reason: In the interests of highway safety
W – Water	
W1 – Excavations below chalk groundwater table	Any works involving excavations below the chalk groundwater table (such as, piling or the implementation of a geothermal open/closed loop system) should be avoided. If these are necessary, a ground investigation should first be carried out to identify appropriate techniques and to avoid displacing any shallow contamination to a greater depth, which could impact the chalk aquifer.
	Reason: To avoid displacing any shallow contamination to a greater depth that could impact the chalk aquifer.
W2 – Water Turbidity	Prior to any excavation works taking place, full details of the proposed mitigation measures in place to prevent the risk of turbidity in the chalk aquifer affecting public water shall be submitted to and approved in writing by the local planning authority.

	Reason: To prevent turbidity in the chalk aquifer from affecting the public water abstraction point and causing disruption to the service.
W2 – Unexpected Pollution	If, during development, pollution not previously identified is found to be present at the site then no further development of that relevant Phase shall be carried out until a remediation strategy detailing how this pollution will be dealt with has been submitted to, and approved in writing by, the local planning authority. The remediation strategy shall thereafter be implemented in accordance with the approved details.
	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 land or water pollution from previously unidentified contamination sources at the development site. No site investigation can fully characterise a site. This is in line with paragraph 170 and 178 of the NPPF and Policies EQ1 and WAT3 of the East Herts District Plan (2018).
Y- Waste	
Y1 – On-Site Waste Storage for flats with Communal Bins	Prior to the commencement of development (excluding Preliminary Works) of a relevant Phase, full details of the onsite storage facilities for waste including waste for recycling shall be submitted to and approved in writing by the local planning authority. The approved facilities shall be provided prior to the commencement of the use hereby permitted and shall be retained thereafter unless alternative arrangements are agreed in writing by the local planning authority.
	There shall be no amendment of the details On-Site Waste Storage for flats with Communal Bins unless otherwise agreed in writing with the local planning authority. Reason – To protect the amenities of nearby residents/occupiers and in the interests of visual amenity.
Y2 – On-Site Waste Storage for	Prior to occupation of a relevant Phase, full details of the on-site storage facilities for waste including waste for recycling shall be submitted to and approved in writing by the local planning authority. The approved facilities shall

Houses with Individual Bins	be provided prior to the commencement of the use hereby permitted and shall be retained thereafter unless alternative arrangements are agreed in writing by the local planning authority.		
	There shall be no amendment of the details On-Site Waste Storage for Houses with Individual Bins unless otherwise agreed in writing with the local planning authority.		
	Reason – To protect the amenities of nearby residents/occupiers and in the interests of visual amenity.		
Y3 – Refuse Collection Circulation Route	No development (excluding Preliminary Works) of a relevant Phase shall commence until further details of the circulation route for refuse collection vehicles have been submitted to the local planning authority and approved in writing. The required details shall include a full construction specification for the route, and a plan defining the extent of the area to which that specification will be applied. No dwelling forming part of the development of that relevant Phase shall be occupied until the refuse vehicle circulation route has been laid out and constructed in accordance with the details thus approved, and thereafter the route shall be maintained in accordance with those details. There shall be no amendment of the Refuse Collection Circulation Route unless otherwise agreed in writing with the local planning authority. Reason – To facilitate refuse and recycling collections.		

Proposed Informatives

S106 Agreement	This planning Permission is subject to a Planning Obligation under S106 of the Town and Councty Planning Act 1990 (as amended)
Other Consents	The permission does not convey any consent which may be required under any legislation other than the Town and Country Planning Acts. Any permission required under the Highways Act, Building Regulations or under any other form of law, must be obtained from the relevant authority or body e.g. Fire Officer, Health and Safety Executive, Environment Agency etc. Neither does this permission negate or override any private covenants which may affect the land.
Highway Agreements	The applicant is advised that in order to implement this permission, it will be necessary for the developer of the site to enter into agreements with Hertfordshire County Council as Highway Authority under Section 278 and Section 38 of the Highways Act 1980 to ensure satisfactory completion of the site access and road improvements. The construction must be undertaken to the Highway Authority's detailed design / specification and to their satisfaction. Construction must be undertaken by a contractor who is authorised to work in the public highway. Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and meet their requirements. In addition, that the agreements under Section 38 of Highways Act for the highways authorities to adopt the newly constructed public highway (and any related features that are required for its operation) on its satisfactory completion include financial provision for future maintenance. Highways Development Management teams should be consulted on any drainage features that are proposed for adoption by Hertfordshire County Council. Any drainage features to be adopted shall be designed and built to accommodate the Highway Authorities adoption requirements and an appropriate commuted sum, based on the approved feature maintenance plan must be agreed.
Materials Storage	The applicant is advised that the storage of materials associated with the construction of this development should be provided within the site on land which is not public highway, and the use of such areas must not interfere with the public highway. If this is not possible, authorisation should be sought from the Highway Authority before construction works commence. https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/business-licences/materialson-the-highway.aspx

Obstruction of	It is an offence under section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in			
Public Highway	any way to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to			
Land	result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant			
	must contact the Highway Authority to obtain their permission and requirements before construction works			
	commence. Further information is available via the website:			
	https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/highways-roads-and-pavements.aspx			
Road Deposits	It is an offence under section 148 of the Highways Act 1980 to deposit mud or other debris on the public highway,			
	and section 149 of the same Act gives the Highway Authority powers to remove such material at the expense of			
	the party responsible. Therefore, best practical means shall be taken at all times to ensure that all vehicles leaving			
	the site during construction of the development are in a condition such as not to emit dust or deposit mud, slurry			
	or other debris on the highway. Further information is available via the website:			
	https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/highways-roads-and-pavements.aspx			
Stopping up of	An application for a "stopping up" order to extinguish highway rights over the land will need to be made. In this			
Public Highway	respect, this initially needs to be made to Hertfordshire County Council via			
Land	https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/changes-to-yourroad/stopping-up-			
	the-highway.aspx# If this proposal is acceptable to the highway authority, then you would need to either make an			
	application to the County Council, as highway authority, for a highway "stopping up" order under Section 116 of			
	the Highways Act 1980 for the area of land in question. Any such application together with a plan showing the area			
	concerned should be sent to Legal Services, Hertfordshire County Council, County Hall, Pegs Lane, Hertford, SG13			
	8DE. The costs of making such an order would be in the region of £3,500 - £5,500 which includes the formal			
	consultation and application to the Magistrates Court. Alternatively, if any such request is in conjunction with the			
	redevelopment of the property, then you may wish to apply for a "stopping up" Order pursuant to Section 247 of			
	the Town and Country Planning Act 1990. All such applications would need to be made to the Secretary of State's			
	National Transport Casework Team (nationalcasework@dft.gov.uk, see also the DfT website); and In the meantime,			
	note that when an area of highway is "stopped up" then the surface of the land reverts back to the original owner			
	of the subsoil of the land. This may or not be the applicant. Details of the ownership of land may be available at			
	the Land Registry, Leicester Office, Westbridge Place, Leicester, LE3 5DR. Their phone number is 0333 011 3500.			
	Land Registry can also be contacted by e-mail on contact@uklandregister.co.uk			

Highway	The applicant is advised that in connection with any proposals for highway structures it will be necessary for the			
Structures	developer of the site to contact the Hertfordshire County Council Bridge Asset Management Team in connection			
	with the requirements of Department for Transport Standard CG 300: Technical Approval of Highway Structures.			
	Further details can be obtained from the Highway Authority by telephoning 0300 123 4047 or by email:			
	highway.structures@hertfordshire.gov.uk			
Public Rights of	The Public Right of Way should remain unobstructed by vehicles, machinery, materials, tools and any other aspect			
Way Obstruction	of the construction during works. The safety of the public using the route and any other routes to be used by			
	construction traffic should be a paramount concern during works, safe passage past the site should be maintain			
	at all times. The condition of the route should not deteriorate as a result of these works. Any adverse effects to the			
	surface from traffic, machinery or materials (especially overspills of cement & concrete) should be made good by			
	the applicant to the satisfaction of this Authority. All materials should be removed at the end of the construction			
	and not left on the Highway or Highway verges. If the above conditions cannot reasonably be achieved then a			
	Temporary Traffic Regulation Order would be required to close the affected route and divert users for any periods			
	necessary to allow works to proceed. A fee would be payable to Hertfordshire County Council for such an order.			
	Further information on the rights of way network is available via the website. Please contact Rights of Way,			
	Hertfordshire County Council on 0300 123 4047 or by email on row@hertfordshire.gov.uk for further information			
	in relation to the works that are required along the route including any permissions that may be needed to carry			
	out the works. https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/countryside-			
	access/rights-of-way/rights-ofway.aspx#DynamicJumpMenuManager_1_Anchor_1			
Water	General: The construction works and operation of the proposed development site should be done in accordance			
protection,	with the relevant British Standards and Best Management Practices, thereby significantly reducing the groundwater			
infrastructure	pollution risk.			
provision, supply				
and efficiency	Infrastructure: There are potentially water mains running through or near to part of proposed development site. I			
measures	the development goes ahead as proposed, the developer will need to get in contact with our Developer Services			
	Team to discuss asset protection or diversionary measures. This can be done through the My Developments Portal			
	(https://affinitywater.custhelp.com/) or <u>awdeveloperservices@custhelp.com</u>			

	Water Supply: In this location Affinity Water will supply drinking water to the development. To apply for a new or upgraded connection, please contact our Developer Services Team by going through their My Developments Portal (https://affinitywater.custhelp.com/) or aw_developerservices@custhelp.com. The Team also handle C3 and C4 requests to cost potential water mains diversions. If a water mains plan is required, this can also be obtained by emailing maps@affinitywater.co.uk. Please note that charges may apply. Water Efficiency: Being within a serious water stressed area, we would encourage the developer to consider the wider water environment by incorporating water efficient features such as rainwater harvesting, rainwater storage tanks, water butts and green roofs (as appropriate) within each dwelling/building.
Waste	The details of on-site waste storage facilities shall identify the specific positions of where wheeled bins will be stationed and the specific arrangements to enable collection from within 15m of the kerbside of the adopted highway/refuse collection vehicle access point.
Environmental Health Department	Gas boilers make a large contribution to the 14% of UK greenhouse gas emissions from homes. The Government intend to exclude gas boilers from new homes by 2025. Alternative heating systems are therefore encouraged, which could include (but are not limited to) electric boilers, solar thermal panels, heat pumps or other energy efficient systems.
SuDS & Land Drainage	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 runoff 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
	Land drainage procedures, rights and legal requirements taking account of Environment Agency and Lead Local Flood Authority (LLFA) requirements and advice. All works to ordinary watercourses, including widening of the

	channel to include additional storage will require ordinary watercourse consent from the LLFAs. It is the applicant's responsibility to check that they are complying with common law if the drainage scheme proposes to discharge into an off-site ditch/pipe. The applicant should seek consent where appropriate from other downstream riparian landowners. Any works proposed to be carried out that may affect the flow within an ordinary watercourse (including erection of flow control structures, any culverting of an ordinary watercourse or works taking place within and/ or over the culvert or within 3 metres of the top of bank of the ordinary watercourse) will also require the prior written consent from the LLFA under Section 23 of the Land Drainage Act 1991. This includes any permanent and or temporary works regardless of planning permission. The LLFAs have a duty to maintain an asset register and records of assets which have a significant impact on the risk of flooding. In order to capture proposed Sustainable Urban Drainage (SuDS) features which may form part of the future register, details of and location of the SuDS assets created or modified through the development should be provided in a GIS layer on completion of the development. For further advice on what the LLFA expect to be contained within the FRA to support a planning application, please refer to the Developers Guide and Checklist on the surface water drainage webpage via: https://www.hertfordshire.gov.uk/services/recycling-waste-andenvironment/water/surface-water-drainage/surface-water-drainage.aspx This link also includes Hertfordshire County Council's policies on SuDS in Hertfordshire.
Piling	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.
Good Practice for Land	Good Practice Procedures for Land Contamination
Contamination	We recommend that developers should:
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. The development will involve the numbering of properties and naming of new streets. The applicant MUST Property consult the Director of Finance and Support Services. Application for this purpose should be made to the Local gazetteer Land and Property Gazetteer Custodian, East Herts Council, Wallfields, Hertford, SG13 8EQ. Phone number: custodian 01279 655 261. requirements Additional regulatory consideration may be required on some of specialist matters relevant to this permission as Additional Regulatory follows: I. Archaeological requirements: contact Hertfordshire County Council Historic Environment Team via email: Considerations historic.environment@hertfordshire.gov.uk and phone: 01992 555 021. II. Sewer protection requirements: the site has public sewers running across or close to it which may be affected by the proposed building works. It may be necessary to divert the sewer and water course and carry out other works to protect it and the proposed building works before any site works are commenced. Contact: Thames Water Development Planning, Asset Investment Unit, Maple Lodge, Denham Way, Rickmansworth, WD3 9SQ. Phone number: 01923 898 072. III. Ground water pollution risk: parts of the site are located within the groundwater protection zone of Sawbridgeworth Pumping Station. The construction works and operation of the proposed development should be in accordance with the relevant British Standards and Best Management Practices, thereby significantly reducing the pollution risk. Construction works may exacerbate any existing pollution. Please refer to CIRIA Publication C532 'Control of water pollution from construction – guidance for consultants and contractors'. IV.Protected species including bats / reptiles / great crested newts: if found during development, works must stop immediately and professional ecological advice must be sought on how to proceed. A licence may be required from Natural England who can be contacted on email: enquiries@naturalengland.org.uk or phone: 0300 060 3900 / 01206 796 666. V. Nesting birds are protected under the Wildlife and Countryside Act 1981 and care should be taken in vegetation clearance works between 1st March and 30th September.

Definitions

The following definitions are suggested (to be agreed)

Local Planning Authority	East Hertfordshire District Council
A414 Speed Limit Review	Means a review of the existing speed limit on the A414 to establish whether a reduced speed
	limit of 40mph and any other recommended measures are required in association with the Full
	A414 / Church Lane Junction Upgrade work.
Preliminary Works	Means an operation or item of work of or connected with or ancillary to:
	a) archaeological investigation;
	b) investigations for the purpose of assessing ground conditions including exploratory boreholes and trial pits;
	c) remedial works in respect of any contamination or other adverse ground conditions;
	d) site clearance including earthworks, regrading and landscape clearance works in compliance;
	e) diversion decommissioning and/or laying of services for the supply or carriage of water, sewerage, gas, electricity, telecommunications or other media or utilities;
	f) the erection of fences and hoardings around the site;
	g) provision of temporary construction site accommodation; and
	h) construction of temporary access and service roads;
A414 Means of Access Preparatory	Construction of the means of access to the site from the A414, approved details of which are
Work	shown in the plan entitled Proposed A414/Church Lane Signalised Junction (ref. 110042/A/64)
	to a wearing course underlying the surfaced finish shown in the approved details.
Noise Bund Preparatory Work	Construction of the noise bund indicatively shown in the submitted Gilston Area Village 7
	Appendix to Design & Access Statement Addendum June 2021 and in compliance with condition B1

Operational Off-site Drainage Works	Development involving a headwall and outfall pipe as indicatively shown on the approved Surface Water Drainage Strategy Plan (drawing reference 44361/4002/001/P10).
Residential Units	Means a unit forming part of the development falling within Use Class C3 (residential)
Roydon Commuter Link	The improved means of pedestrian and cycle connectivity between the planning application site and Roydon railway station, the alignment of which is indicatively shown by the Commuter/utility route (intended to be well-lit and used at all times) and Interim alterative alignment (pre-STC) on the Off-Site Walking and Cycling Improvements plan (drawing reference 1521/165) included at Appendix H of the Transport Assessment.
Eastwick Commuter Link	The means of interim pedestrian and cycle connectivity between the planning application site and boundary of Village 1.
Hunsdon Lock Link	The means of pedestrian and cycle connectivity between the A414 / Church Lane junction to tie into the Rover Stort towpath at the Hunsdon Lock.
Sustainable Transport Corridor	Means all modes means of connectivity to provide direct sustainable travel connectivity between key destinations within the villages, performing in all instances as a public transport (e.g. bus) link designed along its full length to give appropriate priority to sustainable modes over the private car in accommodating dedicated and segregated facilities for walking and cycling as part of the Commuter Route network.
Village 1 to Village 7 Sustainable Transport Corridor Link	Means the Sustainable Transport Corridor between the boundary of Village 7 and the boundary of Village 1 as shown on Parameter Plan 4: Access and Movement (dated November 2020) of the outline planning application for development of Villages 1-6 (3/19/1045/OUT) and Parameter Plan 4 – Vehicular Access and Movement (ref. V7_01_1004) of the planning application for the development of Village 7 (3/19/2124/OUT) OR, if the Sustainable Transport

	Corridor has not been provided to the boundary of Village 1, to the point where the Sustainable Transport Corridor within Village 1 has been provided to ensure a continuous link with it OR, if none of the Sustainable Transport Corridor has been provided within Village 1, to a point on the existing Eastwick Road highway (or as otherwise agreed) to enable vehicles using the Sustainable Transport Corridor to pass completely between the existing A414/Eastwick Road
	highway and Village 7.
Village 7 and Village 1 Phasing Scheme	Means a scheme relating to the phasing of the development within Village 7 relative to the timing of delivery of key infrastructure and facilities within Village 1 and sustainable transport connections from Village 7 to Village 1 facilities and the Central Stort Crossing, such scheme to demonstrate there will be sustainable access for residents of Village 7 to the appropriate education and other facilities, the planned sustainable transport corridor link from Village 7 to Village 1 and the Central Stort Crossing in a timely manner. The detail of which shall be addressed within the section 106 agreement itself.

Gilston Area Draft Schedule of Conditions

'Enabling Works' [definition to be confirmed] comprises site clearance and demolition; tree/vegetation removal (in accordance with the approved plans in Condition 1); soil investigations (including soakage testing, window sampling, boreholes, CBR's and gas monitoring); ecology surveys; archaeology surveys (including geo physical surveys, window samples and trenching); slip trenches to investigate existing services; utilities diversions and connections as agreed with the statutory authorities; drainage surveys (such as CCTV and jetting); river modelling; and topographical surveys.

Condition Number	Title	Villages 1-6
PROCEDUR	AL	
1	Approved Drawings	The approved development shall be carried out in accordance with the following approved drawings:
		 Central Stort Crossing Interim Junction Tie-in Arrangement VD17516-CCi-100-GA REV P03 Village 2 Interim Phase General Arrangement VD17516/V2i-100-GA REV P01 Village 6 Access General Arrangement VD17516-V6-100-GA REV P02 Parameter Plan 1: Existing Vegetation and Buildings Dated November 2020 Parameter Plan 2: Village Corridors, Constraints and Developable Areas dated November 2020
		 Parameter Plan 3: Green Infrastructure & Open Space Dated November 2020 Parameter Plan 4: Access and Movement Dated November 2020 Parameter Plan 5: Principal Land Uses Dated November 2020 Parameter Plan 6: Maximum Building Heights Dated December 2022 Tree Protection Plan Village 1 Access 200731-1.1-GPA-V1-TPP-MM Tree Protection Plan Village 2 Access 200901-1.4-GPA-V2-TPP-MM

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		 Tree Protection Plan Village 6 Access 200728-1.0-GPA-V6-TPP-MM V1 Accesses & CSC Interim Planting Scheme Plan 1/5 HNP495-GRA-X-XX-DR-L-5151 Rev 02 V1 Accesses & CSC Interim Planting Scheme Plan 2/5 HNP495-GRA-X-XX-DR-L-5152 Rev 02 V1 Accesses & CSC Interim Planting Scheme Plan 3/5 HNP495-GRA-X-XX-DR-L-5153 Rev 02 V1 Accesses & CSC Interim Planting Scheme Plan 4/5 HNP495-GRA-X-XX-DR-L-5154 Rev 02 V1 Accesses & CSC Interim Planting Scheme Plan 5/5 HNP495-GRA-X-XX-DR-L-5155 Rev 01 Village 2 Access Planting Plan HNP495-GRA-X-XX-DR-L-5161 Rev 02 Village 6 Access Planting Plan HNP495-GRA-X-XX-DR-L-5141 Rev 03 Gilston River Crossings and Village Development Access Planting Schedule HNP495-GRA-SC-001_Rev 03 Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed.
2	Other Approved Documents	Development shall be undertaken in accordance with the approved plans and documents listed below, except to the extent that those details are superseded or expanded by an approved Design Code or by any Reserved Matters approval or other approval pursuant to any condition of this planning permission: • Development Specification (incorporating Parameter Plans 1-6) December 2022 • Strategic Design Guide July 2022 • Placemaking Strategy July 2022 Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance.

2	Timescales for	The highway accord works to Village 1 shall be begun not later than F years from the data of this
3	Timescales for	The highway access works to Village 1 shall be begun not later than 5 years from the date of this
	RM Submission	permission.
	/Implementation	
		The first application for the approval of reserved matters shall be made to the District Planning
		Authority before the expiration of 5 years from the date of this permission. All subsequent
		applications for the approval of reserved matters shall be made to the District Planning Authority
		before the expiration of 30 years from the date of this permission
		before the expiration of 50 years from the date of this permission
		The development of any reserved matters pursuant to this outline permission shall be begun
		before the expiration of 5 years from the date of approval of that reserved matters.
		before the expiration of 5 years from the date of approval of that reserved matters.
		Reason: To ensure that the development meets the policy standards required by the
		development plan and any other material considerations including national and local policy
		guidance, and in accordance with the provisions of Section 92 of the Town and Country Planning
		Act 1990 (as amended).
4	Reserved	Plans and particulars of the reserved matters referred to in condition 3, relating to the means of
4	Matters	internal access, appearance, landscaping, layout and scale, shall be submitted to and approved in
	Matters	writing by the District Planning Authority in respect of any part of the development of the site
		before any development commences within that part of the site. The development shall
		thereafter be carried out in accordance with the approved details.
		Reason: To ensure that the development meets the policy standards required by the
		development plan and any other material considerations including national and local policy
		guidance, and in accordance with the provisions of Section 92 of the Town and Country Planning
		Act 1990 (as amended).

5	Remedial Works if Development Ceases	In the event that building work should cease (no residential completions for a period of five years) and enabling works have taken place, remedial works shall take place to restore the land, based on a Land Restoration Scheme for the part of the site impacted, that will have been submitted to and approved by the District Planning Authority. Reason: In the interest of environmental and residential amenity, in accordance with Policy GA1, DES2 and DES3 of the East Herts District Plan and Policy AG1 of the Gilston Area Neighbourhood Plan.
6	Strategic Landscape Masterplan	No development (with the exception of Enabling Works) shall take place, nor shall any Village Masterplan pursuant to condition 32 or Reserved Matters application for commercial or residential floorspace pursuant to condition 4 be approved for any part of the site, until a Strategic Landscape Masterplan (SLMP) for the site (which shall include a Design Code and associated Regulatory Plan) has first been submitted to and approved in writing by the LPA. Reason: To ensure a coordinated and comprehensive approach to development in accordance with Policies GA1, DES1 and DES4 of the East Herts District Plan and Policies AG1, AG2, AG3, AG4, AG5, AG7, BU4, TRA1, TRA2, and D1 of the Gilston Area Neighbourhood Plan.
7	Strategic Landscape Masterplan Scope	The SLMP shall be produced in general accordance with the provisions of the Gilston Area Charter Supplementary Planning Document (July 2020) and the plans and documents approved in Conditions 1 and 2, and shall specifically consider the following (which for the avoidance of doubt excludes the village developable areas as shown on Parameter Plan 2 unless otherwise stated): • The approximate location of proposed leisure and commuter routes for pedestrian, cyclists, equestrians and other active travel modes including connections to village boundaries and the site boundary

- The approximate location of proposed Public Rights of Way, and design principles for improvements and/or modifications to existing Public Rights of Way
- The approximate location of, and design principles for, proposed public transport infrastructure including for cyclists, such as cycle hire facilities
- The approximate location within the SLMP area and the indicative location in respect of the villages for the following sports facilities:
 - (i) 1 x Bowls facility comprising:
 - •2 x six-rink bowls greens
 - •up to 0.4ha in total
 - Club house/ancillary facilities
 - (ii) Tennis:
 - 8 x senior courts (min 4 courts per facility)
 - up to 0.75ha in total
 - (iii) Cricket facilities:
 - 2 x senior cricket squares with club house/practice nets
 - 1 x cricket square
 - (v) 15 Grass pitches consisting of a range of adult and junior pitches:
- a Conservation Management Plan to include details of the measures to be implemented in order to ensure the long-term protection and maintenance of the Eastwick Moated sites and Mount Moated site
- Investigate the feasibility of integrating and bringing back into long-term sustainable use, the designated heritage assets within the Hunsdon Airfield Park.
- The approximate location of, and design principles for, a Heritage Trail, accessed primarily through active and sustainable modes of transport, utilising the green corridor network where appropriate.

		The SLMP shall demonstrate consultation with relevant statutory bodies such as Historic England, the Environment Agency, the LLFA and Herts Ecology as appropriate.
		Reason: To ensure a coordinated and comprehensive approach to development in accordance with Policies DES1, DES2 and DES4 of the East Herts District Plan and Policies AG1, AG2, AG4, AG7, BU4, TRA1, TRA2, and D1 of the Gilston Area Neighbourhood Plan.
8	Strategic Landscape Design Code	The SLMP shall be supported by a Strategic Landscape Design Code and associated Regulatory Plan which shall be produced in general accordance with the provisions of the Gilston Area Charter Supplementary Planning Document (July 2020) and the plans and documents approved in Conditions 1 and 2.
		The Strategic Landscape Design Code will provide a set of simple, concise, illustrated design requirements to provide specific, detailed parameters for the physical development of the strategic landscape area.
		As a minimum the code shall include principles for the following: 1. Design:
		SuDS and drainage
		Community food growing
		Sport and recreationPlay spaces
		• Planting
		Village edge treatments
		Response to heritage (assets within Hunsdon Airfield Park and heritage trail)
		Ancillary buildings within landscape areas Feelegisel enhancements
		 Ecological enhancements Gypsy and Traveller and Travelling Show People provision

- Public realm areas
- Pedestrian and cycle routes hierarchy
- Sustainable Transport Corridor
- Sustainable Transport Hubs (if agreed to be appropriate and necessary outside village boundaries)
- · Wayfinding and legibility
- · Street hierarchy -
- All modes parking
- Street furniture
- Boundary treatments
- Utilities
- Lighting
- · Waste and recycling
- Approach to public art
- Materials palette for different forms of built development and hard landscaping
- 2. A scalable Regulatory Plan to assist users in navigating where the provisions of the code will apply.
- 3. Reporting of the Design Code Testing process including how the outcomes have informed the final Design Code.
- 4. Design Code Compliance Checklist.

All subsequent Village Masterplans, Village Design Codes and Reserved Matters Applications shall accord with the approved Strategic Landscape Design Code and Regulatory Plan, and be accompanied by a completed Compliance Checklist which demonstrates compliance with the Code.

		Reason: In order to achieve a coordinated approach to development and high quality design outcomes in accordance with policies GA1, DES1 and DES4 of the East Herts District Plan and Policies AG1, AG2, AG3, AG4, AG5, AG7, BU4, TRA1, TRA2, and D1 of the Gilston Area Neighbourhood Plan.
9	Strategic Landscape Phasing and Delivery Plan	The SLMP shall be accompanied by a Strategic Landscape Infrastructure Delivery Plan which will set out the anticipated phasing of key infrastructure within the SLMP area. The identified infrastructure shall thereafter come forward in accordance with the Strategic Landscape Infrastructure Delivery Plan unless there are unforeseen events / obstacles to delivery and alternative timing for provision is agreed in writing by the District Planning Authority. The Strategic Landscape Infrastructure Delivery Plan may, by written agreement with the District Planning Authority, be updated from time-to-time to reflect increased certainty of delivery of infrastructure.
		Reason: To allow consideration of the impacts of the development and to ensure timely delivery of the necessary infrastructure needed to support the development in accordance with Policy DEL1 of the East Herts District Plan and Policy AG9 of the Gilston Area Neighbourhood Plan. This is a pre-commencement condition as it is necessary to secure the phasing of key infrastructure before any works commence.
10	Strategic Green Space	The SLMP shall include a scheme for the strategic green corridors (Eastwick Valley Corridor, Fiddlers Brook/Golden Brook Corridor, tributaries and ordinary watercourses) and the area adjacent to Fiddlers Brook in the Gilston Community Park which shall include the following elements:
		 Design principles for ecological enhancement and achieving net gains in biodiversity Design principles for how the watercourses (river channel and riparian habitat) will be restored and enhanced, informed by the Water Framework Directive Mitigation and Enhancement Strategy)

- Design principles for how these areas will be landscaped for the benefit of biodiversity including planting and any soft and hard landscaping
- Design principles for how lighting designs will minimise and avoid light spill to trees, hedgerows, woodland edges, watercourses and other light sensitive ecological areas to avoid disturbance impacts
- Design principles for how access to the watercourses will be maintained for flood management inspection and maintenance; and
- All watercourses, ordinary or main river will be retained (but for the avoidance of doubt may be modified or enhanced), with only culverting for access proposed and any works that require consent will be applied for from the relevant authority.
- Design principles for how proposed changes to watercourses will not adversely affect flood risk in the site boundary or elsewhere.
- Design principles for surface water management or natural flood management or flood storage measures to reduce the risk of flooding
- Design principles for demonstrating how these blue green corridors will be protected during development and managed over the longer term i

In producing the scheme consultation will occur with the Environment Agency, the LLFA, and Herts Ecology as appropriate.

Reserved Matter Applications relating to the strategic green corridors and the area adjacent to Fiddlers Brook in the Gilston Community Park shall be prepared in accordance with the approved details.

Reason: It is essential that the detailed designs for these corridors in future masterplans and reserved matters applications protect and enhance the ecological value of the main rivers, some

		of which may require improvement and restoration. This approach is supported by paragraphs 159, 167 and 179 of the NPPF which recognise that the planning system should conserve and enhance the environment by minimising impacts on and providing net gains in biodiversity. This is also supported by policy WAT3 of the East Herts District Plan (2018).
11	Strategic Landscape and Visual Appraisal	The SLMP to be submitted pursuant to conditions 5 shall be supported by a landscape and visual appraisal compliance statement to demonstrate that the proposals contained in the SLMP will not give rise to any new or materially different significant effects in comparison with that reported in the Environmental Statement.
		Reason: In order to ensure the development is within the parameters assessed in the Environmental Statement to avoid unacceptable adverse landscape and visual effects in accordance with Policies GA1 and DES2 of the East Herts District Plan and Policies AG1, AG3, H1of the Gilston Area Neighbourhood Plan.
12	Strategic SuDs Strategy	Prior to the approval of the Strategic Landscape Masterplan, a Strategic Sustainable Drainage System Strategy shall be submitted to and approved in writing by the District Planning Authority in consultation with Hertfordshire County Council as Lead Local Flood Authority. Notwithstanding the details contained in the Development Specification hereby approved as part of outline application 3/19/1045/OUT relating to surface water management and drainage, the Strategy shall follow and include the following details:
		 Evidence to show the location of any SuDS will not become overwhelmed by any source of flood risk including surface water or groundwater. A strategy following the SuDS discharge hierarchy including potential use of rainwater reuse systems as a first step on the hierarchy prior to going to infiltration prior to going by gravity to a surface watercourse.

- Desk based information and preliminary ground investigations, including some site wide infiltration testing undertaken to BRE 365 specification in broad approximations of strategic attenuation features.
- If infiltration drainage is proved viable, identification of areas where infiltration or part infiltration is likely to be located within villages or strategic open spaces.
- If infiltration drainage is unfavourable, surface water greenfield runoff rates and volumes should be provided for each pre-development sub catchment and all post-development scenarios will be limited to the equivalent 100% AEP (1 in 1 year), 3.33% AEP (1 in 30 year) and 1% AEP (1 in 100 year) for the corresponding critical storm durations (without an allowance for future climate change). Appropriate feasible discharge locations should be provided to the closest ordinary watercourses or main river by gravity for any of the developed areas. No pumping of surface water drainage will be acceptable. Any discharge outfall to a watercourse should be assumed to be surcharged.
- Provision of supporting calculations to show how much post development storage is required across the site (assuming infiltration as a worst-case scenario) and how this will be achieved across the development. Where infiltration is not feasible, post development runoff rates and volumes will be limited to the equivalent greenfield scenarios for the equivalent 100% AEP (1 in 1 year), 3.33% AEP (1 in 30 year) and 1% AEP (1 in 100 year) for the corresponding critical storm durations. One Greenfield runoff rate for the whole site or per village will not be accepted. Include interception and source control within the development area, prior to utilising to site control and prior to utilising regional (strategic) control. Overarching supporting modelling for the drainage network to demonstrate how the system could operate at the 100% Annual Exceedance Probability rainfall event, 3.33% AEP plus climate change and 1% AEP plus climate change allowance, to be provided, half drain down times for infiltration storage features should be included as will urban creep on any assumed impermeable areas. Any strategic road networks may need to be considered as separate SuDS networks depending on the adoptable authority requirements. Any large sports fields

- will also need to be included in the drainage scheme (assuming they will be built to operate 365 days a year)
- High level drawings of any SuDS, surface water storage or conveyance feature including cross and long sections, location, size, volume, depth and any inlet and outlet features. This should be supported by a clearly labelled high level drainage layout drawing which relates to the landscaping and blue green infrastructure layouts. Total storage volumes provided within each future sub-catchment should be identified. The usage of above ground and other surface water conveyance and storage SuDS features
- Demonstrate an appropriate SuDS management and treatment train accounting for any sensitive discharge locations such as ecological protection areas, groundwater protections zones, surface drinking water safeguarding zones or areas previously used for landfill.
- Integration with and enhancement of amenity space and link to any climate change mitigation such as urban cooling and social wellbeing.
- Provision of biodiversity enhancement within strategic green space and biodiversity net gain requirements
- Compliance with the agreed Strategic Design Code which includes multifunctional SuDS.
- Indicative phasing plan for the cumulative provision of SuDS and drainage infrastructure within the green infrastructure.
- A high-level assessment of overland exceedance routes in the event of a failure of the drainage system or storm event in excess of the 1 in 100 + 40% CC storm event.
- A high-level management and maintenance plan. It should include maintenance and operational activities and who will be adopting which parts of the SuDS infrastructure

Reason: To ensure the development appropriately addresses climate change and the risk of flooding, to improve and protect water quality, to protect natural habitats and the amenity of residents and ensure the future maintenance of the Sustainable Drainage System in perpetuity and in order to comply with the requirements of Policy GA1 V (y) of the East Herts District Plan 2018 and Policies LA1 of the Gilston Area Neighbourhood Plan

13	Supplementary FRA	Prior to the approval of the SLMP a supplementary assessment of flood risk and climate change shall be submitted to, and approved in writing by, the District Planning authority. This should include the following elements:
		 Additional investigations, surveys and appropriate modelling to establish the detailed areas at risk of flooding from ordinary watercourses, surface water flooding and groundwater flooding (including spring fed watercourses). This would include definition of functional floodplain of ordinary watercourses. No development will occur within the high and medium flood risk areas for main rivers, ordinary watercourses, and surface water flow paths. Detailed Analysis of baseline flow conditions of receiving watercourses. Requires full surveys of all watercourses including any culverted structures impacting a watercourse. This should also include a detailed modelling for ordinary watercourses and main rivers to establish the flood levels that may be required to input to drainage modelling of surcharge outfalls. Full condition survey of all existing structures on all watercourses impacted by the development within the development boundary with an assessment on how any culverts can be daylighted and open naturalised watercourses reinstated without adverse effects on flood risk.
		 All watercourses, ordinary or main river will be retained (but for the avoidance of doubt may be modified and enhanced), with only culverting for access proposed and any works that require consent will be applied for from the relevant authority. An assessment of the 1 in 100 year plus 35% and the 1 in 100 year plus 70% climate change allowances for the Stort, Eastwick Brook, Fiddlers Brook and Pole Hole Brook. A sequential approach to the development to avoid any less to highly vulnerable land uses being located within the design flood (1 in 100 year plus 70%). Submission of the proposed

		 development areas with the flood outlines overlaid will help to demonstrate that this has been achieved. Ensure that any built development which occurs within the design flood is designed to the 1 in 100 year plus 70% climate change allowance. 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. Consideration for an emergency flood evaluation plan if any residual risk from any source of flooding as required. Village Masterplans and Reserved Matter Applications shall be informed by the approved supplementary assessment of flood risk and climate change or as may subsequently be agreed, in writing, by the District Planning authority. Reason: to reduce the risk of flooding and vulnerability to climate change to the proposed development and its future users in accordance with Policy WAT1 'Flood Risk Management' of the East Herts District Plan (2018)
14	Strategic Landscape Ecology Strategy	Prior to or at the same time as the submission of the SLMP a Strategic Landscape Ecology Strategy for the strategic landscape area informed by the Gilston Park Estate Biodiversity Strategy (May 2019) and the Gilston Park Estate Outline Ecological Management Plan (November 2020), and up to date ecology surveys (only required where necessary and appropriate having regard to CIEEM guidance 'Advice note on the lifespan of ecological reports and surveys' April 2019), shall be submitted to and approved in writing by the LPA and shall include the following: • Measures to protect and enhance retained assets (noting commitments secured at the outline application stage);

15	Strategic Landscape Energy & Sustainability	 Identify opportunities to create new biodiversity assets and links to existing off site ecological networks; Demonstration of how the above measures contribute to achievement of 10% min net gain target for the overall Gilston Park Estate site based on an up to date Biodiversity Net Gain metric or alternative methodology as agreed by the LPA; Framework management and maintenance strategy. Reason: To ensure that the development maintains, enhances and contributes appropriately to the local and wider ecological network in accordance with Policy NE2 of the East Herts District Plan and Policies AG1, AG2, AG3, AG4, AG7 and LA1 of the Gilston Area Neighbourhood Plan. Prior to or at the same time as the SLMP, an Strategic Landscape Energy and Sustainability Strategy shall be submitted to and approved in writing by the LPA. The strategy shall confirm the measures to be implemented to minimise climate impacts arising from the strategic landscape aspects of the development in accordance with the Sustainable Development principles in the
	Strategy	Development Specification hereby approved. REASON: In order that the development appropriately mitigates and adapts to the impact of climate change, minimises the impact of pollution and reduces pressure on natural resources in accordance with policies CC2, CC3 and DES4 of the East Herts District Plan and Policy AG1 of the Gilston Area Neighbourhood Plan.
STAGE 2	: SITE-WIDE REQUIR	EMENTS
16	Archaeological WSI	No below ground excavations shall be carried out nor shall any development commence in any part of the site, until an Archaeological Written Scheme of Investigation covering that part of the site has been submitted to and approved in writing by the LPA. The scheme shall include an assessment of archaeological significance and research questions; and

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		 i. The programme and methodology of site investigation and recording through evaluation ii. The programme and methodology of site investigation and recording for any further works as suggested by the evaluation iii. The programme for post investigation assessment iv. Provision to be made for analysis of the site investigation and recording v. Provision to be made for publication and dissemination of the analysis and records of the site investigation vi. Provision to be made for archive deposition of the analysis and records of the site investigation vii. Nomination of a competent person or person/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation. Reason: to ensure the appropriate investigation for presence /recording of heritage assets and to comply with the requirements of Policy GA1 V (o).
17	Implementation of WSI	The development hereby approved shall not take place other than in complete accordance with the programme of archaeological works set out in the Written Scheme of Investigation approved under condition 16.
		Reason: to ensure the appropriate investigation for presence /recording of heritage assets and to comply with the requirements of Policy GA1 V (o).
18	Post	No part of the development shall be occupied or brought into use until the site investigation and
	investigation	post investigation assessment for that part of the development has been completed in
	Assessment	accordance with the programme set out in the Written Scheme of Investigation approved under
		condition 15 and submitted to and approved in writing by the LPA, and thereafter provision made
		for analysis and publication where appropriate.

STAGE 3:	CONSTRUCTION	Reason: to ensure the appropriate investigation for presence /recording of heritage assets and to comply with the requirements of Policy GA1 V (o).
STAGE 3: 19	Gilston Park Estate CTEMP	Prior to the commencement of any part of the development, including any enabling works, a Gilston Park Estate Construction Traffic and Environmental Management Plan (CTEMP) for that part of the development shall be submitted to and approved in writing by the District Planning Authority. The plan shall include the following (where relevant): a) Updated Code of Construction Practice b) The construction programme and phasing (including for any temporary development), including details of any measures to be taken to coordinate construction activities across the Gilston Area to manage and reduce environmental effects. c) Access and routeing arrangements for construction vehicles, including approximate numbers and types of vehicles; location of any highway works necessary to enable construction to take place; haul routes into and through the development site; temporary traffic management or construction accesses from the local highway network including the method of segregating construction traffic from general traffic, pedestrians and cyclists; highway signage strategy; measures to be taken to reduce congestion and avoid peak periods such as school pick up/drop off times; and approach to monitoring and
		 enforcement. d) Hours of operation for construction, demolition, and delivery of materials e) Details of servicing and delivery, including details of site access, compound, hoarding, construction related parking, loading, unloading, turning areas and materials storage areas f) Details of any works to Public Rights of Way, footways, bridleways and cycle ways to enable construction to take place

- g) A scheme of chassis and wheel cleaning for construction vehicles and cleaning of affected public highways. The access roads shall be hard surfaced between the cleaning facility and the highway and must be kept free of mud and debris at all times
- h) Details of a materials management scheme
- i) An air quality and dust management plan
- j) Details of noise and vibration mitigation and monitoring scheme
- k) Mechanisms to deal with other environmental impacts including light and odour
- l) Details of community liaison, communication and consultation arrangements with local residents and businesses, including details of how complaints will be managed
- m) Measures to protect existing vegetation and landscape features, any tree works, and vegetation removal to accommodate construction activity
- n) Post construction restoration/reinstatement measures for the working areas and any temporary access arrangements
- o) Measures to be implemented to ensure wayfinding for both occupiers of the site and for those travelling through it.
- p) A surface water management scheme to outline construction related drainage control measures to protect watercourses and sources, including the River Stort
- q) Measures for the protection of identified archaeological and built heritage assets
- r) Appointment of a suitably qualified Ecological Clerk of Works and details of ecological supervision
- s) Measures to be taken to seek approval from the highway authority that the highway extent has been marked out accurately prior to construction.
- t) Demonstrate how the CTEMP for the part of the development has been cognisant of the CTEMP(s) for prior parts.
- u) Confirmation of details of a watching brief on excavations on the eastern side of Village 2 for opportunistic prior extraction
- v) Evaluate the availability of construction materials from mineral workings in proximity to the site and opportunities to use available materials, where possible

		Thereafter, the construction of the development shall only be carried out in complete accordance with the relevant approved CTEMP. Reason: In the interests of highway safety and the control of environmental impacts on existing and future residents in accordance with policies TRA2, CFLR3, EQ2, EQ3 and EQ4 of the adopted East Herts District Plan 2018 and Policy AG8 and EX1 of the Gilston Area Neighbourhood Plan
20	Site Waste Management Plan	No part of the development hereby permitted shall be commenced until a SWMP for that part has been submitted to and approved in writing by the LPA in consultation with the WPA. The SWMP shall thereafter be implemented in accordance with the approved details. Reason: In order to identify, reuse, manage and reduce the amount of waste produced on site in accordance with Policy 12 of the Hertfordshire Waste Core Strategy.
STRATEGIC	INFRASTRUCTUR	E
21	Foul Water Disposal /Sewerage	No part of the development shall be occupied until confirmation has been provided that either (I) Wastewater network upgrades required to accommodate foul water flows for that part of the development have been completed; or (II) A housing and infrastructure phasing plan has been agreed with Thames Water to allow that part of the development to be occupied. Where a housing and infrastructure phasing plan has been agreed with Thames Water, no occupation shall take place other than in accordance with the agreed housing and infrastructure phasing plan.

		Reason: Network reinforcement works are likely to be required to accommodate the proposed development. Any reinforcement works identified will be necessary in order to avoid sewage flooding and/or potential pollution incidents.
22	V1 Interim Access from A414	The interim access to Village 1 from the A414 shall be constructed wholly in accordance with the approved Central Stort Crossing Interim Junction Tie-in Arrangement drawing (VD17516-CCi-100-GA RevP03) and shall be fully open and operational prior to the occupation of any homes in Village 1 The access arrangements shall thereafter be retained until the Central Stort Crossing and Final Village 1 Access Arrangements have been delivered as approved through planning permission no. 3/19/1046/FUL
		Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance.
23	V1 Interim Access from Eastwick Road	The interim access to Village 1 from Eastwick Road shall be constructed wholly in accordance with the approved Central Stort Crossing Interim Junction Tie-in Arrangement drawing (VD17516-CCi-100-GA Rev P03) and shall be fully open and operational prior to the occupation of any homes in Village 1. The access arrangements shall thereafter be retained until the Central Stort Crossing and Final Village 1 Access Arrangements have been delivered as approved through planning permission no. 3/19/1046/FUL
		Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance

24	V1 Access Arrangements Tree Protection	The Village 1 Interim Access Arrangements shall not be constructed other than in complete accordance with the approved Tree Protection Plan Village 1 Access Drawing 200731-1.1-GPA-V1-TPP-MM read together with the Tree Survey Schedule contained within Appendix 13.4 of the Environmental Statement Volume 3.
		Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance
25	V1 Access Arrangements Landscaping	The V1 Access Arrangements Planting Plan shown on approved drawings HNP495-GRA-X-XX-DR-L-5151 Rev02, 5152 Rev 02, 5153 Rev 02, 5154 Rev 02, and 5155 Rev 01 read together with approved Gilston River Crossings and Village Development Access Planting Schedule HNP495-GRA-SC-001_Rev 03 shall be implemented in the first planting season following completion of the V1 Access Arrangements. Any trees, shrubs or grassed areas which die, are diseased or vandalised within the first five years following completion shall be replaced within the next planting season.
		Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance
26	Interim V2 Access	Notwithstanding the details shown on the submitted Village 2 Interim Phase General Arrangement Drawing (VD17516/V2i-100-GA Rev P01), a revised arrangement for the interim access to Village 2, north of the Pye Corner/Eastwick Road Junction shall be submitted to and approved in writing by the District Planning Authority. The revised arrangement shall demonstrate how the road alignment minimises, as far as possible, loss of ancient hedgerow H194 and how left-turn in/right-turn out movements are to be prevented. Thereafter, the interim

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		access to village 2 shall be constructed wholly in accordance with the approved drawing and shall be fully operational prior to the occupation of the first dwelling in Village 2 (unless the STC link between Village 1 and 2 is in place in which case the trigger shall be prior to the occupation of 1,000 homes in Village 2). The access shall thereafter be retained until the Eastern Stort Crossing and Final Village 2 Access has been delivered as approved through planning permission no. 3/19/1051/FUL. Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance
27	V2 Interim Access Tree Protection	The Village 2 Interim Access shall not be constructed other than in complete accordance with the approved Tree Protection Plan Village 2 Access Drawing 200901-1.4-GPA-V2-TPP-MM read together with the Tree Survey Schedule contained within Appendix 13.4 of the Environmental Statement Volume 3 unless otherwise agreed in writing by the LPA. Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance
28	V2 Interim Access Landscaping	The Village 2 Access Planting Plan shown on approved drawing HNP495-GRA-X-XX-DR-L-5161 Rev 02 read together with approved Gilston River Crossings and Village Development Access Planting Schedule HNP495-GRA-SC-001_Rev 03 shall be implemented in the first planting season following completion of the V2 Access unless otherwise agreed in writing by the LPA. Any trees, shrubs or grassed areas which die, are diseased or vandalised within the first five years following completion shall be replaced within the next planting season.

		Reason: To restrict the development to that applied for and for which the environmental,
		transport and infrastructure impacts have been assessed, and to ensure that the development
		meets the policy standards required by the development plan and any other material
		considerations including national and local policy guidance
29	STC V1-2	Prior to the occupation of any homes in Village 2, the Sustainable Transport Corridor link
		between the Village 1 Access and Village 2 (as defined in the Development Specification and
		shown on Parameter Plan 4: Access and Movement) shall be fully completed and operational. The
		STC link shall thereafter be retained in perpetuity.
		Reason: To restrict the development to that applied for and for which the environmental,
		transport and infrastructure impacts have been assessed, and to ensure that the development
		meets the policy standards required by the development plan and any other material
		considerations including national and local policy guidance
30	STC V3-6	Prior to the occupation of any homes in each of Villages 3, 4, 5 or 6, the Sustainable Transport
		Corridor link (as defined in the Development Specification and shown on Parameter Plan 4:
		Access and Movement) between that village and the Village 1 Access shall be completed and
		operational. The STC link shall thereafter be retained in perpetuity.
		Reason: To restrict the development to that applied for and for which the environmental,
		transport and infrastructure impacts have been assessed, and to ensure that the development
		meets the policy standards required by the development plan and any other material
		considerations including national and local policy guidance

STAGE 4:	STAGE 4: VILLAGE MASTERPLANS & DESIGN CODES		
32	Village Masterplans	A Village Masterplan (VMP) for each of the six villages identified on Parameter Plan 5 hereby approved, shall be submitted to and approved in writing by the LPA, prior to the approval of any Reserved Matters application for residential or commercial floorspace within the boundary of that village.	
		Reason: To ensure a coordinated and comprehensive approach to development in accordance with Policies GA1, DES1 and DES4 of the East Herts District Plan and Policy AG1, AG5, AG6, LA1, BU1, BU2, BU3, BU4, H1 and D1 of the Gilston Area Neighbourhood Plan.	
32	Village Masterplan Scope	The relevant VMP shall be produced in general accordance with the provisions of the Gilston Area Charter Supplementary Planning Document (July 2020), the Strategic Landscape Design Code and Regulatory Plan, and the plans and documents approved in Conditions 1 and 2. The scope of the VMP shall specifically incorporate the following for the relevant village: - guidance on the broad location and quantum of business and commercial, retail and leisure floorspace within the village - the approximate location of village sport and play facilities - the interaction with the relevant village buffer (which lies outside of the VMP area) - the approximate location of proposed leisure and commuter routes for pedestrian, cyclists, equestrians and other active travel modes including connections beyond village boundaries to the strategic landscape areas - the approximate location of proposed designated Public Rights of Way and design principles for improvements and/or modifications to existing Public Rights of Way - the approximate location of proposed public transport infrastructure and active travel infrastructure including cyclists such as cycle hire facilities	

		Reason: To ensure a coordinated and comprehensive approach to development in accordance with Policies DES1, DES2 and DES4 of the East Herts District Plan and Policies AG1, AG2, AG4, AG7, BU4, TRA1, TRA2, and D1 of the Gilston Area Neighbourhood Plan.
33	Village Phasing	The relevant VMP shall be accompanied by a Village Infrastructure Delivery Plan which will set out the anticipated phasing of key infrastructure within the relevant village. The identified infrastructure shall thereafter come forward in accordance with the Village Infrastructure Delivery Plan unless there are unforeseen events / obstacles to delivery and alternative timing for provision is agreed in writing by the District Planning Authority. The Delivery Plan may, by written agreement with the District Planning Authority, be updated from time-to-time to reflect increased certainty of delivery of infrastructure
		Reason: To allow consideration of the impacts of the development and to ensure timely delivery of the necessary infrastructure needed to support the development in accordance with Policy DEL1 of the East Herts District Plan and Policy AG9 of the Gilston Area Neighbourhood Plan.
34	Village Design Codes	Each VMP shall be supported by a Village Design Code and associated Regulatory Plan which shall be produced in general accordance with the provisions of the Gilston Area Charter Supplementary Planning Document (July 2020), the Strategic Landscape Design Code and Regulatory Plan, and the plans and documents approved in Conditions 1 and 2.
		The relevant Village Design Code and Regulatory Plan will provide a set of simple, concise, illustrated design requirements to provide specific, detailed parameters for the physical development of the village.
		As a minimum the code shall include principles for the following:
		1. Village design principles for:

- Block structure
- Public Realm
- Green and blue infrastructure including multifunctional SuDS plus consideration for groundwater and watercourse safeguarding zones (flooding and pollution)
- Maintenance strips for SuDS and all watercourses or water features (springs)
- Biodiversity and amenity benefits SUDS
- Response to heritage (key groupings)
- Routes and movement network, integrating with the wider movement network
- All modes parking typologies
- Street hierarchy and character types
- Sustainable Transport Hubs (and bus parking)
- Land uses
- Density
- Building heights
- Edges, nodes and gateways
- Frontage, access and servicing
- Built form
- Identity
- Areas that will be publicly lit, including streets, recreation areas and other public spaces in accordance with the lighting design principles in the Development Specification (section 3.17)
- Approach to public art
- Indicative village materials palette
- Planting strategy
- 2. A scalable Regulatory Plan to assist users in navigating where the provisions of the code will apply.

		3. Reporting of the Design Code Testing process including how the outcomes have informed the final Design Code.
		4. Design Code Compliance Checklist.
		All subsequent Reserved Matters shall accord with the approved Village Design Code and Regulatory Plan, and shall be accompanied by a completed Compliance Checklist which demonstrates compliance with the Code.
		Reason: In order to achieve a coordinated approach to development and high quality design outcomes in accordance with policies GA1, DES1 and DES4 of the East Herts District Plan Policies AG1, AG5, AG6, LA1, BU1, BU2, BU3, BU4, H1 and D1 Gilston Area Neighbourhood Plan.
35	Management & Maintenance of Streets	Prior to or at the same time as the submission of each VMP, principles for the proposed roles and responsibilities for future management and maintenance of streets within the masterplan area, including a preliminary highway adoptions plan, shall be submitted to and approved in writing by the LPA in consultation with the Highway Authority. The streets shall thereafter be maintained in accordance with the approved details until such time as an agreement has been entered into under Section 38 of the Highways Act 1980 or a Community Ownership and Stewardship Body or Private Management and Maintenance Company has assumed responsibility.
		Reason: In order to achieve a coordinated approach to development and high quality design outcomes in accordance with policies GA1, DES1 and DES4 of the East Herts District Plan Policies AG1, AG5, AG6, LA1, BU1, BU2, BU3, BU4, H1 and D1 Gilston Area Neighbourhood Plan.

36	Village SuDs	Prior to the approval of each Village Masterplan, a Village Sustainable Drainage System scheme
	Strategy	for that village shall be submitted to and approved in writing by the District Planning Authority in consultation with Hertfordshire County Council as Lead Local Flood Authority. The scheme shall accord with the SuDS principles set out in the approved Strategic SuDS Strategy, the Strategic Landscape Masterplan, and the Strategic Design Code and shall include the following details:
		 A Scheme following the SuDS discharge hierarchy with consideration given to rainwater reuse systems as a first step on the hierarchy prior to going to infiltration prior to going by gravity to a surface watercourse. A detailed ground investigation report for areas where infiltration drainage is favourable, for either full infiltration or part infiltration design. Infiltration testing will be to BRE 365 standard (or equivalent) and undertaken at the location and depth of proposed SuDS features. The investigation will include evidence of seasonally high groundwater levels to be undertaken for an agreed period to show that there is at least 1m between the base of any proposed infiltration feature and seasonally high groundwater level. A full scope of the groundwater assessment of monitoring locations and timescales to be agreed with the LPA Where infiltration is not favourable, each village will be split into appropriate sub catchments and appropriate locations where surface water discharge can outfall to a watercourse shall be confirmed. Each SuDS sub catchment shall be able to be delivered in full alongside the appropriate development phase it falls within and shown on a phasing drawing and plan. Pre-development greenfield runoff rates and volumes will be confirmed for each sub catchment and all post-development scenarios be limited to the equivalent 100% AEP (1 in 1 year), 3.33% AEP (1 in 30 year) and 1% AEP (1 in 100 year) for the corresponding critical storm durations. Full, detailed drainage modelling for any village SuDS network (and specifically village 1 access
		road) to demonstrate how the system operates during up to and including the 100% AEP,

- 3.33% AEP including an allowance for climate change and the 1%AEP rainfall event including an allowance for climate change ensuring the agreed discharge rates for that sub catchment are not exceeded for the critical storm durations if infiltration is not feasible. Half drain down times for all infiltration storage features should be included. Urban creep will be included within any assumptions of impermeable area. Any sports pitches shall be included within the drainage network.
- Full detailed engineering drawings of any SuDS, surface water storage or conveyance feature
 including cross and long sections, location, size, volume, depth and any inlet and outlet
 features. This should be supported by a clearly labelled drainage layout plan showing any
 SuDS storage and conveyance networks. Total storage volumes will be provided within each
 sub-catchment.
- The usage of above ground and other surface water storage and conveyance features with a priority focused on rainwater reuse, interception and source control. Any above ground management of surface water (extent and depth) not in a drainage feature will be clearly shown on a drawing along with appropriate mitigation measures and flood resistance and resilience to vulnerable parts of the development included.
- Provision of appropriate water quality assessment including specific requirements for sensitive discharge locations such as ecological designations, groundwater source protections zones, surface drinking water protection zones or areas previously used for landfill. Specific water quality assessments may be required for runoff from main roads.
- The use of flood resistance and resilience measures included in the design. A minimum of 300mm must be provided between the design flood level and the finished floor level. A minimum of 150mm is recommended above external ground levels that are sloping away from vulnerable areas such as doorways.
- Integration of SuDS to enhance any proposed amenity space.
- Provision of biodiversity enhancement within SuDS provision.

		Compliance with the agreed SuDS Design Code. Details of averaged and a route a including those for an average which averaged to 1% AED rainfall.
		 Details of exceedance routes, including those for an event which exceeds to 1% AEP rainfall event including climate change event and how impacts to vulnerable parts of the development will be minimised.
		 A management and maintenance plan including maintenance and operational activities Confirmation of how the measures proposed will integrate appropriately and cumulatively with any wider SuDS infrastructure already approved and/or implemented. In addition to a Construction Environmental Management Plan there will be a SuDS implementation strategy, to ensure that flood risk is not increased on this site and elsewhere and the function of any SuDS is not compromised by building activity.
		All Reserved Matters Applications within the relevant village shall be in accordance with the details thus approved
		Reason: To ensure the development appropriately addresses climate change and the risk of flooding, to improve and protect water quality and to protect natural habitats and the amenity of residents and to comply with the requirements of Policy GA1 V (y) of the adopted East Herts District Plan 2018 and Policy LA1 of the Gilston Area Neighbourhood Plan
37	Village Landscape & Visual Appraisal	VMP to be submitted pursuant to condition 30 shall be supported by a landscape and visual appraisal compliance statement to demonstrate that the proposals contained in the relevant village masterplan will not give rise to any new or materially different significant effects in comparison with that reported in the Environmental Statement
		Reason in accordance with Policy DES2, DES3 and DES4 of the East Herts District Plan (2018) and Policy AG3 and AG5 of the Gilston Area Neighbourhood Plan.

38	Village Ecology Strategy	Prior to or at the same time as the submission of each VMP a Village Ecology Strategy for that village informed by the Gilston Park Estate Biodiversity Strategy (May 2019) and the Gilston Park Estate Outline Ecological Management Plan (November 2020), and up to date ecology surveys (only required where necessary and appropriate having regard to CIEEM guidance 'Advice note on the lifespan of ecological reports and surveys' April 2019), and cognisant of the approved Strategic Landscape Ecology Strategy, shall be submitted to and approved in writing by the LPA and shall include the following:
		 Measures to protect and enhance retained assets (noting commitments secured at the outline application stage);
		 Identify opportunities to create new biodiversity assets and links to existing off site ecological networks;
		 Demonstration of how the above measures contribute to any net gain in the context of the minimum 10% target for the overall Gilston Park Estate site based on an up to date Biodiversity Net Gain metric or alternative methodology as agreed by the LPA; Framework management and maintenance strategy
		Reason: To ensure that the development maintains, enhances and contributes appropriately to the local and wider ecological network in accordance with Policy NE2 of the East Herts District Plan and Policies AG1 of the Gilston Area Neighbourhood Plan.
39	Village Energy & Sustainability Strategy	Prior to or at the same time as the submission of each VMP, a Village Energy and Sustainability Strategy for that village shall be submitted to and approved in writing by the LPA. The strategy shall confirm the measures to be implemented to minimise climate impacts arising from development in that village in accordance with the Sustainable Development principles in the Development Specification hereby approved. The approved measures shall thereafter inform each Reserved Matters submission within the relevant Village.

		Reason: In order that the development appropriately mitigates and adapts to the impact of climate change, minimises the impact of pollution and reduces pressure on natural resources in accordance with policies CC2, CC3 and DES4 of the East Herts District Plan and Policy BU1, BU2 of the Gilston Area Neighbourhood Plan.
40	Parking Strategy for all vehicle modes	Prior to or at the same time as the submission of each VMP, a parking strategy of all vehicle modes and land uses within the relevant village shall be submitted to and approved in writing by the LPA. The parking strategy shall support walkable neighbourhoods and include the following where relevant:
		 Parking ratios, including allocated and unallocated spaces Electric vehicle parking Options for off-plot solutions Zero parking/car-free zones Cycle parking ratios and locations Indicative locations for car club parking Mobility impaired spaces Motorcycle parking ratios and locations
		Reserved matters applications shall thereafter demonstrate how they have been informed by the approved strategy
		Reason In accordance with Policy BU1, BU2, BU3, BU4 and TRA1 of the Gilston Area Neighbourhood Plan .
41	Village 5 sports facilities	The Village 5 Masterplan shall be supported by details which confirm the location and intended end users(community/school/both) of the following sports facilities:
		1 x adult sized and floodlit artificial grass surface football pitches

- 1 x adult sized and floodlit artificial hockey pitch
- 1 x artificial cricket wicket
- Leisure Centre (minimum facilities as per agreed Leisure Centre Feasibility Study).
- Gym/Health Club including 60 fitness stations minimum
- Community sized sports hall

The details submitted shall demonstrate that the locations identified have sufficient capacity to accommodate the facilities and any required supporting/ancillary facilities to Sport England and National Governing Body guidance, and would appropriately complement and not compromise the wider functions of the Gilston Area green infrastructure and open space network.

The approved details shall inform the Reserved Matters applications that follow.

Reason: To ensure that the development makes appropriate provision for sports to support the health and wellbeing of the growing community at Gilston in accordance with policies GA1, CFLR1, CFLR7 and CFLR10 and Policies C1 and LA1 of the Gilston Area Neighbourhood Plan

STAGE 5: RESERVED MATTERS REQUIREMENTS AND COMPLIANCE CONDITIONS

42	Energy &	The plans and particulars for each reserved matters application shall include an Energy and
	Sustainability	Sustainability Statement that demonstrates how that part of the development achieves the
	Statement	requirements set out in the relevant Strategic Landscape or Village Energy & Sustainability
		Strategy.
		The development shall thereafter be implemented in accordance with the details approved.
		Reason: In order that the development appropriately mitigates and adapts to the impact of
		climate change, minimises the impact of pollution and reduces pressure on natural resources in

		accordance with policies CC2, CC3 and DES4 of the East Herts District Plan Policy AG1 and BU1 of the Gilston Area Neighbourhood Plan .
43	Transport, Travel & Access	The plans and particulars to be submitted as reserved matters under condition 4 shall include details of the following, as appropriate:
		 Detailed street layouts, footways and cycleways Proposed adoption plan
		 Foul and surface drainage provision (where relevant)
		 Details of cycle parking provision including design, quantum and siting
		 Details of how any communal amenities for cyclists (if relevant to the proposal) are to be designed in (e.g. showers/lockers)
		Development shall thereafter be carried out in accordance with the approved details.
		Reason: in accordance with Policies DES4 of the East Herts District Plan and Policy BU4 of the Gilston Area Neighbourhood Plan.
44	Buffers to	No development shall commence adjacent to an existing waterway alongside the main river
	Existing	watercourses or an ordinary watercourse waterway until such time as a scheme, for that specific
	Waterways	waterway, for the provision and management of 20 metre wide buffers to existing waterways
		alongside the main river watercourses and 10m buffers to an ordinary watercourse (unless it is
		demonstrated that development is sited outside the 1 in 100 year 70% climate change allowance
		flood envelope) has been submitted to and approved in writing by the LPA. The scheme shall include for that relevant waterway:
		Plans showing the extent and layout of the buffer zone
		 Design principles for any proposed planting scheme (for example, native species)

		 Design principles demonstrating how the buffer zone will be protected during development and managed over the longer term including adequate financial provision and named body responsible for management plus production of a detailed management plan Design principles of any proposed footpaths, fencing, furniture, lighting etc. This should aim to maximise undisturbed habitat with native vegetation and minimise any footpaths or furniture within the 8 metres zone closest to the top of the riverbank. Where footpaths or furniture are required, these will be kept as natural as possible, making use of natural materials and information provide on how impermeable areas will be drained. Design principles of how access to watercourses will be maintained for flood management inspection and maintenance by both vehicular (large, heavy vehicles) and pedestrian access Details of any SuDS, natural flood management or flood storage measures to reduce the risk of flooding. All Reserved Matters Applications relating to these buffers shall be in accordance with the approved details
		Reason: This approach is supported by paragraphs 174 and 180 of the NPPF which recognise that the planning system should conserve and enhance the environment by minimising impacts on and providing net gains in biodiversity and policy WAT3 of the East Herts District Plan (2018).
45	Existing Trees, Hedgerows & Woodlands	With each Reserved Matters application for individual parts of the development, a tree survey and impact assessment (updated from that undertaken to date as considered necessary and appropriate), tree protection plan and arboricultural method statement for that part of the development shall be submitted to and approved in writing by the LPA. The development shall thereafter be carried out in accordance with the approved details.

		Reason: in accordance with Policies NE3 of the East Herts District Plan and Policy AG2 and LA1, of the Gilston Area Neighbourhood Plan.
46	Landscape Schemes	With each Reserved Matters application concerning landscaping for part of the development, a composite hard and soft landscaping scheme for that part shall be submitted to and approved in writing by the LPA. The landscaping scheme shall be prepared in accordance with the relevant Design Code and include the following (where relevant): Details of the extent and type of new planting Details of maintenance regimes Details of any new habitat created on site Details of treatment of site boundaries and/or buffers around waterbodies and woodlands, hedgerows and trees Details of brown and green roofs
		 Planting Plans that show the location of proposed plant species Written specifications (including cultivation and other operations associated with the establishment of grassland and planting) Schedules of plants, noting species, planting sizes and proposed numbers / densities Implementation timetables Landscape Management Plan Surface treatment of paths and access routes Fencing/gates to culvert openings Details of proposed lighting The development of the part shall thereafter be carried out in accordance with the approved details.

		Reason: In accordance with Policies DES3 and NE3 of the East Herts District Plan and Policy LA1 of the Gilston Area Neighbourhood Plan.
47	Neighbourhood Open Space and Play	Reserved matters applications which include residential development shall demonstrate how provision of neighbourhoods greens and neighbourhood play spaces has been addressed in accordance with the Development Specification (paragraph 3.7.4).
		Reason: in accordance with Policy CFLR1 of the East Herts District Plan Policy LA1 of the Gilston Area Neighbourhood Plan.
48	Heritage Design Principles	All reserved matters applications for development within Sensitive Development Areas (as identified on Parameter Plan 2) shall take into account the relevant Sensitive Development Area principles in the Development Specification (paragraphs 4.3.9 to 4.3.12)
		Reason: in accordance with Policies GA1, DES2 and HA1 of the East Herts District Plan and Policy AG1, AG6 and H1 of the Gilston Area Neighbourhood Plan.
49	Operational Fixed Plant Noise	Noise resulting from the operation of fixed plant shall not exceed 5dBA below the background level (or 10dBA below if there is a tonal quality) when measured or calculated according to BS4142:2014 + A1:2019, at a point one metre external to the nearest noise sensitive building
		Reason: In order to ensure an adequate level of amenity for residents of the new dwellings in accordance with policy EQ2 of the adopted East Herts District Plan 2018.
50	Village Noise Management Scheme	Prior to or at the same time as the submission of the Village 1 and Village 6 Masterplan (and prior to the submission of any subsequent relevant reserved matters applications for residential development within the relevant village), a Village Noise Management Scheme shall be submitted to and approved in writing by the LPA, which demonstrates the noise control measures that the relevant reserved matters applications will need to incorporate in the respective part of the development, including through the design, layout and materials, in order for the relevant reserved matters area to achieve compliance with the noise levels set out in the Development

	Specification (section 3.14) and British Standards BS8233 or prevailing best practice guidance as agreed with the LPA. The plans and particulars for each reserved matters application shall include an Noise Statement that demonstrates how that part of the development achieves the requirements set out in the relevant approved Village Noise Management Scheme. The development shall thereafter be carried out and maintained in accordance with the details approved. Reason: In order to ensure an adequate level of amenity for residents of the new dwellings in accordance with policy EQ2 of the adopted East Herts District Plan 2018.
51	Prior to the commencement of any construction works (save for Enabling Works, but excluding site clearance, demolition and tree/vegetation removal) for each part of the development, a Construction Landscape and Ecological Management Plan (CLEMP) for that part of the development shall be submitted to and approved in writing by the Local Planning Authority. CLEMPs shall include the following details as a minimum: a) Measures taken to minimise impacts on the landscape and landscape character during construction b) Description and evaluation of features to be managed, including bat commuting routes and other ecologically sensitive areas or species, trees, hedgerows, woodlands, watercourses and other existing environmental features on-site and off-site c) Measures to be taken to protect and manage the features identified above during the construction process, including pre-construction checks, construction methodology, and watching briefs/Ecological Clerk of Works d) Details of the body or organisation responsible for implementation of the CLEMP and timetables for implementation e) Details of ongoing monitoring (including timetables) and details of how and when any remedial action will be identified, agreed and implemented

		f) Demonstrate how the CLEMP for that phase has been cognisant of the CLEMP(s) for prior phases. Thereafter, the construction of the development shall only be carried out in accordance with the approved CLEMP, or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority. Reason: To secure the protection of existing landscape features and habitats of ecological interest and protected species in accordance with Policies NE1 and NE3 of the East Herts District Plan (2018).
52	OLEMP	Prior to or at the same time as the submission of each Reserved Matters application, an Operational Landscape and Ecology Management Plan (OLEMP) for that part of the site shall be submitted to and approved in writing by the District Planning Authority. The OLEMP shall be cognisant of the Strategic Landscape Ecology Strategy, the relevant Village Ecology Strategy and shall include full details of the following (where relevant):
		 (i) Confirmation of the landscape/habitat resources for the development parcel i.e. - Description/quantity of retained habitats and landscape features and their purpose - Description/quantity of created habitats and landscape features (inc. those for protected species etc) and their purpose - Confirmation of any net biodiversity units for area and linear habitats achieved on that part of the site, and contribution towards any overall net gain in the context of the minimum 10% target for the overall Gilston Park Estate site, based on an up to date Biodiversity Net Gain metric or alternative methodology as agreed by the LPA
		(ii) Management Measures for resources - Works to retained trees as identified in updated Arboriculture surveys and impact assessments

		 Management of vegetation to enable 'curated views' or that frame vistas and key views of local landmarks etc. New planting areas – establishment and aftercare Short term 0-5 years - Five-year establishment maintenance period (e.g temporary fencing to protect planting (esp. from grazing cattle) during establishment period / replacement of failures etc.) Medium term 5-10 years – (e.g woodland thinning etc) Long term 10 years +
		(iii) Access arrangements to enable management and maintenance.
		(iv) On site interpretation measures to inform public about the form and function of habitat and landscape areas.
		The measures in the OLEMP shall be designed and fully implemented in accordance with the details thus approved.
		Reason: To ensure that the development maintains, enhances and contributes appropriately to the local and wider ecological network in accordance with Policy NE2 of the East Herts District Plan.
53	Operational Landscape Environment	Five years following completion of each Reserved Matters approval (plus every five years thereafter for a period of 30 years) a OLEMP monitoring report shall be submitted to LPA for approval. The report shall confirm the effectiveness of the OLEMP and shall be carried out by a
	Management Plan Verification	Chartered Member of the Landscape Institute (CMLI) and/or other suitably qualified professional. As a minimum the report shall include a suite of quantitative and qualitative indicators using methods such as annual site walkovers, surveys and fixed-point photography, to monitor the implementation and effectiveness of mitigation/management measures. The report shall include
		any remediation works required in order to address where measures may not be functioning and/or meeting Biodiversity Net Gain targets expected. The details of all survey findings shall be

		shared with Herts Ecological Record database and any remediation works identified shall thereafter be implemented in accordance with the approved details.
		Reason: To ensure that the development maintains, enhances and contributes appropriately to the local and wider ecological network in accordance with Policy NE2 of the East Herts District Plan.
54	Reserved Matters Application SuDS Details	Prior to or in conjunction with the submission of each Reserved Matters application for individual parts of the development, details and construction drawings of the sustainable drainage components, flow control mechanisms and a construction method statement for that part shall be submitted to and approved in writing by the District Planning Authority in consultation with Hertfordshire County Council as Lead Local Flood Authority. The details submitted must accord with the relevant Village Sustainable Drainage System Strategy and Design Code, the scheme shall then be constructed in accordance with the approved drawings, method statement and modelling calculations prior to the first use of that part of the development. No alteration to the approved drainage scheme shall occur without prior written approval of the District Planning Authority. The details to be submitted shall include the following: • Detailed design of all drainage following the SuDS discharge hierarchy with rainwater reuse
		 systems as a first step on the hierarchy prior to going to infiltration prior to going by gravity to a surface watercourse. Specific detailed evidence of areas where infiltration drainage is favourable, for either full infiltration or part infiltration design. Infiltration testing will be to BRE 365 standard (or equivalent) and undertaken and the location and depth of proposed SuDS features. With additional groundwater monitoring data to show that there is at least 1m between the base of any proposed infiltration feature and seasonally high groundwater level. Where infiltration is not favourable, sub catchments and appropriate locations where surface water discharge can outfall to a watercourse shall be confirmed (in line with the strategic and

- village masterplan). Each SuDS sub catchment (or part thereof) shall be able to be delivered in full alongside the appropriate part of the development it falls within and shown on a phasing drawing and plan.
- Pre-development greenfield runoff rates and volumes will be confirmed for each sub catchment and all post-development scenarios be limited to the equivalent 100% AEP (1 in 1 year), 3.33% AEP (1 in 30 Year) and 1% AEP (1 in 100 year).
- Full, detailed drainage modelling for the SuDS drainage network to demonstrate how the system operates during up to and including the 100% AEP, 3.33% AEP including an allowance for climate change and the 1%AEP critical storm events including an allowance for climate change ensuring discharge rates do not exceed the agreed greenfield discharge rates for the corresponding storm durations. Half drain down times for all infiltration storage features should be included. Urban creep will be included within any assumptions of impermeable area. Any sports pitches shall be included within the drainage network.
- Full detailed engineering drawings of any SuDS, surface water storage or conveyance feature including cross and long sections, location, size, volume, depth and any inlet and outlet features. This should be supported by a clearly labelled drainage layout drawing showing any SuDS storage and conveyance networks. The drawings should show any 'node numbers' that have been referred to in drainage modelling supporting calculations and it also show invert and cover levels, finished floor levels and proposed external ground levels. Total storage volumes will be provided within each sub-catchment.
- The usage of above ground and other surface water storage and conveyance features with a priority focused on rainwater reuse, interception and source control. Any above ground management of surface water (extent and depth) not in a drainage feature will be clearly shown on a drawing along with appropriate mitigation measures and flood resistance and resilience to vulnerable parts of the development included.

- Provision of appropriate water quality assessment including specific requirements for sensitive discharge locations such as ecological designations, groundwater source protections zones, surface drinking water protection zones or areas previously used for landfill. Specific water quality assessments may be required for runoff from main roads.
- The use of flood resistance and resilience measures included in the design. A minimum of 300mm must be provided between the design flood event and the finished floor level. A minimum of 150mm is recommended above external ground levels that are sloping away from vulnerable areas such as doorways.
- Integration of SuDS to enhance any proposed amenity space.
- Provision of biodiversity enhancement within SuDS provision.
- Compliance with the agreed SuDS principles within the approved Design Code(s)
- Phasing plan for the provision of SuDS and drainage infrastructure within each part of the development to show that any strategic SuDS features are in place and operational prior to the occupation/first use of the relevant part of the development.
- Details of final exceedance routes, including those for an event which exceeds to 1% AEP rainfall event including climate change event or blockage of the drainage network.
- A management and maintenance plan including maintenance and operational activities.
- Confirmation of how the measures proposed will integrate appropriately and cumulatively with any wider SuDS infrastructure already approved and/or implemented. In addition to a Construction Environmental Management Plan there will be a SuDS implementation strategy to ensure that flood risk is not increased on this site and elsewhere and the function of any SuDS is not compromised by building activity.
- The development shall be fully implemented and subsequently maintained, in accordance with the timing / phasing arrangements embodied within the development, or within any other period as may subsequently be agreed, in writing, by the District Planning authority.

		The development shall not be carried out otherwise than in accordance with the details thus approved
		Reason: To ensure the development appropriately addresses climate change and the risk of surface water flooding, to improve and protect water quality and to protect natural habitats and the amenity of residents and ensure the future maintenance of the Sustainable Drainage System in perpetuity. In accordance with Gilston Area Neighbourhood Plan Policy LA1.
55	SuDS Verification Report	Prior to the first use of each part of the development a final Completion and Verification Report to a specification agreed and defined by the LPA, signed off by an appropriate, qualified person or body which demonstrates that the sustainable urban drainage measures have been implemented as per the details approved under Condition55; for that part of the development shall be submitted to and approved in writing by the District Planning Authority in consultation with Hertfordshire County Council as Lead Local Flood Authority. It shall include the following:
		 Provision of a Completion and Verification Report appended with substantiating evidence demonstrating the approved construction details and specifications have been implemented in accordance with the surface water drainage scheme. The verification shall include photographs of excavations and soil profiles/horizons, installation of any surface water structure, during construction and final make up, and the control mechanism. Provision of a complete set of as built drawings for site drainage. Post-construction surveys including a CCTV survey for any underground features and piped networks. A management and maintenance plan for the SuDS features and drainage network. Final arrangements for adoption and any other measures to secure the operation of the scheme throughout its lifetime

		Reason: To prevent the increased risk of surface water flooding, to improve and protect water quality, protect natural habitats and the amenity of residents, ensure the future maintenance of the Sustainable Urban Drainage System in perpetuity and comply with the requirements of Policy GA1 V (y) of the adopted East Herts District Plan 2018.
56	Contamination Investigation & Remediation	No part of the development hereby approved shall commence until a remediation strategy to deal with the risks associated with contamination of that part of the site, has been submitted to, and approved in writing by, the District Planning authority. This strategy will include the following components:
		1. A 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 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 District Planning authority.
		The scheme shall thereafter 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

		170 and 178 of the NPPF and Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and policy AG7 of the Gilston Area Neighbourhood Plan.
57	Verification Report	Prior to each part 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 for that part of the development shall be submitted to, and approved in writing, by the District 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, land 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 paragraph 170 and 178 of the NPPF and Policies EQ1 and WAT3 of the East Herts District Plan (2018).
58	Contamination Monitoring & Maintenance Plan	No part of the development hereby permitted shall commence until a monitoring and maintenance plan in respect of contamination, including a timetable of monitoring and submission of reports to the District Planning authority for that part of the development has been submitted to and approved in writing by, the District Planning authority. The 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 LPA in accordance with the details approved. The monitoring and maintenance plan shall thereafter be fully implemented and complied with in accordance with the approved details.
		Reason: To ensure that the site does not pose any further risk to human health, land, or the water environment by managing any ongoing contamination issues and completing all necessary long-term remediation measures. This is in line with paragraph 170 and 178 of the NPPF and Policies EQ1 and WAT3 of the East Herts District Plan (2018).

59	Unsuspected Contamination	If, during development, contamination not previously identified is found to be present at part of the site then no further development shall be carried out on that part until a remediation strategy detailing how this contamination will be dealt with has been submitted to, and approved in writing by, the District Planning authority. The remediation strategy shall thereafter be implemented in accordance with the approved details.
		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 land or water pollution from previously unidentified contamination sources at the development site. No site investigation can fully characterise a site. This is in line with paragraph 170 and 178 of the NPPF and Policies EQ1 and WAT3 of the East Herts District Plan (2018).
60	Infiltration Drainage	No drainage systems for the infiltration of surface water to the ground are permitted other than where a scheme for infiltration drainage has first been submitted to and approved in writing by the LPA. Any proposals for such infiltration drainage that are submitted for approval must be supported by an assessment of the risks to controlled waters. The development shall thereafter 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.
61	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 other than where a scheme has first been submitted to and approved in writing by the LPA. The scheme shall include an assessment of impacts on noise and vibration as well as details of the measures to be taken to mitigate any adverse effects. The groundworks shall thereafter 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 paragraph 170 and 178 of the NPPF and Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and does not have an adverse impact on the local amenity in accordance with policy EQ2 of the East Herts District Plan.
62	Borehole Investigations	Prior to the installation of any boreholes at the site for the investigation of soils, groundwater or geotechnical purposes, a scheme for managing borehole investigations shall be submitted to and approved in writing by the LPA. 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 thereafter be implemented in complete accordance with the approved details
		REASON: To ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in line with paragraph 170 and 178 of the NPPF and Policies EQ2 and WAT3 'Water of the East Herts District Plan (2018).
63	WFD Mitigation & Enhancement Strategy	No development shall take place until a water framework directive mitigation and enhancement strategy has been submitted to and approved in writing by the District Planning Authority. The strategy shall include the following elements:
		 Evidence that the final development would cause no deterioration of waterbody status of the River Stort and Stort Navigation and associated waterbodies, not prevent future improvement to the waterbody, not contribute to cumulative deterioration, using up to date Water Framework Directive classification data Long term objectives, management responsibilities and maintenance schedules Details of any proposed enhancements to watercourses and their corridors to support improving overall water framework directive status

		Details of suitable mitigation and/or compensation as required
		The strategy shall thereafter be carried out in accordance with the approved details
		Reason: To ensure compliance with the Water Framework Directive as implemented in England and the protection of wildlife and supporting habitat and to secure opportunities for enhancing the site's nature conservation value. This approach is supported by paragraphs 170 and 175 of the NPPF and Policy WAT3 of the East Herts District Plan (2018).
64	Details of river crossings and underpasses	No development shall commence in Villages 2, 4 or 6 until such time as full details of any vehicular or pedestrian river crossings or underpasses or other works (e.g. enhancement proposals) on main rivers within that village, informed by a detailed Water Framework Directive assessment have been submitted to, and approved in writing by, the District Planning authority. This should include:
		• Detailed plans, long-sections and cross-sections of the works and its relationship to the main river channel and corridor;
		• A minimum of an 8 metre unobstructed buffer zone from the top of the bank surrounding the watercourse or landward toe of any defence or culvert, is maintained around main rivers for access and biodiversity;
		• Any reduction must demonstrate how any impacts on flood risk, water quality or biodiversity are to be mitigated or compensated for, taking into account the Water Framework Directive and agreed in writing with the District Planning Authority.
		The development shall thereafter be fully implemented and subsequently maintained, in accordance with the details approved or as may subsequently be agreed, in writing, by the District Planning authority.

		Reason: Parameter Plan 4 details the proposed strategic access points including vehicular and public rights of way. This identifies the locations at which the primary vehicular and pedestrian corridors cross watercourses. These crossings/underpasses are also highlighted within the preliminary WFD assessment. This condition is necessary to ensure that there are no detrimental impacts to water quality, biodiversity, the structural integrity of main river watercourses and to reduce the risk of flooding to the proposed development and future users. This is in accordance with Policies WAT1 'Flood Risk Management' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018)
65	Delivery and Servicing Management Plan	Prior to occupation of any non-residential floorspace, a Delivery and Servicing Management Plan (DSMP) for that floorspace shall be submitted to and approved in writing by the District Planning Authority. Thereafter, deliveries to and servicing of that floorspace shall be in accordance with the approved DSMP unless otherwise agreed in writing by the District Planning authority. Reason: In order to safeguard residential amenity, and pedestrian, cyclist and traffic safety, and to secure compliance with Policy TRA2 of the East Herts District Plan (2018) and AG8 of the Gilston Area Neighbourhood Plan 2021.
66	Village 6 Curled Hook Moss	Prior to the commencement of development in Village 6 an Ecological Management Plan and Surface Water Drainage Strategy shall be submitted to and approved in writing with the District Planning Authority to: • Carry out a ground investigation in the vicinity of where Curled Hook Moss was observed along Stone Basin Springs, including water level and quality monitoring, to determine the hydrogeological conditions that provide base-rich water that is required for this moss species. • Carry out a hydrological risk assessment to determine the risk to this moss species from development of Village 6 and any changes in the prevailing hydrogeological regime.

 Where required following the risk assessment, ensure that the Surface Water Drainage Strategy for Village 6 includes appropriate mitigation measures to mitigate the risk of adverse impacts to the Curled Hook Moss where it is found along Stone Basin Springs. In keeping with the Surface Water Drainage Strategy, ensure that any SuDS proposed have a suitable long term management and maintenance regime.
Reason: in accordance with Policies WAT1 'Flood Risk Management' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018)

Informatives

- 1. 'Enabling works' are defined as [to be added]
- 2. 'Local Planning Authority' means East Herts Council.
- 3. 'Highway Authority' means Hertfordshire County Council. The Local Planning Authority will consult with the Highway Authority when providing agreement in writing on applications to discharge relevant conditions.
- 4. Section 106 (S106) Agreement:

This planning permission is also subject to a Planning Obligation under S106 of the Town and Country Planning Act 1990 (as amended).

5. Other Consents:

The permission does not convey any consent which may be required under any legislation other than the Town and Country Planning Acts. Any permission required under the Highways Act, Building Regulations or under any other form

of law, must be obtained from the relevant authority or body e.g. Fire Officer, Health and Safety Executive, Environment Agency etc. Neither does this permission negate or override any private covenants which may affect the land.

6. Highways Agreements:

The applicant is advised that in order to implement this permission, it will be necessary for the developer of the site to enter into agreements with Hertfordshire County Council as Highway Authority under Section 278 and Section 38 of the Highways Act 1980 to ensure satisfactory completion of the site access and road improvements. The construction must be undertaken to the Highway Authority's detailed design / specification and to their satisfaction. Construction must be undertaken by a contractor who is authorised to work in the public highway. Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and meet their requirements.

In addition, that the agreements under Section 38 of Highways Act for the highways authorities to adopt the newly constructed public highway (and any related features that are required for its operation) on its satisfactory completion include financial provision for future maintenance. Highways Development Management teams should be consulted on any drainage features that are proposed for adoption by Hertfordshire County Council. Any drainage features to be adopted shall be designed and built to accommodate the Highway Authorities adoption requirements and an appropriate commuted sum, based on the approved feature maintenance plan must be agreed.

7. Storage of Materials:

The applicant is advised that the storage of materials associated with the construction of this development should be provided within the site on land which is not public highway, and the use of such areas must not interfere with the public highway. If this is not possible, authorisation should be sought from the Highway Authority before construction works commence. Further information is available via the website: https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/business-licences/materials-on-the-highway.aspx

8. Obstruction of Public Highway Land:

It is an offence under section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in any way

to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant must contact the Highway Authority to obtain their permission and requirements before construction works commence. Further information is available via the website: https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements.aspx

9. Road Deposits:

It is an offence under section 148 of the Highways Act 1980 to deposit mud or other debris on the public highway, and section 149 of the same Act gives the Highway Authority powers to remove such material at the expense of the party responsible. Therefore, best practical means shall be taken at all times to ensure that all vehicles leaving the site during construction of the development are in a condition such as not to emit dust or deposit mud, slurry or other debris on the highway. Further information is available via the website: https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements.aspx

10. Stopping Up of Public Highway Land:

An application for a "stopping up" order to extinguish highway rights over the land will need to be made. In this respect, this initially needs to be made to Hertfordshire County Council via https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/changes-to-your-road/stopping-up-the-highway.aspx#

If this proposal is acceptable to the highway authority, then you would need to either make an application to the County Council, as highway authority, for a highway "stopping up" order under Section 116 of the Highways Act 1980 for the area of land in question.

Any such application together with a plan showing the area concerned should be sent to Legal Services, Hertfordshire County Council, County Hall, Pegs Lane, Hertford, SG13 8DE. The costs of making such an order would be in the region of £3,500 - £5,500 which includes the formal consultation and application to the Magistrates Court.

Alternatively, if any such request is in conjunction with the redevelopment of the property, then you may wish to apply for a "stopping up" Order pursuant to Section 247 of the Town and Country Planning Act 1990. All such applications

would need to be made to the Secretary of State's National Transport Casework Team (nationalcasework@dft.gov.uk, see also the DfT website); and

In the meantime, note that when an area of highway is "stopped up" then the surface of the land reverts back to the original owner of the subsoil of the land. This may or not be the applicant.

Details of the ownership of land may be available at the Land Registry, Leicester Office, Westbridge Place, Leicester, LE3 5DR. Their phone number is 0333 011 3500. Land Registry can also be contacted by e-mail on contact@uklandregister.co.uk

11. Highways Structures:

The applicant is advised that in connection with any proposals for highway structures it will be necessary for the developer of the site to contact the Hertfordshire County Council Bridge Asset Management Team in connection with the requirements of Department for Transport Standard CG 300: Technical Approval of Highway Structures. Further details can be obtained from the Highway Authority by telephoning 0300 123 4047 or by email: highway.structures@hertfordshire.gov.uk

12. PROW Obstruction:

The Public Right of Way should remain unobstructed by vehicles, machinery, materials, tools and any other aspects of the construction during works. The safety of the public using the route and any other routes to be used by construction traffic should be a paramount concern during works, safe passage past the site should be maintained at all times. The condition of the route should not deteriorate as a result of these works. Any adverse effects to the surface from traffic, machinery or materials (especially overspills of cement & concrete) should be made good by the applicant to the satisfaction of this Authority. All materials should be removed at the end of the construction and not left on the Highway or Highway verges.

If the above conditions cannot reasonably be achieved then a Temporary Traffic Regulation Order would be required to close the affected route and divert users for any periods necessary to allow works to proceed. A fee would be payable to Hertfordshire County Council for such an order. Further information on the rights of way network is available via the

website. Please contact Rights of Way, Hertfordshire County Council on 0300 123 4047 or by email on row@hertfordshire.gov.uk for further information in relation to the works that are required along the route including any permissions that may be needed to carry out the works.

https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/countryside-access/rights-of-way/rights-of-way.aspx#DynamicJumpMenuManager_1_Anchor_1

13. Land Contamination:

The applicant is advised that any unsuspected contamination that becomes evident during the development of the site shall be brought to the attention of the Local Planning Authority and appropriate mitigation measures agreed.

14. Thames Water Assets:

The proposed development is located within 15 metres of Thames Water's underground assets and as such, the development could cause the assets to fail if appropriate measures are not taken. Please read Thames Water's guide 'Working Near Our Assets' to ensure your workings are in line with the necessary processes you need to follow if you are considering working above or near their pipes or other structures which is available via https://www.thameswater.co.uk/developers/larger-scale-developments/sewers-and-wastewater/build-over-or-near-a-sewer.

Should you require further information contact Thames Water on email: developer.services@thameswater.co.uk or phone: 0800 009 3921 (Monday to Friday, 8am to 5pm). Write to: Thames Water Developer Services, Clearwater Court, Vastern Road, Reading, Berkshire RG1 8DB.

15. National Grid

National Grid's Overhead Lines are protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect the asset. Statutory electrical safety clearances must be maintained at all times. These distances are set out in EN 43 – 8 Technical Specification and 'Development near overhead lines' (July 2008)

Appendix III which is available via

https://www.nationalgrid.com/sites/default/files/documents/Development%20near%20overhead%20lines_0.pdf

Plant, machinery, equipment, buildings or scaffolding should not encroach within 5.3 metres of any of our high voltage conductors at the point where the conductors are under their maximum 'sag' or 'swing' conditions.

If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances.

Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or "pillars of support" of our towers.

16. Additional Regulatory Considerations:

Additional regulatory consideration may be required on some of specialist matters relevant to this permission as follows:

- I. Archaeological requirements: contact Hertfordshire County Council Historic Environment Team via email: historic.environment@hertfordshire.gov.uk and phone: 01992 555 021.
- II. Sewer protection requirements: the site has public sewers running across or close to it which may be affected by the proposed building works. It may be necessary to divert the sewer and water course and carry out other works to protect it and the proposed building works before any site works are commenced. Contact: Thames Water Development Planning, Asset Investment Unit, Maple Lodge, Denham Way, Rickmansworth, WD3 9SQ. Phone number: 01923 898 072.
- III.Ground water pollution risk: parts of the site are located within the groundwater protection zone of Sawbridgeworth Pumping Station. The construction works and operation of the proposed development should be in accordance with the relevant British Standards and Best Management Practices, thereby significantly reducing the pollution risk.

 Construction works may exacerbate any existing pollution. Please refer to CIRIA Publication C532 'Control of water pollution from construction guidance for consultants and contractors'.

- IV.Protected species including bats / reptiles / great crested newts: if found during development, works must stop immediately and professional ecological advice must be sought on how to proceed. A licence may be required from Natural England who can be contacted on email: enquiries@naturalengland.org.uk or phone: 0300 060 3900 / 01206 796 666.
- V. Nesting birds are protected under the Wildlife and Countryside Act 1981 and care should be taken in vegetation clearance works between 1st March and 30th September.

17. Land Drainage:

Land drainage procedures, rights and legal requirements taking account of Environment Agency and Lead Local Flood Authority (LLFA) requirements and advice. All works to ordinary watercourses, including widening of the channel to include additional storage will require ordinary watercourse consent from the LLFAs. It is the applicant's responsibility to check that they are complying with common law if the drainage scheme proposes to discharge into an off-site ditch/pipe. The applicant should seek consent where appropriate from other downstream riparian landowners. Any works proposed to be carried out that may affect the flow within an ordinary watercourse (including erection of flow control structures, any culverting of an ordinary watercourse or works taking place within and/ or over the culvert or within 3 metres of the top of bank of the ordinary watercourse) will also require the prior written consent from the LLFA under Section 23 of the Land Drainage Act 1991. This includes any permanent and or temporary works regardless of planning permission. The LLFAs have a duty to maintain an asset register and records of assets which have a significant impact on the risk of flooding. In order to capture proposed Sustainable Urban Drainage (SuDS) features which may form part of the future register, details of and location of the SuDS assets created or modified through the development should be provided in a GIS layer on completion of the development.

For further advice on what the LLFA expect to be contained within the FRA to support a planning application, please refer to the Developers Guide and Checklist on the surface water drainage webpage via:

https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/surface-water-drainage.aspx

This link also includes Hertfordshire County Council's policies on SuDS in Hertfordshire.

18. Surface Water Discharge to River Stort:

Any surface water discharge to the River Stort will require prior consent from the Canal & River Trust. Please contact Chris Lee from the Canal River Trust Utilities Team via Lee.Chris@canalrivertrust.org.uk.

19. Property Gazetteer Custodian Requirements:

The development will involve the numbering of properties and naming of new streets. The applicant MUST consult the Director of Finance and Support Services. Application for this purpose should be made to the Local Land and Property Gazetteer Custodian, East Herts Council, Wallfields, Hertford, SG13 8EQ. Phone number: 01279 655 261.

20. Bins:

Bins for apartment buildings should be ordered direct from the Council's contractor ten weeks in advance of first occupation. Bins for houses should be ordered direct from the Council's contractor two weeks in advance of first occupation.

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Application Ref: 3/19/1046/FUL

Mr Philip Murphy Quod Quod 8-14 Meard Street London W1F 0EQ

Town and Country Planning Act 1990 (as amended)

DECISION NOTICE

Alterations to the existing Fifth Avenue road/rail bridge, and creation of new bridges to support the widened highway to west of the existing structure to create the Central Stort Crossing, including embankment works, pedestrian and cycle facilities, a pedestrian and cycle bridge over Eastwick Road, lighting and landscaping works and other associated works

Land Adj To Fifth Avenue Existing Eastwick Crossing Hertfordshire/Harlow

In pursuance of their powers under the above mentioned Act and the Orders and Regulations for the time being in force thereunder, the Council hereby

Grant Planning Permission subject to Conditions

For the development proposed in your application received 20th May 2019 and registered on 12th June 2019 and shown on the approved plans.

Conditions:

Consistent implementation of permissions across Local Planning Authority boundaries: 1 No development shall commence until planning permissions are granted for the development as a whole, as detailed in planning applications reference 3/19/1046/FUL (East Herts District) and HW/CRB/19/00220 (Harlow District).

Reason: To ensure, for the development to perform its function, sections of the new roads and bridges must be constructed as a whole across local authority boundaries, that the relevant phases of the development are capable of being built on both sides of the local authority boundary.

2. Approved Drawings and Documents: Subject to any contrary details, drawings and timetables approved under any condition, the development shall be carried out in accordance with the approved drawings listed in the Decision Notice.

Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance.

Time Limit for Commencement:

The development hereby approved shall be begun within a period of three years commencing on the date of this notice.

Reason: To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 and to ensure the timely implementation of the development.

4. Linking Implementation to the Outline:

The development hereby permitted shall not be commenced (save for Enabling Works) unless and until planning permission has been granted for the development pursuant to planning application no. 3/19/1045/OUT (Gilston Area Villages 1-6).

Reason: The harm to the Green Belt and other harms arising from the development are outweighed by the significant public benefit arising from its contribution towards a shift towards active and sustainable travel associated with strategic growth in the Gilston Area and the wider Harlow and Gilston Garden Town in accordance with Policies GA1 'The Gilston Area' and GA2 'The River Stort Crossings' of the East Herts District Plan (2018) and Policies HGT1 'Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town' and SIR1 'Infrastructure Requirements' of the Harlow Local Development Plan (2020).

5. Submission and approval of phasing plans and documents:

Prior to the commencement of the development hereby approved (save for Enabling Works), a Phasing Plan shall be submitted to and approved in writing by the Local Planning Authority. The Phasing Plan shall set out the details of the proposed sequence of development and the extent and location of individual development phases or sub-phases.

Once approved, the development shall be implemented in accordance with the approved Phasing Plan (or any subsequent revision thereof approved in writing by the Local Planning Authority).

Reason: To ensure proper management of the phasing of the development, compliance with essential pre-commencement conditions on the development and the provision of relevant mitigation at appropriate times throughout the development, in a way that does not prevent or unnecessarily hinder practical implementation, and in the interests of the amenity of occupiers and users of the site and in accordance with the requirements of Policies DEL1 'Infrastructure and Service Delivery' and DEL4 'Monitoring of the Gilston Area' of the East Herts District Plan (2018), and Policy IN2 'Impact of Development on the Highways Network Including Access and Servicing' of the Harlow Local Development Plan (2020).

6. Energy & Sustainability Strategy:

Prior to the commencement of any construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) an Energy and Sustainability Strategy for that phase or sub-phase shall be submitted to and approved in writing by the by the Local Planning Authority.

The Strategy will include details of the measures to be implemented to minimise climate impacts arising from the development taking account of all levels of the energy hierarchy and consideration of the East Herts Sustainability Supplementary Planning Document and Harlow and Gilston Garden Town Sustainability Guidance.

The Energy and Sustainability Strategy will specifically address the following:

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- a) How green infrastructure, urban greening and water management have been integrated;
- b) Reducing energy and carbon embodied in construction materials through re-use and recycling of existing materials where possible, and the use of sustainable materials and local sourcing where possible;
- c) Considering high quality innovative design, new technologies and construction techniques, including zero or low carbon energy/energy generation and water efficient, design and sustainable construction methods;
- d) Demonstration that energy and carbon reduction and sustainability has been considered in all stages of the commissioning, procurement, transportation and construction processes.

The phase or sub-phase of the development shall thereafter be implemented in accordance with the relevant approved energy and sustainability strategy.

Reason: In order that the development appropriately mitigates and adapts to the impact of climate change, minimises the impact of pollution and reduces pressure on natural resources in accordance with Policy CC2 'Climate Change Mitigation' of the East Herts District Plan (2018) and Policy PL3 'Sustainable Design, Construction and Energy Usage' of the Harlow Local Development Plan (2020).

7. Materials:

Prior to the commencement of any above ground construction works (save for Enabling Works) on any phase or sub-phase of the site (as defined in plans and documents approved pursuant to Condition 5), the external materials of construction for the structures on that phase or sub-phase shall submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out only using the approved materials.

Reason: In the interests of amenity and good design in accordance with Policy DES4 'Design of Development' of the East Herts District Plan (2018) and Policies PL1 'Design Principles for Development' and 2 'Amenity Principles for Development' of the Harlow Local Development Plan (2020).

Levels:

Prior to the commencement of construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) detailed plans showing the existing and proposed ground levels for that phase or sub-phase of the site relative to adjoining land, shall be submitted to, and approved in writing by the Local Planning Authority and the development shall be carried out in accordance with the approved details.

Reason: To ensure that the development is properly related to the levels of adjoining development in the interests of neighbour amenity and good design in accordance with Policy DES4 'Design of Development' of the East Herts District Plan (2018) and Policies PL1 'Design Principles for Development' and 2 'Amenity Principles for Development' of the Harlow Local Development Plan (2020).

9. Details of river / canal crossings and related structures (in respect of management of water course related environmental issues):

Prior to the commencement of construction works (save for Enabling Works) for each relevant phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) full details of any vehicular or pedestrian river crossings or underpasses on main rivers, or other relevant works (e.g. realignment of a watercourse), informed by a detailed Water Framework Directive assessment, for that phase or sub-phase shall be submitted to, and approved in writing by, the Local Planning Authority.

This should include (as relevant to that phase of the development):

- a) Detailed plans, long-sections and cross-sections of the road or pedestrian crossing/underpass structure or other relevant works, and its relationship to the main river channel and corridor:
- b) A minimum of an 8 metre unobstructed buffer zone is maintained around main rivers for access and biodiversity, except adjacent to structures (as shown on the approved plans in Condition 2). Any reduction must demonstrate how any impacts on flood risk, water quality or biodiversity are to be mitigated or compensated for, taking into account the Water Framework Directive and be agreed in writing with the Local Planning Authority.

The development shall be fully implemented and subsequently maintained, in accordance with the details approved or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: To ensure compliance with the Water Framework Directive and the protection of wildlife and supporting habitat and to secure opportunities for enhancing the site's nature conservation value. This approach is supported by paragraphs 174 and 180 of the NPPF 2021 and Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan 2018, and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

- Details of Stort Navigation (canal) crossing and related structures (in respect of management of the navigable water way and its amenities):
 Prior to the commencement of any phase or sub-phase of the development (save for Enabling Works) related to the Stort Navigation canal road bridge (as defined in plans and documents approved pursuant to Condition 5), full details of the following shall be submitted to and approved in writing by the local planning authority;
 - a) Details of materials and finishes to be used in the construction of the canal road bridge abutments, beams, deck and parapets;
 - Details of vehicle and pedestrian restraint systems;
 - c) The proposed layout and materials of the ramp and steps adjacent to the towpath, including any railings and detail of how the ramp will interact with the bridge holes adjacent;
 - d) A lighting strategy for the tow path tunnel which demonstrates how a balance can be achieved between ensuring safety for vehicles, pedestrians, cyclists and users of the highway whilst also ensuring that the proposals would not cause an unacceptable impact on amenity, biodiversity or landscape and visual effects.
 - e) A maintenance strategy in relation to the above.

The canal road bridge shall thereafter be implemented in accordance with the approved details prior to its first use.

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Reason: To ensure the proposals have no adverse impact on highway safety, amenity or the character, appearance and biodiversity of the Stort Navigation (canal) or the use of its towpath and in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', NE3 'Species and Habitats', EQ3 'Light Pollution', CFLR3 'Public Rights of Way', CFLR4 'Water Based Recreation' and WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policies WE1 'Strategic Green Infrastructure', WE3 'General Strategy for Biodiversity and Geodiversity'PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems', PL1 'Design Principles for Development', PL2 'Amenity Principles for Development' PL8 'Green Infrastructure and Landscaping', PL9 'Biodiversity and Geodiversity Assets', PL10 'Pollution and Contamination', and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

11. Pedestrian/ Cycle Bridges (Eastwick Road and Stort Navigation) (Detailed design): Prior to the commencement of the phase or sub-phase of the development (save for Enabling Works) related to the pedestrian and cycle bridges over Eastwick Road and over the Stort Navigation (as defined in plans and details approved pursuant to Condition 5), a Design Brief shall be submitted to and approved in writing by the Local Planning Authority. The Design Brief shall set out the basis upon which the design of the bridges will be determined and shall have regard to inclusive design, the safety and needs of diverse and / or vulnerable users of the Pedestrian/ Cycle Bridges. The Design Brief shall include details of an engagement strategy identifying how the design shall be informed through engagement.

Prior to the construction of the pedestrian and cycle bridges over Eastwick Road and over the Stort Navigation (save for Enabling Works) (as defined in plans and details approved pursuant to Condition 5), full details shall be submitted to and approved in writing by the Local Planning Authority.

The submitted details shall have regard to inclusive design, the safety and needs of diverse and / or vulnerable users of the Pedestrian/ Cycle Bridges, and shall include as a minimum:

- Full elevation drawings and cross sections to demonstrate the scale and layout of the bridge, including gradients
- Details of materials and appearance
- c) Details of structures including fencing, chicanes, seating, signage
- Hard and soft landscaping proposals, including measures to ensure a satisfactory boundary relationship between the Stort Navigation Pedestrian and Cycle Bridge and adjacent land uses to the east of the bridge
- Details of lighting e)
- f) Details of how innovative, sustainable design solutions have been incorporated
- Details of how sustainable construction methods and materials have been g) incorporated
- Demonstration of compliance with approved parameters pursuant to Condition 2 (VD17516-CC-121-CoMP P03, VD17516-CC-121.1-COMP P03 and CSC Footbridge Design Parameters Revision C)
- A maintenance strategy in relation to the above.

The construction of the pedestrian and cycle bridge over Eastwick Road and over the Stort Navigation shall be carried out in accordance with the approved details and shall be practically completed and open to the public within six months of the completion of the full Central Stort Crossing.

Reason: To allow for approval of the details of this part of the development, as the detailed design of the bridge is not included in approved application drawings and to ensure the delivery of a high quality sustainable design solution for the crossing that supports sustainable travel and both compliments and avoids adverse impacts on the character and appearance of the River Stort and the use of its towpath. This is in accordance with policies CC1 'Climate Change Adaptation', CC2 'Climate Change Mitigation', TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation' and DES4 'Design of Development' of the East Herts District Plan (2018) and Policies PL1 'Design Principles for Development', PL2 'Amenity Principles for Development', Policy PL3 'Sustainable Design, Construction and Energy Usage', SIR2 'Enhancing Key Gateways' and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

12. Lighting Strategy:

Prior to the commencement of construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Lighting Strategy for that phase or sub-phase shall have regard to inclusive design, the safety and needs of diverse and / or vulnerable users of the Pedestrian and Cycle Bridges and routes, including under bridges as applicable, and shall be submitted to and approved in writing by the Local Planning Authority.

The Strategy shall include the following details as a minimum:

- a) Details of the proposed location(s) of all lighting to be installed.
- b) Details of the make and model of the proposed lighting.
- c) A LUX plan demonstrating the light spill from the proposed lighting.
- d) A timetable for provision.
- e) An operation and maintenance plan.

The strategy shall demonstrate how a balance can be achieved between ensuring safety for pedestrians, cyclists and users of the highway whilst also ensuring that the lighting proposals would not cause an unacceptable impact on amenity, biodiversity or landscape and visual effects.

The strategy shall demonstrate how consideration has been given to new and alternative technologies and innovative approaches to securing appropriate levels of light and reduction of energy consumption.

The approved lighting strategy shall thereafter be implemented in accordance with the approved details.

Reason: In the interests of highway safety, the river environment, its users and its biodiversity and in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', NE3 'Species and Habitats', EQ3 'Light Pollution', CFLR3 'Public Rights of Way', CFLR4 'Water Based Recreation' CC2 'Climate Change Mitigation', CC3 'Renewable and Low Carbon Energy' and WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policies WE1 'Strategic Green

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Infrastructure', WE3 'General Strategy for Biodiversity and Geodiversity'PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems', PL1 'Design Principles for Development', PL2 'Amenity Principles for Development', 'PL3 Sustainable Design, Construction and Energy Usage', PL8 'Green Infrastructure and Landscaping', PL9 'Biodiversity and Geodiversity Assets', PL10 'Pollution and Contamination', and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

13. Public Realm Strategy for Burnt Mill Lane:

Prior to the commencement of the phase or sub-phase of the development directly associated with Burnt Mill Lane, Burnt Mill Close and the junction of Burnt Mill Lane with the existing Fifth Avenue crossing (as shown on Drawing VD17516-CC-100.1-GA P07 and as defined in plans and details approved pursuant to Condition 5), details of a Public Realm Strategy shall be submitted to and approved in writing by the Local Planning Authority.

The strategy shall include:

- a) Details of proposed function, layout and design
- b) Details of proposed surface and materials
- c) Soft and hard landscaping, including details of any proposed structures
- d) Measures to manage vehicular access and vehicle speed, including signage and wayfinding
- e) Measures to prioritise walking and cycling at the junction of Burnt Mill Lane and Fifth Avenue
- f) Details of lighting
- g) A maintenance strategy in relation to the above.

Reason: To allow for approval of the details of this part of the development, as the detailed design of the Burnt Mill Lane enhancements are not included in approved application drawings. And to ensure the delivery of a high quality public realm strategy for the route that supports active and sustainable travel.

14. Construction Environment Management Plan (CEMP):

Prior to the commencement of construction works (save for Enabling Works, but excluding site clearance, demolition and tree removal) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a detailed Construction Environmental Management Plan (CEMP) for that phase or sub-phase of the development shall be submitted to and approved in writing by the Local Planning Authority.

CEMPs shall include the following as a minimum:

- a) Updated Code of Construction Practice;
- b) The construction programme and phasing:
- c) Hours of operation and delivery of materials:
- d) Details of any highway works necessary to enable construction to take place, including access;
- e) Parking and loading arrangements;
- f) Emergency planning response including fire prevention and control and worker welfare

- g) Bird Hazard Management Plan to mitigate risks to highway and aerodrome safety caused by the hazard from birds attracted to the site during construction;
- h) Details of site compound: location relative to the CSC site, lighting, hoarding, security, parking, material storage areas, and utilities, including measures taken to utilise renewable energy sources and to reduce energy consumption;
- i) Implementation of an Air Quality Dust Management Plan, incorporating measures for control of dust and dirt on the public highway including siting and details of wheel washing facilities, cleaning of site entrances, site tracks and the adjacent public highway;
- j) Details of consultation and complaint management with local businesses and neighbours including contact details;
- k) Waste management proposals;
- I) Mechanisms to deal with environmental and heritage impacts such as noise and vibration, air quality and dust, light and odour, including pollution incident response processes; and
- m) Surface water management plan during construction;
- n) Demonstrate how the CEMP for that phase has been cognisant of the CEMP(s) for prior phases.

All works shall be carried out in accordance with the approved relevant CEMP thereafter, or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: In the interests of amenity and to limit and control environmental impacts in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', DES4, 'Design of Development', EQ2 'Noise Pollution', EQ4 'Air Quality', WAT1 'Flood Risk Management', WAT2' Source Protection Zones' and WAT3 'Water Quality and the Water Environment' of the adopted East of the East Herts District Plan (2018) and Policies PL2 'Amenity Principles for Development', PL10 'Pollution and Contamination', PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

15. Construction Traffic Management Plan (CTMP):

Prior to the commencement of construction works (save for Enabling Works, but excluding site clearance, demolition and tree/ vegetation removal) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Construction Traffic Management Plan (CTMP) for that phase or sub-phase shall be submitted to and approved in writing by the Local Planning Authority.

CTMPs shall include the following details as a minimum:

- a) Construction vehicle numbers, type, routing;
- b) Access arrangements to the site;
- c) Traffic management requirements;
- d) Delivery and unloading arrangements;
- e) A construction travel plan to include site operatives and other on-site personnel
- f) Timing of construction activities (including delivery times and removal of waste) and to avoid school pick up/drop off times;
- g) Provision of sufficient on-site/ compound parking prior to commencement of construction activities:
- h) Post construction restoration/reinstatement of the working areas and temporary access to the public highway;

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- Where works cannot be contained wholly within the site a plan should be submitted showing the site layout on the highway including extent of hoarding, pedestrian routes and remaining road width for vehicle movements.
- Measures to be taken to seek approval from the highway authority that the highway extent has been marked out accurately prior to construction.
- Demonstrate how the CTMP for that phase has been cognisant of the CTMP(s) for prior phases.

Thereafter, the construction of the development shall only be carried out in accordance with the approved CTMP, or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: To protect highway safety and the amenity of users of the public highway and rights of way in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', DES4 'Design of Development', EQ2 'Noise Pollution', EQ4 'Air Quality', WAT1 'Flood Risk Management', WAT2 'Source Protection Zones' and WAT3 'Water Quality and the Water Environment' of the adopted East of the East Herts District Plan 2018 and Policies PL1 'Design Principles for Development', PL2 'Amenity Principles for Development', PL10 'Pollution and Contamination', PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan 2020, as well as relevant Highway Authority policies.

16. Construction Landscape and Ecological Management Plan (CLEMP): Prior to the commencement of any construction works (save for Enabling Works, but excluding site clearance, demolition and tree/vegetation removal) for each phase or subphase of the development (as defined in plans and documents approved pursuant to Condition 5), a Construction Landscape and Ecological Management Plan (CLEMP) for that phase or sub-phase of the development shall be submitted to and approved in writing by the Local Planning Authority.

CLEMPs shall include the following details as a minimum:

- Measures taken to minimise impacts on the landscape and landscape character during construction
- Description and evaluation of features to be managed, including bat commuting routes and other ecologically sensitive areas or species, trees, hedgerows, woodlands, watercourses and other existing environmental features on-site and off-site
- Measures to be taken to protect and manage the features identified above during the construction process, including pre-construction checks, construction methodology, and watching briefs/Ecological Clerk of Works
- Details of the body or organisation responsible for implementation of the CLEMP d) and timetables for implementation
- Details of ongoing monitoring (including timetables) and details of how and when any remedial action will be identified, agreed and implemented
- Demonstrate how the CLEMP for that phase has been cognisant of the CLEMP(s) for prior phases.

Thereafter, the construction of the development shall only be carried out in accordance with the approved CLEMP, or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: To secure the protection of existing landscape features and habitats of ecological interest and protected species in accordance with Policies NE1 'International, National and Locally Designated Nature Conservation Sites', and NE3 'Species and Habitats' of the East Herts District Plan (2018) and Policies WE3 'General Strategy for Biodiversity and PL9 'Biodiversity and Geodiversity Assets', of the Harlow Local Development Plan (2020).

- 17. Implementation of Floodplain Compensation Measures:
 The development hereby permitted shall be carried out in complete accordance with the submitted Highways Drainage Strategy and Drawings VD17516-CC-502 P05 and VD17516-CC-502.1 P05 and the following measures they detail:
 - a) Compensatory storage shall be provided south of the A414 in accordance with drawing VD17516-CC-502 P05. A compensation area of 5,233m3 will be provided by lowering land (Highways Drainage Strategy Chapter 8, bullet point 3).
 - b) These measures shall by fully implemented prior to any widening of the existing crossing in accordance with the scheme's phasing and timing arrangements (as defined in plans and details approved pursuant to Condition 5).

The measures detailed above shall be retained thereafter throughout the lifetime of the development.

Reason: To reduce the risk of flooding to the proposed development and future occupants and prevent flooding elsewhere by ensuring that compensatory storage of flood water is provided in accordance with Policy WAT1 'Flood Risk Management' of the East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

18. Water Framework Directive Mitigation and Enhancement Strategy:
No phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), shall take place until a Water Framework Directive Mitigation and Enhancement Strategy for that phase or sub-phase has been submitted to, and approved in writing by, the Local Planning Authority.

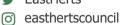
The strategy for that phase or sub-phase shall be carried out as approved and any subsequent variations shall be agreed in writing by the Local Planning Authority.

The scheme shall include the following elements as relevant to that phase or sub-phase:

- a) Evidence that the development will cause no deterioration of waterbody status, nor prevent future improvement to the waterbody, nor contribute to cumulative deterioration of the River Stort and Stort Navigation using up to date Water Framework Directive classification data;
- b) Long-term objectives, management responsibilities and maintenance schedules;
- c) Update the existing scour assessment in the current Water Framework Directive assessment to confirm impacts and mitigation requirements (if additional mitigation needed) for the final design;
- d) Details of any proposed enhancements to watercourses and their corridors to support improving overall Water Framework Directive status (with reference to the approved Species and Habitat Protection and Enhancement Plan)

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Reason: To ensure compliance with the Water Framework Directive and the protection and enhancement of biodiversity in accordance with Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

19. Risk Assessment & Method Statement:

Prior to the commencement of any construction works (save for Enabling Works) for each phase or sub-phase of the development that involves works adjacent to the Stort Navigation (canal) (as defined in plans and documents approved Pursuant to Condition 5), a risk assessment and method statement outlining all works to be carried out adjacent to or affecting (directly or indirectly) the Stort Navigation (canal) in that phase or sub-phase must be submitted to, and approved in writing, by the Local Planning Authority.

The submitted details will include an assessment of any works to the banks of the River Stort Navigation and any works that may increase loading on the canal infrastructure.

Development shall thereafter be carried out in accordance with the approved risk assessment and method statements relevant to that phase or sub-phase.

Reason: To ensure that the works have no adverse impact on the structural integrity of the river walls and towpath. Information should be provided prior to commencement as impacts on the canal corridor may occur during the initial demolition and construction phases. In the interests of users of the Stort Navigation and the water environment in accordance with WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems', of the Harlow Local Development Plan (2020).

20. Land, Air & Water Contamination Investigation & Remediation:
Prior to the commencement of any construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), an Investigation and Remediation Strategy to deal with the risks associated with the contamination of land, air and water relevant to that phase or sub-phase shall be submitted to, and approved in writing by, the Local Planning Authority.

The investigation and remediation strategy shall include the following elements:

- a) 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;
- b) The results of the site investigation and the detailed risk assessment referred to in a) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how and when they are to be undertaken;
- c) 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 b) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

The Remediation Strategies shall thereafter be implemented in complete accordance with the approved details.

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 land, air or water pollution in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

21. Land, Air & Water Contamination Verification Report:

Prior to the completion of each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Verification Report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation for that phase or sub-phase 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 investigation and remediation strategy and its remediation criteria have been met and that remediation of the site is complete in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

22. Contamination Monitoring and Maintenance Plan:

Prior to the commencement of any construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Monitoring and Maintenance plan for that phase or sub-phase in respect of land, air and water 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.

The Monitoring and Maintenance Plan shall cover the period of construction of that phase or sub-phase plus a period of six months, and shall be cognisant of prior phases or sub-phases.

The Monitoring and Maintenance Plan shall thereafter be fully implemented and complied with in accordance with the approved details.

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 monitoring and maintenance plan have been met in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality,

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Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

23. Unsuspected Contamination:

If, during site investigation works and/or development, contamination not previously identified is found to be present at the site then all works in that phase or sub-phase must immediately cease and no further development shall be carried out in that phase or sub-phase 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 without delay.

The remediation strategy shall thereafter be implemented in accordance with the approved details.

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 land or water pollution from previously unidentified contamination sources at the development site. No site investigation can fully characterise a site. This approach is in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

24. Site Waste Management Plan:

Prior to the commencement of any demolition or construction works (save for Enabling Works, but excluding demolition), for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Site Waste Management Plan (SWMP) for that phase or sub-phase shall be submitted to and approved in writing by the Local Planning Authority.

The Site Waste Management Plan shall set out the following:

- a) Details of waste arising during both the site preparation, demolition and construction phases- type and estimated volume;
- Confirmation that opportunities to reuse waste generated by the site are maximised;
- c) where residual waste is to be disposed from the site, details shall be provided as to the volumes, type and timing of waste disposal from the site;
- d) Where waste is being transported to, together with details of the waste carrier;

Demolition and construction shall take place in accordance with the relevant approved Site Waste Management Plan for that phase or sub-phase.

Reason: In order to minimise waste and ensure most sustainable disposal in accordance with Policy CC2 'Climate Change Mitigation' of the East Herts District Plan (2018) and Policy PL3 'Sustainable Design, Construction and Energy Usage' of the Harlow Local Development Plan (2020).

25. 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 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 approach is in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

26. Piling/Deep Foundations Method Statement:

No piling, deep foundations or other intrusive groundworks (investigation boreholes/tunnel shafts/ground source heating and cooling systems) using penetrative methods shall be undertaken until a Piling/ Deep Foundation Method Statement has first been submitted to and approved in writing by the Local Planning Authority in consultation with potentially affected parties responsible for sub-surface infrastructure.

The Statement shall include an assessment of impacts on noise, vibration, land stability, ground water levels, underground pipes and other infrastructure as well as details of the measures to be taken to mitigate any adverse effects.

The groundworks shall thereafter 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) do not harm groundwater resources, damage essential infrastructure and do not have an adverse impact on the local amenity in accordance with Policies EQ1 'Contaminated Land and Land Instability', EQ2 'Noise Pollution' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

27. Scheme for Managing Borehole Investigation:

Prior to commencement of any phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), that involves the installation of, or use of, existing boreholes, 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 operational use of each phase or sub-phase of development and no boreholes should be decommissioned until it has been agreed in writing that they are no longer required.

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Reason: To ensure that a sufficient monitoring network is maintained to allow for the completion of any monitoring required and to ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in accordance with Policy WAT3 'Water Quality and Water Environment' of East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

28. Implementation of Drainage Strategy:

The development hereby approved shall be carried out in accordance with the principles of the approved Drainage Strategy (Reference number: EHUK-VEC-1XX-XX—TN-D-9001 B) and shall include and follow the mitigation details identified for each drainage catchment including:

- a) Specification to demonstrate and follow an appropriate Sustainable Drainage System (SuDS) management and treatment train.
- b) Prioritise on-surface conveyance features.
- c) Provision of biodiversity enhancement within SuDS provision.
- d) Provision of drainage catchments as per the agreed characteristic below or such discharge rates and storage volumes agreed with the Local Planning Authority following detailed design:
- o Catchment C1 limiting the surface water runoff generated by the critical storm events to the maximum of 17 l/s for the 1 in 30 year event providing a minimum of 898m3 of storage.
- o Catchment C2 limiting the surface water runoff generated by the critical storm events to the maximum of 5 l/s for the 1 in 30 year event providing a minimum of 215m3 of storage.
- o Catchment C3 limiting the surface water runoff generated by the critical storm events to the maximum of 5 l/s for the 1 in 30 year event providing a minimum of 95m3 of storage.

The mitigation measures shall be fully implemented prior to operational use of the development and subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: To ensure the development appropriately addresses climate change and the risk of flooding, to ensure satisfactory storage of and disposal of surface water from the entire strategic drainage network, to improve and protect water quality and to protect natural habitats in accordance with Policy WAT3 'Water Quality and Water Environment' of East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

29. Detailed Surface Water Drainage Scheme:

Prior to the commencement of each phase or sub-phase of the development (save for Enabling Works) (as defined in plans and documents approved pursuant to Condition 5), a Detailed Surface Water Drainage Scheme for that phase or sub-phase, or for the whole

affected catchment based on the approved Drainage Strategy and sustainable drainage principles, shall be submitted to and approved in writing by the Local Planning Authority in consultation with Hertfordshire County Council/ Essex County Council as Lead Local Flood Authorities.

The Scheme shall accord with the approved SuDS principles and shall include the following details as relevant to that phase or sub-phase:

- a) Demonstration of an appropriate, final and detailed SuDS management and treatment train for each outfall.
- b) Information on ground conditions, including desk-based assessment, exploratory hole logs, in-situ test data, including infiltration tests undertaken in accordance with the BRE 365 testing procedure and, records of groundwater level monitoring, undertaken for a minimum period of 6 months over the autumn/winter period.
- c) Verification of the suitability of infiltration of surface water for the development.
- d) Any existing drainage network within the extents of the planning application boundary, into which new highway runoff is being discharged, shall be checked to be functional/operational and the highway authority to be advised of existing blockages which need maintenance to repair. Additional attenuation storage shall be provided if identified as required, to reflect any net increases in runoff quantities being discharged into the existing networks, to avoid downstream flooding.
- e) Detailed plan showing the finalised drainage catchment areas.
- f) Full, detailed modelling for the strategic network to demonstrate how the system operates during up to and including the 1 in 1 year, the 1 in 30 year and the 1 in 100 year rainfall event including 40% allowance for climate change. Primarily surface water storage to be provided for up to and including the 1 in 30 year rainfall event.
- g) Full detailed engineering drawings of any SuDS, surface water storage or conveyance feature including cross and long sections, location, size, volume, depth and any inlet and outlet features. This should be supported by a clearly labelled, detailed drainage layout plan showing any SuDS and pipe networks. The plan should show any pipe 'node numbers' that have been referred to in network calculations and it should also show invert and cover levels of manholes. Total storage volumes provided within each catchment should be identified.
- h) Identification of opportunities to address existing surface water flooding in the immediate vicinity of the development site, within the extents of the red line planning application boundary.
- Detailed topographical surveys of the site and any existing watercourses.
- j) A Catchment Walkover of receiving watercourses shall be undertaken including topographical survey, details of water levels, and the location of existing structures that may constrain flows along watercourses receiving surface water runoff from the development, to ensure that there is sufficient capacity to accommodate future changes in flows.
- k) Full condition survey of all existing structures on all watercourse networks impacted by the proposed development or located within the development site.
- I) Full details of connection points to ordinary watercourses and main rivers, including cross sections and long sections drawings of any new proposed structures.
- m) Details of final exceedance routes above the designed 1 in 30 year return period, also including those for an event which exceeds to 1:100 rainfall event including climate change event.
- n) A management and maintenance plan including maintenance and operational activities. This should include land ownership plans with identified operators responsible for any future maintenance for the lifetime of the development.
- o) Phasing plan for the provision of SuDS and drainage infrastructure within each drainage catchment.

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- p) Final, detailed planting plans for all proposed SuDS features and its surrounding area.
- q) Assessment of all works impacting on any existing ordinary watercourses and identification with acknowledgement of any needed ordinary watercourse consents.
- r) Demonstrate that all storage features can half empty within 24 hours for the 1 in 30 year plus 40% climate change critical storm event.
- s) The appropriate level of treatment for all runoff leaving the site, in line with the Simple Index Approach in chapter 26 of the CIRIA SuDS Manual C753 and Highways England Water Risk Assessment Tool (HEWRAT).
- t) A written report summarising the final strategy and highlighting any minor changes to the approved strategy.

The surface water drainage network shall be designed and fully implemented in accordance with the details and phasing plan thus approved.

Reason: To prevent flooding by ensuring the satisfactory storage of / disposal of surface water from the site; to ensure the effective operation of SuDS features over the lifetime of the development; and to provide mitigation of any environmental harm which may be caused to the local water environment. Failure to provide the above required information before commencement of works may result in a system being installed that is not sufficient to deal with surface water occurring during rainfall events and may lead to increased risk and pollution hazard from the site. This is in accordance with Policy WAT3 'Water Quality and Water Environment' of East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

30. SuDS Completion & Verification Report:

Within three months of completion of SuDS works for each phase or sub-phase (as defined in plans and documents approved pursuant to Condition 5), or for a defined catchment relevant to the development, a final Completion and Verification Report for that phase or sub-phase or catchment shall be submitted to, and approved in writing by the Local Planning Authority in consultation with Hertfordshire County Council/ Essex County Council as Lead Local Flood Authorities.

The Completion and Verification Report shall include the following details:

- a) Provision of a Completion and Verification Report appended with substantiating evidence demonstrating the approved construction details and specifications for the SuDS features and drainage network have been implemented in accordance with the surface water drainage scheme. The verification report shall include photographs of excavations and soil profiles/horizons, installation of any surface water structure, during construction and final make up, and the control mechanism.
- b) Provision of a complete set of as built drawings for site drainage.
- c) Post-construction surveys including a CCTV survey for any underground features and piped networks.
- d) A management and maintenance plan for the SuDS features and drainage network, which should include details of the maintenance activities/ frequencies for each feature.

e) Final arrangements for adoption with identified operators responsible for future maintenance and any other measures to secure the operation of the scheme throughout its lifetime.

Reason: To ensure approved drainage measures are fully implemented and appropriate maintenance arrangements are put in place to enable the surface water drainage system to function as intended to ensure mitigation against flood risk. Failure to provide the above required information prior to occupation may result in the installation of a system that is incomplete and / or not properly maintained and may increase flood risk or pollution hazard from the site. This is in accordance with Policy WAT3 'Water Quality and Water Environment' of East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

31. Tree and Hedge Removal:

Until the end of five years following completion of each phase of the development (as defined in plans and documents approved pursuant to Condition 5), all existing trees and hedges which are shown on the approved drawings as being retained, shall be retained and shall not be damaged, cut down, uprooted or destroyed without the prior consent of the Local Planning Authority.

Reason: To ensure the continuity of amenity afforded by existing trees and hedges, in accordance with Policy DES3 'Landscaping' of the East Herts District Plan (2018) and Policy PL7 'Trees and Hedgerows' of the Harlow Local Development Plan (2020).

32. Tree and Hedge Protection Measures:

No phase or sub-phase of development (as defined in plans and documents approved pursuant to Condition 5) shall commence until full details of the tree and hedge protection measures in respect of that phase or sub-phase have been submitted to, and approved in writing by, the Local Planning Authority and until the approved protection has been erected on site.

Protection measures shall be in accordance with BS5837: 2012 Trees in Relation to Design, Demolition and Construction, and be in place for the duration of the works on site. In the event that trees or hedging die, become damaged or otherwise defective within five years of completion of development within that phase or sub-phase, the Local Planning Authority shall be notified as soon as reasonably practicable, and remedial action agreed and implemented. The agreed remediation strategy and associated planting shall be undertaken during the first available planting season.

Reason: To ensure the continuity of amenity afforded by existing trees and hedges, in accordance with Policy DES3 'Landscaping' of the East Herts District Plan (2018) and Policy PL7 'Trees and Hedgerows' of the Harlow Local Development Plan (2020).

33. Landscaping Strategy and Management and Maintenance Plan:
Prior to the first public use of any phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a detailed hard and soft Landscaping Strategy for that phase or sub-phase shall be submitted to and approved by the Local Planning Authority, in consultation with the Highway Authority.

The Landscaping Strategy shall include as a minimum the following details:

a) Planting schedule to show species, sizes, number and densities;

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- b) Planting plans to show the location of proposed planting based on the approved landscaping drawings but informed by a consideration of the screening properties of the proposed planting;
- c) Written specifications to demonstrate cultivation and other operations associated with the establishment of grassland and planting;
- d) Details of hard landscaping proposals including surface treatment of SuDS maintenance access routes, fencing, gates, benches, lighting, bins and other structures;
- e) Details of signage and wayfinding;
- f) Details of any public art;
- g) Implementation timetables;
- h) Landscape Management and Maintenance Plan:
- i) Demonstration how the Landscape Strategy for that phase or sub-phase has been cognisant of the Landscape Strategies for prior phases.

The development shall be carried out in accordance with the approved Landscaping Scheme and the approved timetable and Landscape Management and Maintenance Plan.

Any trees or plants that, within a period of five years after planting, are removed, die or become, in the opinion of the Local Planning Authority, in consultation with the Highway Authority, seriously damaged or defective, shall be replaced as soon as is reasonably practicable with others of species, size and number as originally approved, unless the Local Planning Authority gives its written consent to any variation

Reason: In order to provide green infrastructure and landscaping in accordance with Policies NE4 'Green Infrastructure' and DES3 'Landscaping' of the East Herts District Plan (2018) and Policy 'PL8 Green Infrastructure and Landscaping' and SIR2 'Enhancing Key Gateways' of the Harlow Local Development Plan (2020).

34. Legally Protected Species and Habitat Protection and Enhancement Plan:

No phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) shall commence (save for Enabling Works, but excluding site clearance, demolition and tree/ vegetation removal), until a Species and Habitat Protection and Enhancement Plan for that phase or sub-phase has been submitted to and approved in writing by the Local Planning Authority.

The Species and Habitat Protection and Enhancement Plan shall detail measures to mitigate and/or compensate damages to protected and notable species (under The Wildlife and Countryside Act 1981) and their associated habitat.

The Species and Habitat Protection and Enhancement Plan must be based on up-to-date surveys and consider the whole duration of that phase or sub-phase of the development, from the construction phase through to completion.

The plan shall include the following (as far as is relevant to that phase or sub-phase):

a) Up-to-date ecological surveys conducted by a suitably qualified ecologist, at the appropriate time of year;

- b) Details and drawings of the road crossings and culverts, including how they will interact with the watercourses (e.g. abutments, buffer zones, shading, lighting);
- c) Details of how the development will mitigate and compensate for any impacts it may have on protected species and their associated habitats and habitat corridors including floodplain restoration and how it will enhance habitats and corridors;
- d) Details of improvements to watercourse riparian corridors and river channels;
- e) Measures to be taken to ensure the safe movement of terrestrial mammals through/beneath the structures:
- f) Measures to be taken to provide bird and bat nesting and roosting sites on or around elevated structures:
- g) Measures to be taken to avoid disturbance to landscaping and habitats adjacent to pedestrian/cycle routes;
- h) Demonstration of how the above measures contribute towards biodiversity gain based on an up to date biodiversity net gain metric or alternative methodology as agreed by the Local Planning Authority;
- Description and evaluation of any features to be managed;
- j) Any specific ecological trends and constraints on the site that might influence management;
- k) Aims, objectives, actions and methods to ensure effective management;
- I) Preparation of a works schedule including an annual work plan capable of being rolled forward every 5 years;
- m) Details of ongoing management, maintenance, monitoring and remedial measures;
- n) A programme for implementation;
- o) Details of the body or organisation responsible for implementation and management of the plan;
- p) A scheme for the long-term funding and management mechanisms by which implementation, long term management and protection of these species and habitats will be secured.

The development shall be carried out in accordance with the approved details and the plan shall be implemented and the site managed in accordance with the approved details.

Reason: In order to provide an up to date baseline of biodiversity information and to ensure biodiversity is protected as far as possible and habitats are created and enhanced in accordance with Policies NE3 'Species and Habitats' and WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policies WE3 'General Strategy for Biodiversity and Geodiversity' PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems', and PL9 'Biodiversity and Geodiversity Assets' of the Harlow Local Development Plan (2020).

35. Habitat Compensation Ecological Management Plan - Off-Site:
Prior to the commencement of any phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), that results in the loss of habitat in the Parndon Moat Marsh Local Wildlife Site and Local Nature Reserve, and the Eastwick and Parndon Meads Local Wildlife Site, a Habitat Compensation Ecological Management Plan shall be submitted to and approved in writing by the Local Planning Authority setting out how 1.33 Ha of compensatory habitat will be provided within the area of land identified

in Drawing HNP495-GRA-SK-0011 Rev 03 - CSC Ecological Compensation.

The Plan shall include the following:

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- a) Details of how the development will mitigate and compensate for any impacts it may have on protected species and their associated habitats and habitat corridors including floodplain restoration and how it will enhance habitats and corridors;
- b) Demonstration of how the above measures contribute towards achieving a biodiversity net gain based on an up to date biodiversity metric or alternative methodology as agreed by the Local Planning Authority;
- c) Description and evaluation of any features to be managed;
- d) Any specific ecological trends and constraints on the site that might influence management;
- e) Aims, objectives, actions and methods to ensure effective management;
- f) Preparation of a works schedule including an annual work plan capable of being rolled forward every 5 years;
- g) Details of ongoing management, maintenance, monitoring and remedial measures;
- h) A programme for implementation;
- i) Details of the body or organisation responsible for implementation and management of the plan;
- j) A scheme for the long-term funding and management mechanisms by which implementation, long term management and protection of these species and habitats will be secured.

Thereafter, the Plan shall be implemented in accordance with the approved details and programme.

Reason: To ensure that the development compensates for the loss of designated sites of nature conservation interest in accordance with Policy NE1 and NE3 of the East Herts District Plan (2018) and Policy PL8 and PL9 of the Harlow Local Development Plan (2020).

36. Biodiversity Monitoring and Verification Plan:

Five years following completion of the development hereby approved (plus every five years thereafter for a period of 30 years) a Biodiversity Monitoring and Verification Report and Action Plan shall be submitted to the Local Planning Authority for approval.

The Report shall confirm the effectiveness or otherwise of the Landscape Management and Maintenance Plan (Condition 33), Species and Habitat Protection and Enhancement Plan (Condition 34) and Habitat Compensation Ecological Management Plan - Off-Site (Condition 35). The submission must be made by a suitably qualified professional.

As a minimum the report shall include a suite of quantitative and qualitative indicators using methods such as annual site walkovers, surveys and fixed-point photography, to monitor the implementation and effectiveness of mitigation/ management measures. The report shall include any remediation works required in order to address where measures may not be functioning and/or meeting net gain targets expected. The details of all survey findings shall be shared with Herts Ecological Record database.

Any remediation works identified shall thereafter be implemented in accordance with the approved details.

Reason: To ensure that the development maintains, enhances and contributes appropriately to biodiversity in accordance with Policies NE3 'Species and Habitats' and WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policies WE3 'General Strategy for Biodiversity and Geodiversity' PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems', and PL9 'Biodiversity and Geodiversity Assets' of the Harlow Local Development Plan 2020.

37. Archaeological Written Scheme of Investigation:

No demolition shall be carried out nor shall any development commence in any phase or sub-phase of the site (as defined in plans and documents approved pursuant to Condition 5), until an Archaeological Written Scheme of Investigation covering that phase or sub-phase of the site has been submitted to and approved in writing by the Local Planning Authority.

The Written Scheme of Investigation shall include an assessment of archaeological significance and research questions; and details of:

- a) The programme and methodology of site investigation and recording as suggested by the evaluation
- b) The programme for post investigation assessment
- c) Provision to be made for analysis of the site investigation and recording
- d) Provision to be made for publication and dissemination of the analysis and records of the site investigation
- e) Provision to be made for archive deposition of the analysis and records of the site investigation
- f) Nomination of a competent person or person/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation.

Reason: To ensure the appropriate investigation for presence / recording of heritage assets in accordance with Policy HA3 'Archaeology' of the East Herts District Plan (2018) and Policy PL12 'Heritage Assets and their Settings' of the Harlow Local Development Plan (2020).

38. Implementation of Archaeological Investigation:

No development shall take place in any phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) other than in complete accordance with the programme of archaeological investigation and works set out in the Written Scheme of Investigation for that phase approved pursuant to Condition 37.

Reason: to ensure the appropriate investigation for presence / recording of heritage assets and to comply with the requirements of Policy GA1 of the East Herts District Plan 2018, Policy PL12 of the Harlow Local Development Plan and paragraph 211 of the NPPF 2021.

39. Post Archaeological investigation Assessment:

No phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), shall be brought into use until the site investigation and post investigation assessment has been completed for that phase or sub-phase in accordance with the programme set out in the Written Scheme of Investigation approved pursuant to Condition 37 and the provision made for analysis and publication where appropriate.

Reason: To ensure the appropriate investigation for presence / recording of heritage assets in accordance with Policy HA3 'Archaeology' of the East Herts District Plan (2018) and

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Policy PL12 'Heritage Assets and their Settings' of the Harlow Local Development Plan (2020).

40. Land Restoration:

In the event that outline planning permission has not been granted for planning application EHDC Ref 3/19/1045/OUT within 18 months of the date of this permission and Enabling Works have been undertaken:

- (1) a Land Restoration Scheme of Work to restore any land that has been subject to and/or impacted by the Enabling Works shall be submitted to and approved by the Local Planning Authority within 21 months of the date of this permission; and
- (2) any works carried out in connection with the development hereby permitted (e.g. as Enabling Works) shall be removed and the land restored to its former condition in accordance with the Scheme of Work and programme approved by the local planning authority.

The Land Restoration Scheme of Work to be submitted shall include a programme, detailed specifications and/or plans for remedial and restoration works, full details of replacement tree planting and landscaping along with a maintenance plan to the effect that should any part of replacement planting fail within a period of five years after planting these will be replaced.

The restoration works shall be carried out and completed in complete accordance with the approved details of the Land Restoration Scheme and evidence shall be provided to the satisfaction of the Local Planning Authority of the completion of the restoration works to be confirmed in writing.

If at any period within 21 months of the date of this permission any Enabling Works have been carried out and planning permission has not been granted for the outline planning application EHDC Ref 3/19/1045/OUT, no further material operation shall be carried out on the application site except for restoration works in full accordance with the approved Land Restoration Scheme of Work.

Reason: Permitting "Enabling Works" enables the realisation of public benefits and helps to meet local plan requirements. If the crossing permission is unable to be implemented prior to expiry (on account of condition 4 not being satisfied) than any works to or harm caused to the crossing site is to be rectified so to reverse the effects of the "Enabling Works". In order to ensure the satisfactory replacement of landscaping features which are of amenity and/or biodiversity value, in accordance with Policies NE4 'Green Infrastructure', DES3 'Landscaping', DES4 (III) 'Design of Development' and TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation of the East Herts District Plan (2018) and Policy 'PL8 Green Infrastructure and Landscaping' of the Harlow Local Development Plan (2020).

41. Employment and Training Strategy:

Prior to the commencement of construction works on any part of the development hereby approved (save for Enabling Works), an Employment and Training Strategy shall be submitted to and approved in writing by the Local Planning Authority. The Strategy shall

set out the details of how employment and training opportunites will be provided to the local population during the construction phase of the development.

The Employment and Training Strategy shall provide details of the following:

- a) A schedule of new employment opportunities to be created through the proposed development, including (but not limited to) long-term job creation, short term/temporary job creation, apprenticeships, work placements, work experience and pre-employment training scheme placements.
- b) The process by which jobs will be advertised to local people
- c) The method in which the provision of jobs for local residents will be monitored
- d) Details of training programmes and opportunities, including through local education and further education establishments such as (but not limited to) Hertfordshire University, Herts Regional College, Harlow College and Job Centre Plus.

Once approved, the Employment and Training Strategy shall be implemented (including by all sub-contractors) in accordance with the approved details (or any subsequent revision thereof approved in writing by the Local Planning Authority).

Reason: To ensure opportunities are created for local residents to access employment and/or training during the construction of the development, in accordance with Policy GA1 (r) 'The Gilston Area' and ED6 'Lifelong Learning' of the East Herts District Plan (2018) and Policy PR4 'Improving Job Access and Training' of the Harlow Local Development Plan (2020).

42. Low Noise Road Surfacing:

Prior to the commencement of the development (save for Enabling Works), details of the low noise road surfacing to be provided on the section of Eastwick Road relevant to the development shall be submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority

The development shall be delivered in accordance with the approved details.

Reason: In the interests of amenity and to limit and control environmental impacts in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', DES4, 'Design of Development', EQ2 'Noise Pollution', of the adopted East of the East Herts District Plan (2018) and Policies PL2 'Amenity Principles for Development', PL10 'Pollution and Contamination' and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

Informatives:

- 1. A) 'Enabling Works' comprises "site clearance and demolition; tree/vegetation removal (in accordance with the approved plans in Condition 2); soil investigations (including soakage testing, window sampling, boreholes, CBR's and gas monitoring); ecology surveys; archaeology surveys (including geo physical surveys, window samples and trenching); slip trenches to investigate existing services; drainage surveys (such as CCTV and jetting); river modelling; and topographical surveys"
- 2. B) 'Local Planning Authority' means either East Herts Council and/or Harlow District Council. Both Councils will consult the other when providing agreement in writing on applications to discharge conditions.

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- 3. C) 'Highway Authority' means either Essex County Council and/or Hertfordshire County Council. The Local Planning Authorities will consult with the Highway Authorities when providing agreement in writing on applications to discharge conditions.
- 4. D) The permission does not convey any consent which may be required under any legislation other than the Town and Country Planning Acts. Any permission required under the Highways Act, Building Regulations or under any other form of law, must be obtained from the relevant authority or body e.g. Fire Officer, Health and Safety Executive, Environment Agency etc. Neither does this permission negate or override any private covenants which may affect the land.
- 5. E) The permission is for construction of new public highway infrastructure. As a result the permission cannot be implemented without the prior approval of the local highway authorities (Hertfordshire County Council and Essex County Council). Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and meet their requirements. In order to implement this permission it will be necessary for the developer of the site to enter into agreements with the County Councils as Highway Authorities under Section 278 and Section 38 of the Highways Act to ensure satisfactory completion of the road improvements. The construction must be undertaken to the Highway Authorities' detailed design / specification and to their satisfaction. Construction must be undertaken by a contractor who is authorised to work in the public highway.
- 6. F) A structural reassessment of the deck and associated bearings of Burnt Mill Station Bridge (Essex) is required to be carried out to the latest standards; CS454 for normal traffic loading and CS458 for special type vehicles, prior to the detailed design stage. The results of the reassessment should be submitted to Essex County Council for approval.
- 7. G) Implementation also requires:
- I. that necessary property rights for use and access to all land required for the extended / enlarged and new highways (including drainage features and drainage rights and connections to existing water courses) have been legally secured in the public interest.
- II. that the agreements under Section 38 of Highways Act for the highways authorities to adopt the newly constructed public highway (and any related features that are required for its operation) on its satisfactory completion include financial provision for future maintenance. Highways Development Management teams should be consulted on any drainage features that are proposed for adoption by Hertfordshire County Council/ Essex County Council. Any drainage features to be adopted shall be designed and built to accommodate the Highway Authorities adoption requirements and an appropriate commuted sum, based on the approved feature maintenance plan must be agreed.
- 8. H) The highway authorities also advise that, to ensure any works as part of this development are carried out in accordance with other the provisions of the Highways Act 1980 and other relevant processes, the following advice is considered:
- I. Public Rights of Way:

Public Rights of Way should remain unobstructed by vehicles, machinery, materials, tools and any other aspects of the construction during works. The safety of the public using the route and

any other routes to be used by construction traffic should be a paramount concern during works. Safe passage past the site should be maintained at all times. The condition of the route should not deteriorate as a result of these works. Any adverse effects to the surface from traffic, machinery or materials (especially overspills of cement & concrete) should be made good to the satisfaction of this Authority. All materials should be removed at the end of the construction and not left on the Highway or Highway verges. If the above conditions cannot reasonably be achieved, then a Temporary Traffic Regulation Order would be required to close the affected route and divert users for any periods necessary to allow works to proceed. A fee would be payable to the relevant County Council for such an order. Further information should be sought in relation to the works that are required along the route including any permissions that may be needed to carry out the works.

II. Obstruction of public highway land:

It is an offence under Section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in any way to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant must contact the Highway Authority to obtain their permission and requirements before construction works commence.

III. Storage of materials:

The applicant is advised that the storage of materials associated with the construction of this development should be provided within the site on land which is not public highway, and the use of such areas must not interfere with the public highway. If this is not possible, authorisation should be sought from the Highway Authority before construction works commence.

IV. Road Deposits:

- It is an offence under Section 148 of the Highways Act 1980 to deposit mud or other debris on the public highway, and Section 149 of the same Act gives the Highway Authority powers to remove such material at the expense of the party responsible. Therefore, best practical means shall be taken at all times to ensure that all vehicles leaving the site during construction of the development are in a condition such as not to emit dust or deposit mud, slurry or other debris on the highway.
- 9. I) Other legal procedures providing wider public and private interest safeguards must be satisfied before implementation. These include:
- I. Procedural Orders for any changes to existing public highway that affect pubic and / or private interests.
- II. Procedural Orders for bridging the navigable waterway.
- III. Land drainage procedures, rights and legal requirements taking account of Environment Agency and Lead Local Flood Authority (LLFA) requirements and advice. All works to ordinary watercourses, including widening of the channel to include additional storage will require ordinary watercourse consent from the LLFAs. It is the applicant's responsibility to check that they are complying with common law if the drainage scheme proposes to discharge into an off-site ditch/pipe. The applicant should seek consent where appropriate from other downstream riparian landowners. Any works proposed to be carried out that may affect the flow within an ordinary watercourse will also require the prior written consent from the LLFA under Section 23 of the Land Drainage Act 1991. This includes any permanent and or temporary works regardless of planning permission. The LLFAs have a

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duty to maintain an asset register and records of assets which have a significant impact on the risk of flooding. In order to capture proposed Sustainable Urban Drainage (SuDS) features which may form part of the future register, details of and location of the SuDS assets created or modified through the development should be provided in a GIS layer on completion of the development.

- 10. J) Additional regulatory consideration may be required on some of specialist matters relevant to this permission as follows:
- I. Archaeological requirments (Hertfordshire and Essex County Councils)
- II. Local Land and Property Gazetteer Custodian requirements (District Councils); the development may involve the naming of new streets and numbering of properties)
- III. Sewer protection requirements; the site has public sewers running across or close to it which may be affected by the proposed building works. It may be necessary to divert the sewer and water course and carry out other works to protect it and the proposed building works before any site works are commenced (Thames Water Development Planning, Asset Investment Unit, Maple Lodge, Denham Way, Rickmansworth, WD3 9SQ Telephone: 01923 898072)
- IV. Ground water pollution risk; parts of the site are located within the groundwater protection zone of Sawbridgeworth Pumping Station. The construction works and operation of the proposed development should be in accordance with the relevant British Standards and Best Management Practices, thereby significantly reducing the polution risk. Construction works may exacerbate any existing pollution. Please refer to CIRIA Publication C532 'Control of water pollution from construction- guidance for consultants and contractors'
- V. Protected species including bats / reptiles / great crested newts; if found during development, works must stop immediately and professional ecological advice must be sought on how to proceed. A licence may be required from Natural England who can be contacted on 01206 796666. Nesting birds are protected under the Wildlife and Countryside Act 1981 and care should be taken in vegetation clearance works between 1st March and 30th September.

This Decision Relates to Plan Numbers:

VD17516-CC-101-LS (1 0F 3) A414 FIFTH AVENUE (1 0F 3) LONGITUDINAL SECTION 1 OF 3 P03 (Section Details)

VD17516-CC-101.1-LS (2 OF 3) A414 PEDESTRIAN FOOTBRIDGE LONGITUDINAL SECTION 2 OF 3 P03 (Section Details)

VD17516-CC-101.2-LS (3 OF 3) A414 FITH AVENUE NORTHERN ARM LOGITUDINAL SECTION 3 OF 3 P03 (Section Details)

VD17516-CC-100-GA (1 OF 2) GENERAL ARRANGEMENTS 1 0F 2 P07 (Layout)

VD17516-CC-100.1-GA (2 OF 2) GENERAL ARRANGEMENTS (SHEET 2 OF 2) P07 (Layout)

VD17516-CC-105-RL (SHEET 1 0F 2) RED LINE BOUNDARY P02 (Site plan)

VD17516-CC-105.1-RL (SHEET 2 OF 2) RED LINE BOUNDARY P02 (Site plan)

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VD17516-CC-106 XS A414 FIFTH AVENUE TYPICAL CROSS SECTIONS (SHEET 1 0F 2) P03 (Section Details)
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VD17516-CC-107 XS A414 FIFTH AVENUE TYPICAL CROSS SECTIONS (SHEET 2 0F 2 P03 (Section Details)

VD17516-CC-109-TR A414 FIFTH AVENUE 16.5M LARGE ARTICULATED VEHICLE SWEPT PATHS P02 (Other)

VD17516-CC-110-TR A414 FIFTH AVENUE 10M RIGID AND SINGLE DECK BUS VEHICLE SWEPT PATHS P02 (Other)

VD17516-CC-111-VS PROPOSED VISIBILITY (SHEET 1 OF 2 P03 (Proposed Access Visibility Splays)

VD17516-CC-112-VS PROPOSED VISIBILITY (SHEET 2 OF 2 P03 (Proposed Access Visibility Splays)

VD17516-CC-111.2-VS PROPOSED VISIBILITY FIFTH AVENUE BURNT MILL LANE (SHEET 1 OF 3 P03 (Proposed Access Visibility Splays)

VD17516-CC-111.4-VS PROPOSED VISIBILITY FIFTH AVENUE BURNT MILL LANE (SHEET 3 OF 3 P03 (Proposed Access Visibility Splays)

VD17516-CC-120-EX EXISTING LAYOUT PLAN (SHEET 1 OF 2) P02 (Layout)

VD17516-CC-120.1-EX EXISTING LAYOUT PLAN (SHEET 2 OF 2) P02 (Layout)

VD17516-CC-121- COMP A414 Pedestrian/Cyclist Bridge Design Parameters (SHEET 1 of 2) P03 (Other)

VD17516-CC-121.1- COMP A414 Pedestrian/Cyclist Bridge Design Parameters (SHEET 2 of 2 P03 (Other)

REVISION C NOVEMBER 20 CENTRAL STORT CROSSING ADOPTABLE FOOTBRIDGES -

DESIGN COMPETITION PARAMETERS REVISION C (Other)

VD17516-CC-122- PROPOSED SPEED STRATEGY PLAN P02 (Other)

VD17516-CC-123 - SURF PROPOSED VS EXISTING LEVELS (SHEET 1 OF 2 P02 (Land Levels)

VD17516-CC-123.1 PROPOSED VS EXISTING LEVELS (SHEET 2 OF 2 P02 (Land Levels)

VD17516-CC-160- AR HIGHWAYS AREAS PLAN (SHEET 1 OF 2) P03 (Other)

VD17516-CC-160.1- AR HIGHWAYS AREAS PLAN (SHEET 2 OF 2) P03 (Other)

VD17516-CC-170-AP PRELIMINARY ADOPTION PLANS P02 (Other)

VD17516-CC-170.1-AP PRELIMINARY ADOPTION PLANS P02 (Other)

VD17516-CC-180- ST STRUCTURES LOCATION PLAN (SHEET 1 OF 2) P03 (Location Plan)

VD17516-CC-180.1 STRUCTURES LOCATION PLAN P03 (Location Plan)

VD17516-CC-400-PROPOSED VEHICLE RESTRAINT SYSTEMS P05 (Other)

VD17516-CC-400.1- PROPOSED VEHICLE RESTRAINT SYSTEMS P05 (Other)

VD17516-CCi-100- GA INTERIM JUNCTION TIE-IN GENERAL ARRANGEMENTS P03 (Proposed Access)

VD17516-CC-STR- 010 RIVER STORT BRIDGE -PRELIMINARY DESIGNS GA DRAWINGS P03 (Other)

VD17516-CC-STR-020 STORT NAVIGATION BRIDGE-PRELIMINARY DESIGNS GADRAWINGS P03 (Other)

VD17516-CC-STR- 050 HARLOW RAILWAY BRIDGE - PRELIMINARY DESIGN GA DRAWINGS SHEET 1 of 2 P03 (Other)

VD17516-CC-STR- 051 HARLOW RAILWAY BRIDGE - PRELIMINARY DESIGN GA DRAWINGS SHEET 2 of 2 P03 (Other)

VD17516-CC-501 PRELIMINARY PROPOSED DRAINAGE SHEET 1 OF 2 P03 (Drainage)

VD17516-CC-501.1 PRELIMINARY PROPOSED DRAINAGE SHEET 2 OF 2 P03 (Drainage)

VD17516-CC-502 PRELIMINARY DRAINAGE STRATEGY SHEET 1 OF 2 P05 (Drainage)

VD17516-CC-502.1 PRELIMINARY DRAINAGE STRATEGY SHEET 2 0F 2 P05 (Drainage)

VD17516-CC-503 PRELIMINARY DRAINAGE SWALE C1 P03 (Drainage)

VD17516-CC-504 PRELIMINARY DRAINAGE SWALE C2 P03 (Drainage)

VD17516-CC-505 PRELIMINARY DRAINAGE SWALE C3 P01 (Drainage)

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VD17516-CC-506 PRELIMINARY DRAINAGE FLOOD COMPENSATION LEVEL FOR LEVEL LONG SECTION (Drainage)

HNP495-GRA-X-XX- DR-L-5171 CENTRAL STORT CROSSING PLANTING PLAN (1/5) REV 05 (Landscaping)

VD17516-CC-507 PRELIMINARY DRAINAGE PROPOSED SuDS CATCHMENT AREA SHEET 1 OF 2 P02 (Drainage)

VD17516-CC-507.1 PRELIMINARY DRAINAGE PROPOSED SuDS CATCHMENT AREA SHEET 2 OF 2 P02 (Drainage)

201109-3.3-GPA-CC-TPP-MM TREE PROTECTION PLAN CENTRAL STORT CROSSING (Other)

HNP495-GRA-X-XX- DR-L-5172 CENTRAL STORT CROSSING PLANTING PLAN (2/5) REV 04 (Landscaping)

HNP495-GRA-X-XX- DR-L-5173 CENTRAL STORT CROSSING PLANTING PLAN (3/5) REV 03 (Landscaping)

HNP495-GRA-X-XX- DR-L-5174 CENTRAL STORT CROSSING PLANTING PLAN (4/5) REV 02 (Landscaping)

HNP495-GRA-X-XX- DR-L-5175 CENTRAL STORT CROSSING PLANTING PLAN (5/5) REV 02 (Landscaping)

HNP495-GRA-SC-001 GILSTON RIVER CROSSING AND VILLAGE DEVELOPMENT ACCESSES PLANTING SCHEDULE REV 03 (Landscaping)

HNP495-GRA-SK-0011 CSC ECOLOGICAL COMPENSATION REV 03 (Landscaping) EHUK-VEC-1XX-XX-TN-D-9001 B DRAINAGE STRATEGY REV B (Drainage)

Notes:

- 1. Your proposed works may require building control approval. Please contact Hertfordshire Building Control Ltd who will help you through the process. Please contact them on 0208 207 7456 or email building.control@hertfordshirebc.co.uk.
- 2. East Herts District Council would like to know what you think about our Planning Service process. We would be very grateful if you could complete the survey, by using this link https://www.surveymonkey.co.uk/r/FQMRJR9. There are only four questions to answer, so it will take no time at all. We want to improve our customer experience, so please take the time to let us know what you think.

On Behalf Of Development Management

Dated: 18th March 2022

Signed:

Jenny Pierce

SEE ATTACHED NOTES

TOWN AND COUNTRY PLANNING ACT 1990 PLANNING (LISTED BUILDINGS & CONSERVATION AREAS) ACT 1990

Appeals to the Secretary of State

- If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town and Country Planning Act 1990.
- As this is a decision on a planning application relating to the same or substantially the same land and development
 as is already the subject of an enforcement notice [reference], if you want to appeal against your local planning
 authority's decision on your application, then you must do so within 28 days of the date of this notice.*
- If an enforcement notice is served relating to the same or substantially the same land and development as in your application and if you want to appeal against your local planning authority's decision on your application, then you must do so within:
 - 28 days of the date of service of the enforcement notice, or within 6 months [12 weeks in the case of a householder appeal] of the date of this notice, whichever period expires earlier.*
- As this is a decision to refuse planning permission for a householder application, if you want to appeal against your local planning authority's decision then you must do so within 12 weeks of the date of this notice.*
- As this is a decision to refuse planning permission for a minor commercial application, if you want to appeal against your local planning authority's decision then you must do so within 12 weeks of the date of this notice.*
- As this is a decision to refuse express consent for the display of an advertisement, if you want to appeal against
 your local planning authority's decision then you must do so within 8 weeks of the date of receipt of this notice.*
- If you want to appeal against your local planning authority's decision then you must do so within 6 months of the
 date of this notice.*
- Appeals can be made online at: https://www.gov.uk/planning-inspectorate.
 If you are unable to access the online appeal form, please contact the Planning Inspectorate to obtain a paper copy of the appeal form on tel: 0303 444 5000.
- The Secretary of State can allow a longer period for giving notice of an appeal but will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.
- The Secretary of State need not consider an appeal if it seems to the Secretary of State that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.
- If you intend to submit an appeal that you would like examined by inquiry then you must notify the Local Planning
 Authority and Planning Inspectorate (inquiryappeals@planninginspectorate.gov.uk) at least 10 days before
 submitting the appeal. Further details are on GOV.UK.

Appeals under the Control of Advertisement Regulations

The same provision relating to rights of appeal against the Local Planning Authority's decision applies to advertisements with the following differences:

- Notice of appeal must be given in writing to the Secretary of State within 8 weeks from the date of this notice.
- The notice of appeal must be accompanied by a copy of the following documents:
 - (a) The application forms
 - (b) All relevant plans and particulars
 - (c) This notice of decision
 - (d) All other relevant correspondence with the Authority

The Secretary of State may require a statement of additional matters from either the applicant or the Local Planning Authority, and may with the agreement of both the applicant and the authority determine the appeal without affording an opportunity to appear before an Inspector.

Purchase Notices

• If either the Local Planning Authority or the First Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its

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existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

• In these circumstances, the owner may serve a purchase notice on the Council in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

Compensation

- In certain circumstances compensation may be claimed from the Local Planning Authority if permission is refused or granted subject to conditions by the Secretary of State on appeal or on reference of the application to him.
- These circumstances are set out in Section 169 and related provisions of the Town and Country Planning Act 1971.

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Application Ref: 3/19/1051/FUL

Philip Murphy Quod 8-14 Meard Street London W1F 0EQ

Town and Country Planning Act 1990 (as amended)

DECISION NOTICE

Erection of a new road, pedestrian and cycle bridge; replacement of an existing rail bridge at River Way; alterations to the existing local highway network; lighting and landscaping works; listed building works to Fiddlers Brook Bridge; and other associated works.

Land To The South And East Of Gilston Village And North Of River Stort Gilston Hertfordshire/Harlow

In pursuance of their powers under the above mentioned Act and the Orders and Regulations for the time being in force thereunder, the Council hereby

Grant Planning Permission subject to Conditions

For the development proposed in your application received 20th May 2019 and registered on 12th June 2019 and shown on the approved plans.

Conditions:

1 Consistent Implementation of Permissions Across Local Planning Authority Boundaries: No development shall commence until planning permissions are granted for the development as a whole, as detailed in planning applications reference 3/19/1051/FUL (East Herts District) and HW/CRB/19/00221 (Harlow District).

Reason: To ensure, for the development to perform its function, sections of the new roads and bridges must be constructed as a whole across local authority boundaries, such that the relevant phases of the development are capable of being built on both sides of the local authority boundary.

2. Approved Drawings and Documents:

Subject to any contrary details, drawings and timetables approved under any condition, the development shall be carried out in accordance with the approved drawings listed in the Decision Notice.

Reason: To restrict the development to that applied for and for which the environmental, transport and infrastructure impacts have been assessed, and to ensure that the development meets the policy standards required by the development plan and any other material considerations including national and local policy guidance.

Time Limit for Commencement:

The development hereby approved shall be begun within a period of five years commencing on the date of this notice.

Reason: To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 and to ensure the timely implementation of the development.

4. Linking Implementation to the Outline:

The development hereby permitted shall not be commenced (save for Enabling Works) unless and until planning permission has been granted for the development pursuant to planning application no. 3/19/1045/OUT (Gilston Area Villages 1-6).

Reason: The harm to the Green Belt and other harms arising from the development are outweighed by the significant public benefit arising from its contribution towards a shift towards active and sustainable travel and by enabling delivery of the strategic growth in the Gilston Area (which includes the outline development at Villages 1-6 and Village 7) and the wider Harlow and Gilston Garden Town, both during the plan period and beyond 2033, in accordance with Policies GA1 'The Gilston Area' and GA2 'The River Stort Crossings' of the East Herts District Plan (2018) and Policies HGT1 'Development and Delivery of Garden Communities in the Harlow and Gilston Garden Town' and SIR1 'Infrastructure Requirements' of the Harlow Local Development Plan (2020).

5. Submission and approval of phasing plans and documents:

Prior to the commencement of the development hereby approved (save for Enabling Works), a Phasing Plan shall be submitted to and approved in writing by the Local Planning Authority. The Phasing Plan shall set out the details of the proposed sequence of development and the extent and location of individual development phases or sub-phases.

Once approved, the development shall be implemented in accordance with the approved Phasing Plan (or any subsequent revision thereof approved in writing by the Local Planning Authority).

Reason: To ensure proper management of the phasing of the development, compliance with essential pre-commencement conditions on the development and the provision of relevant mitigation at appropriate times throughout the development, in a way that does not prevent or unnecessarily hinder practical implementation, and in the interests of the amenity of occupiers and users of the site and in accordance with the requirements of Policies DEL1 'Infrastructure and Service Delivery' and DEL4 'Monitoring of the Gilston Area' of the East Herts District Plan (2018), and Policy IN2 'Impact of Development on the Highways Network Including Access and Servicing' of the Harlow Local Development Plan (2020).

6. Energy & Sustainability Strategy:

Prior to the commencement of any construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) an Energy and Sustainability Strategy for that phase or sub-phase shall be submitted to and approved in writing by the by the Local Planning Authority.

The Strategy will include details of the measures to be implemented to minimise climate impacts arising from the development taking account of all levels of the energy hierarchy and consideration of the East Herts Sustainability Supplementary Planning Document and Harlow and Gilston Garden Town Sustainability Guidance.

The Energy and Sustainability Strategy will specifically address the following:

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a) How green infrastructure, urban greening and water management have been integrated;

- b) Reducing energy and carbon embodied in construction materials through re-use and recycling of existing materials where possible, and the use of sustainable materials and local sourcing where possible;
- c) Considering high quality innovative design, new technologies and construction techniques, including zero or low carbon energy/energy generation and water efficient, design and sustainable construction methods;
- d) Demonstration that energy and carbon reduction and sustainability has been considered in all stages of the commissioning, procurement, transportation and construction processes.

The phase or sub-phase of the development shall thereafter be implemented in accordance with the relevant approved Energy and Sustainability Strategy.

Reason: In order that the development appropriately mitigates and adapts to the impact of climate change, minimises the impact of pollution and reduces pressure on natural resources in accordance in accordance with Policy CC2 'Climate Change Mitigation' of the East Herts District Plan (2018) and Policy PL3 'Sustainable Design, Construction and Energy Usage' of the Harlow Local Development Plan (2020).

7. Materials:

Prior to the commencement of any above ground construction works (save for Enabling Works) on any phase or sub-phase of the site (as defined in plans and documents approved pursuant to Condition 5), the external materials of construction for the structures on that phase or sub-phase shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter be carried out only using the approved materials.

Reason: In the interests of amenity and good design in accordance with Policy DES4 'Design of Development' of the East Herts District Plan (2018) and Policies PL1 'Design Principles for Development' and PL2 'Amenity Principles for Development' of the Harlow Local Development Plan (2020).

Levels:

Prior to the commencement of construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) detailed plans showing the existing and proposed ground levels for that phase or sub-phase of the site relative to adjoining land, shall be submitted to, and approved in writing by the Local Planning Authority and the development shall be carried out in accordance with the approved details.

Reason: To ensure that the development is properly related to the levels of adjoining development in the interests of neighbour amenity and good design in accordance with Policy DES4 'Design of Development' of the East Herts District Plan (2018) and Policies PL1 'Design Principles for Development' and PL2 'Amenity Principles for Development' of the Harlow Local Development Plan (2020).

9. Details of river / canal crossings and related structures (in respect of management of water course related environmental issues):

Prior to the commencement of construction works (save for Enabling Works) for each relevant phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), full details of any vehicular or pedestrian river crossings or underpasses on main rivers, or other relevant works (e.g. realignment of a watercourse), informed by a detailed Water Framework Directive assessment, for that phase or sub-phase shall be submitted to, and approved in writing by, the Local Planning Authority.

This should include (as relevant to that phase of the development):

- a) Detailed plans, long-sections and cross-sections of the road or pedestrian crossing/underpass structure or other relevant works, and its relationship to the main river channel and corridor, with specific provision for the diversion of Pole Hole Brook, potential realignment of Fiddlers Brook at Fiddlers Bridge and the new pedestrian bridge between Pye Corner and Terlings Park;
- b) A minimum of an 8 metre unobstructed buffer zone is maintained around main rivers for access and biodiversity, except adjacent to structures (as shown on the approved plans in Condition 2). Any reduction must demonstrate how any impacts on flood risk, water quality or biodiversity are to be mitigated or compensated for, taking into account the Water Framework Directive and be agreed in writing with the Local Planning Authority.

The development shall be fully implemented and subsequently maintained, in accordance with the details approved or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: To ensure compliance with the Water Framework Directive and the protection of wildlife and supporting habitat and to secure opportunities for enhancing the site's nature conservation value. This approach is supported by paragraphs 174 and 180 of the NPPF 2021 and Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan 2018, and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

- Details of Stort Navigation (canal) crossing and related structures (in respect of management of the navigable water way and its amenities):
 Prior to the commencement of any phase or sub-phase of the development (save for Enabling Works) related to the Stort Navigation canal road bridge (as defined in plans and documents approved pursuant to Condition 5), full details of the following shall be submitted to and approved in writing by the local planning authority;
 - a) Details of materials and finishes to be used in the construction of the canal road bridge abutments, beams, deck and parapets;
 - b) Details of vehicle and pedestrian restraint systems;
 - c) A lighting strategy for the towpath tunnel which demonstrates how a balance can be achieved between ensuring safety for vehicles, pedestrians, cyclists and users of the highway whilst also ensuring that the proposals would not cause an unacceptable impact on amenity, biodiversity or landscape and visual effects;
 - d) A maintenance strategy in relation to the above.

The canal road bridge shall thereafter be implemented in accordance with the approved details prior to its first use.

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Reason: To ensure the proposals have no adverse impact on highway safety, amenity or the character, appearance and biodiversity of the Stort Navigation (canal) or the use of its towpath and in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', NE3 'Species and Habitats', EQ3 'Light Pollution', CFLR3 'Public Rights of Way', CFLR4 'Water Based Recreation' and WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policies WE1 'Strategic Green Infrastructure', WE3 'General Strategy for Biodiversity and Geodiversity', PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems', PL1 'Design Principles for Development', PL2 'Amenity Principles for Development', PL8 'Green Infrastructure and Landscaping', PL9 'Biodiversity and Geodiversity Assets', PL10 'Pollution and Contamination', and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

11. Lighting Strategy:

Prior to the commencement of construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Lighting Strategy for that phase or sub-phase shall have regard to inclusive design, the safety and needs of diverse and / or vulnerable users of the Pedestrian and Cycle routes, including under bridges as applicable, and shall be submitted to and approved in writing by the Local Planning Authority.

The Strategy shall include the following details as a minimum:

- a) Details of the proposed location(s) of all lighting to be installed.
- b) Details of the make and model of the proposed lighting.
- c) A LUX plan demonstrating the light spill from the proposed lighting.
- d) A timetable for provision.
- e) An operation and maintenance plan.

The strategy shall demonstrate how a balance can be achieved between ensuring safety for pedestrians, cyclists and users of the highway whilst also ensuring that the lighting proposals would not cause an unacceptable impact on amenity, biodiversity or landscape and visual effects.

The strategy shall demonstrate how consideration has been given to new and alternative technologies and innovative approaches to securing appropriate levels of light and reduction of energy consumption.

The approved lighting strategy shall thereafter be implemented in accordance with the approved details.

Reason: In the interests of highway safety, the river environment, its users and its biodiversity and in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', NE3 'Species and Habitats', EQ3 'Light Pollution', CFLR3 'Public Rights of Way', CFLR4 'Water Based Recreation' CC2 'Climate Change Mitigation', CC3 'Renewable and Low Carbon Energy' and WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policies WE1 'Strategic Green Infrastructure', WE3 'General Strategy for Biodiversity and Geodiversity', PL11 'Water

Quality, Water Management, Flooding and Sustainable Drainage Systems', PL1 'Design Principles for Development', PL2 'Amenity Principles for Development', 'PL3 Sustainable Design, Construction and Energy Usage', PL8 'Green Infrastructure and Landscaping', PL9 'Biodiversity and Geodiversity Assets', PL10 'Pollution and Contamination' and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

- 12. Terlings Park and Stort Valley Noise Mitigation East Herts Council only:
 Prior to the commencement of construction works (save for Enabling Works) on Road 1 of
 the development (as defined in plans and documents approved pursuant to Condition 5),
 full details of the following shall be submitted to and approved in writing by the local
 planning authority in consultation with the local highway authority:
 - a) For Road 1, a detailed noise attenuation scheme based on Drawings HNP495-GRA-X-XX- DR-L-5122 Rev 11 (Eastern Stort Crossing (Western Spur) Planting Plan 2/3); and HNP495-GRA-X-XX- DR-L-5309 Rev 04 (Eastern Stort Crossing Planting Section), but including low noise road surfacing:
 - b) For Road 3, demonstration that the proposed vehicle restraint barrier and/ or low noise road surfacing will be of a specification suitable for achieving noise attenuation within the Stort Valley;
 - c) A programme of regular noise monitoring of sensitive receptors including a methodology and a timetable of monitoring and submission of reports to the Local Planning Authority.

The approved scheme noise attenuation scheme shall thereafter be implemented in accordance with the approved scheme prior to first public use of the relevant phase of the development.

Reason: To protect residential amenities in this location in accordance with policy EQ2 'Noise Pollution' of the East Herts District Plan (2018) and PL10 'Pollution and Contamination' of the Harlow local Development Plan (2020).

13. Construction Environment Management (CEMP)

Prior to the commencement of construction works (save for Enabling Works, but excluding site clearance, demolition and tree removal) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a detailed Construction Environmental Management Plan (CEMP) for that phase or sub-phase of the development shall be submitted to and approved in writing by the Local Planning Authority.

CEMPs shall include the following as a minimum:

- a) Updated Code of Construction Practice;
- b) The construction programme and phasing;
- c) Hours of operation and delivery of materials;
- d) Details of any highway works necessary to enable construction to take place, including access:
- e) Where relevant to the phase or sub-phase of the development that involves the demolition of and construction of the River Way Road Bridge, demonstration that satisfactory alternative pedestrian and vehicular access arrangements are approved and secured:
- f) Parking and loading arrangements;

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- g) Emergency planning response including fire prevention and control and worker welfare
- h) Bird Hazard Management Plan to mitigate risks to highway and aerodrome safety caused by the hazard from birds attracted to the site during construction;
- i) Details of site compound: location relative to the ESC site, lighting, hoarding, security, parking, material storage areas, and utilities, including measures taken to utilise renewable energy sources and to reduce energy consumption;
- j) Implementation of an Air Quality Dust Management Plan, incorporating measures for the control of dust and dirt on the public highway including siting and details of wheel washing facilities, cleaning of site entrances, site tracks and the adjacent public highway;
- k) Details of consultation and complaint management with local businesses and neighbours including contact details;
- Waste management proposals;
- m) Mechanisms to deal with environmental and heritage impacts such as noise and vibration, air quality and dust, light and odour, including pollution incident response processes; and
- n) Surface water management plan during construction;
- o) Demonstrate how the CEMP for that phase has been cognisant of the CEMP(s) for prior phases.

All works shall be carried out in accordance with the approved relevant CEMP thereafter, or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: In the interests of amenity and to limit and control environmental impacts in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', DES4, 'Design of Development', EQ2 'Noise Pollution', EQ4 'Air Quality', WAT1 'Flood Risk Management', WAT2' Source Protection Zones' and WAT3 'Water Quality and the Water Environment' of the adopted East of the East Herts District Plan (2018) and Policies PL2 'Amenity Principles for Development', PL10 'Pollution and Contamination', PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

14. Construction Traffic Management Plan (CTMP):

Prior to the commencement of construction works (save for Enabling Works, but excluding site clearance, demolition and tree/ vegetation removal) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Construction Traffic Management Plan (CTMP) for that phase or sub-phase shall be submitted to and approved in writing by the Local Planning Authority.

CTMPs shall include the following details as a minimum:

- a) Construction vehicle numbers, type, routing;
- b) Access arrangements to the site;
- c) Traffic management requirements;
- d) Delivery and unloading arrangements;
- e) A construction travel plan to include site operatives and other on-site personnel

- f) Timing of construction activities (including delivery times and removal of waste) and to avoid school pick up/drop off times;
- g) Provision of sufficient on-site/ compound parking prior to commencement of construction activities:
- h) Post construction restoration/reinstatement of the working areas and temporary access to the public highway:
- i) Where works cannot be contained wholly within the site a plan should be submitted showing the site layout on the highway including extent of hoarding, pedestrian routes and remaining road width for vehicle movements.
- j) Measures to be taken to seek approval from the highway authority that the highway extent has been marked out accurately prior to construction.
- k) Demonstrate how the CTMP for that phase has been cognisant of the CTMP(s) for prior phases.

Thereafter, the construction of the development shall only be carried out in accordance with the approved CTMP, or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: To protect highway safety and the amenity of users of the public highway and rights of way in accordance with policies TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation', DES4 'Design of Development', EQ2 'Noise Pollution', EQ4 'Air Quality', WAT1 'Flood Risk Management', WAT2 'Source Protection Zones' and WAT3 'Water Quality and the Water Environment' of the adopted East of the East Herts District Plan 2018 and Policies PL1 'Design Principles for Development', PL2 'Amenity Principles for Development', PL10 'Pollution and Contamination', PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' and IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan 2020, as well as relevant Highway Authority policies.

15. Construction Landscape and Ecological Management Plan (CLEMP):
Prior to the commencement of any construction works (save for Enabling Works, but excluding site clearance, demolition and tree/vegetation removal) for each phase or subphase of the development (as defined in plans and documents approved pursuant to Condition 5), a Construction Landscape and Ecological Management Plan (CLEMP) for that phase or sub-phase of the development shall be submitted to and approved in writing by the Local Planning Authority.

CLEMPs shall include the following details as a minimum:

- a) Measures taken to minimise impacts on the landscape and landscape character during construction
- b) Description and evaluation of features to be managed, including bat commuting routes and other ecologically sensitive areas or species, trees, hedgerows, woodlands, watercourses and other existing environmental features on-site and off-site
- c) Measures to be taken to protect and manage the features identified above during the construction process, including pre-construction checks, construction methodology, and watching briefs/Ecological Clerk of Works
- d) Details of the body or organisation responsible for implementation of the CLEMP and timetables for implementation
- e) Details of ongoing monitoring (including timetables) and details of how and when any remedial action will be identified, agreed and implemented
- f) Demonstrate how the CLEMP for that phase has been cognisant of the CLEMP(s) for prior phases.

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Thereafter, the construction of the development shall only be carried out in accordance with the approved CLEMP, or with any amendments as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: To secure the protection of existing landscape features and habitats of ecological interest and protected species in accordance with Policies NE1 'International, National and Locally Designated Nature Conservation Sites', and NE3 'Species and Habitats' of the East Herts District Plan (2018) and Policies WE3 'General Strategy for Biodiversity and PL9 'Biodiversity and Geodiversity Assets', of the Harlow Local Development Plan (2020).

- 16. Implementation of Floodplain Compensation Measures:
 The development hereby permitted shall be carried out in complete accordance with the submitted Highways Drainage Strategy and Drawing VD17516-EC-STR-045 P02 and the following measures they detail:
 - a) Compensatory storage shall be provided by lowering the existing ground below the footprint of the Eastern Crossing culverts in accordance with drawing VD17516-EC-STR-045 P02 and the Highways Drainage Strategy Technical Note (Chapter 8, bullet point 5). A compensation area of 1,455m3 will be provided. These measures shall be fully implemented in accordance with the scheme's timing/phasing arrangements.

The measures detailed above shall be retained thereafter throughout the lifetime of the development.

Reason: To reduce the risk of flooding to the proposed development and future occupants and prevent flooding elsewhere by ensuring that compensatory storage of flood water is provided in accordance with Policy WAT1 'Flood Risk Management' of the East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

17. Water Framework Directive Mitigation and Enhancement Strategy:
No phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), shall take place until a Water Framework Directive Mitigation and Enhancement Strategy for that phase or sub-phase has been submitted to, and approved in writing by, the Local Planning Authority.

The strategy for that phase or sub-phase 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 as relevant to that phase or sub-phase:

- a) Evidence that the development will cause no deterioration of waterbody status, nor prevent future improvement to the waterbody, nor contribute to cumulative deterioration of the River Stort and Stort Navigation, Fiddlers' Brook and their associated tributaries (e.g. Pole Hole Brook) using up to date Water Framework Directive classification data;
- b) Long-term objectives, management responsibilities and maintenance schedules;

- c) Update the existing scour assessment in the current Water Framework Directive assessment to confirm impacts and mitigation requirements (if additional mitigation needed) for the final design;
- d) Details of any proposed enhancements to watercourses and their corridors to support improving overall Water Framework Directive status (with reference to the approved Species and Habitat Protection and Enhancement Plan);
- e) Consider the options and feasibility of modifications to the existing Fiddlers Brook culvert under Eastwick Road at Pye Corner, and the potential to increase its diameter for environmental benefit, taking into account flood risk impacts, other environmental constraints, as well as the cost implication and engineering constraints.

Reason: To ensure compliance with the Water Framework Directive and the protection and enhancement of biodiversity in accordance with Policy WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

18. Risk Assessment & Method Statement:

Prior to the commencement of any construction works (save for Enabling Works) for each phase or sub-phase of the development that involves works adjacent to the Stort Navigation (canal) (as defined in plans and documents approved Pursuant to Condition 5), a risk assessment and method statement outlining all works to be carried out adjacent to or affecting (directly or indirectly) the Stort Navigation (canal) in that phase or sub-phase must be submitted to, and approved in writing, by the Local Planning Authority.

The submitted details will include an assessment of any works to the banks of the River Stort Navigation and any works that may increase loading on the canal infrastructure.

Development shall thereafter be carried out in accordance with the approved risk assessment and method statements relevant to that phase or sub-phase.

Reason: To ensure that the works have no adverse impact on the structural integrity of the river walls and towpath. Information should be provided prior to commencement as impacts on the canal corridor may occur during the initial demolition and construction phases. In the interests of users of the Stort Navigation and the water environment in accordance with WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems', of the Harlow Local Development Plan (2020).

19. Land, Air & Water Contamination Investigation & Remediation:
Prior to the commencement of any construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), an Investigation and Remediation Strategy to deal with the risks associated with the contamination of land, air and water relevant to that phase or sub-phase shall be submitted to, and approved in writing by, the Local Planning Authority.

The investigation and remediation strategy shall include the following elements:

a) 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;

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- b) The results of the site investigation and the detailed risk assessment referred to in a) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how and when they are to be undertaken;
- c) 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 b) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

The Remediation Strategies shall thereafter be implemented in complete accordance with the approved details.

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 land, air or water pollution in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

20. Land, Air & Water Contamination Verification Report:
Prior to the completion of each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Verification Report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation for that phase or sub-phase shall be submitted to, and approved in writing,

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 investigation and remediation strategy and its remediation criteria have been met and that remediation of the site is complete in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

21. Contamination Monitoring and Maintenance Plan:

by the Local Planning Authority.

Prior to the commencement of any construction works (save for Enabling Works) for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Monitoring and Maintenance plan for that phase or sub-phase in respect of land, air and water 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.

The Monitoring and Maintenance Plan shall cover the period of construction of that phase or sub-phase plus a period of six months, and shall be cognisant of prior phases or sub-phases.

The Monitoring and Maintenance Plan shall thereafter be fully implemented and complied with in accordance with the approved details.

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 monitoring and maintenance plan have been met in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

22. Unsuspected Contamination:

If, during site investigation works and/or development, contamination not previously identified is found to be present at the site then all works in that phase or sub-phase must immediately cease and no further development shall be carried out in that phase or sub-phase 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 without delay.

The remediation strategy shall thereafter be implemented in accordance with the approved details.

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 land or water pollution from previously unidentified contamination sources at the development site. No site investigation can fully characterise a site. This approach is in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

23. Site Waste Management Plan:

Prior to the commencement of any demolition or construction works (save for Enabling Works, but excluding demolition), for each phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a Site Waste Management Plan (SWMP) for that phase or sub-phase shall be submitted to and approved in writing by the Local Planning Authority.

The Site Waste Management Plan shall set out the following:

- a) Details of waste arising during both the site preparation, demolition and construction phases- type and estimated volume;
- b) Confirmation that opportunities to reuse waste generated by the site are maximised;
- c) where residual waste is to be disposed from the site, details shall be provided as to the volumes, type and timing of waste disposal from the site;
- d) Where waste is being transported to, together with details of the waste carrier;

Demolition and construction shall take place in accordance with the relevant approved Site Waste Management Plan for that phase or sub-phase.

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Reason: In order to minimise waste and ensure most sustainable disposal in accordance with Policy CC2 'Climate Change Mitigation' of the East Herts District Plan (2018) and Policy PL3 'Sustainable Design, Construction and Energy Usage' of the Harlow Local Development Plan (2020).

24. 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 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 approach is in accordance with Policies EQ1 'Contaminated Land and Land Instability' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

25. Piling/Deep Foundations Method Statement:

No piling, deep foundations or other intrusive groundworks (investigation boreholes/tunnel shafts/ground source heating and cooling systems) using penetrative methods shall be undertaken until a Piling/ Deep Foundation Method Statement has first been submitted to and approved in writing by the Local Planning Authority in consultation with potentially affected parties responsible for sub-surface infrastructure.

The Statement shall include an assessment of impacts on noise, vibration, land stability, ground water levels, underground pipes and other infrastructure as well as details of the measures to be taken to mitigate any adverse effects.

The groundworks shall thereafter 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) do not harm groundwater resources, damage essential infrastructure and do not have an adverse impact on the local amenity in accordance with Policies EQ1 'Contaminated Land and Land Instability', EQ2 'Noise Pollution' and WAT3 'Water Quality and Water Environment' of the East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

26. Scheme for Managing Borehole Investigation:

Prior to commencement of any phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), that involves the installation of, or use of, existing boreholes, 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 operational use of each phase or sub-phase of development and no boreholes should be decommissioned until it has been agreed in writing that they are no longer required.

Reason: To ensure that a sufficient monitoring network is maintained to allow for the completion of any monitoring required and to ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in accordance with Policy WAT3 'Water Quality and Water Environment' of East Herts District Plan (2018) and Policies PL10 'Pollution and Contamination' and PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

27. Implementation of Drainage Strategy:

The development hereby approved shall be carried out in accordance with the principles of the approved Drainage Strategy (Reference number: EHUK-VEC-1XX-XX—TN-D-9001 B) and shall include and follow the mitigation details identified for each drainage catchment including:

- a) Specification to demonstrate and follow an appropriate Sustainable Drainage System (SuDS) management and treatment train.
- b) Prioritise on-surface conveyance features.
- c) Provision of biodiversity enhancement within SuDS provision.
- d) Provision of drainage catchments as per the agreed characteristic below or such discharge rates and storage volumes agreed with the Local Planning Authority following detailed design:
- o Catchment E1 limiting the surface water runoff generated by the critical storm events to the maximum of 11.5 l/s for the 1 in 30 year event providing a minimum of 610m3 of storage.
- o Catchment E2 limiting the surface water runoff generated by the critical storm events to the maximum of 7.9 l/s for the 1 in 30 year event providing a minimum of 416m3 of storage.
- o Catchment E3 limiting the surface water runoff generated by the critical storm events to the maximum of 10.6 l/s for the 1 in 30 year event providing a minimum of 556m3 of storage.
- o Catchment E4 limiting the surface water runoff generated by the critical storm events to the maximum of 8.7 l/s for the 1 in 30 year event providing a minimum of 412m3 of storage.
- O Catchment E5 limiting the surface water runoff generated by the critical storm events to the maximum of 5 l/s for the 1 in 30 year event providing a minimum of 230m3 of storage.
- O Catchment Road 2 limiting the surface water runoff generated by the critical storm events to the maximum of 14.2 l/s for the 1 in 30 year event providing a minimum of 749m3 of storage.

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o Catchment Eastwick Road - limiting the surface water runoff generated by the critical storm events to the maximum of 5 l/s for the 1 in 30 year event providing a minimum of 25m3 of storage.

The mitigation measures shall be fully implemented prior to operational use of the development and subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the Local Planning Authority.

Reason: To ensure the development appropriately addresses climate change and the risk of flooding, to ensure satisfactory storage of and disposal of surface water from the entire strategic drainage network, to improve and protect water quality and to protect natural habitats in accordance with Policy WAT3 'Water Quality and Water Environment' of East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

28. Detailed Surface Water Drainage Scheme:

Prior to the commencement of each phase or sub-phase of the development (save for Enabling Works) (as defined in plans and documents approved pursuant to Condition 5), a Detailed Surface Water Drainage Scheme for that phase or sub-phase, or for the whole affected catchment based on the approved Drainage Strategy and sustainable drainage principles, shall be submitted to and approved in writing by the Local Planning Authority in consultation with Hertfordshire County Council/ Essex County Council as Lead Local Flood Authorities.

The Scheme shall accord with the approved SuDS principles and shall include the following details as relevant to that phase or sub-phase:

- a) Demonstration of an appropriate, final and detailed SuDS management and treatment train for each outfall.
- b) Information on ground conditions, including desk-based assessment, exploratory hole logs, in-situ test data, including infiltration tests undertaken in accordance with the BRE 365 testing procedure and, records of groundwater level monitoring, undertaken for a minimum period of 6 months over the autumn/winter period.
- c) Verification of the suitability of infiltration of surface water for the development.
- d) Any existing drainage network within the extents of the planning application boundary, into which new highway runoff is being discharged, shall be checked to be functional/operational and the highway authority to be advised of existing blockages which need maintenance to repair. Additional attenuation storage shall be provided if identified as required, to reflect any net increases in runoff quantities being discharged into the existing networks, to avoid downstream flooding.
- e) Detailed plan showing the finalised drainage catchment areas.
- f) Full, detailed modelling for the strategic network to demonstrate how the system operates during up to and including the 1 in 1 year, the 1 in 30 year and the 1 in 100 year rainfall event including 40% allowance for climate change. Primarily surface water storage to be provided for up to and including the 1 in 30 year rainfall event.
- g) Full detailed engineering drawings of any SuDS, surface water storage or conveyance feature including cross and long sections, location, size, volume, depth and

any inlet and outlet features. This should be supported by a clearly labelled, detailed drainage layout plan showing any SuDS and pipe networks. The plan should show any pipe 'node numbers' that have been referred to in network calculations and it should also show invert and cover levels of manholes. Total storage volumes provided within each catchment should be identified.

- h) Identification of opportunities to address existing surface water flooding in the immediate vicinity of the development site, within the extents of the red line planning application boundary.
- i) Detailed topographical surveys of the site and any existing watercourses.
- j) A Catchment Walkover of receiving watercourses shall be undertaken including topographical survey, details of water levels, and the location of existing structures that may constrain flows along watercourses receiving surface water runoff from the development, to ensure that there is sufficient capacity to accommodate future changes in flows.
- k) Full condition survey of all existing structures on all watercourse networks impacted by the proposed development or located within the development site.
- I) Full details of connection points to ordinary watercourses and main rivers, including cross sections and long sections drawings of any new proposed structures.
- m) Details of final exceedance routes above the designed 1 in 30 year return period, also including those for an event which exceeds to 1:100 rainfall event including climate change event.
- n) A management and maintenance plan including maintenance and operational activities. This should include land ownership plans with identified operators responsible for any future maintenance for the lifetime of the development.
- o) Phasing plan for the provision of SuDS and drainage infrastructure within each drainage catchment.
- p) Final, detailed planting plans for all proposed SuDS features and its surrounding area.
- q) Assessment of all works impacting on any existing ordinary watercourses and identification with acknowledgement of any needed ordinary watercourse consents.
- r) Demonstrate that all storage features can half empty within 24 hours for the 1 in 30 year plus 40% climate change critical storm event.
- s) The appropriate level of treatment for all runoff leaving the site, in line with the Simple Index Approach in chapter 26 of the CIRIA SuDS Manual C753 and Highways England Water Risk Assessment Tool (HEWRAT).
- t) A written report summarising the final strategy and highlighting any minor changes to the approved strategy.

The surface water drainage network shall be designed and fully implemented in accordance with the details and phasing plan thus approved.

Reason: To prevent flooding by ensuring the satisfactory storage of / disposal of surface water from the site; to ensure the effective operation of SuDS features over the lifetime of the development; and to provide mitigation of any environmental harm which may be caused to the local water environment. Failure to provide the above required information before commencement of works may result in a system being installed that is not sufficient to deal with surface water occurring during rainfall events and may lead to increased risk and pollution hazard from the site. This is in accordance with Policy WAT3 'Water Quality and Water Environment' of East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

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Within three months of completion of SuDS works for each phase or sub-phase (as defined in plans and documents approved pursuant to Condition 5), or for a defined catchment relevant to the development, a final Completion and Verification Report for that phase or sub-phase or catchment shall be submitted to, and approved in writing by the Local Planning Authority in consultation with Hertfordshire County Council/ Essex County Council as Lead Local Flood Authorities.

The Completion and Verification Report shall include the following details:

- a) Provision of a Completion and Verification Report appended with substantiating evidence demonstrating the approved construction details and specifications for the SuDS features and drainage network have been implemented in accordance with the surface water drainage scheme. The verification report shall include photographs of excavations and soil profiles/horizons, installation of any surface water structure, during construction and final make up, and the control mechanism.
- b) Provision of a complete set of as built drawings for site drainage.
- c) Post-construction surveys including a CCTV survey for any underground features and piped networks.
- d) A management and maintenance plan for the SuDS features and drainage network, which should include details of the maintenance activities/ frequencies for each feature.
- e) Final arrangements for adoption with identified operators responsible for future maintenance and any other measures to secure the operation of the scheme throughout its lifetime.

Reason: To ensure approved drainage measures are fully implemented and appropriate maintenance arrangements are put in place to enable the surface water drainage system to function as intended to ensure mitigation against flood risk. Failure to provide the above required information prior to occupation may result in the installation of a system that is incomplete and / or not properly maintained and may increase flood risk or pollution hazard from the site. This is in accordance with Policy WAT3 'Water Quality and Water Environment' of East Herts District Plan (2018) and Policy PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' of the Harlow Local Development Plan (2020).

30. Tree and Hedge Removal:

Until the end of five years following completion of each phase of the development (as defined in plans and documents approved pursuant to Condition 5), all existing trees and hedges which are shown on the approved drawings as being retained, shall be retained and shall not be damaged, cut down, uprooted or destroyed without the prior consent of the Local Planning Authority.

Reason: To ensure the continuity of amenity afforded by existing trees and hedges, in accordance with Policy DES3 'Landscaping' of the East Herts District Plan (2018) and Policy PL7 'Trees and Hedgerows' of the Harlow Local Development Plan (2020).

31. Tree and Hedge Protection Measures:

No phase or sub-phase of development (as defined in plans and documents approved pursuant to Condition 5) shall commence until full details of the tree and hedge protection

measures in respect of that phase or sub-phase have been submitted to, and approved in writing by, the Local Planning Authority and until the approved protection has been erected on site.

Protection measures shall be in accordance with BS5837: 2012 Trees in Relation to Design, Demolition and Construction, and be in place for the duration of the works on site. In the event that trees or hedging die, become damaged or otherwise defective within five years of completion of development within that phase or sub-phase, the Local Planning Authority shall be notified as soon as reasonably practicable, and remedial action agreed and implemented. The agreed remediation strategy and associated planting shall be undertaken during the first available planting season.

Reason: To ensure the continuity of amenity afforded by existing trees and hedges, in accordance with Policy DES3 'Landscaping' of the East Herts District Plan (2018) and Policy PL7 'Trees and Hedgerows' of the Harlow Local Development Plan (2020).

32. Landscaping Strategy and Management and Maintenance Plan:
Prior to the first public use of any phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), a detailed hard and soft Landscaping Strategy for that phase or sub-phase shall be submitted to and approved by the Local Planning Authority, in consultation with the Highway Authority.

The Landscaping Strategy shall include as a minimum the following details:

- a) Planting schedule to show species, sizes, number and densities;
- b) Planting plans to show the location of proposed planting, based on the approved landscaping drawings but informed by a consideration of the screening properties of the proposed planting;
- c) Written specifications to demonstrate cultivation and other operations associated with the establishment of grassland and planting;
- d) Details of hard landscaping proposals including surface treatment of SuDS maintenance access routes, fencing, gates, benches, lighting, bins and other structures;
- e) Details of signage and wayfinding;
- f) Details of any proposed Public Art;
- g) Implementation timetables;
- h) Landscape Management and Maintenance Plan;
- i) Demonstration how the Landscape Strategy for that phase or sub-phase has been cognisant of the Landscape Strategies for prior phases.

The development shall be carried out in accordance with the approved Landscaping Scheme and the approved timetable and Landscape Management and Maintenance Plan.

Any trees or plants that, within a period of five years after planting, are removed, die or become, in the opinion of the Local Planning Authority, in consultation with the Highway Authority, seriously damaged or defective, shall be replaced as soon as is reasonably practicable with others of species, size and number as originally approved, unless the Local Planning Authority gives its written consent to any variation

Reason: In order to provide green infrastructure and landscaping in accordance with Policies NE4 'Green Infrastructure' and DES3 'Landscaping' of the East Herts District Plan (2018); and Policy SIR 2 'Enhancing Key Gateway locations' and Policy 'PL8 Green Infrastructure and Landscaping' of the Harlow Local Development Plan (2020).

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33. Legally Protected Species and Habitat Protection and Enhancement Plan:
No phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) shall commence (save for Enabling Works, but excluding site clearance, demolition and tree/ vegetation removal), until a Species and Habitat Protection and Enhancement Plan for that phase or sub-phase has been submitted to and approved in writing by the Local Planning Authority.

The Species and Habitat Protection and Enhancement Plan shall detail measures to mitigate and/or compensate damages to protected and notable species (under The Wildlife and Countryside Act 1981) and their associated habitat.

The Species and Habitat Protection and Enhancement Plan must be based on up-to-date surveys and consider the whole duration of that phase or sub-phase of the development, from the construction phase through to completion.

The plan shall include the following (as far as is relevant to that phase or sub-phase):

- a) Up-to-date ecological surveys conducted by a suitably qualified ecologist, at the appropriate time of year;
- b) Details and drawings of the road crossings and culverts, including how they will interact with the watercourses (e.g. abutments, buffer zones, shading, lighting);
- c) Details of how the development will mitigate and compensate for any impacts it may have on protected species and their associated habitats and habitat corridors including floodplain restoration and how it will enhance habitats and corridors:
- d) Details of improvements to watercourse riparian corridors and river channels;
- e) Measures to be taken to ensure the safe movement of terrestrial mammals through/beneath the structures;
- f) Measures to be taken to provide bird and bat nesting and roosting sites on or around elevated structures;
- g) Measures to be taken to avoid disturbance to landscaping and habitats adjacent to pedestrian/cycle routes;
- h) Demonstration of how the above measures contribute towards biodiversity gain based on an up to date biodiversity net gain metric or alternative methodology as agreed by the Local Planning Authority;
- i) Description and evaluation of any features to be managed;
- j) Any specific ecological trends and constraints on the site that might influence management;
- k) Aims, objectives, actions and methods to ensure effective management;
- I) Preparation of a works schedule including an annual work plan capable of being rolled forward every 5 years;
- m) Details of ongoing management, maintenance, monitoring and remedial measures;
- n) A programme for implementation:
- o) Details of the body or organisation responsible for implementation and management of the plan;
- p) A scheme for the long-term funding and management mechanisms by which implementation, long term management and protection of these species and habitats will be secured.

The development shall be carried out in accordance with the approved details and the plan shall be implemented and the site managed in accordance with the approved details.

Reason: In order to provide an up to date baseline of biodiversity information and to ensure biodiversity is protected as far as possible and habitats are created and enhanced in accordance with Policies NE3 'Species and Habitats' and WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policies WE3 'General Strategy for Biodiversity and Geodiversity' PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems', and PL9 'Biodiversity and Geodiversity Assets' of the Harlow Local Development Plan (2020).

34. Habitat Compensation Ecological Management Plan - On-Site:

Prior to the commencement of any phase of the development (as defined in plans and documents approved pursuant to Condition 5) that results in the loss of habitat in the Fiddlers' Brook Marsh/Hollingson Meads Local Wildlife Site, and the Hollingson Meads area, a Habitat Compensation Ecological Management Plan shall be submitted to and approved in writing by the Local Planning Authority setting out how 0.82 Ha of compensatory habitat will be provided within the area of land identified on Drawing HNP495-GRA-SK-0010 Rev 01 - ESC Ecological Compensation or such other area of land agreed with the Local Planning Authority.

The Plan shall include the following:

- a) Details of how the development will mitigate and compensate for any impacts it may have on protected species and their associated habitats and habitat corridors including floodplain restoration and how it will enhance habitats and corridors;
- b) Demonstration of how the above measures contribute towards achieving a biodiversity net gain based on an up to date biodiversity metric or alternative methodology as agreed by the Local Planning Authority;
- c) Description and evaluation of any features to be managed;
- d) Any specific ecological trends and constraints on the site that might influence management;
- e) Aims, objectives, actions and methods to ensure effective management;
- f) Preparation of a works schedule including an annual work plan capable of being rolled forward every 5 years;
- g) Details of ongoing management, maintenance, monitoring and remedial measures;
- h) A programme for implementation:
- i) Details of the body or organisation responsible for implementation and management of the plan;
- j) A scheme for the long-term funding and management mechanisms by which implementation, long term management and protection of these species and habitats will be secured.

Thereafter, the Plan shall be implemented in accordance with the approved details and programme.

Reason: To ensure that the development compensates for the loss of designated sites of nature conservation interest in accordance with Policy NE1 and NE3 of the East Herts District Plan (2018) and Policy PL8 and PL9 of the Harlow Local Development Plan (2020).

35. Habitat Compensation Ecological Management Plan - Off-Site:
Prior to the commencement of any phase of the development (as defined in plans and documents approved pursuant to Condition 5) that results in the loss of habitat in the

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Hollingson Meads area, a Habitat Compensation Ecological Management Plan shall be submitted to and approved in writing by the Local Planning Authority setting out how 4.11Ha of compensatory habitat will be provided within the area of land identified on Drawing HNP495-GRA-SK-0011 Rev 03 - CSC Ecological Compensation.

The Plan must include the following:

- a) Details of how the development will mitigate and compensate for any impacts it may have on protected species and their associated habitats and habitat corridors including floodplain restoration and how it will enhance habitats and corridors;
- b) Demonstration of how the above measures contribute towards achieving a biodiversity net gain based on an up to date biodiversity metric or alternative methodology as agreed by the Local Planning Authority;
- c) Description and evaluation of any features to be managed;
- d) Any specific ecological trends and constraints on the site that might influence management;
- e) Aims, objectives, actions and methods to ensure effective management;
- f) Preparation of a works schedule including an annual work plan capable of being rolled forward every 5 years;
- Details of ongoing management, maintenance, monitoring and remedial measures;
- h) A programme for implementation;
- i) Details of the body or organisation responsible for implementation and management of the plan;
- j) A scheme for the long-term funding and management mechanisms by which implementation, long term management and protection of these species and habitats will be secured.

Thereafter, the Plan shall be implemented in accordance with the approved details and programme.

Reason: To ensure that the development compensates for the loss of designated sites of nature conservation interest in accordance with Policy NE1 and NE3 of the East Herts District Plan (2018) and Policy PL8 and PL9 of the Harlow Local Development Plan (2020).

36. Biodiversity Monitoring and Verification Plan:

Five years following completion of the development hereby approved (plus every five years thereafter for a period of 30 years) a Biodiversity Monitoring and Verification Report and Action Plan shall be submitted to the Local Planning Authority for approval.

The Report shall confirm the effectiveness or otherwise of the Landscape Management and Maintenance Plan (Condition 32), Species and Habitat Protection and Enhancement Plan (Condition 33), Habitat Compensation Ecological Management Plan On-Site (Condition 34) and Habitat Compensation Ecological Management Plan - Off-site (Condition 35). The submission must be made by a suitably qualified professional.

As a minimum the report shall include a suite of quantitative and qualitative indicators using methods such as annual site walkovers, surveys and fixed-point photography, to monitor the implementation and effectiveness of mitigation/ management measures. The report shall include any remediation works required in order to address where measures may not

be functioning and/or meeting net gain targets expected. The details of all survey findings shall be shared with Herts Ecological Record database.

Any remediation works identified shall thereafter be implemented in accordance with the approved details.

Reason: To ensure that the development maintains, enhances and contributes appropriately to biodiversity in accordance with Policies NE3 'Species and Habitats' and WAT3 'Water Quality and the Water Environment' of the East Herts District Plan (2018) and Policies WE3 'General Strategy for Biodiversity and Geodiversity', PL11 'Water Quality, Water Management, Flooding and Sustainable Drainage Systems' and PL9 'Biodiversity and Geodiversity Assets' of the Harlow Local Development Plan 2020.

37. Archaeological Written Scheme of Investigation:

No demolition shall be carried out nor shall any development commence (save for Enabling Works) in any phase or sub-phase of the site (as defined in plans and documents approved pursuant to Condition 5), until an Archaeological Written Scheme of Investigation covering that phase or sub-phase of the site has been submitted to and approved in writing by the Local Planning Authority.

The Written Scheme of Investigation shall include an assessment of archaeological significance and research questions; and details of:

- a) The programme and methodology of site investigation and recording as suggested by the evaluation;
- b) The programme for post investigation assessment;
- c) Provision to be made for analysis of the site investigation and recording;
- d) Provision to be made for publication and dissemination of the analysis and records of the site investigation;
- e) Provision to be made for archive deposition of the analysis and records of the site investigation;
- f) Nomination of a competent person or person/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation.

Reason: To ensure the appropriate investigation for presence / recording of heritage assets in accordance with Policy HA3 'Archaeology' of the East Herts District Plan (2018) and Policy PL12 'Heritage Assets and their Settings' of the Harlow Local Development Plan (2020).

38. Implementation of Archaeological Investigation:

No development shall take place in any phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5) other than in complete accordance with the programme of archaeological investigation and works set out in the Written Scheme of Investigation for that phase approved pursuant to Condition 37.

Reason: to ensure the appropriate investigation for presence / recording of heritage assets and to comply with the requirements of Policy GA1 of the East Herts District Plan 2018, Policy PL12 of the Harlow Local Development Plan and paragraph 211 of the NPPF 2021.

39. Post Archaeological investigation Assessment:

No phase or sub-phase of the development (as defined in plans and documents approved pursuant to Condition 5), shall be brought into use until the site investigation and post investigation assessment has been completed for that phase or sub-phase in accordance

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with the programme set out in the Written Scheme of Investigation approved pursuant to Condition 37 and the provision made for analysis and publication where appropriate.

Reason: To ensure the appropriate investigation for presence / recording of heritage assets in accordance with Policy HA3 'Archaeology' of the East Herts District Plan (2018) and Policy PL12 'Heritage Assets and their Settings' of the Harlow Local Development Plan (2020).

40. Land Restoration:

In the event that outline planning permission has not been granted for planning application EHDC Ref 3/19/1045/OUT within 18 months of the date of this permission and Enabling Works have been undertaken:

- (1) a Land Restoration Scheme of Work to restore any land that has been subject to and/or impacted by the Enabling Works shall be submitted to and approved by the Local Planning Authority within 21 months of the date of this permission; and
- (2) any works carried out in connection with the development hereby permitted (e.g. as Enabling Works) shall be removed and the land restored to its former condition in accordance with the Scheme of Work and programme approved by the local planning authority.

The Land Restoration Scheme of Work to be submitted shall include a programme, detailed specifications and/or plans for remedial and restoration works, full details of replacement tree planting and landscaping along with a maintenance plan to the effect that should any part of replacement planting fail within a period of five years after planting these will be replaced.

The restoration works shall be carried out and completed in complete accordance with the approved details of the Land Restoration Scheme and evidence shall be provided to the satisfaction of the Local Planning Authority of the completion of the restoration works to be confirmed in writing.

If at any period within 21 months of the date of this permission any Enabling Works have been carried out and planning permission has not been granted for the outline planning application EHDC Ref 3/19/1045/OUT, no further material operation shall be carried out on the application site except for restoration works in full accordance with the approved Land Restoration Scheme of Work.

Reason: Permitting "Enabling Works" enables the realisation of public benefits and helps to meet local plan requirements. If the crossing permission is unable to be implemented prior to expiry (on account of condition 4 not being satisfied) than any works to or harm caused to the crossing site is to be rectified so to reverse the effects of the "Enabling Works". In order to ensure the satisfactory replacement of landscaping features which are of amenity and/or biodiversity value, in accordance with Policies NE4 'Green Infrastructure', DES3 'Landscaping', DES4 (III) 'Design of Development' and TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation of the East Herts District Plan (2018) and Policy 'PL8 Green Infrastructure and Landscaping' of the Harlow Local Development Plan (2020).

41. Details and Delivery of Junction Improvements A414 Edinburgh Way/River Way and River Way Bus Stops:

Prior to the first operational use of Road 3:

- a) Detailed drawings shall be submitted to and approved in writing by the Local Planning Authority in consultation with the Highway Authority comprising proposed junction improvements to the A414 Edinburgh Way/River Way junction and for new bus stop(s) to River Way:
- b) The Applicant shall enter into a legal agreement under section 278 of the Highways Act 1980 to undertake the works in complete accordance with the approved details;
- c) The agreed works shall be practically complete to the satisfaction of the Highway Authority, demonstration of which shall be provided to the Local Planning Authority.

Reason: To ensure that off-site improvement works occur in a timely fashion in accordance with Policy TRA1 'Sustainable Transport' and Policy TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation' of the East Herts District Plan (2018), and Policy SIR2 'Enhancing Key Gateway Locations', Policy IN1 Development and Sustainable Modes of Travel' and Policy IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

42. Employment and Training Strategy:

Prior to the commencement of construction works on any part of the development hereby approved (save for Enabling Works), an Employment and Training Strategy shall be submitted to and approved in writing by the Local Planning Authority. The Strategy shall set out the details of how employment and training opportunities will be provided to the local population during the construction phase of the development.

The Employment and Training Strategy shall provide details of the following:

- a) A schedule of new employment opportunities to be created through the proposed development, including (but not limited to) long-term job creation, short term/temporary job creation, apprenticeships, work placements, work experience and pre-employment training scheme placements:
- b) The process by which jobs will be advertised to local people;
- c) The method in which the provision of jobs for local residents will be monitored;
- d) Details of training programmes and opportunities, including through local education and further education establishments such as (but not limited to) Hertfordshire University, Herts Regional College, Harlow College and Job Centre Plus.

Once approved, the Employment and Training Strategy shall be implemented (including by all sub-contractors) in accordance with the approved details (or any subsequent revision thereof approved in writing by the Local Planning Authority).

Reason: To ensure opportunities are created for local residents to access employment and/or training during the construction of the development, in accordance with Policy GA1 (r) 'The Gilston Area' and ED6 'Lifelong Learning' of the East Herts District Plan (2018) and Policy PR4 'Improving Job Access and Training' of the Harlow Local Development Plan (2020).

43. Pye Corner Public Realm Improvements:

Within 6 months of the first operational use of Road 1 and Road 2 and in any event prior to commencement of Road 3, a Public Realm Enhancement Strategy for Pye Corner (which shall be located on land within the adopted highway boundary) together with a programme

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for the delivery of the improvement works to Fiddlers' Brook Footbridge shall be submitted to and approved in writing by the LPA in consultation with the Highway Authority.

The Strategy shall detail the proposed enhancements and the programme and arrangements for delivering the details agreed which shall also include a programme for the delivery of the improvement works approved pursuant to Listed Building Consent 3/19/1049/LBC.

The approved details shall be delivered in accordance with the approved programme contained in the Strategy.

Prior to the first operational use of Road 3, the improvements approved including those to Fiddlers' Brook Footbridge pursuant to the Listed Building Consent 3/19/1049/LBC must have been carried out to the satisfaction of the Local Planning Authority.

Reason: To provide enhancements to the public realm of Pye Corner and Fiddlers' Brook Footbridge in the interests of amenity and place making following the closure of the road as a through-route to motorised vehicles, in line with the provisions of Policy GA1 'The Gilston Area', Policy GA2 'The River Stort Crossings', Policy HA1 'Designated Heritage Assets', Policy DES2 'Landscape Character', Policy DES3 'Landscaping', Policy DES4 'Design of Development', Policy TRA1 (Sustainable Transport', Policy TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation, and Policy CFLR9 'Health and Wellbeing' of the East Herts District Plan (2020).

44. Stort Navigation Footbridge Enhancements:

Within 12 months of the first operational use of Road 3, details of the proposed Scheme of Works to the decks and parapets of the two Stort Navigation Footbridges (identified on Drawing VD17516/EC-101-GA P04) shall be submitted to and approved in writing by the LPA in consultation with the Highway Authority.

The Scheme of Works shall demonstrate that the design facilitates the safe movement of pedestrians and cycles being walked across the bridges, the programme and arrangements for delivering the Works agreed.

The approved details shall be delivered in accordance with a programme contained in the Scheme of Works.

Reason: To provide enhancements to the public realm of the Stort Navigation in the interests of amenity and place making, following the closure of the road as a through-route to motorised vehicles, in line with the provisions of Policy GA1 'The Gilston Area', Policy GA2 'The River Stort Crossings', Policy TRA1 'Sustainable Transport', Policy TRA2 'Safe and Suitable Highway Access Arrangements and Mitigation' of the East Herts District Plan (2018), and Policy IN1 Development and Sustainable Modes of Travel' and Policy IN2 'Impact of Development on the Highways Network including Access and Servicing' of the Harlow Local Development Plan (2020).

Informatives:

- 1. A) 'Enabling Works' comprises "site clearance and demolition; tree/vegetation removal (in accordance with the approved plans in Condition 2); soil investigations (including soakage testing, window sampling, boreholes, CBR's and gas monitoring); ecology surveys; archaeology surveys (including geo physical surveys, window samples and trenching); slip trenches to investigate existing services; drainage surveys (such as CCTV and jetting); river modelling; and topographical surveys"
- 2. B) 'Local Planning Authority' means either East Herts Council and/or Harlow District Council. Both Councils will consult the other when providing agreement in writing on applications to discharge conditions.
- 3. C) 'Highway Authority' means either Essex County Council and/or Hertfordshire County Council. The Local Planning Authorities will consult with the Highway Authorities when providing agreement in writing on applications to discharge conditions.
- 4. D) The permission does not convey any consent which may be required under any legislation other than the Town and Country Planning Acts. Any permission required under the Highways Act, Building Regulations or under any other form of law, must be obtained from the relevant authority or body e.g. Fire Officer, Health and Safety Executive, Environment Agency etc. Neither does this permission negate or override any private covenants which may affect the land.
- 5. E) The permission is for construction of new public highway infrastructure. As a result the permission cannot be implemented without the prior approval of the local highway authorities (Hertfordshire County Council and Essex County Council). Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and meet their requirements. In order to implement this permission it will be necessary for the developer of the site to enter into agreements with the County Councils as Highway Authorities under Section 278 and Section 38 of the Highways Act to ensure satisfactory completion of the road improvements. The construction must be undertaken to the Highway Authorities' detailed design / specification and to their satisfaction. Construction must be undertaken by a contractor who is authorised to work in the public highway.
- 6. F) Implementation also requires:
- I. that necessary property rights for use and access to all land required for the extended / enlarged and new highways (including drainage features and drainage rights and connections to existing water courses) have been legally secured in the public interest.
- II. that the agreements under Section 38 of Highways Act for the highways authorities to adopt the newly constructed public highway (and any related features that are required for its operation) on its satisfactory completion include financial provision for future maintenance. Highways Development Management teams should be consulted on any drainage features that are proposed for adoption by Hertfordshire County Council/ Essex County Council. Any drainage features to be adopted shall be designed and built to accommodate the Highway Authorities adoption requirements and an appropriate commuted sum, based on the approved feature maintenance plan must be agreed.
- 7. G) The highway authorities also advise that, to ensure any works as part of this development are carried out in accordance with other the provisions of the Highways Act 1980 and other relevant processes, the following advice is considered:

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I. Public Rights of Way:

Public Rights of Way should remain unobstructed by vehicles, machinery, materials, tools and any other aspects of the construction during works. The safety of the public using the route and any other routes to be used by construction traffic should be a paramount concern during works. Safe passage past the site should be maintained at all times. The condition of the route should not deteriorate as a result of these works. Any adverse effects to the surface from traffic, machinery or materials (especially overspills of cement & concrete) should be made good to the satisfaction of this Authority. All materials should be removed at the end of the construction and not left on the Highway or Highway verges. If the above conditions cannot reasonably be achieved, then a Temporary Traffic Regulation Order would be required to close the affected route and divert users for any periods necessary to allow works to proceed. A fee would be payable to the relevant County Council for such an order. Further information should be sought in relation to the works that are required along the route including any permissions that may be needed to carry out the works.

II. Obstruction of public highway land:

It is an offence under Section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in any way to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant must contact the Highway Authority to obtain their permission and requirements before construction works commence.

III. Storage of materials:

The applicant is advised that the storage of materials associated with the construction of this development should be provided within the site on land which is not public highway, and the use of such areas must not interfere with the public highway. If this is not possible, authorisation should be sought from the Highway Authority before construction works commence.

IV. Road Deposits:

It is an offence under Section 148 of the Highways Act 1980 to deposit mud or other debris on the public highway, and Section 149 of the same Act gives the Highway Authority powers to remove such material at the expense of the party responsible. Therefore, best practical means shall be taken at all times to ensure that all vehicles leaving the site during construction of the development are in a condition such as not to emit dust or deposit mud, slurry or other debris on the highway.

- 8. H) Other legal procedures providing wider public and private interest safeguards must be satisfied before implementation. These include:
- I. Procedural Orders for any changes to existing public highway that affect pubic and / or private interests.
- II. Procedural Orders for bridging the navigable waterway.
- III. Land drainage procedures, rights and legal requirements taking account of Environment Agency and Lead Local Flood Authority (LLFA) requirements and advice. All works to

ordinary watercourses, including widening of the channel to include additional storage will require ordinary watercourse consent from the LLFAs. It is the applicant's responsibility to check that they are complying with common law if the drainage scheme proposes to discharge into an off-site ditch/pipe. The applicant should seek consent where appropriate from other downstream riparian landowners. Any works proposed to be carried out that may affect the flow within an ordinary watercourse will also require the prior written consent from the LLFA under Section 23 of the Land Drainage Act 1991. This includes any permanent and or temporary works regardless of planning permission. The LLFAs have a duty to maintain an asset register and records of assets which have a significant impact on the risk of flooding. In order to capture proposed Sustainable Urban Drainage (SuDS) features which may form part of the future register, details of and location of the SuDS assets created or modified through the development should be provided in a GIS layer on completion of the development.

- 9. I) Additional regulatory consideration may be required on some of specialist matters relevant to this permission as follows:
- I. Archaeological requirments (Hertfordshire and Essex County Councils)
- II. Local Land and Property Gazetteer Custodian requirements (District Councils); the development may involve the naming of new streets and numbering of properties)
- III. Sewer protection requirements; the site has public sewers running across or close to it which may be affected by the proposed building works. It may be necessary to divert the sewer and water course and carry out other works to protect it and the proposed building works before any site works are commenced (Thames Water Development Planning, Asset Investment Unit, Maple Lodge, Denham Way, Rickmansworth, WD3 9SQ Telephone: 01923 898072)
- IV. Ground water pollution risk; parts of the site are located within the groundwater protection zone of Sawbridgeworth Pumping Station. The construction works and operation of the proposed development should be in accordance with the relevant British Standards and Best Management Practices, thereby significantly reducing the polution risk. Construction works may exacerbate any existing pollution. Please refer to CIRIA Publication C532 'Control of water pollution from construction- guidance for consultants and contractors'
- V. Protected species including bats / reptiles / great crested newts; if found during development, works must stop immediately and professional ecological advice must be sought on how to proceed. A licence may be required from Natural England who can be contacted on 01206 796666. Nesting birds are protected under the Wildlife and Countryside Act 1981 and care should be taken in vegetation clearance works between 1st March and 30th September.

This Decision Relates to Plan Numbers:

VD17516-EC-100-GA (1 of 3) General Arrangement (1 of 3) P05 (Layout)

VD17516-EC-100.1 GA (2 of 3) General Arrangement (2 of 3) P05 (Layout)

VD17516-EC-101-GA (3 of 3) General Arrangement (3 of 3) P04 (Layout)

VD17516-EC-102-LS Road 1 Longitudinal Section (Sheet 1 of 3) P03 (Section Details)

VD17516-EC-103-LS Road 2 Longitudinal Section (Sheet 2 of 3) P02 (Section Details)

VD17516-EC-104-LS Road 3 Longitudinal Section (Sheet 3 of 3) P03 (Section Details)

VD17516/EC-104.1- LS River Way Longitudinal Section P01 (Section Details)

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VD17516-EC-108- RL Red Line Boundary P03 (Site plan)

VD17516-EC-110-XS Eastern Stort Crossing Typical Cross Sections Sheet 1 of 2 P02 (Section Details)

VD17516-EC-111-XS Eastern Stort Crossing Typical Cross Sections Sheet 2 of 2 P03 (Section Details)

VD17516-EC-112-TR Village 1 / Terlings Park Access Swept Path Analysis Max Articulated/Refuse P01 (Road Plan/Layout)

VD17516-EC-113-TR ESC/Pye Corner Junction Swept Path Analysis Max Articulated/10m Rigid Goods P03 (Road Plan/Layout)

VD17516-EC-114-TR Village 2 Access Swept Path Analysis Max Articulated Goods Vehicle P02 (Road Plan/Layout)

VD17516-EC-115-TR Village 2 Access Swept Path Analysis 10m Rigid Goods Vehicle P02 (Road Plan/Layout)

VD17516-EC-119-TR River Way Roundabout Swept Path Analysis 10m Rigid Goods/Lights Goods Vehicle P02 (Road Plan/Layout)

VD17516-EC-116-TR Central Roundabout Swept Path Analysis Max Articulated Goods Vehicles P02 (Road Plan/Layout)

VD17516-EC-117-TR Central Roundabout Swept Path Analysis 10m Rigid Goods Vehicle P02 (Road Plan/Layout)

VD17516-EC-118-TR River Way Roundabout Swept Path Analysis Max Articulated Goods Vehicle P02 (Road Plan/Layout)

VD17516-EC-120.1-VS Road 1 Village 1 Resi Access Proposed Design Visibility P01 (Proposed Access Visibility Splays)

VD17516-EC-119.1-TR River Way Roundabout Swept Path Analysis 10m Rigid Goods Vehicle/Private Car P02 (Road Plan/Layout)

VD17516-EC-120-VS Road 1 - Fiddlers' Brook Junction Proposed Design Visibility P03 (Proposed Access Visibility Splays)

VD17516-EC-121- VS Road 2 - Eastwick Road Proposed Design Visibility P02 (Proposed Access Visibility Splays)

VD17516-EC-122-VS Road 1, 2, 3 - Central Roundabout Proposed Design Visibility P02 (Proposed Access Visibility Splays)

VD17516-EC-123-VS Road 3 - River Way Roundabout Proposed Design Visibility P02 (Proposed Access Visibility Splays)

VD17516-EC-123.1- VS River Way Roundabout Vertical Visibility (Proposed Access Visibility Splays)

VD17516-EC-109- EX P02 Existing Layout Plan P02 (Existing Site Plan)

VD17516-EC-133-TR 01 Burnt Mill Lane - Ghost Island Junction Vehicle Swept Path P01 (Road Plan/Layout)

VD17516-EC-140 P03 Proposed Speed Strategy Plan P03 (Other)

VD17516-EC-D141 P01 Existing Speed Limit Plan P01 (Other)

VD17516-EC-142- SURF Proposed vs Existing Levels P02 (Land Levels)

VD17516-EC-151- GEO Roundabout Geometry River Way Roundabout P02 (Road Plan/Layout)

VD17516-EC-150-GEO Roundabout Geometry Road 1, 2, 3 Central Roundabout P02 (Road Plan/Layout)

VD17516/EC-155- DfS Road 1 Proposed Departure from Standard P02 (Other)

VD17516-RW-RBT-120-DfS River Way Roundabout Proposed Departure from Standard P06 (Other)

VD17516-EC-170-AP Preliminary Adoption Plan Sheet 1 of 3 P02 (Other)

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VD17516-EC-171-AP Preliminary Adoption Plan Sheet 2 of 3 P02 (Other)
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VD17516-EC-172-AP Preliminary Adoption Plan Sheet 3 of 3 P02 (Other)

VD17516-EC-180-ST Structures Location Plan P03 (Road Plan/Layout)

VD17516-EC-400- VRS Proposed Vehicle Restraint Systems P02 (Road Plan/Layout)

VD17516-EC-401-VRS Proposed Vehicle Restraint Systems P03 (Road Plan/Layout)

VD17516-V2i-100- GA Village 2 Interim Phase General Arrangement P01 (Road Plan/Layout)

VD17516-EC-STR-030 Fiddlers Brook Bridge - Preliminary Design GA Drawings P03 (Road Plan/Layout)

VD17516-EC-STR- 040 Stort Valley Flood Crossing - Preliminary Design GA drawings - Sheet 1 of 2 P02 (Road Plan/Layout)

VD17516-EC-STR- 041 Stort Valley Flood Crossing - Preliminary Design GA drawings - Sheet 2 of 2 P01 (Road Plan/Layout)

18303-FB-6-008 Fiddlers Bridge - Proposed Structural Repairs Rev A (Plans - Proposed)

VD17516-EC-STR-045 Eastern Crossing Road 3 Proposed Structure Stort Valley - Sheet 1 of 2 P02 (Road Plan/Layout)

VD17516-EC-STR-046 Eastern Crossing Road 3 Proposed Structure Stort Valley - Sheet 2 o P01 (Road Plan/Layout)

VD17516-RW-STR-060 River Way Bridge Preliminary Design General Arrangements P02 (Plans - Proposed)

1774-01-CIVIC-S-SK01 Fiddlers Bridge Gilston Proposed Balustrade P04 (Plans - Proposed)

200928-3.6-GPA-EC-TPP-MM Tree Protection Plan Eastern Stort Crossing (Other)

HNP495-GRA-X-XX-DR-L-5111 Eastern Stort Crossing Planting Plan 1/5 Rev 08 (Landscaping)

HNP495-GRA-X-XX-DR-L-5112 Eastern Stort Crossing Planting Plan 2/5 Rev 08 (Landscaping)

HNP495-GRA-X-XX- DR-L-5113 Eastern Stort Crossing Planting Plan 3/5 Rev 08 (Landscaping)

HNP495-GRA-X-XX-DR-L-5114 Eastern Stort Crossing Planting Plan 4/5 Rev 10 (Landscaping)

HNP495-GRA-X-XX-DR-L-5115 Eastern Stort Crossing Planting Plan 5/5 Rev 03 (Landscaping)

HNP495-GRA-X-XX-DR-L-5121 Eastern Stort Crossing (Western Spur) Planting Plan 1/3 Rev 07 (Landscaping)

HNP495-GRA-X-XX-DR-L-5122 Eastern Stort Crossing (Western Spur) Planting Plan 2/3 Rev 11 (Landscaping)

HNP495-GRA-X-XX-DR-L-5123 Eastern Stort Crossing Western Spur) Planting Plan 3/3 Rev 09 (Landscaping)

HNP495-GRA-X-XX-DR-L-5221 Eastern Stort Crossing (Western Spur) Detailed Planting Plan Rev 06 (Landscaping)

HNP495-GRA-X-XX-DR-L-5309 Eastern Stort Crossing Planting Section Rev 04 (Landscaping)

HNP495-GRA-X-XX-DR-L-5310 Eastern Stort Crossing Planting Elevation 1/2 Rev 03 (Landscaping)

HNP495-GRA-X-XX-DR-L-5311 Eastern Stort Crossing Planting Elevation 2/2 Rev 03 (Landscaping)

HNP495-GRA-SC-001 Gilston River Crossings and Village Development Accesses Planting Schedule Rev 02 (Landscaping)

HNP495-GRA-SK-0010 ESC Ecological Compensation Rev 02 (Landscaping)

HNP495-GRA-SK-0011 CSC Ecological Compensation Rev 03 (Landscaping)

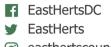
Drainage Strategy: EHUK-VEC-1XX-XX-TN-D-9001 B (Other)

Notes:

- 1. Your proposed works may require building control approval. Please contact Hertfordshire Building Control Ltd who will help you through the process. Please contact them on 0208 207 7456 or email building.control@hertfordshirebc.co.uk.
- 2. East Herts District Council would like to know what you think about our Planning Service process. We would be very grateful if you could complete the survey, by using this link https://www.surveymonkey.co.uk/r/FQMRJR9. There are only four questions to answer, so

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it will take no time at all. We want to improve our customer experience, so please take the time to let us know what you think.

Dated: 18th March 2022

On Behalf Of Development Management

Signed:

Jenny Pierce

SEE ATTACHED NOTES

TOWN AND COUNTRY PLANNING ACT 1990 PLANNING (LISTED BUILDINGS & CONSERVATION AREAS) ACT 1990

Appeals to the Secretary of State

- If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town and Country Planning Act 1990.
- As this is a decision on a planning application relating to the same or substantially the same land and development
 as is already the subject of an enforcement notice [reference], if you want to appeal against your local planning
 authority's decision on your application, then you must do so within 28 days of the date of this notice.*
- If an enforcement notice is served relating to the same or substantially the same land and development as in your application and if you want to appeal against your local planning authority's decision on your application, then you must do so within:
 - 28 days of the date of service of the enforcement notice, or within 6 months [12 weeks in the case of a householder appeal] of the date of this notice, whichever period expires earlier.*
- As this is a decision to refuse planning permission for a householder application, if you want to appeal against your local planning authority's decision then you must do so within 12 weeks of the date of this notice.*
- As this is a decision to refuse planning permission for a minor commercial application, if you want to appeal against your local planning authority's decision then you must do so within 12 weeks of the date of this notice.*
- As this is a decision to refuse express consent for the display of an advertisement, if you want to appeal against
 your local planning authority's decision then you must do so within 8 weeks of the date of receipt of this notice.*
- If you want to appeal against your local planning authority's decision then you must do so within 6 months of the
 date of this notice.*
- Appeals can be made online at: https://www.gov.uk/planning-inspectorate.
 If you are unable to access the online appeal form, please contact the Planning Inspectorate to obtain a paper copy of the appeal form on tel: 0303 444 5000.
- The Secretary of State can allow a longer period for giving notice of an appeal but will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.
- The Secretary of State need not consider an appeal if it seems to the Secretary of State that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.
- If you intend to submit an appeal that you would like examined by inquiry then you must notify the Local Planning
 Authority and Planning Inspectorate (inquiryappeals@planninginspectorate.gov.uk) at least 10 days before
 submitting the appeal. Further details are on GOV.UK.

Appeals under the Control of Advertisement Regulations

The same provision relating to rights of appeal against the Local Planning Authority's decision applies to advertisements with the following differences:

- Notice of appeal must be given in writing to the Secretary of State within 8 weeks from the date of this notice.
- The notice of appeal must be accompanied by a copy of the following documents:
 - (a) The application forms
 - (b) All relevant plans and particulars
 - (c) This notice of decision
 - (d) All other relevant correspondence with the Authority

The Secretary of State may require a statement of additional matters from either the applicant or the Local Planning Authority, and may with the agreement of both the applicant and the authority determine the appeal without affording an opportunity to appear before an Inspector.

Purchase Notices

• If either the Local Planning Authority or the First Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its

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existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the Council in whose area the land is situated.
This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

Compensation

- In certain circumstances compensation may be claimed from the Local Planning Authority if permission is refused or granted subject to conditions by the Secretary of State on appeal or on reference of the application to him.
- These circumstances are set out in Section 169 and related provisions of the Town and Country Planning Act 1971.

Please note you will no longer be receiving a hard copy of this communication.;

Appendix C - Mitigation Route Map

ES Addendum, Chapter 22 Assessment Summary and Mitigation Implementation



CHAPTER 22: ASSESSMENT SUMMARY AND MITIGATION IMPLEMENTATION

22.1.1 Tables 22.1 and 22.2 provide a summary of the predicted residual effects following mitigation implementation and a summary of the proposed mitigation.



Table 22.1: Assessment Summary

Socio Economics and Community Effects

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level		
Construction Effects										
Employment	Low	Beneficial	Minor	Not significant	Not required	Medium	Minor	High		
Operation Effects										
Housing	Low	Beneficial	Major	Significant	Not required	Major	Significant	High		
Operational Employment	Low	Beneficial	Minor	Not significant	Not required	Minor	Not significant	Moderate		
Early Years and Primary Education	Low	Beneficial	Moderate	Not significant	Not required	Moderate	Not significant	Moderate		
Secondary Education	High	Adverse	Major	Significant	Financial Contributions	Major (beneficial)	Significant	Moderate		
Primary Healthcare	Low	Adverse	Moderate	Not significant	Financial Contributions	Moderate (beneficial)	Not significant	High		
Open Space and Play Space	Low	Beneficial	Moderate	Not significant	Not required	Moderate	Not significant	Moderate		
Gypsy, Traveller and Travelling Showpeople Accommodation	High	Beneficial	Major	Significant	Not required	Major	Significant	High		
Cumulative Effects										

Effect Description Mitigation Significance Confidence Level Construction Effects Employment Construction employment and would support construction firms operating in East Herts, the region and wider England economy. Not required Moderate Beneficial High Operation Effects



				T
Housing	Provision of new homes is anticipated to have a high impact in the context of the housing need within East Herts.	Not required	Major Beneficial	High
Education	Provisions of early years, primary and secondary education in V1-7 is anticipated to be sufficient to cater for needs of the new residents.	Not required	Moderate Beneficial for early years and primary education; Major Beneficial for secondary education	Moderate
Primary Healthcare	GP services will be provided centrally within Villages 1-6, catering for the population living in Villages 1-7.	Not required	Moderate Beneficial	High
Open Space and Play Space	The Project's and V1-7 contributions to the green network is anticipated to benefit the new residents as well as the existing East Herts and Harlow residents, wider East of England population and tourism.	Not required	Moderate Beneficial	Moderate
Employment	The Project and V1-6 are anticipated to generate additional employment.	Not required	Moderate Beneficial	Moderate
Gypsy, Traveller and Travelling Showpeople Accommodation	In addition to the 8 pitches safeguarded for Gypsies and Travellers for Village 7, up to 1ha has been safeguarded to provide 15 pitches for Gypsies, Travellers and Travelling Showpeople in Villages 1-6.	Not required	Major Beneficial	High
Project, V1-6 and Committed	l Development			
Effect	Description	Description	Significance	Confidence Level
Construction Effects				
Employment	Construction of the Project, V1-6 committed development are anticipated to generate additional construction employment and would support construction firms operating the region and wider England economy.	Not required	Minor Beneficial	High
Operation Effects				
Housing	The cumulative developments are anticipated to provide new housing which impact is considered to be high in the context of the housing need within East Herts and Harlow.	Not required	Major Beneficial	High
Social Infrastructure	While Villages 1-7 are designed to be self-sufficient, the cumulative developments are anticipated to generate additional pressures on the local social infrastructure.	Onsite provisions or financial contributions	Negligible	Moderate
	Coda IIII activation		_	



Human Health

Environmental Effect	Description	Sensitivity of Receptor	Nature of Impact	Mitigation	Residual Significance of Effect	Confidence Level
Construction Effects	Effect on human health arising from construction activities such as noise and dust.	Dependant on age and general health of individuals.	Adverse	CoCP, CTMP	Not significant	High
Operation Effects	Effect on human health arising from housing and neighbourhood design.	Dependant on age and general health of individuals.	Positive	Onsite provision of social infrastructure (healthcare and secondary school facilities), housing, employment, sustainable transport strategy.	Significant	High

Cumulative Effects

Effect	Description	Sensitivity of Receptor	Nature of Impact	Mitigation	Residual Significance of Effect	Confidence Level
Construction Effects	Effect on human health arising from cumulative schemes construction activities such as noise and dust.	Dependant on age and general health of individuals.	Adverse	CoCP, CTMP	Not significant	Medium
Operation Effects	Effect on human health arising from development.	Dependant on age and general health of individuals.	Positive	Onsite, offsite or financial contribution towards provision of social infrastructure (healthcare and secondary school facilities).	Significant	Medium

Transport and Access

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Effect
Construction						
Severance	Low	Temporary, district	Major	Slight/moderate	Construction Traffic Management Plan	Temporary (long term) Slight/moderate



Pedestrian & Cyclist Delay	Low	Temporary, district	Minor	Slight/moderate	Construction Traffic Management Plan	Temporary (long term) Slight/moderate
Pedestrian & Cyclist Amenity	Low	Temporary, district	Minor	Neutral/slight	Construction Traffic Management Plan	Temporary (long term) Neutral/slight
Driver Delay	Low	Temporary, district	Minor	Slight/moderate	Construction Traffic Management Plan	Temporary (long term) Slight/moderate
Collisions & Safety	Low	Temporary, district	Negligible	Neutral	Construction Traffic Management Plan	Temporary (long term) Neutral
Public Transport	Low	Temporary, district	Moderate	Slight/beneficial	Construction Traffic Management Plan	Slight/beneficial
Operational (2033)						
Severance	Low	Permanent	Major	Slight/moderate	Travel Plan and Sustainable Travel Measures	Slight/moderate
Pedestrian & Cyclist Delay	Low	Permanent	Moderate	Neutral/slight	Travel Plan and Sustainable Travel Measures	Neutral/slight
Pedestrian & Cyclist Amenity	Low	Permanent	Major	Slight/moderate	Travel Plan and Sustainable Travel Measures	Slight/moderate
Driver Delay	Low	Permanent	Minor	Neutral/slight	Travel Plan and Sustainable Travel Measures	Neutral/slight
Collisions & Safety	Low	Permanent	Negligible	Neutral	Travel Plan and Sustainable Travel Measures	Neutral
Public Transport	Low	Permanent	Moderate	Beneficial	Travel Plan and Sustainable Travel Measures	Beneficial
Operational (2040)						
Severance	Low	Permanent	Major	Slight/moderate	Travel Plan and Sustainable Travel Measures	Slight/moderate
Pedestrian & Cyclist Delay	Low	Permanent	Moderate	Neutral/slight	Travel Plan and	Neutral/slight



					Sustainable Travel Measures	
Pedestrian & Cyclist Amenity	Low	Permanent	Major	Slight/moderate	Travel Plan and Sustainable Travel Measures	Slight/moderate
Driver Delay	Low	Permanent	Minor	Neutral/slight	Travel Plan and Sustainable Travel Measures	Neutral/slight
Collisions & Safety	Low	Permanent	Negligible	Neutral	Travel Plan and Sustainable Travel Measures	Neutral
Public Transport	Low	Permanent	Moderate	Beneficial	Travel Plan and Sustainable Travel Measures	Beneficial

Air Quality

Environmental Effect	Sensitivity of Receptor*	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level			
Construction Effects											
Dust Soiling - Existing Receptors	Low	Short-Term	Large	Low	See Error! Reference source not found.	None	Not significant	High			
Dust Soiling - Proposed Receptors	High	Short-Term	Large	High	See Error! Reference source not found.	None	Not significant	High			
Human Health -Existing Receptors	Low	Short Term	Large	Low	See Error! Reference source not found.	None	Not significant	High			
Human Health - Proposed Receptors	Low	Short-Term	Large	Low	See Error! Reference source not found.	None	Not significant	High			



Operation Effects								
Impacts of the Project on existing receptors	Medium to High	Long Term	Negligible	Negligible	None	None	Not Significant	High
Onsite air quality concentrations	Low	Long Term	Negligible	Negligible	None	None	Not Significant	High

Cumulative Effects

Effect	Description	Mitigation	Significance	Confidence Level
Off-site Construction	Dust generation at off-site existing receptors	See Error! Reference source not found.	Not significant	Medium
On-site Construction	Dust generation at on-site proposed receptors	See Error! Reference source not found.	Not significant	High
Off-site Operational	NO ₂ , PM ₁₀ and PM _{2.5} from road traffic generated by the Project at existing off-site receptors.	None	Not significant	High
On-site Operational	NO ₂ , PM ₁₀ and PM _{2.5} from nearby road traffic at proposed on-site receptors.	None	Not significant	High

Noise and Vibration

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level		
Construction Effects										
Construction noise	Medium-High	Temporary, local	Neutral-Major	Adverse	Best practicable means to be employed. The need to do so can be secured by a reasonably worded planning condition.	Minor	Adverse	High.		
Construction	Medium-High	Temporary, local	Minor	Adverse	None	Minor	Adverse	High.		



vibration								
Construction traffic	Medium-High	Temporary, local	Minor	Adverse	None	Minor	Adverse	High.
Operation Effects								
Site suitability	-	-	-	Most areas fall below the thresholds for LOAEL. Some limited areas fall between LOAEL and SOAEL.	Greenway design to be finalised to provide noise reduction from the A414 - secured by planning condition. Further consideration of detailed building layouts to locate gardens away from noisier areas, in order to achieve suitable external amenity noise levels, consider setting back of dwellings closest to Church Lane and Village 6 link road.	Suitable for development	-	High
Operational road traffic	Medium - High	Permanent, local	Neutral - Minor	Beneficial - Adverse	None	Neutral - Minor	Beneficial - Adverse	High
Noise from sports pitches	High	Permanent, local	Neutral - Minor	Adverse	Detailed design to consider distance between sports pitches and residential dwellings, consider screening and noise management plan to control noise	Neutral - Minor	Adverse	High
Plant noise	Medium - High	Permanent, local	Minor	Adverse	Full plant noise assessment to identify specific	Minor	Adverse	High



					measures required at detailed planning stage and secured by planning condition.			
Noise from commercial activity	Medium - High	Permanent, local	Minor	Adverse	Full plant noise assessment to identify specific measures required at detailed planning stage and secured by planning condition.	Minor	Adverse	High

Cumulative Effects

Effect	Description	Mitigation	Significance	Confidence Level
Construction noise and vibration	The only cumulative scheme that is considered to have a potential effect is Villages 1-6. There are a number of common receptors that have been assessed within both applications. The assessment for Villages 1-6 concluded that construction noise would result in a 'neutral' effect, it is not considered to affect the assessment presented within this chapter. The residual effect within this assessment is predicted to be minor adverse, which is not considered to be significant.	No further mitigation is required to address cumulative effects.	Minor adverse	High
Operational road traffic	An assessment of operational road traffic noise was undertaken taking into account traffic flows due to cumulative schemes within the Local Plan and complete Villages 1-6 development. The assessment resulted in a minor effect of beneficial to adverse significance depending upon the receptor. No significant effects were identified.	None	Minor adverse to minor beneficial	High
Plant noise and noise from commercial activity	Plant noise, and commercial activity noise, will be controlled to limiting noise levels at the closest noise sensitive receptors. Surrounding schemes will be required to do the same. The nearest cumulative scheme (Villages 1-6) and the Project do not share common 'closest' receptors, and therefore would not be expected to lead to any significant effects	No further mitigation is required to address cumulative effects.	Minor adverse at the closest receptor.	High

Built Heritage

Receptor	Environmental Effect	Nature of Impact	of Change (impact of	Sensitivity of Receptor (heritage significance)	Inherent Design Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
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Operation impacts	and effects							
Hunsdon Brook Fishponds	Visual	Change to the rural setting and therefore the character of the asset with the introduction of residential built form into the wider environs (southeast of the asset).	Small	Very high	Substantial minimum 20m buffer zone to existing woodland (see parameter plans showing buffers and development zones) Protected by SDA designation	Negligible	Minor (neutral)	Medium
Moated site south of Eastwick Farm	Visual	Change to the rural setting and therefore the character of the asset with the introduction of residential built form into the wider environs (southwest of the asset).	Small	Very high	Buffer zone and associated landscaping treatments	Negligible	Minor (neutral)	Medium
Hunsdon House	Visual	Change to the rural setting and therefore the character of the asset with the introduction of residential built form into the wider environs (south of the asset).	Small	Very high	Substantial green buffer zone (see parameter plans showing buffers and development zones)	Moderate	Minor (adverse)	Medium
Parish Church of St Dunstan	Visual	Change to the rural setting and therefore the character of the asset with the introduction of residential built form into the wider environs (south of the asset).	Small	Very high	Landscaped buffer built into outline application (parameter plans showing buffers and development zones)	Moderate	Minor (adverse)	Medium
Brickhouse Farm House	Visual	Change to the surrounding agricultural land and therefore the character and setting of the asset with the introduction of built form and residential nature of the Village 7 development.	Medium	High	Adjacent trees and southern walled garden to maintain group value and historic character with the barn, stable and cattleshed Protected by SDA designation	Moderate	Moderate (adverse)	Medium
Brickhouse Farm barn and attached stable and cattleshed	Visual Material/physical	Change to the surrounding agricultural land and therefore setting of the asset with the introduction of built form and residential nature of the Village 7 development. Material change to the historic barn and cattleshed	Medium	High	The asset will be appropriately restored and the surrounding new development would be appropriately sited, scaled and detailed to ensure positive relationship with receptor Protected by SDA designation	Negligible	Moderate (adverse)	Medium



		which will be restored as landmarks within the new development.						
Briggens Park and associated buildings	Visual	Change to the rural setting north of the A414 which may change longer distance views looking north and north east from within the Park.	Negligible	High	Extensive landscaping and sympathetic built form to minimise potential visibility	Negligible	Negligible (neutral)	Medium
Hunsdon Mill House and associated buildings	Visual	Change to the rural setting north of the A414 which may change longer distance views.	Negligible	High	Filtered views to and from the receptors utilising landscape buffer	Negligible	Negligible (neutral)	Medium

Cumulative Effects

Receptor	Environmental Effect (cumulative)	Description	Inherent Design Mitigation	Residual Significance of Effect (cumulative)	Confidence Level
Hunsdon Brook Fishponds	Visual	Cumulative change (impact) to value of receptor through minor to negligible alteration to its setting	Setting of the heritage asset primarily understood in the context of their immediate setting, (the stream and Hunsdon House)	Minor (adverse)	Medium
Moated site south of Eastwick Farm	Visual	Cumulative change (impact) to value of receptor through minor to negligible alteration to its setting	Immediate setting of monument to be sustained, landscaping and a sympathetic built form to mitigate the longer distance views from the north.	Moderate (adverse)	Medium
Hunsdon House	Visual	Cumulative change (impact) to value of receptor through moderate to minor alteration to its setting	Restricting building height and consideration of visibility from any status rooms within Hunsdon House in Village 1-6	Moderate (adverse)	Medium
Parish Church of St Dunstan	Visual	Cumulative change (impact) to value of receptor through moderate to minor alteration to its setting	Restricting building height and consideration of visibility from any status rooms within Hunsdon House in Village 1-6	Moderate (adverse)	Medium
Brickhouse Farm and attached stable and cattleshed	Visual	No cumulative change (Project + Villages 1-6) due to the Projects immediate alteration to its setting	Village 1-6 would not change the residual impact and effect of the Project. Village 7 will surround the Brickhouse Farm house and associated buildings, with no cumulative permanent, long-term effect. Only residual effects come from Village 7.	Moderate (adverse)	Medium
Briggens Park and associated buildings	Visual	Small change to value of receptor through moderate to minor alteration to its setting.	Landscaping and a sympathetic built form to mitigate the longer distance views looking north and north east towards the Villages 1-6	Moderate (adverse)	Medium
Hunsdon Mill House and associated	Visual	Small change to value of receptor through minor alteration to its setting.	Topography, vegetation, and reduced inter-visibility between the assets and the development areas	Minor (adverse)	Medium



buildings			

Landscape and Visual

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
Construction Effects								
Hunsdon Footpath 1 (visual effect)	Medium	Direct/ permanent	Large to medium negative	Major/ moderate adverse	None	Large to medium negative	Major/ moderate adverse	High
Operation Effects								
The Site (landscape effect)	Medium	Direct and short- term	Medium negative	Major/moderate adverse	None ¹	Large to medium negative	Major/ Moderate adverse	High
Hunsdon Footpath 1 (visual effect)	Medium	Direct/ permanent	Large to medium negative	Major/moderate adverse	None ¹	Large to medium negative	Major/moderate adverse	High
Church Lane (visual effect)	Medium to Low	Direct/ permanent	Very large to large negative	Major/moderate adverse	None	Very large to large negative	Major/moderate adverse	High
Cumulative Effects								
Effect	Description				Mitigation		Significance	Confidence Level
The Site	Cumulative landscap	oe effect with V1-6 at o	operation		None ¹		Major/moderate adverse	High
81. Pishiobury to Stansted Parklands	Cumulative visual ef	fect with V1-6 project	during construction		None		Major/moderate adverse	High
Harcamlow Way	Cumulative visual ef	fect with V1-6 project	during construction		None		Major/moderate adverse	High

¹ Mitigation-by-design is important and already taken into account. The long-term effect following the completion of the construction phase, however, would not remain significant once the landscape proposals inherent in the design mature and landscape and visual effects reduce.



Towing Path, Three Forests Way, Stort Valley Way, River Stort (Navigation)	Cumulative visual effect with V1-6 project during construction and at operation	None	Major/moderate adverse	High
Local footpaths and areas of access land on the valley floor and north- facing valley slopes of the River Stort	Cumulative visual effect with V1-6 project during construction	None	Major/moderate adverse	High
PROWs to the north and west of Eastwick	Cumulative visual effect with V1-6 project during construction and at operation	None	Major/moderate adverse	High
A414	Cumulative visual effect with V1-6 project during construction	None	Major/moderate adverse	High
Church Lane	Cumulative visual effect with V1-6 project during operation	None	Major/moderate adverse	High

Biodiversity

Ecological Feature	Conservation Importance	Potential Effect	Nature of Effect	Inherent Design Mitigation	Significance Prior to Mitigation	Additional Mitigation	Residual Effects				
Construction Phase											
Hunsdon Mead SSSI	National	Damage to vegetation, contamination and changes in the quantity, flow and quality of water	Permanent	None	Significant negative effect at the County level	Implementation of measures detailed within a CEMP to include use of protective fencing to prevent access by vehicles, incorporating a suitable buffer zone to exclude any storage of potentially polluting materials and a drainage strategy	Not significant				
Eastwick Mead LWS	County	Damage to vegetation, contamination	Permanent		Significant negative effect at the County	Implementation of measures detailed within a CEMP to include use of	Not significant				



		and changes in the quantity, flow and quality of water		None	level	protective fencing to prevent access by vehicles, incorporating a suitable buffer zone to exclude any storage of potentially polluting materials and a drainage strategy	
Lord's Wood LWS (Ancient Woodland)	County	Damage to vegetation, contamination and changes in the quantity, flow and quality of water	Permanent	None	Significant negative effect at the County level	Implementation of measures detailed within a CEMP to include use of protective fencing to prevent access by vehicles, incorporating a suitable buffer zone to exclude any storage of potentially polluting materials and a drainage strategy	Not signficant
Eastwick and Parndon Mead LWS	County	Damage to vegetation, contamination and changes in the quantity, flow and quality of water	Permanent	None	Significant negative effect at the County level	Implementation of measures detailed within a CEMP to include use of protective fencing to prevent access by vehicles, incorporating a suitable buffer zone to exclude any storage of potentially polluting materials and a drainage strategy	Not signficant
Stone Basin Spring	County	Damage to vegetation, contamination and changes in the quantity, flow and quality of water	Permanent	None	Significant negative effect at the County level	Implementation of measures detailed within a CEMP to include use of protective fencing to prevent access by vehicles, incorporating a suitable buffer zone to exclude any storage of potentially polluting materials and a drainage	Not signficant



							strategy	
Woodland (Parcels 1A and 4)		Local	Damage to vegetation	Permanent	None	Significant negative effect at the Local level	Implementation of CEMP to include incorporation of suitable buffer zone and fencing of retained and sensitive habitats	Not signficant
Hedgerows		Local	Damage to vegetation	Permanent	None	Significant negative effect at the Local level	Implementation of CEMP to include incorporation of suitable buffer zone and fencing of retained and sensitive habitats	Not signficant
			Loss of habitat	Permanent	N/A	Insignificant effect		Not signficant
		Local	Harm or death to individuals	Permanent	None	Legal consequences	Undertake work to buildings supporting confirmed bat roosts under a Method Statement (as part of an EPSL) to avoid such effects	Not signficant
Bats	Bat Assemblage excluding Barbastelle		Loss of potential and confirmed bat roosts	Permanent	None	Significant negative effect at the Local level	Install bat boxes on mature trees in woodland to provide alternative roosting sites as compensation, as detailed in a Method Statement (as part of an EPSL)	Not signficant
			Loss of foraging habitat	Permanent	None	Significant negative effect at the Local level	Compensation through habitat creation within open space areas	Not signficant
			Habitat fragmentation	Permanent	None	Significant negative effect at the Local level	Enhancement of retained vegetation and strategic planting to maintain permeability	Not signficant



			Disturbance	Temporary	None	Not significant	Implementation of CEMP to include fencing of retained and sensitive habitats and avoidance of lighting shining on sensitive habitats	Not signficant
			Disturbance	Temporary	None	Not significant	Implementation of measures detailed within a CEMP	Not signficant
			Harm or death to individuals	Permanent	None	Not significant	None	Not signficant
	Barbastelle	National	Loss of potential and confirmed bat roosts	Permanent	None	Not significant	None	Not signficant
			Loss of foraging habitat	Permanent	None	Not significant	None	Not signficant
			Habitat fragmentation	Permanent	None	Significant negative effect at the Local level	Enhancement of retained vegetation and strategic planting to maintain permeability	Not signficant
Badger		Within the Zone of Influence (brought forward	Sett removal	Permanent	None	Legal consequences	Pre-construction survey to be undertaken to update baseline information and determine need for mitigation	Not signficant
-		due to legal consequences)	Sett damage or obstruction	Permanent	None	Legal consequences	Implementation of CEMP to include incorporation of suitable buffer zone and fencing of retained and sensitive habitats	Not signficant



			Harm or death to individuals	Permanent	None	Legal consequences	Implementation of CEMP to include timing and lighting considerations	Not signficant
			Sett disturbance	Temporary	None	Legal consequences	Implementation of CEMP to include incorporation of suitable buffer zone and fencing of retained and sensitive habitats.	Not signficant
			Disturbance	Temporary	None	Significant negative effect at the Local level	Impact avoided through implementation of CEMP to include timing and lighting considerations	Not signficant
Otter		District	Pollution and Siltation	Temporary	None	Significant negative effect at the Local level	Implementation of measures detailed within a CEMP to include incorporating a suitable buffer zone to exclude any storage of potentially polluting materials	Not signficant
Reptiles		Within the Zone of Influence (brought forward due to legal consequences)	Harm or death to individuals	Permanent	None	Legal consequences	Undertake phased vegetation clearance and destructive search of the necessary areas of the Site, to be detailed in a Reptile Mitigation Strategy and implemented through a CEMP to avoid such effects	Not signficant
Birds	Breeding Birds	Local	Harm or death to individuals	Permanent	None	Legal consequences	Impact avoided through implementation of CEMP to include timing of work to avoid bird nesting season or supervision by suitably qualified ecologist	Not signficant



			Loss of habitat	Permanent	None	Significant negative effect at the Local level	Compensation through habitat enhancement and creation within open space areas	Not signficant
			Disturbance	Temporary	None	Not Significant	Implementation of CEMP to include fencing of retained and sensitive habitats and avoidance of lighting shining on sensitive habitats	Not signficant
	Wintering	District	Loss of habitat	Permanent	None	Significant negative effect at the District level	Habitat enhancement and creation within open space areas will not fully compensated for the loss of arable habitat	Significant residual negative effect at the Local level
	Birds	birds District	Disturbance	Temporary	None	Not significant	Implementation of CEMP to include fencing of retained and sensitive habitats and avoidance of lighting shining on sensitive habitats	Not signficant
Occupation Phase								
Lee Valley SPA an	ee Valley SPA and Ramsar		Recreation	Permanent	Impact avoided through provision of public open space to provide new residents with an alternative to the designated site for recreation	Not significant	None	Not signficant
			Pollution	Permanent	None	Not significant	None	Not signficant
Wormley-Hoddesd SAC	onpark Woods	International	Recreation	Permanent	Impact avoided through provision of public open space to provide new residents with an alternative to the designated site	Not significant	None	Not signficant



		I	T .	for repression		I	I
				for recreation			
		Pollution	Permanent	None	Not significant	None	Not signficant
Epping Forest SAC	International	Recreation	Permanent	Impact avoided through provision of public open space to provide new residents with an alternative to the designated site for recreation	Not significant	None	Not signficant
		Pollution	Permanent	None	Not significant	None	Not signficant
Amwell Quarry SSSI	National	Pollution	Permanent	None	Not significant	None	Not signficant
Rye Meads SSSI	National	Pollution	Permanent	None	Not significant	None	Not signficant
Wormley-Hoddesdonpark Wood North SSSI	National	Pollution	Permanent	None	Not significant	None	Not signficant
Epping Forest SSSI	National	Pollution	Permanent	None	Not significant	None	Not signficant
Hatfield Forest SSSI	National	Recreation	Permanent	Impact avoided through provision of public open space to provide new residents with an alternative to the designated site for recreation	Not significant	None	Not signficant
		Pollution	Permanent	None	Not significant	None	Not signficant
Hunsdon Mead SSSI	National	Recreation	Permanent	Impact partially avoided through provision of public open space to provide new residents with an alternative to the designated site for recreation.	Significant negative effect at the County evel	Appropriate design and management of open space through the OEMP	Not signficant
		Hydrological changes and	Permanent	None	Significant at the County level	Implementation of a drainage strategy to	Not signficant



		water quality				include a SuDS	
Eastwick Mead LWS	County	Recreation	Permanent	Impact avoided through provision of public open space to provide new residents with an alternative to the designated site for recreation	Not significant	None	Not signficant
		Hydrological changes and water quality	Permanent	None	Significant negative effect at the County level	Implementation of a drainage strategy to include a SuDS	Not signficant
Lord's Wood LWS (Ancient Woodland)	County	Recreation	Permanent	Impact partially avoided through provision of public open space to provide new residents with an alternative to the designated site for recreation.	Significant negative effect at the County level	Appropriate design and management of open space through the OEMP	Not signficant
		Hydrological changes and water quality	Permanent	None		Implementation of a drainage strategy to include a SuDS will avoid such effects	Not signficant
Eastwick and Parndon Mead LWS	County	Recreation	Permanent	Impact partially avoided through provision of public open space to provide new residents with an alternative to the designated site for recreation	Significant negative effect at the County level	Appropriate design and management of open space through the OEMP	Not signficant
		Hydrological changes and water quality	Permanent	None	Not significant	Implementation of a drainage strategy to include a SuDS will avoid such effects	Not signficant
Stone Basin Spring	County	Hydrological changes and water quality	Permanent	None	Not significant	Implementation of a drainage strategy to include a SuDS will avoid such effects	Not signficant



Woodland (Parcel:	s 1A and 4)	Local	Damage to vegetation	Permanent	Impact partially avoided through provision of public open space to provide new residents with an alternative to the designated site for recreation.	Significant negative effect at the Zone of Influence level	Appropriate design and management of open space through the OEMP	Not signficant		
			Artificial lighting	Permanent	None	Significant negative effect at the Local level	Development of an appropriate lighting strategy to minimise impact of direct and ambient lighting on important features for bats will avoid such effects	Not signficant		
	Bat Assemblage excluding Barbastelle	Assemblage excluding Local	Noise and disturbance	Permanent	Non	Significant negative effect at the Local level	Implementation of access and traffic management measures will avoid such effects	Not signficant		
Bats	Daibastelle	Barbasterie		Increased mortality due to road collisions	Permanent	None	Significant negative effect at the Local level	Implementation of traffic management measures, enhancement of retained vegetation and strategic planting to maintain permeability will avoid such effects	Not signficant	
					Predation	Permanent	None	Not significant	None	Not signficant
	Barbastelle		Artificial lighting	Permanent	None	Significant negative effect at the Local level	Development of an appropriate lighting strategy to minimise impact of direct and ambient lighting on important features for bats will avoid such effects	Not signficant		
			Noise and disturbance	Permanent	None	Significant negative effect at the Local	Implementation of access and traffic management measures will avoid such	Not signficant		



						level	effects	
			Increased mortality due to road collisions	Permanent	None	Significant negative effect at the Local level	Implementation of traffic management measures, enhancement of retained vegetation and strategic planting to maintain permeability will avoid such effects	Not signficant
			Predation	Permanent	None	Not significant	None	Not signficant
Badger		Within the Zone of Influence (brought forward due to legal consequences)	Damage to or interference of setts	Permanent	Strategic planting to create screening buffers will avoid such effects	Not significant	None	Not signficant
Otter		District	Hydrological changes and water quality	Permanent	None	Significant affect at the Local level	Implementation of a drainage strategy to include a SuDS will avoid such effects	Not signficant
			Disturbance and damage to habitats	Permanent	None	Significant negative affect at the Local level	Appropriate design and management of open space through the OEMP	Not signficant
Reptiles		Within the Zone of Influence (brought forward due to legal consequences)	Harm or death to individuals	Permanent	None	Legal consequence	Appropriate design and management of open space through the OEMP	Not signficant
Birds	Breeding Birds	Local	Disturbance	Permanent	None	Significant negative effect Within the Zone of Influence level	Appropriate design and management of open space through the OEMP	Not signficant



		Predation	Permanent	None	Significant negative effect Within the Zone of Influence level	Habitat enhancement and creation within open space areas will not fully mitigate or compensate for the loss of individual birds through predation	Significant residual negative effect Within the Zone of Influence level
Wintering Birds	District	Disturbance	Permanent	None	Significant negative effect Within the Zone of Influence level	Appropriate design and management of open space through the OEMP	Not signficant

Agriculture and Soils

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level		
Construction Effects	onstruction Effects									
Grade 2 agricultural land	Very High	National Short term Permanent	Very High	Major adverse - significant	No mitigation possible (permanent change of use)	High	Major adverse - significant	High		
Subgrade 3a agricultural land	High	National Short term Permanent	Very High	Major/moderate adverse - significant	No mitigation possible (permanent change of use)	High	Major adverse - significant	High		
Subgrade 3b agricultural land	Medium	National Short term Permanent	High	Major/moderate adverse - significant	No mitigation possible (permanent change of use)	Medium	Moderate adverse - significant	High		
Soil resources (topsoil and subsoil)	High (heavy clay loam and clay); Low (sandy loam)	Local Short term Temporary	High	Major/moderate adverse - significant	Follow DEFRA Construction Code of Practice for the Sustainable Use of	High	Minor adverse – Not significant	High		



					Soil on Construction Sites (2009)			
Agricultural tenant	Low	Local Short term Permanent	High	Moderate adverse - significant	No mitigation possible (agricultural tenancies would be extinguished in their current form)	High	Moderate adverse - significant	High

Operation Effects

None Predicted

Cumulative Effects

Effect	Description	Mitigation	Significance	Confidence Level
Grade 2 agricultural land	395.2 ha of Grade 2 agricultural land is required for constructing Gilston Area Villages 1-6 and the Central and Eastern Stort Crossings. In combination with the Project (involving 52.8 ha of Grade 2), this will result in a cumulative impact on 448.0 ha of Grade 2.	None possible	Major adverse - significant	High
Subgrade 3a agricultural land	69.9 ha of Subgrade 3a agricultural land is required for constructing Villages 1-6 and the Central and Eastern Stort Crossings. In combination with the Project (involving 29.6 ha of Subgrade 3a), this will result in a cumulative impact on 99.5 ha of Subgrade 3a.	None possible	Major adverse- significant	High
Subgrade 3b agricultural land	22.5 ha of Subgrade 3b agricultural land is required for constructing Villages 1-6 and the Central and Eastern Stort Crossings. In combination with the Project (involving 7.5 ha of Subgrade 3a), this will result in a cumulative impact on 30.0 ha of Subgrade 3b.	None possible	Moderate adverse -significant	High
Soil Resources	The construction of the Gilston Area Villages 1-6 and Central and Eastern Stort Crossings has the potential to damage soil resources available for reuse on-site. Likewise, the Project also has the potential to damage soil resources available for reuse on-site.	Follow DEFRA Construction Code of Practice for the Sustainable Use of Soil on Construction Sites (2009)	Minor adverse – not significant	High
Agricultural Holdings	The Gilston Area Village 1-6 application and Central and Eastern Stort Crossings will involve the extinguishment of a number of agricultural tenancies. The Project will result in the extinguishment of one agricultural tenancy.	No mitigation possible (agricultural tenancies would be extinguished in their current form)	Moderate adverse - significant	High



Ground Conditions

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
Construction Effects				•	•	•	•	•
Impacts on Construction Workers to exposure to contamination within underlying soils	High	Human Health – Construction Workers – Exposure to potentially contaminated soils	Medium (locally)	Moderate Adverse	Implementation of safe working practices as part of best practice to be detailed in the Construction Phase Plan (CPP) and Construction Environment Management Plan (CEMP).	Negligible	Neutral	High
Impacts to Future Site Residents during construction phase	Very High	Human Health – Residents present during construction phase – potential exposure to contaminated soil dust	Very Low (locally)	Moderate Adverse	Implementation of best practice mitigation to be detailed in the CPP and CEMP.	Negligible	Neutral	High
Impacts on Surface Waters	Medium	Leaching/migrati on of contamination within soils to surface waters	Very Low	Minor Adverse	None required however controls will form part construction best practice and be detailed in the CPP and CEMP	Very Low	Minor Adverse	High
Contamination impacts to shallow groundwater	Low	Leaching/ migration of contamination within shallow soils to shallow groundwater	Very Low	Minor-Neutral Adverse	None required	Very Low	Minor Adverse	High
Contamination impacts to deep	High	Leaching/ migration of	Very Low	Minor Adverse	None required however a Piling	Very Low	Minor Adverse	High



Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
groundwater		contamination within shallow soils to deep groundwater during piling			Risk Assessment will be required should piling in design in specific potentially contaminated areas be identified to penetrate protective London Clay geology overlying the sensitive Chalk Aquifer which will need to be approved by Regulatory Authorities			
Soil Quality	Very high (future residents)	Human Health – Residents through mismanagement of soils for landscaping purposes	Low	Moderate	Management of topsoil and contaminated soils will be detailed in the CPP and CEMP and in the Remediation Strategy which will be secured by Planning Condition	Negligible	Neutral	High
Land Stability	Very Low	Land stability issues caused during the construction phase	Negligible	Neutral	None required	Negligible	Neutral	High
Operation Effects								
Impacts on Future Construction/ Maintenance Workers	High	Potential exposure to contamination within shallow soils	Negligible	Neutral	None required	Negligible	Neutral	High
Future Site Users - Residential	Very High	Potential exposure to	Medium	Major Negative	Assessment and design of	Negligible	Neutral	High



Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
		ground gas in the south eastern portion of the Site			mitigation will be secured by Planning Condition to confirm the ground gas regime beneath the site.			
Impacts on Surface Waters	Medium	Leaching/migrati on of contamination within soils to surface waters	Negligible	Neutral	None required	Negligible	Neutral	High
Contamination impacts to shallow groundwater	Low	Leaching/ migration of contamination within shallow soils to shallow groundwater	Negligible	Neutral	None required	Negligible	Neutral	High
Contamination impacts to deep groundwater	High	Leaching/ migration of contamination within shallow soils to deep groundwater during piling	Negligible	Neutral	None required	Negligible	Neutral	High

Cumulative Effects

Effect	Description	Mitigation	Significance	Confidence Level
None Identified	-	-	-	High

Water Resources and Flood Risk

Environmental Effect	Sensitivity of Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
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Construction Effects								
Waterbodies and Surface Water	Medium	Water Quality from construction works to existing features	Low	Minor Negative	CEMP and CPP to be provided	Low	Minor Negative	High
	Medium	Capacity of watercourses due to changes to existing runoff	Low	Minor Negative	CEMP and CPP to be provided	Negligible	Neutral	High
Human Health - Flood Risk	Medium	Increase in flood risk from surface water flooding	Low	Minor Negative	CEMP and CPP to be provided	Negligible	Neutral	High
Surface Water and Groundwater Quality	Medium	Leaching/Migrati on from stockpiled soils Contamination from excavation works	Low	Minor Negative	CEMP and CPP to be provided	Low	Minor Negative	High
	High	Contamination to groundwater and local drainage	Low	Minor Negative	CEMP and CPP to be provided	Low	Minor Negative	High
Foul Water	Medium	Increase in foul water flows	Low	Minor Negative	CEMP and CPP to be provided	Low	Minor Negative	High
Operation Effects								
Waterbodies and Surface Water	Medium	Water Quality from proposed surface water drainage features	Low	Minor Negative	None Required	Low	Minor Negative	High
	Low	Capacity of watercourses due to changes to existing runoff	Negligible	Neutral	None Required	Negligible	Neutral	High
Human Health - Flood Risk	Low	Increase in flood risk from surface water flooding	Negligible	Neutral	None Required	Negligible	Neutral	High
Surface Water and Groundwater Quality	High	Contamination to groundwater	Low	Minor Negative	None Required	Low	Minor Negative	High



		and local drainage						
Foul Water	Medium	Increase in foul water flows	Low	Minor Negative	None Required	Low	Minor Negative	High
Cumulative Effects								
Effect	Description				Mitigation		Significance	Confidence Level
N/A								

Services and Utilities

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
Construction effects								
Damage to electricity network	High	Short term	High	Moderate adverse	Refer to Section17.7	Negligible	Not significant	High
Damage to gas network	High	Short term	High	Moderate adverse	Refer to Section17.7	Negligible	Not significant	High
Damage to water network	High	Short term	High	Moderate adverse	Refer to Section17.7	Negligible	Not significant	High
Damage to Communications network	High	Short term	Low	Moderate adverse	Refer to Section17.7	Negligible	Not significant	High
Operation Effects								
Increased demand on electricity infrastructure.	High	Long term	High	Moderate adverse	Refer to Section 17.7	Negligible	Moderate beneficial	High
Gas network damage, leakage and ignition.	High	Short term	High	Moderate adverse	Refer to Section17.7	Negligible	Moderate beneficial	High
Water network leakage and bursts	High	Long term	High	Moderate adverse	Refer to Section17.7	Negligible	Moderate beneficial	High



during exploration.				

Light

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
Construction Effects								
Poorly aimed construction lighting at night	High (residential)	Light Pollution	High	Neutral	Measures contained within CoCP/CEMP	Negligible	Neutral	High
Poorly aimed construction lighting at night	High (Sky)	Light Pollution	High	Neutral	Measures contained within CoCP/CEMP	Negligible	Neutral	High
Operation Effects								
Poorly positioned, aimed and controlled lighting at night	High (residential)	Light Pollution	Moderate/Adverse	Neutral	Embedded and Secondary	Negligible	Neutral	High
Poorly positioned, aimed and controlled lighting at night	High (Sky)	Light Pollution	Moderate/Adverse	Neutral	Embedded and Secondary	Negligible	Neutral	High
Poorly positioned, aimed and controlled sports pitch lighting at night to future receptors	High (residential)	Light Pollution	Moderate/Adverse	Neutral	Embedded and Secondary	Negligible	Neutral	High

Cumulative Effects

Effect	Description	Mitigation	Significance	Confidence Level
Construction	Construction lighting for site use	Embedded and Secondary	Neutral	High



Operational Operational light for roads, thoroughfares and sports facilities	Embedded and Secondary	Neutral	High]
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Climate Change

Environmental Effect	Sensitivity of Receptor	Nature of Impact	Impact Magnitude	Significance	Additional Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
Construction Effec	ets							
Fuel use in construction plant & associated facilities	High	Increase in carbon emissions in the atmosphere	Very low	Minor	- Main contractor to set targets and monitor energy, water and waste data during the construction stage, etc.	Very low	Negligible	Medium
Operation Effects								
Regulated carbon emissions from buildings	High	Increase in carbon emissions in the atmosphere	Very low	Minor	Installation of smart meters and/or submeters to monitor operational consumption more accurately; Selection of 100% renewable electricity contracts, where possible, etc.	Very low	Negligible	Medium-High
Unregulated carbon emissions from buildings	High	Increase in carbon emissions in the atmosphere	Very low	Minor	- Energy efficient equipment to be procured and supplied throughout the Project lifecycle including Energy Star rated products for all small power, plug-in equipment.	Very low	Negligible	Medium-High



Carbon emissions from operational traffic	High	Increase in carbon emissions in the atmosphere	Very low	Minor	Introduction of a car sharing scheme or equivalent on site to reduce private car use	Very low	Negligible	Medium-High	
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Archaeology

Environmental Effect	Asset Sensitivity	Nature of Impact	Impact Magnitude	Significance of Effects	Mitigation	Residual Impact Magnitude	Residual Significance of Effect	Confidence Level
Construction Effects								
LP1 - Later Prehistoric	Medium - Area of	Residential	Major change	Moderate/Large	Strip, Map,	Moderate	Moderate	High
activity, NE of	likely IA-RB activity	Development			Record	Change		
Brickhouse Farm	comprising linear							
Cottages, Hunsdon	field boundaries, a							
	possible ring ditch							
	(roundhouse?) and							
	trackway. Large							
	curvilinear enclosure							
	and linear ditch to							
	west, maybe Bronze							
	Age in date.							
LP2 - Late Iron Age	Medium - Possible	Residential	Major change	Moderate/Large	Strip, Map,	Moderate Change	Moderate	High
ditches E of Brickhouse	curvilinear	Development		30. a.o, 2 a. go	Record	Woderate Charige	iviouerate	riigii
arm, Eastwick	enclosure, extent of							
,	activity as yet							



	undefined.							
LP3 - Soilmark of a possible barrow, Eastwick	Low - A macula is noted in extensively ploughed field. If feature is a barrow it is likely to be a pond barrow as is formed of a circular depression.	Open Space	Moderate change	Neutral/Slight	Geophysical survey to inform on further works.	Negligible	Neutral/Slight	Medium
LP4 - Cropmarks of cut features, SW Brickhouse Farm, Hunsdon	Low - Not identified during initial trenching within the area.	Residential	Major Change	Slight/Moderate	Additional trial trenching to inform further works	Moderate Change	Slight	Medium
LP5 - Immediate landscape associated with Brickhouse Farm, Hunsdon	Low - GII LB with likely 17th century origins. HLC suggests that the immediate landscape is 18th century in origin.	Mixed Use	Moderate Change	Neutral/Slight	None	Minor Change	Neutral/Slight	High
LP6 - Late Bronze Age activity north of Brickhouse Farm,	Medium - Features broadly dated to Late Bronze Age, one sherd of Late	Residential	Major Change	Moderate/Large	Strip, Map, Record	Moderate Change	Moderate	High



Hunsdon	Iron Age pottery recovered from subsoil.							
LP7 - Later Prehistoric curvilinear ditches and (post) medieval ridge and furrow, west of Church Lane	Medium - Possibly same features as identified at LP9 and contiguous with LP6&8?	Residential	Major Change	Moderate/Large	Strip, Map, Record	Moderate Change	Moderate	High
LP8 - Late Bronze Age ditches north of A414	Medium - Dated from pottery fragments.	Residential	Major Change	Moderate/Large	Strip, Map, Record	Moderate Change	Moderate	High
LP9 - cropmarks of possible curvilinear ditched enclosures and area of pits and ditches, NE Brickhouse Farm	Medium - It is possible, based on the description that these features are the same as, or in the same group as LP7.	Open Space	Minor Change	Slight	Geophysical survey to inform on further works	Negligible Change	Neutral/Slight	Medium
LP10 - Late Bronze Age ditch west of Church Lane	Low - May be associated with LP8.	Residential	Major Change	Slight/Moderate	Geophysical survey to inform on further works	Moderate Change	Slight	Medium



LP11 - Hunsdon Fishponds	High - Features visible as earthworks, potential for preserved palaeoenvironmental remains. Recently Scheduled.	No Change	No Change	Neutral	Coring, WSI, SM Consent, Conservation Management Plan	No Change	Neutral	High
LP12 - Briggens Estate	High - Registered park and garden.	No Change	No Change	Neutral	None	No Change	Neutral	High
LP13 - Cropmarks west of Pogden's Wood	Low - Not visible on recent photography not AP assessment	No Change	No Change	Neutral	None	No Change	Neutral	High
LP14 - Hunsdon Medieval Village.	Moderate/low - Identified from possible earthworks and documentary evidence.	No Change	No Change	Neutral	None	No Change	Neutral	High
LP15 - Bronze Age activity E of Village 7	Moderate - Areas of Bronze Age activity beyond the western side of the boundary	No Change	No Change	Neutral	None	No Change	Neutral	High



LP16 – Eastwick Village	Moderate/low - Activity dating from at least the Medieval period.	No Change	No Change	Neutral	None	No Change	Neutral	High
LP17 – Eastwick Moats	High - Earthwork of two moated manor houses. Associated as yet undefined earthworks also present.	No Change	No Change	Neutral	None	No Change	Neutral	High
LP18 – Hunsdon Airfield	High - Remains of WWII airfield including perimeter defences and structures associated with the base.	No Change	No Change	Neutral	None	No Change	Neutral	High



Table 8.2: Mitigation Implementation

Socio Economics and Community Effects

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Financial Contribution	Local Authorities	S106	Secondary school places.	TBC
Financial Contribution	Local Authorities	S106	Healthcare provision for Villages 1-7	TBC

Human Health

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
CoCP, CTMP	Developer	Planning Condition, S.106	Monitored by the Council	Construction phase
Onsite, offsite or financial contribution towards provision of social infrastructure (healthcare and secondary school facilities)	Developer/Council	Planning Condition, S.106	Monitored by the Council	Operational phase
Travel Plans and Sustainable Travel Measures	Developer	Planning condition requiring Travel Plans to be submitted and approved, S106	Submission of Travel Plans for approval	Prior to occupation

Transport and Access

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Construction Traffic Management Plans (CTMPs)	Contractor	Planning condition requiring a CTMP to be submitted and approved, S106	Submission of CEMP for approval	Prior to commencement of construction
Travel Plans and Sustainable Travel Measures	Developer	Planning condition requiring Travel Plans to be submitted and approved, S106	Submission of Travel Plans for approval	Prior to occupation



Air Quality

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Construction dust mitigation measures to be included in a dust management plan.	Principal Contractor	Planning Condition	Visual inspections, dust monitoring and site logging	Construction Phase

Noise and Vibration

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Construction: Best practicable means	Council, Contractor	Planning condition requiring a CEMP to be submitted and approved, Entering into a S.61 CoPA agreement.	Submission of CEMP for approval.	Prior to commencement of construction
Site suitability: Further consideration of detailed layouts to minimise external noise in outdoor areas	Developer	Planning condition requiring further details to be submitted for approval at the detailed design stage.	Submission of a supplementary report with details for approval.	Prior to commencement of construction
Plant noise	Developer / Contractor	Planning condition requiring a full assessment at detailed design.	Submission of a supplementary report with details for approval. The condition could potentially include the need for a postinstallation acoustic survey to demonstrate that noise levels are being achieved.	Prior to occupation, on a plot by plot basis where necessary
Commercial noise	Developer / Contractor (depending upon procurement method)	Planning condition requiring a full assessment at detailed design.	Submission of a supplementary report with details for approval. The condition could potentially include the need for a postinstallation acoustic survey to	Prior to occupation, on a plot by plot basis where necessary



	demonstrate that noise levels are	
	being achieved.	

Built Heritage

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
None identified				

Landscape and Visual

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Mitigation-by-design (see Section 12.5)	Delivered through adherence to Parameter Plans and also through detail of Project at reserved matters/discharge-of-conditions stage.	Various		Short-to-long-term
Further recommendations for mitigation (see Section 12.9Error! Reference source not found.)	Delivered through detail of Project at reserved matters/discharge-of- conditions stage	Various		Short-to-long-term

Biodiversity

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Production of CEMP	on of CEMP Developer/Contractor		Supervised by a suitably experienced ecologist	Construction phase
Reptile mitigation strategy (to be incorporated and implemented under the CEMP)	Developer/Contractor/Ecologist	Countryside and Wildlife Act 1981 (as amended) and Planning Condition S.106	Supervised by a suitably experienced ecologist	Construction phase



Lighting strategy for nocturnal wildlife including bats	Developer/Contractor/Ecologist	Planning Condition S.106	Informed by a suitably experienced ecologist	Construction phase
Bat EPSL	EPSL Developer/Contractor		Supervised by a suitably experienced ecologist	Construction phase
Installation of compensatory bat boxes (as part of EPSL)			Supervised by a suitably experienced ecologist	Construction phase
Strategic planting including compensatory/enhancement planting for hedgerow loss and habitat loss/fragmentation for species including bats, reptiles, birds and Badger	Developer/Contractor	Planning Condition S.106	Supervised by a suitably experienced ecologist	Construction phase
Pre-construction survey for Badger Ecologist		Planning Condition S.106	N/A	Construction phase

Agriculture and Soils

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Soil resources on the Site proposed for built development will be safeguarded for re-use in residential gardens, landscaping and amenity areas in accordance with a Construction Code of Practice (CoCP) any subsequent Construction Environmental Management Plans (CEMP).	Contractor	Planning Condition S.106	British Standards: BS 3882:2015 'Specification for Topsoil and BS 8601:2013 'Specification for subsoil and requirements for use.'	Construction phase



Ground Conditions

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale	
CEMP/CPP incorporating soils and materials management protections and piling risk assessment, if applicable.	Contractor	Planning Condition and to adhere to the Code of Construction Practice.	By Council during works.	Construction Phase	
Surface Water Drainage Strategy	Developer	Planning Condition	By Council and Adopting authority during the works.	Inherent Design. Completed during the construction phase and prior to occupation.	
Phase 2 Ground Investigation and Remediation Strategy, including ground gas mitigation design criteria, if required	liation Strategy, including gas mitigation design criteria,		By Council	Post Outline Planning approval as part of Reserved Matters application and Construction Phase	

Water Resources and Flood Risk

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale	
СЕМР	Contractor	Planning Condition and to adhere to the Code of Construction Practice.	By Council during works.	Construction Phase	
Sustainable Surface Water Drainage Strategy	Developer	Planning Condition	By Council and Adopting authority during the works.	Inherent Design. Completed during the construction phase and prior to occupation.	
Foul Water Drainage Strategy	ul Water Drainage Strategy Thames Water with Developer		By Thames Water.	Inherent Design. Completed during the construction phase and prior to occupation.	



Services and Utilities

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Compliance with NJUG/Utility Company guidelines for installation of new utilities	ny guidelines for installation of Developer/Contractor		Design of plans with NJUG requirements followed by review and approval. Post construction review and approval by utility company.	Design and Construction phases
Acquisition of utility asset records from utility companies/councils	Developer/Contractor	None	Review of latest asset plans of the area.	Design and Construction phases

Light

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
Siting and use of appropriate artificial light during defined construction periods	Contractor	CoCP/CEMP	On site monitoring by appropriate, authorised individuals over construction period	Construction
Siting and use of appropriate artificial light with clear pre and post curfew switch times	Developer	Clean Neighbourhood and Environmental Act 2005	On site monitoring by appropriate, authorised individuals over timescale to be agreed with local authority	Operational Phase
Natural screening around the proposed sports pitches	Developer	Planning Condition	Local Planning Authority	Operational Phase

Climate Change

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
None identified				



Archaeology

Mitigation Measure	Implementing Agent(s)	Legal Instrument	Compliance Target	Implementation Timescale
LP1 – Strip, Map, Record and preservation by record	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP2 - Strip, Map, Record and preservation by record	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP 3 – Geophysical Survey to inform further works	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP 4 – Trial Trench Evaluation	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP 6 – Strip, Map, Record and preservation by record	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP 7 – Strip, Map, Record and preservation by record	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP 8 – Strip, Map, Record and preservation by record	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP 9 – Geophysical Survey to inform further works	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP 10 – Geophysical Survey to inform further works	HCC	EH District Plan Policy HA3	WSI	Prior to Construction
LP 11 – Coring followed by a Conservation Management Plan	HE	EH District Plan Policy HA1 and Ancient Monuments and Archaeological Areas Act 1979	WSI, SM Consent, Conservation Management Plan, agreed frequency of inspection	Prior to Detailed design stage

Appendix D – Cumulative Schemes

ES Addendum, Volume II, Appendix 5.4 Schedule of Committed Schemes

Gilston V7 EIA - Schedule of Committed Schemes

No.	Ref. No.	Site Address (Site Allocation)	Postcode	Units	Proposals	Status/ Date
1	N/A	Harlow East (SP 5.3)	CM17 0NG	750	Land in Epping Forest District allocated for circa 750 new homes under the Draft Epping Forest Local Plan.	N/A
2	N/A	Riddings Lane Garden Centre (Site L)	CM18 7HT	50	Land in Epping Forest District on the fringe of Harlow and allocated for circa 50 new homes under the Draft Epping Forest Local Plan.	N/A
3	N/A	Land west of Katherines (SP 5.2)	CM19 5DR	1,100	Land in Epping Forest District on the fringe of Harlow and allocated for circa 1,100 new Land in Epping Forest District is located on the fringe of Harlow and allocated for circa 1,000 new homes. Homes under the Draft Epping Forest Local Plan.	N/A
4	APP/N1540/W/ 16/3146636	YWCA Hostel - The Angle. Fourth Avenue, Harlow, CM20 1DN	CM20 1DS	69	Demolition of all Existing Buildings and Construction of 69 New Residential Dwellings, Including Flats and Houses, Ranging from 3 to 13 Storeys, With Associated Car Parking and Landscaping	Appeal allowed 28/09/16
5	HW/PL/11/000 55; as amended by HW/PL/15/001 42	Land to north of Gilden Way	CM17 0NA	1,200	Erection of 1,200 Dwellings, New Primary School, Community Buildings and Retail/Business/Live Work Units together with Associated Uses Comprising Allotments and Public Open Space, Plus Associated Infrastructure and Engineering Works, with Vehicular Access from Gilden Way.	Approved 21/05/15
5	HW/PL/15/000 06	Land to north of Gilden Way	CM17 0NA	1,200	Approval of All Reserved Matters for Strategic Infrastructure and Phase 1 (Approximately 716 Dwellings and Associated Community Building, Commercial Units, Open Space and Facilities), In Accordance with Condition 1 of HW/PL/15/00142.	Phase 1 granted 08/09/2015
5	HW/REM/15/0 0389	Land to north of Gilden Way	CM17 0NA	1,200	Approval of All Reserved Matters for Phase 2 (Approximately 195 Dwellings and Associated Open Space Including Sports Pavilion, Sports Pitches and Allotments), In Accordance with Condition 1 of HW/PL/15/00142, and the Revised Phasing Plan (Submitted Under Application HW/PL/15/00007).	Phase 2 granted 15/12/2015.
6	HW/COUOR/17 /00096	Terminus House Terminus Street Harlow Essex CM20 1XA	CM20 1XA	222	Notification for Prior Approval for a Proposed Change of Use from Class B1(a) (Offices) to Class C3 (Dwelling Houses) Comprising 222 Dwellings (194 Studios, 28 x 2 Bedroom Units).	Notification 05/05/17
6	HW/COUOR/17 /00443	Terminus House Terminus Street Harlow Essex CM20 1XA	CM20 1XA	222	Change of Use from offices to house comprising a total of 222 dwellings (198 No. Studio Flats and 24 No. 2 Bedroom Flats)	08/12/17
7	N/A	Education Centre, Hodings Road, Harlow (HDC SHLAA Site Ref. 13)	CM20 1NW	24	N/A	2021-31
8	N/A	Purford Green School, Harlow, CM18 6HP (HDC SHLAA Site Ref.	CM18 6HP	30	N/A	2021-31
9	N/A	East of the Downs School (HDC SHLAA Site Ref. SA 16)	CM20 3RB	25	N/A	2021-31
10	N/A	Playing field south of Gilden Way (HDC SHLAA Site Ref. 22)	CM17 0GY	67	N/A	2021-31
11	N/A	Former Scout Hut, Elderfield (HDC SHLAA Site Ref. 23)	CM17 0EF	6	N/A	2014-21
12	N/A	Playing field and land east of Radburn Close south of Clifton Hatch (HDC SHLAA Site Ref. 30 (29Ref 017))	CM18 7EB	69	N/A	2021-31
13	N/A	South of Hawthorns west of Riddings Lane (HDC SHLAA Site Ref. 31)	CM18 7HT	35	N/A	2021-31
14	N/A	Land and garages between Bushey Croft and Rushes Mead (HDC SHLAA Site Ref. 33 (40Ref 022))	CM18 6RJ	13	N/A	2021-31
15	N/A	Garage blocks adjacent to Nicholls Tower (HDC SHLAA Site Ref. 36)	CM18 6EF	11	N/A	2021-31
16	N/A	Elm Hatch and Public House (HDC SHLAA Site Ref. 38 (45Ref 3))	CM18 6BH	10	N/A	2014-21
17	N/A	Stewards Farm (HDC SHLAA Site Ref. 39 (46Ref 035))	CM18 7HZ	10	N/A	2021-31
18	N/A	Land between Barn Mead and Five Acres (HDC SHLAA Site Ref. 40)	CM18 6UZ	10	N/A	2021-31
19	N/A	Kingsmoor House and gardens (HDC SHLAA Site Ref. 44 (51Ref 014))	CM19 4QX	9	N/A	2014-21

20	N/A	Pollard Hatch plus garages and adjacent land (HDC SHLAA Site Ref. 45)	CM19 4JT	20	N/A	2014-21
21	N/A	Katherines Hatch (HDC SHLAA Site Ref. 46 (56Ref 013))	CM19 5NP	10	N/A	2014-21
22	N/A	Service bays rear of the Stow (HDC SHLAA Site Ref. 48 (57Ref 037)) [Application submitted for 88 units (HW/FUL/19/00257) pending decision]	CM20 3AB	8	N/A	2014-21
23	N/A	Garages east of 99-102 Greenhills (HDC SHLAA Site Ref. 52 (62Ref 01))	CM20 3SZ	16	N/A	2021-31
24	N/A	Slacksbury Hatch and associated garages (HDC SHLAA Site Ref. 68 (78Ref 053))	CM19 4ET	10	N/A	2014-21
25	N/A	Garage blocks between 1 and 36 Arkwrights (HDC SHLAA Site Ref. 70 (80Ref 055))	CM20 3LT	7	N/A	2014-21
26	N/A	Lister House, Staple Tye Mews, Staple Tye Depot and the Gateway Nursery (HW/FUL/18/00298; as amended by HW/NMA/19/00343)	CM18 7NW	46	N/A	2014-21
27	N/A	Kingsmoor Recreation Centre (HDC SHLAA Site Ref. 73)	CM19 4QT	35	N/A	2021-31
28	N/A	Open Space to the south of Berecroft (HDC SHLAA Site Ref. 78 (88Ref 063))	CM19 4HB	294	N/A	2021-31
29	N/A	Wissants and adjacent playground (HDC SHLAA Site Ref. 83 (93Ref 068))	CM19 4QW	6	N/A	2014-21
30	N/A	Land and Buildings at Wych Elm inc. bus garage and fire station (HDC SHLAA Site Ref. 88). Part delivery of HDC SHLAA Site Ref. 88 for 122 units and 763 sqm of ground floor commercial floorspace consented on 06/02/20.	CM20 1QR	500	N/A	2021-31 and beyond plan period
31	N/A	Land Adjacent to Katherines School HDC SHLAA Site Ref. 96 (107Ref 079)	CM19 5PN	27	N/A	2014-21
32	N/A	Fishers Hatch HDC SHLAA Site Ref. 98	CM20 3PP	10	N/A	2021-31
33	N/A	Colt Hatch community centre and adjacent land HDC SHLAA Site Ref. 101	CM20 1SX	11	N/A	2021-31
34	N/A	Land between Second Avenue and St Andrews Meadow HDC SHLAA Site Ref. 142	CM18 6BL	16	N/A	2014-21
35	N/A	Northbrooks Playing Fields HDC SHLAA Site Ref. 161	CM19 4DS	70	N/A	2021-31
36	N/A	Playing field west of Deer Park HDC SHLAA Site Ref. 171 (OthCan184)	CM19 4LD	69	N/A	2021-31
37	N/A	Land northwest of Kingsland HDC SHLAA Site Ref. 241	CM18 6XW	41	N/A	2014-21
38	N/A	Playground & land between Little Pynchons and Pear Tree Mead HDC SHLAA Site Ref. 245	CM18 7DF	12	N/A	2021-31
39	N/A	Playground west of 93-100 Jocelyns HDC SHLAA Site Ref. 251	CM17 0BX	12	N/A	2021-31
40	N/A	Sherards House and adjacent land HDC SHLAA Site Ref. 266 (PrCn45)	CM19 4HN	15	N/A	2021-31
41	HW/PL/04/003 02 (as amended)	Phase 2 New Hall Farm and Hubbards Hall Farm (Whole Site), London Road Harlow	CM17 9LU	2,300	Outline Planning Permission Is Sought for The Erection of 2,300 Dwellings Including Parkland and Recreation, Employment and the Development of the Local Centre into a Full Neighbourhood Centre.	Outline permission granted 26/06/2012.
41	HW/PL/13/000 98 & HW/PL/13/001 00	Phase 2 New Hall Farm and Hubbards Hall Farm (Whole Site), London Road Harlow	CM17 9LU		The approval of reserved matters in relation to Parcel 1 of outline planning permission for Newhall Phase 2 (outline planning permission ref. HW/PL/04/00302)/ Phase 1 is being submitted as two linked applications, Area A and Area B, comprising in total 328 units.	Both RMAs granted approval 13/06/2013
42	N/A	1 & 1a Walfords Close (HDC SHLAA Site Ref. 284 PrCn71)	CM17 0DG	12	N/A	2014-21
43	N/A	Westgate House and MS carpark (HDC SHLAA Site Ref. 287 PrCn74)	CM20 1DG	170	N/A	2014-21
44	N/A	Coppice Hatch and garages (HDC SHLAA Site Ref. 301 UCS23)	CM18 6SL	16	N/A	2021-31

45	N/A	Pypers Hatch (HDC SHLAA Site Ref. 314 UCS45)	CM20 3NG	10	N/A	2021-31
46	N/A	Garage block south-east of Fesants Croft (HDC SHLAA Site Ref. 327 UCS68)	CM20 2JS	7	N/A	2014-21
47	N/A	Garage block south of 84-97 Barn Mead (HDC SHLAA Site Ref. 336 UCS80)	CM18 6SW	6	N/A	2021-31
48	N/A	Land east of 144-154 Fennells (HDC SHLAA Site Ref. 343 UCS90)	CM19 4RR	23	N/A	2021-31
49	N/A	Land associated with Hestor House and Hester Mews (HDC SHLAA Site Ref. 347 UCS99)	CM18 6SW	15	N/A	2021-31
50	N/A	Maunds Hatch and Hall (HDC SHLAA Site Ref. 352 UCS109)	CM18 7RG	10	N/A	2021-31
51	N/A	Sumners Hatch (HDC SHLAA Site Ref. 361)	CM19 5RD	19	N/A	2021-31
52	HW/FUL/15/00 229 (as amended by HW/REMVAR/R/17/ 00577; and HW/NMA/18/00471)	Aylets Field; the briars; Copshall Close; - known as Priority Estates	CM18 7FQ	343	Outline Planning application for the Estate Regeneration: Demolish 218 Bungalows and Related Infrastructure, erect 343 One, Two, Three and Four-Storey, Detached, Semi-Detached and Terraced Houses and Flats (200 Affordable Dwellings and 143 Market Homes) and a Community Centre, Lay Out Estate Roads, Footpaths, Parking Spaces, Public and Private Amenity Areas, Drainage Infrastructure, and Landscaping	Granted permission 07/01/16
53	N/A	Green Belt North East Harlow	CM17 0PF	2,600	Will come forward when Local Plan is finalised. Based on work in Harlow Strategic Sites Assessment.	N/A
54	HW/COUOR/16 /00119	Greenway House Parkway Harlow Essex CM19 5QD	CM19 5QD	78	Change of Use from Office Use (Class B1) to 78 Dwellinghouses (Class C3)	Prior approval not required 03/06/2016
55	HW/COUOR/16 /00027	Templefields House, River Way Harlow, CM20 2EA	CM20 2EA	154	Change of Use from Class B1(a) (Offices) to Class C3 (Dwellinghouses) Comprising 154 Units (83 Studios, 68 x 2 Bedrooms)	Prior Approval not required 03/03/16
56	HW/FUL/17/00 097	Proposed Redevelopment of Land at Harvey Centre, West Gate, Market Square, Broad Walk, West Gate, Harlow	CM20 1XR	468	Demolition of the existing buildings and comprehensive re- development of the site to provide a mixed-use development (including 4 new buildings ranging from 3 to 16 storeys) comprising 468 residential units, circa 2,900 m2 of flexible retail floorspace, communal amenity space, a new pedestrian boulevard, car parking,	Granted 06/10/17
56	HW/FUL/17/00 098	Proposed Redevelopment of Land at Harvey Centre, West Gate, Market Square, Broad Walk, West Gate, Harlow	CM20 1XR		cycle parking, with associated hard and soft landscaping, revised access and servicing arrangements.	Granted 06/10/18
57	HW/COUOR/16 /00569	Pearson Education, Edinburgh Gate, Harlow, CM20 2JE	CM20 2JE	202	Conversion of Existing Six Storey Office (B1) to 202 Residential Apartments (C3)	Prior Approval Not Required: 28/02/17
58	HW/OUTAM/1 7/00246	Third Avenue, Harlow, CM19 5AW	CM19 5AW	N/A	Redevelopment of The Former GSK South Site To erect Up To 46,916m ² (GIA) of Class B8 Floorspace, Including Demolition of Buildings, Construction of New Paved Surfaces, Boundary Treatment and Landscaping, Parking and Associated Works.	Granted 22/12/17
59	HW/FUL/17/00 563	1-7 Burnt Mill Harlow CM20 2HT	CM20 2HT	172	Demolition of Existing Motor Dealership Buildings and Replacement with a Development Comprising 172 Residential Units, 1,155m2 of Office Floorspace (within Class B1) and 159 Car Parking Spaces.	Granted 04/06/18
60	N/A	Land to the North of West Road (SAWB2)	CM20 2DB	125	Land to the north of West Road is allocated as a residential development site, to accommodate approximately 125 homes by 2022.	N/A
61	N/A	Land to the South of West Road (SAWB3)	CM20 2LS	175	Land to the south of West Road is allocated as a residential development site, to accommodate approximately 175 homes by 2022.	N/A
62	N/A	Land to the North of Sawbridgeworth (SAWB4)	CM21 0DE	200	Land to the north of Sawbridgeworth is allocated as a residential development site, to accommodate approximately 200 homes by 2027.	N/A
63	N/A	Land North and East of Ware (WARE2)	SG12 7PZ	1,000	Land to the North and East of Ware is allocated as a mixed-use development site, to accommodate approximately 1,000 new homes by 2033. It. In the longer term, and in the event that suitable mitigation measures to identified constraints on both the local and wider strategic road networks can be identified and agreed by HCC, a further 500 dwellings will also be delivered in this location.	N/A
64	HW/CR3B/17/4 0003 (ECC ref: CC/EPF/08/17)	Junction 7a on M11, Gilden Way, Harlow Essex	CM17 9DS	N/A	Construction of a new motorway junction (Junction 7a) on the M11 between existing junctions 7 and 8, to be located approximately 6km north of existing Junction 7, to the north of Moor Hall Road/Matching Road crossing and to the south of Sheering Village and the proposed construction of a new link road and roundabout to link the proposed Junction 7a to Gilden Way (B183) and Sheering Lower Road, to the north-east of Harlow Town in the district of Epping Forest. Proposed widening and road improvements to Sheering Road and Gilden Way (B183) from the proposed new Sheering Road roundabout to the London Road Roundabout, located within the district of Harlow.	Granted by ECC: December 2016.

65	HW/LDCP/16/0 0488	A414 - A1184 Carriageway Dualing Scheme, Edinburgh Way, Harlow	CM20 2AB	N/A	Localised Highway Improvements to The A414, Including Road Widening To Dual Carriageway Along Edinburgh Way Between The Roman Roundabout and The Harlow Mill Roundabout, Improvements To The Harlow Mill Roundabout and Roundabout Approaches from Station Approach and Cambridge Road. Improvements to Include Provision for Pedestrians and Cyclists.	Granted 06/10/17
66	HW/FUL/17/00 130 (as amended by HW/NMA/17/0 0324)	A414 Link Road, London Road, Harlow	CM20 2QT	N/A	Second Primary Access and Associated Highway Works to Serve Newhall Phase II.	Granted by HDC: 06/07/17
67	HW/CCREG4/1 7/00207 (ECC ref: CC/HLW/21/17	New access on A1184, Cambridge Road, Harlow	CM20 2EQ	N/A	Planning Permission to Provide A New Access from the A1184 (Cambridge Road) to The Templefields Enterprise Zone on River Way, Harlow. Scheme Includes Off Site Mitigation Works and Other Ancillary Works.	Granted by ECC: 28/07/2017
68	3/19/1045/OUT	Land North of the Stort Valley and the A414 (Gilston Area, Villages 1- 6)	CM20 2SF	8,500	Outline planning application with all matters reserved apart from vehicular access for the redevelopment of the site through the demolition of existing buildings and erection of a residential led mixed use development comprising up to 8,500 residential homes including market and affordable homes; retirement homes and extra care facilities; a range of community uses including primary and secondary schools, health centres and nursery facilities; retail and related uses; leisure facilities; business and commercial uses; open space and public realm; sustainable urban drainage systems; utility and energy facilities and infrastructure; waste management facilities; rehicular bridge links; creation of new vehicular and pedestrian accesses into the site; and creation of a new vehicular, pedestrian and cycle network within the site; improvements to the existing highway and local road network; undergrounding and diversion of power lines; lighting; engineering works, imfrastructure and associated facilities; together with temporary works or structures required by development.	Awaiting decision. Validated 12 June 2019
69	HW/FUL/18/00144	Edinburgh House Car Park, Edinburgh Gate, Harlow, Essex	CM20 2LQ	361	Redevelopment of existing car park associated with former Pearson House. Erection of two blocks of between 2-11 storeys in height comprising 361 dwellings including ground and first floor car parking together with associated development including podium and ground floor amenity space, landscaping, surface car parking, new pedestrian links, cycle and refuse stores	Permission granted 12/09/19
70	HW/OUTAM/17/003 72	New Frontiers Science Park, Coldharbour Road, Harlow	CM19 5AD	115,200 sqm of Class B1 floorspace	Outline Application for up to 115,200 sqm (GIA) of Offices, Research, and Development Laboratories (Class B1), Ancillary Facilities, New Accesses, Lansdscaping, Parking and Ancillary Works.	Permission granted 23/10/18