



[www.landuse.co.uk](http://www.landuse.co.uk)

# **Sustainability Appraisal of the Hertsmere Local Plan**

## **Scoping Report**

Prepared by LUC  
September 2017

**Project Title:** Sustainability Appraisal of the Hertsmere Local Plan

**Client:** Hertsmere Borough Council

Version	Date	Version Details	Prepared by	Checked by	Approved by
1.0	31/08/2017	Draft for Client Review	Natalie Collins Sarah Smith Sarah Temple	Sarah Smith	Joanna Wright
2.0	13/09/2017	Final for consultation	Natalie Collins Sarah Smith Sarah Temple	Joanna Wright	Joanna Wright



[www.landuse.co.uk](http://www.landuse.co.uk)

# Sustainability Appraisal of the Hertsmere Local Plan

## Scoping Report

Prepared by LUC  
September 2017

Planning & EIA  
Design  
Landscape Planning  
Landscape Management  
Ecology  
GIS & Visualisation

LUC LONDON  
43 Chalton Street  
London  
NW1 1JD  
T +44 (0)20 7383 5784  
[london@landuse.co.uk](mailto:london@landuse.co.uk)

Offices also in:  
Bristol  
Edinburgh  
Glasgow  
Lancaster  
Manchester



Land Use Consultants Ltd  
Registered in England  
Registered number: 2549296  
Registered Office:  
43 Chalton Street  
London NW1 1JD  
LUC uses 100% recycled paper



# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
	The Local Plan Area	1
	The Local Plan	1
	Sustainability Appraisal and Strategic Environmental Assessment	2
	Structure of the Scoping Report	5
<b>2</b>	<b>Relevant Policy Context</b>	<b>6</b>
	Outline of the Hertsmere Borough Local Plan and relationship with other plans and programmes	6
	Environmental, social and economic policy objectives	6
<b>3</b>	<b>Baseline information and key sustainability issues</b>	<b>9</b>
	Introduction	9
	Data limitations	9
	Baseline information, sustainability issues and their likely evolution without the Local Plan	9
	Key sustainability issues and likely evolution without the Plan	18
<b>4</b>	<b>Proposed approach to the SA</b>	<b>33</b>
	Overarching approach to the assessment	33
<b>5</b>	<b>Consultation and next steps</b>	<b>43</b>
<b>Appendix 1</b>		<b>44</b>
	Review of other relevant plans and programmes	44
<b>Appendix 2</b>		<b>63</b>
	Assumptions for SA of site allocations	63

## Tables

Table 1.1: Meeting the Requirements of the SEA Regulations	3
Table 3.1: Likely evolution of key sustainability issues in Hertsmere without implementation of the Local Plan	20
Table 4.1: Incorporation of Green Belt into SA Objectives	35
Table 4.2: Hertsmere Framework for SA of the Local Plan	36
Table 4.3: Key to sustainability scores to be used in the SA of the Local Plan	42

## Figures

Figure 1.1: Main Stages of Sustainability Appraisal	3
Figure 1.2: Stages in SA Scoping (Stage A)	3



# 1 Introduction

- 1.1 Hertsmere Borough Council (HBC) commissioned LUC in July 2017 to carry out Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) of the emerging Local Plan.
- 1.2 The purpose of this Scoping Report is to provide the context for, and determine the scope of, the SA/SEA of the Local Plan and to set out the framework for undertaking the later stages of the SA/SEA.
- 1.3 The scoping stage involves reviewing other relevant plans, policies and programmes, considering the current state of the environment in Hertsmere, identifying any key environmental issues or problems which may be affected by the Local Plan and setting out the 'SA framework', which comprises specific sustainability objectives against which the likely effects of the Local Plan can be assessed.
- 1.4 This Scoping Report has been made available for consultation in line with requirements of the SEA Regulations.

## The Local Plan Area

- 1.5 Hertsmere is located in southern Hertfordshire on the outer fringes of London and borders the London Boroughs of Barnet, Harrow and Enfield as well as Welwyn Hatfield, Three Rivers, Watford and St Albans Councils. The population of the Borough is primarily concentrated within the four main settlements of Borehamwood, Bushey, Potters Bar and Radlett, in addition to a number of smaller settlements including Aldenham, Letchmore, South Mimms, Ridge and Shenley. The Borough has good road and rail links with mainline stations at Elstree and Borehamwood, Potters Bar and Radlett (with Bushey just outside the Borough), as well as the M25 running through the Borough with two junctions (23 and 24), the M1, A1(M) and A41.
- 1.6 Nearly 80% of the 100km<sup>2</sup> (38.6 sq. mile) Borough comprises land in the Metropolitan Green Belt. Minor amendments to the Green Belt boundary were made in 2016, following the adoption of the Site Allocations and Development Management Policies Plan, resulting in the former Shenley Hospital site (developed for housing in the 1990s) being taken out of the Green Belt as well as an area of safeguarded land for employment (approximately 17 hectares) at Rowley Lane, Borehamwood. The majority of the Borough is located within the Watling Chase Community Forest and despite its proximity to London; there is a predominantly rural character to much of the Borough. There are a number of 'Gateway Sites' to the Watling Chase Community Forest which provide car free points of entry to the Forest's network of paths and routes, some of which are experiencing significant development and traffic pressure.
- 1.7 Hertsmere has a population of just over 100,000, with a high employment rate and a large proportion of small businesses. The area remains a major hub for UK and international film and TV production in the form of Elstree Studios and BBC Elstree, both located in Borehamwood. A number of nationally significant research institutions are also based in the borough including the National Institute for Biological Standards and Control (NIBSC), Bio Products and Cancer Research UK/University College London.

## The Local Plan

- 1.8 Hertsmere Borough Council is currently preparing a new Local Plan to guide development in the Borough over the next 15 years, up to 2034. Once adopted, the new Local Plan will replace the Hertsmere Local Plan (2012-2027) which consists of the Core Strategy (adopted January 2013), the Elstree Way Corridor Area Action Plan (adopted July 2015), the Site Allocations and

Development Management Policies Plan (adopted November 2016) and the Policies Map (published November 2016).

- 1.9 The Core Strategy sets out the Council's vision for the Borough to 2027, providing the foundation for decisions on planning applications and development proposals affecting the area. The adopted Core Strategy seeks to strike a balance between the Borough's housing and economic development needs, social welfare and protection of the environment. The Site Allocations and Development Management Policies Plan sets out detailed proposals and policies by which the Council sees the aims and objectives of the Core Strategy being best achieved.
- 1.10 The new Local Plan will set out the vision and objectives for the future of Hertsmere up to 2034, and will reconsider housing and employment needs. It will allocate sites for housing, employment and other forms of development and will set out development management policies for the Borough up to 2034.
- 1.11 Having completed a Strategic Housing Market Assessment (SHMA) and Economic Study, various other evidence documents are being prepared to support the Local Plan, including a Strategic Flood Risk Assessment, a Green Belt Assessment, an Indoor Sports and Outdoor Playing Field Strategy, a Water Cycle Study, a Housing Strategy, a Housing and Employment Land Availability Assessment and a Town Centres and Shopping Study<sup>1</sup>. There are also a number of supporting studies jointly commissioned with neighbouring or other authorities including a Green Arc Strategic Green Infrastructure Plan, a Hertfordshire Green Infrastructure Study, and a Hertfordshire Infrastructure and Investment Strategy.
- 1.12 The Council intends to consult on four stages of the Local Plan as follows:
  - Issues and Options.
  - Preferred Options.
  - Consultation Draft.
  - Proposed Submission Local Plan, also known as Publication or Regulation 19 stage.
- 1.1 In carrying out the scoping stage of the SA for the emerging Hertsmere Borough Local Plan, the work that was carried out previously during the SA of the adopted Core Strategy and the SA of the Site Allocations and Development Management Policies Plan has been drawn on, as appropriate.

## Sustainability Appraisal and Strategic Environmental Assessment

- 1.2 Under the Planning and Compulsory Purchase Act 2004, SA is mandatory for Development Plan Documents. For these documents it is also necessary to conduct an environmental assessment in accordance with the requirements of the SEA Directive (European Directive 2001/42/EC), and the SEA Regulations which transpose the SEA Directive into English law<sup>2</sup>. Therefore, it is a legal requirement for the Hertsmere Borough Local Plan to be subject to SA and SEA.
- 1.3 The requirements to carry out SA and SEA are distinct, although it is possible to satisfy both using a single appraisal process. Government guidance<sup>3</sup> provides information to assist users in complying with the requirements of the SEA Directive and Regulations through a single integrated SA process – this is the process that is being undertaken for the Local Plan. In addition, the guidance widens the approach of SEA to include social and economic as well as environmental issues. From here on, the term 'SA' should therefore be taken to mean 'SA incorporating the requirements of the SEA Directive and SEA Regulations'.
- 1.4 The SA process comprises a number of stages, with scoping being Stage A as shown in **Figure 1.1** below.

---

<sup>1</sup> Local Development Scheme (2016) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Local-Development-Scheme-2016.pdf>

<sup>2</sup> The Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004 No. 1633)

<sup>3</sup> <http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainabilityappraisal/strategic-environmental-assessment-and-sustainability-appraisal-and-how-does-it-relate-to-strategic-environmentalassessment/>

### Figure 1.1: Main Stages of Sustainability Appraisal

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope  
 Stage B: Developing and refining options and assessing effects  
 Stage C: Preparing the Sustainability Appraisal Report  
 Stage D: Consulting on the Local Plan Part 1 Review and the SA report  
 Stage E: Monitoring the significant effects of implementing the Local Plan Part 1 Review

1.5 **Figure 1.2** below sets out the tasks involved in the scoping stage.

### Figure 1.2: Stages in SA Scoping (Stage A)

A1: Identifying other relevant policies, plans and programmes, and sustainability objectives  
 A2: Collecting baseline information  
 A3: Identifying sustainability issues and problems  
 A4: Developing the SA framework  
 A5: Consulting on the scope of the SA

### Meeting the requirements of the SEA Regulations

1.6 This Scoping Report includes some of the required elements of the final 'Environmental Report' (the output required by the SEA Directive). **Table 1.1** below signposts the relevant sections of the Scoping Report that are considered to meet the SEA Regulations requirements (the remainder will be met during subsequent stages of the SA of the Local Plan). This table will be included in the full SA Report at each stage of the SA to show how the requirements of the SEA Regulations have been met through the SA process.

**Table 1.1: Meeting the Requirements of the SEA Regulations**

SEA Directive Requirements	Covered in this Scoping Report?
<b>Preparation of an environmental report</b> in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated. The information to be given is (Art. 5 and Annex I):	The SA Reports produced to accompany consultation on the Draft and Proposed Submission versions of the Local Plan will also form part of the 'Environmental Report'.
a) An outline of the contents, main objectives of the plan or programme, and relationship with other relevant plans and programmes;	Chapters 1 and 2, and Appendix 1.
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Chapter 3.
c) The environmental characteristics of areas likely to be significantly affected;	Chapter 3.
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC.;	Chapter 3.
e) The environmental protection objectives, established at international, community or national level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;	Chapter 2 and Appendix 1.

SEA Directive Requirements	Covered in this Scoping Report?
f) The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. (Footnote: These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects);	Requirement will be met at a later stage in the SA process.
g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Requirement will be met at a later stage in the SA process.
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Methodology presented in Chapter 4. Requirement will be met fully at a later stage in the SA process.
i) A description of measures envisaged concerning monitoring in accordance with Art. 10; and,	Requirement will be met at a later stage in the SA process.
j) A non-technical summary of the information provided under the above headings.	Requirement will be met at a later stage in the SA process.
The report shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Art. 5.2)	This Scoping Report and the subsequent Environmental Reports will adhere to this requirement.
<p>Consultation:</p> <ul style="list-style-type: none"> <li>authorities with environmental responsibility, when deciding on the scope and level of detail of the information which must be included in the environmental report (Art. 5.4)</li> </ul>	Consultation with the relevant statutory environmental bodies on this Scoping Report will be undertaken from September to October 2017.
<ul style="list-style-type: none"> <li>authorities with environmental responsibility and the public, shall be given an early and effective opportunity within appropriate time frames to express their opinion on the draft plan or programme and the accompanying environmental report before the adoption of the plan or programme (Art. 6.1, 6.2)</li> </ul>	Public consultation will be undertaken at all stages in the SA process.
<ul style="list-style-type: none"> <li>other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Art. 7).</li> </ul>	Unlikely to be relevant to the Hertsmere Local Plan.
<b>Taking the environmental report and the results of the consultations into account in decision-making (Art. 8)</b>	
<p><b>Provision of information on the decision:</b> When the plan or programme is adopted, the public and any countries consulted under Art.7 must be informed and the following made available to those so informed:</p> <ul style="list-style-type: none"> <li>the plan or programme as adopted</li> <li>a statement summarising how environmental considerations have been integrated into the plan or programme and how the environmental report of Article 5, the opinions expressed pursuant to Article 6 and the results of consultations entered into pursuant to Art. 7 have been taken into account in accordance with Art. 8, and the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and</li> <li>the measures decided concerning monitoring (Art. 9)</li> </ul>	Requirement will be met at a later stage in the SA process.
<b>Monitoring</b> of the significant environmental effects of the plan's or programme's implementation (Art. 10)	Requirement will be met at a later stage in the SA process.

### Habitats Regulations Assessments

- 1.7 Under Article 6 (3) and (4) of the Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) land-use plans, including Local Plans, are also

subject to Habitats Regulations Assessment (HRA). The purpose of HRA is to assess the impacts of a land-use plan against the conservation objectives of a European Site and to ascertain whether it would adversely affect the integrity of that site.

- 1.8 The HRA process for the Local Plan will be undertaken separately from the SA and will need to consider the potential for adverse effects on the integrity of Natura 2000 and Ramsar sites within the Borough both alone and in combination with development proposed in neighbouring authorities' plans. The findings will be taken into account in the SA where relevant (for example to inform judgements about the likely effects of potential development locations on biodiversity).

## Structure of the Scoping Report

- 1.9 This chapter has described the background to the production of the Local Plan and the requirement to undertake SA and other assessment processes. The remainder of this report is structured into the following sections:
- **Chapter 2** describes the review of plans, policies and programmes of relevance to the SA of the Local Plan (this is supported by more detailed information in **Appendix 1**).
  - **Chapter 3** presents baseline information for the Borough, which will inform the assessment of the policies and allocations in the Local Plan.
  - **Chapter 4** sets out the SA Framework and the methodology for the remainder of the SA process, including the SA objectives and appraisal questions that will be used to appraise the Local Plan, including reasonable alternative approaches to planning for future development. Chapter 4 also describes the proposed structure of the SA Report.
  - **Chapter 5** describes the next steps to be undertaken in the SA of the Local Plan

## 2 Relevant Policy Context

### Outline of the Hertsmere Borough Local Plan and relationship with other plans and programmes

The Environment Report should include:

*"an outline of the contents and main objectives of the plan or programme and of its relationship with other relevant plans and programmes"*

(SEA Regulations Schedule 2(1))

- 2.1 The Hertsmere Borough Local Plan will include all major planning policy for the Borough in a single document and will need to meet the requirements of the National Planning Policy Framework (NPPF) in 2012, key aspects of which are set out in the next section of the Scoping Report. Once complete, it will replace both the Core Strategy (adopted 2013) and the Site Allocations and Development Management Policies Plan (adopted 2016). Local communities may choose to produce a neighbourhood plan for their area in order to set out a vision and planning policies for the use and development of land in a neighbourhood. Any such plans<sup>4</sup> will need to be in conformity with the strategic policies in the Hertsmere Borough Local Plan.
- 2.2 One of the main requirements of the NPPF is for local authorities to significantly boost their supply of housing and this applies across the Country. The Strategic Housing Market Assessment (SHMA) helps the Council work out how many houses are needed and of what type. It estimates the need to be 3,151 homes per annum across the housing market area as a whole (which includes Dacorum, St Albans, Three Rivers and Watford districts) between 2013 and 2036. Some 599 homes per annum are estimated for Hertsmere over the same period.

### Environmental, social and economic policy objectives

The Environment Report should include:

*"The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation."*

(SEA Regulations Schedule 2(5))

- 2.3 There is a wide range of plans and programmes at the international and national levels that are relevant to the emerging Hertsmere Borough Local Plan. The full review of other relevant plans and programmes can be seen in **Appendix 1** and the key components are summarised below.

#### Key international plans, policies and programmes

- 2.4 At the international level, Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive') and Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') are particularly significant as they require Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA) to be undertaken in relation to the emerging Local Plan. These processes should be undertaken iteratively and integrated into the production of the Local Plan in

---

<sup>4</sup> At the time of writing, two Neighbourhoods Plans were in production within Hertsmere.

order to ensure that any potential negative environmental effects (including on European-level nature conservation designations) are identified and can be mitigated.

- 2.5 There are a wide range of other EU Directives relating to issues such as water quality, waste and air quality, most of which have been transposed into UK law through national-level policy; however, the international directives have been included in **Appendix 1** for completeness.

### Key national plans, policies and programmes

- 2.6 The most significant development in terms of the policy context for the emerging Local Plan has been the publication of the NPPF which replaced the suite of Planning Policy Statements (PPSs) and Planning Policy Guidance (PPGs). The purpose of the NPPF was to streamline national planning policy, having reduced over a thousand pages of policy down to around 60 pages. The Hertsmere Borough Local Plan must be consistent with the requirements of the NPPF, which sets out information about the purposes of local plan-making. It states that:
- "Local Plans must be prepared with the objective of contributing to the achievement of sustainable development. To this end, they should be consistent with the principles and policies set out in this Framework, including the presumption in favour of sustainable development."*
- 2.7 The NPPF also requires Local Plans to be 'aspirational but realistic'. This means that opportunities for appropriate development should be identified in order to achieve net gains in terms of sustainable social, environmental and economic development; however significant adverse impacts in any of those areas should not be allowed to occur.
- 2.8 One of the core planning principles set out in the NPPF is that planning should take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs. Other core planning principles are linked to health – such as design and transportation. Section 8 of the NPPF recognises that the planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities.
- 2.9 The NPPF requires local planning authorities to set out the strategic priorities for the area in the Local Plan. This should include strategic policies to deliver:
- the homes and jobs needed in the area;
  - the provision of retail, leisure and other commercial development;
  - the provision of infrastructure for transport, telecommunications, waste management, water supply, wastewater, flood risk and coastal change management, and the provision of minerals and energy (including heat);
  - the provision of health, security, community and cultural infrastructure and other local facilities; and
  - climate change mitigation and adaptation, conservation and enhancement of the natural and historic environment, including landscape.
- 2.10 In addition, Local Plans should:
- plan positively for the development and infrastructure required in the area to meet the objectives, principles and policies of this Framework;
  - be drawn up over an appropriate time scale, preferably a 15-year time horizon, take account of longer term requirements, and be kept up to date;
  - be based on co-operation with neighbouring authorities, public, voluntary and private sector organisations;
  - indicate broad locations for strategic development on a key diagram and land-use designations on a proposals map;
  - allocate sites to promote development and flexible use of land, bringing forward new land where necessary, and provide detail on form, scale, access and quantum of development where appropriate;

- identify areas where it may be necessary to limit freedom to change the uses of buildings, and support such restrictions with a clear explanation;
- identify land where development would be inappropriate, for instance because of its environmental or historic significance; and
- contain a clear strategy for enhancing the natural, built and historic environment, and supporting Nature Improvement Areas where they have been identified.

## 3 Baseline information and key sustainability issues

### Introduction

- 3.1 The collection of information on the current state of the environment is a key component of the SA process and a requirement of the SEA Directive. It provides a baseline from which to predict and subsequently monitor the sustainability effects of the Plan's policies and proposals.

The 'Environmental Report' should include:

- *"The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme"*
- *"the environmental characteristics of areas likely to be significantly affected"*
- *"any existing environmental problems which are relevant to the plan or programme, including in particular, those relating to any areas of a particular environmental importance, such as any areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive."*

SEA Regulations Schedule 2 (2, 3 and 4)

- 3.2 Sufficient baseline information to meet these requirements has been collected and is organised below by SA theme.

### Data limitations

- 3.3 It should not be assumed that all baseline data are currently available or that it will be possible to collect missing data in the future. SEA Guidance recognises that data gaps will exist but suggests that where baseline information is unavailable or unsatisfactory, authorities should consider how it will affect their assessments and determine how to improve it for use in the assessment of future plans. The collection and analysis of baseline data is regarded as a continual and evolving process, given that information can change or be updated on a regular basis.
- 3.4 Not all the relevant information was available at the local level and as a result there are some gaps within the data set, but it is considered that the available information provides a sufficiently comprehensive view of sustainability within the plan area.

### Baseline information, sustainability issues and their likely evolution without the Local Plan

- 3.5 The baseline information included within this SA Report is largely drawn from that presented in the SA of the Pre-submission Site Allocations and Development Management Policies Plan<sup>5</sup>. This information has been amended, where relevant, to take account of new information that has become available since the earlier SA work. As well as providing a snapshot of the current social, economic and environmental situation in the Borough, it can also be taken as the likely evolution of the environment without the implementation of the Plan unless otherwise stated. This chapter

---

<sup>5</sup> SA (incorporating SEA) of Hertsmere Borough Pre-submission Site Allocations and Development Management Policies Plan (2015) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-SD02-Sustainability-Appraisal-2015.pdf>

also highlights key items of forthcoming evidence which will be considered in future stages of the SA, once they become available.

### **Biodiversity and geodiversity**

- 3.6 A number of habitats within Hertsmere have been identified as internationally important under the EU Habitats Directive, including characteristic oak-hornbeam woodlands. However, there are no EU level designations in the Borough such as Special Areas of Conservation, Special Protection Areas or Ramsar sites. As mentioned previously, an HRA will be undertaken during the plan preparation process and its results used to inform the SA.
- 3.7 There are two Sites of Special Scientific Interest (SSSIs) in Hertsmere Borough:
- *Redwell Wood*, a large ancient semi natural woodland which is notified primarily for its oak hornbeam stand type with healthy remnants;
  - *Castle Lime Works*, a geological SSSI displaying the finest exposure of clay-filled pipes in the chalk karst of England<sup>6</sup>.
- 3.8 There are three Local Nature Reserves within Hertsmere: Fisher's Field, Hillfield Park Reservoir and Furzefield Wood & Lower Halfpenny Bottom. There are no National Nature Reserves located within the Borough<sup>7</sup>.
- 3.9 Some 130 Wildlife Sites were identified in Hertsmere in 2008, making up approximately 7% of the Borough. Six sites larger than 50ha were identified: Hillfield Park Reservoir, Little Organ Hall Farm pasture, Porters Park (Radlett) Golf Course, Dyrham Park, Tyttenhanger Gravel Pit and Redwell, Hawkshead & Mymmshall Wood<sup>8</sup>.
- 3.10 The Hertfordshire Biodiversity Action Plan<sup>9</sup> identified two Key Biodiversity Areas in Hertsmere:
- *Upper Colne Valley*: An area of wetlands and heath centred on the River Colne, Tyttenhanger Gravel Pit and Colney Heath in St Albans District.
  - *Mymmshall Brook/Water End*: The woodland complex of Redwell Wood and the stream swallow holes and associated sites around the brook up to the major swallow hole complex just to the north.
- 3.11 Hertsmere contains three Regionally Important Geological Sites (RIGS): Shenley Chalk Mine, Radlett Plantation and Radlett Field.
- 3.12 The underlying bedrock in Hertsmere is chalk, which rises at the Chilterns to the north, and underlies London to the south. The chalk is important in influencing the general topography of the area and in providing an underground aquifer, which affects the calcareous nature of the water and the levels of rivers, streams, springs and flushes<sup>10</sup>.
- 3.13 In Hertsmere, the chalk occurs at the surface around Aldenham, southwest and northeast of Radlett towards North Mimms Park and the edges of the Mymmshall Brook valleys. It is edged by the overlying Reading Beds, consisting of mottled clay, sands and pebbles that occur at the surface, in a band, from Radlett to South Mimms and Potters Bar. Most of the solid geology consists of London Clay, which dominates much of the Borough, from Bushey and Borehamwood across to Potters Bar<sup>11</sup>.

---

<sup>6</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>7</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>8</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>9</sup> A Local Biodiversity Action Plan (reviewed March 2006) [http://www.hef.org.uk/nature/biodiversity\\_vision/](http://www.hef.org.uk/nature/biodiversity_vision/)

<sup>10</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>11</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

## Soils and minerals

- 3.14 Geologically, Hertsmere lies on the boundary between the chalk of Hertfordshire to the north and the London clay and Reading Beds of the London Basin to the south. There is a marked contrast in soil types across the Borough. In the headwaters of the catchment (southern end of the Borough) across Borehamwood, Bushey and Potters Bar the soils are generally clays of low permeability, seasonally waterlogged, with medium to high runoff producing potential. The soils in the lower part of the catchment (northern end of the Borough) across Radlett and Shenley are generally well-drained, loamy sandy soils permeable producing relatively low amounts of runoff<sup>12</sup>.
- 3.15 The geology noted under paragraph 3.12 gives rise to acid-neutral soils within Hertsmere, apart from localised areas where calcareous soils may exist directly influenced by the chalk. These are largely Argillic brown earths or brown earths, clayey or loamy and with impeded drainage<sup>13</sup>.
- 3.16 Hertsmere contains a minerals and railhead safeguarding area. The mineral safeguarding area for sand/gravel covers a large proportion of Hertsmere, while the railhead safeguarding area is located to the north of Hertsmere, within close proximity to Radlett.
- 3.17 According to Natural England's Agricultural Land Classification, land within Hertsmere Borough includes best and most versatile agricultural land, with elements of Grade 2 agricultural land around Aldenham, Letchmore Heath and Colney Heath, and the majority of land being Grade 3. Over 95% of new homes were provided on previously developed land, mostly within defined urban areas, according to the Authority Monitoring Report 2013/14<sup>14</sup>. The Borough also contains important reserves of sand and gravel, which have been identified by Hertfordshire County Council as 'preferred areas' for future mineral extraction in its Minerals Local Plan.

## Landscape

- 3.18 There is no Area of Outstanding Natural Beauty in Hertsmere.
- 3.19 Hertsmere falls within the Northern Thames Basin National Character Area (NCA), which contains a diverse range of semi-natural habitats including ancient woodland, lowland heath and floodplain grazing marsh. The pattern of woodlands is varied across the area and includes considerable areas of ancient semi-natural woodland. Hertfordshire is particularly wooded in some areas. Significant areas of wood pasture and pollarded veteran trees are also present. Mixed farming is characteristic of the basin, with arable land predominating in the Hertfordshire plateaux. Landscape parklands surrounding 16<sup>th</sup> and 17<sup>th</sup> century rural estates and country houses built for London merchants are a particular feature in this NCA<sup>15</sup>.
- 3.20 Hertsmere contains 16 Local Character Areas (No. 014-029), the largest of which are located in the centre of Hertsmere, between the settlements of Radlett, Borehamwood and Potters Bar (Borehamwood Plateau, High Canons Valleys and Ridges and Arkley Plain). These three LCAs contain gently undulating ground, with a number of distinctive features including historic parklands, reservoirs and pasture lands.

## Open space

- 3.21 A total of 257 open spaces have been identified in Hertsmere, comprising 999.3 hectares. This amounts to 9.9% of the total area of the Borough<sup>16</sup>.
- 3.22 Hertsmere has a diverse distribution of different types of open space. However, compared to the proposed standards there are a number of deficiencies within Hertsmere. In particular, there is a shortage of play facilities across the Borough which has been identified as a key problem.

---

<sup>12</sup> Strategic Flood Risk Assessment: Volume I (2008) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB02a-SFRA-Final-Report-and-Appendix-E.PDF>

<sup>13</sup> Biodiversity, Trees and Landscape SPD: Part B – Biodiversity (2010) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-BD10a-BTL-SPD-2010-Part-B.pdf>

<sup>14</sup> Authority Monitoring Report 2013/14 (2015) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Planning-Publications/AMR-2013-2014.pdf>

<sup>15</sup> National Character Area profile: 111: Northern Thames Basin (2013) <http://publications.naturalengland.org.uk/publication/4721112340496384?category=587130>

<sup>16</sup> Hertsmere Open Space Study (2011) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB25-HBC-Open-Space-Study-Oct-2011.pdf>

Additionally, some accessibility issues were identified in Aldenham & Shenley, Borehamwood & Elstree, Bushey and Potters Bar, that need to be addressed through planning policy<sup>17</sup>.

### *Green space*

- 3.23 Some 591 sites within Hertsmere have been identified as green space or amenity land. A large majority of these are considered 'amenity greens', comprising almost 60% of the sites identified. 'Amenity greens' are defined as roadside verges or very small areas of green space. Although amenity greens tend to provide a more useable space for people than say semi natural greenspace, they do not contribute as much as other types (e.g. parks or outdoor sports facilities) to local communities in terms of recreation, social, environmental and visual amenity terms<sup>18</sup>.
- 3.24 Hertsmere's Green Infrastructure Plan<sup>19</sup> seeks to conserve and enhance strategic greenspaces and Green Infrastructure (GI) resources such as the Aldenham Country Park, as well as registered and minor historic parklands, areas with an intact small scale or historic field boundary network, minor watercourses and wetlands within Hertsmere.

### **Air quality**

- 3.25 The main air quality issues in Hertsmere relate to nitrogen dioxide (NO<sub>2</sub>). Hertsmere Council has recorded concentrations of NO<sub>2</sub> above the annual mean objective at a number of relevant locations outside existing Air Quality Management Areas (AQMAs)<sup>20</sup>. However, as these are all in close proximity to existing AQMAs it is not considered necessary to amend existing or create new AQMAs at these locations. All other pollutants in the Borough are meeting the objective levels. At present, there are eight AQMAs located in Hertsmere:
- AQMA 1 – An area comprised of the properties at 23-27 Dove Lane and the caravan site Brookes Place off the A1000 Barnet Road, near the M25.
  - AQMA 2 – An area comprised of a property known as Charleston Paddocks, St Albans Road, South Mimms, Potters Bar, near the M25.
  - AQMA 3 – An area comprised of properties 31-29 Blanche Lane South Mimms near the M25.
  - AQMA 4 – An area comprised of the domestic properties 12 Grove Place, Hartspring Lane and caravans numbered 1-4, 7-8, 55-58 and 60 within Winfield Caravan site, Hartspring Lane, near the M1 at Bushey.
  - AQMA 5 – An area comprised of eight properties on the east side of the A5183 High Street, Elstree around the junction with the A411 Barnet Lane.
  - AQMA 6 – An area comprised of properties at 133 to 167 High Street on the east side of the High Street opposite the bus station Potters Bar.
  - AQMA 7 – An area encompassing residential properties along both sides of Watling Street, between the junctions with Park Road and Aldenham Road.
  - AQMA 8 – An area encompassing residential properties along both sides of Shenley Road and Theobald Street, and the roundabout joining Shenley Road and Eldon Avenue.
- 3.26 A managed motorway scheme was recently implemented on a section of the M25 running through the Borough between Junctions 23 and 24 (South Mimms services to Potters Bar). The air quality impacts arising from this change are currently under investigation.

---

<sup>17</sup> Hertsmere Open Space Study (2011) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB25-HBC-Open-Space-Study-Oct-2011.pdf>

<sup>18</sup> Green Spaces and Amenity Land Report (2012) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB26-Green-Spaces-Amenity-Land-2012.pdf>

<sup>19</sup> Hertsmere Borough Green Infrastructure Plan (2011) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Development-Framework/Hertsmere-Green-Infrastructure-Plan.pdf>

<sup>20</sup> 2015 Air Quality Updating and Screening Assessment (2015) <https://www.hertsmere.gov.uk/Documents/04-Environment-Refuse--Recycling/Environmental-Health/Pollution-Control/Updating-and-Screening-Assesment-2015.pdf>; those sites exceeding the annual mean objective that are not located within an existing AQMA are as follows: central Potters Bar; on the periphery of South Mimms; central Radlett; central Elstree; adjacent to Hartspring Lane; and in central Borehamwood.

### Climatic factors

- 3.27 There is widespread scientific consensus that the Earth's climate is changing and that human activity could be the principal cause. Scientific forecasts suggest that the UK's climate will continue to get warmer and that heavy rainfall will be more frequent. Weather extremes, such as heat waves would become more common and others such as snowfall would become less common. Sea levels will continue to rise and storm surges will become more frequent, increasing the risk of flooding in coastal areas.
- 3.28 Changes to the climate will bring new challenges to the Borough's built and natural environments. Climate change estimates (at the 50% probability level) for the East of England for the 2080s, based on medium emissions scenarios, predict an increase in winter mean temperature of approximately 4°C and an increase in summer mean temperature of approximately 4°C<sup>21</sup>.
- 3.29 In 2015, Hertsmere emitted the lowest amount of CO<sub>2</sub> overall amongst all local authorities in the County. However, transport in Hertsmere produced the fourth highest amount of CO<sub>2</sub>, attributable to transport, across the County<sup>22</sup>.

### Water quality and water resources

- 3.30 Hertsmere Borough falls within the catchment of the River Colne, which flows from northeast to southwest from Colney Heath through to Watford. The main tributaries of the Colne along this reach are the Hilfield Brook, Radlett Brook, Tykeswater and Mimshall Brook.
- 3.31 Hertsmere mainly falls within the Colne Management and Operational Catchment. A majority of water for people and businesses is abstracted from groundwater within the catchment. Some rivers fed by this suffer from low flows during dry weather, which is exacerbated by abstraction. In the future, the demand for water for people, business and the environment may increase beyond the capacity available locally<sup>23</sup>.
- 3.32 Affinity Water provides the mains water supply in Hertsmere Borough. However, their Water Resources Management Plan found that their Central and Southeast regions do not have sufficient water for the whole of the 25-year planning period to meet their customers' need for water. They have considered a wide range of options to rebalance supply and demand, which has resulted in a substantial investment programme for their Centre region, where Hertsmere is located<sup>24</sup>.
- 3.33 Wastewater can have a detrimental impact on water quality, with over 2,000 residential properties and six large sewage treatment works discharging treated water into local rivers in the catchment. In addition, challenges caused when intermittent sewage is discharged (under license) during storm events, can also impact on groundwater<sup>25</sup>.

### Forthcoming evidence

- 3.34 Hertfordshire County Council, in conjunction with 9 Hertfordshire local authorities and Chiltern District Council, has commissioned a Water Cycle Study (titled Hertfordshire Water Study 2017), which is expected to be finalised in winter 2017. This has involved collaborative working between the County and district councils, the Environment Agency, Hertfordshire LEP and the water companies that serve the area (Thames Water, Affinity Water and Anglian Water). This describes the current environmental and infrastructure capacity with regards to water infrastructure and resources in the Hertfordshire area and consider solutions to any capacity issues identified over the period 2021 to 2051. The March 2017 draft of this document recorded the following main outcomes from the evaluation of need for Hertsmere:

---

<sup>21</sup> UK Climate Projections (December 2014) <http://ukclimateprojections.metoffice.gov.uk/21708>

<sup>22</sup> UK local authority and regional carbon dioxide emissions national statistics: 2005-2015 (2017) <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2015>

<sup>23</sup> Catchment Data Explorer: Colne Management Catchment (2017) <http://environment.data.gov.uk/catchment-planning/ManagementCatchment/3017>

<sup>24</sup> Final Water Resources Management Plan, 2015-2020 (2014) <https://stakeholder.affinitywater.co.uk/docs/FINAL-WRMP-Jun-2014.pdf>

<sup>25</sup> Catchment Data Explorer: Colne Operational Catchment (2017) <http://environment.data.gov.uk/catchment-planning/OperationalCatchment/3096/Summary>

- *The evaluation indicates most growth areas remain relatively unconstrained (by the wastewater system), up to and including in 2031, with only localised network capacity likely requiring strategic intervention in Potters Bar*
- *The potential impact of sewer discharges on watercourse quality in Borehamwood by 2051 could require the promotion of more sustainable construction solutions (for development sites) to ensure rainfall runoff is discharging to the environment (not the foul sewers)*
- *The evaluation indicates a large degree of uncertainty in 2051, with the high scenario demonstrating strategic intervention could be required across the district (mainly to improve sewer and STW capacity). This scale of intervention could require adaptation of local planning policies and / or construction methods to limit foul flows and promote large-scale water recycling*

3.35 The Study also predicted that Maple Lodge Sewage Treatment Works is limited in its capacity to accommodate expected growth and will require at least focused planning from 2021 onwards to ensure it can accommodate this.

3.36 The Study also concluded that, whilst the availability of water resources will be largely sufficient until 2021, significant improvement could be required after this date to ensure water resource availability.

### **Flood risk**

3.37 The risk of flooding posed to properties arises from a number of sources including river, groundwater, surface water and sewers. Hertsmere has a history of drainage infrastructure flooding, which has been recorded in all urban areas across the Borough, however it appears most significant in Bushey and Borehamwood and least significant in Radlett<sup>26</sup>.

3.38 The Hertsmere Borough Strategic Flood Risk Assessment (SFRA) was published in May 2008<sup>27</sup>. Hertsmere falls within the catchment of the River Colne, which has extensive partially developed floodplain with development built up to the water's edge and narrow floodplains in the headwaters, with some properties at risk of flooding. The main urban areas such as Borehamwood, Radlett and Potters Bar are at risk of flooding from a number of sources and flooding mechanisms, including overtopping of river banks, in-channel blockages and constrictions causing the back-up of water, overflow of surface water and sewerage drainage infrastructure, rapid surface water runoff from urban areas, breach or overtopping of flood storage areas and reservoirs and groundwater flooding<sup>28</sup>.

3.39 Fluvial flooding from the River Colne has resulted in frequent flooding of properties in the main urban area of Watford around the boundary of Hertsmere and Watford Borough Councils. Historical flooding within Hertsmere has mostly been in recreational areas and open space, with limited damage caused to property. Potters Bar was worst affected by fluvial flooding in 1993, while the downstream part of the Mimms Hall Brook catchment has a history of flooding with serious flooding to houses and property recorded on five occasions since 1928. The flooding in Mimms Hall Brook is thought to be attributed to insufficient channel capacity, however blockage at bridges is also thought to be a factor<sup>29</sup>.

3.40 There are a number of Source Protection Zones within the Borough to ensure that rivers and aquifers are protected from pollution, with these principally located within the northeast and west of the Borough.

3.41 Hertsmere contains a number of areas susceptible to flooding. Areas of land within Flood Zones 2 and 3 are located along the west-north boundary of the Borough, as well as The Brook, Mimms Hall Brook and Catherine Bourne.

<sup>26</sup> Strategic Flood Risk Assessment: Volume I (2008) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB02a-SFRA-Final-Report-and-Appendix-E.PDF>

<sup>27</sup> Strategic Flood Risk Assessment: Volume I (2008) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB02a-SFRA-Final-Report-and-Appendix-E.PDF>

<sup>28</sup> Strategic Flood Risk Assessment: Volume I (2008) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB02a-SFRA-Final-Report-and-Appendix-E.PDF>

<sup>29</sup> Strategic Flood Risk Assessment: Volume I (2008) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB02a-SFRA-Final-Report-and-Appendix-E.PDF>

- 3.42 Overall, surface water flooding is highlighted as a major cause of frequent flooding in the Borough and often occurs in combination with groundwater flooding.

*Forthcoming evidence*

- 3.43 The Council has commissioned a Strategic Flood Risk Assessment update, which is expected to become available in late 2017/early 2018.

**Historic environment**

- 3.44 There are many heritage designations within Hertsmere including 319 Listed Buildings, 15 Conservation Areas, 32 archaeological sites, four Registered Parks and Gardens (Wrotham Park, Aldenham House, Wall Hall, The Rose Garden, Bushey), and four Scheduled Monuments. The Battle of Barnet 1471 Registered Battlefield is also partially within the Borough's boundary. Hertsmere Borough also maintains a list of Locally Important Buildings, which includes 380 buildings of local significance. At present, there are no heritage assets at risk within the Borough.

**Health**

- 3.45 The health of people in Hertsmere is generally better than the national average. Some 84.76% of people reported being in 'very good' or 'good' health, while only 4.01% of people reported being in 'bad' or 'very bad' health<sup>30</sup>. The breakdown by ward of resident general health in the 2011 Census shows that Aldenham East has the best health in Hertsmere with 90.55% reporting very good or good health. However, Borehamwood Cowley Hill ward has the worst with only 78.6% reporting 'very good' or 'good' health<sup>31</sup>.
- 3.46 In 2015, 61.1% of adults in Hertsmere were physically active, compared to the English average of 57%. Furthermore, between 2013 and 2015, 62.4% of adults in the area were recorded as being overweight, compared to the English average of 64.8%. Excess weight in children is also recorded as being below the national average<sup>32</sup>.
- 3.47 Life expectancy for both men and women is higher than the England average. However, life expectancy is 7.2 years lower for men and 7.3 years lower for women in the most deprived areas of Hertsmere than in the least deprived areas<sup>33</sup>.

*Forthcoming evidence*

- 3.48 The Council has commissioned an Indoor Sports and Outdoor Playing Field Strategy, which will be taken into account when it becomes available.

**Deprivation**

- 3.49 The English Indices of Deprivation 2015<sup>34</sup> are a measure of multiple deprivations in small areas or neighbourhoods, called Lower-layer Super Output Areas (LSOAs) in England, which are a similar size to electoral wards. Seven domains of deprivation are measured: Income; Employment; Education; Health; Crime; Barriers to housing & services and Living environment. Each domain contains a number of indicators. The seven domains are combined to give a multiple deprivation score. There are 32,844 LSOAs nationally and 62 LSOAs in Hertsmere.<sup>35</sup>
- 3.50 According to the English Indices of Deprivation 2015<sup>36</sup>, Hertsmere is ranked 243<sup>rd</sup> for the Index of Multiple Deprivation (IMD) multiple deprivation score (rank of average score) out of 326 local authority areas in England. This means that compared to the rest of the country, Hertsmere is in the 50% least deprived areas. Hertsmere's average deprivation rank across its 62 LSOAs is

<sup>30</sup> Knowing our Community (2015) <https://www.hertsmere.gov.uk/Documents/11-Your-Council/Equality--Diversity/Knowing-Our-Community-2015-v2.pdf>

<sup>31</sup> English Indices of Deprivation (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

<sup>32</sup> Public Health and NHS Outcomes Frameworks for Children (2016) <http://fingertips.phe.org.uk/cyphof#page/4/gid/8000025/pat/102/ati/101/are/E07000098/iid/20602/age/201/sex/4>

<sup>33</sup> Health Profile 2016 (2016) <https://www.hertsmere.gov.uk/Documents/03-Community/Community-Information/Knowing-our-Community/Health-profile-2016.pdf>

<sup>34</sup> English Indices of Deprivation (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

<sup>35</sup> The English Indices of Deprivation, File 1: Index of multiple deprivation (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

<sup>36</sup> DCLG, English indices of deprivation 2015 (2015) <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015>

21,818, which is slightly below the Hertfordshire average of 22,160. Hertsmer is a very diverse borough with varying levels of deprivation with overall IMD levels of LSOAs ranging from 3,049 (Borehamwood Cowley Hill 006C, the most deprived LSOA in Hertfordshire and in the top 10% most deprived nationally) to 32,695 (Bushey Heath 013C in the top 1% least deprived nationally). There are eight wards within the 20% most deprived in the country which are classified as having barriers to housing and services: Aldenham West, Shenley, Borehamwood Cowley Hill, Borehamwood Hillside, Bushey North, Borehamwood Kenilworth, Potters Bar Oakmere, and Potters Bar Parkfield.

### Population and social issues

- 3.51 In 2016 the population of Hertsmer was 103,500<sup>37</sup>. This number is predicted to increase to 122,000 by 2034<sup>38</sup>. Hertsmer is projected to have a 9.75% increase in population from 2014 to 2034, of which 4.3% will be from natural change (i.e. births minus deaths), 4.9% from net migration within the UK, and 0.5% from net international migration<sup>39</sup>.
- 3.52 Hertsmer has a higher than the County average proportion of those aged over 75 years and this trend is predicted to continue. The proportion of those aged over 85 is projected to increase from 2.7% of the population to 3.2%, a rise of 429 people in real terms.
- 3.53 The 2011 Census estimates the population density of the Borough at 9.9 persons per hectare which is higher than the national average of 4.1 persons per hectare. However, of the total population, 85,007 people live in 'urban' areas (representing 85% of the population of the Borough) with a population density of 20.3 persons per hectare, while 15,024 people live in 'rural' areas with a population density of 2.5 persons per hectare<sup>40</sup>.
- 3.54 Between Academic Year 2011/12 and Academic Year 2015/16, the percentage of pupils at Key Stage 4 attaining Level 2 including GCSE English and Maths in Hertsmer, has increased from 65.5% to 71.1%.<sup>41</sup>
- 3.55 Hertsmer Borough has a relatively low level of crime, with no wards classified as being within the 30% most deprived nationally. However, the total number of crimes reported in Hertsmer continues to increase. Anti-social behaviour is recorded as the most common offence in the Borough<sup>42</sup>.

### Religion

- 3.56 There are at least ten different types of faith in Hertsmer, comprising 70 individual groups. The area with the most faith communities is Borehamwood and Elstree, which also has the greatest population in the Borough. Bushey and Potters Bar all have a lower proportion of faith communities compared to the respective proportion of the population. Aldenham and Shenley contain 21% of the Borough's faith communities and just 16% of the population<sup>43</sup>.
- 3.57 According to Hertsmer's Faith community audit<sup>44</sup>, there were two communities in particular that require their own site and building for religious purposes in 2012: Shenley Jewish Community and the Borehamwood Muslim Community.

### Economy and labour market

- 3.58 At 86.7% of the total population, the percentage of the Borough population that is economically active is higher than the county, regional and country average. The percentage of the Borough's population that are in employment at 84.5% is also higher than the regional and British averages.

---

<sup>37</sup> Nomis – Labour Market Profile, accessed 7<sup>th</sup> August 2017 (2017) <https://www.nomisweb.co.uk/reports/lmp/la/1946157225/report.aspx?town=hertsmer>

<sup>38</sup> ONS, Subnational Population Projections for Local Authorities in England, 2014-based projections (2016)

<sup>39</sup> ONS, Understanding Projected Population Change at the Local Authority Level, 2014-based projections (2016)

<sup>40</sup> ONS, Population Density (2011)

<sup>41</sup> Herts Insight, Education and Lifelong Learning Profile Selection: Hertsmer District Geo-type: Districts (2017) <http://atlas.hertsliis.org/profiles/profile?profileId=119&geoTypeId=15>

<sup>42</sup> UK Crime States (2017) <http://www.ukcrimestats.com/Constituency/65994>

<sup>43</sup> Faith Community: Needs Assessment (2012) <https://www.hertsmer.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Faith-Community-Needs-Assessment-December-2012.pdf>

<sup>44</sup> Faith Community: Needs Assessment (2012) <https://www.hertsmer.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/Faith-Community-Needs-Assessment-December-2012.pdf>

- 3.59 The Borough's largest employment industries are: wholesale and retail trade, and repair of motor vehicles and motorcycles (19.2%); construction (11.5%) and education (9.6%).
- 3.60 The proportion of people who are unemployed is 3.5% of the population, which is below the regional (3.8%) and national averages (4.8%). The three main occupations in Hertsmere in the same period were administrative and secretarial (19.1%), associate professional and technical (16.5%), and professional occupations (15.4%). Unemployment in Hertsmere has dropped significantly from 5.2% (Apr 14-Mar 15) to 4.1% (Apr 15-Mar 16) to 3.1% (Apr 16-Mar 17)<sup>45</sup>. The number of people claiming Job Seeker's Allowance is in line with the county and regional average.
- 3.61 The general proportion of full-time to part-time jobs, at approximately 2:1, is in line with regional and national averages.
- 3.62 In 2015, the average full-time weekly earnings were £552 for residents in Hertsmere, compared to £614 in Hertfordshire. Furthermore, in 2016, the average full-time annual earnings were £30,360 for residents in Hertsmere, compared to £33,820 in Hertfordshire.
- 3.63 The level of job density calculated as the ratio of total jobs to population ages 16-64 in Hertsmere is 0.93%, which is higher than both the regional average (0.81%) and the national average (0.83%). Of the 6,695 enterprises in Hertsmere in 2016, 91% were 'micro' size (0-9 employees), 7.1% were considered to be 'small' (10-49 employees), 1.6% were considered to be 'medium' (50-249 employees) and 0.3% were considered to be 'large' (250+ employees). According to the 2011 Census, 37% of the resident workforce commuted to London and only 41% actually work in the Borough. Hertsmere has a significant number of in-commuters and continues to be a 'net exporter' of labour resulting in a small, negative commuting balance.
- 3.64 The Hertfordshire London Arc Jobs Growth and Employment Land study<sup>46</sup> indicates that there is likely to be a small shortfall in office, industrial and warehousing floorspace in the Borough by 2026.

### Housing

- 3.65 The South West Hertfordshire SHMA<sup>47</sup> considers housing need in the South West Hertfordshire Housing Market Area (HMA). The HMA comprises the following local authority areas:
- Dacorum;
  - Hertsmere;
  - St Albans;
  - Three Rivers; and
  - Watford.
- 3.66 Hertsmere Borough has an exceptionally high house price to earnings ratio. Average house prices in Hertsmere are above the regional and national average, at £461,800<sup>48</sup>. Yet weekly earnings in Hertsmere are below the county average.
- 3.67 A survey carried out of local authorities by the National Housing Federation indicated that Hertsmere was the least affordable local authority in the East of England, with parts of the Borough having amongst the greatest gaps between housing affordability and access to services in England. The wide gap between local household incomes and house prices not only means that there is high demand for affordable housing to rent but also that the cost of 'intermediate' housing is not affordable to many seeking accommodation in the Borough<sup>49</sup>.

<sup>45</sup> Nomis – Labour Market Profile, accessed 7<sup>th</sup> August (2017)

<https://www.nomisweb.co.uk/reports/lmp/la/1946157225/report.aspx?town=hertsmere>

<sup>46</sup> Hertfordshire London Arc Jobs Growth and Employment Land: Final Report (2009) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Development-Framework/Hertfordshire-London-Arc-Final-Report-March-2009.pdf>

<sup>47</sup> South West Hertfordshire Strategic Housing Market Assessment (2016) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SW-Herts-SHMA-Final-Report-Jan16.pdf>

<sup>48</sup> Herts Insight, House Prices in Hertfordshire Selection: Hertsmere District Geo-type: Districts (2017) <http://atlas.hertslis.org/profiles/profile?profileId=994&geoTypeId=15>

<sup>49</sup> Affordable Housing: Supplementary Planning Document (2015) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Planning-Publications/AH-SPD-Nov-2015-FINAL-AS-PRINTED.pdf>

- 3.68 As of 1<sup>st</sup> September 2015, there were 811 households on Hertsmere's housing register (a 7.4% increase since January 2015). Approximately 90% reside in Hertsmere and all are required to have a connection with Hertsmere so there remains an acute need for affordable housing in the Borough. The Housing Register for Hertsmere currently shows a high overall requirement for affordable dwellings with one to three bedrooms<sup>50</sup>.

#### *Forthcoming evidence*

- 3.69 The Council is carrying out a Housing and Employment Land Availability Assessment, which will be taken into account when available.

#### **Transport**

- 3.70 Hertsmere is well connected to London and the rest of the country. The M25 and M1 motorways and the A1 all run through the Borough, which is also serviced by main line rail services stopping at Potters Bar, Radlett and Borehamwood. However, some problems are caused by road links being better than access to public transport, particularly in terms of east to west transportation, which is reflected in high levels of car ownership and traffic congestion. Congestion is a major local concern<sup>51</sup>.
- 3.71 According to the *Hertfordshire Infrastructure & Investment Strategy* (2009), walking, cycling, bus and coach networks are generally adequate to cater for existing demand. However, hours of bus operation can be restrictive and there is a lack of a focused centre for services in Hertfordshire. There is a severe deficit in rail services both for passengers and freight<sup>52</sup>.
- 3.72 The 2009 predictions for rail capacity indicate that without further substantial investment at a national scale the effectiveness of the rail network would be severely restricted post-2021, which may suppress the attractiveness of this mode<sup>53</sup>. Indeed the main issue for rail in Hertfordshire is that despite having an extensive north-south rail network traversing the County, rail use is constrained by a lack of capacity<sup>54</sup>. Without further intervention, conditions on the road network will continue to deteriorate. The *Hertfordshire Infrastructure & Investment Strategy*<sup>55</sup> identifies a number of ways to resolve the deficit on the motorway network and help improve conditions at a number of key locations on Hertfordshire's road network. The *Hertfordshire Infrastructure and Investment Strategy* identified Hartspring Roundabout on the junction of the A41/B462 Hartspring Lane, within Hertsmere as a key corridor requiring improvement works to enable future growth by 2021.

### Key sustainability issues and likely evolution without the Plan

- 3.73 Analysis of the baseline information has enabled a number of key sustainability issues facing Hertsmere to be identified. Identification of the key sustainability issues and consideration of how these issues might develop over time if the Local Plan is not prepared, help meet the requirements of Annex 1 of the SEA Directive to provide information on:

*"the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan; and any existing environmental problems which are relevant to the plan."*

---

<sup>50</sup> Affordable Housing: Supplementary Planning Document (2015) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Planning-Publications/AH-SPD-Nov-2015-FINAL-AS-PRINTED.pdf>

<sup>51</sup> Local Development Plan: Infrastructure Assessment (2013) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Planning-Publications/CD12-Hertsmere-Infrastructure-Assessment.pdf>

<sup>52</sup> Hertfordshire Infrastructure & Investment Strategy: Transport Technical Report (2009) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB24b-HIIS-Study-2009-Trans-Tech-Report.pdf>

<sup>55</sup> Hertfordshire Infrastructure & Investment Strategy: Transport Technical Report (2009) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB24b-HIIS-Study-2009-Trans-Tech-Report.pdf>

- 3.74 **Table 3.1** summarises the likely evolution of the baseline without the plan in relation to each of the key sustainability issues. This considers a medium-term scenario, where the adopted Core Strategy would still be in place.
- 3.75 The information in **Table 3.1** shows that, in general, the current trends in relation to the various social, economic and environmental issues affecting Hertsmere would be more likely to continue without the implementation of the Local Plan. In most cases, the emerging Local Plan offers opportunities to directly and strongly affect existing trends in a positive way, through an up-to-date plan that reflects the requirements of the NPPF.

**Table 3.1: Likely evolution of key sustainability issues in Hertsmere without implementation of the Local Plan**

Key sustainability issues	Likely evolution without implementation of the Local Plan
<p><b>Housing Provision (Supply)</b> – There is a need to ensure sufficient land is available to meet future housing requirements within Hertsmere.</p>	<p>Policy CS1 of the Core Strategy states that the Council will make provision for at least 3,990 additional dwellings within the Borough between 2012 and 2027, a development rate of a minimum of 266 dwellings per year. The Site Allocations and Development Management Policies Plan (SADMPP) (2016) demonstrates a supply of 4,177 dwellings between 2012 and 2027, averaging 278.5 dwellings per year and allocates specific sites for development through Policy SADM1.</p> <p>The recently published SHMA<sup>56</sup> found that Hertsmere requires 599 dwellings per year.</p> <p>Without the emerging Local Plan, there would be a shortfall in housing.</p>
<p><b>Housing Provision (Affordable Housing)</b> – There is a need for affordable housing across Hertsmere due to the fact that average earnings are below the county average yet house prices are above regional and national averages.</p>	<p>Policy CS4 of the Core Strategy states that developments of 5 self-contained, residential units or more (gross), or residential sites of more than 0.2 hectares, should make provision for 35-40% Affordable Housing dependent upon post codes area.</p> <p>The recently published SHMA<sup>57</sup> found Hertsmere requires 434 affordable dwellings per year, equating to 72% of the required total number of dwellings required per year.</p> <p>Without the emerging Local Plan, there would be a shortfall in affordable housing.</p>
<p><b>Housing Provision (Mix)</b> – There is the need for a mix of housing types including one to three bedroom houses.</p>	<p>Policy CS7 of the Core Strategy states that housing developments in excess of 10 units (gross) are required to contain some variation within their housing mix, with sites over 25 units or 1 hectare reflecting identified variations within the Borough’s housing need, and that on large sites allocated in the Site Allocations DPD and large windfall sites, the need for a proportion of sheltered or extra care housing is considered as part of the</p>

<sup>56</sup> South West Hertfordshire Strategic Housing Market Assessment (January 2016)

<sup>57</sup> South West Hertfordshire Strategic Housing Market Assessment (January 2016)

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>overall housing mix.</p> <p>The Elstree Way Corridor Area Action Plan (EWCAAP) (2015) Policy EWC3 requires a mix of homes to be provided in the AAP area. Housing developments of over 25 units must contain variation in type and size, including a proportion of three bed units.</p> <p>The recently published SHMA<sup>58</sup> found there is a high overall requirement for three bedroom homes and one to three bedroom affordable homes. It also found there residential care housing need of 669 units from 2013-2026.</p> <p>Without the emerging Local Plan, the required housing mix would likely still be delivered during the plan period of current Local Plan (until 2027). Following this, without a planned local approach to development, the required housing mix may not be delivered.</p>
<p><b>Service Accessibility</b> – Promote vibrant inclusive communities with good accessibility to services, education and employment.</p>	<p>Policy CS18 of the Core Strategy states that the Council will require new development to contribute to the Community Strategy aim of achieving fair access to key community facilities, and where necessary provide key community facilities.</p> <p>Policy CS19 of the Core Strategy states that proposals for the provision or dual use of key community facilities will be supported, and that the loss of facilities will not be permitted.</p> <p>Policy SADM32 supports provision and enhancement of community facilities and identifies specific proposals for provision of community facilities. Policy SADM33 also supports provision and enhancement of facilities in which faith communities can meet and worship. Policy SADM42 supports specific proposals to improve facilities, functions and environment of town centres. Policy SADM45 aims to protect class A1 shops in local and neighbourhood centres, neighbourhood parades and for individual shops. Policies SADM46, SADM47 and SADM48 give further details on appropriate development in such areas.</p>

<sup>58</sup> South West Hertfordshire Strategic Housing Market Assessment (January 2016)

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>The EWCAAP Policy EWC4 promotes retention and enhancement of community facilities and provision of new facilities where a need has been identified.</p> <p>The recently published SHMA<sup>59</sup> found that Hertsmere requires 599 dwellings per year, the residents of which will require additional accessible services.</p> <p>Without the emerging Local Plan, services would likely still be retained and provided during the plan period of current Local Plan (until 2027). Following this, without a planned local approach to development, the required accessible services may not be delivered.</p>
<p><b>Health</b> – There is a need to reduce health inequalities within Hertsmere.</p>	<p>Policy SP1 of the Core Strategy states that all development should ensure healthy living environments for residents and users of development. Policy CS19 also states that healthcare facilities should be retained.</p> <p>SADMPP Policy SADM20 works to maintain health and amenity by ensuring development of sensitive uses in proximity to AQMAs are only permitted where it will not result in an undue impact on health. In addition, this policy states that new residential development should not be exposed to existing significant sources of noise pollution and light installations should not harm the amenity of residents. Policy SADM30 is also expected to contribute to retaining residential amenity.</p> <p>Life expectancy in Hertsmere is 9.7 years lower for men and 5.5 years lower for women in the most deprived areas of Hertsmere than in the least deprived areas. Additionally, the rates of smoking, excess winter deaths and deaths and injuries on roads are above the England average. Local priorities include reducing obesity, increasing physical activity, reducing smoking, and helping the growing older population maintain their health<sup>60</sup>.</p> <p>Without the emerging Local Plan, these issues are likely to continue,</p>

<sup>59</sup> South West Hertfordshire Strategic Housing Market Assessment (January 2016)

<sup>60</sup> Public Health England: Hertsmere District Health Profile 2017

Key sustainability issues	Likely evolution without implementation of the Local Plan
<p><b>Biodiversity</b> – Although there are no EU level designations in Hertsmere, a number of habitats have been identified as internationally important under the EU Habitats Directive.</p>	<p>although the SADMPP is expected to safeguard residential amenity throughout the current Local Plan period (until 2027).</p> <p>Policy CS12 of the Core Strategy states that developments conserve and enhance the natural environment of the Borough, including biodiversity, habitats, protected trees, landscape character, and sites of ecological and geological value. It also requires developments to identify opportunities for habitat creation and enhancement.</p> <p>Policy SADM10 of the SADMPP requires developers to avoid significant harm to sites of importance for biodiversity and geodiversity in the first instance or implement mitigation or compensatory measures where this is not possible and the benefits of development clearly outweigh any harm. SADMPP Policy SADM12 requires healthy, high quality trees and hedgerows to be retained. SADM 13 and SADM16 may also retain the quality of watercourses, by requiring development to have regard to its impact on these. SADM28 requires the Watling Chase Community Forest Plan and supplementary planning guidance to be material considerations for the determination of planning applications in the Forest area.</p> <p>A number of habitats have been identified as internationally important under the EU Habitats Directive. These include characteristic oak-hornbeam woodlands, the natural stand type found within Hertsmere<sup>61</sup>. Additionally, Redwell Wood SSSI is located in Hertsmere and over 40% of this site is in an unfavourable - recovering condition<sup>62</sup>.</p> <p>Without the emerging Local Plan, habitats are likely to be protected during the plan period of the current Local Plan (until 2027). Following this, without a planned local approach to development, habitat and biodiversity may be at risk from poorly planned development and their conditions could degrade.</p>

<sup>61</sup> Hertsmere Borough Council: Biodiversity, Trees and Landscape SPD (2010)

<sup>62</sup> Natural England: Redwell Wood SSSI - SSSI Condition Summary

Key sustainability issues	Likely evolution without implementation of the Local Plan
<p><b>Heritage</b> – Hertsmere has a large number of listed buildings, designated conservation areas, four Registered Parks and Gardens and four Scheduled Monuments.</p>	<p>Policy CS14 of the Core Strategy states that development proposals must conserve or enhance the historic environment of the Borough. Additionally, it states that developments should be sensitively designed to a high quality and not cause harm to identified, protected sites, buildings or locations of heritage or archaeological value including Conservation Areas, Listed Buildings, Historic Parks and Gardens, Scheduled Ancient Monuments or their setting, and identified and as yet unidentified Archaeological Remains.</p> <p>SADMPP Policy SADM29 states that the Council will not permit development proposals that fail to protect or enhance the setting, significance, character and appearance of a heritage asset, including nationally and locally listed buildings and historic parks and gardens. It states that historic features, open spaces and views should be retained within conservation areas. It also states that developers will be required to undertake an archaeological field assessment prior to the Council granting planning permission. Development on or affecting the setting of the site of the Battle of Barnet (1471) is not permitted.</p> <p>Hertsmere contains numerous heritage features which could be adversely affected by poorly planned development.</p> <p>Without the emerging Local Plan, heritage features and their setting are likely to be protected during the plan period of the current Local Plan (until 2027). Following this, without a planned local approach to development, heritage assets and their settings may be at risk from poorly planned development.</p>
<p><b>Transport</b> – Issues associated with road links being better than access to public transport is reflected in high levels of car ownership and traffic congestion. However, traffic congestion will continue without intervention. Additionally, there is a severe deficit in rail services both for passengers and freight.</p>	<p>Policy CS24 of the Core Strategy requires new development to comply with the Hertfordshire Local Transport Plan, provide a Travel plan, and contributes to the provision or funding of new infrastructure or improved public transport services and non-motorised routes.</p> <p>Policy CS25 of the Core Strategy make requirements for the quantity of off-street parking for all modes of transport to be provided at new</p>

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>developments.</p> <p>Policy CS26 of the Core Strategy states that the Council will support a wide range of measures to provide safer and more reliable alternatives to the car, including improved public transport facilities and routes, and the enhancement, additional and safeguarding of non-motorised links.</p> <p>SADMPP Policy SADM38 aims to direct new development to the appropriate category of road in the road hierarchy, which may contribute to reducing congestion. Policy SADM39 directs major trip generating development to town centres and Transport Development Areas, where access to sustainable transport is likely to be better.</p> <p>Policy EWC1 of the EWCAAP requires development proposals to provide access across the Elstree Way Corridor by sustainable modes of transport. EWC5 supports promotion of safer and more attractive routes for pedestrians, cyclists and public transport users.</p> <p>CO<sub>2</sub> emissions per capita for transportation alone in Hertsmere (3.6 tCO<sub>2</sub> per person in 2015) is significantly higher than the average for Hertfordshire (2.3 tCO<sub>2</sub> per person in 2015) and England (1.9 tCO<sub>2</sub> per person in 2015). Moreover, transport emissions in Hertsmere have been increasing from 2012-2015<sup>63</sup>. Additionally Hertsmere contains 8 AQMAs.</p> <p>Without the emerging Local Plan, transport issues are likely to continue, notably following the plan period of the current Local Plan (until 2027), and transport related emissions likely to continue to rise.</p>
<p><b>Climate Change Adaptation and Mitigation</b> - There is the need to address issues related to climate change and low carbon development and to reduce pollution and emissions including those from transport methods.</p>	<p>Policy CS17 of the Core Strategy states that residential development must achieve minimum levels of the Code for Sustainable Homes and Part L of the Buildings Regulations. It also requires all new non-domestic development to achieve as minimum CO<sub>2</sub> emissions reductions in-line with the Building Regulations Part L. Additionally, it requires large scale</p>

<sup>63</sup> CECC (2015): UK local authority and regional carbon dioxide emissions national statistics: 2005-2015

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>developments to incorporate on-site renewable energy generation.</p> <p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes minimising pollution, using locally sourced materials where possible in line with the requirements of BREEAM on sustainable design, as well as achieving reduced levels of energy consumption and the use of energy from renewable resources.</p> <p>SADMPP Policies SADM13 and SADM15 are likely to contribute to climate change mitigation by minimising future increases in flood risk. Policies SADM34, SADM35, SADM36 and SADM37 may also contribute to climate change mitigation as these promote retention, enhancement and creation of green space.</p> <p>Although decreasing, the CO<sub>2</sub> emissions per capita in Hertsmere (7.1 tCO<sub>2</sub> per person in 2015) is higher than the average for Hertfordshire (5.5 tCO<sub>2</sub> per person in 2015) and England (5.6 tCO<sub>2</sub> per person in 2015)<sup>64</sup>. Additionally Hertsmere contains 8 AQMAs.</p> <p>Without the emerging Local Plan, the NPPF and Buildings Regulations will enforce energy efficiency and carbon reduction requirements on developments. Also, the environmental requirements of the current Local Plan will remain in force over its plan period (until 2027). Without a planned approach to development through the emerging Local Plan however, there is less opportunity to adopt a co-ordinated, spatial approach that would help to manage health and environmental risks and require higher efficiency and environmental standards. Therefore, issues regarding greenhouse gas emissions and the effects of climate change may continue.</p>

<sup>64</sup> CECC (2015): UK local authority and regional carbon dioxide emissions national statistics: 2005-2015

Key sustainability issues	Likely evolution without implementation of the Local Plan
<p><b>Resource Efficiency</b> - There is a need to reduce energy demand, improve energy efficiency and the use of low carbon and renewable resources.</p>	<p>Policy CS17 of the Core Strategy states that residential development must achieve minimum levels of the Code for Sustainable Homes (although the Code was withdrawn in 2014) and Part L of the Buildings Regulations. It also requires all new non-domestic development to achieve as a minimum CO<sub>2</sub> emissions reductions in-line with the Building Regulations Part L. Additionally, it requires large scale developments to incorporate on-site renewable energy generation.</p> <p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes minimising pollution, using locally sourced materials where possible in line with the requirements of BREEAM on sustainable design, as well as achieving reduced levels of energy consumption and the use of energy from renewable resources.</p> <p>SADMPP Policy SADM17 requires wastewater efficiency measures to be incorporated into the development. This policy also requires non-residential development to enable achievement of the BREEAM 'Excellent' standard or the best practice level of the Association for Environment Conscious Building Water Standards or equivalent.</p> <p>Although decreasing, the CO<sub>2</sub> emissions per capita in Hertsmere (7.1 tCO<sub>2</sub> per person in 2015) is higher than the average for Hertfordshire (5.5 tCO<sub>2</sub> per person in 2015) and England (5.6 tCO<sub>2</sub> per person in 2015)<sup>65</sup>. Additionally Hertsmere contains 8 AQMAs.</p> <p>Without the emerging Local Plan, the NPPF and Buildings Regulations will enforce energy efficiency and carbon reduction requirements on developments. Also, the environmental requirements of the current Local Plan will remain in force over its plan period (until 2027). Without a planned approach to development through the emerging Local Plan</p>

<sup>65</sup> CECC (2015): UK local authority and regional carbon dioxide emissions national statistics: 2005-2015

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>however, there is less opportunity to adopt a co-ordinated, spatial approach that would help to manage health and environmental risks and require higher efficiency and environmental standards. Therefore, issues regarding resource efficiency may continue.</p>
<p><b>Water Supply</b> – Affinity Water who provide the mains water supply in Hertsmere do not have sufficient water to meet their customers’ future needs for water.</p>	<p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes improving water efficiency through measures such as water saving devices in line with the Code for Sustainable Homes and BREEAM as a minimum requirement and incorporating the use of Sustainable Urban Drainage Systems.</p> <p>SADMPP Policy SADM13 supports effective use of the water supply and does not permit development that may affect the water table.</p> <p>Affinity Water provides the mains water supply in Hertsmere Borough. However, their Water Resources Management Plan found that their Central and Southeast regions do not have sufficient water for the whole of the 25-year planning period to meet their customers’ need for water<sup>66</sup>.</p> <p>Without the emerging Local Plan, water efficiency measures will be implemented over the plan period of the current Local Plan (until 2027). Following this, without a Local Plan there may be water supply shortages due to inappropriate development.</p>
<p><b>Open Space</b> – There is a shortage of open space across the whole of Hertsmere, particularly the availability of play facilities.</p>	<p>Policy CS15 of the Core Strategy states the council will safeguard, enhance and facilitate access to parks and open spaces, as well as to rural visitor attractions and the wider local countryside.</p> <p>SADMPP Policy SADM34 encourages development to improve the quality, quantity and/or accessibility of open space, sports and leisure facilities and to not exacerbate existing deficits of open space and leisure facilities.</p>

<sup>66</sup> Final Water Resources Management Plan, 2015-2020 (2014) <https://stakeholder.affinitywater.co.uk/docs/FINAL-WRMP-Jun-2014.pdf>

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>Policies SADM35 and SADM36 require developments to retain Local Green Space and Minor Amenity Land in most circumstances. Policy SADM37 requires larger developments to provide new open space on site.</p> <p>Hertsmere has a diverse distribution of different types of open space. However, compared to the proposed standards there are a number of deficiencies within Hertsmere<sup>67</sup>.</p> <p>Without the emerging Local Plan, open spaces are likely to be protected and enhanced during the plan period of the current Local Plan (until 2027). Following this, without a planned local approach to development, open spaces may be at risk from poorly planned development. Moreover, due to the increased housing requirements, demand for open space by residents will likely increase and may result in open space deficiencies.</p>
<p><b>Air quality</b> – Hertsmere Council has measured concentrations of NO<sub>2</sub> above the annual mean objective within and outside of existing AQMAs.</p>	<p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes minimising air pollution.</p> <p>Policy SADM20 of the SADMPP does not permit development that would significantly exacerbate poor air quality in AQMAs and requires that sensitive development located in or adjacent to AQMAs will not result in an undue impact on health.</p> <p>Hertsmere contains eight AQMAs designated due to nitrogen dioxide pollutants. Four of these were designated in 2003, two in 2005<sup>68</sup>, and two in 2016<sup>69</sup>.</p> <p>Whilst the SADMPP is expected to ensure that poor air quality is not exacerbated in the Borough, air quality may deteriorate after the current</p>

<sup>67</sup> Hertsmere Borough Council: Open Space Study (2011)

<sup>68</sup> Defra: Air Quality Areas - Hertsmere Borough Council

<sup>69</sup> Air Quality Consultants (2017) 2016 Air Quality Annual Status Report (ASR): Hertsmere Borough Council

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>Local Plan period (until 2027). Without the Local Plan, and its planned approach to development, air pollution issues may continue. The new Local Plan could act to improve air quality, rather than just ensuring it does not deteriorate further.</p>
<p><b>Flooding</b> – Surface water flooding is highlighted as a major cause of frequent flooding in Hertsmere and often occurs in combination with groundwater flooding. Drainage infrastructure flooding has also been recorded in all urban areas across the Borough.</p>	<p>Surface water flooding is highlighted as a major cause of frequent flooding in the Borough and often occurs in combination with groundwater flooding<sup>70</sup>.</p> <p>Waste water has a detrimental impact on water quality, with over 2,000 residential properties and six large sewage treatment works discharging treated water into local rivers in the catchment. In addition, challenges caused when intermittent sewage is discharged (under license) during storm events, can also impact on groundwater<sup>71</sup>.</p> <p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes incorporating the use of Sustainable Urban Drainage Systems and avoiding development in floodplains.</p> <p>SADMPP Policy SADM13 directs development towards Flood Zone 1. This policy does not permit new development in Flood Zone 3b and will only support redevelopment in this zone if for a compatible use. Policy SADM14 requires development to be located within areas of lower flood risk. It also requires that development does not increase risk of flooding elsewhere and requires development at risk of flooding to be flood resilient, resistant and safe. In addition, Policy SADM15 promoted use to SuDS for flood attenuation and reduction in flood risk.</p> <p>Without the Local Plan, the Core Strategy may successfully limit the</p>

<sup>70</sup> Strategic Flood Risk Assessment: Volume I (2008) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB02a-SFRA-Final-Report-and-Appendix-E.PDF>

<sup>71</sup> Catchment Data Explorer: Colne Operational Catchment (2017) <http://environment.data.gov.uk/catchment-planning/OperationalCatchment/3096/Summary>

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>impacts of flooding over its plan period. Following this, without a planned approach to development via the local plan, issues regarding flooding may continue due to inappropriate development.</p> <p>Pollution reduction measures will be implemented over the plan period of the current Local Plan (until 2027). However, without a planned approach to development via the emerging Local Plan, particularly following the plan period of the Core Strategy, there may be water continued and increasing issues with regard to water pollution due to inappropriate development.</p>
<p><b>Deprivation</b> – Hertsmere’s average deprivation rank is below the county average, with one LSOA falling in the top 10% most deprived nationally.</p>	<p>There are no policies directly regarding deprivation in the current Local Plan (until 2027).</p> <p>Life expectancy in Hertsmere is 9.7 years lower for men and 5.5 years lower for women in the most deprived areas of Hertsmere than in the least deprived areas. Additionally, 13.1% of children are in low income families<sup>72</sup>. One LSOA within Hertfordshire falls within the top 10% most deprived LSOAs nationally<sup>73</sup>.</p> <p>Without the emerging Local Plan, these issues are likely to continue.</p>
<p><b>Soil and minerals</b> – Development on previously developed land should continue to be prioritised to decrease pressure on Hertsmere’s best and most versatile agricultural land. Sand and gravel reserves in the Borough will need to be safeguarded from development.</p>	<p>Policy CS16 of the Core Strategy states developments should not create an unacceptable level of risk to the wider environment. This also requires developments to incorporate sustainability principles, minimise their impact on the environment and ensure prudent use of natural resources. This includes minimising soil pollution and remediating land affected by instability and contamination.</p> <p>Policy CS12 of the Core Strategy states proposals will only be permitted where there is no likelihood of the land being sterilised for future agriculture or mineral extraction.</p>

<sup>72</sup> Public Health England: Hertsmere District Health Profile 2017

<sup>73</sup> DCLG: English indices of deprivation 2015

Key sustainability issues	Likely evolution without implementation of the Local Plan
	<p>SADMPP Policy SADM18 states that development within the Mineral Consultation Area will not be permitted to sterilise or prevent the future extraction of the mineral resource.</p> <p>The Borough contains areas of high quality agricultural land as well as important reserves of sand and gravel, which have been identified by Hertfordshire County Council as 'preferred areas' for future mineral extraction in its Minerals Local Plan<sup>74</sup>.</p> <p>Without the emerging Local Plan, agricultural land and sand and gravel reserves will be protected over the plan period of the current Local Plan (until 2027). Following this, without a planned approach to development via the local plan, high quality agricultural land and mineral reserves may be at risk from inappropriate development.</p>

---

<sup>74</sup> Hertsmere Local Plan: Core Strategy (2013)

## 4 Proposed approach to the SA

- 4.1 As described in **Chapter 1**, the SA work will incorporate the requirements of the SEA Regulations. The approach to carrying out the SA for the Hertsmere Borough Local Plan will be based on current best practice and Government SA/SEA guidance<sup>75</sup>.
- 4.2 The SA will be undertaken in collaboration with the Hertsmere Borough Council officers responsible for drafting the Local Plan in order to fully integrate the SA process with the production of the Plan.
- 4.3 The SEA Regulations set out consultation requirements at the SA Scoping stage.

Part 3 of the SEA Regulations 12(5) states that:

*“when deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies.”*

- 4.4 The ‘scope’ includes the range of SA objectives that will be used to assess the effects of the Local Plan and the approach to that will be taken to the appraisal of ‘reasonable alternatives’ (see below). The ‘detail’ includes the assumptions that will be made in assessing the Plan against each of the SA objectives. All of this information is contained within the SA Scoping Report which will be subject to consultation with the statutory environmental bodies.

### Overarching approach to the assessment

- 4.5 Our SA work on the Local Plan will be mindful of the sustainability issues facing the Borough, such as those set out in **Chapter 3**, and of the need to weigh up potentially opposing sustainability effects that are often associated with development. For example, whilst there may be environmental disadvantages associated with some aspects of proposed housing and economic development, it is important to strike a balance with the likely social and economic advantages of, for example, addressing deprivation and housing need. Another area where such tensions often need to be considered is in weighing up the need to seek support from developers for infrastructure and affordable housing against the need to ensure that delivery of housing is not threatened by the level of obligations placed on developers.

#### Reasonable alternatives

- 4.6 In relation to the overarching approach to the assessment, the SEA Regulations require the following:

Part 3 of the SEA Regulations 12(2) require that:

*“The report shall identify, describe and evaluate the likely significant effects on the environment of:*

*(a) Implementing the plan or programme; and*

*(b) Reasonable alternatives taking into account the objectives and the geographical scope of the Plan or Programme.”*

Schedule 2 (h) of the SEA Regulations requires that the Environmental Report includes a description of:

*“(h) an outline of the reasons for selecting the alternatives dealt with”*

<sup>75</sup> Contained within the National Planning Practice Guidance website (<http://bit.ly/1zsrfo>).

- 4.7 Therefore, the SA must appraise not only the policies or site allocations preferred by the Local Plan but 'reasonable alternatives' to those policies and allocations. This implies that alternatives that are not reasonable do not need to be subject to appraisal. There is no requirement in the SEA Regulations for all possible reasonable alternatives to be subject to appraisal. Part (b) of Regulation 12(2) above notes that reasonable alternatives will take into account the objectives of the plan, as well as its geographical scope. Therefore, alternatives that do not meet the objectives of the Local Plan or national policy, or are outside the Plan area are unlikely to be reasonable.
- 4.8 The objectives, policies and site allocations of the Local Plan and reasonable alternatives are in the process of being defined. The Council's reasons for selecting the alternatives to be included in the Plan and for preferring particular alternatives for inclusion in the Proposed Submission Plan will be reported at a later stage in the SA process, once these decisions have been made.

### Types of effect

- 4.9 For those alternatives deemed reasonable, the SA will set out their sustainability effects in comparative terms.

The SEA Regulations, Schedule 2(6) require the Environmental Report to consider:

*The likely significant effects on the environment, including short, medium and long term effects, permanent and temporary effects, positive and negative effects and secondary, cumulative and synergistic effects, on issues such as (a) biodiversity, (b) population, (c) human health, (d) fauna, (e) flora, (f) soil, (g) water, (h) air, (i) climatic factors, (j) material assets, (k) cultural heritage including architectural and archaeological heritage, (l) landscape and (m) the inter-relationship between the issues referred to in sub-paragraphs (a)-(l).*

### SA framework

- 4.10 The development of a set of SA objectives (known as the SA framework) is a recognised way in which the likely environmental and sustainability effects of a plan can be described, analysed and compared. SA objectives are developed from the review of plans, policies and programmes, the collection of baseline information and the identification of the key sustainability issues.
- 4.11 The Borough's latest set of SA objectives, used for the appraisal of its Site Allocations and Development Management (SADM) Policies Plan, have been used as a starting point for the development of a set of SA objectives for the new Local Plan. The SADM Policies Plan SA objectives took those developed for the SA of the adopted Core Strategy.
- 4.12 The SADM Policies Plan SA objectives have been reviewed in light of the review of plans, policies and programmes, baseline information and key sustainability issues for Hertsmere (as presented in **Chapters 2 and 3**) and amendments have been made to a number of the objectives to ensure they are appropriate for the SA of the new Local Plan. All of the topics specifically required in Schedule 2(6) of the SEA Regulations are clearly addressed by the headline SA objectives. The total number of SA objectives is 15. The review of the SA objectives has sought to avoid duplication and any single SA objective covering too many issues (as this would result in mixed effects always being identified).
- 4.13 The proposed SA framework for the new Local Plan is presented in **Table 4.2**. The final column in the table demonstrates which SA objective addresses each of the topics that are required by the SEA Directive to be covered (set out in Schedule 2 of the SEA Regulations). The SA framework also provides indicative appraisal questions to illustrate the considerations that will be relevant when assessing the Local Plan options.

### Green Belt

- 4.14 Some 80% of the Borough is Green Belt. As a result of the proximity to London, there are a number of activities occurring within the Green Belt, many of which predate planning policy, including established institutions and reasonably substantial settlements. Land use has changed

and developed over time, land has been redeveloped and there is constant pressure on the Green Belt boundaries so it is vital to have defensible Green Belt boundaries<sup>76</sup>.

- 4.15 The Green Belt is a policy designation, yet it relates to a number of environmental issues. According to the National Planning Policy Framework (NPPF), “Green Belt serves five purposes:
- to check the unrestricted sprawl of large built-up areas;
  - to prevent neighbouring towns merging into one another;
  - to assist in safeguarding the countryside from encroachment;
  - to preserve the setting and special character of historic towns; and
  - to assist in urban regeneration, by encouraging the recycling of derelict and other urban land” (Para 80).
- 4.16 Green Belt is not a sustainability issue in itself, but the purposes of the Green Belt listed above relate to a number of sustainability objectives, as demonstrated in **Table 4.1**.

**Table 4.1: Incorporation of Green Belt into SA Objectives**

Green Belt purpose	Relevant SA objective
<ul style="list-style-type: none"> <li>• To check the unrestricted sprawl of large built-up areas</li> </ul>	SA Objective 8: To maintain and enhance the quality of countryside and landscape
<ul style="list-style-type: none"> <li>• To prevent neighbouring towns merging into one another</li> </ul>	SA Objective 8: To maintain and enhance the quality of countryside and landscape
<ul style="list-style-type: none"> <li>• To assist in safeguarding the countryside from encroachment</li> </ul>	SA Objective 8: To maintain and enhance the quality of countryside and landscape
<ul style="list-style-type: none"> <li>• To preserve the setting and special character of historic towns</li> </ul>	SA Objective 7: To protect and enhance historic buildings, heritage assets and archaeological sites
<ul style="list-style-type: none"> <li>• To assist in urban regeneration, by encouraging the recycling of derelict and other urban land</li> </ul>	SA Objective 6: To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land

<sup>76</sup> Review of Selected Green Belt Sites and Boundaries: Assessment for Site Allocations and Development Management policies (edited 2014) <https://www.hertsmere.gov.uk/Documents/09-Planning--Building-Control/Planning-Policy/Local-Plan/SADMS-EB28-GB-Boundary-Review-April-2014.pdf>

**Table 4.2: Hertsmere Framework for SA of the Local Plan**

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
<p><b>SA Objective 1</b></p>	<p><b><u>Education</u></b> To improve access to education, training, opportunities for lifelong learning and employability</p>	<p>Provide new and improved education facilities, which will support raising attainment and the development of skills, leading to a work ready population of school and college leavers?</p> <p>Promote the development of education services that retain young people through further and higher education in order to develop and diversify the skills needed to make Hertsmere prosper?</p> <p>Create new opportunities to improve educational attainment, qualification levels and participation in education and training through access to existing or the provision of new educational infrastructure?</p>	<p>Population</p>
<p><b>SA Objective 2</b></p>	<p><b><u>Services</u></b> To ensure ready access to essential services and facilities for all residents</p>	<p>Provide new and enhance existing leisure facilities, where thresholds/standards require these?</p> <p>Create opportunities to lead healthier lifestyles, including development that enhances existing and /or makes provision for and maintenance towards open spaces, sports and recreational facilities e.g. publicly available pitches, allotments, swimming pools, courts, etc.?</p> <p>Provide new or enhanced local services to support new and growing communities?</p> <p>Provide for the specific needs of disabled and older people?</p>	<p>Population, Human Health</p>
<p><b>SA Objective 3</b></p>	<p><b><u>Housing Provision</u></b> To ensure the provision of housing, including affordable housing and a mix that meets local needs</p>	<p>Create developments that make significant contributions to local housing needs?</p> <p>Provide a mix of housing suitable for a range of ages and household types?</p> <p>Provide affordable housing?</p>	<p>Population, Material Assets, Human Health</p>

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
<b>SA Objective 4</b>	<p><b><u>Community Cohesion</u></b></p> <p>To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces</p>	<p>Create well-designed developments with a sufficient critical mass or density to support local services and public transport provision?</p> <p>Reduce levels of crime, anti-social behaviour and the fear of crime through high quality design and intervention, i.e. street layout, public space provision, passive surveillance, lighting etc.?</p> <p>Make provision for religious places of worship in Shenley and Borehamwood?</p>	Population, Human Health
<b>SA Objective 5</b>	<p><b><u>Health</u></b></p> <p>To improve population's health and reduce inequalities</p>	<p>Provide, steward and maintain green infrastructure assets and networks (including green open space and river/canal corridors), ensuring that these are linked into new and existing developments, to improve the connectivity of green space and green networks?</p> <p>Create opportunities to lead healthier lifestyles, including development that enhances existing and /or makes provision for and maintenance towards open spaces, sports and recreational facilities e.g. publicly available pitches, allotments, swimming pools, courts, etc.?</p> <p>Provide new or enhanced local health services to support new and growing communities?</p>	Population, Human Health
<b>SA Objective 6</b>	<p><b><u>Soil and minerals</u></b></p> <p>To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources</p>	<p>Avoid development of high quality agricultural land? Ensure the re-use and redevelopment of brownfield sites?</p> <p>Result in efficient use of recycled/secondary materials?</p> <p>Protect mineral resources and infrastructure?</p> <p>Ensure development avoids sterilisation of local mineral reserves?</p>	Soil

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
<b>SA Objective 7</b>	<p><b><u>Heritage</u></b></p> <p>To protect and enhance historic buildings, heritage assets and archaeological sites</p>	<p>Avoid adverse effects on listed buildings (including locally listed buildings), conservation areas, scheduled ancient monuments, registered parks and gardens, and registered battlefields and their settings?</p> <p>Provide appropriately scaled, designed and landscaped developments that relate well to and enhance the historic character of the Borough and contribute positively to its distinctive sense of place?</p> <p>Promote the enhancement of the Borough’s archaeological resource and other aspects of heritage, such as parks and open spaces, and areas with a particular historical or cultural association?</p> <p>Promote access to, as well as enjoyment and understanding of, the local historic environment?</p> <p>Improve participation in cultural activities?</p> <p>Help foster heritage-led regeneration?</p> <p>Improve existing and provide new leisure, recreational, or cultural activities related to the historic environment?</p>	Cultural Heritage, including architectural and archaeological heritage
<b>SA Objective 8</b>	<p><b><u>Landscape</u></b></p> <p>To maintain and enhance the quality of countryside and landscape</p>	<p>Consider the existing character, form and pattern of the Borough’s landscapes, buildings and settlements?</p> <p>Protect and enhance the local distinctiveness and contribution to a sense of place?</p>	Landscape

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
<b>SA Objective 9</b>	<p><b><u>Emissions</u></b></p> <p>To reduce greenhouse gas emissions, including a reduced dependence on the private car</p>	<p>Ensure a complementary mix of land uses within compact communities that minimises the length of journeys to services and facilities and employment opportunities, increases the proportion of journeys made on foot or by cycle, and are of a sufficient density to support and enhance local services and public transport provision?</p> <p>Situate development in locations well served by public transport, cycle paths and walking routes?</p> <p>Provide new and improved sustainable transport networks, including cycle and walking routes, to encourage active travel and improve connectivity to local service centres, transport hubs, employment areas and open/green spaces?</p> <p>Improve strategic public transport infrastructure?</p>	Air, Climatic Factors, Human Health
<b>SA Objective 10</b>	<p><b><u>Biodiversity and Geodiversity</u></b></p> <p>To protect and enhance biodiversity and geodiversity</p>	<p>Protect and where possible enhance nationally designated biodiversity sites and species?</p> <p>Avoid net loss, damage to, or fragmentation of locally designated and non-designated wildlife sites, habitats and species and encourage net gain in biodiversity?</p> <p>Enhance and increase the extent of habitats for protected species and priority species identified in the Hertfordshire BAP or the England Biodiversity Strategy 2020?</p> <p>Increase opportunities for people to come into contact with resilient wildlife places while encouraging respect for and raising awareness of the sensitivity of these sites?</p> <p>Integrate biodiverse habitats into new developments, as well as contribute to improvements in ecological connectivity and ecological resilience in rural and urban areas?</p> <p>Maintain and enhance ecological networks in the Borough?</p>	Biodiversity, Fauna, Flora

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
		<p>Protect sites valued for their geological characteristics?</p> <p><b>NB</b> Climate change is likely to impact upon habitats and thereby biodiversity. Plan policies that achieve the goals listed above should all help to enhance the ability of wildlife to adapt to a changing climate.</p>	
<b>SA Objective 11</b>	<p><b><u>Water quality and quantity</u></b></p> <p>To improve water quality and manage water resources sustainably</p>	<p>Ensure that development does not lead to the deterioration of groundwater, surface water or river water quality?</p> <p>Locate development where adequate foul drainage, sewage treatment facilities and surface water drainage can be made available?</p> <p>Incorporate SuDS (including their long-term maintenance) into development, so as to reduce the rate of run-off and the risk of surface water flooding and combined sewer overflow?</p> <p>Increase water efficiency, particularly in new developments?</p>	Water, Biodiversity, Fauna, Flora
<b>SA Objective 12</b>	<p><b><u>Flooding</u></b></p> <p>To minimise the risk of flooding taking account of climate change</p>	<p>Avoid development in locations at risk from flooding or which could increase the risk of flooding elsewhere, taking into account the impacts of climate change?</p> <p>Create development that incorporates SuDS (including their long-term maintenance) to reduce the rate of run-off and reduce the risk of surface water flooding and combined sewer overflows?</p>	Water, Climatic Factors, Human Health
<b>SA Objective 13</b>	<p><b><u>Air Quality</u></b></p> <p>To improve local air quality</p>	<p>Situate development in locations well served by public transport, cycle paths and walking routes in order to reduce emissions?</p> <p>Situate developments within walking distance to essential services and facilities?</p> <p>Make provision for new and improved sustainable transport</p>	Air, Human Health

SA Objective Reference	SA Objective	Appraisal questions: Will the Plan ...?	Relationship with the SEA Topics
		networks, including cycling and walking routes?	
<b>SA Objective 14</b>	<p><b><u>Energy Efficiency</u></b></p> <p>To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy</p>	<p>Create strategic-scale developments that make significant and lasting contributions to the UK's national carbon target of reducing emissions by at least 80% from 1990 levels by 2050?</p> <p>Create connected energy networks that provide local low carbon and renewable electricity and heat?</p>	Climatic Factors
<b>SA Objective 15</b>	<p><b><u>Economy</u></b></p> <p>Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres</p>	<p>Improve access to jobs for local people from all sectors of the community that will reduce inequality between standards of living?</p> <p>Enhance the vitality and vibrancy of town centres?</p> <p>Provide high quality employment sites and associated infrastructure suitable for the likely continuation in a shift from manufacturing to higher skill, service industries?</p>	Population, Material Assets

### Form of assessment and use of SA matrices

- 4.17 Each policy and site allocation option in the Local Plan will be assessed and a judgement made as to the likely effect of the option on the baseline in relation to the SA objectives.
- 4.18 The findings of the SA will be presented in SA matrices, which will include a colour-coded score for the alternatives against each of the 15 SA objectives, along with a concise justification for the score given. The detailed SA matrices will be presented as an appendix to the full SA report.
- 4.19 The SA scores will differentiate between significant effects and other more minor effects through the use of colour coded symbols, as shown in the key below. Mixed effects will be recorded for an SA objective where there is potential for positive effects in relation to one aspect of the objective but potential for negative effects in relation to another.

**Table 4.3: Key to sustainability scores to be used in the SA of the Local Plan**

<b>++</b>	Significant positive effect likely
<b>+</b>	Minor positive effect likely
<b>0</b>	No or negligible effect likely
<b>-</b>	Minor negative effect likely
<b>--</b>	Significant negative effect likely
<b>+/-</b>	Mixed effect likely
<b>?</b>	Likely effect uncertain

- 4.20 The dividing line between sustainability scores is often quite small. Where we distinguish significant effects from more minor effects this is because, in our judgement, the effect of the allocation or policy on the SA objective will be of such magnitude that it will have a noticeable and measurable effect compared with other factors that may influence the achievement of that objective.

## 5 Consultation and next steps

- 5.1 To meet the requirements of the SEA Directive, the views of the three statutory consultees (Natural England, English Heritage and the Environment Agency) are being sought in relation to the scope and level of detail to be covered by the SA of the Hertsmere Borough Local Plan. This requirement is being met by publishing this SA Scoping Report for consultation with the three statutory bodies for a five week period.

### Consultees are asked to consider the following questions in particular:

- Are any significant sustainability issues or opportunities missing or misrepresented in the sustainability profile for the area covered by or potentially affected by the Local Plan? If so, please provide evidence to support suggested additional issues. (**Chapter 3**)
- Do the SA objectives and associated SA methodology provide a reasonable framework with which to address the likely **significant** sustainability effects of the Local Plan? (**Chapter 4, Appendix 2, Appendix 3**)

- 5.2 Responses from the consultees will be addressed in the subsequent stages of the SA. The next formal output of the SA process will be at the Issues and Options stage, during which high-level options for the Local Plan will be appraised. The results of this assessment will inform the Hertsmere Borough Council planning team in their preparation of subsequent iterations of the Local Plan. The SA of the Issues and Options will be presented in an SA report, which will be published for public consultation alongside the Issues and Options document (currently scheduled for consultation between September and November 2017). Further SA reports will accompany consultation on the Preferred Options, Consultation Draft and the Proposed Submission Local Plan.

# Appendix 1

## Review of other relevant plans and programmes

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
<b>INTERNATIONAL</b>			
<b>EU Directives</b>			
<p><i>SEA Directive 2001</i> Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment</p>	<p>Provides for a high level of protection of the environment and contributes to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.</p>	<p>Develop policies that take account of the Directive as well as more detailed policies derived from the Directive at the national level.</p>	<p>Requirements of the SEA Directive must be met in Sustainability Appraisals.</p>
<p><i>The Industrial Emissions Directive 2010</i> Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)</p>	<p>Lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.</p>	<p>Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.</p>	<p>Include sustainability objective / appraisal question for reducing pollution.</p>
<p><i>Energy Performance of Buildings Directive 2010 on the energy performance of buildings 2010/31/EU</i></p>	<p>The Directive aims to promote the energy performance of buildings and building units. It requests that member states adopt either national or regional methodology for calculating energy performance and minimum requirements for energy performance.</p>	<p>Policies and site allocations should take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.</p>	<p>Include SA objective relating to the energy performance/efficiency of existing and proposed buildings.</p>
<p><i>The Birds Directive 2009</i> Directive 2009/147/EC is a codified version of Directive 79/409/EEC as amended</p>	<p>Requires the preservation, maintenance, and re-establishment of biotopes and habitats to include the following measures:</p> <ul style="list-style-type: none"> <li>• Creation of protected areas.</li> <li>• Upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones.</li> <li>• Re-establishment of destroyed biotopes.</li> </ul> <p>Creation of biotopes.</p>	<p>Policies should make sure that the upkeep of recognised habitats is maintained and not damaged from development.</p> <p>Should also avoid pollution or deterioration of habitats or any other disturbances affecting birds.</p>	<p>Include sustainability objective / appraisal questions for the protection of biodiversity.</p>
<p><i>The Waste Framework Directive 2008</i> Directive 2008/98/EC on waste</p>	<p>Aims to prevent or reduce waste production and its harmfulness and to increase the recovery of waste by means of recycling, re-use or reclamation. Aims to achieve recovery or disposal of waste without endangering human health and without using processes that could harm the environment.</p>	<p>Develop policies that take account of the Directive as well as more detailed policies derived from the Directive</p>	<p>Include sustainability objective / appraisal questions that minimise waste production as well as</p>

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
		contained in the NPPF.	promote recycling.
<p><i>The Air Quality Directive 2008</i></p> <p>Directive 2008/50/EC on ambient air quality and cleaner air for Europe</p>	Avoid, prevent and reduce harmful effects of ambient noise pollution on human health and the environment.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to maintain and enhance air quality.
<p><i>The Floods Directive 2007</i></p> <p>Directive 2007/60/EC on the assessment and management of flood risks</p>	Establishes a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions that relate to flood management and reduction of risk.
<p><i>The Water Framework Directive 2000</i></p> <p>Directive 2000/60/EC establishing a framework for community action in the field of water policy</p>	Protection of inland surface waters, transitional waters, coastal waters and groundwaters.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to protect and minimise the impact on water quality.
<p><i>The Landfill Directive 1999</i></p> <p>Directive 99/31/EC on the landfill of waste</p>	Prevent or reduce negative effects on the environment from the landfilling of waste by introducing stringent technical requirements for waste and landfills.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to increase recycling and reduce the amount of waste.
<p><i>The Drinking Water Directive 1998</i></p> <p>Directive 98/83/EC on the quality of water intended for human consumption</p>	Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to protect and enhance water quality.
<p><i>The Packaging and Packaging Waste Directive 1994</i></p> <p>Directive 94/62/EC on packaging and packaging</p>	Harmonise the packaging waste system of Member States. Reduce the environmental impact of packaging waste.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to minimise the environmental impact of waste and promote

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
waste			recycling.
<i>The Habitats Directive 1992</i> Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	Promote the maintenance of biodiversity taking account of economic, social, cultural and regional requirements. Conservation of natural habitats and maintain landscape features of importance to wildlife and fauna.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to protect and maintain the natural environment and important landscape features.
<i>The Nitrates Directive 1991</i> Directive 91/676/EEC on nitrates from agricultural sources.	Reduce water pollution caused or induced by nitrates from agricultural sources and prevent further such pollution.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to reduce water pollution.
<i>The Urban Waste Water Directive 1991</i> Directive 91/271/EEC concerning urban waste water treatment	Protect the environment from the adverse effects of urban waste water collection, treatment and discharge, and discharge from certain industrial sectors.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to reduce water pollution.
<b>European plans, policies and programmes</b>			
EU Seventh Environmental Action Plan (2002-2012)	The EU's objectives in implementing the programme are: (a) to protect, conserve and enhance the Union's natural capital; (b) to turn the Union into a resource-efficient, green and competitive low-carbon economy; (c) to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing; (d) to maximise the benefits of the Union's environment legislation; (e) to improve the evidence base for environment policy; (f) to secure investment for environment and climate policy and get the prices right; (g) to improve environmental integration and policy coherence; (h) to enhance the sustainability of the Union's cities; (i) to increase the Union's effectiveness in confronting regional and global environmental	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to protect and enhance the natural environment and promote energy efficiency.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	challenges.		
European Spatial Development Perspective (1999)	Economic and social cohesion across the community. Conservation of natural resources and cultural heritage. Balanced competitiveness between different tiers of government.	Develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective / appraisal questions to conserve natural resources and cultural heritage.
European Landscape Convention (Florence, 2002)	The convention promotes landscape protection, management and planning.	Develop policies that take account of the Convention.	Include sustainability objective / appraisal questions to protect the archaeological heritage.
European Convention on the Protection of the Archaeological Heritage (Valletta, 1992) <i>Revision of the 1985 Granada Convention</i>	Protection of the archaeological heritage, including any physical evidence of the human past that can be investigated archaeologically both on land and underwater. Creation of archaeological reserves and conservation of excavated sites.	Develop policies that take account of the Convention.	Include sustainability objective / appraisal questions to protect the archaeological heritage.
<b>Other international plans, policies and programmes</b>			
Johannesburg Declaration on Sustainable Development (2002)	Commitment to building a humane, equitable and caring global society aware of the need for human dignity for all. Renewable energy and energy efficiency. Accelerate shift towards sustainable consumption and production.	Develop policies that take account of the Declaration.	Include sustainability objective / appraisal questions to enhance the natural environment and promote renewable energy and energy efficiency.
Aarhus Convention (1998)	Established a number of rights of the public with regard to the environment. Local authorities should provide for:  The right of everyone to receive environmental information  The right to participate from an early stage in environmental decision making  The right to challenge in a court of law public decisions that have been made without respecting the two rights above or environmental law in general.	Develop policies that take account of the Convention.	Ensure that public are involved and consulted at all relevant stages of SA production.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA Plan
<b>NATIONAL</b>			
<b>White Papers</b>			
Energy White Paper: Our Energy Future (2003)	<p>There are four key aims in this document:</p> <ul style="list-style-type: none"> <li>To put ourselves on a path to cut the United Kingdom carbon dioxide emissions- the main contributor to global warming- by some 60 % by about 2050, with real progress by 2020;</li> <li>To maintain the reliability of energy supplies;</li> <li>To promote competitive markets in the United Kingdom and beyond, helping to raise the rate of sustainable economic growth and to improve our productivity; and</li> </ul> <p>To make sure that every home is adequately and affordably heated.</p>	The Local Plan and its policies need to promote development that is energy efficient and increases the use and/ or availability of renewable energy	Include a sustainability objective relating to energy efficiency.
Heritage Protection for the 21 <sup>st</sup> Century: White Paper (2007)	<p>The proposals in this White Paper reflect the importance of the heritage protection system in preserving our heritage for people to enjoy now and in the future. They are based around three core principles:</p> <ul style="list-style-type: none"> <li>Developing a unified approach to the historic environment;</li> <li>Maximising opportunities for inclusion and involvement; and</li> <li>Supporting sustainable communities by putting the historic environment at the heart of an effective planning system</li> </ul>	The Local Plan policies will need to ensure that they protect the Borough's heritage assets.	Include a sustainability objective relating to cultural heritage.
Natural Environment White Paper, 2011 <i>The Natural Choice: securing the value of nature</i>	<p>Protecting and improving our natural environment;</p> <p>Growing a green economy; and</p> <p>Reconnecting people and nature.</p>	Protect the intrinsic value of nature and recognise the multiple benefits it could have for communities.	Include a sustainability objective / appraisal question relating to the enhancement of the natural environment.
Electricity Market Reform White Paper 2011, <i>Planning our Electric Future: A White Paper for Secure, Affordable and Low-Carbon Electricity</i>	This White Paper sets out the Government's commitment to transform the UK's electricity system to ensure that our future electricity supply is secure, low-carbon and affordable.	Develop policies that support renewable energy generation and encourage greater energy efficiency.	Include sustainability objective / appraisal questions to reduce carbon emissions and increase proportion of energy generated from renewable sources.
The Future of Transport White Paper 2004: A network for 2030	<p>Ensure we can benefit from mobility and access while minimising the impact on other people and the environment, now and in the future.</p> <p>Get the best out of our transport system without damaging our overall quality of life.</p>	Develop policies that provide for an increase in demand for travel whilst minimizing impact on the environment. Policies also needed to	Include sustainability objective / appraisal questions to reduce the need to travel and improve choice and use of

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	<p>Develop strategies that recognise that demand for travel will increase in the future.</p> <p>Work towards a transport network that can meet the challenges of a growing economy and the increasing demand for travel but can also achieve the government's environmental objectives.</p>	<p>promote public transport use rather than increasing reliance on the car.</p>	<p>sustainable transport modes.</p>
<p>Water White Paper, 2011 <i>Water for Life</i></p>	<p>Objectives of the White Paper are to:</p> <ul style="list-style-type: none"> <li>• Paint a clear vision of the future and create the conditions which enable the water sector and water users to prepare for it;</li> <li>• Deliver benefits across society through an ambitious agenda for improving water quality, working with local communities to make early improvements in the health of our rivers by reducing pollution and tackling unsustainable abstraction;</li> <li>• Keep short and longer term affordability for customers at the centre of decision making in the water sector;</li> <li>• Protect the interests of taxpayers in the policy decisions that we take;</li> <li>• Ensure a stable framework for the water sector which remains attractive to investors;</li> <li>• Stimulate cultural change in the water sector by removing barriers to competition, fostering innovation and efficiency, and encouraging new entrants to the market to help improve the range and quality of services offered to customers and cut business costs;</li> <li>• Work with water companies, regulators and other stakeholders to build understanding of the impact personal choices have on the water environment, water resources and costs; and</li> </ul> <p>Set out roles and responsibilities – including where Government will take a stronger role in strategic direction setting and assessing resilience to future challenges, as well as clear expectations on the regulators.</p>	<p>Ensure that site allocations and policies will support the wise use of water, and improvement of water quality.</p>	<p>Include sustainability objective / appraisal questions that relate to water quality and quantity.</p>
<p>Urban White Paper 2000, <i>Our Towns and Cities: The Future – delivering an urban renaissance</i></p>	<p>New, sustainable homes that are attractive, safe and practical. Retaining people in urban areas and making them more desirable places to live. Improving quality of life, opportunity and economic success through tailored solutions in towns and cities.</p>	<p>Allocate sites that will effectively deliver better towns and cities taking into account the key aims of the White Paper.</p>	<p>Include sustainability objective / appraisal questions to prioritise new development on brownfield sites or conversion of existing buildings; and to improve the quality of life in urban areas.</p>
<p>Rural White Paper 2000, <i>Our Countryside: The Future – a fair deal for rural</i></p>	<p>Facilitate the development of dynamic, competitive and sustainable economies in the countryside.</p> <p>Maintain and stimulate communities and secure access to services for those who live and work</p>	<p>Allocate sites that will increase employment and services in the rural parts of</p>	<p>Include sustainability objective / appraisal questions that aim to</p>

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
<i>England</i>	<p>in the countryside.</p> <p>Conserve and enhance rural landscapes.</p> <p>Increase opportunities for people to get enjoyment from the countryside.</p>	the Borough whilst conserving the landscape.	improve the economies of rural areas with minimal impact to the environment.
Housing White Paper 2016, <i>Fixing our broken housing market</i>	<p>The White Paper sets out ways to address shortfall in affordable homes and boost housing supply. The White Paper focuses on the following:</p> <ul style="list-style-type: none"> <li>• Planning for the right homes in the right places – Higher densities in appropriate areas, protecting the green belt while making more land available for housing by maximising the contribution from brownfield and surplus public land, regenerating estates, releasing more small and medium-sized sites, allowing rural communities to grow and making it easier to build new settlements</li> <li>• Building homes faster – Improved speed of planning cases, ensuring infrastructure is provided and supporting developers to build out more quickly.</li> <li>• Diversifying the Market – Backing small and medium-sized house builders, custom-build, institutional investors, new contractors, housing associations.</li> <li>• Helping people now – supporting home ownership and providing affordable housing for all types of people, including the most vulnerable</li> </ul>	Allocate sites that will fulfil the aims of the White Paper, including development on smaller/medium sized sites, brownfield land and sites capable of achieving higher densities.	Include sustainability objectives/appraisals that relate to providing the right mix of housing and recognise the sustainability advantages of development on brownfield land.
<b>Policies and Strategies</b>			
DCLG (2012) National Planning Policy Framework	<p>Presumption in favour of sustainable development.</p> <p>Delivering sustainable development by:</p>	Development plan has a statutory status as the starting point for decision making.	Sustainability appraisal should be an integral part of the plan preparation process, and should consider all the likely significant effects on the environment, economic and social factors.
	Building a strong, competitive economy.	Set out clear economic visions for that particular area.	Include a sustainability objective / appraisal question relating to strengthening the economy.
	Ensuring vitality of town centres.	Recognise town centres as the heart of their communities.	Include a sustainability objective / appraisal question relating to the vitality of town centres.
	Promoting sustainable transport	To implement sustainable transport modes depending	Include a sustainability objective / appraisal

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
		on nature/location of the site, to reduce the need for major transport infrastructure.	question relating to sustainable transport.
	Supporting high quality communications infrastructure.	Enhance the provision of local community facilities and services by supporting the expansion of electronic communications networks.	Include a sustainability objective / appraisal question relating to improving communications infrastructure.
	Delivering a wide choice of high quality homes.	Identify size, type, tenure and range of housing that is required in particular locations.	Include a sustainability objective / appraisal question relating to housing availability and quality.
	Requiring good design.	Establish a strong sense of place to live, work and visit.	Include a sustainability objective / appraisal question relating to good design.
	Promoting healthy communities.	Promote safe and accessible environments with a high quality of life and community cohesion.	Include a sustainability objective / appraisal question relating to health and well-being.
	Protecting Green Belt Land.	To prevent the coalescence of neighbouring towns.	Include a sustainability objective relating to the coalescence of towns.
	Meeting the challenge of climate change, flooding, and coastal change.	Use opportunities offered by new development to reduce causes/impacts of flooding.	Include a sustainability objective / appraisal question relating to climate change mitigation and adaption.
	Conserving and enhancing the natural environment.	Recognise the wider benefits of biodiversity.	Include a sustainability objective / appraisal question relating to the conservation and

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	<p>Conserving and enhancing the historic environment</p> <p>Facilitating the use of sustainable materials.</p>	<p>Sustain and enhance heritage assets and put them to viable uses consistent with their conservation.</p> <p>A local plan may be considered unsound if there has been no proper assessment of the significance of heritage assets in the area, and the plan does not contain a positive strategy for the conservation, enhancement and enjoyment of the historic environment.</p> <p>Encourage prior extraction of minerals where practicable and environmentally feasible.</p>	<p>enhancement of the natural environment.</p> <p>Include a sustainability objective / appraisal question relating to the conservation of historic features.</p> <p>Include a sustainability objective / appraisal question relating to avoiding sterilisation of identified, viable mineral reserves.</p>
<p>National Planning Practice Guidance, DCLG, 2014</p>	<p>Provides further guidance to be read alongside the NPPF on a range of topics that link to the promotion of sustainable development including:</p> <ul style="list-style-type: none"> <li>• Air quality</li> <li>• Climate change</li> <li>• Conserving and enhancing the historic environment</li> <li>• Flood risk</li> <li>• Health and well being</li> <li>• Housing and economic development</li> <li>• Natural environment</li> <li>• Minerals</li> <li>• Rural housing</li> <li>• Open space</li> <li>• Transport</li> <li>• Waste</li> </ul> <p>Water supply, wastewater and water quality</p>	<p>The NPPG sets out a range of social, economic and environmental considerations for the preparation of the Local Plan. It also includes information on preparation of local plans which can be taken into consideration.</p>	<p>The NPPG sets out a range of social, economic and environmental considerations for the preparation of the Local Plan. It also includes information on undertaking sustainability appraisals which can be taken into consideration.</p>
<p>DfT (2013) <i>Door to Door: A</i></p>	<p>The strategy's vision is for an inclusive, integrated and innovative transport system that works</p>	<p>Enhance public transport</p>	<p>Include a relevant</p>

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
<i>strategy for improving sustainable transport integration</i>	<p>for everyone, and where making door-to-door journeys by sustainable means is an attractive and convenient option. Four key areas to address are highlighted:</p> <ul style="list-style-type: none"> <li>• improving availability of information;</li> <li>• simplifying ticketing;</li> <li>• making connections between different steps in the journey, and different modes of transport, easier; and</li> </ul> <p>providing better interchange facilities.</p>	provision and encourage active modes of travel such as walking and cycling.	sustainability objective / appraisal question relating to sustainable transport.
DEFRA (2011) <i>Biodiversity 2020: A strategy for England's wildlife and ecosystem services</i>	<p>The strategy aims to guide conservation efforts in England up to 2020, and move from a net biodiversity loss to gain. The strategy includes 22 priorities which include actions for the following sectors:</p> <ul style="list-style-type: none"> <li>• Agriculture;</li> <li>• Forestry;</li> <li>• Planning and Development;</li> <li>• Water Management;</li> <li>• Marine Management;</li> <li>• Fisheries;</li> <li>• Air Pollution; and</li> </ul> <p>Invasive Non-Native Species.</p>	Develop policies that promote conservation and enhancements of biodiversity.	Include sustainability objective / appraisal question that relates to biodiversity.
Lifetime Neighbourhoods (2011)	This document is a national strategy for housing in an ageing society. It seeks to support residents to develop lifetime neighbourhoods in terms of resident empowerment, access, services and amenities, built and natural environment, social networks/well-being and housing.	The policies and site allocations will need to reflect the requirements set out within the national strategy.	Include a sustainability objective relating to the creation of sustainable communities.
UK Bioenergy Strategy (2012)	<p>The UK Government has a responsibility to ensure that its policies only support bioenergy use in the right circumstances. This strategy is based on four principles which will act as a framework for future government policy on bioenergy.</p> <p>In summary the four principles state that:</p> <ul style="list-style-type: none"> <li>• Policies that support bioenergy should deliver genuine carbon reductions that help meet UK carbon emissions objectives to 2050 and beyond.</li> <li>• Support for bioenergy should make a cost effective contribution to UK carbon emission objectives in the context of the overall energy goals.</li> <li>• Support for bioenergy should aim to maximise the overall benefits and minimise costs (quantifiable and non-quantifiable) across the economy.</li> </ul> <p>At regular time intervals and when policies promote significant additional demand for bioenergy in the UK, beyond that envisaged by current use, policy makers should assess and respond to the impacts of this increased deployment on other areas, such as food security and biodiversity.</p>	The principles of the Bioenergy Strategy 2012 will need to be reflected within the Local Plan policies.	Include a sustainability objective relating to energy efficiency and climate change.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
National Planning Policy for Waste (2014)	<p>Key planning objectives are identified within National Planning Policy for Waste, requiring planning authorities to:</p> <ul style="list-style-type: none"> <li>• help deliver sustainable development through driving waste management up the waste hierarchy</li> <li>• Ensure waste management is considered alongside other spatial planning concerns</li> <li>• provide a framework in which communities take more responsibility for their own waste</li> <li>• help secure the recovery or disposal of waste without endangering human health and without harming the environment,</li> </ul> <p>ensure the design and layout of new development supports sustainable waste management</p>	Develop policies that promote sustainable waste management and use of the waste hierarchy.	Include sustainability objective / appraisal question that relates to waste reduction.
DCLG (2011) <i>Laying the Foundations: A Housing Strategy for England</i>	Aims to provide support to deliver new homes and improve social mobility.	Develop policies that encourage development of residential properties.	Include sustainability objective / appraisal question that assesses whether housing need is being met.
UK Government Sustainable Development Strategy: Securing the Future (2005)	<p>The Strategy sets out 5 principles for sustainable development:</p> <ul style="list-style-type: none"> <li>• Living within environmental limits;</li> <li>• Ensuring a strong, healthy and just society;</li> <li>• Achieving a sustainable economy;</li> <li>• Promoting good governance ; and</li> <li>• Using sound science responsibly.</li> </ul> <p>The strategy sets four priorities for action:</p> <ul style="list-style-type: none"> <li>• Sustainable consumption and production;</li> <li>• Climate change and energy;</li> <li>• Natural resource protection and environmental enhancement;</li> <li>• Sustainable communities</li> </ul> <p>The strategy commits to:</p> <ul style="list-style-type: none"> <li>• A programme of community engagement;</li> <li>• Forums to help people live sustainable lifestyles;</li> <li>• Open and innovative ways for stakeholders to influence decision; educating and training</li> </ul>	<p>The Local Plan should seek to deliver sustainable communities. These are places which:</p> <ul style="list-style-type: none"> <li>• Meet the diverse needs of existing and future residents</li> <li>• People want to live and work in</li> <li>• Are sensitive to their environment</li> <li>• Contribute to a high quality of life</li> <li>• Are safe and inclusive</li> <li>• Are well planned, built and run; and</li> <li>• Offer equality of opportunity and good services for all</li> </ul>	To ensure that the requirements of the Strategy are embedded within the SA framework.
National Policy Statement EN1: Overarching Energy Policy Statement (2011)	This policy document sets out government policy for the delivery of major planning applications for energy development. These will be dealt with by the Planning Inspectorate, rather than local authorities in which the development occurs. The document also specifies the criteria for waste management, traffic and transport , water quality and quantity, noise and vibration, open	The Local Plan will need to be consistent with the National Policy Statement.	Include a sustainability objective relating to energy efficiency.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	spaces and green infrastructure, the landscape, visual impact, dust flood risk, historic environment, odour, light, smoke/steam, insects, coastal change, aviation, biodiversity and geodiversity.		
The Carbon Plan: Delivering our Local Carbon Future (2011)	The Carbon Plan sets out the government's plans for achieving the emissions reductions it committed to in the first four carbon budgets.  Emissions in the UK must, by law, be cut by at least 80% of 1990 by 2050. The UK was first to set its ambition in law and the Plan sets out progress to date.	The Local Plan will need to include policies that reflect the targets within the Carbon Plan.	Include a sustainability objective relating to greenhouse gas emissions.
DEFRA (2011) Securing the Future: Delivering UK Sustainable Development Strategy	Enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life for future generations. There are 4 shared priorities: <ul style="list-style-type: none"> <li>sustainable consumption and production;</li> <li>climate change and energy;</li> <li>natural resource protection and environmental enhancement; and sustainable communities.</li> </ul>	Develop policies that meet the aims of the Sustainable Development Strategy.	Include sustainability objective / appraisal questions to cover the shared priorities.
Department of Health (2010) <i>Healthy Lives, Healthy People: our Strategy for public health in England</i>	Protect the population from serious health threats; helping people live longer, healthier and more fulfilling lives; and improving the health of the poorest, fastest. Prioritise public health funding from within the overall NHS budget.	Policies within the Local Plan should reflect the objectives of the strategy where relevant.	Include a sustainability objective / appraisal question relating to health and well-being.
Building a Greener Future: Policy Statement (DCLG, 2007)	This Statement confirms the government's intention to achieve 25% more energy efficient homes by 2010, 44% more efficient homes by 2013 and zero carbon (net carbon emissions should be zero per annum) homes by 2016.	Policies should seek to promote zero carbon residential development.	Include sustainability objectives / appraisal questions relating to renewable energy generation and energy efficiency.
DECC (2011) UK Renewable Energy Roadmap  (updates setting out progress and changes to the strategy dated 2013 and 2013)	Make the UK more energy secure Help protect consumers from fossil fuel price fluctuations. Help drive investment in new jobs and businesses in the renewable energy sector. Keep the UK on track to meet carbon reduction objectives	Encourage developments that would support renewable energy provision including electricity, heat and transport.	Include sustainability objectives / appraisal questions relating to renewable energy generation and energy efficiency.
Community Energy Strategy (DECC, 2014)	Sets out plans to promote and facilitate the planning and development of decentralised community energy initiatives in four main types of energy activity:	Ensure that site allocations and policies will support community low carbon and renewable energy provision	Include sustainability objectives / appraisal questions relating to renewable energy

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	<ul style="list-style-type: none"> <li>• Generating energy (electricity or heat)</li> <li>• Reducing energy use (saving energy through energy efficiency and behaviour change)</li> <li>• Managing energy (balancing supply and demand)</li> </ul> Purchasing energy (collective purchasing or switching to save money on energy)	including electricity, heat and transport.	generation and energy efficiency.
The National Adaptation Programme – Making the Country Resilient to a Changing Climate (Defra, 2013)	The report sets out visions for the following sectors: <ul style="list-style-type: none"> <li>• Built Environment – “buildings and places and the people who live and work in them are resilient to a changing climate and extreme weather and organisations in the built environment sector have an increased capacity to address the risks and take the opportunities from climate change”.</li> <li>• Infrastructure – “an infrastructure network that is resilient to today’s natural hazards and prepared for the future changing climate”.</li> <li>• Healthy and resilient communities – “a health service, a public health and social care system which are resilient and adapted to a changing climate. Communities and individuals, including the most vulnerable, are better prepared to cope with severe weather events and other impacts of climate change. Emergency services and local resilience capability take account of and are resilient to, a changing climate”.</li> <li>• Agriculture and Forestry – “profitable and productive agriculture and forestry sectors that take the opportunities from climate change are resilient to its threats and contribute to the resilience of the natural environment by helping maintain ecosystem services and protect and enhance biodiversity”.</li> <li>• Natural Environment – “the natural environment, with diverse and healthy ecosystems, is resilient to climate change, able to accommodate change and valued for the adaptation services it provides”.</li> <li>• Business – “UK businesses are resilient to extreme weather and prepared for future risks and opportunities from climate change”.</li> <li>• Local Government – “Local government plays a central in leading and supporting local places to become more resilient to a range of future risk and to be prepared for the opportunities from a changing climate”.</li> </ul>	Policies should take account of the aims of the Programme.	Include sustainability objectives / appraisal questions which seek to promote the implementation of adaptation measures to make the area more resilient to a changing climate.
The National Flood and Coastal Erosion Risk Management Strategy for England (Environment Agency, 2011)	This Strategy sets out the national framework for managing the risk of flooding and coastal erosion. It sets out the roles for risk management authorities and communities to help them understand their responsibilities. The strategic aims and objectives of the Strategy are to: <ul style="list-style-type: none"> <li>• “manage the risk to people and their property;</li> <li>• Facilitate decision-making and action at the appropriate level – individual, community or local authority, river catchment, coastal cell or national;</li> </ul> Achieve environmental, social and economic benefits, consistent with the principles of	Policies should seek to reduce and manage the risk of all types of flooding.	The SA framework should include sustainability objectives / appraisal questions which seek to reduce the risk and manage flooding sustainably.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	sustainable development”.		
Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy (HM Government, 2013)	<p>The aim of the Programme is to improve the environment and protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced whilst promoting sustainable economic growth:</p> <ul style="list-style-type: none"> <li>• encourage businesses to contribute to a more sustainable economy by building waste reduction into design, offering alternative business models and delivering new and improved products and services;</li> <li>• encourage a culture of valuing resources by making it easier for people and businesses to find out how to reduce their waste, to use products for longer, repair broken items, and enable reuse of items by others;</li> <li>• help businesses recognise and act upon potential savings through better resource efficiency and preventing waste, to realise opportunities for growth; and</li> </ul> <p>support action by central and local government, businesses and civil society to capitalise on these opportunities.</p>	Primarily an issue for the County Waste Plan and Waste Management Strategy rather than the Local Plan.	N/A.
Future Water: The Government’s Water Strategy for England (DEFRA, 2008)	<p>Sets out how the Government want the water sector to look by 2030 and an outline of the steps which need to be taken to get there.</p> <p>The vision for 2030 is one where we, as a country have:</p> <ul style="list-style-type: none"> <li>• “improved the quality of our water environment and the ecology it supports, and continue to maintain high standards of drinking water quality from taps;</li> <li>• Sustainably managed risks from flooding and coastal erosion, with greater understanding and more effective management of surface water;</li> <li>• Ensure a sustainable use of water resources, and implement fair, affordable and cost-reflective water charges;</li> <li>• Cut greenhouse gas emissions; and</li> </ul> <p>Embed continuous adaptation to climate change and other pressures across the water industry and water users”.</p>	Policies should aim to contribute to the vision set out in this Strategy.	Include sustainability objectives / appraisal questions which seek to protect, manage and enhance the water environment.
The Air Quality Strategy for England vol. 1 (2007)	<p>The Air Quality Strategy sets out a way forward for work and planning on air quality issues by setting out the air quality standards and objectives to be achieved. It introduces a new policy framework for tackling fine particles, and identifies potential new national policy measures which modelling indicates could give further health benefits and move closer towards meeting the Strategy's objectives. The objectives of strategy are to:</p> <ul style="list-style-type: none"> <li>• Further improve air quality in the UK from today and long term.</li> </ul> <p>Provide benefits to health, quality of life and the environment.</p>	The Local Plan policies will need to work towards further improving air quality in the UK	Include a sustainability objective relating to air quality.
Working with the grain of	This Strategy seeks to protect and improve the rural, urban, marine and global environment and	The Local Plan should	Include a sustainability

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
nature – A Biodiversity Strategy for England (2011))	lead on the integration of these with other policies across Government and internationally.	minimise loss of biodiversity when allocating sites for development.	objective relating to the protection and enhancement of biodiversity.
National Infrastructure Plan (2014)	The Infrastructure Plan allows for long term public funding certainty for key infrastructure areas such as: roads, rail, flood defences and science. All elements highlighted in the Plan represent firm commitment by government to supply the funding levels stipulated. The Plan also highlights what steps the government will take to ensure effective delivery of its key projects.	The Local Plan objectives and policies should support the delivery of infrastructure to support new development.	To ensure that infrastructure delivery is embedded within the SA framework.
Water for People and the Environment: Water Resources Strategy for England and Wales (Environment Agency, 2009)	<p>The Strategy vision for water resource “is for there to be enough water for people and the environment, meeting legitimate needs”.</p> <p>Its aims include:</p> <ul style="list-style-type: none"> <li>• To manage water resource and protect the water environment from climate change.</li> <li>• Restore, protect, improve and value species and habitats that depend on water.</li> <li>• To contribute to sustainable development through good water management.</li> </ul> <p>People to understand how water and the water environment contribute to their quality of life.</p>	Policies should reflect the aims of the strategy where relevant.	Include sustainability objectives / appraisal questions that seek to promote water management and efficiency.
Safeguarding our Soils: A Strategy for England (DEFRA, 2009)	<p>The vision is “by 2030, all England’s soils will be managed sustainability and degradation threats tackled successfully. This will improve the quality of England’s soils and safeguard their ability to provide essential services for future generations”.</p> <p>The Strategy highlights the areas for priority including:</p> <ul style="list-style-type: none"> <li>• Better protection for agricultural soils.</li> <li>• Protecting and enhancing stores of soil carbon.</li> <li>• Building the resilience of soils to a changing climate.</li> <li>• Preventing soil pollution.</li> <li>• Effective soil protection during construction and development.</li> <li>• Dealing with our legacy of contaminated land.</li> </ul>	Ensure that site allocations and policies will help protect and enhance the quality of soils and seek to sustainably manage their quality for future generations.	Include sustainability objectives / appraisal questions that seek to safeguard and enhance the quality of soil.
The Plan for Growth implementation update (2013)	The plan for growth, published alongside Budget 2011, and as part of the Autumn Statement 2011, announced a programme of structured reforms to remove barriers to growth for businesses and equip the UK to compete in the global race. These reforms span a range of	The Local Plan policies will need to reflect the ambitions set out within the Plan for	Include a sustainability objective relating to economic growth.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	<p>policies including improving UK infrastructure, cutting red tape, root and branch reform of the planning system and boosting trade and inward investment, to achieve the governments four ambitions for growth:</p> <ul style="list-style-type: none"> <li>• Creating the most competitive tax system in the G20</li> <li>• Encouraging investment and exports as a route to a more balanced economy</li> <li>• Making the UK the best place in Europe to start, finance and grow a business</li> </ul> <p>Creating a more educated workforce that is the most flexible in Europe.</p>	Growth 2013.	
DEFRA (2007) <i>The Air Quality Strategy for England, Scotland, Wales and Northern Ireland</i>	<p>Make sure that everyone can enjoy a level of ambient air quality in public spaces, which poses no significant risk to health or quality of life.</p> <p>Render polluting emissions harmless.</p>	Develop policies that aim to meet the standards.	Include sustainability objective / appraisal questions to protect and improve air quality.
<b>Legislation</b>			
Housing Act 2004	<p>Protect the most vulnerable in society and help create a fairer and better housing market.</p> <p>Strengthen the Government's drive to meet its 2010 decent homes target.</p>	Develop policies that help to create a fairer and better housing market.	Include sustainability objective / appraisal questions to improve access to good quality and affordable housing.
Housing and Planning Act (2016)	<p>The Act makes widespread changes to housing policy at the national level. Measures introduced in the Act relate to starter homes, and permitting the sale of higher value local authority homes. Starter homes are the new affordable housing product designed by the government to specifically meet the housing needs of younger generations and to allow them to access home-ownership. The overarching aim of the Act is to promote home ownership and increase levels of house building.</p>	The Local Plan will need to take account of the provisions of the Act in relation to housing provision.	Include a sustainability objective relating to the provision of an appropriate range of housing within the Borough.
Localism Act (2011)	<p>The Localism Act introduces a number of measures to decentralise decision making process to the local level, creating space for Local Authorities to lead and innovate, and giving people the opportunity to take control of decisions that matter to them. The Localism Act includes a number of important packages.</p> <ul style="list-style-type: none"> <li>• The new act makes it easier for local people to take over the amenities they love and keep them part of local life;</li> <li>• The act makes sure that local social enterprises, volunteers and community groups with a bright idea for improving local services get a chance to change how things are done.</li> <li>• The act places significantly more influence in the hands of local people over issues that make a big difference to their lives.</li> <li>• The act provides appropriate support and recognition to communities who welcome new development.</li> <li>• The act reduces red tape, making it easier for authorities to get on with the job of</li> </ul>	The Local Plan will need to reflect the principles of Localism as identified in the document, including Neighbourhood Planning.	<p>To ensure the concepts of the Localism Act are embedded within the SA framework.</p> <p><i>Relates to the overall SA process.</i></p>

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
	<p>working with local people to draw up a vision for their area's future.</p> <ul style="list-style-type: none"> <li>The act reinforces the democratic nature of the planning system passing power from bodies not directly to the public, to democratically accountable ministers.</li> <li>The act enables Local Authorities to make their own decisions to adapt housing provision to local needs, and make the system fairer and more effective.</li> <li>The act gives Local Authorities more control over the funding of social housing, helping them plan for the long- term.</li> </ul> <p>In relation to planning, the Localism Act enables the Government to abolish regional spatial strategies, introduce Neighbourhood Plans and Local Referendums.</p>		
The Climate Change Act (2008)	<p>The Climate Change Act was passed in 2008 and established a framework to develop an economically credible emissions reduction path. It also strengthened the UK's leadership internationally by highlighting the role it would take in contributing to urgent collective action to tackle climate change under the Kyoto Protocol.</p> <p>The Climate Change Act includes the following:</p> <ul style="list-style-type: none"> <li>2050 target. The act commits the UK to reducing emissions by at least 80% in 2050 from 1990 levels. This target was based on advice from the CCC report: Building a Low- carbon Economy. The 80% target includes GHG emissions from the devolved administrations, which currently accounts for around 20% of the UK's total emissions.</li> </ul> <p>Carbon Budgets. The Act requires the Government to set legally binding 'carbon budgets'. A carbon budget is a cap on the amount of greenhouse gases emitted in the UK over a five-year period. The first four carbon budgets have been put into legislation and run up to 2027.</p>	The Local Plan policies must reflect the objectives of The Climate Change Act, in order to contribute to reducing UK carbon emissions.	Include a sustainability objective relating to climate change.
Energy Act (2008)	<p>The Act works towards a number of policy objectives including carbon emissions reduction, security of supply, and competitive energy markets. Objectives: Electricity from Renewable Sources: changes to Renewables Obligation (RO), designed to increase renewables generation, as well as the effectiveness of the RO.</p> <p>Feed in tariffs for small scale, low carbon generators of electricity. Smart meters: the Act mandates a roll-out of smart meters to medium sized businesses over the next five years.</p> <p>Renewable heat incentives: the establishment of a financial support mechanism for those generating heat from renewable sources.</p>	Policies and site allocations will have to ensure a positive contribution in meeting the climate change challenge by capitalising on renewable and low carbon energy opportunities and adaptation measures which reduce the threat of climate change.	Include a sustainability objective relating to energy efficiency and climate change.
Flood and Water Management Act (2010)	The Act aims to reduce the flood risk associated with extreme weather. It provides for better, more comprehensive management of flood risk for people, homes and businesses, helps safeguard community groups from unaffordable rises in surface water drainage charges, and protects water supplies to the consumer.	The Local Plan should protect existing and future development as well as residents from flood risk.	The overview of flood risk management in England which is provided in the Act will need to be reflected in the Framework of the SA.

Plan or programme	Key objectives relevant to the Local Plan and SA	Implications for the Local Plan	Implications for the SA
Town and country planning legislation	<p>A range of legislation published in 2017 is of relevance to the Local Plan. This includes:</p> <ul style="list-style-type: none"> <li>- The Neighbourhood Planning Act 2017 – Act aims to strengthen neighbourhood planning by ensuring that planning decision- makers take account of well-advanced neighbourhood development plans and by giving these plans full legal effect at an earlier stage.</li> <li>- The Town and Country Planning (Brownfield Land Register) Regulations 2017 - The regulations require local authorities to prepare and maintain registers of brownfield land that is suitable for residential development.</li> <li>- The Town and Country Planning (Permission in Principle) Order 2017 the Order provides that sites entered on Part 2 of the new brownfield registers will be granted permission in principle.</li> </ul> <p>The regulations and order above aim to improve the quality and consistency of data held by local planning authorities, which will provide certainty for developers and communities, encouraging investment in local areas.</p>	<p>The Local Plan policies should take into account well-advanced neighbourhood plans.</p> <p>The Local Plan should promote and prioritise development of brownfield land.</p>	<p>Include a sustainability objective/appraisal question that recognises the sustainability value of development on brownfield land.</p>

# Appendix 2

## Assumptions for SA of site allocations

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b>SA Objective 1: To improve access to education, training, opportunities for lifelong learning and employability</b>						
<b><u>HOUSING ALLOCATIONS</u></b> Distance to educational facilities.	<=1km from secondary AND <=500m from at least one primary school  <b>OR</b> Provision of new facilities	<=1km from at least one secondary school  <b>OR</b> <=500m from at least one primary/infant/junior school  <b>OR</b> <=1km from a college or other education or training facility	N/A	N/A	>1km from secondary AND >500m from at least one primary school  <b>OR</b> Loss of facilities	N/A
<b>SA Objective 2: To ensure ready access to essential services and facilities for all residents</b>						
<b><u>HOUSING ALLOCATIONS</u></b> Proximity to services/facilities/assets	<=400m) of a Town or Local Centre	401-800m of a Town or Local Centre	Where an allocation is within 800m of a Town Centre or Local Centre but there are potential barriers to access for all ages and abilities (e.g. major road, topography).	>800m of a Town Centre or Local Centre, but <= 400m of a bus stop.	>800m of a Town Centre or Local Centre and >400m of a bus stop.	N/A
<b><u>HOUSING ALLOCATIONS</u></b> 'Geographical Barriers to Housing and Services' domain of the Index of Multiple	Allocation located within one of the 20% least deprived areas within the Borough ('Geographical Barriers to Housing and Services')	N/A	All other allocations.	N/A	Allocation located within one of the 50% most deprived areas within the Borough ('Geographical Barriers to Housing and Services')	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
Deprivation	domain of the Index of Multiple Deprivation  <b>OR</b> Provision of new facility				Services' domain of the Index of Multiple Deprivation)	
<b>SA Objective 3: To ensure the provision of housing, including affordable housing and a mix that meets local needs</b>						
<b><u>HOUSING ALLOCATIONS</u></b> Delivery of affordable housing	Significantly contributes to the delivery of affordable housing (>50 dwellings)	For <b>urban areas</b> , contributes to the delivery of affordable housing (11-50 dwellings)  <b>OR</b> For <b>rural areas</b> , contributes to the delivery of affordable dwellings (6-50 dwellings)	For <b>urban areas</b> , no contribution to affordable housing (10 dwellings or fewer).  <b>OR</b> For <b>rural areas</b> , no contribution to affordable housing (5 dwellings or fewer)	N/A	N/A	Uncertainty
<b>SA Objective 4: To improve community cohesion by reducing and preventing crime and deprivation, as well as providing sufficient community spaces</b>						
<b><u>HOUSING ALLOCATIONS</u></b> Reducing and preventing crime	N/A	N/A	Levels of crime and fear of crime will not be influenced by the location of development sites (rather they will be determined through the detailed proposals for each site). Therefore, the effects of the potential sites on this SA objective will be assumed to be	N/A	N/A	Uncertainty

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
			negligible (0).			
<b><u>HOUSING ALLOCATIONS</u></b> 'Barriers to housing and services' domain of the Index of Multiple Deprivation	Allocation located within one of the 20% most deprived areas within the Borough ('Overall – Barriers to housing and services' domain of English Indices of Deprivation).	N/A	All other allocations.	N/A	N/A	N/A
<b><u>EMPLOYMENT ALLOCATIONS</u></b> 'Overall – Employment Deprivation' domain of the Index of Multiple Deprivation	Allocation located within one of the 20% most deprived areas within the Borough ('Overall – Employment Deprivation' domain of English Indices of Deprivation).	N/A	All other allocations.	N/A	N/A	N/A
<b>SA Objective 5: To improve population's health and reduce inequalities</b>						
<b><u>HOUSING ALLOCATIONS</u></b> Distance to nearest NHS GP surgery or hospital	N/A	<=800m from nearest NHS GP surgery or hospital	N/A	>800m from nearest NHS GP surgery or hospital	N/A	Uncertainty
<b><u>HOUSING ALLOCATIONS</u></b> Distance to nearest sport/recreational facility or open space/Local Green	<=800m from open space, sport or recreation facility <b>OR</b> Provision of new facility	<=400m from PRoW but >800m of open space sport & recreation facility	N/A	Site containing PRoW (-?)	>800 m from open space, sport or recreation facility and >400 m from PROW <b>OR</b>	Uncertainty

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
Space.					Loss of existing facility	
<p><b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b></p> <p>Development allocations that are adjacent to strategic road network (motorway or 'A' roads) or are within close proximity of waste management facilities.</p>	N/A	N/A	All other allocations.	<p>Site within 500m of an Anaerobic Digestion facility</p> <p><b>OR</b></p> <p>Within 250m of any other waste management facility</p>	Site within 200m of an A road or Motorway	
<b>SA Objective 6: To safeguard soil quantity and quality including reducing contamination and prioritising previously developed land, as well as protecting mineral resources</b>						
<p><b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b></p> <p>Agricultural grade of land</p>	N/A	N/A	N/A	<p>Significant proportion (&gt;=25%) of allocation on Grade 3 agricultural land.</p> <p><b>OR</b></p> <p>Site consists partly of Grades 1 or 2 agricultural land, but less than 25% of site.</p>	Significant proportion (>=25%) of allocation on Grade 1 or 2 agricultural land.	N/A
<p><b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b></p> <p>Greenfield or brownfield</p>	N/A	Allocation entirely or mainly (>50%) on brownfield land.	N/A	Allocation entirely or mainly (>=50%) on greenfield land.	N/A	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
land						
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b> Minerals Safeguarding Area	N/A	N/A	Allocation is not within 250m of a Minerals Safeguarding Area.	Allocation is within 250m of a Minerals Safeguarding Area.	N/A	N/A
<b>SA Objective 7: To protect and enhance historic buildings, heritage assets and archaeological sites</b>						
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b> Impact on designated historic buildings, archaeological sites and other heritage assets.	Allocation would bring heritage at risk back into appropriate use.	Allocation would enhance the setting of a heritage asset or have its significant better revealed.	No historic buildings, heritage assets or archaeological sites within 1km of allocation and no further assets with views to the site or to which the site may form part of the setting.	Where allocation is between 250m and 1km of historic buildings, heritage assets and/or archaeological sites, and has potential to cause harm to the asset, which could be mitigated, a minor negative effect with uncertainty (-?) occurs. Uncertainty as the actual effect on historic assets will depend on whether the development is visible from the asset and the exact scale, design and layout of the new development.	A significant negative effect with uncertainty (--?) occurs where allocation is within 250m of or includes a historic building, heritage assets or archaeological sites, where it is unlikely that the impact could be mitigated. Uncertainty as the actual effects on historic assets will depend on the exact scale, design and layout of the new development.	N/A
<b>SA Objective 8: To maintain and enhance the quality of countryside and landscape</b>						
<b><u>HOUSING AND EMPLOYMENT</u></b>	N/A	Allocation would help to improve and restore an area with	Allocation within area of 'weak' strength of character according to	Allocation on greenfield land within an area of 'moderate' or 'strong'	Allocation would be significantly at odds with existing landscape	

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b><u>ALLOCATIONS</u></b> Landscape character		poor landscape condition, according to the Landscape Character Assessment  <b>OR</b> Site is on brownfield or degraded land	the Landscape Character Assessment.	strength of character according to the Landscape Character Assessment.	and/or lead to loss of distinctive features of the relevant Landscape Character Area.	
<b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b> Settlement coalescence	N/A	N/A	A negligible effect with uncertainty (0?) occurs when the allocation is within the Green Belt but unlikely to contribute towards settlement coalescence. Uncertainty as the actual effect will depend on the design, layout and landscaping of the new development.  <b>OR</b> When an allocation is within an existing urban area or far away from neighbouring settlements, it's likely to have a negligible effect with no uncertainty (0).	A minor negative effect with uncertainty (-?) occurs when the allocation is within the Green Belt and may contribute towards coalescence of two or more settlements. Uncertainty as the actual effect will depend on the design, layout and landscaping of the new development.	A significant negative effect with uncertainty (--?) occurs when the allocation is within the Green Belt and would join two or more settlements. Uncertainty as the actual effect will depend on the design, layout and landscaping of the new development.	N/A
<b>SA Objective 9: To reduce greenhouse gas emissions, including a reduced dependence on the private car</b>						
<b><u>HOUSING AND EMPLOYMENT</u></b>	Within walking distance of 3 or more sustainable	Within walking distance of 2	N/A	Within walking distance of 1 sustainable	Not within walking distance of any	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b>ALLOCATIONS</b> Distance to public transport.	transport links (within 400m of a bus stop, 1km of a railway station and 400m of a cycle route)	sustainable transport links (within 400m of a bus stop, 1km of a railway station and 400m of a cycle route)		transport link (within 400m of a bus stop, 1km of a railway station or 400m of a cycle route)	sustainable transport links (within 400m of a bus stop, 1km of a railway station or 400m of a cycle route)	
<b>SA Objective 10: To protect and enhance biodiversity and geodiversity</b>						
<b>ALL ALLOCATIONS</b> Distance (impacts on) to: National or local designated wildlife site (SSSI, NNR, LNR, LWS, Eco-site, HMWT reserve), BAP Priority Habitats, Ancient Woodland or Regionally Important Geological Site.  Impacts on internationally designated wildlife sites as assessed via the HRA and taken into account in the SA Report.	N/A	N/A	All other allocations.	Significant proportion of allocated land ( $\geq 25\%$ ) is on undesignated greenfield land.  <b>OR</b> Allocated land is $\leq 100\text{m}$ from a designated site (other than SSSI).	Significant negative effect (--) if significant proportion of allocated land ( $\geq 25\%$ ) lies within designated site.  <b>OR</b> Allocated land is $\leq 100\text{m}$ from an SSSI.  <b>OR</b> Significant negative effect with uncertainty (--?) if significant proportion of allocated land ( $\geq 25\%$ ) lies within an SSSI Impact Risk Zone for the relevant type of development. Uncertainty relates to whether potentially significant negative effects can be mitigated.	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
<b>SA Objective 11: To improve water quality and manage water resources sustainably</b>						
<p><b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b></p> <p>Allocations located within a Source Protection Zone (SPZ)</p>	N/A	N/A	All other allocations.	Minor negative effect with uncertainty (-?) if site falls within an SPZ.	N/A	N/A
<b>SA Objective 12: To minimise the risk of flooding taking account of climate change</b>						
<p><b><u>ALL ALLOCATIONS</u></b></p> <p>Allocations on brownfield or greenfield land and within flood zones</p>	N/A	N/A	<p>&gt;5% of site within Flood Zone 3</p> <p><b>AND/OR</b></p> <p>&lt;25% within Flood Zone 2 or proposed use classified as 'water compatible development'</p>	<p>&gt;=25% of site within Flood Zone 2</p> <p><b>OR</b></p> <p>Smaller area (5% to 25%) within Flood Zone 3</p>	>=25% of site within Flood Zones 3a or 3b	Uncertainty
<b>SA Objective 13: To improve local air quality</b>						
<p><b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b></p> <p>Development allocations that are within, or directly</p>	N/A	N/A	Not within an AQMA or likely to generate traffic that uses an AQMA route as its primary access	N/A	Within an AQMA or likely to generate traffic that uses an AQMA route as its primary access	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
connected via road, to one of the Air Quality Management Areas (AQMAs) in the Borough.						
<b>SA Objective 14: To minimise the need for energy, increase energy efficiency, and to increase the use of renewable energy</b>						
<p><b><u>HOUSING AND EMPLOYMENT ALLOCATIONS</u></b></p> <p>Energy consumption and potential for renewable energy use</p>	N/A	N/A	The location of housing and employment allocations will not have an effect on levels of domestic energy consumption and the potential for renewable energy use. These factors are influenced more by the specific design and construction methods used, and whether renewable energy infrastructure is incorporated into development. Therefore, the effects of the potential allocations on this SA objective will be assumed to be negligible (0).	N/A	N/A	N/A
<b>SA Objective 15: Facilitate a sustainable and growing economy for the Borough that creates economic and employment opportunities, as well as providing for vital and viable town centres</b>						
<b><u>HOUSING ALLOCATIONS</u></b>	N/A	Allocation is within 800m of a sustainable	N/A	Allocation is further than 800m from the nearest	N/A	N/A

Site assessment criteria	Significant positive effect (++)	Minor positive effect (+)	No/negligible effect (0)	Minor negative effect (-)	Significant negative effect (--)	Uncertain effect (?)
Proximity to town centres		transport link (bus stop, railway stations or cycle paths).		sustainable transport link (bus stop, railway station or cycle path)		
<b><u>HOUSING ALLOCATIONS</u></b> Proximity to employment opportunities	<=500m from an existing employment area	501-1000m from an existing employment area	N/A	1001-2000m from an existing employment area <b>OR</b> Loss of existing employment area	>2000m from an existing employment area	N/A
<b><u>EMPLOYMENT ALLOCATIONS</u></b> Site size	Allocation is large (more than 0.5ha in size)	Allocation is small (0.5ha in size or smaller)	N/A	N/A	N/A	N/A